3.13 TRANSPORTATION AND PARKING

This section summarizes the projected traffic and parking impacts, including transit, pedestrian, bicycle, and loading impacts, that would result from implementation of the EIS Alternatives. A detailed transportation impact analysis was prepared and included in Appendix E.

3.13.1 Affected Environment

Regional and Local Access

Existing SFVAMC Fort Miley Campus

The existing SFVAMC Fort Miley Campus is a 29-acre site located in northwestern San Francisco. The site is positioned along the north side of Clement Street, with access points at 42nd Avenue and at 43rd Avenue (Figure 3.13-1). Regional and local access points to and from the existing Campus are summarized below.

Regional Access

State Route 1 (SR 1), U.S. Highway 101 (U.S. 101), Interstate 80 (I-80), and Interstate 280 (I-280) provide regional access to and from the existing SFVAMC Fort Miley Campus.

East Bay: I-80 and the San Francisco–Oakland Bay Bridge, via U.S. 101, provide access to and from the East Bay area. 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.

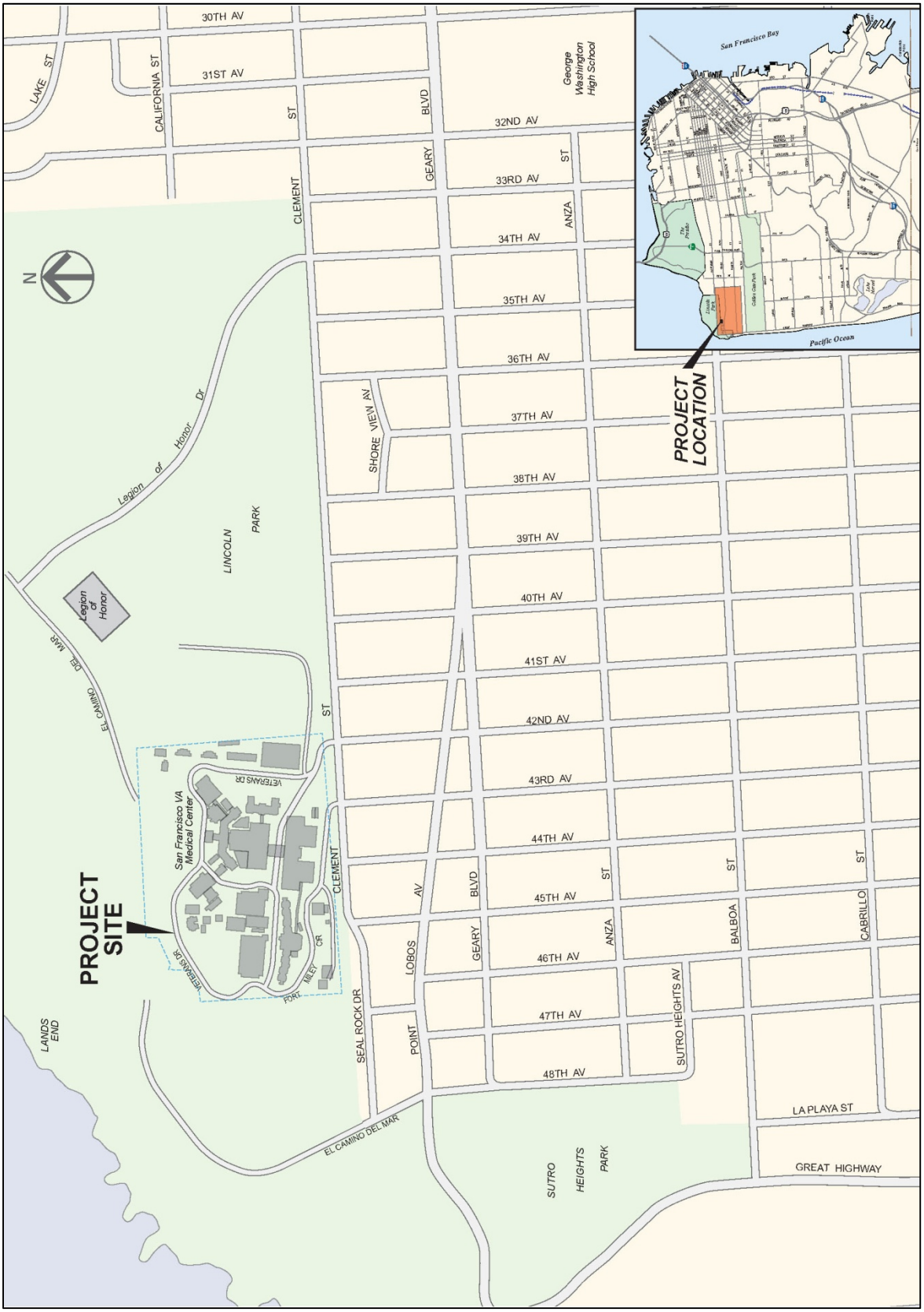
South Bay: SR 1 (called Park Presidio Boulevard in the vicinity of the existing SFVAMC Fort Miley Campus) and I-280 provide access to and from the South Bay area. Access to SR 1 is provided via its intersections with Clement Street or Geary Boulevard. Access to I-280 is provided via its interchange with SR 1 south of the existing Campus.

North Bay: SR 1 (Park Presidio Boulevard) and the Golden Gate Bridge provide access to and from the North Bay area. Access to SR 1 is provided via its intersections with Clement Street or Geary Boulevard.

Local Access

Clement Street is an east-west roadway running from 45th Avenue to Arguello Boulevard. Clement Street transitions to Seal Rock Drive at 45th Avenue to Camino del Mar. Clement Street (and Seal Rock Drive) 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 roadway that runs between 48th Avenue and Gough Street. 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.



Source: AECOM, 2012

Figure 3.13-1: Project Location

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 roadway running from the Great Highway to 41st Avenue, where Point Lobos Avenue merges with Geary Boulevard. On-street parking is provided on both sides of the street. 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 roadway running from El Camino Del Mar within Lincoln Park to Fulton Street, and from Lincoln Way to Sloat Boulevard. In the vicinity of the existing SFVAMC Fort Miley Campus, 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 roadway running from Clement Street to Fulton Street, and from Lincoln Way to Sloat Boulevard. North of Clement Street, this roadway leads into Veterans Drive, the main access drive to the existing SFVAMC Fort Miley Campus. In the vicinity of the existing SFVAMC Fort Miley Campus, 42nd Avenue is two-way with one travel lane in each direction. On-street parking is provided on both sides of the street.

43rd Avenue is a north-south roadway running from Clement Street to Fulton Street, and from Lincoln Way to Sloat Boulevard. North of Clement Street, the roadway leads into Fort Miley Circle at a secondary access point to the existing SFVAMC Fort Miley Campus. In the vicinity of the existing Campus, 43rd Avenue is two-way with one travel lane in each direction. On-street parking is provided on both sides of the street.

Fort Miley Circle is a two-way internal roadway on the existing 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 existing SFVAMC Fort Miley Campus. Parking spaces are also provided along the roadway within the existing SFVAMC Fort Miley Campus.

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

Mission Bay Area

As noted in Chapter 2.0, “Alternatives,” for purposes of this EIS and with regard to Alternative 2, the Mission Bay area is bounded by I-80 on the north, Second Street and San Francisco Bay on the east, Cesar Chavez Street on the south, and Seventh/Brannan/Potrero Streets on the west (Figure 2-3).

Regional Access

U.S. 101, I-80, and I-280 provide regional access to and from the Mission Bay area.

Local Access

Major east-west arterials in the Mission Bay area consist of Market Street, Mission Street, Folsom Street, and 16th Street. Major north-south arterials in the Mission Bay area are The Embarcadero, Third Street, Fourth Street, Sixth Street, Seventh Street, Eighth Street, Ninth Street, 10th Street, and Van Ness Avenue.

Traffic

Existing SFVAMC Fort Miley Campus

Traffic counts for each study intersection in the area of the existing SFVAMC Fort Miley Campus were collected on Wednesday, February 15, 2011 (Appendix E). See Figure 3.13-2 for the location of the study intersections addressed in the transportation analysis. The intersection analysis uses the 2000 *Highway Capacity Manual* (HCM) methodology, which is based on level of service (LOS).[1] The LOS methodology is a qualitative description of the performance of an intersection based on average delay per vehicle.

For signalized intersections, the HCM methodology determines the capacity of each lane group approaching the intersection. (Note that the only signalized intersections near the existing Campus are on Geary Boulevard.) The LOS is then based on average delay (in seconds per vehicle) for the various movements within the intersection. A combined weighted-average delay and LOS are then presented for the intersection. For unsignalized intersections, the LOS is based on the average delay (in seconds per vehicle) for all approaches for an all-way stop, or the conservative approach for a one- or two-way stop controlled intersection.

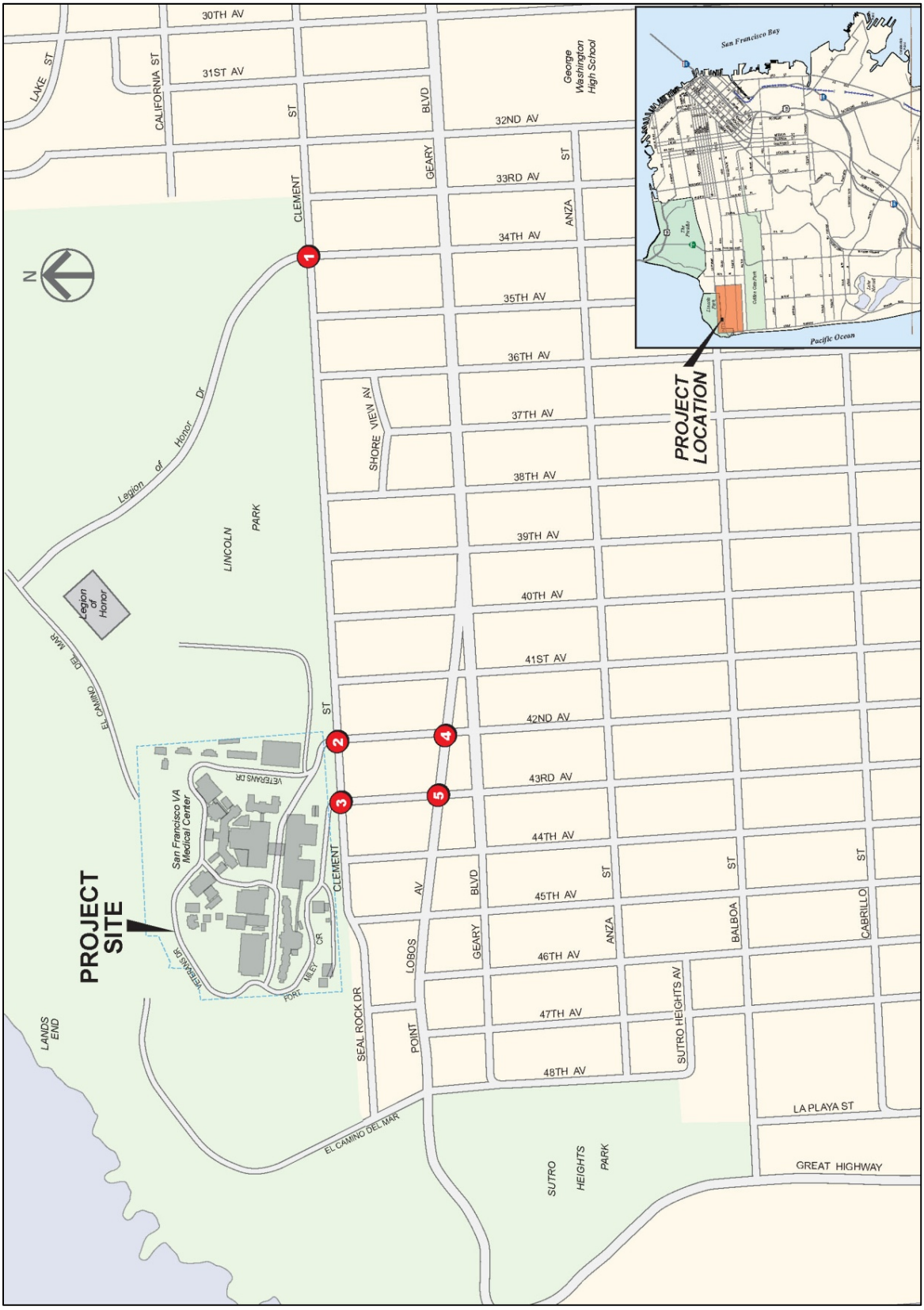
Intersection LOS ranges from LOS A, which indicates free flow or excellent conditions with short delays, to LOS F, which indicates congested or overloaded conditions with extremely long delays. LOS A through D are considered excellent to satisfactory levels of service, and LOS E and LOS F represent unacceptable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

Lane geometries for each intersection are presented in Figure 3.13-3, and the existing conditions traffic volumes are presented in Figure 3.13-4. The existing conditions intersection LOS is summarized in Table 3.13-1. Detailed LOS calculations are provided in Appendix E. As shown in Table 3.13-1, under existing conditions, all five study intersections were found to operate at acceptable conditions (LOS D or better) during the weekday PM peak hour, when traffic congestion is typically highest.

Mission Bay Area

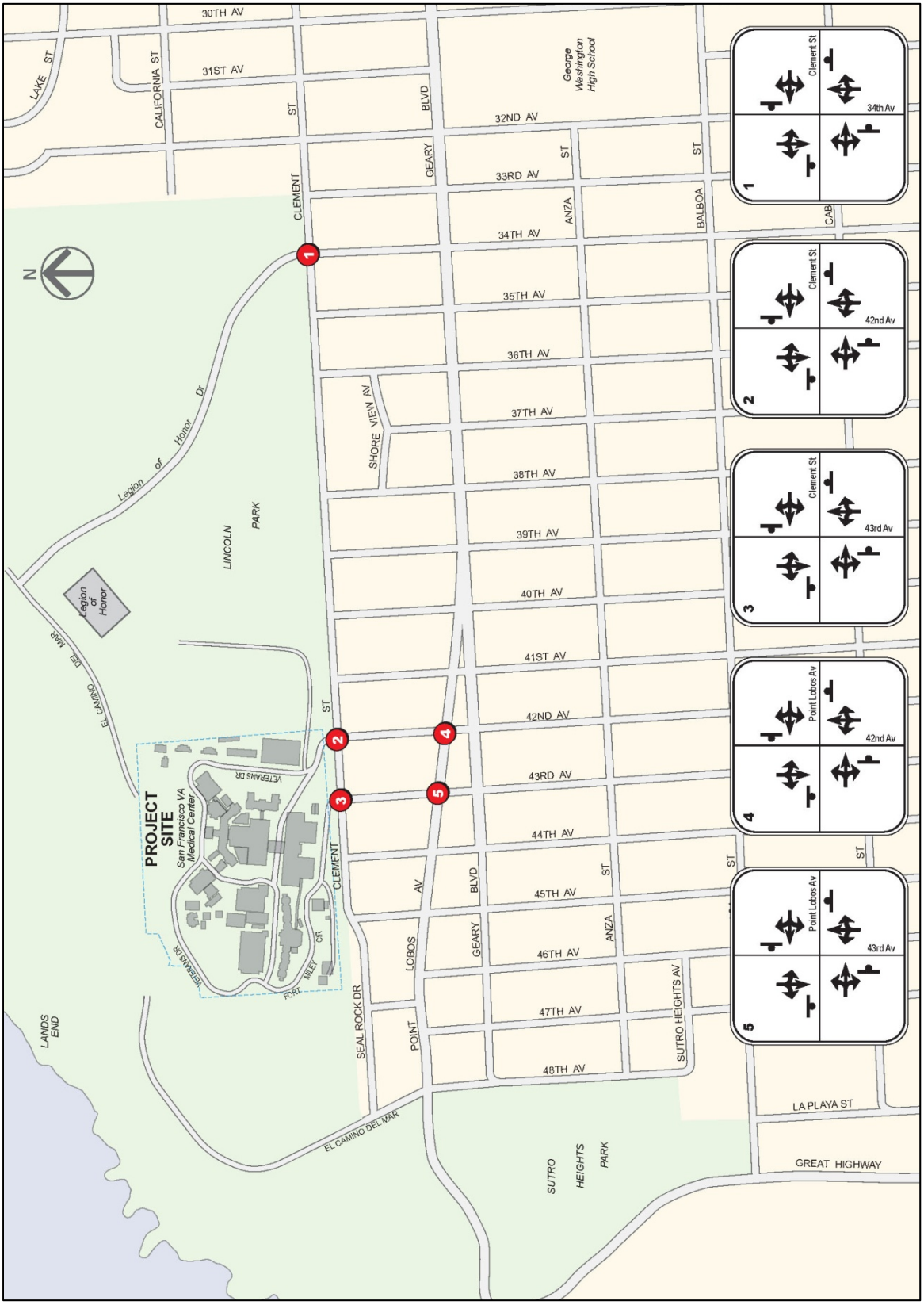
Study intersections were not identified for the Mission Bay area because of the uncertainty about where SFVAMC facilities might be located within this approximately 2.5-square-mile area. Therefore, traffic counts and LOS information are not provided. At the time that specific site locations are identified for SFVAMC facilities in the Mission Bay area, study intersections will be identified and a project-level transportation analysis will be completed.

[1] 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 vehicle (such as the downtown nature of the area, number of pedestrians, vehicle types, lane widths, grades, on-street parking and queues). These adjustments are performed to ensure that the LOS analysis results reflect the operating conditions that are observed in the field.



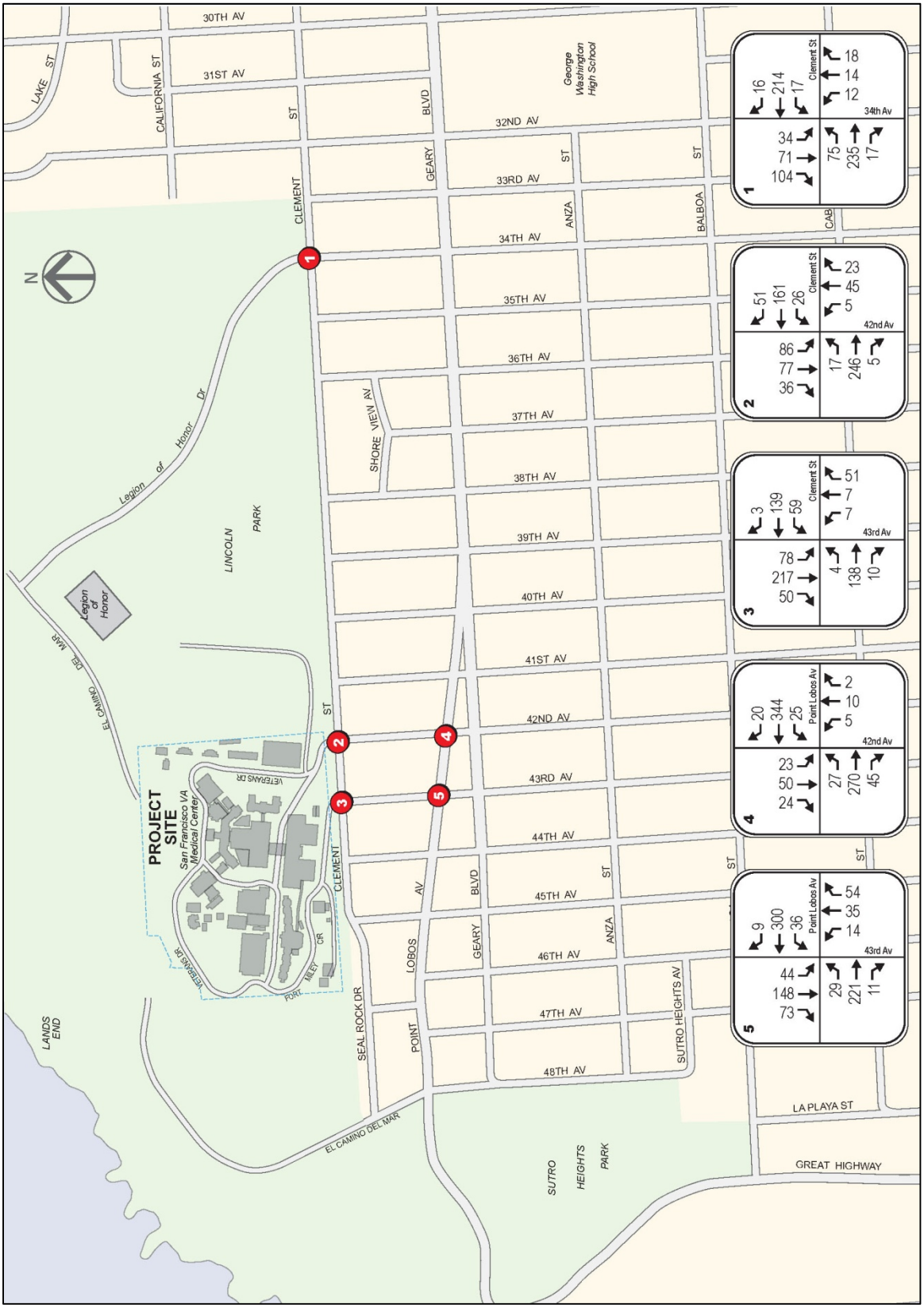
Source: AECOM, 2012

Figure 3.13-2: Intersection Analysis Locations near the SFVMC Fort Miley Campus



Source: AECOM, 2012

Figure 3.13-3: Intersection Lane Geometry near the SFVAMC Fort Miley Campus (Existing Conditions)



Source: AECOM, 2012

Figure 3.13-4: Intersection Traffic Volumes near the SFVAMC Fort Miley Campus (Existing Conditions)

Table 3.13-1: Intersection Level of Service—Existing Conditions, Weekday PM Peak Hour

Intersection		Control Type	Existing Conditions near the SFVAMC Fort Miley Campus	
			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

Notes:
[1] Delay presented in seconds per vehicle. Average delays beyond 50 seconds are shown as ">50.0" because delays above this threshold are beyond the meaningful range of the analysis.
Source: AECOM, 2012

Transit

Existing Fort Miley Campus

The SFVAMC Fort Miley Campus 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.

San Francisco Municipal Transportation Agency (SFMTA or Muni) Lines 38-Geary, 38L-Geary Limited, and 38AX-Geary A Express operate in the vicinity of the existing SFVAMC Fort Miley Campus. The key characteristics of each line are summarized in Table 3.13-2. Figure 3.13-5 illustrates the transit service in the vicinity of the existing Campus. Every other bus for Muni Line 38-Geary provides direct access into the existing Campus via Veterans Drive/Fort Miley Circle. Otherwise, all three lines provide access at Point Lobos Avenue one block south of the Campus.[2,3]

The nearest major Muni stops to the SFVAMC Fort Miley Campus 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 a.m. and 8:00 p.m., the 38-Geary provides direct access to the Campus via

[2] All Muni-related information (headways, ridership, capacity) was collected via SFMTA's Transit Effectiveness Project, which collected ridership data between October 2006 and June 2007. Thus, all data such as routes and headways are relative to the time of data collection, and do not consider changes to Muni service since June 2007.

[3] The SFMTA Board approved its amended 2009-2010 Operating Budget and related actions after declaring a fiscal emergency in April 2009. 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 for various lines have been implemented since September 2010.

Table 3.13-2: Muni Service in the Project Vicinity

Line	Weekday PM Peak Hour Headways (minutes)	Nearest Stop to the Fort Miley Campus
38-Geary	12–15	Veterans Drive[1]; 42nd Avenue/Geary Boulevard (eastbound); 44th Avenue/Point Lobos Avenue (westbound).
38L-Geary Limited	5–6	42nd Avenue/Geary Boulevard (eastbound); 44th Avenue/Point Lobos Avenue (westbound).
38AX-Geary A Express	10–15	42nd Avenue/Geary Boulevard (eastbound); 44th Avenue/Point Lobos Avenue (westbound).

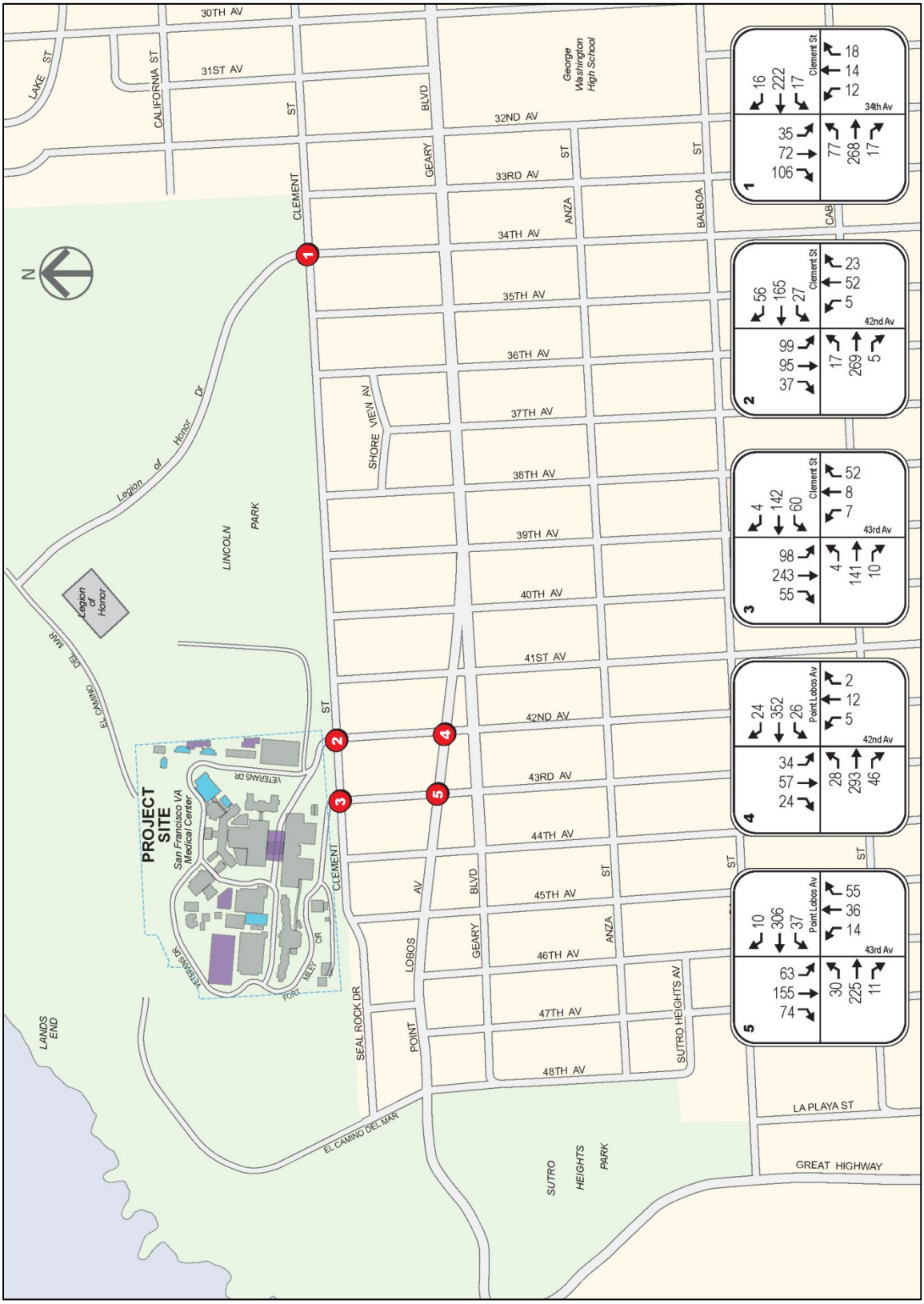
Notes:
[1] Direct service to the SFVAMC Fort Miley Campus varies by time of day.
Source: SFMTA, 2012

Veterans Drive; between 6 a.m. and 8 p.m., all buses serve the Campus, transitioning to every other bus (approximately every 10–15 minutes) after 8 a.m. 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 Campus. 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 (toward 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), which is the stop along the line that has the highest ridership. Table 3.13-3 presents the weekday PM peak-hour capacity utilization for each Muni bus route that directly serves the existing SFVAMC Fort Miley Campus. 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 (eastbound) trips are considered to be traveling toward downtown, and outbound (westbound) trips are considered traveling away from downtown.

As shown, 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.



Source: AECOM, 2012

Figure 3.13-5: Transit Network—Existing Conditions

Table 3.13-3: Muni Ridership and Capacity in the Existing SFVAMC Fort Miley Campus Vicinity, Weekday PM Peak Hour

Route	Direction	Existing Conditions, Weekday PM Peak Hour			
		Ridership	Capacity	Utilization	Maximum Load Point
38-Geary	Inbound	487	846	57.6%	Geary/Webster
	Outbound	675	1,125	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	Inbound	–	–	–	
	Outbound	177	252	70.2%	Pine/Montgomery

Source: AECOM, 2012

Mission Bay Area

Local service in the Mission Bay area is provided by Muni bus and light rail lines, while regional transit service is provided by Bay Area Rapid Transit (BART), Golden Gate Transit, and AC Transit.

The Mission Bay area is near several key transit facilities including the Transbay Terminal, the Embarcadero BART/Muni Metro Station, and the Montgomery BART/Muni Metro Station. Transit service to and from the East Bay is provided by BART and AC Transit. BART operates regional rail transit service between the East Bay (from Pittsburg/Bay Point, Richmond, Dublin/Pleasanton, and Fremont) and San Francisco, and between San Mateo County (Millbrae and San Francisco International Airport) and San Francisco. Transit service to and from the South Bay is provided by BART (via connection to Caltrain in Millbrae), SamTrans, and Caltrain. Transit service to and from the North Bay is provided by Golden Gate Transit buses and ferries.

Muni provides local transit service within San Francisco, including bus (diesel and electric trolley), light rail (Metro), street car, and cable car lines. Local transit is available along major east-west roadways such as Market Street, Mission Street, Howard Street Folsom Street, Harrison Street, and Bryant Street. North-south access is provided along most roadways.

Pedestrian

Existing SFVAMC Fort Miley Campus

Sidewalks and walkways are provided within the existing SFVAMC Fort Miley Campus and connect to sidewalks along Clement Street. Sidewalks are provided around Fort Miley Circle and Veterans Drive and between buildings within the Campus. All major streets in the vicinity of the existing Campus have sidewalks and all major intersections have marked crosswalks. In addition, most intersection corners in the vicinity of the Campus provide curb ramps, but they are not compliant with the Americans with Disabilities Act, lacking tactile warning devises such as truncated dome tiles. The northeast corner of the 42nd Avenue/Clement Street intersection provides pedestrian access to the Campus east parking lot (Lot B) but also lacks a curb ramp.

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

Mission Bay Area

All major streets in the Mission Bay area have sidewalks and all major intersections have marked crosswalks. Intersection corners also have curb ramps, although some are not Americans with Disabilities Act compliant and lack tactile warning systems such as truncated domes. In the Mission Bay area, there is generally a moderate level of pedestrian activity throughout the day, with peaks occurring in the morning as employees head to office buildings, during the midday as employees head to and from lunch, and in the evening as employees head home.

Bicycle

Existing SFVAMC Fort Miley Campus

Four major citywide bicycle routes consisting of Class I and Class III bikeways are situated in the vicinity of the existing SFVAMC Fort Miley Campus. 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 vicinity of the existing SFVAMC Fort Miley Campus are illustrated in Figure 3.13-6 and are described below.

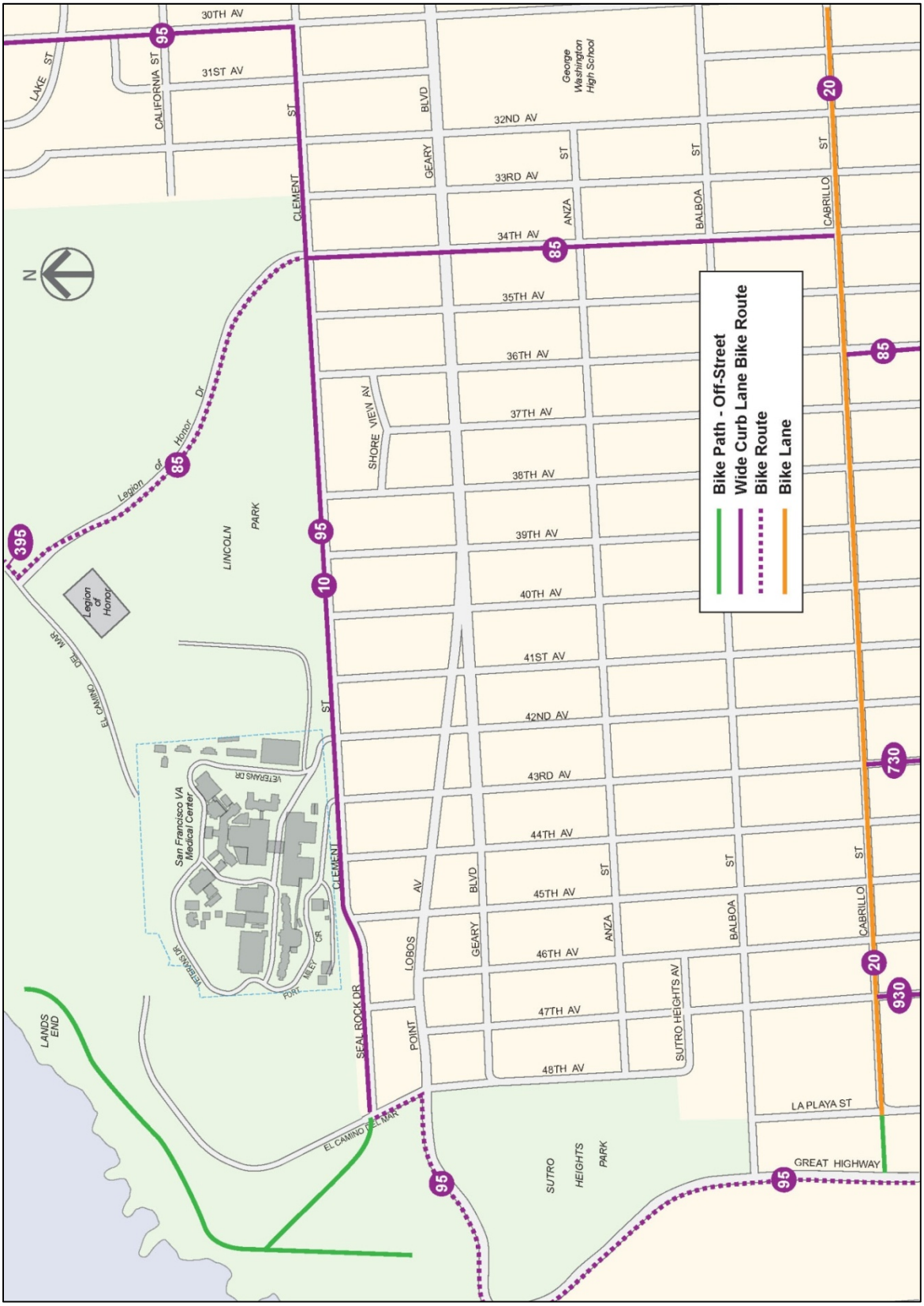
Route 10 is an east-west Class II/III bikeway that runs on Clement Street between Camino del Mar and 30th Street and turns onto Lake Street/Clay Street/Broadway Street to The Embarcadero. In the vicinity of the existing Fort Miley Campus, Route 10 is a Class III facility that overlaps with Route 95 on Clement Street.

Route 85 is a north-south Class III bikeway that runs between the California Palace of the Legion of Honor and Daly City via 34th Avenue and Lake Merced Boulevard. In the vicinity of the existing SFVAMC Fort Miley Campus, Route 85 runs along 34th Avenue and Legion of Honor Drive and connects Route 395, Route 95, and Route 10.

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 existing SFVAMC Fort Miley Campus, 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 between Clement Street and 30th Avenue.

Route 395 is an east-west Class III bikeway that runs on El Camino del Mar between 34th Avenue and Sea Cliff Avenue. East of the existing SFVAMC Fort Miley Campus, Route 395 connects 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.



Source: AECOM, 2012

Figure 3.13-6: Bicycle Network—Existing Conditions

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

Mission Bay Area

Within the Mission Bay area, bicycle lanes are provided along Terry A. Francois Street, 16th Street, Howard Street, Folsom Street, The Embarcadero, Seventh Street, Eighth Street, and 11th Street. Bicycle routes are provided along Second Street, Fifth Street, and Townsend Street. Howard Street operates as one-way couplet with Folsom Street operating in the eastbound direction and Howard Street operating in the westbound direction. There is generally a low to moderate level of bicycle activity in the area.

Loading

Existing SFVAMC Fort Miley Campus

Medical, building, office, and food supplies are delivered to the existing SFVAMC Fort Miley Campus on a daily basis. Delivery vehicles access the site via the 42nd Avenue/Clement Street intersection, where they use Fort Miley Circle and Veterans Drive to directly access individual building delivery bays. There are currently 11 loading bays on-campus, distributed as follows among on-site structures:

- Building 7—one bay
- Building 203—four bays
- Building 6—one bay
- Building 12—three bays
- Building 208—two bays

Mission Bay Area

Loading facilities were not identified for the Mission Bay area because a specific site for SFVAMC facilities has not been identified.[4]

Site Access and Circulation

Existing SFVAMC Fort Miley Campus

Access to the existing SFVAMC Fort Miley Campus is provided from 42nd Avenue and 43rd Avenue onto Veterans Drive, which provides access to all Campus buildings and all parking lots. The two internal roadways—Fort Miley Circle and Veterans Drive—provide access throughout the Campus. Existing traffic patterns indicate

[4] Loading facilities were not identified in the Mission Bay area because of the uncertainty about where SFVAMC facilities might be relocated to within this approximately 2.5-square-mile area.

that a majority of vehicles enter from 42nd Avenue/Clement Street and exit from 43rd Avenue/Clement Street. Emergency vehicle access to the Campus is currently provided via the 42nd Avenue entrance.

Mission Bay Area

Specific access and circulation points were not identified for the Mission Bay area because a specific site for SFVAMC facilities has not been identified.[5]

Parking

Existing SFVAMC Fort Miley Campus

On-street parking in the vicinity of the existing SFVAMC Fort Miley Campus generally consists of unmetered parallel parking. Existing on-street parking conditions were qualitatively assessed by field observations conducted during the weekday PM peak period. Based on the field observations, it was determined 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 on Clement Street, 34th Avenue, 42nd Avenue, 43rd Avenue, and Point Lobos Avenue.

Two parking structures (Building 209 and Building 212) and 10 surface parking lots (Lot B through Lot L) are provided within the existing SFVAMC Fort Miley Campus; these facilities are illustrated in Figure 3.13-7. Patients and visitors currently park in Lots B and H, which are accessed from both 42nd Avenue and 43rd Avenue. Based on field observations, it was determined that these facilities were well utilized during the PM peak period, and occupancies of around 80 percent were observed. The existing parking supply within the existing SFVAMC Fort Miley Campus is provided in Table 3.13-4.

Mission Bay Area

On-street parking, parking lots, and parking structures exist throughout the Mission Bay area.[6]

3.13.2 Regulatory Framework

There are no applicable federal standards relating to transportation and parking.

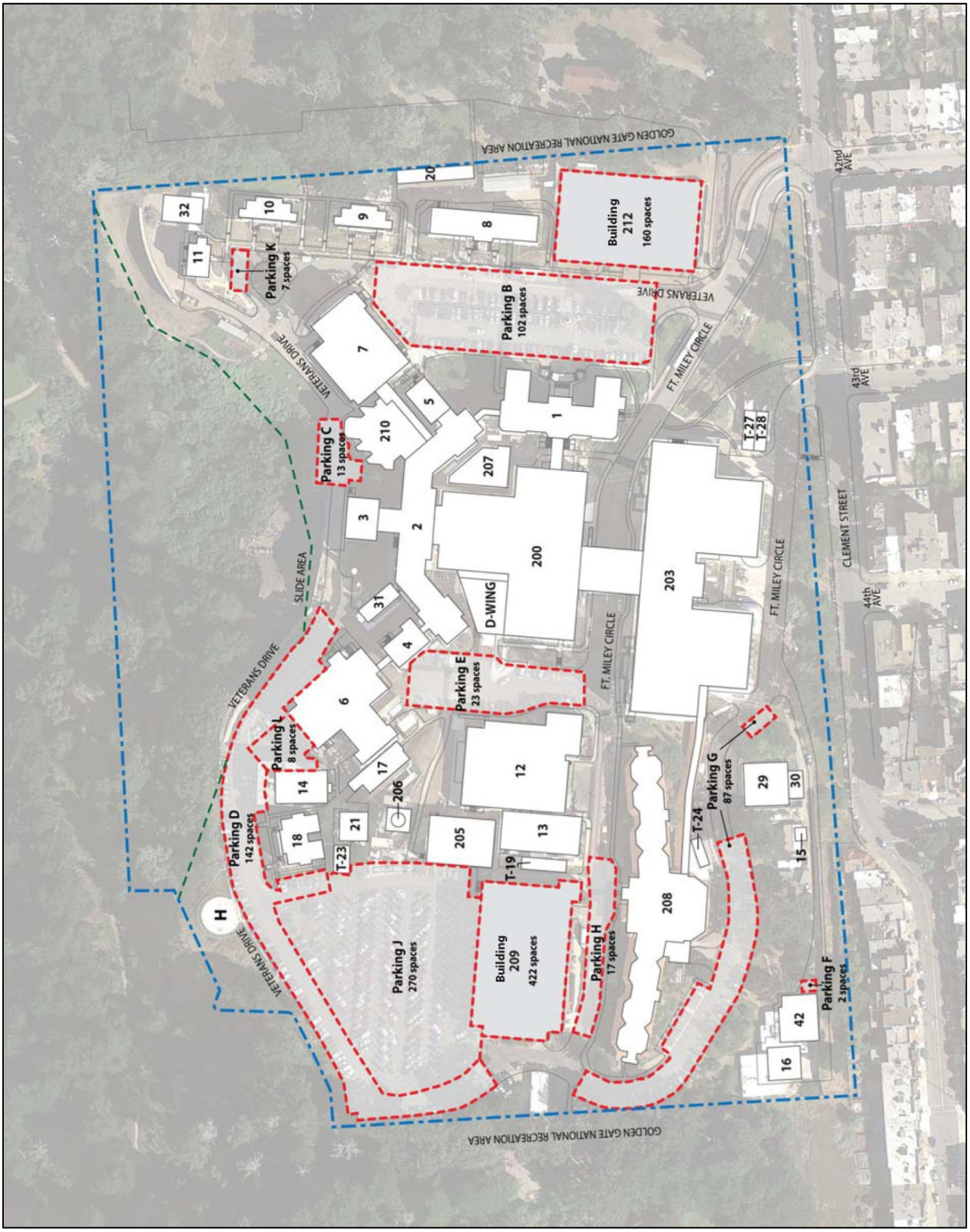
3.13.3 Environmental Consequences

Significance Criteria

A NEPA evaluation must consider the context and intensity of the environmental effects that would be caused by, or result from, the EIS Alternatives. There are no standard federal policies for assessment of project-level transportation, transit, pedestrian, bicycle, loading, and parking impacts. Therefore, after a review of guidance

[5] Specific access and circulation points were not identified in the Mission Bay area because of the uncertainty about where SFVAMC facilities might be relocated to within this approximately 2.5-square-mile area.

[6] Specific parking amenities were not identified in the Mission Bay area because of the uncertainty about where SFVAMC facilities might be relocated to within this approximately 3-square-mile area.



Source: VA, 2012

Figure 3.13-7: Parking Facilities—Existing Conditions

Table 3.13-4: 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: VA, 2012; AECOM, 2012

from other federal transportation agencies such as the Federal Highway Administration and the Federal Transit Administration, the thresholds used by the jurisdiction closest to the project site, the City and County of San Francisco, were used for this analysis.

An alternative would be considered to result in an adverse operational impact related to transportation and parking if any of the following conditions related to signalized or unsignalized intersections would occur:

- *Signalized intersections*—Project-related traffic would cause the intersection LOS to deteriorate from LOS D or better to LOS E or LOS F, or from LOS E to LOS F. The project may result in adverse impacts at intersections that operate at LOS E or LOS F under existing conditions, depending on the magnitude of the project's contribution to the worsening of the average delay per vehicle. In addition, the project would have an adverse impact if it would cause major traffic hazards or contribute considerably to cumulative traffic increases that would cause deterioration in LOS to unacceptable levels.

- *Unsignalized intersections*—Project-related traffic would cause the intersection LOS 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 would be met. In addition, the project would have an adverse impact if it would cause major traffic hazards or contribute considerably to cumulative traffic increases that would cause deterioration in LOS to unacceptable levels.

In addition, an alternative would have an adverse effect on the environment if any of the following additional conditions would occur:

- The project alternative 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 alternative would have an adverse effect on the transit provider if project-related transit trips would cause the capacity utilization standard to be exceeded during the peak hour.
- The project alternative 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 alternative would create potentially hazardous conditions for bicyclists or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas.
- The project alternative 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 alternative would result in inadequate emergency access.

Construction-related impacts generally would not be considered adverse, because of their temporary and limited duration, but they are included in the analysis.

Assessment Methods

The following scenarios were evaluated to identify the potential transportation impacts of the proposed LRDP at the SFVAMC Fort Miley Campus:

- Existing Conditions
- 2015 Near-Term Conditions:
  - Without Project (Alternative 3)
  - Plus Project Alternative 1 Conditions (Phase 1)
  - Plus Project Alternative 2 Conditions (Phase 1)
- 2023 Long-Term Conditions:
  - Without Project (Alternative 3)
  - Plus Project Alternative 1 Conditions (Phases 1 and 2)
  - Plus Project Alternative 2 Conditions (Phases 1 and 2)

- 2035 Cumulative Conditions:
  - Without Project (Alternative 3)
  - Plus Project Alternative 1 Conditions (Phases 1 and 2)
  - Plus Project Alternative 2 Conditions (Phases 1 and 2)

The 2035 Cumulative Conditions are discussed in Section 4.3.13 in Chapter 4.0, "Cumulative Impacts."

Intersections: LOS was analyzed at five study intersections, which represent locations where the proposed LRDP could potentially affect operations for each of the scenarios identified above. The location of each study intersection is illustrated in Figure 3.13-2. At all five intersections, the weekday PM peak hour was analyzed (defined as the peak hour for the period of 4–6 p.m.). The study intersections are as follows:

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

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

Pedestrians: Pedestrian conditions throughout the study area were assessed qualitatively, 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 on pedestrian conditions as a result of project-generated activities, including project-generated traffic, were also assessed qualitatively.

Bicycles: Bicycle conditions throughout the study area were assessed qualitatively as they relate to the study area—including safety and right-of-way issues—and existing and potential new bicycle facilities were noted. Impacts on bicycle conditions as a result of project-generated activities, including project-generated traffic and driveway movements, were also assessed qualitatively. Absent NEPA requirements for bicycle parking, San Francisco Planning Code (Planning Code) requirements for bicycle parking, showers, and lockers (if applicable) were identified and compared to the proposed supply.

Parking: Parking supply and occupancy for on- and off-street public parking facilities in the study area were obtained via field observations. Absent NEPA requirements for parking supply, the proposed supply of parking was evaluated against Planning Code requirements and the estimated peak parking demand generated by each alternative. The impacts of the proposed parking arrangement—including driveway placement, design, and control—on transit and pedestrian conditions were also assessed qualitatively.

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. Absent NEPA requirements for loading, Planning Code requirements for loading spaces were identified and compared to the proposed supply. In addition, discussion regarding truck access to the loading docks and internal loading circulation was provided. The impacts of loading activities associated with each alternative—including driveway placement, design, and control—on transit and pedestrian conditions were also assessed qualitatively.

Project Travel Demand Methodology

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

Trip Generation

The person-trip generation for each alternative 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 information contained in the Institute of Transportation Engineers' (ITE's) *Trip Generation*, because the City's *Transportation Impact Analysis Guidelines for Environmental Review* (*SF Guidelines*) (CCSF Planning 2002) do not contain rates for uses comparable to those of the Proposed Action. However, it should be noted that modal split information, inbound/outbound trip details, and work/nonwork trip details are all taken from the *SF Guidelines*, as it provides data specific to the study area.

ITE trip generation rates were developed by summarizing numerous surveys conducted for various land uses in suburban areas throughout the United States. Specifically, areas were selected for trip analysis whose trip characteristics tended to be fully by automobile. Thus, ITE rates account for vehicle-trips only. Because the standard methodology outlined in the *SF Guidelines* examines trips made by all modes of travel, the ITE trip generation rates (vehicle-trips) were adjusted for this analysis using an appropriate average vehicle occupancy rate to determine total "person trips" by a given land use. Because ITE survey data were taken at various locations throughout the country, the national average vehicle occupancy rate was used. Table 3.13-5 presents the trip generation rates used for the analysis of the alternatives.

Table 3.13-5: Person-Trip Generation Rates

Land Use (ITE Land Use Code)	ITE Trip Generation Rates		Adjusted for Person-Trips[1]	
	Weekday Daily	PM Peak Hour	Weekday Daily	PM Peak Hour
Hospital (610)	16.50 trips/KSF	1.14 trips/KSF	17.82 trips/KSF	1.23 trips/KSF
Office (710)	11.01 trips/KSF	1.49 trips/KSF	11.89 trips/KSF	1.61 trips/KSF
Research and Development (760)	8.11 trips/KSF	1.07 trips/KSF	8.76 trips/KSF	1.16 trips/KSF
Motel (320)	5.63 trips/room	0.47 trip/room	6.08 trips/room	0.51 trip/room

Notes: All rates are presented per 1,000 square feet of floor area.

[1] ITE trip generation rates are adjusted using the national average vehicle occupancy rate 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).

Source: CCSF Planning, 2002; ITE, 2010; 2000 U.S. Census

Mode Split

Project-generated person-trips were assigned to travel modes to determine the number of auto, transit, and "other" trips, where "other" includes walk, bicycle, motorcycle, taxi, and additional modes. It should be noted that mode split information for the proposed uses is based on the *SF Guidelines*.

Trip Distribution/Assignment

The trips generated by the proposed LRDP would be 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*. For this analysis, it has been assumed that the trip distribution for the proposed LRDP hospital and research uses would be similar to the trip distribution for office uses. Table 3.13-6 presents the trip distribution percentages used for the analysis of each of the alternatives.

Table 3.13-6: Trip Distribution Patterns

San Francisco Trip Origin/Destination	Trip Type	
	Work	**Non-work**
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: CCSF Planning, 2002

Parking Demand

Like trip generation calculations, the proposed LRDP's parking demand was calculated using rates provided from ITE's *Parking Generation, 3rd Edition*. ITE parking generation rates were developed by summarizing numerous surveys conducted from various uses.

Loading Demand

The proposed LRDP's loading demand was calculated using information contained in the *SF Guidelines*, which provides daily, average-hour, and peak-hour loading demand for various land uses.

Project Travel Demand

Trip Generation

Under both Alternative 1 and Alternative 2, nearly 47,950 square feet of net new construction (the difference between demolished buildings and new construction) is proposed within the existing SFVAMC Fort Miley Campus. This new construction is anticipated to generate an estimated 555 person-trips on a weekday daily basis and 57 person-trips during the weekday PM peak hour. Table 3.13-7 summarizes the person-trip generation for the proposed uses under 2015 Near-Term (Phase 1) Conditions for Alternative 1 and Alternative 2.[7]

Table 3.13-7: Person-Trip Generation Service—2015 Near-Term Conditions for Alternative 1 and Alternative 2

Phase/Proposed Action	Corresponding ITE Land Use	Net New Square Feet	Person-Trips	
			Daily	PM Peak
Near-Term (Phase 1) Projects				
1.1 Building 41 Research	R&D Center (760)	12,500	109	14
1.3 Building 22 Hoptel Addition	Motel (320)	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**

Notes:
ITE = Institute of Transportation Engineers (refers to ITE *Parking Generation*)
Motel ITE Land Use Code was utilized for the proposed hoptel use.
Sources: SFVAMC, 2012; AECOM, 2012

Table 3.13-8 and Table 3.13-9 summarize the person-trip generation for the proposed uses under 2023 Long-Term (Phase 2) Conditions for Alternative 1 and Alternative 2. Under Alternative 1, generation of an estimated 5,363 person-trips on a weekday daily basis is anticipated, and 533 person-trips would be generated during the weekday PM peak hour. Under Alternative 2, an estimated 680 person-trips would be generated on a weekday daily basis, and 84 person-trips would be generated from the existing SFVAMC Fort Miley Campus during the weekday PM peak hour. In addition, under Alternative 2 the proposed 350,000 square feet of new space in the Mission Bay area would generate an estimated 7,605 person-trips on a weekday daily basis, and 792 person-trips would be generated during the weekday PM peak hour. In total, under 2023 Long-Term Conditions for Alternative 2, the LRDP would generate an estimate of 8,285 person-trips on a weekday daily basis and 876 person-trips during the weekday PM peak hour.

[7] The person-trip generation for the proposed uses under 2020 Near-Term Alternatives 1 and 2 is a conservative estimate, because it does not take into account the existing space deficiency at the SFVAMC Fort Miley Campus.

Table 3.13-8: Person-Trip Generation—2023 Long-Term Conditions for Alternative 1

Phase/Proposed Action	Corresponding ITE Land Use	Net New Square Feet	Person-Trips	
Long-Term (Phase 2) Projects				
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
Total		**189,700**	**5,363**	**533**

Sources: *SFVAMC*, 2012; AECOM, 2012

Table 3.13-9: Person-Trip Generation—2023 Long-Term Alternative 2

Phase/Proposed Action	Corresponding ITE Land Use	Net-New SF	Person-Trips	
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
Total (Phase 2)		**419,700**	**8,285**	**876**

Note: ITE = Institute of Transportation Engineers (refers to ITE *Parking Generation*)
Sources: SFVAMC, 2012; AECOM, 2012

Mode Split

Table 3.13-10 presents the trip generation by mode for Alternative 1. As shown, Alternative 1 is expected to generate 20 vehicle-trips from the existing SFVAMC Fort Miley Campus under 2015 Near-Term plus Project Conditions and 191 vehicle-trips under 2023 Long-Term plus Project Conditions during the weekday PM peak hour.

Table 3.13-10: Trip Generation by Mode—Alternative 1

Direction	Person-Trips					Vehicle-Trips
	Auto	Transit	Walk	Other[1]	Total	
2015 Near-Term (Phase 1) Projects						
Inbound	7	3	2	1	13	4
Outbound	23	13	6	2	43	16
Total	**30**	**16**	**8**	**2**	**57**	**20**
2023 Long-Term (Phase 2) Projects[2]						
Inbound	134	64	36	14	247	76
Outbound	184	94	48	16	342	115
Total	**318**	**158**	**83**	**30**	**589**	**191**

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

Table 3.13-11 presents the trip generation by mode under Alternative 2. As shown, Alternative 2 is expected to generate 20 vehicle-trips from the existing SFVAMC Fort Miley Campus under 2015 Near-Term plus Project Conditions during the weekday PM peak hour. Under 2023 Long-Term plus Project Conditions, Alternative 2 would generate 52 vehicle-trips from the existing Campus and 263 vehicle-trips from the potential new SFVAMC Mission Bay Campus during the weekday PM peak hour.

Table 3.13-11: Trip Generation by Mode—Alternative 2

Direction	Person-Trips					Vehicle-Trips
	Auto	Transit	Walk	Other[1]	Total	
2015 Near-Term (Phase 2) Projects (Existing SFVAMC Fort Miley Campus)						
Inbound	7	3	2	1	13	4
Outbound	23	13	6	2	43	16
Total	**30**	**16**	**8**	**2**	**57**	**20**
2023 Long-Term (Phase 2) Projects (Existing SFVAMC Fort Miley Campus)[2]						
Inbound	13	6	3	1	23	7
Outbound	62	36	15	4	118	46
Subtotal	***75***	***42***	***19***	***5***	***141***	***52***
Potential New 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**

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

Parking Demand

Table 3.13-12 presents the weekday parking demand for Alternative 1. Overall, Alternative 1 would result in a peak-period parking demand at the existing SFVAMC Fort Miley Campus of an estimated 128 spaces under 2015 Near-Term Conditions and 730 spaces under 2023 Long-Term Conditions. Table 3.13-13 presents the weekday parking demand for Alternative 2. Overall, Alternative 2 is anticipated to result in a peak-period parking demand of an estimated 128 spaces under 2015 Near-Term Conditions. Under 2023 Long-Term Conditions, Alternative 2 is anticipated to result in a peak-period parking demand of an estimated 306 spaces at the existing SFVAMC Fort Miley Campus, and 1,010 spaces at the potential new SFVAMC Mission Bay Campus.

Table 3.13-12: Parking Demand—Alternative 1

Scenario	Hospital Use[1]	Office Use[2]	Research & Development[2]	Motel Use[3]	Medical-Dental Office Use[4]	Total
2015 Near-Term (Phase 1)	59	32	30	**7**	**0**	**128**
2023 Long-Term (Phase 2)	82	49	168	**7**	**424**	**730**

Notes: ITE = Institute of Transportation Engineers (refers to ITE *Parking Generation*); sf = square feet
[1] ITE Land Use Code 630—Clinic: Peak Period Equation: T=(X)(4.43), where X=1,000 sf
[2] ITE Land Use Code 70—Office: Peak Period Equation: T=(X)(2.4), where X=1,000 sf
[3] ITE Land Use Code 320—Motel: Peak Period Equation: T=(X)(0.9), where X=rooms
[4] ITE Land Use Code 730—Medical-Dental Office Building: Peak Period Equation: T=(X)(3.53), where X=1,000 sf
Source: AECOM, 2012

Table 3.13-13: Parking Demand—Alternative 2

Scenario		Hospital Use[1]	Office Use[2]	Research & Development[2]	Motel Use[3]	Medical-Dental Office Use[4]	Total
2015 Near-Term (Phase 1)		59	32	30	**7**	**0**	**128**
2023 Long-Term (Phase 2)	*Fort Miley Campus*	*82*	*49*	*168*	***7***	***0***	***306***
	Mission Bay Campus	*0*	*0*	*480*	***0***	***530***	***1,010***
	Total	**82**	**49**	**648**	**7**	**530**	**1,316**

Notes: ITE = Institute of Transportation Engineers (refers to ITE *Parking Generation*); sf = square feet
[1] ITE Land Use Code 630—Clinic: Peak Period Equation: T=(X)(4.43), where X=1,000 sf
[2] ITE Land Use Code 70—Office: Peak Period Equation: T=(X)(2.4), where X=1,000 sf
[3] ITE Land Use Code 320—Motel: Peak Period Equation: T=(X)(0.9), where X=rooms
[4] ITE Land Use Code 730—Medical-Dental Office Building: Peak Period Equation: T=(X)(3.53), where X=1,000 sf
Source: AECOM, 2012

Background Growth

Background growth in travel demand 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 is 0.5 percent per year for all the study intersections. Applying this level of growth is consistent with previous studies conducted in the vicinity of the existing SFVAMC Fort Miley Campus, 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 Campus is near buildout conditions. This methodology was used in both near-term and long-term assumptions.

Muni ridership projections for future-year scenarios were based primarily on growth factors obtained from the transit ridership assignment output from the San Francisco County Transportation Authority Travel Demand Model. The model output provides line-by-line and stop-by-stop boardings and alighting for each Muni line, called "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 to Muni service proposed by the TEP for the vicinity of the SFVAMC Fort Miley Campus were also incorporated into the capacity analysis.

The 2015 Near-Term Condition evaluated conditions in the 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 San Francisco and the region.

Transportation Network Modifications

Also included in the 2015 Near-Term Condition analyses are changes to the transportation network, including those associated with the 2009 *San Francisco Bicycle Plan* and SFMTA's TEP. The 2009 *San Francisco Bicycle Plan* outlines a package of near-term improvements, including the following in the vicinity of the existing SFVAMC Fort Miley Campus:

- Bike lanes (Route 95) along Great Highway and Point Lobos Avenue between El Camino Del Mar and Cabrillo Street
- Minor improvements along Clement Street (Route 10/95) between 30th Avenue and 34th Avenue and 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
- 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 existing SFVAMC Fort Miley Campus, the TEP proposes to increase frequency of the 38L-Geary Limited.

2023 Long-Term Effects Methods and Assumptions

Like the 2015 Near-Term analysis, the 2023 Long-Term Condition assumes a 0.5 percent per year growth rate for background traffic for all study intersections. Muni ridership growth was calculated using the same methodology discussed for 2015 Near-Term background growth above.

Transportation Network Modifications

The same changes to the transportation network assumed under the 2015 Near-Term Condition are assumed under the 2023 Long-Term Condition analyses

Alternative 1: SFVAMC Fort Miley Campus Buildout Alternative

Near-Term Projects

Construction

Traffic

It is anticipated that construction activities at the existing SFVAMC Fort Miley Campus for Alternative 1 near-term projects would take an estimated 32 months to complete. Construction activities would mainly be limited to between the hours of 7:30 a.m. and 6:00 p.m. and would abide by City of San Francisco noise ordinances, unless otherwise permitted. On occasion, construction may also take place beyond 7 p.m. for major concrete pours or drywall, and 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.

In general, construction activity can be expected to occur in five stages: demolition, excavation and below-grade concrete, above-grade structure, paving, and painting. Paving and painting activities associated with each phase would occur concurrently with the above-grade structure construction stage. Details about each construction stage are included in Appendix F of the transportation impact analysis.

Construction activities associated with Alternative 1 would 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). SFVAMC would follow SFMTA's *Regulations for Working in San Francisco Streets*, referred to as "The Blue Book,"[8] and would reimburse SFMTA for installation and removal of temporary striping and signage changes required during project construction. It should be noted that construction of certain components under Phases 1 and 2 of the LRDP (near-term and long-term projects) may occur concurrently. Throughout the construction period, construction-related trucks would flow into and out of the site. The impact of construction truck traffic would result in less capacity on local streets on a short-term, temporary basis, because of 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.

[8] The SFMTA Blue Book, 7th Edition, is available online through SFMTA (http://www.sfmta.com).

Construction staging would occur primarily within the confines of the existing SFVAMC Fort Miley Campus. With the SFVAMC Chief Engineer's approval, the concrete pump locations could be moved inside the footprint of the structure once the building would reach ground level. Temporary closures of sidewalk and on-street parking facilities may be required within the project site and along Clement Street. As a result, pedestrians would be required to use the other internal sidewalks within the site and motorists would 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 along Clement Street would need to be closed or relocated during the construction period, because most of the construction activity would occur within the SFVAMC Fort Miley Campus. However, because the route of Muni service is proposed to enter and exit via 42nd Avenue and stop at the Patient Welcome Center drop-off circle, temporary relocation of the Muni stop may be required during construction of the Patient Welcome Center drop-off circle and reconstruction of the sidewalk. The relocation of the bus stop would be coordinated with Muni's Street Operations and Special Events Office. In addition, the construction contractor would coordinate with Muni's Street Operations and Special Events Office before construction to coordinate construction activities and reduce any impacts on transit operations.

The majority of construction activity would be focused within the existing SFVAMC Fort Miley Campus. Clement Street, including the sidewalk and bus stop along the Campus boundary, would be relatively unaffected by Campus construction. Any temporary sidewalk or traffic lane closures along Clement Street would be coordinated with the City to minimize impacts on traffic. In general, lane and sidewalk closures are subject to review and approval by the City's Transportation Advisory Staff Committee, which consists of representatives of City departments including SFMTA; the Department of Public Works; the Fire, Planning, Police, and Public Health Departments; the Port Commission; and the Taxi Commission.

Construction traffic associated with Alternative 1 near-term projects—both construction truck traffic and additional vehicular traffic from construction workers—would not substantially affect vehicular, pedestrian, and bicycle circulation. Overall, construction-related transportation impacts would be temporary and minor.

Parking

Construction workers who drive to the site would generate temporary demand for parking. Construction workers would likely park in the existing SFVAMC Fort Miley Campus's unrestricted on-street parking spaces, in the Campus's existing off-street facilities, or on-site at the parking garage and parking lots as they are completed . Parking demand generated by construction workers' personal vehicles is expected to be accommodated by existing parking facilities on the existing Campus. However, should on-site parking be unavailable, parking demand generated by construction workers could be accommodated through the on-street parking supply in the vicinity of the Campus, especially along Clement Street and Point Lobos Avenue. Overall, the project's construction-related parking demand would be short term and temporary, and the impact would be minor.

Operation

Traffic

Implementation of Alternative 1 near-term projects would result in an increase in vehicle trips to and from the existing SFVAMC Fort Miley Campus. Growth in traffic as a result of planned development both within and

outside of the study area was used to develop 2015 Near-Term traffic volumes and were then compared against traffic conditions with the addition of Alternative 1 traffic volumes. The resulting 2015 Near-Term plus Alternative 1 Conditions traffic volumes at the study intersections are illustrated in Figure 3.13-8. The LOS results for the study intersections are summarized in Table 3.13-14.

As shown in Table 3.13-14, under 2015 Near-Term plus Alternative 1 Conditions, all five study intersections are projected to operate at acceptable conditions (LOS D or better) under the weekday PM peak hours. Therefore, the impact of Alternative 1 near-term projects on local roadway volumes in the vicinity of the existing SFVAMC Fort Miley Campus would be minor.

Transit

Under Alternative 1, the Fort Miley Circle loop currently used by the 38-Geary bus line 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 for the south side of the new drop-off circle.

Alternative 1 would generate approximately 16 transit trips (of which three would be toward the existing SFVAMC Fort Miley Campus and 13 would be away from the Campus) during the weekday PM peak hour (Table 3.13-10). Transit trips to and from the Campus would use the nearby Muni bus lines for local trips, as well as for regional trips (via transfers).

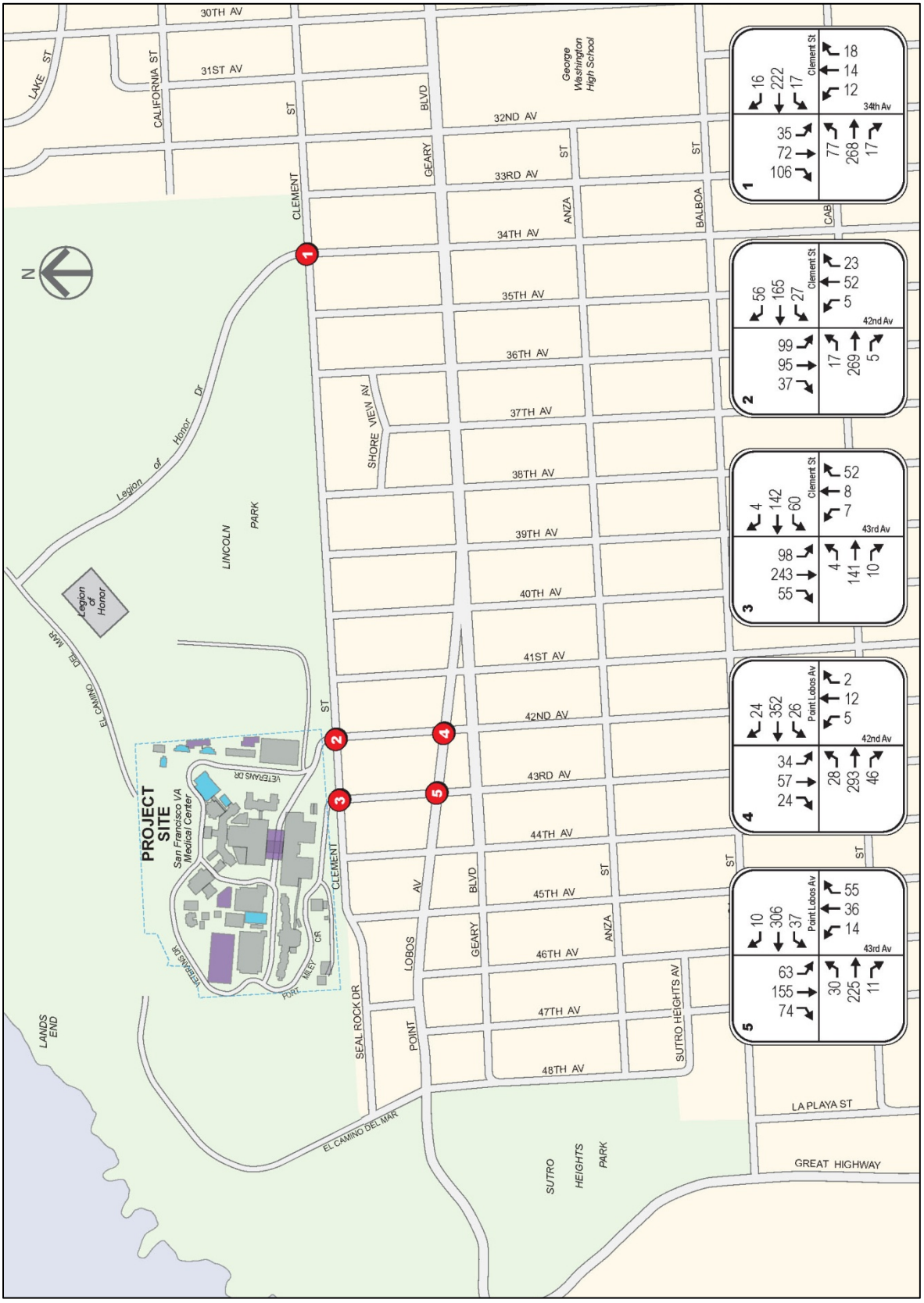
Muni ridership under 2015 Near-Term Conditions are provided in Table 3.13-15. As Muni defines trips with respect to downtown San Francisco, the project's 13 transit trips away from the existing SFVAMC Fort Miley Campus in the weekday PM peak hour would correspond to the "inbound" direction with respect to downtown, and the project's three trips toward the Campus would correspond to the "outbound" direction under Alternative 1.

Based on the ridership totals presented, sufficient capacity would be available for the transit demand of Alternative 1 in the "inbound" direction for both the 38-Geary and 38L-Geary Limited lines associated with the implementation of Alternative 1 near-term projects. Specifically, the 38-Geary line can accommodate as many as 177 additional riders before reaching its capacity utilization threshold, and the 38L-Geary Limited line can accommodate as many as 403 additional riders before reaching its capacity utilization threshold. Thus, the 13 project-related transit trips away from the existing SFVAMC Fort Miley Campus could be accommodated under Alternative 1.

Although the 38AX-Geary A Express line would approach the 85 percent capacity in the "outbound" direction, it would still be able to accommodate an additional 13 riders, which still exceeds the estimated three transit trips to the SFVAMC Fort Miley Campus during the weekday PM peak hour. Given that capacity is available on parallel bus lines (38-Geary and 38L-Geary), the proposed LRDP would not result in an adverse impact under Alternative 1. The impact of Alternative 1 near-term projects on transit operations would be minor.

Pedestrian

Alternative 1 near-term projects would involve improving sidewalks and walkways for pedestrians to provide improved connectivity. Pedestrian trips generated by Alternative 1 would include walk trips to and from the



Source: AECOM, 2012

Figure 3.13-8: Intersection Traffic Volumes—2015 Near-Term plus Project Alternative 1 and 2 Conditions

Table 3.13-14: Intersection Levels of Service—2015 Near-Term plus Alternative 1/Alternative 2 Conditions, Weekday PM Peak Hour

	Intersection	Control Type	2015 Near-Term Conditions		2015 Near-Term plus Project Alternative 1/ Alternative 2 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

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

Table 3.13-15: 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: AECOM, 2012

existing SFVAMC Fort Miley Campus, plus walk trips to and from transit lines. Overall, Alternative 1 would add approximately 24 pedestrian trips (about eight walk trips and 16 transit trips) to the adjacent sidewalks during the weekday PM peak hour.

The new pedestrian trips generated under Alternative 1 could be accommodated on the nearby sidewalks and would not adversely affect pedestrians along the nearby sidewalks and crosswalks. The proposed LRDP under Alternative 1would not conflict with existing pedestrian facilities or propose design features hazardous to pedestrians. Therefore, implementing Alternative 1 would not result in adverse impacts on pedestrian conditions.

All pedestrian traffic entering and exiting the parking lot would utilize the crosswalks at 42nd Avenue/Clement Street and 43rd Avenue/Clement Street. However, given the relatively low volume of pedestrians in the vicinity of the SFVAMC Fort Miley Campus, few conflicts between project-related traffic and pedestrians are expected to occur. Pedestrian impacts under Alternative 1 would be minor.

Bicycle

Alternative 1 would generate new bicycle trips. A portion of the two "other" trips presented in Table 3.13-10 would be bicycle trips. With the current bicycle and traffic volumes on the adjacent streets, bicycle travel generally occurs without major impedances or safety problems. The expected increase in bicycle trips that would occur with implementation of Alternative 1 near-term projects in the study area would not be substantial enough to affect overall bicycle circulation in the area or the operations of adjacent bicycle facilities. Thus, no adverse bicycle impacts are expected as a result of Alternative 1 near-term projects. Also, the addition of project-related vehicular traffic would also not result in any adverse impacts on bicycle conditions or the availability of bicycle lanes in the project vicinity, especially along Clement Street. Bicycle impacts under Alternative 1 would be minor.

Parking

Typically, the assessment of parking impacts compares the proposed parking supply against the supply required by the Planning Code and the anticipated peak parking demands. Absent NEPA thresholds or federal parking standards, Planning Code requirements were used to calculate parking requirements.

Parking requirements for Alternative 1 under the 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
- *Motel use:* One space for each guest unit, plus one for the manager's dwelling unit, if any[9]

It is assumed that the research and development land use would be classified as office use for the Planning Code requirements. Based on these requirements, 78 parking spaces (44 spaces for the hospital use, 13 for the office use, 13 for the research and development use, and 8 spaces for the hoptel use) would be required under Alternative 1.

Alternative 1 would result in a parking demand of an estimated 128 spaces during the weekday peak period (Table 3.13-12). As part of Alternative 1 near-term projects, 214 existing parking spaces would be eliminated and replaced by the construction of a new 477-space parking structure (Building 211), for a net addition of 263 spaces by the year 2015. This total would meet City guidelines, which indicate that 78 spaces should be provided per the Planning Code, and would exceed the weekday peak-period demand. Adequate parking would be provided under Alternative 1. This impact would be minor.

[9] Motel use was utilized for the proposed hoptel use.

Loading

Minimal impacts on delivery vehicle access are expected as a result of implementation of Alternative 1 near-term projects. Minor modifications in on-site delivery routes are expected with the conversion of Fort Miley Circle into a pedestrian promenade; however, the primary access points along Clement Street would remain the same.

Typically, the need for loading spaces is determined by comparing the anticipated square footage of a development against the supply required by the Planning Code. Absent NEPA thresholds or federal loading space standards, Planning Code requirements were used to calculate demand for loading spaces at the existing SFVAMC Fort Miley Campus. The Planning Code requirements for off-street loading spaces for office, hospital, motel, medical-dental office, and research and development uses are as follows:

- Less than 100,000 square feet of gross floor area—zero spaces
- 100,001–200,000 square feet of gross floor area—one space
- 200,001–500,000 square feet of gross floor area—two spaces
- More than 500,000 square feet of gross floor area—three spaces plus one space for each additional 400,000 square feet

Each of the buildings proposed under the near-term time frame 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 would be part of the Emergency Operations Center, would not be required to provide off-street loading spaces.) Therefore, a conservative approach to the calculation of Planning Code loading requirements has been taken. Instead of calculating requirements for each individual building, the total amounts of development for all proposed buildings have been combined. Because the total gross floor area for Alternative 1 near-term projects would be only 58,300 square feet, no loading spaces are required according to the Planning Code.

The loading demand would be adequately met via the existing 11 loading bays provided along Fort Miley Circle and Veterans Drive. No impact would occur.

Site Access and Circulation

Patients and visitors are expected to enter the existing SFVAMC Fort Miley Campus via 42nd Avenue and park in facilities on the east side of the site, which include Building 212 and Lot B. Employees are expected to enter the Campus via 43rd Avenue and park in facilities on the west side of the site, which include Building 209 and Building 211. The 43rd Avenue entrance would be designated for staff and service/delivery vehicles. Employees would enter the SFVAMC Fort Miley Campus via 43rd Avenue and be directed to parking facilities on the west side of the Campus (Lots I and J). Buses, taxis, and private vehicles would utilize the Patient Welcome Center drop-off circle to transport passengers to/from the Campus. SFVAMC provides adequate emergency vehicle access via the 43rd Avenue entrance, using Fort Miley Circle to access the Ambulatory Care Center as it would allow for adequate maneuvering space for larger vehicles such as ambulances and fire trucks and would not result in adverse impacts on emergency access. Impacts on site access and circulation under Alternative 1 would be minor.

Long-Term Projects

Construction

Traffic

Impacts associated with Alternative 1, Phase 2 (long-term projects) would be similar to those discussed above for Alternative 1, Phase 1 (near-term projects). Construction activities for Alternative 1 long-term projects are estimated 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). As under Alternative 1 near-term projects, SFVAMC would follow SFMTA's *Regulations for Working in San Francisco Streets*, referred to as "The Blue Book,"[10] and would reimburse SFMTA for installation and removal of temporary striping and signage changes required during project construction. Project-related construction traffic—both construction truck traffic and additional vehicular traffic from construction workers—would not substantially affect vehicular, pedestrian, and bicycle circulation. Overall, construction-related transportation impacts of Alternative 1 long-term projects would be short term and temporary and would be minor.

Parking

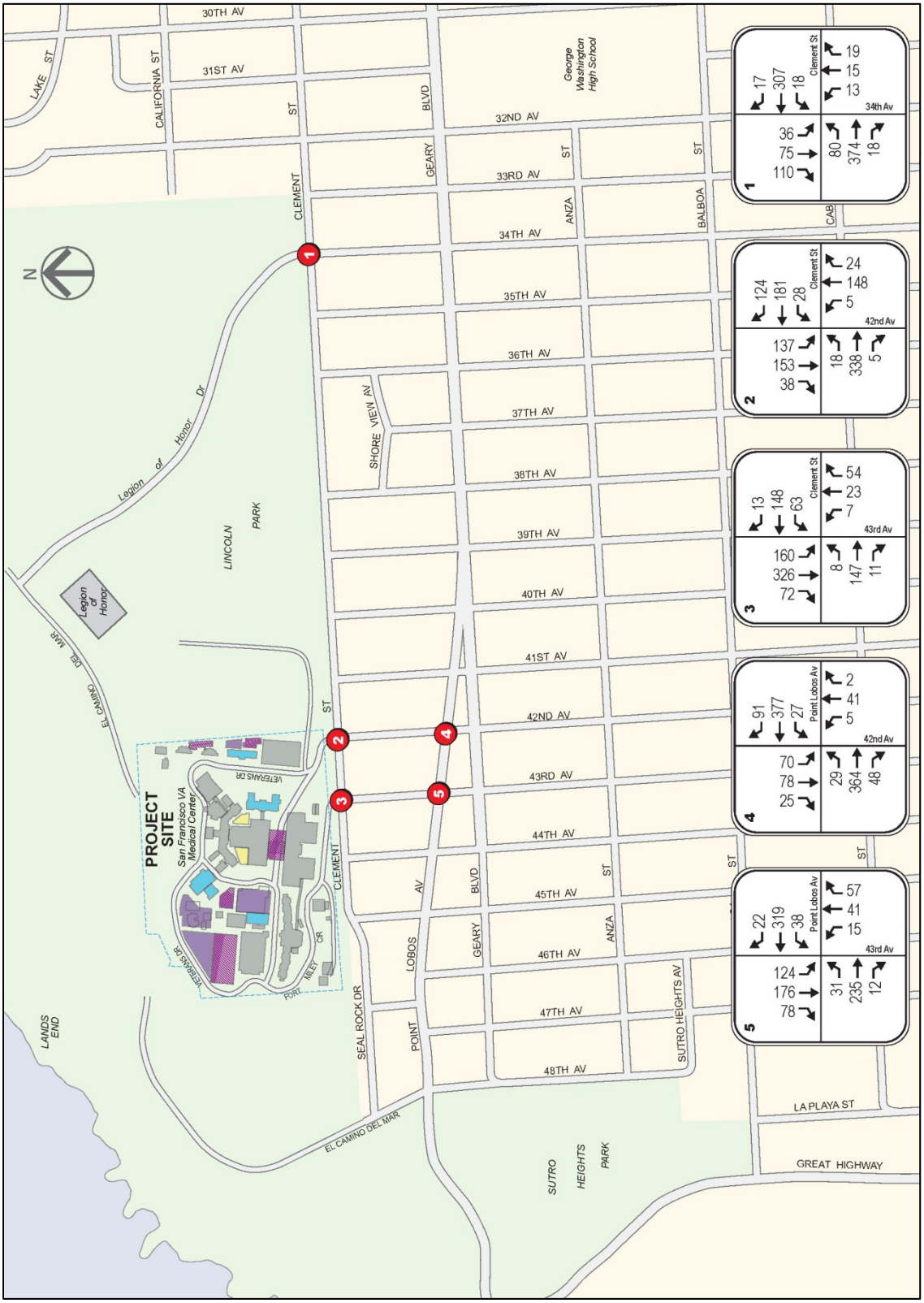
As under near-term conditions, parking demand generated by construction workers' personal vehicles for Alternative 1 long-term projects is expected to be accommodated by existing parking facilities within the existing SFVAMC Fort Miley Campus. Should on-site parking be limited, parking demand generated by construction workers could be accommodated through the on-street parking supply in the vicinity of the Campus. Overall, construction-related parking demand would be short term and temporary and impacts of Alternative 1 long-term projects would be minor.

Operation

Traffic

Implementation of Alternative 1 long-term projects would result in an increase in vehicle trips to and from the existing SFVAMC Fort Miley Campus. Growth in traffic as a result of planned development both within and outside of the study area was used to develop 2023 Long-Term plus Alternative 1 Conditions traffic volumes. Please note that Alternative 1 long-term conditions at the existing SFVAMC Fort Miley Campus account for the ongoing operation of Phase 1 from the near-term projects, plus planned development in the vicinity of the study area. As described previously, the 2023 Long-Term plus Alternative 1 conditions include Phases 1 and 2, and are subsequently referred to as long-term projects. The resulting 2023 Long-Term plus Project Alternative 1 Conditions traffic volumes at the study intersections are illustrated in Figure 3.13-9. The LOS results for the study intersections are summarized in Table 3.13-16.

[10] The SFMTA Blue Book, 7th Edition, is available on-line through SFMTA (www.sfmta.com)



Source: AECOM, 2012

Figure 3.13-9: Intersection Traffic Volumes—2023 Long-Term plus Alternative 1 Conditions

Table 3.13-16: Intersection Levels of Service—2023 Long-Term plus Alternative 1 Conditions, Weekday PM Peak Hour

	Intersection	Control Type	2035 Long-Term Conditions		2035 Long-Term plus 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	C	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

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

As shown in Table 3.13-16, under 2023 Long-Term plus Project Alternative 1 Conditions, all five study intersections are projected to operate at acceptable conditions (LOS D or better) under the weekday PM peak hours. As such, Alternative 1 would not be considered to have an adverse impact at this study intersection. The impacts of Alternative 1 long-term projects on local roadway conditions would be minor.

Transit

Alternative 1 long-term projects would generate approximately 158 transit trips (64 toward the existing SFVAMC Fort Miley Campus and 94 away from the Campus) during the weekday PM peak hour (Table 3.13-10). Please note that Alternative 1 long-term conditions at the SFVAMC Fort Miley Campus account for the ongoing operation of Phase 1 from the near-term projects, plus planned development in the vicinity of the study area. Transit trips to and from the Campus would use the nearby Muni bus lines for local trips, as well as for regional trips (via transfers).

Anticipated Muni ridership under 2023 Long-Term Conditions are provided in Table 3.13-17. As Muni defines trips with respect to downtown San Francisco, the 64 transit trips away from the existing SFVAMC Fort Miley Campus in the weekday PM peak hour would correspond to the “inbound” direction with respect to downtown, and the 94 trips toward the Campus would correspond to the “outbound” direction under the long-term projects associated with Alternative 1.

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 bus lines. Specifically, the 38-Geary bus line can accommodate as many as 113 additional riders before reaching its capacity utilization threshold, and the 38L-Geary Limited line can accommodate as many as 338 additional riders before reaching its capacity utilization threshold. Thus, the 94 transit trips away from the Campus associated with Alternative 1 long-term projects could be accommodated.

Table 3.13-17: Muni Service under 2023 Long-Term Conditions

Line	Direction	Existing Conditions			2023 Long-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%**

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

Although the 38AX-Geary A Express lines would operate over the 85 percent capacity utilization threshold in the "outbound" direction, sufficient capacity would be available on parallel bus lines (38-Geary and 38L-Geary) to handle the 64 new transit trips toward the existing SFVAMC Fort Miley Campus under Alternative 1 long-term projects. Thus, the LRDP would not be expected to have a substantial effect on transit operations under Alternative 1 long-term projects. Transit impacts of Alternative 1 long-term projects would be minor.

Pedestrian

Pedestrian trips generated by the operation of Alternative 1 long-term projects would include walk trips to and from the existing SFVAMC Fort Miley Campus, plus walk trips to and from transit lines. Overall, the long-term projects of Alternative 1 would add approximately 241 pedestrian trips (about 83 walk trips and 158 transit trips) to the adjacent sidewalks during the weekday PM peak hour. Please note that Alternative 1 long-term conditions at the SFVAMC Fort Miley Campus account for the ongoing operation of Phase 1 from the near-term projects, plus planned development in the vicinity of the study area. The new pedestrian trips generated by Alternative 1 long-term projects could be accommodated on the nearby sidewalks and would not adversely affect pedestrian traffic along nearby sidewalks and crosswalks. 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 Campus, few conflicts between project-related traffic and pedestrians are expected. Alternative 1 would not conflict with existing pedestrian facilities or propose design features that would be hazardous to pedestrians. Pedestrian impacts under Alternative 1 long-term projects would be minor.

Bicycle

Operation of Alternative 1 long-term projects would generate new bicycle trips. A portion of the 30 "other" trips presented in Table 3.13-10 would be bicycle trips. Please note that Alternative 1 long-term conditions at the SFVAMC Fort Miley Campus account for the ongoing operation of Phase 1 from the near-term projects, plus planned development in the vicinity of the study area. With the current bicycle and traffic volumes on the adjacent streets, bicycle travel generally occurs without major impedances or safety problems. Furthermore, the anticipated increase in bicycle trips within the study area under Alternative 1 would not be substantial enough to affect overall bicycle circulation in the area or the operations of adjacent bicycle facilities. Thus, no adverse impacts are expected as a result of Alternative 1 long-term projects. Also, the addition of project-generated vehicular traffic

would also not result in any adverse impacts on bicycle conditions in the vicinity of the existing Campus. Alternative 1 would not conflict with existing or planned bicycle facilities or propose design features that would be hazardous to bicycle operations. Bicycle impacts of Alternative 1 long-term projects would be minor.

Parking

Under 2023 Alternative 1 conditions, no additional parking facilities would be constructed within the existing SFVAMC Fort Miley Campus beyond the net addition of 263 spaces proposed under 2015 Near-Term conditions.

Alternative 1 under 2023 conditions would have a parking demand of an estimated 730 spaces during the weekday peak period (Table 3.13-12). In accordance with local guidance provided in the Planning Code, development of Alternative 1 long-term projects would necessitate the provision of 560 new spaces (462 spaces for the hospital use, 20 spaces for the office use, 70 spaces for the research and development use, and eight spaces for the hoptel use) to meet daily and peak demands. Therefore, the net addition of 263 spaces would not meet the parking demand of 730 spaces under 2023 Alternative 1 conditions. 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 with San Francisco's "Transit First" policy. Parking impacts of Alternative 1 long-term projects would be minor.

Loading

Minimal impacts on delivery vehicle access are expected as a result of the proposed LRDP. Minor modifications to truck routes within the SFVAMC Fort Miley Campus are expected with the conversion of a segment of Fort Miley Circle into a pedestrian promenade. As with the Alternative 1 near-term projects, most of the buildings proposed in the long-term time frame 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. Because the total gross floor area for the proposed LRDP in the long-term time frame is 305,600 square feet, two loading spaces would be required in the long-term time frame according to the Planning Code. Based on existing loading operations at the existing Campus, it is anticipated that this demand would be met via the existing 11 loading bays provided along Fort Miley Circle and Veterans Drive, therefore no impact would occur.

Site Access and Circulation

No major changes would be made to access points or the internal roadway network beyond those already discussed for Alternative 1 near-term projects. Therefore, site access and circulation would be similar to those described above for the near-term time frame. Overall, adequate site access and circulation and emergency vehicle access would be provided. Impacts of Alternative 1 long-term projects on site access and circulation would be minor.

Alternative 2: SFVAMC Campus Plus Mission Bay Campus Alternative

Near-Term Projects

Alternative 2 near-term projects (both construction and operation) would be the same as Alternative 1 near-term projects (see Tables 2-1 and 2-2 and Figures 2-1 and 2-2). Therefore, the impacts of Alternative 2 near-term projects for construction, traffic, transit, pedestrian, bicycle, parking, loading, and site access and circulation would be the same as the impacts of Alternative 1 near-term projects. These impacts would range in significance from no impact to minor.

Long-Term Projects

Alternative 2 long-term projects (both construction and operation) at the existing SFVAMC Fort Miley Campus would be the same as Alternative 1 long-term projects, except that the ambulatory care center would be located at the potential new SFVAMC Mission Bay Campus under Alternative 2 (see Tables 2-1 and 2-2 and Figures 2-1 and 2-2). Therefore, the impacts of Alternative 2 long-term projects at the existing Campus would be the same as or less than the impacts of Alternative 1 long-term projects. The impact discussion below focuses primarily on the impacts that may result from construction and operation of the ambulatory care center, research building, and associated parking structures at the potential new Campus, as proposed as part of Alternative 2, Phase 2.

As discussed in Chapter 2.0, buildout of the existing SFVAMC Fort Miley Campus is expected to be completed by 2023, while buildout of the potential new SFVAMC Mission Bay Campus is expected to be completed by 2027. For simplification, however, the potential new Campus is discussed qualitatively under 2023 Long-Term Alternative 2 Conditions. Because a specific location for the potential new Campus has yet to be determined, a detailed quantitative analysis of transportation impacts on the Mission Bay area has not been conducted. Therefore, further analysis to quantify transportation impacts at the potential new Campus would be required in the future, once a specific location in the Mission Bay area has been identified.

Construction

Traffic

Construction activities of Alternative 2 long-term projects at the SFVAMC Fort Miley Campus are expected to be similar to but slightly lower in intensity than those discussed for Alternative 1 long-term projects. In particular, construction activities associated with Alternative 2 long-term projects 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 construction-related transportation impacts at the existing Campus would be short term and temporary and, therefore, would be minor.

With regard to the potential new SFVAMC Mission Bay Campus, a construction plan would need to be developed specific to the site location once it is defined. Such a plan would be developed in such a way as to ensure that any impacts of project-related construction activity on the surrounding area would be temporary. In general, lane and sidewalk closures are subject to review and approval by the City’s Transportation Advisory Staff Committee. Before construction, the project contractor would need to coordinate with Muni’s Street Operations and Special Events Office to coordinate construction activities and minimize any impacts on transit operations. Because, a

construction plan would need to be developed, the construction-related transportation impacts of Alternative 2 long-term projects would be considered minor.

Parking

Parking demand generated by construction workers at the potential new SFVAMC Mission Bay Campus under Alternative 2 long-term projects would require further analysis once a specific location and site plan is determined. Because 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, the construction-related parking impacts of Alternative 2 long-term projects on Mission Bay would be considered minor.

Operation

Traffic

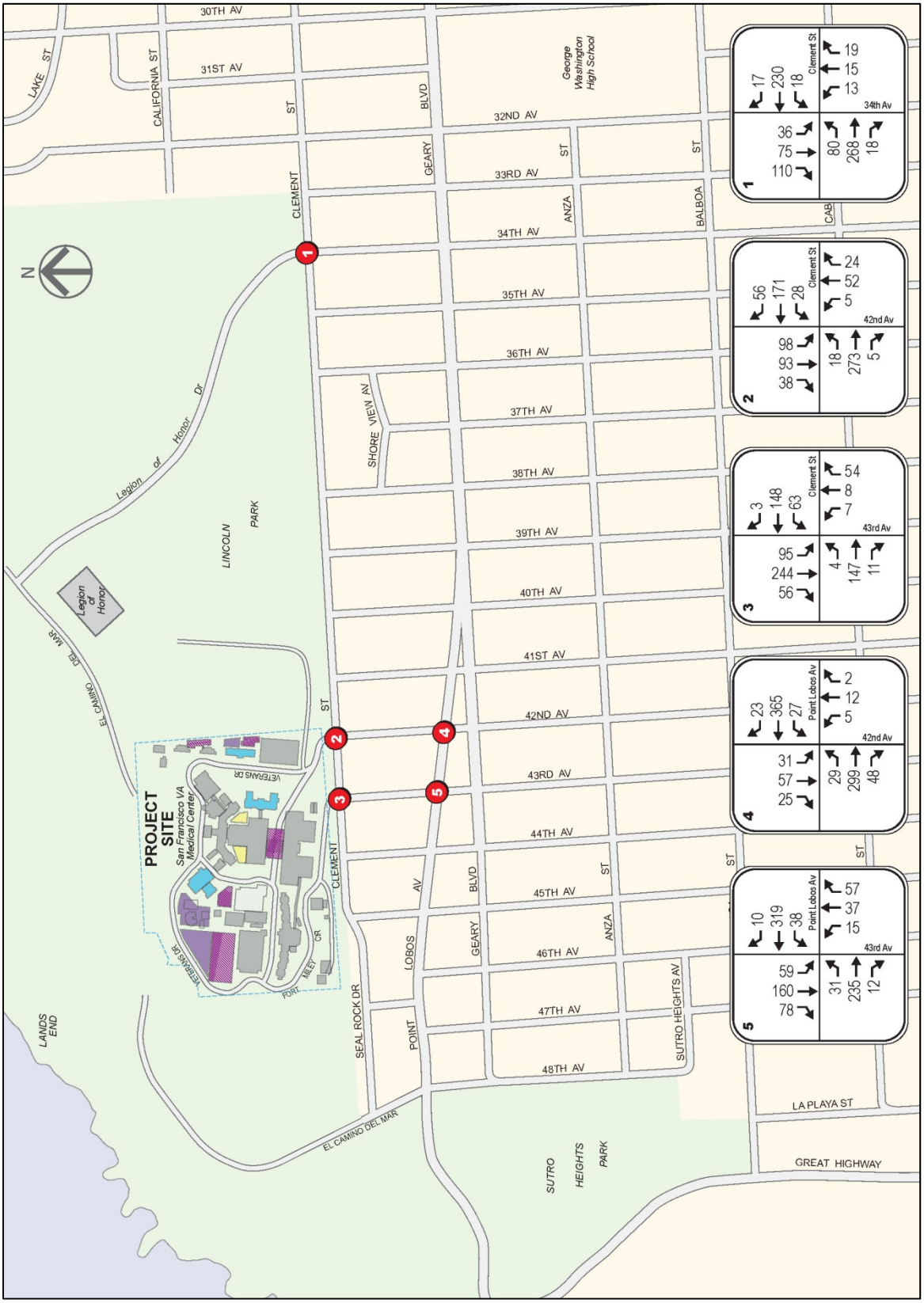
Alternative 2 would result in an increase in vehicle trips to and from the existing SFVAMC Fort Miley Campus and potential new SFVAMC Mission Bay Campus under long-term projects. Growth in traffic as a result of planned development both within and outside of the study area was used to develop 2023 Long-Term plus Alternative 2 traffic volumes. The 2023 Long-Term plus Alternative 2 conditions include Phases 1 and 2. Please note that Alternative 2 long-term conditions at the existing Campus account for the ongoing operation of Phase 1 from the near-term projects, plus planned development in the vicinity of the study area. Alternative 2 long-term projects at the Mission Bay area compose Phase 2. The resulting 2023 Long-Term plus Alternative 2 Conditions traffic volumes at the study intersections are illustrated in Figure 3.13-10. The LOS results for the study intersections are summarized in Table 3.13-18.

As shown in Table 3.13-18, under 2023 Long-Term plus Project Alternative 2 Conditions (Phases 1 and 2), all five study intersections are projected to operate at acceptable conditions (LOS D or better) under the weekday PM peak hours. Traffic impacts at the existing SFVAMC Fort Miley Campus under Alternative 2 long-term projects would be minor.

The location of the 150,000-square-foot ambulatory care center and 200,000-square-foot research building would be an undetermined site in the Mission Bay area of San Francisco. Alternative 2 would generate an estimated 263 vehicle-trips during the weekday PM peak hour for the potential new SFVAMC Mission Bay Campus (Table 3.13-11). These trips may result in adverse impacts at nearby intersections; however, further project-level NEPA analysis would be required once a specific location is determined. Because the location of the potential new Campus has not yet been determined, the operational transportation impacts of Alternative 2 long-term projects at the potential new Mission Bay Campus would be considered adverse.

Transit

Alternative 2 long-term projects would generate an estimated 42 transit trips at the existing SFVAMC Fort Miley Campus (six toward the Campus and 36 away from the Campus) during the weekday PM peak hour (Table 3.13-11). Please note that Alternative 2 long-term conditions at the SFVAMC Fort Miley Campus account for the ongoing operation of Phase 1 from the near-term projects, plus planned development in the vicinity of the study area. Alternative 2 long-term projects at the Mission Bay area compose Phase 2. Transit trips to and from the



Source: AECOM, 2012

Figure 3.13-10: Intersection Traffic Volumes—2023 Long-Term plus Alternative 2 Conditions

Table 3.13-18: Intersection Levels of Service—2023 Long-Term plus Alternative 2 Conditions, Weekday PM Peak Hour

	Intersection	Control Type	2035 Long-Term Conditions		2035 Long-Term plus 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

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

Campus would use the nearby Muni bus lines for local trips, as well as for regional trips (via transfers). Muni ridership under 2023 Long-Term Conditions are provided in Table 3.13-17. As Muni defines trips with respect to downtown San Francisco, the project's 36 transit trips away from the Campus in the weekday PM peak hour under Alternative 2 long-term projects would correspond to the "inbound" direction with respect to downtown, and the project's six trips toward the Campus would correspond to the "outbound" direction.

Based on the ridership totals presented, sufficient capacity would be available for the project's transit users in the "inbound" direction for both the 38-Geary and 38L-Geary Limited lines. Specifically, the 38-Geary line can accommodate as many as 113 additional riders before reaching its capacity utilization threshold, and the 38L-Geary Limited line can accommodate as many as 338 additional riders before reaching its capacity utilization threshold. Thus, the project's 36 transit trips away from the existing SFVAMC Fort Miley Campus could be accommodated under Alternative 2 long-term projects.

Although the 38AX-Geary A Express lines would exceed the 85 percent capacity utilization threshold in the "outbound" direction, sufficient capacity would be available on parallel bus lines (30-Geary and 38L-Geary) to handle the six transit trips toward the existing SFVAMC Fort Miley Campus. Thus, Alternative 2 long-term projects would not be expected to have an adverse impact on transit operations. Alternative 2 long-term projects would, therefore, have a minor impact on ongoing transit operations at the existing Campus.

The potential new SFVAMC Mission Bay Campus would generate an estimated 216 transit trips during the weekday PM peak hour. The transit lines utilized by riders would depend on the specific location of the potential new Campus. The project's 216 total transit trips to/from the potential new Campus could potentially result in adverse impacts on transit lines serving the area. However, project-level analysis would be required once a specific location for the potential new Campus is determined. The Campus would still be serviced by a VA shuttle connecting to transit hubs in order to make is convenient for staff, patients, and visitors to arrive by transit. VA

would work closely with San Francisco transit agencies to ensure public routes are not impacted by the project and that it is convenient for staff, patients and visitors to use a transit connection close by, to the extent possible. Therefore, operational transit impacts at the potential new Mission Bay Campus are anticipated to be minor.

Pedestrian

The proposed LRDP would involve improving sidewalks and walkways for pedestrians to provide improved connectivity. The proposed landscaping is expected to encourage alternative modes of transportation. Pedestrian trips generated by Alternative 2 long-term projects would include walk trips to and from the existing SFVAMC Fort Miley Campus, plus walk trips to and from transit lines. Please note that Alternative 2 long-term conditions at the existing SFVAMC Fort Miley Campus account for the ongoing operation of Phase 1 from the near-term projects, plus planned development in the vicinity of the study area. Alternative 2 long-term projects in the Mission Bay area compose Phase 2. Overall, Alternative 2 long-term projects would add an estimated 61 pedestrian trips (about 19 walk trips and 42 transit trips) to the adjacent sidewalks during the weekday PM peak hour at the SFVAMC Fort Miley Campus. The new pedestrian trips generated under Alternative 2 long-term projects could be accommodated on the nearby sidewalks and would not adversely affect pedestrian traffic along nearby sidewalks and crosswalks. Pedestrian impacts of Alternative 2 long-term projects at the existing SFVAMC Fort Miley Campus would be minor.

The potential new SFVAMC Mission Bay Campus would add an estimated 327 pedestrian trips (about 111 walk trips and 216 transit trips) to the adjacent sidewalks during the weekday PM peak hour. The project's 327 total walk trips to/from the potential new Campus and project-generated vehicular traffic may result in adverse impacts on adjacent sidewalks in the vicinity. However, project-level analysis would be required once a specific location for the SFVAMC Mission Bay facility is determined. Accessibility by pedestrians would be carefully considered throughout the Campus, including connections to walkable transit lines stops in the area. VA would work to resolve operational pedestrian conflicts at the potential new Mission Bay Campus, therefore the impact would be minor.

Bicycle

Alternative 2 long-term projects would generate new bicycle trips. A portion of the five "other" trips presented in Table 3.13-11 would be bicycle trips at the existing SFVAMC Fort Miley Campus. Please note that Alternative 2 long-term conditions at the existing SFVAMC Fort Miley Campus account for the ongoing operation of Phase 1 from the near-term projects, plus planned development in the vicinity of the study area. Alternative 2 long-term projects in the Mission Bay area compose Phase 2. With the current bicycle and traffic volumes on the adjacent streets, bicycle travel generally occurs without major impedances or safety problems. The expected increase in bicycle trips within the area as a result of Alternative 2 would not be substantial enough to affect overall bicycle circulation in the area or the operations of adjacent bicycle facilities. Thus, no adverse bicycle impacts are expected as a result of Alternative 2 long-term projects at the existing Campus. Also, the addition of project-generated vehicular traffic would also not result in any adverse impacts on bicycle conditions in the vicinity of the Campus. Bicycle impacts of Alternative 2 long-term projects would be minor.

The potential new SFVAMC Mission Bay Campus would generate an estimated 39 bicycle trips. The current bicycle and traffic volumes on the adjacent streets and safety for the undetermined location would need to be assessed to determine the impact of Alternative 2 long-term projects on nearby facilities. The expected increase in bicycle and vehicle trips within the Mission Bay area under Alternative 2 long-term projects may potentially affect overall

bicycle circulation in the area or the operations of adjacent bicycle facilities. It is anticipated that these bicycle trips can be accommodated within the Mission Bay area, however, project-level NEPA analysis would be required once a specific location for the potential new Campus is determined. VA would work closely with San Francisco departments, including agencies that are focused on providing bicycle accessibility around the City, making it convenient for staff, patients, and visitors to arrive and leave by way of bicycle. In addition, the new building design would incorporate LEED principals and meet City standards for accommodating bicycle parking on site. Therefore, impacts to bicycle trips at the potential new Mission Bay Campus are anticipated to be minor.

Parking

Based on the Planning Code guidance discussed previously for Alternative 1 near-term projects, the development of Alternative 2 long-term projects would necessitate the provision of an estimated 160 parking spaces at the existing SFVAMC Fort Miley Campus (62 spaces for the hospital use, 20 spaces for the office use, 70 spaces for the research and development use, and eight spaces for the motel use) and an estimated 700 parking spaces at the potential new SFVAMC Mission Bay Campus (500 spaces for the hospital use and 200 spaces for the research and development use). As presented in Table 3.13-13, Alternative 2 long-term projects would result in a parking demand of an estimated 306 spaces at the existing Campus and 1,010 spaces for the potential new Campus during the weekday peak period. Under 2023 Alternative 2 conditions, no additional parking facilities would be constructed beyond the net addition of 263 spaces proposed under 2015 Near-Term conditions within the existing Campus. Therefore, the net addition of 263 spaces would not meet the parking demand of 306 spaces at the existing Campus under 2023 Alternative 2 conditions, and the provision of 875 spaces at the potential new Mission Bay Campus would not meet the parking demand of 1,010 parking spaces at the potential new Campus.

However, as discussed previously, 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 with San Francisco's "Transit First" policy. Therefore, the operational parking impacts at both the existing SFVAMC Fort Miley Campus and the potential new Mission Bay Campus would be minor.

Loading

At the existing SFVAMC Fort Miley Campus, minimal impacts on delivery vehicle access are expected as a result of Alternative 2 long-term projects. Please note that Alternative 2 long-term conditions at the existing Campus account for the ongoing operation of Phase 1 from the near-term projects, plus planned development in the vicinity of the study area. Alternative 2 long-term projects in the Mission Bay area compose Phase 2. Minor modifications in delivery routes are expected with the conversion of Fort Miley Circle into a pedestrian promenade.

As with Alternative 1 near-term projects, most of the buildings proposed under Alternative 2 long-term projects 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. Because the total gross floor area for the proposed LRDP at the existing SFVAMC Fort Miley Campus in the long-term time frame is 185,600 square feet, one loading space would be required in the

long-term time frame according to the Planning Code. Based on existing loading operations at the existing Campus, it is anticipated that this demand would be met via the existing 11 loading bays provided along Fort Miley Circle and Veterans Drive, and no impact would occur.

The total gross floor area for the potential new SFVAMC Mission Bay Campus as proposed under Alternative 2 is 350,000 square feet. Thus, the development at the potential new Campus would be required to have two loading spaces under 2023 Long-Term plus Alternative 2 Project Conditions, according to Planning Code requirements. Project-level NEPA analysis would be required once a specific location for the potential new Campus is determined. It is anticipated that project design elements would be available and implemented to ensure that operational loading impacts at the potential new Mission Bay Campus would be minor.

Site Access and Circulation

The access and circulation to the potential new SFVAMC Mission Bay Campus would be dependent on the location of the proposed site and site plan. Project-level NEPA analysis would be required once a specific location and site plan for the potential new Campus is determined. It is anticipated that project design elements would be available and implemented to ensure that operational site access and circulation impacts at the potential new Mission Bay Campus would be minor.

Alternative 3: No Action Alternative

Near-Term Projects

Construction

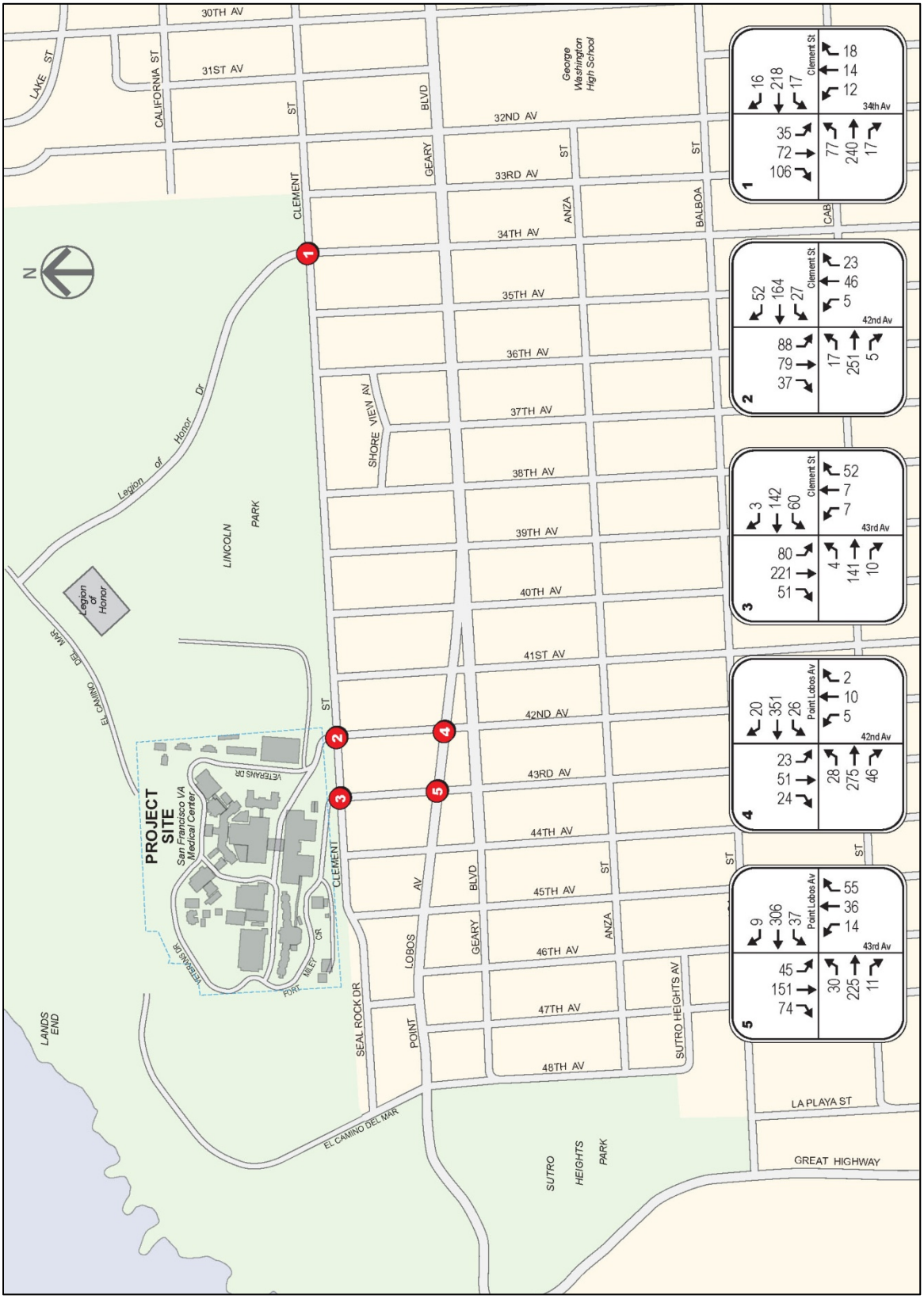
Under Alternative 3, there would be no construction or retrofitting of existing buildings. Thus, no construction-related transportation, traffic, or parking impacts would occur.

Operation

Traffic

Alternative 3 would involve the continued operation of facilities at the existing SFVAMC Fort Miley Campus. No additional vehicle trips would be generated by the Campus as a result of Alternative 3. Ambient growth in traffic volumes as a result of planned development both within and outside of the study area was used to develop traffic volumes for 2015 Near-Term Alternative 3 Conditions. The resulting 2015 Near-Term Alternative 3 Conditions traffic volumes at the study intersections are illustrated in Figure 3.13-11. The LOS results for the study intersections are summarized in Table 3.13-19.

As shown in Table 3.13-19, under 2015 Near-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. Alternative 3 would not be considered to have adverse impacts at any study intersections. Alternative 3 would have a minor operational impact on the study intersections.



Source: AECOM, 2012

Figure 3.13-11: Intersection Traffic Volumes—2015 Near-Term Alternative 3 Conditions

Table 3.13-19: Intersection Levels of Service—2015 Near-Term Alternative 3 Conditions, Weekday PM Peak Hour

	Intersection	Existing Conditions		2020 Near-Term Conditions	
		LOS	Delay[1]	LOS	Delay[1]
1	34th Avenue/ Clement Street	B	12.0	B	12.7
2	42nd Avenue/ Clement Street	B	11.2	B	12.0
3	43rd Avenue/ Clement Street	B	11.9	B	13.2
4	42nd Avenue/ Point Lobos Avenue	B	12.7	B	13.4
5	43rd Avenue/ Point Lobos Avenue	B	14.7	C	15.3

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

Transit

The 38-Geary, 38L-Geary Limited, and 38AX-Geary A Express lines would operate under capacity in the outbound direction (Table 3.13-15) under Alternative 3. Because no additional transit trips would be generated under Alternative 3, no operational impacts associated with the existing SFVAMC Fort Miley Campus would occur under 2015 Near-Term Alternative 3 Conditions.

Pedestrian

No additional pedestrian trips would be generated under Alternative 3. Therefore, no operational impacts associated with the existing SFVAMC Fort Miley Campus would occur under 2015 Near-Term Alternative 3 Conditions.

Bicycle

No additional bicycle trips would be generated under Alternative 3. Therefore, no operational impacts associated with the existing SFVAMC Fort Miley Campus would occur under 2015 Near-Term Alternative 3 Conditions.

Parking

No additional parking demand would be generated under Alternative 3. Therefore, no operational impacts associated with the existing SFVAMC Fort Miley Campus would occur under 2015 Near-Term Alternative 3 Conditions.

Loading

The potential need for additional loading spaces is determined based on gross square footage of a particular development, but no development would occur under Alternative 3. Therefore, no operational impacts associated with loading activities at the existing SFVAMC Fort Miley Campus would occur under 2015 Near-Term Alternative 3 Conditions.

Site Access and Circulation

Alternative 3 would not involve modifying the existing roadway alignments within and adjacent to the existing SFVAMC Fort Miley Campus. As a result, no operational impacts related to site access and circulation would occur under 2015 Near-Term Alternative 3 Conditions.

Long-Term Projects

Construction

No construction or retrofitting of existing buildings would occur at the existing SFVAMC Fort Miley Campus or in the Mission Bay area under 2023 Long-Term Alternative 3 Conditions. Thus, no construction-related transportation, traffic, or parking impacts would occur.

Operation

Traffic

As noted previously under the evaluation of Alternative 3 near-term traffic impacts, the continued operation of existing facilities at the SFVAMC Fort Miley Campus would not generate additional vehicle trips to or from the Campus as part of Alternative 3. Ambient 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 traffic volumes. The resulting traffic volumes for 2023 Long-Term Alternative 3 Conditions at the study intersections are illustrated in Figure 3.13-12. The LOS results for the study intersections are summarized in Table 3.13-20.

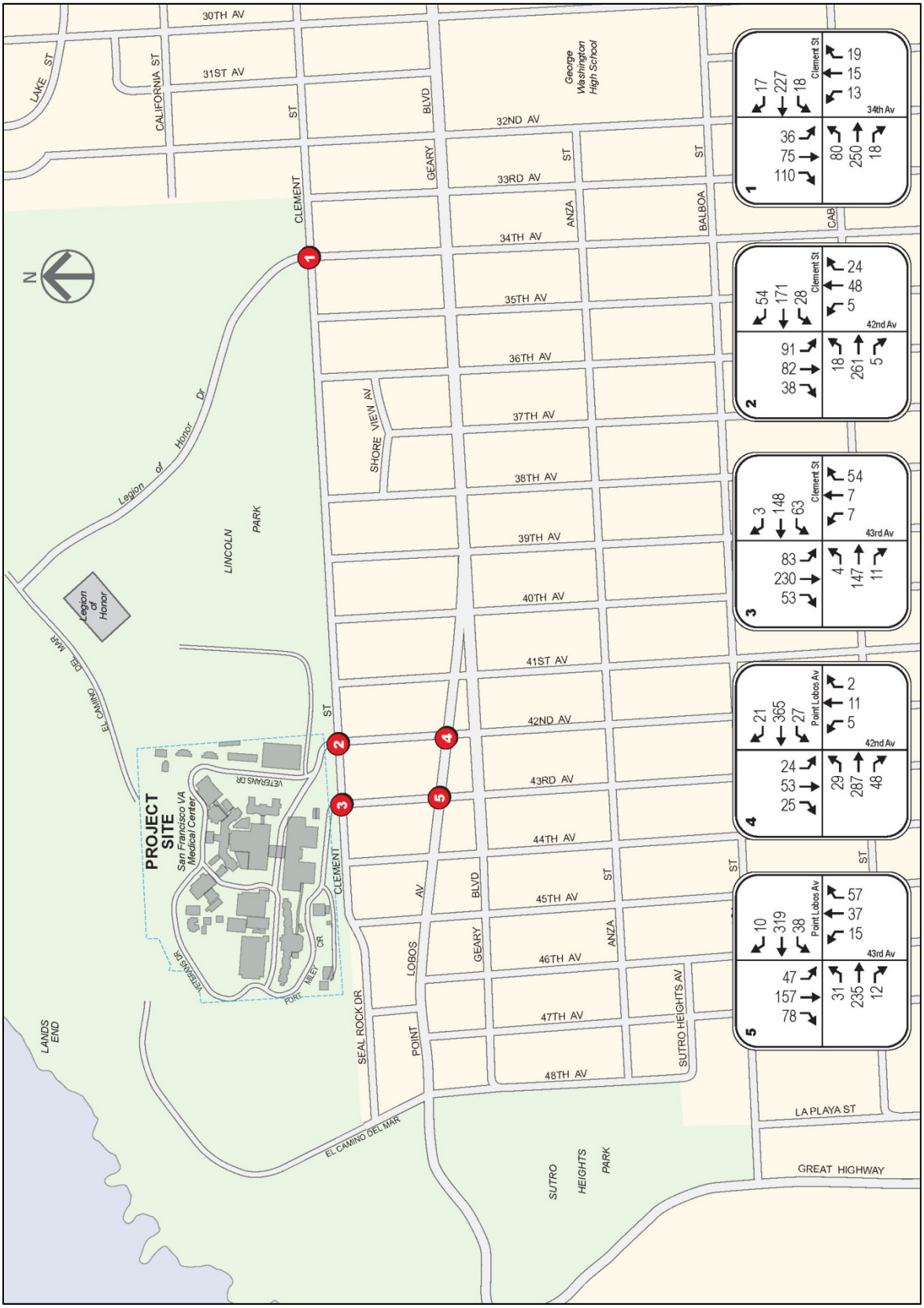
As shown in Table 3.13-20, under 2023 Long-Term Alternative 3 Conditions, all five study intersections are projected to operate at acceptable conditions (LOS D or better) under the weekday PM peak hours. Alternative 3 would not be considered to have an adverse intersection impact at any study intersection. Alternative 3 would have a minor operational impact on study intersections.

Transit

No additional demand for transit service would occur under Alternative 3. Therefore, no operational impacts associated with the SFVAMC would occur under 2023 Long-Term Alternative 3 Conditions.

Pedestrian

No additional pedestrian trips would be generated under Alternative 3. Therefore, no operational impacts associated with the existing SFVAMC Fort Miley Campus would occur under 2023 Long-Term Alternative 3 Conditions.



Source: AECOM, 2012

Figure 3.13-12: Intersection Traffic Volumes—2023 Long-Term Alternative 3 Conditions

Table 3.13-20: Intersection Levels of Service—2023 Long-Term Alternative 3 Conditions, Weekday PM Peak Hour

	Intersection	Existing Conditions		2015 Near-Term Conditions		2023 Long-Term 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	B	15.3	C	15.8

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

Bicycle

No additional bicycle trips would be generated under Alternative 3. Therefore, no operational impacts associated with the existing SFVAMC Fort Miley Campus would occur under 2023 Long-Term Alternative 3 Conditions.

Parking

No additional vehicle trips would be generated under Alternative 3. Therefore, no operational impacts associated with the existing SFVAMC Fort Miley Campus would occur under 2023 Long-Term Alternative 3 Conditions.

Loading

The potential need for additional loading spaces is determined based on gross square footage of a particular development, but no development would occur under Alternative 3. Therefore, no operational impacts associated with loading activities at the existing SFVAMC Fort Miley Campus would occur under 2023 Long-Term Alternative 3 Conditions.

Site Access and Circulation

Alternative 3 would not involve modifying the existing roadway alignments within and adjacent to the existing SFVAMC Fort Miley Campus. As a result, no operational impacts related to site access and circulation would occur under 2023 Long-Term Alternative 3 Conditions.

3.13.4 References

AECOM. 2012. *San Francisco VA Medical Center Long Range Development Plan Draft EIS Transportation Impact Study.* San Francisco, CA.

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