

CHAPTER 3 TRANSPORTATION

3.1 Introduction

Chapter 3 of the Draft EIS/EIR presented the process and findings of the transportation analysis conducted for the Project alternatives, and is summarized here. Assessments of existing Geary corridor transportation conditions, both in terms of facilities and performance, were presented for public transit, vehicular traffic, non-motorized transportation, and vehicle parking/loading. Existing and future conditions were assessed within the regulatory framework(s) applicable to each travel mode.

Data from a variety of sources was used for the transportation analysis. The analysis was based on a detailed multimodal evaluation consisting of several key steps, including:

- **Existing Conditions:** Through an extensive data collection process, a detailed understanding of existing travel patterns on the corridor was developed. This served as the basis for the analytical tools used to evaluate how the project would affect future travel patterns. Unless specified otherwise, all data represents existing transportation conditions in 2012, when the bulk of the transportation data was collected.
- **Future Travel Forecasting:** Analysis of travel patterns in the Draft EIS/EIR were estimated using transportation forecasting models, including the San Francisco Chained Activity Modeling Process (SF-CHAMP). SF-CHAMP is a regional travel demand model used to assess the impacts of socioeconomic, land use, and transportation system changes on the performance of the local transportation system. Year 2020 No Build conditions were used as the environmental baseline against which future conditions were compared. Year 2020 was used as the baseline so as to more accurately compare the build alternatives taking into account future traffic conditions given the length of time between issuing the Notice of Preparation (2008), existing conditions (2012), and the anticipated opening year of the project (2020).
- **Transportation Operations:** Projections of future conditions for the project opening year (2020) and the project horizon year (2035) for all No Build and build alternatives were then modeled using a mix of specialized transportation analysis tools, including multimodal simulation software, traffic analysis software, and assessments of pedestrian and bicycle safety.

Multiple traffic counts were conducted along the Geary corridor to determine when the maximum use of the transportation system occurs. The results indicated that the Geary corridor experiences the highest volumes during the PM peak period. Accordingly, the analysis in Draft EIS/EIR focused on the PM peak period. This is consistent with the approach suggested in the San Francisco Planning Department's *Transportation Impact Analysis Guidelines*, the document which guides CEQA-level analysis in the City of San Francisco.

No changes to the text of Draft EIS/EIR Section 3.1, Introduction, are needed with regard to the changes to the Hybrid Alternative/SRA or in response to a comment on the Draft EIS/EIR.

3.2 Corridor Travel Patterns

The Draft EIS/EIR provided an overview of existing and future travel patterns on the Geary corridor, as well as in surrounding neighborhoods. The Geary corridor functions as an east-west transit spine in the northern portion of San Francisco, connecting residents and businesses to numerous neighborhoods and employment centers. It is comprised of Geary Boulevard and the one-way pair of Geary and O'Farrell Streets. The Geary corridor is one of the busiest transit corridors in San Francisco, with buses carrying over 50,000 passengers per weekday. Slightly less than one quarter of weekday trips are currently made by transit. The greatest traffic volumes on the corridor occur directly east of the Masonic tunnel while transit demand traveling east peaks at Van Ness Avenue. The corridor is wide compared to other streets in San Francisco, with a right-of-way of about 125 feet primarily with three travel lanes in each direction, and intersects almost 90 roadways between 48th Avenue and Market Street.

Future conditions were evaluated for horizon years 2020 and 2035 and include assumptions for planned transportation improvements and land use projections. Population, for example, is projected to be 2 percent greater and jobs 7 percent greater in 2020 than 2012; similarly, population is expected to be 20 percent higher and jobs 40 percent higher in 2035 compared to 2012. By neighborhood in the study area, it is expected that Japantown will have the greatest increase in trips (excluding Downtown).

No changes to the text of Draft EIS/EIR Section 3.2, Corridor Travel Patterns, are needed with regard to the changes to the Hybrid Alternative/SRA or in response to a comment on the Draft EIS/EIR.

3.3 Transit Conditions

Summary of Draft EIS/EIR Findings

Section 3.3 of the Draft EIS/EIR analyzed the potential for the alternatives to result in adverse impacts to transit conditions, including travel times/reliability and crowding. The analysis in the Draft EIS/EIR was based on future year (2020 and 2035) transit forecasts and future transit performance of the five alternatives (No Build and four build alternatives) as modeled by the multimodal transportation simulation software package VISSIM. The Draft EIS/EIR examined the performance of each alternative in terms of bus travel times, bus reliability, and system-wide multi-modal delay.

In terms of future ridership,¹ weekday Geary corridor boardings would increase by approximately 21 percent from over 50,000 in 2012 to about 64,000 in the year 2020. Ridership is projected to increase by an additional 19 percent to about 77,000 in 2035 under the No Build Alternative; this ridership increase is related directly to the expected increases in study area population. In 2020,

¹ Please note that these ridership numbers differ from those originally published in Section 3.3.4 of the Draft EIS/EIR because they have since been updated to correct typographical errors. These changes are shown below in the text changes for page 3.3-18 and changes to Figure 3.3-10 from the Draft EIS/EIR.

the Hybrid Alternative/SRA would result in about 78,000 daily transit boardings, a 21 percent increase from the No Build Alternative. In 2035, the Hybrid Alternative/SRA would serve about 94,000 daily transit riders, 23 percent higher than in the No Build Alternative.

In terms of future bus travel times, Section 3.3.4 of the Draft EIS/EIR noted that, in the 2020 scenario, the Hybrid Alternative/SRA would reduce travel times by 10 to 20 percent for the entire Geary corridor and by 15 to 30 percent between Van Ness Avenue and 25th Avenue. Travel time reliability would improve with the Hybrid Alternative/SRA compared to the No Build Alternative in 2020 and in 2035. The Hybrid Alternative/SRA would have travel times that are 15 to 25 percent lower than the No Build Alternative for the entire Geary corridor, and 15 to 30 percent lower between Van Ness and 25th Avenues. In terms of system-wide multi-modal delay, the Hybrid Alternative/SRA would improve the flow of traffic and provide streetscape improvements that would improve pedestrian crossings and safety. As a result, the improvements to transit service in the Hybrid Alternative/SRA would contribute to multimodal accessibility in the Geary corridor.

The Draft EIS/EIR did not include any avoidance, minimization or mitigation measures in Section 3.3.5 as there were no potential adverse effects to transit (bus) conditions.

Changes to the Hybrid Alternative/SRA

The changes to the Hybrid Alternative/SRA were examined for the potential to result in new or worsened effects to transit conditions.

Retention of Webster Street Pedestrian Bridge

Retaining the Webster Street pedestrian bridge would require westbound BRT buses to travel in mixed flow lanes in approaching the Webster Street intersection. (See **Appendix D** of this Final EIR for detailed diagrams of bus lanes in the Hybrid Alternative/SRA).

This is because the pedestrian bridge supports do not permit full extension of the westbound bus-only lane across the Webster Street intersection. SFMTA examined whether the change in bus lane configuration here, along with anticipated pedestrian improvements, would have any potential to substantially alter bus service through this area. SFMTA's examination concluded that the retention of the Webster Street pedestrian bridge could result in 1-2 second westbound bus delays on average; such delays would not substantially affect BRT service.²

Construction-period impacts would be greatly reduced at Webster and Geary as the proposed modification would eliminate demolition, major excavation work, and associated costs of demolition work. This would result in a reduced number of traffic and transit disruptions.

Retention of Spruce-Cook Local/Express Stops

Regarding the Hybrid Alternative/SRA changes in the Spruce-Cook area, existing eastbound and westbound local/express bus stops on this block would remain. Given that a new BRT stop would not be built, no related construction would occur. Both the eastbound and westbound bus stops would be slightly reduced in length. Given that there would no longer be BRT stops in this

² SFMTA, 2016. Geary Boulevard Bus Rapid Transit: Webster Street Bus Delay Analysis.

location, overall BRT travel time would be slightly faster (due to one less BRT stop), which would benefit riders traveling between other stops. BRT buses would stop at Arguello to the west and Presidio/Masonic to the east. However, this would result in a greater walking distance to or from a BRT stop (approximately 5 blocks) for people starting or ending journeys in the Spruce-Cook area who prefer not to use the local service. However, the stops would continue to be served by local and commute-period express buses.

Additional Pedestrian Improvements

The additional pedestrian improvements would require conversion of a total of 25 on-street parking spaces to non-parking use and would all occur within existing right-of-way. None of the additional pedestrian improvements would be constructed where a traffic or transit lane currently exists or is planned to exist, so they would not affect traffic or transit lane configurations or capacity. Therefore, they would not affect vehicle delay and no new or worsened effects to mixed-flow travel lanes or bus/automobile travel times would occur.

Changes to the Draft EIS/EIR

As a result of the foregoing, several text changes to the Draft EIS/EIR are needed to reflect the above changes to the Hybrid Alternative/SRA introduced in this Final EIR and to make minor text revisions in response to comments and/or to correct minor typographical errors.

Page 3.3-4, changes in response to comment A-3.10 and text edits

Table 3.3-2 Existing Transit Routes Crossing the Geary Corridor

ROUTES	CROSS STREET AT GEARY	WEEKDAY HOURS OF OPERATION	WEEKDAY AM/PM PEAK HEADWAYS (MIN)	AVERAGE WEEKDAY RIDERSHIP (2011)
18 46th Avenue	33rd Avenue	5:00 AM to 1:00 AM	20/20	3,700
29 Sunset	25th Avenue	5:45 AM 1:00 AM	10/10	18,800
28 19th Avenue	Park Presidio Boulevard	5:45 AM 1:00 AM	11/10	12,800
28L 19th Avenue	Park Presidio Boulevard	AM Peak and PM Peak Only	12/-	3,000
44 O'Shaughnessy	6th Avenue	5:00 AM to 1:00 AM	9/9	16,900
33 Stanyan	Arguello Boulevard	5:00 AM to 1:00 AM	15/15	6,200
43 Masonic	Masonic Avenue	5:00 AM to 1:10 AM	10/12	12,000
24 Divisadero	Divisadero Street	24 hours daily	10/10	11,400
22 Fillmore	Fillmore Street	24 hours daily	9/8	16,800
49 Mission/Van Ness	Van Ness Avenue	6:00 AM - 1:15 AM	8/8	26,800
47 Van Ness	Van Ness Avenue	6:00 AM - 1:15 AM	10/10	13,100
19 Polk	Polk Street	5:20 AM to 1:30 AM	15/15	7,600
27 Bryant	Leavenworth Street/ Jones Street	5:00 AM to 1:00 AM	15/15	7,900
30 Stockton	Mason Street/ Kearny Street	5:20 AM to 1:30 AM	7.5/8	32,400
45 Union Stockton	Mason Street/ Kearny Street	5:30 AM to 1:00 AM	8/12	11,700
Golden Gate Transit Route 92	Park Presidio to Webster Street	AM Peak and PM Peak Only	Between 30 and 60/between 30 and 60	230
BART	Market Street at Montgomery BART	4:00 AM to 12:00 AM	3/3	44,300 ^{39,000*}

Connecting services at Market Street include the 9-San Bruno, 9L-San Bruno Limited, F-Market & Wharves, J-Church, KT-Ingleside/Third Street, L-Taraval, M-Ocean View, and N-Judah routes.

Connecting services at Market Street and Sansome Street include the 10-Townsend and 12-Folsom/Pacific routes.

Connecting services at Market Street between 3rd and 5th Streets include the 8X Bayshore Express, 8AX-Bayshore A Express, 8BX-Bayshore B Express, and 81X-Caltrain Express (NB Only) routes.

*Average Weekday Entries to Montgomery Street BART Station, 2015September 2013.

Source: SFMTA, 2013; BART, 2013; Golden Gate Transit, 2013.

Page 3.3-18, text and figure edits (Figure 3.3-10) to correct minor typographical errors

3.3.4.1 | FUTURE GEARY CORRIDOR RIDERSHIP

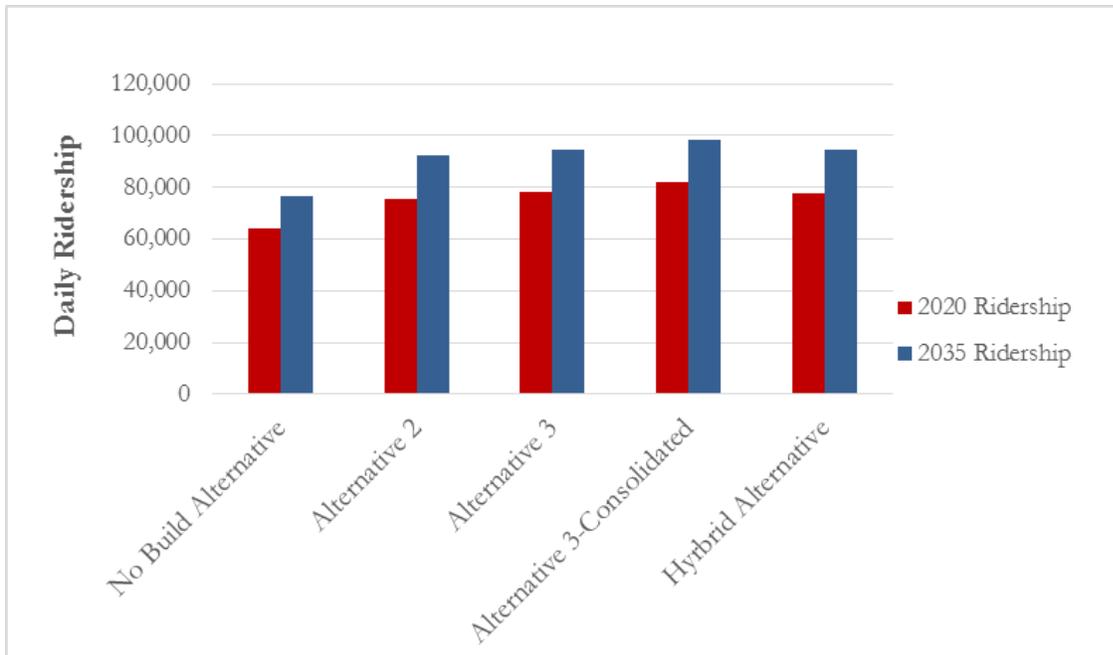
Projections of future Geary corridor bus ridership show that weekday Geary corridor boardings would increase by approximately ~~29~~21 percent from over 50,000 in 2012 to about ~~70,000~~64,000 in the year 2020. Ridership is projected to increase by an additional ~~24~~19 percent to ~~nearly 84,000~~ about 77,000 in 2035 under the No Build Alternative; this ridership increase is related directly to the expected increases in study area population. The No Build and build alternatives would result in higher ridership on Geary corridor bus routes.

In 2020, the build alternatives would result in daily transit boardings ~~ranging between 75,000 and 82,000 boardings (9 percent to 18 percent higher than in the No Build Alternative)~~ of up to 82,000 boardings (28 percent higher than in the No Build Alternative). In 2035, the build alternatives would serve between 92,000 and 99,000 daily transit riders (~~44~~20 percent to ~~48~~28 percent higher than in the No Build Alternative).

In both future years, Alternative 2 would attract the lowest amount of ridership among the build alternatives. Meanwhile, Alternative 3-Consolidated would serve the highest number of projected transit trips. Alternatives 3 and the Hybrid Alternative would attract ridership levels somewhere between those of Alternatives 2 and 3-Consolidated. Alternative 3-Consolidated would attract more riders than the other build alternatives because it would offer the shortest waiting times and the shortest average walking distances to stations. In the other build alternatives, travelers may need to wait for a local service or an express service, under Alternative 3-Consolidated all riders would board the first bus that shows up. Since the overall level of service is similar in each scenario, Alternative 3-Consolidated would offer the shortest waiting times. By providing high frequency and rapid service at all stations, Alternative 3-Consolidated would offer shorter walking distances for travelers wishing to use a limited or BRT service. Ridership under Alternative 3-Consolidated would suffer from longer minimum walking distances to all stations and slightly slower travel speeds, but the benefit of more BRT stations and shorter waiting times would do more to attract ridership than the lack of local stops and slower travel speeds would to discourage riders. Projected ridership for 2020 and 2035 is presented in Figure 3.3-10.³ As shown, projected daily ridership for 2020 varies by build alternative between ~~70,000~~75,000 and ~~over 80,000~~nearly 82,000. By 2035, build alternative daily ridership would approach 100,000 for Alternative 3-Consolidated.

³ The only change to Figure 3.3-10 from the Draft EIS/EIR is to the No Build Alternative ridership number bars, thus this change is not shown in the strikethrough underline format.

Figure 3.3-10 2020 and 2035 Daily Transit Ridership



Page 3.3-19, changes in response to staff-initiated modifications (Retention of Spruce/Cook Local/Express Stops)

Table 3.3-4 Number of Bus Stops between 34th Avenue and Market Street

STOP COUNT	ALTERNATIVE				
	NO BUILD ALTERNATIVE	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 3-CONSOLIDATED	HYBRID ALTERNATIVE
LOCAL STOPS					
Eastbound Local Stops	33	30	27	NA	22
Westbound Local Stops	34	31	28	NA	25
BRT STOPS					
Eastbound BRT/Limited Stops	15	12	13	20	16 15
Westbound BRT/Limited Stops	16	13	14	21	17 16

Source: Fehr & Peers, 2014

Table 3.3-5 Average Bus Stop Spacing from 33rd Avenue to Kearny Street

SERVICE TYPE	AVERAGE STOP SPACING IN FEET				
	NO BUILD ALTERNATIVE	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 3-CONSOLIDATED	HYBRID ALTERNATIVE
AVERAGE STOP SPACING (IN FEET)					
BRT/Limited Stops	1540	2180	2180	1310	1630 1740
Local Stops	720	840	960	1310	1190
AVERAGE DISTANCE TO STOP (IN FEET)					
BRT/Limited Stops	380	540	540	330	410 440
Local Stops	180	210	240	330	300

Source: Fehr & Peers, 2014

Page 3.3-20, text edits to correct minor typographical errors

3.3.4.4 | BUS TRAVEL TIMES (2020)

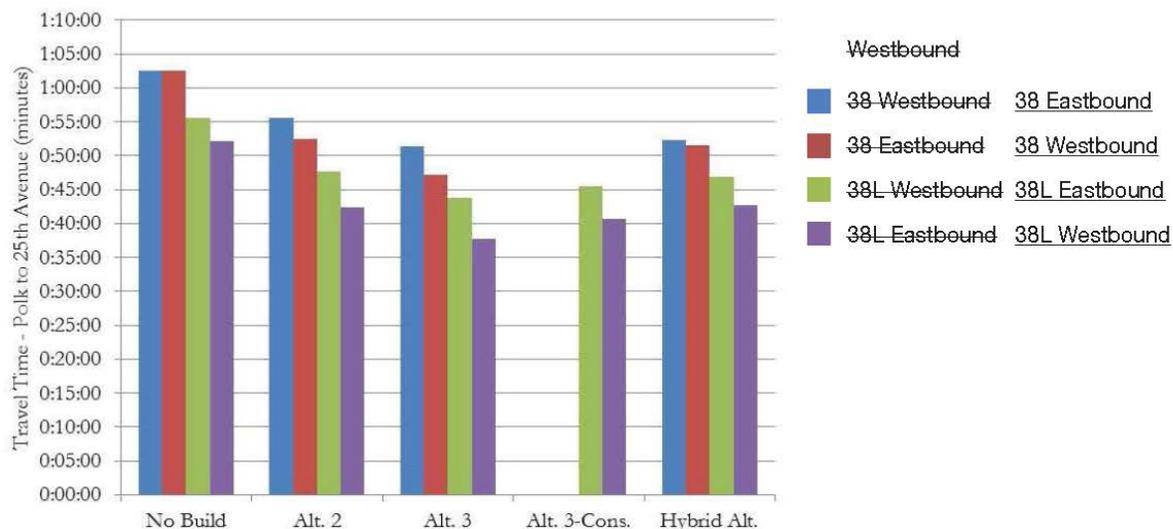
In future scenarios, bus travel times are expected to vary by alternative. In all 2020 scenarios, the No Build Alternative would result in the highest travel times. In the No Build Alternative, anticipated infrastructure improvements will marginally improve travel time, but future increases in traffic will offset any benefits of these basic improvements.

Alternatives 3 and 3-Consolidated would have center-running lanes that help reduce travel times. Alternatives 3 and 3-Consolidated have the lowest travel time of all alternatives in 2020, with reductions in travel time of between 15 and 30 percent relative to the No Build Alternative for the entire Geary corridor. For the segment between Van Ness Ave and 25th Ave where the build alternatives would have the greatest impact, travel time reductions would be between 30 and 40 percent. Alternative 2 and the Hybrid Alternative would reduce travel times by 10 to 20 percent for the entire Geary corridor and by 15 to 30 percent between Van Ness Ave and 25th Ave.

Tables 3.3-7 and 3.3-8 and Figures 3.3-11 and 3.3-12 show travel times by alternative in 2020 and 2035. Tables 3.3-6 and 3.3-9 display the percent reduction in travel times from the No Build Alternative.

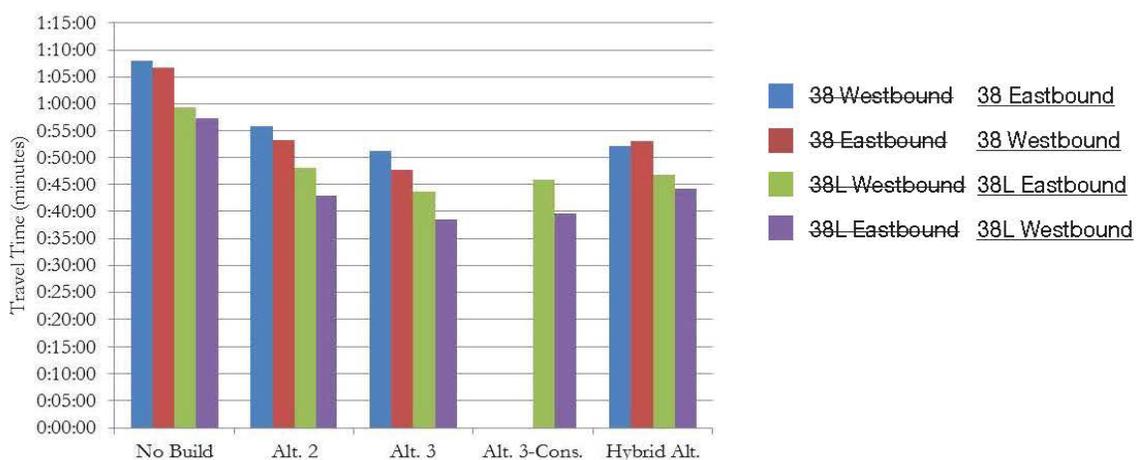
Page 3.3-21 and 3.3-23, figure edits

Figure 3.3-11 Year 2020 Geary Corridor Bus Travel Times (Entire Corridor, 48th Avenue to Transbay Terminal)



Source: Fehr & Peers and SFCTA, 2014

Figure 3.3-12 Year 2035 Geary Corridor Bus Travel Times (Entire Corridor, 48th Avenue to Transbay Terminal)



Source: Fehr & Peers and SFCTA, 2014

3.4 Automobile Traffic

Summary of Draft EIS/EIR Findings

Section 3.4 of the Draft EIS/EIR analyzed the potential for the alternatives to result in adverse impacts to automobile traffic. The analysis in the Draft EIS/EIR was based on travel forecasting and assignment models including the SF-CHAMP, Dynamic Traffic Assignment, VISSIM and Synchro. The Draft EIS/EIR examined the potential for the alternatives to affect automobile travel time delay, intersection delay/level of service (LOS), system-wide multi-modal delay, and vehicle miles traveled. Traffic operations were analyzed at 49 on-corridor intersections and 29 off-corridor intersections for three project years: existing conditions (2012); the anticipated project opening year (2020); and the project horizon year (2035).

Section 3.4.2 of the Draft EIS/EIR reported that traffic volumes on the Geary corridor are generally higher than those on many other corridors in San Francisco. The speed limit on Geary is 25 miles per hour throughout the corridor, with the exception of Masonic Street to Gough Street, where the speed limit is 35 miles per hour in both directions (where the roadway serves as an expressway). Most Geary corridor intersections currently operate at LOS C or better. However, the unsignalized intersection of Presidio Avenue and Geary Boulevard currently operates at LOS E. Daily weekday VMT in San Francisco is expected to increase by 4.3 percent from existing conditions under the 2020 No Build Alternative.

Section 3.4.4 of the Draft EIS/EIR concluded that traffic operations under any of the build alternatives, including the Hybrid Alternative/SRA, would not severely inhibit circulation for automobiles in the Geary corridor in 2020 or 2035. Although levels of peak hour traffic congestion would increase at some intersections by varying degrees depending on the build alternative, the Geary corridor cannot feasibly be widened to accommodate higher automobile volumes without acquisition and demolition of existing buildings. Additionally, overall corridor travel times for automobile traffic would be similar under each of the build alternatives.

In terms of potential automobile traffic effects, the Draft EIS/EIR noted that by 2020 and 2035, the Hybrid Alternative/SRA was projected to have less overall PM peak hour traffic on Geary Boulevard than the No Build Alternative. The reduction in traffic with the build alternatives is primarily due to the reduction in traffic capacity caused by the removal of mixed travel lanes, but also due to improved transit service. As Geary corridor transit service improves, some drivers would switch travel modes from driving to transit for travel on the Geary corridor.

Notwithstanding the above, Draft EIS/EIR reported that the Hybrid Alternative/SRA would cause adverse effects at four study intersections in 2020; three on-corridor intersections and one off-corridor intersection. Additionally, three intersections would continue to operate at LOS E or F during the PM peak hour under the Hybrid Alternative/SRA, but would not be adversely affected by the project. The Hybrid Alternative/SRA would cause adverse effects at eight study intersections in 2035; four on-corridor intersections and four off-corridor intersections. Additionally 11 intersections would continue to operate at LOS E or F during the PM peak hour, but would not be adversely affected by the project.

Increased traffic delay at some intersections would not adversely affect multimodal travel on the Geary corridor (as discussed in Section 3.3.4 of the Draft EIS/EIR). Because traffic operations were evaluated during worst-case PM peak hour conditions and because non-peak hour traffic operations would be substantially better, the build alternatives would not create severely congested roadway operations throughout the day.

Each build alternative would incorporate features that would help avoid or minimize traffic congestion attributable to the features of the proposed project. These features include: optimized signal timing, signal priority for transit vehicles on Geary Boulevard (benefitting east-west traffic movements), reduced left-turn movements along the Geary corridor, and the addition of new right-turn pockets at key locations. With these features, the overall travel times for automobile traffic along the corridor would not substantially change under the build alternatives.

The Draft EIS/EIR reported that daily weekday VMT in San Francisco is expected to increase by 4.3 percent from existing conditions under the 2020 No Build Alternative. Relative to VMT under 2020 No Build, the Hybrid Alternative/SRA is projected to result in a decrease in VMT by about 0.1 to 0.4 percent. These numbers indicate that the project could enhance transit service levels without causing major disruptions to vehicular traffic patterns in San Francisco. Similarly, in 2035, the Hybrid Alternative/SRA would decrease VMT relative to the No Build Alternative by approximately 0.4 percent.

The Draft EIS/EIR included several minimization measures and standard practices would be employed to reduce the need for mitigation measures. At all intersections along Geary Boulevard, measures that would reduce automobile delay may include intersection widening, removal of parking lanes, addition of travel lanes or other strategies to increase intersection capacity. Providing additional travel lanes or otherwise increasing vehicular capacity at these intersections is not feasible because it would require narrowing sidewalks to deficient widths and/or demolition of adjacent buildings. Signal timing adjustments may improve intersection operations, but major timing changes would be infeasible due to traffic, transit, or pedestrian signal timing requirements. Other measures to increase capacity, such as the use of tow away zones or other parking prohibitions to add through lanes or turn pockets, would worsen pedestrian conditions by eliminating the buffer between pedestrians and moving traffic that on-street parking provides. This would increase exposure of pedestrians at intersections that would not support project goals for pedestrian comfort and safety. The Draft EIS/EIR found that because no feasible measures exist to reduce project impacts at the 11 affected intersections, traffic effects at these intersections under the associated build alternative would remain substantial and adverse.

Changes to the Hybrid Alternative/SRA

The changes to the Hybrid Alternative/SRA were examined for the potential to result in new or worsened effects to automobile traffic.

Retention of Webster Street Pedestrian Bridge

The retention of the Webster Street pedestrian bridge would result in greatly reduced construction-period impacts to traffic at Webster and Geary, as the proposed modification would eliminate demolition and major excavation work that would have been required under the previous proposal to demolish the existing bridge. Retention of the bridge would not change the number or capacity of proposed mixed-flow traffic lanes; therefore, no new or worsened traffic impacts would occur as a result of the bridge retention and crossing modification.

Retention of Spruce-Cook Local/Express Stops

Regarding the Hybrid Alternative/SRA changes in the Spruce-Cook area, the changes propose removal of the originally proposed BRT stops from the Spruce-Cook block of Geary Boulevard. Existing eastbound and westbound local/express bus stops on this block would remain and their lengths would be slightly reduced. There would be no change to mixed-flow traffic lanes, and therefore no change to automobile travel times or delay. This proposed modification would reduce construction impacts as new block-long BRT stops would not be constructed and the existing eastbound and westbound bus stops would be reduced in length through painting/restriping. Construction-period effects related to this modification would not result in any new or worsened effects to automobile traffic require any avoidance, minimization, or mitigation measures not already identified in the Draft EIS/EIR.

Additional Pedestrian Improvements

The Hybrid Alternative/SRA as described in the Draft EIS/EIR included the implementation of 65 pedestrian crossing bulbs throughout the Geary corridor; the modified Hybrid Alternative/SRA would include 26 additional pedestrian crossing bulbs at numerous locations through the Geary corridor. These pedestrian improvements would require conversion of a total of 25 on-street parking spaces to non-parking use. None of these improvements would require any space from an existing or future automobile travel lane. Since traffic modeling in the Draft EIS/EIR assumed that all turning movements would occur only from existing or proposed travel lanes, none of the pedestrian improvements added to the Hybrid Alternative/SRA would have any potential to result in any new or worsened traffic impacts relative to the conclusions expressed in the Draft EIS/EIR.

Other Changes to the Draft EIS/EIR

Regulatory Requirements Change: Vehicle Miles Traveled

The following changes to Draft EIS/EIR Section 3.4, Automobile Traffic, are needed to address San Francisco's adoption of revised transportation impact CEQA thresholds pursuant to Senate Bill 743 through Planning Commission Resolution 19579 (further discussed below) as well as to provide minor corrections to the text.

Senate Bill 743, signed in 2013, requires the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to automobile level of service (LOS) for evaluating transportation impacts. In January 2016, OPR published a revised proposal for changes to the CEQA Guidelines recommending vehicle miles traveled (VMT) as opposed to LOS as the primary metric of transportation impact across the State of California. San Francisco adopted OPR's proposed CEQA Guidelines in March 2016 through Planning Commission Resolution 19579. This resolution removes automobile delay as a significant impact on the environment under CEQA and replaces it with a VMT threshold for the City's CEQA determinations going forward.

The Draft EIS/EIR utilized LOS-based analysis, since it was the City's metric for evaluating transportation impacts at the time of preparation and publication of the Draft EIS/EIR. As noted in the Draft EIS/EIR, the LOS-based analysis led to several substantial, adverse impacts at intersections along and near the Geary corridor. These include four study intersections in the year 2020 and eight study intersections in the year 2035, as expressed on Draft EIS/EIR page 3.4-59:

- Parker Street and Geary Boulevard (2035)
- Laguna Street and Geary Boulevard (2020, 2035)
- Gough Street and Geary Boulevard (2020, 2035)
- Van Ness Avenue and Geary Boulevard (2020, 2035)
- California Street and Arguello Boulevard (2035)
- California Street and Presidio Avenue (2035)
- Fulton Street and Stanyan Street (2020, 2035)
- Anza Street and Park Presidio Boulevard (2035)

For the reasons outlined above, none of the changes to the Hybrid Alternative/SRA or the VMT policy change would alter any of these impact conclusions from the Draft EIS/EIR.

In sum, this Final EIR is updating the regulatory information in the Draft EIS/EIR to reflect the City's policy decision regarding the VMT metric. Notably, this Final EIR is retaining all LOS-based traffic impact conclusions from the Draft EIS/EIR.

Please also see **Appendix A** (Errata Summary), which reflects updates to Draft EIS/EIR Chapter 7 (CEQA Analysis), to which VMT-based significance criteria have been similarly appended.

Page 3.4-7, text changes to provide additional discussion of regulatory changes

LOS ~~has been~~ is a performance metric used by the City to evaluate intersection operations for automobiles. ~~However, pursuant to Planning Commission Resolution 19579, automobile delay as described by LOS is no longer considered a significant impact on the environment pursuant to CEQA.~~⁴~~The City has recently been studying potential alternative metrics that could be used in addition to, or in lieu of LOS as a performance metric. Additionally, in September 2013, the Governor signed Senate Bill 743, which established a process to change the analysis of transportation impacts under CEQA to include alternative performance metrics. Based on the draft alternative methods of transportation analysis currently proposed by the Governor's Office of Planning and Research, several alternatives are being considered to evaluation transportation conditions, including the change in Vehicle Miles Traveled (VMT) resulting from a proposed project. As a result, and consistent with the evaluation of other recent projects in San Francisco, as well as recent statewide guidance,~~ this chapter includes information on LOS as well as other automobile performance metrics, including project-related changes to travel times, reliability, and VMT.

⁴ Because the public comment period for the Draft EIS/EIR ended before the Planning Commission's adoption of Resolution 19579, the analysis of LOS has been retained in this document. This Final EIR considers traffic impacts of the proposed project under both LOS and VMT.

Page 3.4-8, text changes to provide additional discussion of regulatory changes

3.4.2.6 | REGIONAL AND CITY VEHICULAR MILES TRAVELED

Many factors affect travel behavior. These factors include density, diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management. Typically, low-density development at great distance from other land uses, located in areas with poor access to non-private vehicular modes of travel, generate more automobile travel compared to development located in urban areas, where a higher density, mix of land uses, and travel options other than private vehicles are available.

Given these travel behavior factors, San Francisco has a lower VMT ratio than the nine-county San Francisco Bay Area region. In addition, some areas of the City have lower VMT ratios than other areas of the City. These areas of the City can be expressed geographically through transportation analysis zones. Transportation analysis zones are used in transportation planning models for transportation analysis and other planning purposes. The zones vary in size from single city blocks in the downtown core, multiple blocks in outer neighborhoods, to even larger zones in historically industrial areas like the Hunters Point Shipyard.

For example, for households, the regional average daily household VMT per capita is 17.2. The City's average daily household VMT per capita is 8.4.

Page 3.4-8, text changes to provide additional discussion of regulatory changes

Traffic conditions were analyzed at 49 on-corridor intersections and 29 off-corridor intersections. As previously mentioned, the PM peak period was chosen as the analysis time period as it represents the period when the maximum use of the transportation system occurs. It is also consistent with the approach suggested in the San Francisco Planning Department's *Transportation Impact Analysis Guidelines*.

SFCTA uses SF-CHAMP to estimate VMT by private automobiles and taxis for different land use types. Travel behavior in SF-CHAMP is calibrated based on observed behavior from the California Household Travel Survey 2010-2012, Census data regarding automobile ownership rates and county-to-county worker flows, and observed vehicle counts and transit boardings.

Page 3.4-27, text edits to make minor clarifications/correct typographical errors in the Draft EIS/EIR

3.4.4.5 | EFFECTS ON TAXI AND SHUTTLE OPERATIONS

The build alternatives would not affect taxi or shuttle operations beyond the effects of the project on private vehicle traffic. Through roadway signing and marking, as well as enforcement, taxis and shuttles would not be permitted to use the dedicated center-running bus-only lanes along the Geary corridor. In locations where buses would operate next to the curb, parking would be prohibited; however, loading zones for taxis and shuttles would be provided at upstream or downstream curb space. Please refer to 3.6, Parking and Loading Conditions.

Page 3.4-56, text edits needed to amend typographical errors in the Draft EIS/EIR

Hybrid Alternative (2035)

The Hybrid Alternative would cause adverse effects at eight study intersections in 2035; four on-corridor intersections and four off-corridor intersections:

- 1) **Parker Street and Geary Boulevard (signalized)**
 - **2035 No Build Conditions:** LOS D
 - **2035 Hybrid Alternative Conditions:** LOS E

Reason for effect: The intersection LOS would degrade under Hybrid Alternative ~~3-Consolidated~~ conditions. This overall decrease in delay is primarily attributable to an increase in delay in the north- and southbound directions.
- 2) **Laguna Street and Geary Boulevard (signalized)**
 - **2035 No Build Conditions:** LOS F
 - **2035 Hybrid Alternative Conditions:** LOS E

Reason for effect: The effect of the Hybrid Alternative ~~3-Consolidated~~ under 2020 Conditions would be considered an adverse effect. This would also be considered an adverse effect under 2035 Conditions.
- 3) **Gough Street and Geary Boulevard (signalized)**
 - **2035 No Build Conditions:** LOS F
 - **2035 Hybrid Alternative Conditions:** LOS F

Reason for effect: The effect of the Hybrid Alternative ~~3-Consolidated~~ under 2020 Conditions would be considered an adverse effect. This would also be considered an adverse effect under 2035 Conditions.
- 4) **Van Ness Avenue and Geary Boulevard (signalized)**
 - **2035 No Build Conditions:** LOS F
 - **2035 Hybrid Alternative Conditions:** LOS E

Reason for effect: The effect of the Hybrid Alternative ~~3-Consolidated~~ under 2020 Conditions would be considered an adverse effect. This would also be considered an adverse effect under 2035 Conditions.
- 5) **California Street and Arguello Boulevard (signalized)**
 - **2035 No Build Conditions:** LOS D
 - **2035 Hybrid Alternative Conditions:** LOS E

Reason for effect: The intersection LOS would degrade under Hybrid Alternative conditions. This overall decrease in delay is primarily attributable to an increase in delay in the east- and westbound directions.
- 6) **California Street and Presidio Avenue (signalized)**
 - **2035 No Build Conditions:** LOS D
 - **2035 Hybrid Alternative Conditions:** LOS E

Reason for effect: The intersection LOS would degrade under Hybrid Alternative conditions. This overall increase in delay is primarily attributable to increased volumes and subsequent delays on the eastbound and westbound through movements.
- 7) **Fulton Street and Stanyan Street (signalized)**
 - **2035 No Build Conditions:** LOS F
 - **2035 Hybrid Alternative Conditions:** LOS F

Reason for effect: The effect of the Hybrid Alternative under 2020 Conditions would be considered an adverse effect. This would also be considered an adverse effect under 2035 Conditions.

8) Anza Street and Park Presidio Boulevard (signalized)

- **2035 No Build Conditions:** LOS E
- **2035 Hybrid Alternative Conditions:** LOS E

Reason for effect: The intersection would continue to operate at the same LOS with the Hybrid Alternative ~~3-Consolidated~~. The Hybrid Alternative ~~3-Consolidated~~ would not increase the overall intersection LOS to a significant degree, although it would contribute to the worsening of delay via an increase in traffic volumes to the westbound critical movement that would be considered significant.

Additionally the following 11 intersections would continue to operate at LOS E or F during the PM peak hour under the Hybrid Alternative ~~3-Consolidated~~, but would not be adversely affected by the project:

- Wood Street and Geary Boulevard
- Lyon Street and Geary Boulevard
- Divisadero Street and Geary Boulevard
- Scott Street and Geary Boulevard
- Steiner Street and Geary Boulevard
- Webster Street and Geary Boulevard
- Van Ness Avenue and O'Farrell Street
- Fulton Street and Park Presidio Boulevard
- Bush Street and Franklin Street
- Polk Street and Hyde Street
- O'Farrell Street and Hyde Street

3.5 Pedestrian and Bicycle Transportation

Summary of Draft EIS/EIR Findings

The Draft EIS/EIR analyzed the potential for the alternatives to result in adverse impacts to pedestrian and bicycle modes of transportation. These impacts are summarized here. The analysis in the Draft EIS/EIR was based on technical reports prepared for the Geary BRT Project, including a Pedestrian Safety Analysis and Recommendations (Appendix D-8 of the Draft EIS/EIR). The Draft EIS/EIR examined the potential for the alternatives to affect pedestrians and bicyclists in terms of pedestrian delay, sidewalk conditions, pedestrian safety, access for senior and persons with disabilities, and bicycle delay.

The Draft EIS/EIR noted in Section 3.5.2 that there are high pedestrian volumes on the entire Geary corridor, especially during peak commute hours. Based on existing counts and travel assumptions from the SF-CHAMP model, there are over 38,000 walking trips along the Geary corridor during the evening peak hour.

The study area is home to a significant population of seniors, as approximately 40 senior centers are located within a quarter mile of the Geary corridor. The corridor is also heavily used by people

with disabilities, including people who use wheelchairs, are deaf, and/or are blind. On some segments of the corridor, such as the blocks between Masonic Avenue and Gough Street, long block lengths combined with long crossing distances restrict pedestrian connectivity. Pedestrian crossing distances, i.e., the length across the roadway between curb ramps, vary along the Geary corridor. Crossing distances gradually increase from approximately 50 feet near 48th Avenue to approximately 125 feet between Divisadero Street and Gough Street.

The Mayor's Pedestrian Strategy and WalkFirst Study identified the Geary corridor as a high pedestrian injury corridor, especially for collision types involving a left-turning vehicle, high speeds, and pedestrians crossing without a crosswalk. The Geary corridor is home to a large senior population; about 20 percent of pedestrians injured along the corridor are seniors.

Geary Boulevard currently has no separated right-of-way for bicycle facilities, except for one block between Presidio Avenue and Masonic Avenue (Class III). Cyclists must therefore share travel lanes with all other traffic. As a result of these unfavorable bicycling conditions, few bicyclists currently travel along the corridor. Geary carries the fewest bicyclists of all nearby parallel east-west streets, with less than five bicyclists per hour in the morning and afternoon peak periods.⁵ However, many cyclists cross Geary Boulevard at various locations. During a five-year period (2006-2010), there were 69 reported bicycle collisions in the Geary corridor, or approximately 14 per year. Bicycle collisions are more common east of Van Ness Avenue and on streets parallel to or crossing Geary rather than along Geary itself.

Section 3.5.4 of the Draft EIS/EIR noted that overall pedestrian delay would not substantially change under Alternative 2 and the Hybrid Alternative/SRA relative to No Build conditions, as signal phasing would largely remain similar to existing conditions. Conversely, Alternatives 3 and 3-Consolidated would have slightly higher pedestrian delay than the No Build Alternative, caused by differences in signal phasing. The Draft EIS/EIR found that the average pedestrian delay during the PM peak hour would be roughly 25-30 seconds per person traversing the corridor for Alternative 2 and the Hybrid Alternative/SRA, and 35-40 seconds per person for Alternatives 3 and 3-Consolidated.

Curb-to-curb crossing distance would not vary substantially between the No Build and build alternatives. In center-running segments of the Hybrid Alternative/SRA, curb-to-curb crossing distances would be divided by a center median and signal. Therefore the total crossing distance would not increase, and the center median would provide refuge for pedestrians not able cross both segments of Geary in one signal length.

The section of the Hybrid Alternative/SRA west of Palm Avenue would have center-running transit operations. In these locations, protected left turn signal phasing for automobiles would be provided, thus reducing potential vehicle-pedestrian conflicts at intersections with left-turns from Geary Boulevard to side streets. People with visual impairments may have difficulty identifying locations of bus stops in sections of the corridor with center-running transit operations, but design features such as tactile cues on signal posts would provide wayfinding information to people with visual impairments.

⁵ SFCTA & SFMTA. 2008. Bicycle Demand Study.

Bicycle volumes on Geary are expected to increase by approximately 20 percent by 2020 and by 30 percent by 2035 compared to existing volumes. The Hybrid Alternative/SRA would include enhanced bicycle accommodations on Geary Boulevard on the one block between Presidio Avenue and Masonic Avenue. This would include designated bicycle lanes in both directions as well as enhanced treatments to promote cyclist visibility. The Hybrid Alternative/SRA would not be expected to adversely affect bicycling delays in the corridor. Bicycle delay per person during the PM peak hour would be roughly 60-80 seconds per person bicycling along the corridor.

In summary, the Draft EIS/EIR concluded that there would be no adverse effects to pedestrian and bicycle circulation along the Geary corridor as a result of the project and thus no avoidance, minimization, or mitigation measures related to pedestrians or bicycles were necessary. However, Section 3.5.5 of the Draft EIS/EIR did identify a number of improvement measures to enhance the pedestrian and bicycle environment. These are set forth in **Appendix C of this Final EIR**.

Changes to the Hybrid Alternative/SRA

The changes to the Hybrid Alternative/SRA were examined for the potential to introduce new or worsened effects to pedestrians and bicycles.

Retention of Webster Street Pedestrian Bridge

The retention of the Webster Street pedestrian bridge and addition of two pedestrian surface crossings on either side of the Webster Street bridge (a straight crossing on the west side of the intersection and a staggered crossing on the east side) would yield benefits related to pedestrian safety, as there would be street-level crossings in addition to the overhead crossing. Pedestrians would have the option to use either the new surface crossings or the existing Webster Street pedestrian overcrossing. The staggered crossing would improve pedestrian sight distance at the westbound frontage road, as pedestrians would cross in front of the existing bridge pier so the pier would not obstruct sight lines between crossing pedestrians and approaching vehicles. A pedestrian barrier would be installed on the center median to guide pedestrians to the second crossing.

Retention of Spruce/Cook Local/Express Stops

The Hybrid Alternative/SRA would no longer add BRT stops and associated full block bus bulbs to the Spruce-Cook block of Geary Boulevard and would retain the current local/express bus stops in this area. Given that there would only be no BRT stops on this block, the walking distance between BRT stops would increase by approximately five blocks in this area. In addition, changes to the Hybrid Alternative/SRA include one additional pedestrian crossing bulb in this area to better facilitate pedestrian movement and crossings. Thus, the mixed effects of increased walking distance between BRT stops, but enhanced pedestrian conditions with the addition of a pedestrian crossing bulb, would offset one another. Accordingly, the removal of the BRT stops at Spruce/Cook as part of changes to the Hybrid Alternative/SRA would not result in any new or worsened pedestrian or bicycle effects.

Additional Pedestrian Improvements

The third modification to the Hybrid Alternative/SRA includes incorporating additional pedestrian crossing improvements to further enhance pedestrian safety at high priority locations along the Geary corridor. The proposed modifications would include pedestrian bulbouts, painted safety zones, and daylighting at various intersections. These improvements would reduce pedestrian crossing distances and improve pedestrian visibility to drivers, which would help to

increase the overall safety of pedestrians in the corridor. Pedestrian crossing bulbs help reduce curb-to-curb crossing widths and the time needed to cross a roadway, especially for slower-moving pedestrians, through an extension of the sidewalk into the intersection. Additional benefits include increased pedestrian visibility, a larger pedestrian queuing area, traffic calming impacts by visually and physically narrowing the roadway, and extra space for curb ramps. This results in improved visibility for seniors and people with disabilities, and additional curb space for wheelchair maneuvering. Therefore, the addition of more pedestrian safety features would not result in any new or worsened pedestrian or bicycle effects. None of the Hybrid Alternative/SRA changes described above would require new avoidance, minimization, or mitigation measures.

Changes to the Draft EIS/EIR

As a result of the foregoing, several text changes to the Draft EIS/EIR are needed to reflect the changes to the Hybrid Alternative/SRA introduced in this Final EIR, as well as to correct an erroneous reference to a Draft EIS/EIR appendix (the Pedestrian Safety Analysis and Recommendations was provided in Appendix D-8).

Page 3.5-6, text edits to correct minor typographical errors

The Mayor's Pedestrian Strategy and WalkFirst Study identified the Geary corridor as a high pedestrian injury corridor, especially for collision types involving a left-turning vehicle, high speeds, and pedestrians crossing without a crosswalk. Appendix D-~~84~~ (~~Geary Corridor Pedestrian Safety Analysis and Recommendations~~) describes pedestrian collision characteristics and recommends countermeasures, including those recommended through the WalkFirst Investment Strategy.

Figure 3.5-1 displays pedestrian-automobile collisions along the Geary corridor from 2007-2011 (Statewide Integrated Traffic Records System, 2014). The figure illustrates that the majority of collisions occurred east of Divisadero, although some portions to the west also experienced high concentrations of pedestrian collisions. In particular, some intersections between Arguello Boulevard and 25th Avenue have higher than average numbers of pedestrian collisions.⁶ The Geary Corridor Pedestrian Safety Analysis confirms that segments east of Divisadero Street experienced the highest number of severity-weighted pedestrian injuries per-mile along the Geary corridor, followed by the segment from Cook Street to 22nd Avenue. The latter segment also experienced overrepresented shares of collisions involving left turning vehicles (about 40 percent versus 25 percent city-wide) and involving seniors (about 30 percent compared to 14 percent citywide).

Page 3.5-8, text edits to correct minor typographical errors

The Geary corridor is home to a large senior population; about 20 percent of pedestrians injured along the corridor are seniors (see Appendix D-~~84~~). Figure 3.5-2 shows existing senior centers and stop locations along the Geary corridor.

⁶ Appendix D-~~84~~ provides more detail on the corridor collision history by breaking down the corridor into seven segments and comparing their collision history.

Page 3.5-11, text edits to correct minor typographical errors

The Geary corridor does not have a dedicated bicycle facility, and few bicyclists currently travel along the corridor - Geary carries the fewest bicyclists of all nearby parallel east-west streets, with less than 5 bicyclists per hour in the morning and afternoon peak periods.⁷ However, many cyclists cross Geary Boulevard at various locations. Bicycle volumes are over two hundred percent heavier east of Masonic Avenue on Geary Boulevard and Geary Street than west of Masonic Avenue. See Appendix D-84 for additional information on existing bicycle volumes along the Geary corridor.

Page 3.5-16, text edits to reflect staff-initiated changes (additional pedestrian improvements)

Pedestrian crossing bulbs and median nose cones reduce roadway crossing distances and provide refuge and improve visibility of the pedestrian to vehicle traffic, therefore reducing their exposure to traffic. As described in Chapter 2, the build alternatives project includes a provision of bulbouts to enhance transit access. The build alternatives project also includes a provision for 54 additional pedestrian crossing bulbs to improve pedestrian safety at high priority locations (Appendix D-84 provides detail on the process for selecting high priority locations for bulbouts). These bulbouts would add to the 14 corner bulbouts already planned to be completed along the Geary corridor in the No Build Alternative for a total of 65 new bulbouts. The Hybrid Alternative/SRA as revised would provide 26 additional pedestrian crossing bulbs, for a total of 91 bulbs including the 65 bulbs previously included.

Page 3.5-17, table edits to reflect staff-initiated changes (additional pedestrian improvements)

Table 3.5-4 Number of Additional Pedestrian Crossing Bulbs by Alternative

	NO BUILD ALTERNATIVE	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 3-C	HYBRID ALTERNATIVE
Number of Pedestrian Crossing Bulbs Provided to Improve Pedestrian Safety (compared to existing conditions)	14	65	65	65	65 91
Pedestrian Refuges Added to Medians	No	Yes	Yes	Yes	Yes

Source: Fehr & Peers, 2014

Page 3.5-19, text edits to correct minor typographical errors

The build alternatives would provide improved access for seniors and people with disabilities in several ways. All build alternatives would add new crosswalks at intersections where crossings are restricted today, which would benefit seniors and pedestrians with disabilities by providing more frequent crossing opportunities. Several new landscaping and urban design features, such as new ADA-compliant curb ramps, improved bus waiting areas, as well as new pedestrian crossing bulbs, nose cones, and pedestrian-scale lighting, would all promote improved comfort and have potential safety benefits for seniors and people with disabilities. Proximity to senior high injury

⁷ SFCTA & SFMTA. 2008. Bicycle Demand Study.

density corridors was considered in the selection of proposed pedestrian crossing bulb locations (see Appendix D-84).

Page 3.5-22, text edits to correct minor typographical errors

There would be no adverse effects to pedestrian and bicycle circulation along the Geary corridor as a result of the project. The following improvement measures would be useful strategies to allow pedestrian and bicycle travel and access to and from BRT stops and would enhance overall project performance:

- **I-PED-1.** Include WalkFirst pedestrian safety recommendations where possible as part of project design (WalkFirst recommendations described in detail in Appendix D-84).
- **I-PED-2.** Use Universal Design Principles to inform detailed engineering design of pedestrian and station facilities to enhance access for disabled persons.
- **I-PED-3.** Include state of the practice bicycle safety and design treatments for the Masonic-to-Presidio bicycle connection, including current design guidance from the City's Bicycle Plan and other state and national sources.
- **I-PED-4.** Monitor pedestrian safety on parallel streets to assess if and how changes in traffic volumes affect pedestrian safety, and identify improvements to address safety issues if necessary.

3.6 Parking and Loading Conditions

Summary of Draft EIS/EIR Findings

The Draft EIS/EIR Section 3.6 analyzed the potential for the alternatives to result in adverse parking and loading impacts. These impacts are summarized here. The analysis was based on detailed parking and loading studies prepared for the Geary BRT Project.

As noted in Draft EIS/EIR Section 3.6.2, the Geary corridor provides a diverse supply of on-street parking and loading facilities, including metered and unmetered general parking spaces, residential parking permit zones (RPP), commercial and passenger loading zones, and parking spaces for persons with disabilities. There are an estimated total of 1,704 parking and loading spaces along the Geary corridor between 34th Avenue and Market Street. Most of the spaces identified (74 percent) are metered or non-metered general parking spaces, including spaces in RPP zones. Fourteen percent of the spaces are designated for commercial loading at some or all times, 11 percent are for passenger loading, and about one percent is parking for people with disabilities. Individual on-street spaces often vary in use between times of day and days of the week. For example, many spaces are designated for loading activities only during specified daytime hours but become general parking spaces in the evening and overnight.

The study area for the parking and loading analysis in the Draft EIS/EIR included on-street spaces on the corridor between 34th Avenue and Market Street. The analysis evaluated how changes to parking in the Geary corridor affected the overall parking supply in the area, including the supply of parking on streets surrounding the corridor and nearby publicly-accessible off-street parking. To quantify the total parking supply available, all parking and loading spaces were considered together, including unrestricted parking spaces, metered spaces, short-term spaces, and

RPP zone spaces, since many users could use one or more types of spaces. The supplies of parking and loading spaces in the corridor are largely interchangeable. The analysis is conservative (i.e., “worst-case”), as the selected distance is well within the accepted significance criterion of one-quarter to one-half mile.

Section 3.6.4 of the Draft EIS/EIR presented the change in parking and loading supply that would result from implementation of the Hybrid Alternative/SRA both in the Geary corridor as a whole as well as for identified segments of the Geary corridor. The Hybrid Alternative/SRA would not remove any off-street spaces in garages or lots. Similarly, it would not involve changes to parking and loading spaces on surrounding streets or in off-street facilities.

The Draft EIS/EIR found that changes in the location and amount of parking spaces would vary by alternative. The Hybrid Alternative/SRA would not result in the net loss of parking between Park Presidio Boulevard and Palm/Jordan Avenues (center-running bus-only lane), but would result in net parking losses in other corridor segments. The largest amount of parking supply loss in a single segment (120 or more spaces) would occur in the Broderick to Laguna segment in the Hybrid Alternative/SRA, where side-running bus lanes would be constructed.

On-street parking loss could result from construction of new station platforms, pedestrian crossing bulbs, travel lane striping to accommodate bus-only lanes, or exclusive right- and left-turn pockets. Parking gains could result from bus stop consolidation, relocation of curb bus stop locations, restriping of existing curb lanes for parking, or addition of parking spaces through restriping of existing parking.

The Hybrid Alternative/SRA would entail the relocation or removal of some commercial and passenger loading zones in the study area. However, all existing loading spaces would be replaced in close proximity to their current locations or their demand could be served with existing nearby loading zones. On Geary Boulevard between Lyon and Baker Streets, there is currently one passenger loading space along the service road on the north side of the block. The space serves Providence Place, a senior assisted living facility that does not have off-street parking or loading spaces. The parking lane along this block face is proposed for elimination with all build alternatives, including the Hybrid Alternative/SRA to accommodate a single, wider mixed-flow lane that would provide more spaces for buses to maneuver in the narrow service road. The Hybrid Alternative/SRA proposes to designate the curb lane along this block as an “active loading zone,” which would prohibit parking but allow standing. This modification would allow passenger loading to continue along the facility’s frontage but still provide most of the benefits to traffic and transit associated with parking lane removal.

In the Union Square area, approximately five commercial spaces and one passenger loading space would be removed and could not be relocated in the nearby area. Most nearby curb space is already designated for loading and general parking in the area is very scarce, resulting in few opportunities to convert parking spaces to loading spaces. Consolidation of loading zones in this area would occur in the following blocks:

- Geary Street between Mason and Powell Streets on the north side (net loss of one passenger loading space and one commercial loading space).
- Geary Street between Grant and Kearny Streets on the north side (net loss of three commercial loading spaces).
- O'Farrell Street between Stockton and Market Streets on the south side (net loss of one commercial loading space).

However, the Draft EIS/EIR found that eliminating these loading spaces would have a minimal effect on the total loading space supply in the Union Square portion of the corridor. In the section of the Geary corridor between Mason and Market Streets, 94 existing spaces (70 percent) are dedicated to commercial loading and 38 existing spaces (28 percent) are dedicated to passenger loading. A loss of six loading spaces would equate to less than 5 percent of total loading spaces in this section of Geary Street and O'Farrell Street. Most perpendicular streets in this area also have large supplies of loading spaces. The remaining loading spaces would be expected to accommodate loading demand. The project team would work with affected land uses (including local business owners) to try to improve effects of loading space consolidation.

The Draft EIS/EIR found that a net loss of parking in the Geary corridor under the Hybrid Alternative/SRA would not inhibit multimodal access in the corridor because a sufficient parking supply would remain to accommodate automobile access while improvements to pedestrian, bicycle, and transit travel would enhance access by alternative modes. The Hybrid Alternative/SRA was designed to minimize parking space removal, and additional parking spaces cannot be accommodated along the Geary corridor without reducing the pedestrian and transit performance benefits of the project. With the Hybrid Alternative/SRA, all loading spaces removed would be relocated within close proximity or would be consolidated because loading demand could be accommodated with existing nearby loading zones.

The Draft EIS/EIR identified one avoidance measure in Section 3.6.5 to further reduce the project's parking and loading effects. That measure is listed as A-PRK-4, and states "Where there are multiple options available to relocate lost loading spaces, the project team shall work with affected land uses, including businesses owners, to identify which location best meets local loading needs and the purpose and need of the project. If space is not available to relocate loading spaces, then loading spaces shall be consolidated with existing nearby loading zones that have additional capacity."

Changes to the Hybrid Alternative/SRA

The changes to the Hybrid Alternative/SRA were examined for the potential to result in new or worsened effects to parking and loading.

Retention of the Webster Street Pedestrian Bridge

The retention of the Webster Street pedestrian bridge would not require any changes to parking and loading spaces. Changes to the Hybrid Alternative/SRA to retain this bridge would thus not introduce any new or worsened effects regarding parking and loading.

Retention of Spruce/Cook Local/Express Stops

The Draft EIS/EIR proposed block-long BRT stops on the Spruce-Cook block of Geary Boulevard, which would have required removal of all parking and loading spaces on that block.

Regarding the Hybrid Alternative/SRA changes in the Spruce/Cook area, without implementation of new BRT bus stops as previously proposed, approximately 10 existing parking and loading spaces on the Spruce-Cook block would be preserved. Therefore, the change in the Spruce/Cook area between the Draft and Final EIR would not introduce any new or worsened effects regarding parking and loading.

Additional Pedestrian Improvements

The additional pedestrian improvements would require conversion of a total of 25 on-street parking spaces to non-parking use. Ten of these spaces would be along the Geary corridor; 15 would be along side streets. The combination of two proposed modifications to the Hybrid Alternative – these pedestrian improvements plus the aforementioned changes to the Spruce-Cook bus stops – would collectively result in a net increase of 15 on-street spaces lost on the Geary corridor, which would be a negligible portion of overall parking loss along the immediate Geary corridor as described in the Draft EIS/EIR (i.e., this change would not change the overall 3-percent decrease in area-wide parking supply under the Hybrid Alternative/SRA, as reported in the Draft EIS/EIR). Therefore, these changes to the Hybrid Alternative/SRA would not result in any new or worsened effects regarding parking and loading.

Changes to the Draft EIS/EIR

As a result of the foregoing, the following text changes to Draft EIS/EIR Section 3.6, Parking and Loading Conditions, are needed to reflect the changes to the Hybrid Alternative/SRA introduced in this Final EIR. The changes below reflect the net decrease of 15 parking spaces due to the Spruce-Cook bus stop configuration changes and additional pedestrian improvements.

Page 3.6-7, staff-initiated modifications reflecting a net decrease of approximately 15 parking spaces under the Hybrid Alternative (note that not all numbers sum correctly due to rounding)

Table 3.6-2 Change in Area-wide Public Parking Supply in the Geary Corridor, by Alternative and Corridor Segment

CORRIDOR SEGMENT	ESTIMATED PUBLIC PARKING SPACES IN AREA	AREA-WIDE PUBLIC PARKING SUPPLY (WITH % CHANGE)			
		ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 3-CONSOLIDATED	HYBRID ALTERNATIVE
34th Avenue - 25th Avenue	1,000	950 (-6%)	960 (-4%)	960 (-4%)	960 (-4%)
25th Avenue - Park Presidio	1,430	1,380 (-4%)	1,320 (-7%)	1,410 (-1%)	1,410 (-1%)
Park Presidio - Palm/Jordan	1,750	1,710 (-2%)	1,740 (-1%)	1,770 (+1%)	1,750 (0%)
Palm/Jordan - Broderick	1,830	1,740 (-5%)	1,710 (-7%)	1,760 (-4%)	1,740(-5%)
Broderick - Gough	3,790	3,630 (-4%)	3,700 (-2%)	3,730 (-1%)	3,660(-4%)
Corridor (34th - Gough) total	9,800	9,400 (-4%)	9,430 (-4%)	9,630 (-2%)	9,490(-3%)

Note: SFCTA rounded to nearest ten. Not all numbers sum correctly due to rounding.

Page 3.6-11, minor corrections to the text

Table 3.6-5 Change in Parking Supply in the Masonic Study Area

ALTERNATIVE	NUMBER OF PARKING SPACES ON GEARY	PERCENT CHANGE IN AREA PUBLIC PARKING SUPPLY
No Build	109	N/A
2	32	-7%
3	16	-9%
3-Consolidated	36	-7%
Hybrid	32 <u>3231</u>	-7%

Page 3.6-12, staff-initiated modifications and minor corrections to the text.

Table 3.6-7 Change in Parking Supply in the Japan/Fillmore Study Area

ALTERNATIVE	NUMBER OF PARKING SPACES ON GEARY	PERCENT CHANGE IN AREA PUBLIC PARKING SUPPLY
No Build Alternative	154	N/A
Alternative 2	60	-3%
Alternative 3	105	-2%
Alternative 3-Consolidated	105	-2%
Hybrid Alternative	60 <u>59</u>	-3%

Table 3.6-9 Change in Supply of Commercial Loading Spaces

CORRIDOR SEGMENT	# SPACES: NO BUILD ALTERNATIVE	CHANGE IN NUMBER OF COMMERCIAL LOADING SPACES IN GEARY CORRIDOR							
		ALTERNATIVE 2		ALTERNATIVE 3		ALTERNATIVE 3- CONSOLIDATED		HYBRID ALTERNATIVE	
		SPACES RELOCATED	CHANGE IN TOTAL SUPPLY	SPACES RELOCATED	CHANGE IN TOTAL SUPPLY	SPACES RELOCATED	CHANGE IN TOTAL SUPPLY	SPACES RELOCATED	CHANGE IN TOTAL SUPPLY
34 th Avenue - 25 th Avenue	3	1	0	2	0	2	0	2	0
25 th Avenue - Park Presidio	10	0	0	3	0	0	0	0	0
Park Presidio - Palm/Jordan	7	0	0	1	0	0	0	0	0
Palm/Jordan - Broderick	2	0	0	1	0	0	0	0	0
Broderick - Laguna	8	4	0	2	0	2	0	4	0
Laguna - Van Ness	2	0	0	0	0	0	0	0	0
Van Ness - Market	205	6	-5	6	-5	6	-5	6 <u>8</u>	-5
Corridor Total	237	11	-5	15	-5	10	-5	12 <u>14</u>	-5