San Francisco County Transportation Authority
1455 Market Street, 22nd Floor
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AGENDA

Geary Bus Rapid Transit (BRT)
CITIZENS ADVISORY COMMITTEE (GCAC) – Meeting 33

Date: Wednesday, January 4, 2017; 6:00 p.m.

Location: SFCTA Offices, 1455 Market Street, 22nd Floor

Members: Cyndi Bakir, Asher Butnik, Paul Chan, Joanna Fong, Peter Gallotta, Richard Hashimoto, Benjamin Horne, Jolsna John, Angela Paige Miller, William Newsom, Alexander Post, Kevin Stull

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6:00 1. Committee Meeting Call to Order

6:05 2. Adoption of Minutes of the November 17 Meeting – ACTION* **3**

6:10 3. Updates and Announcements – INFORMATION

6:15 4. Adopt a Motion of Support to Certify the Final Environmental Impact Report for the Geary Corridor Bus Rapid Transit Project; Adopt the CEQA Findings including a Statement of Overriding Considerations; Adopt the Mitigation, Monitoring, and Reporting Program; Approve the Hybrid Alternative as the Geary Corridor Bus Rapid Transit Project; and Select the Hybrid Alternative as the Locally Preferred Alternative – ACTION* **7**

The purpose of the Geary Corridor Bus Rapid Transit (BRT) Project is to improve the speed, reliability, and quality of public transportation service along the Geary corridor while also increasing pedestrian safety, enhancing the streetscape, and maintaining multimodal circulation. In partnership with the San Francisco Municipal Transportation Agency, and as lead agency under the California Environmental Quality Act (CEQA), the Transportation Authority has prepared a Final Environmental Impact Report (EIR) for the Geary Corridor BRT Project. The Geary Corridor BRT Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) published on October 2, 2015 evaluated four build alternatives encompassing side- and center- bus lane designs, and a no-build alternative. The Draft EIS/EIR identified the Hybrid Alternative, which includes segments of side-running and center-running dedicated bus lanes, as the Staff-Recommended Alternative. The Final EIR includes responses to comments received during the Draft EIS/EIR public comment period and incorporates minor design modifications to the Hybrid Alternative in response to the comments received. The Final EIR was published on December 9, 2016 via notifications in multiple formats and languages including a radius mailing along the corridor. The Geary Corridor BRT Citizens Advisory Committee has overseen the project from its inception and will meet on January 4, 2017 to consider a recommendation regarding certification of the Geary Corridor BRT EIR, Project approval, and selection of the Locally Preferred Alternative.

7:30 5. Next Steps and SFMTA CAC Formation – INFORMATION+

The Geary BRT project lead will transition from the Transportation Authority to SFMTA together with completion of the environmental review phase. To facilitate ongoing and in-depth community input through the design and construction phases, SFMTA will form a new Citizens Advisory Committee (CAC) and a separate Business Advisory Committee (BAC). The project team will provide an overview of outreach to be conducted during future project phases, including the formation of the new CAC and BAC. **We are seeking comments and input from the Committee.**

7:45 7. Public Comment

8:00 8. Adjournment

* Materials attached.

+ Materials distributed at meeting

This meeting location is wheelchair accessible. In order to allow individuals with environmental illness or multiple-chemical sensitivity to attend the meeting, individuals are requested to refrain from wearing perfume or other scented products. All times shown are for information only. Items will be called at the discretion of the Moderator.

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Draft Minutes

Geary Bus Rapid Transit (BRT)
CITIZENS ADVISORY COMMITTEE (GCAC)
Meeting 32 - Thursday November 17, 2016

Present were the following members:

Asher Butnik, Joanna Fong, Peter Gallotta, Richard Hashimoto, Benjamin Horne, William Newsom, Winston Parsons, Alexander Post, Kevin Stull

Transportation Authority staff: Colin Dentel-Post

SFMTA Staff: Wahid Amiri, Liz Brisson, Kate Elliott, Monica Munowitch

1. **Committee Meeting Call to Order**

   The meeting was called to order by Meeting 32 moderator William Newsom at 6:07 PM.

2. **Adoption of Minutes of the September 29 Meeting – ACTION**

   Joanna Fong moved to approve the September 29, 2016 minutes. Mr. Newsom seconded the motion. The motion passed unanimously.

3. **Updates and Announcements – INFORMATION**

   Colin Dentel-Post welcomed Liz Brisson to the project team in the role of SFMTA Phase I lead. He announced that there would be a SPUR panel forum on November 22nd and there was an open spot for a GCAC member. Kevin Stull volunteered to join the panel.

   Peter Gallotta asked how the previous week's election results would impact federal funding for Geary BRT. Mr. Dentel-Post indicated the project is planning for $100M in Small Starts funding from the Federal Transit Administration, but it was too early to tell what the election's implications would be.

4. **Update on Stakeholder Outreach and Next Steps– INFORMATION**

   Liz Brisson gave an update on outreach since the last GCAC meeting. She explained the outreach process leading up to the milestone of the Final Environmental Impact Report (EIR). Ms. Brisson explained that Cathedral Hill stakeholders requested conversion of the Gough stop to a Rapid stop; staff explained it is not a good candidate for a Rapid stop but that local service would get faster and more reliable. Japantown requested to retain Laguna as a Rapid stop; staff recommends it be retained as a local-only stop primarily to save time for more transit riders, bus it committed to including better wayfinding, streetscaping, an education campaign (including ambassadors), and improved vehicle branding (including sign heads, new bus flags).

   Wahid Amiri gave an update on outreach with representatives of the Holy Virgin Cathedral, who had three main concerns: parking, the center-to-side bus lane transition location, and the Collins stop.

There are a total of 20 parking spaces lost near the Cathedral, so staff evaluated alternatives like shared parking or street reconfiguration. A potential design at 29th Avenue shows parking reconfiguration could result in 19 new parking spaces. Mr. Amiri explained that the transition location west of 25th Avenue is to avoid the busiest retail area but staff is committed to continuing review of tradeoffs at other locations, including further outreach. The Collins local stop is proposed for removal, but the project team understands that seniors use it frequently and is committed to re-evaluating the proposal. Mr. Amiri explained that upcoming milestones were the publication of the Final Environmental Document and Board approvals.

Richard Hashimoto raised concerns about converting the Laguna stop to a local-only stop, noting that people currently use the Rapid service and are concerned about wait times for local buses, but also noted the communications strategies staff has proposed could help with some concerns. Ms. Brisson said she was committed to further discussions with the community.

William Newsom asked how reversible a decision on the stop would be, like making it local-only and later converting it back to Rapid. Ms. Brisson indicated that staff had done technical studies to develop their recommendation but the Transportation Authority and SFMTA Boards would need to give final approval. Kate Elliot indicated that the stop changes would happen first, followed but the expensive construction to build bus bulbs later in the process. Mr. Dentel-Post added that the environmental document analyzed alternatives and that Board approval represents overall project approval; additional outreach will occur to inform design details in the next phase.

Benjamin Horne asked about possible streetscape design refinements in Japantown. Ms. Brisson indicated staff would meet with community members to discuss the improvements they desire.

Peter Gallota asked what the travel time difference would be if the Laguna were Rapid. Ms. Brisson said the analysis found that about 5-8% of the project's travel time benefit for through riders would be lost.

Winston Parsons asked about the stop removal at Collins. Mr. Amiri indicated that the team was still evaluating options, but if the analysis found that that keeping the stop would not affect the environmental analysis then the design could be changed to keep the stop as-is.

Joanna Fong asked why the stop elimination was proposed in the first place. Mr. Dentel-Post said it was part of the consolidated service design and that the project team had met with area stakeholders previously and the issue had not come up.

Kevin Stull asked if the idea was to have these issues resolved by a Board hearing in December. Mr. Amiri stated that these analyses were on a parallel track and the team did not want to hold up the environmental analysis.

Joanna Fong stated that this approval of concept is at a high level and the process would then forward to the next phase of work and refinement, and that this is typical.

During public comment, Maureen Duffey said she lived at the corner of Laguna and Geary and petitioned for a Limited bus stop many years ago. She noted that there are hills on either side of Laguna so it would be difficult for seniors to go to Fillmore or Van Ness.

David Hyry said that Laguna has the highest density of senior housing and is an economic and tourist center. He asked if the California Pacific Medical Center (CPMC) expansion was accounted for in the project analysis, and said how this would affect travel time at Laguna was unknown. He questioned whether the Board of Supervisors would approve the plan and said a lot remained unaddressed.

Suzanne Smith said she was the president of Residents Association at the Sequoias, and that it was

important talk in terms of the environment people live in, specifically that the Laguna stop is on a hill and many seniors live there.

Lois Scott said she lived at the intersection of Laguna and Geary in a cooperative, and wished that the project team had done more outreach to the disabled community since it looked like there would be unanticipated consequences. She said that many people need to use walkers if they go very far, but can walk to destinations close by, and if the stop change resulted in more people using walkers it could slow down bus loading times. She said she was glad the team was working to better identify Rapid and Local buses.

Bob Starzel said he was disappointed that a request to move the CAC meeting to the Richmond was turned down, and thought the CAC should get out to see things their way from Masonic west and the fragile businesses there. He said he was concerned about changes to the Boulevard. He asked if copies of the EIR had been made available, and also whether the California Traffic Control Devices Committee had anything to do with the Federal Transit Administration delay.

Euliky Sisca said she lived near Laguna and did not care if it was a Local or Rapid stop but she could not fit on a bus in the morning because it so busy. She expressed concern that if the Rapid stop were eliminated and there were fewer buses stopping at Laguna it would be even harder for commuters to get on a bus.

Cindy Jo said she was at the meeting to oppose elimination of the Laguna stop, and she is also part of Chinatown groups, which have many members who use the Laguna stop.

In response to public comments, Mr. Dentel-Post explained that the Laguna stop is a challenging trade-off and explained the technical analysis of travel time and ridership, which found that many more riders would benefit from a Local-only stop at Laguna, and also noted that the project would include more service overall on the corridor to address crowding and bus bunching. He also clarified that both the Local and Rapid are getting the new low-floor buses, and said the CPMC project was included in the project analysis assumptions.

Peter Gallotta asked what the ratio of local to rapid service would be. Ms. Brisson responded that SFMTA consistently monitors ridership on both and it is challenging for the agency to balance service to minimize crowding. She noted that the service plan assumptions for the project include 6-minute headways for the Local and 2-3 minute headways for the Rapid at peak times.

5. Update on Final Environmental Document and Preview of Notifications and Outreach – INFORMATION

Colin Dentel-Post gave a presentation and update on the environmental process, next steps on approvals, and upcoming notification activities.

Kate Elliot talk about the SPUR panel on November 22nd at 12:30pm, which was featured in the SFGate blog and an article. She said a mailer is planned to be published after Thanksgiving, that flyers/postcards would be passed out at bus stops to announce when the environmental document is released, that web updates and new content would be added, and social media notifications were planned.

Richard Hashimoto asked if there would be opportunity for public comment at the TA Board. Mr. Dentel-Post said yes, there would be.

Kevin Stull asked how Scott Weiner's election to the State Senate would affect the TA Board. Mr. Dentel-Post mentioned that the Mayor would assign a person to the seat, but the timing was unknown.

Joanna Fong thanked Kate for her presentation and said the transparency is good. She said it was a good idea to emphasise that the environmental document was not the end of the public process.

Alexander Post asked if the GCAC could learn about outreach efforts ahead of time so they could get involved. Ms. Elliot said yes.

Richard Hashimoto asked about letters submitted from the public and whether the GCAC could see them. Mr. Dentel-Post said he would share them with the GCAC.

Winston Parsons said he wanted to share thoughts about the Laguna stop since it's a hard thing to balance. He noted that people in the outer Richmond buy cars or move because the bus is slow. He said he was hopeful there was a way to make it work so it is not detrimental to seniors and can benefit the project. He said his inclination is to keep the stop at Laguna local.

Kevin Stull asked if the team could send links to articles and the blog. Mr. Dentel-Post said he would send them again.

Peter Gallotta asked if the GCAC would receive the final environmental document and wanted to know the timeline of who decides first. He said he hope that the approvals would be in January due to the December holidays. Mr. Dentel-Post said the project team would let the GCAC know when the document is available and that the GCAC recommendation would be first, followed by the TA Board, then the SFMTA Board.

During public comment, Bob Starzel asked if it takes 10 days after the FTA publishes the notice in the Federal Register before the TA Board could act. Mr. Dentel Post said the ten-day requirement is for CEQA purposes so it would be ten days from release of the document. Mr. Starzel also asked if the final document would include a more precise categorization of Phase I and Phase II and the Federal funding amount. Mr. Dentel Post clarified that the final document is mostly responses to comments, including changes in response to feedback, but there would be no changes to the assumed Federal funding amount.

6. Public Comment

Nick Carnero said he lived in the Richmond and that people really want the project, and it should be built now.

7. Adjournment

Winston Parsons moved to adjourn the meeting. Kevin Stull seconded the motion. The motion was approved unanimously and the meeting adjourned at 7:48 p.m.

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Memorandum

Date: 12.22.16

RE: Geary BRT CAC
January 4, 2017

To: Geary Bus Rapid Transit Citizens Advisory Committee

From: Eric Cordoba – Deputy Director for Capital Projects

Subject: **ACTION** – Adopt a Motion of Support to Certify the Final Environmental Impact Report for the Geary Corridor Bus Rapid Transit Project; Adopt the CEQA Findings including a Statement of Overriding Considerations; Adopt the Mitigation, Monitoring, and Reporting Program; Approve the Hybrid Alternative as the Geary Corridor Bus Rapid Transit Project; and Select the Hybrid Alternative as the Locally Preferred Alternative

Summary

The purpose of the Geary Corridor Bus Rapid Transit (BRT) Project is to improve the speed, reliability, and quality of public transportation service along the Geary corridor while also increasing pedestrian safety, enhancing the streetscape, and maintaining multimodal circulation. In partnership with the San Francisco Municipal Transportation Agency, and as lead agency under the California Environmental Quality Act (CEQA), the Transportation Authority has prepared a Final Environmental Impact Report (EIR) for the Geary Corridor BRT Project. The Geary Corridor BRT Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) published on October 2, 2015 evaluated four build alternatives encompassing side- and center- bus lane designs, and a no-build alternative. The Draft EIS/EIR identified the Hybrid Alternative, which includes segments of side-running and center-running dedicated bus lanes, as the Staff-Recommended Alternative. The Final EIR includes responses to comments received during the Draft EIS/EIR public comment period and incorporates minor design modifications to the Hybrid Alternative in response to the comments received. The Final EIR was published on December 9, 2016 via notifications in multiple formats and languages including a radius mailing along the corridor. The Geary Corridor BRT Citizens Advisory Committee has overseen the project from its inception and will meet on January 4, 2017 to consider a recommendation regarding certification of the Geary Corridor BRT EIR, Project approval, and selection of the Locally Preferred Alternative.

BACKGROUND

The purpose of the Geary Corridor Bus Rapid Transit Project (Geary BRT or Project) is to improve the speed, reliability, and quality of public transportation service along the Geary corridor while also increasing pedestrian safety, enhancing the streetscape, and maintaining multimodal circulation. It is a signature project in the voter-approved Prop K Expenditure Plan.

The 6.5-mile Geary corridor is served by the Muni 38 Geary Local, Rapid, and Express bus routes and includes Geary Boulevard, Geary Street, O'Farrell Street as well as portions of other streets the routes traverse. Physical improvements are proposed along the corridor generally between Market Street and 34th Avenue.

The corridor is an exceptionally busy transit link; each day it sees more than 52,000 boardings via public transit and serves automobile volumes that vary between 12,000 in the outlying neighborhoods west of Park Presidio to 45,000 at the highest-demand locations. In addition, the corridor hosts tens of thousands people walking daily.

The BRT Project would include:

- Dedicated bus lanes separated from regular (mixed-flow) traffic to reduce delays and improve reliability.
- Stop spacing adjustments to improve efficiency, including relocating and removing bus stops.
- High-quality stations, with more room for passengers to wait, canopies for weather protection, seating, vehicle arrival time information, pedestrian-scale lighting, landscaping, and Americans with Disabilities Act (ADA) accessibility.
- Traffic signal optimization to improve traffic flow.
- Improved Transit Signal Priority to provide additional green light time for buses approaching intersections.
- Pedestrian safety enhancements to reduce crossing distances at intersections, increase the visibility of people walking, calm traffic, and improve crossing signals.

In 2007, the Transportation Authority Board adopted the Geary Corridor BRT Feasibility Study, which evaluated the feasibility of five conceptual design alternatives for the Geary corridor. BRT was identified as an efficient and cost-effective way to deliver high-quality transit service to the Geary corridor. The Feasibility Study found that BRT would be feasible in the Geary corridor and recommended environmental review and further design work to identify a preferred alternative.

DISCUSSION

The Transportation Authority has prepared a Final Environmental Impact Report (EIR) for the Geary Corridor Bus Rapid Transit (BRT) Project. The Transportation Authority is the lead agency under the California Environmental Quality Act (CEQA). The San Francisco Municipal Transportation Agency (SFMTA) will design, implement, and operate the Project. The Federal Transit Administration (FTA) is the lead agency under the National Environmental Policy Act (NEPA) and is expected to separately publish a Final Environmental Impact Statement (EIS) and Record of Decision (ROD).

In November 2008, the Transportation Authority, in cooperation with FTA, issued a federal Notice of Intent (NOI) to prepare an EIS and a state Notice of Preparation (NOP) to prepare an EIR. The Project team undertook a comprehensive outreach effort to inform the environmental scope and alternatives development for the Project, including three public scoping meetings and meetings with the Geary BRT's Citizens Advisory Committee (GCAC), Technical Advisory Committee (TAC), and numerous stakeholder groups. This analysis and outreach is documented in the 2009 Geary Alternatives Screening Report and the 2014 Geary Bus Rapid Transit Design Options Screening Report.

The Geary Corridor BRT Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) was completed, published in the Federal Register, and circulated for public comment from October 2, 2015 to November 30, 2015. The Draft EIS/EIR evaluated five project alternatives as described below.

Alternative 1, No-Build: Under the No Build Alternative, physical infrastructure and transit service in the Geary corridor would remain unaltered except for changes associated with other City projects that are either planned or programmed to be implemented in the Geary corridor by the year 2020. These changes, many of which have recently been implemented or are currently underway, include planned

service increases, wireless Transit Signal Priority (TSP) at signalized intersections, new or replaced traffic signals at several locations, 14 new pedestrian crossing bulbs and curb ramps at various locations, pedestrian countdown signals at signalized intersections where they do not already exist, and replacement of all corridor rolling stock with new low-floor buses.

Build Alternatives: Each of the four build alternatives would implement BRT along the Geary corridor, including dedicated bus-only lanes from Market Street to 34th Avenue. West of 34th Avenue and from Market Street to the Transbay Terminal, the Project would not include new bus-only lanes and buses would continue to operate using existing infrastructure. In addition, each build alternatives would include upgraded fiber-based TSP at most signalized intersections; high-amenity stations at BRT stops; two mixed-flow traffic lanes in each direction between Gough Street and 34th Avenue; pedestrian improvements, including pedestrian crossing bulbs, high-visibility crosswalk striping, new surface crosswalks at several locations; and construction of a new bicycle lane on Geary in the block between Masonic Avenue and Presidio Avenue to close an existing gap in the City's bicycle network.

Alternative 2, Side-Lane BRT: Alternative 2 would implement BRT service to replace the existing 38R service while retaining Local and Express service in the corridor. From Market Street to 34th Avenue, buses would operate in dedicated side-running bus-only lanes, replacing the existing outside travel lanes of the Geary corridor, next to the existing curbside parking lane that would remain at most locations. Existing 38 Local service would also operate in the dedicated bus lanes but would pull out of the lanes to service curbside local bus stops, enabling BRT buses to pass.

Alternative 3, Center-Lane BRT with Dual Medians and Passing Lanes: Alternative 3 would also include operation of BRT, local, and express buses. This alternative would be different from Alternative 2 from Gough Street to 27th Avenue. There, BRT and local service would operate in dedicated bus-only lanes in the center of the Geary corridor. BRT stations and local bus stops would be provided at center boarding islands. A bus passing lane at local bus stops would enable BRT buses to pass local buses stopped to load and unload passengers. In all other locations, this alternative would be similar to Alternative 2.

Alternative 3-Consolidated, Center-Lane BRT with Consolidated Bus Stops, Dual Medians, and No Passing Lanes: The configuration of Alternative 3-Consolidated would be similar to Alternative 3, with center bus-only lanes from Gough Street to 27th Avenue. However, BRT service would replace both 38R and 38 Local service as a new consolidated service, eliminating the need for bus passing lanes. BRT stations would be closer together than existing Rapid stops, but farther apart than existing local stops.

Hybrid Alternative: The Hybrid Alternative incorporates various physical features of Alternatives 2 and 3-Consolidated in different segments, combined to provide a mix that intends to maximize benefits and minimize impacts. BRT, local, and express buses would operate in the corridor. From Market Street to Palm Avenue, local and BRT buses would operate in side-running bus-only lanes. Between Palm Avenue and 27th Avenue, local and BRT buses would operate in dedicated bus-only lanes in the center of the Geary corridor, with no bus passing lanes. Every stop would serve both local and BRT buses; these stops would be closer together than existing Rapid stops, but farther apart than existing local stops. Between 27th Avenue and 34th Avenue, all buses would operate in new side-running bus-only lanes. Between 34th Avenue and 48th Avenue, no bus-only lanes would be constructed; all buses would operate in mixed-flow lanes. In side-running portions of the corridor, BRT buses would be able to pass local buses at local stops.

Identification of the Staff-Recommended Alternative: Project staff from both the Transportation Authority and SFMTA identified the Hybrid Alternative as the Staff-Recommended Alternative (SRA), as reflected in the Draft EIS/EIR. Chapter 10 of the Draft EIS/EIR presents a full analysis of the relative benefits and impacts of the Geary Corridor BRT alternatives. The BRT alternatives are evaluated based on their performance in meeting the Project purpose and need, as well as based on considerations of

importance to multiple agencies and numerous community stakeholder groups, including the GCAC. This process included an extensive public outreach process to collect input on the alternatives, with three public open houses in 2013 and 2014 and meetings with more than 25 community stakeholder groups.

Transportation Authority and SFMTA staffs recommend approval of the Hybrid Alternative and selection of the Hybrid Alternative as the Locally Preferred Alternative (LPA). Selection of an LPA is required under NEPA. Both Alternative 3 and Alternative 3-Consolidated have significant and costly constraints due to the existing underpasses of Geary Boulevard at Fillmore Street and Masonic Avenue. The No Build Alternative would not meet the Project purpose and need, because it would include relatively minimal improvements to transit performance and pedestrian safety. Of the remaining alternatives, the analysis found that the Hybrid Alternative would outperform Alternative 2 in terms of transit performance and pedestrian safety. The Hybrid Alternative would also preserve most curbside parking between Arguello Boulevard and 25th Avenue, addressing a key concern of stakeholders in the Richmond District, while Alternative 2 would result in more parking loss in this area. Based on its superior performance in meeting the need and purpose of the Project by improving transportation conditions in the corridor and its similar or reduced impacts in key areas of community concern compared to other alternatives, Transportation Authority and SFMTA staffs recommend approval of the Hybrid Alternative and selection of the Hybrid Alternative as the Project LPA.

Draft EIS/EIR Publication and Notification: The Transportation Authority published a Notice of Availability/Notice of Completion (NOA/NOC) and distributed copies of the Draft EIS/EIR to the State Clearinghouse on October 2, 2015. An NOA also appeared in the Federal Register concurrently. The public comment period was initially scheduled to last 45 days from the release date, but was subsequently extended from October 2, 2015 through November 30, 2015. The Transportation Authority made the Draft EIS/EIR document available for public review and comment by placing electronic copies on the Transportation Authority website, and by making hard copies available at SFMTA, Planning Department, four branches of the San Francisco Public Library located near the corridor, and Transportation Authority offices. Additionally, CDs were available upon request, and hard copies available for purchase from the Transportation Authority. Comments from the public could be sent by mail or email throughout the circulation period, and verbal or written comments could be submitted at the public comment meeting. Access to the technical reports and supporting documents were made available upon request.

The Transportation Authority noticed the availability of the Draft EIS/EIR for public review and comment, the date and time of the public comment meeting on the Draft EIS/EIR, and the dates of the comment period through a variety of communications channels. Multilingual communications included Spanish, Chinese, and Filipino, and in some cases also Russian, Japanese, Vietnamese, and Korean. A multilingual mailer was sent to over 20,000 residential and commercial addresses along the Geary corridor. The project team also provided announcements via a multilingual project website; a multilingual email to over 1,000 recipients; multilingual ads posted in bus shelters and buses along the corridor; newspaper ads in the San Francisco *Examiner*, *Richmond Review*, *The New Fillmore*, *Western Edition*, *Central City Extra*, *Kstati*, and *Nichi Bei Weekly*; Facebook ads; Facebook and Twitter posts; and a press release.

Public Comment Meeting on the Draft EIS/EIR: As part of the public review process for the Draft EIS/EIR, the Transportation Authority hosted a noticed public comment meeting on November 5, 2015 at St. Mary's Cathedral. The meeting was designed to share project information, discuss the Project with staff, and submit public comments in writing on comment cards or orally via court reporters. Approximately 160 people attended the meeting.

Public and Agency Comments: During and immediately after the formal comment period on the Draft EIS/EIR, the Transportation Authority received a total of 299 comment communications (e.g. letters, emails, oral comment transcripts). These included 6 communications from agencies, 13 communications from organizations, and 280 separate communications from 244 individuals. All comments received during the public comment period, as well as those received before December 10, 2015, are included in Appendix B of the Final EIR along with written responses to each of the comments.

The most commonly received comments included the following topic areas:

- Pedestrian safety and access, including retention of the Webster Street pedestrian bridge
- Type and range of alternatives
- Traffic/auto travel on Geary and diversion to surrounding roadways
- Local business impacts (including construction-period effects, parking, and access)
- Parking and loading supply
- Project cost
- Tree removal/replanting
- Stop locations/removal
- Nature of outreach conducted and length of public comment period
- Bicycle safety/access

The other common comment areas were the Project's overall merits and preferences for a LPA. About 50 commenters indicated opposition to the Project, while more than 90 commenters stated support for one or more of the build alternatives or the Project in general. Of the approximately 50 commenters who expressed a preference between the alternatives studied, nearly half supported Alternative 3 or Alternative 3C, the fully center-running alternatives, and about a third preferred Alternative 2, the fully side-running alternative. Smaller numbers of commenters indicated support for the Hybrid Alternative or only a portion of a build alternative.

Additional Comments and Outreach: Throughout the environmental phase of the Project, the project team has conducted significant outreach, meeting more than 60 times with more than 30 stakeholder groups to incorporate feedback. Some of these meetings have been conducted in languages other than English. The team has also attended neighborhood events such as farmer's markets, Sunday Streets, and the Richmond Community Health Fair to provide information to the public about the Project. A survey of corridor merchants and a survey of business customers in the Richmond provided additional input that informed the Project design. Virtual reality kiosks, known as OWLs, were installed at two corridor intersections (at Webster Street and 17th Avenue) from October 2015 through December 2015 to provide passers-by with visualizations of the BRT Project and collect responses to several survey questions. Finally, the GCAC convened regularly to provide ongoing input on the environmental analysis and community engagement.

Since the close of the public comment period of the Draft EIS/EIR on November 30, 2015, the project team has continued to receive public input. Individual comments received after December 10, 2015 are not included in the Final EIR but are included as an Enclosure. The Transportation Authority has reviewed the comments received after the close of the public comment period on the Draft EIS/EIR. Key issues raised in these comments, as well as during community engagement that occurred after the close of the comment period, include:

- Richmond stakeholder concerns: project benefits and impacts
- Red transit-only lanes

- Laguna Street bus stop
- Webster and Steiner Street Pedestrian Overcrossings
- Spruce Street bus stop
- Holy Virgin Cathedral concerns: parking and bus lane transition
- Project alternatives: preference for rail, other BRT alternatives, or No Project Alternative
- Collins Street bus stop
- Final EIR approval schedule

Comments on several of these topics are similar to comments previously received on the Draft EIS/EIR and responded to in the Final EIR, which included several project changes in response to the input received. In addition, most of these topics are discussed in the Final EIR Chapter 5: Public Participation. Comments regarding two of these topics were received recently and not addressed in the Final EIR:

- **Collins Street bus stop:** The SRA includes removal of the local bus stop at Collins Street. However, representatives of Russian-American Community Services (RACS), located on Collins Street at Anza Street, raised concerns about seniors who rely on RACS services and use the stop at Collins Street. The project team continues to meet with RACS representatives and is working to resolve this issue.
- **Final EIR approval schedule:** After the Transportation Authority published the Final EIR on December 9, 2016 and distributed notifications of the Board certification hearing scheduled on January 5, 2017, several requests were received to delay the Board hearing to provide additional time for review of the Final EIR. However, the 27 days between publication of the Final EIR (including the Response to Comments) and the Board certification hearing significantly exceeds CEQA requirements and provides sufficient time for review. The project team has conducted extensive outreach throughout the environmental phase of the project to address issues raised by community stakeholders.

None of the communications received after the close of the comment period contain new information revealing new or more severe significant environmental impacts that would result from the Project, identify feasible Project alternatives or mitigation measures substantially different from those identified in the Draft EIS/EIR, or point to substantial flaws in the Draft EIS/EIR.

Final EIR Publication and Notification: On December 9, 2016 the Transportation Authority published the Final EIR. The Final EIR includes all comments received during the Draft EIS/EIR comment period and responses to those comments. The Final EIR was posted on the Transportation Authority's website and also made available for public review at the Transportation Authority office, SFMTA's office, the Planning Department's Planning Information Counter, and at four branches of the San Francisco Library near the corridor. Electronic or paper copies of the Final EIR were sent to all parties that commented on the Draft EIS/EIR and provided either a physical mailing address or an email address.

Concurrent with publication of the Final EIR on December 9, 2016, an NOC was published in the State Clearinghouse and the NOA was posted on the Transportation Authority's website announcing the document's availability and the upcoming Transportation Authority Board approval hearing on January 5, 2017. Notice included an email to the project email list with over 900 addresses and a multilingual mailer sent to over 37,500 commercial and residential addresses near the corridor. In addition, the Transportation Authority provided notice of the Final EIR release and approval hearing via a press release; newspaper ads; posts on Facebook, Twitter, and Nextdoor; over 280 multilingual

posters at bus stops and on utility poles along the corridor; and project representatives distributing approximately 10,000 handouts at bus stops.

The Draft EIS/EIR was prepared as a joint document to meet all pertinent requirements of both NEPA and CEQA. However, following publication of the Draft EIS/EIR, the federal and local agencies agreed to prepare the Final EIR separate from a Final EIS in order to provide for local approvals that were ready to proceed, while allowing staff to respond to Federal direction on EIS administrative comments. Following approval of the EIR, the Transportation Authority and SFMTA will collaborate with FTA in the subsequent preparation of a Final EIS and ROD for the Project in compliance with NEPA. The Final EIS and ROD are expected to be published in early 2017.

Modifications to the Staff-Recommended Alternative in the Final EIR: In response to public comments on the Draft EIS/EIR, the project team made minor changes to the Hybrid Alternative/SRA in the Final EIR. These modifications address key local concerns within the context of the established need and purpose for the Project and, as documented in the Final EIR, do not worsen or introduce any new environmental impacts.

- **Retention of Local and Express bus stops at Spruce/Cook (No new BRT stops):** In response to merchant concerns about the loss of parking and loading spaces, the Hybrid Alternative/SRA no longer adds a BRT stop to the Spruce-Cook block of Geary Boulevard. The existing eastbound and westbound bus stops on this block would remain and serve Local buses only rather than Local and Rapid buses under the existing service plan. This change would retain parking and loading on this block while eliminating the corridor's lowest-ridership Rapid stop.
- **Retention of the Webster Street pedestrian bridge:** The existing pedestrian bridge at Webster Street would remain standing and open for use, in response to many comments from Japantown and Western Addition stakeholders asking that it remain. In addition, the Hybrid Alternative/SRA would add two new, ADA-compliant pedestrian surface crossings on either side of the Webster Street intersection with multiple median refuges and other safety features.
- **Additional pedestrian crossing improvements at various intersections within the Geary corridor:** The No Project Alternative assumes construction of 14 pedestrian crossing bulbs at various locations along the Geary corridor. The Hybrid Alternative had proposed to construct an additional 51 pedestrian crossing bulbs at high-priority locations, for a total of 65. In response to many comments citing the importance of pedestrian safety, the project team modified the Hybrid Alternative to add an additional 26 pedestrian bulbs (for a grand total of 91) and several additional pedestrian safety features at strategic locations.

FUNDING PLAN

The cost estimate for the Hybrid Alternative/SRA is $300 million. The funding plan (shown in Attachment 1) reflects the $300 million funding needed for the Project. It includes $50.7 million in Prop K funds, of which $17.1 million has been allocated to date for planning and preliminary design engineering and $33.6 million is programmed for engineering design and construction.

While the Draft EIS/EIR did not contemplate any specific construction scenario, due to uncertainty as to which alternative might ultimately be selected, the Draft EIS/EIR acknowledged that any of the build alternatives would comprise a large-scale project that would likely be constructed in phases over time.

Following publication of the Draft EIS/EIR, the Transportation Authority and SFMTA identified a potential set of near-term improvements that would allow more rapid implementation of an initial set of project elements for which funding is readily available. At the same time, the agencies are seeking to secure funding for the remainder of the Project.

The cost of the near-term BRT improvements and concurrent paving and utility improvements is estimated at $65 million. This cost includes some elements that would be funded by other agencies, including San Francisco Public Works (SFPW), which anticipates contributing Highway User Tax Account funds to fund the paving, and the San Francisco Public Utilities Commission, which would fund the work to be done on its utilities systems. Funding for near term improvements includes Prop K, Prop A (the City's General Obligation Bond), Prop AA Vehicle Registration Fees, SFMTA's Revenue Bond, and SFPW's Follow the Paving funds, as well as Metropolitan Transportation Commission (MTC) Transit Performance Initiative (federal funds).

SFMTA plans to continue refining the cost estimate and funding plan for the remainder of the Project as it proceeds with planning and conceptual engineering work.

The funding plan for the remainder of the Project includes $100 million in potential FTA Small Starts funds, which are disbursed on a competitive basis. Given the corridor's high existing ridership, Geary BRT is expected to be very competitive for the Small Starts funding. The SFMTA has indicated that it would apply for entry into the Small Starts program in 2017.

The remainder of the costs could be filled with other local, regional, state, and federal sources expected to be available in the next few years, with the most promising described in Attachment 1. MTC recently evaluated Geary BRT for the underway Plan Bay Area 2040 update and determined it to be a 'high performing' project. This ranking positions the Project well to receive regional, state, and federal discretionary funds.

PROPOSED ACTIONS AND NEXT STEPS

The actions before the GCAC are to adopt a motion of support for: certification of the Final EIR; adoption of findings required by CEQA, including a Statement of Overriding Considerations; adoption of the Mitigation Monitoring, and Reporting Program (MMRP); approval of the Hybrid Alternative as the Geary BRT Project; and selection of the Hybrid Alternative as the LPA. The Transportation Authority Board will take action on the aforementioned at its special meeting on January 5, 2017.

CEQA Certification: Before approving a proposed preferred alternative for the Geary Corridor BRT Project, the Transportation Authority must certify that (1) the Final EIR has been prepared in compliance with CEQA; (2) the Final EIR has been reviewed and considered by the agency; and (3) the Final EIR reflects its independent judgment and analysis as the lead agency. (Public Resources Code § 21100; CEQA Guidelines § 15090).

Adoption of CEQA Findings: If an EIR identifies one or more significant effects on the environment that would occur as a result of the proposed Project, the Transportation Authority Board must make one of three findings with respect to each significant effect (Public Resources Code § 21081(a); CEQA Guidelines § 15091):

- Changes have been made to the Project, or incorporated into the Project, that mitigate or avoid the identified significant effects on the environment.
- Those changes or alterations (i.e., mitigation measures) are within the responsibility and jurisdiction of another public agency, and have been or can and should be adopted by that other agency.
- The agency finds that the mitigation measures or alternatives identified in the EIR are infeasible for specific "economic, legal, social, technological, or other considerations."

The CEQA Findings (Attachment 2) identifies one area, traffic, where the Transportation Authority finds that because some aspects of the Project would cause potentially significant impacts for which

feasible mitigation measures are not available to reduce the impact to a less-than-significant level, the impacts are significant and unavoidable.

Statement of Overriding Considerations: If significant effects cannot be mitigated to a less-than-significant level, the Transportation Authority must also adopt findings indicating the specific overriding economic, legal, social, technological, or other benefits of the Project that are viewed as outweighing each of the significant adverse effects. (Public Resources Code § 21081(b)). This statement is included in Attachment 2.

Adoption of a Mitigation, Monitoring, and Reporting Program: Section 21081.6 of CEQA requires public agencies to adopt a reporting or monitoring program whenever a project or program is approved that includes mitigation measures identified in an environmental document. The MMRP is included as Exhibit 1 to the CEQA Findings (Attachment 3).

Approval of The Project: The Transportation Authority is considering approval of the Geary BRT Project, and selection of the Hybrid Alternative as the Locally Preferred Alternative under NEPA.

Completion of NEPA Process: The Transportation Authority and SFMTA will separately coordinate with FTA to complete the EIS and ROD, which constitutes the final approval step under the federal NEPA process. Completion of the NEPA process is required before the Project can receive federal funding.

Current Schedule: Completion of the NEPA process is anticipated in early 2017. SFMTA plans to implement the Project in phases, with the first phase to include project improvements east of Stanyan Street and the second phase to include the portion of the corridor west of Stanyan Street. The SFMTA Board is anticipated to legislate Phase 1 design elements in mid-2017. Engineering design of Phase 2, the full project, will also begin in early 2017. Construction of Phase 1 is proposed to begin in mid-2017 and be complete by 2019. Construction of Phase 2 is anticipated to occur from 2019 to 2020.

ALTERNATIVES

1. Adopt a motion of support to certify the Final Environmental Impact Report for the Geary Corridor Bus Rapid Transit Project; adopt the CEQA Findings including a Statement of Overriding Considerations; adopt the Mitigation, Monitoring, and Reporting Program; approve the Hybrid Alternative as the Geary Corridor Bus Rapid Transit Project; and select the Hybrid Alternative as the Locally Preferred Alternative, as requested.
2. Adopt a motion of support to certify the Final Environmental Impact Report for the Geary Corridor Bus Rapid Transit Project; adopt the CEQA Findings including a Statement of Overriding Considerations; adopt the Mitigation, Monitoring, and Reporting Program; approve the Hybrid Alternative as the Geary Corridor Bus Rapid Transit Project; and select the Hybrid Alternative as the Locally Preferred Alternative, with modifications.
3. Defer action, pending additional information or further staff analysis.

FINANCIAL IMPACTS

None. There are no impacts on the Transportation Authority's adopted Fiscal Year 2016/17 budget from the proposed action.

RECOMMENDATION

Adopt a motion of support to certify the Final Environmental Impact Report for the Geary Corridor Bus Rapid Transit Project; adopt the CEQA Findings including a Statement of Overriding Considerations; adopt the Mitigation, Monitoring, and Reporting Program; approve the Hybrid

Alternative as the Geary Corridor Bus Rapid Transit Project; and select the Hybrid Alternative as the Locally Preferred Alternative.

Attachments (3):

1. Funding Information Table
2. CEQA Findings: Findings of Fact, Evaluation of Mitigation Measures and Alternatives, and Statement of Overriding Considerations for the Geary Corridor BRT Project
3. Final EIR Appendix C: Mitigation Monitoring and Reporting Program

Enclosure:

1. Public Communications Since the Comment Period

Attachment 1: Geary Bus Rapid Transit Funding Plan
December 2016

Near-Term Improvements [1]			Project Phases [2]					
Source [3]	**Type**	**Status**	**PLAN**	**ENV**	**CER/PS&E**	**CON**	**Total by Status**	**TOTAL**
Transit Performance Initiative - Investment	Federal	Allocated						**$7,497,481**
		Programmed						
		Planned				$7,497,481	**$7,497,481**	
Highway User Tax Account	Local	Allocated						**$2,000,000**
		Programmed				$1,000,000	**$1,000,000**	
		Planned				$1,000,000	**$1,000,000**	
Prop A T2030 Bond Pedestrian Safety Improvements	Local	Allocated			$1,606,500		**$1,606,500**	**$13,299,000**
		Programmed				$11,692,500	**$11,692,500**	
		Planned						
Prop AA Vehicle Registration Fee	Local	Allocated						**$5,064,919**
		Programmed				$2,064,919	**$2,064,919**	
		Planned				$3,000,000	**$3,000,000**	
Prop K Sales Tax [4]	Local	Allocated			$1,978,946		**$1,978,946**	**$10,000,000**
		Programmed				$8,021,054	**$8,021,054**	
		Planned						
SFMTA Revenue Bond Series 2014	Local	Allocated				$700,000	**$700,000**	**$700,000**
		Programmed						
		Planned						
SF Public Utilities Commission	Local	Allocated						**$26,000,000**
		Programmed						
		Planned			$2,600,000	$23,400,000	**$26,000,000**	
Transportation and Street Infrastructure Program - Follow the Paving (General Fund)	Local	Allocated			$94,600		**$94,600**	**$94,600**
		Programmed						
		Planned						
	Total Phase 1	**Allocated**			**$3,680,046**	**$700,000**	**$4,380,046**	**$64,656,000**
		Programmed				**$22,778,473**	**$22,778,473**	
		Planned			**$2,600,000**	**$34,897,481**	**$37,497,481**	
					$6,280,046	**$58,375,954**	**$64,656,000**	

Attachment 1: Geary Bus Rapid Transit Funding Plan
December 2016

Full BRT (Remainder of Project) [1]

Source [3]	Type	Status	Project Phases [2] PLAN	ENV	CER/PS&E	CON	Total by Status	TOTAL
FTA 5309 Small Starts [5]	Federal	Allocated						**$100,000,000**
		Programmed						
		Planned				$100,000,000	**$100,000,000**	
Prop K Sales Tax [4]	Local	Allocated	$780,000	$8,090,892	$6,319,470		**$15,190,362**	**$40,798,167**
		Programmed			$14,135,751	$11,472,054	**$25,607,805**	
		Planned						
TBD [6]	TBD	Allocated						**$94,545,833**
		Programmed						
		Planned			$16,157,913	$78,387,920	**$94,545,833**	
	Total Phase 2	**Allocated**	**$780,000**	**$8,090,892**	**$6,319,470**		**$15,190,362**	**$235,344,000**
		Programmed			**$14,135,751**	**$11,472,054**	**$25,607,805**	
		Planned			**$16,157,913**	**$178,387,920**	**$194,545,833**	
			$780,000	**$8,090,892**	**$36,613,134**	**$189,859,974**	**$235,344,000**	

[1] The Near-Term Improvements include a potential initial set of project elements between Market and Stanyan, including side-running bus-only lanes, stop upgrades, repaving, traffic signal and striping work, pedestrian crossing enhancements, and water and sewer upgrades. The Full BRT package includes all remaining Geary BRT project elements, including the proposed center bus-only lanes through the Richmond district.

[2] Acronyms for project phases include: PLAN - pre-environmental planning, ENV - Environmental Documentation, CER/PS&E - Conceptual Engineering Report/Plans, Specifications & Estimates or Final Design, CON - Construction. The construction phase includes the incremental cost for procuring new BRT vehicles for the project.

[3] Acronyms for funding sources include: FTA - Federal Transit Administration, SFMTA - San Francisco Municipal Transportation Agency, and SFPW - San Francisco Public Works.

[4] Resolution 15-29 reserves $10 million from current Prop K Geary BRT funding for design/construction of the Near-Term Improvements and reserves all the remaining Prop K funds currently programmed to the Full BRT package.

[5] The Geary BRT project team plans to apply for Small Starts funds in 2017. Small Starts projects must be seeking no more than $100 million.

[6] Potential sources for the Full BRT package include MTC Transit Performance Initiative, OneBayArea Grant, cap and trade funds, new bridge tolls, new regional gas tax, other state or federal discretionary funds, or the Mayor's 2030 Transportation Task Force package (e.g. additional sales tax, vehicle license fees). The Task Force identified Geary BRT (listed as Geary Rapid Network Improvements) as one of the few named projects in its investment plan, with a $27 million investment. The Task Force also deemed Geary BRT to be eligible for a portion of the $58 million identified for the Transit Performance Initiative in its investment plan.

Attachment 2

Geary Boulevard Bus Rapid Transit Project

California Environmental Quality Act Findings: Findings of Fact, Evaluation of Mitigation Measures and Alternatives, and Statement of Overriding Considerations

San Francisco Transportation Authority

In determining to approve the proposed Geary Boulevard Bus Rapid Transit Project (Geary BRT/Project) and related approval actions, the San Francisco County Transportation Authority (SFCTA/Authority) makes and adopts the following findings of fact and statement of overriding considerations, and adopts the following recommendations regarding mitigation measures and alternatives based on substantial evidence in the whole record of this proceeding and under the California Environmental Quality Act (CEQA), California Public Resources Code Sections 21000 *et seq.*, particularly Sections 21081, 21081.5, and 21081.6, the Guidelines for Implementation of CEQA, 14 California Code of Regulations Section 15000 *et seq.*, particularly Sections 15091 through 15093, and Chapter 31 of the San Francisco Administration Code (Chapter 31).

I. Introduction

This document is organized as follows:

Section I Introduction, provides a description of the proposed Project, the environmental review process for the Project, the SFCTA, and other Agency actions to be taken to implement Geary BRT, as well as the extent and location of records.

Section II identifies the impacts found not to be significant, and identifies impacts found not to be significant but that can be further reduced through improvement measures.

Section III identifies potentially significant impacts that can be avoided or reduced through mitigation measures and describes the applicable mitigation measures.

Section IV identifies the significant impacts that cannot be avoided or reduced to less-than-significant levels and describes any applicable mitigation measures and the disposition of the mitigation measures. This section also sets forth the economic, legal, social, technological, and other considerations that support the rejection of certain mitigation measures as infeasible that were not incorporated into the Project.

Section V evaluates the different project alternatives and the economic, legal, social, technological, and other considerations that support the rejection of the alternatives as infeasible.

Section VI presents a statement of overriding considerations setting forth specific economic, legal, social, technological, and other reasons in support of SFCTA's approval of the Project despite the significant unavoidable impacts discussed in Section V.

The Mitigation Monitoring and Reporting Program (MMRP) for the mitigation measures that have been proposed for adoption is attached to these findings as **Exhibit 1** and is incorporated by reference. The MMRP is required by CEQA Section 21081.6 and CEQA Guidelines Section 15091. The MMRP sets forth each mitigation measure listed in the Final Environmental Impact Report (Final EIR)[1] that is

[1] Under CEQA Guidelines section 15362(b), the Final EIR consists of the Draft EIR, comments and recommendations received on the Draft EIR, a list of persons commenting, the response of the lead

required to reduce or avoid a significant adverse impact. **Exhibit 1** also specifies the agency responsible for the implementation of each measure and establishes monitoring actions and a monitoring schedule. In addition, the findings include **Exhibit 1's** list of Improvement Measures that the SFCTA recommends for implementation by the San Francisco Municipal Transportation Authority (SFMTA) and other implementing agencies, to further reduce the effects of those environmental impacts found to be less than significant.

These findings are based on substantial evidence in the entire record before the SFCTA. The references set forth in these findings to certain pages or sections of the Draft EIS/EIR or the Final EIR are for ease of reference and are not intended to provide an exhaustive list of the evidence relied upon for these findings.

A. Project Description

The Project proposes to implement bus rapid transit improvements along San Francisco's Geary corridor. The Geary corridor encompasses the entirety of Geary Boulevard and Geary Street as well as portions of other auxiliary streets, including O'Farrell Street between Market and Gough Street. **Figure 1** below depicts the Geary corridor.

The Draft EIS/EIR, published in October 2015, considered four build alternatives and one no-build alternative.

- No Build Alternative
- Alternative 2 (Side-lane bus rapid transit (BRT))
- Alternative 3 (Center-lane BRT with dual medians and passing lanes)
- Alternative 3-Consolidated (Center-lane BRT with dual medians and consolidated bus service)
- Hybrid Alternative (Incorporates elements of Alternatives 2, 3, and 3-Consolidated)

Each of the four build alternatives proposes some form of BRT service and associated physical infrastructure improvements along the Geary corridor. **Figure 2** below provides a schematic diagram of the four build alternatives.

The Geary BRT Project approved in this action by SFCTA, after extensive agency and public feedback, is the Hybrid Alternative, which was described in the Draft EIS/EIR as the Staff Recommend Alternative (SRA), and includes the minor modifications to the Hybrid Alternative discussed fully in in Sections 2.2.3 and 2.2.7 of the Draft EIS/EIR and Chapter 2 of the Final EIR. The Project would operate BRT, local, and express buses along the Geary corridor, for approximately 6.5 miles, from the Transbay Transit Center to 48th Avenue. The Project would be constructed entirely within existing street right-of-way.

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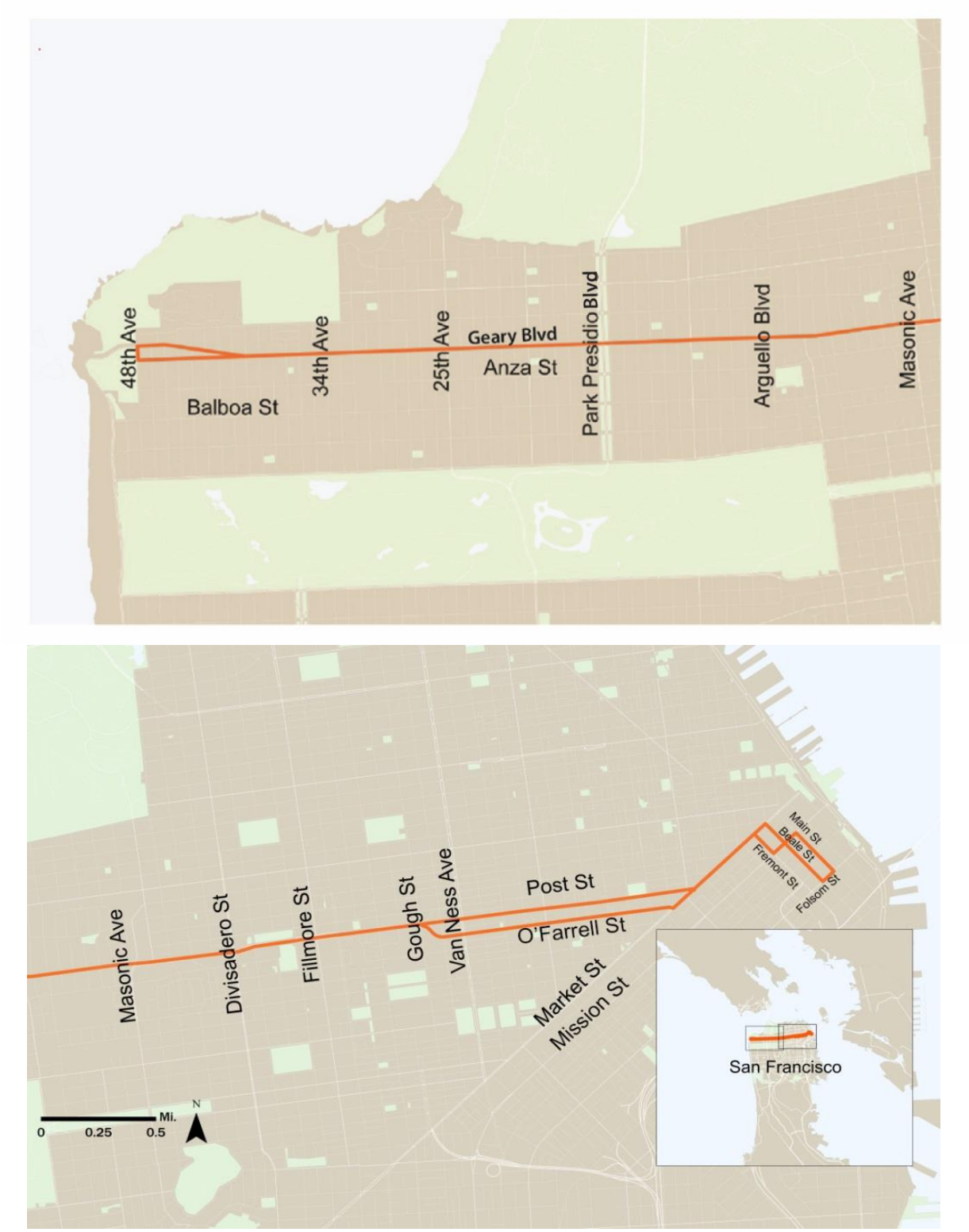
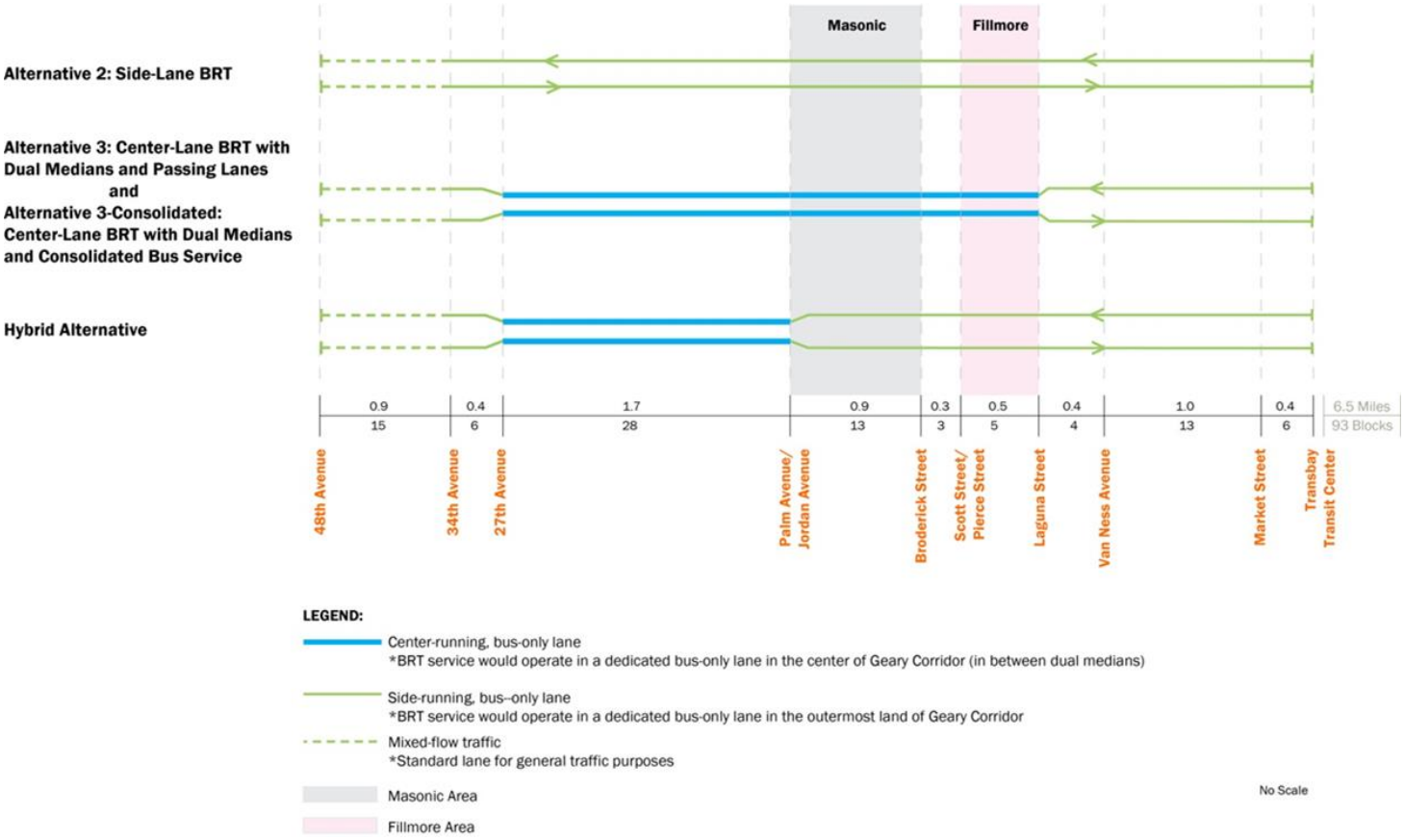
agency to the comments received, and any other information added by the lead agency. For purposes of these findings, references to the Final EIR herein incorporates the Draft EIS/EIR.

Figure 1-1 Geary Corridor



The Hybrid Alternative/SRA would construct and use new side-running bus-only lanes from Gough Street West to Palm Avenue. At Palm Avenue, bus lanes would transition to center-running and continue west to 27th Avenue. At 27th Avenue, bus lanes would transition to side-running, continuing west to 34th Avenue. The Hybrid Alternative/SRA includes both BRT and local services, and BRT buses would make all stops in the designated consolidated-stop portion of the corridor. East of Gough Street, the Hybrid Alternative/SRA would retain the existing right-side-running bus-only lanes on Geary Street and O'Farrell Street and add new bus-only lanes on several additional blocks in this segment. To reduce bus conflicts with turning traffic at key locations, specific "spot improvements" in this corridor segment include lane reconfigurations and queue jump signals. Due to lighter traffic conditions west of 34th Avenue, BRT vehicles would continue to travel in the existing mixed-flow lanes, and no changes would be made to existing stops.

Figure 1-2 Schematic Diagram of the Build Alternatives



The Geary BRT would also include features designed to minimize safety risks to drivers, pedestrians, and other corridor users, as well as features to improve the comfort and efficiency of public transit along Geary. These features include, but are not limited to:

- Protected left turn signals and curb bulbs at key crosswalks to improve pedestrian safety
- Additional signalized pedestrian crossings and median refuges
- Enhanced bicycle facilities between Presidio Avenue and Masonic Avenue
- Additional on-street parking would be added where feasible
- Increased signal cycle lengths would be implemented at certain intersections
- Sidewalk widening in certain locations throughout the corridor

- Upgraded curb ramps, increased pedestrian-scale lighting, and other urban design features

B. Project Purpose/Objectives

The Geary corridor is an exceptionally busy transit link; each day the corridor sees more than 50,000 person-trips via public transit and serves automobile volumes that vary between 12,000 in the outlying neighborhoods west of Park Presidio to 45,000 at the highest-demand locations. In addition, the corridor hosts tens of thousands of daily pedestrian trips.

While the Geary corridor serves thousands of multimodal trips per day, current transit performance and pedestrian conditions in the Geary corridor are in need of improvement in several key ways. SFCTA identified the following transportation needs in the Geary corridor, which serve as the basis for the project purpose:

- Existing transit service in the Geary corridor is unreliable, slow, and crowded, and is in need of improvement in order to promote high ridership and competitiveness with other travel modes.
- Geary Boulevard's wide travelway and high vehicle travel speeds create unfavorable pedestrian conditions – especially west of Gough Street and throughout the Richmond District.
- The Geary corridor's existing street and streetscape environment do not provide a high-quality transit passenger experience, despite the corridor's high transit ridership.

C. Environmental Review

The SFCTA, in cooperation with the Federal Transit Administration (FTA), initiated a joint EIS under the National Environmental Policy Act (NEPA) and EIR under the California Environmental Quality Act (CEQA). Federal agencies that approve the Project will consider the effects of the Project under NEPA in the Final EIS, while State and local agencies that approve the Project will consider the effects of the Projects as identified under CEQA in the Final EIR. On November 20, 2008, the SFCTA sent a **Notice of Preparation** (NOP) to the State Clearinghouse and to local, regional, and State agencies. The FTA published a **Notice of Intent** (NOI) in the Federal Register on November 24, 2008. The NOP indicated the environmental topics anticipated to be addressed as well as the alternatives to be considered in the Draft EIS/EIR. The SFCTA noticed a 30-day comment period. The SFCTA also took the following actions to provide notification of the Project and its scoping period:

- Advertisements in local newspapers
- A mailing to more than 23,000 residential and commercial occupants of buildings along the Geary corridor, as well as to the outreach database of interested parties developed during the Feasibility Study
- Online announcements on SFCTA and SFMTA web sites
- Announcement poster at bus stops along the Geary corridor
- Issued press releases as a means of partnering with the local media to raise awareness of the project and to communicate opportunities to provide input.

The SFCTA held scoping meetings in December 2008 in the Outer Richmond at the Jackie Chan Activity Center, and in the Tenderloin at the Tenderloin Community School. In July 2009, the project team hosted another community meeting in the Richmond neighborhood as part of the scoping process.

In response to the NOI and NOP, the SFCTA and FTA received over 266 comments, comprising both oral and written submissions. The comments included recommendations for one or more alternatives to be analyzed in the EIS/EIR, comments on the potential environmental impacts to the study area, and

miscellaneous suggestions to add to/alter the Project. The information collected from the scoping period can be found in the *Geary Boulevard Bus Rapid Transit Draft Summary Report*, SFCTA, February 2009.

The comments on alternatives recommended that:

- Incremental changes to service take place instead of the BRT Project
- Transportation Systems Management (TSM) improvements (such as extending diamond lanes) take place instead of the BRT Project
- Additional build alternatives be analyzed
- Rail alternatives be considered over the BRT Project

The comments on environmental impacts expressed concerns over the following conditions:

- Accessibility of the BRT to the elderly and disabled
- Traffic operations and concerns regarding congestion (during construction and operation), traffic/pedestrian signals, emergency access
- Division of neighborhoods and a need for community incentives
- Accuracy of the Project's impact analysis, and efficiency of public consultation
- Pedestrian safety

After multiple rounds of alternatives development and screening, documented in the 2009 ***Geary Alternatives Screening Report*** and the 2014 *Geary Bus Rapid Transit Design Options Screening Report*, FTA and SFCTA prepared a Draft EIS/EIR that analyzed 5 alternatives:

1. No Build Alternative
2. Alternative 2 (Side-lane bus rapid transit (BRT))
3. Alternative 3 (Center-lane BRT with dual medians and passing lanes)
4. Alternative 3-Consolidated (Center-lane BRT with dual medians and consolidated bus service)
5. Hybrid Alternative (Incorporates elements of Alternatives 2, 3, and 3-Consolidated)

The Draft EIS/EIR analyzed each of the alternatives at an equal level of detail, which included:

- A description of the alternative's setting
- The identification of the impacts of each alternative
- The compilation of mitigation measures for each significant or potentially significant impact within each alternative

The Draft EIS/EIR included discussions of operational, construction, and cumulative effects of the alternatives on transportation, land use, community impacts, growth, aesthetics and visual resources, cultural resources, utilities, geology, soils, seismicity and topography, hazardous waste and materials, hydrology and water quality, air quality, noise and vibration, energy, biological resources, and environmental justice.

In addition to the above-mentioned alternatives considered and analyzed in detail, the Draft EIS/EIR explained why several previously-considered alternatives were rejected from further consideration; reasons for the rejection of these alternatives were related to:

- Traffic conditions, including congestion, diversions, circulation, access, and parking and loading conditions
- Transit travel time, reliability, and passenger experience and access
- Pedestrian access, safety, and streetscape design

- Bicycle safety and connectivity
- Rail readiness
- Capital and operating costs
- Impacts to Muni operations
- Construction impacts

Based on an extensive technical analysis of the alternatives under consideration, as well as input from stakeholders and members of the public, the Draft EIS/EIR identified an alternative, the Hybrid Alternative, as the staff recommendation for ultimate selection ("Hybrid Alternative/SRA").

The SFCTA published a Notice of Availability/Notice of Completion (NOA/NOC) and distributed **copies of the Draft EIS/EIR** to the State Clearinghouse on October 2, 2015. An NOA also appeared in the Federal Registry concurrently. The SFCTA noticed the availability of the Draft EIS/EIR for public review and comment with the dates of the initial, and later extended, comment period (the extended period was from October 2, 2015 through November 30, 2015). The SFCTA advertised the NOA and the public comment meetings through posted notifications and through the project webpage.

The SFCTA made the Draft EIS/EIR document available for public review and comment by placing electronic copies on the SFCTA website, and by making hard copies available at SFMTA, Planning Department, the San Francisco Public Library, and SFCTA offices. Additionally, CDs were available upon request, and hard copies available for purchase from the SFCTA. Comments from the public could be sent by mail or email throughout the circulation period, and verbal comments could be submitted at the public hearing. Access to the technical reports and supporting documents were made available upon request.

As part of the public review process for the Draft EIS/EIR, the SFCTA hosted a public comment meeting on November 5, 2015 in the St. Mary's Cathedral. The meeting was designed to encourage the general public to view project information, discuss the project with staff, and submit public comments in writing on comment cards or orally via court reporters.

The Final EIR contains the SFCTA's responses to the public's comments submitted on the Draft EIS/EIR during the 59-day public review period for the Draft EIS/EIR, clarification of information presented within the Draft EIS/EIR, corrections to informational/editorial errors in the Draft EIS/EIR, and descriptions of several changes to the Hybrid Alternative in response to public comments. The FTA is anticipated to separately adopt a Final EIS and Record of Decision (ROD) subsequent to local certification of the EIR and local project approval. While the Draft EIS/EIR was prepared as a joint document to meet the requirements of both NEPA and CEQA, the Federal and local agencies mutually agreed to prepare separate final environmental documents.

Subsequent to the close of the public comment period on the Draft EIS/EIR, the SFCTA received some additional comments on the Project, primarily concerning the merits of the project and the alternatives analysis. These late comments are addressed in the Final EIR at section 5.4. None of these later-received comments, nor any of the comments received during the public comment period introduce any new information such that recirculation of the EIR would be triggered under CEQA.

On December 9, 2016 the SFCTA published the Final EIR by posting the document on its public website. At that time, the document was also made available for public review at the SFCTA office, SFMTA's office, the Planning Department's Planning Information Counter, and at the San Francisco Library. Between December 8 and 9, CDs, paper copies of the Final EIR, or notices of availability with links to on-line versions of the Final EIR were sent to parties included on the Distribution List and to those parties that commented on the Draft EIS/EIR and provided a physical mailing address. Email notices

with a link to the online digital files of the Final EIR were sent to commenters on the Draft EIS/EIR who had previously provided an email address but no physical mailing address. The NOA was submitted to local newspapers. The SFCTA sent email notifications to those individuals, groups, and agencies on the project list.

The SFCTA is certifying the Final EIR, adopting CEQA Findings, including a statement of overriding considerations and MMRP, and approving the Hybrid Alternative/SRA. In certifying the Final EIR, the Authority finds that the Final EIR adds no significant new information to the Draft EIS/EIR that would require recirculation of the Draft EIS/EIR under CEQA because neither the Final EIR nor any information received since publication of the Final EIR contains any information revealing 1) any new significant environmental impact that would result from the Project or from a new mitigation measure proposed to be implemented; 2) any substantial increase in the severity of a previously identified environmental impact; 3) any feasible project alternative or mitigation measure considerably different from others previously analyzed that would clearly lessen the environmental impacts of the Project but that would lessen the environmental impacts of the Project but that was rejected by SFCTA; or, 4) that the Draft EIS/EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

D. Environmental Analysis of the Project

The environmental analysis of the Project is summarized in Chapters 3 and 4 of the Final EIR, with full details provided in respective chapters of the Draft EIS/EIR and Chapter 7 of the Draft EIS/EIR making explicit CEQA conclusions.

Chapter 2 of the Final EIR describes the Hybrid Alternative/SRA as modified from the Hybrid Alternative presented in the Draft EIS/EIR. Chapter 2 of the Draft EIS/EIR provides a full description of all alternatives analyzed in the environmental review process. Chapter Seven of the Draft EIS/EIR explains the relationship between the NEPA requirements, under which an environmental impact statement is required for the Project, and the CEQA requirements under which an EIR is required for the project. Chapters three and four of the Final EIR are each divided into sections based on the various environmental factors considered. The sections generally start with a description of the affected environment and existing conditions and conclude with a description of impacts and any measures that would avoid, minimize, and/or mitigate impacts. The analysis of the environmental factors in these chapters identifies any impacts that would result from the Hybrid Alternative/SRA. Section 10.4 of the Draft EIS/EIR provides a summary of the environmental consequences of the Hybrid Alternative/SRA and explains how it compares to the other alternatives in terms of environmental impacts and its performance in achieving the Project purpose and need.

Based on technical analyses presented in the Draft EIS/EIR, agency, stakeholder, and public input received during circulation of the Draft EIS/EIR and additional analysis by SFCTA and SFMTA staff of proposed Hybrid Alternative design modifications, the SFCTA and SFMTA staff also jointly recommend the Hybrid Alternative/SRA as the Locally Preferred Alternative.

The Hybrid Alternative/SRA, represents an optimized alternative very similar to the Hybrid Alternative presented in the Draft EIS/EIR, but with minor design modifications that were made between the Draft EIS/EIR and Final EIR in response to comments from the public. The Hybrid Alternative/SRA includes a combination of new BRT lanes and infrastructural upgrades. New side-running bus-only lanes would run from 34th Avenue to 27th Avenue and from Palm Avenue (just east of Arguello Boulevard) to Gough Street. Between 27th Avenue and Palm Avenue, the Hybrid Alternative/SRA would utilize center-running bus-only lanes and consolidated local and BRT stops. Local and BRT stops would also be consolidated in the segments of the corridor between 34th Avenue and 27th Avenue and between Palm

Avenue and Masonic Boulevard. Both local and BRT services would exist with this alternative, but both would make all stops in the consolidated-stop portion of the corridor.

The Hybrid Alternative presented in the Final EIR includes updates made between the Draft EIS/EIR and Final EIR. These updates include:

- **Retention of Local and Express bus stops at Spruce/Cook (No new BRT stops).** The Hybrid Alternative/SRA no longer adds a BRT stop to the Spruce-Cook block of Geary Boulevard. The existing eastbound and westbound bus stops on this block would remain and their lengths would be reduced slightly. These bus stops would serve Local-only buses rather than Local and Rapid buses under the existing service plan, which would increase the distance between Rapid bus stops.
- **Retention of the Webster Street pedestrian bridge.** The existing pedestrian bridge at Webster Street would remain standing and open for use. In addition, the Hybrid Alternative/SRA would add 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 (i.e., a Z-crossing in which the crossing is offset at the center median) on the east side. 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.
- **Additional pedestrian crossing improvements at various intersections within the Geary corridor:** The No Project Alternative assumes construction of 14 pedestrian crossing bulbs at various locations along the Geary corridor. The Hybrid Alternative had proposed to construct an additional 51 pedestrian crossing bulbs at high-priority locations in the Geary corridor as detailed in the project plans (Appendix A), for a total of 65 (No Project plus Build Alternatives). Modifications to the Hybrid Alternative add a further 26 pedestrian bulbs (grand total of 91), plus a painted safety zone, and also implement daylighting at strategic intersection locations along the Geary corridor.

The Final EIR details how the Hybrid Alternative analyzed in the Draft EIS/EIR compares with the Hybrid Alternative/SRA. In general, impacts from the Hybrid Alternative/SRA are the same or similar between the Draft EIS/EIR and the Final EIR. In no case does the Final EIR identify any new or more severe impacts for the Hybrid Alternative/SRA than those identified for any of the alternatives in the Draft EIS/EIR. Since the Final EIR does not identify a new or more severe significant impact or a new mitigation measure, the project is not required to recirculate the Draft EIS/EIR prior to certification, consistent with the CEQA Guidelines, Section 15088.5.

E. Approval Actions

The following approval actions will be taken in regard to the Geary BRT Project:

Local Agencies

1. San Francisco County Transportation Authority

- Certifies EIR under CEQA.
- Approves the Project, advising FTA of the Locally Preferred Alternative (LPA) selected.
- Approves funding from both Federal and local sources (Proposition K and Small Starts Funding).

2. San Francisco Municipal Transportation Authority

- Approves the Project as the responsible agency.
- Approves funding agreements for the project with the SFCTA, FTA, and any other sources.
- Approves local traffic code and parking legislation.
- Approves various design and construction contracts.

3. San Francisco Board of Supervisors

- Approves sidewalk and grade changes.

4. San Francisco Departments of public Works, Public Utilities, and Fire

- Approve various design plans and construction work in right-of-way, including removal and replanting of trees, median and sidewalk design, drainage systems, and utility systems.

5. San Francisco Planning Department

- Determines Consistency of Project with the General Plan.

6. San Francisco Historic Preservation Commission

- Approves certificate of appropriateness for construction of Geary BRT roadways and structures within the Kearny-Market-Mason-Sutter Downtown Conservation District, and adjacent to the New Montgomery-2nd Street Downtown Conservation District.

7. San Francisco Arts Commission

- Approves design of City public structures.

Regional Agencies

1. San Francisco Bay Area Regional Water Quality Control Board

- Enforces compliance with the statewide stormwater Construction General permit

2. Metropolitan Transportation Commission

- Made air quality conformity determination in coordination with the interagency Bay Area Air Quality Conformity Task Force (The record of this determination was included in as Appendix G of the Draft EIS/EIR).

Federal Agencies

1. Federal Transit Administration

- Approves the Record of Decision under NEPA (anticipated subsequent action following or in tandem with FTA's issuance of a Final EIS)
- Approves federal funding for the Project (anticipated subsequent action following approval of a Record of Decision)

F. Contents and Location of Records

The record upon which all findings and determinations related to the Geary BRT Project are based on the following:

- The Project plans and supporting documents, prepared by the SFCTA.
- The Final EIR, including the Draft EIS/EIR, all comments received on the Draft EIS/EIR, all Responses to Comments, discretionary text changes made by staff, and all appendices and documents referenced in, or relied upon, by the Final EIR.

- All information (including written evidence and testimony) provided by staff to SFCTA relating to the Project, specifically the Draft EIS/EIR, and the alternatives set forth in the Draft EIS/EIR and as updated in the Final EIR.
- All information (including written evidence and testimony) presented to SFCTA by the environmental consultant and sub-consultants who prepared the Draft EIS/EIR and the Final EIR, and others who contributed to reports presented to SFCTA.
- All information (including written evidence and testimony) presented to SFCTA from other public agencies relating to the Project or specifically to the Draft EIS/EIR and the Final EIR.
- All information (including written evidence and testimony) presented at any public hearing, meeting, or workshop related to the Project and the Draft EIS/EIR and Final EIR.
- The MMRP for the Project.
- All public meeting agendas, minutes, reports, all oral testimony and oral and video records of public hearings, and written testimony at public hearings before SFCTA and other agencies, and all reports, correspondence, references, and material kept in the ordinary course of business associated with the public planning process related to the Project.
- All applicable staff administrative records, memoranda and public reports kept during the ordinary course of business, and that provide substantial evidence to support the findings within the Final EIR; these include, but are not limited to, attachments, appendices, and references kept in the ordinary course of business.
- All other documents comprising the record pursuant to Public Resources Code Section 2116.76(e).

SFCTA is the custodian of all documents comprising the record of proceedings, including, without limitation, the documents listed above. The SFCTA offices are located at 1455 Market St. San Francisco, CA 94103.

G. Requirements of Findings of Fact

CEQA requires public agencies to identify the potential impacts of their activities on the environment, and where feasible,[2] to avoid or mitigate the effects of those activities on the environment. However, as per Public Resources Code 21002:

> *"In the event [that] specific economic, social, or other conditions make infeasible such project alternatives, or such mitigation measures, individual projects may be approved in spite of one or more significant effects."*[3]

Section 21002 mandates that agencies must adopt findings before approving projects for which EIRs are required. For each significant environmental impact identified in an EIR for a proposed project, the

2 Public Resources Code Section 21061.1 defines "feasible" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors."

3 California Public Resources Code section 21002.

approving agency is required to issue a written finding reaching one or more of three potential conclusions. The three findings are[4]:

- Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effect on the environment.
- Those alterations or changes are within the responsibility and jurisdiction of another public agency and have been, or can be and should be, adopted by that other agency.
- Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

If a project includes significant impacts which cannot be avoided or substantially lessened, the public agency, after adopting appropriate findings, may irrespective, approve the project. In order to do this, the agency must adopt a statement of overriding considerations through which:[5]

> *"If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."*

The California Supreme Court has acknowledged that:

> *"…the wisdom of approving…any development project, a delicate task which requires a balancing on interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced."*[6]

The Geary BRT Project Final EIR identified significant effects that may occur as a result of the project; therefore, in accordance with the above-mentioned provisions, SFCTA hereby adopts these findings as part of the approval of the Project. These findings are a reflection of the judgement of SFCTA, independent from other entities, and constitute the SFCTA's best efforts to set forth the evidentiary and policy bases for its decision to approve the Project in a manner consistent with the CEQA requirements. Consequently, these findings are not purely informational, but comprise a binding set of obligations that come into effect with the SFCTA's approval of the Project.

H. Findings About Significant Environmental Impacts and Mitigation Measures

The following Sections (II, III, and IV) set forth the SFCTA's findings concerning the Final EIR's determinations regarding significant environmental impacts and the mitigation measures proposed to address them. These findings provide both the analyses and conclusions of the SFCTA regarding the environmental impacts of the Project and the mitigation measures included as part of the Final EIR, and adopted by SFCTA as part of the project. In making these findings, the SFCTA has considered the opinion of staff and experts, other agencies, and the general public.

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[4] California Public Resources Code Section 21081.

[5] Public Resources Code Section 15093, 15043(b), 21081(b).

6 *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 576.

SFCTA confirms that the determination of significance thresholds for CEQA impacts set forth in Chapter Seven, CEQA Evaluation, of the Draft EIS/EIR are judgment decisions at the discretion of the SFCTA and that the significance thresholds are supported by substantial evidence in the record, which comprises the expert opinion of the Final EIR preparers and SFCTA staff. Furthermore, the SFCTA finds that the significance thresholds in the Final EIR provide reasonable and appropriate means through which to evaluate the significance of the adverse environmental effects of the Project. Although the SFCTA is not legally bound by the determinations set forth in the Final EIR, SFCTA finds them both persuasive and adequate and hereby adopts them as its own.

To avoid unnecessary duplication, these findings do not describe the full analysis of each environmental impact under CEQA contained in the Final EIR; instead, a full explanation of these environmental findings and conclusions under CEQA can be found in the Draft EIS/EIR and Final EIR. Except where noted, these findings incorporate by reference, and rely upon as substantial evidence, the discussion, and analyses within the Final EIR supporting the Final EIR's determination regarding the Project's impacts and those mitigation measures designed to address impacts. In compiling these findings, the SFCTA ratifies, adopts, and incorporates in these findings the determinations and conclusions of the Final EIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

As set forth below, the SFCTA adopts and incorporates all of the mitigation measures set forth in the Final EIR that the SFCTA determines are feasible (see attached MMRP). These mitigation measures will substantially lessen or avoid the potentially significant and significant impacts that would occur as a result of the Project. The SFCTA adopts all of the mitigation measures set forth in the Final EIR.

In the event that a mitigation measure set forth in the Final EIR has been inadvertently omitted in these findings or the MMRP, such mitigation measure is hereby adopted and incorporated in the findings below by reference. Furthermore, if the language describing a mitigation measure in these findings or the MMRP fails to adequately reflect the mitigation measure in the Final EIR due to a clerical error, the language of the policies and implementation measures as set forth in the Final EIR shall take precedence. The mitigation measure numbers used in these findings exactly reflect the mitigation measure numbers in the Final EIR.

In Sections II, III, and IV below, the same findings are made for a category of environmental impacts and mitigation measures where appropriate. Rather than repeat the findings to address each and every significant effect and mitigation measure, the initial finding obviates the need for such repetition because in no instance is the SFCTA rejecting the conclusions of the Final EIR or the recommended mitigation measure, except in those instances where SFCTA has expressly rejected a mitigation measure as infeasible for the reasons set forth in these findings.

II. Impacts Found Not to be Significant and thus Requiring No Mitigation; Improvement Measures

A. Less than Significant Impacts

Based on substantial evidence in the whole record of this proceeding, SFCTA finds that implementation of the Project will not result in any significant impacts in the environmental categories listed below in this Section IIA. Each of these topics is analyzed and discussed in detail, including, but not limited to, in the Draft EIS/EIR and Final EIR at the pages indicated.

1. Land Use

a) **Construction:** Consistent with existing public right of way. No acquisition of private land required (**Draft EIS/EIR Sections 4.1.4.2; 7.5.2** and **Final EIR Section 4.1**).

b) **Operation:** Consistent with existing land use plans/policies. Consistent with existing/planned land uses. Project would not create a physical division of communities/neighborhoods (**Draft EIS/EIR Sections 4.1.4.4; 7.5.2** and **Final EIR Section 4.1**).

c) **Cumulative:** The Project is consistent with adopted plans for growth in key areas (**Draft EIS/EIR Section 5.5.4** and **Final EIR Section 4.1**).

2. Population and Housing/Growth

a) **Construction:** The Project would adhere to City regulations for work conducted in the public rights-of-way, which would limit the ability of construction to prove detrimental to population or job growth **(Draft EIS/EIR Section 4.3.4.2; 7.5.13** and **Final EIR Section 4.3)**.

b) **Operation:** The Project would comply with existing development patterns, population, housing, and employment densities, and would not substantially alter growth beyond what is projected for the study area **(Draft EIS/EIR Section 4.3.4.4; 7.5.13** and **Final EIR Section 4.3).**

c) **Cumulative:** Construction of the Hybrid Alternative/SRA, in combination with other past, planned, and reasonably foreseeable projects would result in indirect and cumulative growth-related impacts. However, such growth would be consistent with adopted plans, and would not be in excess of the growth projected for the Bay Area and San Francisco. Thus, cumulative impacts to growth would not be considered cumulatively considerable/significant under CEQA **(Draft EIS/EIR Section 5.5.6;** and **Final EIR Section 4.3).**

3. Visual Resources/Aesthetics

a) **Construction:** Although construction equipment and activities would be visible during phases of Project implementation, these interruptions would be short-term in nature, and thus would not result in any significant impacts to visual resources (**Draft EIS/EIR Sections 4.4.4.1.2; 7.5.3** and **Final EIR Section 4.4**).

b) **Operation:** The Hybrid Alternative/SRA would result in neutral, to somewhat beneficial, views in Landscape Unit 1, and although visual changes are expected within Landscape Unit 2, these changes are not expected to be detrimental, but would rather enhance the intactness and unity of Geary corridor, and would not result in significant impacts (**Draft EIS/EIR Sections 4.4.4.2; 7.5.3** and **Final EIR Section 4.4**).

c) **Cumulative:** Visual changes resulting from the construction of the Hybrid Alternative/SRA would contribute to and be part of the trend of cumulative aesthetic changes that are occurring with the transportation system of the City. The Hybrid Alternative/SRA incorporates new landscaping and tree planting, along with a visually consistent street design that comports with the *Better Streets Plan.* Given the long-term positive effect the project would have related to visual resources, the project's

contribution to cumulative visual and aesthetic changes would be considered beneficial (**Draft EIS/EIR Sections 5.5.7; 7.5.3** and **Final EIR Section 4.4**), and would not result in significant impacts.

4. Cultural/Paleontological Resources

a) Construction: Construction of the Hybrid Alternative/SRA would have a low potential to encounter and/or harm any previously unrecorded archaeological artifacts and/or paleontological resources. All streetscape improvements would occur within existing right-of-way; however, components of the AWSS occur within the curb-to-curb roadway. Coordination with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* would ensure that no roadway work would have an adverse impact on any historic property (**Draft EIS/EIR Sections 4.5.4.1; 7.5.4** and **Final EIR Section 4.5**). Construction of the Hybrid Alternative/SRA could have potentially adverse impacts regarding the AWSS fire hydrants, the Golden Triangle Streetlights, and adverse noise impacts to historic properties (**See Section III below**).

b) **Operation:** The operation of the Hybrid Alternative/SRA would not have any adverse impacts to archaeological, historic, and/or paleontological resources (**Draft EIS/EIR Sections 4.5.4.2.3; 7.5.4** and **Final EIR Section 4.5**).

c) **Cumulative:** The land used for the Geary BRT Project and the adjacent land would not suffer any anticipated adverse impacts to paleontological and/or archaeological resources. The historic nature of the Geary corridor will continue to reflect a more contemporary appearance due to the size and scope of existing and planned projects within the corridor. However, The Geary BRT Project in of itself would have minimal impacts and thus a less than significant cumulative contribution towards affecting historic resources (**Draft EIS/EIR Sections 5.5.8; 7.5.4** and **Final EIR Section 4.5**).

5. Utilities and Service Systems

d) **Cumulative:** The Project would not significantly increase demand for potable water, waste disposal services, or electricity; therefore, the Hybrid Alternative/SRA would not have a cumulatively considerable contribution to impacts on utilities (**Draft EIS/EIR Sections 5.5.9; 7.5.5** and **Final EIR Section 4.6**).

6. Geology/Soils/Seismic/Topography

a) **Cumulative:** The Geary BRT Project in combination with projected land development would not result in cumulative geology/soils hazards as federal, state, and local regulations would be enforced to minimize potential impacts to a less-than-significant level (**Draft EIS/EIR Sections 5.5.10; 7.5.6** and **Final EIR Section 4.7**).

7. Hazards and Hazardous Materials

a) **Operation:** Operation of Geary BRT features would not pose a risk of uncovering hazardous materials as most risks associated with hazards and hazardous materials are related to construction (**Draft EIS/EIR Section 4.8.4.2.2; 7.5.7** and **Final EIR Section 4.8**).

b) **Cumulative:** The risk of uncovering/encountering hazardous materials is location-specific. All past, existing and foreseeable projects would need to comply with Federal, State, and local regulations, which would ensure that the Hybrid Alternative/SRA

would not significantly contribute to a cumulatively considerable impact to hazards and hazardous materials (**Draft EIS/EIR Section 5.5.11; 7.5.7** and **Final EIR Section 4.8**).

8. Hydrology and Water Quality

a) **Operation:** The Geary corridor is not located within a mapped flood hazard zone and would not be subject to flooding hazards due to reservoir failure, tsunamis, or projected sea level rise. No water quality standards or Waste Discharge Requirements would be exceeded due to project runoff. Once operational, the various project components and new BRT service will have an insignificant to no effect on groundwater as these improvements do not require water (**Draft EIS/EIR Sections 4.9.4.2; 7.5.8** and **Final EIR Section 4.9**).

b) **Cumulative:** With adherence to Federal, State, and local regulations pertaining to water quality, the Project would not contribute to a cumulatively considerable impact to hydrology and water quality (**Draft EIS/EIR Sections 5.5.12; 7.5.8** and **Final EIR Section 4.9**).

9. Air Quality

a) **Construction:** With adherence to City ordinances and regulations regarding construction, such as the Construction Dust Control Ordinance, the Hybrid Alternative/SRA would not result in any adverse effects during construction related to emissions of air pollutants and GHGs (**Draft EIS/EIR Sections 4.10.4.4; 7.5.9** and **Final EIR Section 4.10**).

b) **Operation:** The Hybrid Alternative/SRA would not create potential for a new localized carbon monoxide violation. The Hybrid Alternative/SRA is not considered a Project of Air Quality Concern (Appendix F). With implementation of the Clean Air Plan's Transportation Control measures (TCMs), the Project would be consistent with the primary goals of the 2010 Clean Air Plan (**Draft EIS/EIR Sections 4.10.4.2; 7.5.9** and **Final EIR Section 4.10**).

c) **Cumulative:** Pollution is a cumulative impact by its very nature. The Geary BRT Project would not contribute to an air quality violation or result in a cumulatively considerable net increase in criteria air pollutants. The maximum construction-related health risk would not exceed the project-level thresholds. Based on the project-level thresholds and the low percentage of total health risk, construction activities of the build alternatives would not contribute considerably to existing health risks. Based on the project-level thresholds and the low percentage of total health risk, operational activities would not contribute considerably to existing health risks. Given this, the Project would not significantly contribute to any cumulatively considerable impacts to air quality (**Draft EIS/EIR Section 5.5.13; 7.5.9** and **Final EIR Section 4.10**).

10. Noise and Vibration

a) **Construction Noise:** With adherence to the San Francisco Noise Ordinance, equipping impact tools with both intake and exhaust mufflers, and obtaining a noise permit for night work from DPW, temporary construction noise effects would not be significant. (**Draft EIS/EIR Sections 4.11.4.3.3; 7.5.11** and **Final EIR Section 4.11**).

b) **Operation:** Project-related noise levels would not exceed the FTA significance criteria. Thus, Hybrid Alternative operational noise would not result in any adverse effect. No significant stationary sources of ground-borne vibration would occur. Project-related traffic vibration levels would not be perceptible by sensitive receptors. Thus, operational vibration would not result in an adverse effect (**Draft EIS/EIR Sections 4.11.4.6; 7.5.11** and **Final EIR Section 4.11**).

c) **Cumulative:** Construction of other anticipated projects would occur along the Geary corridor; however, it is unlikely that substantial noise and vibration would occur at the same place and at the same time as construction activity resulting from the implementation of any of the project alternatives. As such, there would be no adverse cumulative noise and vibration effects during construction (**Draft EIS/EIR Sections 5.5.14; 7.5.11** and **Final EIR Section 4.11**).

11. Energy

a) **Construction:** Construction of the Hybrid Alternative/SRA would require *indirect* consumption of fossil fuels, labor, and construction materials. These expenditures would be, for the most part, irrecoverable; however, they are not in short supply, and their use would not have an adverse effect upon continued availability of these resources (**Draft EIS/EIR Sections 4.12.4.1; 7.8** and **Final EIR Section 4.12**).

b) **Operation:** The Hybrid Alternative/SRA would result in increased bus ridership which would decrease the total vehicle miles travelled by automobiles. The reductions in direct energy use would be considered small but beneficial effects (**Draft EIS/EIR Sections 4.12.4.2; 7.8** and **Final EIR Section 4.12**).

c) **Cumulative:** Like the Geary BRT Project, other planned land and transportation development projects in the Geary corridor would require energy consumption for construction and operation. These other planned and programmed projects would ultimately result in long-term reductions in energy consumption, particularly resulting from conversion to a more fuel efficient bus fleet by 2035. Accordingly, the project alternatives would not result in any cumulative energy effect (**Draft EIS/EIR Sections 5.5.15; 7.8** and **Final EIR Section 4.12**).

12. Biological Resources

a) **Operation:** Given that the study area is located entirely within an urban (developed) environment with little or no indigenous vegetation, and none of the special-status plant and animal species are known or expected to occur in the corridor, it is unlikely that any sensitive or special-status species would be affected by the Hybrid Alternative/SRA (**Draft EIS/EIR Sections 4.13.4.2; 7.5.12** and **Final EIR Section 4.13**).

b) **Cumulative:** Trees removed as a result of implementation of the Hybrid Alternative/SRA, and other planned projects, would be replaced at the City-ordained replacement ratio. Therefore, the Hybrid Alternative/SRA would not contribute to a cumulatively considerable impact to biological resources (**Draft EIS/EIR Sections 5.5.16; 7.5.12** and **Final EIR Section 4.13**).

B. Less than Significant Impacts; Improvement Measures

In the case of less-than-significant impacts, mitigation is not necessary, but the SFCTA finds that impacts can be reduced or minimized further through the implementation of certain improvement measures. These improvement measures would be implemented during Project construction and operation. These measures would be adopted as part of the Project's MMRP. The SFCTA finds that implementation of these improvement measures would further reduce less-than-significant impacts associated with the below-mentioned areas of environmental concern.

1. Transportation

Operation/Construction:

A) **I-PED-1. Include *WalkFirst* pedestrian safety recommendations where possible.**

B) **I-PED-2. Use Universal Design principles to inform detailed engineering design, and enhance access for disabled people.**

C) **I-PED-3. Include state of the practice bicycle safety and design treatments for the Masonic-to-Presidio bicycle connection.**

D) **I-PED-4. Monitor pedestrian safety on ancillary streets to assess if/how changes in traffic volume affect pedestrian safety.**

E) **I-PRK-1. Create on-street parking where bus stops are consolidated or relocated.**

F) **I-PRK-2. Provide any additional on-street parking from lane striping and infill spaces.**

G) **I-PRK-3. Where removal of curb spaces is necessary, retention and replacement of parking spaces for people with disabilities should be prioritized over retention of all other spaces.**

Implementation of **I-PED-1** through **I-PED-4** would ensure that pedestrian safety is a priority; both during project construction and operation. Implementation of **I-PRK-1** through **I-PRK-3** would likewise ensure that the paved space is used as efficiently as possible to create additional parking, and convenient parking for disabled people.

2. Visual Resources/Aesthetics

Construction

A) **I-VQ-2. Development of a consistent palette of street tree types.**
B) **I-VQ-3. Coordinate station design with long term urban design studies, including studies for the Divisadero to Laguna segment of the corridor.**

A consistent palette of tree types would maximize the visual unity within the Geary corridor, while coordinating the station design with other localized studies would encourage new visual resources to be complimentary.

3. Cultural Resources

Construction

A) **I-CUL-7. Consider the design, lighting, materials, and colors of the built elements of the project within close proximity to historic resources.**

By designing the built elements of the Project with care and consideration, ancillary historic structures would be complimented or enhanced, as opposed to detracted from.

III. Findings of Potentially Significant Impacts That Can Be Avoided or Reduced Through Implementation of Mitigation Measures

CEQA requires agencies to adopt mitigation measures that would avoid or substantially lessen a project's identified significant impacts or potential significant impacts if such measures are feasible.

These findings in Section III concern mitigation measures identified in the Final EIR, that are proposed and recommended for adoption by the SFCTA. All mitigation measures identified in the Final EIR that will reduce or avoid adverse significant environmental impacts are proposed for adoption, and are set forth in **Exhibit 1,** in the **MMRP**. The Draft EIS/EIR discussed potential strategies to reduce significant impacts of automobile traffic at study intersections and found them found to be infeasible, and thus inapplicable to the proposed Hybrid Alternative/SRA. Section IV below summarizes the determinations in the Draft EIS/EIR and explains in more detail why these strategies cannot feasibly be adopted.

The MMRP (**Exhibit 1**) is required by CEQA Section 21081.6 and CEQA Guidelines Section 15091. The MMRP serves to identify each feasible mitigation measure listed in the Final EIR which is required to reduce or avoid a significant adverse environmental impact. The MMRP additionally identifies the agency responsible for implementation of each measure, the monitoring actions for each measure, and the compilation of a monitoring schedule. The SFCTA hereby adopts the MMRP as required by Section 21081.6 of the Public Resources Code.

Mitigation Measures within the Jurisdiction of Other Agencies

The SFCTA has made the determination that the mitigation measures identified in this Section III can and should be implemented, thus determining the measures to be feasible. SFCTA acknowledges that the implementation of mitigation measures may fall within the jurisdiction of other agencies, including but not limited to SFMTA, FTA, Caltrans, SFDPW, and SHPO[7].

The SFCTA will enforce the implementation of the mitigation measures by designating a Mitigation Monitoring Manager to oversee both the monitoring and reporting of all mitigation and improvement measures. Furthermore, the SFCTA will require that all accountable agencies (listed in the MMRP) have agreements, or contracts, that guarantee the implementation of the mitigation and improvement measures.

The SFCTA (or its consultant) may conduct random audits of the construction site and, through the above-mentioned agreements, will have the authority to resolve any discrepancies or issues that may arise with other agencies concerning compliance with mitigation and improvement measures. The SFCTA, by adopting these findings, adopts all of the feasible mitigation and improvement measures as they are set out in the Final EIR. SFCTA further finds that the mitigation and improvement measures discussed in this Section are feasible and enforceable through the project approval actions and will mitigate, reduce, or avoid significant environmental effects of the Project.

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[7] 'Caltrans' is the California Department of Transportation. 'SFDPW' is the San Francisco Department of Public Works, and 'SHPO' is the State Historic Preservation Officer.

There are no additional mitigation measures available to the Project, other than those identified in the Final EIR, which would reduce these significant impacts to a level of insignificance.

SFCTA urges the SFMTA**,** FTA, Caltrans, SFDPW, SHPO, and NAHC to adopt and implement the mitigation and improvement measures set forth in the Final EIR that are within the jurisdiction and responsibility of such entities, and finds that these agencies can and should adopt and participate in the implementation of the mitigation measures.[8] Further, the SFCTA intends to enforce the mitigation measures through its contractual agreements with the SFMTA, FTA and other agencies. Under the circumstances that mitigation measures are not adopted by such other agencies, one or more of the additional significant impacts listed below would occur, depending on the nature of the mitigation measures not implemented.

A. Transportation

Operation: One to three passenger loading spaces will be lost and seven to twelve spaces relocated.

1) A-PRK-4 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.

Implementation of this measure would reduce impacts to passenger loading to a less-than-significant level (**Draft EIS/EIR Section 3.6.4.5; Final EIR Section 3.6**).

Construction: Several impacts, in the form of traffic congestion, noise, and vibration, will occur to local businesses and residents during construction of the Project.

2) M-CI-C1. A TMP that includes traffic rerouting, a detour plan, and public information procedures shall be developed during the design phase with participation from local agencies, other major project proponents in the area, local communities, business associations, and affected drivers. Early and well-publicized announcements and other public information measures would be implemented prior to and during construction to minimize confusion, inconvenience, and traffic congestion. The TMP shall include at minimum the following provisions:

- Construction planning shall seek to minimize nighttime construction in residential areas and minimize daytime construction impacts on retail and commercial areas.
- As part of the TMP public information program, San Francisco Municipal Transportation Agency (SFMTA) shall coordinate with adjacent properties along the Geary corridor to determine the need for colored parking spaces (i.e., loading zones) and work to identify locations for replacement spaces or plan construction activities to minimize impacts from the loss of these spaces. SFMTA shall also coordinate with adjacent properties along the Geary corridor to ensure that pedestrian access to these properties is maintained.
- The TMP shall incorporate SFMTA's process for accepting and addressing complaints. This includes provision of contact information for the Project

[8] 'NAHC' is the Native American Heritage Commission.

Manager, Resident Engineer, and Contractor on project signage with direction to call if there are any concerns. Complaints would be logged and tracked to ensure they are addressed.

- The TMP shall identify or otherwise designate adequate passenger and truck loading zones to be maintained for adjacent land uses, including maintaining access to driveways and providing adequate loading zones on the same or adjoining street block face.

Implementation of this measure would reduce construction-related impacts to a less-than-significant level (**Draft EIS/EIR Section 4.2.5.1 Final EIR Section 4.2**).

B. Visual Resources

Construction: Temporary disruptions to the visual and aesthetic environment would occur during Project construction.

1) MIN-VQ-1.

- Project construction shall be phased to reduce the period of disruption at any particular location to the shortest practical length of time.
- Construction lighting shall be shielded and directed to limit direct illumination to within the area of work and avoid all light trespass.
- Construction staging and storage areas shall be screened by visually opaque screening wherever they will be exposed to public view for extended periods of time.
- Implementation of this measure would reduce construction-related visual impacts to a less-than-significant level (**Draft EIS/EIR Sections 4.4.5.1; 7.5.3 Final EIR Section 4.4**).

C. Cultural Resources

Construction. As detailed in **Sections 4.5 and 7.5.4 of the Draft EIS/EIR** and **Final EIR Section 4.5**, archaeological, historic, architectural, and paleontological resources may potentially be affected by construction-related activities.

1) MIN-CUL-C1. Limit the use of construction equipment that creates high vibration level, such as vibratory rollers.

2) MIN-CUL-C2. Develop and implement a Vibration Reduction and Minimization Plan, which would include the identification of vibration-sensitive structures using distance impact thresholds.

3) MIN-CUL-C3. During advanced conceptual engineering or final design phases, an individual assessment of vibration-sensitive structures would be conducted where construction activities and equipment would exceed FTA's impact distance guidance for category IV structures.

4) MIN-CUL-C4. Conduct vibration monitoring during construction.

5) A-CUL-C5. Design proposed stations and stops in the vicinity of the Golden Triangle Streetlights, Japan Center light standards, and components of the AWSS to avoid the removal, relocation, or damage to these historic structures.

OR

6) MIN-CUL-C6. In the event that avoidance of the Golden Triangle Streetlights, Japan Center light standards, and AWSS are infeasible, all effort will be made first for relocation of such elements within the immediate vicinity of their original location while maintaining placement (distance) within the sidewalk in respect to curb and/or adjacent buildings. For the light standards, additional effort would be made to relocate a light standard within the same block if there is a site where the original light standard has been removed or replaced by modern standards; and last, relocation to an available site within the historic property boundary where an original standard has been removed or replaced by modern standards.

7) I-CUL-C7. Harmonize the visual qualities of built elements of the project alternatives with adjacent historic properties through careful consideration of design, lighting, materials, and color choices that would complement and be sensitive to nearby historic properties.

8) MIN-CUL-C8. Focused archival research will identify any specific areas within the APE that may be likely to contain potentially significant remains, and methods and findings will be documented as an addendum to the current report. The Phase I addendum report will be submitted to the City's Environmental Review Officer (ERO) and the SHPO for concurrence. Research will be initiated once the project's APE map is finalized identifying the major Areas of Direct Impact. The Addendum Survey Report would include:

- A contextual and documentary research section that addresses the development of urban infrastructure that provides a basis for evaluating potential resources as they relate to the history of San Francisco.
- A cut-and-fill reconstruction of the corridor, comparing the modern versus mid-1800s ground surface elevations, to fine-tune the initial prehistoric sensitivity assessment, and refining the location of high-sensitivity locations where prehistoric remains may be preserved.
- Relevant profiles and plan views of specific blocks to illustrate the methods used in analyzing available documentation.
- Summary and conclusions to provide detailed information on locations that have the potential to contain extant historic-era and prehistoric archaeological remains that might be evaluated as significant resources, if any.

Two results are possible based on documentary research:

- No or low potential for sensitive locations: major Areas of Direct impact have no potential to retain extant archaeological remains that could be evaluated as significant resources. No further work would be recommended, beyond adherence to the Unanticipated Discovery Plan.
- Potential sensitive locations: if major Areas of Direct Impact contain locations with moderate to high potential to retain extant historic or prehistoric archaeological remains that could be evaluated as significant resources, further work would be carried out, detailed in a Testing and Treatment Plan.

9) MIN-CUL-C9. Depending on the results of archival research, in concert with the City's ERO, project avoidance areas or, more likely, areas requiring presence/absence investigations for cultural resources will be identified and fieldwork undertaken following

exposure of the ground surface, but prior to construction to identify buried cultural resources.

10) MIN-CUL-C10. A Testing and Evaluation/Treatment Plan, if required, will provide archaeological protocols to be employed immediately prior to project construction to test areas identified as potentially significant or having the potential to contain buried cultural resources. In case such areas might be unavoidable, minimization measures will be proposed. The procedures detailed in the Treatment Plan would be finalized in consultation with the City's ERO and the SHPO.

For historic-era resources, work would initially entail detailed, focused documentary research to evaluate the potential significance of any archaeological material identified during initial research that might be preserved. Significance would be based on the data-potential of possible remains applied to accepted research designs. Two results could ensue:

- No potentially significant remains: if no locations demonstrate the potential for significant remains, no further archaeological testing would be recommended.
- Potentially significant remains: if any locations have the potential to contain significant remains, then appropriate field methods will be proposed, including compressed testing and data-recovery efforts. Testing will be initiated immediately prior to construction, when there is access to historic ground levels. Should a site or site feature be found and evaluated as potentially significant, data recovery would take place immediately upon discovery if avoidance of the site is still not possible.
- For prehistoric resources, a Treatment Plan will identify relevant research issues for resource evaluation, and pragmatic methods to identify, evaluate, and conduct data recovery if needed. This may include a pre-construction geo-archaeological coring program or a compressed three-phase field effort occurring prior to construction when the ground surface is accessible.

11) MIN-CUL-C11. Upon completion of all fieldwork, a technical report shall be prepared. This Final Archaeological Resources Report (FARR) shall document all field and laboratory methods, analysis, and findings. The FARR shall be subject to review and approval by the City's ERO and the SHPO. Copies of the approved FARR shall be submitted to the City's ERO, the SHPO, and the Northwest Information Center (NWIC), together with any associated archaeological site records.

12) MIN-CUL-C12. If buried cultural resources are encountered during construction activities, construction will be halted and the discovery area isolated and secured until a qualified archaeologist assesses the nature and significance of the find.

13) MIN-CUL-C13. If human remains are discovered, the County coroner will be notified as soon as is reasonably possible (CEQA Section 15064.5). There will be no further site disturbance where the remains were found. If the remains were determined to be Native American, then the coroner is responsible for contacting the California Native American Heritage Commission (NAHC) within 24 hours. The NAHC, pursuant to Public Resources Code (PRC) Section 5097.98 will notify those persons it believes to be the most likely descendant (MLD). Treatment of the remains will be dependent on the views of the MLD.

14) MIN-CUL-C14. In the event that paleontological resources are encountered during any phase of project construction, all soil-disturbing activity within 100 feet of the find shall

be temporarily halted until a qualified paleontologist can assess the significance of the find and provide proper management recommendations.

With implementation of the mitigation measures above, construction-related impacts to cultural resources would be reduced to a less-than-significant level (**Draft EIS/EIR Section 4.5.5.1; 7.5.4** and **Final EIR Section 4.5**).

D. Utilities and Service Systems

Construction: As detailed in **Sections 4.6 and 7.5.5** of the **Draft EIS/EIR** and **Section 4.6** of the **Final EIR**, implementation of the Hybrid Alternative/SRA would involve construction of a dedicated transit way, station platforms, curb bulbs, center medians, and landscaping that all have the potential to conflict with public utilities and/or limit access to public utilities by utility providers. Due to the proximity to existing facilities, some utilities would require relocation or modification due to direct conflict or to maintain access for utility providers to conduct maintenance, repair, and upgrade/replacement activities.

1) MIN-UT-1. BRT construction shall be closely coordinated with concurrent utility projects planned within the Geary corridor.

2) MIN-UT-2. Inspection and evaluation of sewer pipelines within the project limits shall be undertaken to assess the condition of the pipelines and need for replacement. Drain inlets on the corridor shall also be inspected to assess condition and confirm functionality. Spot repairs or minor replacement-in-place of sewers may be performed during construction of the project if desired by SFPUC and agreed to by SFMTA.

3) MIN-UT-3[9]. During planning and design, consideration would be given to ensure that Geary corridor station facilities do not prevent access to the underground AWSS lines. Adequate access for specialized trucks to park next to gate valves shall be maintained. Gate valves shall not be located beneath medians, station platforms, or sidewalks.

Operation: The Hybrid Alternative/SRA, once operational, has the potential to conflict with existing utilities that would be kept in place through Project implementation.

4) MIN-UT-4. In situations where utility facilities are being protected in place, SFMTA shall create a plan to accommodate temporary closure of the transitway and/or stations in coordination with utility providers to allow utility providers to perform maintenance, emergency repair, and upgrade/replacement of underground facilities that may be located beneath project features such as the BRT transitway, station platforms, or curb bulbs. Signage for BRT patrons and safety protocols for Muni operators and utility providers shall be integrated into this plan.

With incorporation of the mitigation measures above, construction and operation-related impacts to utilities would be reduced to a less-than-significant level (**Draft EIS/EIR Section 4.6.4.2.1** and **Final EIR Section 4.6**).

[9] Due to an editing error, MIN-UT-3 and MIN-UT-4 were not included in Chapter 7 of the Draft EIS/EIR, but were included in Section 4.6.5. They are applicable to the project and adopted here.

E. Geology/Soils/Seismic/Topography

Construction: As described in **Sections 4.7.4.2 and 7.5.6** of the **Draft EIS/EIR**, and **Final EIR Section 4.7**, activities during construction, such as shoring and cutting, have the potential to result in significant impacts to the surrounding environment.

1) MIN-GE-C1. Shoring will be typically required for all cuts deeper than five feet. Shoring design of open excavations must consider the potential surcharge load from neighboring structures. Furthermore, the potential for lateral movement of excavation walls as a result of earthquake-related surcharge load from nearby structures must also be assessed. The following shoring and slope stability BMPs will be implemented during construction:

- Heavy construction equipment, building materials, excavated soil, and vehicle traffic shall be kept away from the edge of excavations, generally a distance equal to or greater than the depth of the excavation.
- In the event of wet weather, storm runoff shall be prevented from entering the excavation. Excavation sidewalls can be covered with plastic sheeting, and berms can be placed around the perimeter of the excavated areas.
- Sidewalks, slabs, pavement, and utilities adjacent to proposed excavations shall be adequately supported during construction.

Operation: Certain operational components of the Project, such as new paving, pedestrian curbs, BRT stations, and streetlights, could result in significant adverse impacts to Geology/Soils/Seismic/Topography.

2) MIN-GE-1: A geotechnical consultant shall review the design of the build alternatives and offer recommendations best suited to the build alternative carried forward. Any recommendations provided by the geotechnical consultant shall be incorporated into the final plans, and are likely to include the following:

MIN-GE-1a. For lightly loaded structures such as bus stops, canopies, and walls, incorporate geotechnical and/or structural methods to mitigate the effects of liquefaction on the foundations during final design. The geotechnical mitigation methods may range from recompaction of the upper material to provision of a mechanically stabilized earth (MSE) foundation system. The structural mitigation methods may range from planning for repairs/maintenance after a seismic event to supporting the improvements on mat foundations or interconnected beam foundations to tolerate the anticipated seismic settlement without collapse.

MIN-GE-1b. Fill soils shall be overexcavated and replaced with engineered fill as needed.

MIN-GE-1c. Deeper foundations shall be designed for station platforms and canopies located in areas of fill or areas mapped as liquefaction areas, as needed.

With implementation of the above mitigation measures, construction and operation-related impacts to Geology/Soils/Seismic/Topography would be reduced to a less-than-significant level (**Draft EIS/EIR Sections 4.7.4.2; 7.5.6** and **Final EIR Section 4.7**).

F. Hazards and Hazardous Materials

Construction: As described in **Section 4.8.4.1** of the **Draft EIS/EIR** and **Final EIR Section 4.8**, increased risk of exposure to hazardous substances, such as aerially deposited lead in the soil and asbestos, would result from construction of the Hybrid Alternative/SRA.

1) MIN-HZ-C1. Prior to construction, a limited Preliminary Site Investigation (Phase I) shall be performed to investigate hazardous materials concerns related to soil, groundwater, and construction materials on the Geary corridor, as identified in this section.

Areas where soils will be disturbed during construction shall be sampled and tested for contaminants specific to the hazardous materials concerns identified in that location. Soil analytical results shall be screened against the Regional Water Board's Environmental Screening Levels (ESLs) and other applicable risk-based standards to determine appropriate actions to ensure the protection of construction workers, future site users, and the environment and also be screened against state and federal hazardous waste thresholds to determine soil management options. Representative samples of exposed shallow soils shall be collected within 30 feet of the edge of the roadway and analyzed for total lead and soluble lead. For example, aerially-deposited lead is a potential concern throughout the Geary corridor, while naturally-occurring asbestos is potentially present in only a small portion of the Geary corridor. Accordingly, samples in all areas shall be analyzed for total and soluble lead; samples from excavation areas overlying serpentinite bedrock shall also be analyzed for asbestos. Additional investigation may be required to fully evaluate potential hazardous materials issues if concerns are identified during the Preliminary Site Investigation. All environmental investigations at the project shall be provided to project contractors, so the findings may be incorporated into their Health and Safety and Hazard Communication Programs.

2) MIN-HZ-C2. Prior to construction, groundwater shall be collected in areas near reported hazardous materials release sites and analyzed for TPH and volatile organic compounds if project excavations were to extend into the groundwater in those areas. Hazardous materials release sites that have affected groundwater near the Geary corridor are located at 3675 Geary Boulevard, 450 Mission Street, and 2130 O'Farrell Street.

Additional hazardous materials releases may occur or be discovered in the future. Therefore, an updated review of regulatory agency records shall be conducted prior to the groundwater investigation, to ensure that groundwater that will be encountered during construction is properly investigated.

3) MIN-HZ-C3. A Hazardous Building Materials survey shall be conducted prior to construction. The survey shall minimally sample traffic paint and structures to be demolished or modified.

4) MIN-HZ-C4. Based on the findings and recommendations of the Preliminary Site Investigation, the project may need to implement special soil, groundwater, and construction materials management and disposal procedures for hazardous materials, as well as construction worker health and safety measures during construction. In addition to the findings and recommendations of the Preliminary Site Investigation, the following measures shall be implemented prior to construction.

- Groundwater from dewatering of excavations, if any, should be stored in Baker tank(s) during construction activities and the water should be characterized prior to disposal or recycling.
- A construction risk management plan should be implemented by contractors with procedures for identifying and mitigating potentially unreported releases of hazardous materials.

With implementation of the above mitigation measures, construction-related impacts resulting from the handling, transport, and disposal of hazardous substances would be reduced to a less-than-significant level (**Draft EIS/EIR Sections 4.8.5.1; 7.5.7; Final EIR Section 4.8**).

G. Hydrology and Water Quality

Construction: As set forth in **Section 4.9** of the **Draft and Draft EIS/EIR** and **Final EIR Section 4.9**, increased occurrences of soil erosion, surface water runoff, and soil entrapment would result from construction-related activities.

1) MIN-HY-C1. Any construction work that adversely affects the combined sewer system will require coordination with SFPUC, and construction-related activities shall be consistent with the SFPUC's *Keep it on Site, Pollution Prevention Guide for the Construction Industry*.[10]

2) MIN-HY-1. Landscape areas shall be designed to minimize and reduce total runoff. Any irrigation and fertilizers shall be used to the minimum extent practicable and feasible.

Implementation of the above mitigation measures would reduce construction-related impacts to Hydrology and water quality to a less-than-significant level (**Draft EIS/EIR Sections 4.9.5.1; 7.5.8** and **Final EIR Section 4.9**)

H. Noise and Vibration

Construction: As set forth in **Section 4.10** of the **Draft EIS/EIR** and **Final EIR Section 4.10**, during construction-related activities, noise and vibration impacts would occur due to the use of certain machinery such as heavy pile drivers etc.

1) MIN-NOISE-C1. A Vibration Reduction and Minimization Plan shall be developed to avoid construction vibration damage using all reasonable and feasible means available. The Plan shall provide a procedure for establishing thresholds and limiting vibration values for structures with a potential to be adversely affected. The following steps shall be taken in development of the location-specific vibration reduction plan:

- Potential vibration-sensitive structures shall be identified using the distance impact thresholds in the final engineering drawings;
- Vibration-sensitive structures shall be individually assessed to identify the structure's ability to withstand the loads and displacements due to construction vibrations;

[10] San Francisco Public Utilities Commission. *Keep it on Site, Pollution Prevention Guide for the Construction Industry*. Available at: http://www.sfsewers.org/modules/showdocument.aspx?documentid=290.

- Construction related vibration in proximity to identified vibration-sensitive historic structures shall not be allowed to exceed the recommended levels set forth in pertinent FTA guidance;
- Peak particle velocities shall be monitored and recorded near sensitive receptors identified where the highest vibration producing activities occur;
- Rubber tired instead of tracked vehicles shall be used near vibration sensitive areas;
- Pavement breaking shall be prohibited during nighttime hours; and
- Residents within 300 feet of areas where construction activities and pavement breaking will take place shall be notified at least two weeks in advance of the proposed activity through the media and mail. A program shall be implemented to receive and respond to public complaints regarding vibration during construction.

2) MIN-NOISE-C2. Project construction shall implement best practices in equipment noise control, including the following:

- Use newer equipment with improved noise muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators intact and operational. Newer equipment will generally be quieter in operation than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding).
- Perform all construction in a manner that minimizes noise. Utilize construction methods or equipment that will provide the lowest level of noise effects.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes.
- Impact tools and equipment, such as jack hammers, shall have intake exhaust mufflers and acoustically attenuating shields or shrouds recommended by the manufacturers and approved by the Director of Public Works or the Director of Building Inspection.

3) MIN-NOISE-C3. Project construction will conduct truck loading, unloading, and hauling operations so that noise and vibration are kept to a minimum by carefully selecting routes to avoid passing through residential neighborhoods to the greatest possible extent.

4) MIN-NOISE-C4. Perform independent noise monitoring in sensitive areas, as needed, to demonstrate compliance with applicable noise limits. Require contractors to modify and/or reschedule their construction activities if monitoring determines that maximum limits are exceeded at residential land uses per the City Noise Ordinance.

5) MIN-NOISE-C5. Temporary sound walls, curtains, or other noise canceling technologies may be used in locations where sensitive receptors could experience construction-related noise exceedances.

With implementation of the above mitigation measures, construction-related impacts resulting from increased noise and vibration would be reduced to a less-than-significant level (**Draft EIS/EIR Section 4.11.5; 7.5.11; Final EIR Section 4.1**).

I. Biological Resources

Construction: As described more fully in **Section 4.13** of the **Draft and Draft EIS/EIR** and **Final EIR Section 4.13**, in order to implement the Hybrid Alternative/SRA, several existing trees would have to be removed during construction-related activities.

1) MIN-BO-C1. Mature trees shall be preserved and incorporated into the project landscape plan as feasible, as well as the planting of replacement trees and landscaping. For each tree removed, a replacement tree is required.

2) MIN-BO-C2. To preclude potential effects under the MBTA, tree removal shall occur outside nesting bird season (February 1 through August 31). Regardless of time of year, preconstruction surveys shall be performed prior to tree removal to determine occurrence of nesting birds. If active protected bird nests are encountered during preconstruction surveys, no-disturbance buffers would be created around active protected bird and/or raptor nests during the breeding season, or until it is determined that all young have fledged. Typical buffers include 500 feet for raptors and 50 feet for passerine nesting birds. The size of the buffer zones and types of construction activities restricted in these areas may be further modified during consultation with CDFW, and shall be based on existing noise and human disturbance levels at the project site. Nests initiated during construction are presumed to be unaffected, and no buffer will be necessary. The "take" of any individual protected birds shall be prohibited. Monitoring of active nests when construction activities encroach upon established buffers may be required by CDFW.

3) MIN-BO-C3. Seed palettes used for revegetation of disturbed areas shall be reviewed to prevent introduction of invasive species to the site. Follow-up site maintenance shall include a protocol for landscaping staff to recognize weeds and perform maintenance in a manner that prevents weed establishment.

With implementation of the above mitigation measures, construction-related impacts to biological resources would be reduced to a less-than-significant level (**Draft EIS/EIR Section 4.13.5; 7.5.12** and **Final EIR Section 4.13**).

IV. Significant Impacts that Cannot Be Avoided or Reduced to A Less-Than-Significant Level; Mitigation Measures Rejected as Infeasible

Based on substantial evidence in the whole record of these proceedings, the SFCTA finds that, where feasible, changes or alterations have been required, or incorporated into, the Project to reduce significant environmental impacts listed below as identified in the Draft EIS/EIR. The SFCTA hereby adopts all the above-mentioned feasible mitigation measures (Section III) found in the Draft EIS/EIR, which are relevant to the Project and thereby set forth in the MMRP (**Exhibit 1**). As discussed in the Draft EIS/EIR, standard strategies to reduce significant transportation level of service impacts are infeasible. These strategies are discussed herein for informational purposes. To the extent required, the SFCTA specifically finds that there is substantial evidence that for the specific economic, legal, social, technological, or other considerations set forth in these findings and in the Draft EIS/EIR, the Final EIR and the whole record make these strategies infeasible. The SFCTA therefore rejects these measures, and the effects resultantly remain significant and

unavoidable. Based on the analysis within the Final EIR, other considerations in the record, and the standards of significance, the SFCTA finds that because some facets of the Project would cause potentially significant impacts for which feasible mitigation measures are not available to reduce the impact to a less-than-significant level, the impacts are ***significant and unavoidable***.

The SFCTA determines that the following significant impacts on the environment, as illustrated in the Final EIR, are unavoidable; however, under Public Resources Code Section 21081(a)(3) and (b), and CEQA Guidelines 15092(a)(3), 15092(b)(2)(B), and 15093, the SFCTA determines that the impacts are acceptable due to overriding considerations described in Section VI below. This finding is supported by substantial evidence found in the record of this proceeding.

A. Traffic Impacts in 2020 (Existing Conditions Plus project)

The Hybrid Alternative/SRA would cause adverse effects at four study intersections in 2020; three on-corridor intersections and one off-corridor intersection. The Draft EIS/EIR found that the typical strategies used to avoid these impacts were infeasible, and the SFCTA confirms this determination for the reasons stated below in Section IV.C. Project features and the mitigation measure in the form of traffic management strategies described above in Section III.A 2 (**M-CI-C1**) may reduce these impacts, but the impacts would remain ***significant and unavoidable*** at these intersections:

- Laguna Street and Geary Boulevard
- Gough Street and Geary Boulevard
- Van Ness Avenue and Geary Boulevard
- Fulton Street and Stanyan Street

B. Traffic Impacts in 2035 (Cumulative Conditions Plus Project)

The Project-specific impacts in 2020 would make a considerable contribution to cumulative traffic impacts in 2035 at the 8 intersections listed below. The Draft EIS/EIR found that the typical strategies typically used to reduce traffic level of service impacts are infeasible, and the SFCTA confirms that these strategies are infeasible, and to the extent required, hereby rejects them for the reasons stated in Section IV.C. Project features and the mitigation measure in the form of traffic management strategies described above in Section III.A.2 (**M-CI-C1**) may reduce these impacts, but the impact would remain ***significant and unavoidable***.

- Parker Street and Geary Boulevard
- Laguna Street and Geary Boulevard
- Gough Street and Geary Boulevard
- Van Ness Avenue and Geary Boulevard
- California Street and Arguello Boulevard
- California Street and Presidio Avenue
- Fulton Street and Stanyan Street
- Anza Street and Park Presidio Boulevard

C. Traffic Related Strategies Rejected as Infeasible

As discussed in the Draft EIS/EIR, typical strategies to reduce significant transportation level of service impacts are infeasible at the above intersections. These measures are discussed herein for

informational purposes. In addition, to the extent necessary by law, SFCTA hereby finds that there is substantial evidence that for specific economic, social, technological, or other considerations mentioned below, the following strategies are infeasible and are therefore rejected.

Under standard practice, impacts related to traffic congestion can be reduced or eliminated by adding travel lanes or otherwise increasing vehicular capacity through use of tow-away or temporary no parking lanes and/or adjusting signal timing. However, these types of measures are often infeasible in dense, urban and built-out environments: increased automobile capacity is often ineffective in the long-run due to the risk of induced demand; providing additional travel lanes or otherwise increasing vehicular capacity at some intersections would require narrowing sidewalks to deficient widths and/or acquisition and demolition of adjacent buildings; signal timing adjustments may improve intersection operations, but major timing changes are often infeasible due to traffic, transit, or pedestrian signal timing requirements at the impacted intersection or adjacent (downstream or upstream) intersections; use of tow away zones or other parking prohibitions to add through lanes or turn pockets, can worsen pedestrian conditions by eliminating the buffer between pedestrians and moving traffic that on-street parking or loading provides. This would increase exposure of pedestrians at intersections which would not support project goals for pedestrian comfort and safety, particularly where concurrent transit travel times are not improved.

As noted in Section 3.4.5 of the Draft EIS/EIR, the specific reasons the types of strategies typically used in standard practices are infeasible at the following intersections are as follows:

- **All Intersections on Geary Boulevard (Geary and Laguna; Gough; Van Ness)(2020):** Along Geary Boulevard, providing additional travel lanes or otherwise increasing vehicular capacity would require removal of the proposed bus-only lanes, narrowing the adjacent sidewalks and/or acquisition and demolition of adjacent buildings due to the limited street right-of-way.
- **Fulton Street and Stanyan Street (2020; 2035):** At this intersection, providing additional travel lanes or otherwise increasing vehicular capacity at this intersection would require narrowing sidewalks and/or acquisition and demolition of adjacent buildings due to the street limited right-of-way.
- **All Intersections on Geary Boulevard 2035 (Geary and Parker/Laguna/Gough/Van Ness):** Along Geary Boulevard, providing additional travel lanes or otherwise increasing vehicular capacity would require removal of the proposed bus-only lanes, narrowing sidewalks and/or acquisition and demolition of adjacent buildings due to the limited street right-of-way.
- **California Street and Arguello Boulevard 2035:** At this intersection, restricting eastbound, or eastbound and westbound left turns during peak hours would substantially reduce adverse effects, but would also require those vehicles that need to travel in the north or southbound direction to turn left either prior to the California/Arguello intersection, or by making a series of right turns. This would divert traffic onto smaller residential streets, which may not have sufficient capacity and would not support policies discouraging the use of smaller residential streets.
- **California Street and Presidio Avenue 2035:** At this intersection, increasing signal cycle lengths and optimizing the timing of each signal phase would substantially reduce adverse effects to vehicular traffic, but would adversely impact pedestrian

wait times, transit travel times, and traffic through-put at the intersection and at adjacent intersections.

- **Anza Street and Park Presidio Boulevard 2035:** At this intersection, providing additional eastbound and westbound travel lanes would be possible by reconfiguring the eastbound and westbound approaches to add capacity, but would require removal of parking, reduction of sidewalk widths, and/or adding right-turn pockets directly adjacent to sidewalks.

For the reasons stated above, SFCTA finds that the project incorporates all feasible mitigation measures which would eliminate or substantially lessen all significant effects on the environment. The SFCTA confirms that the strategies outlined in the Draft EIS/EIR and found to be infeasible for the reasons set forth above are rejected.

The remaining significant and unavoidable impacts at the intersections listed above are found to be acceptable due to the overriding considerations set forth below.

V. Evaluation of Project Alternatives

This Section V describes the Hybrid Alternative/SRA as well as the alternatives identified and analyzed in the Final EIR, and the reasons for adopting the Hybrid Alternative/SRA and the reasons for rejecting the other alternatives in the Final EIR as infeasible. This section defines the Project's purpose, and provides the context for understanding the reasons for accepting and/or rejecting specific alternatives, as well as describes the Project alternative components analyzed within the Final EIR.

CEQA mandates that an EIR evaluate a reasonable range of alternatives, either to the Project or to the Project location, that generally reduce or avoid potentially significant impacts occurring as a result of Project implementation. CEQA further mandates that each EIR evaluate a 'No Project' alternative, which considers the relative progression of environmental conditions without the Project's potential impacts. Alternatives provide a basis of comparison to the Project in terms of beneficial, significant, and unavoidable impacts. This comparative analysis is used to determine reasonable, and feasible, mitigation measures for the Project. The SFCTA Board has given each proposed alternative careful consideration, and rejects the Final EIR alternatives that are not selected for approval due to their being infeasible for the specific economic, legal, social, technological, or other considerations outlined herein.

A. Reasons for Selection of the Project

As discussed above in Section I, the Project is based on the Hybrid Alternative/SRA analyzed in the Final EIR. The SFCTA has undertaken a detailed process in selecting the Hybrid Alternative/SRA. The agency first identified the need for BRT in the Geary Corridor in the Proposition-K expenditure plan in 2003 and the 2004 Countywide Transportation Plan.

The '**Geary Corridor BRT Feasibility Study,**' completed in 2007, identified the primary objectives of the Project to be:

- To improve the reliability and speed of transit within the Geary corridor, in order to promote higher ridership and competitiveness with other travel modes.
- To improve the existing unfavorable pedestrian conditions – especially west of Gough Street and throughout the Richmond District.

- To provide a high-quality passenger experience within the corridor, comprising improvements to the streets and surrounding streetscapes.

The Feasibility Study also considered an initial set of BRT design alternatives.

To narrow down a set of build alternatives for environmental evaluation, the SFCTA prepared an '**Alternatives Screening Report**' in May 2009. The project team conducted further alternatives development and screening, documented in the 2014 *Geary Bus Rapid Transit Design Options Screening Report*. These analysis rounds used the following criteria to evaluate potential options and screen them for fatal flaws:

- Traffic conditions, including congestion, diversions, circulation, access, and parking and loading conditions
- Transit travel time, reliability, and passenger experience and access
- Pedestrian access, safety, and streetscape design
- Bicycle safety and connectivity
- Rail readiness
- Capital and operating costs
- Impacts to Muni operations
- Construction impacts

In developing the Hybrid Alternative/SRA for approval, the SFCTA has carefully considered the extent to which the Hybrid Alternative/SRA meets the objectives of the Project, its attributes, and the environmental effects of the Project. Furthermore, the SFCTA has considered factors of importance to Project stakeholders, including public and Agency comments received during the Draft EIS/EIR public comment period, and further input from the Geary BRT Citizens Advisory Committee.

In identifying the Hybrid Alternative/SRA, the SFCTA went through an alternatives performance evaluation process. As explained in **Section 10.2 of the Final EIR**, the SFCTA developed a list of seven key areas, each of which includes multiple indicators (see Section 10.2 of the Draft EIS/EIR). These indicators, listed below, were selected because they: 1) are related to the project need and purpose or to key issues identified by the public and other stakeholders, and 2) show varying levels of performance between the build alternatives and so facilitate selection of a single alternative as the LPA. These factors served as the main consideration in evaluating alternatives for adoption. These key areas, and indicators, are described as follows:

- Transit performance
  - Vehicle travel time – The bus PM peak travel time, local and BRT.
  - Reliability – The difference between average and 95th percentile bus travel time.
  - Ridership – Daily boarding for all Geary lines.
- System performance
  - Person delay (auto and transit) – PM peak delay per person per intersection along the Geary corridor.
  - Diversions – Increase in PM peak hour traffic on nearby parallel streets.

- Environmental and Social effects
    - Parking opportunities – Change in number of curb spaces (all types)
    - Trees and landscaping provided – Percent of existing trees retained, and the median area available for landscaping opportunities.
- Pedestrian access and safety
    - Ease of access to stops – Average maximum walk to closest local stop, and average maximum walk to closest BRT stop.
    - Pedestrian safety improvements – Opportunity for pedestrian curb bulbs in optional locations, and the elimination of permissive left turn signals or conversion to protected phase signals.
- Rail readiness
    - Ease of conversion to rail – The extent of future construction to accommodate rail service.
- Cost
    - Construction costs – Total construction costs.
    - Operation and maintenance costs – Annual operating costs, combined with annual maintenance costs.
- Construction Impacts
    - Access to business during construction – Length of construction duration.

The evaluation process identified the strengths and weaknesses of each build alternative, and identified some alternatives with fatal flaws.

The project team evaluated and compared these remaining alternatives, as well as the No Build Alternative, according to the performance indicators listed above. A summary of the analysis, which is more fully set forth in Section 10.3.6, results follows.

Transit travel time. Throughout the corridor, the build alternatives would reduce Rapid bus travel times by about 9 minutes in 2020 compared to the No Build scenario. The Hybrid Alternative would be slightly faster than Alternative 2, although slightly slower than Alternative 3.

Transit reliability. Transit reliability is measured using the difference between the average bus travel time in each alternative and the 95th percentile travel time, which for a weekday round-trip commuter would approximately correspond to the worst travel time experienced on any one commute journey over a two-week period. The build alternatives would reduce 95th percentile additional travel time for limited/BRT service by between 1 about 1.5 minutes relative to the No Build alternative, representing a 20% or better reliability improvement. Differences between build alternatives would be relatively small.

Ridership. In 2020, the Hybrid Alternative is projected to increase ridership in the corridor by approximately 12 percent relative to the No Build Alternative. Alternative 2 would increase ridership by about 9 percent over the No Build Alternative. Alternative 3 and 3Additional service provided with the build alternatives would accommodate these new riders without increasing crowding.

Person-delay. Person-delay, or the total hours that all auto and transit users spend in delay during the peak period, provides a measure of overall transportation system efficiency and performance in

the corridor. The measure includes all intersections along the corridor between Van Ness Avenue and 25th Avenue. The Hybrid Alternative would reduce delay by 12 percent compared to the No Build Alternative, while Alternative 2 would reduce delay by 16 percent.

Diversions. With fewer mixed traffic lanes on Geary Boulevard with the proposed BRT project, some drivers are expected to use other parallel routes to reach their destinations. These diversions are projected to be greatest in the section of the corridor near Masonic Avenue. In this area, traffic on nearby parallel streets (between Fulton Street and the Presidio) with the Hybrid Alternative would increase by an estimated average of 7 percent in the PM peak hour in 2020 relative to projected volumes in the No Build scenario. The diversion rate with Alternative 2 is expected to be approximately 4 percent.

Parking Preservation. The build alternatives would result in elimination of on-street parking spaces in at least some portions of the corridor. Alternative 2 would remove approximately 27 percent of spaces on the Geary Corridor itself, or about 4 percent of the total public parking supply within one to two blocks of the corridor. The Hybrid Alternative would remove less parking, a total of 22 percent of spaces on the streets comprising the Geary Corridor or about 3 percent of the total nearby public parking supply. While Alternative 2 would have parking losses distributed throughout the corridor, the Hybrid Alternative would minimize the number of spaces lost in the Richmond District between Arguello Boulevard and 25th Avenue, the core of a retail district with very limited off-street parking supplies.

Existing trees retained. The build alternatives considered would retain most of the existing trees corridor-wide, but some would need to be removed and replaced in order to accommodate street reconfigurations. Alternative 2 would result in the removal of up to 156 trees, while the Hybrid would remove up to 195 existing trees.

Median landscaping area. The Hybrid Alternative would increase the amount of landscaped median area in the corridor from 3.1 acres to 3.5 acres, a 13 percent increase, by replacing the existing single median with two new medians between approximately Palm Avenue and 27th Avenue. Alternative 2 would provide approximately the same amount of median area as the No Build alternative.

Average stop spacing. The build alternatives include fewer bus stops than currently exist and would continue to exist with the No Build Alternative. Most notably, the Hybrid Alternative would consolidate local and BRT stops between Arguello Boulevard and 34th Avenue. As a result, it would increase the average spacing between local stops from 720 feet to 1,190 feet, while average spacing between Rapid/BRT stops would increase from 1,540 to 1,740 feet. Alternative 2 would result in higher average spacing between BRT stops, but less change in the average distance to local stops.

Pedestrian safety improvements. The build alternatives would include pedestrian safety improvements along the Geary corridor, including installation of new corner bulbs to reduce crossing distances, new pedestrian crossing signals, and traffic signal upgrades. The Hybrid Alternative would provide additional benefits in the Palm to 27th Avenue section of the corridor due to proposed signal upgrades and protected left turn phases. Alternative 2 would include 65 new curb bulbs, while the Hybrid Alternative would include 91 new curb bulbs. The Hybrid Alternative configuration would also provide more design flexibility to place bulbs in the most advantageous locations for pedestrian safety.

Rail-readiness. The Hybrid Alternative would best facilitate future conversion to rail service in the Palm to 27th Avenue portion of the corridor due to its center-running alignment and consolidated stops. Outside that segment, the build alternatives would not differ; all would require substantial construction to construct rail, but none would preclude the possibility of doing so.

Capital costs. In terms of capital construction costs, Alternative 2 would be less expensive than the Hybrid Alternative because it would utilize much of the existing pavement and reuse most of the existing median, while the Hybrid Alternative would require replacement of the existing single median in the Richmond with new bus lanes and dual medians.

Operating costs. The annual cost to operate bus service on the Geary corridor is expected to increase over time due to increasing traffic congestion and the need to accommodate higher ridership. By 2020, the service is estimated to cost $36.7 million annually to operate with the No Build scenario. The build alternatives would improve bus travel time and reliability, attracting additional riders and necessitating further increases in service frequency to accommodate them. With both Alternative 2 and the Hybrid Alternative, the annual operating cost is expected to increase to nearly $50 million.

Total construction duration. The recommended construction approach would involve construction on multiple work zones of several blocks each in order to minimize the length of disruption on any one block. Thus, construction in any individual work zone would generally be shorter than the length of time required to construct the entire project. Construction durations for the overall project would vary from 21 months for Alternative 2 to 23 months for the Hybrid Alternative.

In addition to the above evaluation indicators, the SFCTA compared the build alternatives in terms of environmental impacts. Except for traffic impacts, there were no significant and unavoidable impacts among the project build alternatives for most of the environmental factors that were considered. As to traffic impacts, the distinguishing differences among the alternatives were identified:

Traffic operations/delay at intersections. As detailed in **Section 3.4 of the Draft EIS/EIR and Final EIR Section 4.13**, fewer intersections would experience undesirable levels of traffic delay with any of the build alternatives than under the No Build Alternative. However, all build alternatives would result significant impacts related to LOS at on- and off-corridor intersections in the years 2020 and 2035.

Alternative 2

- 2020: 1 on-corridor and 1 off-corridor intersection
- 2035: 4 on-corridor and 1 off-corridor intersections

Alternative 3

- 2020: 2 on-corridor and 1 off-corridor intersection
- 2035: 4 on-corridor and 5 off-corridor intersections

Alternative 3-Consolidated

- 2020: 1 on-corridor and 1 off-corridor intersection
- 2035: 3 on-corridor and 6 off-corridor intersections

Hybrid Alternative

- 2020: 3 on-corridor and 1 off-corridor intersection
- 2035: 4 on-corridor and 4 off-corridor intersections

As discussed in Draft EIS/EIR Section 3.4.5, as there are no feasible measures by which to reduce or eliminate these intersection LOS impacts, all of the above impacts would be considered significant and unavoidable.

Through the process of conducting the above analysis, SFCTA staff engaged in a collaborative process with SFMTA staff to consider the performance of the alternatives under consideration and identify the alternative that best meets the project need and purpose. This process included an extensive public outreach process in 2013 and 2014, with three public open houses and meetings with more than 25 community stakeholder groups, to collect input on the alternatives. Based on the analysis of performance and public input received, the Draft EIS/EIR identified the Hybrid Alternative/SRA as the staff-recommended Locally Preferred Alternative.

Between the Hybrid Alternative/SRA and Alternative 2, 3 and 3C, the Hybrid Alternative/SRA would provide the most significant improvements to transit performance and the greatest improvement to pedestrian safety in the corridor, and therefore best meet the project need and purpose. The Hybrid Alternative would result in more intersections with undesirable traffic delays than Alternative 2 and related significant and unavoidable environmental impacts, but would still have fewer intersections with undesirable traffic delays than would exist with the No Build Alternative. The Hybrid Alternative would remove less parking than Alternative 2, particularly in the neighborhoods along the corridor where merchants are most concerned about parking loss. Lastly, while the Hybrid Alternative would result in more existing tree loss than Alternative 2, it would provide more are and opportunities for new median landscaping.

The Hybrid Alternative is also the environmentally superior alternative, because it would result in the fewest long-term environmental impacts of any of the project alternatives. The Hybrid Alternative would result in significant unavoidable impacts to signalized intersection level of service; however, this impact would also be significant and unavoidable with implementation of the No Build and any of the build alternatives.

The Hybrid Alternative would be the environmentally superior alternative for the following reasons:

- The Hybrid Alternative would result in the greatest reduction in operational GHG emissions relative to the No Build Alternative.
- The Hybrid Alternative would have reduced air quality and noise and vibration impacts to sensitive receptors relative to Alternative 2 given its center-running bus-only segments.

B. Alternatives Rejected and Reasons for Rejection

The SFCTA rejects as infeasible the alternatives set forth in the Draft EIS/EIR and Final EIR and listed below, because the SFCTA finds that there is substantial evidence, including evidence of economic, legal, social, technological, and other considerations described in Section VI below under CEQA Guidelines 15091(a)(3), that make infeasible such alternatives.

1. The No Build Alternative

The No Build Alternative is rejected as infeasible due to its poor performance as it pertains to meeting the Project's purpose and need. The performance evaluation process, summarized above and detailed in **Section 10.2 of the Draft EIS/EIR** and **Final EIR Section 4.13**, demonstrates that the No Build Alternative fails to perform well when compared to the other Alternatives, and does not compete in regard to the factors applicable to the Project's objective. Most notably, the No Build Alternative performed worst in transit performance and pedestrian safety, both key elements of the Project purpose and need.

With regard to environmental factors, the No Build Alternative would avoid many of the construction-related impacts and costs associated with the Project, including traffic effects, parking restrictions, and the removal of trees, although some previously planned improvements for the Geary corridor, would have construction-related impacts. Although traffic conditions at intersections within the Geary corridor would worsen under the Hybrid Alternative, these conditions would be comparatively worse in the long run under the No Build Alternative than under any of the build alternatives. Under the No Build Alternative, there would be adverse effects at ten study intersections in 2020 and 21 study intersections in 2035, whereas the Hybrid Alternative/SRA would impact far fewer intersections - four intersections in 2020 and eight intersections in 2035. Given this, fewer intersections would experience unacceptable levels of service under the Hybrid Alternative/SRA than under the No Build Alternative.

In addition, the No Build Alternative does not meet the Project Objectives to improve transit service in the Geary corridor in order to promote high ridership and competitiveness with other travel modes, does not create favorable pedestrian conditions, or provide a high quality transit passenger experience.

2. Build Alternative 2: Side-Lane BRT

The alternatives evaluation showed that Alternative 2 had the best performance for some project effects, including the fewest congested intersections and less person-delay and diverted traffic than the Hybrid Alternative. Alternative 2 would result in the fewest existing trees removed. It also would have the lowest construction cost of the build alternatives, with an estimated cost of $170M, which came in approximately 43 percent cheaper than the Hybrid Alternative. Although Alternative 2 performed well in the above-mentioned areas, the alternative did not perform as well as the Hybrid Alternative in regard to several areas that are core elements of the Project's purpose and need, including transit travel time, reliability, and ridership, as well as the number and quality of pedestrian safety improvements included. Alternative 2 would also not perform as well as the Hybrid in terms of the amount of parking preserved in the corridor, particularly in the key Richmond business district, or in terms of the amount of median space available for landscaping.

After consideration of environmental impacts within the alternatives evaluation process, including consideration of stakeholder, agency, and public comments, Build Alternative 2 is rejected as infeasible because it would not achieve the Project's purpose and need, specifically to improve transit performance and pedestrian conditions, to the extent that the Hybrid Alternative/SRA would. Given this, Alternative 2 is rejected as infeasible.

3. Alternative 3: Center-Lane BRT with Dual Medians and Passing Lanes

Alternative 3 would offer several advantages relative to the Hybrid Alternative, including the best transit travel time and reliability of all alternatives. However, Alternative 3 is rejected as infeasible because it includes center-running bus-only lanes through the Fillmore and Masonic areas.

Alternative 3 (and 3C) includes the restoration of a surface street at the Fillmore underpass. However, filling the underpass is considered infeasible and rejected: Filling the underpass would require a longer community process to obtain consensus on a refined new street design, then additional time for engineering design and construction. A time estimate for these steps places construction completion beyond 2020. This would result in unacceptable delays to the Geary BRT project.

Alternative 3 (and 3C) included center-running BRT lanes through the Masonic underpass Center BRT lanes at Masonic would result in a poor passenger waiting experience in several ways, largely as a result of the location of the BRT platforms below grade in the existing trench adjacent to the underpass. This location would result in poor visibility of the station from its surroundings, as well as a noisy and windy passenger waiting environment. Members of the public and of the Project Citizens Advisory Committee had significant concerns about these personal security and comfort issues. Wayfinding would be more challenging with the center-running stop configuration, because the eastbound BRT station would be located just west of Masonic Avenue, while the westbound station would be just east of Presidio Avenue, a block away, and both would be below grade.

Vertical circulation could also become a challenge in the future. Due to the width of the platforms, only a single elevator and a relatively narrow set of stairs could be accommodated to serve passenger access needs at the end of each platform adjacent to the Masonic underpass. Ridership projections indicate that this capacity would be sufficient to accommodate expected passenger flows in the opening and horizon years of the project, but if ridership at the station were higher than expected or continued to grow beyond 2035, modifications to increase capacity could be needed. Due to the limited width of the underpass, constructing additional access infrastructure would likely necessitate removing the remaining westbound mixed traffic lane through the underpass, resulting in additional traffic on the surface.

Finally, center BRT lanes at Masonic would require all but one westbound traffic lane to be at the surface, which would increase congestion and diversions to parallel streets while increasing conflicts with pedestrians and bicyclists.

Finally, Alternative 3 would cost $430 million, substantially more than the Hybrid Alternative, creating a major funding challenge since it would cost more than the Federal Small Starts program maximum of $300 million and would have a much larger funding gap. Given these funding issues and the issues with center-running BRT lanes at Fillmore Street and Masonic Avenue, Alternative 3 is rejected as infeasible.

4. Alternative 3-Consolidated: Center-Lane BRT with Consolidated Bus Stops, Dual Medians, and No Passing Lanes.

Alternative 3-Consolidated would provide better transit travel times, reliability, and ridership than the Hybrid Alternative/SRA, and would also preserve the most parking in the corridor. However, Alternative 3C includes center-running BRT lanes through the Fillmore and Masonic areas, and thus has the same issues as Alternative 3. Alternative 3-Consolidated would likewise result in a delay

in project implementation necessary to fill the Fillmore underpass, and a poor passenger experience and other issues at Masonic. Alternative 3-Consolidated would cost $435 million, the most of any alternative and resulting in a major funding challenge. Therefore, for the same reasons as set forth above for Alternative 3, Alternative 3-Consolidated is rejected as infeasible.

5. Rejection of Additional Alternatives

During the term of analysis of the Geary BRT Project, including the previous rounds of planning design and analysis, as outlined in **Chapter 10** of the **Draft EIS/EIR**, and during the Draft EIS/EIR comment period, additional alternatives and configurations were proposed, including those by various property owners, residents and commentators. These alternatives included light rail and subway options, improvements to other parallel corridors, and various design alternatives to bus only lanes or bus rapid transit lanes or segments thereof (see, e.g Draft EIS/EIR at Section 10.2 and Final EIR at Appendix B at B.2.2.1). As presented in the record, the Draft EIS/EIR and Final EIR reviewed a reasonable range of alternatives, and CEQA does not require the project sponsor to consider every proposed alternative, so long as the CEQA requirements for alternatives analysis have been studied. For the economic, legal, social, technological, and other reasons set forth above, set forth in Chapter 10 of the Draft EIS/EIR, and/or as set forth in response to comments on the Draft EIS/EIR (Final EIR at Appendix B), these alternatives are hereby rejected as infeasible.

VI. Statement of Overriding Considerations

Pursuant to CEQA Section 21081, CEQA Guideline 15093, and Chapter 31, SFCTA hereby finds, after consideration of the Draft EIS/EIR and the Final EIR and the evidence in the record, that each of the overriding economic, legal, social, technological, and other benefits of the Project, as set forth below, independently and collectively outweighs the significant and unavoidable impacts of the Project, and is an overriding consideration warranting approval of the Project.

Additionally, SFCTA finds that the mitigation measures and alternatives to the Project that have been rejected, were rejected for legitimate and unavoidable economic, legal, social, technological, and other considerations in addition to those reasons explained throughout this document. The specific reasons for these findings are based on substantial evidence within the record including, but not limited to, the documents referenced herein.

On the basis of the above findings and the substantial evidence within the entire record, the SFCTA specifically finds, and hereby declares this statement of overriding considerations.

The Project proposed has been objectively evaluated, and found to provide numerous benefits related to transit performance, passenger experience, access, and pedestrian safety, streetscapes, system performance, and operation and maintenance, as described below.

Transit Performance

The Project would significantly improve transit travel time, reliability, and ridership along the Geary corridor. In 2020, the Hybrid Alternative/SRA would reduce BRT/Rapid transit travel times by 9 minutes compared to the No Build Alternative, a reduction of 24 percent between Market Street and 33rd Avenue. Travel time savings in future years would be greater. Among other features, the Hybrid Alternative/SRA would include bus-only lanes, more frequent transit service, optimized signal timing, upgraded signal priority for transit vehicles and the addition of new right-turn pockets at key locations. Reliability would also improve with the Hybrid Alternative/SRA by an estimated

20 percent or more, while ridership would increase by 12 percent compared to the No Build Alternative.

Passenger Experience

The proposed project offers numerous benefits to the passenger experience when compared to both existing conditions and the No Build Alternative. High quality bus stations would be provided, each with shelters, seating, vehicle arrival time information, and other amenities including protective railings as appropriate. Stations at Rapid/BRT service stops would allow buses to pull straight against the platform without weaving toward the curb. The platforms would be large enough to comfortably accommodate waiting passengers, long enough to load two BRT vehicles, and designed to provide Americans with Disabilities Act (ADA) accessibility.

Access and Pedestrian Safety

The project would incorporate features to increase pedestrian safety at intersections, including pedestrian countdown signals, additional curb bulbs, and median refuges to reduce crossing distances at intersections and increase safety. New crosswalks would be added at several locations where they are currently missing. Reduced left-turn movements in the Richmond together with protected turn phases at remaining left turns would reduce conflicts between left-turning traffic and pedestrians. All traffic signals would be retimed to meet local and federal standards for minimum pedestrian crossing speed and countdown signals would be provided at all intersections to give pedestrians more information about when it is safe to cross. At some intersections, Leading Pedestrian Intervals would give pedestrians a head start before a green signal is given to vehicles. New ADA curb ramps and Accessible Pedestrian Signals (APS) along the corridor would improve safety and access for all users. Pedestrians would also benefit from streetscape improvements including additional pedestrian-scale lighting and median landscaping.

Streetscape

The project aims to improve the visual connectivity along the Geary corridor; the Hybrid Alternative/SRA would accomplish this by creating urban streetscapes and including corridor-specific visual characteristics into the design of the Geary BRT Project. New lighting, BRT station amenities, pedestrian infrastructure, landscaping, and other amenities would enhance the overall appearance of the corridor. The new dual medians in the Richmond would provide 13 percent more space for landscaping and trees. Additionally, a consistent palette of street trees, implemented with the Hybrid Alternative/SRA, would further enhance the visual character of the Geary corridor. Implementation of BRT infrastructure would demonstrate investment along the corridor, provide a greater sense of permanence than the existing bus transit system, and support place-making, livability, and vibrant commercial districts along the corridor.

System Performance

The project would reduce auto and transit delays within the Geary corridor when compared to the No Build Alternative, as well as overall vehicle miles travelled (VMT) in San Francisco. The project would increase transit ridership in the corridor by 12 percent by 2020. Partly as a result, the project would result in approximately 20,000 fewer daily weekday VMT by 2020 and approximately 40,000 fewer daily weekday VMT by 2035. The number of intersections along the corridor and on parallel routes with undesirable levels of traffic congestion would also decrease with the project, resulting in more efficient travel for all modes.

San Francisco General Plan Consistency

The Project would help implement and would be consistent with several San Francisco General Plan Transportation Element Policies, particularly Policy 20.13 which supports the installation of dedicated bus lanes and Bus Rapid Transit lanes to expedite transit travel times and improve transit reliability.

Likewise, the Project supports other Transportation Element policies, including Policy 1.4 (Increase the capacity of transit during the off-peak hours); Policy 11.1 (Maintain and improve the Transit Preferential Streets program to make transit more attractive and viable as a primary means of travel): Policy 14.2 (Ensure that traffic signals are timed and phased to emphasize transit, pedestrian, and bicycle traffic as part of a balanced multi-modal transportation system); Policy 14.3 (Improve transit operation by implementing strategies that facilitate and prioritize transit vehicle movement and loading); Policy 20.14 (Engage new technologies that will emphasize and improve transit services on transit preferential streets) and Objective 21 (Develop transit as the primary mode of travel to and from downtown and all major activity centers within the region).

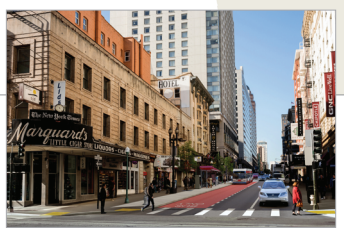
Finally, the Project supports Transportation Element Objective 14 and Policies 14.1 (Reduce road congestion on arterials through the implementation of traffic control strategies, such as traffic signal synchronization and turn controls, that improve vehicular flow without impeding movement for pedestrians and bicyclists); Objective 15 (Encourage alternatives to the automobile and reduced traffic levels on residential streets that suffer from excessive traffic through the management of transportation systems and facilities) Policy 15.1 (Discourage excessive traffic on residential streets by incorporating traffic-calming treatments) and Policy 18.1 (wherever feasible, divert through automobile and commercial traffic from residential neighborhoods onto major and secondary arterials).

For the aforementioned reasons, the SFCTA hereby finds that the Project's adverse, unavoidable environmental impacts are outweighed by the Project's evaluated benefits. Therefore, the SFCTA adopts these findings and overriding considerations.

Geary Corridor
Bus Rapid Transit Project

APPENDIX C: MITIGATION MONITORING AND REPORTING PROGRAM

FINAL ENVIRONMENTAL IMPACT REPORT
(EIR)




SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY
IN PARTNERSHIP WITH
SFMTA
Municipal Transportation Agency
November 2016

APPENDIX C

Mitigation Monitoring and Reporting Program

APPENDIX C

Mitigation Monitoring & Reporting Program
for the Geary Corridor Bus Rapid Transit Project
in San Francisco, CA
by the
San Francisco County Transportation Authority and San Francisco Municipal Transportation Agency

C.1 Introduction

This Mitigation Monitoring and Reporting Program (MMRP) is for the Geary Bus Rapid Transit (BRT) Project. The California Environmental Quality Act (CEQA) requires an enforceable mitigation monitoring program for projects. CEQA Section 21081.6 and CEQA Guidelines 15097(a) require public agencies to adopt a program for monitoring and reporting on the measures required to mitigate or avoid significant environmental impacts identified in the Final Environmental Impact Report (EIR). Under CEQA, the MMRP must be adopted when a public agency makes its findings pursuant to CEQA so that the mitigation requirements can be made conditions of project approval. Consistent with these requirements, this MMRP ensures compliance with all mitigation requirements set forth in the Final EIR that have been determined to be feasible under the CEQA Findings. These measures include, but are not limited to, elements that would be designed into the project and implementation of best management practices (BMPs) during construction. This MMRP will be kept on file in the offices of the San Francisco County Transportation Authority (SFCTA), 1455 Market Street, 22nd Floor, San Francisco, CA 94103.

C.2 Mitigation Monitoring & Reporting Program

Analysis of each environmental factor in Chapters 3 through 7 of the Draft EIS/EIR includes discussion of the regulatory setting, affected environment, environmental consequences (including permanent/project operational impacts, construction impacts, and cumulative impacts), and mitigation and improvement measures for each project alternative, including the locally preferred alternative (LPA). This MMRP includes all feasible mitigation measures that are applicable to the adopted project, the Hybrid Alternative/SRA, which is also the LPA. In addition to identified mitigation measures, this MMRP includes several "improvement measures." Improvement measures identified in the Final EIR are not needed to avoid or reduce significant impacts, but either embody regulatory requirements or are standard construction procedures or best practices that are recommended to reduce or avoid impacts that are less than significant. The purpose of the MMRP is to list all mitigation and improvement measures adopted for the Geary BRT Project and the milestones at which measures must be implemented. The MMRP also identifies the implementing, enforcing, and monitoring entities. SFCTA, as the lead agency under CEQA, will oversee the implementation of the mitigation and monitoring program through project implementation, including construction, testing, and initial operations. SFCTA will designate a Mitigation Monitoring Manager to oversee the monitoring and reporting of all mitigation and improvement measures. The San Francisco Municipal Transportation Agency (SFMTA), as a responsible agency under CEQA, will be the entity that will construct and operate the project and will be responsible for carrying out mitigation measures that must be implemented as part of

project design, construction, and operation. SFMTA shall designate a mitigation and monitoring coordinator to oversee the implementation of all relevant mitigation measures.

To ensure compliance with the MMRP, further agreements between SFCTA and SFMTA will require SFMTA to implement or, through contracts, ensure implementation of, the avoidance, mitigation, and improvement measures. SFCTA (or its Consultant) will conduct periodic audits of the construction site, and through the agreements will have authority to resolve with SFMTA any issues that arise concerning compliance with mitigation requirements on the part of SFMTA or its contractor. Through its CEQA Findings, SFCTA will also urge other agencies that will issue permits for the work, including the Department of Public Works and California Department of Transportation (Caltrans) to require compliance with the mitigation measures through their permits.

Table C-1 is organized by environmental discipline, or affected resource. It provides a list of the mitigation and improvement measures identified in the Final EIR and includes a summary of the following information:

- **Affected Resource:** Provides a broad title of the impact or effect that is to be mitigated or improved.
- **Contractor:** Refers to any contractor hired by SFMTA to implement the project.
- **Mitigation and Improvement Measures:** Provides a brief description of the mitigation or improvement measures. The MMRP includes all mitigation and improvement measures identified in the Final EIR that SFCTA and SFMTA found feasible and adopted as part of the CEQA Findings for the project. SFCTA will ensure that these measures are fully enforceable, in most cases by SFMTA, by making them conditions of project funding. Through agreements with SFMTA, SFCTA will require SFMTA to incorporate the measures into design documents, construction specifications, and project operational procedures. Other agencies may assist SFCTA in monitoring compliance with mitigation measures, such as the Federal Transit Administration (FTA), Department of Public Works, or Caltrans through their permitting and funding authority.
- **Implementation Procedure:** Describes by whom and when the mitigation and improvement measures must be implemented.
- **Implementation Responsibility:** Describes who is responsible for implementing the mitigation and improvement measures. In most cases it is SFMTA or the Contractor.
- **Implementation Schedule:** Identifies the project phase or milestone at which the mitigation and improvement measures must be implemented. The Mitigation Monitoring Manager must approve that the mitigation measure is adequately addressed at each phase of project development.
- **Monitoring Responsibility:** Identifies the agency responsible for ensuring that mitigation measures are implemented. In most cases it is SFMTA.
- **Report Recipient:** Identifies the agencies that will be notified that the mitigation measures have been implemented adequately.

Table C-1 Mitigation Monitoring & Reporting Program for the Geary BRT Project

NO.	AFFECTED RESOURCES	MITIGATION & IMPROVEMENT MEASURES	IMPLEMENTATION PROCEDURE	IMPLEMENTATION RESPONSIBILITY	IMPLEMENTATION SCHEDULE	MONITORING RESPONSIBILITY	REPORTING RECIPIENT
1(I)	Pedestrian and Bicycle Transportation	**I-PED-1.** Include WalkFirst pedestrian safety recommendations where possible as part of project design (WalkFirst recommendations described in detail in Appendix D-8).			Final design		SFCTA Planning Department
2(I)	Pedestrian and Bicycle Transportation	**I-PED-2.** Use Universal Design Principles to inform detailed engineering design of pedestrian and station facilities to enhance access for disabled persons.			Final design		SFCTA
3(I)	Pedestrian and Bicycle Transportation	**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.			Final design		SFCTA
4(I)	Pedestrian and Bicycle Transportation	**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.			Construction phase		SFCTA
5(I)	Parking and Loading Conditions	**I-PRK-1.** On-street parking should be created where bus stops are consolidated or relocated, as feasible.	SFMTA to implement as part of construction planning phase. Per contract specifications, Contractor to implement during construction.	SFMTA	Construction planning phase, construction phase	SFMTA to prepare weekly reports during applicable phase of project construction.	SFCTA
6(I)	Parking and Loading Conditions	**I-PRK-2.** Additional on-street parking should be provided from lane striping and infill spaces where feasible. With reconfiguration of the street, opportunities would exist to create additional parking spaces, for example by converting parallel spaces to back-in angled spaces where a reduction in the number of travel lanes allows.	SFMTA to implement as part of construction planning phase. Per contract specifications, Contractor to implement during construction.	SFMTA	Construction planning phase, construction phase	SFMTA to prepare weekly reports during applicable phase of project construction.	SFCTA

NO.	AFFECTED RESOURCES	MITIGATION & IMPROVEMENT MEASURES	IMPLEMENTATION PROCEDURE	IMPLEMENTATION RESPONSIBILITY	IMPLEMENTATION SCHEDULE	MONITORING RESPONSIBILITY	REPORTING RECIPIENT
7(I)	Parking and Loading Conditions	**I-PRK-3**. Where removal of curb spaces is necessary, retention and replacement of parking spaces for people with disabilities should be prioritized over retention of all other spaces. Among remaining spaces, retention and replacement of loading spaces shall be prioritized over retention of general and short-term parking spaces. Where feasible, parking spaces for people with disabilities and loading spaces shall be relocated on the same block face as they currently exist. In locations where this is not feasible, such parking spaces and loading spaces should be relocated to the nearest cross street close to its intersection with Geary Boulevard.	SFMTA to implement as part of construction planning phase. Per contract specifications, Contractor to implement during construction.	SFMTA	Construction planning phase, construction phase	SFMTA to prepare weekly reports during applicable phase of project construction.	SFCTA
8(A)	Parking and Loading Conditions	**A-PRK-4.** 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.			Final design		SFCTA
9(M)	Community Impacts	**M-CI-C1.** A Transportation Management Plan (TMP) that includes traffic rerouting, a detour plan, and public information procedures shall be developed during the design phase with participation from local agencies, other major project proponents in the area, local communities, business associations, and affected drivers. Early and well-publicized announcements and other public information measures would be implemented prior to and during construction to minimize confusion, inconvenience, and traffic congestion. The TMP shall include at minimum the following provisions: • Construction planning shall seek to minimize nighttime construction in residential areas and minimize daytime construction impacts on	SFMTA to implement as part of construction planning phase. Per contract specifications, Contractor to implement during construction.	SFMTA – planning Contractor – construction	Construction planning phase, construction phase	SFMTA to oversee approvals from Caltrans and SFDPW. SFMTA to provide weekly reports on adherence to TMP throughout construction duration.	SFCTA Caltrans SFDPW

NO.	AFFECTED RESOURCES	MITIGATION & IMPROVEMENT MEASURES	IMPLEMENTATION PROCEDURE	IMPLEMENTATION RESPONSIBILITY	IMPLEMENTATION SCHEDULE	MONITORING RESPONSIBILITY	REPORTING RECIPIENT
		retail and commercial areas. • As part of the TMP public information program, San Francisco Municipal Transportation Agency (SFMTA) shall coordinate with adjacent properties along the Geary corridor to determine the need for colored parking spaces (i.e., loading zones) and work to identify locations for replacement spaces or plan construction activities to minimize impacts from the loss of these spaces. SFMTA shall also coordinate with adjacent properties along the Geary corridor to ensure that pedestrian access to these properties is maintained. • The TMP shall incorporate SFMTA's process for accepting and addressing complaints. This includes provision of contact information for the Project Manager, Resident Engineer, and Contractor on project signage with direction to call if there are any concerns. Complaints would be logged and tracked to ensure they are addressed. • The TMP shall identify or otherwise designate adequate passenger and truck loading zones to be maintained for adjacent land uses, including maintaining access to driveways and providing adequate loading zones on the same or adjoining street block face.					
10(MIN)	Visual Resources	**MIN-VQ-C1.** • Project construction shall be phased to reduce the period of disruption at any particular location to the shortest practical length of time. • Construction lighting shall be shielded and directed to limit direct illumination to within the area of work and avoid all light trespass. • Construction staging and storage	Per contract specifications, Contractor to implement during construction.	Contractor	Construction	SFTMA to provide weekly reports outlining adherence to standards throughout construction duration.	SFCTA

NO.	AFFECTED RESOURCES	MITIGATION & IMPROVEMENT MEASURES	IMPLEMENTATION PROCEDURE	IMPLEMENTATION RESPONSIBILITY	IMPLEMENTATION SCHEDULE	MONITORING RESPONSIBILITY	REPORTING RECIPIENT
		areas shall be screened by visually opaque screening wherever they will be exposed to public view for extended periods of time.					
11(I)	Visual Resources	**I-VQ-2.** In order to maximize overall Geary corridor visual unity, a consistent palette of street tree types could be developed, reviewed by City planning staff, and applied throughout the Geary corridor.					SFCTA
12(I)	Visual Resources	**I-VQ-3.** Coordinate with Geary corridor planning efforts of the City planning department. Station design could be coordinated with long-term urban design studies of the City planning department, including studies for the Divisadero to Laguna Street segment of the Geary corridor.					SFCTA Planning Department
13(MIN)	Cultural Resources	**MIN-CUL-C1**. Limit the use of construction equipment that creates high vibration level, such as vibratory rollers.	Per contract specifications, Contractor to implement during construction.	Contractor	Construction	SFTMA to provide weekly reports outlining adherence to standards throughout construction duration.	SFCTA
14(MIN)	Cultural Resources	**MIN-CUL-C2.** Develop and implement a Vibration Reduction and Minimization Plan, which would include the identification of vibration-sensitive structures using distance impact thresholds.	SFMTA to perform independent noise and vibration monitoring. Contractor to implement modifications as needed during project construction, per contract specifications.	Contractor	Final design and construction	SFMTA to provide weekly reports on compliance with City noise ordinance throughout construction duration.	SFCTA
15(MIN)	Cultural Resources	**MIN-CUL-C3.** During advanced conceptual engineering or final design phases, an individual assessment of vibration-sensitive structures would be conducted where construction activities and equipment would exceed FTA's impact distance guidance for category IV structures.	SFMTA to perform independent assessment of vibration-sensitive structures. Contractor to implement modifications as needed during project construction, per contract specifications.	Contractor	Final design and construction	SFTMA to provide weekly reports outlining adherence to standards throughout construction duration.	SFCTA

NO.	AFFECTED RESOURCES	MITIGATION & IMPROVEMENT MEASURES	IMPLEMENTATION PROCEDURE	IMPLEMENTATION RESPONSIBILITY	IMPLEMENTATION SCHEDULE	MONITORING RESPONSIBILITY	REPORTING RECIPIENT
16(MIN)	Cultural Resources	**MIN-CUL-C4.** Conduct vibration monitoring during construction.	Per contract specifications, Contractor to implement during construction.	Contractor	Construction	SFTMA to provide weekly reports outlining adherence to standards throughout construction duration.	SFCTA
17(A/MIN)	Cultural Resources	**A-CUL-C5.** Design proposed stations and stops in the vicinity of the Golden Triangle Streetlights, Japan Center light standards, and components of the AWSS to avoid the removal, relocation, or damage to these historic structures. OR **MIN-CUL-C6.** In the event that avoidance of the Golden Triangle Streetlights, Japan Center light standards, and AWSS are infeasible, all effort will be made first for relocation of such elements within the immediate vicinity of their original location while maintaining placement (distance) within the sidewalk in respect to curb and/or adjacent buildings. For the light standards, additional effort would be made to relocate a light standard within the same block if there is a site where the original light standard has been removed or replaced by modern standards; and last, relocation to an available site within the historic property boundary where an original standard has been removed or replaced by modern standards.	SFMTA in coordination with SFDPW and SFPUC with approval by SF Arts Commission and HPC.	SFMTA, SFDPW, SFPUC	Final design	SFMTA to oversee approvals by SF Arts Commission and SF HPC	SFCTA Planning Department
18(I)	Cultural Resources	**I-CUL-C7.** Harmonize the visual qualities of built elements of the project alternatives with adjacent historic properties through careful consideration of design, lighting, materials, and color choices that would complement and be sensitive to nearby historic properties.	SFMTA in coordination with SFDPW and SFPUC with approval by SF Arts Commission and HPC.	SFMTA, SFDPW, SFPUC	Final design	SFMTA to oversee approvals by SF Arts Commission and SF HPC	SFCTA Planning Department

NO.	AFFECTED RESOURCES	MITIGATION & IMPROVEMENT MEASURES	IMPLEMENTATION PROCEDURE	IMPLEMENTATION RESPONSIBILITY	IMPLEMENTATION SCHEDULE	MONITORING RESPONSIBILITY	REPORTING RECIPIENT
19(MIN)	Cultural Resources	**MIN-CUL-C8.** Focused archival research will identify any specific areas within the APE that may be likely to contain potentially significant remains, and methods and findings will be documented as an addendum to the current report. The Phase I addendum report will be submitted to the City's Environmental Review Officer (ERO) and the SHPO for concurrence. Research will be initiated once the project's APE map is finalized identifying the major Areas of Direct Impact. The Addendum Survey Report would include: • A contextual and documentary research section that addresses the development of urban infrastructure that provides a basis for evaluating potential resources as they relate to the history of San Francisco. • A cut-and-fill reconstruction of the corridor, comparing the modern versus mid-1800s ground surface elevations, to fine-tune the initial prehistoric sensitivity assessment, and refining the location of high-sensitivity locations where prehistoric remains may be preserved. • Relevant profiles and plan views of specific blocks to illustrate the methods used in analyzing available documentation. • Summary and conclusions to provide detailed information on locations that have the potential to contain extant historic-era and prehistoric archaeological remains that might be evaluated as significant resources, if any. Two results are possible based on documentary research: • No or low potential for sensitive locations: major Areas of Direct impact have no potential to retain	Qualified archaeologist to conduct research during final design to inform construction planning and further consultation with SHPO.	SFCTA to provide qualified archaeologist to implement.	Final design	Agencies to submit Addendum Survey Report to SHPO as part of ongoing Section 106 consultation. SFMTA to provide final design and oversee archaeology approvals from the Planning Department.	SFCTA SHPO Planning Department

NO.	AFFECTED RESOURCES	MITIGATION & IMPROVEMENT MEASURES	IMPLEMENTATION PROCEDURE	IMPLEMENTATION RESPONSIBILITY	IMPLEMENTATION SCHEDULE	MONITORING RESPONSIBILITY	REPORTING RECIPIENT
		extant archaeological remains that could be evaluated as significant resources. No further work would be recommended, beyond adherence to the Unanticipated Discovery Plan. • Potential sensitive locations: if major Areas of Direct Impact contain locations with moderate to high potential to retain extant historic or prehistoric archaeological remains that could be evaluated as significant resources, further work would be carried out, detailed in a Testing and Treatment Plan.					
20(MIN)	Cultural Resources	**MIN-CUL-C9.** Depending on the results of archival research, in concert with the City's ERO, project avoidance areas or, more likely, areas requiring presence/absence investigations for cultural resources will be identified and fieldwork undertaken following exposure of the ground surface, but prior to construction to identify buried cultural resources.	Qualified archaeologist to conduct research during final design to inform construction planning and further consultation with SHPO.	SFCTA to provide qualified archaeologist to implement.	Pre-construction	Agencies to submit Addendum Survey Report to SHPO as part of ongoing Section 106 consultation. SFMTA to provide final design and oversee archaeology approvals from the Planning Department.	SFCTA SHPO Planning Department
21(MIN)	Cultural Resources	**MIN-CUL-C10.** A Testing and Evaluation/Treatment Plan, if required, will provide archaeological protocols to be employed immediately prior to project construction to test areas identified as potentially significant or having the potential to contain buried cultural resources. In case such areas might be unavoidable, minimization measures will be proposed. The procedures detailed in the Treatment Plan would be finalized in consultation with the City's ERO and the SHPO. For historic-era resources, work would initially entail detailed, focused documentary research to evaluate the potential significance of any archaeological material identified during	Per contract specifications, qualified archaeologist to instruct construction crews on this procedure prior to start of construction and throughout construction, as needed. Construction crew members to implement if needed during project construction.	SFCTA to provide qualified archaeologist to prepare Testing and Treatment Plan, if required. Contractor or SFMTA to provide qualified archaeologist to implement Testing and Treatment Plan if	Construction	Agencies to consult with SHPO on a Testing and Treatment Plan to complete the Section 106 process. SFMTA to monitor instruction and to provide weekly reports of archaeological findings and procedures throughout project construction duration as well as verification of training of all	SFCTA SHPO Planning Department

NO.	AFFECTED RESOURCES	MITIGATION & IMPROVEMENT MEASURES	IMPLEMENTATION PROCEDURE	IMPLEMENTATION RESPONSIBILITY	IMPLEMENTATION SCHEDULE	MONITORING RESPONSIBILITY	REPORTING RECIPIENT
		initial research that might be preserved. Significance would be based on the data-potential of possible remains applied to accepted research designs. Two results could ensue: • No potentially significant remains: if no locations demonstrate the potential for significant remains, no further archaeological testing would be recommended. • Potentially significant remains: if any locations have the potential to contain significant remains, then appropriate field methods will be proposed, including compressed testing and data-recovery efforts. Testing will be initiated immediately prior to construction, when there is access to historic ground levels. Should a site or site feature be found and evaluated as potentially significant, data recovery would take place immediately upon discovery if avoidance of the site is still not possible. For prehistoric resources, a Treatment Plan will identify relevant research issues for resource evaluation, and pragmatic methods to identify, evaluate, and conduct data recovery if needed. This may include a pre-construction geoarchaeological coring program or a compressed three-phase field effort occurring prior to construction when the ground surface is accessible.		required.		relevant construction crew staff working on job site.	
22(MIN)	Cultural Resources	**MIN-CUL-C11.** Upon completion of all fieldwork, a technical report shall be prepared. This Final Archaeological Resources Report (FARR) shall document all field and laboratory methods, analysis, and findings. The FARR shall be subject to review and approval by the City's ERO and the SHPO. Copies of the approved FARR shall be submitted to the City's ERO, the SHPO, and the Northwest	Qualified archaeologist to prepare report to inform construction planning and further consultation with SHPO.	SFCTA to provide qualified archaeologist to implement.	Pre-construction	Agencies to Submit Addendum Survey Report to SHPO as part of ongoing Section 106 consultation. SFMTA to provide final design and oversee archaeology approvals from the	SFCTA SHPO Planning Department

NO.	AFFECTED RESOURCES	MITIGATION & IMPROVEMENT MEASURES	IMPLEMENTATION PROCEDURE	IMPLEMENTATION RESPONSIBILITY	IMPLEMENTATION SCHEDULE	MONITORING RESPONSIBILITY	REPORTING RECIPIENT
		Information Center (NWIC), together with any associated archaeological site records.				Planning Department.	
23(MIN)	Cultural Resources	**MIN-CUL-C12.** If buried cultural resources are encountered during construction activities, construction will be halted and the discovery area isolated and secured until a qualified archaeologist assesses the nature and significance of the find.	Per contract specifications, construction crews to be instructed on this policy prior to start of construction and throughout construction, and to implement if needed during project construction.	Contractor to provide qualified archaeologist to implement.	Construction	SFMTA to monitor instruction and to provide weekly reports of archaeological findings and procedures throughout project construction duration.	SFCTA SHPO Planning Department
24(MIN)	Cultural Resources	**MIN-CUL-C13.** If human remains are discovered, the County coroner will be notified as soon as is reasonably possible (CEQA Section 15064.5). There will be no further site disturbance where the remains were found. If the remains were determined to be Native American, then the coroner is responsible for contacting the California Native American Heritage Commission (NAHC) within 24 hours. The NAHC, pursuant to Public Resources Code (PRC) Section 5097.98 will notify those persons it believes to be the most likely descendant (MLD). Treatment of the remains will be dependent on the views of the MLD.	Per contract specifications, construction crews to be instructed on this policy prior to start of construction and throughout construction, and to implement if needed during project construction.	Contractor to provide qualified archaeologist to implement.	Construction	SFMTA to monitor instruction and to provide weekly reports of archaeological findings and procedures throughout project construction duration.	SFCTA County Coroner NAHC Planning Department
25(MIN)	Cultural Resources	**MIN-CUL-C14.** In the event that paleontological resources are encountered during any phase of project construction, all soil-disturbing activity within 100 feet of the find shall be temporarily halted until a qualified paleontologist can assess the significance of the find and provide proper management recommendations.	Per contract specifications, construction crews to be instructed on this policy prior to start of construction and throughout construction, and to implement if needed during project construction.	Contractor to provide qualified paleontologist to implement.	Construction	SFMTA to monitor instruction and to provide weekly reports of paleontological findings and procedures throughout project construction duration.	SFCTA SHPO Planning Department

NO.	AFFECTED RESOURCES	MITIGATION & IMPROVEMENT MEASURES	IMPLEMENTATION PROCEDURE	IMPLEMENTATION RESPONSIBILITY	IMPLEMENTATION SCHEDULE	MONITORING RESPONSIBILITY	REPORTING RECIPIENT
26(MIN)	Utilities	**MIN-UT-1.** BRT construction shall be closely coordinated with concurrent utility projects planned within the Geary corridor.	SFMTA, SFPUC, and SFDPW to implement as part of construction planning phase, including coordination with the Committee for Utility Liaison on Construction and Other Projects (CULCOP) and the San Francisco Street Construction Coordination Center.	SFMTA, SFPUC, and contractor	Permitting and construction (planning phase)	SFMTA to oversee approvals from SFDPW.	SFCTA
27(MIN)	Utilities	**MIN-UT-2.** Inspection and evaluation of sewer pipelines within the project limits shall be undertaken to assess the condition of the pipelines and need for replacement. Drain inlets on the corridor shall also be inspected to assess condition and confirm functionality. Spot repairs or minor replacement-in-place of sewers may be performed during construction of the project if desired by SFPUC and agreed to by SFMTA.	SFMTA and SFPUC to conduct needed sewer inspections during final design.	SFMTA, SFPUC	Final design and construction (planning phase)	SFMTA to oversee approvals from SFDPW.	SFCTA
28(MIN)	Utilities	**MIN-UT-3.** During planning and design, consideration would be given to ensure that Geary corridor station facilities do not prevent access to the underground auxiliary water supply service (AWSS) lines. Adequate access for specialized trucks to park next to gate valves shall be maintained. Gate valves shall not be located beneath medians, station platforms, or sidewalks.	SFMTA, SFDPW, SFPUC, and the San Francisco Fire Department to coordinate and plan during final design, and again for construction planning. Per contract specifications, Contractor to implement during construction.	SFMTA, SFPUC, and the San Francisco Fire Department	Final design and construction	SFMTA to oversee approvals from SFPUC and San Francisco Fire Department. SFMTA to provide weekly reports on accessibility of AWSS lines and gate valves throughout construction duration.	SFCTA
29(MIN)	Utilities	**MIN-UT-4.** In situations where utility facilities are being protected in place, SFMTA shall create a plan to accommodate temporary closure of the transitway and/or stations in coordination with utility providers to allow utility providers to perform maintenance, emergency repair, and upgrade/replacement of underground facilities that may be located beneath project features such as the BRT transitway, station platforms, or curb bulbs. Signage for BRT patrons and safety	SFMTA to coordinate with utility providers, SFDPW, the SFPUC and San Francisco Fire Department during final design to ensure project design considers utility maintenance programs, including those overlapping with project construction.	SFMTA	Final design and construction	SFMTA to oversee approvals from SPUC, San Francisco Fire Department, and SFDPW.	SFCTA

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		protocols for Muni operators and utility providers shall be integrated into this plan.					
30(MIN)	Geology/Soils/ Seismic/ Topography	**MIN-GE-C1.** Shoring will be typically required for all cuts deeper than five feet. Shoring design of open excavations must consider the potential surcharge load from neighboring structures. Furthermore, the potential for lateral movement of excavation walls as a result of earthquake-related surcharge load from nearby structures must also be assessed. The following shoring and slope stability BMPs will be implemented during construction: • Heavy construction equipment, building materials, excavated soil, and vehicle traffic shall be kept away from the edge of excavations, generally a distance equal to or greater than the depth of the excavation. • In the event of wet weather, storm runoff shall be prevented from entering the excavation. Excavation sidewalls can be covered with plastic sheeting, and berms can be placed around the perimeter of the excavated areas. • Sidewalks, slabs, pavement, and utilities adjacent to proposed excavations shall be adequately supported during construction.	Per contract specifications, contractor to implement during construction.	Contractor	Construction	SFMTA to oversee cuts and provide weekly reports describing the shoring technique used on all cuts deeper than five feet throughout project construction duration.	SFCTA
31(MIN)	Geology/Soils/ Seismic/ Topography	**MIN-GE-1.** A geotechnical consultant shall review the design of the build alternatives and offer recommendations best suited to the build alternative carried forward. Any recommendations provided by the geotechnical consultant shall be incorporated into the final plans, and are likely to include the following: **MIN-GE-1a.** For lightly loaded structures such as bus stops, canopies, and walls, incorporate geotechnical and/or structural	Per contract specifications, Contractor to implement during design and construction phase, in preparation of construction of station platforms.	Contractor	Final design/ permitting/ construction	SFMTA to provide weekly report on soil modification treatments throughout project construction duration.	SFCTA

NO.	AFFECTED RESOURCES	MITIGATION & IMPROVEMENT MEASURES	IMPLEMENTATION PROCEDURE	IMPLEMENTATION RESPONSIBILITY	IMPLEMENTATION SCHEDULE	MONITORING RESPONSIBILITY	REPORTING RECIPIENT
		methods to mitigate the effects of liquefaction on the foundations during final design. The geotechnical mitigation methods may range from recompaction of the upper material to provision of a mechanically stabilized earth (MSE) foundation system. The structural mitigation methods may range from planning for repairs/maintenance after a seismic event to supporting the improvements on mat foundations or interconnected beam foundations to tolerate the anticipated seismic settlement without collapse. **MIN-GE-1b.** Fill soils shall be overexcavated and replaced with engineered fill as needed. **MIN-GE-1c.** Deeper foundations shall be designed for station platforms and canopies located in areas of fill or areas mapped as liquefaction areas, as needed.				
32(MIN)	Hazards and Hazardous Materials	**MIN-HZ-C1.** Prior to construction, a limited Preliminary Site Investigation (Phase I) shall be performed to investigate hazardous materials concerns related to soil, groundwater, and construction materials on the Geary corridor, as identified in this section. Areas where soils will be disturbed during construction shall be sampled and tested for contaminants specific to the hazardous materials concerns identified in that location. Soil analytical results shall be screened against the Regional Water Board's Environmental Screening Levels (ESLs) and other applicable risk-based standards to determine appropriate actions to ensure the protection of construction workers, future site users, and the environment and also be screened against state and federal hazardous waste thresholds to determine soil management options. Representative samples of exposed shallow soils shall be	SFMTA to implement following final design.	SFMTA	Final design/ construction planning	SFMTA to provide a report with findings.	SFCTA Caltrans

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		collected within 30 feet of the edge of the roadway and analyzed for total lead and soluble lead. For example, aerially-deposited lead is a potential concern throughout the Geary corridor, while naturally-occurring asbestos is potentially present in only a small portion of the Geary corridor. Accordingly, samples in all areas shall be analyzed for total and soluble lead; samples from excavation areas overlying serpentinite bedrock shall also be analyzed for asbestos. Additional investigation may be required to fully evaluate potential hazardous materials issues if concerns are identified during the Preliminary Site Investigation. All environmental investigations at the project shall be provided to project contractors, so the findings may be incorporated into their Health and Safety and Hazard Communication Programs.				
33(MIN)	Hazards and Hazardous Materials	**MIN-HZ-C2.** Prior to construction, groundwater shall be collected in areas near reported hazardous materials release sites and analyzed for TPH and volatile organic compounds if project excavations were to extend into the groundwater in those areas. Hazardous materials releases sites that have affected groundwater near the Geary corridor are located at 3675 Geary Boulevard, 450 Mission Street, and 2130 O'Farrell Street. Additional hazardous materials releases may occur or be discovered in the future. Therefore, an updated review of regulatory agency records shall be conducted prior to the groundwater investigation, to ensure that groundwater that will be encountered during construction is properly investigated.	SFMTA shall implement testing of groundwater prior to construction to inform construction planning. Per contract specifications, Contractor shall adhere to Construction Implementation Plan.	SFMTA	Final design/ construction planning	SFMTA to provide report outlining hazardous building materials and shall include procedures in Construction Implementation Plan. SFMTA to provide weekly reports on adherence to Construction Implementation Plan throughout construction duration.	SFCTA Caltrans

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34(MIN)	Hazards and Hazardous Materials	**MIN-HZ-C3.** A Hazardous Building Materials survey shall be conducted prior to construction. The survey shall minimally sample traffic paint and structures to be demolished or modified.	SFMTA shall implement testing of structures to be demolished prior to construction to inform construction planning. Per contract specifications, Contractor shall adhere to Construction Implementation Plan.	SFMTA	Final design/ construction planning	SFMTA to provide report outlining hazardous building materials and shall include procedures in Construction Implementation Plan. SFMTA to provide weekly reports on adherence to Construction Implementation Plan throughout construction duration.	SFCTA Caltrans
35(MIN)	Hazards and Hazardous Materials	**MIN-HZ-C4.** Based on the findings and recommendations of the Preliminary Site Investigation, the project may need to implement special soil, groundwater, and construction materials management and disposal procedures for hazardous materials, as well as construction worker health and safety measures during construction. In addition to the findings and recommendations of the Preliminary Site Investigation, the following measures shall be implemented prior to construction. • Groundwater from dewatering of excavations, if any, should be stored in Baker tank(s) during construction activities and the water should be characterized prior to disposal or recycling. • A construction risk management plan should be implemented by contractors with procedures for identifying and mitigating potentially unreported releases of hazardous materials.	Per contract specifications, plan (including special provisions) to be written by Contractor as part of construction planning phase.	Contractor	Construction (planning phase)	SFMTA to oversee approval from Caltrans. SFMTA to provide weekly reports on adherence to plan throughout construction duration.	SFCTA Caltrans

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36(MIN)	Hydrology and Water Quality	**MIN-HY-C1.** Any construction work that adversely affects the combined sewer system will require coordination with SFPUC, and construction-related activities shall be consistent with the SFPUC's *Keep it on Site, Pollution Prevention Guide for the Construction Industry*.[2]	SFMTA shall obtain any needed approval from SFPUC.	SFMTA, SFPUC, and Contractor	Permitting and construction (planning phase)	SFMTA to oversee approvals from SFPUC. SFMTA to provide weekly reports on adherence to *Keep it on Site* guidelines throughout construction duration.	SFCTA RWQCB
37(MIN)	Hydrology and Water Quality	**MIN-HY-1**. Landscape areas shall be designed to minimize and reduce total runoff. Any irrigation and fertilizers shall be used to the minimum extent practicable and feasible.	SFMTA and landscape architects to implement during landscape design. SFDPW to implement water and fertilizer usage during project operation.	SFMTA, SFDPW	Final design and operation	SFMTA to oversee approvals from SF Arts Commission and Planning Department.	SFCTA
38(MIN)	Noise and Vibration	**MIN-NOISE-C1.** A Vibration Reduction and Minimization Plan shall be developed to avoid construction vibration damage using all reasonable and feasible means available. The Plan shall provide a procedure for establishing thresholds and limiting vibration values for structures with a potential to be adversely affected. The following steps shall be taken in development of the location-specific vibration reduction plan: • Potential vibration-sensitive structures shall be identified using the distance impact thresholds in the final engineering drawings; • Vibration-sensitive structures shall be individually assessed to identify the structure's ability to withstand the loads and displacements due to construction vibrations; • Construction related vibration in proximity to identified vibration-sensitive historic structures shall not be allowed to exceed the recommended levels set forth in	SFMTA to perform independent noise and vibration monitoring. Contractor to implement modifications as needed during project construction, per contract specifications.	Contractor	Final design and construction	SFMTA to provide weekly reports on compliance with City noise ordinance throughout construction duration.	SFCTA

[2] San Francisco Public Utilities Commission. *Keep it on Site, Pollution Prevention Guide for the Construction Industry*. Available at: http://sfwater.org/modules/showdocument.aspx?documentid=4622.

NO.	AFFECTED RESOURCES	MITIGATION & IMPROVEMENT MEASURES	IMPLEMENTATION PROCEDURE	IMPLEMENTATION RESPONSIBILITY	IMPLEMENTATION SCHEDULE	MONITORING RESPONSIBILITY	REPORTING RECIPIENT
		pertinent FTA guidance; • Peak particle velocities shall be monitored and recorded near sensitive receptors identified where the highest vibration producing activities occur; • Rubber tired instead of tracked vehicles shall be used near vibration sensitive areas; • Pavement breaking shall be prohibited during nighttime hours; and • Residents within 300 feet of areas where construction activities and pavement breaking will take place shall be notified at least two weeks in advance of the proposed activity through the media and mail. A program shall be implemented to receive and respond to public complaints regarding vibration during construction.				
39(MIN)	Noise and Vibration	**MIN-NOISE-C2.** Project construction shall implement best practices in equipment noise control, including the following: • Use newer equipment with improved noise muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators intact and operational. Newer equipment will generally be quieter in operation than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding). • Perform all construction in a manner that minimizes noise. Utilize construction methods or equipment that will provide the lowest level of noise effects.	Per contract specifications, Contractor to implement during construction.	Contractor	Construction	SFMTA to provide weekly reports outlining adherence to standards throughout construction duration.	SFCTA

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		• Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes. • Impact tools and equipment, such as jack hammers, shall have intake exhaust mufflers and acoustically attenuating shields or shrouds recommended by the manufacturers and approved by the Director of Public Works or the Director of Building Inspection.					
40(MIN)	Noise and Vibration	**MIN-NOISE-C3.** Project construction will conduct truck loading, unloading, and hauling operations so that noise and vibration are kept to a minimum by carefully selecting routes to avoid passing through residential neighborhoods to the greatest possible extent.	Per contract specifications, Contractor to implement daily during project construction.	Contractor	Construction	SFMTA to provide weekly reports on adherence to noise and vibration minimization practices throughout construction duration.	SFCTA
41(MIN)	Noise and Vibration	**MIN-NOISE-C4.** Perform independent noise monitoring in sensitive areas, as needed, to demonstrate compliance with applicable noise limits. Require contractors to modify and/or reschedule their construction activities if monitoring determines that maximum limits are exceeded at residential land uses per the City Noise Ordinance.	SFMTA to perform independent noise and vibration monitoring. Contractor to implement modifications as needed during project construction, per contract specifications.	Contractor	Construction	SFMTA to provide weekly reports on compliance with City noise ordinance throughout construction duration.	SFCTA
42(MIN)	Noise and Vibration	**MIN-NOISE-C5.** Temporary sound walls, curtains, or other noise canceling technologies may be used in locations where sensitive receptors could experience construction-related noise exceedances.	Per contract specifications, Contractor to implement daily during project construction.	Contractor	Construction	SFMTA to provide weekly reports on adherence to noise and vibration minimization practices throughout construction duration.	SFCTA

NO.	AFFECTED RESOURCES	MITIGATION & IMPROVEMENT MEASURES	IMPLEMENTATION PROCEDURE	IMPLEMENTATION RESPONSIBILITY	IMPLEMENTATION SCHEDULE	MONITORING RESPONSIBILITY	REPORTING RECIPIENT
43(MIN)	Biological Resources	**MIN-BO-C1.** Mature trees shall be preserved and incorporated into the project landscape plan as feasible, as well as the planting of replacement trees and landscaping. For each tree removed, a replacement tree is required.	A qualified arborist will be on the landscape design team to work with SFMTA and SFDPW staff to identify preservation opportunities for mature trees.	Qualified arborist, SFMTA, SFDPW	30% design through final design	SFMTA to provide CER, final design, and oversee project approvals from SPFPW Bureau of Urban Forestry.	SFCTA
44(MIN)	Biological Resources	**MIN-BO-C2.** To preclude potential effects under the MBTA, tree removal shall occur outside nesting bird season (February 1 through August 31). Regardless of time of year, preconstruction surveys shall be performed prior to tree removal to determine occurrence of nesting birds. If active protected bird nests are encountered during preconstruction surveys, no-disturbance buffers would be created around active protected bird and/or raptor nests during the breeding season, or until it is determined that all young have fledged. Typical buffers include 500 feet for raptors and 50 feet for passerine nesting birds. The size of the buffer zones and types of construction activities restricted in these areas may be further modified during consultation with CDFW, and shall be based on existing noise and human disturbance levels at the project site. Nests initiated during construction are presumed to be unaffected, and no buffer will be necessary. The "take" of any individual protected birds shall be prohibited. Monitoring of active nests when construction activities encroach upon established buffers may be required by CDFW.	Per contract specifications, a qualified wildlife biologist will implement preconstruction survey and exclusion structures and buffers as needed prior to construction and monitor as needed during construction.	Contractor will provide a qualified wildlife biologist to implement.	Pre-construction/ construction	SFMTA to provide weekly report throughout project construction duration.	SFCTA
45(MIN)	Biological Resources	**MIN-BO-C3.** Seed palettes used for revegetation of disturbed areas shall be reviewed to prevent introduction of invasive species to the site. Follow-up site maintenance shall include a protocol for landscaping staff to recognize weeds and perform maintenance in a manner that prevents weed establishment.	Qualified landscape architect will exclude noxious weeds from landscape plan.	Qualified landscape architect provided by SFMTA.	Final design	SFMTA to provide final design and oversee project approvals from SFDPW Bureau of Urban Forestry.	SFCTA