

Volume II
of the
Final EIS/EIR for the
Van Ness Avenue BRT Project

Appendices I & J

Appendix I

Response to Comments

1. Introduction & Approach

During circulation of the Draft EIS/EIR for public review period (November 4 through December 23, 2011) 7 agencies, 69 individuals and 11 organizations provided comments on the Draft EIS/EIR. These comments came in multiple formats, including:

- Letters
- Emails
- Verbal comments transcribed by a court reporter at the November 30, 2011 public hearing
- Comment cards submitted by attendees at the November 30, 2011 public hearing or at a neighborhood or stakeholder meeting.

Responses to the comments have been created based on information in the Draft EIS/EIR, supporting technical studies, and updated analysis undertaken since circulation of the Draft EIS/EIR. Updated analysis was undertaken to respond to comments received on the Draft EIS/EIR and to address the LPA design which includes refinement of some center-lane configured BRT design features presented in the Draft EIS/EIR, including the Vallejo Northbound Station Variant. The results of this updated analysis are reflected in the responses to comments contained in this Appendix I, as appropriate, covering the following environmental factors: community impacts, aesthetics/visual resources, biological resources, cultural resources, utilities and public services, hydrology and water quality, transportation (including travel patterns, transit, traffic, non-motorized transportation, and parking), construction impacts, Financial Analysis, and Alternatives Analysis. The updated analysis undertaken as part of the Final EIS/EIR, including that undertaken to consider the LPA with and without the Vallejo Northbound Station Variant, did not result in the inclusion of significant new information to the Draft EIS/EIR that substantially changes the project description or environmental setting, changes the impact significance findings in the Draft EIS/EIR, results in a conclusion that more severe environmental changes would result from the proposed project beyond those identified in the Draft EIS/EIR, or identifies new feasible ways to mitigate or avoid substantial adverse environmental effects of the project that the project sponsor declines to implement. Instead, the information presented in the responses to comments “merely clarifies or amplifies or makes insignificant modifications” in the Draft EIS/EIR. (CEQA Guidelines Section 15088.5(b)).

As required under NEPA, a copy of the Final EIS/EIR, either a CD containing an electronic version of the document or a hard copy, will be sent to each person, organization or agency that submitted substantive comments on the Draft EIS/EIR.

2. Most Common Comments & Master Responses

The SFCTA’s review of the public comments received in all formats identified major topics most commonly raised in the comments and during outreach activities. These most common topics are listed below in Table 1, and corresponding responses to each of these comments is provided in Section 2.1 Master Responses. The master responses comprehensively address the multiple and varied comments on these major topics.

Table 1. List of Most Common Comments

No.	Most Common Comments
1	Definition of project limits.
2	Alternatives screening and lack of alternatives that include express bus or peak period only service.
3	Private buses and shuttles.

No.	Most Common Comments
4	Cost effectiveness of Van Ness BRT and alternatives considered and withdrawn.
5	Transit stop elimination.
6	Construction Impacts on businesses and residents.
7	Tree removals and replanting opportunities.
8	Modeling traffic diversions.
9	Calculating traffic impacts.
10	Calculating air quality impacts on Van Ness Avenue, Franklin Street, and Gough Street.
11	Calculating noise and vibration impacts on Van Ness Avenue, Franklin Street, and Gough Street
12	Incorporating CPMC into analyses, including emergency services operations and construction coordination.
13	Pedestrian crossings and safety.

2.1. Master Responses

Master responses have been written for commonly expressed questions and comments received during the Draft EIS/EIR circulation period. Several responses to comments throughout Appendix I make reference to these master responses provided below.

Master Comment #1: Definition of project limits.

The following comments touch on the Master Comment #1 topic and express a desire for the project limits to be either longer, shorter or for the project to provide certain linkages with other lines: O-1-1, O-1-5, I-12-1, I-21a-1, I-21a-3, I-21b-1, I-31a-1, I-34b-1, I-41-2, I-54-1, I-55-4, and I-67-2.

Master Response #1:

The project limits were determined based on the findings of multiple planning studies and supporting analysis. As noted in Sections 1.1 – 1.3 of both the Draft and Final EIS/EIR, Van Ness Avenue has been identified as a high priority transit improvement corridor in a number of planning studies undertaken by the City and in a voter approved transit funding plan. The Authority first identified Van Ness Avenue for transit priority treatments in 1995 when it developed a Long-Range Fixed Guideway plan for the four transit corridors included in the Prop B Expenditure Plan, approved by voters in 1989. The Four Corridors Plan defines the waterfront as the northern end of the corridor, and states that the southern terminal point for the Van Ness Avenue corridor is “still open to discussion.” Muni’s Vision for Rapid Transit (2000) identifies Van Ness Avenue and Mission Street as a combined priority transit corridor, noting that the integration of light rail on Van Ness Avenue with operations on Mission Street would be challenging since the latter Mission Street does not have as much street width as Van Ness Avenue. For this reason, the plan called for the planned BRT treatments to be implemented from Mission/South Van Ness to Lombard Street. Building on the 2000 Muni’s Vision for Rapid Transit and the 2003 Countywide Transportation Plan, the Authority prepared the Van Ness Avenue BRT Feasibility Study. The study outlined BRT treatments over the same project limits, which were considered to have logical termini based on the findings of the aforementioned planning studies and supporting analysis.

The southern terminus of the project limits is defined as Mission/South Van Ness Avenue for similar reasons to those cited in those previous studies. The width on Mission Street does not allow for the same types of treatments as on Van Ness Avenue. Additionally, this intersection marks the start of the corridor where the 47

and 49 routes run along the same right of way. Thus Mission/South Van Ness Avenue is a logical terminus for the southern limits of the project.

The SFMTA, through the proposed Transit Effectiveness Project (TEP) is currently studying potential transit improvements for the length of Mission Street to enhance the travel time and reliability of all routes that utilize that corridor. The TEP is undergoing environmental review, and if approved is proposed for implementation in a similar timeframe as the Van Ness Avenue BRT Project. Information about the TEP, including where and how to comment on the proposed project and its environmental review process, can be found at <http://www.sfmta.com/cms/mtep/tepoever.htm>.

The northern terminus of the project limits is defined as Lombard Street because traffic patterns show a significant decrease north of Lombard, thus causing significantly less delay to transit than south of Lombard Street. Existing traffic counts show that during the PM peak period, the block of Van Ness Avenue north of Lombard Street has less than 450 vehicles northbound (versus more than 1,400 vehicles on the block south of Lombard Street – nearly 70% less) and 620 vehicles southbound (versus nearly 1,300 on the block south of Lombard Street – more than 50% less) (source: Vehicular Traffic Analysis Technical Memorandum, Appendix 4). The traffic counts on Van Ness Avenue are lower north of Lombard Street because northbound traffic on Van Ness Avenue heading towards the western neighborhoods in San Francisco and the Golden Gate Bridge turn off of the corridor at Lombard Street and similarly, southbound inter-neighborhood and regional traffic tends to turn onto Van Ness Avenue from Lombard Street as opposed to from streets further north due to those streets' lower capacity and connectivity as compared with Lombard Street. Due to the lower traffic volumes, transit delays on Van Ness Avenue north of Lombard Street are significantly less frequent and severe as they are within the project limits. Thus, full BRT treatments were not proposed for the corridor north of Lombard Street.

Master Comment #2: Alternatives screening and lack of alternatives that include express bus or peak period only service.

The following comments touch on the Master Comment #2 topic, which included comments recommending alternative locations for the project, and more limited options such as adding buses only, bulb-outs only, eliminating some stops, running an express bus line, and eliminating parking during peak times: A-7a-4, O-6a-2, O-9-2, I-6-1, I-13-2, I-20-1, I-25-2, I-31a-3, I-31b-5, I-32-8, I-33-2, I-38-9, I-41-5, I-55-1, I-55-2, I-68-4, and I-69-2.

Master Response #2:

As described in Chapters 1 and 2, based on the outcome of the Van Ness Avenue BRT scoping and screening processes the Draft EIS/EIR defined four project alternatives to be evaluated, including the No Build Alternative. Section 2.6 of the Final EIS/EIR includes Alternatives Considered and Withdrawn during the screening process and the rationale for withdrawing them from consideration. Alternatives that were considered and then withdrawn from further consideration included Curb-Lane BRT-No Parallel Parking, Surface Light Rail-Subway, Transit Priority Streets (TPS) Treatments without a Dedicated Bus Lane, and a Peak Period Dedicated Bus Lane.

Through the scoping and screening processes described in both the Draft and Final EIS/EIR, alternatives were screened out of further environmental analysis if they indicate a “fatal flaw” or overall low performance:

- **Fatal Flaws.** The Curb-Lane BRT-No Parallel Parking and Surface Light Rail-Subway alternatives failed to address one or more screening criteria or were found to worsen existing conditions. The screening process considered the inability to provide improvement with respect to one or more of the screening criteria a fatal flaw. These two alternatives failed to meet one or more of the screening criteria so they were dropped from consideration in the EIS/EIR.
- **Low Performance.** The TPS Treatments without a Dedicated Bus Lane and Peak Period Dedicated Bus Lane alternatives had no fatal flaws, but through the screening process were found to provide only slight

or modest levels of improvement. These two alternatives, which did little to advance several screening criteria, were eliminated from consideration in the EIS/EIR.

The TPS Treatments without a Dedicated Bus Lane and Peak Period Dedicated Bus Lane alternatives were not recommended for further evaluation in the EIS/EIR because the magnitude of expected benefits was found to be low. TPS treatments were expected to provide about half of the reduction in travel times as BRT treatments (Van Ness Avenue BRT Feasibility Study). Additionally, without a dedicated bus lane buses would continue to operate in mixed traffic and experience associated reliability impacts, including some buses having very crowded conditions. Of all transit delays, mixed traffic delays have the greatest variability (Van Ness BRT Feasibility Study, 2007).

A peak period only bus lane would provide transit travel time and reliability benefits only during the peak period. However, Van Ness Avenue transit experiences delays and reliability problems throughout the day and on weekends; additionally, transit ridership on the Van Ness corridor is strong throughout the day, and not just during the peak commute periods (Van Ness BRT Feasibility Study; 2007 APC Data).

More information on this process and the criteria used to screen alternatives can be found in the Alternatives Screening Report, which can be found on the Project website, www.vannessbrt.org. This report identifies the three alternatives to be studied in the EIS/EIR, and was adopted by the Authority Board in 2008 (Resolution 08-71).

Master Comment #3: Private buses and shuttles

The following comments touch on the Master Comment #3 topic: I-1-1, I-32-6, I-45-1, I-49-3, and I-65-1.

Master Response #3:

Private shuttles are currently prohibited from using transit lanes or stops citywide. With BRT on Van Ness Avenue, both shuttle services and taxis would continue to operate in mixed-flow traffic lanes and would not travel within the dedicated BRT lanes or use BRT stations. The Draft EIS/EIR analysis of the impacts of the project on the transportation system takes into account traffic from shuttle buses operating in mixed-flow traffic lanes. The project's impact on shuttle services themselves would be similar to its impacts on other private vehicles, which are detailed in the traffic analysis in Chapter 3.3 of both the Draft and Final EIS/EIR. Chapter 3 also provides specific information regarding shuttle services in Sections 3.1.2.4, 3.2.1.2, and 3.2.3.

City agencies continue to study shuttle services citywide and work to better integrate this growing sector into the overall transportation system. In 2011, the Authority completed a Strategic Analysis Report (SAR) on the Role of Shuttle Services in San Francisco's Transportation System,¹ which examined existing shuttle services and regulations and developed policy recommendations. Following the SAR, the SFMTA is currently working to develop the Muni Partners Program, a component of the multi-agency Transportation Demand Management Partnership Project led by the Authority.² In February 2013, SFMTA approved an 80-foot private shuttle stop on the west side of Van Ness Ave from Union Street to 80 feet southerly. The stop will be put in place in March 2013 and is reserved for private shuttle pickups on weekdays between 6 a.m. and 10 a.m. This is the second private shuttle stop in San Francisco; the other is located near 8th and Market Streets. The design of the BRT system does not preclude the use of the facilities by private shuttles if City policy regarding their operations changes.

¹ The SAR is available at www.sfcta.org/shuttles

² Available on the project website at www.sfcta.org/tdm

Master Comment #4: Cost effectiveness of Van Ness BRT and alternatives considered and withdrawn

The following comments touch on the Master Comment #4 topic: O-7-1, I-13-2, and I-13-3; I-31b-4

Master Response #4:

Cost effectiveness was a key consideration in selecting the BRT build alternatives for the Van Ness Avenue corridor in the Feasibility Study, the Screening Report, and in the Draft EIS/EIR. As part of the screening process, a wide range of alternatives was considered for further evaluation, including potentially lower-cost transit improvements such as Transit Preferential Streets (TPS) treatments without a dedicated bus lane, express buses, and more expensive alternatives including surface rail or a subway. As explained in greater detail in Master Response #2, alternatives were screened out of further environmental analysis if they contained a “fatal flaw” or overall low performance in meeting the project purpose and need. Section 2.6 of both the Draft and Final EIS/EIR includes additional information on alternatives considered and withdrawn (and the rationale for withdrawing them from consideration). Transit improvements that did not include a dedicated bus lane were screened out due to low performance, while the rail options were eliminated from further consideration based on high capital costs and construction intensity/duration.

The capital cost estimates for BRT range from \$93 to \$136 million. BRT would provide annual operating cost savings because faster speeds and reduced travel times allow fewer vehicles to provide the same service frequency. These savings would range from \$1.2 to \$2.4 million annually. Thus, the BRT project is expected to have a positive impact on Muni’s annual operating budget. The BRT project is expected to result in operational cost savings, reducing strain on Muni’s operating budget. By increasing transit speeds, fewer vehicles are needed on Van Ness Avenue to provide the same service frequency.³ As a result, the project is projected to reduce annual transit operating costs by 2.4 million for the LPA. These savings could be reinvested in additional service for the 47 or 49 which would further reduce crowding or elsewhere in the Muni system. In 2035, Mitigation M-TR-1 calls for an additional vehicle to be added into service on both the 47 and the 49. The operations costs analysis indicates that these vehicles could be added at no additional operating costs due to the costs savings from lower BRT travel times. For more information on project operations and maintenance costs, see Section 9.2 of the Final EIS/EIR.

Alternatives without the full BRT features, like express bus service, showed significantly lower benefits than the alternatives under consideration in the EIS/EIR (Van Ness BRT Screening Summary Report, 2008; Van Ness BRT Feasibility Study, 2007). Adding express or limited-stop buses on Van Ness Avenue would save capital cost compared with the BRT project, but would require higher SFMTA annual operating costs.

Lastly, the Van Ness Avenue BRT has received the Federal Transit Administration’s highest cost-effectiveness rating several years in a row. It is the only Small Starts Project in the country to receive at least a “medium-high” rating for Project Justification (which incorporates cost effectiveness), and is one of only two projects in Bay Area identified for Small Starts funding through MTC’s Resolution 3434, in part due to its cost effectiveness. Funding to construct the BRT project is not interchangeable with Muni operations funding for existing operations or additional vehicle operations. The identified funding sources for the project primarily include the Federal Transit Administration’s Small Starts program and San Francisco’s Prop K sales tax, both of which are legally restricted to providing funding to construct capital transit improvements. They are not permitted to fund ongoing transit operations. For more detail on project funding sources, please see Sections 9.1.3 and 9.1.4 of the EIS/EIR.

Master Comment #5: Transit stop elimination

³ The project will increase the size of buses from 40 ft to 60 ft, increasing capacity by 25 percent between the two SFMTA bus lines operating on the Van Ness BRT corridor (49 and 47) without adding any additional vehicle.

The following comments touch on the Master Comment #5 topic: A-7a-41, O-7-2, O-11b-2, I-3-2, I-42-4, I-49-6, I-53-3, I-56-4, I-56-5, I-57-3, and I-57-5.

Master Response #5:

As described in Section 2.2.2, under all build alternatives, six northbound and six southbound existing Muni bus stops on Van Ness Avenue which serve the 47 and 49 Muni lines would be discontinued. Under the LPA, a seventh northbound stop at Mission/South Van Ness would be discontinued, with the nearby 47 stop located on South Van Ness Avenue, just south of Mission Street. Under the LPA, the proposed project would have 8 or 9 northbound stations depending on if the Vallejo Northbound Station Variant is included, and 9 southbound BRT stations instead of the 15 northbound and 14 southbound Muni stops in each direction currently on Van Ness Avenue. The reason for eliminating, or consolidating, stops is to reduce dwell and overall travel time and to achieve greater reliability of service, which are key features of rapid transit such as BRT. Existing bus stops on intersecting and nearby streets would not be affected by the proposed project. For example, stop spacing would remain unchanged on the 19-Polk Muni line, which provides local Muni service one block east of Van Ness Avenue. Table 2-3 in the Final EIS/EIR shows the locations of proposed stations in each build alternative, including the LPA. All proposed stations would be within one block of Muni Rapid cross routes. Figures 2-2 and 2-3 show the locations of existing Muni bus stops, and the locations of the proposed LPA stations.

The average spacing of the proposed BRT station locations under the LPA would be approximately 1,130 feet, requiring an average walk of up to 565 feet (two blocks) from a location halfway between two stops; this would constitute an increase, on average, of up to approximately 215 feet of additional walking to access stops if a person had an origin or destination exactly between the proposed BRT station locations. A distance of 215 feet is less than one block along Van Ness Avenue. On average, the proposed project complies with the applicable 1,000- to 1,200-foot spacing guideline for light rail lines (source: SFMTA FY 2008-FY2027 Draft Short Range Transit Plan, 2007).⁴

In addition to considering Muni's stop spacing guideline, the BRT station locations are based on three goals: 1) place stops as evenly spread out as possible within the project corridor; 2) consider ridership and place stations where the largest numbers of passengers board and alight; and 3) facilitate easy connections with other Muni lines, particularly other Rapid network lines. Grade was also considered, and stations were not proposed on blocks with a grade of greater than 8 percent, consistent with ADA standards. Within the study area, more than 70% of the blocks along Van Ness Avenue have grades less than 5%, and there are no blocks with grades greater than 10 percent. The proposed BRT station locations were then refined based on public and agency input into the design process, including from the Van Ness BRT Citizens Advisory Committee, the Mayor's Office on Disability, and accessibility coordinators at the SFDPW and SFMTA. In recent public meetings, considerable concern was expressed by local residents regarding the lack of transit stations proposed in the vicinity of the Van Ness Avenue and Vallejo Street intersection. In response to this public concern, a southbound transit station at the intersection of Van Ness Avenue and Vallejo Street has been incorporated into the LPA. A northbound transit station in this same location, referred to as the Vallejo Northbound Station Variant, could also be implemented, and will be decided upon at the time of project approval.

The project team has also met with local groups and organizations that focus on accessibility issues during preparation of the Feasibility Study and EIS/EIR, including the Lighthouse for the Blind and Visually Impaired, the Mayors Disability Council Physical Access Committee, and the Muni Accessibility Advisory Committee, to gather input for the BRT project. Chapter 8 of the Final EIS/EIR provides additional detail on the public participation process.

As described in Section 2.2.2, existing stops for the 47 and 49 bus lines are approximately 700 feet apart on Van Ness Avenue. This is approximately 100 feet closer together than Muni recommends for the local bus network. Consolidation of existing stops will mean that some bus patrons will need to walk further to reach a bus stop compared with existing conditions. The project proponents recognize that the proposed project would increase the distance between stops, which would increase the physical effort required to reach transit relative to existing conditions for some bus patrons. This may pose a burden to some bus patrons. The Van Ness BRT project is

⁴ There are no SFMTA stop spacing guidelines for BRT.

designed to be as universally accessible as possible. The Draft EIS/EIR provided a full evaluation of the project's accessibility for all users, which was updated and included in Section 3.4.3.1 of the Final EIS/EIR. The evaluation is based on the principles of Universal Design and recognizes that users, including the elderly and disabled, may have different concerns. Some may depend on transit to meet their need for efficient travel in the Van Ness corridor, while others prefer more frequent stops to minimize walking distances. The evaluation identifies the increase in physical effort required to reach a transit stop as posing a challenge to some riders, but also notes other benefits the project provides to improve accessibility in the corridor. For example, level or near level boarding at BRT stations would reduce the physical effort required to board transit vehicles, while curb bulbs, nose cones, pedestrian countdown signals, and accessible pedestrian signals at intersections would allow people with a greater range of physical abilities to safely cross the street.

Master Comment #6 Construction impacts on businesses and residents

The following comments touch on the Master Comment #6 topic: O-5-1, O-5-5, O-5-7, O-5-8, O-5-14, O-5-16, I-8-1, I-4-1, I-11-2, I-20-3, I-31a-1, and I-36-1, and I-36-8.

As explained in Section 4.15 Construction Impacts of both the Draft and Final EIS/EIR, residents and businesses would experience temporary impacts during project construction related to increased noise, dust, vibration, and air emissions from construction equipment. Also, transit patrons may be inconvenienced by relocation of transit stops and delayed transit service; and drivers would experience slower speeds along Van Ness Avenue. In addition, parking may be temporarily converted to mixed-flow traffic lanes, resulting in a loss of colored and non-colored parking spaces along Van Ness Avenue. A description of the construction plan is provided below, followed by a discussion of construction impacts and how they would be addressed.

Construction would include the following major activities along the length of the proposed project: pavement rehabilitation as needed along the transitway, pavement resurfacing of Van Ness Avenue from curb to curb, reconstruction of curb and gutters (including curb bulbs), replacement of the sewer pipeline, reconfiguration of the median, construction of BRT stations, replacement of the OCS support poles/streetlights system, replacement of traffic signal infrastructure, and associated utility relocations. BRT station construction would involve installing components such as platforms, canopies, ticket vending equipment, railings, lighting, signage, and station furniture.

Project construction is anticipated to last a period of 20 months for the LPA. With the exception of replacement of the overhead contact system support poles/streetlights and equipment staging and transport, all construction activities would occur within the existing Van Ness Avenue right-of-way. There would be no complete sidewalk closures, and merchant access would be maintained throughout construction. Two traffic lanes would remain open in each direction during peak periods, although additional closures may be necessary during off-peak hours. The preferred construction approach is to have three-block segments of Van Ness Avenue in spaced out locations in the corridor under construction at time, limiting the disruption to particular businesses. In other words, construction activities would primarily occur on multiple 3-block segments on Van Ness Avenue at one time. Thus, multiple construction crews would be working at different 3-block segments along the corridor at one time. This approach would stagger the impacts of construction along the corridor and minimize the duration of the disruption at any one location, although it would involve the most intensive environmental impacts (i.e. traffic, parking and air quality) at one location. The preferred construction approach would be the most efficient approach in terms of resource management and mobilization and would minimize the effect of delays at one location greatly impacting the entire project schedule.

During construction, temporary conversion of existing parking lanes to mixed-flow traffic lanes would be implemented on the three-block segments where construction is taking place, resulting in removal of on-street parking on both sides of Van Ness Avenue within the 3-block segments. This allows for a minimum of two lanes of traffic open in each direction while construction in the segment is underway. Parking would be maintained on

the blocks where construction is not underway, aside from completed blocks where parking would be permanently removed by the project design. Temporary removal of curbside parking would include colored parking spaces, including truck and passenger loading spaces, which could affect surrounding land uses. As part of the TMP described below, the SFMTA will work with affected land uses to determine modified loading operations during construction. Sidewalks will remain open during construction, therefore, it is not anticipated that access to businesses and other properties along Van Ness Avenue would be disrupted. During construction, there would be a temporary increase in traffic, slower speeds along Van Ness Avenue, and reduced road capacity due to the closure of one southbound and one northbound traffic lane. Existing transit service would be disrupted; bus stops would be relocated along Van Ness Avenue, and buses would experience reduced speeds as well.

Lastly, the affected community would be subject to noise, dust, vibration, and air emissions from construction equipment during project construction. These impacts would cause temporary inconvenience to area residents, businesses, and people traveling through the corridor, and would therefore be considered less than significant. They could be minimized by implementing a Transportation Management Plan (TMP) and keeping the public informed about the construction schedule and activities throughout the construction period. The following mitigation measures will be implemented through the TMP:

- A TMP that includes traffic rerouting, a detour plan, and public information procedures will be developed during the design phase with participation from local agencies, other major project proponents in the area (e.g., CPMC Cathedral Hill, Hayes Two-Way Conversion, and the Geary Corridor BRT projects), local communities, business associations, and affected drivers. Early and well-publicized announcements and other public information measures will be implemented prior to and during construction to minimize confusion, inconvenience, and traffic congestion.
- As part of the TMP, construction planning will minimize nighttime construction in residential areas and minimize daytime construction impacts on retail and commercial areas.
- As part of the TMP, construction scheduling and planning in the Civic Center area will take into consideration major civic and performing arts events.
- As part of the TMP public information program, SFMTA will coordinate with adjacent properties along Van Ness Avenue to determine the need for colored parking spaces and work to identify locations for replacement spaces or plan construction activities to minimize impacts from the loss of these spaces.
- As part of the TMP public information program, SFMTA will coordinate with adjacent properties along Van Ness Avenue to ensure that pedestrian access to these properties is maintained at all times.
- As part of the TMP, the SFMTA's process for accepting and addressing complaints would be implemented. 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 are logged and tracked to ensure they are addressed.
- As part of the TMP, adequate passenger and truck loading zones would be maintained for adjacent land uses, including maintaining access to driveways and providing adequate loading zones on the same or adjoining street block face.

In addition to these measures, during construction coordination with relevant City and State agencies will occur to minimize temporary impacts to traffic, transit, parking and non-motorized users. The SFMTA would also have advisory committees throughout design and construction; these committees would have community members as business representatives present for input.

Furthermore, all construction activities would be coordinated with other projects planned in the Van Ness Avenue corridor, including the CPMC Cathedral Hill and Geary BRT projects, and repaving along Franklin, Gough and Polk streets as part of the Road Repaving and Street Safety Bond Program (including the Polk Street Corridor Improvement Project). A Project Construction Plan (PCP) has been prepared to provide detailed information, schedules, and maps on construction of the Van Ness Avenue BRT Project. This document will be kept current in coordination with the TMP. The PCP and TMP take into account potential impacts of other planned projects under construction in the general vicinity of the Van Ness Avenue BRT Project. Coordination of all planned construction activities and permanent utility relocation and modification activities with the other projects in the vicinity would minimize cumulative construction impacts. Coordination and planning efforts are facilitated through the San Francisco Committee for Utility Liaison on Construction and Other Projects (CULCOP), the San Francisco Street Construction Coordination Center which include representatives from multiple city agencies like the Planning Department and Department of Public Works, and Caltrans with the emphasis on the most efficient construction planning to minimize disruption to the community.

Master Comment #7: Tree removals and replanting opportunities

The following comments touch on the Master Comment #7 topic and express a desire for the preservation of trees, ask for more information about the quality of trees to be removed, or question the if the tree removal information is accurate: O-6a-3, I-14-1, I-15-1, I-16-1, I-36-6, I-39-4, I-40d-27, I-42-3, I-47-1, I-57-6, I-64-2, I-68-3, A-7a-2, Aa-7a-4, A-7a-29, A-7a-30, A-7a-31, A-7a-32, A-7a-35, A-7b-2, A-7c-3, A-7c-13, A-7c-15, A-7c-18, A-7c-22, A-7c-26, A-7c-31, A-7c-35, A-7c-38, A-7c-42, A-7e-2, A-7e-3, A-7f-2, A-7f-3, A-7f-4, A-7f-5, A-7f-6, A-7h-2, A-7h-12, A-7h-18, A-7h-26, A-7i-1, A-7i-4.

Master Response #7:

The effect of the proposed project on existing trees was another major concern expressed in comments. There is a strong desire among the public and local agencies to preserve existing trees. The San Francisco Department of Public Works (SFPDW) requested additional analysis be completed pertaining to removal of median trees, which is reflected in Sections 4.4.2.5 and 4.4.3.4 of this document.

Thus in response to comments received and developments in project design explained below, a more comprehensive Tree Removal Evaluation and Planting Opportunity Analysis was undertaken in 2012 to identify the maturity and health of trees in the corridor and therefore better understand the impacts of tree removal and the opportunities for preserving trees, and the parameters of new tree plantings (BMS, 2013). This analysis was undertaken for all of the build alternatives, including the LPA. The 2012 survey took into account the following factors that were not taken into account in the 2009 survey, the results of which were presented in the Draft EIS/EIR:

- In October 2012, Caltrans issued a design requirement for the project that new tree plantings must be set back by 35 feet from each intersection. This 35-foot setback must be applied to all new, or replacement, tree plantings and is not being applied to existing trees. In other words, existing median trees must not be removed to achieve the 35-foot setback. The 35-foot setback reduces the number of replacement trees that can be planted under all of the build alternatives, including the LPA.
- Sidewalk trees that would be removed under Build Alternative 2 were quantified, as well as locations where median trees would need to be removed to accommodate turn pockets.
- The maturity and condition of all median trees, as well as each sidewalk tree that would be removed under build Alternative 2, were evaluated to better understand the biological and aesthetic value of these trees and the impacts that would result from removal of existing trees under each build alternative, including the LPA. This evaluation informed impacts, as well as opportunities, for tree preservation reported in Sections 4.4 and 4.13.
- A 15-foot separation between existing trees to be preserved and new trees to be planted was assumed in determining the number of new trees that could be planted.

A certified arborist evaluated each median tree on Van Ness Avenue within the project limits for tree health and condition, using a scale of 1 to 5, which is defined in Table 4.4-2 in Section 4.4.2 (BMS, 2013). Sidewalk trees that would be removed under Build Alternative 2 were also evaluated for health/condition. The planting opportunity analysis, including the list of potential replacement trees, took into consideration the OCS clearance requirements of 5 feet between the OCS wires and a tree, and 5 feet between the top of the OCS wires and a tree canopy. These OCS setbacks require the bottom of a tree canopy to be a minimum of 23 feet from the ground or a tree of any height to have a tree canopy narrower than 11 feet. Thus, some existing median trees may need to be removed because they could not survive the pruning that would be required to provide the needed OCS clearance, even if they were able to survive construction vibrations. The OCS clearance also informs the list of potential replacement trees because replacement trees must be able to grow to maturity given the required pruning. While removal and replanting of trees provide urban design opportunities that support City planning goals, the preservation of trees is considered of greater value than the value of the aforementioned urban design opportunities. Existing trees are scenic and biological resources; therefore, preservation of trees has been a design priority for each build alternative, including the LPA. The tree surveys and evaluations conducted in 2009 and 2012, and documented in the technical report, Tree Removal and Planting Opportunity Evaluation (BMS 2013) have supported design efforts to reduce removal of existing trees under each build alternative, including the LPA.

Table MR7-1 provides a breakdown of existing median trees by health/condition that would be removed by each alternative, including the LPA. Mature trees of healthy condition 4 or 5 are considered to be of the greatest biological value and visual quality due to their health, height, and the mature canopies they provide. It would also require a longer period of time for replacement trees to grow to equivalent size as mitigation for their removal, and replacement trees would have a narrower canopy than many removed trees. Thus, removal of mature, healthy trees is considered of greater impact than removal of young trees or trees in fair or poor health. There are 28 median trees in the project corridor that are mature and of healthy condition 4 or 5, which represents 27 percent of trees in the corridor.

Table MR7-1: Removed Trees Summarized by Tree Health and Condition

BUILD ALTERNATIVE ¹	TREES TO BE REMOVED			
	MATURE TREES CONDITION 4 OR 5	YOUNG TREES CONDITION 4 OR 5	TOTAL TREES CONDITION 4 OR 5	MATURE & YOUNG TREES CONDITION 1-3
Existing Conditions/ No Build Alternative	0	0	0	0
Alternative 2	6	30	36	22
Alternative 3	28	50	78	24
Alternative 4	11	40	51	13
LPA ²	23	44	67	23

Implementation of Design Option B would not appreciably change the impacts to landscape and trees under Build Alternatives 3 and 4.

The existing conditions for Build Alternative 2 differ from that of the other build alternatives and LPA because affected sidewalk trees were evaluated. No sidewalk trees would be impacted under the other build alternatives, including the LPA.

The LPA is a combination and refinement of the center-running alternatives with limited left turns (Build Alternatives 3 and 4 with Design Option B). Incorporation of the Vallejo Northbound Station Variant in the LPA design would not affect tree removal or planting opportunities under the LPA.

Source: Van Ness BRT Tree Removal Evaluation and Planting Opportunity Analysis performed by BMS Design Group (BMS, 2013).

Table MR7-1 provides an overview of the anticipated number of trees that would be removed under each build alternative, including the LPA, and the number of replacement and infill trees that could be planted based on the spacing assumptions explained above.⁵ The greatest number of existing trees would be preserved under Build Alternative 2, while it is assumed that no median trees would be preserved under Build Alternative 3. The number of trees that would be preserved under Build Alternative 4 and the LPA fall within the range of that for Build Alternatives 2 and 3. All of the build alternatives, including the LPA, would result in a substantial net gain of trees in the corridor when new planting opportunities are considered. Each of the build alternatives, including the LPA, would result in new tree plantings at locations of removed sidewalk bus shelters as feasible. In addition,

⁵ With different assumptions (closer spacing), more trees could be planted. This would be determined during final design, and a conservative scenario is evaluated in this analysis.

under each of the build alternatives, including the LPA, trees would be planted in areas of the median where trees do not currently exist, and where existing trees would require removal because they would not survive project construction. Increased sidewalk and median tree plantings over existing conditions would improve the visual setting, with improvements growing over time as plantings mature, resulting in long-term, beneficial effects. At the same time, however, there would be a plant establishment period lasting for several years for new trees to reach maturity. This would be a period of reduced benefits compared with the benefits offered by mature trees and their canopies. The trade-offs between increased plantings in the corridor and the loss of existing trees is discussed for each build alternative, including the LPA, in Section 4.4.3.4 of this document.

Master Comment #8: Calculating and Modeling Existing and Future Traffic, Including Traffic Diversions

The following comments touch on the Master Comment #8 topic: O-1-3, O-2-8, O-7-3, O-9-1, I-8-3, I-31b-1, I-31b-4, I-31b-5, I-31b-7, I-32-1, I-32-2, I-38-5, I-38-10, I-40d-6, I-40d-10, I-40d-11, I-40d-13, I-40d-16, I-40d-19, I-40d-24, I-40d-34, I-55-3, I-67-2, and I-69-1.

Due to the complexity and large scale of the traffic study area, a multi-step process was used to calculate and model changes in traffic volumes that would result from the implementation of BRT, including the diversion of traffic from Van Ness Avenue onto other streets, as well as to calculate the associated transportation impacts. An overview of the process is shown in the bullet points below, and is further described through this response, Master Response #10, and in greater detail in the Vehicular Traffic Analysis Technical Memorandum (CHS, 2011):

1. Traffic turning movement counts were collected at 91 of the 139 intersections in the traffic study area (see Figure 3.3-1 of the Final EIS/EIR for a map of traffic study area) in the spring of 2007. The counts were collected at all intersections on Gough, Franklin, and Van Ness Avenue within the traffic study area and an additional 11 intersections on Polk, Larkin and Hyde streets within the traffic study area.
2. The specific turning movement counts collected as part of Step 1 were used, along with a signal timing plan provided by the SFMTA, to calibrate the existing conditions (2007) Synchro traffic analysis model.
3. Separately, 24-hour traffic counts were collected in March 2007 at five locations along Van Ness Avenue and one location each along Franklin and Gough streets. These locations were selected because they represent blocks in the traffic study area with arterial roads as cross streets in the northern, middle, and southern sections. These 24-hour counts (different than the turning movement counts taken at 91 intersections) were taken to determine the peak hour to perform the intersection LOS analysis (as shown in Table 3.3.1 of the EIS/EIR), -
4. San Francisco Chained Activity Modeling Process (SF-CHAMP), San Francisco's Travel Demand forecasting model was used to predict changes in origin/destination choice, travel mode (i.e., auto, transit, bicycle, etc.) choice, and route choice for the entire San Francisco area with the implementation of anticipated land use changes (i.e., development projects) and transportation changes (i.e., Van Ness BRT and other anticipated projects such as Central Subway and the Presidion Parkway). The direction and amount of change (i.e., percent of growth or reduction) in traffic volumes were then applied to the existing traffic volumes and those volumes used in the existing conditions (2007) Synchro traffic analysis model. This provided turning movement traffic counts for every intersection in the traffic study area for the No Build Alternative and each build alternative in 2015 and 2035.
5. A series of refinements were made to the modeled intersection traffic volumes for each scenario to account for factors SF-CHAMP isn't designed to capture (e.g., grades, signal timing, etc.).
6. The final volumes for the No Build Alternative and each build alternative, in both 2015 and 2035, created through steps 1 through 5 were used as inputs to Synchro traffic analysis models which were used to calculate traffic impacts on Van Ness Avenue and five parallel streets in Chapter 3.3 of the EIS/EIR. The volumes were also used to create the inputs for the localized Air Quality and Noise and Vibration impacts analysis in Chapter 4.10 and 4.11 (see Master Responses #11 and #12).

7. The LOS analysis, based on outputs of the existing conditions Synchro model which was calibrated using the PM peak turning movement traffic counts at 91 intersections, showed that all of the intersections in the traffic study area, except for the intersection of Gough Street and Green Street, operated at LOS D or better conditions in 2007 (see Section 3.3.2.4 and Figure 3.3-2). This method is consistent with standard traffic engineering practice to evaluate LOS conditions for both existing conditions and future year baselines in NEPA and CEQA.

Use of SF-CHAMP

SF-CHAMP is the San Francisco travel demand forecasting model developed by SFCTA, and it was used to determine how the project would change traffic patterns or modes of transport as described in Chapter 3 of the EIS/EIR. SF-CHAMP is a computer-based tool that can be used to assess the impacts of land use, socioeconomic, and transportation system changes on the performance of the local transportation system. SF-CHAMP was developed to reflect San Francisco's unique transportation system and socioeconomic and land use characteristics. The relationships and parameters in SF-CHAMP were statistically estimated from San Francisco residents' observed travel patterns and then tested to make sure the model matched observed transit line boardings, roadway volumes, and numbers of vehicles. For each modeled scenario, a detailed representation of San Francisco's transportation system is used, as well as population and employment characteristics, to produce measures relevant to transportation and land use planning. Using future year transportation, land use, and socioeconomic inputs, the model forecasts future travel demand.

The SF-CHAMP Model incorporates a state-of-the-art approach to forecasting travel demand called "tour", or "activity-based travel demand modeling". This activity-based model is more sensitive than traditional four-step models to a broader array of conditions that influence travelers' choices. The federal government, as part of the Travel Model Improvement Program (TMIP), Transportation Research Board, and the Second Strategic Highway Research Program (SHRP2) has recently invested a great deal of resources to get as many metropolitan areas as possible to adopt this state-of-the-art approach (see tmiponline.org, TRB Special Report 288, and SHRP2 C10 and C46 scope of work).

SF-CHAMP has been reviewed by local, regional, and federal agencies, and published in numerous peer reviewed transportation and modeling journals, and has been approved for use on federal projects by the MTC as part of their bi-annual model consistency process. SF-CHAMP is the primary tool for travel demand forecasting in San Francisco, and is commonly used by multiple San Francisco agencies, including the SFMTA and the Planning Department's Environmental Planning section for the travel demand forecasting component of transportation impact analyses. More information on the SF-CHAMP model can be found at www.sfcta.org/modeling and a validation report can be found in Appendix 1 of the Van Ness BRT Vehicular Traffic Analysis Technical Memorandum (CHS, 2013).

For purposes of this project, SF-CHAMP incorporated projected land use growth for both the 2015 and 2035 scenarios as inputs, using ABAG 2007 projections which were used in the most recently adopted Regional Transportation Plan (RTP), Transportation 2035, for which an EIR was prepared.⁶ State of California Government Code 65089 states that data bases (i.e., land use inputs) for models such as SF-CHAMP used to determine quantitative impacts of development on the circulation system "...shall be consistent with the data bases used by the regional planning agency [i.e., MTC]". For this reason, land use projections used in the SF-CHAMP model for EIRs led by the San Francisco Planning Department as well as this EIS/EIR are required to use land use projections that are within one percent of regional ABAG projections for population, employed residents, households, and employment. . The San Francisco Planning Department takes San Francisco's employment and housing growth provided by ABAG and distributes the growth to better reflect anticipated developments in San Francisco such as the California Pacific Medical Center and the Market and Octavia Area Plan. This methodology has been approved by the MTC such that the project remains federally compliant. . See Appendix 2 of the Van Ness BRT Vehicular Traffic Analysis Technical Memorandum (CHS,

⁶ The land use projections used for the Van Ness Avenue BRT EIS/EIR modeling effort are discussed briefly in Section 3.1.2 of the EIS/EIR and in more detail in the Traffic Analysis Technical Memorandum (CHS, 2013),

2013) for details on how the Planning Department allocates future growth in San Francisco. SF-CHAMP also incorporates all anticipated transportation network changes separate from the Van Ness BRT Project in both the 2015 and 2035 scenarios. A list of these improvements can be found in Chapter 2 of the Final EIS/EIR.

SF-CHAMP was used as the primary technical modeling tool to predict changes in travel patterns for private vehicles with the implementation of BRT in both the near term (2015) and horizon year (2035). The SF-CHAMP model takes into account the “attractiveness” (i.e., relative capacity, driving travel time, left turn opportunities, etc.) of streets relative to each other, as well as the relative “attractiveness” of other modes (e.g., cost, travel time, frequency, etc.) when determining the changes in traveler behavior with the implementation of BRT. In other words, Van Ness Avenue would be less attractive to drivers when compared with the No Build Alternative and BRT service on Van Ness Avenue would be slightly more attractive than the 47/49 service under the No Build Alternative. SF-CHAMP does not take into account changes in signal timing (although it does take into account transit travel time improvements through the implementation of TSP) or the nuances of operations such as queuing for specific directional movements (i.e., a right turn at a specific intersection).

For the build alternatives, SF-CHAMP was coded to show one lane of mixed traffic converted to transit only in each direction, representing a reduced capacity of slightly less than 1/3 (the buses would no longer be operating in the mixed traffic lanes). SF-CHAMP was also coded to reflect the BRT benefits that are proposed as part of the project 47 and 49 with benefits meant to represent BRT (see Appendix 2 of the Vehicular Traffic Analysis Technical Memorandum, CHS, 2013). Since SF-CHAMP calculations are based on observed San Francisco traveler behavior in circumstances that reflect changes in streets’ auto capacity or increases in transit performance, the outputs are representative of behavior change with the implementation of BRT.

Calculating Traffic Volumes for No Build and Build Alternatives

Traffic volumes for the existing conditions were collected based on actual field counts. Volumes for 2015 and 2035 No Build and Build Alternatives were developed based on series of modeling and manual refinement processes, as described below.

1) **Existing traffic counts:** Traffic turning movement counts were collected at 91 of the 139 intersections in the traffic study area (see Figure 3.3-1 of the EIS/EIR for a map of intersections in the traffic study area) in the spring of 2007 with a few additional intersections collected in 2008 and 2009 to better model the traffic south of Market within the traffic study area. The counts were collected at all intersections on Gough, Franklin, and Van Ness Avenue within the traffic study area and an additional 11 intersections on Polk, Larkin and Hyde streets within the traffic study area. Traffic counts were also collected at the intersection of Duboce/13th/US 101 Freeway offramp. Intersections where turning movement counts were collected can be found in Appendix 4 of the Vehicular Traffic Analysis Technical Memorandum (CHS, 2013) ⁷.

2) **Traffic volume balancing:** The specific turning movement counts collected as part of Step 1 were used, along with a signal timing plan provided by the SFMTA, to create the existing conditions (2007) Synchro traffic model. This original set of volumes was balanced for all 139 study area intersections between the total number of vehicles arriving at an intersection and departure from an intersection. For study area intersections along Polk, Larkin, and Hyde streets where existing conditions volumes were not collected using field counts, this balancing exercise was used to estimate the amount of traffic in the existing conditions Synchro Model. Section 2.2 of the Vehicular Traffic Analysis Technical Memorandum (CHS, 2013) describes the results of the existing conditions (2007) Synchro traffic model.

3) **2015 and 2035 traffic volume estimation:** The traffic volume estimates generated by SF-CHAMP for the near-term 2015 and long-term 2035 horizon years were used to calculate growth factors (i.e., percent change in volumes) between 2005⁸ and 2015 and between 2005 and 2035 for each north-south street in four different sections of the corridor from the Duboce/13th/US 101 Freeway offramp to Lombard Street. and for the east-west streets by facility type (e.g. arterial, collector, and local streets) in the traffic study area from Mission to

⁷ Please note that these intersection level traffic counts are different than the 24-hour traffic counts described in Section 3.3.2.2 (Table 3.3-1) which were used to determine the time period with peak traffic volumes in the traffic study area.

⁸ SF-CHAMP represents transportation in 5-year increments. The 2005 estimates most closely match the 2007 existing conditions traffic volumes collected through field data

Lombard Street.. These growth factors were applied to the 2007 traffic volumes and the calibrated existing conditions (2007) Synchro model to estimate 2015 near-term No Build and 2035 long-term No Build traffic volumes to minimize margin of error. The initial set of future traffic volumes were balanced between the upstream departure volumes and downstream arrival volumes to ensure equilibrium of traffic volumes within the study area. Similarly, traffic volumes generated by SF-CHAMP were used to create growth factors on the parallel streets and side streets for BRT project scenarios. These growth factors were applied to the calibrated Synchro existing conditions model to estimate traffic volumes for each intersection in 2015 and 2035 for all of the build alternatives. The next two steps involved adjustments to the raw model outputs that account for differences in turning opportunities in order to more realistically represent diverted traffic within the corridor.

4) Adjustments to raw model outputs. Using the raw estimated traffic volumes created through steps 1-3 above, a series of adjustments were made based on knowledge of San Francisco traveler behavior, as described below.

4a) Incorporating differences in turning opportunities: The build alternatives would include elimination of 13 left-turn pockets along Van Ness Avenue in both northbound (6 bays) and southbound directions (7 bays) as seen in Tables MR8-1 and MR8-2 below. Also, a design variation (Design Option B,) was considered for the two center-lane BRT alternatives, under which left-turn bays would only be provided at Broadway in the southbound direction and at Lombard in the northbound direction. The LPA incorporates Design Option B. With the reduced number of left-turn opportunities, left turn volumes from the existing left turn bays were adjusted using knowledge of San Francisco and general traveler behavior, based on the assumptions below. TAC staff with San Francisco based traffic engineering experience, including the City Traffic Engineer, reviewed the assumptions for reassigning left turning vehicles.

- Approximately one-third of the left-turn traffic would be diverted to the upstream left turn bay if there is one available within two blocks of the affected intersection.
- Approximately one-third of the left-turn traffic would be diverted to the downstream left turn bay if there is one available within two blocks of the affected intersection.
- Approximately one-third of the left-turn traffic would circle the block to reach its desired destination points. Additionally, if upstream and downstream left-turn opportunities are unavailable within two blocks of the affected intersection, then all left turning traffic would circle the block.

Table MR8-1: Van Ness Avenue Northbound Left Turn Opportunities by Alternative

Northbound	Alternative 1 (No-Build)	Alternative 2 (Side Lane BRT)	Alternative 3 and 4 (Center Lane BRT)	Alternative 3 and 4 (Center Lane BRT) with Design Option B
Hayes	✓	✓	✓	
Grove	✓	✓	✓	
Turk	✓	✓	✓	
Ellis	✓			
Geary	✓			
Pine	✓	✓	✓	
Sacramento	✓			
Jackson	✓			
Pacific	✓			
Green	✓			
Union	✓	✓	✓	
Lombard	✓	✓	✓	✓

Note: The LPA incorporates Design Option B, and thus is represented in the far right column.

Table MR8-2: Van Ness Avenue Southbound Left Turn Opportunities, by Alternative

Southbound	Alternative 1 (No-Build)	Alternative 2 (Side Lane BRT)	Alternative 3 and 4 (Center Lane BRT)	Alternative 3 and 4 (Center Lane BRT) with Design Option B
Fell	✓	✓	✓	
Grove	✓			
McAllister	✓			
Golden Gate	✓	✓	✓	
Eddy	✓			
O'Farrell	✓			
Bush	✓	✓	✓	
Clay	✓			
Washington	✓			
Broadway	✓	✓	✓	✓
Filbert	✓			

Note: The LPA incorporates Design Option B, and thus is represented in the far right column.

4b) Accounting for circuitous or unlikely detours: For this step, the raw volumes created by applying growth factors provided by the SF-CHAMP model to the 2007 existing conditions volumes were refined based on professional judgment and past experience to reduce the number of trips that the model predicted would divert outside the corridor, and put them on parallel streets within the corridor (i.e., Gough, Franklin, etc.) A list of criteria was created for the manual adjustment of the traffic volumes to account for circuitous or unlikely detours projected by the SF-CHAMP model. TAC staff with San Francisco based traffic engineering experience, including the City Traffic Engineer, reviewed the methods and criteria to account for circuitous or unlikely detours. The raw outputs generated using SF-CHAMP growth factors were revised if modeled diverted vehicles were assigned to streets outside of the traffic study area that have steep slopes or numerous stop signs, to streets that are narrow and residential (e.g., northern sections of Webster Street) or to streets that are discontinuous in many sections along its routes (such as mid-section of Octavia Street). The streets meeting the criteria above are not suitable or attractive for traffic diversions. At the same time, the parallel arterial streets within the study area, such as Franklin, Gough, Hyde, and Larkin are one-way and have better signal synchronization, higher capacities, and are closer to Van Ness Avenue to accommodate diverted traffic.

Vehicles assigned to those streets with less capacity by SF-CHAMP were manually reassigned to the parallel arterial streets in the study area with more capacity. This means that the traffic impact analysis represents higher traffic volumes and more congestion when determining environmental impacts than if the growth factors from SF-CHAMP were used without any manual adjustments.

4c) Detailed, congestion-related adjustments: The third round of manual adjustments was applied to achieve an equilibrium of traffic volumes in the study area, especially for the northern portion of the traffic study area. This is necessary because the northern section of Gough Street has only one southbound lane, instead of the 3-5 southbound lanes in the southern section, and many intersections have stop signs while Van Ness Avenue has higher capacities and a lower volume to capacity ratio. Manual adjustments were made to relocate some traffic from Gough Street to Van Ness Avenue and Polk Street southbound in order to balance overall traffic demand in the southbound direction in the northern section of the study area.

This adjustment is reasonable because the roadway network in downtown San Francisco is a grid system, and driver behavior indicates that travelers in San Francisco will find the fastest alternative routes to reach their destinations if one street is overly congested. This is especially the case if the congested street is more constrained, has numerous stop signs, and has a steep grade (e.g., northern sections of Gough Street) whereas alternative streets have comparatively more lanes and capacities (e.g., Van Ness Avenue). Approximately 100 to 120 vehicles were reassigned for the 2015 build alternatives. Approximately 150 to 170 vehicles were reassigned for the 2035 build alternatives. TAC staff with San Francisco based traffic engineering experience, including the City Traffic Engineer, reviewed the methodology for making these detailed, congestion-related adjustments.

4d) Accounting for different left turning opportunities for Design Option B and the LPA: Design Option B and the LPA only have one left turn opportunity SB (Broadway) and one left turn opportunity NB (Lombard) within the BRT corridor. Based on data about the origins and destinations of left-turning drivers from SF-CHAMP, as well as the relative capacities, operations, and characteristics of the numerous intersections in the Van Ness BRT Traffic Study Area, left-turning traffic at the left turn bays for Build Alternatives 3 and 4 was reassigned to other routes within the study area to develop the 2015 and 2035 Build Alternatives 3 and 4 Design Option B (and the LPA) traffic volumes. All vehicles for each left turn opportunity were reassigned based on the likely diversion of traffic for that particular movement. Figure MR8-1 below provides an example of how the reassignment was done for NB left turns at Pine Street. Appendix 7 of the Vehicular Traffic Analysis Technical Memorandum shows how the reassignment was done for all eight remaining left turn opportunities. TAC staff, including the City Traffic Engineer, reviewed the approach to reassignment of the left turning traffic for Design Option B.

4e) Balancing: The forecast traffic volumes were then balanced between the upstream departure volumes and downstream arrival volumes to ensure equilibrium of traffic volumes within the study area for all No Build and Build alternatives.

The adjustment method described above provided the resulting changes in travel demand and vehicle traffic volumes for each No Build and build alternative in 2015 and 2035. The Vehicular Traffic Impact Analysis Technical Memorandum (CHS, 2013), Appendix 8, shows the volumes of all turning movements at all intersections in all scenarios in this EIS/EIR.

The resulting volumes indicate that on average, there would be 19 percent to 32 percent fewer private vehicles on Van Ness Avenue in 2015 with the implementation of BRT. This equates to roughly 315 to 650 fewer vehicles in each direction, depending on the location than under the No Build Alternative in 2015.⁹ This also means that in almost all locations along the corridor, the majority (67%-81%) of drivers on Van Ness Avenue in the No Build Alternative would likely continue to drive on Van Ness Avenue with the implementation of BRT because it would still be the quickest/most direct route to their destinations.

⁹For Design Option B (LPA), due to the elimination of left turns along Van Ness Avenue and subsequent traffic diversions to other streets, the very southern end of the corridor near Market Street would experience a significantly greater reduction in vehicle traffic volumes on Van Ness Avenue, particularly in the NB direction (up to 965 fewer vehicles per hour than in the No Build Alternative – nearly 50%).

Figure MR8-1: Reassignment of left turn volumes for NB Pine Street for Design Option B (LPA)



Resulting Changes in Travel Demand and Vehicle Traffic Volumes

Results further indicate that the 19 percent to 32 percent of private vehicle trips that would otherwise have used Van Ness Avenue under the No Build Alternative 1 in 2015 would change their tripmaking in a number of different ways. The changes in travel behavior for the 315-650 “former Van Ness drivers” are forecast to be split between the following:

- Travelers who would continue to drive during the PM peak hour, but use one of the parallel streets in the corridor (Gough, Franklin, Polk, Larkin, or Hyde streets) instead of Van Ness Avenue;¹⁰ or
- Travelers who would use transit; walk or bike; change the time of day of their trip; forego the trip; or continue to drive during the PM peak, but use a route through another part of the city other than Gough, Polk, Hyde, or Larkin Streets.

The resulting volumes indicate that in the 2015 PM peak, with the implementation of BRT, an average of 35 to 430 vehicles in each direction (1 to 7 vehicles per minute) could divert away from Van Ness Avenue and make their trip on a parallel street within the corridor (i.e., travel on Gough, Franklin, Polk, Larkin, and Hyde streets). The amount of additional private vehicles traffic varies widely up and down the two-mile stretch of corridor analyzed, but any given segment of Gough, Franklin, or Polk streets could experience an additional 50 to 250 vehicles during the PM peak hour (vph) in most typical locations, or roughly one to four additional vehicles per minute (source: CHS, 2013). Volumes on Franklin Street would tend to have the largest increase in traffic volumes of those three parallel streets while Polk would tend to have the lowest increase (on some segments along Gough and Polk streets, there would be no increase in traffic volumes during the PM peak hour with the implementation of BRT). Larkin and Hyde streets could also experience an increase in traffic volume of approximately 20 to 130 vph during the PM peak hour in typical locations, with Larkin experiencing higher increases in traffic volumes than Hyde Street. Some segments of Larkin and Hyde streets would experience even lower or no increases in traffic volumes during the PM peak hour with the implementation of BRT. The PM peak hour represents the worst-case traffic conditions.

As an example, Figure MR8-2 shows changes of traffic volumes in 2015 with the implementation of the LPA versus the No Build Alternative. Between Eddy and California streets, under Design Option B (LPA), approximately 540 fewer vehicles would travel on Van Ness in the SB direction and approximately 410 fewer vehicles would travel in the NB direction than under the No Build Alternative. Of the combined 950 vehicle reduction during the PM peak hour, approximately 360 (six per minute) vehicles would divert onto Gough, Franklin, Polk, Larkin, or Hyde streets. Franklin Street would have the highest increase in vehicles (160 vehicles per hour, or about three per minute), and increased traffic volumes on Polk Street would be next highest, with approximately 140 vehicles per hour. Gough, Larkin, and Hyde streets would have significantly fewer vehicles diverted from Van Ness, with less than 60 additional vehicles per hour (less than one per minute) between Eddy and California.¹¹

Other drivers who would have traveled on Van Ness Avenue without the implementation of BRT would choose to drive at a different time of day, drive on a different route outside of adjacent parallel streets, or travel by

¹⁰ SF-CHAMP includes classifications for all streets in San Francisco (e.g., arterial, major arterial, local, etc.), and incorporates the fact that Van Ness Avenue is US 101 into its calculations for whether a driver would divert. The fact that a significant number of regional auto trips already use other routes in the corridor such as Franklin and Gough (see Chapter 3.1) instead of Van Ness Avenue is an indication that a diversion of some of these drivers to other routes with the implementation of BRT is a reasonable model output.

¹¹ The greatest increase in traffic volumes in the study area would be on Franklin Street, north of Market Street for Design Option B and the LPA. Due in large part, to the reduction of left turn pockets along Van Ness Avenue, left turning vehicles under the Design Option B and LPA would use that segment of Franklin Street to go north. Thus, that intersection during the PM peak hour would experience an increase of up to 560 left turning vehicles in 2015 and 620 left turning vehicles in 2035 with the implementation of the LPA. These increases in traffic volumes are significantly higher than the increases at other segments along Franklin Street (more than three times the average of increased volumes at other screenline intersections along the corridor), and even higher than intersections on other parallel streets (more than five times the increase on Gough Street). The Synchro traffic analysis model incorporates these increased volumes when calculating significant traffic impacts, and shows that this change in traffic volumes causes operations at the intersection of Franklin and Market Street to perform at LOS F, with more than 100 seconds of delay for the left turn from Market Street onto Franklin Street in 2015 (see Section 3.3.3.2 and Master Response #9).

Francisco Planning Department for environmental review. The Synchro model developed for this EIS/EIR can account for roadway striping, signal phasing and timing, pedestrian volumes, and conflicts between pedestrian crossing and turning vehicles. Its results include LOS and delay, for each movement and for the intersection as a whole, as well as vehicle queue length.

In the near term (2015), the EIS/EIR (Chapter 3.3) indicates that there would be up to four intersections in the traffic study area that would operate at LOS E or F with the implementation of BRT (the LPA represents the highest number of intersections that would operate at LOS E or F of any of the alternatives), all of which would be on streets parallel to Van Ness Avenue. In 2035, the EIS/EIR indicates that up to 12 intersections in the traffic study area would operate at LOS E or F with the implementation of BRT (the LPA represents the highest number of traffic delay intersections).

Chapter 3.3 states that there would be significant traffic delay (LOS) impacts associated with the build alternatives in both 2015 (two to three intersections, depending on the alternative) and 2035 (five to eight intersections, depending on the alternative). The EIS/EIR identifies three intersections with significant impacts in 2015 (Franklin/Market, Gough/Hayes, and Franklin/O'Farrell). These impacts would apply to the LPA may be determined to be unavoidable, as described below. The EIS/EIR identifies eight intersections with significant impacts in the long term (2035) with the implementation of BRT. These impacts would apply to the LPA and may be determined to be unavoidable, as described below:

Gough/Sacramento

Gough/Eddy

Gough/Hayes

Franklin/O'Farrell

Franklin/Eddy

Franklin/McAllister

Franklin/Market/Page

South Van Ness/Mission/Otis

There are no intersections operating at LOS E or F on Van Ness Avenue in existing conditions (2007). The perceived congestion is due mostly to operational constraints (uncoordinated signals, left turns, etc.) which can create long queuing for certain movements at certain intersections. However, the overall delay at these intersections operates at acceptable levels. Results indicate that there would be no significant traffic impacts at intersections on Van Ness Avenue in 2015 and only one (South Van Ness/Mission/Otis) in 2035. This is, in part, due to the reduction in traffic volumes. However, the remaining traffic on Van Ness Avenue would also benefit from the reduction in left turns as well as the transit signal priority, reducing delays for the north-south traffic traveling on Van Ness Avenue. These improvements, coupled with SFgo traffic signal technology on Gough Street, Franklin Street, and Van Ness Avenue, can help ensure that traffic operations in the corridor are managed such that the impacts do not exceed those identified in this EIS/EIR.

This EIS/EIR identifies mitigation measures such as restriping lane markings for additional turn lanes, changing signal timing, or adding traffic signals. However, Sections 3.3.4.1 (2015 Build Alternative) and 3.3.4.2 (2035 Build Alternative) of the EIS/EIR explain in detail that these potential mitigation measures have various problems that may result in findings of infeasibility, as summarized below::

1. Pedestrian Conflicts. At the intersections of Gough/Hayes, Van Ness/Hayes, Franklin/Pine, Franklin/Eddy, Franklin/McAllister, Gough/Sacramento, Gough/Eddy, and South Van Ness/Mission/Otis, potential mitigation measure scould include the removal of parking during peak periods to create a tow-away lane and/or creating a right-turn pocket, or changing intersection signal timing. These changes would potentially increase pedestrian safety risks by increasing traffic that would otherwise not use these intersections (induced traffic) and eliminating on-street parking, which provides a buffer between moving vehicles and pedestrians.

2. Transit Conflicts. At the intersection of Franklin/O'Farrell, a potential mitigation measure could include removing a bus-only lane along O'Farrell Street, but doing so would adversely affect bus speed and cause delays in Muni bus operations.

3. Bicycle Conflicts. At the intersection of Franklin/Market/Page, potential mitigation measures could include closing Page Street to vehicular traffic and signal timing changes that eliminate the Page Street phase from the signal, but the loss of the Page Street phase of the traffic signal would make it difficult for bicycle users, who heavily utilize Page Street bike lanes, to turn left onto Market Street bike lanes.

The EIS/EIR identifies mitigation measures and provides information about those measures. The decision to adopt mitigation measures will be made by the decision-makers (i.e., the Authority Board). Decision-makers will consider the Final EIS/EIR prior to deciding whether to approve the project. As part of that process, decision-makers will make any required findings, and, for CEQA purposes, those will include determining whether mitigation measures are feasible or infeasible, considering specific economic, legal, social, technological or other considerations. If the decision-makers determine that mitigation measures or project alternatives that reduce or avoid significant impacts are feasible, they will be adopted and incorporated into the project. If the decision-makers determine that mitigation measures are infeasible and that significant and unavoidable impacts will occur, decision-makers will need to adopt findings that the project will result in economic, legal, social, technological or other benefits, notwithstanding the unavoidable environmental risks of the project.

In addition to the mitigation measures discussed above involving intersection reconfigurations, both the Draft and Final EIS/EIR discuss traffic management strategies that, while not reducing intersection traffic impacts to less than significant levels, may improve traffic management in the study area. These strategies, which are included in mitigation measure M-Traffic Management Toolbox, described in Section 3.3.4.2, include such actions as:

- Providing guidance to drivers regarding alternate routes through signage and wayfinding guides. Such strategies are part of mitigation measures TR-C2 and TR-C5 (See Final EIS/EIR Section 4.15.1.2). The SFMTA would continue to monitor traffic after construction and during project operation. If the above mentioned construction measures prove to be helpful in minimizing traffic delay impacts, the SFMTA may choose to implement similar strategies on an as-needed basis during project operation.
- Providing information to drivers and others during project construction regarding circulation changes and alternate routes, including developing a transportation management plan during construction. Such strategies are part of mitigation measure TR-C7 (See Final EIS/EIR Section 4.15.1). These information channels could create new patterns, helping inform drivers during operations phase.
- Adding pedestrian amenities in the project area to reduce the effects of automobile traffic delays on pedestrians. These types of pedestrian improvements cannot be modeled to show a reduction in traffic on an individual project/intersection basis. Rather, shifts from driving to walking tend to occur as a network of improvements are implemented. The toolbox of improvements identified in Section 3.3.4.2 can be used to help build that network, and over the long run may reduce traffic volumes and therefore traffic impacts. In the near-term, they will not worsen traffic conditions.

The EIS/EIR and the Vehicular Traffic Analysis Technical Memorandum (CHS, 2013) have been corrected, where needed, to show that there are 139 intersections in the traffic study area. The Vehicular Traffic Analysis Technical Memorandum and the EIS/EIR explain that the LOS analysis presented in both of those documents provided the results of the model analysis for those intersections showing LOS E or F conditions, but the model analysis included all 139 intersections in the study area. The analysis showed better than LOS E or F conditions (e.g. LOS A-D conditions) at many intersections in the study area; those intersections showing LOS E or F conditions are described in the EIS/EIR and the Vehicular Traffic Analysis Technical Memorandum. Figures 3.3-2 through 3.3-10 show which of the 139 intersections in the study area would operate at LOS A-D, LOS E or LOS F for 2007 existing conditions and for each project alternative, including the No Build Alternative, in 2015 and 2035.

Master Comment #10: Calculating air quality impacts on Van Ness Avenue, Franklin Street, and Gough Street

The following comments touch on the Master Comment #10 topic: I-25-1, I-32-5, I-36-8, I-37-1, I-40d-25, I-40d-29, and I-68-1.

Master Response #10:

As explained in Master Response No. 9, implementation of the proposed project would result in changes to existing traffic conditions with regards to traffic flow and circulation. Changes to traffic setting would directly impact localized air quality. Therefore, air quality impacts associated with changes to traffic conditions are discussed in Section 4.10, Air Quality of both the Draft and Final EIS/EIR and reiterated below. Implementation of the proposed project would result in a diversion of automobile travelers from Van Ness Avenues to parallel street (e.g., Franklin Street). Consequently, traffic volumes on Franklin Street are anticipated to increase, resulting in slower travel speeds. Baseline traffic volumes were obtained from the SYNCHRO traffic operations model were used as inputs for the location-based air quality impact analysis. Increased traffic volumes on parallel streets would potentially increase localized pollutant concentrations. As discussed in Section 4.10, pollutant concentrations were assessed using CALINE4 estimated for 3,443 vehicles that would be diverted onto Franklin Street. This volume included baseline traffic volumes and then considered increased traffic looking ahead to the year 2035, both with and without the proposed BRT project. As shown in Table MR 10-1, under year 2035 with BRT traffic conditions, CO, NO₂, PM₁₀ and PM_{2.5} concentrations along Franklin Street would be well below State standards.

Therefore, the proposed project would result in a less-than-significant impact related to localized pollutant concentrations associated with traffic diversion onto parallel streets.

Table MR 10-1: Localized Operational Concentrations, 2035 with BRT

POLLUTANT	CONCENTRATION AT NEAREST SENSITIVE RECEPTOR	STATE STANDARD	SIGNIFICANT IMPACT ?
CO (1-Hour)	0.5 ppm	20 ppm	No
CO (8-Hour)	0.35 ppm	9.0 ppm	No
NO ₂ (1-Hour)	<0.009 ppm	0.18 ppm	No
PM ₁₀ (24-Hour)	14 µg/m ³	50 µg/m ³	No
PM ₁₀ (Annual)	2.8 µg/m ³	20 µg/m ³	No
PM _{2.5} (Annual)	1.2 µg/m ³	12 µg/m ³	No

SOURCE: Terry A. Hayes Associates Inc., *Van Ness BRT Project Air Quality Impact Report Addendum, 2013.*

An increase in traffic volumes on parallel streets would potentially increase vehicle idling. Section 4.10, *Air Quality* evaluated localized air emissions associated with the potential increase in vehicle idling. An idle emissions analysis was completed using the CAL3QHC dispersion model at intersections that would experience the highest vehicle delay in the long-term, horizon year of 2035. This was identified as the Gough Street/Hayes Street intersection with a PM peak hour volume of 3,954 vehicles and an average delay of 195 seconds per vehicle. CAL3QHC incorporates methods for estimating queue lengths and the contribution of emissions from idling vehicles. The model permits the estimation of total air pollution concentrations from both moving and idling vehicles. The model calculates CO and PM concentrations. As shown in Table MR 10-2, under year 2035 with BRT traffic conditions, emissions associated with idling vehicles would be well below State standards.

Table MR10-2: Idle Emissions, 2035 with BRT

POLLUTANT	SIDEWALK CONCENTRATIONS	STATE STANDARD	SIGNIFICANT IMPACT ?
CO (1-Hour)	0.1 ppm	20 ppm	No
CO (8-Hour)	0.07 ppm	9.0 ppm	No
PM ₁₀ (24-Hour)	4 µg/m ³	50 µg/m ³	No
PM ₁₀ (Annual)	0.8 µg/m ³	20 µg/m ³	No
PM _{2.5} (Annual)	0.3 µg/m ³	12 µg/m ³	No

SOURCE: Terry A. Hayes Associates Inc., *Van Ness BRT Project Air Quality Impact Report Addendum, 2013.*

Moreover, localized CO concentrations, known as hotspots, were assessed due to associated heavy traffic congestion, which most frequently occurs at signalized intersections of high-volume roadways. The Bay Area Air Quality Management District (BAAQMD) has developed the following screening criteria for determining whether a project should be further analyzed for localized CO impacts:

- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The proposed project would not increase traffic volumes at any intersections in the traffic study area (including Van Ness Avenue and five parallel streets: Gough, Franklin, Polk, Larkin, and Hayden) to more than 24,000 vehicles per hour. For example, the maximum PM peak hour volumes on Franklin Street with the proposed project would be approximately 3,023 and 3,443 vehicles in 2015 and 2035, respectively. As a result, the proposed project would be consistent with the criteria above and further analysis of CO concentrations is not required. Therefore, the proposed project would result in a less-than-significant impact related to localized CO concentrations.

Master Comment #11: Calculating noise and vibration impacts on Van Ness Avenue, Franklin Street, and Gough Street

The following comments touch on the Master Comment #11 topic: A-5a-4, A-5a-8, , A-5a-9, I-25-1, I-32-4, I-40d-26, I-40d-29, and I-68-1.

Master Response #11:

Traffic impacts related to traffic diversion are discussed in Chapter 3.3, while noise and vibration impacts related to traffic diversion are discussed in Chapter 4.11 of the both the Draft and Final EIS/EIR.

The criteria in the federal *Transit Noise and Vibration Impact Assessment* guidelines (FTA, 2006) were used to assess existing ambient noise levels and future noise impacts from BRT operations. They are founded on well-documented research on community reaction to noise and are based on change in noise exposure using a sliding scale. The amount that transit projects are allowed to change the overall noise environment is reduced with increasing levels of existing noise. The noise impact criteria for human annoyance are based on a comparison of the existing outdoor noise levels and the future outdoor noise levels from a proposed transit project. They incorporate activity interference caused by the transit project alone and annoyance due to the change in the noise environment caused by the project. There are two levels of impact included in the FTA criteria, as shown in Figure 4.11-3. The interpretations of these two levels of impact are summarized as follows:

- **Severe Impact.** Project noise above the upper curve is considered to cause Severe Impact because a significant percentage of people would be highly annoyed by the new noise.
- **Moderate Impact.** The change in the cumulative noise level is noticeable to most people, but it may not be sufficient to cause strong, adverse reactions from the community. In this transitional area, other project-specific factors must be considered to determine the magnitude of the impact and the need for mitigation, such as the existing level, predicted level of increase over existing noise levels, and the types and numbers of noise-sensitive land uses affected.

The evaluation of vibration impacts can be divided into two categories: (1) human annoyance, and (2) building damage. Generally, human annoyance criteria are used to assess potential impacts associated with operational vibration, whereas building damage criteria are used to estimate vibration impacts due to construction activities.

Noise monitoring was conducted at various sites along Van Ness Avenue to assess the existing noise conditions throughout noise-sensitive regions in the project area. The monitoring sites include noise-sensitive locations, such as residences, a concert hall, and a hotel. The primary objectives of the measurements are to evaluate the existing noise environment and determine the appropriate impact criteria per FTA guidelines. BRT noise levels were calculated using the operation schedule, speed, and distance of the proposed project limits. The calculated noise levels were then compared to the “Moderate Impact” and “Severe Impact” criteria, established according to the ambient noise conditions. Calculation results demonstrate no anticipated noise impacts along Van Ness Avenue from the proposed BRT service.

Section 4.11.5.2 describes the noise and vibration effects of the project on parallel streets that would receive the most diverted traffic under project conditions. This analysis takes into account the diversions of private vehicles to parallel streets within the Van Ness Avenue corridor, using the Synchro numbers from Appendix 10 of the Vehicular Traffic Analysis Technical Memorandum (CHS, 2013) as inputs for location based noise and vibration impact analysis. (See Section 4.11.5.2.) The traffic related noise increases were calculated using the ratios of the existing and projected traffic volumes for the no-build alternative and the build alternatives, including the LPA, with or without the Vallejo NB station variant.

The analysis in Chapter 4.11 indicates that there would be a less than significant noise and vibration impact due to traffic diverted onto parallel streets during project operation. Noise-sensitive land uses (receivers) were analyzed along and between Franklin and Gough streets, including primarily residential buildings as well as schools, churches, hotels, and two small museums (see Section 4.11.4). Franklin and Gough streets are expected to attract more of the traffic that will divert from Van Ness Avenue with the BRT than any other routes; worst-case traffic noise levels were calculated on these streets using traffic volumes representing LOS C conditions, the loudest hour conditions (see Section 4.11.5.2). Along segments of these two roadways paralleling Van Ness Avenue, future traffic noise levels under the build alternatives are predicted to be zero to 1.5 dB higher than future no-project noise levels and, relative to existing traffic noise levels, future project traffic noise levels would increase by zero to 2.2 dB; typically, a noise level change of 3 dB or less is not noticeable (see Section 4.11.5.2). The project noise study also concluded that the potential for vibration impact from rubber-tire-fitted vehicles, such as those used in BRT projects, can be reasonably dismissed (see Section 4.11.5.3).

Master Comment #12: Incorporating CPMC into analyses, including emergency services operations and construction coordination.

The following comments touch on the Master Comment #12 topic: I-36-5, I-56-2, I-56-6, I-56-7, and O-1-4.

Master Response #12:

Traffic Analysis Incorporation of the CPMC Project

The Draft EIS/EIR traffic analysis accounted for the California Pacific Medical Center (CPMC) expansion project in the 2035 horizon year and the document identifies cumulative environmental impacts of Van Ness BRT in combination with CPMC and other planned projects consistent with regional residential and employment growth projections (see Section 5.5.1.5 of the Final EIS/EIR for a description of the updated analysis). CPMC

expansion is considered a reasonably foreseeable project for purposes of the cumulative impacts analysis, with expected completion in 2016. As explained in Section 5.5 of the EIS/EIR, the travel demand forecasting model used to project traffic volumes for the 2015 opening year and 2035 horizon year included trips generated by foreseeable projects. Also, to ensure consistency between the CPMC and Van Ness BRT environmental analyses, traffic volumes for intersections in the vicinity of CPMC were modified to reflect the projected vehicle trip generation in the CPMC EIR for the 2035 alternatives.

The 2035 trip volumes accounting for CPMC were used to simulate the traffic speeds and delays presented in Section 3.3 of the EIS/EIR (since CPMC construction is not scheduled for completion until after 2016, it was not reflected in the 2015 models). That section compares the modeled 2035 build alternatives traffic speeds and delays with the baseline year (2007) as well as the 2035 No Build Alternative. Using the significance criteria specified in Section 3.3.3, it identifies cumulative traffic impacts of Van Ness BRT in combination with CPMC and other planned projects.

For more information, Section 2.7 of the EIS/EIR describes the CPMC project and other planned land use and transportation projects that could be implemented during the same timeframe but independent of Van Ness BRT in or near the project corridor. Section 3.3 and the Vehicular Traffic Impact Analysis Technical Memorandum describes the traffic analysis methodology and lists all project-specific and cumulative traffic impacts. Section 5.3 provides a full list of reasonably foreseeable projects and their expected completion dates, while Section 5.5 further explains the cumulative traffic impact analysis and summarizes cumulative impacts.

As discussed in Section 5.5.1.5, construction of multiple projects, such as CPMC and the Van Ness Avenue BRT, within close vicinity would escalate the traffic impacts during the construction period. The impacts would be adverse, but they could be lessened by closely coordinating the projects to implement a Transportation Management Plan (TMP) and to keep the public informed about the construction schedule and activities throughout the construction period. A TMP that includes traffic rerouting, a detour plan, and public information procedures will be developed during the design phase with participation from local agencies including Caltrans, other major project sponsors in the area (e.g., the CPMC and Geary Boulevard BRT projects), local communities, and affected travelers. Early and well-publicized announcements and outreach will help to minimize confusion and traffic congestion at the start of construction.

Ambulance Access to CPMC

Van Ness Avenue BRT will facilitate ambulance access to CPMC. Emergency vehicles may use transit-only lanes throughout San Francisco, and would be allowed full use of the BRT lanes on Van Ness Avenue to bypass traffic in the mixed-flow lanes. The BRT lanes in the LPA are physically separated from the mixed-flow lanes only at stations, allowing emergency vehicles to enter or exit the lanes as necessary throughout the corridor, including at every intersection, as discussed in Chapter 2 of the EIS/EIR. Thus, emergency vehicles would have access to the same number of lanes under the build alternatives as the No Build Alternative. Chapter 2 of the both the Draft and Final EIS/EIR also explains that emergency vehicles would be able to trigger Transit Signal Priority similar to the BRT vehicles.

Ambulances would not access CPMC directly from Van Ness Avenue. CPMC plans to locate the ambulance entrance on Post Street just east of Franklin Street (San Francisco, 2012).

Master Comment #13: Pedestrian crossings and safety.

The following comments touch on the Master Comment #13 topic: A-5b-1, A-5b-4, A-5b-5, A-5b-6, A-7a-6, A-7h-8, O-3-1, O-7-3, O-7-9, I-10-1, I-10-2, I-28-3, I-57-4, and I-63-1.

Master Response #13:

As explained in Section 3.4 Non-motorized Transportation of both the Draft and Final EIS/EIR, Van Ness Avenue has relatively long crossing distances, and not all intersections currently provide median refuges for pedestrians unable to cross the entirety of Van Ness Avenue during one light cycle. To address this existing condition of pedestrian crossing distance and time, a crossing speed analysis was completed for the project to

estimate how quickly pedestrians would have to cross an intersection given the allotted signal time, which is discussed in Section 3.4.3.1, Pedestrian Signals and Timing. The study found that each of the build alternatives, including Design Option B and the LPA, would improve the conditions and meet required crossing speeds for pedestrians set by the City and the Federal Highway Administration at nearly all intersections.

A center lane configuration, including the configuration identified in the LPA, would require transit patrons to cross only as far as the median to reach the station platform. The proposed project would improve crossing conditions significantly in the following ways:

- 1) Shortening crossing distances with provision of curb bulbs at most signalized intersections.
- 2) Providing consistent, ADA compliant (i.e., 6 feet wide or greater) pedestrian refuges across Van Ness Avenue with protective nose cones on east-west crossings of each intersection.
- 3) Installing accessible pedestrian signals (APS), which communicate when to cross the street in a nonvisual manner, on all crosswalk legs at all signalized intersections.

These improvements are in addition to the planned installation of countdown pedestrian signals at all intersections under the No Build Alternative, and would be implemented as part of BRT construction. In addition, the project will provide a landscaped buffer along the sidewalk for the blocks where there would be no parking and no striped buffer between vehicle traffic and the sidewalk (for the LPA, this would include the block between O'Farrell and Geary streets as well as the two blocks between Broadway and Green streets). The LPA will also include guardrails along the sidewalk side of the platform except at station entrances next to crosswalks, as described for Alternative 3 in both the Draft and Final EIS/EIR. This design will reduce the amount of transit riders crossing outside of crosswalks to reach the station.

The aforementioned pedestrian design features would improve crossing conditions and reduce the chance, when compared to existing conditions, for pedestrians to be caught in the crosswalk before the light changes. Also, countdown signals display the remaining seconds to cross the street and thereby provide additional information to crossing pedestrians. Lastly, pedestrian safety would be improved with the addition of a landscaped buffer for the blocks where there would be no parking.

3. Response to Comments

Approximately 86 comment letters, emails, transcribed verbal comments, and comment cards in total were submitted during the Draft EIS/EIR public review period. Within each of these, the project team identified and numbered specific comments that pertain to the information presented in the Draft EIS/EIR. Underlined text and an adjacent number indicate these individual comments within each letter, email, transcribed verbal comments or comment card. Then on the page following each numbered letter, email, transcribed verbal comment and comment card, responses to comments are provided.

In the pages that follow, the written and transcribed comments are provided and are organized according the following groups: Agencies, Organizations, and Individuals. At the beginning of each section a table is provided that lists the commenters, and the page numbers on which the commenter's comments and response to the comments may be found.

Agency Comment
Letters and Responses
on the Draft EIS/EIR
for the
Van Ness Avenue
Bus Rapid Transit Project

Appendices I (contd')

APPENDIX I

Agency Comment Letters and Responses

REVIEWERS	PAGE NUMBER	
	COMMENT LETTER	RESPONSES
AGENCIES		
FEMA	2	4
EPA	5	7
Caltrans	8	9
Golden Gate Bridge, Highway, and Transportation	10	11
San Francisco Department of Public Health	12, 19	16, 27
San Francisco Public Utilities Commission	28	31
San Francisco Department of Public Works	32, 46, 48, 54, 56, 113 117, 121, 127, 129, 130	39, 47, 51, 55, 107, 115 120, 123, 128

U.S. Department of Homeland Security
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, CA. 94607-4052



FEMA

November 21, 2011

Rachel Hiatt, Senior Environmental Planner
100 Van Ness Avenue, Floor 26
San Francisco, California 94102

RECEIVED NOV 23 2011

Dear Ms. Hiatt:

This is in response to your request for comments on the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for Van Ness Avenue BRT Project San Francisco County.

Please consult with the City and County of San Francisco. While the City of San Francisco, San Francisco County, California is a participant in the National Flood Insurance Program (NFIP), there are no published FIRMs at this time. The City uses the Preliminary FIRMs to guide development. The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A-1-1

A summary of these NFIP floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.
- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any **development** must not increase base flood elevation levels. **The term development means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

Rachel Hiatt, Senior Environmental Planner
Page 2
November 21, 2011

- All buildings constructed within a coastal high hazard area, (any of the "V" Flood Zones as delineated on the FIRM), must be elevated on pilings and columns, so that the lowest horizontal structural member, (excluding the pilings and columns), is elevated to or above the base flood elevation level. In addition, the posts and pilings foundation and the structure attached thereto, is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.
- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at <http://www.fema.gov/business/nfip/forms.shtm>.

Please Note:

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community's floodplain manager for more information on local floodplain management building requirements. The San Francisco County floodplain manager can be reached by calling Linda Yeung, Deputy City Administrator, at (415) 554-7124.

If you have any questions or concerns, please do not hesitate to call me at (510) 627-7186.

Sincerely,



Gregor Blackburn, CFM, Branch Chief
Floodplain Management and Insurance Branch

cc:

Linda Yeung, Deputy City Administrator, City and County of San Francisco
Ray Lee, WREA, State of California, Department of Water Resources, North Central Region
Office

Gregor Blackburn, CFM, Branch Chief, Floodplain Management and Insurance Branch,
DHS/FEMA Region IX

Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: FEMA

Reviewer's
Comment
Number

Response

A-I-I	According to the 2007 Preliminary Flood Insurance Rate Map (FIRM) maps the project site is not located within a floodplain. Nonetheless, the SFMTA will consult with the City and County of San Francisco regarding floodplain management building requirements that may apply to project design as standard practice and design review during project final design.
-------	--



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

December 14, 2011

Mr. Alexander Smith
Federal Transit Administration, Region IX
201 Mission Street, Suite 1650
San Francisco, CA 94105

Subject: Draft Environmental Impact Statement for the Van Ness Avenue Bus Rapid
Transit Project, San Francisco, California (CEQ #20110372)

Dear Mr. Smith:

Alex

The Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

We commend the Federal Transit Administration and the San Francisco County Transportation Authority for seeking to improve transit service and the pedestrian environment in the Van Ness Avenue corridor. We also support efforts to reduce the quantity of stormwater runoff entering the combined sewer system and maximize onsite treatment, as proposed in the *San Francisco Better Streets Plan*, and encourage use of tools such as permeable paving, infiltration planters, vegetated swales, and rain gardens in final design of the project.

A-2-1

We have rated this Draft Environmental Impact Statement (DEIS) as LO, *Lack of Objections*. Please see the attached *Rating Factors* for a description of our rating system.

A-2-2

Also, please note that San Francisco County is federally designated as nonattainment for PM_{2.5}, in addition to ozone, as indicated in the text of the DEIS.

We appreciate the opportunity to review the DEIS. When the Final EIS is released for public review, please send one CD copy to the address above (mail code: CED-2). If you have any questions, please contact Carolyn Mulvihill, the lead reviewer for this project, at 415-947-3554 or mulvihill.carolyn@epa.gov.

Sincerely,



Connell Dunning, Transportation Team Supervisor
Environmental Review Office
Communities and Ecosystems Division

Enclosures:

Summary of EPA Rating Definitions

cc: Rachel Hiatt, San Francisco County Transportation Authority

Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: USEPA

Reviewer's
Comment
Number

Response

A-2-1	As explained in Section 4.9.3.I Hydrologic Impacts, permeable paving, infiltration planters, swales, and rain gardens are San Francisco Better Streets Plan concepts that have been identified for consideration during the 30 percent design engineering of the preferred alternative.
A-2-2	The rating of the Draft Environmental Impact Statement as "LO," Lack of Objections is part of the project administrative record.

Dec 19 11 04:09p

Div of Env Planning & Eng 510-286-5600

p. 2

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN, Governor

DEPARTMENT OF TRANSPORTATION

111 GRAND AVENUE
P.O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-6301
TTY 711



*Flex your power!
Be energy efficient!*

December 19, 2011

Michael,

Yolanda knows this went to you.

Ms. Rachel Hiatt
Senior Transportation Planner
San Francisco County Transportation Authority (SFCTA)
100 Van Ness Avenue, 26th Floor
San Francisco, CA 94102

Dear Ms. Hiatt,

The purpose of this letter is to submit the California Department of Transportation's (Caltrans) comments regarding the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/S) for the proposed Van Ness Avenue Bus Rapid Transit (BRT).

Based on our review, the traffic operations information presented in the DEIR/DEIS is inconsistent with the traffic operations analysis results in the *Transportation Operations Performance Results – Package "B"* report dated 8/31/2010.

A-3-1

In addition, the traffic operations information presented in the DEIR/DEIS appears to be inconsistent with the latest draft Project Study Report/Project Report. The Department, however, does intend to continue working closely with the SFCTA to address, resolve and reconcile a number of operational issues raised during the course of our review of the DEIS/R and the design issues raised in our review of the most recent draft Project Study Report/Project Report (PSR/PR) submitted by the SFCTA.

A-3-2

Please contact me at (510) 286-5231 or Yolanda Rivas, Office Chief of Environmental Analysis at (510) 286-6126 for more information.

Sincerely,

MELANIE BRENT
Supervising Environmental Planner

- c: Tilly Chang (SFCTA Deputy Director), Shari Tavafrashti (SFCTA Project Manager & Principal Engineer, Capital Projects), Jose Louis Moscovich (SFCTA Executive Director)

Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Caltrans

Reviewer's
Comment
Number

Response

- | | |
|-------|--|
| A-3-1 | The Transportation Operations Performance Results -- Package B, dated 8/31/2010 comprised draft text for the transportation analysis used in Chapter 3 of the analysis. Based on Caltrans (and other agency/stakeholder) inputs, the text in the Draft EIS/EIR as well as the Vehicular Traffic Analysis Technical Memorandum supersede the Transportation Operations Performance Results. These documents are consistent with the traffic operations in the Project Study Report/Project Report. Since the time of this comment, the project team has met with Caltrans staff, which found the documents to be consistent with the traffic operations information presented in the EIS/EIR. |
| A-3-2 | Please see response to comment A-3-1. |

From: David Davenport [DDavenport@goldengate.org]
Sent: Mon 12/19/2011 4:25 PM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] Van Ness BRT Draft EIS/EIR Comments

Please find a copy of the Golden Gate Bridge, Highway and Transportation District's comments regarding the Van Ness Bus Rapid Transit Project Draft EIS/EIR below. A signed hard copy has been placed in the mail. Thank you.

December 19, 2011

Mr. Michael Schwartz
Transportation Planner
San Francisco County Transportation Authority
100 Van Ness Avenue, 26th Floor
San Francisco, CA 94102

Re: Van Ness Avenue Bus Rapid Transit Project Draft EIS/EIR

Dear Mr. Schwartz:

Golden Gate Bridge, Highway and Transportation District (District) staff has reviewed the Draft EIS/EIR for the Van Ness BRT Project and offers the following comments.

District staff raised several issues when it reviewed the Administrative Draft EIS/EIR, and it appears those issues have been addressed in the Draft EIS/EIR. The District appreciates accommodations so that Golden Gate Transit (GGT) buses can effectively serve Van Ness Avenue once the Bus Rapid Transit Project is completed.

A-4-1

The District understands that there will be construction impacts as part of this project, as identified in Section 4.15. District staff looks forward to working with SFCTA to minimize the effect of those impacts on GGT bus operations and passengers.

A-4-2

Based on our understanding of the project alternatives, the District would like to formally express its preference for Alternative 3. Alternative 3, which allows for right-side passenger boarding in a center-running busway, benefits GGT passengers more than Alternative 4, while improving bus operations more than Alternative 2. However, if Alternative 4 is selected as the locally preferred alternative, the District has a strong preference for right-side boarding platforms at Union Street rather than curbside bus stops at Chestnut Street.

A-4-3

A-4-4

Thank you for providing the District with the opportunity to submit comments on the Van Ness Avenue Bus Rapid Transit Project Draft EIS/EIR. We look forward to working with SFCTA as this project is implemented. You may contact Barbara Vincent, Principal Planner, at (415) 257-4465 if you have any questions regarding these comments.

Sincerely,

Ron Downing
Director of Planning

c: B. Vincent, C. Koch, D. Davenport, R. Hibbs, File

David Davenport, Associate Planner
Golden Gate Bridge, Highway & Transportation District
(415) 257-4546

Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Golden Gate Bridge, Highway, & Transportation District

Reviewer's Comment Number	Response
A-4-1	Thank you for your comment indicating that previously raised issues have been addressed in the EIS/EIR.
A-4-2	The project team will continue to work with District staff on how to minimize disruption to Golden Gate Transit (GGT) service during construction. For example, most existing stops will be maintained during construction as feasible, or a replacement stop in the immediate vicinity will be created. The SFMTA and GGT have similar goals to maintain transit access during construction, and the traffic management plan (described in Section 4.15) will use best practices to minimize traffic and transit delays. Please see Master Response #6 for additional information about project construction.
A-4-3	Support for Build Alternative 3 noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA. The LPA allows for right side boarding.
A-4-4	Build Alternative 4 was not selected as the LPA. The staff recommended LPA maintains a Golden Gate Transit Stop at Union Street.



San Francisco
Department of Public Health

Edwin M. Lee
Mayor

December 16, 2011

Barbara Garcia MPA
Director of Health

Ms. Rachel Hiatt
Senior Transportation Planner
San Francisco County Transportation Authority
100 Van Ness Avenue, 26th Floor
San Francisco, CA 94102

Rajiv Bhatia MD, MPH
Director of Environmental Health

Re: Van Ness Avenue BRT draft EIR/EIS noise assessment

Dear Ms Hiatt:

Please accept the following comments on the draft EIS/ EIR concerning the assessment and management of transportation noise.

The adequate consideration and management of traffic noise through the planning of transportation facilities and operations is very important to public health. Human impacts of noise, including those on stress, mental function, learning, and hypertension, are determined primarily by background or ambient noise levels. Traffic noise is the predominant contributor to background or ambient noise levels in urban areas and existing levels of traffic noise are already at unhealthy levels in large areas of San Francisco. Furthermore, because the standards in city noise regulations are relative to ambient levels, any increase in the ambient level makes our city's enforceable noise regulations less health protective.

As articulated in the San Francisco General Plan Environmental Protection Element, noise-sensitive land use and transportation planning and design are *the primary policy means* to manage ambient noise levels. Currently, no city noise regulations limit or control traffic noise levels during the operation of transportation facilities. The Department of Public Health very much supports bus rapid transit (BRT) on Van Ness. BRT projects have great potential to equitably improve the quality and reliability of public transportation for all city residents and to reduce the significant public health costs of automobile-based travel. We hope these comments on the noise analysis and recommendations for design contribute to a successful project.

A-5a-1

A-5a-2



1. In the discussion of the policy and regulatory setting, please enumerate objectives and policies in the *San Francisco's General Plan Environmental Protection Element* section on transportation noise, specifically those policies that might be reasonably affected by this project, including policies under Objective 9, *Reduce Transportation-Related Noise* and Objective 10, and *Minimize The Impact Of Noise On Affected Areas*.

A-5a-3

1390 Market Street
Suite 822
San Francisco, CA 94102
Phone 415.252.3931
Fax 415.252.3818
www.sfenvironmentalhealth.org

2. The Federal Transportation Agency criteria for cumulative noise assessment (which is applied in the impact analysis) is not described or presented in the regulatory setting (4.11.2.1) I would suggest adding an explanation of cumulative criteria and how these cumulative criteria differ from project noise criteria. I would also suggest adding either Figure 3.2 or Table 3.3 from the FTA transit noise guidelines. **A-5a-4**
3. Unfortunately, the authors of the DEIR appear to have mis-applied San Francisco Police Code §2909 in proposing a 5-dB increment as a significance threshold for noise for this project. The Department of Public Health and the DPH Noise Control Officer are responsible for enforcement of Section 2909 of the Code and responsible for interpretation, monitoring and enforcement of all city noise regulations under Article 2900. While any increase in background levels of noise are of public health concern, no Section 2909 standards currently apply to changes in the ambient noise level or to changes in traffic noise levels. Most standards under §2909 are relative, that is, they provide for acceptable sound levels *above an existing ambient level*. In the application of these standards, the ambient level is defined as the lowest sound level repeating itself during a minimum ten-minute period. Traffic noise is a major component of ambient noise. Measures used to assess Section 2909 standards are short term measurements of noise (< 10 minutes) and criteria are not applied to long term measurements taken for noise analysis including the Leq (1hr) and the Ldn. Section 2909 standards apply only to noise emissions from mechanical and electronic equipment and are not applicable to traffic noise. **A-5a-5**
4. Section 2909(d) provides a project-relevant absolute standard for the maximum level of noise in an interior habitable room that can produced by a fixed exterior source of noise. This standard is provided to prevent sleep disturbance, protect public health and prevent the acoustical environment from progressive deterioration due to the increasing use and influence of mechanical equipment. Under this standard, no fixed noise source may cause the noise level measured inside any sleeping or living room in any dwelling unit located on residential property to exceed 45 dBA between the hours of 10:00 p.m. to 7:00 a.m. or 55 dBA between the hours of 7:00 a.m. to 10:00 p.m. with windows open except where building ventilation is achieved through mechanical systems that allow windows to remain closed. The standard in Section 2909(d) should be identified in discussion of the regulatory setting as it would be applicable to any fixed project-noise sources (e.g., noise sources on boarding platforms). The standard applies to short term noise measures across the day and night. **A-5a-6**
5. The California Noise Insulation Standards (California Code of Regulations, Title 24 §1207.11.3) includes a health protective interior noise standard of 45 dBA Ldn. This 45 dBA Ldn standard for habitable indoor room is the same as the level that recommended by the US EPA. This standard is intended to be protective from *all* exterior urban noise sources *including traffic noise*. The standard is usually applied in the context of building construction but could have broader applicability in environmental review (see discussion below). **A-5a-7**
6. Ambient noise levels along the corridor approach or are greater than 70 dB Ldn, meaning that project area has among the highest levels of traffic noise in San Francisco. To illustrate the noise environment in a city context, the EIR/EIS could incorporate the San Francisco Background Noise Level Map Noise Map into the description of the affected environment. The map estimates noise levels (Ldn) for all city streets based on vehicle volume, type and, speed utilizing on the SOUNDPLAN® program. This map is attached and contained within the General Plan Environmental Protection Element. **A-5a-8**
7. Most noise related health and welfare impacts are based on cumulative noise levels and not on project noise emissions. Impact evaluation for this project (Tables 4-11-4 and 4.11-5), appropriately includes evaluation of cumulative noise levels, however, from the analysis, it is not clear whether impact analysis judgments against FTA criteria are based on project noise level criteria, cumulative noise level criteria, or both. I would suggest adding the cumulative threshold level to the tables for clarity and specifying conformity with both levels separately. **A-5a-9**

8. Please remove from the EIR/EIS the noise analysis based on Section 2909 of the San Francisco Police Code (“City Noise Criterion”). For the reasons stated above, current San Francisco law does not provide support for such a standard or its application to the measures taken in this analysis. **A-5a-10**

9. Consider applying the 45 dBA Ldn standard in the State Building Code, along with an appropriate exterior to interior noise transmission factor, as a health protective standard to evaluate current and future levels of traffic noise. An ambient level, at a residential building plane, of >60 dB Ldn would be a useful proxy for violation of the 45 dB Ldn interior standard. Along the Van Ness corridor, traffic noise levels are already above this standard and well above other health based guidelines for residential locations. Given this, the project should aim to avoid any further deterioration in the noise environment. Where projects either significantly contribute to or worsen ambient noise levels, they should mitigate these effects, for example, by providing additional acoustical insulation of existing buildings. **A-5a-11**

10. In the impact analysis, consider discussion of physical infrastructure and design elements of this project relevant to General Plan policies for transportation noise. For example, Policy 9.1 states, *Limit City purchases of vehicles to models with the lowest noise emissions and adequately maintain City-owned vehicles and travel surfaces.* **A-5a-12**

11. Given that the project will result in minor increase in cumulative noise levels at some locations, we strongly concur with Improvement Measure 1-NO-1, requiring maintenance of streets to limit noise. We would suggest incorporating additional improvement measures, including those related to the purchase of quiet vehicles and vehicle maintenance. **A-5a-13**

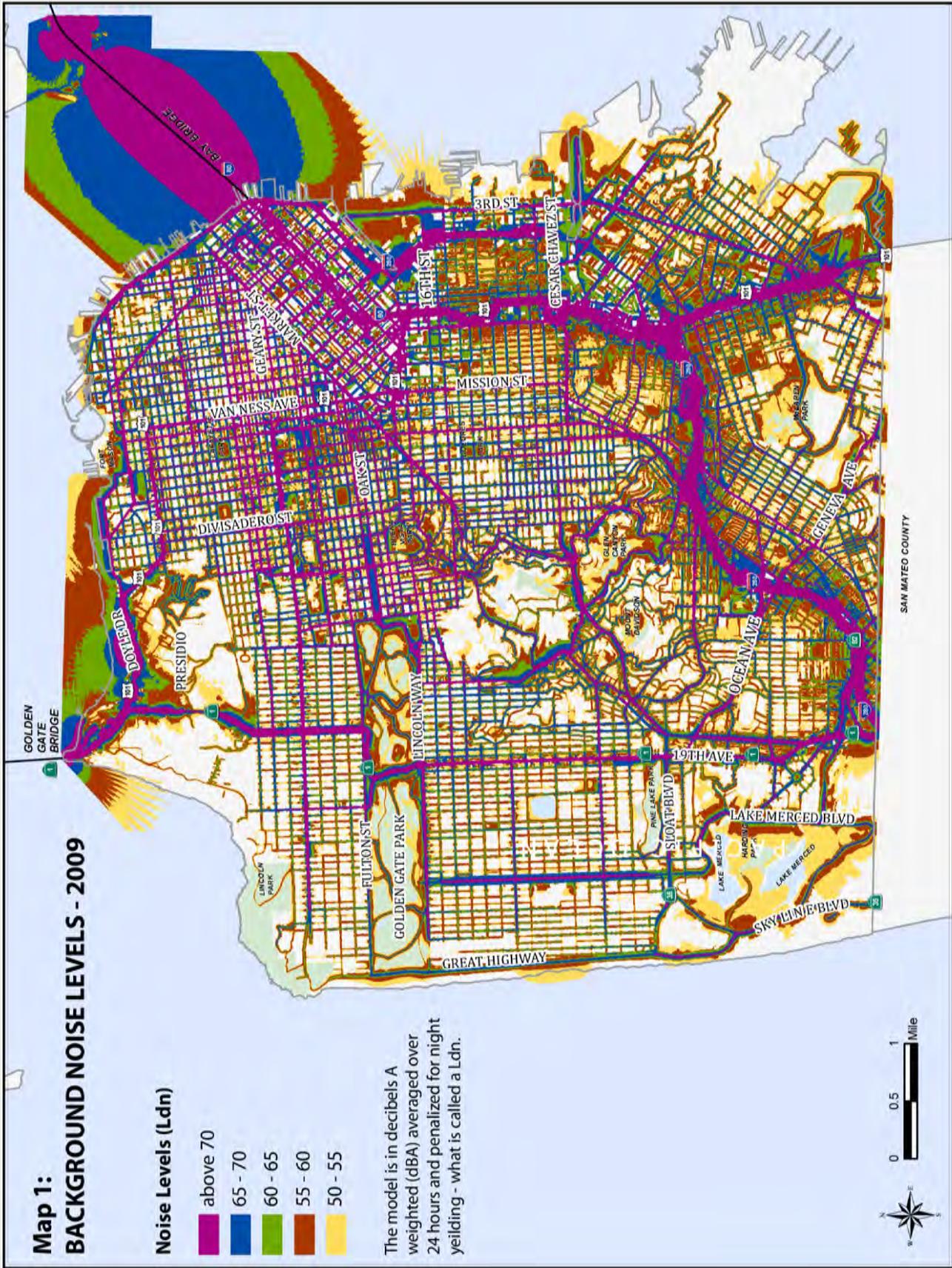
12. Consider as an additional improvement measure ensuring that the structural design of bus stops includes a review by an acoustical engineer for the purpose of limiting noise associated with passenger waiting and boarding. Each of the design options may be somewhat better or worse at shielding noise associated with stops and loading. Acoustical analysis of structural design could examine effects on noise sources including braking, acceleration, passenger loading, and public communication. **A-5a-14**

Thank you for your consideration of these comments. Please do not hesitate to contact me if you have any questions.

Sincerely,



Rajiv Bhatia, MD, MPH
Director, Occupational and Environmental Health



Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: San Francisco Department of Public Health

Reviewer's Comment Number	Response
A-5a-1	The commenter is correct. Please see response to comment A-5a-5 below.
A-5a-2	Support for project noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for analysis supporting the staff recommended LPA which proposes to build BRT for some of the same reasons noted in the comment.
A-5a-3	EIS/EIR Section 4.II.3 (Regulatory Setting) focuses on regulation and guidance relevant to quantitative noise impact criteria for assessing project and cumulative noise impacts. The policies referred to by the commenter do not directly relate to the applicable criteria. However, in response to this comment, policies bearing some relationship to the proposed project are referenced in the Draft EIS/EIR Section 4.II.3 (Regulatory Setting).
A-5a-4	Section 4.II.3 (Regulatory Setting) of the EIS/EIR displays Figure 3-1 from the FTA Transit Noise and Vibration Impact Assessment Guidelines (http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf). Per the commenter's request, Figure 3-2 from the FTA Guidelines has been added to this section of the Final EIS/EIR. Note that FTA Guidelines Figures 3-1 and 3-2 are simply two different perspectives on the same set of criteria. Although the curves in Figure 3-1 are defined in terms of the project noise exposure and the existing noise exposure, it is the increase in the cumulative noise – when project is added to existing – that is the basis for the criteria. A brief explanation of these two perspectives has been added to the Final EIS/EIR.
A-5a-5	<p>The commenter is correct that Section 2909, the noise limit from the City's municipal code, does not discuss transportation noise. As explained in Section 4.II.3, because the SFCTA is the lead agency under CEQA noise and vibration impact evaluation considers the available criteria set forth by the City of San Francisco, in addition to criteria set forth by the FTA. Section 4.II.3.2 of the Final EIS/EIR has been revised to explain that Section 2909 states that the City defines the generally accepted threshold for a clearly perceptible sound increase from a stationary source as 5dB, and that the City does not specify a threshold for transportation noise or another applicable, nonstationary source. The revised text explains that the noise threshold set forth in Section 2909 may not be the most appropriate threshold for evaluating a transit project on Van Ness Avenue, but nonetheless this threshold was considered since it is the only available, City threshold. Moreover, Table 7-1 CEQA Significance Criteria in the Final EIS/EIR was revised to state that, "The FTA thresholds were applied to determine impacts because the FTA Transit Noise and Vibration Impact Assessment (FTA, 2006) methodology and thresholds are the established method for evaluating noise and vibration impacts of transit improvements such as the proposed project. No such threshold has been established by the City of San Francisco, and the City's Municipal Code Section 2909 described below is not an appropriate threshold. Nonetheless it is considered as a frame of reference."</p> <p>The EIS/EIR indicates that future traffic noise level (L_{dn}) values at residential and hotel receivers along Van Ness Avenue would range from 72 to 77 dBA with the project. According to the City's Background Noise Level Map of 2009, the Franklin and Gough Street corridors experience roadside traffic noise level (L_{dn}) values above 70 dBA. Therefore, in accordance with the SFCTA guidelines, the noise level increase threshold would be 3 dB for this project. The predicted future increase in noise levels along Van Ness</p>

Avenue is 1 dB, while the maximum cumulative increase in Ldn predicted along either Franklin or Gough streets is 2.2 dB. Therefore, no significant impacts are anticipated using the Section 2909 guidelines.

- A-5a-6 No fixed noise sources associated with BRT stations or any other components of the proposed project were identified that posed a risk of violating the referenced Noise Ordinance provision at the nearest applicable noise-sensitive receivers. Accordingly, the referenced provision was not applied in the noise assessment.
- A-5a-7 The noise standard referenced by the commenter relates to sound insulation requirements for multifamily residential construction under Title 24. It is not directly relevant to the evaluation of the noise impacts of a transportation project at existing multifamily residences. In addition, it does not provide a threshold for project contribution to noise.
- A-5a-8 Existing noise levels reported in Tables 4.II-4 and 4.II-5 are reasonably consistent with the referenced noise map and are based on corridor-specific noise measurement data. They already demonstrate that existing noise levels along Van Ness Avenue and surrounding streets are high. Nevertheless, the referenced noise map has been added to the Final EIS/EIR.
- A-5a-9 As noted in the response to Comment 5a-4, there is only one set of FTA noise impact criteria. This set of criteria is responsive to both cumulative noise – defined by the FTA as existing plus project noise – and the project’s contribution to that cumulative noise. Conclusions regarding impact levels are identical whether they are evaluated from the perspective of Figure 3-I or the perspective of Figure 3-2 of the FTA Transit Noise and Vibration Impact Assessment Guidelines (http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf). EIS/EIR Tables 4.II-4 and 4.II-5 present sufficient information to evaluate the impact levels from either of these two perspectives; they simply use the first of these two perspectives to directly illustrate the basis for determining those levels of impact. Also, Chapter 5 provides an analysis of cumulative impacts, including a discussion of noise during project construction (Section 5.4.II).
- A-5a-10 Please see response to comment A-5a-5.
- A-5a-11 Please see Master Response #11, for a detailed description of the noise analysis methodology, which assesses existing ambient noise levels and future noise impacts from project operations. Section 4.II.5 of the EIS/EIR presents the results of the analysis which conclude that the proposed project would not worsen ambient noise levels such that mitigation measures are required, and adverse noise and vibration effects would not result. Degradation of interior noise levels requiring acoustical insulation of existing buildings would not result.
- A-5a-12 Project impacts were determined to be less than significant as long as pavement discontinuities did not cause unusual increases in operational noise and vibration levels. Accordingly no mitigation is required beyond appropriate pavement surface maintenance. However, this response discusses the practicality and degree of benefit in complying with General Plan Policy 9.I.

In general, the most distinctive characteristic that distinguishes between quieter and louder buses is whether the buses are powered by electricity or internal combustion (e.g., diesel) engines. As indicated in Chapter 2 of the EIS/EIR, there is currently an approximately even split between diesel and electric buses operating along the project corridor, and that split is expected to be maintained under any build alternative, including the LPA. The primary reason for the split fleet is the constraint on availability of Overhead Contact System (OCS) power for some bus routes. The primary bus lines operating within the project corridor are the 47 and the 49. The 47 route extends beyond OCS coverage and relies on internal combustion engine (diesel) powered buses; OCS coverage is complete along the 49 route, which is served by electric powered buses. These constraints on OCS coverage would also apply under all alternatives, including the LPA (with or without the Vallejo Northbound Station Variant). Therefore, it would not be practical to substantially increase the proportion of electric buses serving the corridor under Build conditions. This, in turn, constrains the ability to substantially reduce bus noise emissions under build

Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: San Francisco Department of Public Health

Reviewer's Comment Number	Response
A-5a-1	The commenter is correct. Please see response to comment A-5a-5 below.
A-5a-2	Support for project noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for analysis supporting the staff recommended LPA which proposes to build BRT for some of the same reasons noted in the comment.
A-5a-3	EIS/EIR Section 4.II.3 (Regulatory Setting) focuses on regulation and guidance relevant to quantitative noise impact criteria for assessing project and cumulative noise impacts. The policies referred to by the commenter do not directly relate to the applicable criteria. However, in response to this comment, policies bearing some relationship to the proposed project are referenced in the Draft EIS/EIR Section 4.II.3 (Regulatory Setting).
A-5a-4	Section 4.II.3 (Regulatory Setting) of the EIS/EIR displays Figure 3-I from the FTA Transit Noise and Vibration Impact Assessment Guidelines (http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf). Per the commenter's request, Figure 3-2 from the FTA Guidelines has been added to this section of the Final EIS/EIR. Note that FTA Guidelines Figures 3-I and 3-2 are simply two different perspectives on the same set of criteria. Although the curves in Figure 3-I are defined in terms of the project noise exposure and the existing noise exposure, it is the increase in the cumulative noise – when project is added to existing – that is the basis for the criteria. A brief explanation of these two perspectives has been added to the Final EIS/EIR.
A-5a-5	<p>The commenter is correct that Section 2909, the noise limit from the City's municipal code, does not discuss transportation noise. As explained in Section 4.II.3, because the SFCTA is the lead agency under CEQA noise and vibration impact evaluation considers the available criteria set forth by the City of San Francisco, in addition to criteria set forth by the FTA. Section 4.II.3.2 of the Final EIS/EIR has been revised to explain that Section 2909 states that the City defines the generally accepted threshold for a clearly perceptible sound increase from a stationary source as 5dB, and that the City does not specify a threshold for transportation noise or another applicable, nonstationary source. The revised text explains that the noise threshold set forth in Section 2909 may not be the most appropriate threshold for evaluating a transit project on Van Ness Avenue, but nonetheless this threshold was considered since it is the only available, City threshold. Moreover, Table 7-1 CEQA Significance Criteria in the Final EIS/EIR was revised to state that, "The FTA thresholds were applied to determine impacts because the FTA Transit Noise and Vibration Impact Assessment (FTA, 2006) methodology and thresholds are the established method for evaluating noise and vibration impacts of transit improvements such as the proposed project. No such threshold has been established by the City of San Francisco, and the City's Municipal Code Section 2909 described below is not an appropriate threshold. Nonetheless it is considered as a frame of reference."</p> <p>The EIS/EIR indicates that future traffic noise level (L_{dn}) values at residential and hotel receivers along Van Ness Avenue would range from 72 to 77 dBA with the project. According to the City's Background Noise Level Map of 2009, the Franklin and Gough Street corridors experience roadside traffic noise level (L_{dn}) values above 70 dBA. Therefore, in accordance with the SFCTA guidelines, the noise level increase threshold would be 3 dB for this project. The predicted future increase in noise levels along Van Ness</p>



San Francisco
Department of Public Health

Edwin M. Lee
Mayor

Barbara Garcia MPA
Director of Health

Rajiv Bhatia MD, MPH
Director of Environmental Health

December 19, 2011

Ms. Rachel Hiatt
Senior Transportation Planner
San Francisco Country Transportation Authority
100 Van Ness Avenue, 26th Floor
San Francisco, CA 94102

Re: Van Ness Avenue BRT draft EIS/EIR pedestrian conditions

Dear Ms Hiatt:

Please accept the following comments on the draft EIS/ EIR of the Van Ness Avenue Bus Rapid Transit Project concerning the assessment pedestrian conditions. These comments focus specifically on fatal and non-fatal injuries to pedestrians.

While bus rapid transit (BRT) has great potential to equitably improve the quality and reliability of public transportation for all city residents and to reduce the significant public health costs resulting from automobile-based travel, it is important that these projects also consider their effects on fatal and non-fatal pedestrian injuries. Transit routes tend to have higher volumes of pedestrians and therefore greater opportunities for pedestrian-vehicle conflicts and injuries. The Mayor's Citywide Pedestrian Safety Task Force (PSTF) designated Van Ness to be a "high-injury" corridor due to its relatively high linear density of pedestrian injuries and fatalities.

A-5b-1

The Department appreciates the attention given to pedestrian safety in this draft EIS/EIR. The consideration of safety conditions and project effects is much more detailed than that in environmental review documents historically conducted in San Francisco. These comments are intended to support this focus and have several objectives. First, we wish to provide supplementary data and maps on existing pedestrian safety conditions based on a comprehensive corridor analyses conducted by the PSTF in November 2011. This data complements the data in the EIS/EIR. Second, we wish to offer a summary analysis (Table 2) illustrating how the project compares with no-project conditions with regards to effects on recognized determinants of pedestrian injuries. This approach identifies a few data gaps and improvement areas. It may be a useful template for analysis for future BRT projects. Third, we wish to identify improvement measures for consideration in the design phase of the project. We hope these data, analyses and recommendations contribute to a successful project.

A-5b-2



1390 Market Street
Suite 822
San Francisco, CA 94102
Phone 415.252.3931
Fax 415.252.3818
www.sfenvironmentalhealth.org

1. Supplementary Data on Existing Safety Conditions

Figure 1, below, illustrates the location of police-recorded pedestrian injuries and police-recorded serious and fatal injuries both for the Van Ness corridor and adjacent streets for 2005-2009. Most intersections between Mission and Union have recorded pedestrian injuries. Serious and fatal injuries appear concentrated at Mission and between O'Farrell and California.

Figure 1. Pedestrian Injuries and Fatalities along the Van Ness corridor (SWITRS 2005 – 2009)

Van Ness Ave. from Mission St. to Lombard St.
San Francisco, CA

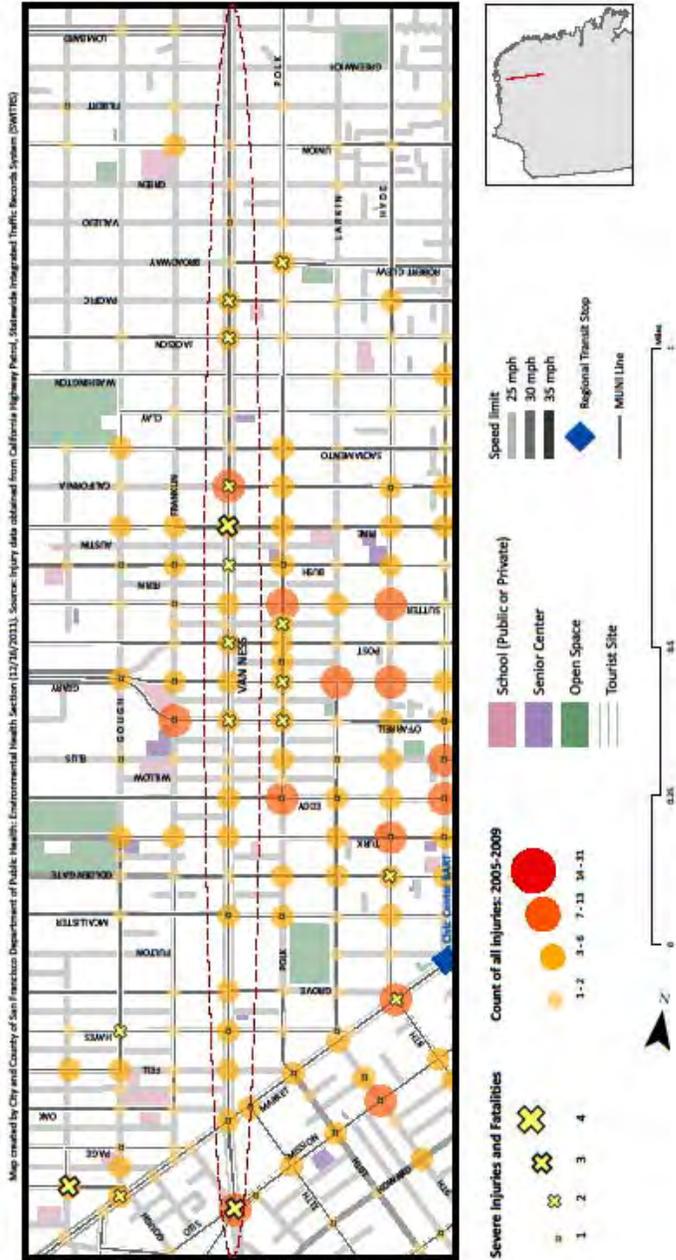


Table 1 provides selected characteristics of pedestrian injuries and collisions along the Van Ness corridor relative to the city (data source: SWITRS 2005 – 2009). Some of the key differences are enumerated below.

- The linear density of injuries and fatal collisions combined is significantly higher along the Van Ness corridor compared to the city as a whole (41.9 per mile vs. 3.5 per mile).
- The proportion of collisions resulting in serious or fatal injuries is double that of the city as a whole (25% vs. 12%). This may reflect the higher share of vehicle-involved collisions proceeding straight or potentially higher vehicle speeds.
- A higher proportion of collisions on the corridor occurred in the late evening to early morning hours relative to citywide data (51% vs. 31%), which may be an effect of both higher speed and poor vehicle and pedestrian visibility.
- Three-quarters of collisions occurred at intersections; however, one-quarter occurred at other (e.g. midblock) locations. The overall proportion of vehicle-involved collisions that were proceeding straight in advance of the collision was greater than the proportion making turns. This suggests that prevention efforts need to consider injury causes other than turn conflicts. The share of vehicle-involved collisions making right-turns is somewhat higher than the comparable citywide figure. The share of vehicle-involved collisions making left turns is similar to the citywide statistic.
- Approximately 40% of collisions are attributed to pedestrian right-of-way violations by drivers, while approximately 30% are attributed to one of several pedestrians violating the vehicle code.

Table 1. Selected Characteristics of Van Ness Corridor Pedestrian Injury Collisions with City Comparison (Data Source: SWITRS 2005 – 2009)

	Van Ness Corridor Conditions	Citywide Comparison
Pedestrian Injuries		
Total injuries (N)	88	3,883
% severe or fatal	25%	12%
Injuries and fatalities per mile	41.9	3.5
Collision location		
Total collisions (N)	85	3,730
Intersection ^a	75%	68%
Mid-block ^a	25%	32%
Collision time of day		
3:00am - 6:00am	4%	2%
6:01am - 9:00am	12%	13%
9:01am - 3:30pm	19%	35%
3:31pm - 6:30pm	15%	21%
6:31pm - 2:59am	51%	31%
Vehicle movement preceding collision^b		
Proceeding straight	39%	27%
Making right turn	13%	9%
Making left turn	22%	23%
Primary Collision Factor		
Driving Under the Influence of Alcohol or Drugs	4%	1%
Pedestrian Right of Way Violation	37%	40%
Pedestrian Violation	32%	31%
Traffic Signals and Signs	9%	5%
Unsafe Starting or Backing	6%	5%
Unsafe Speed	4%	5%

a Per SFMTA definition, intersection collisions occur <21 feet from an intersection; the remaining are classified as mid-block.

b The remaining collision vehicle movement categories were other, not stated, slowing/stopping, entering traffic, changing lanes.

2. Pedestrian Safety Impact Analysis

Table 2 summarizes existing conditions for a number of factors recognized as determinants of fatal and non-fatal pedestrian injuries and assesses the effects of both the no-build and build alternatives on these factors. This analysis utilizes data from the draft EIS/EIR along with data from the PTSF comprehensive corridor analysis. We identify specific recommendations of the Citywide Pedestrian Safety Task Force Data Subcommittee for this corridor for particular factors. Given our limited time, we did not provide an assessment based on the Pedestrian Environmental Quality Index (PEQI), though such an analysis would be amenable to this type of project. Overall, this comprehensive analysis illustrates that the build alternatives are equal or superior to no-build for all factors with available information.

Pedestrian Safety Factors	Existing Conditions	Change: Existing Conditions to No Build Alternative	Change: Existing Conditions to BRT Build Alternatives	Relationship to Pedestrian Safety	Pedestrian Safety Task Force Data Subcommittee Recommendation
Traffic					
Traffic volume	Heavy traffic volumes	-	+ to ++	Lower traffic volumes are associated with lower risk of pedestrian injury. There were some traffic diversions to other streets and transportation modes noted in the DEIR, with non-significant impacts in changes in vehicle volumes on proximate corridors.	
Vehicle speed (85th percentile)	28.3 mph from Golden Gate - Lombard	?	?	Vehicle speed is a principal factor determining both the frequency and lethality of motor vehicle collisions.	
Street Design					
Parking buffer	Exists along most of corridor	/	/	The lateral separation between pedestrians and motor vehicles which supports pedestrian safety and increases pedestrian comfort.	
Parking restrictions near intersections	<i>Unknown - not assessed</i>	?	?	Parking restrictions near intersections can increase pedestrian visibility by drivers and improve safety.	Yes
Rumble strips	None	?	?	Rumble strips recommended for piloting as a traffic calming measure on streets with heavy traffic, particularly in areas with fast-moving vehicle approaches (e.g., near freeway on and off ramps).	Yes

Speed Radar Signs	None	?	?	Speed radar signs have proven effective in reducing speeds and increasing compliance with speed limits.	Yes
Traffic lane narrowing	Mixed flow traffic lanes of 10' - 11.5'	/	+	Narrower traffic lanes may slow vehicle traffic and reduces the crossing distance for pedestrians.	Yes
Intersection Safety Conditions					
Accessible Pedestrian Signals	The following five intersections along Van Ness Avenue are equipped with APS on some or all crossing legs: Market, Fell, Hayes, Grove, and McAllister streets.	++	++	Accessible pedestrian signals are a pedestrian pushbutton that communicates when to cross the street in a nonvisual manner, such as audible tones, speech messages, and vibrating surfaces; they are particularly helpful for blind pedestrians and can help all pedestrians know when to cross.	Yes
Crossing distance	Long - 90 feet	/	++	Reduced crossing distances benefit pedestrian safety by reducing exposure to vehicle traffic.	Yes
Crossing time	Largely out of compliance with City and National standards	+	++	Shorter signal crosswalk times can be a movement barrier for pedestrians, and cause hazardous conditions if pedestrians are still crossing when the signals changes.	Yes
Crosswalks at signalized intersections	Present on all four sides at all signalized crossings; ladder crosswalks at four intersections, the rest have traditional parallel line crosswalks.	/	++	Crosswalks - especially those with high visibility - indicate pedestrian right of way on the roadway and alert vehicles to the potential presence of pedestrians.	Yes
Curb bulbs	Existing, typical curb bulbs extend 7 feet into the street and reduce the crossing distance to 86 feet at 17 locations.	/	++	Curb bulbs reduce crossing distances, help slower moving pedestrians finish crossing, increase pedestrian visibility, provide additional space for pedestrians and curb ramps, and calm traffic by visually and physically narrowing the roadway.	Yes
Curb ramps at signalized intersections	One or more missing curb ramps at most intersections.	++	++	Curb ramps increase access and safety for pedestrians with disabilities as well as pedestrians pushing children in strollers.	Yes

Leading Pedestrian Intervals	<i>Unknown - not assessed</i>	?	?	Leading pedestrian intervals release pedestrians three to five seconds before any conflicting autos receive the green. They reduce conflicts with turning vehicles by allowing pedestrians to establish their right-of-way, and appear to reduce the incidence of pedestrians yielding to turning vehicles - making it easier for pedestrians to cross the street.	Yes
Left turn pockets	Left turn pockets at 12 northbound and 10 southbound intersections	/	++	Left turning movements present a particular safety hazard to pedestrians; removing opportunities for left turns reduces pedestrian conflicts.	Yes
Lighting, intersection and pedestrian scale	Street and pedestrian scale lighting is currently lacking.	+	+	Lighting increases pedestrian visibility to vehicles and can also impact perceived comfort; lighting is a particularly important issue given the higher proportion of collisions occurring at night along the corridor.	Yes
Medians, including Nose Cones	Medians vary in size, quality, presence; nose cones completely missing at 15 signalized intersections; missing in one direction on 11 signalized intersections.	/	++	Medians provide a refuge for pedestrians who were not able to cross the street in one signal cycle; nose cones provide a physical barrier between pedestrians and traffic.	Yes
Pedestrian countdown signals at signalized intersections	15/29 intersections have pedestrian countdown signals on all crossing legs, 3/29 have them on some legs, 11/29 have no pedestrian signals.	++	++	An SFMTA study found countdown timers, which inform the pedestrian of how much time they have left to cross the street before the light turns red, were associated with an approximately 20% decrease in pedestrian injury collisions at signalized intersections.	Yes
Sidewalk Conditions					
Public seating	Minimal public seating on the corridor	/	/	The presence of public seating can support walking, particularly for seniors and people with disabilities.	

<p>Sidewalk Width</p> <p>Generally meets city standards though sometimes reduced by street furnishing</p>	<p>/</p> <p>+</p>	<p>Sidewalk width is a primary factor in determining the level of safety and comfort for pedestrians.</p>
<p>Trees/Planters</p> <p>Streets trees and landscaped planters</p>	<p>/</p> <p>/</p>	<p>Trees and planters improve the pedestrian experience, can be a buffer between pedestrians and traffic, and can calm traffic.</p>
<p>Symbol Interpretation</p>		
<p>/ No notable change</p>		
<p>-- Conditions notably degrade</p>		
<p>- Conditions modestly degrade</p>		
<p>+ Conditions modestly improve</p>		
<p>++ Conditions notable improve</p>		
<p>? Information on future conditions not available/unknown</p>		

3. Additional Improvement Measures

As documented in the draft EIS/EIR and also summarized in Table 2 above, the project encompasses several physical or operational changes that would likely reduce the probability of fatal and non-fatal pedestrian injuries. These changes include:

- Overall reductions in private vehicle volumes along the corridor
- Reductions in the frequencies of right turn movements at some locations
- Reductions in allowed left-turn movements at some locations
- Dedicated left-turn signal phases
- Reductions in crossing length and improved intersection amenities
- New streetscape features buffering pedestrians from vehicle traffic

Given the high existing frequency of fatal and non-fatal pedestrian injuries along the entire corridor, the EIS/EIR or further project design might consider several additional improvement measures for safety. These additional measures could be prioritized to high pedestrian volume and high pedestrian injury locations, and in proximity to schools and facilities serving the elderly or disabled. The following strategies were identified as potentially beneficial for pedestrian safety along the Van Ness Corridor by the PSTF Data Subcommittee:

- Leading pedestrian intervals
- Arterial traffic calming strategies, including:
 - Rumble strips at high pedestrian volume locations and preceding BRT boarding islands
 - Speed radar signs
- Parking restrictions near intersections
- Additional pedestrian scale lighting including at intersections

Thank you for your consideration of these comments. Please do not hesitate to contact me or Megan Wier (megan.wier@sfdph.org) of my staff if you have any questions.

Sincerely,



Rajiv Bhatia, MD, MPH
Director, Occupational and Environmental Health

A-5b-5

A-5b-6

Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: San Francisco Department of Public Health

Reviewer's Comment Number	Response
A-5b-1	Chapter 3.4 of the Draft EIS/EIR (Non-Motorized Transportation) describes the performance and impacts of each of the alternatives, including the LPA, on pedestrian safety, including fatal and non-fatal pedestrian injuries. Table 3.4.6 shows the number and locations of pedestrian collisions, including the subset of collisions with serious injury along Van Ness Avenue. See Master Response #13 for details on some features of pedestrian safety as part of the BRT project.
A-5b-2	Thank you for the supplemental data. The Draft EIS/EIR used Caltrans TASAS data as the basis for documenting existing conditions. The maps and table submitted by the commenter provide additional context for the corridor, and are consistent with findings in the Draft EIS/EIR. The pedestrian crowding and access analyses and thresholds are consistent with City standards for pedestrian impacts. The project team looks forward to working with SFDPH on future environmental analyses for BRT projects to continue to refine our evaluation of pedestrian safety.
A-5b-3	Please see response above for Comment A-5b-2
A-5b-4	Please see response above for Comment A-5b-2
A-5b-5	Thank you for your summary of project features that improve pedestrian safety.
A-5b-6	These design features will be considered as part of advanced design of the project, if approved. Pedestrian lighting is already a feature of the build alternatives, including the LPA.



**San Francisco
Water Power Sewer**

Services of the San Francisco Public Utilities Commission

I N T E R O F F I C E M E M O R A N D U M

EDWIN M. LEE
MAYOR

ANSON MORAN
PRESIDENT

ART TORRES
VICE PRESIDENT

ANN MOLLER CAEN
COMMISSIONER

FRANCESCA VIETOR
COMMISSIONER

VINCE COURTNEY
COMMISSIONER

ED HARRINGTON
GENERAL MANAGER

To: Michael Schwartz
San Francisco County Transportation Authority

From: Irina P. Torrey, AICP, Bureau Manager
Bureau of Environmental Management



Date: December 20, 2011

Subject: Van Ness Avenue Bus Rapid Transit Project Draft Environmental
Impact Statement/ Environmental Impact Report (EIS/EIR)

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement/ Environmental Impact Report for the Van Ness Avenue Bus Rapid Transit Project. The San Francisco Public Utilities Commission (SFPUC) offers the following comments:

General Comments:

Recycled Water Systems - The property is not located within the designated recycled water use area as defined in the Reclaimed Water Ordinances 390-91, 391-91 and 393-94. Therefore, installation of a recycled water system(s) for recycled water use is not required.

A-6-1

Non-potable Water Use for Soil Compaction and Dust Control - Non-potable water must be used for soil compaction and dust control activities during project construction as required by CCSF Ordinance 175-91. The SFPUC operates a recycled water truck-fill station at the Southeast Water Pollution Control Plant that provides recycled water for these activities at no charge. For more information please contact (415) 695-7358.

A-6-2

Comments on the Utilities Section:

San Francisco's new Water Efficient Irrigation Ordinance went into effect January 1, 2011. Projects with new or modified landscape area of 1,000 square feet or greater will require the approval from the SFPUC prior to construction and must meet requirements of the Water Efficient Irrigation Ordinance. The ordinance, adopted as Chapter 63 of Administrative Code, applies to public agency, commercial and residential landscaping projects.

A-6-3

The SFPUC strongly recommends that the sewer utilities be relocated outside of the San Francisco Municipal Transportation Agency's (SFMTA) proposed right-of-way

A-6-4
continued



San Francisco Water Power Sewer

Services of the San Francisco Public Utilities Commission

I N T E R O F F I C E M E M O R A N D U M

(ROW). SFPUC Wastewater Enterprise (WWE) requires access for maintenance, overhead power lines within five lateral feet of any part of a sewer main would impact access and our ability to maintain WWE utilities. Any structures/features located over sewers would prevent the proper operation and maintenance of the SFPUC's sewer facilities, create extra cost for removal and or reconstruction of surface facilities, and may result in the shutdown of SFMTA services. Surface structures/features may be removed if needed and the SFPUC WWE would not pay for any charges associated with the replacement of these structures/features or disruption of service (i.e. de-energizing wires, bus disruption or rerouting, SFMTA personnel time). Additionally, potential inference with appropriate operation and maintenance of the sewer facilities could result in violation of the SFPUC's National Pollutant Discharge Elimination System (NPDES) permits for wastewater discharge.

A-6-4
continued

Moreover, any existing sewer laterals located within the platform or bulb out area would need to be replaced and the vents would need to be relocated to the face of the new curb. The SFMTA would be responsible for restoration of street infrastructure when there is a need for future repair/replacement under the proposed platform. The SFPUC's responsibility for future repair and replacement of sewer laterals will only be from the sewer main to the face of the new sidewalk curb. Proposed City legislation dealing with sidewalk widths will address this change in responsibility (from existing curb face to new curb face).

A-6-5

Drainage should be constructed as necessary within SFMTA ROW. Due to the proposed changes in the curb alignments, relocation of existing drainage facilities would be necessary. Construction of SFMTA ROW curb may also require construction of additional drainage facilities to capture overland flow depending on changes to the roadway crown and grades. Hydraulic analysis will be required to determine the effects of changes of the street cross section and layout on the conveyance of stormwater flow in the street. Drainage facilities located within the SFMTA ROW should be maintained by the SFMTA and should be connected to sand trap manholes located outside of the SFMTA ROW before connecting to the main sewer facilities.

A-6-6

Please note that additional coordination and discussion with the SFPUC is needed at this time. Please coordinate with the WWE for review and approval of all construction submittals, requests for information, and instructional bulletins. Additionally, SFMTA should conduct a thorough pre- and post- project condition assessment on all WWE assets within and close to the project area using SFPUC specified procedures. This effort should be coordinated with the WWE. For continued coordination with the WWE please contact Betsey Eagon at (415) 554-1871 or beagon@sfwater.org.

A-6-7



San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

I N T E R O F F I C E M E M O R A N D U M

Thank you for your attention to these comments.

Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: San Francisco Public Utilities Commission

Reviewer's Comment Number	Response
A-6-1	Thank you for the comment indicating the project is not within a recycled water use area.
A-6-2	The project will comply with all City standards during construction, including use of non potable water for soil compaction.
A-6-3	The project will comply with all applicable City standards.
A-6-4	The Draft EIS/EIR assumes utility replacement in station locations where the SFMTA ROW would be directly above the sewer. Further consideration of utility placement will be undertaken as part of detailed design. Under the LPA (with or without the Vallejo Northbound Station Variant), replacement of the sewer pipeline is assumed at station locations and in areas where the transitway would cause direct load (weight) on the sewer. Since the project has not completed its load (weight) analysis, there currently is not an estimate for the lengthening of the timeframe due to replacement of sewer pipeline under the LPA, but the timeframe will fall between the full replacement of Build Alternative 3 (4 to 12 months) and the partial replacement of Build Alternative 4 (2 to 4 months). A more refined understanding of the sewer replacement work and its timeline will be part of 30% design.
A-6-5	Build alternatives 3 and 4, including the staff recommended LPA (with or without the Vallejo Northbound Station Variant), do not require moving the curb line except at corner bulb locations, thus minimizing the need to replace lateral sewer lines. Laterals will be identified for replacement as necessary during detailed design. Build Alternative 2 would require the replacement of sewer laterals at all BRT station locations because they would functionally extend the curb line.
A-6-6	Drainage considerations will be incorporated into the design process if the project is approved, per applicable requirements.
A-6-7	The project team has coordinated with the SFPUC WVE and will continue to do so as part of detailed design.

Van Ness BRT DEIR/EIS review
DPW Comments - Attachment 1

No.	By	Date	Comment
1	ELA	10/18/2006	As a follow-up to our discussion on September 29 regarding the Van Ness BRT, I have attached my evaluation of the current BRT alternatives that I prepared as a member of the Van Ness BRT Technical Advisory Committee. Overall, the side-loading alternative ranked highest with respect to the evaluation criteria. Based on my informal conversations with DPW Disability Access Coordinator Kevin Jensen and Paul Sacamano with Bureau of Urban Forestry, they prefer the side-loading alternative as well.
2	BUF	11/8/2006	I would like to also clarify that BUF strongly prefers the side boarding alternative to the center lane boarding. With center lane boarding all the trees, including the Arbor Day 2006 memorial tree to Rosa Parks sponsored by the NAACP, would have to be removed and any replacements trees would have to be very small and would not compensate for the loss.
3	DPW	10/16/2007	See letter from DPW Director to Tilly Chang on Oct 16, 2007 [attachment 2]
4	DPW - Ops	8/26/2008	Thank you for your email. I have had an opportunity to look at all three plans, and the one that concerns me the most is having any kind of bus platform in the center of the roadway. Van Ness Ave. is a very different street than Market St., and if Market St. is the model we're looking at, I'm definitely very concerned as we are already looking at strategies to retroactively green the medians on Market St. The original planners and visionaries of our City, who planned our streets, definitely had a great idea and as one that has been involved in urban greening for quite some time now, I feel very strongly about removing such a great green connector in a beautiful city like San Francisco. Our position at Operations remains the same, we strongly support having BRT or any form of transportation pick-up along the sidewalk sides of the street by either dedicating bulb-outs or bus only lanes. From my working with the many residents and businesses along Van Ness over the years, myself, Carla, Liz, and all of us that understand the current scope strongly oppose removal of the medians with the center-loading option. I also believe that there are other feasible routes that may not have been studied yet, such as the Franklin St. or Larkin St. options where such
5	DPW	8/29/2008	See DPW-BUF comments from BUF to Kris Opbroek on Aug 29, 2008 [attachment 3]

A-7a-1

A-7a-2

A-7a-3

A-7a-4

A-7a-5

Van Ness BRT DEIR/EIS review
DPW Comments - Attachment 1

No.	By	Date	Comment
6	BBR	9/2/2008	Center loading involves the public crossing the busy Van Ness Ave (3 lanes) to gain access to a public transportation function. This has been done on Judah, Ocean and Market Sts (just 1 lane to cross). We have pedestrians accidents on these streets already even though it is only a one lane crossing. On Judah & Ocean it required the building of many raised platforms that in themselves cause vehicle accidents. These streets are of a much different nature than Van Ness. For one thing these streets didn't have medians with extensive greenery and very mature trees (some of which are historical) that Van Ness has. Another is that only one lane needs to be crossed to get to these raised platforms or islands on these streets whereas three lanes will need to be crossed on Van Ness. I very often (more often than not) see pedestrians crossing over to the islands not using the corners or crosswalks where the stop signs or lights are located. On Market St the attenuators are being redesigned to accept planter boxes to improve the greening. Why remove the greening that has been on Van Ness for decades just to install rail lines. Isn't it the Mayor's priority to green the city?
7	BSM	9/2/2008	There are 3 alternatives, DPT will need to review the width of the bus lanes.
8	BSM	9/2/2008	For alternative 2; this is the plan we had discuss with Kris earlier with the extension thru the entire Van Ness corridor.
9	BSM	9/2/2008	For alternative 3, the proposed exclusive bus lanes are in the median. From a Program viewpoint, there are proposed "median island landscaping" in the 6' median islands between the transit lane and the traveled lane on both sides of Van Ness Avenue. I don't know how these two 6' landscaping strips will be maintained. Further, there are existing traffic signals and controllers in the median. I don't think there was consideration on where these facilities need to be relocated to.
10	BSM	9/2/2008	Second, there are transitions at two locations. At the Van Ness/Greenwich intersection, the northbound bus/transit lane will cross/transition across the 3 left turn lanes and continue along Van Ness Avenue thru Lombard. There is a concern on this movement related to potential collisions.

A-7a-6

A-7a-7

A-7a-8

A-7a-9

A-7a-10

Van Ness BRT DEIR/EIS review
DPW Comments - Attachment 1

No.	By	Date	Comment
11	BSM	9/2/2008	The second location is at the intersection of South Van Ness/Mission. The southbound bus/transit lane will make either a right hand or left hand turn. In both cases, I'll have to assume that there will be a separate signal for this movement, else there will be conflicts. For buses heading westbound Mission making a right hand turn onto South Van Ness will require evaluation on the proposed platform to ensure that the turning radius is satisfied. Finally, buses on Van Ness Avenue are overhead lines, the existing OH lines will need to be rest to extend into the center of Van Ness Avenue.
12	BSM	9/2/2008	For alternative 4, the proposal is to establish bus/transit lanes on the side of the median island. With platforms/bus stops in the median with landscaping. While this provides the maximum landscaping, the exit from MUNI vehicles is on the left hand side and not the right. The proposed platforms are on the right hand side. This design will need to be evaluated to determine the feasibility of provided exit for buses on the right side instead of the left.
13	DPW	9/4/2008	See DPW-BSES comments from Chris Ellen Montgomery to Kris Opbroek on Sep 4, 2008 [attachment 4]
14	DPW	9/5/2008	See DPW comments from Kris Opbroek to Rachel Hiatt on Sep 5, 2008 [attachment 5]
15	BUF	4/8/2011	See James DeVinny's memo to Charle Yu on Apr 8, 2011 [attachment 6]
16	ESH	4/11/2011	Add reference to OSHA regulatory requirements for work under energized overhead lines. In the construction approach/transit discussions, the Admin EIR/S did not discuss whether existing OCS would remain active or if substitute diesel buses would be used. The construction cost & schedule could vary significantly depending on how the transit is handled during construction.
17	ESH	4/11/2011	Include freeway on-ramp (S Van Ness & 13th St) and off-ramp (Mission & Duboce) in the traffic study. For example, at the Mission & S Van Ness intersection, the existing traffic configuration has 3 left turn lanes from Mission to 3 northbound lanes on S Van Ness. If one of the lanes on S Van Ness is converted into a BRT only lane, traffic could be backed up on Mission and affect the Mission/Duboce off-ramp.

A-7a-11

A-7a-12

A-7a-13

A-7a-14

A-7a-15

A-7a-16

A-7a-17

Van Ness BRT DEIR/EIS review
DPW Comments - Attachment 1

No.	By	Date	Comment
18	EHY	4/14/2011	Impacts to existing sewers in term of operation maintenance as well as future replacement has not been taken into consideration. It is recommended that sewer facilities are relocated outside of the MTA ROW. If sewer lines to remain underneath proposed work (platforms, landscaping, bus lines), there would be extra cost for removal/reconstruction of surface facilities as well as shut down of MTA services during maintenance and replacement/repair of sewer facilities in future. PUC shall not be responsible for these extra costs. Sewer lines underneath proposed poles and trees shall be relocated.
19	EHY	4/14/2011	Due to change in curb alignments, relocation of existing drainage facilities will be necessary. In addition, construction of MTA ROW curb may also require construction of additional drainage facilities to capture overland flow depending on roadway crown and grades.
20	EHY	4/14/2011	MTA ROW Drainage: Drainage shall be constructed as necessary for MTA ROW. These drainage facilities located within the MTA ROW shall be maintained by MTA and shall be connected to sand trap manhole located outside of the MTA ROW before connecting to the main sewer facilities.
21	EHY	4/14/2011	Street surface drainage shall be taken into consideration since there will be changes to street cross section.
22	EHY	4/14/2011	Any existing sewer laterals located within the platform or bulb out area shall be replaced and vents shall be relocated to the face of new curb. MTA shall be responsible for restoration of street infrastructure when there is a need for future repair/replacement under the proposed platform. PUC's responsibility for future repair and replacement of lateral will be up to face of new sidewalk curb. Sidewalk width change legislation shall address this change in responsibility (from ex. curb face to new curb face).
23	EHY	4/14/2011	PUC is recommended to enter into discussions with MTA regarding these concerns/issues. BOE-Hydraulic will provide necessary technical help to PUC.

A-7a-18

A-7a-19

A-7a-20

A-7a-21

A-7a-22

A-7a-23

Van Ness BRT DEIR/EIS review
DPW Comments - Attachment 1

No.	By	Date	Comment
24	EHY	4/14/2011	Poles/New trees, if any in sidewalk area shall be installed minimum of 5' away from the sewer laterals (5' from edge of sewer pipe to edge of pole foundation/tree pit). Type of trees proposed shall be reviewed and approved to meet guidelines for vegetation in proximity of sewer facilities.
25	EHY	4/14/2011	Pre and post construction inspection of sewer facilities is suggested to determine damage, if any, due to contractors operations to existing sewer facilities that will remain in close proximity of the proposed MTA facilities.
26	EHY	4/14/2011	See Comments on BRT Project - Apr 2011 (EHY).xlsx [attachment 7]
27	DPW	4/23/2011	See LPA Selection Framework (DPW-combined comments) 04-23-10.xlsx [attachment 8]
28	BUF	11/10/2011	BUF strongly prefer the side loading option.
29	BUF	11/10/2011	Both of the center loading options would have significant impacts to the trees and landscaping in the medians.
30	BUF	11/10/2011	Although one center loading option preserves some median trees, the amount of pruning required to achieve and then maintain the clearances for the bus lines is simply unrealistic for our crews.
31	BUF	11/10/2011	In addition, maintaining the proposed new landscape for the other option would be extremely costly (and we provided cost estimates to the SFCTA) because we would have to work at off hours, paying overtime, and closing lanes of traffic for safety.
32	BUF	11/10/2011	The center loading options also greatly reduce the overall amount of green space on the roadway.
33	BUF	11/10/2011	The side loading option preserves the existing medians, and actually provides for some potential additional planting opportunities at bulb outs.
34	BUF	11/10/2011	From BUF's perspective, the only option that we support is the side-loading option.
35	BUF	11/10/2011	BUF expressed concern that the EIR did not adequately address the impacts of the proposed tree removals.

A-7a-24**A-7a-25****A-7a-26****A-7a-27****A-7a-28****A-7a-29****A-7a-30****A-7a-31****A-7a-32****A-7a-33****A-7a-34****A-7a-35**

Van Ness BRT DEIR/EIS review
DPW Comments - Attachment 1

No.	By	Date	Comment
36	DAC	12/5/2011	Pedestrian islands at crosswalks should never be less than 5 feet in width, measured from curb to curb. This will accommodate the minimum clear wheelchair user space of 4 feet in length, plus 6 inches of tolerance at front & back to moving traffic and transit way lanes. This is especially important on the proposed designs since the traffic lanes are rather narrow and not all wheelchair and scooter users fit into a 4 feet long space. It is much better to provide pedestrian refuge island of at least 6 feet in clear width, as that enables the use of detectible warnings at each end of the island. This is a vast improvement in accessibility of crossing such a busy street as Van Ness Ave. for those who have low vision or who are blind.
37	DAC	12/5/2011	The Complete Streets concept would require that the existing sidewalks be included in the proposed scope of work, not excluded. The Third Street Light Rail Project had many problems during construction because the existing sidewalk conditions were not addressed. The entire cross-section of the public right of way must be evaluated – from ground floor entrance threshold elevations on each side at the back of sidewalk. The gutter and curb elevations may need to be raised or lowered in order to achieve accessible sidewalks and accessible building entrances. This may affect the final street grades accordingly. Let’s learn from the lessons of the Third Street Light Rail Project. Existing non-accessible conditions must not be perpetuated by the scoping and design of the various BRT schemes.
38	DAC	12/5/2011	The increased difficulty for persons who have low vision or who are blind to navigate the schemes with center running BRT lanes must be addressed (both shared centered boarding islands and narrow single direction boarding islands). Those schemes must investigate and propose mitigating measures that will be taken in order to provide clearly perceptible wayfinding information to that community of users.

A-7a-36

A-7a-37

A-7a-38

Van Ness BRT DEIR/EIS review
DPW Comments - Attachment 1

No.	By	Date	Comment
39	DAC	12/5/2011	Conversely, the relative ease of wayfinding for persons who have low vision or who are blind in the scheme with both BRT and Bus Boarding areas on and adjacent to the sidewalks must be stated. This makes transferring between public and private transportation systems much more direct and easier to navigate than the alternatives for persons who have low vision or who are blind in particular.
40	DAC	12/5/2011	The increased difficulty in using the narrow single direction boarding islands for persons who use wheelchairs and scooters must be addressed. The difficulty arises from platform congestion and a platform width barely wide enough than the minimum 5 feet required to turn a wheelchair or scooter around and to enter and exit even the proposed low floor BRT vehicles.
41	DAC	12/5/2011	The effect on persons who are disabled of the proposed reduction in the number of transit boarding stops must be addressed. The topography (street and sidewalk grades) between stops and in making transfers between transit stops must be evaluated and the impacts on persons with disabilities addressed.
42	DAC	12/5/2011	On-street accessible parking and passenger loading zones will be potentially moved and / or reduced in number and may already be inadequate. Study the need, and provide such areas distributed along the length of all schemes. The locations of on-street accessible parking and passenger loading zones must be located in areas with the least amount of running grade and cross-slope possible.
43	DAC	12/5/2011	Pedestrian phase timing of signalized intersections must be based on a walking speed that is appropriate for persons with disabilities. The recommend rate is 2.8 feet per second, which the SFMTA has in the past stated is its typical number. Providing accessible pedestrian islands will enable the wide street to be crossed in multiple phases, which will be a great benefit to slow walkers. Clearly state for the record what the design pedestrian speed will be. Again, we should learn from the criticisms of the Third Street Light Rail Project.

A-7a-39

A-7a-40

A-7a-41

A-7a-42

A-7a-43

Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: San Francisco Department of Public Works

Reviewer's Comment Number	Response
A-7a-1	<p>This comment is out of date, as it refers to evaluation from the Van Ness Avenue BRT Feasibility Study approved in 2007. A more recent evaluation (Chapter I0) was written as part of the EIS/EIR.</p>
A-7a-2	<p>This comment refers to alternatives evaluation performed as part of the Feasibility Study and is out of date.</p> <p>See Master Response #7 regarding tree removal and planting opportunities. As explained in Master Response #7, a comprehensive Tree Removal Evaluation and Planting Opportunity Analysis was undertaken in fall 2012 to identify the maturity and health of trees in the corridor and therefore better understand the impacts of tree removal and the opportunities for preserving trees, and the parameters of new tree plantings (BMS, 2013). The analysis took into consideration recent design requirements which affect tree removal and planting opportunities. The EIS/EIR provides detailed information about tree removals for all alternatives, including the LPA, in the Aesthetics/Visual Resources Section 4.4.3.4. The EIS/EIR also identifies the estimated planting opportunities to replace removed trees or to plant new trees in the median or sidewalk, as shown in Table 4.4.4. For all alternatives, more median and sidewalk trees will result after replanting than currently exist.</p> <p>Mature tree canopies provide water quality, aesthetic and carbon off-set benefits. There would be a period of reduced benefits until the new tree plantings grow to maturity, and these benefits would not be fully compensated in the event different tree types are selected that do not offer the same size canopy as existing trees that would be removed. However, under each build alternative, including the LPA, the reduced benefits due to smaller tree canopy size would be offset by an overall increase in trees in the corridor.</p> <p>The LPA (with or without the Vallejo Northbound Station Variant) would require removal of 90 median trees, 23 of which are mature trees in good or excellent condition (health). New tree plantings would increase the number of trees in the median and along Van Ness Avenue as a whole while also increasing the permeable area. The Rosa Parks tree does not qualify as a landmark or significant tree per the City's ordinance, nonetheless it may warrant special consideration in planning and the SFCTA has discussed the possibilities for relocating it with the Bureau of Urban Forestry. Decisions about tree plantings and relocation of existing trees will be decided as part of the design phase, if the project is approved.</p>
A-7a-3	<p>See comments A-7b-1 through A-7b-4 as part of response to letter A-7b from DPW Director to Tilly Chang on Oct 16, 2007.</p>
A-7a-4	<p>See Master Response #7 for details on tree removal and planting opportunities. The EIS/EIR assesses the effects of tree removals in Sections 4.4 (Aesthetic and Visual Resources) and 4.13 (Biological Environment) as well as in the Alternatives Analysis, Chapter I0.</p> <p>The urban design and landscaping benefits of the median on Van Ness Avenue is a factor considered in the LPA selection process, as described in Section I0.2.4.4. Also, the ease of maintaining a median is a factor considered in the LPA selection process, described in Section I0.2.4.7. Preservation of existing trees, tree planting opportunities and maintenance factors were taken into account in selecting the</p>

recommended LPA. The project team will coordinate with DPW to preserve as many existing trees as possible in the design of the system. The LPA will provide planting and greening opportunities along the median for almost all blocks along the corridor.

Section I.2.I Countywide Planning Context provides a historical context for the proposed project, and describes how Van Ness Avenue has been identified as a high-priority transit improvement corridor and has been targeted for rapid transit in planning studies dating back to 1995.

See Master Response #2, Chapter 2 of the Draft EIS/EIR, and the Alternatives Screening document for information on alternatives development and screening. Van Ness Avenue has been identified in numerous adopted plans as being a major north-south transit route in the Muni Rapid Network, and BRT was identified as the recommended solution in the Feasibility Study for achieving the speed and reliability improvements for the corridor to serve in that function. Parallel streets such as Franklin and Larkin are of a different character than Van Ness Avenue, are less suited to transit in many areas, and have not been identified for rapid transit improvements. Those streets have much higher grades than Van Ness Avenue, particularly in the northern portion of the corridor. Larkin Street is stop controlled for numerous intersections, which is not conducive to rapid transit. Finally, the fact that these streets are one-way for the majority of the corridor means that service would need to be separated onto different streets, which is undesirable.

- A-7a-5 See responses to comments A-7c-1 through A-7c-43 for letter A-7c from BUF to Kris Opbroek on Aug 29, 2008
- A-7a-6 The precedent for center-running transit exists in other parts of the City such as the T-Third line, showing that it can be implemented successfully. Designs for Van Ness Avenue BRT will discourage pedestrians from crossing outside of the crosswalk. For the recommended LPA, this will include guardrails along the length of the platform except at crosswalks, where the station entrances will be. Note that rail is not part of the project definition for any of the alternatives. Please see Master Response #13 for a summary of how crossing pedestrian conditions on Van Ness Avenue would improve. Please also see Master Response #7 and response to comment A-7a-2 for information on how greening would be maintained under all of the build alternatives, including the LPA.
- A-7a-7 The Project team reviewed the width of the BRT lanes with the SFMTA as part of the analysis for the Draft EIS/EIR. For the LPA, the BRT lanes would be 11.5-12 feet in width.
- A-7a-8 Comment noted.
- A-7a-9 Since this comment was submitted in September 2008 multiple technical advisory committee meetings have taken place, including with staff from DPW BUF, to ensure that the plantings shown in the visualizations are feasible and maintainable. For Build Alternative 3, the project does not propose trees in the 4' median due to maintenance considerations, but rather would only have trees in the nine foot median.
- Replacement of all existing traffic signals will be a component of the project in coordination with SFgo under any of the alternatives.
- A-7a-10 The transitions to and from the exclusive BRT lanes will be governed through exclusive bus signal phases which will provide the vehicles with a queue jump ahead of traffic, controlled through transit signal priority. These phases are represented in the transportation operations models, and will be further refined during advanced design. Engineering designs for the project have ensured that all movements as part of the project can be made safely.
- A-7a-11 See Response to Comment A-7a-10.
- Overhead Contact System (OCS) replacement would be included under any of the build alternatives,

including the LPA, as part of the project definition (See Chapter 2 of the EIS/EIR).

- A-7a-12 The definition and designs of the alternatives used in the EIS/EIR were refined since the submission of this comment, and are described in Chapter 2 of the Draft EIS/EIR.
- A-7a-13 See responses to comment A-7d-I regarding letter A-7d from Chris Ellen Montgomery to Kris Opbroek on Sept 4, 2008.
- A-7a-14 See responses to comments A-7e-1 through A-7e-66 regarding letter A-7e from Kris Opbroek to Rachel Hiatt on Sep 5, 2008.
- A-7a-15 See responses to comments A-7f-1 through A-7f-7 in attachment 6.
- A-7a-16 The Project Construction Plan assumes that the OCS would be active throughout construction in all areas feasible. There may be some temporary bus substitutions at times when construction would not allow for the OCS; however, no increase in buses is anticipated beyond how this is handled in maintenance operations today. Further refinement of SFMTA operations will occur during the design phase. All OSHA regulatory requirements will be followed throughout construction.
- A-7a-17 Section 3.3 (Figure 3.3-I) shows the Synchro traffic study area of 139 intersections, including the Mission/Otis/ South Van Ness Avenue intersection and the Mission/Otis/Duboce offramp from Hwy 101. The Synchro traffic models include changes to intersection lane configuration to reflect BRT service and outputs from the models reflect the resulting changes to traffic operations based on those changes. See the Vehicular Traffic Analysis Technical Memorandum for more details on the assumptions and outputs as part of the traffic modeling. The 95th percentile queue length from Synchro indicates that congested traffic would not exceed the block length from Mission/South Van Ness Avenue to Mission/Otis/Duboce for all 2015 and 2035 BRT scenarios except for 2035 Build Alternatives 3 and 4, and thus would not affect freeway operations. Under 2035 Build Alternatives 3 and 4, this blocking is likely to occur less than 5% of the time. On average the queue would be shorter and would not extend this far.
- The Mission Duboce off-ramp was modeled as part of the Mission/Otis/Duboce intersection for all scenarios. Due to Synchro's limitations, the off-ramps and westbound 13th street traffic was analyzed together as westbound traffic with one shared through and left lane, two through lanes and one exclusive right turn lane. This configuration was effective in identifying intersection impacts as well as the maximum queue length on the ramp, because the westbound right-turn is the critical movement and this is modeled as a separate lane. The analysis shows that the off-ramp 95th percentile queue would not spill over to the freeway in 2015. However, in 2035 it may extend to the freeway with the BRT in place. But the length of the queue would be less than the queue length under 2035 No Build due to reduced right turns accessing NB Van Ness Avenue under the Build Scenario. The South Van Ness/13th Street on-ramp for US 101 is not included in the study area because ramp and lane capacity would not be reduced under any of the scenarios and traffic diversions would not increase volumes using South Van Ness Avenue to access the on-ramp.
- A-7a-18 The EIS/EIR assumes mainline sewer replacement wherever the BRT transitway or station platforms would conflict with regular sewer maintenance (i.e., full replacement under Build Alternative 3, replacement at station locations under Build Alternative 4, and replacement at station locations and in areas where the transitway would cause direct load (weight) on the sewer for the LPA). This is reflected in the cost estimates in Chapter 9 of the Draft EIS/EIR as well as Chapter 4.15 (Construction).
- Coordination with DPW and SFPUC, along with further analysis on the best solution for sewer replacement, including whether or not to relocate the sewer, will be conducted as part of advanced design. Negotiations related to capital and operations/maintenance cost sharing will be undertaken during the design phase, if the project is approved.

- A-7a-19 Roadway crown and grades will be unchanged under all project alternatives, including the LPA (with or without the Vallejo Northbound Station Variant). Curb modifications may necessitate relocation of existing curb inlets to maintain drainage functionality, as discussed in Section 4.9.3.I Hydrologic Impacts. New inlets would be required to drain the transitway only under Alternative 3.
- A-7a-20 Operational practices for maintaining utilities on Van Ness Avenue will comply with all City standards. Cost sharing agreements will be further refined during the design phase, if the project is approved.
- A-7a-21 Section 4.9.3.I of the EIS/EIR, Hydrologic Impacts, explains that under each of the build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant), stormwater would continue to flow towards the curbside storm drains, and under Build Alternative 3 additional curb inlets at the median islands would capture surface runoff from the transitway. In addition, existing curb inlets at intersection locations would be relocated or otherwise modified to accommodate curb changes resulting from curb bulbs, or other sidewalk modifications. As currently designed, each of the proposed build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant), would result in greater permeable surface area compared with existing conditions and the No Build Alternative. Section 4.9.3.I describes additional design features listed in the San Francisco Better Streets Plan that will be considered during project final design to provide additional pervious surface area and landscaping in the corridor, and improve both drainage and water quality. Section 10.2.4.4 Urban Design/Landscape describes how changes in the amount of permeable or landscaped surface area for the build alternatives, at the present level of design, is considered in the alternatives analysis and LPA selection process. Build Alternatives 2 and 4 (with or without Design Option B) would nearly double the amount of permeable surface area over existing conditions and the No Build Alternative, whereas Build Alternative 3 (with or without Design Option B) would increase the permeable surface area along Van Ness Avenue by 0.1 acre. The LPA (with or without the Vallejo Northbound Station Variant) would increase the amount of permeable surface by approximately 0.2 acre.
- A-7a-22 The LPA requires minimal replacement of the existing sidewalk curb. At bulb locations, sewer laterals may be replaced as necessary. Sidewalk width change legislation will address responsibility between private abutting owners and City for sewer lateral maintenance from new curbline. Build Alternative 2 would require the replacement of sewer laterals at all BRT station locations because they would functionally extend the curb line. Cost sharing between City departments for street infrastructure work will be further defined during design phase.
- A-7a-23 The project team has started meeting with SFPUC on a regular basis and would continue to do so as part of the design phase, if the project is approved.
- A-7a-24 Replacement trees will comply with all City and County of San Francisco and Caltrans standards or receive justified design exceptions, including offset from sewer laterals. Chapter 2 identifies that the project will obtain DPW approval to remove and replace trees.
- A-7a-25 An initial sewer survey was completed in May, 2012. Additional surveys will be performed pre and post construction, as agreed upon by the SFMTA, SFPUC, and DPW during the design phase, if the project is approved.
- A-7a-26 Please see responses to comments A-7g-1 through A-7g-3 (Attachment 7).
- A-7a-27 Please see responses to comments A-7h-1 through A-7h-26 (Attachment 8).
- A-7a-28 Support for Build Alternative 2 noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the staff recommended LPA.
- A-7a-29 See Master Response #7 for details on tree removal and planting opportunities. The EIS/EIR assesses the effects of tree removals in Sections 4.4 (Aesthetic and Visual Resources) and 4.13 (Biological Environment) as well as in the Alternatives Analysis, Chapter 10.

All of the build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant), would result in a substantial net gain of trees in the corridor when new planting opportunities are considered. The impact from the removal of existing trees and shrubs would be alleviated under each build alternative, including the LPA, with replacement planting. Increased sidewalk and median tree plantings over existing conditions would result in long-term, beneficial effects to biological resources, with improvements growing over time as plantings mature. At the same time, however, there would be a plant establishment period lasting for several years for new trees to reach maturity. This would be a period of reduced benefits compared with the benefits offered by mature trees and their canopies. The trade-offs between increased plantings in the corridor and the loss of existing trees is discussed for each build alternative, including the LPA, in Section 4.4.3.4 of this document. The project was determined to have less than significant impacts with incorporation of mitigation measures regarding tree loss.

To clarify, Build Alternative 2 would involve the removal of median trees in some locations where the left turn pockets are removed, resulting in significant altering of the median (20 trees).

- A-7a-30 The EIS/EIR provides detailed information about tree removals for all alternatives, including the LPA, in the Aesthetics/Visual Resources Section 4.4.3.4. Section 4.4.3.4 summarizes the results of a comprehensive Tree Removal Evaluation and Planting Opportunity Analysis was undertaken in fall 2012 to identify the maturity and health of trees in the corridor and therefore better understand the impacts of tree removal and the opportunities for preserving trees, and the parameters of new tree plantings (BMS, 2013). The analysis took into consideration the OCS clearance requirements of 5 feet between the OCS wires and a tree, and 5 feet between the top of the OCS wires and a tree canopy. These OCS setbacks require the bottom of a tree canopy to be a minimum of 23 feet from the ground, or a tree of any height to have a canopy narrower than 11 feet. The analysis assumed a 15-foot separation between existing trees to be preserved and new tree plantings. The Final EIS/EIR shows the number of trees that would need to be removed as part of implementation of the LPA. DPW Bureau of Urban Forestry has concurred that pruning is realistic for the trees shown as removed, preserved, and newly planted as part of all build alternatives, including the LPA. The analysis assumes sufficient resources for proper maintenance.
- A-7a-31 The costs of maintenance provided by DPW for each of the alternatives are included in the operational costs described in Chapter 9 of the Draft EIS/EIR. The LPA maintenance costs would be similar to those of Build Alternative 3B; although not the major component of transitway maintenance costs, tree pruning costs would be similar to Build Alternative 3B. For the LPA, annualized operations and incremental maintenance would cost \$6 million, less than the No Build Alternative.
- A-7a-32 The amount of permeable surface is quantified and described for each of the alternatives, including the LPA, in Section 4.9 of the Draft EIS/EIR. All of the build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant), would increase the amount of permeable surface along the corridor. The staff recommended LPA (with or without the Vallejo Northbound Station Variant) would increase the amount of permeable surface by approximately 0.2 acre, as compared to a 0.5 acres increase for build alternatives 2 and 4 (with or without Design Option B).
- A-7a-33 The planting areas are described in the Draft EIS/EIR. While there would be new potential planting areas in the bulbouts under Build Alternative 2, there would also be some sidewalk planting areas removed due to the construction of station platforms.
- A-7a-34 Support for Build Alternative 2 noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the staff recommended LPA.
- A-7a-35 Please see response to comments A-7a-29 and A-7a-30.
- A-7a-36 The LPA would include medians at least 6 feet in width, with the exception of the southern crosswalk at the Mission/South Van Ness Avenue intersection (a configuration under existing conditions).
Build Alternative 2 would feature a single 14-foot wide median at most locations. Build Alternative 3

would feature a 9-foot wide median/station platform and 4-foot wide median that would flank each side of the transitway at most locations. Build Alternative 4 would feature a single 14-foot wide median at most locations. The staff recommended LPA would feature a 9-11 foot wide median/station platform at most locations. Under Build Alternatives 2-4, there would be some locations with medians less than 5 feet in width. If one of those alternatives were selected as the LPA and the project were to be approved, efforts would be made during the design phase to ensure that the medians were at least six feet wide.

All intersections would feature a protective nose cone on the inside of the crosswalk at the median or station platform. All installed curb ramps would meet current City standards and ADA requirements to provide access by people in wheelchairs, as noted in Section 2.2, and 3.4.3.

- A-7a-37 Curb ramps will be brought up to accessible standards as part of project. Installation of curb ramps may require sidewalk replacement at intersection corners; however, sidewalk replacement in its entirety is not part of the scope of the project and is not required to construct the project. Repaving the sidewalks would increase the capital cost and construction impact of the project significantly, risking the project's feasibility.
- A-7a-38 The project team will work closely with blind and low vision stakeholder groups and experts to ensure universal design and accessibility. This could include audible (e.g., sound queues to identify station locations), visual (e.g., symbols visible from far distances), and tactile (e.g., sidewalk materials) features. The project team has already conducted a focus group with blind and low-vision transit riders, coordinated through the Lighthouse for the Blind and Visually Impaired, and has also met with the Muni Accessibility Advisory Committee (MAAC) in multiple instances.
- A-7a-39 The universal design analysis included as part of Chapter 3.5 was reviewed by DPW. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the staff recommended LPA.
- A-7a-40 The staff recommended LPA will include platforms of a minimum of 9 feet in width, exceeding ADA and City standards for boarding islands.
- A-7a-41 See Master Response #5 for a full discussion of stop spacing. The increase in stop spacing and sidewalk grade is discussed as part of the universal design analysis in the Non-Motorized Transportation Chapter (3.4) in the Draft EIS/EIR. In response to comments regarding wider stop spacing in the vicinity of the Van Ness Avenue and Vallejo Street intersection, which has higher grades than other parts of the corridor, the LPA would include a southbound station at the intersection of Vallejo Street and Van Ness Avenue. A northbound transit station in this same location, referred to as the Vallejo Northbound Station Variant, could also be implemented, and will be decided upon at the time of project approval.
- A-7a-42 The Parking section (3.5) and Community Impacts section (4.2) in the EIS/EIR identify blocks where loading and accessible zones would be moved and could not be replaced on the same block or immediately adjacent streets. Under the LPA (with or without the Vallejo Northbound Station Variant), no blocks have blue spaces removed that could not be replaced on the same block. Exact replacement locations will be determined in later stages of design, and will be done in consultation with SFMTA Accessible Services. The design will place accessible parking and loading zones in areas with the least amount of running grade and cross slope as possible.
- A-7a-43 The minimum crossing speeds are shown in Chapter 3.4 of the Draft EIS/EIR (Non-Motorized Transportation). Wherever possible, the project strives to meet the 2.8 feet per second standard. (Arup, 2012). The LPA, in part due to the reduction in left turn locations as well as pedestrian bulbout opportunities, would be able to reconfigure Van Ness Avenue so that it meets the federal standard of 3.0 feet per second for 24 intersections in the project area and the City recommended standard of 2.8 feet per second for 6 intersections. Currently, 8 intersections do not meet the 3.0 foot standard and 9 intersections do not meet the 2.8 feet per second standard. The LPA will provide a minimum of 6 foot pedestrian refuges for all crossings except the southern crosswalk at Mission/South Van Ness Avenue, a configuration under existing conditions. The project (LPA) increases the number of intersections meeting

the additional City standard of 2.5 feet per second standard from 3 to 6.

City and County of San Francisco



Gavin Newsom, Mayor
Fred V. Abadi, Ph.D., Director



Phone: (415) 554-6920
Fax: (415) 554-6944
TDD: (415) 554-6900
<http://www.sfdpw.com>

Department of Public Works
Office of the Director
City Hall, Room 348
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4645

DRAFT

October 16, 2007

Ms. Tilly Chang, Deputy Director of Planning
San Francisco Transportation Authority
100 Van Ness, 26th Floor
San Francisco, CA 94102-5244

Subject: Department of Public Works' review comments on the Van Ness BRT EIR

Thank you for the opportunity to participate in the Van Ness BRT EIR scoping meeting. The Department of Public Works (DPW) looks forward to working with the San Francisco Transportation Authority (TA) on the upcoming Van Ness BRT project. DPW's responsibility for the maintenance and improvements of the public Right of Way in San Francisco make the DPW an important stakeholder in the project. The DPW shares the TA's commitment to ensure that San Francisco receives good value for its transportation investments, while improving the public Right of Way for all users.

Based on information from the Van Ness BRT EIR scoping meeting held at the TA's offices October 4, 2007, as well as from the previous feasibility study meetings, DPW has the following comments:

1. All alternatives should be studied equally. Some discussion was had in the scoping meeting of not including the Curb side alternative. The DPW would like to ensure that both the Curb side and Transit System Management (TSM) alternatives are studied.
2. As mentioned in the scoping meeting, the DPW has concerns about the impacts of the Center loading alternative, which may impact pedestrian safety, ADA access, and would result in significant tree loss.
3. The DPW does not support Caltrans relinquishment of the Right of Way to the City.
4. Based on discussion in the scoping meeting, DPW understands that as part of the EIR process, an agency coordination plan will be developed, including the TA convening a multi-agency TAC. It is our expectation that prior to selecting the preferred alternative, there will be an opportunity to comment on specific design and operations.

A-7b-1

A-7b-2

A-7b-3

A-7b-4

We look forward to working with you on this exciting project.

Regards,

Fred V. Abadi, Ph.D.

Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: San Francisco Department of Public Works

Reviewer's Comment Number	Response
A-7b-1	Comment is out of date. Alternatives are defined in Chapter 2 of the EIS/EIR, and have been studied equally in compliance with NEPA.
A-7b-2	Comment is out of date. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for analysis supporting the LPA. Concerns cited in the comment were taken under consideration in the selection process (see indicators C-1 through C-4 and indicator F-6).
A-7b-3	The Draft EIS/EIR assumes that Caltrans retains ownership of the Right of Way.
A-7b-4	DPW has participated in the TAC throughout the EIS/EIR phase of the project. DPW was able to comment on the locally preferred alternative as part of the public commenting process and continues to work on the refinement of the LPA design and operation through the TAC process. If the project is approved, DPW would be closely involved in the design process.

NOTE: This letter (in DPW Attachment 5) is the same letter as Letter 7c (Attachment 3). See that letter for comments.

City and County of San Francisco



Gavin Newsom, Mayor
Edward D. Reiskin, Director



(415) 641-2627
FAX (415) 641-2666
<http://www.sfdpw.com>

Department of Public Works
Bureau of Urban Forestry
2323 Cesar Chavez, Bldg. A
San Francisco, CA 94124

Liz Lerma, Acting Superintendent

August 29, 2008

To: Kris Opbroek

Subject: Urban Forestry review comments regarding the Preliminary Engineering Studies documents dated August 14, 2008, as prepared by Parsons for the San Francisco Transportation Authority.

Urban Forestry General Comments:

1. More details are needed regarding the general landscape plan, in order to fully evaluate the alternatives. **A-7c-1**
2. While DPW and other agencies have been diligent about commenting on the alternatives from the initial planning phase, these concerns have not necessarily been incorporated into the BRT alternatives currently presented. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible. **A-7c-2**
3. Alternative 2, The Side Lane BRT is by far the best of the proposed design from an urban forestry perspective. Center islands are problematic, as center lane BRT's would have a huge negative impact on San Francisco's infrastructure and assets: landscaping, irrigation systems and mature trees of significant value. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees. **A-7c-3**
4. Alternative 2 provides wider sidewalks. Wider sidewalks provide (1) more space for greening along Van Ness, a mayoral priority; (2) would better address storm water management, a crucial PUC issue tied to the maintenance of San Francisco's aging sewer system; (3) increases the regional water system's reliability by putting storm water into the ground, rather than into the sewer system; (4) is environmentally superior because it reduces wastewater discharges to the San Francisco Bay and Pacific Ocean by putting storm water into the ground, rather than into the sewer system; (5) will add more beauty to the cityscape and therefore, (6) increases property values and; (7) are also more pedestrian friendly. **A-7c-4**
5. Due to the proposed bulb-outs, Alternative2 will provide by far the best curb ramps along this corridor. There are locations where sub-sidewalk basements encroach into the street corner area. Providing bulb-outs will minimize and perhaps eliminate conflicts between curb ramps and sub-sidewalk basements, and thereby will minimize the unit costs for curb ramps, a cost savings to San Francisco. **A-7c-5**
6. What is the long-term plan for landscape maintenance? **A-7c-6**

Alternative 2: Side Lane BRT

Sheet A2-1

1. Alternative 2, The Side Lane BRT is by far the best of the proposed design from an urban forestry perspective. **A-7c-7**
2. More detail needed RE: proposed landscape areas at Otis and South Van Ness Avenue. **A-7c-8**

Sheet A2-2 through A2-10

"IMPROVING THE QUALITY OF LIFE IN SAN FRANCISCO" We are dedicated individuals committed to teamwork, customer service and continuous improvement in partnership with the community.

Customer Service

Teamwork

Continuous Improvement

1. Alternative 2, The Side Lane BRT is by far the best of the proposed design from an urban forestry perspective.
2. More detail needed RE: proposed landscape areas.

A-7c-9

A-7c-10

Alternative 3: Center Lanes with Side Median BRT

Sheet A3-1 through A 3-6

1. Raised island platforms do not allow for tree planting.
2. Center bus lanes may require bus lane closures to perform landscape maintenance.
3. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees
4. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A-7c-11

A-7c-12

A-7c-13

A-7c-14

A3-7

1. Will require removal of a signature tree, the Rosa Parks Memorial Tree, which will likely go to the Board of Appeals, with much public opposition expected.
2. Raised island platforms do not allow for tree planting.
3. Center bus lanes may require bus lane closures to perform landscape maintenance.
4. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees
5. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A-7c-15

A-7c-16

A-7c-17

A-7c-18

A-7c-19

A3-8

1. Raised island platforms do not allow for tree planting.
2. Center bus lanes may require bus lane closures to perform landscape maintenance.
3. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees
4. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A-7c-20

A-7c-21

A-7c-22

A-7c-23

A3-9

1. Raised island platforms do not allow for tree planting.
2. Center bus lanes may require bus lane closures to perform landscape maintenance.
3. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees
4. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A-7c-24

A-7c-25

A-7c-26

A-7c-27

A3-10

1. More detail needed RE: proposed landscape areas.

A-7c-28

Alternative 4: Center Lanes BRT with Left Side Loading / Center Median

Sheet A4-1 through A4-6

1. Raised island platforms do not allow for tree planting.
2. Center bus lanes require bus lane closures to perform landscape maintenance.
3. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees.
4. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A-7c-29

A-7c-30

A-7c-31

A-7c-32

A4-6

1. Raised island platforms do not allow for tree planting.
2. Center bus lanes require bus lane closures to perform landscape maintenance.
3. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees.
4. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A-7c-33

A-7c-34

A-7c-35

A-7c-36

A4-7

1. Will require removal of a signature tree, the Rosa Parks Memorial Tree, which will likely go to the Board of Appeals, with much public opposition expected.
2. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees.
3. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A-7c-37

A-7c-38

A-7c-39

A4-8 through A4-10

1. Raised island platforms do not allow for tree planting.
2. Center bus lanes require bus lane closures to perform landscape maintenance.
3. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees.
4. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A-7c-40

A-7c-41

A-7c-42

A-7c-43



Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: San Francisco Department of Public Works

Reviewer's Comment Number	Response
A-7c-1	<p>Sufficient details are provided in the EIS/EIR for each alternative to evaluate the environmental impacts of landscape changes. The BUF was consulted for representative plants to put in the visualizations and to be used for analysis. See Master Response #7 for details on tree removal and planting opportunities. The EIS/EIR assesses the effects of tree removals in Sections 4.4 (Aesthetic and Visual Resources) and 4.13 (Biological Environment) as well as in the Alternatives Analysis, Chapter 10. Mitigation measures are identified in Section 4.4.4 that will assure the landscape plan that will be developed during the advanced project design phase will maintain the aesthetic character of the project area.</p>
A-7c-2	<p>Comment is out of date. Since date of this comment, BUF provided input on the representative plantings which are shown in the visualizations in the Draft EIS/EIR, and their comments related to possible plantings were incorporated.</p>
A-7c-3	<p>Support for Build Alternative 2 noted. See Master Response #7 for details on tree removal and planting opportunities. The EIS/EIR assesses the effects of tree removals in Sections 4.4 (Aesthetic and Visual Resources) and 4.13 (Biological Environment) as well as in the Alternatives Analysis, Chapter 10.</p> <p>Public presentations on the project have included concerns about tree removal. The extent of tree removal differs under each build alternative and the LPA, and detailed information on reasons for tree removal and their condition (maturity and health) is presented in Section 4.4.3.4.</p>
A-7c-4	<p>1) All alternatives, including the staff recommended LPA (with or without the Vallejo Northbound Station Variant), provide additional effective sidewalk space by moving the bus stops from the sidewalk to BRT station locations. Build Alternative 2 does not provide any additional sidewalk space beyond the other Build Alternatives.</p> <p>2 - 4) Permeable surface area for all alternatives is quantified in Chapter 4.9 (Hydrology and Water Quality). All build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant), would increase the amount of permeable surface. Build alternatives 2 and 4 would increase the permeable surface the most.</p> <p>5-6) Please see Chapter 10 of the EIS/EIR and the LPA report for the analysis supporting the staff recommended LPA. Section 10.2.4.4 has criteria related to urban design. It does not discuss impact of each alternative on real estate values, as there is not sufficient information to determine such a measure.</p> <p>7) Chapter 3.4 of the Draft EIS/EIR (Non-Motorized Transportation) evaluates each of the alternatives, including the LPA (with or without the Vallejo Northbound Station Variant), on pedestrian safety and comfort. Chapter 10 (Alternatives Analysis) also demonstrates the performance of each of the alternatives against pedestrian evaluation criteria and performance indicators. Please see Chapter 10 of the EIS/EIR and the LPA report for the analysis supporting the LPA. Section 10.2.4.3 contains criteria related to access and pedestrian safety.</p>
A-7c-5	<p>Comment is out of date. Alternatives have since been better defined as part of the EIS/EIR. All of the build alternatives, including the LPA, would provide corner bulbouts.</p>

- A-7c-6 The project assumes that DPW would continue to maintain the landscaping under any of the alternatives. Cost sharing agreements for any increased cost over existing conditions will be refined and negotiated during the design phase, if the project is approved.
- A-7c-7 Support for Build Alternative 2 noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.
- A-7c-8 Comment is out of date. Alternatives have since been better defined.
- A-7c-9 Support for Build Alternative 2 noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.
- A-7c-10 Comment is out of date. Alternatives and landscaped areas were better defined as part of the Draft EIS/EIR.
- A-7c-11 Large tree plantings are not proposed for platform locations nor are they represented as such in the EIS/EIR.
- A-7c-12 Maintenance agreements and requisite operational accommodations will be further refined as part of the design phase, if the project is approved. Additional maintenance costs for the build alternatives, including the LPA, are reflected in Chapter 9 of the EIS/EIR.
- A-7c-13 See Master Response #7 for details on tree removal and planting opportunities. The EIS/EIR assesses the effects of tree removals in Sections 4.4 (Aesthetic and Visual Resources) and 4.13 (Biological Environment) as well as in the Alternatives Analysis, Chapter 10.
- A-7c-14 Comment is out of date. Since the date of this comment, the project team worked with DPW Bureau of Urban Forestry to determine representative landscaping which is shown in the visualizations in Chapter 4.4. BUF comments regarding the feasibility of landscaping were incorporated into the EIS/EIR.
- A-7c-15 Build Alternative 3 and the staff recommended LPA would require the removal of the dedicated Rosa Parks Memorial Tree. All relevant City processes will be followed, as described in Chapter 4.13 Biological Environment.
- Since the Rosa Parks tree is relatively young, it could be relocated to a different location, either along the corridor or in a different part of the city. Decisions about tree plantings and relocation of existing trees will be decided as part of the design phase if the project is approved.
- A-7c-16 Tree planting on station platforms is not proposed as part of this project.
- A-7c-17 Maintenance agreements, and requisite operational accommodations will be further refined as part of the design phase, if the project is approved. Additional maintenance costs of the build alternatives, including the LPA, are reflected in Chapter 9 of the EIS/EIR.
- A-7c-18 See Response to Comment A-7c-13.
- A-7c-19 Comment is out of date. Since the date of this comment, the project team worked with DPW Bureau of Urban Forestry to determine representative landscaping which is shown in the visualizations in Chapter 4.4. BUF comments regarding the feasibility of landscaping were incorporated into the EIS/EIR.
- A-7c-20 The Draft EIS/EIR does not propose tree planting on station platforms.
- A-7c-21 Maintenance agreements, and requisite operational accommodations will be further refined as part of the design phase, if the project is approved. Additional maintenance costs for the build alternatives, including the LPA, are reflected in Chapter 9 of the EIS/EIR.

- A-7c-22 See Response to Comment A-7c-13.
- A-7c-23 See Response to Comment A-7c-19.
- A-7c-24 Tree planting on station platforms is not proposed as part of this project.
- A-7c-25 Maintenance agreements, and requisite operational accommodations will be further refined as part of the design phase if the project is approved. Additional maintenance costs for the build alternatives, including the LPA, are reflected in Chapter 9 of the Draft EIS/EIR.
- A-7c-26 See Response to Comment A-7c-13.
- A-7c-27 See Response to Comment A-7c-19.
- A-7c-28 Comment is out of date. Alternatives and landscaped areas were better defined as part of the Draft EIS/EIR.
- A-7c-29 Large tree plantings are not proposed for platform locations nor are they represented as such in the EIS/EIR.
- A-7c-30 Maintenance agreements, and requisite operational accommodations will be further refined as part of the design phase if the project is approved. Additional maintenance costs for the build alternatives, including the LPA, are reflected in Chapter 9 of the EIS/EIR.
- A-7c-31 See Response to Comment A-7c-13.
- A-7c-32 See response to comment A-7c-19 above.
- A-7c-33 See response to comment A-7c-29 above.
- A-7c-34 See response to comment A-7c-30 above.
- A-7c-35 See response to comment A-7c-13 above.
- A-7c-36 See response to comment A-7c-19 above.
- A-7c-37 See response to comment A-7c-15 above.
- A-7c-38 See response to comment A-7c-13 above.
- A-7c-39 See response to comment A-7c-19 above.
- A-7c-40 See response to comment A-7c-29 above.
- A-7c-41 See response to comment A-7c-30 above.
- A-7c-42 See response to comment A-7c-13 above.
- A-7c-43 See response to comment A-7c-19 above.

City and County of San Francisco



Gavin Newsom, Mayor
Edward D. Reiskin, Director



(415) 695-2017
FAX (415) 695-2175
<http://www.sfdpw.com>

Department of Public Works
Bureau of Street Environmental Services
2323 Cesar Chavez Street
San Francisco, CA 94124-1003
Tim Hines, Acting Superintendent

Date: September 4, 2008
To: Kris Opbroek, Project Manager
From: Chris Ellen Montgomery, Assistant Superintendent BSES
Subject: Bureau of Street Environmental Comments, RE: General Alternative 4: Center Lanes BRT with Left Side Loading / Center Median

More details are needed regarding the median design plan, in order to fully evaluate our ability to mechanical sweep. We have had problems with other transportation designs. For example, the 3rd Street Light Rail platform design is problematic- we need to use a Flusher to push the debris out from under the platform before we can remove it.

Depending on platform design, our mechanical sweeping costs may be doubled. Presently, Van Ness is swept at night (there is a 10% pay differential) with minimum impact to vehicle traffic or pedestrians. If the platform is built with an overhang, we might have to use an additional truck driver to operate a Flusher truck. This also increases our use of water. Once the center median/platform was flushed, we would also then need to mechanically sweep it. An overhanging platform provides areas for debris to collect and accumulate despite regular sweeping. Whenever there is an interface between buses and maintenance workers, there is an increased safety risk.

A-7d-1

Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: San Francisco Department of Public Works

Reviewer's
Comment
Number

Response

A-7d-I

Comment is out of date. DPW has determined that there would not need to be an additional truck because the platforms are not proposed to be built with an overhang. Operations and maintenance costs, provided by DPW, are reflected for each alternative in Chapter 9 as well as the Alternatives Analysis, Chapter 10 in the EIS/EIR.

All City standards will be met for the maintenance of the BRT infrastructure. The project team has been working closely with DPW operations to determine cost and operation of maintenance along the corridor. Agreements will be further developed as part of the design phase, if the project is approved.

City and County of San Francisco



Gavin Newsom, Mayor
Edward D. Reiskin, Director

**Kris Opbroek
Project Manager**
30 Van Ness, 5th Floor
San Francisco, CA 94102

PH 415.558.4045
www.sfdpw.org

Department of Public Works

Architecture Bureau
Gary Hoy

Construction Management
Donald J. Eng, P.E.

Engineering Bureau
James Chia

Project Management Bureau
Edgar A. Lopez

Street Use and Mapping Bureau
Barbara L. Moy

Date: September 5, 2008
To: Rachel Hiatt, San Francisco County Transportation Authority
From: Kris Opbroek, Project Manager, Department of Public Works
Subject: Department of Public Works Comments
Van Ness Avenue Bus Rapid Transit (BRT), Preliminary Engineering
Studies, August 14, 2008

The Department of Public Works has evaluated the three Alternatives shown in the Preliminary Engineering Studies, August 14, 2008. Comments are attached and structured as follows:

Bureau of Engineering (BOE), Landscape Architecture (ELA), John Thomas
Bureau of Engineering (BOE), Streets & Highways (ESH), Patrick Rivera
Bureau of Engineering (BOE), ADA, Disability Access Coordinator, Kevin Jensen
Bureau of Engineering (BOE), Mechanical (EME), Michael Smith
Bureau of Engineering (BOE), Hydraulics (EHY), Ken Sin
Bureau of Street Environmental Services (BSES), Chris Montgomery
Bureau of Urban Forestry (BUF), Liz Lerma

I would also like to highlight that the Better Streets Policy, Chapter 98 of the San Francisco Administrative Code (Ord. 33-06, File No. 051715, App. 3/10/2006), calls for a number of design requirements for city streets. This expands upon the City's Transit First Policy and the Urban Design Element of the City's General Plan to include elements such as, but not limited to, stormwater management (98.1.c.2), generous landscaping, lighting and greenery (98.1.c.1), public view corridors (98.1.c.3), habitat for urban wildlife (98.1.c.4) and useable open space (98.1.d.3). The three alternatives should be evaluated with this policy as the city standard.

Basic comments on the three alternatives relative to the Better Streets Policy:

Alternative 2: Maintains the current stormwater benefit of the median. Also maintains generous landscaping and greenery, public view corridors, habitat for urban wildlife.

A-7e-1

Alternative 3: Significantly reduces the stormwater management and landscaping and greenery, degrades the public view corridor and habitat for urban wildlife.

A-7e-2

Alternative 4: Somewhat reduces the stormwater management and landscaping and greenery by removing portions of the existing median, degrades the habitat for urban wildlife.

A-7e-3

"IMPROVING THE QUALITY OF LIFE IN SAN FRANCISCO" We are dedicated individuals committed to teamwork, customer service and continuous improvement in partnership with the community.
Customer Service Teamwork Continuous Improvement

To: **Rachel Hiatt, San Francisco County Transportation Authority**

From: **John Thomas, Landscape Architect, Dept. of Public Works**

Date: **August 27, 2008**

Re: **Van Ness BRT Study—Alternatives Evaluation, Urban Design/Landscape Criteria**

The Department of Public Works has evaluated the alternatives for the Van Ness Avenue Bus Rapid Transit Study based on their urban design performance. The five scenarios studied were:

- Alternative 1: 2010 No Project
- Alternative 2: Side Lanes
- Alternative 3: Center Lanes with Side Medians
- Alternative 4: Center Lanes with Center Medians

We evaluated, commented on and assigned a score on a scale of 1 (low) to 5 (high) to certain urban design criteria, including:

- Street identity
- Ability to create useable open space
- Quantity, quality and character of landscape
- Quality of sustainable storm water management treatments

We have also commented on but did not assign a score to other related criteria with the expectation that this will inform the evaluations and scoring being prepared by other City Departments, including:

- BRT transit route branding

Sub criteria for Urban Design Evaluation

Street Identity. This sub criterion reflects the ability of an alternative to develop a coherent design concept for Van Ness Avenue through the design and placement of the BRT platforms, traffic lanes, street trees, and planting areas.

Ability to Create Useable Open Space. This sub criterion reflects the ability of an alternative to provide spaces along Van Ness Avenue, which pedestrians may use comfortably for a variety of purposes.

Quantity, Quality and Character of Landscaping. This sub criterion reflects the ability of a BRT alternative to provide street trees and ground covers in a manner that enhances its overall identity, and supports and enhances its primary elements (for example, sidewalks, traffic/BRT lanes, and BRT platforms).

A-7e-4
continued



Quality of Sustainable Storm Water Management Treatments. This sub criterion reflects the ability of a BRT alternative to reduce the amount of storm water runoff.

A-7e-4
continued

Summary of Urban Design Evaluation

Alternative 1: 2010 No Project (existing conditions)

A-7e-5
continued

The existing landscape character of Van Ness Avenue is one of the most developed of San Francisco's major thoroughfares. From Market Street to Lombard Street, 292 mostly mature trees occur along the sidewalks. The predominant sidewalk tree is London Plane Tree (*Platanus acerifolia*) with 194 specimens. Other significant tree species include *Ficus microcarpa* (41 trees), *Tristania conferta* (23 trees), and *Acacia melanoxylon* (20 trees).

In addition to the sidewalk trees, 89 trees occur in the center median. Thirty-seven mature specimens of various *Eucalyptus* species and six small flowering fruit trees have been complemented in recent years by two additional species. Thirty *Tristania conferta* have been planted in the narrow median sections created by the left-turn lanes, and 16 *Quercus suber* (Cork Oak) have been planted where the median is at its full fourteen-foot width. In 2006, one of these cork oaks, a large 60" box specimen, was planted (north of Jackson Street) in memory of Rosa Parks.

Enhancing the center median tree planting is an extensive (51,000 square feet) area for median groundcovers. Approximately 28,000 square feet of this area was recently renovated with *Ceanothus*, *Geranium Ivy* and *Fortnight Lily*. As part of the renovation, the chain link fence on the Civic Center block between McAllister Street and Grove Street was replaced with ornamental fencing. Throughout the corridor, the median planting is currently set back from the back of curb by a 1'-6" wide concrete or cobble edging. The edging improves safety for maintenance staff by establishing a shy way from vehicular traffic.

A streetscape proposal for Van Ness Avenue from Market St. to McAllister St. is currently in the planning/agency review phase. The proposal includes sidewalk planting areas with raised curbs and low ornamental fencing, hanging planter baskets from the existing street lights, a landscaped median from Market St. to Fell St., and street trees on both sides of Van Ness between Grove St. and McAllister St.

Alternative 1 has a relatively consistent character with respect to the median footprint, maintaining a regular form except where left-turn lanes are provided. The mature trees and approximate 50,000 square feet of groundcover area retain rainwater, thereby reducing storm water runoff.

Alternative 2: Side Lanes

The design features of the side lane alternative conserve and build upon the existing condition of Van Ness Avenue. The 14-foot wide existing median becomes more continuous with the reduction of left-turn lanes. The line of sidewalk street trees, which is currently broken at the bus stops, may now run continuously behind the bus bulb platform areas. With the preservation of the existing trees and groundcovers, the plant palette for Alternative 2 will most likely be derived from the existing vegetation: London Plane and *Tristania* trees in the sidewalks; and *Eucalyptus*, *Tristania*, and Cork Oak in the

center median. The center median's 14-foot width permits a broad selection of tree profiles, from upright to spreading, should additional tree species be considered at certain highlighted locations (for example, Market St. or between O'Farrell St. and Geary St.)

Alternative 2 performs strongly on all of the urban design criteria: street identity; ability to create useable open space; quality, quantity, and character of landscape; and quality of sustainable storm water management treatments.

Alternative 2 has strong street identity because it preserves the existing planted median on Van Ness Avenue with minimal lane weaving, thus maintaining a consistent linear form with transitions only at the left-turn lane pockets. The median trees and sidewalk trees exhibit a consistent pattern on a block-by-block basis: there are no segments of the corridor where both do not occur. With the introduction of the bulbs at the bus platforms, sidewalk trees may now form a continuous tree line along the sidewalk. This will significantly improve upon the existing condition, where sidewalk trees generally do not occur in the bus stops. The trees and landscape median also have a consistent relationship to the roadway and BRT lanes by framing their edges.

The center median's 14-foot width allows sufficient room for the planting to be set back from the curb, thus increasing the safety of maintenance staff. (A 1'-6"-wide paved border has been installed on the existing median for this purpose.) The median width also allows the median planting profile to vary in height if desired (for example, beginning low at the curb and ascending in height toward the center).

Alternative 2 creates useable open space because the bus platforms integrate with the adjacent sidewalk, creating 23'-wide sidewalk areas that serve as mixed-use spaces. Bus riders waiting in the platform areas would benefit from the nearby presence of street trees running through where the platform meets the sidewalk. In addition, the dedicated BRT lane adjacent to the sidewalk places through traffic 12'-6" away from pedestrians at the bus platform (19'-6" where there is a parking lane), thus providing separation between vehicles and pedestrians.

Of the three alternatives, Alternative 2 preserves the most existing median vegetation, thus retaining the most mature tree canopy. It also provides the most median landscape area (94,000 square feet). Its area to edge ratio (square feet of landscape area/linear feet of edge) is the highest of the three alternatives (8.27) This figure indicates that the shape of the median areas is wider than in the other schemes, thus giving the medians more compositional strength and improving the ease of maintenance.

With regard to branding, Alternative 2 provides an opportunity to create bus stops with architectural features in front of a continuous street tree line. The stops would create an alternating rhythm effect along Van Ness Avenue as they move from one side to the other. Although buses would not have exclusive use of the BRT lanes, the lanes' continuous and regular linear form has potential for articulation in texture and/or color.

Alternative 3: Center Lanes with Side Medians

Alternative 3 places the dedicated BRT lanes in the center of Van Ness Avenue, flanked by side medians. Bus platforms occur in the side medians. The side medians range in width. Block segments are 2', 4', 6', 8' and 12' wide, with most median widths six or eight-feet. Where lanes transition in horizontal alignment, the median end tapers.

Since Alternative 3 removes all but four of the existing median trees, new median trees (approximately 237 trees, planted 40' on center) are proposed where the median is at least 4-feet wide. Since the medians are relatively narrow and adjacent to vehicular lanes, tree profiles should be either columnar or upright to avoid conflicts with spreading branches. Tree species selection could reflect an emphasis on certain highlighted locations such as Market St. and the medians north and south of the Geary St. bus platforms. The application of a 1'-6"-wide paved setback to the 6' and 8'-wide medians would reduce the planting area to 50% or less of the overall median width.

The placement of the bus platforms in the center medians allows the sidewalk tree planting to run continuously along the entire block. Tree species selection would most likely be either London Plane Tree or Tristania (Brisbane Box), two of the most commonly planted existing sidewalk trees.

Alternative Three's concept of placing the BRT lanes in the center of the roadway, separated from traffic lanes by parallel landscape medians and bus platforms, has the potential for a strong axial effect. Formal inconsistency and the inability to plant trees on the BRT platform due to accessibility clearances, however, limit the effectiveness of the parallel medians to establish a consistent streetscape character and mediate between the BRT realm and vehicular traffic. The landscape medians weave in their horizontal alignment, and vary considerably in width and shape. In some cases they are too narrow for trees, which, coupled with the treeless bus platforms, breaks the continuity of the median tree line along the corridor.

The character of Alternative 3's center realm varies along the corridor. Blocks may have consistent double rows of trees through the entire block length; rows of trees combining with bus platforms in either a staggered or parallel composition; or no trees where the median is less than four-feet wide.

The amount of median area in Alternative 3 that can be planted in trees and groundcovers is approximately 49,800 square feet. The area to edge ratio is 3.25, the lowest of all the alternatives. Since Alternative 3 removes the most existing trees and has the least amount of shrub/groundcover area, its ability to retain rainwater is comparatively low.

With regard to branding, Alternative 3 provides an opportunity to create a freestanding architectural image for the bus platforms in the center of the roadway. The irregular weaving pattern of the dedicated BRT lanes diminishes their figural character.

Alternative 4: Center Lanes with Center Medians

Alternative 4 retains all or portions of the center median for 11 blocks between Market St. and Lombard St. The placement of the bus platforms in the center medians allows the sidewalk tree planting to run continuously along the entire block. Tree species selection would most likely be either London Plane or Tristania, the two most commonly planted existing sidewalk trees. The appropriate tree profiles for the center realm will vary. Fourteen-foot wide landscaped medians allow for trees with a columnar to spreading habit, while eight-foot medians would accommodate columnar to upright trees. The variation in median width would also affect the application of a 1'-6" wide paved setback, which proportionally works best with the 14' median.

In so far as it preserves more of the existing center median, Alternative 4 compares favorably to Alternative 3. Alternative 4 preserves more existing trees (35) and provides more shrub/groundcover area (64,700 square feet) than any of the center loading alternatives (and thus ranks well with regard to storm water retention). Its area to edge ratio of 4.93 is also the highest of the center loading concepts.

With regard to street identity, Alternative 4 has qualities similar to Alternative 3 (center lanes with side medians). Where side medians occur they are frequently irregular and narrow in shape due to the weaving lane configuration. This condition, coupled with treeless bus platforms resulting from accessibility clearances, results in an inconsistent tree pattern. On six blocks north of Sutter Street, a side median is two-feet wide, too narrow to plant with ground covers or trees.

The branding potential for Alternative 4 lies with the bus platforms occupying a freestanding location in the center of the right-of-way. Lane weaving and the highly variable quality of the medians undermine its ability to express a coherent transit realm.

Overall, Alternative 2: Side Lanes performed best of the four proposed alternatives. It preserves the most existing trees and landscape area; results in significantly more planting area with a high area to edge ratio as well as formal consistency; and creates the most useable public space by integrating with the existing sidewalks. Alternative 5: Contra-Flow performed the best of the center platform alternatives, due to its strong linear form and compositional clarity and consistency. Alternative 3: Center Lanes with Side Median, and Alternative 4: Center Lanes with Center Median are compositionally inconsistent, with medians of irregular and narrow shape. Of the two, Alternative 4 had the larger amount of trees and groundcover area, as well as the higher area to edge ratio.

Please see the attached spreadsheets for a full description of the evaluation of alternatives and assigned scores.

	Alternative 1: 2010 No Project (Existing Conditions)	Alternative 2: Side Lanes	Alternative 3: Center Lanes with Side Medians	Alternative 4: Center Lanes with Center Medians
Street Identity	<ul style="list-style-type: none"> -strong central axis with consistently planted 14' wide median 	<ul style="list-style-type: none"> - preserves existing median planting - traffic lanes/median consistently linear, with minimal weaving - median trees consistent on block by block basis 	<ul style="list-style-type: none"> -center medians weave and vary in width and shape - presence of median trees and groundcovers vary from block to block 	<ul style="list-style-type: none"> - center medians weave and vary in width and shape - presence of median trees and groundcovers vary from block to block
Ability to Create Useable Open Spaces	<ul style="list-style-type: none"> - side platforms combine with sidewalks to create 23' wide mixed-use spaces, especially valuable where ground is relatively level - bus platform areas can be shaded by sidewalk trees 	<ul style="list-style-type: none"> - 8' wide bus platforms bounded by roadway provide little opportunity for multiple uses 	<ul style="list-style-type: none"> - 8' wide bus platforms bounded by roadway provide little opportunity for multiple uses 	<ul style="list-style-type: none"> - 8' wide bus platforms bounded by roadway provide little opportunity for multiple uses
Quality, Quantity and Character of Landscape	<ul style="list-style-type: none"> - 14,750 s.f. paved median - area/edge ratio: 6.90 - 292 existing sidewalk trees - London Plane Tree predominant sidewalk tree - 89 median trees (mature Eucalyptus and Rosa Parks Memorial Tree) - 51,000 s.f. median planting area - sidewalk tree line broken at bus stops - 14'-wide median with 1'-6" concrete/cobble shwyway easy to maintain - 28,000 s.f. median planting recently renovated - 37 mature Eucalyptus - 51,000 s.f. median planting area 	<ul style="list-style-type: none"> - total (net) median trees: 200 - 217 new sidewalk trees - 0 s.f. paved median (median less than 4' wide) - preserves 89 existing trees and 28,000 s.f. existing groundcover - 94,000 s.f. median planting area - 111 proposed median trees (40' on center spacing) - 1,100 s.f. median with trees/no groundcover (median 4' wide) - area/edge ratio: 8.27 - 14'-wide median (identical to existing condition) allows for 1'-6" shwyway to set planting area back from curb, thus improving ease of maintenance - preserving existing mature trees improves storm water retention - large amount of median planting area significantly improves stormwater retention 	<ul style="list-style-type: none"> - total (net) median trees: 241 - 217 new sidewalk trees - removes 85 existing trees (4 existing trees remain); removes 28,000 s.f. existing groundcover - 49,800 s.f. median planting area - 237 proposed median trees (40' on center spacing) - 4,100 s.f. median with trees/no groundcover (median 4' wide) - 2,800 s.f. paved median (median less than 4' wide) - relatively narrow medians of irregular shape difficult to maintain - area/edge ratio: 3.25 - removing most existing mature trees decreases storm water retention - low amount of median planting decreases storm water retention (compared to existing condition) 	<ul style="list-style-type: none"> - total (net) median trees: 169 - 217 new sidewalk trees - removes 54 existing trees (35 to remain); removes 16,000 s.f. existing groundcover - 64,700 s.f. median planting area - 134 proposed median trees (40' on center spacing) - 2,200 s.f. median with trees/no groundcover (median 4' wide) - 3,300 s.f. paved median (median less than 4' wide) - relatively narrow medians of irregular shape difficult to maintain - area/edge ratio: 4.93 - preserves most trees of center loading alternatives - moderate amount of median planting improves storm water retention
Quality of Sustainable Stormwater Management Treatments				

**Van Ness BRT – Alternatives 2, 3, 4
DPW Streets & Highways Comments
August 2008**

Alternative 2 Side Lane BRT

General Comments

1. Upgrade all curb returns with ADA compliant ramps
2. Existing hydrants at corners with planned bulb outs will need to be relocated toward the new curb alignment
3. See attached Conflict Report below prepared and submitted to SFCTA on 7/15/2005

A-7e-6

A-7e-7

A-7e-8

A2-1

1. Mission/Otis: Will one of the double left turn lanes from EB Mission to WB Otis be removed with the curb bulbing? Suggestion to not change the double left turn lane
2. Will 12th St. be two ways at S.Van Ness?

A-7e-9

A-7e-10

Alternative 3 Center Lanes w/ Side Median BRT

General Comments

1. Upgrade all curb returns with ADA compliant ramps
2. Existing hydrants at corners with planned bulb outs will need to be relocated toward the new curb alignment
3. See attached Conflict Report below prepared and submitted to SFCTA on 7/15/2005

A-7e-11

A-7e-12

A-7e-13

A3-1

1. Mission/Otis: Will one of the double left turn lanes from EB Mission to WB Otis be removed with the curb bulbing? Suggestion to not change the double left turn lane
2. Will 12th St. be two ways at S.Van Ness?

A-7e-14

A-7e-15

Alternative 4 Center Lanes w/ Left Side Loading/Center Median BRT

General Comments

1. Upgrade all curb returns with ADA compliant ramps
2. Existing hydrants at corners with planned bulb outs will need to be relocated toward the new curb alignment
3. See attached Conflict Report below prepared and submitted to SFCTA on 7/15/2005

A-7e-16

A-7e-17

A-7e-18

**Van Ness BRT – Alternatives 2, 3, 4
DPW Streets & Highways Comments
August 2008**

**Van Ness Bus Rapid Transit Study
Potential Public Works and Utility Conflicts with Alternative BRT Concepts
Review of Sewer As-Builts; Auxiliary Water Supply System As-Builts;
and Water Department As-Builts
July 15, 2005
Patrick Rivera**

Existing Condition

DPW sent notices of intent (NOIs) to a comprehensive list of private companies and public agencies that may have facilities along the Van Ness corridor in the vicinity of the proposed BRT projects. These NOIs request that the company provide as-built drawings of any facilities in the project study area. As of this writing, 21 of 47 total agencies have responded to the notice. Of those 21, DPW finds that three companies/agencies have facilities in the project area that may have significant implications for the BRT alternatives. These include a sewer facility and auxiliary water supply facilities, described below. It's recommended that during the planning phase, a utility composite drawing be developed in order to overlay the various BRT options to determine potential conflicts.

A-7e-19

Sewer As-Builts

Along Van Ness Avenue from Market to Lombard Streets, there are manholes and various sizes and types of sewer lines that run down the center of Van Ness Avenue. These sewer lines are located underneath the existing center median. The sizes and types of sewer lines include the following:

A-7e-20

- 3'x5' brick sewer
- 27" Vitrified Clay Pipe (VCP)
- 12" VCP
- 18" VCP
- 16" RCP
- 15" Iron Stone Pipe (ISP)
- 16" ISP
- 16" Brick Pipe

During planning and design of the Van Ness BRT, consideration should be given to the affect any future maintenance, repair and replacement of the sewer lines will have on the operation of the proposed Van Ness BRT lines. Depending on which alignment is chosen (center-lane or side-lane), Muni service may need to be altered in order to accommodate for these operations. The center-lane BRT alternatives should allow for maintenance workers to access the center median area to repair sewer facilities as necessary. Ensuring the ability to reroute Muni service to a lane other than the center lane in the event of needed sewer repairs will address the conflict. Also, manholes may need to be relocated and associated sewer lines may need to be realigned to accommodate for proposed medians and boarding islands.

Auxiliary Water Supply System (AWSS) As-Builts

The AWSS system is a high pressure water system that supplies water to fight fires for the specific use of the San Francisco Fire Department. The system includes the underground ductile iron and cast iron pipes and underground cisterns. The AWSS lines along Van Ness switches from the east to the west side of Van Ness. The location of the AWSS lines from the face of curb to the centerline of the pipes vary between 20ft to 35 ft. During planning and design of the Van

A-7e-21

continued

**Van Ness BRT – Alternatives 2, 3, 4
DPW Streets & Highways Comments
August 2008**

Ness BRT, consideration should be given to the affect any future maintenance, repair and replacement of the AWSS lines will have on the operation of the proposed Van Ness BRT lines. BRT alternatives should not prevent access to the underground AWSS lines. Depending on which alignment is chosen, Muni service may need to be altered in order to accommodate for these operations. Ensuring the ability to reroute Muni service to other lanes in the event of needed AWSS repairs will address this conflict.

A-7e-21
continued

Also, gate valves may need to be relocated and associated AWSS lines may need to be realigned to accommodate for proposed medians and boarding islands. Gate valves are used to control water flow through the AWSS pipes. A special truck with a motorized rig is used to turn the gate valves. There must be adequate access for the trucks to park next to the gate valve in order to turn the valves. The gate valves cannot be located beneath a medians or boarding islands. Furthermore, per City standard, hydrants may need to be relocated to within 24 inches to 27 inches from the face of the curb to the centerline of the hydrant at proposed curb bulb areas.

A-7e-22

Another AWSS facility within the Van Ness corridor is the SFFD cisterns. Cisterns are large storage tanks buried under the roadway surface approximately 25' to 30' in diameter and 20'-25' tall and hold approximately 75,000 gallons of water. The cisterns are another source of water SFFD can use in addition to the fire hydrants. The as-builts identify 10 cisterns along the Van Ness corridor. During planning and design of the Van Ness BRT, consideration should be given to the affect any future maintenance, repair and replacement of the cisterns will have on the operation of the proposed Van Ness BRT lines. Depending on which alignment is chosen, Muni service may need to be altered in order to accommodate for these operations. Ensuring the ability to re-route Muni service to other lanes in the event of needed cistern repairs will address this conflict.

A-7e-23

San Francisco Water Department (SFWD) As-Builts

The SFWD system provides drinking water to the businesses and residents of San Francisco as well as low pressure fire hydrants. The system includes underground ductile iron pipes, gate valves to control water flow and hydrants. The SFWD water line along both the west and east sides of Van Ness Ave. During planning and design of the Van Ness BRT, consideration should be given to the affect any future maintenance, repair and replacement of the SWFD lines will have on the operation of the proposed Van Ness BRT lines. BRT alternatives should not prevent access to the underground SFWD water lines. Depending on which alignment is chosen, Muni service may need to be altered in order to accommodate for these operations. Ensuring the ability to reroute Muni service to other lanes in the event of needed water line repairs will address this conflict. Furthermore, per City standard, hydrants may need to be relocated to within 24 inches to 27 inches from the face of the curb to the centerline of the hydrant at proposed curb bulb areas.

A-7e-24

**Van Ness BRT – Alternatives 2, 3, 4
DPW Streets & Highways Comments
August 2008**

Utility Companies Responding to NOI Requests

1	SBC	Bob Pickard	370 3 rd St, Room 5200	San Francisco, CA 94107	415.542.9095
2	NRG	Nicholas Joseph	460 Jessie Street	San Francisco, CA 94103	415.644.9783
3	CCSF-DTIS	Gerald Snyder	901 Rankin St	San Francisco, CA 94124	415.550.2723
4	SFPUC-Water Pollution Control	Gordon Mak	750 Phelps	San Francisco, CA 94124	415.648.6882
5	Sprint	Serf Garcia	1850 Gateway Drive, 2 nd Floor	San Mateo, CA 94404	650.513.2336
6	Port of San Francisco	Skip Zoeller	Pier 1	San Francisco, CA	415.274.0552
7	Electric Lightwave, LLC	Tom Burke	650 J Street	Sacramento, CA 95814- 2412	916.231.5748
8	Comcast	Paul O'Leary	2055 Folsom St	San Francisco, CA 94110	415.863.8500
9	RC10N	Twila Griffith	1400 Fashion Blvd #100	San Mateo, CA 94404	650.212.8123
10	CCSF Bureau of Surveys & Mapping	Javier Rivera	875 Stevenson	San Francisco, CA 94102	415.554.5864
11	MCI	Cris Kurbanick/Pam Brown	375 Newhall St	San Francisco, CA 94124	415.970.2134
12	AT&T	JL Robinett, Shasta Consulting Group	2741 N.Main	Walnut Creek, CA 94596	925.944.8416
13	DPW BOE Hydraulics	Chung Linh	1680 Mission St., 3 rd Floor	San Francisco, CA 94103	415.554.8298
14	Level 3 Communications	Steven Gilman	1025 Eldorado Blvd., Ste 33A- 523	Broomfield CO 80021	720.888.5920
15	DPW BOE Mechanical Section	Michael Smith	30 Van Ness Ave., 5 th Floor	San Francisco, CA 64102	415.558.4536
16	M.Powell Communications/ICG Communications	Curt Heley	190 Park Center Plaza Suite 100	San Jose, CA	
17	XO Communications	ChadAuchey	855 Mission Ct	Fremont, CA 94539	510.580.6363
18	Global Crossing	Luis Garcia	435 W.Commercial St.	East Rochester, NY 14445	585.255.1027
19	SFPUC-SFWD	Arleen Chan	1990 Newcomb Ave	San Francisco, CA 94124- 1617	415.550.4931
20	SFPUC-BLHP	Rod Clavel	1155 Market St, 4 th Floor	San Francisco, CA 94103	415.554.0729
21	DPT	Kenneth Kwong	25 Van Ness Ave., Ste 345	San Francisco, CA 94102	415.554.2337

**Van Ness BRT – Alternatives 2, 3, 4
DPW Streets & Highways Comments
August 2008**

City and County of San Francisco



Gavin Newsom, Mayor
Edward D. Reiskin, Director

Kevin W. Jensen, AIA
ADA / Disability Access
Coordinator
30 Van Ness, 5th Floor
San Francisco, CA 94102

PH (Main) 415.557.4675
PH (Office) 415.557.4685
TTY 415.558.4088
www.sfdpw.org
kevin.w.jensen@sfdpw.org

Architecture Bureau
Gary Hoy
Construction Management
Donald J. Eng, P.E.
Engineering Bureau
James Chia
Project Management Bureau
Edgar A. Lopez
Street Use and Mapping Bureau
Barbara L. Moy

29 August 2008

To: Kris Opbroek

Subject: Accessibility review comments regarding the Preliminary Engineering Studies documents dated August 14, 2008, as prepared by Parsons for the San Francisco Transportation Authority.

General Accessibility Comments – All Three Alternatives:

1. The Side Lane BRT is by far the best of the proposed design alternatives for persons with disabilities and pedestrians of all types. Boarding islands are problematic for persons with disabilities, particularly those with hearing and vision loss as well as cognitive disabilities. Wider sidewalks are much more pedestrian friendly and much needed along Van Ness. Wider sidewalk can accommodate much more pedestrian and neighborhood amenities where people need them and will use them. The other alternatives divide the pedestrian realm up into narrow strips that are not nearly as pedestrian friendly and useful.
2. Center boarding island alternatives: Interface of boarding islands with crosswalks is difficult and problematic for persons with disabilities. Wayfinding is difficult and pedestrian safety is reduced as compared to side lane BRT alternative.
3. Indicate all existing and new accessible on-street parking spaces (blue curb and green curb) and associated adjacent curb ramps at the rear of each space.
4. Indicate all on-street existing and new passenger loading spaces (white curb) and associated adjacent curb ramps at the rear of each space.
5. Show total on-street parking space quantities for each block face: non-accessible and accessible.
6. Wider crosswalks are good for persons with visual disabilities. Wider crosswalks facilitate locating the associated curb ramps in the center of the crosswalk, which aids the wayfinding of persons with visual impairments.
7. Provide accessible refuge islands with “thumbnail” or equivalent at all Van Ness crosswalks, at Mission Street and at Market Street transit islands. Widen crosswalks if necessary to achieve this.
8. Due to the proposed bulb-outs, this alternative will provide by far the best curb ramps along this corridor. There are locations where sub-sidewalk basements encroach into the street corner area. Providing bulb-outs will minimize and

A-7e-25

A-7e-26

A-7e-27

A-7e-28

A-7e-29

A-7e-30

A-7e-31

A-7e-32

"IMPROVING THE QUALITY OF LIFE IN SAN FRANCISCO" We are dedicated individuals committed to teamwork, customer service and continuous improvement in partnership with the community.
Customer Service Teamwork Continuous Improvement

perhaps eliminate conflicts between curb ramps and sub-sidewalk basements, and thereby will minimize the unit costs for curb ramps.

Alternative 2: Side Lane BRT

Sheet A2-1 Alternative 2: Side Lane BRT

1. Provide accessible refuge islands with “thumbnail” or equivalent at Mission Street crosswalk along east side of intersection and at Van Ness crosswalk along north side of Mission Street. Widen crosswalk if necessary.
2. Provide accessible refuge island with “thumbnail” or equivalent at Van Ness crosswalk along north side of Market Street. Widen crosswalk if necessary.

A-7e-33

A-7e-34

Sheet A2-2 Alternative 2: Side Lane BRT

1. Provide accessible refuge island with “thumbnail” or equivalent at Van Ness crosswalk along south side of Hayes Street. Widen crosswalk if necessary.

A-7e-35

Sheet A2-5 Alternative 2: Side Lane BRT

1. Provide accessible refuge islands with “thumbnail” or equivalent at Van Ness crosswalk along north side of Bush Street. Widen crosswalk if necessary.

A-7e-36

Sheet A2-6 Alternative 2: Side Lane BRT

1. Provide accessible refuge islands with “thumbnail” or equivalent at Van Ness crosswalk along south side of Pine Street. Widen crosswalk if necessary.
2. Provide accessible refuge islands with “thumbnail” or equivalent at Van Ness crosswalk along south side of Sacramento Street. Widen crosswalk if necessary.

A-7e-37

A-7e-38

Sheet A2-7 Alternative 2: Side Lane BRT

1. Provide accessible refuge islands with “thumbnail” or equivalent at Van Ness crosswalk along north side of Clay Street. Widen crosswalk if necessary.
2. Provide accessible refuge islands with “thumbnail” or equivalent at Van Ness crosswalks along Washington Street. Widen crosswalks if necessary.
3. Provide accessible refuge islands with “thumbnail” or equivalent at Van Ness crosswalks along Jackson Street. Widen crosswalks if necessary.
4. Provide accessible refuge islands with “thumbnail” or equivalent at Van Ness crosswalks along Pacific Avenue. Widen crosswalks if necessary.

A-7e-39

A-7e-40

A-7e-41

A-7e-42

Sheet A2-8 Alternative 2: Side Lane BRT

1. Provide accessible refuge islands with “thumbnail” or equivalent at Van Ness crosswalk along Broadway. Widen crosswalk if necessary.

A-7e-43

2. Provide accessible refuge islands with “thumbnail” or equivalent at Van Ness crosswalks along Vallejo Street. Widen crosswalks if necessary.
3. Provide accessible refuge islands with “thumbnail” or equivalent at Van Ness crosswalks along Green Street. Widen crosswalks if necessary.
4. Provide accessible refuge islands with “thumbnail” or equivalent at Van Ness crosswalks along Union Street. Widen crosswalks if necessary.

A-7e-44

A-7e-45

A-7e-46

Sheet A2-9 Alternative 2: Side Lane BRT

1. Provide accessible refuge islands with “thumbnail” or equivalent at Van Ness crosswalk along Filbert Street. Widen crosswalk if necessary.
2. Provide accessible refuge islands with “thumbnail” or equivalent at Van Ness crosswalks along Greenwich Street. Widen crosswalks if necessary.
3. Provide straight-line crosswalk from street corner to street corner at the Van Ness crosswalk along the south side of Lombard Street. Provide straight-line crosswalk from street corner to street corner at the Lombard crosswalk along the west side of Van Ness Avenue. Widen crosswalks if necessary. Provide accessible refuge island with “thumbnail” or equivalent at the Van Ness crosswalk along the north side of Lombard Street. Align associated curb ramps with direction of crosswalk.

A-7e-47

A-7e-48

A-7e-49

Alternative 3: Center Lanes with Side Median BRT

General Alt. 3 General Comments:

1. Island platforms that are only 8 feet wide do not provide sufficient width at the crosswalks to install detectable warning material to define traffic and BRT lanes. At least 9 feet (preferably at least 10 feet) from curb face to curb face is necessary in order to provide detectable warnings. Without detectable warnings at such hazardous vehicular traffic locations persons with disabilities will be at a distinct disadvantage with respect to safety and wayfinding.
2. There is no possibility of providing pedestrian refuge islands at the block bounded by Fell and Hayes Streets, at the southern crosswalk at Turk Street, at the Greenwich Street intersection and the south side of the Lombard Street intersection. These are all long crosswalks and persons with disabilities will need refuge areas at all Van Ness Avenue crosswalks due to lower walking speed and stamina issues.
3. Of the three alternatives presented, this one provides the least accessibility and the most numerous potential problems for persons with disabilities.
4. This alternative is a very poor fit with the available overall right of way width. It divides the pedestrian realms up into slivers of space that cannot accommodate pedestrian and neighborhood amenities in the way that wide sidewalks can.
5. Due to the reduced number of proposed bulb-outs, this alternative will make it difficult to provide the required curb ramps along this corridor. There are locations where sub-sidewalk basements encroach into the street corner area. Constructing curb ramps over sub-sidewalk basements will significantly increase the unit costs for curb ramps.

A-7e-50

A-7e-51

A-7e-52

A-7e-53

A-7e-54

“IMPROVING THE QUALITY OF LIFE IN SAN FRANCISCO” We are dedicated individuals committed to teamwork, customer service and continuous improvement in partnership with the community.

Customer Service Teamwork Continuous Improvement

Sheet A3-9 Alternative 3: Center Lanes with Side Median BRT

1. Provide straight-line crosswalk from street corner to street corner at the Van Ness crosswalk along the south side of Lombard Street. Provide straight-line crosswalk from street corner to street corner at the Lombard crosswalk along the west side of Van Ness Avenue. Widen crosswalks if necessary. Provide accessible refuge island with “thumbnail” or equivalent at the Van Ness crosswalk along the north side of Lombard Street. Align associated curb ramps with direction of crosswalk.

A-7e-55

Alternative 4: Center Lanes BRT with Left Side Loading / Center Median

General Alt. 4 General Comments:

1. This alternative is also a comparatively poor fit with the available overall right of way width. It divides the pedestrian realms up into slivers of space that cannot accommodate pedestrian and neighborhood amenities in the way that wide sidewalks can.
2. Due to the greatly reduced number of proposed bulb-outs, this alternative will make it very difficult to provide the required curb ramps along this corridor. There are locations where sub-sidewalk basements encroach into the street corner area. Constructing curb ramps over sub-sidewalk basements will significantly increase the unit costs for curb ramps.
- 3.

A-7e-56

A-7e-57

Sheet A4-2 Alternative 4: Center Lanes BRT with Left Side Loading / Center Median

1. Provide accessible refuge island with “thumbnail” or equivalent at Van Ness crosswalk along south side of Hayes Street. Offset traffic & BRT lanes and widen crosswalk as necessary.

A-7e-58

Sheet A4-9 Alternative 4: Center Lanes BRT with Left Side Loading / Center Median

1. Provide straight-line crosswalk from street corner to street corner at the Van Ness crosswalk along the south side of Lombard Street. Provide straight-line crosswalk from street corner to street corner at the Lombard crosswalk along the west side of Van Ness Avenue. Offset traffic and/or BRT lanes and widen crosswalks as necessary. Provide accessible refuge island with “thumbnail” or equivalent at the Van Ness crosswalk along the north side of Lombard Street. Align associated curb ramps with direction of crosswalk.

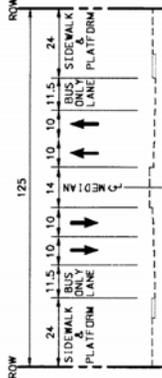
A-7e-59

End of Document

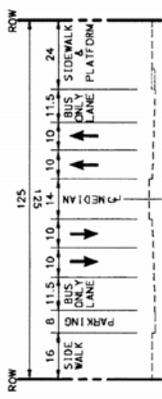


“IMPROVING THE QUALITY OF LIFE IN SAN FRANCISCO” We are dedicated individuals committed to teamwork, customer service and continuous improvement in partnership with the community.
Customer Service Teamwork Continuous Improvement

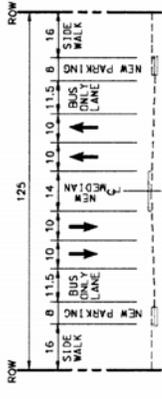
ALT 2



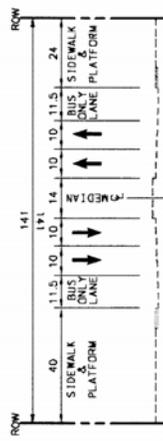
ALT 2 SECTION 5
SCALE: 1"=20'



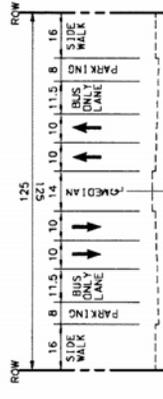
ALT 2 SECTION 3
SCALE: 1"=20'



ALT 2 SECTION 1
SCALE: 1"=20'



ALT 2 SECTION 4
SCALE: 1"=20'



ALT 2 SECTION 2
SCALE: 1"=20'

CISTERN - FIT BELOW CISTERN OUTLINE



MATCHLINE - SEE SHEET A2-2

LEGEND
 BUS LANE
 PLATFORMS
 LANDSCAPING
 NEW CURB BULB
 EXISTING BUS STOPS
 RELOCATED BUS STOPS
 NEAREST PROPOSED BUS STOP
 REMOVE EXISTING CURB BULB
 EXISTING CURB BULB

PLAN
SCALE: 1"=40'

HP HYDRANT IN LANDSCAPED AREA WOULD REQUIRE 10'x10' CONCRETE PAD

GEOTECH - ALL ABBSS GATE VALVES, AIR VALVES, AND CISTERN COVERS AND FRAMES IN BUS LANES TO BE BROUGHT TO GRADE. ANY FRAMES AND COVERS IN MEDIANS/PLANTING AREAS SHALL REQUIRE GATE VALVES TO BE RELOCATED.

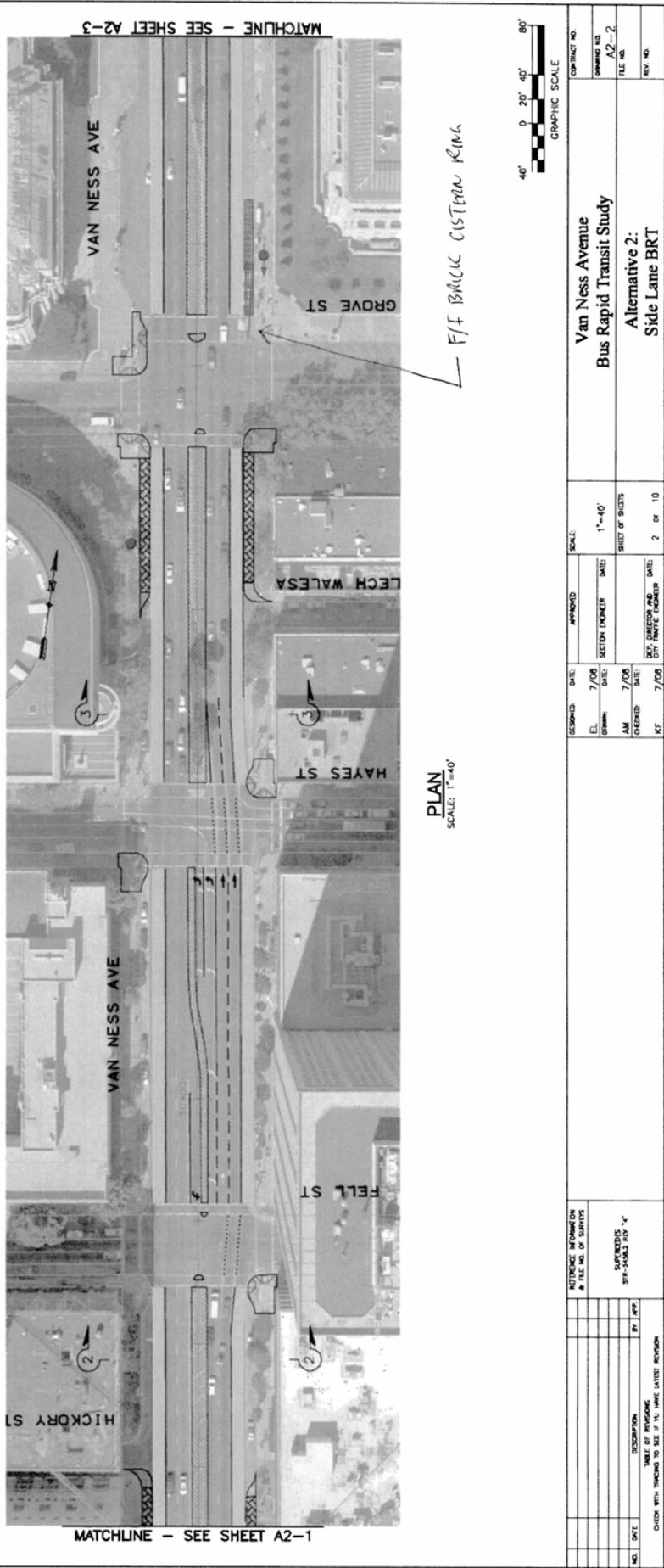
RELOCATED CURB BULB
 M. SMITH DFW/BOE/EMC 407
 08/09/08 415 598-41336

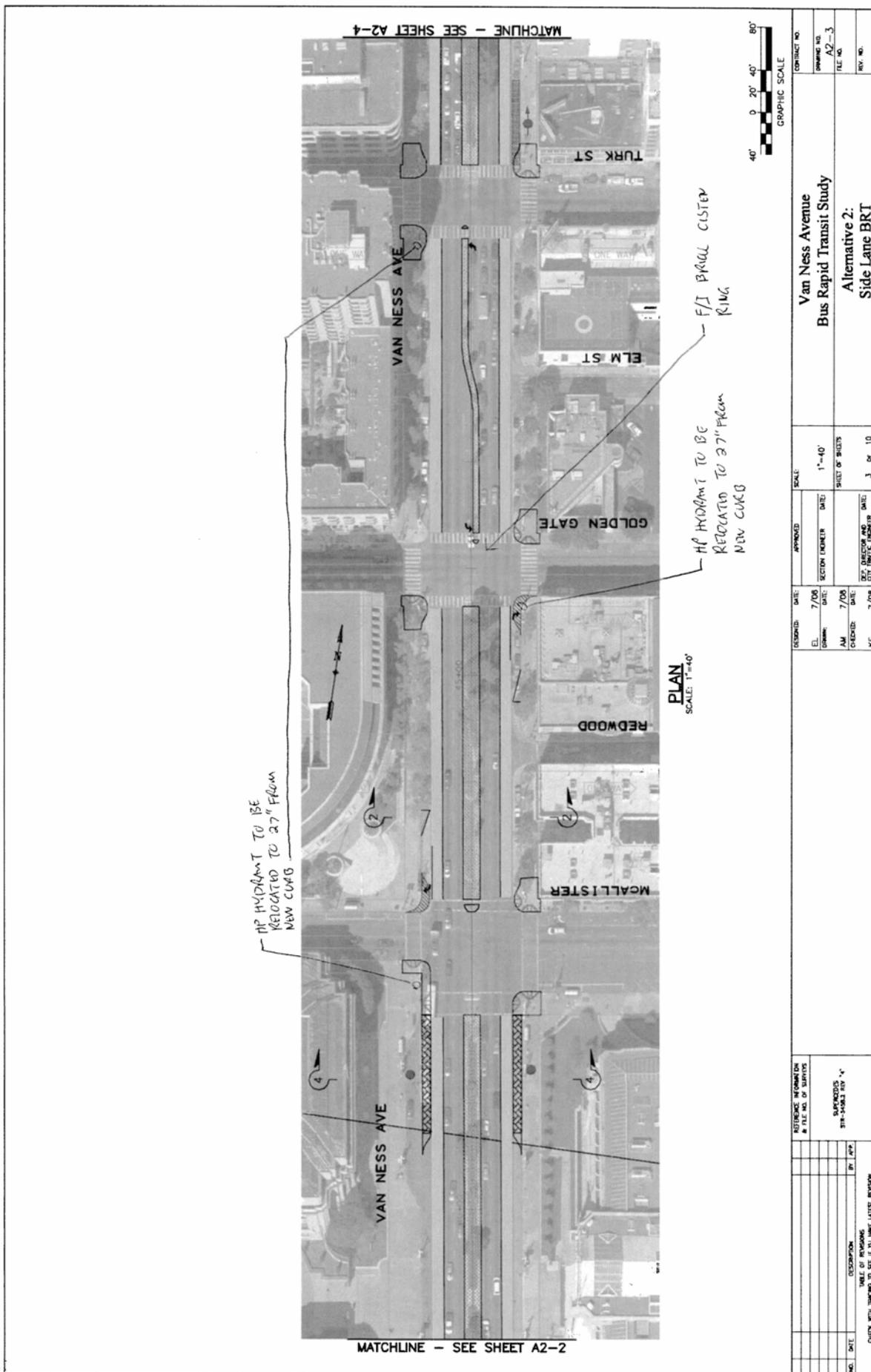
GRAPHIC SCALE
 0 20' 40' 80'

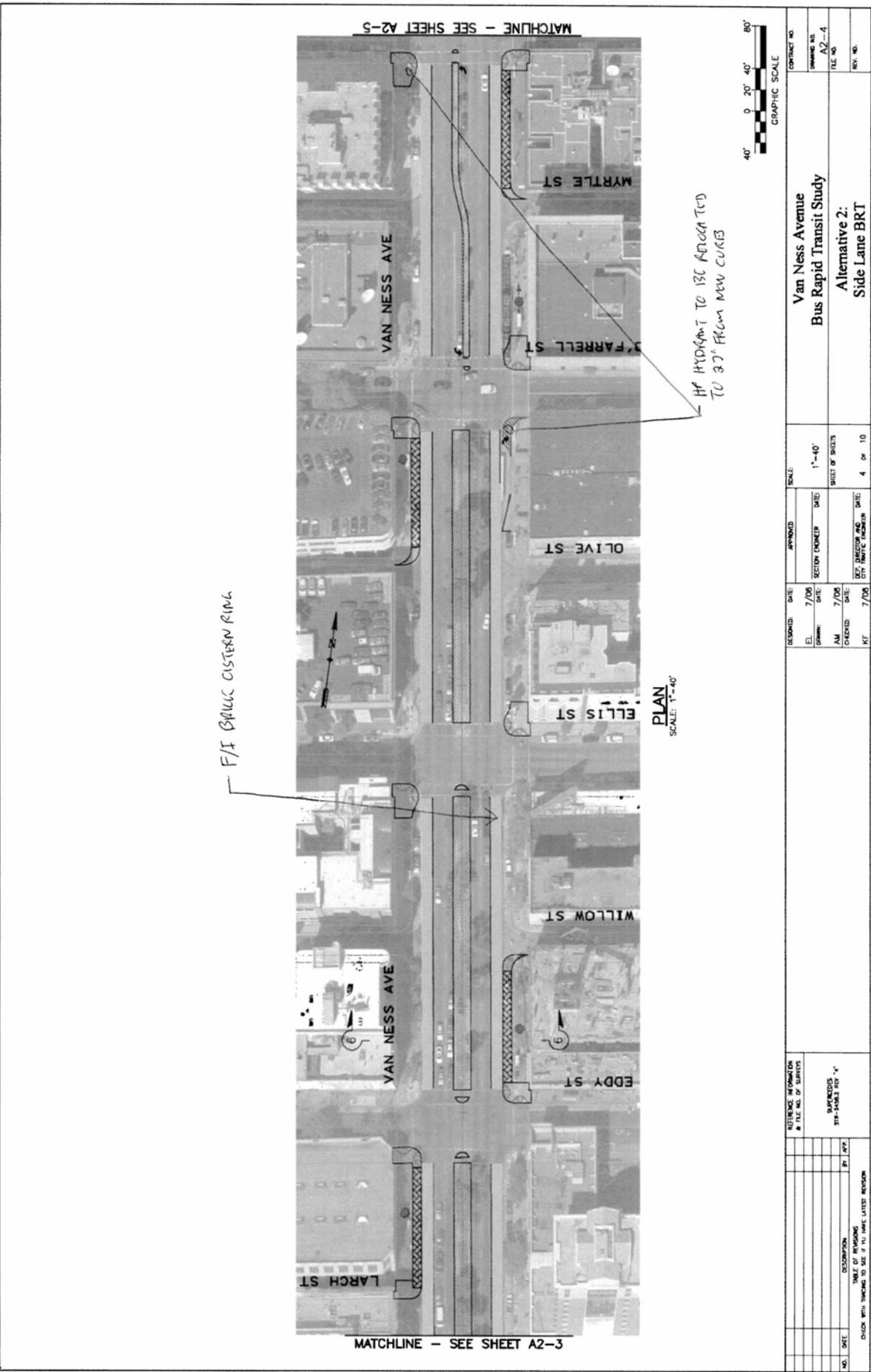
CONTRACT NO. DRAWING NO. FILE NO. REV. NO.		Van Ness Avenue Bus Rapid Transit Study Alternative 2: Side Lane BRT	
DESIGNED: DATE EL 7/08 DRAWN: DATE AM 7/08 CHECKED: DATE KF 7/08	APPROVED: DATE SECTION ENGINEER: DATE SHEET OF SHEETS 1 of 10	SCALE: 1"=40'	SHEET OF SHEETS: 1 of 10
REFERENCE INFORMATION & FILE NO. OF SURVEY		SUPPLEMENTARY SHEETS (SEE "S")	
NO. DATE DESCRIPTION CHECK WITH DRAWING TO SEE IF IT HAS LATEST REVISION		BY: J.P.P.	

MCS 08/28/08

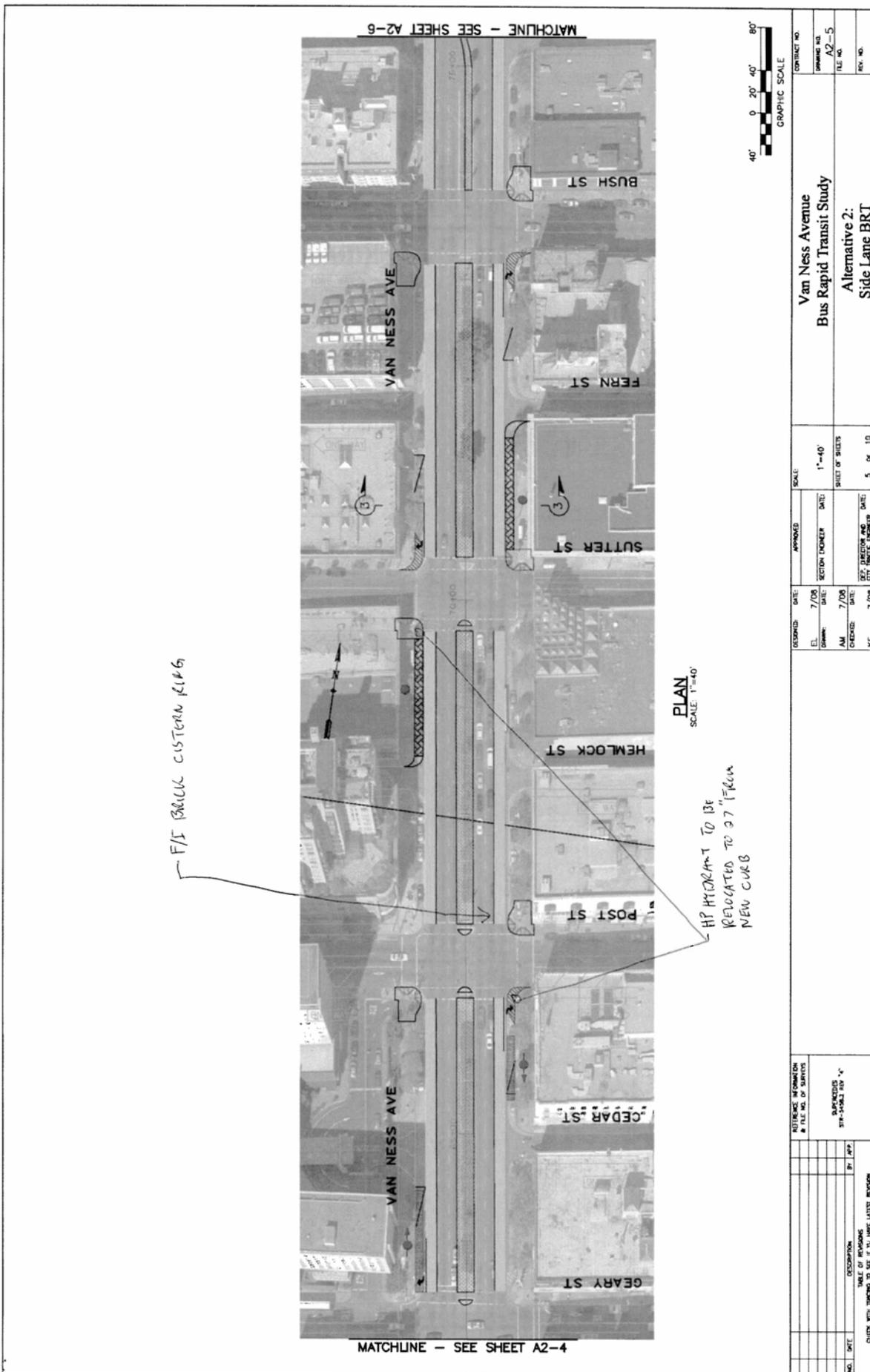
A-7e-60 continued



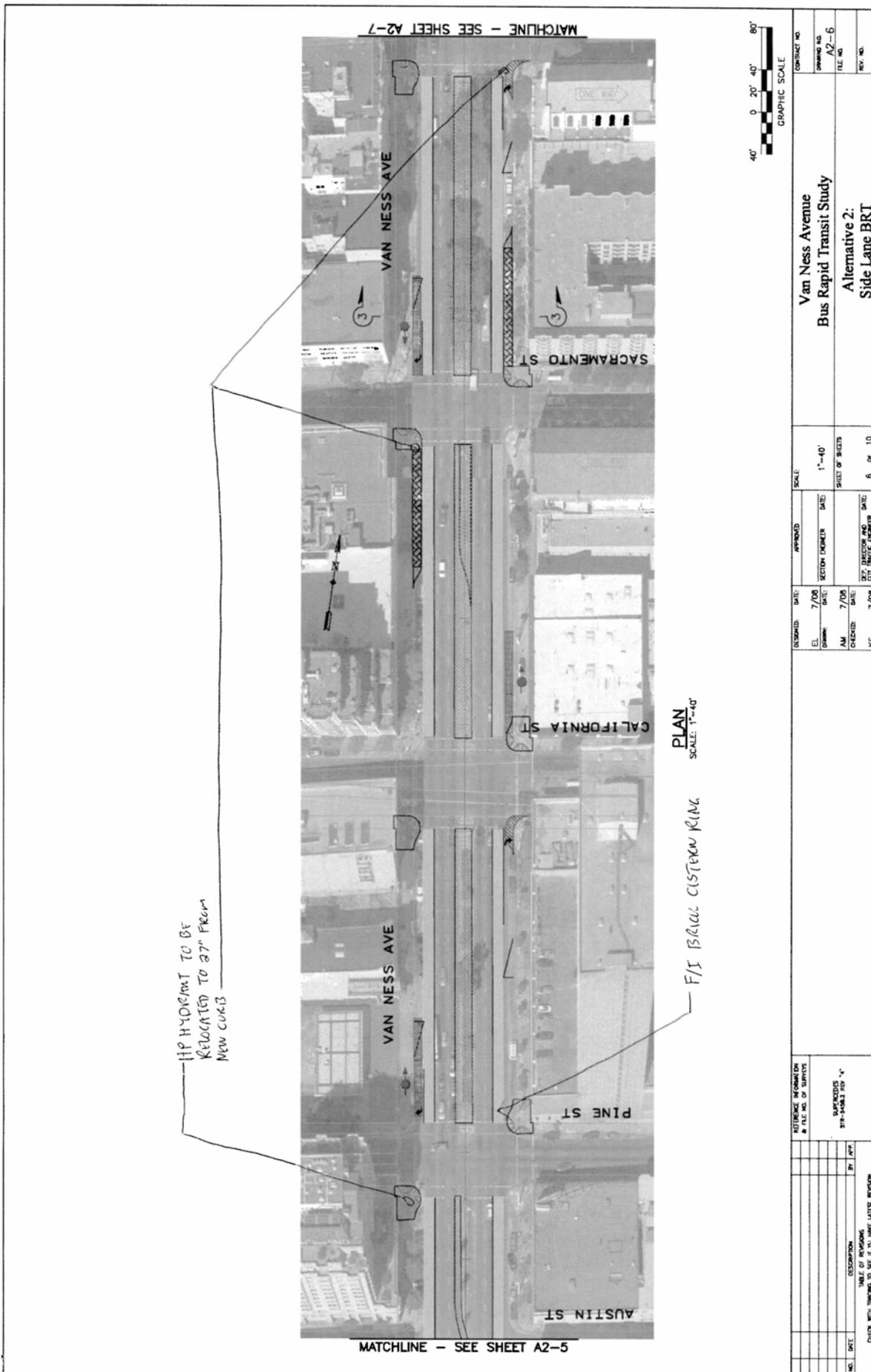


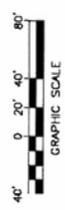
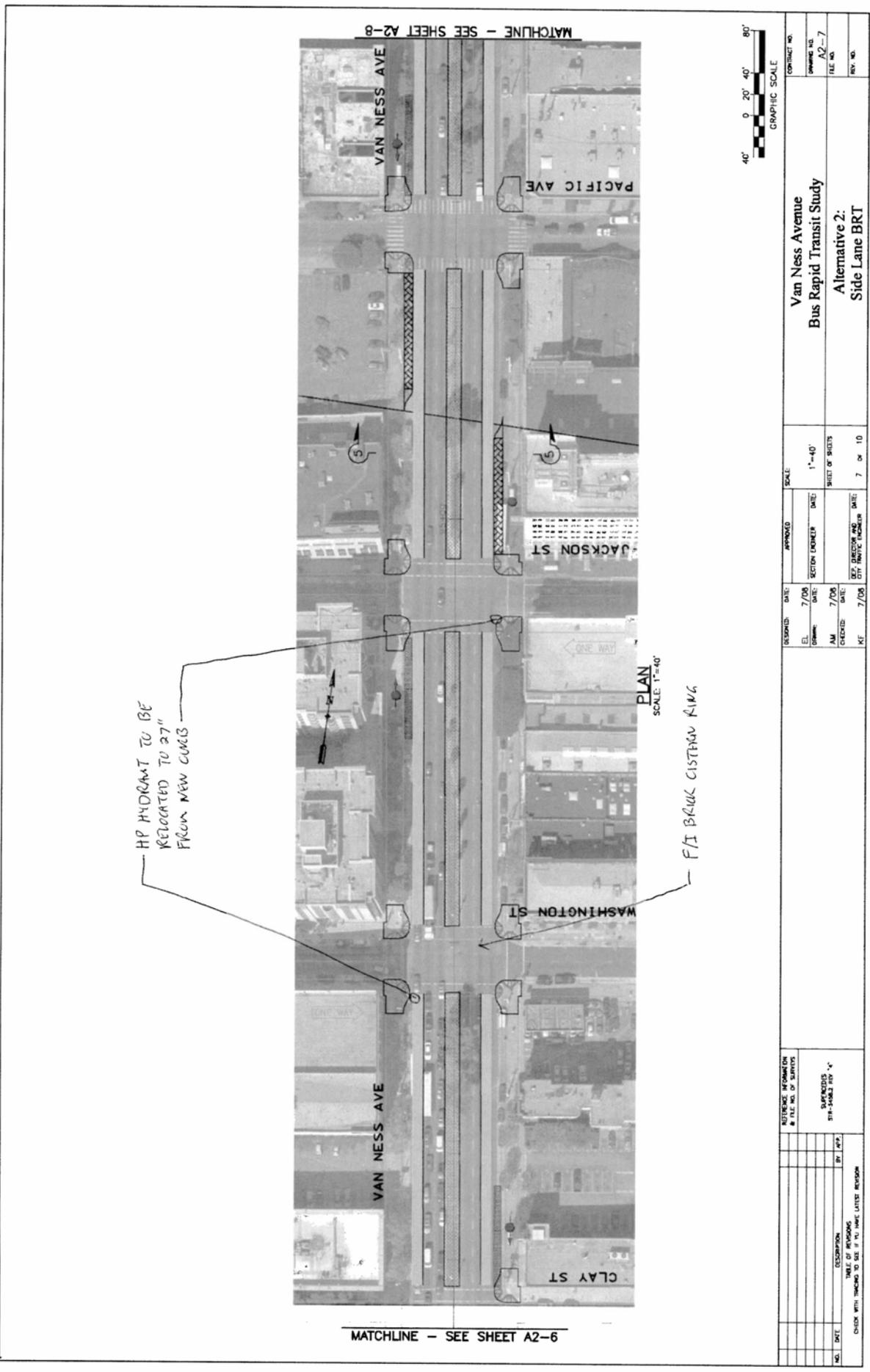


REFERENCE INFORMATION & FILE NO. OF SURVEYS SUPERSEDES STR-14083 210'-4"		DESIGNED: DATE: 7/06 EL: 7/06 AM: 7/06 KF: 7/06	APPROVED: DATE: 7/06 SECTION NUMBER: DATE: 7/06 SHEET OF SHEETS: 4 OF 10	CONTRACT NO. DRAWING NO. A2-4 FILE NO. REV. NO.
PROJECT TITLE Van Ness Avenue Bus Rapid Transit Study Alternative 2: Side Lane BRT				



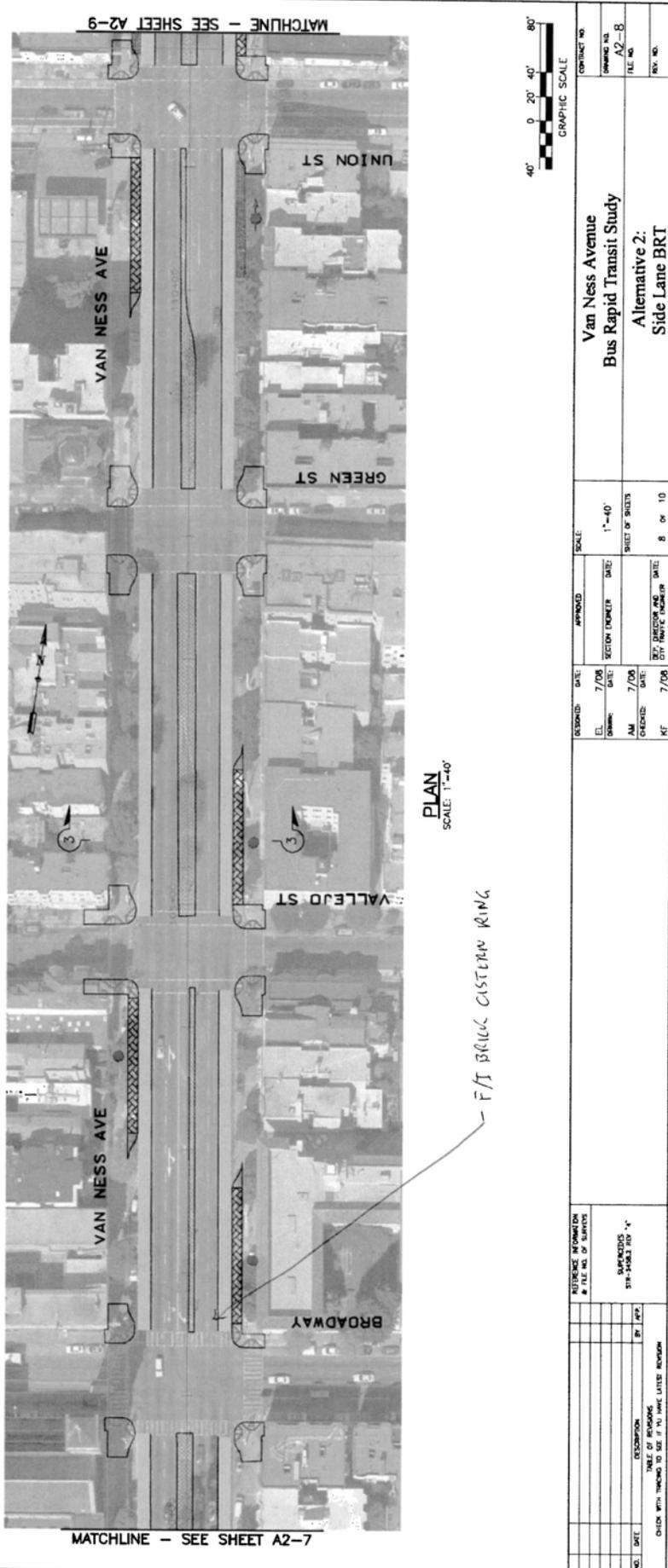
AUTHORITY INFORMATION & FILE NO. OF SURVEYS SURVEYS STS-31083 210'-4"		DESIGNED: DATE: 7/08 EL: 7/08 AM: 7/08 KF: 7/08		APPROVED: DATE: 7/08 SECTION ENGINEER: DATE: 7/08 CITY DIRECTOR AND DATE: 7/08 DIST. DATE: 7/08		SCALE: 1"=40' SHEET OF SHEETS: 5 of 10		CONTRACT NO. DRAWING NO. A2-5 FILE NO. REV. NO.	
Van Ness Avenue Bus Rapid Transit Study Alternative 2: Side Lane BRT									





TITLE: Van Ness Avenue Bus Rapid Transit Study Alternative 2: Side Lane BRT		CONTRACT NO. DRAWING NO. A2-7 FILE NO. REV. NO.
DESIGNED BY: AM DATE: 7/08	CHECKED BY: KF DATE: 7/08	SCALE: 1"=40' SHEET OF SHEETS: 7 OF 10
APPROVED: _____ SECTION ENGINEER: _____ DATE: _____		DEF. DIRECTOR AND CITY ROUTE ENGINEER: _____ DATE: _____
ATTACHED INFORMATION: # FILE NO. OF SHEETS: _____ SUPERVISOR: STR-34483 JIV "A"		
NO. DATE DESCRIPTION BY: _____	CHECK WITH TRACKING SHEET TO DETERMINE LATEST REVISION	

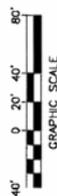
A-7e-60
continued



HP HYDRANT TO BE
RELOCATED TO 37" FROM
NEW CURBS

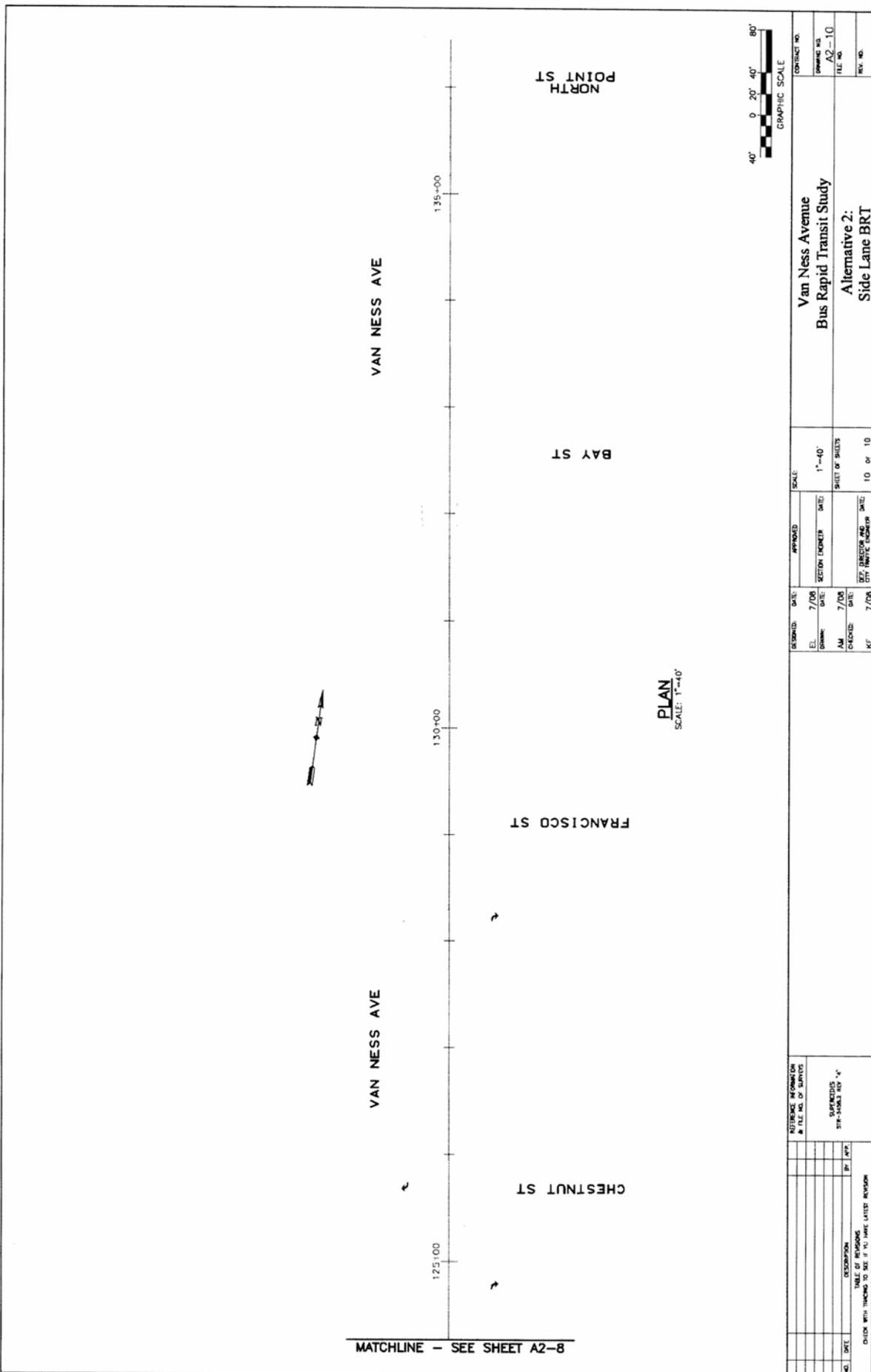


PLAN
SCALE: 1"=40'

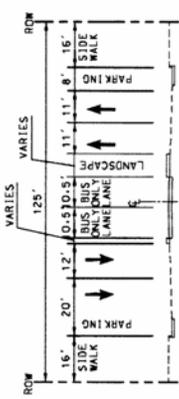


CONTRACT NO. DRAWING NO. A2-9		SCALE: 1"=40'		SHEET OF SHEETS 9 OF 10	
PROJECT TITLE Van Ness Avenue Bus Rapid Transit Study		APPROVED:		DATE: 7/05	
ALTERNATIVE: Side Lane BRT		SECTION ENGINEER:		DATE: 7/05	
REF. DESIGN AND CITY TRAFFIC NUMBER:		CHECKED: AM		DATE: 7/05	
DATE: 7/05		DATE: 7/05		DATE: 7/05	
REFERENCE INFORMATION & FILE NO. OF SURVEY:		SURVEYED BY:			
TABLE OF REVISIONS CHECK WITH MATCHLINES TO SEE IF LATEST REVISION		DATE:			
NO.		DESCRIPTION			
DATE		BY:			

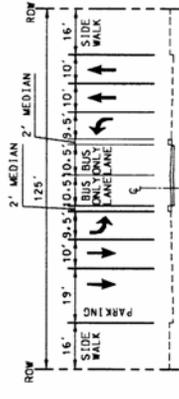
A-7e-60
continued



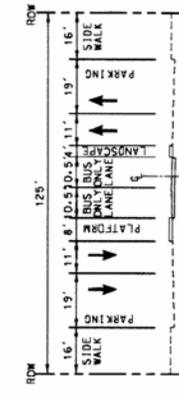
ALT 3



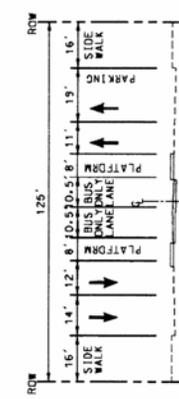
ALT 3 SECTION 1
SCALE: 1"=20'



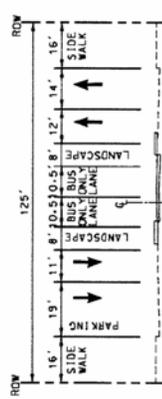
ALT 3 SECTION 3
SCALE: 1"=20'



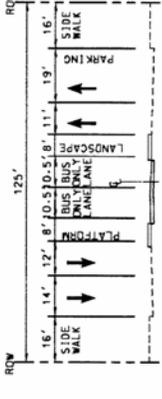
ALT 3 SECTION 5
SCALE: 1"=20'



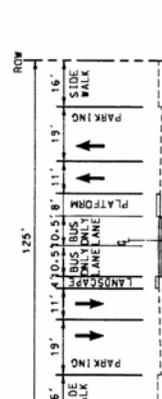
ALT 3 SECTION 7
SCALE: 1"=20'



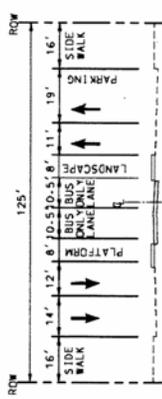
ALT 3 SECTION 2
SCALE: 1"=20'



ALT 3 SECTION 4
SCALE: 1"=20'

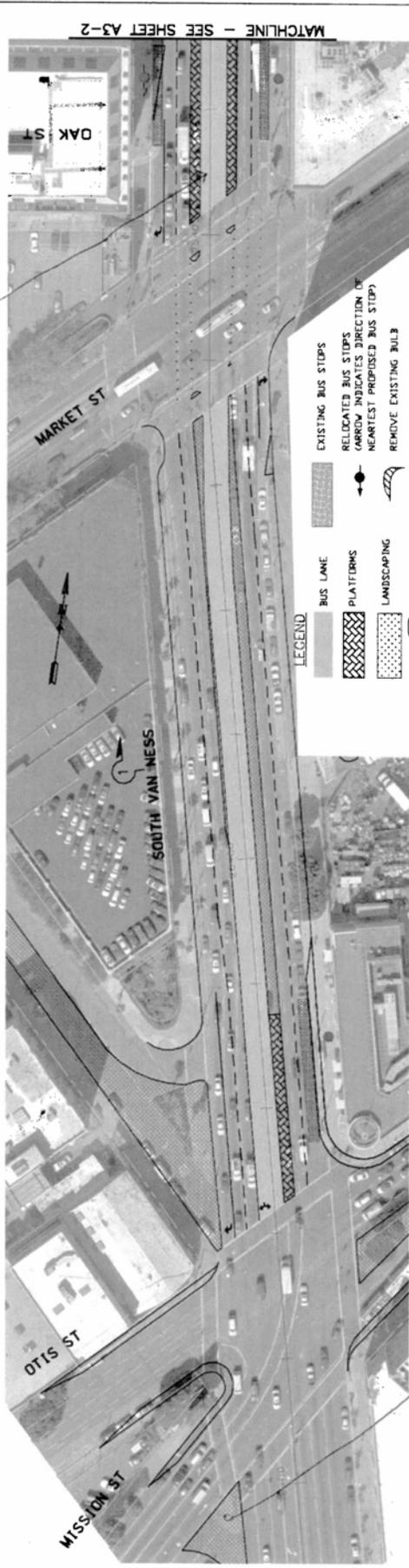


ALT 3 SECTION 6
SCALE: 1"=20'



ALT 3 SECTION 8
SCALE: 1"=20'

F/I BRICK CISTERN COVERS
RAISE CISTERN COVERS



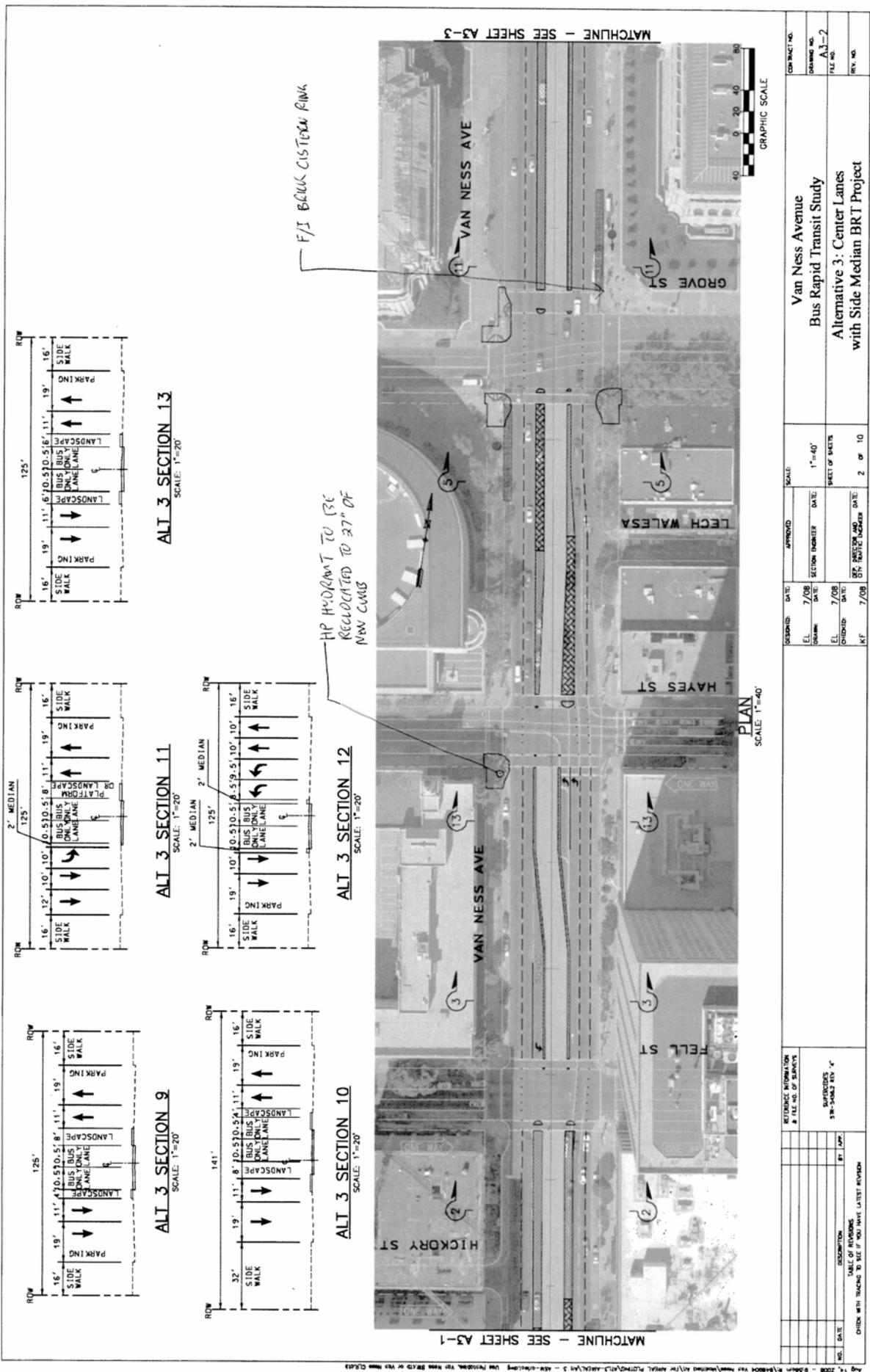
PLAN
SCALE: 1"=40'

HP ITORANT IN LANDSCAPE AREA
WOULD REQUIRE 10'x10' CONCRETE PAD

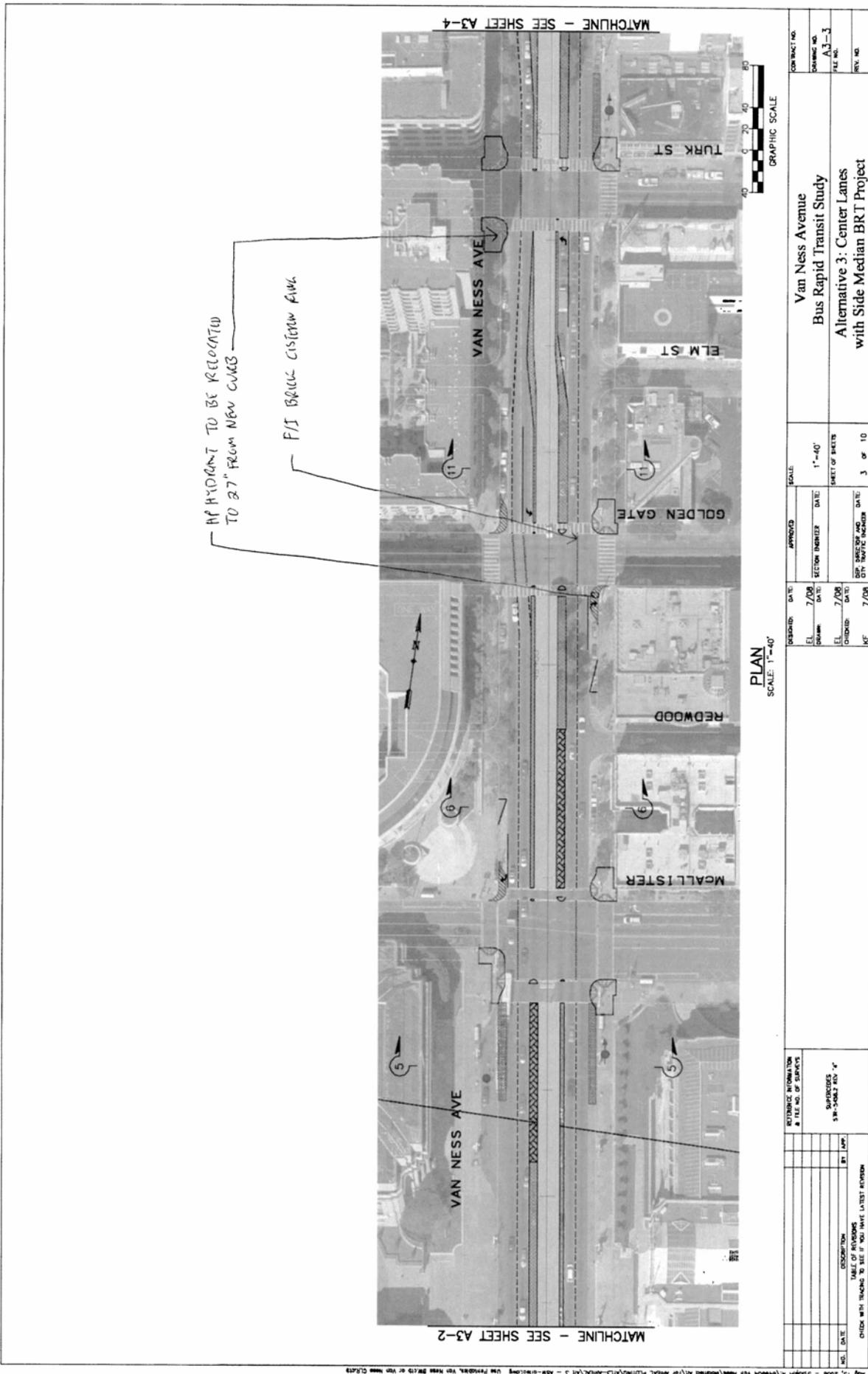
NOTE:
1. SEE SHEET A3-2 FOR ADDITIONAL SECTIONS

REVISION INFORMATION & FILE NO. OF SHEETS		SCALE: 1"=40'		APPROVED:		DATE: 7/08		SHEET NO. 1 OF 10	
NO.	DATE	DESCRIPTION	BY	APP.	EL	SECTION NUMBER	DATE	SHEET OF SHEETS	DATE
		TABLE OF REVISIONS							
ORDER WITH TRACKING TO SEE IF YOU HAVE LATEST REVISION									
PROJECT INFORMATION PROJECT NO. 08/187/168 DRAWING NO. 415 558-4536 FILE NO. A3-1 REV. NO. 08/187/168				PROJECT NAME Van Ness Avenue Bus Rapid Transit Study Alternative 3: Center Lanes with Side Median BRT Project					

MBS 08/187/168



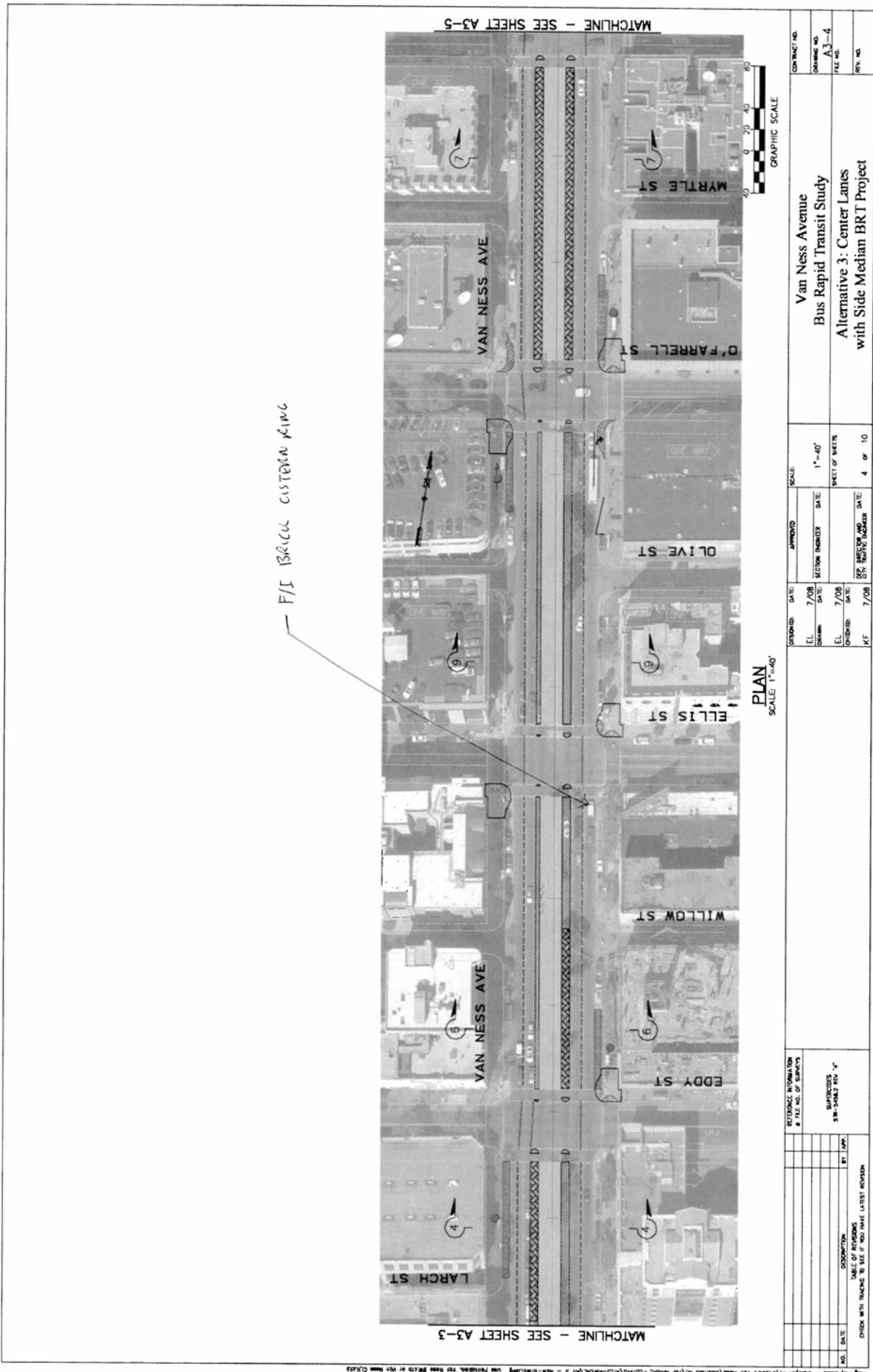
REFERENCE INFORMATION # FILE NO. OF SHEETS 18-30003 200-1"		DATE 7/08		APPROVED DATE 7/08		SCALE 1"=40' SHEET OF SHEETS 2 OF 10		PROJECT NO. 18-30003		CONTRACT NO. 200-1"	
TABLE OF REVISIONS CHECK WITH TRACKING TO SEE IF YOU HAVE LATEST REVISION		DATE 7/08		BY / APP. [Signature]		DESCRIPTION [Blank]		PROJECT NO. 18-30003		CONTRACT NO. 200-1"	
Van Ness Avenue Bus Rapid Transit Study Alternative 3: Center Lanes with Side Median BRT Project											



PLAN
SCALE: 1"=40'

REVISIONS CHECK WITH TRACKS TO SEE IF YOU WANT LATEST REVISION NO. DATE DESCRIPTION BY APP.		REVISION INFORMATION & FILE NO. OF DRAWINGS SUPERVISOR SW-SUMBL BOX "J"		DESIGNED: DATE: 7/08 EL DATE: 7/08 CHECKED: DATE: 7/08 HF DATE: 7/08		APPROVED: DATE: 7/08 SECTION ENGINEER: DATE: 7/08 DATE: 7/08		SCALE: 1"=40' SHEET OF SHEETS: 3 OF 10		PROJECT NO.: CONTRACT NO.: Van Ness Avenue Bus Rapid Transit Study Alternative 3: Center Lanes with Side Median BRT Project		DRAWING NO.: A3-3		FILE NO.: A3-3		REV. NO.:	
---	--	--	--	---	--	--	--	---	--	---	--	-----------------------------	--	--------------------------	--	-----------	--

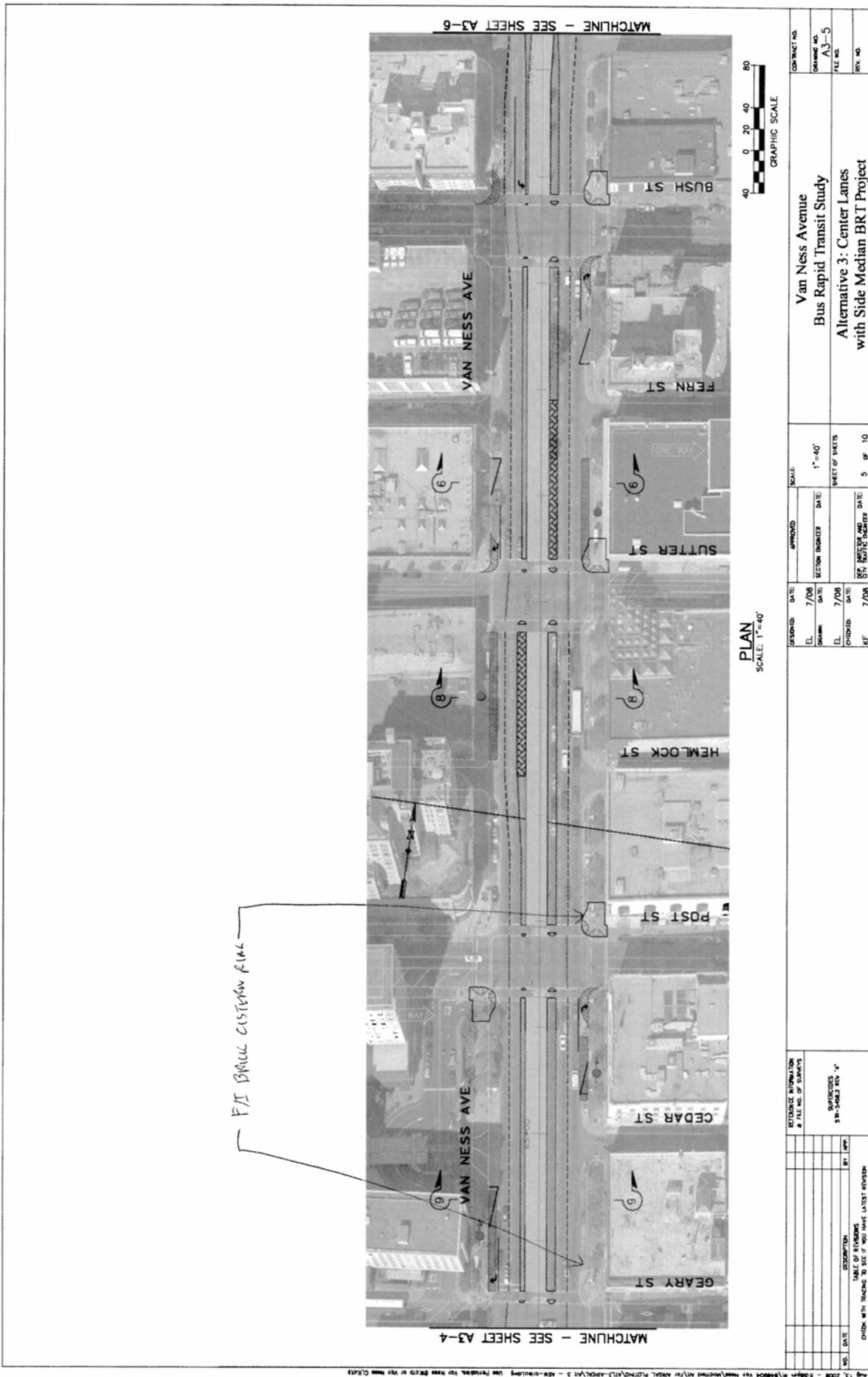
A-7e-60
continued



PLAN
SCALE: 1"=40'

REFERENCE INFORMATION & FILE NO. OF DRAWING		APPROVED		CONTRACT NO.	
SHEET NO. 4	SHEET OF SHEETS 4 OF 10	DATE 7/08	SECTION NUMBER	DRAWING NO. A3-4	PROJECT NO.
DATE 7/08	DATE 7/08	DATE 7/08	DATE 7/08	FILE NO.	REV. NO.
TABLE OF REVISIONS CHECK WITH TRACKING TO SEE IF NOT THE LATEST REVISION		Van Ness Avenue Bus Rapid Transit Study Alternative 3: Center Lanes with Side Median BRT Project			
NO.	DATE	DESCRIPTION	BY	APP.	

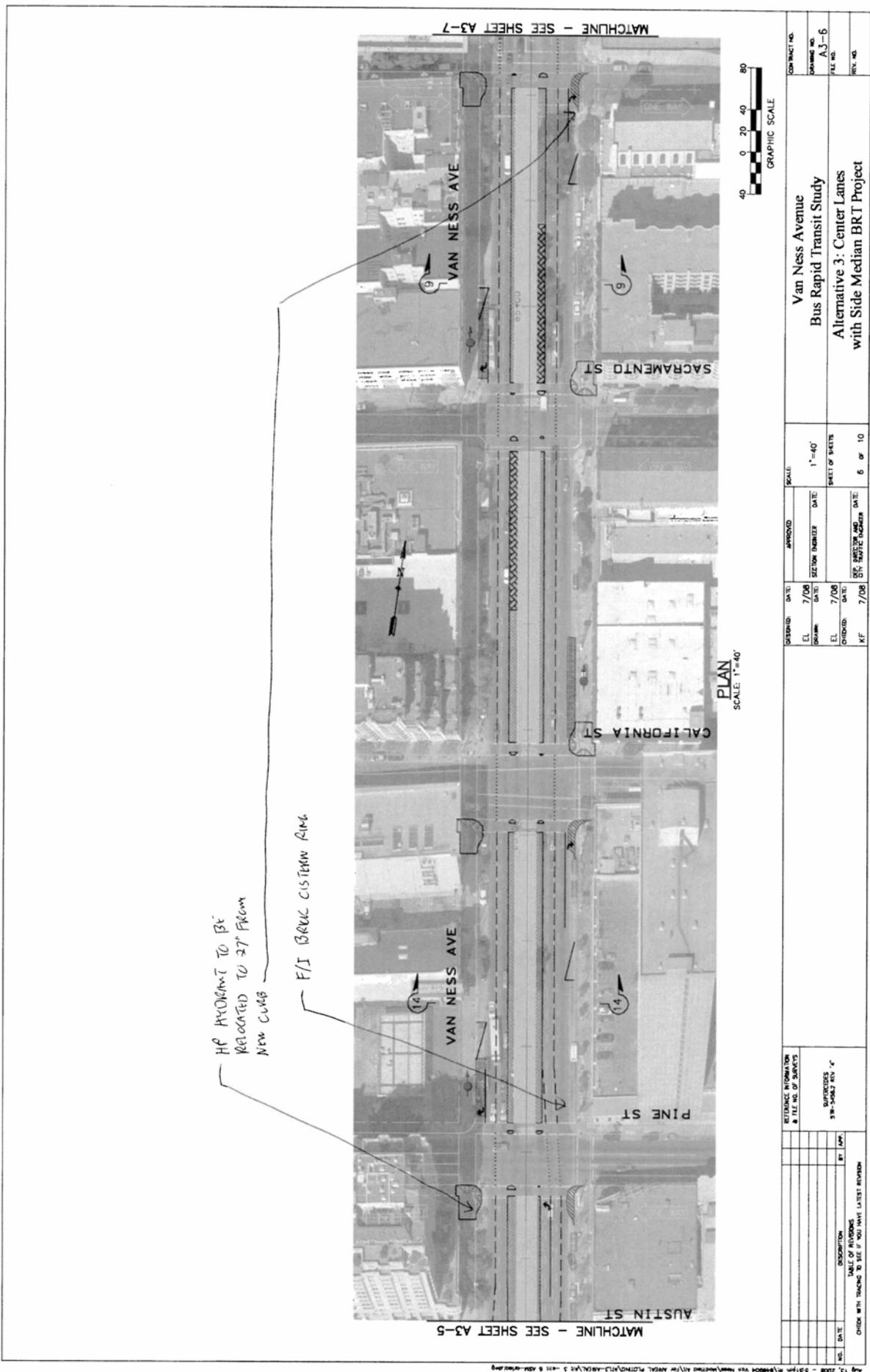
A-7e-60
continued



F/I BRIDGE SYSTEM PLAN

PLAN
SCALE: 1"=40'

REVISION INFORMATION # FILE NO. OF SHEETS SUBMITTED 31-03-08 10:41 AM		CONTRACT NO. DRAWING NO. FILE NO. REV. NO.	
TABLE OF REVISIONS CHECK WITH TRACKING TO SEE IF YOU WANT LATEST REVISION		Van Ness Avenue Bus Rapid Transit Study Alternative 3: Center Lanes with Side Median BRT Project	
NO.	DATE	DESCRIPTION	BY
DESIGNED	DATE	APPROVED	SCALE
EL.	7/08	SECTION NUMBER	1"=40'
DATE		DATE	SHEET OF SHEETS
			5 of 10
		BY	DATE
			7/08



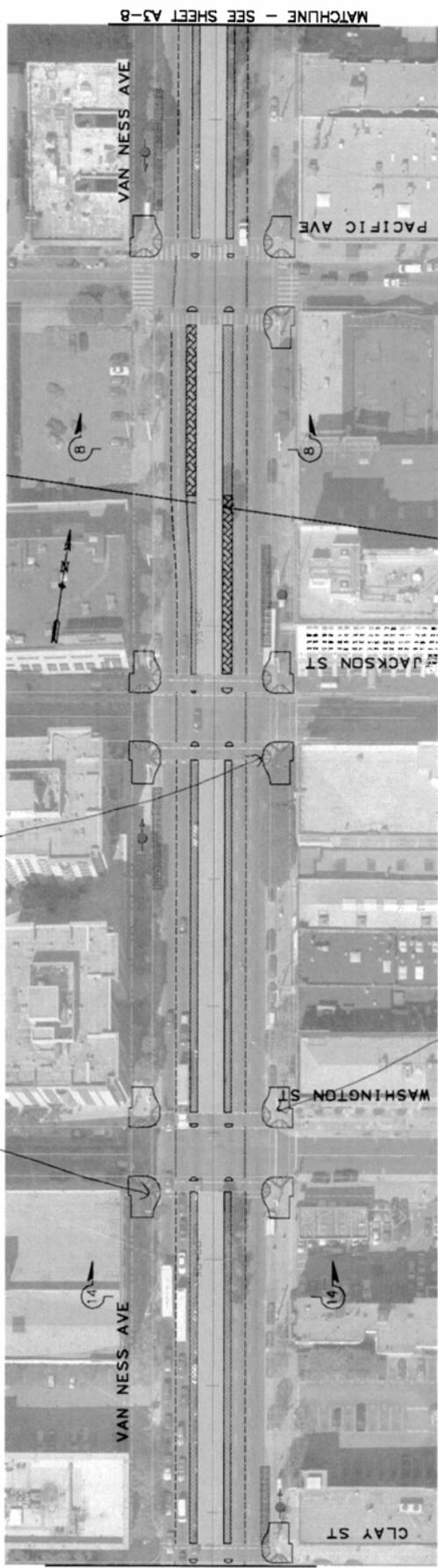
PLAN
SCALE: 1"=40'

MATCHLINE - SEE SHEET A3-7

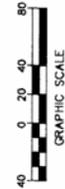
MATCHLINE - SEE SHEET A3-5

NO. DATE DESCRIPTION CHECK WITH MATCHING TO SEE IF YOU WANT LATEST REVISION		REFERENCE INFORMATION & FILE NO. OF SUBFILES REVISIONS - 3-8-2008 100-0		DESIGNED DATE: 7/08 EL. DATE: 7/08 DRAWN DATE: 7/08 CHECKED DATE: 7/08 IN CHARGE DATE: 7/08		APPROVED SECTION NUMBER: DATE: 7/08 SHEET OF SHEETS: 6 OF 10		PROJECT NO. DRAWING NO. FILE NO. REV. NO.	
Van Ness Avenue Bus Rapid Transit Study Alternative 3: Center Lanes with Side Median BRT Project									

HP HYDRA-MT TO BE
RELOCATED TO 37' FROM
NEW CURBS



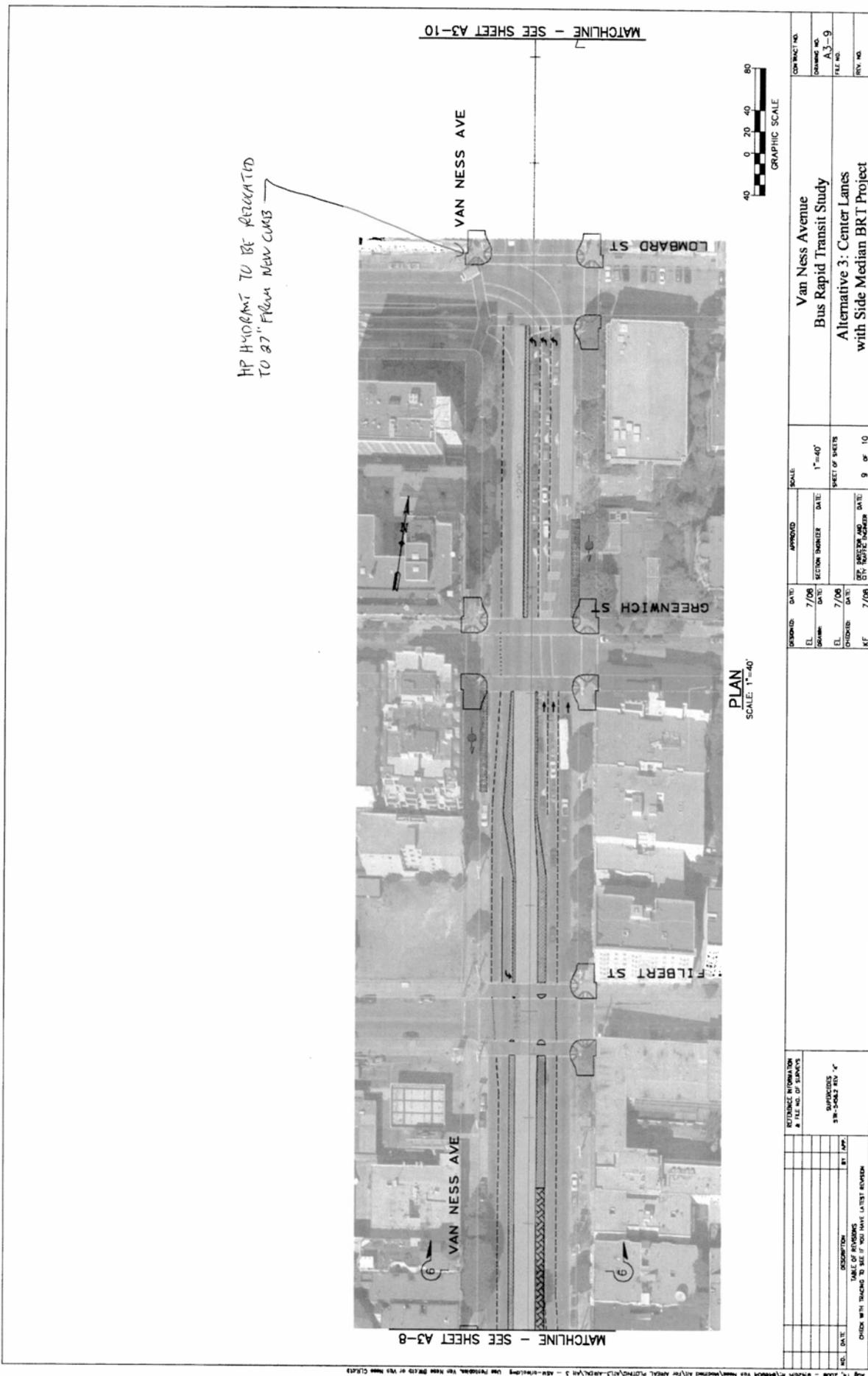
PLAN
SCALE: 1"=40'



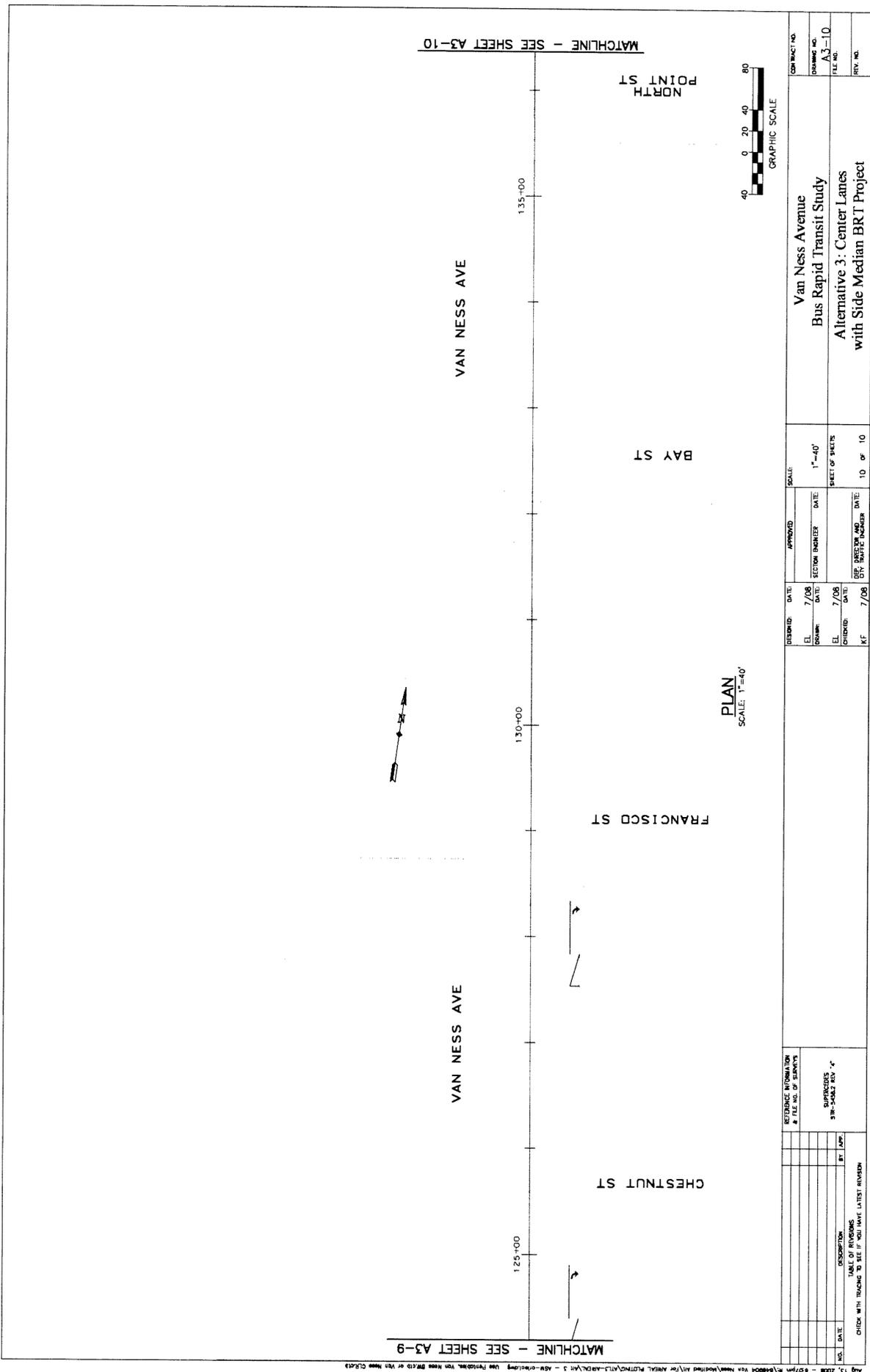
F/S NEW CYCLIC CISTERNA RING

NO. DATE		DESCRIPTION	BY APP
CHECK WITH MATCHES TO SEE IF YOU HAVE LATEST REVISION			
TABLE OF REVISIONS			
SUPERSEDES 514-SHEET A3-6			
REFERENCE INFORMATION & FILE NO. OF SHEETS			
DESIGNED BY	DATE	APPROVED	SCALE
DK	7/08	SECTION NUMBER	1"=40'
EL	7/08	DATE	SHEET OF SHEETS
CHKD BY	DATE	REP. SHEET NO.	7 OF 10
DATE	DATE	DATE	DATE
7/08	7/08	7/08	7/08
CONTRACT NO.		PROJECT NO.	
514-SHEET A3-6		Van Ness Avenue	
FILE NO.		Bus Rapid Transit Study	
REV. NO.		Alternative 3: Center Lanes	
		with Side Median BRT Project	

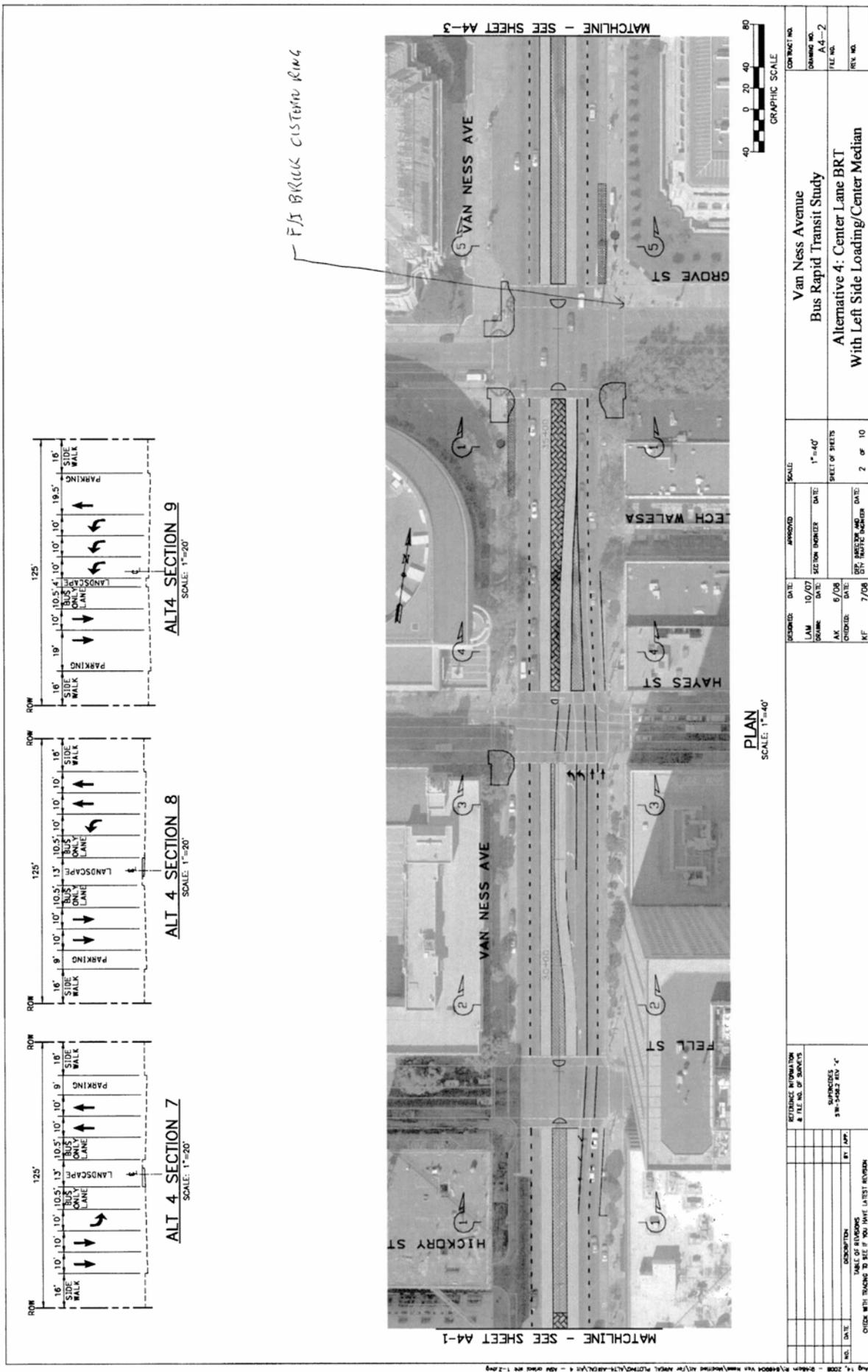
A-7e-60
continued

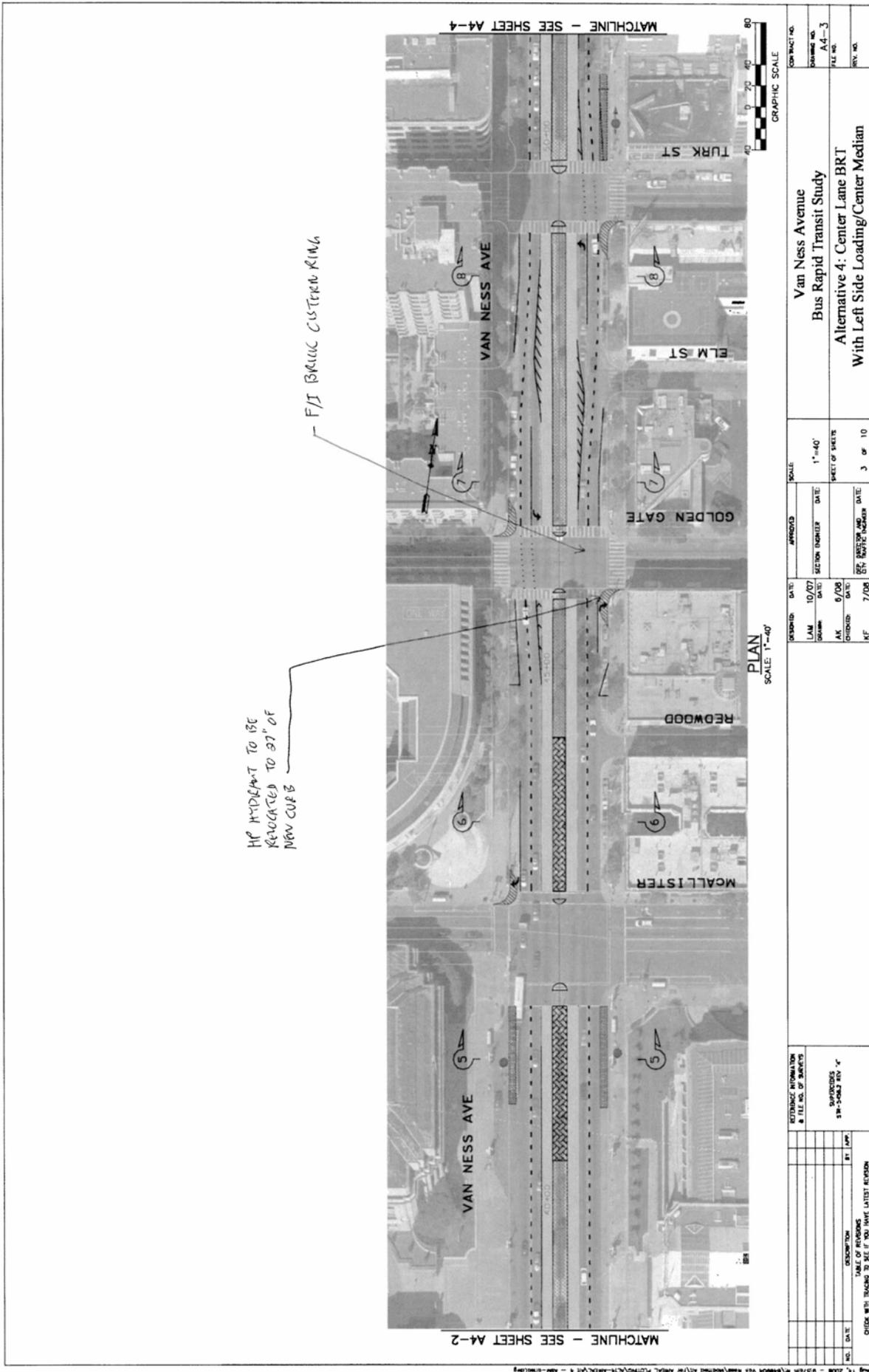


A-7e-60
continued



A-7e-60
continued



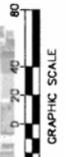


HP HYDRANT TO BE
RELOCATED TO 37' OF
NEW CURB

FIT BRASS CISTERNE RING

MATCHLINE - SEE SHEET AA-2

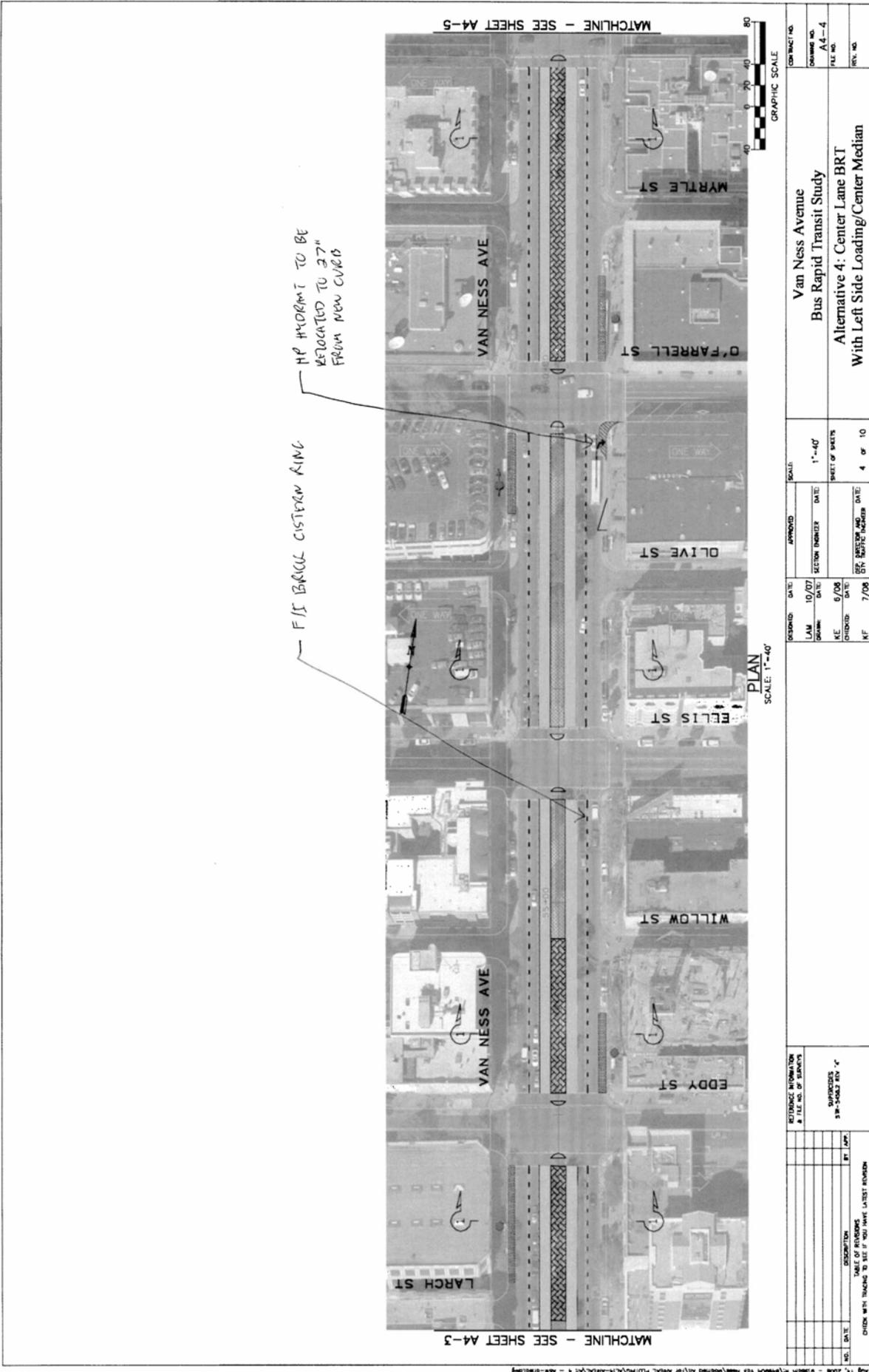
MATCHLINE - SEE SHEET AA-4



PLAN
SCALE: 1"=40'

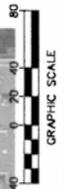
ESTIMATE INFORMATION & FILE NO. OF SHEETS		APPROVED DATE: 10/07		SCALE: 1"=40'		CONTRACT NO.	
SUPERVISOR SUN-SUNG CHOI - C		SECTION NUMBER:		SHEET OF SHEETS: 3 OF 10		DRAWING NO. A4-3	
TABLE OF REVISIONS CHECK WITH TRACKING TO SEE IF YOU HAVE LATEST REVISION		DATE: 8/08		DATE: 7/08		FILE NO.	
NO. DATE DESCRIPTION BY APP.		DATE: 7/08		DATE: 7/08		REV. NO.	
Van Ness Avenue Bus Rapid Transit Study				Alternative 4: Center Lane BRT With Left Side Loading/Center Median			

A-7e-60
continued



HP HYDRANT TO BE
RELOCATED TO 27"
FROM NEW CURB

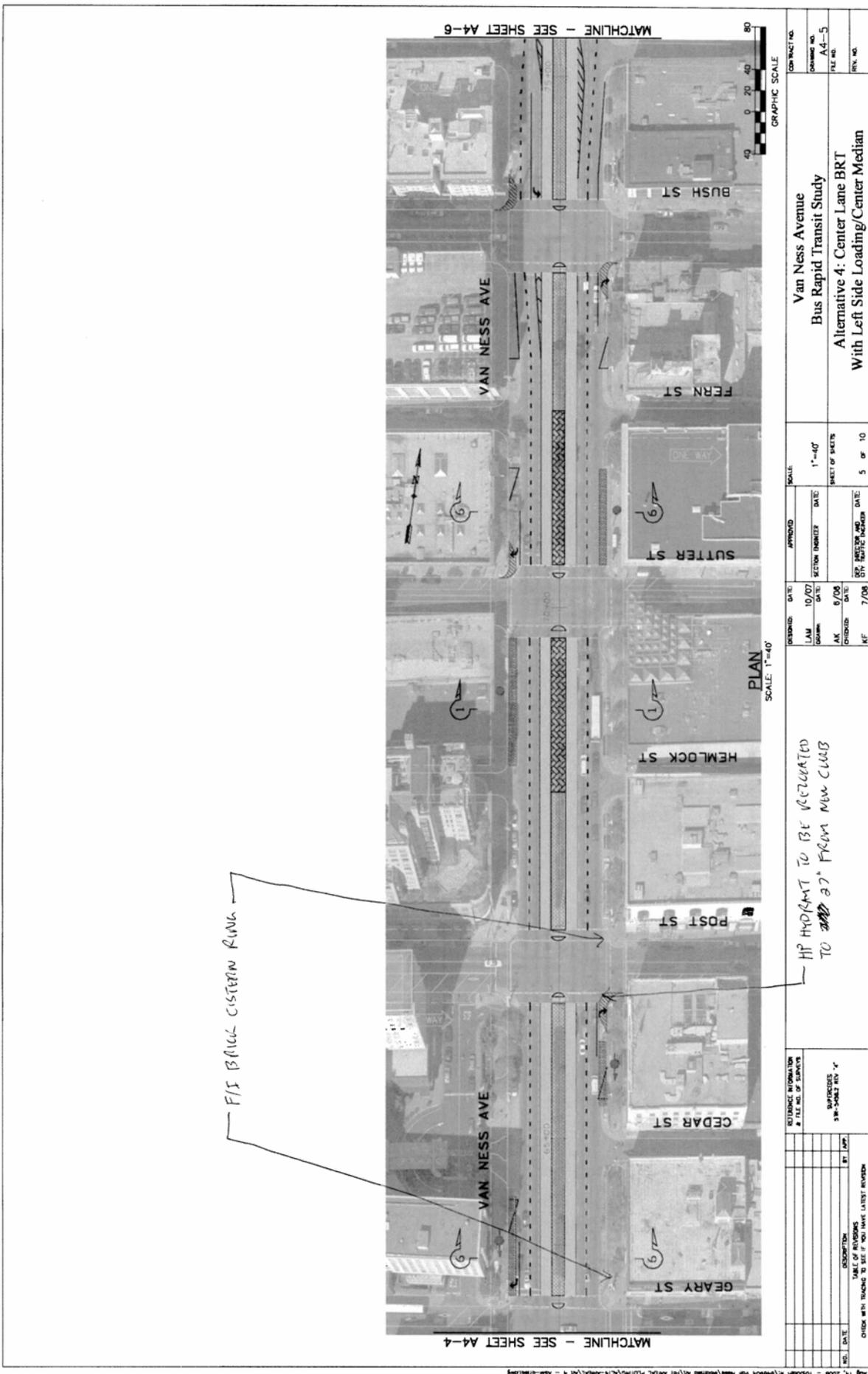
F15 BRICK CISTERNA RING



PLAN
SCALE: 1"=40'

REFERENCE INFORMATION & FILE NO. OF DRAWING		CONTRACT NO. DRAWING NO. FILE NO. REV. NO.	
VAN NESS AVENUE BUS RAPID TRANSIT STUDY ALTERNATIVE 4: CENTER LANE BRT WITH LEFT SIDE LOADING/CENTER MEDIAN		CONTRACT NO. DRAWING NO. FILE NO. REV. NO.	
DESIGNED DATE: 10/07/07 UAM DRAWING DATE: 10/07/07 KE DATE: 6/08/08 CHECKED DATE: 7/08/08	APPROVED DATE: 10/07/07 SECTION ENGINEER DATE: 10/07/07 DATE: 6/08/08	SCALE: 1"=40' SHEET OF SHEETS: 4 OF 10	DATE: 7/08/08 DATE: 6/08/08 DATE: 7/08/08
TABLE OF REVISIONS CHECK WITH TRACKING TO SEE IF YOU HAVE LATEST REVISION		DATE DESCRIPTION BY APP.	

A-7e-60
continued



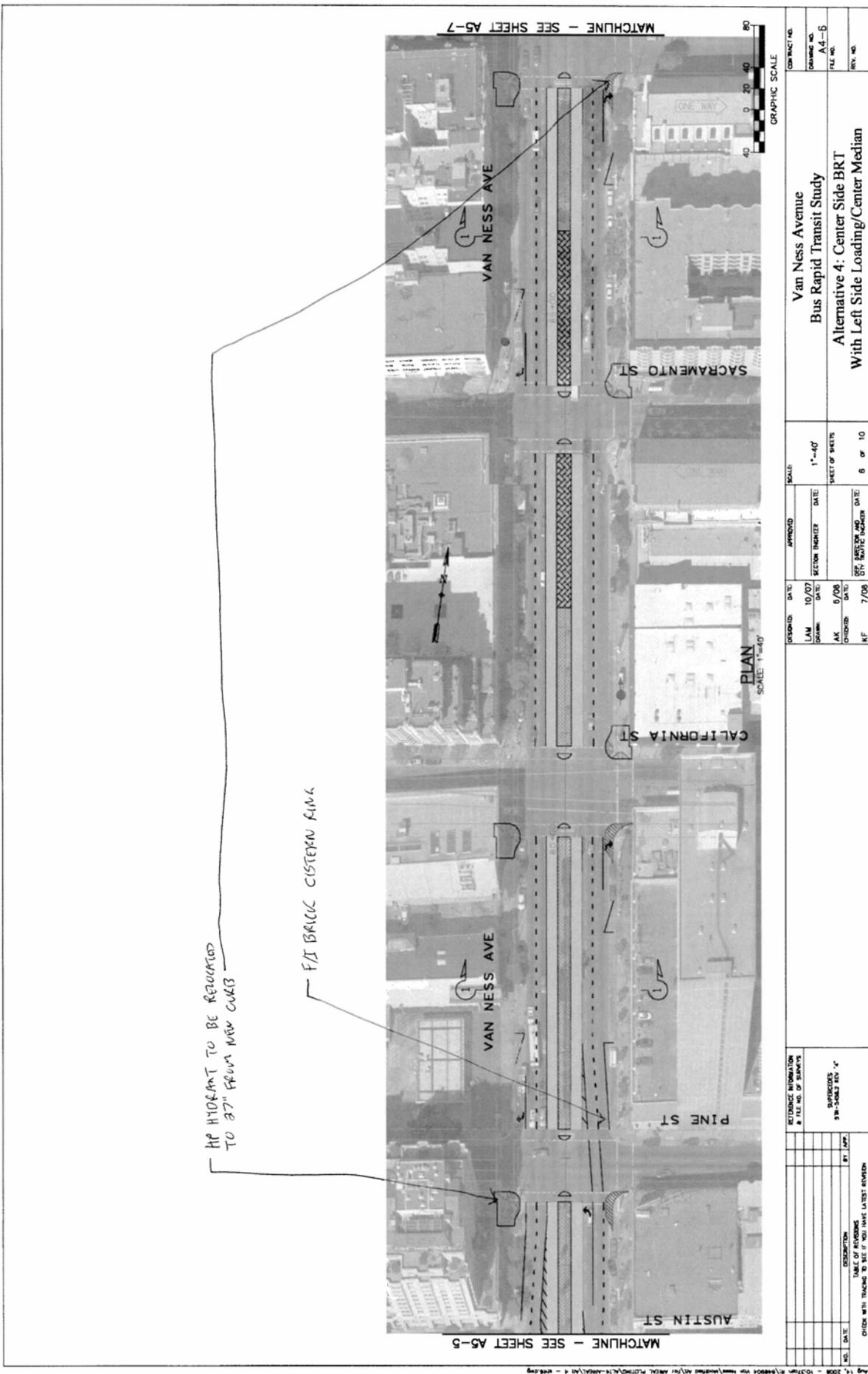
F/S BRICK CISTERNA RING

HP HYDRANT TO BE RELOCATED
TO 37' FROM NEW CLUB

PLAN
SCALE: 1"=40'

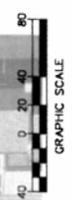
CONTRACT NO. ORDER NO. A4-5 FILE NO. REV. NO.		Van Ness Avenue Bus Rapid Transit Study Alternative 4: Center Lane BRT With Left Side Loading/Center Median	
DESIGNED: LAM DATE: 10/07 CHECKED: AK DATE: 8/08	APPROVED: [Signature] DATE: 7/08	SCALE: 1"=40' SHEET OF SHEETS: 5 OF 10	DATE: 7/08
REFERENCE INFORMATION & FILE NO. OF DRAWINGS		TABLE OF REVISIONS CHECK WITH TRACKING TO SEE IF YOU HAVE LATEST REVISION	
NO.	DATE	DESCRIPTION	BY

A-7e-60
continued



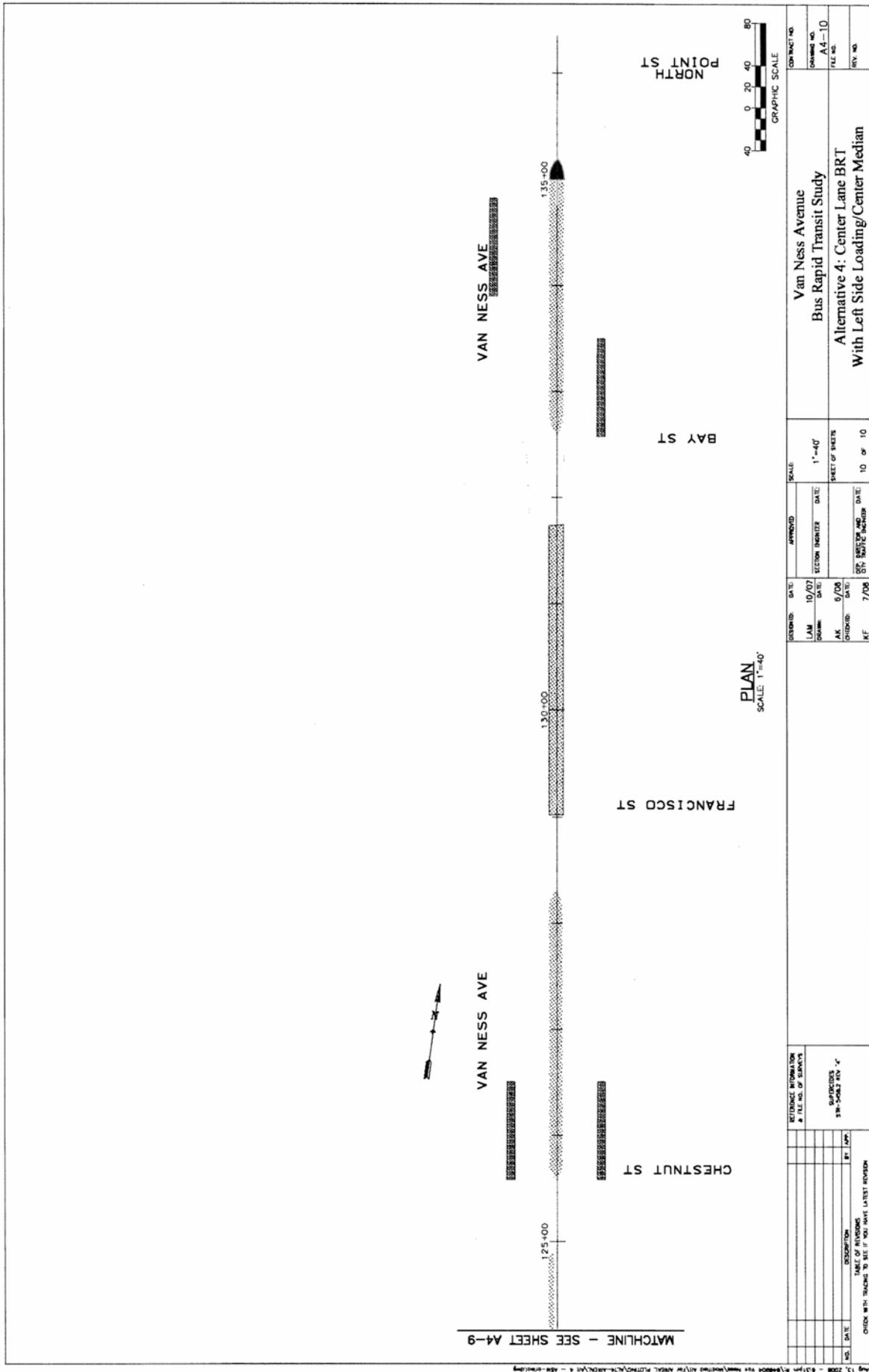
MATCHLINE - SEE SHEET A5-7

MATCHLINE - SEE SHEET A5-5



PLAN
SCALE: 1"=40'

REFERENCE INFORMATION & FILE NO. OF SHEETS		APPROVED		SCALE		CONTRACT NO.	
SHEETS 10 OF 10		DATE: 7/08		1"=40'		VAN NESS AVENUE Bus Rapid Transit Study	
DATE: 10/07		SECTION NUMBER:		SHEET OF SHEETS: 8 OF 10		ALTERNATIVE 4: CENTER SIDE BRT With Left Side Loading/Center Median	
DATE: 6/08		DATE:		DATE:		DRAWING NO. A4-5	
DATE: 7/08		DATE:		DATE:		FILE NO.	
DATE:		DATE:		DATE:		REV. NO.	



REFERENCE INFORMATION • FILE NO. OF DRAWING SUPPLEMENTS 5/8-5062 REV "A"		APPROVED DATE: 10/03 SECTION NUMBER: 11-407 SCALE: 1"=40' SHEET OF SHEETS: 10 OF 10		CONTRACT NO. A4-10	
CHECKED WITH TRACKING TO SEE IF YOU HAVE LATEST REVISION DATE: _____ BY: LPP		DATE: 5/08 CHECKED: KF DATE: 7/08		PROJECT NO. A4-10	
VAN NESS AVENUE Bus Rapid Transit Study Alternative 4: Center Lane BRT With Left Side Loading/Center Median		DATE: 10/03 CHECKED: KF		FILE NO. A4-10	

Van Ness Avenue - BRTS
BOE-Hydraulics Comments

	Alternative 2		Alternative 3		Alternative 4	
	DWG	Comment	DWG	Comment	DWG	Comment
Market to Mission ST	A2-1	Dual sewer lines located adjacent to existing curb line. Proposed bulb-out and platform will be located above sewer. Sewer may need to be relocated. Sewer located within proposed landscaped area. Any planned work will require review in order to determine maintenance and replacement of sewer line.	A3-1	Dual sewer lines located adjacent to existing curb line. Proposed bulb-out and platform will be located above sewer (NE Corner SVN & Mission). Sewer may need to be relocated. Sewer located within proposed landscaped area. Any planned work will require review in order to determine maintenance and replacement of sewer line.	A4-1	Dual sewer system located outside of proposed work Sewer located within proposed landscaped area. Any planned work will require review in order to determine maintenance and replacement of sewer line.
Side Street - 12th St	A2-1		A3-1		A4-1	
Market to Fell	A2-2	Sewer located in the center of the street ROW Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-2	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-2	Sewer located in the center of the street ROW. Platform are located above Sewer. Sewer may need to be relocated.
Fell to Hayes	A2-2	Sewer located in the center of the street ROW Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-2	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-2	Sewer located in the center of the street ROW. Landscaping are located above Sewer. Sewer may need to be relocated.
Hayes - Grove	A2-2	Sewer located in the center of the street ROW Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-2	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-2	Sewer located in the center of the street ROW. Platform are located above Sewer. Sewer may need to be relocated.
Grove - McAllister	A2-3	Sewer located near current bus lane on east side of the median. Sewer line is not affected	A3-3	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-3	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.
McAllister - Golden Gate	A2-3		A3-3	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-3	Sewer located near current bus lane on east side of the median. Sewer may need to be relocated.
Golden Gate - Turk	A2-3	Sewer located in the center of the street ROW Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-3	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-3	Sewer located in the center of the street ROW. Landscaping are located above Sewer. Sewer may need to be relocated.

Alternative 2		Alternative 3		Alternative 4	
DWG	Comment	DWG	Comment	DWG	Comment
A2-4	Dual Sewer located outside of the median area. Sewer lines are not affected.	A3-4	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-4	Dual Sewer located in the proposed bus lanes. Sewer may need to be relocated.
A2-4	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-4	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-4	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.
A2-4	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-4	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-4	Sewer located in the center of the street ROW. Landscaping are located above Sewer. Sewer may need to be relocated.
A2-4	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-4	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-4	Sewer located in the center of the street ROW. Platform are located above Sewer. Sewer may need to be relocated.
A2-5	No sewer on street	A3-5	No sewer on street	A4-5	No sewer on street
A2-5	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-5	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-5	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.
A2-5	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-5	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-5	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.
A2-6	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-6	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-6	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.

As of 8/26/08

Page 2 of 4

A-7e-61
continued

Van Ness Avenue - BRTS
BOE-Hydraulics Comments

Alternative 2		Alternative 3		Alternative 4	
DWG	Comment	DWG	Comment	DWG	Comment
A2-6	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-6	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-6	Sewer located in the center of the street ROW. Landscaping are located above Sewer. Sewer may need to be relocated.
A2-6	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-6	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-6	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.
A2-6	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-6	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-6	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.
A2-7	No sewer on street	A3-7	No sewer on street	A4-7	No sewer on street
A2-7	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-7	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-7	Sewer located in the center of the street ROW. Landscaping are located above Sewer. Sewer may need to be relocated.
A2-7	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-7	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-7	Sewer located in the center of the street ROW. Platform are located above Sewer. Sewer may need to be relocated.
A2-8	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-8	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-8	Sewer located in the center of the street ROW. Landscaping are located above Sewer. Sewer may need to be relocated.
A2-8	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-8	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-8	Sewer located in the center of the street ROW. Landscaping are located above Sewer. Sewer may need to be relocated.

As of 8/26/08

Page 3 of 4

A-7e-61
continued

	Alternative 2		Alternative 3		Alternative 4	
	DWG	Comment	DWG	Comment	DWG	Comment
Vallejo - Green	A2-8	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-8	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-8	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.
Green - Union	A2-8	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-8	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-8	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.
Union - Filbert	A2-9	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-9	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-9	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.
Filbert - Greenwich	A2-9	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-9	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-9	Sewer located in the center of the street ROW. Landscaping are located above Sewer. Sewer may need to be relocated.
Greenwich - Lombard	A2-9	Sewer located in the center of the street ROW. Landscaping is located adjacent to (E) Sewer. Sewer may be impacted.	A3-9	Sewer located in the center of the street ROW. Landscaping is located adjacent to (E) Sewer. Sewer may be impacted.	A4-9	Sewer located in the center of the street ROW. Landscaping is located adjacent to (E) Sewer. Sewer may be impacted.

Van Ness Avenue – BRTS
BOE-EHY

General Comments:

- Where there are sewer lines underneath proposed work (platforms, landscaping, bus lane), there may be a need to relocate sewer line outside. Sewer lines located under proposed structures would increase SFPUC’s cost to repair, replace or maintain the sewer line.
- Where bus lanes are located above the existing sewer line, the bus lanes must provide for Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown for access.
- Street surface drainage must be taken into consideration when there are bulb-outs or sidewalk widening proposed. Any introduction of bulb-outs to a street ROW must be designed to meet the conveyance of a 100-year design storm system.
- Any existing sewer laterals located in the proposed bulb-out or platform area shall be evaluated for replacement. MUNI shall be responsible for restoring street infrastructure when there is a need for sewer lateral repair/replacement/maintenance under the proposed bulb-out or platform are.
- Right turn pocket from eastbound Mission to southbound S Van Ness appears to be eliminated with landscaping. Please confirm.

A-7e-62

A-7e-63

A-7e-64

A-7e-65

A-7e-66

Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: San Francisco Department of Public Works

Reviewer's Comment Number	Response
A-7e-1	<p>Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the staff recommended LPA. Section 10.2.4.4 Urban Design/Landscape describes how changes in the amount of permeable or landscaped surface area for the build alternatives, at the present level of design, is considered in the alternatives analysis and LPA selection process. See response to Comment 7a-2I.</p>
A-7e-2	<p>Please see comment A-7e-1 regarding stormwater management.</p> <p>Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the staff recommended LPA.</p> <p>See Response to Comment A-7c-I3</p> <p>Mature tree canopies provide water quality, aesthetic and carbon off-set benefits. There would be a period of reduced benefits until the new tree plantings grow to maturity, and these benefits would not be fully compensated in the event different tree types are selected that do not offer the same size canopy as existing trees that would be removed. However, under each build alternative, including the LPA (with or without the Vallejo Northbound Station Variant), the reduced benefits due to smaller tree canopy size would be offset by an overall increase in trees in the corridor.</p> <p>Similarly, it is recognized that there will be a plant establishment period for new trees to reach maturity and therefore the greenspace feel of the median would take time to manifest itself. While the appearance of Van Ness Avenue would change with the addition of BRT streetscape features (stations and transitway) in the median under Build Alternatives 3, 4, and the LPA a landscaped median design with tree plantings would be developed throughout the corridor, in harmony with urban design goals set by the City for Van Ness Avenue.</p>
A-7e-3	<p>See Response to Comment A-7e-2. All tree removal would comply with City permits, and the project would comply with provisions of the Migratory Bird Treaty Act, as discussed in Sections 4.13 and 4.15.II of the EIS/EIR.</p> <p>Please see comment A-7e-1 regarding stormwater management.</p> <p>Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the staff recommended LPA.</p>
A-7e-4	<p>Comment is out of date. Evaluation criteria, indicators, and alternatives performance used in Chapter 10 of the EIS/EIR were later reviewed by DPW staff as part of their role on the TAC. All alternatives were further refined since the time of comment and public circulation of the Draft EIS/EIR. Thus, the analysis cited in this comment is no longer accurate for the alternatives described in the EIS/EIR, including the LPA.</p> <p>Section 4.4 evaluates visual impacts of the project, including project design and landscaping. Section 3.4 evaluates pedestrian conditions, and Section 4.9 evaluates changes in storm runoff.</p>

- A-7e-5 Please see response to comment A-7e-4.
- A-7e-6 Curb ramp upgrades to meet ADA standards are included for all ramps for all alternatives as part of the Caltrans 2007 Ten-Year State Highway Operation and Protection Program (SHOPP) repaving project in coordination with the Van Ness BRT.
- A-7e-7 As part of the preliminary engineering phase, a complete survey will be undertaken to understand the utility conflicts for all components of the project, including utility relocations such as hydrants. These details will be taken into account during detailed design.
- A-7e-8 Chapter 4.6 (Utilities) incorporates the findings of the conflict report.
- A-7e-9 Section 3.3.3.2 indicates that one of the two mixed traffic left turn bays would be eliminated under all build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant). This allows for a dedicated lane for buses to turn left. The operational traffic Synchro models included this reduction in turn lanes to determine potential significant environmental impacts.
- A-7e-10 No changes to directionality on 12th Street are proposed as part of the project under any of the build alternatives, including the LPA.
- A-7e-11 Curb ramp upgrades to meet ADA standards are included for all ramps for all alternatives as part of the Caltrans 2007 Ten-Year State Highway Operation and Protection Program (SHOPP) repaving project in coordination with the Van Ness BRT.
- A-7e-12 As part of the preliminary engineering phase, a complete survey will be undertaken to understand the utility conflicts for all components of the project, including utility relocations such as hydrants. These details will be taken into account during detailed design.
- A-7e-13 Chapter 4.6 (Utilities) incorporates the findings of the conflict report.
- A-7e-14 Section 3.3.3.2 indicates that one of the two mixed traffic left turn bays would be eliminated under all build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant). This allows for a dedicated lane for buses to turn left. The operational traffic Synchro models included this reduction in turn lanes to determine potential significant environmental impacts.
- A-7e-15 Please see response to comment A-7e-10.
- A-7e-16 Curb ramp upgrades to meet ADA standards are included for all ramps for all alternatives as part of the Caltrans 2007 Ten-Year State Highway Operation and Protection Program (SHOPP) repaving project in coordination with the Van Ness BRT.
- A-7e-17 All existing fire hydrants at corners with planned bulb outs will be relocated as needed per standards, as noted in Sections 4.6 and 4.15.5 of the EIS/EIR.
- A-7e-18 Chapter 4.6 (Utilities) incorporates the findings of the conflict report.
- A-7e-19 Chapter 4.6 (Utilities) includes incorporates the findings of the conflict report.
- A-7e-20 Chapter 4.6 (Utilities) includes incorporates the findings of the conflict report. The EIS/EIR reflects any increase in maintenance cost for the various alternatives, including the LPA, and this is described in Chapter 9. In addition, construction intensity for each alternative, including the LPA, is shown in Chapter 10 and this reflects the amount of utility replacement and/or relocation required with the implementation of Van Ness Avenue BRT.
- A-7e-21 The AWSS line runs beneath the outer traffic lane, and the valves are located above the line. Center-lane configured Build Alternatives 3 and 4 and the LPA would not require rerouting for AWSS maintenance, and utility relocations would address maintenance requirements as discussed in Section 4.6.3.2 Utility

Facility Access and Planning.

- A-7e-22 Please see response to comment A-7e-21.
- A-7e-23 Please see response to comment A-7e-21.
- A-7e-24 Utility relocations would address maintenance requirements as discussed in Section 4.6.3.2 Utility Facility Access and Planning.
- A-7e-25 All build alternatives would have more effective sidewalk width due to the removal of the existing bus shelters. Build Alternative 2 would not have wider sidewalks than the other build alternatives. Please see response to comment A-7a-38.
- A-7e-26 Please see response to comment A-7a-38.
- A-7e-27 Chapter 3.5 of the Draft EIS/EIR shows a summary of the colored curb parking spaces while Appendix B shows the existing spaces on a block-by-block basis, and the change in amount depending on the alternative.
- The adjacent curb ramps were not identified at this phase of design.
- For the LPA (with or without the Vallejo Northbound Station Variant), in most cases colored spaces would be able to be retained on the same street block or on adjacent blocks. All blue spaces would be retained on the same or adjoining block face with the implementation of BRT. Passenger and truck loading zones could be provided on the same side of the street, where feasible, so that crossing a street for loading would not be needed; however, specific locations were identified where provision of replacement colored spaces on an adjoining block may not be feasible or where an affected business may have special needs requiring immediately adjacent parking, such as passenger loading zones that serve elderly or infirmed people or truck loading zones that support delivery of large commercial goods. Potentially significant colored parking zone impacts on the area's adjacent uses are identified in Chapter 4.2 Community Impacts: Table 4.2-9.
- A-7e-28 Chapter 3.5 of the Draft EIS/EIR shows a summary of the colored curb parking spaces while Appendix B shows the existing spaces on a block-by-block basis, and the change in amount of parking depending on the alternative. The adjacent curb ramps were not identified at this phase of design. The parking analysis presented in Chapter 3.5 of the Final EIS/EIR considers adherence to ADA design requirements such as provision of curb ramps behind handicapped spaces (which largely are not present in existing conditions).
- See Response to Comment A-7e-27.
- A-7e-29 These quantities are shown for each alternative, including LPA, in Appendix B of the Draft EIS/EIR.
- A-7e-30 Crosswalks will have a minimum 10 foot width and may be wider. Crosswalk width is anticipated to be determined during preliminary engineering.
- A-7e-31 Thumbnails at intersections are part of the project definition, referred to as nose cones, and are described in Chapter 2 of the Draft EIS/EIR. Median refuge islands will be at least 6 feet wide for the LPA at all intersections except the south crosswalk at Mission/South Van Ness, a configuration under existing conditions.
- A-7e-32 It is unclear which alternative is being referred to in this comment. Regardless, all build alternatives, including the LPA, will provide bulbout opportunities. The estimated costs of the bulbs are incorporated into the capital costs shown in Chapter 9. No cost savings for the reduction in conflicts between ramps and sub-sidewalk basements are assumed in the estimates.
- A-7e-33 Thumbnails at intersections are part of the project definition, referred to as nose cones, and are described in Chapter 2 of the Draft EIS/EIR. This is included in project design, as shown in the engineering

drawings in Appendix A of the Draft EIS/EIR. Crosswalks are shown with 10 foot widths in the EIS/EIR.

- A-7e-34 See response to comment A-7e-33.
- A-7e-35 See response to comment A-7e-33.
- A-7e-36 See response to comment A-7e-33.
- A-7e-37 See response to comment A-7e-33.
- A-7e-38 See response to comment A-7e-33.
- A-7e-39 See response to comment A-7e-33.
- A-7e-40 See response to comment A-7e-33.
- A-7e-41 See response to comment A-7e-33.
- A-7e-42 See response to comment A-7e-33.
- A-7e-43 See response to comment A-7e-33.
- A-7e-44 See response to comment A-7e-33.
- A-7e-45 See response to comment A-7e-33.
- A-7e-46 See response to comment A-7e-33.
- A-7e-47 See response to comment A-7e-33.
- A-7e-48 See response to comment A-7e-33.
- A-7e-49 The current configuration requires an angled crosswalk in order to accommodate the turning geometry for vehicle traffic. During advanced design, the project will further study the feasibility of a straight-line crosswalk at this intersection. Improvements to the median on the north side of the Lombard Street/Van Ness Avenue intersection will meet ADA standards.
- A-7e-50 Build Alternative 3 includes island platforms with 9 feet of width. The crosswalks will all include detectable warning strips to define traffic and BRT lanes when crossing from the sidewalk or platform using the curb ramps.
- A-7e-51 The commenter is correct. If Build Alternative 3 were to be chosen as the LPA, staff would refine the engineering of the BRT during the design phase to provide pedestrian refuges at these intersections if possible. The LPA provides a 6-11 foot pedestrian refuge at all areas noted in the comment.
- A-7e-52 Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the staff recommended LPA.
- Chapter 3.4 in the Draft EIS/EIR (non-motorized transportation) provides an analysis of universal design and Section 10.2.4.3 includes a comparison of each alternative's performance in meeting universal design principles. These analyses were reviewed by the DPW Accessibility Coordinator.
- A-7e-53 Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the staff recommended LPA. Performance indicator C-1 captures the width of the median. The sidewalk width would be unchanged for all of the build alternatives, including the staff recommended LPA.
- A-7e-54 The commenter is correct that Build Alternative 3 would provide the fewest pedestrian bulbouts of any of the build alternatives, including the LPA. Unit costs of curb ramps have been incorporated into the

Capital costs shown in Chapter 9. These costs were the most up to date based on the level of design at the time of preparation of the Draft EIS/EIR. Further surveys during the design phase may reveal sub-sidewalk basements that could alter the costs of providing pedestrian bulbouts.

- A-7e-55 The current configuration requires an angled crosswalk in order to accommodate the turning geometry for vehicle traffic. During advanced design, the project will further study the feasibility of a straight-line crosswalk at this intersection. Improvements to the median on the north side of the Lombard Street/Van Ness Avenue intersection will meet ADA standards.
- A-7e-56 The existing sidewalk width would not be changed under any of the build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant). Curb bulbs would be provided under all build alternatives, including the LPA, which extend from the sidewalk. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the staff recommended LPA. Performance indicator C-I considers the width of the median. Build Alternative 4 would have a wider median than existing conditions at most locations, with 14 feet being the most common.
- The LPA includes a median width of 6-11 feet at most locations, with 6 feet being the minimum width at all locations except the southern crossing of Mission/South Van Ness, a configuration under existing conditions.
- A-7e-57 All build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant), would provide more bulbouts than under existing conditions. Unit costs of curb ramps have been incorporated into the Capital costs shown in Chapter 9. These costs were the most up to date based on the level of design at the time of preparation of the Draft EIS/EIR. Further surveys during the design phase may reveal sub-sidewalk basements that could alter the costs of providing pedestrian bulbouts.
- A-7e-58 This is included in project design, as shown in the engineering drawings in Appendix A of the Draft EIS/EIR.
- A-7e-59 The current configuration requires an angled crosswalk in order to accommodate the turning geometry for vehicle traffic. During advanced design, the project will further study the feasibility of a straight-line crosswalk at this intersection. Improvements to the median on the north side of the Lombard Street/Van Ness Avenue intersection will meet ADA standards.
- A-7e-60 Comments out of date. More recent engineering drawings are included as part of Appendix A in the Draft and Final EIS/EIR.
- A-7e-61 Potential sewer replacements and relocations caused by the implementation of Van Ness Avenue BRT are reflected in the Capital Costs in Chapter 9 and the Construction intensity performance indicator in Chapter 10. Under Build Alternative 2, no sewer replacement/relocation is assumed as a result of the project. Under Build Alternative 3, replacement/relocation of the entire sewer is assumed as a result of the project. Under Build Alternative 4, replacement/relocation of the sewer at BRT station locations is assumed as a result of the project. Under the LPA, replacement/relocation of the sewer is assumed at BRT station locations and areas where the BRT would cause significant load (weight) on the sewer. Coordination with all relevant City and County of San Francisco agencies with regard to utilities will take place during the design phase if the project is approved.
- A-7e-62 See Response to Comment A-7e-61.
- A-7e-63 Comment out of date. Since submittal of this comment, DPW has provided maintenance cost estimates for each of the build alternatives, including the LPA, which are reflected in Chapter 9 of the Draft EIS/EIR. Under the LPA, SFPUC would be able to access the sewer without needing to stop BRT service. Muni ROW drainage will be incorporated into advanced design of the project, if the project is approved.

- A-7e-64 Street surface drainage will be incorporated into the design phase for the project, per applicable requirements, if the project is approved.
- A-7e-65 The LPA requires minimal replacement of the existing sidewalk curb. At station platforms and bulb locations, sewer laterals would be sleeved or replaced as necessary and the City will relinquish ownership of laterals from new curb line. Build Alternative 2 could require the sleeving or replacement of sewer laterals at all BRT station locations because they would functionally extend the curb line.
- A-7e-66 The right turn pocket (slip lane) from eastbound Mission to southbound South Van Ness Avenue is proposed to be maintained under all of the build alternatives, including the LPA.

City and County of San Francisco



Edwin M. Lee, Mayor
Edward D. Reiskin, Director

San Francisco Department of Public Works

Office of the Deputy Director for Operations
Urban Forestry Permits and Policy Group
2323 Cesar Chavez Street
San Francisco, CA 94124
(415) 641-2676 ■ www.sfdpw.org



TO: Charles Yu, Engineer, DPW Bureau of Engineering
FROM: James DeVinny, Arborist Inspector, DPW Urban Forestry Permits & Policy
DATE: April 8, 2011
SUBJECT: Urban Forestry Comments for DPW Response to Van Ness BRT DEIR

Build Alternative 2 remains the vastly preferred alternative from the Urban Forestry perspective because it would preserve existing tree and landscape plantings.

A-7f-1

Benefits which trees provide to the urban environment include: noise reduction, wind mitigation, interception and diversion from storm drains of stormwater, interception of carcinogenic particulates emitted by automobiles, carbon sequestration, and exchange of carbon dioxide for oxygen.

These benefits are recognized and promoted by numerous local, state, and federal policies and guidelines. The San Francisco County Transportation Authority's Draft EIS/EIR for the Van Ness Bus Rapid Transit Project addresses tree removal and replacement in the context of visual impacts and impacts to wildlife. The DEIS/DEIR fails to account for the impact that the proposed reduced mature tree canopy (drastically reduced in Build Alternative 3 and reduced in Alternative 4) would have on air quality, water quality, and post-construction/operational noise pollution.

A-7f-2

The benefits provided by the trees which comprise a forest, urban or otherwise, are quantified by both the number of trees and the surface area of the individual trees' leafy canopy and bark. It follows that the benefits provided by trees increase with maturity and increasing canopy spread.

Table 4-4.2 illustrates the anticipated number of trees to be removed and the estimated number to be planted for each Build Alternative. Build Alternative 3 proposes removal and replacement of 101 median trees, or just under 25% of the trees on the corridor. The DEIS/DEIR fails to capture the loss of surface area, which would be a higher proportion, since the largest tree canopy spread and trunk diameters in the corridor belong to the median trees. The San Francisco Green Landscaping Ordinance acknowledges that the greatest stormwater benefits occur when tree canopies cover impervious areas and intercept water before it falls to the ground. The DEIS/DEIR does not address the change in stormwater patterns while replacement trees reach maturity (many of the existing trees are 20 – 30 years old) or the difference between replacement trees with narrow canopies (including palms) and the current benefits provided by the existing broad-canopy, mature median trees.

A-7f-3

Similarly, discussion of air quality does not address the reduction in tree surface area (and associated reduction of carbon dioxide- and particulate-mitigating benefits) due to narrower canopy replacement trees and the time between removal of existing trees and maturity of replacement trees. The potential impact that loss of large tree canopy might have on wind patterns and related energy consumption isn't

A-7f-4

continued



San Francisco Department of Public Works
Making San Francisco a beautiful, livable, vibrant, and sustainable city.

acknowledged, nor is the loss or reduction of noise mitigation provided by the existing trees and the associated effects on residents, workers, and pedestrians.

Discussing the visual impacts to the corridor, Section 4.4.3.4 states “the consistent median configuration provided by Build Alternative 3 would provide a strong, central axis for visual continuity in the corridor.” Both Build Alternative 3 and achieving this axis would require the removal of all median trees, which conflicts with Better Streets Plan Chapter 6.1, which states that “street trees are the most important organizing element of the streetscape environment.”

Throughout the document, there is also a clear bias toward replacing the varied tree planting with a single species as a way of creating a strong identity for the corridor. I believe this is a subjective intrusion in the document and would like to introduce the idea that the diversity of tree species in the existing median serves as a much stronger place-maker than a consistently planted row of a single species, such as *Phoenix canariensis* (as illustrated in some of the renderings). Not only are Canary Island Date Palms expensive and susceptible to the fatal and highly contagious pathogen *Fusarium oxysporum*, they are already planted on the Dolores median, Market Street Median, and the Embarcadero. Currently, the Van Ness Avenue median represents one of the largest and most densely planted right-of-way spaces on the east side of the city. It is also one of the most diversely planted medians in the city, with at least 20 different species occurring between Market Street and North Point. As mentioned earlier, many of the trees are 20 – 30 years old, and a few of the species are found in the city only in the Van Ness median and Golden Gate Park. Some of the city’s only Camden Wollybutt (*Eucalyptus macarthurii*), Yellow Box (*Eucalyptus melliodora*), and Black Marlock (*Eucalyptus redunca*) are found on this diverse tree laboratory. Some of the city’s finest examples of the much maligned *Corymbia ficifolia* (which is endangered in its native range and particularly well-adapted to San Francisco) are to be found on the Van Ness median. Dismissing the exuberant planting in favor of a “strong central axis” devoid of trees except for overplanted and doomed Canary Island Date Palms seems like a mistake that will be regretted by many for years.

Finally, 4.5 and 4.13.2 refer to one of the Cork Oaks as “a *significant tree* protected by the Landmark Tree Ordinance.” This is not correct. None of the trees on Van Ness, either in the median or on the sidewalk, have been officially designated as Landmark Trees. The Public Works Code defines Significant Trees as tree on private property, but within 10’ of the right-of-way and meeting certain size criterion. The trees on Van Ness are protected because they are in the public right-of-way. Removal of any of these trees will require a permit issued by the Department of Public Works and subject to public process which may include public hearings.

Thank you.

↑
A-7f-4
continued

A-7f-5

A-7f-6

A-7f-7



Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: San Francisco Department of Public Works

Reviewer's Comment Number	Response
A-7f-1	Support for Build Alternative 2 noted. See Response to Comment A-7e-2.
A-7f-2	See Response to Comment A-7e-2.
A-7f-3	<p>Mature tree canopies provide stormwater management benefits. There would be a period of reduced benefits until the new tree plantings grow to maturity, and these benefits would not be fully realized in the event different tree types are selected that provide less canopy than the existing trees that would be removed. However, under each build alternative, including the LPA (with or without the Vallejo Northbound Station Variant), any reduced benefits due to smaller tree canopy size would be offset by an overall increase in trees and pervious surface area in the corridor. Under all build alternatives, including the LPA, more trees would be planted than would be removed, resulting in more trees after construction of the BRT than are currently present in the Van Ness Avenue corridor.</p> <p>See Master Response #7 regarding tree removals and replanting opportunities.</p>
A-7f-4	<p>See Response to Comment A-7e-2. Under existing conditions, the No Build Alternative, or the build alternatives, trees within the roadway median and/or along the roadway edges have or would have a negligible influence on sound propagation. The distribution of trees is and would be narrow and discontinuous. Furthermore, even for those trees that are densely leaved, the leaves tend to be concentrated at heights well above the paths between traffic noise sources and the nearest noise-sensitive receivers. Only continuous, deep groupings of non-deciduous foliage with relatively densely-packed leaves or needles positioned in the path of sound propagation have the potential to substantially attenuate noise levels. For similar reasons, tree plantings along Van Ness Avenue are unlikely to affect wind patterns or energy consumption.</p>
A-7f-5	<p>The mitigation for tree loss, as described in Section 4.4., is the replacement of those trees, and to look for opportunities to preserve trees throughout project design. Since there would be a net increase in the number of trees, this would be consistent with the Better Streets Plan, Chapter 6.I.Preservation of trees, where feasible, will be a priority during the design phase if the project is approved. New trees would help enhance the urban design of the corridor, supplementing preserved trees.</p> <p>See Master Response #7 regarding preserved trees and replanting opportunities.</p>
A-7f-6	<p>The point that diversity of tree species can service as a strong place-maker is well taken. The consistency of the median was cited as an urban design goal by the multi-agency technical advisory committee (TAC) during the Van Ness Avenue BRT feasibility study and preparation of the Draft EIS/EIR, on which DPW had representation through the EIS/EIR TAC. This study included the Van Ness Corridor Initial Land Use and Urban Design Needs Assessment, completed by the San Francisco Planning Department. This study cited a consistent median as being desirable for the corridor. The consistency of the median does not mean that the design would only choose a small number of species. Rather, this refers to the consistency in look and feel of the median. New tree plantings would supplement trees that are preserved. Particular tree species to be planted will be selected as part of the design phase if the project is approved.</p>
A-7f-7	<p>Comment is out of date. The Draft EIS/EIR does not refer to the Rosa Parks tree as significant. Section</p>

4.13.2 of the Final EIS/EIR explains that the Rosa Parks Tree does not qualify as a landmark or significant tree, but warrants special consideration in planning. Section 4.15.II explains that a preconstruction survey would be required by a certified arborist to identify protected trees that would be impacted by the proposed project and determine the need for tree removal permits and tree protection plans during construction and into project operation. Build Alternative 3 and the staff recommended LPA (with or without the Vallejo Northbound Station Variant) would require the removal of the dedicated Rosa Parks Memorial Tree. All relevant City processes will be followed, as described in Chapter 4.13 Biological Environment.

Since the Rosa Parks tree is relatively young, it could be relocated to a different location, either along the corridor or in a different part of the city. Decisions about tree plantings and relocation of existing trees will be decided as part of the design phase if the project is approved.

	Alternative 2		Alternative 3		Alternative 4	
	DWG	Comment	DWG	Comment	DWG	Comment
Market to Mission St	A2-1	Dual sewer lines located adjacent to existing curb line. Proposed bulb-out and platform will be located above sewer. Sewer may need to be relocated.	A3-1	Dual sewer lines located adjacent to existing curb line. No impact.	A4-1	Dual sewer system located outside of proposed work
Side Street - 12th St	A2-1	Sewer located within proposed landscaped area. Any planned work will require review in order to determine maintenance and replacement of sewer line.	A3-1	Sewer located within proposed landscaped area. Any planned work will require review in order to determine maintenance and replacement of sewer line.	A4-1	Sewer located within proposed landscaped area. Any planned work will require review in order to determine maintenance and replacement of sewer line.
Market to Fell	A2-2	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-2	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-2	Sewer located in the center of the street ROW. Platform and landscaping are located above Sewer. Sewer may need to be relocated.
Fell to Hayes	A2-2	Sewer located in the center of the street ROW. Proposed landscaping (narrow median) is located above Sewer. Sewer may need to be relocated.	A3-2	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-2	Sewer located in the center of the street ROW. Landscaping and platform are located above Sewer. Sewer may need to be relocated.
Hayes - Grove	A2-2	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-2	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-2	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Sewer may need to be relocated.
Grove - McAllister	A2-3	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-3	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-3	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.
McAllister - Golden Gate	A2-3	Sewer located near current bus lane on east side of the median. Sewer line may not be affected	A3-3	Sewer located in the landscaping area on the east side. Sewer may need to be relocated.	A4-3	Sewer located near current bus lane on east side of the median. Sewer may need to be relocated
Golden Gate - Turk	A2-3	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-3	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-3	Sewer located in the center of the street ROW. Landscaping is located above Sewer. Sewer may need to be relocated.
Turk - Eddy	A2-4	Dual Sewer located outside of the median area. Sewer lines may not be affected	A3-4	Sewer located in the landscaping or the platform area on the east side. Sewer may need to be relocated.	A4-4	Dual Sewer located in the proposed bus lanes adjacent to landscaping and platform. Sewer may need to be relocated.

	Alternative 2		Alternative 3		Alternative 4	
	DWG	Comment	DWG	Comment	DWG	Comment
Eddy - Ellis	A2-4	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-4	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-4	Sewer located in the center of the street ROW. Landscaping is located above Sewer. Sewer may need to be relocated.
Ellis - O'Farrell	A2-4	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-4	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-4	Sewer located in the center of the street ROW. Landscaping are located above Sewer. Sewer may need to be relocated.
O'Farrell - Geary	A2-4	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-4	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-4	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Sewer may need to be relocated.
Geary - Post	A2-5	No sewer on street	A3-5	No sewer on street	A4-5	No sewer on street
Post - Sutter	A2-5	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-5	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-5	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.3
Sutter - Bush	A2-5	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-5	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or repla	A4-5	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.
Bush - Pine	A2-6	Sewer located in the center of the street ROW. Proposed landscaping (narrow median) is located above Sewer. Sewer may need to be relocated.	A3-6	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-6	Sewer located in the center of the street ROW. Landscaping is located above Sewer. Sewer may need to be relocated.
Pine - California	A2-6	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-6	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-6	Sewer located in the center of the street ROW. Landscaping is located above Sewer. Sewer may need to be relocated.
California - Sacramento	A2-6	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-6	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-6	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.
Sacramento - Clay	A2-6	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-6	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-6	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.

as of 8/26/2008

C:\Users\lyuc\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\VK0K7N98\Comments on BRT Project - Apr 2011 (EHV).xlsx

	Alternative 2		Alternative 3		Alternative 4	
	DWG	Comment	DWG	Comment	DWG	Comment
Clay - Washington	A2-7	No sewer on street	A3-7	No sewer on street	A4-7	No sewer on street
Washington - Jackson	A2-7	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-7	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-7	Sewer located in the center of the street ROW. Landscaping is located above Sewer. Sewer may need to be relocated.
Jackson - Pacific	A2-7	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-7	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-7	Sewer located in the center of the street ROW. Platform is located above Sewer. Sewer may need to be relocated.
Pacific - Broadway	A2-8	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-8	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-8	Sewer located in the center of the street ROW. Landscaping is located above Sewer. Sewer may need to be relocated.
Broadway - Vallejo	A2-8	Sewer located west of the existing median. No impact.	A3-8	Sewer located west of existing median. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-8	Sewer located west of existing median. Landscaping and platform are located above Sewer. Sewer may need to be relocated.
Vallejo - Green	A2-8	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-8	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-8	Sewer located in the center of the street ROW. Landscaping is located above Sewer. Sewer may need to be relocated.
Green - Union	A2-8	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-8	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-8	Sewer located in the center of the street ROW. Landscaping is located above Sewer. Sewer may need to be relocated.
Union - Filbert	A2-9	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-9	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-9	Sewer located in the center of the street ROW. Landscaping & Platform are located above Sewer. Sewer may need to be relocated.
Filbert - Greenwich	A2-9	Sewer located in the center of the street ROW. Proposed landscaping is located above Sewer. Sewer may need to be relocated.	A3-9	Sewer located in the center of the street ROW. Bus Lanes are located above Sewer. Bus Lanes will require Muni ROW drainage. Any SFPUC maintenance, repair or replacement of line will require bus lane shutdown.	A4-9	Sewer located in the center of the street ROW. Landscaping is located above Sewer. Sewer may need to be relocated.
Greenwich - Lombard	A2-9	Sewer located in the center of the street ROW. Landscaping is located adjacent to (E) Sewer. Sewer may be impacted.	A3-9	Sewer located in the center of the street ROW. Landscaping is located adjacent to (E) Sewer. Sewer may be impacted.	A4-9	Sewer located in the center of the street ROW. Landscaping is located adjacent to (E) Sewer. Sewer may be impacted.

as of 8/26/2008

C:\Users\yrc\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\VK7K7998\Comments on BRT Project - Apr 2011 (EHY).xlsx

Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: San Francisco Department of Public Works

Reviewer's
Comment
Number

Response

A-7g-1

Comments out of date. These are comments on earlier drawings. Discussions with SFPDW hydraulics and SFPUC took place through TAC meetings before the release of the Draft EIS/EIR. Potential impacts of the project on the sewer can be found in Section 4.6 of the EIS/EIR. Further discussions between SFMTA, SFPUC, and DPW will continue through the design phase of the project.

Van Ness Avenue BRT
LPA Selection Framework

NO. EVALUATION SUBCRITERIA

DEFINITIONS/MEASURES OF EFFECTIVENESS

SOURCE (ASSUMPTIONS)

PRELIMINARY DRAFT

A TRANSIT OPERATIONS/PERFORMANCE			
1	Transit travel time	Minutes of travel time Shortest pedestrian crossings, limited to 3 to 4 lanes with wide accessible pedestrian refuge islands may result in shorter ped crossing times overall, increasing traffic throughput.	VISSIM microsimulation
2	Reliability	Travel time covariance	VISSIM microsimulation
3	Vehicle operational safety	Service impact of breakdown (qualitative) Operator survey (considers issues such as # of conflicts (pkg/right turns/bikes), inconsistent door operation, head-on approaches - (qualitative)	SFMTA operator survey
4	Attract/retain transit riders	Systemwide transit ridership	SF CHAMP
B TRANSIT RIDER EXPERIENCE			
5	Waiting experience	Platform crowding (above or below threshold) No consideration of trees/landscape as contributing to the transit rider experience ADA: 14 feet wide platforms provide adequate room for maneuvering to / from transit vehicles and for seating for waiting for those who cannot stand for long periods.	Non-motorized transportation analysis
		Size of buffer between platform and traffic ADA: 4 feet wide pedestrians islands are not at all accessible or appropriate. At least 5 feet must be provided at crosswalks in all cases - no exceptions. Otherwise the design scheme fails from an accessibility and pedestrian safety standpoint.	Engineering drawings
6	In-vehicle experience	Lane weaving (number of lane transitions) Load at maximum load point (above or below threshold)	Engineering drawings Ridership/platform designs
7	Security	Ease of enforcing POP ADA: Having a clearly defined POP may help wayfinding and use of facilities by persons who are blind or who have low vision.	SFMTA
C ACCESS AND PEDESTRIAN SAFETY			
8	Pedestrian crossing experience exposure	Average refuge width ADA: 14 feet wide refuge / platforms provide adequate room for accessible maneuvering to / from transit vehicles and detectable and accessible pedestrian refuge islands. Accessible pedestrian signals and other wayfinding elements for pedestrians who are blind or have low vision are a must in order to find the platforms.	Engineering drawings
		Average crossing distance ADA: 14 feet wide refuge / platforms provide the shortest accessible pedestrian crossing distances (and therefore the quickest, even using 2.8 fps ped speed), breaking up individual crossings to 3 and no more than 4 lanes typically provided that curb bulbs are also provided at crosswalks.	Engineering drawings
		# of round-trip traffic ventures average pedestrian crossing time provides adequate sight distances	ARUP
9	ADA accommodation	Platform width ADA: 14 feet wide platforms provide adequate room for accessible maneuvering to / from transit vehicles and for seating for waiting for those who cannot stand for long periods. Having both inbound and outbound vehicles on a shared platform makes use by persons with disabilities vastly better as compared to the other options, especially the split narrow island option. path of travel/intersection/returns/median-ped refuges	ARUP
10	Quality of Bicycle Access	Number and types of vehicle movements in conflict with bikes	Engineering drawings
D URBAN DESIGN/LANDSCAPE			
11	Street identity	Consistency of median footprint (# of plan views) Consistency of streetscape features (qualitative) provide adequate lighting for all modes	Engineering drawings Visualizations
12	Quality of landscape	Edge-area ratio of landscape Number of healthy existing trees preserved impacts to trees if preserved (severe pruning requirements, etc.)	Engineering drawings Engineering drawings/landscape design criteria
13	Quality of landscape	Square feet of permeable surfaces/landscape (also account for affect on adjacent street network)	BMS Report/Landscape Plan
E VEHICLE CIRCULATION AND PARKING			
14	Average person-delay	Average total intersection person-delay	VISSIM microsimulation
15	Person-throughput	Average persons per lane per hour on Van Ness Avenue	SF CHAMP
16	Accommodate traffic circulation and access	Average intersection LOS in Van Ness corridor # of new turn restrictions, including trucks # of conflicts between vehicles with ped/bike/BRT	VISSIM microsimulation Engineering drawings
17	Parking opportunities	Net change in on-street parking capacity by segment	Engineering drawings

A-7h-1

A-7h-2

A-7h-3

A-7h-4

A-7h-5

A-7h-6

A-7h-7

A-7h-8

A-7h-9

A-7h-10

A-7h-11

A-7h-12

A-7h-13

A-7h-14

		ADA: Schemes that eliminate or reduce accessible on-street parking and accessible on-street passenger loading zones must propose how those spaces will be maintained for each affected business / block.	
	provides adequate sight distances		
	provides for delivery of goods & services to local businesses.		
F	ENVIRONMENTAL EFFECTS		
18	Air pollutant emissions	# of cases of increased CO levels above threshold of significance	Traffic operations/Air quality
		No consideration of the environmental impact of removing mature trees, and the noise impact of removing mature trees	impacts analysis
		GHG emission	SF CHAMP/air quality impacts analysis
19	Energy impact	Fuel consumption (function of VMT)	Energy impact analysis
20	Noise impacts	# of noise impacts (increase in noise to sensitive receptors above significance threshold)	Noise impact analysis
		ADA: Schemes with lower ambient noise are better for pedestrians who are blind or have low vision. Hearing traffic patterns clearly and accessible pedestrian signals is aided by this.	
G	COST (CAPITAL/OPERATING)		
21	Total capital cost	\$, including construction cost, facility costs, and vehicles	Cost estimates; SFMTA
		include total project cost - landscape/streetscape, street lights, sewer relocations, sub sidewalk basements, etc...	(facility/vehicles)
22	Operating cost	\$	SFMTA
23	Maintenance cost	\$ cost to maintain vehicles (parts; shuttling)	SFMTA
		\$ cost to maintain runningway	SFMTA/SFDPW
		life cycle cost of pavement (roadway/BRT lanes) & facilities cost to maintain landscaping, sewers, etc...	
		no consideration of \$ cost to maintain trees and landscape - potentially MUCH greater than current due to lane closure requirements, keeping trees clear of lines, etc.	
H	CONSTRUCTABILITY/MAINTAINABILITY		
24	Construction duration	Months	Construction staging and phasing plan
25	Construction intensity	Linear feet of utility relocation/assume of all sewers	Parsons (engineering drawings)
		(include all types of utilities - water, PG&E, etc.)	
		Include AWSS utilities and Hydrant relocations for ease of maintenance access / related utility work	
26	Ease of access for maintenance	Ease of accessing utilities and runningway for maintenance	SFMTA/SFDPW/PUC
		(# of special conditions/service interruptions)	
		Ease of access for utility maintenance, repair & future replacement, including AWSS utilities	
		Ease of accessing medians for landscape maintenance	
		Platforms are problematic for street cleaning and require additional resources	
		Additional Bulk outs will be problematic for Mechanical Sweepers	
		Likely to experience additional debris as result of design	
		no consideration of maintenance of landscaping/trees as well!	
27	Ease of access to land uses during construction	Average length/duration of sidewalk closures	Construction staging and phasing plan

A-7h-15

A-7h-16
A-7h-17

A-7h-18

A-7h-19

A-7h-20

A-7h-21
A-7h-22

A-7h-23

A-7h-24

A-7h-25

A-7h-26

S drive: CHF: Van Ness Avenue BRT

KEY

ESH Comments
EHY Comments
ADA Comments
BUF Comments
EME Comments
BS&S Comments

Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: San Francisco Department of Public Works

Reviewer's Comment Number	Response
A-7h-1	Minimum pedestrian crossing speeds are incorporated into signal timing for all transportation operations models, including Synchro and VISSIM, wherever feasible. Crossing speeds for each alternative are discussed in Chapter 3.4 of the EIS/EIR. Crossing distance is accounted for through evaluation criteria C-2 in Chapter 10 of the Draft EIS/EIR.
A-7h-2	Tree opportunities on platforms do not vary by alternative, and trees and landscaping are considered for their aesthetic value in Chapter 4.4 Aesthetics/Visual Resources of the Draft EIS/EIR. The number of preserved trees is considered as part of performance indicator F-6 in Chapter 10 of the EIS/EIR.
A-7h-3	The width of platforms are accounted for in performance indicator C-3 in Chapter 10 of the Draft EIS/EIR.
A-7h-4	The LPA proposes medians of at least 6 feet for all crossings except the southern crosswalk at Mission/South Van Ness, a configuration under existing conditions. If one of the other build alternatives had been selected as the LPA, staff would have made efforts to provide a minimum of six foot refuges wherever possible.
A-7h-5	This guidance will be used during the design phase, and does not vary by alternative.
A-7h-6	The width of platforms and refuges are accounted for in performance indicators B-1, B-2, C-1, and C-3 in Chapter 10 of the Draft EIS/EIR. Accessible pedestrian signals will be included at every intersection as part of the project description (see Chapter 2 of the Draft EIS/EIR).
A-7h-7	Please see Master Response #13 for a summary of how crossing conditions on Van Ness Avenue would improve with implementation of the proposed project. The Universal Design discussion in Section 3.4 discusses crossing distance to refuges for all of the build alternatives, including the LPA. Build Alternative 3 would have refuges off-center, which means that it would be closer from one side of the street while farther from the other when compared with the other build alternatives, including the LPA. Under the LPA, crossings would not be more than 3 lanes to reach a minimum 6 foot pedestrian refuge (often 9-11 feet) with only a few exceptions.
A-7h-8	Pedestrian crossing time is accounted for through crossing distance and would not vary significantly between alternatives. Similarly, site distance does not vary significantly between alternatives. Please see Master Response #13 for a summary of how crossing conditions on Van Ness Avenue would improve with implementation of the proposed project.
A-7h-9	Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the staff recommended LPA. Width of platforms is accounted for in performance indicators B-1, B-2, and C-3 in Chapter 10 of the Draft EIS/EIR. As noted in the Universal Design analysis in Chapter 3.4 having shared platforms in some locations but not others, as under Build Alternative 4, could make the system less intuitive by having

a less consistent design. This is captured through performance indicator C-3 that looks at universal design performance for each of the Build Alternatives, including the LPA.

- A-7h-10 These criteria are covered in the EIS/EIR under the performance indicators as part of Access and Pedestrian Safety (Section 10.2.4.3), particularly performance indicator C-3 which looks at universal design.
- A-7h-11 Street lighting that meets Caltrans standards as well as pedestrian lighting are included for all build alternatives, including the LPA, and thus do not differentiate between them.
- A-7h-12 Performance indicator F-6 in Chapter 10 of counts removed trees, including consideration of pruning requirements. This indicator is a proxy for the number of severely pruned trees. Chapter 9 of the Draft EIS/EIR reflects increased maintenance costs for all of the build alternatives, and is represented through performance indicator G-3.
- A-7h-13 Evaluation Criteria E-3 reflects LOS performance at all 139 intersections in the traffic study area, including parallel streets to the east and west of Van Ness Avenue.
- A-7h-14 Bicycle and pedestrian conflicts are accounted for through performance indicators C-3 and C-4 in Chapter 10 of the Draft EIS/EIR.
- A-7h-15 Section 3.5 of the Draft EIS/EIR (Parking) describes the approach to replacement of all color curb parking spaces. Wherever possible, the color spaces will be replaced on the same block or an immediately adjacent alley or cross street. Performance indicator F-5 looks at the number of parking opportunities, and is a proxy for the number of loading zones provided.
- A-7h-16 The project is within Caltrans right of way, and therefore the project is following Caltrans standards for sight distances. At the locations where Caltrans standards are unable to be met, the project will secure approval from Caltrans.
- A-7h-17 Changes in parking supply, including color loading zones that encapsulate commercial loading, are accounted for in performance indicator F-5 in Chapter 10 and are further described in Section 3.5 of the Draft EIS/EIR.
- A-7h-18 Removal and replacement of trees is a factor considered in the selection of the LPA, as discussed in Section 10.2.4.6 Environmental and Social Effects. See Master Response #7 regarding tree removal and planting opportunities. As explained in Master Response #7, a comprehensive Tree Removal Evaluation and Planting Opportunity Analysis was undertaken in fall 2012 to identify the maturity and health of trees in the corridor and therefore better understand the impacts of tree removal and the opportunities for preserving trees, and the parameters of new tree plantings (BMS, 2013). The analysis took into consideration recent design requirements which affect tree removal and planting opportunities. The EIS/EIR describes tree removals for all alternatives, including the LPA, in Section 4.4.3.4.

All of the build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant), would result in removal of existing trees. The extent of tree removal differs under each build alternative and the LPA, and detailed information on reasons for tree removal and their condition is presented in Section 4.4 Aesthetics/Visual Resources. Section 4.4.3.4 also describes the planting opportunities under each build alternative, including the LPA. The impact from the removal of existing trees and shrubs would be alleviated under each build alternative, including the LPA, with replacement planting. Increased sidewalk and median tree plantings over existing conditions would result in long-term, beneficial effects to biological resources, with improvements growing over time as plantings mature. Although tree removal impacts of the proposed project do not result in significant biological impacts, incorporation of a median design plan previously described in Section 4.4.4 as mitigation measures M-AE-3 and M-AE-4, in addition to measures I-BI-1 through I-BI-2 described below, would reduce impacts from tree removal.

The center lane configured alternatives would not require removal of all trees, as explained in Section 4.4.3.4. Mature tree canopies provide water quality, aesthetic and carbon off-set benefits. There would be a period of reduced benefits until the new tree plantings grow to maturity, and these benefits would not be fully realized in the event different tree types are selected that provide less canopy than the existing trees that would be removed. However, under each build alternative, including the LPA, any reduced benefits due to smaller tree canopy size would be offset by an overall increase in trees in the corridor.

Under existing conditions, the No Build Alternative, or the build alternatives, trees within the roadway median and/or along the roadway edges have or would have a negligible influence on sound propagation. The distribution of trees is and would be narrow and discontinuous. Furthermore, even for those trees that are densely leaved, the leaves tend to be concentrated at heights well above the paths between traffic noise sources and the nearest noise-sensitive receivers. Only continuous, deep groupings of non-deciduous foliage with relatively densely-packed leaves or needles positioned in the path of sound propagation have the potential to substantially attenuate noise levels.

- A-7h-19 All build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant), would have similar ambient noise levels. The staff recommended LPA would involve fewer vehicles on Van Ness Avenue, resulting in lower ambient noise than the no build alternative.
- A-7h-20 The construction capital costs shown in evaluation criteria H-1 in Chapter 10 of the Draft EIS/EIR include utility replacements/relocations as necessary due to conflicts caused directly by the BRT project. Most separate, but related projects, such as replacement of the OCS support poles/streetlights do not vary by alternative and are not considered part of the project costs since they would be implemented regardless of Van Ness Avenue BRT. A description of the Van Ness Avenue BRT project and the separate but related projects can be found in Chapter 2 of the Draft EIS/EIR.
- A-7h-21 The lifecycle cost of the pavement does not vary by alternative. The capital and maintenance costs (the two components of lifecycle costs) of the facilities are shown in Chapter 9 of the Draft EIS/EIR and are described as performance indicators G-3 and H-1. These indicators are proxies for life-cycle cost.
- A-7h-22 Maintenance costs for all facilities, including trees and landscaping, are reflected through performance indicator G-3 in Chapter 10 of the Draft EIS/EIR and is further discussed in Chapter 9 of the Draft EIS/EIR.
- A-7h-23 Performance indicator G-3 in Chapter 10 of the Draft EIS/EIR incorporates DPW's cost estimates to maintain trees and landscaping. Further analysis on this is shown in Chapter 9 of the Draft EIS/EIR.
- A-7h-24 Performance indicator H-3 in Chapter 10 of the Draft EIS/EIR -- linear feet of utility relocation and curb rebuild -- serves as a proxy for the construction intensity related to other types of utilities. Chapter 4.6 describes the impacts to utilities of each of the build alternatives.
- A-7h-25 Comment out of date.
- Performance indicator H-1 in Chapter 10 of the Draft EIS/EIR reflects the cost of relocation of all utilities, including AWSS and hydrants. It also includes the costs of platform, bulbout, and street maintenance, including debris. The total construction cost (which includes utility relocations) for the LPA would be \$125.6M, between the costs of build alternatives 3 and 4.
- Ease of access for utility and landscaping maintenance are reflected in performance indicator G-4 in Chapter 10 of the Draft EIS/EIR. These costs are also included in the maintenance costs shown in Chapter 9 of the Draft EIS/EIR. The LPA (with or without the Vallejo Northbound Station Variant) would have similar ease of access as Build Alternative 4 outside of station locations. Rerouting the vehicles outside the transit lanes for blocks where maintenance is being performed would be possible, and similar to Build Alternative 4. On blocks with stations and blocks where the buses transition towards stations, ease of access would be similar to Build Alternative 3.

A-7h-26 The project team has discussed maintenance with DPW, and determined that the design will have minimal incremental costs to street cleaning because of the low height of the platforms. Costs for additional maintenance of the bulbs are reflected in performance indicator G-4 in Chapter 10 of the Draft EIS/EIR and further reflected in Chapter 9 of the Draft EIS/EIR. The LPA (with or without the Vallejo Northbound Station Variant) would have similar ease of access as Build Alternative 4 outside of station locations. Rerouting the vehicles outside the transit lanes for blocks where maintenance is being performed would be possible, and similar to Build Alternative 4. On blocks with stations and blocks where the buses transition towards stations, ease of access would be similar to Build Alternative 3.

City and County of San Francisco

San Francisco Department of Public Works

Office of the Director

1 Dr. Carlton B. Goodlett Place, City Hall, Room 348

San Francisco, CA 94102

(415) 554-6920 ■ www.sfdpw.org



Edwin M. Lee, Mayor
Mohammed Nuru, Interim Director



December 13, 2011

Mr. Michael Schwartz
Transportation Planner
San Francisco County Transportation Authority
100 Van Ness Ave., 26th Floor
San Francisco, CA 94102

Subject: DPW Comments to the Draft EIR/EIS for the Van Ness BRT Project

Dear Mr. Schwartz,

Thank you for the opportunity to review the Draft EIR/EIS for the Van Ness BRT Project, and for inviting DPW to be on the Technical Advisory Committee during the environmental process. Throughout the environmental process, DPW has consistently advocated for a project that, in addition to serving its intended purpose for transit, would also:

- Improve the quality of life for the San Francisco residents,
- Increase the number of trees while preserving the existing mature trees,
- Enhance public access and comply with the ADA,
- Easily and cost effectively maintain above ground and below ground infrastructure.

| **A-7i-1**
| **A-7i-2**
| **A-7i-3**

Attach is a compilation of comments that DPW had provided, both internally and directly to the Transportation Authority throughout the planning process. DPW feels that Alternative 2 encompasses most of the attributes listed above, and therefore strongly endorse this alternative.

| **A-7i-4**

Regardless of the Locally Preferred Alternative that is chosen, I anticipate that there would be an increase in the maintenance costs for DPW. In addition, a maintenance agreement is likely required for DPW to maintain the exclusive MTA right-of-way. I hope that we can work together to explore ideas on how to finance the additional maintenance costs.

| **A-7i-5**

Please call if you have any questions.

Sincerely,

Mohammed Nuru
Interim Director of Public Works

Attachments 1-8

NOTE:
Comment Letters A-7i, A-7j, and A-7k are repeat letters for which comments have already been addressed under Comment Letters A-7c and A-7d, which were provided as attachments to Comment Letter A-7i.



Agency Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: San Francisco Department of Public Works

Reviewer's Comment Number	Response
A-7i-1	See Response to Comment A-7a-4.
A-7i-2	All alternatives, including the staff recommended LPA, would be in full compliance with ADA standards.
A-7i-3	All alternatives, including the staff recommended LPA would allow for cost-effective maintenance
A-7i-4	Support for Build Alternative 2 noted. All build alternatives, including the LPA, comply with all of the goals expressed by the commenter. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for analysis supporting the staff recommended LPA.
A-7i-5	Maintenance costs are reflected in Chapter 9 of the Draft EIS/EIR. Cost sharing agreements will be refined as part of the design phase if the project is approved.

NOTE: This letter (in DPW Attachment 5) is the same letter as Letter 7d (Attachment 4). See that letter for comments.

City and County of San Francisco



Gavin Newsom, Mayor
Edward D. Reiskin, Director



(415) 695-2017
FAX (415) 695-2175
<http://www.sfdpw.com>

Department of Public Works
Bureau of Street Environmental Services
2323 Cesar Chavez Street
San Francisco, CA 94124-1003
Tim Hines, Acting Superintendent

Date: September 4, 2008
To: Kris Opbroek, Project Manager
From: Chris Ellen Montgomery, Assistant Superintendent BSES
Subject: Bureau of Street Environmental Comments, RE: General Alternative 4: Center Lanes BRT with Left Side Loading / Center Median

More details are needed regarding the median design plan, in order to fully evaluate our ability to mechanical sweep. We have had problems with other transportation designs. For example, the 3rd Street Light Rail platform design is problematic- we need to use a Flusher to push the debris out from under the platform before we can remove it.

Depending on platform design, our mechanical sweeping costs may be doubled. Presently, Van Ness is swept at night (there is a 10% pay differential) with minimum impact to vehicle traffic or pedestrians. If the platform is built with an overhang, we might have to use an additional truck driver to operate a Flusher truck. This also increases our use of water. Once the center median/platform was flushed, we would also then need to mechanically sweep it. An overhanging platform provides areas for debris to collect and accumulate despite regular sweeping. Whenever there is an interface between buses and maintenance workers, there is an increased safety risk.

NOTE:
Comment Letters A-7i, A-7j, and A-7k are repeat letters for which comments have already been addressed under Comment Letters A-7c and A-7d, which were provided as attachments to Comment Letter A-7i.

NOTE: This letter (in DPW Attachment 5) is the same letter as Letter 7c (Attachment 3). See that letter for comments.

City and County of San Francisco



Gavin Newsom, Mayor
Edward D. Reiskin, Director



(415) 641-2627
FAX (415) 641-2666
<http://www.sfdpw.com>

Department of Public Works
Bureau of Urban Forestry
2323 Cesar Chavez, Bldg. A
San Francisco, CA 94124

Liz Lerma, Acting Superintendent

August 29, 2008

To: Kris Opbroek

Subject: Urban Forestry review comments regarding the Preliminary Engineering Studies documents dated August 14, 2008, as prepared by Parsons for the San Francisco Transportation Authority.

Urban Forestry General Comments:

1. More details are needed regarding the general landscape plan, in order to fully evaluate the alternatives.
2. While DPW and other agencies have been diligent about commenting on the alternatives from the initial planning phase, these concerns have not necessarily been incorporated into the BRT alternatives currently presented. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.
3. Alternative 2, The Side Lane BRT is by far the best of the proposed design from an urban forestry perspective. Center islands are problematic, as center lane BRT's would have a huge negative impact on San Francisco's infrastructure and assets: landscaping, irrigation systems and mature trees of significant value. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees.
4. Alternative 2 provides wider sidewalks. Wider sidewalks provide (1) more space for greening along Van Ness, a mayoral priority; (2) would better address storm water management, a crucial PUC issue tied to the maintenance of San Francisco's aging sewer system; (3) increases the regional water system's reliability by putting storm water into the ground, rather than into the sewer system; (4) is environmentally superior because it reduces wastewater discharges to the San Francisco Bay and Pacific Ocean by putting storm water into the ground, rather than into the sewer system; (5) will add more beauty to the cityscape and therefore, (6) increases property values and; (7) are also more pedestrian friendly.
5. Due to the proposed bulb-outs, Alternative 2 will provide by far the best curb ramps along this corridor. There are locations where sub-sidewalk basements encroach into the street corner area. Providing bulb-outs will minimize and perhaps eliminate conflicts between curb ramps and sub-sidewalk basements, and thereby will minimize the unit costs for curb ramps, a cost savings to San Francisco.
6. What is the long-term plan for landscape maintenance?

Alternative 2: Side Lane BRT

Sheet A2-1

1. Alternative 2, The Side Lane BRT is by far the best of the proposed design from an urban forestry perspective.
2. More detail needed RE: proposed landscape areas at Otis and South Van Ness Avenue.

Sheet A2-2 through A2-10

NOTE:
Comment Letters A-7i, A-7j, and A-7k are repeat letters for which comments have already been addressed under Comment Letters A-7c and A-7d, which were provided as attachments to Comment Letter A-7i.

1. Alternative 2, The Side Lane BRT is by far the best of the proposed design from an urban forestry perspective.
2. More detail needed RE: proposed landscape areas.

Alternative 3: Center Lanes with Side Median BRT

Sheet A3-1 through A 3-6

1. Raised island platforms do not allow for tree planting.
2. Center bus lanes may require bus lane closures to perform landscape maintenance.
3. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees
4. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A3-7

1. Will require removal of a signature tree, the Rosa Parks Memorial Tree, which will likely go to the Board of Appeals, with much public opposition expected.
2. Raised island platforms do not allow for tree planting.
3. Center bus lanes may require bus lane closures to perform landscape maintenance.
4. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees
5. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A3-8

1. Raised island platforms do not allow for tree planting.
2. Center bus lanes may require bus lane closures to perform landscape maintenance.
3. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees
4. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A3-9

1. Raised island platforms do not allow for tree planting.
2. Center bus lanes may require bus lane closures to perform landscape maintenance.
3. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees
4. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A3-10

1. More detail needed RE: proposed landscape areas.

Alternative 4: Center Lanes BRT with Left Side Loading / Center Median

Sheet A4-1 through A4-6

1. Raised island platforms do not allow for tree planting.
2. Center bus lanes require bus lane closures to perform landscape maintenance.
3. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees.
4. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A4-6

1. Raised island platforms do not allow for tree planting.
2. Center bus lanes require bus lane closures to perform landscape maintenance.
3. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees.
4. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A4-7

1. Will require removal of a signature tree, the Rosa Parks Memorial Tree, which will likely go to the Board of Appeals, with much public opposition expected.
2. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees.
3. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.

A4-8 through A4-10

1. Raised island platforms do not allow for tree planting.
2. Center bus lanes require bus lane closures to perform landscape maintenance.
3. Center bus lanes will require the removal of all trees, which will require a tree removal permit, which will likely go to the Board of Appeals, with much public opposition expected. The TA has not discussed the removal of mature trees at the meetings with the public. Removal of mature, established trees is in direct conflict with the greening goals of the City of San Francisco. There will be enormous public opposition to the removal of 150 mature median trees.
4. The concept designs presented to the public are misleading in terms of where and what type of landscaping would be possible.



Individual Comment
Letters and Responses
on the Draft EIS/EIR
for the
Van Ness Avenue
Bus Rapid Transit Project

Appendices I (contd')

APPENDIX I

Individual Comment Letters and Responses

REVIEWERS	PAGE NUMBER	
	COMMENT LETTER	RESPONSES
INDIVIDUALS		
Daniel McCoy	3	4
Gregory Arenius	5	6
Alfred Boehl	7	9
Jerome Bernstein	11	12
Ben Casement Stoll	13	14
William Raymond	15	16
Elizabeth McRae Sanchez	17	18
Robert Mack	19	20
John Stevens	22	23
Ed	24	25
Patricia Sullivan	26	27
Anna Sojourner	28	29
Jean Balibrera	30	31
Lisa Van Cleef	32	33
Jason Dewees	34	35
Christopher Altman	36	37
Sue Hestor	38	40
Charles Lebedeff	41	42
Sharon Soong	43	44
Charles Marsteller	45	46
Aaron Goodman	48, 51	50, 52
Hitesh Soneji	53	54
Dehan Glanz	55	56
Bobby Singh	57	58
Lisa and Michael Wais	59	60
Bruce Johnson	61	62
Ildiko Polony	63	64
Maggie Robbins	65	66
Ellie Lum	67	68
Shoshanna Flach	69	70
George Sery	71, 76	73, 77
David Bezanilla	78	80

REVIEWERS	PAGE NUMBER	
	COMMENT LETTER	RESPONSES
Rachel Quimby	82	83
Henrietta Wisniewski	84, 86	85, 87
Charles McClure	88	89
I. L. Girshman	90	92
Alvin Huie	96	97
Ralph Jacobson	98	101
Timothy Wickland	103	104
Mary Miles	106, 108, 110, 112	107, 109, 111, 122
Eric Whitney	131	132
Christopher Pederson	134	136
Matt Wisniewski	137	138
Christina Castro	139	140
Ryan Kauffman	141	142
Paul Lucas	143	144
Herman Lee	145	146
Julie Bernstein	147	148
Ziggy Tomcich	149	151
Daniel Weaver	153	154
Kanya Dorland	155	156
Don Kertzman	157	158
Henry Pan	159	162
Rose Campbell	163	164
Michelle Brant	165	167
Jackie Sachs	168, 186	170, 187
Linda Chapman	172	183
Samantha Robinson	188	189
Hiroshi Kokame	190	191
Anonymous	192, 194	193, 195
Tim Hickey	196	197
Tes Welborn	198	199
Kevin Day	201	202
Kevin Stull	203	204
Rose Sery	205	206
Tim Donnelly	208	210
Donna Morrison	212	213

From: Daniel [mccoy.daniel@gene.com]
Sent: Fri 12/23/2011 10:51 PM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] San Francisco County Transportation Authority: Employer Shuttles

This is an enquiry e-mail via <http://www.sfcta.org> from:
Daniel <mccoy.daniel@gene.com>

I'd like to suggest that employer shuttles such as those operated by Genentech, Apple and Google be considered for access to the BRT lanes and that the project should incorporate and consider employer shuttle operations given the number of San Francisco resident/riders these services carry each and every day.

I-1-1

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Daniel McCoy

Reviewer's
Comment
Number

Response

I-I-I	Please see Master Response #3 for a discussion of how private shuttles would operate on Van Ness Avenue with the BRT project.
-------	---

From: Gregory Arenius [gregory@arenius.com]
Sent: Fri 12/23/2011 11:49 PM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] San Francisco County Transportation Authority: Support for BRT

This is an enquiry e-mail via <http://www.sfcta.org> from:
Gregory Arenius <gregory@arenius.com>

I would like to voice my support for the Van Ness bus rapid transit project. I think it is important that we do this and do it right. I think the best of the design alternatives is option three. It doesn't force a different bus fleet like option four or have the draw backs of buses being delayed by people parking and taking right turns as option two. Also, dedicated center lanes are likely to actually be bus only lanes. The bus lanes that the city has that aren't in the center are rarely respected as actual bus only lanes by drivers.

I-2-1

I-2-2

Thanks,
Greg

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Gregory Arenius

Reviewer's Comment Number	Response
I-2-I	Support for Build Alternative 3 is noted. Please see Chapter 10 of the EIS/EIR and the LPA Report (SFCTA, 2012) for the analysis supporting the LPA. Build Alternatives 3 and 4 (with and without Design Option B) would result in approximately the same travel time reduction (see Section 10.2.4.1). The travel time for Build Alternative 2 takes into account conflicts and delays with right-turning automobiles and parking cars, as noted in Section 10.2.4.1 Transit Performance. The LPA is a refinement of Build Alternatives 3 and 4 that utilizes center running transit-only lanes and does not require the need to procure dual-side door vehicles
I-2-I	Support for Build Alternative 3 is noted. Please see Chapter 10 of the EIS/EIR and the LPA Report (SFCTA, 2012) for the analysis supporting the LPA. Build Alternatives 3 and 4 (with and without Design Option B) would result in approximately the same travel time reduction (see Section 10.2.4.1). The travel time for Build Alternative 2 takes into account conflicts and delays with right-turning automobiles and parking cars, as noted in Section 10.2.4.1 Transit Performance. The LPA is a refinement of Build Alternatives 3 and 4 that utilizes center running transit-only lanes and does not require the need to procure dual-side door vehicles

From: Alfred Boehl [m-in-sfca@comcast.net]
Sent: Saturday, November 05, 2011 9:59 AM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] Favoring Build # 3

After reading most of the executive summary update, I encourage Build # 3. My reason for doing so is it will likely result in faster transit flow which would encourage greater transit usage (as well as more condo/apt development). Build # 2 would likely result in illegal delivery trucks remaining in the curb lane. Also, auto's leaving and parking along the curb will delay buses. And what about overlook stalled cars due to wrecks or engine failures? The latter concerns were completely overlooked or certainly failed being mentioned when describing Build 2. Why not?

I-3-1

I do think the executive summary has overlooked several improvements. Will there be "more limited" runs from Market to Sacramento streets during the commuting hours (7-9 a.m. and 4-6 pm)? It seems to me offering these "limited runs" would move more people during the peak periods of usage more efficiently and encourage more housing and reduce reliance on autos. It also would be effective when the 47 bus is delayed in heavy traffic due to AT&T events.

I-3-2

Another concern is limiting right hand turns from the "middle" non-transit lane. (example: Broadway St has a protected light for right turns). Are such right turns being more limited to encourage faster and more efficient traffic flows? After all, drivers would be encouraged to use Gough for turning right when driving towards the Tenderloin and the Financial districts.

I-3-3

The executive summary fails to mention how dedicated bus lanes would enhance greater bus use during the 4th of July and Fleet Week events (as well as other Fort Mason area planned events). It never ceases to amaze me why the city has not suggested moving both events closer to the Ferry building or South Beach area. Doing so would encourage greater use of BART and MUNI. The Fisherman's Wharf/Crissy Field area is not served by mass transit. Having both events in the Fisherman's Wharf area most likely results in extra MUNI and the police overtime pay. The city desperately needs to address overtime pay far more effectively. Why is SFMTA not addressing this extra overtime expense more effectively? Are the Fisherman's Wharf event contributions sufficient to offset the police and MUNI overtime costs? The city really needs to do a more reasonable, thorough, objective and fair analysis of city costs, transit benefits and event contributions. In other words, be consistently transit friendly and MEANT IT!!

I-3-4

Are these concerns not being addressed because SFMTA department heads live outside the city and not fully aware or just unconcerned with city resident inconveniences and overtime costs? After all, they earn their salaries regardless of improvements. It is unfortunate salary increases are not directly related to cost controls and greater efficiency. It is please confirm how it is.

Also, there is greater likelihood of better weather along the eastern side of the San Francisco Bay. AT&T park is testament to such. The City needs to get real!! Please forward this aspect of my comments to the correct city events planning/approving department.

Regards,

Alfred Boehl

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Alfred Boehl

Reviewer's
 Comment
 Number

Response

I-3-1 See Response to Comment I-2-1. Sections 3.2.2.2 Reliability and I0.2.4.1 Transit Performance discuss the likelihood of unexpected stops during transit service. Conflicts from delivery vehicles and broken down cars fall into the category of unexpected stops.

I-3-2 All three build alternatives, including the LPA, would operate in a transitway that is dedicated to bus operation and would not be shared with cars (an exception is that under Build Alternative 2, cars would be permitted to traverse the transitway to make a right-turn where permitted, and to parallel park within the curbside parking area). Thus, the BRT service would operate on a schedule independent of traffic conditions. Heavy traffic due to AT&T events would not have a noticeable effect on the BRT service. Limited runs would not be needed because the BRT service is designed with flexibility to meet demand for special events and projected ridership needs during commute hours.

Boarding patterns in Chapter 3.2 of the Draft EIS/EIR show that ridership demand is strong throughout the corridor, indicating the need to keep regular stop spacing. The BRT project proposes to reduce 6 stops in each direction to help improve transit speed and reliability. Please see Master Response #5 for the criteria for how stop locations were determined. The three main criteria considered were even spacing, ridership, and the presence of key cross transit routes. The LPA allows passing outside of station locations and does not preclude the potential for express service should that operation be determined to be desirable in the future.

I-3-3 With the implementation of BRT, the only limitations on right turns would be for trucks at some locations (similar to existing conditions) onto Van Ness Avenue from cross streets. Each build alternative, including the LPA, incorporates features that help avoid or minimize traffic impacts, including right-turn pockets at high-demand locations (Section 3.3.4).

Due to changes to curbed medians and curb bulbs, the BRT alternatives, including the LPA, would result in some changes to circulation for trucks attempting to turn onto Van Ness Avenue from cross streets (see Section 3.1.2.5). In addition, advisory signs stating "Right Turn for Buses/Trucks Not Advised" are proposed at two-way street crossings at Pacific, Broadway, Vallejo, Green, Union, Filbert, Greenwich, and Lombard streets under all alternatives because of encroachment into opposing lanes. This is in addition to the existing advisory signs currently posted at Grove, McAllister, Eddy, California, and Clay streets.

Build Alternatives 3 and 4 have identical vehicular traffic operations, with the exception of right-turning movements at the intersection of Van Ness Avenue and Geary Street. Due to the transition from a center-running BRT with a single median north of Geary Street to a right-side loading BRT with two medians for this block, the southbound Van Ness Avenue exclusive right-turn lane to Geary Street would not be provided under Build Alternative 4; this intersection operates at LOS B under 2015 Build Alternative 3. Without the exclusive SB right-turn lane, LOS at this intersection would remain at LOS B under 2015 Build Alternative 4 without Design Option B and decrease to LOS C under 2035 Build Alternative 4, with or without Design Option B (see Sections 3.3.3.2 and 3.3.3.3). The LPA (with or without the Vallejo Northbound Station Variant) would have the same private vehicle traffic operations as presented for Build Alternative 4 with Design Option B in the Draft EIS/EIR, except that the LPA only has right-turn pockets at three intersections on Van Ness Avenue, all in the southbound direction, provided at: Mission/Otis/South Van Ness, Market Street, and Pine Street, which creates minimal changes in traffic operations, as noted in Section 3.3. The center running BRT alternatives (including the

LPA) would not be impacted by right turning vehicles since they would not cross the transit lane. Under Build Alternative 2, there would be conflicts between right turning vehicles and transit.

I-3-4

Section 10.2.4.1 of the EIS/EIR compares the alternatives' performance during special circumstances, such as 4th of July and Fleet Week events. All of the BRT alternatives, including the LPA, would increase the capacity of the Van Ness Avenue corridor to accommodate large flows of passengers due to special events or citywide emergencies. Both regularly scheduled Muni service and special event shuttles could operate within the dedicated transitway protected from event-related congestion in the mixed-flow lanes. The LPA utilizes right-side platforms, so supplementary buses added for special events would be able to stop at the BRT stations in the corridor.

Comments regarding scheduling of 4th of July and Fleet Week events and associated transportation services will be forwarded to Interdepartmental Staff Committee on Traffic and Transportation (ISCOTT). For special event street closures including street fairs, athletic events, and neighborhood block parties, the ISCOTT meeting is the public hearing. ISCOTT is composed of members from the following agencies: Municipal Transportation Agency, Public Works, Police, Fire, Public Health, and the Port of San Francisco.

From: jerome bernstein [jeromeb2339@gmail.com]
Sent: Mon 11/7/2011 12:14 PM
To: vannessbrt@sfcta.org
Subject:[vannessbrt] San Francisco County Transportation Authority: et tu, T Line

What can you tell the citizens re why this project will differ from the disaster that took place during the construction of the 3rd St T Line?

Aside from that project being behind schedule for an enormous amount of time, small businesses failed, cars were damaged, car tires were routinely destroyed, etc - it was a horror show of poor planning and not a lot of sympathetic interaction with the neighborhood or its people.

I-4-1

Why should or will this be any different?

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Jerome Bernstein

Reviewer's
Comment
Number

Response

I-4-I

Recent research comparing the construction of BRT to Light Rail transit and Metro systems indicates that BRT is substantially faster and less disruptive to construct than light rail, and it shares the existing roadway (Deng and Nelson, *Recent Developments in Bus Rapid Transit*, Transport Reviews, Vol. 31, No.1, January 2011). The LPA would have a construction period of 20 months while limiting all construction to existing right-of-way other than the replacement of the overhead contact system support poles/streetlights. In addition, the construction approach would only have segments of Van Ness Avenue under construction for three blocks at a time, limiting the disruption to particular businesses. The LPA would avoid the longer term construction duration and intensity experienced with the 3rd Street T line. Please see Master Response #6 construction impacts on businesses and residents.

The project team has done outreach with businesses along the corridor, including the Polk District Merchants Association and the Van Ness Corridor Association, to ensure consistent communication in advance and during any proposed construction should the project be approved.

From: Ben Casement Stoll <kasmander@gmail.com>
Sent: Wed, Nov 9, 2011 at 11:25 AM
To: Michael.Schwartz@sfcta.org
Subject: San Francisco County Transportation Authority: Van Ness Avenue BRT

Dear Mr. Schwartz,

I'm writing to express my strong support for instituting a Bus Rapid Transit system along Van Ness Avenue. As a resident in the Mission district, I've found that my options for traveling to neighborhoods north of Market street are slow and frequently unreliable. This cuts residents in my neighborhood off from large sections of the city. I'm hopeful that BRT on Van Ness Avenue would shorten travel time, increase ridership and ultimately ease congestion by reducing trips by car.

I-5-1

Yours,
Ben Casement Stoll

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Ben Casement Stoll

Reviewer's
Comment
Number

Response

I-5-I

Commenter's support for BRT on Van Ness Avenue is noted.

From: William Raymond [william.a.raymond@gmail.com]
Sent: Tue 11/15/2011 11:42 AM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] San Francisco County Transportation Authority: Draft EIS/EIR Comment

This is an enquiry e-mail via <http://www.sfcta.org> from:
William Raymond <william.a.raymond@gmail.com>

This is a HORRIBLE idea!!! As someone who takes the 47 or 49 bus line every work day, the problem isn't that the buses don't move fast enough. It's that there aren't enough buses on the existing road. Every day I am packed into these human sardine tins. Instead of spending millions on this hair brained idea, get more buses running on the 47 and 49 lines. Buying and staffing a dozen more buses would save millions, reduce over crowding, and be just as fast. Do you people that come up with these ideas actually ride the bus??? I doubt it.

I-6-1

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: William Raymond

Reviewer's
Comment
Number

Response

I-6-I

Dislike of project noted. Please see Master Response #2, Chapter 2 of the Draft EIS/EIR, and the Alternatives Screening Report on the project website (www.vannessbrt.org) for further description of why Alternatives without full BRT features were considered and withdrawn. SFMTA policy sets the City's maximum acceptable average passenger load at 85 percent of vehicle capacity. Existing average passenger loads during the peak hour on the 47 and 49 do not exceed this threshold on either line, as detailed in Section 3.2.1.3. However, poor reliability results in uneven spacing between buses, causing some buses to have very crowded conditions. By providing dedicated transit lanes, the BRT project improves transit reliability, which improves this "spot" crowding by having buses arrive at more even intervals.

The BRT project is expected to result in operational cost savings, reducing strain on Muni's operating budget. By increasing transit speeds, fewer buses are needed on Van Ness Avenue to provide the same service frequency. As a result, the project is projected to reduce annual transit operating costs by 2.4 million for the LPA. These savings could be reinvested in additional service for the 47 or 49, as recommended by the commenter, or elsewhere in the Muni system. For more information on project operations and maintenance costs, see Section 9.2 of the EIS/EIR.

From: Elizabeth McRae Sanchez [emsanch@gmail.com]
Sent: Tue 11/15/2011 1:16 PM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] San Francisco County Transportation Authority: Van Ness Avenue Bus Rapid Transit

This is an enquiry e-mail via <http://www.sfcta.org> from:
Elizabeth McRae Sanchez <emsanch@gmail.com>

This is a brilliant idea. North/south traffic more properly belongs on Franklin, Gough, and/or Larkin. Van Ness Avenue is ideal for bus rapid transit. Please don't be dissuaded by merchants. Their business will probably increase, rather than the reverse, when Van Ness becomes easier to navigate.

I-7-1

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Elizabeth McRae Sanchez

Reviewer's
Comment
Number

Response

I-7a-1	The EIS/EIR concludes, as the commenter noted, that the BRT service proposed under the build alternatives, including the LPA, would improve transit access to jobs and commercial uses in the Van Ness Avenue corridor, which is likely to benefit the local economy (see Section 4.2.4).
--------	---

25 Mosswood Rd.
Hillsborough, California
17 November 2011

Mr. Michael Schwartz
Municipal Transportation Authority
100 Van Ness Ave., 26th Fl.
San Francisco, California

Dear Mr. Schwartz:

The proposed Van Ness Avenue bus rapid transit (BRT) is another boondoggle that will cost large sums of money, have huge cost overruns, take years to complete, and the construction will add to the already congested traffic on Van Ness Avenue. Traffic along Van Ness Avenue, particularly during the morning and afternoon commute periods, is already congested and will become more so should this boondoggle be completed. Please file this project in the nearest shredder.

I-8-1

The Municipal Railway will have a projected deficit for the upcoming fiscal year. Spending money for the Van Ness construction project will only add to the Municipal Railway's financial difficulties by increasing the deficit. Then too, because the price tag for many government-sponsored construction projects are underestimated, the construction costs frequently increase over a period of time. This results in many cost overruns that are frequently voted in favor of.

I-8-2

Once this project is complete and in service, there will be fewer lanes of traffic for other vehicles. With current traffic patterns remaining unchanged, the traffic congestion will be considerably worse than at present. Traffic along adjacent streets is likely to increase, thereby delaying traffic on those streets.

I-8-3

The logical course of action is to file this project in the nearest shredder in order to avoid the problems of cost overruns and increased traffic congestion. Thank you for your time and attention to this matter.

Sincerely,


Robert B. Mack

Individuals' Comments on the Van Ness Avenue BRT Project DEIS/R

Reviewer: Robert Mack

Reviewer's
Comment
Number

Response

I-8-I

The commenter's dislike for the project is noted. The Federal Transit Administration (FTA) has rated the Van Ness Avenue BRT a "medium-high" project justification; it is the only Small Starts Project in the country to receive a "high" rating for cost effectiveness; and is one of only two projects in Bay Area identified for Small Starts funding through MTC's Resolution 3434, in part due to its cost effectiveness. Recent research comparing the construction of BRT to Light Rail transit and Metro systems indicates that BRT is substantially faster and less disruptive to construct than light rail, and it shares the existing roadway (Deng and Nelson, *Recent Developments in Bus Rapid Transit*, Transport Reviews, Vol. 31, No.1, January 2011). Please see Master Response #6 for more details on construction impacts on businesses and residents.

Section 3.3 of the EIS/EIR discusses the potential traffic delay impacts associated with existing conditions, the future No Build Alternatives, and the Build Alternatives (including the LPA) during the heaviest traffic period (weekday PM peak hour of 5-6pm). The results of those analyses indicate that BRT would not cause any significant traffic impacts on Van Ness Avenue in the near term (Year 2015).

While the proposed project would result in the elimination of one mixed flow traffic lane in each direction, mixed flow traffic would benefit from the elimination of the 47 and 49 buses pulling to and from the curb as in current conditions, which causes traffic delays during the morning commute and other hours. Enforcement of double-parking violations during commute hours will be implemented as part of standard SFMTA traffic control officer duties.

North-south traffic in the remaining two lanes would benefit from the implementation of Transit Signal Priority by taking advantage of the longer and coordinated green times afforded through the elimination of left turns, particularly for the LPA. Synchro traffic analysis indicates that BRT is not projected to have a significant effect on traffic speeds on Van Ness Avenue in 2015 compared to the No Build Alternative (See Section 3.3). With implementation of the proposed project, traffic analysis shows that drivers would change routes, or divert, from Van Ness Avenue to use parallel streets due to the reduction of traffic lanes on Van Ness Avenue. As explained in Section 3.1.2.3, traffic modeling shows that up to 6 vehicles per minute could divert away from Van Ness Avenue to make their trip on a different street. In part for the reasons stated above, congestion related to the project on Van Ness Avenue is not expected to increase significantly, even during commute hours.

The project has analyzed study area travel patterns, including travelers going to and from Marin County. As explained in Section I.1, the Van Ness Avenue corridor functions in the role of a regional and local arterial. Approximately 33 percent of private vehicle traffic on Van Ness Avenue in the study area is regional, while 67 percent is local traffic. As explained in Section 3.1.3, Franklin and Gough streets are the primary regional routes for private vehicles in the study area, carrying a higher number and proportion of regional private vehicular traffic than Van Ness Avenue. Section 3.1.2 explains how these traffic conditions are expected to change with implementation of the proposed project, including diversion of traffic from Van Ness Avenue to parallel streets, namely Franklin and Gough streets. Section 3.2.1.2 provides an overview of regional transit service, including Golden Gate Transit which provides commuter service between Marin and downtown San Francisco. Section 3.2.2 provides an overview of how regional transit would be affected with the proposed project, including an explanation of how Golden Gate

Transit would utilize the BRT transitway and selected stations, which would improve their travel time and reliability in the corridor. One of the goals of the project is to improve transit performance to and from Marin County by having Golden Gate Transit vehicles utilize the BRT facility. This would provide travelers between Marin County and San Francisco with an enhanced set of travel options.

I-8-2 The BRT project capital costs will not impact Muni's operating deficit. The project is expected to have a positive impact on SFMTA's annual operating budget. By increasing transit speeds, fewer buses are needed on Van Ness Avenue to provide the same service frequency. As a result, the project is projected to reduce annual transit operating costs by \$2.4 million for the LPA. These savings could be reinvested in additional service for the 47 or 49, as recommended by the commenter, or elsewhere in the Muni system. For more information on project operations and maintenance costs, see Section 9.2 of the Draft EIS/EIR.

Funding to construct the BRT project will not come from Muni operations funding. The identified funding sources for the project primarily include the Federal Transit Administration's Small Starts program and San Francisco's Prop K sales tax, both of which are legally restricted to providing capital funding to construct transit improvements but not transit operations. For more detail on project funding sources, please see Sections 9.1.3 and 9.1.4 of the EIS/EIR.

The project's capital construction cost estimates use standardized methodology and unit costs.

I-8-3 Section 3.3 of the EIS/EIR discusses the potential traffic delay impacts associated with existing conditions, the future No Build Alternatives, and the Build Alternatives (including the LPA). In 2015, there would be three intersections in the corridor (including Gough Street, Franklin Street, Van Ness Avenue, Polk Street, Larkin Street, and Hyde Street that would experience significant project specific traffic delay impacts with the implementation of the LPA (Gough/Hayes, Franklin/O'Farrell and Mission/South Van Ness/Otis intersections). This would constitute a similar number of congested intersections as the No Build Alternative in 2015. In 2035, there would be eight intersections in the traffic study area that would experience significant cumulative impacts with the implementation of the LPA. Under the No Build Alternative, 7 intersections in the traffic study area would operate with a significant level of congestion (Level of Service E or F) in 2035. Please see Master Response #8 for a discussion of how traffic diversion from Van Ness Avenue onto parallel streets was considered. Master Response #9 explains how the traffic diversion was analyzed for traffic impacts.

Please see response to comment I-8-I for details on how traffic is expected to operate on Van Ness Avenue with the implementation of BRT.

From: John Stevens [usmcable6@sbcglobal.net]
Sent: Thu 11/17/2011 10:08 AM
To: vannessbrt@sfcta.org
Subject: Comment on Van Ness BRT

I am a daily user of the Van Ness Muni.

Van Ness Ave is a very, very busy street now. Reducing the number of lanes will make it virtually impossible to use at peak traffic hours.

I-9-1

What will happen, is drivers will use the bus lanes, just like they do now on other streets where dedicated bus lanes exist.

I-9-2

John Stevens
2200 Sacramento ST # 803
San Francisco CA 94115
415.921.1933

Individuals' Comments on the Van Ness Avenue BRT Project DEIS/R

Reviewer: John Stevens

Reviewer's
Comment
Number

Response

I-9-1 Section 3.3 of the EIS/EIR discusses the potential traffic delay impacts associated with existing conditions, the future No Build Alternatives, and the Build Alternatives (including the LPA). In 2015, there would be three intersections in the corridor (Gough/Hayes, Franklin/O'Farrell and Mission/South Van Ness/Otis) that would experience significant project specific traffic delay impacts with the implementation of the LPA. None of these congested intersections in 2015 would be on Van Ness or South Van Ness avenues. The build alternatives would have a similar number of congested intersections as the No Build Alternative in 2015. In 2035, there would be eight intersections in the corridor that would experience significant cumulative impacts with the implementation of the LPA. The only intersection on Van Ness or South Van Ness avenues would be at South Van Ness/Mission/Otis. Under the No Build Alternative, 7 intersections in the traffic study area would operate with a significant level of congestion (Level of Service E or F) in 2035.

Please see response to comment I-8-1 for details on how traffic is expected to operate on Van Ness Avenue with the implementation of BRT.

I-9-2 The LPA, as well as Build Alternatives 3 and 4, would have the transit lanes in the center of the street, with painted lanes and potentially audible warnings such as rumble strips. These are all designed to reduce the number of transit lane violations by private vehicles. Build Alternative 2 would also incorporate some of these design features; however parking cars and right-turning vehicles would traverse the BRT lane creating an increased potential for conflicts and violations due to double-parked vehicles.

From: Ed [ed123@sonic.net]
Sent: Thu 11/17/2011 1:22 AM
To: vannessbrt@sfcta.org
Subject: San Francisco County Transportation Authority: Draft EIS/EIR Comment

This is an enquiry e-mail via <http://www.sfcta.org> from:
Ed <ed123@sonic.net>

Hi, thanks for working on the Van Ness BRT. It's sorely needed.

Three concerns I have with putting the BRT in the middle of the street versus at curbside:

1. Pedestrians will jaywalk to try to catch a bus and risk getting hit by traffic while in the crosswalk or even in the middle of the street. **I-10-1**
2. Pedestrians will not be able to make it all the way to the islands before the traffic lights change, forcing traffic (in the direction of the BRT) to wait until the pedestrians have made it across. This would limit the smooth flow of traffic. **I-10-2**
3. Don't assume that all pedestrians are at the curb and start walking when the crosswalk countdown starts. Many might not be at the curb when the countdown starts and might start crossing when the countdown is about to end.

See Principle #5: Tolerance for Error, page 3-91.

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Ed

Reviewer's
Comment
Number

Response

- | | |
|--------|---|
| I-10-1 | The LPA will include guardrails along the sidewalk side of the platform except at station entrances next to crosswalks, as described for Alternatives 3 in the Draft EIS/EIR. This design will reduce the amount of transit riders crossing outside of crosswalks to reach the station. The BRT project also includes significant pedestrian improvements to encourage transit riders to use the crosswalk. These are described in Master Response #13 and include the implementation of pedestrian countdown signals and audible (accessible) pedestrian signals at every signalized intersection in the corridor as well as pedestrian bulbs in as many locations as feasible to shorten crossing distances. In addition, the project will provide a landscaped buffer along the sidewalk for the blocks where there would be no parking and no striped buffer between vehicle traffic and the sidewalk (for the LPA, this would include the block between O'Farrell and Geary streets as well as the two blocks between Broadway and Green streets). |
| I-10-2 | Please see Master Response #13. At all station locations, there would be sufficient signal time for pedestrians to cross the entirety of Van Ness Avenue while meeting federal standards for walking speed. Thus, transit riders would have nearly twice the time needed to cross to the median. |

From: Patricia Sullivan [patriciasullivan5@gmail.com]
Sent: Thu 11/17/2011 8:54 AM
To: vannessbrt@sfcta.org
Subject: Van Ness Bus Lane

The Van Ness corridor is congested enough. Removing cars from one lane in each direction will only make it worse. Have the creators of this proposal ever observed that street on a Saturday or Sunday? The number of bus riders is minimal as compared to the number of passengers in cars. It will discourage people from driving to the area, resulting in a loss of business.

I-11-1

I-11-2

Never underestimate the intelligence of San Francisco government officials.

Patricia C. Sullivan, Ed.D.
601 Van Ness Avenue
San Francisco, CA 94102

Individuals' Comments on the Van Ness Avenue BRT Project DEIS/R

Reviewer: Patricia Sullivan

Reviewer's Comment Number	Response
I-11-1	Please see Chapter 3.3 of the EIS/EIR, Master Response #9, and response to comment I-8-3 for a discussion of vehicle operations in the traffic study area with the implementation of BRT. Please see responses to comments I-8-1 and I-8-3 for details on how traffic is expected to operate on Van Ness Avenue with the implementation of BRT.
I-11-2	<p>Data submitted to the National Transit Database for Fiscal Years 2007-2010 (the years of study of the EIS/EIR) indicate that up to 23,000 transit trips are taken on the 49 route on Saturdays and more than 23,000 trips are taken on the 47 and 49 routes combined on Sunday. Since existing delays to transit happen on the weekends as well as during the week (Van Ness BRT Feasibility Study [SFCTA 2007]), weekend transit riders would benefit from the travel time reduction and improved reliability of BRT. In addition, the number of weekend transit riders would likely grow with the implementation of BRT, similar to the growth in weekday transit ridership analyzed in the EIS/EIR. Finally, private vehicle counts taken in 2007 to determine the peak travel period, show that while there are a significant number of vehicles on Van Ness Avenue on the weekends, both Van Ness and the parallel streets within the corridor (i.e., Gough, Franklin, Polk, Larkin, and Hyde) have lower vehicle counts on weekends than on weekdays. Thus, traffic impacts would be the same as or less than what is described in Chapter 3.3 of the EIS/EIR, which describes weekday PM peak traffic conditions.</p> <p>See Section 4.2 on community impacts for discussion on how the BRT project would affect businesses along Van Ness Avenue.</p>

From: Anna Sojourner [wd40@lmi.net]
Sent: Fri 11/18/2011 9:17 AM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] San Francisco County Transportation Authority: support Van Ness BRT

This is an enquiry e-mail via <http://www.sfcta.org> from:
Anna Sojourner <wd40@lmi.net>

Hello,

I fully support the development of Van Ness BRT. I would use it to travel from the Mission to Aquatic Park, so I would like to see the service implemented, but I would also support it being longer - perhaps all the way down to Mission Street, and past Lombard to the very end of Van Ness.

I-12-1

Anna Sojourner

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Anna Sojourner

Reviewer's
Comment
Number

Response

I-12-I

Please see Master Response #I about how the project limits were defined. Lombard Street was selected as the northern terminus of the project due to the sharp decrease in traffic volumes and delays north of Lombard Street, making the need for BRT features less necessary along that part of Van Ness Avenue. The Transit Effectiveness Project (TEP) and the Mission Mobility Project both consider ways to enhance transit service along Mission Street, which would complement Van Ness Avenue BRT and also improve service for the I4 and I4L. The TEP is also looking at transit improvements north of Lombard Street on Van Ness Avenue, including the potential for dedicated lanes and signal priority, as part of its environmental review (see response to comment O-I-1).

From: Jean Balibrera [jean.balibrera@gmail.com]
Sent: Fri 11/18/2011 3:24 PM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] the Van Ness Avenue BRT

I rode the 47 and 49 buses for 19 years 2 times a day from Van Ness and Union to Van Ness and Grove. There were plenty of days that there was so much traffic on Van Ness that it took 35-40 minutes to get home.

I-13-1

Have you considered putting on an express or limited bus that could take 47 or 49 riders from Lombard to Mission?

I-13-2

The folks could get a #14 or simple 49 to go south or could pick a simple 47 to go south east.

I-13-3

My idea would save a lot of money or at least be a good experiment.

Jean Balibrera

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Jean Balibrera

Reviewer's
Comment
Number

Response

- | | |
|--------|---|
| I-13-1 | Improving slow transit speeds is a key goal of the project, as described in Chapter I, of the EIS/EIR, Purpose and Need. Section 3.2 of the EIS/EIR details the existing transit conditions in the Van Ness Avenue corridor and compares the impacts to transit performance of each alternative, including the LPA. |
| I-13-2 | Please see Master Responses #2 and #4, and the Alternatives Screening Report on the project website (www.vannessbrt.org), for further description of why alternatives without full BRT features were considered and withdrawn. |
| I-13-3 | Please see Master Response #4 that describes the project capital and maintenance costs, funding plan and operational cost savings for Muni. Adding express or limited-stop buses on Van Ness Avenue would save capital cost compared with the BRT project, but would increase Muni's annual operating costs. |

From: Lisa Van Cleef [lisavancleef@gmail.com]
Sent: Mon 11/21/2011 7:37 AM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] San Francisco County Transportation Authority: Van Ness Ave trees

This is an enquiry e-mail via <http://www.sfcta.org> from:
Lisa Van Cleef <lisavancleef@gmail.com>

Please allow the trees to remain. The corridor will be so bleak with out them. Let's not add to our tree deficit. It's bad enough as is.

I-14-1

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Lisa Van Cleef

Reviewer's
Comment
Number

Response

I-I4-I

Please see Master Response #7 regarding tree removals and replanting opportunities. Please see Chapter 10 of the EIS/EIR and the LPA Report for the analysis supporting the LPA. Removal and replacement of trees is a factor considered in the selection of the LPA, as discussed in Section 10.2.4.6 Environmental and Social Effects. Information on trees to be removed under each build alternative, including the LPA, and opportunities for new tree plantings is presented in Section 4.4.3.4, Landscape and Trees. A summary of trees to be removed under each build alternative and opportunities for new tree plantings is provided in Table 4.4-4.

The LPA (with or without the Vallejo Northbound Station Variant) would not change sidewalk landscaping and trees, with the exception of new tree plantings at locations of removed sidewalk bus shelters as feasible. Build Alternative 2 is anticipated to increase the number of trees in the project corridor by 113 trees. Build Alternative 3 is anticipated to increase the number of trees in the project corridor by 109 trees. Similarly, Build Alternative 4 is anticipated to increase the number of trees in the project corridor by 97 trees. The LPA (with or without the Vallejo Northbound Station Variant) is anticipated to increase the number of trees in the project corridor by 53 trees. The EIS/EIR recognizes that even with planting of more new trees than the number of trees removed, removal of trees, particularly mature trees, would result in a noticeable visual change in the corridor for several years. The effects of tree removals on a block by block basis is discussed in detail for each alternative in Section 4.4.3.4. Mitigation measures to reduce the visual impact of removing some median landscape and trees are found in Section 4.4.4.

From: Jason Dewees [jjuania@yahoo.com]
Sent: Mon 11/21/2011 4:48 PM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] San Francisco County Transportation Authority: Preservation of median trees

This is an enquiry e-mail via <http://www.sfcta.org> from:
Jason Dewees <jjuania@yahoo.com>

I fervently support the development of BRT on Van Ness (and elsewhere in SF). However, I oppose the alternatives that necessitate removal of the significant heritage trees in the avenue's median. Removal of heritage trees must be factored in more seriously to the decision among the alternatives. The trees planted in the median of Van Ness Avenue compose an arboretum of mature Eucalyptus, Corymbia, and other species that have proven themselves valuable contributors to the urban ecology. Removal of decades-old mature trees takes away established carbon sinks, major rainfall buffers that enhance water infiltration and reduce stormwater runoff. In addition, the demonstration and propagation value of these trees, many representing unusual species, may not be known to the general public and the planning community; these trees show success in SF's unusual climate and can be used as seed sources for future planting. They cannot be considered in the same light as mass-produced trees like *Platanus x hispanica* (London plane) or *Lophostemon confertus* (Brisbane box).

I support Van Ness BRT insofar as the plan preserves the vast majority of the arboretum planted in its median.

I-15-1

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Jason Dewees

Reviewer's
Comment
Number

Response

I-15-I

Please see Master Response #7.

Information on trees to be removed under each build alternative and opportunities for new tree plantings is presented in Section 4.4.3.4, Landscape and Trees. A summary of trees to be removed under each build alternative and opportunities for new tree plantings is provided in Table 4.4-2. The LPA (with or without the Vallejo Northbound Station Variant) would not require the removal of sidewalk trees, as explained in Section 4.4.3.4. Mature tree canopies provide water quality, aesthetic and carbon off-set benefits. There would be a period of reduced benefits until the new tree plantings grow to maturity, and these benefits would not be fully realized in the event different tree types are selected that provide less canopy than the existing trees that would be removed. However, under each build alternative, including the LPA, reduced benefits due to smaller tree canopy size would be offset by an overall increase in trees in the corridor.

Please see Chapter 10 of the EIS/EIR and the LPA Report for the analysis supporting the LPA. Removal and replacement of trees is a factor considered in the selection of the LPA, as discussed in Section 10.2.4.6 Environmental and Social Effects.

From: Christopher Altman [queriss@gmail.com]
Sent: Tue 11/22/2011 8:18 PM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] San Francisco County Transportation Authority: Save the trees

This is an enquiry e-mail via <http://www.sfcta.org> from:
Christopher Altman <queriss@gmail.com>

I think cutting down trees for transit rail is a terrible idea. Leave the trees alone and use an alternative.

I-16-1

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Christopher Altman

Reviewer's
Comment
Number

Response

I-16-I Please see Chapter 10 of the EIS/EIR and the LPA report for the analysis supporting the LPA. Removal and replacement of trees is a factor considered in the selection of the LPA, as discussed in Section 10.2.4.6 Environmental and Social Effects. Information on trees to be removed under each build alternative and opportunities for new tree plantings is presented in Section 4.4.3.4, Landscape and Trees. A summary of trees to be removed under each build alternative and opportunities for new tree plantings is provided in Table 4.4-4. The greatest number of existing trees would be preserved under Build Alternative 2, while it is assumed that no median trees would be preserved under Build Alternative 3. The number of trees that would be preserved under Build Alternative 4 and the LPA fall within the range of that for Build Alternatives 2 and 3. The LPA (with or without the Vallejo Northbound Station Variant) would require removal of 90 median trees, and is anticipated to increase the number of trees in the project corridor by 53 trees. Please see Master Response #7.

From: Sue Hestor [hestor@earthlink.net]
Sent: Tue 11/22/2011 8:45 PM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] Not mailing to PLANNING DEPARTMENT LIST for Van Ness BRT DEIR

San Francisco has had a **unified CEQA process** since CEQA was first implemented in the 1970s. When CEQA was first implemented, and for every substantive amendment of Article 31 in later years, I sat through and participated in ALL of the hearings on how notice would be given, what documents would be provided and WHO would get notice. The Planning Commission AND THE BOARD OF SUPERVISORS intentionally decided to give broad notice, conduct public appeal hearings at the Commission level, provide more than notices to people who requested to get hard copies of DEIRs/Neg Decs, and otherwise expanded the public process beyond that the minimum standards in CEQA and NEPA regulations. THIS WAS ALL INTENTIONAL.

I have been on the "ALL NOTICES/CITY-WIDE" LIST for environmental and project notices for several decades. I get and read ALL notices and more particularly get hard copies of both neg decs and DEIRs.

I-17-1
continued

I am trying to understand how - **AND WITH WHAT PUBLIC NOTICE** - the CTA maneuvered to set up its OWN CEQA notice process without people like myself being even aware that the CTA was intentionally opting out of the SF Administrative Code Chapter 31 procedures.

For decades the Planning Department has maintained geographically based lists for environmental and project notices. Some of us get ALL NOTICES FOR THE ENTIRE CITY. Which is why I was shocked to find out about the Van Ness BRT DEIR by reading a CTA Committee agenda which noted that one had been released. The response that I got - that SFCTA follows CEQA and NEPA regulations was rather sobering. The MINIMUM standard has up to now never been the standard followed on CEQA notices.

The Planning Commission and the Board of Supervisors conducted extensive hearings when SF adopted its initial CEQA process. The City has used geographically based lists BASED ON LISTS MAINTAINED BY THE PLANNING DEPARTMENT **AND** where appropriate for a specific project supplements those lists with other appropriate lists from such entities as Redevelopment, the Port, etc. But the CORE notice list has ALWAYS been the list maintained by Planning - because virtually all EIRs/Neg Decs come out of the environmental office that is physically situated in Planning Department offices.

I attempted to reach Mr. Moscovich on this only to find out that he will be out of the office for several weeks.

This is an issue way beyond a single EIR. It is about the ability of members of the public to assume that they get ALL NOTICES THEY HAVE FILED FOR because they signed up under the notice procedure the City has followed for over 3 decades - the

environmental/project notice list maintained at the Planning Department.

I will be pursuing this issue until I understand HOW the CTA exempted itself from the CEQA notice process followed throughout San Francisco AND WHY PEOPLE LIKE MYSELF WERE NEVER NOTIFIED ABOUT IT.

 I-17-1
continued

Sue Hestor
846-1021

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Sue Hestor

Reviewer's
Comment
Number

Response

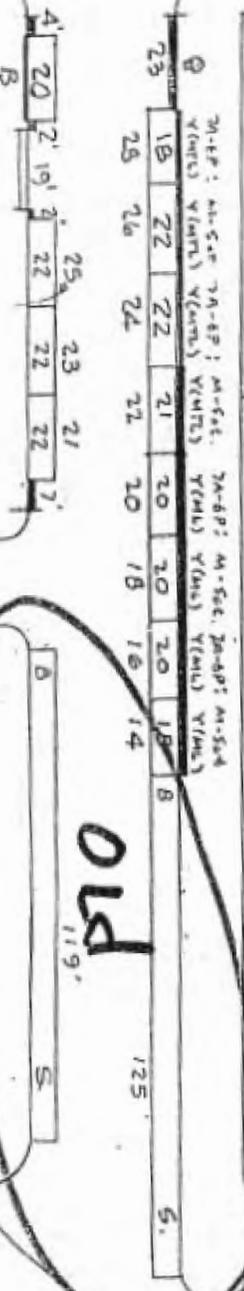
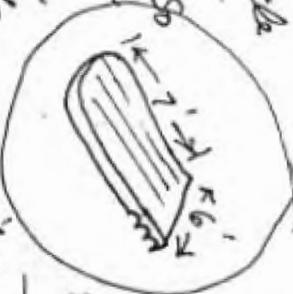
I-17-I

To clarify, the San Francisco County Transportation Authority (SFCTA) is the CEQA lead agency for the project. The SFCTA has developed its own noticing approach based on established local, state and federal requirements. The SFCTA provided notice consistent with noticing procedures for a Draft EIR stated in Chapter 3I of the San Francisco Municipal Code. The document was circulated for more than 45 calendar days per NEPA/CEQA regulations/requirements (CEQ NEPA Regulations - 40 CFR Sec. 1506.10c; 14 CCR § 15087d). An electronic version of the Draft EIS/EIR was posted on the City Planning Department website in addition to the project website at www.vanessbrt.org; paper copies were made available at SFCTA (100 Van Ness Ave.), the SFMTA (1 S. Van Ness Ave.), the SF Planning Department (1660 Mission St.), the SF Main Library (100 Larkin St.), the Golden Gate Valley Branch Library (1651 Union St.), and the Marina Branch Library (1890 Chestnut St. at Webster St.) throughout the duration of the public comment period. A radius mailer was also sent to residents and businesses adjacent to the project corridor with information about public meetings and how to access the document. Newspaper ads were placed in citywide English, Spanish, and Chinese newspapers as well as a local neighborhood newspaper. These ads contained legal Notice of Availability/Notice of Completion Information. Finally, advertisements announcing the availability of the document were placed on transit vehicles and in transit shelters along the corridor as well as on key Muni transfer lines. CD copies of the Draft EIS/EIR were made available upon request through the SFCTA at no cost to the public and paper copies could be purchased at the cost of printing.

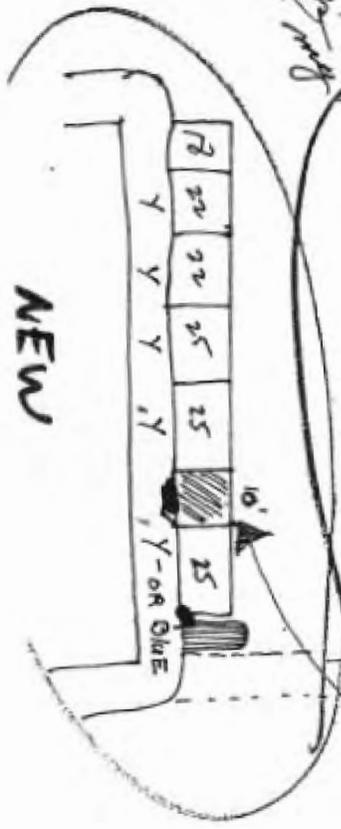
MR. Ford - MTA.

12-7-06

This would help the
 Bus move faster
 and open more
 Lanes for
 Trucks don't have
 to back up in
 No more getting
 and out almost
 always more
 also from
 VANNESS
 But Red
 RAMP TO BUS
 12 20 20 10 20 25 8 25 6 25 4 25 2



Handwritten notes and signatures, including 'All signs' and 'to get the signs'.



Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Charles Lebedeff

Reviewer's
Comment
Number

Response

I-18-I	Each of the BRT build alternatives, including the LPA, would offer level or near level boarding for passengers (including those in wheelchairs or with baby strollers) to board and alight the bus with ease. Ramps would not be needed. As stated in Section 3.5.3, the SFMTA will give priority to retaining color-painted, on-street parking spaces, such as loading zones on street blocks where parking would be removed. All blue handicapped parking spaces will be designed to provide a curb ramp behind each space.
--------	---

From: Sharon Soong [soong.sharon@gmail.com]
Sent: Sat 11/26/2011 10:56 AM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] Attn: Michael Schwartz

We live at Gough and Vallejo Streets and we are in favor or Build Alternative 4: Center-lane BRT with left-side boarding and single median

This seems like the most efficient method and I think it would cost less than Alternative 3. Alternative 2 seems awkward and I can imagine lots of horn honking and complaints about buses not pulling all the way over to the curb which is extremely irritating.

Thank you,
Sharon and James Soong

I-19-1

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Sharon and James Soong

Reviewer's
Comment
Number

Response

I-19-I

Support for Build Alternative 4 is noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA. Section 10.2.4.7 Operations and Maintenance and Section 10.2.4.8 Construction and Capital Costs discuss project costs. The LPA performs similarly to Build Alternatives 3 and 4 with Design Option B in terms of operation and maintenance costs, having the greatest reduction in annual operations and maintenance costs. The LPA would have a \$126 million construction cost, ranging between the cost of build alternatives 3 (\$130 million) and 4 (\$119 million).

Under Build Alternative 2 curbside stations would be built on curb extensions within the curbside parking area, so buses would not need to pull over to the curb to provide level boarding for patrons. Figure 2-I in the Draft EIS/EIR shows a typical cross section of the design, and the curbside station can be seen extending from the sidewalk through the parking zone to the bus lane.

On Sun, Dec 4, 2011 at 8:17 AM, Charles Marsteller <cm_marsteller@hotmail.com> wrote:
Dear Mr.Schwartz,

I note that the first sentence of my brief comment--filed rather spontaneously on the MTA website--is somewhat convoluted.

I am surprised to see that there is not much difference in projected transit savings times between Express Bus and the VN BRT given the cost in dollars and construction disruptions.

I would suggest this rewrite for clarity:

Greetings,

I would respectfully submit to you the suggestion that you may wish to address the transit improvement times specified in the final TIP Study for the #49 Mission "Express" (19%) as it compares to the transit savings times projected for the VN BRT.

I-20-1

Seems to me that there is not much of a time improvement between conventional Express Bus and the BRT as proposed no doubt due to the typical surface transit/traffic signal constraints.

I-20-2

In a time of limited Federal, State, City and Muni resources and budget constraints in a strained economy, this raises SIGNIFICANT cost-benefit questions--as well as impacts on Corridor merchants and traffic during the 3-years of projected construction tear up (coupled with the construction of the new Sutter Hospital at VN/Geary).

I-20-3

Please submit this as my comment on the BRT DEIR/EIR.

Charles M. Marsteller

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Charles Marsteller

Reviewer's
 Comment
 Number

Response

I-20-1 By TIP, the project team assumes the commenter meant the TEP (Transit Effectiveness Project). The TEP includes the evaluation of the 49 Limited, which is one of the two Van Ness Avenue BRT routes. While travel time savings were not specified for a specific line in the final TEP, nor were specific treatments designated, the TEP and Mission Mobility Studies are currently analyzing ways to improve transit speed and reliability on the Mission segment of the 49 route. Please see Master Response #2 and #4 and the Alternatives Screening Report on the project website (www.vannessbrt.org) for further description of why alternatives without full BRT features were considered and withdrawn. Alternatives without the full BRT features showed significantly lower benefits than the alternatives under consideration in the EIS/EIR (Van Ness BRT Screening Summary Report, 2008; Van Ness BRT Feasibility Study, 2007).

I-20-2 Please see response above to comment #20-1.

I-20-3 During the alternatives screening process, BRT was selected for analysis on Van Ness Avenue because it meets the Project Purpose and Need at much lower cost than alternative transit investments, such as rail. The FTA Small Starts Annual Report on Funding Recommendations (Fiscal Year 2014) has rated the project "High" for cost effectiveness. It is the only Small Starts Project in the country to receive at least a "medium-high" rating for Project Justification (which incorporates cost effectiveness), and is one of only two projects in Bay Area identified for Small Starts funding through MTC's Resolution 3434, in part due to its cost effectiveness. The identified funding sources for the project primarily include the Federal Transit Administration's Small Starts program and San Francisco's Prop K sales tax. For more detail on project funding sources, please see Sections 9.1.3 and 9.1.4 of the Draft EIS/EIR.

The construction plan for Van Ness BRT is designed to minimize impacts on traffic, pedestrians, and merchants, as detailed in Section 4.15 of the DEIS/DEIR. The total duration of construction is estimated to be 14 to 21 months, depending on the alternative and construction approach (LPA, with or without the Vallejo Northbound Station Variant, is projected to have a 20 month construction duration) but work would occur on three-block segments at a given time. This approach would stagger the impacts of construction along the corridor and minimize the duration of the disruption at any one location. Two traffic lanes would remain open in each direction during peak periods, although additional closures may be necessary during off-peak hours. Merchant access would be maintained throughout construction. Please see Master Response #6 for more details on construction impacts on businesses and residents.

Recent research comparing the construction of BRT to Light Rail transit and Metro systems indicates that BRT is substantially faster and less disruptive to construct than light rail, and it shares the existing roadway (Deng and Nelson, *Recent Developments in Bus Rapid Transit*, Transport Reviews, Vol. 31, No.1, January 2011). The LPA (with or without the Vallejo Northbound Station Variant) would have a construction period of 20 months while limiting all construction to existing right-of-way other than the replacement of the overhead contact system support poles/streetlights. In addition, the construction approach would only have segments of Van Ness Avenue under construction for three blocks at a time, limiting the disruption to particular businesses. It is anticipated that the LPA would avoid the longer term construction duration and intensity experienced with the 3rd Street T line.

The project team has done outreach with businesses along the corridor, including the Polk District

Merchants Association and the Van Ness Corridor Association, to ensure consistent communication in advance and during any proposed construction should the project be approved.

From: Aaron Goodman [amgodman@yahoo.com]
Sent: Tue 11/29/2011 10:41 AM
To: vannessbirt@sfcta.org
Subject: [vannessbirt] Van Ness BRT Draft EIS/EIR - comment memo (Attn: Michael Schwartz)

Attn: Michael Schwartz
Project Team Van Ness BRT Draft EIS/EIR
100 Van Ness Avenue, Floor 26
San Francisco CA 94102

November 29, 2011

To whom it may concern;

I am deeply concerned on the lack of vision by the planning department on the linkage and connectivity of lines and expenditures up front on the proposed Van-ness BRT line.

I-21a-1

The 49 /14 and 14L bus lines that run near that corridor and extend the length of mission street and out to Daly City carry one of the largest muni lines at capacity daily.

A simple extension of the lines @ grade via BRT or light-rail secondary systems would alleviate large amounts of congestion and traffic due to residents in the outlying excelsior who rely on transit to get downtown.

The 49 connects to BART on the southern end, and Ghiradelli on the northern side. The 14 and 14L connect also along mission and nearly intersect at Van-Ness with the future proposed BRT lines. To propose one small implemented system and not show a further extension and line proposal out to the furthestmost extensions possible is ridiculous.

I-21a-2

The costs of running the BRT and lines out to the excelsior would greatly alleviate street level traffic if a designated lane was provided through the mission to the excelsior all the way to the Balboa Park station.

I-21a-3

Please include in your plans ADEQUATE future line designation, and CONNECTIVITY to existing transit stops to provide quicker and easier connectivity to existing systems.

The mission corridor and excelsior are both experiencing and are planning exponential growth and to ignore the needed routing outbound to these areas dis-enfranchises many families, seniors, students and working class people who would rely on these systems instead of driving downtown. Please find the attached image of proposed future lines and extensions that should be "shovel-ready" and implementable to achieve better connectivity and line use for the proposed Van Ness corridor and outlying neighborhoods secondary systems.

Sincerely

Aaron Goodman
amgodman@yahoo.com
25 Lisbon St. SF, CA 94112

The BRT lines along the proposed Van-Ness corridor should extend along the shown black lines out to the south-western Balboa Park Station, picking up the large volumes of riders on the 49, 14 and 14L Muni existing lines. A link connection between the Excelsior/Mission area and the T-Third St. is in proposal at Geneva, adding the future development of the BVHP, Schlage Lock Factory, and future density proposed, a BRT line along the Ceasar Chavez Corridor, along BayShore Boulevard to the Mission Excelsior would improve connectivity. The shown yellow lines propose an F-Line extension to the public park areas and possibly through them to reduce traffic impacts. The proposed red-line shows along sunset boulevard and Junipero serra boulevard direct out to daly city bart extensions that would connect muni systems and future proposed density and growth in the sunset with service lines that would connect to regional transit. The West side BRT systems would link along the great highway, and up sloat boulevard to west portal, or along sunset boulevard as shown in the red and blue dashed lines. Density TOD development would occur along the BRT lines, through infill above the bus systems development providing modern bar-housing development above transit stops within existing neighborhoods vertically.

The Parkmerced/Stonestown/SFSU-CSU development areas on the southwestern part of the city would density Junipero Serra Boulevard, and Brotherhood Way intersection @ 19th along the eastern edge of Parkmerced out to Daly City Bart where a number of open sites and airiel development could occur. This area is an entry into the southwestern portion of the city and could easily link back up to transit proposals along the excelsior corridor. Providing for a more meaningful connection system north to south on the western side and southeastern and southwestern portions of the city to alleviate traffic and congestion. Please provide in the EIR a fully shown future extension system that connects to regional transit and provides adequate connectivity to other proposed development and transit systems. Intermodal design and housing infill above or adjacent to these proposed new transit stops are critical in the early design decisions. Providing slender 3-6 story designs above and adjacent to existing roadways of 4-8 lanes provides infill and open-space concepts that will allow density but provide better access to transit and open-space.



Intermodal entry station with examples of housing blocks and slender infill designs.

BRT FUTURE LINES + CONNECTIVITY TO REGIONAL TRANSIT
Aaron Goodman 11.29.11 – Memo Submitted via email with this attached image and link.

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Aaron Goodman

Reviewer's Comment Number	Response
I-21a-1	Please see Master Response #1 for information on how the project limits were defined. The 49L route of Van Ness Avenue BRT would continue to run between North Point Street and City College, providing connectivity between places along the corridor. The Mission Mobility Study, led by the SFMTA is looking at near-term improvements to the portions of the routes traveling along Mission Street while the Transit Effectiveness Project (TEP) includes the evaluation of the 49 Limited, which is one of the two Van Ness Avenue BRT routes. While the TEP does not specify travel time savings for a specific line, nor designate specific treatments, the TEP and Mission Mobility Studies are currently analyzing ways to improve transit speed and reliability on the Mission segment of the 49 route. The TEP is also looking at longer term implementation of travel time reduction improvements for the I4, I4L, and the 49 routes along Mission Street. The TEP is currently undergoing environmental review. Both of these projects, if approved as proposed, would further the benefits of BRT.
I-21a-2	Please see above response to Comment #21a-1.
I-21a-3	Please see Master Response #1 for information on how the project limits were defined and response to Comment I-12-I for information on how Mission Street is being studied for potential improvements which will complement Van Ness Avenue BRT.

<<PART 2>>

From: **Aaron Goodman** <amgodman@yahoo.com>
Date: Sun, Dec 4, 2011 at 9:57 AM
Subject: Re: [vannessbrt] Van Ness BRT Draft EIS/EIR - comment memo (Attn: Michael Schwartz)
To: Michael Schwartz <michael.schwartz@sfcta.org>

thank you for the note that it was received.

its about linkage of systems, and overlaying systems architecturally.

even if new systems need to be created, it will provide a better process for getting people out of their cars and into the transit systems.

housing and development will follow and assist in the financing of the projects.

I-21b-1

agoodman

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Aaron Goodman

Reviewer's
Comment
Number

Response

I-21b-1 The City's General Plan has designated certain areas for residential and employment growth. New developments would fund necessary improvements through fees and developer agreements as necessary. The City's transit impact development fee is applied to projects with impacts on transit.

See also Response to Comment I-21a-1.

From: Hitesh Soneji [hsoneji@ccsf.edu]
Sent: Thu 12/1/2011 10:32 AM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] Letter of Support for Van Ness BRT

Dear SFCTA,

As long time San Francisco residents, our family with a 3 yr. old is constantly trying to reduce our footprint on this planet. Empowered with a sustainable vision for the future of San Francisco, we full heartedly support BRT efforts throughout SF, including on Van Ness. We support the tough and difficult decisions you will make to prioritize MUNI over automobiles through San Francisco streets.

I-22-1

It is completely inequitable and inconsistent with our city's transit first policy that automobiles continue to receive the priority and spotlight that does not befit their impact and cost to our city and it's residents. I am glad to see that Van Ness BRT is finally moving forward and would like to see that same happening on Geary ASAP.

I-22-2

Feel free to contact me for further information

Hitesh Soneji
Sustainability Science & Energy Studies
415-452-7116 | <http://fog.ccsf.edu/~hsoneji>
Office: S35-D | Hrs: Tues 11-Noon, Thurs 4-5p

Engineering Dept, City College of San Francisco <http://www.ccsf.edu/engtech>

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Hitesh Soneji

Reviewer's
Comment
Number

Response

I-22-1	Commenter's support is noted.
I-22-2	Section 3.3.4 of the EIS/EIR discusses the applicability of the City's Transit First Policy to the Van Ness BRT Project and approach to mitigations of the traffic delay environmental impacts. Also, Section I.2.I Countywide Planning Context of the Draft EIS/EIR discusses the City's Transit First Policy and how the project purpose and need relates to the County and City's larger transit planning context. Each of the build alternatives and the LPA is consistent with the City's Transit First Policy.

From: Dehan Glanz [DehanGlanz@GMail.Com]
Sent: Thu 12/1/2011 1:55 PM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] San Francisco County Transportation Authority: Van Ness BRT EIR Studies

This is an enquiry e-mail via <http://www.sfcta.org> from:
Dehan Glanz <DehanGlanz@GMail.Com>

Hello SFMTA -

Thank you for doing these studies!! We REALLY need improved transit on Van Ness (VN) Avenue.

My favorite options are 3 or 4: only these scenarios will create the kind of transit-priority environment so desperately needed on VN. Happy to talk further if anyone wants further input from me.

I-23-1

Good work!

Dehan Glanz
415-710-0754

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Dehan Glanz

Reviewer's
Comment
Number

Response

I-23-I	Support for project and alternatives 3 and 4 noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA. Section 10.2.4.I discusses how transit performance is considered among the project alternatives in the LPA selection process.
--------	--

From: Bobby Singh [bbysingh@yahoo.com]
Sent: Thu 12/1/2011 10:54 AM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] Please bring Bus Rapid Transit to Van Ness so we can revolutionize bus service in the Bay Area

To whom it may concern,

I live in San Francisco and use MUNI every day for work and personal travel. I often have to travel on Van Ness. As you are aware, MUNI service on Van Ness is often quite slow and is not meeting the goal set by MUNI and residents of San Francisco. I strongly encourage you to take all the necessary steps to make BRT on Van Ness and Geary a reality as soon as possible.

I-24-1

Thank you.

Bobby Singh

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Bobby Singh

Reviewer's
Comment
Number

Response

Reviewer's Comment Number	Response
I-24-I	Commenter's support is noted. Transit travel times would decrease by 19% with Build Alternative 2 versus existing conditions, by 28% minutes with Build Alternative 3 and 4, and by 33% minutes with Build Alternatives 3 and 4 with Design Option B (LPA). Please refer to Section 3.2.2.3 for further information about transit travel speed.

From: Lisa Podos [lpodos@yahoo.com]
Sent: Sat 12/3/2011 6:18 AM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] Van Ness Bus Line

We would like to voice our opposition to the proposal to remove traffic lanes on Van Ness. This will negatively impact the residential quality of life in SF. Please consider alternatives, e.g. a bus only lane during high traffic hours. Thank you.
Lisa and Michael Wais, SF

I-25-1
I-25-2

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Lisa and Michael Wais

Reviewer's Comment Number	Response
I-25-1	Opposition to the build alternatives noted. Please see Master Response #9 that addresses traffic diversion from Van Ness Avenue onto parallel streets and Master Responses #10 and 11 that address air quality and noise impacts.
I-25-2	Please see Master Response #2 on alternatives definition and screening, Chapter 2 of the Draft EIS/EIR, and the Alternatives Screening Report (April, 2008). The alternatives screening process evaluated peak-hour only bus lanes. Analysis showed that this treatment was not effective in meeting the project purpose and need because delays to transit are caused by traffic on Van Ness Avenue occur during off-peak and weekends in addition to weekday peak periods.

From: Bruce Johnson [bjohnson68@yahoo.com]
Sent: Sat 12/3/2011 9:52 AM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] Please bring Bus Rapid Transit to Van Ness so we can revolutionize bus service in the Bay Area

North-South bus lines in SF move very slowly, making them uncompetitive with other modes of transit (including walking...! Yes, I can walk up Van Ness faster than the 49 bus can take me up it at certain times of the day!!!)

I-26-1

Let's look at how to bring intelligent Bus Rapid Transit to Van Ness Ave.

I-26-2

Thanks,
Bruce
San Francisco

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Bruce Johnson

Reviewer's Comment Number	Response
I-26-1	In 2015, bus speeds would increase from the current average of 5 mph to 6mph for Build Alternative 2 and 7mph for Build Alternatives 3 and 4 (including the LPA). Please refer to Section 3.2.2.3 for a discussion of travel speed improvements as a result of the build alternatives.
I-26-2	Commenter's support is noted.

From: Ildiko Polony [ildiko.polony@gmail.com]
Sent: Sat 12/3/2011 12:27 PM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] letter of support for BRT on Geary and Van Ness

Dear SFCTA,

As a Bay Area native and a 6 year resident of San Francisco, as a student, a dancer, a cyclist and someone who cares deeply about the future of San Francisco, I urge you to move forward with expediency on BRT projects and any transportation projects that put people first through improving transit service and bicycle infrastructure. Follow San Francisco's own transit first policy, the Better Street Plan and continue to be a leader in equitable, sustainable urban design. Erode the dominance of the single occupancy vehicle, by building infrastructure around alternative transportation that makes transit and biking the more practical option to all San Franciscans. Make it harder to drive and easier to take transit and ride your bike. Implementing BRT on Van Ness and on Geary will make transit more efficient, make cyclists safer and will make our city more sustainable and more beautiful.

I-27-1

I-27-2

It is completely inequitable and inconsistent with our city's transit first policy that automobiles continue to receive the priority and spotlight that does not benefit their impact and cost to our city and its residents. I am glad to see that Van Ness BRT is finally moving forward and would like to see the same happening on Geary ASAP.

Sincerely,

Ildiko Polony

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Ildiko Polony

Reviewer's
Comment
Number

Response

- | | |
|--------|--|
| I-27-1 | Support for the project is noted. Section I.2.I Countywide Planning Context discusses the City's Transit First Policy and how the project purpose and need relates to the County and City's larger transit planning context. Each of the build alternatives and the LPA is consistent with the City's Transit First Policy. |
| I-27-2 | The Geary Corridor Bus Rapid Transit project is undergoing environmental review, and is approximately 18 months behind the Van Ness Avenue BRT project timeline. The Geary BRT project team is currently working to finalize details of the alternatives to be evaluated in each segment of the corridor. For more information, including the project schedule and current activities, please visit www.gearybrt.org . |

From: Maggie Robbins [maggieinsf@gmail.com]
Sent: Sat 12/3/2011 5:18 PM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] Please bring Bus Rapid Transit to Van Ness!

Dear MTA,

I am thrilled to see the MTA moving ahead with planning a BRT route along part of Van Ness! The design ideas seem great, and hope you are getting lots of support from those of us who regularly walk along and cross this street, as well as those who regularly take the bus along Van Ness. I welcome more efficient, more rider-friendly, and more attractive bus facilities along Van Ness. Increasingly tourists use MUNI facilities along McAllister and along Van Ness, so if the new design makes rider information (where to get on/off, routes maps, bus location and stop ID, and of course real-time arrival times) more easily available, that would be a bonus for us all!

I-28-1

I live just east of Van Ness along McAllister -- so this is a local bus route for me. I don't own a car, and I take the Van Ness bus fairly often, usually in morning or evening in the pre- or post-commute times, and weekends. (It is not my usual commute route (which is bicycling or walking to Civic Center BART, with a short walk at the other end of the trip). But I've taken the bus during the rush times occasionally and it can be quite a crush of people then. Sardines being tossed around in a can comes to mind!

I-28-2

A question: Will it be possible to re-connect City Hall's western entrance (across Van Ness) to the plaza between the War Memorial Building and the Herbst Theater building? It is such a shame the connection between City Hall with the institutions to the west has been severed as Van Ness filled with traffic over the decades.

I-28-3

Regards,
Maggie Robbins
580 McAllister St., #414
San Francisco, CA 94102

Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Maggie Robbins

Reviewer's Comment Number	Response
I-28-1	Support for the project noted. Each of the build alternatives, including the LPA, would feature real-time passenger information, pedestrian scale lighting, and BRT stations with wayfinding signage and maps.
I-28-2	The proposed project would involve upgrade of the existing 47 vehicle fleet from 40 feet to 60 feet to accommodate more passengers on each vehicle. Improved reliability will also improve crowded conditions caused by bus bunching.
I-28-3	Connecting City Hall's west entrance with the uses west of Van Ness Avenue are beyond the scope of this project, and do not support the project purpose and need. Nonetheless, the proposed project would upgrade crosswalk features and improve the safety and comfort of the crossing experience for pedestrians, as described in Section 3.4 Non-motorized Transportation of the Draft EIS/EIR. Please see Master Response #13 for a summary of how crossing conditions on Van Ness Avenue would improve.

From: Ellie Lum [ellielum1@mac.com]
Sent: Sun 12/4/2011 12:18 PM
To: vannessbrt@sfcta.org
Subject: [vannessbrt] Bring BRT to San Francisco!

Dear SFCTA,

As long time San Francisco residents, I am constantly trying to reduce my footprint on this planet. Empowered with a sustainable vision for the future of San Francisco, I full heartedly support BRT efforts throughout SF, including on Van Ness. I support the tough and difficult decisions you will make to prioritize MUNI over automobiles through San Francisco streets.

I-29-1

It is completely inequitable and inconsistent with our city's transit first policy that automobiles continue to receive the priority and spotlight that does not befit their impact and cost to our city and it's residents. I am glad to see that Van Ness BRT is finally moving forward and would like to see that same happening on Geary ASAP.

I-29-2

Feel free to contact me for further information Thanks, Ellie

~~~~~

Ellie Lum  
R.E. Load Bags  
reloadbags.com  
ellie@reloadbags.com

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Ellie Lum

Reviewer's  
Comment  
Number

Response

- |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-29-1 | Support for BRT and the project is noted. Section I.2.I Countywide Planning Context discusses the City's Transit First Policy and how the project purpose and need relates to the San Francisco's larger transit planning context. Each of the build alternatives and the LPA is consistent with the City's Transit First Policy.                                                                                                                            |
| I-29-2 | The Geary Corridor Bus Rapid Transit project is undergoing environmental review, and is approximately 18 months behind the Van Ness Avenue BRT project timeline. The Geary BRT project team is currently working to finalize details of the alternatives to be evaluated in each segment of the corridor. For more information, including the project schedule and current activities, please visit <a href="http://www.gearybrt.org">www.gearybrt.org</a> . |

From: Shoshannah Flach [shoshannah.flach@tpl.org]  
Sent: Mon 12/5/2011 12:36 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: pretty good webinar experience

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Shoshannah Flach <shoshannah.flach@tpl.org>

I found the webinar informative and it did inspire me to get more involved, review the options more and make comment. I was a bit frustrated that I could only choose one element for the poll questions but I understand the technical issues and know that I can elaborate in email, etc.

**I-30-1**

Interesting project. As an SF resident who grew up along the Van Ness corridor, it will be interesting to see how it pans out. Anything should be an improvement (car drivers may disagree)

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Shoshannah Flach

Reviewer's  
Comment  
Number

Response

| Reviewer's Comment Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-30-I                    | Support for the webinar is noted. The webinar was designed to provide information on the project and encourage public review and comment on the Draft EIS/EIR. The polling questions were designed to keep participants engaged in the presentation, and were not used as a method for collecting public comment. Please see Chapter 8 for a summary of all outreach undertaken as part of the public review and comment on the Draft EIS/EIR. |

To Van Ness Ave BRT committee:

12/5/2011

From: George Sery

My wife and I own a home at 2414 Gough St (near Broadway) adjacent to the proposed Van Ness BRT project. We have lived in this home since 1997 and in the area since 1978. My wife and I, and our neighbors, are greatly concerned that the elimination of any auto lanes on Van Ness as part of the BRT project will encourage more auto traffic in the surrounding residential streets. Note the Gough/Green modeled increased delays with the build options (Chapter 3 Oct 2011 report). A significant negative. Furthermore, the cost of the various build proposals is very high, given the small actual increment of time savings... the modeling shows best case for BRT travelers (<5 minutes). As an aside, the use of percentages to illustrate the gain is practically misleading and should not be used in any calculated judgment of cost effectiveness.

I-31a-1

The background material in section 2 (Dec 2006 report) which deals with current transit and auto use highlight that transit carries much less than half of the trip volume, even during congested times. Given the complexity of individual travel decisions, I see it unlikely that a substantial change in behavior will occur for a few minutes of transit improvement (less than 5 minutes best case) on the short Van Ness leg. Given that the study shows that there is currently little problem north of California street, I also believe any proposal which deals with the full length is inappropriate and overly expensive for such a small change in absolute travel time. My wife and I support the option which retains all 6 lanes available for auto....with focus on any improvements to the "south of California" section. Actually, south of Geary. This is where the most significant problem lies....this is where the solutions should focus. Preserve 6 lanes for autos. Introduce the planned improvements for the buses which help speed loading and unloading. According to the 2006 report delay findings (sec 7.1.3), about half of the delay time is spent on loading and unloading (> 4 minutes). Substantial gains should be achieved without build options...by using all-door loading, low-floor boarding, and on bus proof of payment options....all part of the no-build option. Given the current federal government deficit issues, we should focus on the smartest expenditures for tangible improvements with minimum negative impact. We believe that only the no-build alternative provides the best value and lowest negative impact.

I-31a-2

I-31a-3

Additional follow-up questions/comments: (Forgive me for the detailed questions. I worked in Electronics Industry R&D for 30 years where modeling of many types was an essential tool. I understand the importance and the limitations associated with models and their assumption sets. Hence, my desire to understand more thoroughly, the cost benefit etc. model basis.)

Issues/Questions:

1. Explain the high rating for cost effectiveness. What specific calculations were made? What was the source of data? The use of "percentages" is highly misleading in terms of the specific time advantages for the upgrade options. Presumably, cost benefit is calculated based on absolute benefits: e.g. passenger minutes saved per \$\$\$. The best case improvements are listed as just over 4 minutes for a BRT rider. Furthermore, the impact to auto drivers is not fully articulated. Particularly for any autos diverted off Van Ness or to other routes outside the Gough to Polk corridor. Those delays should be factored in as negatives in a total cost benefit equation. Since most trips are not BRT, it's essential to properly weight

I-31a-4  
continued

the total benefit. Both from the perspective of the beneficiary (the BRT passenger) and the payee (we the tax payers).

2. Clarify the benefit for the “no build options”: Since ~ 50% of delay time is Dwell delay (boarding/unboarding – Dec 2006 report section 7.1.3 – noted as > 4 minutes), there must be practically significant benefit to the “no build” with the speed up options planned. It seems that this could be the most cost effective option in terms of benefit “minutes per \$\$”. The current Oct 2011 report indicates only a 0.2 of a minute (12 seconds) improvement for route 47 for the no build vs. the current situation. Since assumptions about volume must be made for 2015, this comparison is not direct. What is the modeled benefit in 2015 with and without the planned “no build improvements”? There should be a factor associated with these point a. improvements noted below which are part of the no-build option. Also consider the cost/benefit of incremental improvements noted in point b, c.
  - a. Boarding through all doors. New buses with level boarding. Automated pay systems.
  - b. Traffic signal priority...for buses in the prior block?
  - c. Simple Bus bulbs. But with cars allowed in the lane. Prevents bus delay from pulling over.
3. Why do you think ridership will increase ~ 35% in 2015? Car trip is practically not impacted. Bus trips best case are < 5’ improved. Percentage savings of total trip time would be much less. Where are these extra riders coming from along this corridor? Personally, I live on this corridor and I walk downtown. Its close enough to avoid transit and get exercise....the greenest option of all.
  - a. Bus travel time improvement less than 5’. Average delay for all intersections basically unaffected for “all persons”. E.g. ~ 18 secs. Page 3-26. Practically insignificant benefits when you consider “average commute times”.
4. Does the \$8.3M annual no build option cost include all the benefits of passenger loading/unloading, etc.?
  - a. The travel benefit time seems too small at 12 seconds vs. 2007 condition.
  - b. Secondly, given ~ \$2M best case annual cost savings for option 3 or 4, the annual savings would offset the initial cost differential when? ~ 50 years..... assuming \$100M delta in upfront cost. You can argue the federal money is committed, but not all is committed...and we as tax payers are paying this burden as well.
5. As a suggestion at the Pacific Height Residents presentation, I was told to review other BRT success stories. I reviewed a number. It’s very difficult to find a parallel case with a very similar situation. Cleveland cited as a good example highlights a major urban renovation driving force. \$4.3B investment. Not reflective of SF case. SF is far healthier then Cleveland and the benefits of BRT in our case on this Van Ness corridor are practically much more limited. *This gets back to the actual cost/benefit weighting for money spent on this project. I’d rather have our \$\$ go to the large infrastructure problem we have with decaying bridges and roadways. A much more expensive and urgent need.*

Thank you for your attention.

Sincerely,

George Sery

2414 Gough St.

San Francisco CA, 94123

Email: georgesery@gmail.com

I-31a-4  
↑ continued

I-31a-5

I-31a-6

I-31a-7

I-31a-8

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: George Sery

Reviewer's  
Comment  
Number

Response

I-31a-1

Please see Master Responses #8 and #9 that address traffic diversion from Van Ness Avenue onto nearby streets. As noted by the commenter, Section 3.3 of the Draft EIS/EIR discusses traffic delay impacts associated with each of the build alternatives, including the LPA.

The Federal Transit Administration (FTA) has given the Van Ness Avenue BRT a “medium-high” project justification rating (the only Small Starts Project in the country to receive such a designation) and it is one of only two projects in the region identified by MTC for Small Starts funding through Resolution 3434 due in part to its cost effectiveness.

Recent research comparing the construction of BRT to Light Rail transit and Metro systems indicates that BRT is substantially faster and less disruptive to construct than light rail, and it shares the existing roadway (Deng and Nelson, *Recent Developments in Bus Rapid Transit*, Transport Reviews, Vol. 31, No.1, January 2011). Chapter I and 3.2 of the Draft EIS/EIR describes the benefits of the build alternatives (including the LPA), including transit travel time and reliability improvements, pedestrian safety enhancements, increased transit ridership, and reduction in transit operating costs. Please see Master Response #6 for additional information about project construction.

The travel time savings cited by the commenter is only for the segment of the corridor that contains the VISSIM model (Mission to Clay Street). With a similar travel time savings benefit applied to the remainder of the corridor, the reduction would be between 6 and 7 minutes in each direction (up to 14 minutes round trip). It also does not include the numerous other benefits of BRT outside of travel time reduction, including enhanced reliability and increased pedestrian comfort and safety.

I-31a-2

Support for the No Build Alternative noted. Chapter 3.I of the Draft EIS/EIR outlines changes in travel patterns based on the anticipated improvements in travel time of the BRT. The SF CHAMP travel demand forecasting model was used to predict these changes based on the travel time improvements anticipated for BRT. More detail on SF CHAMP can be found in Master Response #8 and the Vehicular Traffic Analysis Technical Memorandum (CHS, 2013).

See Master Response #1 on the definition of project limits. SFMTA bus travel time, reliability, and delay data collected as part of the Van Ness Avenue BRT Feasibility Study indicate the need for BRT improvements along the length of the project corridor. Additional projected housing and employment growth along the Van Ness Avenue corridor will worsen operations for SFMTA buses; the Van Ness Avenue BRT Project will implement improvements that will allow bus operations to improve with or without projected growth. See previous response about cost effectiveness of project.

The BRT project would dedicate approximately 1/3 of roadway capacity for transit riders. This is consistent with the fact that in existing conditions, 29% of daily motorized trips on Van Ness Avenue are transit trips (see Table 3.1-1 and Figure 3.1-2 in the EIS/EIR).

I-31a-3

See Master Response #2, on the definition of alternatives and screening. Transit Preferential Streets (TPS)-only treatments were considered as part of the screening process, but analysis indicated that this option would not meet the project's purpose and need, and was thus screened out. The No Build Alternative does include TPS features (see Table 2-2 in the Draft EIS/EIR), including: all-door

boarding, low floor buses, and proof-of-payment. Chapter 3.2 of the Draft EIS/EIR indicates that alone, the transit travel time benefits were not significant when compared with existing conditions. In addition, transit delays related to traffic congestion will increase with the anticipated residential and employment growth in the Van Ness Avenue Corridor and throughout San Francisco, as demonstrated in the County-wide Transportation Plan. The use of exclusive transit lanes as part of the Van Ness Avenue BRT Project would protect Muni vehicles from delays caused by increased traffic congestion along Van Ness Avenue. The Federal Transit Administration has rated the Van Ness Avenue BRT high for cost effectiveness every year since 2008. It is the only Small Starts Project in the country to receive at least a “medium-high” rating for Project Justification (which incorporates cost effectiveness), and is one of only two projects in Bay Area identified for Small Starts funding through MTC’s Resolution 3434, in part due to its cost effectiveness.

I-31a-4

The high cost effectiveness rating comes from FTA’s annual Small Starts Report (the 2013 report can be found at [http://fta.dot.gov/12304\\_14365.html](http://fta.dot.gov/12304_14365.html)). The calculation is based on the cost of the project divided by the number of minutes saved per rider through the implementation of the BRT project. The data is generated through SF-CHAMP (San Francisco’s travel demand forecasting model; see Master Response #8 for more information) while the assumptions about travel time are based on national research and then checked for consistency with the outputs of the VISSIM microsimulation model, both of which are outlined in Chapter 3.2, and discussed further in the Vehicular Traffic Analysis Technical Memorandum (CHS, 2013).

The FTA calculation does not include impact to auto drivers. Average total intersection delay for three modes -- autos, transit, and pedestrians -- was calculated through the VISSIM modeling, and is shown in Chapter 10 of the Draft EIS/EIR (indicator E-1).

See Master Responses #8 and #9 for more details on diversions. In 2015, with any of the project alternatives, the same number of intersections (or less, depending on the alternative) will operate at LOS E or F as compared to the No Build Alternative (see Chapter 3.3 of the Draft EIS/EIR) throughout the traffic corridor study area, which includes the north-south streets from Gough to Hyde streets. This modeling demonstrates the project’s ability to maintain system performance (a purpose and need goal) while also achieving the significant transit benefit. A cost-benefit analysis was not performed in the manner described in the comment because it does not evaluate the purpose and need of the project, which is to improve transit along the corridor (consistent with multiple approved/adopted plans, including the City Charter’s Transit First policy) while maintaining corridor circulation for all modes. The SF-CHAMP model analyzed changes in traffic volumes citywide, including areas outside of the Hyde to Gough traffic study area. The model predicted the volume of traffic that would be diverted to all north-south streets east of Van Ness to The Embarcadero and west of Van Ness to the Great Highway. (Vehicular Traffic Analysis Technical Memorandum, CHS 2013, Appendix 5). The modeling showed that, with implementation of BRT, in 2015, streets outside the corridor (east of Van Ness to Embarcadero and west of Van Ness to Presidio) may see a total increase in traffic of approximately 200 vehicles in each direction with no street experiencing more than a 50 vehicles per hour increase in each direction. This increase represents a relatively small percentage of the overall volumes in these corridors, and therefore were not further analyzed using the Synchro model since this smaller volume change would not constitute a significant impact.

I-31a-5

The 2015 No Build Alternative includes the benefits described in Chapter 2 (Section 2.2.1) of the Draft EIS/EIR, which reflect reasonably foreseeable projects, consistent with CEQA and NEPA. The No Build Alternative includes boarding through all doors and low floor buses (and the transit travel time benefits associated with these features), but does not include level or near level boarding because that would involve construction of raised station platforms, considered a key component of the BRT project (and a considerable cost component of the project). Master Response #2, Chapter 2 of the EIS/EIR, and the Alternatives Screening Report (April, 2008) discuss consideration of an option with Transit Preferential Streets features only such as transit signal priority. It was determined that the option did not meet the project purpose and need. The 2015 No Build Alternative reflects background traffic growth, as noted in

the comment, consistent with CEQA and NEPA. The moderate improvements for the 2015 No Build Alternative versus existing conditions reflect the increase in residential and employment growth (and resulting traffic) anticipated in the corridor and San Francisco, as well as circulation changes (e.g., Hayes 2-way conversion). See Chapter 3 of the EIS/EIR, Master Responses #8 and #9, and the Vehicular Traffic Analysis Technical Memorandum (CHS, 2013) for more details on the modeling. The costs of the No Build Alternative are not noted in the document because they are assumed to be implemented whether or not the BRT is implemented. The cost-effectiveness of the implementation of BRT is based on the incremental cost of BRT improvements above and beyond what is already planned for the corridor. (i.e., beyond the No Build Alternative).

- I-3 1a-6 Ridership changes are based on output from SF-CHAMP, San Francisco's travel demand forecasting model (CHS, 2012). Section 3.2.2.3 describes results from a microsimulation VISSIM model that was used to calculate the change in travel time from Duboce/Mission/Otis to Clay Street. The model predicts a 32% reduction in travel time (4.5 minutes between Mission and Clay streets). If similar benefits (i.e., a 32% reduction in travel time) were to be assumed for the corridor all the way to Lombard Street, transit travel time would be reduced by 6-7 minutes for the LPA versus existing conditions. (This is a reduction from 20 minutes for existing conditions (documented in the Transit Effectiveness Project Automated Passenger Count Data from 2006-2007) versus 13 minutes for the LPA. This would represent a reduction of up to 14 minutes round trip. As described in Section 10.2.4.I, some of the new transit riders would be former drivers or people that travel by modes other than transit (e.g., biking or walking), while others would be people making new trips (i.e., those that would not have traveled otherwise). Section 10.2.4.I also includes results from SF-CHAMP forecasts indicating that overall Muni systemwide ridership will increase by 2% versus the No Build Alternative in 2015 (7% versus existing conditions) with the implementation of the BRT (LPA).
- I-3 1a-7 The annual operating cost of the No Build Alternative is based on the travel times, which includes all of the features described in Chapter 2 of the Draft EIS/EIR. The travel time reflects not only these improvements, but also the anticipated residential and employment growth by the year 2015 (and the resulting increase in traffic and transit delays resulting from that traffic) as well as reasonably foreseeable projects, as described in Chapter 2 of the Draft EIS/EIR. See Chapter 3 of the EIS/EIR, Master Response #8, and the Transportation Technical Memorandum for more details on the modeling.
- The operations maintenance and cost savings indicate that the project would not be an additional cost burden on the Muni system if implemented, and therefore no service would need to be taken away from other parts of the system while provided the significant travel time and reliability benefits of the project for existing and anticipated transit riders.
- The identified funding sources for the project primarily include the Federal Transit Administration's Small Starts program and San Francisco's Prop K sales tax, both of which are legally restricted to providing capital funding to construct transit improvements. They are not permitted to fund ongoing transit operations.
- I-3 1a-8 Comments views on the cost/benefits of the project are noted. While a number of US cities have implemented BRT (significantly more internationally), each transit project is unique in each city.

On Wed, Dec 7, 2011 at 8:40 PM, George Sery <[georgesery@gmail.com](mailto:georgesery@gmail.com)> wrote:

Thank you Mr. Schwartz. I appreciate the attention. There was one more factor that I had forgotten which the substantial negative impact of the construction process for the various build options. During that period of more than a year, I presume there will be substantial negative impact in the full corridor. This effect should be understood and presumably has been modeled. As such, it should be included in as a negative factor in the overall cost benefit.

**I-31b-1**

Sincerely,  
George Sery

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: George Sery

Reviewer's  
Comment  
Number

Response

I-31b-1

The construction approach and environmental impacts are discussed in Chapter 4.15 of the Draft EIS/EIR. The street would function similar to the BRT project, with two lanes open in each direction at all times, except that the buses would be operating in one of the two remaining lanes and there would be general construction friction that would slow down traffic. The staging of construction would be in approximately 3 block segments such that the corridor would only experience the impacts of construction for a shorter duration than the entire construction period. Recent research comparing the construction of BRT to Light Rail transit and Metro systems indicates that BRT is substantially faster and less disruptive to construct than light rail, and it shares the existing roadway (Deng and Nelson, *Recent Developments in Bus Rapid Transit*, Transport Reviews, Vol. 31, No.1, January 2011). Please see Master Response #6 for more details on construction impacts on businesses and residents.

Construction staging for the LPA would be as described for Build Alternatives 3 and 4, except that replacement of the aging sewer pipeline would be required at station locations and in areas where the transitway would cause direct load (weight) on the sewer. The duration for LPA construction (with or without the Vallejo Northbound Station Variant) would be longer than under Build Alternative 4 because it would require rebuilding the curb for the entire median as well as replacement of the sewer pipeline as described above. The Build Alternative 4 design does not require rebuilding of the median curbs on blocks that are not proposed to have stations and do not currently have a left turn pocket and also would not have locations with the transitway running directly over the sewer, meaning more linear feet of sewer would require replacement under the LPA than under Build Alternative 4. Under this construction implementation scenario, construction for the LPA is anticipated to require 20 months to substantial completion.

A key goal of environmental review and the EIS/EIR is to disclose the impacts of construction of the project such that the public and decision-makers can weigh these "costs" versus the benefit of the project. Converting the impacts of construction to monetary values beyond the capital costs for the project is not standard practice for City projects.

2233 Franklin St. #3  
San Francisco, CA 94109  
Dec. 5, 2011 Van Ness

BRT EIS/EIR Attn: Michael Schwartz  
SFCTA  
100 Van Ness Ave. 26<sup>TH</sup> Floor  
San Francisco, CA 94102

RECEIVED DEC 07 2011

Dear Mr. Schwartz:

Subject: Comments on the Van Ness Avenue Bus Rapid Transit Draft EIS/EIS

As a twenty year resident at the above address I have reviewed the subject Draft EIS/EIR and find that it focuses on the impacts to Van Ness Avenue but **does not adequately address the potential impacts to the residents of the neighboring streets.**

I-32-1

With the dedication of two lanes of Van Ness Avenue/ Highway 101 to Bus Rapid Transit, the report indicates that approximately **a third of the traffic will be diverted** to neighboring streets. With its synchronized stop lights Franklin Street with its three lanes will bear the brunt of the diverted North bound traffic from Highway 101 despite the **unrealistic estimate of 17% in the report.** As indicated in the report Franklin Street already carries more of the North bound traffic than Highway 101/Van Ness Avenue.

Currently Franklin Street is posted with **weight restriction signage** from California Street to Lombard to prohibit heavy vehicles and tour buses. However the San Francisco Police have been unable to enforce this restriction given higher priorities. With the elimination of the lanes on Van Ness additional north bound heavy vehicles are likely to continue to ignore the signage. The report does not mention these heavy vehicles on Franklin Street.

I-32-2

In the section on **Utilities** the report does not adequately address the fact that a **major gas pipe line** runs under Franklin Street and has not incorporated comments from PGE as to whether there would be an impact to this pipe line from the weight of the increased traffic on Franklin Street. Given the explosions of the gas line in San Bruno this omission is a concern since quiet frequently the PG&E crews close down lanes on Franklin Street near Broadway to work on this gas line. At this same intersection the **water main has been broken** in the past due to the heavy traffic which should require additional input for the report from the SFPUC to address the potential impacts to the sewer and water lines there.

I-32-3

The sections of the report on **Vibration and Noise** address the structures on Van Ness but not the neighborhood streets. Franklin Street has its own historic structures, churches, two schools and high rise apartment buildings with a much narrower street. The report mentions average speeds on Franklin Street of 10 MPH. but the **actual speeds** the

I-32-4  
*continued*

vehicles are traveling on the down slope of Franklin are **at or above the speed limit** leading to several **crashes at the Broadway intersection**. With the opening of the freeway off ramp to Octavia Street the traffic on Franklin Street has already increased leading to **cracks developing in historic buildings** some built prior to 1800. Also with parallel parkers, garbage trucks, Fed/Ex, UPS, moving vans, and school drop offs and pickups blocking lanes on Franklin Street this already generates enough **vehicle horn noise** as the traffic funnels to two lanes. The existing measurements and potential increase in vibration and noise to the residents on Franklin Street should be addressed in the report.

I-32-4  
*continued*

Additionally the section on **Air Quality** does not address the impacts to the neighborhood streets. Given the canyon like appearance of Franklin Street with its high rise apartments and narrow street the **vehicle emissions tend to hang in this corridor**. With so many residents in older buildings which are not necessarily air tight, the report should address the potential impact of carbon monoxide and other emissions from the additional traffic.

I-32-5

The section on **Employee Shuttle Services** implies that these types of vehicles would not be able to utilize the dedicated bus lanes. Currently employers in South San Francisco and Silicon Valley and the Academy of Art have various buses that stop along Van Ness Avenue to pick up employees or students. Where will these vehicles be allowed to stop?

I-32-6

The **assumption** in the report that people will be diverted from driving their cars to **riding transit, walking and bicycling is unrealistic** considering that most of the people are commuting to Marin and Sonoma counties via Highway 101/Van Ness or transiting the city.

I-32-7

As a rider of Muni along the corridor I am in favor of **Alternative 1, retaining the six lanes of traffic on Highway 101/Van Ness Avenue. Eliminating** some of the Muni stops on Van Ness and **increasing the number of buses** and **prohibiting** the buses from **tail gaiting** would achieve the same results without the additional cost and disruption due to construction. These steps should be tried with the expenditure of some of the FTA funds before proceeding with the more costly alternatives which diverts more Highway 101 traffic which will greatly impact the neighborhood streets.

I-32-8

Sincerely yours,

David Bezanilla

**Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

Reviewer: David Bezanilla

Reviewer's  
 Comment  
 Number

Response

I-32-1 Please refer to Master Responses #8 and 9 for discussion of diverted traffic and associated impacts, and regarding impacts on neighboring streets. Specifically regarding traffic diverting to Franklin, the majority of drivers who would drive on Van Ness Avenue under the No Build Alternative would continue to drive on Van Ness Avenue under any of the build alternatives (70 to 80 percent, depending on the location). Of the remaining 20 to 30 percent, approximately half would continue to drive on a street within two blocks of Van Ness Avenue – mostly Franklin and Gough streets; approximately a third would switch modes to transit or change their travel time of day or destination; and a small portion would continue driving on other parallel streets throughout San Francisco. Consequently, less than 17% of the peak hour traffic volume would divert to Franklin. (See EIS/EIR Sections S.6.3 and 3.1.2.3 for more details.)

I-32-2 Please refer to Master Response #8 and #9 for discussion of diverted traffic and associated impacts. Significant noise and vibration impacts are not anticipated to result from project operation, on Van Ness Avenue or parallel streets receiving diverted traffic (see Chapter 4.II of the EIS/EIR). It is likely that most trucks would not divert from Van Ness Avenue to parallel streets due to the increased grade/slope on parallel streets, and because they are either engaged in regional travel on the U.S. 101 or making deliveries to land uses on Van Ness Avenue. For the above reasons, as concluded in the EIS/EIR, the amount of heavy truck traffic diverting to parallel streets is not anticipated to create vibration or weight impacts on these streets.

I-32-3 Please see above response to comment 32-2. Changes in traffic on parallel streets were taken into account as part of the noise and vibration analysis outlined in Chapter 4.II. No significant impacts were identified.

I-32-4 Please see Master Response #11, and Section 4.II.5.2 regarding noise and vibration impacts on neighboring streets. Franklin and Gough streets are expected to attract more of the traffic that will divert from Van Ness Avenue with the BRT than any other routes; thus worst-case traffic noise levels were calculated on these streets using traffic volumes representing LOS C conditions (loudest speed for noise creation) during the highest volume hour (see Section 4.II.5.2). Along segments of these two roadways paralleling Van Ness Avenue, future traffic noise levels under the build alternatives are predicted to be zero to 1.5 dB higher than future no-project noise levels and, relative to existing traffic noise levels, future project traffic noise levels would increase by zero to 2.2 dB; typically, a noise level change of 3 dB or less is not noticeable. Thus, noise-sensitive land uses, including schools, churches and residences, would be not adversely affected by increased noise due to diverted traffic on parallel streets. The proposed project would not change the mix (or types) of vehicles traveling on Van Ness Avenue and parallel streets. It is unlikely that most trucks would divert from Van Ness Avenue to parallel streets due to the increased grade/slope on parallel streets (trucks are currently prohibited on Franklin Street north of California Street and are also prohibited on Gough Street north of Sacramento for this reason), and because they are either completing regional travel on the U.S. 101 or making deliveries to land uses on Van Ness Avenue. It is unlikely that the diverted traffic would result in a noticeable increase in vehicle horn honking, as the project would not affect curbside parking on parallel streets, garbage pick-up operations, deliveries or school drop off/pick-ups as noted in the comment.

The project does not propose to increase the capacity of Franklin Street, nor its operating speed or posted

speed limit. Thus, it is not anticipated that the project would contribute to any additional speed-related crashes at the Broadway/Franklin intersection.

Lastly, significant vibration impacts from rubber-tire-fitted vehicles are extremely rare. This is because rubber-tire-fitted vehicles are not as massive as railway vehicles. They are typically well isolated by the vehicle suspension design and rubber tires, which act as a highly effective barrier to vibration transmission from the vibration-generating carriage and the main propagation medium for vibration excitation, the ground; therefore, potential vibration impact from rubber-tire-fitted vehicles, such as those used in BRT projects, can be reasonably dismissed.

- I-32-5 Please see Master Response #10 regarding air quality impacts at neighborhood streets and streets with canyon-like air dispersion characteristics.
- I-32-6 Currently, private shuttles are not regulated by SFMTA, and thus are not considered public transit nor are they legally allowed to make stops in existing Muni bus zones. The Van Ness Avenue BRT would not change the policy towards shuttles in this regard. The project proposes to convert existing bus loading zones to curbside parking, where feasible, but does not preclude the use of those spaces for shuttle loading to be determined as a future project separate from the Van Ness Avenue BRT Project. The project would retain some curbside parking, including loading zones, on most blocks such that private shuttle services would likely be able to load passengers in the vicinity of their existing stops with the implementation of BRT. BRT stations under the LPA would be located within the dedicated transitway, which would reduce interference between transit operations and operations of private vehicles and shuttles. Please see Master Response #3, as well as [www.sfcta.org/shuttles](http://www.sfcta.org/shuttles) and [www.sfcta.org/tdm](http://www.sfcta.org/tdm), for more information on the City's work to better integrate shuttle services into the overall transportation system. The Authority led Transportation Demand Management (TDM) Partnership Project is working with the SFMTA to examine policies regarding private shuttles through the Muni Partner Program, including how to best manage loading and use of street right-of-way on streets with dedicated transit lanes and loading zones.
- I-32-7 Chapter 3.I of the Draft EIS/EIR states that at a typical screenline, regional private vehicle travelers (i.e., those with trips beginning or ending outside of San Francisco) on Van Ness Avenue only comprise 20%-33% of the private vehicles using the roadway. Similarly, "through trips" (i.e., trips that both begin and end outside of San Francisco) only comprise 1% of all trips on Van Ness Avenue. See Table 3.I-2 in the Draft EIS/EIR and the Vehicular Traffic Analysis Technical Memorandum (CHS, 2013) for more details. The SF CHAMP model was used to predict changes in travel behavior.
- I-32-8 Support for the No Build Alternative noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA. See Master Response #2, Chapter 2 of the Draft EIS/EIR, and the Alternatives Screening Report (April, 2008) for details on concepts development and screening. Transit Preferential Streets only treatments were considered as part of the screening process, but analysis indicated that this option would not meet the project's purpose and need, and was thus screened out. The TPS Treatments without a Dedicated Bus Lane and Peak Period Dedicated Bus Lane alternatives were not recommended for further evaluation in the EIS/EIR because the magnitude of expected benefits is low. TPS treatments were expected to provide about half of the reduction in travel times as BRT treatments (Van Ness Avenue BRT Feasibility Study). Additionally, without a dedicated bus lane, buses would continue to operate in mixed traffic and experience associated reliability impacts. Of all transit delays, mixed traffic delays have the greatest variability (Van Ness Avenue BRT Feasibility Study, 2007). Unless reliability is improved, increasing the number of buses will not reduce travel time or prevent bunching. Removing buses from mixed traffic lanes will help address these problems. More information on the process and the criteria used to screen alternatives can be found in the Alternatives Screening Report on the project website, [www.vannessbrt.org](http://www.vannessbrt.org). This report identifies the three alternatives studied in the EIS/EIR, and was adopted by the Authority Board in 2008 (Resolution 08-71).

From: Rachelle Quimby [rachelquimby@yahoo.com]  
Sent: Fri 12/9/2011 12:51 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] Better Rapid Transit Proposal

Hello,

I love MUNI. I use the bus system most days and find the service exceptional. I take routes 47 and 49 regularly. I take these routes at different times of the days (including commute times and late evenings) and on different days of the week. I continue to be amazed at how quickly the trip is on these two buses from my home in the Cow Hollow district to destinations on Van Ness Avenue and Mission Street.

**I-33-1**

I, therefore, was quite surprised to learn the San Francisco County Transportation Authority is considering spending between \$90 and \$130 million, depending on the alternative chosen, to reduce travel times on the Van Ness Avenue buses!!

I strongly recommend a "No Build" option. I "vote" in favor of retaining six lanes. Instead I suggest you consider bus only lanes during peak commuter times on weekdays in the morning and evening when traffic is heaviest. The cost for this alternative would be minimal.

**I-33-2**

The second choice would be the right lane alternative, which is the least costly of the three BRT alternatives.

**I-33-3**

I am clear the City of San Francisco, the State of California, and the Federal Government would be able to find better uses for the \$90 to \$130 million. The best option might be to not spend the money at all.

I appreciate your consideration.

Best,

Rachelle Quimby

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Rachele Quimby

| Reviewer's<br>Comment<br>Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-33-1                          | Chapters 1 and 3.2 of the Draft EIS/EIR, as well as the Van Ness Avenue Feasibility Study (2007) detail the significant travel time and reliability deficiencies for routes 47 and 49 in existing conditions. Please see Master Comment #4 for information about the cost effectiveness of the project.                                                                                                                                                                                                                   |
| I-33-2                          | Support for the No Build Alternative noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA. See Master Response #2, Chapter 2 of the Draft EIS/EIR, and the Alternatives Screening Report (April, 2008) for details on concepts development and screening. Please see also response to Comment I-6-I.                                                                                                                                                                  |
| I-33-3                          | Support of Build Alternative 2 as a second choice noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA. Chapter 9 Financial Analysis presents the project capital and operations and maintenance costs. Section 10.2.4.7 describes how project operations and maintenance costs are considered in the LPA selection process. Build Alternative 2 would have the highest annual operating cost to Muni, and the lowest construction cost among the build alternatives. |

From: Hennie Wisniewski [hennie@planeteria.net]  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] Van Ness Avenue Bus Rapid Transit  
Sent: Sat 12/10/2011 1:22 PM

Sirs and Madams --

I like plan 4 the best. I know I have to walk to the center of the street to get the transit -- but often I have to walk across the whole street. I use public transportation all the time and of course the lines on Van Ness (movies, opera house, symphony, CalTrain). I often feel people who rarely or never use public transportation are the ones who have the most pull about how it will be!

**I-34a-1**

I live in Pacific Heights and I am for Alternative 4.

Henrietta Wisniewski  
1960 Pierce Street #1  
San Francisco, Ca 94115  
[hennie@planeteria.net](mailto:hennie@planeteria.net)

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Henrietta Wisniewski

Reviewer's  
Comment  
Number

Response

|         |                                                                                                                                                                                                                                                                                                                                                           |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-34a-I | Support for Build Alternative 4 noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA. Each of the build alternatives, including the LPA, would provide improved transit access to the many special event uses along the corridor, and to major transit transfer points like Market and Geary streets. |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

From: Hennie Wisniewski [hennie@planeteria.net]  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] Van Ness Avenue Bus Rapid Transit  
Sent: Sat 12/10/2011 1:24 PM

Sirs and Madams --

See note below. Forgot to mention, that I do not understand why the plan doesn't go to the foot of Van Ness -- Why does it stop at Lombard?

**I-34b-1**

Henrietta Wisniewski

Sirs and Madams --

I like plan 4 the best. I know I have to walk to the center of the street to get the transit -- but often I have to walk across the whole street. I use public transportation all the time and of course the lines on Van Ness (movies, opera house, symphony, CalTrain). I often feel people who rarely or never use public transportation are the ones who have the most pull about how it will be!

I live in Pacific Heights and I am for Alternative 4.

Henrietta Wisniewski  
1960 Pierce Street #1  
San Francisco, Ca 94115  
[hennie@planeteria.net](mailto:hennie@planeteria.net)

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Henrietta Wisniewski

Reviewer's  
Comment  
Number

Response

I-34b-1

Please see Master Response #1 on the definition of project limits. The northern terminus of the project limits was defined as Lombard Street in the Draft EIS/EIR due to the fact that traffic patterns show a significant decrease in the PM peak from the block between Greenwich and Lombard to the block between Lombard and Chestnut (70% decrease northbound; 52% decrease southbound; (CHS, 2012). The block north of Lombard has less than 600 vehicles per hour northbound and less than 425 vehicles southbound during the PM peak hour. Delays caused by these lower volumes of mixed traffic are significantly less frequent and severe as they are within the study area. Thus, full BRT treatments were not proposed for the corridor north of Lombard Street. Note that the 47 and 49 routes will continue to North Point Street as their terminus.

From: McClure, Charles [cmcclure@honolulu.gov]  
Sent: Mon 12/12/2011 12:20 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] Van Ness BRT Project

Mr. Michael Schwartz:

I own a condo at Daniel Burnham Court. I think the analysis of the Van Ness BRT alternatives is thorough. The no-build/existing condition is not satisfactory, not acceptable. For me, the bus interface with BART and the MUNI streetcar at Market Street is confusing with separate entrances, changes of levels, and considerable walking distance involving crossing streets. I don't see that any improvements to the Market Street "intermodal" transfer situation are proposed in coordination with the BRT project, and I recommend that special attention be given to the design of the Market Street intersection with the goal of improving passenger convenience and pedestrian safety.

**I-35-1**

**I-35-2**

Charles McClure

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Charles McClure

Reviewer's  
Comment  
Number

Response

- |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-35-1 | Support for the build alternatives noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA. The LPA was shown to meet the project purpose and need and was thus selected by staff and the Authority Board for inclusion in this Final EIS/EIR.                                                                                                                                                                                                                                                                                                                    |
| I-35-2 | Design and implementation of the Van Ness Avenue BRT would be coordinated with the Better Market Street Project, if it is eventually approved, which is currently considering designs for Market Street, including the enhancement of intermodal transfers. In any event, project design will prioritize passenger convenience and safety with transfers at all stations. Improvements such as pedestrian signals, audible pedestrians signals (APS), pedestrian lighting, and pedestrian corner bulbs are all designed to enhance safety and comfort for all pedestrians, including transferring Muni passengers. |

From: I.L. Girshman [HiGoNRG@cs.com]  
Sent: Fri 12/16/2011 2:49 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Draft EIS/EIR Comment

This is an enquiry e-mail via <http://www.sfcta.org> from:  
I.L. Girshman <HiGoNRG@cs.com>

I have extensive comments but a lack of time to sum them up and transmit them to you.

In general the planning document is too massive to reasonably review. Similarly, the project itself and supporting planning reviews do not seem to include the attendant effects of the project, evidently preferring to only concentrate on the mass transit aspects of the plan, instead of considering the entire environment of the Van Ness Corridor. Impacts to be considered would be traffic on Van Ness and surrounding streets, access to buildings on Van Ness and surrounding streets, impact to the retail corridor on Polk Street, etc. In other words, the impacts are NOT just limited to improving Van Ness transit and therefore "speeding up the trip and raising ridership rates". In fact, that is one of the slightest impacts.

I-36-1

Specific comments:

3.1 --- Fails to note vehicle/truck travel distinctions. Van Ness Avenue supports a huge variety of vehicles, including double trailer semi's, large private shuttle buses, tourist luxury coaches, open flatbed trailer trucks, double decker tourist coaches, private vehicles towing trailers and large RVs, muni buses returning to their garages, delivery trucks, etc. Some of these vehicles will be unable to navigate the new lanes proposed and unable to navigate the new turning radiaa proposed at corners of Van Ness intersections.

I-36-2

3.1 --- identifying "through trips" as only those which include more than 2 counties is not correct and misstates the nature of and origins of heavy traffic on Van Ness, which often includes private vehicles traveling through SF County and therefore ignorant of alternative routes to Van Ness. They are traveling on Hwy. 101, they don't know about MUNI lines 47 and 49.

I-36-3

The entire document mentions very little about Van Ness Avenue being Hwy. 101, which provides an almost contiguous route from the US/Mexican border all the way to the US/Canadian border, a distance of over 1400 miles.

I-36-4

4.0 --- Development Projects on Van Ness fails to emphasize the massive CPMC project proposed at Van Ness/Geary, including the office building to be constructed on the opposite corner. More specific info is needed regarding the time frames proposed for building both the BRT and CPMC projects and how they will interlace with each other and the effects on traffic patterns on Van Ness during the extended construction periods.

I-36-5

Similarly, project planning does not seem to include impacts on other Muni lines which intersect the Van Ness lines, which include almost every bus line in the city.

I-36-6

Not enough information on mitigation of impacts from removal of mature tree canopies, which would include noise impacts, air pollution impacts as well as visual impacts.

I-36-7

5.4.10 --- Does not mention increased particulate matter from idling heavy bus/truck traffic stuck in Van Ness traffic in some proposed alternatives.

I-36-8

5.4.11 -- Does not specify construction timing during each day. Would work be done 24/7? 5 days per week, 9-5? Traffic patterns on Van Ness do not necessarily only reflect the standard "rush hour" pattern --- Saturday and Sunday are often quite heavy, and traffic frequently reflects the scheduling of events in San Francisco that serve as a region-wide draw (i.e., people will drive their private vehicles into SF from neighboring counties --- such as events at the Wharf like 4th of July, Fleet Week, etc.) Would construction be phased to avoid shutting down Van Ness in these period of heavy demand?

I-36-9

5.4.12 -- Does not mention restricted sidewalk spaces necessary to accommodate new bus stop structures. Does not mention if paid advertising at these structures will be present, which will impact the visual environment.

I-36-10

5.3.1/3 --- Does not mention impacts on Gough and Franklin street intersections and attendant pollution in surrounding areas, in particular Gough between Lombard and Sacramento.

I-36-11

Does not mention how to mitigate traffic needing to turn right and route itself around blocks to be able to turn west off Van Ness since left turns will be prohibited.

I-36-12

Finally, although mention is made of certain "soft" changes planned for Van Ness (better timing of signal lights, pavement renewals, etc.) there should be an alternative which would install only these changes and others such as adding to MUNI buses the ability to "hold" yellow lights so as to speed up their progress to the next stop, said alternative to include a reassessment of the necessity of doing the project at all once these economical and less disruptive changes have been installed.

I-36-13

Thank you for the opportunity to comment and for all your hard work in making SF a better place to live and work.

I. Girshman

PS) I certainly hope all the members of your planning staff have spent hours & hours, at varying times/days of the week, observing traffic patterns and Muni usage on Van Ness. I would suggest this be required for anybody participating in this project BEFORE work gets started.

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: I. Girshman

| Reviewer's Comment Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-36-1                    | <p>Traffic on Van Ness Avenue and surrounding streets is discussed in Section 3.3 of the Draft EIS/EIR. Transit and pedestrian access to buildings on Van Ness Avenue and surrounding streets would be improved with implementation of the project. Private auto access to buildings would be similar to the No Build Alternative, with the exception of reduced left turn opportunities on Van Ness Avenue (only 1 in each direction for the LPA).</p> <p>Section 4.2 of the Draft EIS/EIR discusses Community Impacts, including potential impacts on businesses. Businesses that would lose color parking zones that could not be replaced on the same block or immediately adjacent were identified in Section 4.2. The analysis does not identify any impacts to businesses in the retail corridor of Polk Street. Under the LPA (with or without the Vallejo Northbound Station Variant), it was confirmed that in most cases colored spaces would be able to be retained on the same street block or on adjacent blocks. However, specific locations were identified where provision of replacement colored spaces on an adjoining block may not be feasible or where an affected business may have special needs requiring immediately adjacent parking, such as passenger loading zones that serve elderly or infirmed people or truck loading zones that support delivery of large commercial goods. Potentially significant colored parking zone impacts on the area's adjacent uses are identified in Table 4.2-9 in Chapter 4.2 Community Impacts. Chapter 4.15 identifies potential construction impacts. Please see Master Response #6 for more details on construction impacts on businesses and residents.</p> |
| I-36-2                    | <p>All build alternatives, including the LPA, would allow for navigation by commercial trucks. Section 3.1.2.5 identifies intersections with truck restrictions under each of the alternatives and the LPA. Final roadway designs will be approved by SFMTA and Caltrans design staff to ensure the roadway meets standards for traffic and truck operations.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| I-36-3                    | <p>Van Ness Avenue's role as US 101 is discussed in the Introduction Chapter, as well as Sections 3.1 and 3.3 of the Transportation Chapter.</p> <p>The far right column in Table 3.1-2 in the Draft and Final EIS/EIR shows the number and proportion of regional pass-through trips, defined as trips that begin and end outside of San Francisco but use the corridor. The next column to the left indicates the number and proportion of trips that have at least one trip end (origin or destination) outside of San Francisco but use the corridor.</p> <p>Table 3.1-3 shows the proportion of "Divertible" and "Nondivertible." Divertible trips are defined as trips that do not have an origin or destination in the neighborhoods surrounding Van Ness Avenue, and most closely resemble the type of trips described by the comment. 74% of regional trips tend to have origins and destinations outside of those neighborhoods, and thus could technically take a different route through San Francisco.</p> <p>Signage can be used to direct unfamiliar drivers to appropriate routes. The reduction in left turns for all alternatives, including the LPA, would enhance traffic operations for those wishing to drive the length of the corridor. For this reason, the Synchro models used to support the analysis in Chapter 3.3 indicate that travel speeds along Van Ness Avenue would remain similar for the build alternatives in spite of the reduction in the travel lane.</p>                                                                                                                                                                                                                             |

- I-36-4 See response to comment I-36-3.
- I-36-5 Chapter 4.15 of the Draft EIS/EIR (Construction) indicates the need to coordinate construction and traffic management planning for construction with other major projects, including the CPMC. If the project is approved, this will be a required mitigation measure, and close coordination would be part of any implementation planning to be performed as part of more advanced design.
- I-36-6 The project team first analyzed the cross-transit delays using a VISSIM microsimulation model. The results are presented in Section 3.2.2.3. Outputs from the model indicate that in 2015, buses crossing Van Ness Avenue would only increase their delay in crossing Van Ness by an average of 6 seconds for the LPA versus the No Build Alternative.

To determine if there is a significant transit delay impact, cross-transit delay was calculated using the same methodology employed by the San Francisco Planning Department for the San Francisco Bicycle Plan EIR. The delay calculation consists of 1) changes in mixed-traffic delay, 2) changes in dwell times due to increased boardings, and 3) changes in time to pull out from stops due to increased traffic delays. The analysis indicates that no route on the SFMTA rapid network that crosses Van Ness Avenue BRT would have an increase in mixed traffic delay and dwell time delay across the traffic study area of more than 60 seconds with the implementation of BRT when compared with the No Build alternative in 2035. For this analysis, Year 2035 with Design Option B and the LPA was used because it represents the largest increase in ridership and the largest increase in traffic delays (see Section 3.3). The one cross route with greater than a 60 second increase in mixed traffic and dwell time delay during the PM peak hour with the implementation of BRT would be the 31 inbound. The delay for this route in 2035 would increase by just over 3 minutes (190 seconds) with the implementation of BRT. This is nearly 3 minutes less than the threshold established by the San Francisco Planning Department (1/2 of the 12 minute headway or 6 minutes) that would create a potentially significant impact. Pullout time would need to increase significantly for all routes (more than 50 seconds) in order for the delay to reach a threshold of significance.

It should be noted that Van Ness BRT would not have transit signal priority at the cross streets carrying the most significant number of transit vehicles -- Market Street and Geary/O'Farrell. Discussion of cross transit delay has been added to the Final EIS/EIR in Section 3.2.

- I-36-7 See Master Response #7 on loss of tree canopy. Removal and replacement of trees is a factor considered in the selection of the Locally Preferred Alternative, as discussed in Section 10.2.4.6 Environmental and Social Effects. Information on trees to be removed under each build alternative and opportunities for new tree plantings is presented in Section 4.4.3.4, Landscape and Trees. A summary of trees to be removed under each build alternative and opportunities for new tree plantings is provided in Table 4.4-4, and Master Response #7. The center lane configured alternatives would not require removal of all trees, as explained in Section 4.4.3.4. Mature tree canopies provide water quality, aesthetic and carbon off-set benefits. There would be a period of reduced benefits until the new tree plantings grow to maturity, and these benefits would not be fully compensated where different tree types are selected based on OCS clearance requirements do not offer the same size canopy as existing trees that would be removed. However, under each center running alternative, the reduced benefits due to smaller tree canopy size would be offset by an overall increase in trees in the corridor.

Under existing, no-build, and build conditions, trees within the roadway median and/or along the roadway edges have or would have a negligible influence on sound propagation. The distribution of trees is and would be narrow and discontinuous. Furthermore, even for those trees that are densely leaved, the leaves tend to be concentrated at heights well above the paths between traffic noise sources and the nearest noise-sensitive receivers. Only continuous, deep groupings of non-deciduous foliage with relatively densely-packed leaves or needles positioned in the path of sound propagation have the potential to substantially attenuate noise levels.

I-36-8

Section 5.4.10 discusses cumulative air quality impacts, including toxic air contaminants (TAC). Particulate matter emissions from trucks and buses (heavy vehicles) are considered in the aforementioned analyses (Section 4.10.3). As described in Section 4.10.3, the purpose of the proposed traffic is to improve traffic flow and minimize heavy duty vehicles idling time along Van Ness Avenue (see Section 3.3.3 for detailed traffic analysis). The mixed flow traffic lanes benefit from the removal of Muni buses and associated traffic congestion delays resulting from buses maneuvering between traffic lanes to access curbside stations.

Under each of the project alternatives, including the LPA and no-build scenario, the current Muni bus fleet would be upgraded to a lower-emissions emitting fleet. It is anticipated that the new hybrid diesel-electric buses would further reduce the emission of diesel particulate matter (DPM) by emitting 95 percent less of DPM when compared to the buses to be replaced. In addition, engine idling activity that generate DPM emissions would be reduced by removing MUNI buses from mixed flow lanes and placing them in a free-flowing transit lane. Also, it is likely that most trucks would not divert from Van Ness Avenue to parallel streets (i.e., Franklin Street) due to the increased grade/slope on parallel streets, and because they are either completing regional travel on the U.S. 101 or making deliveries to land uses on Van Ness Avenue. Thus, as concluded in the EIS/EIR, the amount of heavy truck traffic diverting to parallel streets are not anticipated to create significant air quality impacts.

As discussed in detail in Section 4.10.3 and reiterated in Section 5.4.10, the proposed project would not result in unmitigatable, significant air quality impacts. In considering cumulative impacts, according to the Bay Area Air Quality Management District (BAAQMD), a proposed project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact. As shown in Table 4.10-6 of Section 4.10.3, idle emissions would be well below the State standards, resulting in a less than adverse air quality impacts to the region's existing air quality conditions. In accordance with BAAQMD guidance, each alternative would result in a less-than-significant on a project-level and would not be cumulatively considerable.

Although not specifically addressed in this comment, the proposed project would increase traffic volumes and may increase congestion on streets that parallel Van Ness Avenue. A project-specific and cumulative PM<sub>2.5</sub> analysis has been added to Section 4.10.3 in the Final EIS/EIR to address this issue. An assessment was completed both for the segment with the greatest incremental increases in annual average daily traffic and the highest total annual average daily traffic. Franklin Street north of Market Street under either center lane configured alternatives (Build Alternatives 3 and 4, including the LPA) would experience the greatest traffic volume (i.e., 47,823 average daily annual vehicles) increased due to potential vehicle trips diversion. The total average daily traffic along this segment would be 29,419 vehicles in 2035 and the incremental increase as a result of the proposed project would be 8,612 vehicles. The project contribution along this segment would be 4,486 annual average daily vehicles in 2035. The results of the analysis show that both annual PM<sub>2.5</sub> concentrations and health risk associated with PM<sub>2.5</sub> exposure would be less than the BAAQMD significance thresholds.

I-36-9

Section 4.15 Construction Impacts discusses the construction approach, and states that most of the work could be done during daylight hours, but some nighttime work would be required to permit temporary closures of the second traffic lane for tasks that could interfere with traffic or create safety hazards, subject to City approval with respect to noise ordinance requirements.

All construction work would be conducted in compliance with obtained permits and regulations set forth by the City and Caltrans, in accordance with the SFMTA Regulations for Working in San Francisco Streets (Blue Book), the MUTCD, San Francisco Municipal Code (Noise Ordinance, Sections 2907 and 2908), and SFPUC and SFDPW BSM work orders. Mitigation Measure TR-C7 requires implementation of a Transportation Management Plan (TMP) to provide advance notice to motorists and transportation and emergency service providers of information on construction activities and durations, detours, and access issues during each stage of construction. Please see Master Response #6 for more details on construction impacts on businesses and residents.

- I-36-10      None of the build alternatives, including the LPA, would result in sidewalk restrictions. The BRT stations for Build Alternatives 3, 4 and the LPA would be located in the center of Van Ness Avenue, and would not create sidewalk restrictions. Build Alternative 2 stations would be located on curb extensions, and would not infringe upon sidewalk space. Each of the build alternatives would open up new sidewalk space at locations where existing Muni bus shelters would be removed.
- Advertisements would not be more significant or out of character with existing advertising on bus shelters, and would be on fewer shelters since the project proposes to remove 6 stops in each direction.
- I-36-11      Section 3.3 of the EIS/EIR identifies potential traffic delay impacts on Gough and Franklin Streets. Section 4.10 identifies potential air quality impacts on corridor streets, including Gough, Franklin, Polk, Larkin, and Hyde streets as well as Van Ness Avenue.
- I-36-12      Right turn pockets have been added for all of the build alternatives, including the LPA, with priority given to areas that currently allow left turns (e.g., Pine Street). See Section 2.2.2 of the EIS/EIR for more detail. Section 3.3 of the EIS/EIR examines traffic impacts, and reflects traffic volumes that include these additional turn movements. The right turns volumes are reflected in the modeling and impact analysis. See Master Responses #8 and #9 for more details on how traffic volumes and impact analyses were calculated.
- I-36-13      Some of the projects in the No Build Alternative such as All-Door Boarding/Proof-of-Payment will be implemented in the near term, ahead of construction of the BRT project. However, the City's policy is to coordinate construction projects (including the infrastructure for transit signal priority) so as to avoid repeated construction projects in the same area within a similar time period. Please see Master Response #6 for additional information about project construction.
- After the certification of the Final EIS/EIR, multiple decisions by the SFMTA Board would need to be made before the project could enter construction. In addition, the project would need to seek approval of numerous permits outlined in Chapter 2 of the EIS/EIR (note: this text has been updated in Sections 2.8 and 2.9 of the Final EIS/EIR). The timing of such approvals would allow for evaluation of any improvements that have been implemented to be taken into consideration.

From: Alvin Huie [huie@sbcglobal.net]  
Sent: Mon 12/19/2011 5:12 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Draft EIS/EIR Comment

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Alvin Huie <huie@sbcglobal.net>

I tried calling you to get some input as to how to make a comment; I don't think that this plan has been thoroughly thought through on a wide scale. The assertion that this will speed up traffic on Van Ness Avenue by taking out 1 lane of vehicle traffic is completely False. A good example of where this is being tried is the Embarcadero; the street had 3 lanes of traffic and has been modified to allow the F street car a dedicated lane. It took me 25 minutes to drive from Bay St. to Mission and the Embarcadero has separate left-turn lanes. Rather than speeding up traffic on Van Ness the project will cause more traffic delays with the corresponding pollution from all the cars that sit idling waiting to get across town. The City traffic engineers have done an outstanding job in setting the timing of the traffic signals so that the traffic runs smoothly and efficiently through the City. The BRT project will allow the traffic signals to be changed randomly and will cause a complete nightmare of traffic through out the whole City and in effect, negating the great work the traffic engineers have done. I think the planners have not driven through the Van Ness corridor to really comprehend the impact that the BRT project will do to the overall traffic in the City.

**I-37-1**

**I-37-2**

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Alvin Huie

| Reviewer's<br>Comment<br>Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-37-1                          | <p>The proposed project is not intended to increase vehicle traveling rate on Van Ness Avenue. As described in Chapter I of the DEIS/DEIR, the proposed project aims to balance vehicle circulation with the attainment of other project objectives, such as improved transit performance and increased efficiency in terms of the number of people able to move through the corridor.</p> <p>As shown in Figure 3.2-6 in the EIS/EIR, traffic congestion is expected to increase by 2015 without implementation of Van Ness BRT. An increased in traffic congestion would result in an impairment to average vehicle speed traveling along Van Ness Avenue. However, BRT is not projected to have a significant effect on travel speeds on Van Ness Avenue in 2015 compared to the No Build Alternative. This is because north-south vehicle movements would be able to take advantage of the transit signal priority and the longer green light times afforded through the elimination of left turns, particularly for the LPA. By 2035, significant and unavoidable traffic impacts are expected to occur with the project at several intersections in the corridor, primarily along Franklin and Gough Streets. These traffic impacts are described in detail in Section 3.3. With implementation of mitigation measures, the project would result in less than significant air quality impacts. Please see Section 4.10 for the complete air quality analysis. Please see Master Responses 8, 9, and 10.</p> |
| I-37-2                          | <p>Transit Signal Priority (TSP) is proposed as part of the Van Ness BRT project to reduce transit delay at most, but not all, intersections along Van Ness Avenue. TSP would extend green signals on Van Ness Avenue by up to 15 seconds when a BRT vehicle is approaching to allow it to pass through the intersection. Microsimulation modeling results indicate that the LPA will increase delay for vehicles crossing Van Ness Avenue by about 3 seconds while reducing delay for vehicles traveling along Van Ness Avenue by about 4 seconds at an average intersection, resulting in a slight overall average delay reduction. Section 3.3 of the Draft EIS/EIR provides a full traffic impacts analysis for the project.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

19 Dec, 2011

Van Ness BRT

After attending your "open house" on Wednesday 30 November, 2011 and reading thru the "Van Ness BRT Draft Environmental Impact Statement / Environmental Impact Report (EIS/EIR)", I would like to share some concerns / opinions / perspectives thru the eyes of one who plies his trade in the "Public Transit" field and has done so here for 26 years.

## CHAPTER #2 : PROJECT ALTERNATIVES

As a Taxi Driver here for the past 26 years, I too have seen and had to deal with a serious increase in the number of cars / volume of traffic on the streets here in San Francisco. I too would like to see FEWER / LESS cars / traffic on the streets here. It would make my job "easier" and as you aspire here in your own BRT project having "Dedicated Bus lanes" that would "speed up" travel time for Muni Buses, FEWER / LESS cars / traffic on the streets here would allow me to get my passengers to their destinations in LESS time. However, and I DO try and remain "optimistic" thru all of this, the chances / possibilities of FEWER / LESS cars / traffic on the streets here any time soon are unfortunately, about as good as waiting for the Sun to RISE one day in the WEST ! I know from talking with passengers in my Taxi that "travel time" on many current MUNI routes is very slow. And though I am driving a car / Taxi which "theoretically" should be a "quicker mode" of transit / transport, current traffic conditions here in the City and now several projects which have resulted in a REDUCTION of traffic lanes via more "Bike lanes" / loss of traffic lanes due to streets changed from one way to two way { WB Hayes Van Ness to Gough; MacAllister Hyde to Jones } / Cesar Chavez {when it is finally finished} lane reduction from 3 lanes to 2 lanes have only served to INCREASE my "travel time" especially during weekday PM Peak / PM Rush Hour traffic and holiday / weekend afternoons. And with constant "whining & sniveling" from SFMTA and general public dissatisfaction with Cab service here, ANY talk / implementation of Traffic lane REDUCTION does NOT "bode" well for me, other Taxi Drivers, and ultimately, the "Taxi riding Public".

I-38-1

I-38-2

I personally have NO issues with people who use MUNI as their choice of "Public Transit / Transport". I acknowledge and agree with the need for an adequate and efficient public Bus system as one form / option of "Public Transit / Transport". But for me and the "Public Transit / Transport" riding Public, MUNI Buses are NOT the only choice / form of "Public Transit / Transport". Many disabled / handicapped / Seniors depend on and it is often their preferred choice of "Public Transit / Transport", the "Para Transit" Bus / Vehicle program, Ramp / Wheelchair Taxis, and regular Taxis. For these people, it offers them an alternative to often "overcrowded / slow moving" MUNI Buses. It MUST be remembered here. "Para Transit" Bus / Vehicle program, Ramp / Wheelchair Taxis, and regular Taxis are ALSO forms of "Public Transit / Transport". They can NOT be forgotten about / ignored. Van Ness BRT / any & all BRT Projects that call for "Dedicated Bus Lanes" for MUNI Buses only and thereby REDUCE the availability of Traffic lanes for "Para Transit" Bus / vehicle program, ramp / wheelchair Taxis, and regular Taxis and other forms of "Public Transit / Transport" is NOT an amicable and fair solution for all forms of "Public Transit / Transport". By implementing "Dedicated Bus lanes" that would "speed up" travel time for Muni Buses, but in doing so, REDUCE the number of available traffic lanes "Para Transit" Bus / Vehicle program, Ramp / Wheelchair Taxis, and regular Taxis and other forms of "Public Transit / Transport" would have to depend on to get to their destinations ultimately runs CONTRARY to the concepts BRT Projects are trying to promote. Reducing travel time for those who depend on / for those who choose to use ANY form of "Public Transit / Transport" as an alternative to driving a car. "Dedicated Bus Lanes" for MUNI Buses will benefit MUNI riders but they will NOT benefit those who choose / must

I-38-3  
*continued*

depend on other forms of “Public Transit / Transport” AND the DRIVERS of these other forms of “Public Transit / Transport”. This is a VERY important issue. Especially for me as a Taxi Driver ! I need as many traffic lanes available as possible to get my passengers to their destinations. And in the case of Van Ness Avenue, this is a VERY important thoroughfare / route that “Para Transit” Bus / Vehicle program, Ramp / Wheelchair Taxis, and regular Taxis and other forms of “Public Transit / Transport” depend on AND need to have as accessible as possible. That translates in to having access to as many traffic lanes as possible. I am sure you are already well aware of the fact / reality that Van Ness Avenue is a HEAVILY traveled corridor / thoroughfare.

I-38-3  
*continued*

And this is NOT going to change, if ever, any time soon. AM AND PM Peak / Rush Hour traffic, weekend nights {Friday & Saturday}, holiday / weekend afternoons { Saturday & Sunday} , accessing Van Ness from Lombard, and after 4th of July fireworks and Fleet Week shows along the Bay & the Wharf are the most congested times. And this translates into MANY days / periods of time that EVERY traffic lane available on Van Ness is used to its “maximum potential”. ANY reduction of available / accessible traffic lanes caused by the implementation of “Dedicated Bus Lanes” for MUNI Buses, especially during ANY / ALL of the aforementioned times, will only to serve to generate a Traffic “disaster / nightmare” for EVERYONE ! NOT a “positive” solution or “positive PR” for BRT’s cause ! As discussed in your “Van Ness BRT Draft Environmental Impact Statement / Environmental Impact Report (EIS/EIR)”, traffic directed to / encouraged to use “alternative routes” was one “possible solution” to alleviate potential traffic congestion that would be caused by / generated from the implementation of “Dedicated Bus Lanes” for MUNI Buses. While Franklin Street offers a “NB alternative route”, SB “alternative routes” are basically NON – existent. SB Gough Street , which is TWO – way from Lombard Street to Sacramento Street { Gough becomes one – way SB here at Sacramento Street} , is seriously OVER crowded from Union Street to Sacramento Street and at its worst, from Lombard to Sacramento Street during AM AND PM Peak / Rush Hour periods, weekend nights {Friday & Saturday}, holiday / weekend afternoons { Saturday & Sunday} , accessing Gough from Lombard as an “alternative route” to Van Ness, and after 4th of July fireworks and Fleet Week shows along the Bay & the Wharf. ANY other “promotion” of other “alternative routes” that would INCREASE the number of vehicles / volume of traffic on other streets would almost certainly generate complaints / protest from residents who reside on these streets. NOT what you need / want to generate. My other concern is how Traffic Signals would be “preempted / prioritized” for Buses as they approach intersections. I understand the concept and the reasoning. But... it must be done in such a way to MINIMIZE potential traffic flow disruptions at busy cross street intersections. These would include Union Street, Broadway, California, Pine, Bush, Sutter, Geary, O’Farrell, Turk, MacAllister { NB Golden Gate Transit Buses access Van Ness here}, Hayes, and Fell. It should also be noted that many SB Golden Gate Transit Buses turn LEFT / EB on to Mac Allister from SB Van Ness.

I-38-4

I-38-5

I-38-6

My concern is that excessive / long green light “preempt / priority” times for Van Ness Buses, will in turn, generate congestion and traffic delays on the aforementioned cross streets. Not only will this delay / interrupt the “Para Transit” Bus / Vehicle program, Ramp / Wheelchair Taxis, and regular Taxis, but also MUNI Buses that ply these cross streets on their routes !! This is especially a concern for me during the AM AND PM Peak / Rush Hour traffic and weekend nights {Friday & Saturday} when there IS still a lot of traffic on the streets. This issue can NOT be ignored. So with all of this in mind, from the 4 possible BRT projects, one “NO Build” and 3 “Builds”, and based on everything I have shared with you here, while I DO want EVERYONE to get where need to go in less time than they do at the moment, for the “Para Transit” Bus / Vehicle program, Ramp / Wheelchair Taxis, regular Taxis, and all other forms of “Public

I-38-7  
*continued*

Transit / Transport”, ANY loss / reduction of accessible / available traffic lanes for me translates into more difficult times getting around. For me, it is ALREADY bad enough here in the City. So, I favor the “NO Build” choice. I feel that ALL Bus Stops could be located AFTER / PAST the intersection, for SB on the SW Corner and for NB on the NE corner. This would help minimize potential traffic congestion problems on cross streets from excessive / long “preempt / priority” green light times for Van Ness Buses. Van Ness Buses would receive a “preempt / priority” green light as they approach an intersection. By having a Bus Stop located on the NEAR corner { for SB the NW Corner; for NB the SE corner} BEFORE the Bus would cross an intersection, this would generate a LONGER “preempt / priority” green light because the “preempt / priority” green light would not “cancel out” until AFTER the Bus finishes loading / unloading passengers, bicycles, wheelchairs, etc and then crosses an intersection. Therefore, ALL Bus Stops should be located AFTER / PAST the intersection, for SB on the SW Corner and for NB on the NE corner. Once the Bus clears / finishes crossing the intersection, the “preempt / priority” green light would “cancel out” quicker as opposed to forcing cross street traffic to have to wait for a Bus stopped BEFORE it crosses an intersection, while it loads / unloads passengers, bicycles, wheelchairs, etc and in the process, MINIMIZING how long cross street traffic would have to wait. And finally, I am OK with having the Bus Stop design from “Build Alternative 2” but that RIGHT lane would NOT be a “Dedicated Bus Lane”. It would be accessible / available for ALL vehicles.

I-38-7  
*continued*

I-38-8

I-38-9

However, by using “Build Alternative 2”, it will make it easier for MUNI Buses as they would NOT have to “pull out” of the Traffic Lane and then “pull back into” the Traffic Lane after they load / unload passengers.

### CHAPTER #3 : TRANSPORTATION ANALYSIS

I have read your “projected transportation analysis” with regard to “projected decreases / increases” in the number of cars / traffic volume on Van Ness and some peripheral streets. But I ask HOW did you / can anyone ascertain how many vehicles were / are “local trips / “regional trips” / regional pass thru trips” ?? What criteria was used? And how was it used? I then read : “Transit ridership would increase by 28 to 35 percent with the implementation of BRT; more than 50 percent of these new transit riders would be former private vehicle {auto} occupants”. HOW DO YOU KNOW THIS?? How does ANYONE know HOW people will react / modify how they get around IF BRT is implemented? What criteria was used? And how was it used? You REALLY believe that ANY BRT Project can be built / implemented based on this type of “projected ridership / transportation analysis”? “Guesstimates / speculation”. SFMTA’s 3rd Street “Light Rail Line” still has NOT realized the “projected ridership” that “projected ridership / transportation analysis” had “forecasted / predicted”. As a matter of fact, it is LOSING money! “Guesstimates / speculation” do NOT make for good criteria used when it comes to making ANY decisions! Especially if a decision is made based on “guesstimates / speculation”. And I see TOO much of your criteria that you have used in making your “findings / presentations” here based on “guesstimates / speculation”. San Francisco already suffers enough from previous decisions made that were based on “guesstimates / speculation”. Especially where the SFMTA was involved. This is NOT good! We do NOT need more Transportation “debacles”!

I-38-10

Thank you for taking time to read this thru!

Respectfully,  
Ralph Jacobson

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Ralph Jacobson

| Reviewer's Comment Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-38-1                    | The Van Ness Avenue BRT is projected to reduce the number of private vehicles and vehicles miles traveled in the Van Ness Avenue Corridor (see Figure 3.I-4) as well as citywide (see Table 4.I0-5). Reductions in mixed travel lanes to accommodate bicycle and pedestrian facilities that are occurring in other parts of the City are projects independent of the Van Ness Avenue BRT Project. The SFMTA balances the needs of taxis along with the other travel modes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| I-38-2                    | Chapter 3.3 of the Draft EIS/EIR describes the changes in delay and travel time for motorized traffic, which includes taxis. The results indicate that in 2015, the number of intersections operating at LOS E or F is similar for the build alternatives and LPA as the No Build Alternative. In 2035, the least number of intersections operating at LOS E or F would occur under the No Build Alternative (7) and the most would occur under the LPA (12). Other alternatives would have traffic intersection effects in-between these numbers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| I-38-3                    | Chapter 3.3 of the Draft EIS/EIR describes the changes in delay and travel time for motorized traffic, which includes taxis. Taxis and paratransit would still have full access to the corridor, and parking and loading would be largely retained. While taxis are considered part of the transit system, their needs are distinct from fixed route transit such as the 47 and 49. Chapter 1 of the Draft EIS/EIR (Purpose and Need) describes the goals of the project, including improvements to travel time and reliability for fixed route transit on the corridor. Currently, the travel time and reliability gap between autos (including taxis) and fixed route transit is significant. As shown in Chapter 3.2 of the Draft EIS/EIR, the proposed project is anticipated to reduce travel time and increase reliability for fixed route transit while allowing autos (and taxis) to benefit from signal coordination and the reduction in left turns in order to minimize any increased delays for those modes.                                                                                       |
| I-38-4                    | Section 10.2.4.1 of the Draft EIS/EIR compares the alternatives' performance during special circumstances, such as 4th of July and Fleet Week events. While creation of the Van Ness BRT dedicated transitway would reduce lane capacity for private vehicles (as well as taxis), BRT would increase the overall capacity of the Van Ness corridor to accommodate large flows of people traveling during special events. Both regularly scheduled Muni service and special event shuttles could operate within the dedicated transitway protected from event-related congestion in the mixed-flow lanes. Due to congested conditions in the mixed-flow traffic lanes and high volumes of transit passengers, the dedicated transit lanes proposed with BRT are particularly important to provide efficient and reliable movement through the Van Ness corridor during special events. The Van Ness Avenue BRT Project, as proposed, does not preclude SFMTA policy changes to allow taxis in the BRT lane for special events or general circumstances in the future, particularly after evaluation of service. |
| I-38-5                    | See Master Responses #8 and #9 for a discussion of the modeling of traffic diversions. The delay impacts and changes in travel time for users of Van Ness Avenue and the parallel streets in the corridor are described in Section 3.3 of the Draft EIS/EIR. Autos would be able to use varying parallel routes or take advantage of the enhanced operational changes on Van Ness Avenue (e.g., coordinated signals, reduced left turns, and lack of buses in the remaining two lanes).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| I-38-6                    | Transit Signal Priority (TSP) will be able to hold green signals for up to 15 seconds to reduce delay for                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

approaching BRT vehicles at most, but not all, intersections along Van Ness Avenue. TSP will not be installed at the intersections of Van Ness Avenue and Market Street as well as South Van Ness Avenue and Mission Streets due to high transit volumes on cross-streets and/or constrained signal timing. Microsimulation modeling results indicate that the LPA will increase delay for vehicles crossing Van Ness Avenue by about 3 seconds while reducing delay for vehicles traveling along Van Ness Avenue by about 4 seconds. Section 3.3 of the Draft EIS/EIR provides a full traffic impacts analysis of the project.

I-38-7 Support for No Build Alternative noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.

I-38-8 The LPA proposes all stations on the near side of intersections to allow for easier truck turning movements onto Van Ness Avenue while maintaining pedestrian and transit rider safety. SFMTA analysis indicates that this will not significantly change performance of the BRT, and TSP will be optimized such that the timing will take loading and unloading into account.

I-38-9 Please see Master Response #2 on alternatives definition and screening, Chapter 2 of the Draft EIS/EIR, the Alternatives Screening Report (April, 2008), and response to commenter #45 (comment #1). TPS treatments were looked at during screening, including peak-hour only bus lanes. Analysis showed that this treatment was not effective in meeting the project purpose and need because delays to transit caused by traffic on Van Ness Avenue occur during off-peak and weekends in addition to weekday peak periods.

Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.

I-38-10 The text in Section 3.I.2.2 has been revised to include more conditional language: “up to 50% of the new transit riders could be former drivers.”

Please see Master Response #8 on transportation modeling. The local, regional, and pass-through trips were estimated using the SF-CHAMP travel demand forecasting model, which is calibrated using the travel surveys and the most up-to-date data available.

The transit ridership percent increase was estimated using the SF-CHAMP travel demand forecasting model. Table 3.2-7 shows the increase in transit ridership in 2015 as approximately 11,300 for the LPA versus the No Build Alternative (40,900 vs. 52,300). Muni system wide ridership would increase by approximately the same amount, meaning that the growth in riders on Van Ness Avenue is not simply coming through a reduction in ridership on other lines, but rather generates new transit trips. Similarly, the increase in transit trips in the corridor (including Polk Street) is similar to the increase in transit trips on Van Ness Avenue, meaning the increase for the 47/49 is not generated simply through a decrease in trips on the 19 Polk Street bus.

Finally, the average net decrease in drivers in the corridor (covering all north-south streets between Gough Street and Hyde Street) is greater than 50% of the number of new transit riders on Van Ness Avenue. This indicates that there would be a sufficient decrease in the number of drivers in the traffic study area to be related to the increase in transit riders on the BRT.

From: Timothy Wickland [wickland@post.harvard.edu]  
Sent: Tue 12/20/2011 10:36 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Draft EIS/EIR Comment

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Timothy Wickland <wickland@post.harvard.edu>

To whom it may concern,

I am writing to comment on the Draft Environmental Impact Statement/Environmental Impact Report for Van Ness BRT.

I would like to express my strong support for Alternative 3, and my strong opposition to Alternatives 1 and 2.

**I-39-1**

Alternative 1 represents a missed opportunity to have a significant positive impact on the economic well-being and quality of life of everyone who lives in San Francisco.

The selection of Alternative 2, while preferable to Alternative 1, would be a shame: the location of the bus lane between mixed traffic lanes and parking guarantees delays and accidents. Additionally, the side BRT lanes do a poorer job of visually communicating the quality of the BRT service.

**I-39-2**

Alternative 3 represents the best choice: center bus lanes separated from general traffic, offering the greatest improvements in speed, reliability, and operating costs. Moreover, Alternative 3 offers the most compelling visual and spatial identity for Van Ness Ave and is most likely to spur additional positive social and economic effects.

**I-39-3**

Alternative 4 is also strong, and has the attraction of retaining more large trees and high quality landscaping in the single median. However, the absence of barriers between the bus lanes and general traffic lanes will likely lead to more violations (i.e., private vehicles using BRT lanes) and thus more delays, and potentially more accidents, than Alternative 3.

**I-39-4**

For Alternatives 3 and 4, I also support Design Option B, due to the increased speed and reliability it would offer BRT; improved landscaping opportunities at some intersections; and potential benefits to through traffic flow on Van Ness.

**I-39-5**

Regards,  
Timothy Wickland  
1299 Bush St, San Francisco

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Timothy Wickland

| Reviewer's Comment Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-39-1                    | Support for Build Alternatives 3 and 4 is noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA, which is a center-lane configured alternative like Build Alternatives 3 and 4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| I-39-2                    | <p>Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.</p> <p>Build Alternative 2 would have the most conflicts with mixed flow traffic because cars would be allowed to enter the transitway to parallel park and to complete right turns. Also, there is a greater likelihood of unexpected stops during transit service which could be caused by conflicts from double-parked delivery vehicles or broken down cars (see Section 3.2 of the Draft EIS/EIR). The travel time for Build Alternative 2 takes into account conflicts with right-turning automobiles and parking cars, as noted in Section 10.2.4.I Transit Performance.</p> <p>Curbside BRT stations proposed under Build Alternative 2 would not likely be as visible as the median BRT stations proposed under a center lane BRT configuration due to the presence of sidewalk trees and street furniture; nonetheless the BRT stations under each build alternative, including the LPA (with or without the Vallejo Northbound Station Variant), would feature wayfinding signage and BRT branding features. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| I-39-3                    | <p>Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.</p> <p>Each of the build alternatives, including the LPA, would operate in a transitway separated from mixed flow traffic. Build Alternative 2 would have more conflicts with mixed flow traffic than Build Alternatives 3, 4, and the LPA because cars would be allowed to enter the transitway to parallel park and to complete right turns. Also, there is a greater likelihood of unexpected stops during transit service which could be caused by conflicts from double-parked delivery vehicles or broken down cars (see Section 3.2 of the Draft EIS/EIR).</p> <p>Each of the build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant), would result in reductions in Muni operating cost, as discussed in Chapter 9 Financial Analysis. Build Alternative 2 would result in a 17% vehicle operations cost savings compared with the No Build Alternative. Build Alternatives 3 and 4 would result in the same vehicle operating cost, yielding a 28 percent savings compared with the No Build Alternative. Incorporation of Design Option B into Build Alternative 3 or 4, including the LPA, would result in a 32 percent operating cost savings.</p> <p>Build Alternatives 3 and 4, and the LPA, would result in the same travel time savings and same chance of an unexpected stop, as described in Section 3.2 and Section 10.2.4.I, Transit Performance. The LPA has a physical separation of the transit lane from mixed traffic vehicles at station locations.</p> <p>The significant reallocation of space and replanting of landscaping in the median under build alternatives 3 and 4, including Design Option B and the LPA (with or without the Vallejo Northbound Station Variant), creates an opportunity to unify the urban design of the street.</p> |

- I-39-4 Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.
- Build Alternatives 3, 4, and the LPA would remove nearly all conflicts with private vehicles and other buses or shuttles, and Build Alternative 3 would achieve the greatest such conflict reduction due to the dual median. Incorporation of Design Option B would further reduce conflicts due to the reduction in left turns. The LPA has a physical separation of the transit lane from private vehicle traffic at station locations.
- Drawbacks of the dual median configuration of Build Alternative 3 are that buses would not have the capability to pass another vehicle in the event of a breakdown. The LPA preserves the operational flexibility for vehicles to pass one another outside of station locations. These factors were considered in the LPA selection process, as explained in Section 10.2.4.1 Transit Performance.
- Please Master Response #7 regarding tree removal and planting opportunities.
- I-39-5 Support for Design Option B noted. Incorporation of Design Option B into Build Alternatives 3 or 4, as proposed for the LPA, would further reduce conflicts with other vehicles and pedestrians due to the reduction in left turns, which supports transit travel time savings and reliability, and reduced total intersection delay (a multimodal performance indicator) as discussed in Section 10.2.4.1 Transit Performance and 10.2.4.5 System Performance, respectively. These performance indicators are considered in the LPA selection process. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.
- Section 3.3 also indicates that the north-south private vehicle traffic on Van Ness Avenue would benefit from the elimination of the left turn phase at most intersections under Design Option B and the LPA.

From: Mary Miles <[page364@earthlink.net](mailto:page364@earthlink.net)>  
Date: Wed, Dec 21, 2011 at 10:40 AM  
Subject: Fw: IMMEDIATE DISCLOSURE REQUEST  
To: Jose Luis Moscovich <[jlm@sfcta.org](mailto:jlm@sfcta.org)>, [Rachel.hiatt@sfcta.org](mailto:Rachel.hiatt@sfcta.org), Michael Schwartz <[Michael.Schwartz@sfcta.org](mailto:Michael.Schwartz@sfcta.org)>

Please note:

- 1) Ms. Hiatt (listed as the contact in the DEIR/DEIS) has been completely unavailable for any queries in the public comment period.
- 2) Mr. Schwartz was not available for many days during the comment period.
- 3) The materials requested are referred to in the document, and have not been available during the public comment period.

**I-40a-1**

Mary Miles  
Attorney at Law  
364 Page St., #36  
San Francisco, CA 94102  
[\(415\) 863-2310](tel:(415)863-2310)

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Mary Miles

Reviewer's  
Comment  
Number

Response

|         |                                                                                                                                                                                                                                                                                                                                                                     |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-40a-I | SFCTA staff was available during the entire 49 day comment period. If one staff member was not available during that time period, contact information for a substitute was given through an auto-reply or outgoing message. Emails and phone calls received by the Authority during the public comment period requesting information were returned within 48 hours. |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

From: Mary Miles <[page364@earthlink.net](mailto:page364@earthlink.net)>

Date: Wed, Dec 21, 2011 at 2:06 PM

Subject: Re: Fw: IMMEDIATE DISCLOSURE REQUEST

To: Michael Schwartz <[michael.schwartz@sfcta.org](mailto:michael.schwartz@sfcta.org)>

Cc: Jose Luis Moscovich <[jlm@sfcta.org](mailto:jlm@sfcta.org)>, [rachel.hiatt@sfcta.org](mailto:rachel.hiatt@sfcta.org)

Mr. Schwartz:

Thank you, but you were not in your office during the latter part of the week of 12/14/11 - 12/16/11. The contact listed for the reference materials in the DEIS/DEIR is Ms. Hiatt. It was not clear to me that I should instead contact you or someone else for the materials referenced in the document. Is there a contact in case you are not available? Also, should public comment be addressed to Ms. Hiatt, as directed in teh DEIS/DEIR or to you, or to someone else's attention?

I-40b-1

I still do not have the dates of the traffic field counts with the actual counts, since they are not included in the material you sent, in your e-mail below, or in the DEIS/DEIR. How were these counts compiled? Were these counts actual cordon counts? When (dates and times) were each of the seven field counts made? You said yesterday that your office had the field data on the counts. If I need to get the information elsewhere, please let me know as soon as possible, giving the full contact information for whoever has these records if it is not your agency.

I-40b-2

I-40b-3

Thank you for your response on the disk. I will pick it up today if possible.

Sincerely,  
Mary Miles

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Mary Miles

| Reviewer's<br>Comment<br>Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-40b-1                         | Rachel Hiatt was on a medical leave of absence that coincided with public circulation of the Draft EIS/EIR. Emails and voicemails sent to Ms. Hiatt were automatically forwarded to appropriate Authority staff, and were responded to within 48 hours during the public comment period.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| I-40b-2                         | Please see Master Response #9 for information on what traffic field data were collected for the traffic analysis, why they were collected and how that data were used in the traffic impact analysis. The dates of the 24 hour traffic counts collected at seven intersections were provided to the commenter during the public comment period as was the Vehicular Traffic Analysis Technical Memorandum, which as noted in Chapter 4 of the Draft EIS/EIR is available upon request. The EIS/EIR at Section 3.3.2.2 states that the field data referred to by the commenter was collected in March 2007. Note that these counts were used solely to determine the peak traffic hour, and are different than the intersection turning movement counts taken at 91 intersections primarily in the spring 2007 (with some additional intersections counted in 2008 and 2009) and used to calibrate the existing conditions Synchro model. |
| I-40b-3                         | Please see Master Response #9 and Response to Comment 40b-2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

From: Mary Miles <[page364@earthlink.net](mailto:page364@earthlink.net)>  
Date: Thu, Dec 22, 2011 at 1:03 PM  
Subject: Re: Fw: IMMEDIATE DISCLOSURE REQUEST  
To: Michael Schwartz <[michael.schwartz@sfcta.org](mailto:michael.schwartz@sfcta.org)>

Mr. Schwartz:

Thank you for your response and attachments. I appreciate the provision of the reference materials on the disk yesterday afternoon, even if I won't have time to review that information before the deadline for public comment. Also, thanks again for providing the information you attach today, which I will review as time permits.

**I-40c-1**

You were unavailable from 12/14 - 12/16, and I therefore asked Ms. Cheng for the field count data. She told me on 12/16 that I should wait for your return on 12/19/11. It is now the day before your agency has said that public comment is due. So, yes, we do disagree that you have been available or that the instructions in the DEIS/DEIR document or anywhere else are clear on contact information.

The time for comment on the DEIS/DEIR is extraordinarily short for a project of this magnitude and a DEIR of this complexity and size. Many people are busy with other work commitments and 45 days (now 49 days) is inadequate time to comment on a large and complex DEIS/DEIR. Additionally, many people are away or have other types of commitments during the December holiday season, and for these reasons I have asked that the time for public comment be extended by at least 30 days. I can't think of any reason why urgency should be imposed on the public on this project and ask again for a time extension so that people can have the opportunity for meaningful public participation in the environmental review of this important project, as required under CEQA/NEPA. This is not intended as a personal criticism but as a general criticism and intended to serve both your agency and the public by drawing attention to this problem so that you may consider the possibility of providing a time extension on the deadline for comment.

**I-40c-2**

Sincerely,  
Mary Miles

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Mary Miles

Reviewer's  
Comment  
Number

Response

I-40c-1 Michael Schwartz was out of the office for two days during the public comment period. During those two days, information on how to reach the office manager (who had knowledge on the appropriate alternative contact for Van Ness BRT information) was left through an auto-reply on his email and the outgoing message on his voicemail. The commenter was able to obtain information during his absence from the office manager.

Public comment addressed to Rachel Hiatt, Michael Schwartz, or general Authority email addresses were all compiled as part of the public record.

I-40c-2 Local, state and federal guidelines/regulations were taken into account when establishing the circulation period. The document was circulated for 49 days, more than the 45 calendar days per NEPA/CEQA requirements (CEQ Regulation Sec. 1506.10c; 14 CCR § 15087d).

FROM:  
Mary Miles, Attorney at Law (SB #230395)  
for Coalition for Adequate Review  
364 Page St., #36  
San Francisco, CA 94102  
(415) 863-2310

TO:  
Van Ness BRT EIS/EIR  
San Francisco County Transportation Authority  
100 Van Ness Avenue, 26th Floor  
San Francisco, CA 94102  
vannessbrt@sfcta.org

Leslie Rogers, Region IX Administrator  
Federal Transit Administration  
U.S. Department of Transportation  
201 Mission Street, Suite 2210  
San Francisco, CA 94105

**BY E-MAIL AND U. S. MAIL**

DATE: December 23, 2011

**PUBLIC COMMENT ON DRAFT ENVIRONMENTAL IMPACT  
STATEMENT/ENVIRONMENTAL IMPACT REPORT (EIS/EIR) ON VAN NESS  
AVENUE BUS RAPID TRANSIT PROJECT**

This is public comment on the Draft EIS/EIR (“DEIR”) on the Van Ness Avenue Bus Rapid Transit Project (“BRT”).

The DEIR is dated “October 2011,” but in fact was not publicly released until Friday, November 4, 2011, in an e-mailed announcement that did not contain the DEIR. The November 4, 2011 e-mail stated a deadline date for comment on the DEIR of December 19, 2011, only 45 days after the e-mail, the minimum allowed under the California Environmental Quality Act (“CEQA”), (Cal. Pub.Res. Code [“PRC”] §§21000 *et seq.*)

The DEIR document itself was not readily available to the public by downloading due to its immense size. It was only available in CD/electronic format. The agency charged \$58 for a hard copy, a cost that precluded many from having access to the document in a usable format. Further, information referred to in the DEIR was not made available on request, including information necessary for impacts analysis such as field traffic counts. After several requests this commenter has not yet received the original source documents but only unattributed summaries.

Although the San Francisco Transportation Authority (“SFCTA”) extended that time by four days, until December 23, 2011, the time remains inadequate due to the size and complexity

I-40d-1

I-40d-2

I-40d-3  
*continued*

of the DEIR, the magnitude and importance of the Project, the unavailability of staff, and the failure to provide requested information. Although this commenter asked for documents referred to in the DEIR, that information was not provided with adequate time for review before the deadline for comment.

I-40d-3  
continued

Both the lack of public availability of a free hard copy and the inadequate public comment period deprived the public of meaningful participation in the environmental review process. The DEIR claims that “community” and “stakeholder” meetings were held, but within the legal requirements of CEQA and NEPA, these are irrelevant and meaningless. This Project is of regional, statewide, and nationwide significance, since it affects a State and United States Highway that carries thousands of travelers through San Francisco on Highway 101, which is also Van Ness Avenue.

Where the comment period is inadequate and the public is deprived of meaningful participation in the review process, the agency cannot claim in the future that the public or any individual failed to exhaust administrative remedies within the time for public comment, since the opportunity was not there. To give the public adequate opportunity, the public comment period for this DEIR should be extended to 90 days total.

For the above-stated reasons this Comment is necessarily incomplete.

The DEIR does not satisfy the legal requirements of CEQA<sup>1</sup> and other statutes and ordinances for reasons including but not limited to the following.

**1. The Lead Agency Has Not Acted with Objectivity.**

The DEIR aggressively promotes the Project and contains misleading information about its benefits, while failing to inform the public and decisionmakers of its severe impacts on the vast majority of travelers on this Federal Highway who travel by automobile. For example, the DEIR falsely and without supporting evidence claims that many residents along the affected area do not own cars. In any event, that claim is irrelevant since the users of the U.S. Highway 101/Van Ness Avenue are largely *not* residents of that area, but are using Van Ness Avenue and surrounding streets as a major roadway through the center of San Francisco and to and from the Civic Center, downtown, major employment hubs, and the freeway system. The number of travelers on Van Ness Avenue and nearby streets far exceeds the number of housing units in that area.

I-40d-4  
I-40d-5

The DEIR claims that transit ridership would increase “by 28 to 35 percent with BRT” and “more than half of the additional riders would be former drivers.” (S-6) The basis of that claim is unexplained and contrary to the admission on the next page of the DEIR that fewer than 6 percent of drivers would “switch modes to transit or change their travel time of day or destination” due to the Project’s severe impacts on travel on U.S. Highway 101, Van Ness Avenue. (S-7)

I-40d-6

Other parts of the DEIR also fail to identify the Project’s direct, indirect, and cumulative impacts on traffic, air quality, and parking. The document is legally inadequate and must be

I-40d-7  
continued

<sup>1</sup> Where this Comment refers to CEQA, it is also intended to refer to the similar provisions of NEPA unless otherwise stated.

corrected and recirculated to give the public accurate information and the opportunity for meaningful comment on the Project, bearing in mind that, “An EIR is a document of information not of advocacy.” (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 738)

I-40d-7  
continued

Further, the document cannot survive judicial scrutiny because the traffic impacts analysis lacks an accurate description of the Project and of existing conditions on Van Ness Avenue and nearby streets as required by both CEQA and NEPA, contains no legally adequate analysis of cumulative traffic impacts, and admits that it contains *no* proposed mitigation of the Project’s severe impacts on traffic. The analysis is therefore void and a nullity under the law.

I-40d-8

## 2. The Project Description Is Not Stable, Finite, and Accurate.

The DEIR describes the Project as “three build alternatives,” with two “options” for “Build Alternative 3,” and a “no Build alternative,” (S-4 to S-6) instead of a finite description, and therefore does not satisfy CEQA. (*County of Inyo v. City of Los Angeles* (1977) 72 Cal.App.3d 185, 193)

I-40d-9

There is no way with the “options” and compounded variables described that the public can understand what the Project is, its impacts, and any proposed mitigations or alternatives unless the DEIR describes the single, finite project that is proposed on Van Ness Avenue. (*Id.*) The public is not required to wait until *after* the close of comment for this critical information, as the DEIR demands. The failure to provide an accurate and finite Project description is an abuse of discretion under CEQA.

## 3. The Baseline Is Legally Defective and Invalidates the Impacts Analysis.

The DEIR fails to describe a legally adequate baseline description of the existing conditions in the Project area, the necessary information and beginning point for impacts analysis. The baseline is also flawed by the lack of data for its claims and conclusions.

I-40d-10  
continued

The 2007 traffic counts were only taken at five intersections on Van Ness Avenue. (DEIR 3-39) Additional counts were only included on one segment of Franklin Street and one segment of Gough Street. (DEIR, p. 3-39)<sup>2</sup> This is insufficient baseline data for any meaningful analysis of traffic in this large study area.

According to a “Vehicular Traffic Impact Analysis Technical Memorandum,” by CHS Consulting Group [“CHS Memo”], which was apparently used for the traffic impacts analysis in the DEIR, the BRT “traffic study area includes a total of 141 intersections,” but “Due to the large number of intersections in the traffic study area, the discussion of existing and future LOS focuses only on those operating at LOS E and F. The City and County of San Francisco has established LOS D as a threshold, so there is no need to present LOS for intersections operating

<sup>2</sup> “Greenwich and Filbert”: 38,281 daily; “Pacific and Broadway,” 36,487 daily; Geary and Post, 41,499 daily; “Hayes and Grove,” 42,910 daily; and “Market and Fell,” 44,499 daily. (DEIR, p.3-39) The DEIR also says that counts were taken on Gough Street “Ellis to Geary,” 27,007 daily; and Franklin Street Northbound, “Post to Sutter,” 30,901 daily. (DEIR, p.3-39)

at LOS D or better condition.” (CHS Memo, p.5.) The DEIR similarly states: “The Van Ness Avenue BRT Project traffic study area includes 139 intersections,” but that “Due to the large number of intersections in the traffic study area, the discussion of existing and future intersection and approach LOS focuses only on those signalized intersections or worst approaches at unsignalized intersections operating at LOS E and F. The City and County of San Francisco also use LOS D as a threshold, so signalized intersections or worst approach at unsignalized intersections operating at LOS E or F are assessed.” (DEIR, p.3-36)

I-40d-10  
continued

Both the CHS Memo and the DEIR are severely flawed by those statements, which illustrate the DEIR’s defective baseline. By restricting the analyses to selected intersections that are already congested, the Project’s traffic impacts are necessarily minimized. Not surprisingly, the DEIR incorrectly concludes that intersections already operating at LOS F will also operate at LOS F with the Project. However, the omission of baseline data and LOS analyses of intersections that now operate satisfactorily or better invalidates the DEIR as an informational document, nullifies the impacts analysis and is an abuse of discretion under CEQA. (See, e.g., *Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 184 Cal.4th 310, 321,328; *Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council* [“*Sunnyvale*”] (2010) 190 Cal.App.4th 1351; 1383, 1386, 1392) The DEIR was required to measure the actual traffic at the time the notice of preparation was published, September 23, 2007. (*Ibid.*; CEQA Guidelines §15125(a); DEIR, Appendix F) The impacts analysis must then compare the actual on-ground existing conditions at that time with the Project’s changes to determine both direct and cumulative impacts. Those existing conditions must include not just streets that already operate at LOS E and F, but also those that do not. The same baseline existing conditions must be used as the beginning point in the analysis of cumulative impacts.

I-40d-11

The baseline is also inadequate, because the Project proposes eliminating two traffic lanes on U.S. Highway 101, Van Ness Avenue fails to measure traffic at most key intersections on already-severely-congested streets where the DEIR says traffic will be diverted due to the Project’s significant impacts on traffic. The description of existing conditions must include measurements of traffic on the intersecting streets, not just on Van Ness. Further there is no measurement of traffic at intersections leading to areas of major congestion, such as streets in the Civic Center and the South Van Ness freeway ramps. These omissions are an informational defect that pervades the impacts analysis and fails to inform the public and decisionmakers about the Project’s impacts.

I-40d-12

The DEIR admits that the “Build” Alternatives eliminating *two traffic lanes on Van Ness Avenue* would reduce the “mixed-traffic capacity” along that highway by one-third. (DEIR, p.3-46.) However, the DEIR claims that of the 1/3 of travelers and freight haulers who are affected by the Project’s unmitigated delays, “approximately 29 percent...would change their travel patterns, including driving on other streets, shifting the trip to other times of day, or shifting to other modes, such as transit, walking, and bicycling.” (DEIR p.3-46) One third of the traffic on Van Ness would be 12,000 to 15,000 vehicles and trucks. (DEIR, p.3-39, traffic volumes) No evidence is provided for the speculative mode shift, and there is no analysis of the impacts of the diversion on the “five parallel streets” where the traffic is predicted to shift.

I-40d-13

The Project proposes BRT “stations,” meaning large bus stops, at the intersections of Van Ness at Mission Street, Market Street, McAllister Street, Eddy Street, O’Farrell Street, Myrtle

I-40d-14  
continued

Street, Geary Blvd., Sutter Street, Sacramento Street, Jackson Street, Pacific Avenue, Broadway, Green Street, and Union Street (DEIR, p.2-8), but there is no baseline description or analysis of the existing conditions and projected change in traffic due to pedestrians crossing Van Ness and side streets to get to and from those “stations” and the buses stopped at them. Further, nothing in the DEIR assures that buses will not leave the BRT lane and pass one another in traffic lanes, a common existing condition that will likely continue to contribute to even more congested, dangerous conditions with the Project.

I-40d-14  
continued

The DEIR’s failure to include traffic count data, including the dates the counts were made on all affected streets, and to do an LOS analysis at all affected intersections severely flaws the document’s informational purpose. That data is required as the baseline description of existing conditions for identifying the Project’s impacts on traffic.

I-40d-15

The DEIR claims that such counts were part of the LOS calculations, but there is no indication of the dates the counts were taken. (DEIR, p.3-1, 3-38) That basic information is necessary to satisfy CEQA and the San Francisco “*Transportation Impact Analysis Guidelines for Environmental Review*,” which require on-ground traffic counts to establish existing conditions, including “the date that the counts were actually taken,” “[c]opies of all counts used in the analysis,” and “[t]he LOS calculation sheets need to include the date and data used in the calculation was actually collected.” (DEIR, p.3-42; San Francisco Planning Department: *Transportation Impact Analysis Guidelines for Environmental Review*, Appendix B,-1-2.)

I-40d-16

The traffic measurements that the DEIR claims it made do not coincide with the intersections where it claims it analyzed LOS. If it did not measure traffic at the intersections analyzed, the DEIR fails to comply with basic requirements establishing the baseline for its analysis. (*Sunnyvale, supra*, 190 Cal.App.4th at p.1380-1381, 1392.) That baseline must describe actual existing conditions and not computer projections. (*Id.*)

For example, the DEIR claims it analyzed LOS cumulative traffic impacts at Gough/Green, Gough/Clay, Gough/Sacramento, Gough/Eddy, Gough/Hayes, Franklin/Pine, Franklin/O’Farrell, Franklin/Eddy, Franklin/McAllister, Franklin/Market, Van Ness/Pine, Otis/Mission/S. Van Ness, Duboce/Mission/Otis/US101 Off-Ramp (DEIR, pp. 3-53,3-61, 3-63, 3-67) However, there are no traffic counts for those intersections in the DEIR. (DEIR, p.3-39)

I-40d-17

We are told that “The two arterial roads to the west of Van Ness Avenue, Franklin and Gough streets, carry approximately 31,000 and 27,000 daily vehicles, respectively,” (DEIR p.3-38) with no supporting field counts or dates for those figures in the DEIR or any other document. This commenter made several requests for the traffic count sheets, receiving only unattributed summaries without the field data required by CEQA and by City’s *Transportation Impact Guidelines for Environmental Review*, which is cited as authority for the DEIR’s analysis.

Instead of actual counts, the LOS analysis refers to computer projections as the baseline for analyzing the Project’s traffic impacts (DEIR, p.3-45-47), an approach consistently rejected by courts. (*Sunnyvale, supra*, 190 Cal.App.4th at p.1380-1381.) This failure is highlighted in the DEIR’s LOS analysis where it refers to intersections that do not coincide with the areas where, instead of using the traffic counts it claims were collected in 2007, the DEIR uses a projection from “the SF-CHAMP model” for the year 2015, and/or uses a computer projection of traffic for

I-40d-18  
continued

the “No-Build Alternative” as a baseline, comparing that projection with projected traffic under the “Build Alternatives.” (DEIR, p.3-43, 46-47)

I-40d-18  
continued

The Project’s “Build Alternatives” also eliminate 13 left-turn lane pockets on Van Ness, and several right turn lanes, which the DEIR admits will cause additional slowing, circling, diversion, and spillover traffic. (DEIR, p.3-46.) However, there is no analysis of the Project’s direct and cumulative impacts on congestion caused by delayed turning and bottlenecks at the few intersections where turns may finally be made.

I-40d-19

#### 4. The DEIR Fails to Identify the Project’s Impacts.

Besides the defective traffic and transit analyses, the DEIR fails to analyze the Project’s impacts on air quality, noise, parking, community services, and growth inducement, instead reciting unsupported conclusions of no impacts.

The Project will obviously cause impacts on air quality, noise, parking, community services and growth inducement, since it admittedly causes severe impacts by worsening traffic congestion not only Van Ness Avenue but also nearby streets.

##### a. Traffic and Transit: There Is NO Legally Adequate Cumulative Impacts Analysis or Analysis of Bus Crowding.

The DEIR contains *no* analysis or identification of impacts on traffic and transit on cross streets that will be affected by the increased traffic caused by diverting at least 29% of traffic by the Project’s reduction of traffic capacity on U.S. Highway 101/Van Ness Avenue. (DEIR, pp.3-21 to 3-33) The DEIR thus fails to provide critical information on the Project’s impacts and is legally inadequate.

I-40d-20

The DEIR also fails to identify impacts of bus crowding. The DEIR admits that on Van Ness Avenue buses already “operate with crowded, but not crush conditions, which is contrary to some riders’ experiences,” and dismisses those important criticisms: “Because these loads are averaged over the peak hour, the differences between the data and anecdotal experience of crowded Van Ness Avenue buses may be explained by reliability issues...” (DEIR, p.3-20) Instead of addressing the severe crowding issue, the DEIR dismissively deflects the crowding problem to the irrelevant issue of delays in waiting for buses, concluding that “the average amount of delay per person along Van Ness Avenue...would stay the same” whether the BRT is built or not. (DEIR, p.3-24) The BRT provides no new buses or staffing.

I-40d-21

However, the crowding is *not* addressed anywhere in the DEIR. Transit studies conducted for the Market and Octavia Area Plan Project, which will add 10,000 new residents to the Project area for the Van Ness BRT, state that Muni lines in the Van Ness Corridor, and the Mission Street Corridor were already at or over peak hour capacity in 2004. (See, e.g., Market and Octavia Neighborhood Plan EIR at pp.4-195) The lack of quantified data, analysis and mitigation of crowding render the entire impacts analysis pointless, since the BRT presents no solutions. Indeed, the DEIR claims that ridership will *increase* by 28 to 35 percent with BRT” and “more than half of the additional riders would be former drivers.” (S-6) However, the Project fails to fund or accommodate that increase with a single new bus. There is no evidence that any new buses and staffing have been funded by SFCTA, MTA, or any other agency.

I-40d-22

There is no legally adequate analysis of the Project's cumulative impacts on traffic and transit. The required procedure for analyzing cumulative impacts under CEQA is described in the CEQA Guidelines (14 Cal.Code Regs. ["CEQA Guidelines"] §15130) There is no such analysis in the DEIR. Huge projects are already planned that will drastically affect travel in the Project area, including the Market and Octavia Area Plan (adding 10,000 new residents to the immediate area, and a cluster of 40-story high-rises at Van Ness and Market, the Mid-Market Plan, the CPMC plan, the Eastern Neighborhoods Plan, the new PUC and other government buildings and employment hubs in the Civic Center and Market Street areas, large residential structures planned and/or already in construction in the Project Area, and the increase in traffic due to population and employment growth. The failure to identify and analyze possible cumulative impacts is an abuse of discretion and a failure to proceed as required by CEQA/NEPA.

I-40d-23

Instead of analyzing cumulative impacts, the DEIR compares 2015 conditions under the "No-Build Alternative" with "projected traffic conditions in the long-term horizon Year 2035 for the "No Build Alternative and the three build alternatives," (DEIR, p.3-45) with the assumption that 29% of the existing traffic has been diverted from Van Ness Avenue to someplace else and that "some motorists wishing to make a left turn along Van Ness would alter behavior, including using a downstream or upstream left-turn opportunity or circulating around the block to reach their destination." (DEIR, p.3-46) Thus the cumulative analysis begins with a speculative reduction of 1/3 in the existing traffic volumes without analyzing where the traffic went or the Project's impacts on nearby streets from adding thousands of vehicles. (DEIR, p.3-7) The DEIR admits that vehicles will crowd the already-congested Franklin and Gough Streets, and will also increase traffic on Polk, Larkin, Hyde, and routes outside the "Van Ness Avenue corridor" that will become more "attractive" with the gridlock caused by the Project. (DEIR, pp.3-7 to 3-8)

I-40d-24

The DEIR admits that a large number of transit lines cross the Van Ness proposed BRT corridor, but has *no* analysis of the Project's impacts on those streets, which affect Muni Lines 1, 1AX, 1BX, 2, 3, 5, 6, 10, 14, 14L, 16X, 21, 30, 31, 31AX, 31BX, 38 (Geary), 38L, 38AX, 41, 45, 71, 71L, J, K, L, M, N, S, F, and C lines carrying hundreds of thousands of passengers, as well as Golden Gate Transit lines 10, 70, 80, 54, 72, 73, 76, 93, 97, and private shuttle bus services. The failure to identify, analyze and mitigate the impacts on cross traffic and cross transit violates CEQA.

#### **b. Air Quality**

The discussion of Air Quality section of the DEIR at pp. 4.10-1 to 4.10-20 is completely inadequate, since it contains *no* identification or analysis of the impacts of increased traffic congestion, which will surely cause more idling, circling, and spillover traffic, causing air quality impacts, nullifying the document's informational purpose and violating CEQA's mandate to mitigate these impacts. The conclusion of no impacts on air quality is clearly erroneous and unsupported.

I-40d-25

#### **b. Noise**

The Project will obviously lead to increased noise and vibration impacts on Van Ness Avenue and nearby streets that the DEIR fails to describe and analyze. There is no data in the DEIR showing any noise measurement or analysis on streets where the document says Van Ness

I-40d-26  
*continued*

traffic will be diverted, on any cross streets that will experience additional congestion from spillover and circling traffic, idling vehicles, including buses and trucks, and the DEIR therefore fails to comply with CEQA. Natural buffers such as vegetation in the median strip and parked vehicles will also be removed, with no analysis of those impacts, or of the cumulative impacts from increased traffic due to other large development projects in the Project area.

I-40d-26  
continued

**c. Visual Impacts/Historic Resources**

The Project calls for not just the elimination of two traffic lanes on U.S. Highway 101, but also the complete elimination of the center median on the full length of Van Ness to construct “BRT stations,” with huge bus stops either in the middle of Van Ness or on both sides of it, removing mature landscaping, thus converting the landscaped Avenue to a wider asphalt corridor up to eight lanes, marked by three to four (not just two) bus lanes at large stops, instead of the existing six-lane divided Avenue.

I-40d-27

The Project’s “Build Alternatives 3 and 4” remove *all* of the existing median landscaping on Van Ness Avenue (DEIR, p.4.4-34 to 35) including mature trees, to create incompatible large bus stop facilities. The Project also installs a large amount of additional visual clutter, including additional bus stop structures with advertising, no-turn signs, additional new higher poles with brighter street lights replacing historic streetlamps(DEIR, p.4.4-31), and other obtrusive objects that are incompatible with the existing conditions and visual character of the surroundings. (DEIR 4.4-21 to 4.5-30) There is no accurate illustration in the DEIR of the proposed new poles and streetlights that will replace the smaller ones that are of historic and aesthetic merit that the Project will remove. The simulations depicted in the DEIR are from long distances and do not accurately describe the full impacts of the proposed Project on visual, aesthetic, and historic resources. Nor does the DEIR show what the proposed large new bus stops will look like.

**d. Parking**

The Project proposes to remove hundreds of existing parking spaces on Van Ness, cross streets, and parallel streets, affecting commercial, residential, and institutional uses, as well as loading throughout the area. The DEIR fails to propose any effective mitigations for those impacts. The DEIR also fails to analyze the cumulative impacts from other projects that will remove parking spaces or that fail to provide adequate parking, such as the Market and Octavia project (eliminating 5,640 parking spaces in the Project area and requiring no parking for 10,000 new residents), the San Francisco Bicycle Plan (removing more than 2,000 street parking spaces), and other major proposed developments in the area. None of these cumulative impacts are even mentioned, much less analyzed in the DEIR.

I-40d-28

**e. Land Use, Including Commercial and Industrial Transportation**

The DEIR’s land use section also fails to comply with CEQA, since it does not identify or propose mitigations for the Project’s impacts on land uses caused by increased congestion, noise, and lack of parking. Highway 101 is a major traffic, transit, and commercial freight-hauling corridor. The Project’s inevitable impacts on traffic will cause serious delays and congestion for all these uses. The diversion of traffic to nearby streets that are already congested will cause additional congestion and noise on those and nearby cross streets, including residential, commercial, and institutional areas. These land use impacts are not analyzed in the DEIR.

I-40d-29

There is no legally adequate cumulative impacts analysis of the Project's land use impacts. Instead, the DEIR suggests that if the Project is consistent with the San Francisco General Plan, it need not analyze and mitigate land use impacts, a notion consistently rejected by courts.

I-40d-30

Furthermore, even if it were relevant to the requirement of identifying and mitigating the Project's impacts on land use, the San Francisco General Plan is itself defective, since it contains no legally adequate Land Use element or Housing element in violation of the California Planning and Zoning Law. (Government Code, §§65300 *et seq.*)

**f. Growth Inducement**

The DEIR improperly dismisses without support the Project's growth inducement impacts. For example, the BRT has been used as a catch-all excuse and claim of "mitigation" of transportation impacts in a number of huge development projects, such as the Market and Octavia project, which will introduce 10,000 new residents to the Project area without providing parking or any mitigation of transportation impacts. Thus, the analysis and cumulative impacts analysis in this DEIR must take into account the growth from other development projects, instead of falsely claiming that the Project "would not lead to unplanned growth in the Van Ness Avenue corridor or larger region" and "would support planned growth and the planning goals of the City." (DEIR, p.4.3-2)

I-40d-31

**g. Emergency Services**

Emergency services will inevitably be affected by the increased congestion on Van Ness and nearby streets and cross streets but are unaddressed

I-40d-32

**5. The DEIR Fails to Propose Mitigations of the Project's Impacts.**

The DEIR (S-9) announces that "The City may also choose not to mitigate traffic impacts." This plainly violates CEQA, which requires effective mitigation of each of the Project's impacts, including descriptions of all mitigations including those found infeasible, and analyses of their feasibility, all supported by substantial evidence already in the administrative record.

I-40d-33  
*continued*

Under CEQA, mitigation includes "Avoiding the impact altogether by not taking a certain action or parts of an action" and "Minimizing impacts by limiting the degree or magnitude of the action and its implementation." (CEQA Guidelines §15370) The DEIR must propose effective mitigation measures for each identified significant impact, and their effectiveness must be supported by substantial evidence. (See, *e.g.*, *Woodward Park Homeowners Association, Inc. v. City of Fresno* (2007) 150 Cal.App.4th 683, 724.) The DEIR's feasibility and infeasibility analyses must also be supported by substantial evidence, which the DEIR also fails to do. (*Lincoln Place Tenants Association v. City of Los Angeles* (2007) 167 Cal.App.4th 425, 449)

The DEIR fails to propose effective mitigations of even the few identified traffic impacts in its defective analysis, admitting that they are not effective and announcing without support that they are "infeasible." (DEIR, p.5-13) It is certainly feasible to minimize the Project's impacts by not taking the action or parts of it. (CEQA Guidelines, §15370)

The DEIR announces that “No mitigation is recommended” for the Project’s traffic impacts on Gough Street, Franklin Street, Mission/South Van Ness Avenue, and for any of its identified cumulative impacts. (DEIR p.7-16) The DEIR also proposes no effective mitigation for the Project’s impacts on Van Ness, and its impacts on nearby streets in plain violation of CEQA.

I-40d-33  
continued

The DEIR also fails to propose effective mitigations for direct, indirect, and cumulative impacts on air quality, noise, land use, parking, and emergency services, since it does not correctly identify and analyze those impacts.

I-40d-34

**6. The Public Has Been Deprived of a Meaningful Role in Proceedings on the DEIR.**

The process is compromised by the lack of objectivity of the lead agency, which advocates for the Project instead of presenting neutral information about the Project’s impacts and proposing effective mitigations for them.

The proposed process of approval is entirely by unelected bodies, which makes the process unaccountable. The EIR is not a good faith attempt at objectively informing the public, since the SFCTA is the Project sponsor, the lead agency for CEQA purposes, the environmental reviewing agency, and the principal decisionmaking body. There is no provision for the public to appeal the decisions of the SFCTA Board or the MTA Board to an elected decisionmaking body. Thus, the procedural mechanisms begin and end with Project proponents, not with objective decisionmaking and providing objective information to the public.

I-40d-35

Further, as noted, the short time for public comment and the unavailability of documents and the DEIR itself in a usable format, restrict the opportunity for public participation in the environmental review process. Community “outreach” confabs are irrelevant to the environmental review of this important Project and to the procedures required by CEQA and NEPA, since the relevant public comment must be on the environmental review, *i.e.*, the DEIR, not opinions expressed in community meetings on the Project. The Project affects travel in the entire City, region, and state and requires serious analysis and serious proposed mitigations.

DATED: December 23, 2011

SIGNED:

  
Mary Miles

**Individuals' Comments on the Van Ness Avenue BRT Project DEIS/R**

Reviewer: Mary Miles

| Reviewer's<br>Comment<br>Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-40d-1                         | <p>The Federal Transit Administration signed the document during the last week of October and the NOA was posted during the first week of November. See response to comment 40c-2 regarding the comment period.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| I-40d-2                         | <p>CEQA Guidelines Section 15087 requires public agencies to make copies of the draft EIR available by furnishing copies to the public library and having copies in the offices of the Lead Agency. The project followed State of California Public Records Act provisions regarding charging for the cost of reproduction of public documents. An electronic version of the document was also made available without charge on the <a href="http://www.vanessbrt.org">www.vanessbrt.org</a> website and was readable in both Adobe's free Acrobat Reader and Apple's free Preview program. Physical copies of the document were made available at multiple libraries, the Authority and SFMTA offices, and at the San Francisco Planning Department.</p> <p>All subsequent documents requested were made available to the commenter within a reasonable amount of time from original requests. Please see Response to Comment 40b-2.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| I-40d-3                         | <p>Please see Response to Comment 40c-2 regarding the draft EIS/EIR comment period, and Response to Comment 40d-2 regarding how the Draft EIS/EIR was made available to the public and efforts made to provide Draft EIS/EIR background documents to commenter.</p> <p>Meetings with stakeholder groups are not required under CEQA and NEPA; however these meetings were designed to share information about the project and encourage feedback from the public about the draft document and to elicit preferences for a locally preferred alternative.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| I-40d-4                         | <p>The document is a joint Draft EIS/EIR. Following FTA guidance, the document must show how the alternatives meet the project Purpose and Need. For this reason, the project must include information on the project performance. At the same time, the project adequately discloses environmental impacts, pursuant to both NEPA and CEQA guidance.</p> <p>Section I.3.2.I, Transit Performance Needs, of the Draft EIS/EIR states that "approximately 46 percent of households in the Van Ness Avenue corridor do not own cars, compared with 29 percent citywide (SFCTA, 2006)." The statistic is provided in the Project Purpose and Need chapter of the Draft EIS/EIR to support the need for transit improvements in the Van Ness corridor given the large number of households that are dependent on transit and other alternative transportation modes and to indicate the potential use of the BRT for people with destinations on or near Van Ness Avenue. The cited source is the Authority's 2006 BRT Feasibility Study, which in turn cites the Bay Area Travel Survey and Census 2000 data.</p> <p>The Van Ness corridor serves high volumes of both regional and local trips, as discussed in Section 3.I.I.I. Most private vehicle trips on Van Ness Avenue are local intra-San Francisco trips, not regional trips. Nearly 600,000 trips are made to, from, or within the neighborhoods surrounding Van Ness Avenue daily, of which most are local, intra-San Francisco, trips (Source: SF CHAMP). Twenty percent of trips to, from, or within the corridor are by transit, while walking and bicycling account for another 26%. On Van Ness Avenue itself, about 29% of all trips passing the average screenline are on transit (see</p> |

Table 3.I.-4 of the EIS/EIR; Source: SF-CHAMP).

Using the SF-CHAMP model, the Draft EIS/EIR indicates that a minority of trips on Van Ness Avenue have an origin or destination outside of San Francisco while a very small fraction of trips (<1%) are “through trips” with both an origin and a destination outside of San Francisco.

- I-40d-5 Please see response to comment 40d-4, above.
- I-40d-6 Please see response to comment I-38-10. The text on page S-6 as well as Section 3.1.2.2 has been revised to include more conditional language: “up to 50% of the new transit riders could be former drivers.”
- I-40d-7 The Draft EIS/EIR analyzed direct and indirect impacts on the environmental factors mentioned, in Sections 3.3, 4.3, 4.10, and 4.2, respectively. Cumulative impacts for all affected environmental factors are discussed in Chapter 5.
- I-40d-8 The traffic analysis describes and analyzes existing conditions as well as the proposed project, in Section 3.3. Potential mitigations are also described in section 3.3.
- I-40d-9 NEPA requires federal agencies to evaluate all reasonable alternatives or a range of reasonable alternatives in enough detail so that a reader can compare and contrast the environmental effects. It is common practice to analyze multiple project alternatives in a NEPA document. A preferred project alternative, referred to as the Locally Preferred Alternative (LPA) is selected based on the analysis presented in the Draft EIS/EIR and the public and agency comments received which are factors considered in an alternatives analysis process intended to identify the LPA . CEQA encourages the use of joint environmental documents. (CEQA Guidelines Section 15226; see also 15170).

The Draft EIS/EIR for the Van Ness Avenue BRT presented three build alternatives (Build Alternative 2, Build Alternative 3, and Build Alternative 4) and one No Build Alternative (see Section 2.2 Project Alternatives). The description of each project alternative, including elements common to all, constitutes the project description pursuant to CEQA and NEPA. The project description is consistently presented throughout this Draft EIS/EIR.

The EIS/EIR also presents a design option called Design Option B that would eliminate all but one northbound left turn (at Lombard Street) and all but one southbound left turn (at Broadway Street). Design Option B is being considered under Build Alternatives 3 and 4, and is presented in Sections 2.2.2 and 2.2.2.3. Table S-I: Summary of Environmental Impacts and Table 7-2 Summary of Environmental Impacts under CEQA encapsulate the impacts of each build alternative, including Build Alternative 3 and 4 with and without Design Option B. The environmental impacts of the project that would result under Design Option B are described in more detail in Chapters 4, 5, and 7.

The LPA is Center Lane BRT with Right Side Boarding/Single Median and Limited Left Turns, a refinement of the center alternatives (build alternatives 3 and 4 with design option B) presented in the Draft EIS/EIR, as explained in Chapter 10 of the Final EIS/EIR. Under the LPA, BRT vehicles would operate alongside the median for most of the corridor, similar to Build Alternative 4. At station locations, the BRT runningway would transition to the center of the roadway, allowing for right side loading using standard vehicles, similar to Build Alternative 3. See Section 10.3 of the Final EIS/EIR for a full description of the LPA.

- I-40d-10 Please see Master Response #9 for information on what traffic field data were collected for the traffic analysis, why they were collected and how that data were used in the traffic impact analysis. As explained in Master Responses #8 and #9, calculation of the EIS/EIR existing traffic was not based simply on traffic counts at the 7 intersections referenced in the comment. The EIS/EIR language has been clarified to describe the source of traffic data used in the analysis in more detail.

The EIS/EIR and the Vehicular Traffic Analysis Technical Memorandum (CHS, 2013) have been corrected, where needed, to show that there are 139 intersections in the traffic study area. The Vehicular

Traffic Analysis Technical Memorandum and the EIS/EIR statements cited by commenter, explaining that the LOS analysis presented in both of those documents provided the results of the model analysis for those intersections showing LOS E or F conditions but not other intersections does not mean that the other intersections in the study area were not analyzed. The model analysis included all 139 intersections in the study area. The analysis showed better than LOS E or F conditions at all other intersections in the study area (e.g. LOS A-D conditions). Figures 3.3-2 through 3.3-10 show which of the 139 intersections in the study area would operate at LOS A-D, LOS E or LOS F for 2007 existing conditions and for each project alternative, including the No Build Alternative, in 2015 and 2035.

I-40d-11

Please see Master Response 8 for a description of how the traffic analysis was conducted. Please note that the twenty-four (24)-hour traffic counts collected in March 2007 at five locations along Van Ness Avenue and one location each along Franklin and Gough streets, as described in Master Comment 8, are different than the turning movement counts taken at 90 intersections. The 24-hour counts were taken to determine the peak hour to perform the intersection LOS analysis (as shown in Table 3.3.I of the EIS/EIR), and not to determine existing LOS as the commenter suggests. The LOS analysis, based on outputs of the existing conditions Synchro model which was calibrated using the PM peak turning movement traffic counts at 90 intersections, showed that all of the intersections in the traffic study area, except for the intersection of Gough Street and Green Street, operated at LOS D or better conditions in 2007 (see Section 3.3.2.4 and Figure 3.3-2). This method is consistent with standard traffic engineering practice to evaluate LOS conditions for both existing conditions and future year baselines in NEPA and CEQA.

The EIS/EIR presents abundant data about traffic conditions during three different years. First, it presents 2007 existing conditions based on the data as explained in Master Responses #8 and #9. The project will not be considered for approval until 2013 and is not expected to open, if approved, before 2015. Therefore, to assure that the analysis of conditions with the project are sufficiently conservative and based on conditions that will exist when the project begins operations, the analysis added to 2007 existing conditions the degree of traffic growth expected to occur between 2007 and 2015, based on employment and population growth using ABAG 2007 projections. Master Response #8 explains regulatory requirements related to the use of ABAG projections.

Commenter states that the analysis should have used traffic conditions at the time the notice of preparation was published, September 23, 2007, as the baseline against which impacts of the project should have been compared. However, such an analysis would have underestimated the traffic impacts of the project because it would not have taken into account the growth in traffic in the study area between 2007, the year the NOI/NOP was published, and the year the project is expected to actually start operating. The EIS/EIR also considered cumulative conditions by adding to 2007 existing conditions all traffic from all cumulative growth in the area expected to occur between 2007 and 2035. It then compared conditions in 2035 without the project and with the project for each project alternative. The analytical approach used in the EIS/EIR is consistent with the approach upheld in *City of Sunnyvale v. Pfeiffer* (2011) 200 Cal.App.4<sup>th</sup> 1552.

I-40d-12

The Van Ness Avenue corridor study area is defined as Van Ness Avenue and five parallel streets, including Gough and Franklin streets to the west and Polk, Larkin, and Hyde streets to the east. There were 139 intersections in the study area analyzed for the 2007 existing conditions scenario (Section 3.3.2), including traffic on intersecting streets from Lombard on the north to Mission-Duboce on the south (see Figure 3.3-1). Thus the study area included the Civic Center area. The South Van Ness Avenue freeway on-ramp was not included in the existing conditions analysis as it would not be subject to any change in traffic volumes. The project does not cause an increase in traffic at the on-ramp, instead, it causes some traffic diversions off of Van Ness Avenue before traffic reaches the South Van Ness Avenue freeway on-ramp. The project also does not decrease the capacity of the South Van Ness Avenue freeway on-ramp.

I-40d-13

Please see Master Response #8 for an overview of how traffic diversion was analyzed. Chapter 3.3 of the

EIS/EIR and the Vehicular Traffic Analysis Technical Memorandum provide additional details on this analysis. Chapter 3.3 of the EIS/EIR summarizes the calculation of traffic impacts on the parallel streets based on volumes that include the diversions.

I-40d-14 The pedestrian signals at all intersections would be pre-timed, rather than actuated by pedestrians. Thus, the signal timing (which the traffic models rely upon) would not change based on any increases or decreases in pedestrian volumes. The existing conditions Synrho traffic model accounts for delay related to pedestrian activity, including passenger crossings at station locations.

The greatest increase in boardings/alightings under the LPA would be at the Geary/O'Farrell station, with up to 920 additional boardings and alightings per hour in 2035 versus existing conditions (spread out across two intersections). This would create an average of up to 11-12 additional pedestrians per light cycle, on average, with some needing to cross to or from the east side of Van Ness Avenue and the others crossing to or from the west side. Most other stations (other than Market Street) would have a significantly lower increase in passenger activity versus existing conditions and the No Build Alternative. A Synrho sensitivity analysis indicates that increased pedestrian activity in connection with these stations would not change intersection LOS or the traffic impact findings. The analysis considers year 2035 conditions under the LPA and finds that intersection delay would be increased by less than one second per vehicle at all intersections except the intersection of Geary Street/Van Ness Avenue where the delay would be 1.3 seconds per vehicle. Geary Street/Van Ness Avenue includes the highest potential for pedestrian conflicts for all permitted turning movements. The traffic conditions at Geary Street/Van Ness Avenue would continue to operate at LOS C with consideration of pedestrian delay impacts. The analysis of pedestrian activity at the Geary/O'Farrell station is provided in Appendix 15 (Pedestrian Volume Sensitivity Analysis) of the Van Ness BRT Vehicular Traffic Analysis Technical Memorandum (CHS, 2013).

By reducing congestion and loading delays through the implementation of BRT, the project is designed to reduce the need for vehicles to pass each other. The project does not anticipate the need for vehicles to pass each other except in the event of mechanical failure or emergency. For the LPA, buses would be able to pass each other on the left at station locations if needed, meaning they would not need to enter into mixed flow traffic. In addition, when there is a mechanical failure or emergency under existing conditions, the failed vehicle would block one of the three lanes on Van Ness Avenue – leaving only two mixed flow lanes, similar to BRT conditions. For the above reasons, passing associated with BRT operations would not impact traffic congestion beyond what is already accounted for in the traffic operations models. As noted in the EIS/EIR (Section 10.2.4.1) passing outside the BRT lanes on the right under mechanical failure and emergency situations for the center alternatives (including the LPA) would require special operator training to ensure safety.

I-40d-15 Please see Response to Comment 40d-10.

I-40d-16 Please see Response to Comment 40d-10 and Master Responses #8 and #9.

I-40d-17 Please see Response to Comment 40 b-2.

I-40d-18 Please see Responses to Comments 40d-10 and 40d-11.

I-40d-19 See Master Response #8 for a description of the approach to analyzing traffic diversion. Detailed information on the effect of eliminating left turn lanes is available in the Vehicular Traffic Analysis Technical Memorandum (CHS, 2013), which documents how any increased concentration of left turns at remaining intersections was considered. See also Master Response #9. All of the Synrho models incorporate the traffic volumes and operations of reassigned left turning vehicles. The resulting LOS impacts account for any delays caused by diverted traffic and reassignment of left turns.

I-40d-20 In response to comment, the project team first analyzed the cross-transit delays attributable to the project using a VISSIM microsimulation model. The results are presented in Section 3.2.2.3. Outputs from the model indicate that in 2015, buses crossing Van Ness Avenue would only experience an increase in delay

in crossing Van Ness by an average of 6 seconds for the LPA versus the No Build Alternative.

To determine if the project causes a significant transit delay impact, cross-transit delay was calculated by determining 1) changes in mixed-traffic delay, 2) changes in dwell times due to increased boardings, and 3) changes in time to pull out from stops due to increased traffic delays. The analysis indicates that no route on the SFMTA rapid network that crosses Van Ness Avenue BRT would have an increase in mixed traffic delay and dwell time delay across the traffic study area of more than 60 seconds with the implementation of BRT when compared with the No Build alternative in 2035. For this analysis, Year 2035 with Design Option B and the LPA was used because it represents the largest increase in ridership and the largest increase in traffic delays (see Section 3.3). The one cross route with greater than a 60 second increase in mixed traffic and dwell time delay during the PM peak hour with the implementation of BRT would be the 31 inbound. The delay for this route in 2035 would increase by just over 3 minutes (190 seconds) with the implementation of BRT. This is nearly 3 minutes less than the threshold established by the San Francisco Planning Department (1/2 of the 12 minute headway or 6 minutes) that would create a potentially significant impact. Average pullout time delay would be 5 seconds, significantly less than the delay required for there to be a significant impact for the 31 inbound (more than a minute). For further detail, please see Appendix 3 of the Van Ness BRT Vehicular Traffic Analysis technical Memorandum, CHS, 2013.

The Van Ness BRT would not have transit signal priority at the cross streets carrying the most significant number of transit vehicles -- Market Street and Geary/O'Farrell. Discussion of cross transit delay has been added to the Final EIS/EIR in Section 3.2.

I-40d-21

Although the crowding analysis demonstrates that in existing conditions there is adequate capacity on both lines over the peak hour to meet Muni's operating standards, poor reliability can result in crush loads on individual buses. As noted in Section 3.1.2.3, poor reliability explains crowded conditions on individual buses because variability in headways between buses results in variability in the number of passengers boarding each bus. For example, if buses are scheduled to run 8 minutes apart but one is delayed and runs 12 minutes behind the preceding bus, approximately 50 percent more passengers than average are likely to accumulate at stops along the route and attempt to board the bus, resulting in overcrowded conditions on that vehicle. If the following bus is just 4 minutes behind the delayed bus, it will likely have only half the average passenger load. Improving transit reliability reduces variability in passenger loads, thereby reducing the incidence of overcrowding experienced by passengers on individual buses.

Chapter 3.2 (Pg 3-22) of the Draft EIS/EIR explains the methodology for calculating transit ridership. This involves using 2007 Automatic Passenger Counter (APC) data collected by SFMTA and applying SF-CHAMP growth factors to determine future ridership. The crowding analysis divides the hourly ridership by the amount of capacity available on the buses (i.e., number of buses times the amount of space on each bus).

Consistent with SFMTA guidelines and City transit thresholds, the Draft EIS/EIR analyzed transit crowding during the peak hour; Due to the inconsistency of transit boardings at exact (i.e., to the minute) time of day on a daily basis, and due to the relatively high frequency of buses on Van Ness Avenue, it is not possible to analyze the average loads on a particular bus run. As explained in the Draft EIS/EIR there is enough overall capacity to accommodate passengers during the peak hour, but the lack of reliability means that transit riders sometimes wait a significant amount of time for a bus, resulting in bus bunching. When bunching occurs, the vehicles are significantly more crowded. The project is proposing to improve this condition by making the buses more reliable, with more even spacing, resulting in less crowding in particular instances.

The existing load factors collected from APC in 2007 are presented in Table 3.2-5 of the Draft EIS/EIR. These data are more recent than data referenced in the Market and Octavia Area Plan EIR, which used data from 2004 (Market and Octavia Neighborhood Plan EIR, 2007, Volume II, page 4-205) As shown in the table, average northbound passenger load factors over the PM peak period on

Muni routes 47, 49, and 19 are between 0.52 and 0.71, meaning passenger loads of 52% to 71% of capacity, at the maximum load points for each route. These loads do not exceed Muni's load factor threshold of 0.85. Table 3.2-11 shows the projected load factors in 2015 with and without BRT, all of which would remain below 0.85. With BRT, the fleet replacement is expected to increase the transit capacity of the corridor by upgrading the 47 line from 40-foot to 60-foot motorcoaches, which help to offset the increase in ridership anticipated as part of the project. By 2035 (which takes into account residential and employment growth anticipated for the area, including anticipated development projects in within Market and Octavia Area Plan study area), load factors are expected to exceed 0.85 with Center BRT, as shown in Table 3.2-12. Mitigation M-TR-1, which would add one additional vehicle each to routes 47 and 49, is proposed in 2035 to reduce crowding to below the 0.85 standard. As explained in Section 3.2.4, this reduction in headways could be possible with no additional operating costs due to the expected travel time savings forecast in that horizon year. See Section 9-4 for additional information on the project's expected operating cost savings.

I-40d-22 Please see response to Comment # 40d-21. Part of the BRT capital project cost shown in Chapter 9 of the Draft EIS/EIR includes the cost to expand the existing 40 foot motorcoaches currently serving the 47 route to 60 foot motorcoaches. This would create additional capacity to help offset the increase in ridership.

I-40d-23 The Draft EIS/EIR includes a cumulative traffic impact analysis consistent with CEQA Guidelines Section 15130 summary of projections approach. The SF-Champ model, used to project expected 2035 cumulative traffic conditions, incorporates projected land use growth using ABAG 2007 projections, which were used in the most recently adopted Regional Transportation Plan, Transportation 2035, for which an EIR was prepared. As explained in Master Response #8, the San Francisco Planning Department allocates ABAG's employment and population projections within the city based on anticipated development in San Francisco. Known developments within the Market and Octavia Area Plan study area, the CPMC project, developments in the Eastern Neighborhoods Plan study area, and other approved, planned, and potential developments are accounted for through the ABAG 2007 projections allocated citywide by the San Francisco Planning Department For further detail on land use allocation, please see Appendix 2 of the Van Ness BRT Vehicular Traffic Analysis technical Memorandum, CHS, 2013.

Further, traffic volumes for the intersections in the vicinity of the proposed CPMC hospital and medical office building were modified to reflect the projected vehicle trip generation for these two buildings in the CPMC EIR for the 2035 build alternatives and manually adjusted for reasonableness. Traffic operations analysis for existing and future year analyses used a SYNCHRO operations model as explained in Master Response #9

Further information regarding the relationship of the Market-Octavia Plan to the project is discussed in response to comment 40d-31.

I-40d-24 See Master Comment #8 on the approach to analyzing traffic diversions and Master Response #9 on how traffic impacts based on those diversions were calculated. Assumptions and traffic volumes under each scenario are further discussed in the Vehicular Traffic Analysis Technical Memorandum. The EIS/EIR 2035 No Build Alternative considers 2035 cumulative traffic conditions without the project but with projected traffic growth through 2035 due to population and employment increases using the ABAG 2007 Projections. The EIS/EIR compares the 2035 No Build Alternative to 2035 cumulative condition with the project effects added for each of the other project alternatives. See EIS/EIR Section 3.3.3.

With regard to the commenter's concern regarding the analysis of transit lines that cross the Van Ness proposed BRT corridor, the traffic analysis evaluated project effects on transit lines that cross the corridor. For more information, see the response to Comment 40d-20.

I-40d-25 Air quality impacts from localized air pollution and toxic air contaminants are described in Draft EIS/EIR Section 4.10.3.3. The Draft EIS/EIR concluded that the project would not result in significant air quality impacts from these effects. Refer to Master Response #10 for a discussion of localized carbon monoxide, nitrogen dioxide, and particulate matter concentrations related to increased traffic on streets parallel to Van Ness Avenue, where the project is projected to cause increased congestion. The proposed project would not increase congestion on Van Ness Avenue. In response to comments, the analysis of these effects has been augmented. Master Response #10 includes additional analysis to support the EIS/EIR conclusion that the project would not cause significant air quality impacts associated with localized pollution concentrations.

I-40d-26 Please see Master Response #11. As documented in the Noise Study Report, noise-sensitive land uses (receivers) were analyzed for existing conditions (which takes into account the implementation of Octavia Boulevard) along and between Franklin and Gough streets, including primarily residential buildings as well as schools, churches, hotels, and two small museums (see Section 4.11.4). Franklin and Gough streets are expected to attract more of the traffic that will divert from Van Ness Avenue with the BRT than any other routes; worst-case traffic noise levels were calculated on these streets using traffic volumes representing LOS C conditions (loudest speed for noise creation) during the highest volume hour (see Section 4.11.5.2). Along segments of these two roadways paralleling Van Ness Avenue, future traffic noise levels under the build alternatives are predicted to be zero to 1.5 dB higher than future no-project noise levels and, relative to existing traffic noise levels, future project traffic noise levels would increase by zero to 2.2 dB; typically, a noise level change of 3 dB or less is not noticeable (see Section 4.11.5.2).

The project noise study also concluded that the potential for vibration impact from rubber-tire-fitted vehicles, such as those used in BRT projects, can be reasonably dismissed (see Section 4.11.5.3).

Regarding the noise attenuation effect of parked cars or vegetation, in order for a noise barrier to be effective, it must be solid with no gaps. Even when parking spaces are heavily utilized, gaps between parked vehicles and reduced barrier attenuation over automobile hoods, trunks, pickup beds, etc. would result in negligible insertion loss at the nearest noise-sensitive receivers. Furthermore, while legal parking spaces along Van Ness Avenue are often substantially occupied, parking utilization is not 100 percent 24 hours per day, so larger gaps between parked vehicles can appear from time to time. In addition, there are numerous gaps between legal locations for sustained parking, e.g., intersections, bus turnouts, driveways, loading-only zones, and other restricted zones. Also, existing vegetation in the Van Ness corridor is not of a density to noticeably affect ambient noise.

Regarding the comment about cumulative analysis, the noise analysis assesses cumulative noise impacts along both Van Ness Avenue and diversion streets (Franklin and Gough streets). The cumulative analysis along Van Ness Avenue is summarized in the Cumulative Noise and Increase in Cumulative Noise columns of EIS/EIR Tables 4.11-4 and 4.11-5. The cumulative analysis along diversion streets is embodied in the predicted increase in traffic noise levels under future with project conditions relative to existing conditions, presented under heading 4.11.4.2 of the EIS/EIR. All of these cumulative assessments reflect future cumulative changes in traffic demand along the analyzed streets due to factors such as forecast changes in population and employment as well as the proposed project. See Section 3.3.1 (Traffic Evaluation Methodology) of the EIS/EIR for further detail.

As documented in the Noise Study Report, the noise analysis followed procedures in the Federal Highway Administration document, FHWA-RD-77-108, which provides foundations and basic equations for calculating traffic noise levels. The main variables in calculating traffic noise are traffic volumes, traffic speeds, and distances between the traffic lanes and noise sensitive receivers. When traffic from Van Ness will be diverted to Franklin and Gough, the only variable will be traffic volumes because the speeds and distances from the noise sensitive receivers will not be changed. Therefore, traffic related noise increases can be calculated using the ratios of the traffic volumes of the existing and project as well as no build and project.

Because there were no planned project related changes to the diversion streets and the only change was an

anticipated increase in traffic volumes, it was concluded that noise measurements would not be necessary and project related impacts could be adequately identified by modeling. Results of the predictions showed that traffic noise increases would be below the significance threshold.

Please see Master Response #11 for additional discussion of the noise and vibration analysis.

I-40d-27

Not all of the build alternatives would eliminate the existing median and all build alternatives, including the LPA, provide for rebuilding some median and landscaping, not all of the build alternatives would eliminate the existing median, as explained in Section 4.4.3.4. Build Alternative 2 would not eliminate the existing median on any block of Van Ness Avenue, and would increase the median width at locations where existing left-turn pockets would be removed. Build Alternative 4 would require reconstruction of the median at proposed station locations, and would maintain much of the existing median throughout the remainder of the corridor (including existing trees and landscaping). Build Alternative 3 would require reconstruction of the existing median throughout the corridor, which is anticipated to require removal of all existing trees and landscaping. The LPA would require reconstruction of the existing median along each block with a proposed station, which is anticipated to require removal of all existing trees and landscaping along blocks with stations. Appendix A of the EIS/EIR provides plan drawings, showing median widths, for the entire length of each build alternative and LPA.

Chapter 2 shows typical cross sections for existing conditions and each of the build alternatives. The BRT would not result in any additional lanes beyond existing conditions, and in areas with removed left turns pockets, would result in fewer lanes. Buses would continue to occupy two lanes, as in existing conditions; however, these lanes would now be exclusively used by transit vehicles.

Van Ness Avenue currently has bus stops with advertisements; as a major traffic thoroughfare, there is already significant signage. The project proposes to remove six bus stops, thus reducing some of the clutter.

Visual simulations are presented in Figures 4.4-8 through 4.4-11 depicting each of the build alternatives, and the LPA (Figure 4.4-11), at three different locations along Van Ness Avenue, including the McAllister Street/Van Ness Avenue intersection located within the Civic Center Historic District. An existing condition photo is also presented in each figure for comparison purposes. These simulations show an example of a feasible replacement OCS pole/lighting network design that is the height required to support the BRT build alternatives, including the LPA, and a BRT station design of the proposed height and size. The McAllister Street/Van Ness Avenue intersection depicted in Figures 4.4-10 and 4.4-11 provides a simulation of the project in the context of City Hall and other buildings in the Civic Center Historic District. Section 4.4.4 identifies mitigation measures to ensure that landscape plans, BRT stations, street lights/OCS poles, and project signage will be visually compatible with all City design-related policies. Further, structures and landscaping will be subject to design review by the San Francisco Arts Commission and, in the Civic Center Historic District, the Historic Preservation Commission. There would be no adverse effect to historic resources as a result of implementation of Van Ness BRT. The State Historic Preservation Officer concurred with this finding (see Appendix C of the Final EIS/EIR).

I-40d-28

Parking losses are discussed in the EIS/EIR in Section 3.5. Cumulative parking losses are discussed in Section 5.5.2. Community impacts of parking removal, including impacts to local businesses, are discussed in Section 4.2.4.2. Cumulative community impacts, including cumulative community impacts of parking removal, are discussed in Section 5.5.3. Impacts to parking during construction are addressed in sections 4.15.1 and 4.15.2.

I-40d-29

The proposed project would not impact land use. Noise, traffic and parking impacts are described in Sections 4.11, 3.3, and 3.5 respectively. Construction period impacts are described in Section 4.15.

Please see Master Responses #9, regarding analysis of traffic congestion, and above responses to comment # 40d-25, regarding noise impacts and # 40d-28, regarding parking and community impacts.

I-40d-30 As discussed in Section 5.4.1, the build alternatives, including the LPA, would not change existing and planned land uses. The project would provide improved transit service to the major activity centers in the corridor, such as the Civic Center and planned CPMC Cathedral Hill Campus. No direct or cumulative impacts to existing land uses or planned development would occur, thus the project would not contribute to any cumulative land use impacts.

The comment regarding the adequacy of the San Francisco General Plan does not relate to an environmental impact and no response is required.

I-40d-31 Growth related to the developments in the Market and Octavia Area Plan study area was evaluated as part of the cumulative impact analysis (Chapter 5). See also Section 2.7.3 for a list of local planning projects considered in the cumulative impact analysis. The Market and Octavia Area Plan envisions improved transit service on Van Ness Avenue, as discussed in Section 4.1.1.3 Land Use, but implementation of the Market and Octavia Area Plan or other development projects are not dependent on implementation of the Van Ness Avenue BRT. The Market and Octavia Area Plan and other previously approved projects have been separately approved and subject to separate environmental analysis independent of the Van Ness BRT project. New development seeking project approvals within those study areas would need to conform to CEQA regulations, including project level environmental review where appropriate.

The traffic impact modeling is consistent within one percent of the Association of Bay Area Governments (ABAG) population and employment growth projections (California Government Code 65089 and MTC Congestion Management Program Guidelines require consistency with regional land use inputs for model consistency and approval). These projections were made in the same year (2007) as the Notice of Preparation/Notice of Intent of the Van Ness Avenue BRT Project, and have since been included in the approved Metropolitan Transportation Commission's Regional Transportation Plan (Transportation 2035). Thus, the growth that the Van Ness BRT project supports is planned growth, consistent with regional growth projections.

I-40d-32 As discussed in response to comment 29-2, the dedicated BRT transitway would be available for use by emergency response vehicles (EIS/EIR, Chapter 2, Section 2.2.2), thereby facilitating emergency service access during peak hour congestion. The same number of lanes would be available to emergency vehicles as in existing conditions.

I-40d-33 Please see Master Response #9 and response to comment O-1-2 regarding traffic impact mitigation and findings that decision-makers would need to make if they determine that there are not feasible mitigation measures or alternatives to avoid significant impacts.

I-40d-34 Please see responses to comments 40d-25, 40d-26, 40d-28, 40d-29 and 40d-32.

I-40d-35 The San Francisco County Transportation Authority Board of Commissioners consists of the 11 members of the San Francisco Board of Supervisors. Each member is elected through a district voting process every four years. The Authority Board will certify the EIR and approve the project as explained in EIS/EIR Section 2.8.

Other approvals required for the project are listed in EIS/EIR Sections 2.8 and 2.9.

From: Eric Whitney [whitneywebworks@yahoo.com]  
Sent: Wed 12/21/2011 11:32 AM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Public Comment on Van Ness Ave. BRT

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Eric Whitney <whitneywebworks@yahoo.com>

Thank you so much for the opportunity to give comment on these proposals. I live on Van Ness Avenue, in the residences of Opera Plaza, so will likely have a direct impact as a homeowner on whatever decision is or is not decided upon. My comments are general, but tend to favor options 3 & 4. I believe that whatever is decided upon, it should take into consideration future expandability of bus service (or rail,) to Fort Mason, the Marina area, and eventually out to the GG bridge. As the bridge remains one of the city's greatest attractions, ease of hop on/hop off transportation around the city will not only ease and encourage more tourism around the city, but will help residents access areas of the city that remain somewhat inaccessible.

I-41-1

I-41-2

The current state of traffic congestion on Van Ness will remain challenging as long as buses are required to flow with regular traffic. Side lane routes may do little to discourage double parking for retailers and delivery vehicles (thus slowing buses) and general traffic slowing for right turns and pedestrians. Center lanes, although more costly would seem to ameliorate many issues and speed the transportation corridor.

I-41-3

I know it is difficult to imagine the extra costs involved with a center lane solution; however, in the long run it will serve to reinvigorate the Van Ness merchants corridor, and increase homeowners property values. In my dreams, the buses would eventually be replaced with a rail system, tied to the F Market, that runs all the way out to the bridge.

I-41-4

I-41-5

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Eric Whitney

| Reviewer's Comment Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-4I-1                    | Support for Build Alternatives 3 and 4 noted. Please see Chapter 10 of the Draft EIS/EIR for the analysis supporting the LPA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| I-4I-2                    | <p>Please see Master Response #1 on the defining of the project limits. The northern terminus of the project limits was defined as Lombard Street in the Draft EIS/EIR due to the fact that traffic patterns show a significant decrease in the PM peak from the block between Greenwich and Lombard to the block between Lombard and Chestnut (70% decrease northbound; 52% decrease southbound; CHS, 2012). The block north of Lombard has less than 600 vehicles per hour northbound and less than 425 vehicles southbound during the PM peak hour. Delays caused by these lower volumes of mixed traffic are significantly less frequent and severe as they are within the study area. Thus, full BRT treatments were not proposed for the corridor north of Lombard Street.</p> <p>The BRT routes (47 and 49) will continue to North Point street. In addition, the Transit Effectiveness Project (TEP) is looking at transit improvements north of Lombard Street on Van Ness Avenue, including the potential for dedicated lanes and signal priority, as part of its environmental review.</p> <p>Please see Master Response #2 on alternatives definition and screening, Chapter 2 of the Draft EIS/EIR, and the Alternatives Screening Report (April, 2008). Surface rail and subway alternatives were not recommended for further analysis based on cost-effectiveness analysis performed for the Alternatives Screening Report and BRT Feasibility Study. Rail technology would provide high levels of transit benefits but with significantly more capital and construction costs. BRT on Van Ness Avenue has been demonstrated to be a more cost-effective alternative than more expensive rail technologies.</p> |
| I-4I-3                    | Support for build alternatives 3 and 4 noted. All build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant), will reduce the impact of traffic congestion on transit operations by providing a dedicated lane for transit. Build Alternatives 3 and 4, and the LPA, would remove nearly all conflicts with private vehicles within the BRT corridor, whereas under Build Alternative 2 cars would be able to enter the transitway to complete right turns and parallel park. This results in a greater likelihood of unexpected stops during transit service under Build Alternative 2 than the other build alternatives and LPA, which degrades transit travel time and reliability. Sections 3.2.2.2 Reliability and 10.2.4.I Transit Performance discuss how these factors are considered in the LPA selection process. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| I-4I-4                    | <p>The LPA would have transit running in the center of the street.</p> <p>Each of the build alternatives would provide improved transit accessibility to the commercial uses in the Van Ness Avenue corridor, and improved pedestrian conditions. These factors are anticipated to have beneficial economic effects for these commercial uses, as discussed in Section 4.2.4.2.</p> <p>Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| I-4I-5                    | Please see Master Response #2 on alternatives definition and screening, Chapter 2 of the Draft EIS/EIR, and the Alternatives Screening Report (April, 2008). Surface rail and subway alternatives were not recommended for further analysis based on cost-effectiveness analysis performed for the Alternatives                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

Screening Report and BRT Feasibility Study. Rail technology would provide high levels of transit benefits but with significantly more capital and construction costs. BRT on Van Ness Avenue has been demonstrated to be a more cost-effective alternative than more expensive rail technologies.

From: Christopher pederson [chpederson@yahoo.com]  
Sent: Thu 12/22/2011 11:08 AM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] Comments on EIS/EIR

Thank you for this opportunity to comment on the draft EIS/EIR. Unfortunately, this opportunity has arrived years too late. Perhaps every EIR for a project to improve public transportation should also include a section analyzing the adverse environmental impacts caused by the inordinate amount of time it takes to concoct falsely precise speculations about how much extra delay car drivers might experience more than twenty years from now. I cannot believe that anyone involved in the process takes the predictions seriously, but they have to pretend they do because that's what they think CEQA requires.

**I-42-1**

It's time for this farcical and harmful misinterpretation of CEQA to stop. The delay and frustration that a car driver experiences at an intersection is no more of an effect on the physical environment than the delay and frustration that that same driver experiences while hunting for parking. Idling cars might contribute to air pollution, but the EIR indicates that this project won't have any significant effects on air quality. The EIR's conclusion that this project will have significant adverse impacts on the environment simply because of traffic delays is therefore incorrect.

Of course, the primary reason for acting as if traffic delays qualify as an environmental effect is because of several decades worth of caselaw that misconstrues CEQA as if it were the Car Enhancement and Quantification Act rather than the California Environmental Quality Act. Given that California's excessive dependence on the automobile is a primary driver of many of the most serious environmental problems that this state confronts, it is ironic (to say the least) that CEQA is routinely applied in ways that either promote even more automobile dependency or that obstruct attempts to provide attractive alternatives.

Given this bad caselaw, it is understandable that the EIR classifies possible future traffic delays as environmental effects and identifies potential measures to reduce those speculative delays. As the EIR correctly points out, however, those measures would conflict with numerous city mandates to improve the environment by improving public transit and pedestrian facilities. I therefore strongly support the EIR's conclusion that the identified traffic mitigation measures are infeasible and unlikely to be successful in the long run.

**I-42-2**

With respect to the alternatives evaluated in the EIR, the City should identify either alternative 3B or 4B as the locally preferred alternative. Those alternatives provide the greatest time savings and are therefore likely to be the most successful versions. IF buses with dual-side boarding are likely to be used on the Geary BRT and other enhanced bus routes and if buses with doors on both sides are affordable and reliable, then I favor alternative 4B. That alternative can be constructed more quickly and affordably and would minimize removal of mature street trees. The EIR, however, does not provide enough information to make this decision.

**I-42-3**

The City should also consider consolidating the stops at Mission and Market Streets. Much of the time savings for BRT comes from avoiding stops that are too closely spaced. It makes little sense to have two elaborate BRT bus stops that are only one short, flat block apart.

**I-42-4**

The Final EIR should also identify realistic, fundable strategies for making bus service faster and more reliable on Mission Street. If northbound buses are bunched or separated by long gaps when they get to Van Ness, the benefits of BRT on Van Ness won't be fully realized.

**I-42-5**

I look forward to an expeditious conclusion to this process and raps implementation of BRT on Van Ness Avenue.

Christopher Pederson

Sent from my iPad

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Christopher Pederson

| Reviewer's<br>Comment<br>Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-42-1                          | <p>The EIS/EIR analyzed project-related traffic delay following NEPA and CEQA guidance. According to state and local CEQA guidelines and criteria, a potentially significant impact to traffic circulation would occur if the project conflicts with applicable plans, ordinances or policies that establish measures of effectiveness for a circulation system. A potentially significant traffic congestion impact would occur if the project conflicts with an applicable congestion management program, including level of service (LOS) standards and travel demand measures, and other standards for designated roads. The San Francisco Planning Department's Traffic Impact Analysis criteria for significant impact at intersections are based on intersection LOS. The operational impact on signalized intersections is considered significant when project-related traffic causes the intersection level of service to deteriorate from LOS D or better in Baseline to LOS E or F, or from LOS E to LOS F in with Project scenario. The project may result in significant adverse impacts at intersections that operate at LOS E or F under Baseline conditions depending upon the magnitude of the project's contribution to the worsening of the average delay per vehicle. (See EIS/EIR, Chapter 7, Table 7-I for further details.)</p> |
| I-42-2                          | <p>Support is noted. Section 3.3.4 of the EIS/EIR discusses the applicability of the City's Transit First Policy to the Van Ness BRT Project. Section 1.2.1 Countywide Planning Context discusses the City's Transit First Policy and how the project purpose and need relates to the County and City's larger transit planning context. Each of the build alternatives, and the LPA, is consistent with the City's Transit First Policy. Please see Master Response #9 and Section 3.3 for a discussion of potential mitigations and their feasibility to be consistent with City policy.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| I-42-3                          | <p>Support for Alternative 4 with Design Option B noted. The LPA offers the same travel time savings presented in the Draft EIS/EIR for Build Alternatives 3 and 4 with Design Option B. The LPA would feature right-side boarding, as presented for Build Alternative 3 in the Draft EIS/EIR.</p> <p>The LPA (with or without the Vallejo Northbound Station Variant), would remove a total of 90 median trees, which is less than Alternative 3, which would remove 102 median trees, but more than Alternative 4, which would remove 64 median trees.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| I-42-4                          | <p>Please see Master Response #5 on transit stop consolidation. The placement and number of stops relied on a number of factors, including: boardings/alightings, transfer routes, slopes surrounding stations, and adjacent land uses. For the reasons cited by the commenter, the LPA features a NB and SB station at Market Street, but no station at Mission Street, with the NB and SB 47 and 49 stops being south of the BRT corridor.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| I-42-5                          | <p>Please see Master Response #1 for information on how the project limits were defined and response to Comment I-12-I for information on how Mission Street is being studied for potential improvements which will complement Van Ness Avenue BRT.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

From: Matt Wisniewski [matt.j.wisniewski@gmail.com]  
Sent: Thu 12/22/2011 11:53 AM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Van Ness BRT- please choose build alt 3

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Matt Wisniewski <matt.j.wisniewski@gmail.com>

I used to work at Lombard and Franklin, a block away from the proposed terminus of the Van Ness BRT route. I rode my bike up Polk because the busses are such a mess on Van Ness. Working on Lombard I would see an army of Golden Gate transit busses limp by, only to continue limping down Van Ness.

Build alternative 3 is by far the best option. It would not require specialized left boarding busses. It would speed up times for cars in the right turn lane. Most of all, it would be physically separated from private auto traffic, which would make travel times faster and more predictable but which would also send a message that this city takes its "Transit First" policy seriously.

**I-43-1**

Build alternative 3 please.

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Matt Wisniewski

Reviewer's  
Comment  
Number

Response

I-43-I

Support for Build Alternative 3 is noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.

The LPA does not require vehicles with doors on both sides and physically separates transit from autos at station locations. of the average delay per vehicle. (See EIS/EIR, Chapter 7, Table 7-1 for further details.)

From: Christina Castro [christina.b.castro@gmail.com]  
Sent: Thu 12/22/2011 9:51 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Draft EIS/EIR Comment

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Christina Castro <christina.b.castro@gmail.com>

I strongly support the implementation of the Van Ness Avenue Bus Rapid Transit project, with hopes that it will spur development and implementation to other heavily used corridors.

**I-44-1**

Of the alternatives presented, I'm definitely not a big fan of Alternative #2. It seems to provide slower service due to drivers making right hand turns, folks wanting to park curbside, double parkers, and bicyclists. This alternative also requires passengers to traverse the entire width of the very busy, wide street to get to the opposite stop.

I also hope that the SFCTA aims to build this and future BRT's with the Institute for Transportation & Development Policy's Gold Standard in mind. San Francisco is touted as a world class, transit-first city and should aim to build a Gold-rated system.

**I-44-2**

Thank you.

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Christina Castro

Reviewer's  
Comment  
Number

Response

I-44-1 Support for BRT and lower preference for Build Alternative 2 noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA. Transit performance, pedestrian access and safety, and bicycle performance are all factors considered in selection of the LPA.

I-44-2 Comment noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.

Full featured BRT is proposed under all of the Build Alternatives, including the LPA, and addresses numerous features of the Institute for Transportation & Development Policy's Gold Standard, such as segregated right-of-way, prohibitions of most turns across the bus right-of-way, ticket vending machines at select locations, intersection treatments, pedestrian access, safe and comfortable stations, multiple doors on BRT vehicles, minimized bus emissions, and integration with other public transit.

From: Ryan Kauffman [kauffman@apple.com]  
Sent: Fri 12/23/2011 11:15 AM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Corporate Shuttle Access to BRT lanes

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Ryan Kauffman <kauffman@apple.com>

Hello,

Corporate shuttles such as the ones at Apple, Google, Genentech, Yahoo, Facebook, and others are growing in popularity and enhancing the cities livability for those seeking an urban lifestyle and a sub-urban tech job. This trend has led to a substantial increase in shuttles along VanNess, in some cases as many as 10-15 per hour. Integrating these shuttles into the access plan for a BRT dedicated lane will be pivotal to capitalizing this excellent traffic calming measure. Please consider including shuttle access to the BRT lane on VanNess.

Thank You

Ryan

--

Michael Schwartz  
Transportation Planner  
San Francisco County Transportation Authority  
415-522-4823  
michael.schwartz@sfcta.org

**I-45-1**

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Ryan Kauffman

Reviewer's  
Comment  
Number

Response

| Reviewer's Comment Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-45-I                    | Please see Master Response #3 for a summary of how private buses and shuttles would interact with the BRT. Consistent with City policy prohibiting private shuttle use of bus stops and dedicated lanes, shuttles would be prohibited from using the dedicated Van Ness BRT transitway. However, the BRT infrastructure would not preclude the ability of shuttle to use the transit lanes should SFMTA policies change on this issue. |

From: Paul J. Lucas [paul@lucasmail.org]  
Sent: Fri 12/23/2011 12:25 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Van Ness BRT comment

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Paul J. Lucas <paul@lucasmail.org>

Build Alternative 3 is the best: busses don't have to compete with parked cars or right-turning cars; busses are also boarded from the right as is conventional (unlike Alternative 4) thus not requiring special busses with left-boarding doors.

**I-46-1**

Left turns on Van Ness should be reduced to "major" intersections so as to minimize cars in the bus lanes.

**I-46-2**

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Paul Lucas

Reviewer's  
Comment  
Number

Response

- |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-46-1 | Support for Build Alternative 3 noted. Please see Chapter 10 of the Draft EIS/EIR for the analysis supporting the LPA. The LPA would have transit running in the center of the street, avoiding right turning vehicles and would also use standard right side boarding vehicles as would Build Alternative 3.                                                                                                                                                                                                                                                                                   |
| I-46-2 | As described in Section 2.2.2.2, both center-running alternatives (Build Alternatives 3 and 4) contain a design option referred to as Design Option B. This design option would eliminate all but one NB left turn (at Lombard Street) and all but one SB left turn (at Broadway) in the project corridor. Design Option B would reduce conflicts at intersections with turning vehicles and increase the green light time available to BRT buses for through movement. The LPA incorporates this Design Option, thus reducing the left turns to one in each direction within the project area. |

From: Herman Lee [namreh\_eel@hotmail.com]  
Sent: Fri 12/23/2011 12:36 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Feedback regarding the Van Ness Corridor BRT EIS/EIR

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Herman Lee <namreh\_eel@hotmail.com>

Dear SF BRT,

As a resident along the Van Ness Cooridor and a Muni Rider, I have a strong interest in the new Van Ness Coordidor options. I love the idea of improving the Van Ness transit and would be all for an option that improves bus times, minimizes confusion by fellow commuters and tourists, and keeps as much of Van Ness planted and treed. After reviewing all options, I believe that alternative 4 (with or without build option B) will be the most effective and least confusing for riders and could allow non-station areas to remain planted and treed.

**I-47-1**

I am concerned about the congestion that would result from any of these build alternative/options in all neighborhoods near Van Ness. In my review of the documents, I did not see any option for eliminating the curb side parking spaces. I believe that converting the curb side parking into a traffic lane or turning lane could be helpful. Would it be worthwhile to consider that as a traffic mitigation option?

**I-47-2**

Thank you,  
Herman Lee

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Herman Lee

| Reviewer's<br>Comment<br>Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-47-1                          | <p>Support for Build Alternative 4 noted. Please see Chapter 10 of the Draft EIS/EIR for a summary of the analysis supporting the LPA. Please see Master Response #7 regarding trees and landscaping.</p> <p>The LPA (with or without the Vallejo Northbound Station Variant) would remove a total of 90 median trees, which is less than Alternative 3, which would remove 102 median trees, but more than Alternative 4, which would remove 64 median trees. The LPA would only remove existing landscaping on blocks that feature a station location.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| I-47-2                          | <p>Eliminating parking on Van Ness Avenue was considered in the early planning and feasibility studies for the proposed project (see Section 2.6.I.I), and it was considered a fatal flaw project feature because curbside commercial and passenger loading is vital to so many of the businesses and residences fronting on Van Ness Avenue. Also, removal of the parking lane would degrade the pedestrian environment by eliminating an existing buffer between pedestrians on the sidewalk and moving traffic for the entire length of the corridor. As explained in Master Response #9 and Section 3.3.4, the EIS/EIR identifies mitigation measures for traffic impacts at selected intersections, such as parking town away lanes and traffic turn pockets. However, implementation of such measures would cause conditions that conflict with the City's Transit First Policy in the City Charter. As explained in Master Response #9, the Authority Board would consider whether to adopt these mitigation measures at the time it considers the project for approval.</p> |

From: Julie Bernstein [web-brt@funcrunch.org]  
Sent: Fri 12/23/2011 12:59 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Draft EIS/EIR Comment

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Julie Bernstein <web-brt@funcrunch.org>

I am a San Francisco/Nob Hill resident and I rely heavily on public transit; I do not drive and have never owned a car. I support the BRT as any improvement along the congested Van Ness corridor would be welcome. Of the options presented, Build Option 2 appears most favorable.

**I-48-1**

Sincerely,

Julie Bernstein

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Julie Bernstein

Reviewer's  
Comment  
Number

Response

|        |                                                                                                                                     |
|--------|-------------------------------------------------------------------------------------------------------------------------------------|
| I-48-I | Support for Build Alternative 2 noted. Please see Chapter 10 of the Draft EIS/EIR for a summary of the analysis supporting the LPA. |
|--------|-------------------------------------------------------------------------------------------------------------------------------------|

From: Ziggy Tomcich [boyziggy@funcrunch.org]  
Sent: Fri 12/23/2011 1:05 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] Support for Van Ness BRT Build alternative 2

Thank you for working on speeding up MUNI along Van Ness Ave. I truly hope that your plans actually happen and i want to offer my full support as a resident of San Francisco. I live in Nob Hill and commute each day up and down Van Ness. Many times i walk the two miles to work because it's often times faster and always more reliable than riding MUNI.

#### Support for BRT Build alternative 2- curbside BRT

I want to offer my full support for Build alternative 2 and only option 2- a curbside dedicated BRT lane. To me this option makes the most sense for several reasons.

I-49-1

#### Curbside BRT is more reliable

Buses always will break down at some point. I usually see a broken down bus at least once a month along Van Ness. When a bus breaks down with a curbside BRT lane, other buses can easily pass the broken down bus which minimizes the effect. Passengers can also safely disembark a broken down bus that's not parked at designated BRT station. With center BRT lanes, a broken down bus will stop all bus traffic. Passengers won't be able to exit the bus that's not at BRT stop, and many buses will be backed up behind the broken down bus with no way of passing or letting passengers off the bus. We've seen this along Market Street and on MUNI streetcar lines all the time. It's frustrating for riders and it's why MUNI metro streetcars are so notoriously unreliable.

I-49-2

#### Curbside BRT can be used by private buses

A curbside BRT lane would allow private buses to make use of it. I see as many private buses traveling Van Ness Ave. during rush hour as I do MUNI and Golden Gate buses. Even though private buses are not part of MUNI, they are part of the traffic along Van Ness and they should not be left out of traffic planning. Each person who rides a private bus takes one car off the road. This plan should support people riding any bus regardless if it's MUNI, Golden Gate, or the Google, Apple, or Academy or Art Shuttles.

I-49-3

#### Bus breakdowns will be a huge problem with center BRT lanes

Because of the huge problem of what happens when a bus breaks down, i would not support BRT build alternatives 3 or 4 at all. Being able to safely exit a bus at any time is very important. With build options 3 and 4, I foresee people being stranded on buses between BRT stops due to a breakdown ahead of them, with no way to disembark. This is dangerous.

I-49-4

#### Center BRT lanes less convenient

Build options 3 and 4 would be less convenient for passengers having to cross street traffic every time to board a bus. Most of the time I catch a bus is when I'm walking up or down Van Ness Ave. and one happens to stop where I am. I never wait for buses. With build options 3 and 4, you don't have the option of walking up Van Ness and hopping on a bus if it happens to be stopping in front of you. Build

I-49-5  
*continued*

options 3 and 4 require passengers to sit and wait for a bus, eliminating the option of walking to their destination and hopping on a bus if it happens to be coming. You would have many fewer riders with this option.

 **I-49-5**  
*continued*

BRT should have fewer stops than proposed

Finally I am concerned with the large number of BRT stops. Please consider eliminating stops at Eddy and Sutter, as they are only 2 blocks away from the Geary stop. The whole point of BRT is to make bus travel faster. Walking 2 extra blocks is not unreasonable, and it will drastically speed up service allowing for fewer buses to carry more passengers.

 **I-49-6**

Thank you for your time in this important project. I totally support BRT build alternative 2 and feel that it will greatly improve our quality of life by actually making travel along Van Ness competitive with walking. Thanks!

-Ziggy Tomcich  
1110 Jackson St #4  
San Francisco CA 94133  
510-757-7965  
boyziggy@funcrunch.org

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Ziggy Tomcich

| Reviewer's Comment Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-49-1                    | Support for BRT and Build Alternative 2 noted. Please see Chapter 10 of the Draft EIS/EIR for a summary of the analysis supporting the LPA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| I-49-2                    | Performance indicator A-2 analyzes bus passing capability for each of the alternatives. One of the advantages of the LPA is that it allows for passing outside of station locations in the event of bus breakdowns. If buses were to breakdown at station locations, buses would be able to anticipate the breakdown and pass each other using the adjacent mixed travel lane or, with on-street operations management, use the oncoming transit lane. Operators will be trained to ensure safe passenger alighting of the vehicle in the event of emergency breakdowns.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| I-49-3                    | Please see Master Response #3. Consistent with City policy prohibiting private shuttle use of bus stops and dedicated lanes, shuttles would be prohibited from using the dedicated Van Ness BRT transitway. Neither the center-running LPA nor the side-running Alternative 2 would permit shuttles to use the proposed dedicated lane. However, the BRT infrastructure would not preclude the ability of shuttle to use the transit lanes should SFMTA policies change on this issue.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| I-49-4                    | New vehicles are planned to replace the existing buses on Van Ness Avenue in the near future, which is expected to significantly reduce the incidence of bus breakdowns. In the event that a BRT vehicle does break down between stations with the center-running Locally Preferred Alternative, passengers would remain aboard until either the issue is resolved or an official directs traffic in the adjacent lanes to stop for them to exit the bus safely. This configuration would be similar to that of other center-running transit in San Francisco that operates safely on, for example, Market Street, 19th Avenue, and the Embarcadero.                                                                                                                                                                                                                                                                                                                                                                                                          |
| I-49-5                    | <p>The LPA is center-running, similar to Alternatives 3 and 4. Currently, pedestrians are not required to cross Van Ness Avenue to board or disembark a bus going in one direction, but must cross the entire width of the street to reach a bus going the other direction. With center-running BRT, pedestrians would need to cross to the center of Van Ness Avenue (half the width of the street) to reach a bus traveling in either direction, resulting in the same total crossing distance for a round trip.</p> <p>BRT would be more reliable than the existing 47 and 49, resulting in more consistent and predictable wait times at stops. Center-running BRT provides a significantly greater reliability improvement than side-running BRT, as shown in Section 3.2.2.3 of the DEIS/DEIR, due to reduced traffic interference. In addition, real-time arrival information will be provided at all BRT stations, allowing passengers to know when the next bus will arrive.</p>                                                                     |
| I-49-6                    | Please see Master Response #5 for a general discussion of stop spacing and the factors used to select stop locations. While the BRT project would consolidate stops to improve travel times and reliability, eliminating additional stops would reduce access to the BRT both from connecting transit routes and the adjacent land uses in the corridor. Eddy and Sutter are currently well-used stops, with approximately 1,300 and 1,000 daily boardings, respectively, as shown in Figure 3.2-3 in the DEIS/DEIR. The proposed BRT station at Eddy would continue to serve passengers transferring to and from Muni route 31, while Sutter serves transfers to and from routes 2 and 3. Eliminating the Eddy and Sutter stops would also leave gaps between the adjacent stops of approximately 1,900 and 2,200 feet, respectively. These distances are significantly longer than the proposed maximum distance between BRT stations, increasing the walking distance and physical effort required for passengers to reach a stop in those sections of the |

corridor. The LPA proposes stations at approximately 3 block intervals along the corridor, in order to consolidate stops to improve travel times and reliability.

From: Daniel Weaver [djpweaver@yahoo.com]  
Sent: Fri 12/23/2011 2:46 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: VanNess Avenue Streetlights

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Daniel Weaver <djpweaver@yahoo.com>

Replicating the existing design of the landmark streetlight/OCS poles is appropriate. Adding conventional light fixtures such as cobra head lights is not appropriate, particularly in combination with historic shapes such as tear-drop designs. Also, the cobra head fixtures do not perform an adequately to direct and control the light source. The historic fixture shapes such as the teardrop design are most appropriate for the almost 100 year old pole design. Also, the Van Ness Avenue sidewalks need additional lighting and this issue should be incorporated in the design criteria and process. The color of light should also be changed from the HPS to an appropriate shade of white. Presumably this will be easily accomplished with the use of LED lighting. Signs affixed to the poles should be designed to enhance the poles and not conflict with them. Finally, the Van Ness Avenue streetlight pole design should be land-marked as part of this project.

I-50-1

I-50-2

I-50-3

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Daniel Weaver

Reviewer's  
Comment  
Number

Response

- |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-50-1 | As discussed in Section 4.4, the design and installation of the OCS support pole/streetlight network would retain the function of the existing network as an infrastructural element with a uniform aesthetic throughout the corridor and visual character that is reminiscent of the architectural style of the original OCS support pole/streetlight network. The design of the replacement OCS support pole/streetlight network would be reviewed and approved by the San Francisco Arts Commission, and, in the Civic Center Historic District, the San Francisco Historic Preservation Commission. |
| I-50-2 | Section 2.2.1 shows that, as part of the build alternatives, including the LPA (with or without the Vallejo Northbound Station Variant), pedestrian-scale lighting would be provided. New lighting would be energy efficient, require low maintenance, and meet current lighting requirements for safety. The addition of LED lighting option will be considered during project design.                                                                                                                                                                                                                 |
| I-50-3 | As discussed in Section 4.4, appropriate signage will be included in the replacement of the OCS support pole/streetlight network. See Section 4.5.3 of the EIS/EIR, which explains that the OCS system was evaluated as a potential historic resource but found not eligible under criteria of the National Register of Historic Places and the California Register of Historic Resources.                                                                                                                                                                                                              |

From: Kanya Dorland [kdorland38@gmail.com]  
Sent: Fri 12/23/2011 4:18 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Van Ness BRT EIR - Comments

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Kanya Dorland <kdorland38@gmail.com>

I believe this project is crucial to the future of transit in the City. The project has undeniable benefits for improved transit reliability, and these benefits should be prioritized over any increase in road delays to personal vehicles. Franklin and Gough, two streets parallel to Van Ness Avenue, already serve as primary personal vehicle routes, and Van Ness Avenue is the primary transit route in the study area. This project would support this existing transit corridor, and assist the city in achieve its state mandated greenhouse gases reduction goals by improving the transit and pedestrian experience on the corridor through reliability and comfort measures. Further the City's CEQA threshold/criteria of significance can be revised so that impacts to transit are considered more significant than to personal vehicles. Additionally, this project will reduce the operating cost for the Van Ness Avenue corridor transit service by 16% to 30% by enabling fewer buses to service the corridor, so any gap in funding would eventually be covered by a reduction in operating costs. For these reasons, I prefer the Van Ness BRT Improvement Alternative 4 because I believe the City will gain the most in public and financial benefits and improved air quality if it pursues the option that improves transit service to the greatest possible level on the Van Ness Avenue Corridor.

**I-51-1**

**I-51-2**

**I-51-3**

**I-51-4**

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Kanya Dorland

Reviewer's  
Comment  
Number

Response

- |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-5I-1 | <p>Support for project noted. Section 1.2.I Countywide Planning Context discusses the City's Transit First Policy and how the project purpose and need relates to the County and City's larger transit planning context. Each of the build alternatives, and the LPA, promotes the Transit First Policy, and reduces vehicle miles traveled (VMT), helping the City to achieve greenhouse gas reduction goals.</p> <p>This section also provides a historical context for the proposed project, and describes how Van Ness Avenue has been identified as a high-priority transit improvement corridor and has been targeted for rapid transit in planning studies.</p> |
| I-5I-2 | <p>Revision of City policy regarding CEQA is beyond scope of this project.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| I-5I-3 | <p>While Van Ness BRT is expected to significantly reduce transit operating costs in the corridor, as detailed in Section 9.2 of the EIS/EIR, the operating surplus will not be used to cover the capital funding needs of the project. Planned and potential funding sources for the project are listed in Section 9.1.</p>                                                                                                                                                                                                                                                                                                                                           |
| I-5I-4 | <p>As discussed in Section 10.1, all of the build alternatives would result in a slight (0.1-percent to 0.7-percent) reduction in citywide VMT relative to the No Build Alternative (Alternative I). These small differences between the alternatives do not distinguish them in terms of air quality performance.</p>                                                                                                                                                                                                                                                                                                                                                 |

**From:** don kertzman [drdoousa@hotmail.com]  
**Sent:** Friday, December 16, 2011 8:49 PM  
**To:** vannessbrt@sfcta.org  
**Subject:** [vannessbrt] San Francisco County Transportation Authority: vanness rapid route

This is an enquiry e-mail via <http://www.sfcta.org> from:  
don kertzman <[drdoousa@hotmail.com](mailto:drdoousa@hotmail.com)>

DO IT!

**I-52-1**

---

**Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

---

Reviewer: Don Kertzman

---

Reviewer's  
Comment  
Number

Response

---

|        |                                            |
|--------|--------------------------------------------|
| I-52-I | Support for the proposed project is noted. |
|--------|--------------------------------------------|

EIR\_EIS PUBLIC MEETING - Vol. I - November 30, 2011  
Transcript of oral comments (see court reporter's statment after letter 59)

MR. HENRY PAN: So I'm concerned about Muni replacing the transit shelters on Van Ness Avenue. I'm concerned if we go with Alternative 4, which would involve center -- basically center boarding BRT with doors on the left side not -- I meant to say Alternative 3. So Alternative 3, if that were to be built, it would pretty much be a waste of time and money to, like, replace -- to basically remove all the shelters on Van Ness Avenue that were installed just this past year.

And then another thing I'm concerned with is with the mailings. So what they did was they mailed an advisory that the EIR was released to people living, I believe, 500 feet from the center of Van Ness Avenue and all residents on Franklin and Gough. The problem I have with that is that most of those residents, they tend to drive and they're not doing outreach to the people that live in Nob Hill which are more likely to rely on the bus rapid transit because I live one block east of the project area on Washington Street and I never received a mailing and I'm sure lots of people don't even know that the EIR comment period is happening right now. So once

**I-53-1****I-53-2**  
*continued*

they hear about this project going through and they want to comment on it, they are basically going to get -- won't be able to have that chance to say their opinion.

**I-53-2**  
*continued*

What else is there. I think that's pretty much it -- Oh, I have one more.

And I'm kind of concerned with the stop spacing, too, because they are kind of close together because -- let's see. How do I put it. It's basically not spaced as far apart as I would like it to be because some of the stops are pretty redundant. Like the stop at Jackson and Pacific -- actually, never mind about that one.

**I-53-3**

And one of the problems I have with the stop at Sutter Street, I believe it's like right between the stops at Sacramento and Geary, it would involve a transfer to -- well, it will basically connect the Van Ness BRT with the 2 and the 3 which isn't bad, but you have two other routes: the 1 California on Sacramento and the 38 Geary which run directly parallel to the 2 Clement which all three serve the Richmond District and the Laurel Heights area. So it's redundant to have a stop on Sacramento -- not Sacramento, Sutter Street.

And not only that, the 1, 2 and the 38 serve the same area in the Financial District and thus having a stop -- wait. No, actually, the 1 California serves the

Financial District and the 38 serves the Union Square area and so basically the 2 serves the Union Square area and the Financial District so having a stop at Sutter would be pretty redundant because they could transfer at Sacramento to the 1 California -- no, actually at Clay, not Sacramento, to the 1 to get to the Financial District and the 38 to Union Square so it's redundant to have a stop at Sutter Street.

That's all I have to say.

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Henry Pan

Reviewer's  
 Comment  
 Number

Response

I-53-1 The new Muni (“wave”) shelters were installed by Clearchannel through an outdoor advertising contract with the City. Under any of the build alternatives, new stations would be installed, replacing these shelters at the current bus stop locations. Clearchannel would move the shelters to other parts of the Muni system at no cost to the City.

I-53-2 Outreach performed to notify stakeholders of the availability of Draft EIS/EIR for public review and comment included the following components:

- Radius mailer, within 500 feet of the Van Ness Avenue project study area and all buildings that front Franklin, Gough and Polk streets.
- Publishing of the Notice of Availability/Notice of Completion of the Draft EIS/EIR in the “San Francisco Examiner,” “The Sing Tao Daily” (in Cantonese), “El Mensajero” (In Spanish), and the “Marina Times.”
- Posting of advertisements in English, Cantonese, and Spanish, announcing the availability of the Draft EIS/EIR for public review and comment in Muni bus shelters along the corridor, including Mission Street and at key cross routes.
- Posting of the Notice of Availability/Notice of Completion in English, Cantonese, and Spanish on blocks on Van Ness Avenue within the project study area that do not contain a bus shelter.
- Posting of advertisements in English, Cantonese, and Spanish in SFMTA and Golden Gate Transit bus vehicles.
- Presentation on the project and the availability of the Draft EIS/EIR at more than 20 stakeholder meetings during the public comment period.

These outreach procedures were consistent with, and in a number of instances, exceeded standard practice for public circulation of Draft EIRs in San Francisco.

I-53-3 Please see Master Response #5 for a general discussion of stop spacing and the factors used to select stop locations. While the BRT project would consolidate stops to improve travel times and reliability, eliminating additional stops would reduce access to the BRT both from connecting transit routes and the adjacent land uses in the corridor. Sutter is currently a well-used stop, with approximately 1,000 daily boardings, as shown in Figure 3.2-3 in the DEIS/DEIR. The proposed BRT station at Sutter would continue to serve passengers transferring to and from Muni routes 2 and 3. Eliminating the stop would also leave a gap of approximately 2,200 feet between the stops at Geary/O’Farrell and Sacramento, significantly longer than the proposed maximum distance between BRT stations, increasing the walking distance and physical effort required for passengers to reach a stop in that portion of the corridor. The LPA proposes station locations at 3 block intervals along the corridor, in order to consolidate stops to improve travel times and reliability.

EIR\_EIS PUBLIC MEETING - Vol. I - November 30, 2011  
Transcript of oral comments (see court reporter's statment after letter 59)

MS. ROSE CAMPBELL: Well I'm against the project doing anything, at least on the upper end of Van Ness Avenue where it's not needed. Traffic is working fine there. I can see south of California Street, maybe there or wherever it starts getting really blocked up but certainly not up in the upper end of -- the north end of Van Ness Avenue. It's not needed. It will put traffic over onto Gough Street where I live. There's already a tremendous amount of traffic going south on Gough Street. It really can't hold any more.

I feel that because they have put so much time and hired a lot of people, that the momentum is for it to go forward whether people want it or not. And one of the women said, "Well voters voted for this particular project." Well we were one of the voters. We have lived here for a long time. We know what was on that. Unless you went way back into the details, it wasn't stated in the description that it was going to be this project which I think is a waste of money. I feel that because they have the money, they want to spend it.

That's it.

**I-54-1**

**Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

Reviewer: Rose Campbell

Reviewer's  
 Comment  
 Number

Response

I-54-I

Comment against the project noted. See Master Response #1 on the definition of project limits and Master Responses #8 and #9 on traffic diversions. SFMTA bus travel time, reliability, and delay data collected as part of the Van Ness Avenue BRT Feasibility Study indicate the need for BRT improvements along the length of the corridor. Additional projected housing and employment growth along the Van Ness Avenue corridor will worsen operations for SFMTA buses; the Van Ness Avenue BRT Project will implement improvements that will allow bus operations to improve independent of projected growth. Existing conditions data collected during the feasibility study indicates that the 47 and 49 buses are delayed and unreliable in the northern end of the corridor. The Van Ness corridor is projected to have significant employment and residential growth in the future (e.g., CPMC), necessitating the improvements in order to most efficiently meet that demand.

The project analyzed traffic diversions caused by the project and analyzed their impacts in Section 3.3 of the Draft EIS/EIR. In the near term (2015), traffic volumes on Gough Street would increase with the implementation of BRT (LPA) by a maximum of 105 vehicles/hour (less than 2 vehicles/minute) just north of California Street. In 2035, traffic volumes on Gough Street would increase with the implementation of BRT by a maximum of 230 vehicles per hour (less than 4 vehicles per minute). In the near term (2015), there would be 4 intersections in the traffic study area that would operate at LOS E or F with the implementation of BRT (LPA), including the stop-controlled intersection at Gough and Green. This intersection would already operate at LOS F in the No Build Alternative in 2015. In 2035, 5 intersections along Gough Street would operate at LOS E or F with the implementation of BRT (under the LPA) – at Green, Clay, Sacramento, Eddy, and Hayes streets. Projected impacts at the intersections of Gough/Sacramento and Gough/Eddy would be significant and unavoidable with the implementation of the LPA.

Chapter I of the Draft EIS/EIR provides background on the numerous studies that have identified BRT on Van Ness Avenue as a key component of the Muni rapid network.

EIR\_EIS PUBLIC MEETING - Vol. I - November 30, 2011  
Transcript of oral comments (see court reporter's statment after letter 59)

MS. MICHELLE BRANT: Well, I say I very strongly like the no-build alternative. That it wasn't seriously considered by the committee mainly because the funding is more focused on eliminating one lane in each direction on Van Ness. That the lowest cost of the other three BRT alternatives, the lowest cost is \$90 million. For a fraction of that cost, they could keep all six lanes an Van Ness and focus on other things like tow-away zones during busy hours, making the buses during the morning commute and the late afternoon commute so they go more directly to downtown so people don't have to transfer. They could do all sorts of things to make the buses nicer and to even lower the bus fares so that more people would take the bus and this would give -- more people would ride the bus. They could have no parking during limited times to speed the bus during busy hours -- all this for a fraction of \$90 million.

**I-55-1****I-55-2**

In addition to that, the -- gives more flexibility because you can see how things are going rather than build an immovable blockage to where only the buses are. There is really nothing in this plan to discourage cars. Cars will just go other places and they will disrupt residential neighborhoods. I don't know anybody personally in my neighborhood who is for this.

**I-55-3**

And the other thing about these -- taking up one lane in each direction on Van Ness is they make no distinction between the Van Ness corridor that is heavily traveled which is California south to Market and from Market to California and then the traffic sort of dies out and yet they continue with the three BRT alternatives. They continue it all the way down Van Ness so I vote for no-build.

**I-55-4**

Thank you.

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Michelle Brant

| Reviewer's<br>Comment<br>Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-55-1                          | Preference for No Build Alternative noted. The No Build Alternative was provided the same level of analysis as the build alternatives and LPA in the EIS/EIR. Chapter I explains the project purpose and need. Chapter 10 explains the reasoning for selecting the LPA. Section 2.6 provides a summary of alternatives considered during the project feasibility phase that were determined to be low performing or have fatal flaws and therefore not analyzed in the EIS/EIR as a project alternative, such as tow-away zones and provision Transit Signal Priority treatments without a dedicated bus lane.                                             |
| I-55-2                          | Funding to construct the BRT project is not interchangeable with Muni operations funding for existing operations or additional vehicle operations. The identified funding sources for the project primarily include the Federal Transit Administration's Small Starts program and San Francisco's Prop K sales tax, both of which are legally restricted to providing capital funding to construct transit improvements. The sources may not be used to fund ongoing transit operations or new initiatives such as fare free policies. For more detail on project funding sources, please see Sections 9.1.3 and 9.1.4 of the Draft EIS/EIR.               |
| I-55-3                          | Please see Master Responses #8 and #9 on traffic diversions. Please see Section 3.1.2 for a discussion of how travel patterns would change with implementation of the proposed project. Section 3.1.2 explains that many drivers, between 105 and 450 depending on the build alternative, are expected to divert from Van Ness Avenue to parallel streets such as Gough or Franklin to make their trip through the corridor. Also, Section 3.1 explains that the build alternatives, including the LPA, would result in decreased vehicle volumes in the project corridor because some drivers are expected to switch travel mode from driving to transit. |
| I-55-4                          | Please see Master Response #1 which explains the definition of project limits. SFMTA bus travel time, reliability, and delay data collected as part of the Van Ness BRT Feasibility Study indicate the need for BRT improvements along the length of the corridor, including the segment north of California Street, particularly with the additional residential and employment growth (and resulting trip-making) anticipated in the corridor.                                                                                                                                                                                                           |

EIR\_EIS PUBLIC MEETING - Vol. I - November 30, 2011  
Transcript of oral comments (see court reporter's statment after letter 59)

MS. JACKIE SACHS: For one thing, you're messing with a state highway and that is wrong. I don't know how they can mess with a state highway. Number two, with the bus rail's rapid transit coming in, if you have -- with California Pacific taking over the Cathedral Hotel down at Post on Van Ness between Post and Geary taking over that facility, if you have a stop there, this sort of thing, it will impede the ambulances going into the medical facility. If there's a traffic accident at that corner, it will impede the rescue -- the police and fire department to come to the scene of an accident if there's an accident at that corner, that sort of thing. There's no way that you can have a stop there.

I-56-1

I-56-2

Now as far as the side streets are concerned, you have to take into consideration California Pacific's loading dock and where the ambulance entrance is and all that. Where the ambulance entrance is, you have to take that into consideration.

I-56-3

And also by eliminating -- by spacing the stops out every two to three blocks, you are not taking into consideration the concerns of the senior and disabled community who cannot walk long distances especially after dark, that sort of thing. You have to take that into consideration as well and they're not doing that. They want to space it. They think it's going to speed up the traffic. Twenty years ago what they did is they

I-56-4

changed the bus stops on Van Ness, this sort of thing, but they should make it so that -- up until about 20 years ago, they had the bus stops on Van Ness Avenue where cross-town buses stopped so people can make transfers. This way if you make it up every two to three blocks, they have to walk two to three blocks to get to their transfer. And then if they don't make their transfer, they have to wait for the next bus because of the service -- because of the timing of the buses. This does not make sense at all. This should not be done like this at all.

**I-56-5**

This is a state highway, like I said earlier. This is a state highway. You also have to take into consideration the 18-wheelers that drive on Van Ness. The people -- as far as California Pacific between Post and Geary, you have to take into consideration the delivery trucks going in and out of the facility and the front door and the back door. You have to take into consideration the paratransit vans with wheelchairs in them, people with walkers as well as taxicabs.

**I-56-6**

**I-56-7**

You have to take all that into consideration before you think about doing anything on Van Ness.

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Jackie Sachs

| Reviewer's<br>Comment<br>Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-56-1                          | The California Department of Transportation (Caltrans) is a Responsible Agency under CEQA in the environmental review process and will approve the project. As discussed in Section 1.2.2.2, development of BRT on Van Ness Avenue is consistent with Caltrans Deputy Directive 98, which supports the integration of BRT on the state highway system, recognizing its potential to increase the “person-throughput” and vehicle occupancy rate, reduce congestion, mitigate pollution, reduce greenhouse gas (GHG) emissions, and improve goods movement. Furthermore, although Van Ness Avenue is designated a regional arterial road in the San Francisco General Plan and is part of the US 101 highway system, the two parallel streets to the west, Franklin and Gough streets, carry substantially more regional automobile trips than Van Ness Avenue (see Section 3.1.1.1, Table 3.1-2.). Through the implementation of the LPA and the resulting reduction in left turn opportunities on Van Ness Avenue, it is possible that more through and regional traffic would switch from Franklin and Gough to Van Ness Avenue (US 101) versus the No Build Alternative while more local traffic would use Franklin and Gough streets. |
| I-56-2                          | Please see Master Response #12. The dedicated BRT transitway would be available for use by emergency response vehicles (EIS/EIR, Chapter 2, Section 2.2.2). This will ensure similar response times and reliability as under the No Build Alternative since emergency vehicles would have use of the same number of lanes in either scenario. The closest BRT station to the CPMC hospital is proposed between O’Farrell and Geary streets, one block south of the CPMC hospital.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| I-56-3                          | The proposed CPMC medical office building would have 9 parking levels, which would be accessed via Geary Street. Parking Level A would provide a loading dock with access via Cedar Street. All vehicle entries on Geary and Cedar streets would be right turns because Cedar Street is one-way EB and Geary Street is one-way WB. Vehicles entrances to the hospital parking garage and emergency areas would be along Geary Street, Post Street, and Franklin Street Van Ness Avenue would provide the main pedestrian entrances for both the proposed hospital and medical office building. (See Chapter 2, Section 2.7.3.) Traffic volumes for the intersections in the vicinity were modified to reflect the projected vehicle trip generation for these two buildings in the CPMC EIR for the 2035 build alternatives and manually adjusted for the Van Ness Avenue BRT analysis (see EIS/EIR Chapter 3, Section 3.3.1).                                                                                                                                                                                                                                                                                                            |
| I-56-4                          | Please see Master Response #5 for a discussion of stop spacing, the factors used to select stop locations, and impacts of the project on universal accessibility. In response to comments regarding wider stop spacing in the vicinity of the Van Ness Avenue and Vallejo Street intersection, which has higher grades than other parts of the corridor, the LPA would include a southbound station at the intersection of Vallejo Street and Van Ness Avenue. A northbound transit station in this same location, referred to as the Vallejo Northbound Station Variant, could also be implemented, and will be decided upon at the time of project approval.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| I-56-5                          | Please see Master Response #5 for additional details on how stop locations were selected and Table 2-3 in the Draft EIS/EIR for a full list of proposed stop locations. Facilitating transfers to east-west transit routes was a key criterion in the selection of proposed BRT station locations. All BRT stations under the LPA are in locations with crossing transit routes to facilitate easy transfer connections. In response to comments regarding wider stop spacing in the vicinity of the Van Ness Avenue and Vallejo Street intersection, which has higher grades than other parts of the corridor, the LPA would include a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

southbound station at the intersection of Vallejo Street and Van Ness Avenue. A northbound transit station in this same location, referred to as the Vallejo Northbound Station Variant, could also be implemented, and will be decided upon at the time of project approval.

I-56-6 Accommodating truck maneuverability is important in supporting land uses along the Van Ness Avenue corridor, as well as regional goods movement. Attainment of the project objectives goes with the need to accommodate goods circulation and access within the corridor, as well as maintain some on-street parking for loading/unloading and drop-off access. (See EIS/EIR Chapter I, Project Purpose and Need, Section I.3.2.2 Multimodal Circulation Needs) and Section 3.I.2.5 for a discussion of effects on truck-turning movements. The LPA proposes all stations on the near side of intersections to allow for easier truck turning movements onto Van Ness Avenue while maintaining pedestrian and transit rider safety.

I-56-7 Please see Master Response #12 for further discussion of the relationship between the CPMC and Van Ness BRT projects.

The primary vehicle access points to the proposed California Pacific Medical Center (CPMC) facility would not be directly from Van Ness Avenue. The primary nonemergency drop-off area for the hospital building would be inside the complex on a driveway accessed via Geary Boulevard, west of Van Ness Avenue. Vehicle access to the hospital parking would be from either Geary Boulevard or Post Street. Delivery trucks would use the hospital's service vehicle and loading entrance accessed from Franklin Street. Vehicle access and loading dock entries to the Cathedral Hill Medical Office Building (on the east side of Van Ness Avenue) would be from Geary and Cedar streets. CPMC plans for additional designated curbside loading and drop-off zones in several locations, including one passenger drop-off area on the east side of Van Ness Avenue. The BRT LPA would place the designated transit lanes in the center of Van Ness Avenue, eliminating potential conflicts between buses and vehicles accessing this curbside drop-off area.

The main pedestrian entrances to both buildings would be from Van Ness Avenue. The BRT project will improve conditions for pedestrians with disabilities in the corridor, including adjacent to the CPMC complex. The project includes new curb bulbs, median refuges, accessible pedestrian signals, and other accessibility improvements.

EIR\_EIS PUBLIC MEETING - Vol. I - November 30, 2011  
Transcript of oral comments (see court reporter's statment after letter 59)

MS. LINDA CHAPMAN: First, I tried to get a copy of the EIR. I called the library because the brochure that was given out said that you could get EIR at several places. I called the main library to make sure they had them there and they said they didn't. They said they only had one to go look at. Now I have never been involved with an EIR process where you could not get the document -- a hard copy -- which you need in order to be able to mark it up and flip through it. It's very time-consuming to try to do it on a computer and I do not have a computer at home. Most libraries allow one hour of computer time including the public library, the last time I was there. So that is not a way that people can actually look at an EIR. The library that I normally use was largely closed around Thanksgiving weekend when I was trying to get the EIR and the main library, likewise, I think and no document to pick up, number one.

Two, a public hearing is a place where people testify. They hear each others' questions and comments and that's important. You hear what people from other groups that might be more informed or somebody brings up a question that you might not have thought of. He didn't even take any questions -- give answers to questions and that is not a public process. I've never seen one like this with an EIR. I've commented on EIRs and gone to lots of EIR hearings with the City Planning

**I-57-1****I-57-2**  
*continued*

Department so this is a very poor public process. They came to a couple of neighborhood groups and did a group presentation, but there was a limited time for questions and answers because in the neighborhood groups, there were other things on the agenda so they can only get like a few minutes of comments.

And also told me -- told everybody that the comments that were made there were not official. They weren't really going to be considered which is true. They are not in the record, right? Out of all the people who are here, probably very few are going to come over and sit down and talk to you whereas in a public hearing, everything is recorded -- everybody's questions or comments and that's not happening.

So I don't think this is an appropriate EIR comment process at all. I'm never going to see that EIR I'm sure. I assume it's quite large as far as I can tell and I'm not going to be able to sit in front of a computer all the time looking for the parts that I want to read. I don't want to read all of them. With a book, you can flip through and find the chapters that matter. I think they have it chaptered somehow, but -- there's something like where you can, on the computer website, or whatever, you can call up a chapter or something but I didn't succeed in doing it. I can't tell from a list what is actually in the chapter, if that's what I want whereas in a book, you can just sort of flip through it.



I-57-2  
*continued*

So one, they don't have a published document. Two, they do not have a public hearing process as we know it. This is not a hearing. I don't know what you would call it. It's an open house.

Now to the substance of the matter -- and again, I haven't seen the EIR. I've seen this which I think it's a good little publication, this little brochure. It's a useful overview. Based on this alone, one, they are eliminating lots of Muni stops. They cannot do that. Unconscionable. There are a growing number of people who are older apart from the ones who are disabled maybe all their lives or became disabled. Old people become less and less physically fit and now they expect them to walk -- to have bus stops five blocks apart. Now to get to Van Ness in the first place, they don't all live on Van Ness. To get to the bus, people have to walk a few blocks maybe and then walk farther. And think about it with grocery bags. The people who designed this plan, have cars. I actually know somebody who is on the Citizen Advisory Committee. He doesn't live down here. He lives at West Portal and he has a car. Now I'm sure he uses Muni quite a lot, but if he's going grocery shopping, he's going to take his car. We down here do not have that option. Most of the people in the Nob Hill area have no vehicle at all. When we did census data which was some years ago, 65 percent of the households of Nob Hill overall had no vehicle. In one census tracked on Nob Hill, 90 percent of the people had

**I-57-3**

no vehicle. This was a few years ago, not the current census, but it very likely hasn't changed much because most of the buildings haven't change. That means if you're going to do grocery shopping or transport heavy stuff, you have to use Muni. Now when they eliminated some bus stops on Geary down there where I was living at the time, now I came home with my big heavy bags of grocery that I had get on and off the bus with big heavy bags of grocery and carry them two and a half blocks up the hill but now I had another additional block to carry them. And in addition, in my building a woman with a walker had been able to use the Geary bus when the stop was at Mason and Geary. She could manage a bit with the walker. Once they eliminated it, she had to take a taxi because everybody is not fit to begin with and also if you don't have a car and if you're actually a Muni user, you have to do all of your business on Muni -- all your heavy stuff.

So it is just impractical to base this on the opinions of people who let's say have cars that they can use when they need it or a bicycle. I was on a Muni bus recently -- maybe the 31. It was packed and it's one that actually stops at reasonable intervals and so on and it is packed with old people most of the time -- very old people in many cases and fragile people and

people with walkers and canes and all kinds of stuff. And some tourists from out of town began commenting. They said, "Gee, your Muni system, people complain about it but look at all of these people. In our city, these people would all be at home or they would have to have cars. They would not be able to be using the bus because they are very far apart," or whatever -- they are on slow schedules.

San Francisco -- I don't remember the exact source -- but it was some kind of federal survey or national survey where they found that this was one of the cities that had the best access for older people because they could get out. They could use Muni. It has a good network. When you eliminate bus stops, you make it so many people can't then use it or use it easily and they will be unable to go out and do their shopping and so on. How many blocks can they carry it to get home or they will be isolated at home, unable to go out to activities that they would normally have done.

Van Ness already eliminated some bus stops a few years ago in the '80s, I guess. Like they used to have a bus stop at each -- like at Sacramento and Clay where the buses crossed. I had a physical condition and it was extremely painful. It went on for many, many months and luckily it turned out not to be permanent, but many

people have this permanently. I would get off the Van Ness bus at Sacramento and Clay to transfer coming from work and there was no longer a stop where the bus -- I would have just had to walk a little short distance. Instead I had to walk up like another extra half block, or whatever, in agony and it was the first time I realized how important these things were when it happened to me. Most of the people who do this kind of planning don't have a clue what it's like to have disabilities.

And older people, as they become older and older, they become in effect disabled let's say with weakness or pain. We cannot have bus stops eliminated. They need to have a bus stop at each place where there is a crossing bus and no farther than two blocks apart on bus stops. That would be reasonable.

On crossing Van Ness, I'm glad they are putting in timing signals. That certainly needs to be done but we also need to have more time to cross at many intersections. I doubt that they are planning to increase the crossing time which is what people have been asking for. There are some intersections where there is adequate time to get across and then there are others like Pine where you practically have to sprint. And I'm not particularly limited, but I have to step off

I-57-4

right at the moment it changes and rush to get over and I still can't make it before it changes so they need to add time for crossing Van Ness. Bulbs are not sufficient because there are bulbs there already. But even at Pine and Van Ness, there are bulbs and you can't get across. It's very dangerous. One night I got stuck in the middle and it was wind and rain so I couldn't run across in that kind of weather. And when I got stuck there, I thought I was going to die. There is a huge velocity. All these cars are coming at you and the wind is blowing and what is located at that corner? A huge senior housing complex. This is an area where there are many, many older people living because of the nature of the buildings. They are old buildings anyway. There are lots of studio and one-bedroom apartments, Muni service, relatively safe. So there's a huge population of older people around Nob Hill and Polk Gulch and so on. And then they have built many senior complexes in the area like from Gough and Laguna, Van Ness, Larkin Street and even up to Hyde. It's an area where there are many places built for older people. So now we're going to eliminate bus stops. It's really unconscionable. And they don't listen. It's like these arrogant people who have no disability themselves, have never thought what it would be like and have a car,

**I-57-5**

probably, when they need to go shopping.

The other thing that concerns me is the Van Ness Plan. The Van Ness Plan is an area plan for the traffic and the buildings and so forth -- use. The Van Ness Plan made a point of trying to improve the corridor with greenery. Most of it hasn't been implemented yet. There's been a start on that -- and to have more housing on the corridor and they have been building more housing. Well the intent was to have a beautifully landscaped median so that it will be like a front yard for the people who are living in all this high-density housing to be able to look down and see at least trees and thinking like that. Well, now along comes this plan and they want to rip out the median. Now if they are going to do an improved bus system down the sides, that's fine. It's not particularly disruptive to the landscaping. They can replant street trees. They will have their little bulbs for the bus stops and that's all right, but to do it in the median is just unacceptable -- either version. Much of it will be taken up by the bus stops. The tree planting won't be the same as they can do here. It has not been accomplished well yet but it could be. It needs to have a lot of lush trees like the plan originally intended -- the street trees and the trees in the median. And if

I-57-6

they build this, they are basically eliminating that and they are putting a lot of infrastructure in the median -- buses and bus stops and all of this stuff where people will look out of their windows or people who are pedestrians and walking up, that's what they are going to see instead of a beautiful median like on Divisadero. They did beautiful tree planting in the median and along the street, trees down the side and it's just stunning. It makes a huge difference. That's just like a small street. This is one where they intended for it to be a boulevard with major plantings. And where it has wide medians, there could be much, much more impact but this would eliminate it completely. And just the fact that they have not completely accomplished it, doesn't mean that it doesn't matter at all so I think those are my main --

When Mayor Newsom came in, he began -- for the first time somebody cared about it and they began planting the medians with a lot of low, floral cover and other greenery and they just have not done all of the tree planting which needs to be done but this would eliminate it.

I think those are the main things. If he had asked questions, I would have asked when the lights are prolonged for this bus, I understand that they're not

going to flip the light and shorten the crossing time like for some pedestrians who are trying to cross the street or something but I guess they are going to hold the green lights on Van Ness longer. What is the impact on all these buses that cross Van Ness because there are many, many intersections. I forget right now how many. I counted them. Practically every intersection has a bus crossing or turning in order to go back on its route in the opposite direction and so will there be a significant impact on that from holding the light green on Van Ness and obviously red longer against all the buses that are trying to cross Van Ness. I'm wondering what impact that will have on Muni service on those lines. All of those lines are going to have more of a delay at the intersections where they are holding the light for the Van Ness buss so I wondered about that.

**I-57-7**

So anyway, thank you very much.

There is one thing I forgot. They have very rosy ideas about how this is going to speed things along, but there is tremendous congestion at the intersections of Van Ness sometimes. It's not always in the main rush hour. Sometimes it's in the weekend evenings or afternoons. And so the Van Ness bus goes along and it's in its own lane. It doesn't have interference from cars on Van Ness but when it gets to the intersection, there

**I-57-8**

is all the traffic -- the people trying to cross and getting stuck in the box. The cars and the pedestrians, they are all backed up there so I do not see how this is going to achieve what they expect to achieve because it doesn't have priority over getting them through the intersections.

So thank you.

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Linda Chapman

| Reviewer's Comment Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-57-1                    | <p>Paper copies of the Draft EIS/EIR were made available at libraries in the project vicinity, as follows: at the SF Main Library (100 Larkin St.), the Golden Gate Valley Branch Library (1651 Union St.), and the Marina Branch Library (1890 Chestnut St. at Webster St.). Paper copies of the Draft EIS/EIR were also available at the City's Planning Information Center, and at the SFCTA and the SFMTA offices. Additionally an electronic version was made available at <a href="http://www.vannessbrt.org">www.vannessbrt.org</a>, and CD copies were made available to the public at no charge. Paper copies were also available to purchase at the cost of printing.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| I-57-2                    | <p>The public hearing was presented in an open house format. The public had an opportunity to discuss project features with subject experts including engineers and planners on the project development team. There was a 30-minute PowerPoint presentation given during the public hearing, and over two hours were devoted to a Q/A session with the development team. Additionally, a court reporter was available during the hearing to take formal testimony from the public. All testimony has been included in this response to comments document for public review.</p> <p>Verbal comments made at community meetings without a court reporter were not included in this response to comments. Staff explained that people needed to make their comments in writing or verbally to the court reporter during the public comment period if they wanted a response as part of the Final EIS/EIR.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| I-57-3                    | <p>Please see Master Response #5 and the Universal Design analysis in Section 3.4.3.I of the Draft EIS/EIR for detailed discussions of these issues. The BRT project does consider the needs of the elderly and disabled communities in both its stop location and spacing. In response to comments regarding wider stop spacing in the vicinity of the Van Ness Avenue and Vallejo Street intersection, which has higher grades than other parts of the corridor, the LPA would include a southbound station at the intersection of Vallejo Street and Van Ness Avenue. A northbound transit station in this same location, referred to as the Vallejo Northbound Station Variant, could also be implemented, and will be decided upon at the time of project approval. Facilitating transfers to east-west transit routes was a key criterion in the selection of proposed BRT stop locations. The LPA includes stops at most cross-streets with transit service and is designed to facilitate easy transfer connections. Please see Table 2-3 in the Draft EIS/EIR for a full list of proposed stop locations.</p> <p>Chapter 3.I of the Draft EIS/EIR indicates that fewer people own cars in the neighborhoods surrounding Van Ness Avenue than the citywide average. A goal of the project is to improve speed and reliability of bus service for those who are both transit dependent as well as those who choose to ride transit.</p> |
| I-57-4                    | <p>Please see Master Response #13 for a summary of how crossing conditions on Van Ness Avenue would improve. Crossing conditions and distances to refuges and to cross the entire street would be improved over existing conditions, and a number of additional intersections would become compliant with ADA and City standards for pedestrian crossing speed. For example, locations that already have curb bulbs would be provided a pedestrian refuge at the median with a protective nose cone.</p> <p>Under the LPA, the median would be widened from 4 feet to 9 feet at Pine and Van Ness (and at most locations where left turns are removed). This, in addition to the fact that the adjacent lanes would only</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

have buses instead of private vehicle traffic should improve waiting conditions in the event a pedestrian cannot cross the entire street in one light cycle.

I-57-5 Please see Master Response #5 and the Universal Design analysis in Section 3.4.3.I of the Draft EIS/EIR for detailed discussions of how the project impacts seniors and persons with disabilities. The selected BRT stations are located at transit cross routes and areas with higher boardings. In the case of Nob Hill and Polk Gulch neighborhoods, there would be stations located at O'Farrell/Geary, Sutter/Bush, Sacramento/Clay and Jackson/Pacific streets, with an average spacing of just over 2 blocks per station in that section (4 stations over 9 blocks).

In response to comments regarding wider stop spacing in the vicinity of the Van Ness Avenue and Vallejo Street intersection, which has higher grades than other parts of the corridor, the LPA would include a southbound station at the intersection of Vallejo Street and Van Ness Avenue. A northbound transit station in this same location, referred to as the Vallejo Northbound Station Variant, could also be implemented, and will be decided upon at the time of project approval.

I-57-6 Preservation of existing trees is one of the factors considered in the LPA selection process (see Section 10.2.4.6, Criterion F-6). Neither of the median (center-running) build alternatives would eliminate all existing plantings in the corridor. Build Alternative 3 would remove all median trees and landscaping. Build Alternative 4 would require removal of trees and landscaping at proposed station locations, and would maintain some existing trees and landscaping. The LPA (with or without the Vallejo Northbound Station Variant) would require removal of all existing landscaping on blocks with stations. Table 4.4-2 of the EIS/EIR shows the estimated number of trees that would be removed under each alternative, broken down by median and sidewalk trees. As shown in Table 4.4-2, approximately 37 percent of existing median trees would be preserved under Build Alternative 4. Both new and existing trees would require ongoing maintenance pruning, however, to avoid interference with the OCS wires providing power to the electric trolleys. Including proposed new trees, both center lane alternatives (Alternatives 3 and 4) and the LPA (with or without the Vallejo Northbound Station Variant) would provide a greater number of median trees than existing conditions, because currently not all blocks on Van Ness Avenue feature a landscaped median. The LPA would provide 107 trees in the median and 362 trees along the sidewalk, which is 53 greater than existing conditions. As noted by the commenter, some blocks do not currently have median trees, or feature young trees without any surrounding landscaping. The LPA would provide opportunities to plant new trees at these locations. However, it is recognized that there will be a plant establishment period for new trees to reach maturity and therefore the greenspace feel of the median would take time to manifest itself.

While the appearance of Van Ness Avenue would change with the addition of BRT streetscape features (stations and transitway) in the median under Build Alternatives 3 and 4 and the LPA, a consistent, landscaped median design with tree plantings would be developed throughout the corridor, in harmony with urban design goals set by the City for Van Ness Avenue.

I-57-7 Transit Signal Priority (TSP) will be able to hold green signals to reduce delay for approaching BRT vehicles at most, but not all, intersections along Van Ness Avenue. Van Ness BRT will not have signal priority at intersections with very frequent and high-ridership intersecting transit routes, such as at Market, Mission, Geary, and O'Farrell Streets. VISSIM microsimulation results obtained for intersections along Van Ness and South Van Ness Avenues between Mission and Clay streets estimate that the LPA will increase delay for buses on cross streets for less than 5 seconds per bus across Van Ness Avenue in 2015. However, delays for buses traveling along Van Ness Avenue with the LPA would decrease by more than 8 seconds per bus per intersection versus the No Build Alternative, resulting in an average delay reduction for all buses (both travelling along and crossing Van Ness Avenue) of approximately 4 seconds per bus with the implementation of BRT.

I-57-8 The proposed dedicated transit lane would allow BRT vehicles to avoid traffic congestion approaching intersections, while Transit Signal Priority would reduce transit delays at intersections. If vehicles on cross-streets periodically "block the box," delaying through traffic on Van Ness Avenue, the center-

running transit lanes proposed with the LPA should minimize delays to transit compared with transit running in curb lanes, as in the existing condition. This is because traffic that does not clear the intersection during a light cycle would block the part of the intersection near the curb first, moving towards the middle of the street.

Traffic volumes are highest in the corridor during the weekday PM peak period; therefore the PM peak period represents the worst-case traffic scenario and was used as the basis for the transportation analysis, including evaluation of traffic impacts and transit speeds. Representative weekday and weekend peak period traffic volumes are provided in the Draft EIS/EIR in Table 3.3-1.

EIR\_EIS PUBLIC MEETING - Vol. I - November 30, 2011  
Transcript of oral comments (see court reporter's statment after letter 59)

MS. JACKIE SACHS (CONT'D.): What I forgot to say earlier was that -- he was talking about eliminating left turns on Van Ness Avenue. What they should do on 19th Avenue -- for example, in the Sunset District, they have "no left turn" along 19th Avenue from Lincoln all the way to Sloat. What they should do on Van Ness because of the aging population and the people taking the buses and people in walkers, canes and wheelchairs and babies and mothers with strollers, that sort of thing, is we should have no right turn on Van Ness -- no right turn on red so that people can cross Van Ness safely. That's one thing I forgot to say. Like Betty was saying, on 19th Avenue, if you go down in the Richmond District -- in the Sunset District between Lincoln Avenue and Stonestown, you can't make a left turn off of 19th Avenue.

I think that's about it. If I have anything more to say, I'll say it at the CAC meeting on the 7th of December.

**I-58-1**

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Jackie Sachs

Reviewer's  
Comment  
Number

Response

I-58-I

Provision of right turns is important to maintaining local circulation and access. The only limitations on right turns would be for trucks at some locations where the move could not be accommodated (similar to existing conditions) In fact, each build alternative, including the LPA, incorporates features that help avoid or minimize traffic impacts, including right-turn pockets at high-demand locations (Section 3.3.4). The lower vehicle traffic volumes anticipated with the implementation of BRT would reduce the number of right turn movements, even when accounting for the elimination of left turns.

EIR\_EIS PUBLIC MEETING - Vol. I - November 30, 2011  
Transcript of oral comments (see court reporter's statment after letter 59)

MS. SAMANTHA ROBINSON: So my name is Samantha Robinson. I am a four-year resident of the Nob Hill neighborhood. I am a car owner, but I primarily use public transit out of choice.

I am here to support the development of BRT on Van Ness. I think it's critically important that we improve the reliability of public transit to ensure that it remains a viable option as a transportation alternative in San Francisco.

**I-59-1**

In looking at the alternatives, I believe that options Build Alternatives 2 and 4 offer the most flexibility, but I also like the esthetics of Build Alternative 3.

**I-59-2**

My main concerns are around ensuring reliability so I hope that the TEP implementation at south of Market can be implemented at the same time that the dedicated transit lane is put in place so that service is reliable heading both north and south.

**I-59-3**

On a personal note, I have changed my personal use of public transportation and specifically the 47 and 49 because those bus lines are not reliable. I regularly travel two places in San Francisco where I could take the 47 and 49 and then connect to alternative transit. Instead, I choose to take bus lines that are more reliable. Improving 47 and 49 will increase ridership and be better for our city.

**I-59-4**

Thank you. That's all.

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Samantha Robinson

| Reviewer's<br>Comment<br>Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-59-1                          | Commenter's support is noted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| I-59-2                          | Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA. Flexibility of operations is accounted for through Performance Indicator A-4. The LPA allows the use of a standard right door vehicle, providing greater fleet flexibility. Concerning landscaping design, the aesthetics of Build Alternative 3 are discussed in response to comment 30-6. The LPA would have the ability to provide a unified landscaping design.                                                                                                                                                                            |
| I-59-3                          | Near term improvements are being studied as part of the Mission Mobility study. The TEP is currently undergoing environmental review for their Travel Time Reduction Program, and includes analysis of improvements along Mission Street where the 49 route will travel south of the BRT Project alignment.                                                                                                                                                                                                                                                                                                                                       |
| I-59-4                          | Improving reliability is a key goal of the project, and outlined in Chapter 1 of the EIS/EIR as part of the project purpose and need. Daily ridership changes for the Muni Lines 47 and 49 lines are shown in Section 3.2.2.2 in the EIS/EIR. Ridership under Build Alternative 2 ridership would increase by 29% in Year 2015 and 51% in Year 2035 versus existing conditions. Under Build Alternatives 3 and 4 (including the LPA), ridership would increase by 37% in Year 2015 and 59% in Year 2035 versus existing conditions. The BRT would show a significant increase in ridership versus the No Build Alternative in both 2015 and 2035. |



SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

# Comment Card

## Van Ness Avenue Bus Rapid Transit Environmental Impact Statement/Environmental Impact Report

Please provide comment on the findings in the Draft Environmental Impact Statement/  
Environmental Impact Report (EIS/EIR), and Project Alternatives Analysis, including your  
preference for the Locally Preferred Alternative (LPA) to be constructed.

All identifying information is optional. Responses to comments will be published in the  
Final EIS/EIR. Include your email or mailing address if you wish to be notified when the  
final report is published.

HIROSHI KOKAME  
NAME

Self  
AFFILIATION

hiroshi-kokame@mac.com  
EMAIL OR MAILING ADDRESS

Comments:

I like Build Alternative 4.  
I also like Alternative 4-B.

~~The bus stations like safer,~~  
~~and decrease more and built,~~

The bus stations are bigger.  
They are more comfortable  
and safer. Passengers are  
standing farther away from  
traffic.

It provides passengers a more  
rail-like experience.

Removing left turn lanes will  
speed up transit and be safer for  
pedestrians

I-60-1

I-60-2

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Hiroshi Kokame

Reviewer's  
Comment  
Number

Response

I-60-1 Support for Build Alternative 4 (with and without Design Option B) noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA. Alternative 4 (with and without Design Option B) provides the greatest platform width and the greatest amount of buffer between the bus platforms and traffic; it features a 14 foot wide platform and a 17.5-foot buffer measured as 7 feet from the center of the platform plus the 10.5-foot BRT lane (see Section 10.2.4.2, Performance Indicator B-2). The amount of buffer between platform and the auto traffic was factored into the LPA selection process. Under all of the build alternatives (including the LPA, with or without the Vallejo Northbound Station Variant), no platforms exceeded crowding thresholds.

I-60-2 As discussed in Section 2.2.2.2 of the EIS/EIR, Build Alternatives 3 and 4 with Design Option B and the LPA would eliminate all but one northbound left turn (at Lombard Street) and all but one southbound left turn (at Broadway), would reduce conflicts at intersections with turning vehicles and pedestrians while also increasing the green light time available to BRT buses for through movement.

Pedestrian crossings on Van Ness Avenue are long, affecting the walking speed required to cross the entire street in one light cycle, which is a measure of pedestrian safety. In existing conditions, crosswalks at left turn locations do not have a median refuge wider than four feet, and signal timing typically does not allow for the slower walking speed of 2.5 feet per second (fps) suggested by City guidelines. Compared to the No Build Alternative, with Alternative 2 an additional 12 Van Ness Avenue intersections would meet the City's standard for pedestrian walking speed of 2.5 fps at a crossing, and an additional 5 intersections would meet this standard under Alternatives 3 and 4, while an additional 8 would meet this standard with Design Option B (see Section 3.4.3.1 Pedestrian Impacts - Flexibility in Use).



SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

# Comment Card

Van Ness Avenue Bus Rapid Transit

Environmental Impact Statement/Environmental Impact Report

Please provide comment on the findings in the Draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR), and Project Alternatives Analysis, including your preference for the Locally Preferred Alternative (LPA) to be constructed.

All identifying information is optional. Responses to comments will be published in the Final EIS/EIR. Include your email or mailing address if you wish to be notified when the final report is published.

NAME

AFFILIATION

EMAIL OR MAILING ADDRESS

Comments:

① Format of this evening's Presentation was very HELPFUL — Much thanks to all staff who participated. It made I-61 the dominant interaction AND allowed individuals to formulate questions get direct answers prior to main presentation. Thank you!

I-61-1

② Counter-Intuitive Claims need to be ADDRESSED more directly to be more clear  
 - A. extra cost and extra construction time for option 2  
 - B. lower costs of option 4 which requires whole new set of Buses.

I-61-2

③ Parking Loss: option 3 vs 3B  
 374 vs 411 ?  
 How does center net? Take out so many

I-61-3

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Anonymous

Reviewer's  
Comment  
Number

Response

- I-6I-1 Build Alternative 2 would provide a dedicated bus lane in the right-most lane of Van Ness Avenue, compared to Build Alternatives 3 and 4 which would have dedicated lanes in the median. In order to provide 2 lanes of mixed-flow traffic access during construction of Build Alternative 2, construction would be phased so that only one side of Van Ness Avenue is built at a time. Construction phasing for all build alternatives is described further in Section 4.15 Construction Impacts: Construction Implementation Staging.
- Build Alternative 2 would be the least costly (\$93 million) of the Build Alternatives and Alternatives 3 and 4 would cost \$136 million and \$112 million respectively (see Table 9-1 in Section 9.1.1). The LPA would cost \$126 million.
- I-6I-2 Build Alternative 2 would provide a dedicated bus lane in the right-most lane of Van Ness Avenue, compared to Build Alternatives 3 and 4 which would have dedicated lanes in the median. In order to provide 2 lanes of mixed-flow traffic access during construction of Build Alternative 2, construction would be phased so that only one side of Van Ness Avenue is built at a time. Construction phasing for all build alternatives is described further in Section 4.15 Construction Impacts: Construction Implementation Staging.
- Build Alternative 2 would be the least costly (\$93 million) of the Build Alternatives and Alternatives 3 and 4 would cost \$136 million and \$112 million respectively (see Table 9-1 in Section 9.1.1). The LPA would cost \$126 million.
- I-6I-3 Alternative 3 provides left turn lanes which would require additional cross sectional widths to accommodate lane transitions for other vehicles. Alternative 3B would remove left turn lanes and provide additional cross sectional widths which can then be used for parking spaces. Please see Section 3.5.2 for an explanation of changes in parking with implementation of the proposed project.



SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

## Comment Card

Van Ness Avenue Bus Rapid Transit

Environmental Impact Statement/Environmental Impact Report

Please provide comment on the findings in the Draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR), and Project Alternatives Analysis, including your preference for the Locally Preferred Alternative (LPA) to be constructed.

All identifying information is optional. Responses to comments will be published in the Final EIS/EIR. Include your email or mailing address if you wish to be notified when the final report is published.

NAME

AFFILIATION

EMAIL OR MAILING ADDRESS

Comments:

Key Issue: TRAFFIC

the numbers presented seem  
very counter intuitive  
option 2 loses 33 spaces  
but options 3 & 4 (center lanes)  
lose much more 68 & 45

Why? AND then just removing  
left turn lanes everything BACK?

I-62-1

**Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

Reviewer: Anonymous

Reviewer's  
Comment  
Number

Response

I-62-I

A key issue for the project is traffic impacts. Please see Master Responses #8 and #9 for a summary of how traffic impacts were analyzed and addressed.

Build Alternative 3 provides left turn lanes which require additional cross sectional widths to accommodate lane transitions for other vehicles and limit the available space for any additional parking spaces. However, additional widths required for lane transitions under Build Alternatives 2 and 4 would come from the center median and would not yield any additional parking spaces. By removing left turns, there would be less lane transitions that require the removal of parking. Please see the engineering drawings in Appendix A of the EIS/EIR to see how left turns affect lane transitions. Appendix B shows the parking loss on a block-by-block basis for each alternative, including the LPA (with and without the Vallejo Northbound Station Variant).



SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

## Comment Card

**Van Ness Avenue Bus Rapid Transit  
Environmental Impact Statement/Environmental Impact Report**

Please provide comment on the findings in the Draft Environmental Impact Statement/  
Environmental Impact Report (EIS/EIR), and Project Alternatives Analysis, including your  
preference for the Locally Preferred Alternative (LPA) to be constructed.

All identifying information is optional. Responses to comments will be published in the  
Final EIS/EIR. Include your email or mailing address if you wish to be notified when the  
final report is published.

Tim Hickey  
NAME

self  
AFFILIATION

thickey@yahoo.com  
EMAIL OR MAILING ADDRESS

Comments:

I would prefer 4B. It would be safer for  
pedestrians, drivers, and cyclists. It would  
be faster and the larger median more  
convenient.

I-63-1

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Tim Hickey

Reviewer's  
Comment  
Number

Response

I-63-I

Support for Build Alternative 4 with Design Option B noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA selection. Section 10.2.4.3 describes how pedestrian and bicycle safety are considered in the LPA selection process (Chapter 10). There would be some operational differences for cyclists using Van Ness Avenue under each build alternative; however the project alternatives were determined to perform essentially the same with regard to the bicycle performance indicator.

Build Alternative 4 with incorporation of Design Option B would provide the widest median, and all the build alternatives would improve crossing conditions for pedestrians. Please see Master Response #13 for a summary of how crossing conditions on Van Ness Avenue would improve. Build Alternatives 3, 4, and the LPA would provide the fastest transit travel time (or greater travel time savings) compared with Build Alternative 2. Incorporation of Design Option B (part of the LPA) through the elimination of left turns would achieve an additional travel time savings. Build Alternatives 3, 4, and the LPA (with or without the Vallejo Northbound Station Variant) would reduce conflicts with right turning private vehicles and vehicles attempting to parallel park as compared with Build Alternative 2. The reduction in left turns would improve pedestrian and driver safety by reducing this conflicting movement.

The Stations help us understand & discuss info.

SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY



### Comment Card

Van Ness Avenue Bus Rapid Transit

Environmental Impact Statement/Environmental Impact Report

Please provide comment on the findings in the Draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR), and Project Alternatives Analysis, including your preference for the Locally Preferred Alternative (LPA) to be constructed.

All identifying information is optional. Responses to comments will be published in the Final EIS/EIR. Include your email or mailing address if you wish to be notified when the final report is published.

Tes Welborn

NAME

AFFILIATION

tesw@aol.com

EMAIL OR MAILING ADDRESS

Comments: (because of concerns re dual side doors)  
I favor #3, with some left turns, & like #4.  
If possible, transplant removed trees/plants.

I-64-1

I-64-2

How would bike lanes affect plan? I'd hope to narrow sidewalks, not further reduce lanes or parking. (The bikes on Polk. would be best)

I-64-3

I-64-4

Can't you get construction going sooner??  
I'd like to see costs of buying & maintaining dual side bus doors, & repair records.  
- Can these be made in USA?  
- How would maintenance be funded?  
- Is GGT open to dual side doors?

I-64-5

I-64-6

**Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

Reviewer: Tes Welborn

Reviewer's  
 Comment  
 Number

Response

- I-64-1 Support for open house hearing format is noted. Support for Build Alternative 3 noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA selection. Build Alternative 4 would have less operating flexibility due to the requirement for buses to load from the left side at most stations, as described in Section 10.2.4.I Transit Performance (Performance Indicator A-4). This feature was considered in the LPA selection process. The LPA would use standard right-side door vehicles. Table 2-4 in Section 2.2.2 shows the proposed turn pockets that would be provided under each build alternative, including incorporation of Design Option B/LPA.
- I-64-2 As described in Section 4.13.4, Biological Environment, Mitigation Measure I-BI-1 requires that mature trees shall be preserved and incorporated into the project landscape where feasible and in accordance with City of San Francisco regulations. It is assumed that large, mature trees could not be successfully transplanted and that young trees would be considered for transplanting and evaluated by the San Francisco Department of Public Works, Bureau of Urban Forestry. Per typical requirements by the Bureau of Urban Forestry, any trees that do not survive transplanting would be replaced with a tree of equal size.
- I-64-3 Bike lanes are not planned on Van Ness Avenue as part of the BRT project. The project Purpose and Need, detailed in Chapter I of the DEIS/DEIR, includes improving the safety and comfort of pedestrians. Narrowing the sidewalks on Van Ness Avenue would conflict with the project purpose because it would degrade pedestrian conditions relative to existing and No Project conditions.
- As the commenter suggests, the project proposes that Polk Street remain the primary bicycle route in the corridor. Polk Street is one block east of Van Ness Avenue, has significantly lower traffic volumes, and is a designated Class II/Class III bicycle facility.
- For more information, Section 3.4.2.2 of the Draft EIS/EIR describes bicycle conditions in the corridor, while Section 3.4.3.I describes the impacts of the project on bicyclists.
- I-64-4 Narrowing the sidewalks on Van Ness Avenue would conflict with the project purpose because it would degrade pedestrian conditions relative to existing and No Project conditions.
- I-64-5 Section 2.8 of the EIS/EIR provides an overview of the design process. If the EIS/EIR is certified, a NEPA ROD is issued, and the project approved, the SFMTA would commence preparation of 30 percent plans and the Conceptual Engineering Report (CER). The design process requires phased development of project plans and specifications, subject to review and approval by permit authorities at the 30-, 65-, 95-, and 100-percent design levels. The primary elements of the 30 percent design include roadway and pavement, sidewalks and medians, utilities base map updating, architectural and landscape design, and ongoing public outreach. Accommodation of ADA requirements would also occur at this stage when designing curb bulbs and curb ramps. The design schedule is: 30-percent design 2012-2014, 65- through 100-percent design documents 2014-2015, and advertisement for construction in 2015. Please see Master Response #6 for additional information about project construction.
- I-64-6 Please see Chapter 10 of the Draft EIS/EIR for a summary of the analysis supporting the LPA selection. The LPA selection process took the challenges of dual side door vehicles into account. The capital costs

of purchasing dual side door vehicles are accounted for in Chapter 9 of the EIS/EIR, as are additional maintenance costs. The LPA in this Final EIS/EIR would utilize right-side door vehicles in the recommended design (see Section 10.3, Appendix A). Since the project is partially funded through federal FTA grants (see Chapter 9 of the EIS/EIR), procurement of vehicles would meet the FTA's "Buy America" requirements for 60 percent domestic cost content. More information about the Buy America requirements is available at <http://www.dot.gov/highlights/buyamerica#fta>.

Golden Gate Transit was not proposing to purchase dual side door vehicles under any of the build alternatives or LPA (see Chapter 2 of the EIS/EIR).



SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

# Comment Card

## Van Ness Avenue Bus Rapid Transit Environmental Impact Statement/Environmental Impact Report

Please provide comment on the findings in the Draft Environmental Impact Statement/  
Environmental Impact Report (EIS/EIR), and Project Alternatives Analysis, including your  
preference for the Locally Preferred Alternative (LPA) to be constructed.

All identifying information is optional. Responses to comments will be published in the  
Final EIS/EIR. Include your email or mailing address if you wish to be notified when the  
final report is published.

KEVIN DAY  
NAME

SELF  
AFFILIATION

KEVIN-JOSEPH-@HOTMAIL.COM  
EMAIL OR MAILING ADDRESS

### Comments:

I THINK THE EIR SHOULD TAKE IN  
ACCOUNT FOR THE PRIVATE BUS SYSTEM  
(GOOGLE, APPLE, ETC.) THIS COULD, IF ALLOWED  
(OPTIONS W/ BUS IN MIDDLE OF RIGHT-OF-WAY)  
REDUCE TRAFFIC LANES DOWN TO ONLY ONE  
IN EACH DIRECTION. PRIVATE BUSES WOULD  
STILL BE IN CURB LANE

I-65-1

I THINK ALL TREES PLANTED BY PROJECT  
SHOULD BE MAINTAINED BY GOVERNMENT & NOT  
PRIVATE PROPERTY OWNERS.

I-65-2

THIS "COST" FOR THIS PROJECT SHOULD  
BE BASED ON A NIGHT TIME <sup>PREMIUM</sup> ~~PREMIUM~~  
OF 1.5x TO 2.0 TIMES DAY RATE.

I-65-3

ARE ALL SEWERS GOING TO BE RELOCATED.

I-65-4

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Kevin Day

| Reviewer's<br>Comment<br>Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-65-1                          | <p>Please see Master Response #3 regarding City policies for private shuttle services. While policies do not currently allow private shuttles to operate in transit lanes, the LPA does not preclude the use of the lanes by private shuttles if that policy were to change.</p> <p>The Draft EIS/EIR identified a number of intersections that would experience traffic delays (see Section 3.3) under the No Build and build alternatives. Further reducing the number of mixed traffic lanes on Van Ness Avenue from two to one in each direction would likely cause new traffic impacts throughout the corridor. Please see Master Response #8, and Section 3.3.3.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| I-65-2                          | <p>The San Francisco Department of Public Works would maintain the median and street trees planted as part of this project.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| I-65-3                          | <p>The cost estimates assume procedures standard for a project of this nature, including nighttime work when necessary. Please see Chapter 4.15 for details on the approach to construction for the project.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| I-65-4                          | <p>Section 4.6.I explains that the SFPUC operates and maintains the sewer beneath Van Ness Avenue, which also functions as a stormwater system called the combined sewer system (CSS). The VCP sewer pipeline beneath Van Ness Avenue is aged and in a varied condition, and therefore it is conservatively assumed that construction activities under Build Alternatives 3 and 4 have the potential to damage this pipeline where construction activities would occur directly above it. Thus, complete relocation and replacement of the VCP sewer pipeline within the project limits is assumed under Build Alternative 3 (including Design Option B). Under Build Alternative 4 (including Design Option B), relocation and replacement of the sewer pipeline on Van Ness Avenue is assumed at each station location, and for the block between Geary and O'Farrell streets, because these are the only areas where the BRT would be running directly over the current sewer location. Under the LPA, which combines design features of Build Alternatives 3 and 4, replacement of the aging sewer pipeline would be required at station locations and in areas where the transitway would cause direct load (weight) on the sewer.</p> |

SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY



# Comment Card

## Van Ness Avenue Bus Rapid Transit Environmental Impact Statement/Environmental Impact Report

Please provide comment on the findings in the Draft Environmental Impact Statement/  
Environmental Impact Report (EIS/EIR), and Project Alternatives Analysis, including your  
preference for the Locally Preferred Alternative (LPA) to be constructed.

All identifying information is optional. Responses to comments will be published in the  
Final EIS/EIR. Include your email or mailing address if you wish to be notified when the  
final report is published.

Kevin Stull

NAME

AFFILIATION

875 Post St. #142 San Francisco, CA 94109

EMAIL OR MAILING ADDRESS

### Comments:

I-66-1

I have used the buses along Van Ness a lot in my  
life and I am both optimistic and cautious in the  
changes that will be happening to Van Ness.  
Improvements in the bus times and services are  
much needed since change is so hard to come by and  
has taken so long to implement. And with more people  
visiting and living in San Francisco, changes to public  
transportation and to our major thoroughfares need  
to be fixed <sup>now</sup> more than ever. I'm also cautious  
~~because~~ that it gets built as close to or as perfect  
a way that everyone's ideas of how this should look  
like matches what they envisioned. I wish everyone  
who is involved in this project the best of luck  
in moving this forward.

---

**Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

---

Reviewer: Kevin Stull

---

Reviewer's  
Comment  
Number

Response

---

|        |                                                                                           |
|--------|-------------------------------------------------------------------------------------------|
| I-66-I | Commenter's support is noted. The SFMTA will lead design and construction of the project. |
|--------|-------------------------------------------------------------------------------------------|



SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

## Comment Card

### Van Ness Avenue Bus Rapid Transit

### Environmental Impact Statement/Environmental Impact Report

Please provide comment on the findings in the Draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR), and Project Alternatives Analysis, including your preference for the Locally Preferred Alternative (LPA) to be constructed.

All identifying information is optional. Responses to comments will be published in the Final EIS/EIR. Include your email or mailing address if you wish to be notified when the final report is published.

NAME Rose Sery - lives on Gough  
Broadway

AFFILIATION \_\_\_\_\_

EMAIL OR MAILING ADDRESS rosesery@gmail.com

Comments:

- I want the no build option.
- Any one of the other options will
- put more traffic through the neighborhood in the north end of Gough St.
- it is not needed at north end of Van Ness
- will provide very little improvement.
- will slow the car traffic
- is a waste of money
- just because money and time have already gone into this idea does not mean it has to happen
- no one who voted for the proposition to improve bus service knew that it would mean this project.
- the increased traffic on Gough will lower my house value.

I-67-1

I-67-2

I-67-3

I-67-4

**Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

Reviewer: Rose Sery

Reviewer's  
 Comment  
 Number

Response

I-67-1 Support for No Build Alternative noted. Please see Chapter 10 of the Draft EIS/EIR and the LPA report for the analysis supporting the LPA.

I-67-2 Please see Master Response #1 on the definition of project limits for an explanation of how the northern project limits were defined. SFMTA bus travel time, reliability, and delay data collected as part of the Van Ness BRT Feasibility Study indicate the need for BRT improvements along the length of the corridor, including the segment north of California Street, particularly with the additional residential and employment growth (and resulting trip-making) anticipated in the corridor.

Please see Master Response #8 for an explanation of traffic diversion. Traffic diversions with implementation of the BRT and related impacts are analyzed in Chapter 3.3. In the near term (2015), traffic volumes on Gough Street would increase with the implementation of BRT (under the LPA) by a maximum of 105 vehicles/hour (less than 2 vehicles per minute) just north of California Street. In 2035, traffic volumes on Gough Street would increase with the implementation of BRT by a maximum of 235 vehicles per hour (less than 4 vehicles per minute). In the near term (2015), there would be 4 intersections in the traffic study area that would operate at LOS E or F with the BRT (under the LPA), including the stop-controlled intersection at Gough and Green. This intersection would already operate at LOS F in the No Build Alternative in 2015. In 2035, 5 intersections along Gough Street would operate at LOS E or F with the BRT (under the LPA) – at Green, Clay, Sacramento, Eddy, and Hayes streets. Traffic impacts at the intersections of Gough/Hayes, Gough/Sacramento and Gough/Eddy would be significant and unavoidable.

The last page of Section 3.3 in the EIS/EIR identifies a Traffic Management “Toolbox,” which lists available tools or strategies that can be used to improve traffic management in the project study area. Although these mitigations would not mitigate the traffic impacts to less than significant, SFMTA will attempt to manage resulting traffic through driver wayfinding and signage as well as a public awareness campaign and transportation management plan (TMP) during construction. During project operation, if these strategies are deemed successful or suggest that other similar strategies could be successful, SFMTA may choose to implement similar strategies on an on-going basis. In addition, pedestrian amenities implemented at additional corridor locations may result in mode shift that could help lessen the severity of traffic impacts.

I-67-3 Chapter 1 of the EIS/EIR discusses how BRT addresses the projects purpose and need. Details on transit performance are outlined in Section 3.2. All build alternatives, including the LPA, would provide significant travel time saving, reliability improvements, and pedestrian safety enhancements.

At the same time, Section 3.3.3.2 of the Draft EIS/EIR (Table 3.3-5) describes auto travel speed for Van Ness Avenue and the parallel streets within the corridor for existing conditions and all of the alternatives in 2015. The auto travel speed on Van Ness Avenue with BRT would not decrease by more than 0.3mph versus the No Build Alternative; with the LPA, auto speed would actually increase versus the No Build Alternative due to the reduction in left turn opportunities and the benefit of transit signal priority for the north-south movement. For the other streets in the corridor (Gough, Franklin, Polk, Larkin, and Hyde), average auto travel speed would not decrease by more than 1mph versus the No Build

Alternative, depending on the alternative. With the LPA, travel speeds on the parallel streets in the corridor would decrease by a maximum of 0.5mph,

Section 3.3.3.3 of the Draft EIS/EIR (Table 3.3-12) describes auto travel speed for Van Ness Avenue and the parallel streets within the corridor for existing conditions and all of the alternatives in 2035. The speed along Van Ness Avenue under Build Alternatives 2, and Build Alternatives 3 and 4 with Design Option B (LPA) would be similar to the speed under 2035 No Build Alternative ( $\pm 0.3$  mph). Speed along Van Ness Avenue in both directions would decrease by 1.1-1.4mph under Year 2035 Build Alternatives 3 and 4 versus the 2035 No Build Alternative. This is mainly due to the increase in traffic volumes for NB left turns from Van Ness Avenue and changes in signal timing and phasing for these left turns. Left turns at these intersections can only be made under a protected phase. Speed along Polk, Larkin and Hyde would decrease by less than 1mph for any of the build alternatives versus the No Build Alternative. The speed along SB Gough street would decrease by 1-1.6mph with the implementation of BRT while the speed along NB Franklin Street would decrease by 2-3mph. These decreases in speed are caused by traffic diversions to these streets through the implementation of BRT and the significant residential and employment growth in San Francisco between 2007 and 2035.

I-67-4

Opposition to the project is noted. See Section 1.2 of the EIS/EIR for background on the planning process leading to the development of this project, including Proposition K passed by voters in 2003 which created the Prop K Expenditure Plan that recommended development of a citywide Bus Rapid Transit (BRT) Network with a BRT line on Van Ness Avenue. Chapter 9 provides a financial analysis of the proposed project.

In accordance with NEPA and CEQA, the EIS/EIR analyzes the environmental impacts of the project and analyzes traffic impacts of the proposed project in Section 3.3.3. See also Master Response #9, which explains how traffic impacts were calculated and provides a summary of the intersections that would experience increased delay as a result of the project.

PAGE 1

SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY



**Comment Card**  
**Van Ness Avenue Bus Rapid Transit**  
**Environmental Impact Statement/Environmental Impact Report**

Please provide comment on the findings in the Draft Environmental Impact Statement/  
Environmental Impact Report (EIS/EIR), and Project Alternatives Analysis, including your  
preference for the Locally Preferred Alternative (LPA) to be constructed.

All identifying information is optional. Responses to comments will be published in the  
Final EIS/EIR. Include your email or mailing address if you wish to be notified when the  
final report is published.

Tim Donnelly  
NAME

AFFILIATION  
66 Tim 141 @ yahoo . com  
EMAIL OR MAILING ADDRESS

Comments:

This is a bad idea. As a resident living on Van Ness I see the traffic back up everytime there is a double parked truck or some other law closure. The adjacent streets can not handle the overflow. The noise and pollution would be detrimental to the quality of life in the neighborhood.

I-68-1

If they choose to remove a lane of parking that would cause grief to the businesses and residents as well as create a safety issue for pedestrian. It would also create a nightmare for those who live on that street.

I-68-2

The parked cars create a buffer as well as provide access to businesses. It would also require removal of all the trees.

I-68-3

Page 2



SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

### Comment Card

### Van Ness Avenue Bus Rapid Transit Environmental Impact Statement/Environmental Impact Report

Please provide comment on the findings in the Draft Environmental Impact Statement/  
Environmental Impact Report (EIS/EIR), and Project Alternatives Analysis, including your  
preference for the Locally Preferred Alternative (LPA) to be constructed.

All identifying information is optional. Responses to comments will be published in the  
Final EIS/EIR. Include your email or mailing address if you wish to be notified when the  
final report is published.

Tim Donnelly  
NAME

\_\_\_\_\_  
AFFILIATION

\_\_\_\_\_  
EMAIL OR MAILING ADDRESS

Comments:

An easy alternative, which  
should be adopted regardless  
is to make the #47 bus an express,  
stopping only at major connections.

I-68-4

If this project is indeed going  
to go forward, I recommend  
adopting a trial program  
Simply paint the road lane  
in each direction with diamonds  
and add signage designating it  
as a bus only lane. This would  
be inexpensive, and would display  
quickly whether or not this plan  
will work.

I-68-5

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Tim Donnelly

| Reviewer's Comment Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I-68-1                    | <p>Parking and loading would be largely retained along Van Ness Avenue with the implementation of BRT, reducing the likelihood of trucks double parking. If approved, the corridor will be closely monitored after the start of revenue service to ensure illegal parking is kept to a minimum. As part of the project, Van Ness Avenue will be resurfaced and all utilities brought up to standard, reducing the chances of emergency lane closures. Under the LPA (with or without the Vallejo Northbound Station Variant), colored parking spaces will be retained where possible. However, specific locations were identified where provision of replacement colored spaces on an adjoining block may not be feasible or where an affected business may have special needs requiring immediately adjacent parking, such as passenger loading zones that serve elderly or infirmed people or truck loading zones that support delivery of large commercial goods. Potentially significant colored parking zone impacts on the area's adjacent uses are identified in Table 4.2-9 in Chapter 4.2 Community Impacts.</p> <p>See Master Response #11 regarding traffic noise and pollution effects on adjacent streets.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| I-68-2                    | <p>On-street parking is beneficial for pedestrians and businesses on Van Ness Avenue, and the BRT project is designed to minimize parking loss. The project would reduce the number of on-street parking spaces on some sections of Van Ness Avenue, such as where the BRT stations are located and necessitate wider center medians. However, parking spaces would be added in other locations, including where existing curbside bus stops are removed. Although the City and County of San Francisco does not consider displacement of parking spaces an environmental impact, Section 3.5 of the Draft EIS/EIR outlines the effects of each project alternative on parking supply. The LPA would remove 105 parking spaces along the corridor (the Vallejo Northbound Station Variant would remove 104 parking spaces), and maintaining colored parking is a priority.</p> <p>The analysis of pedestrian impacts in Section 3.4.3.1 addresses the benefit on-street parking provides as a buffer between moving traffic and pedestrians on the sidewalk. The analysis identifies the negative effect of parking removal on pedestrians, but given the project's other planned improvements to sidewalk conditions, such as new curb bulb-outs, pedestrian lighting, and removal of existing bus shelters, the analysis finds an overall neutral to positive impact on sidewalk conditions and safety. In addition, along the sidewalk in any areas without parking, Caltrans design guidance requires a buffer to enhance pedestrian safety, such as a landscaped buffer or a striped shoulder. Under the LPA, this would occur on the block between O'Farrell and Geary streets as well as the two blocks between Broadway and Green streets.</p> <p>Section 4.2.4.2 identifies locations where parking removal could have an adverse effect on adjacent businesses. Sections 3.5 and 4.2.4.2 identify measures that will be incorporated into project design to minimize loss of on-street parking and its negative effects on pedestrians and businesses.</p> |
| I-68-3                    | <p>Please see Master Response #7. Preservation of trees has been a design priority for each build alternative, including the LPA as discussed in Section 4.4.3.4.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| I-68-4                    | <p>See Master Response #2 on alternatives definitions and screening, Chapter 2 of the Draft EIS/EIR, and the Project Screening Report (April, 2008). Stop consolidation alone does not provide sufficient benefit to the many riders of the 47 or 49 lines to meet the project Purpose and Need. BRT stop spacing is</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

designed to connect with all major crossing transit routes as well as be near key land use connections.

- I-68-5 This BRT project is defined as the combination of the transit improvements described in Chapter 2 of the Draft EIS/EIR. A trial phasing of implementation of some of the features of BRT may be studied during the design phase. For example, SFMTA is planning to implement all-door boarding/Proof-of-Payment system wide during the summer of 2012. However, the implementation of new traffic signals and along Van Ness Avenue, new signal timing along the entire Van Ness Avenue corridor (including Franklin and Gough streets) through the SFgo program (see Chapter 2 of the Draft EIS/EIR for more details), and the removal of left turns along Van Ness Avenue are key components to maintaining multimodal corridor circulation with the implementation of BRT and the conversion of one mixed traffic lane to a transit-only lane. Without those features, it would be hard to evaluate the effects of the whole package of projects. In addition, the LPA would have buses operating in the center lanes. This cannot be piloted without constructing BRT stations in the median.

From: Donna Morrison [morrison.donna@sbcglobal.net]  
To: Michael Schwartz [michael.schwartz@sfcta.org]  
Subject: [vannessbrt] Re: FW: Better Rapid Transit Proposal

On Fri, Dec 2, 2011 at 10:54 PM, Donna Morrison <[morrison.donna@sbcglobal.net](mailto:morrison.donna@sbcglobal.net)> wrote:

Dear Michael,

I am writing to express my grave concerns that the BRT proposal to eliminate two lanes of traffic on Van Ness Avenue for buses only will be a very expensive venture for VERY little commuter time saved. And it will quite obviously push more frustrated drivers on to the residential side streets. I urge you to retain the 6 lanes (No Build) and consider instead the possibility of a dedicated right lane for buses during commute hours. Then if this proves to be of limited help in speeding bus time and attracting riders, it would be the LEAST expensive to undo.

I-69-1

I-69-2

Sincerely,

Donna Morrison

Gough Street Property Owners Association

2523 Gough Street

San Francisco, California 94123

## Individual Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Donna Morrison

Reviewer's  
Comment  
Number

Response

I-69-1

The Federal Transit Administration (FTA) has rated the Van Ness Avenue BRT “medium-high” project justification, (the only Small Starts Projects in the country to receive such a designation) and “high” for cost effectiveness; it is one of only two projects in Bay Area identified for Small Starts funding through MTC’s Resolution 3434, in part due to its cost effectiveness. Recent research comparing the construction of BRT to Light Rail transit and Metro systems indicates that BRT is substantially faster and less disruptive to construct than light rail, and it shares the existing roadway (Deng and Nelson, Recent Developments in Bus Rapid Transit, Transport Reviews, Vol. 31, No.1, January 2011). Section 1.3 of the Draft EIS/EIR presents the project purpose and need, and Section 3.2 describes benefits of the build alternatives (including the LPA), pertaining to transit travel time and reliability improvements, pedestrian safety enhancements, increased transit ridership, and reduction in transit operating costs. Section 3.3.3 presents traffic impacts in detail, including traffic on parallel streets. Also, please see Master Responses #8 and #9 that address traffic diversion from Van Ness Avenue onto parallel streets.

Section 10.2 presents the analysis of how the build alternatives, including the LPA, perform with respect to several performance measures including transit performance, and cost of project construction, operation and maintenance.

I-69-2

Please see Master Response #2 on alternatives definition and screening, Chapter 2 of the Draft EIS/EIR, and the Alternatives Screening Report (April, 2008). TPS treatments were looked at during screening, including peak-hour only bus lanes. Analysis showed that this treatment was not effective in meeting the project purpose and need because delays to transit caused by traffic on Van Ness Avenue occur during off-peak and weekends in addition to weekday peak periods.

Organization Comment  
Letters and Responses  
on the Draft EIS/EIR  
for the  
Van Ness Avenue  
Bus Rapid Transit Project

Appendices I (contd')



**APPENDIX I**

# Organization Comment Letters and Responses

| <b>REVIEWERS</b>                                    | <b>PAGE NUMBER</b>    |                  |
|-----------------------------------------------------|-----------------------|------------------|
|                                                     | <b>COMMENT LETTER</b> | <b>RESPONSES</b> |
| <b>ORGANIZATIONS</b>                                |                       |                  |
| Pacific Heights Residents Association               | 2                     | 3                |
| Hayes Valley Neighborhood Association               | 5                     | 9                |
| SFMTA Muni Accessibility Advisory Committee         | 11                    | 12               |
| WalkSF                                              | 13                    | 14               |
| Polk District Merchants Association                 | 15                    | 22               |
| Transportation Solutions Defense and Education Fund | 25, 28, 30, 32        | 27, 29, 31, 33   |
| Golden Gate Valley Neighborhood Association         | 34                    | 35               |
| San Francisco Transit Riders Union                  | 38                    | 39               |
| Gough Street Property Owners Association            | 40                    | 41               |
| ReLISTO                                             | 42                    | 43               |
| The Avenue Assisted Living                          | 44, 46                | 45, 47           |

# PACIFIC HEIGHTS RESIDENTS ASSOCIATION

2585 PACIFIC AVENUE  
SAN FRANCISCO, CA 94115  
TELEPHONE: (415) 922-3572

19 December 2011

Van Ness BRT EIS/EIR  
Attn: Mr. Michael Schwartz  
San Francisco County Transportation Authority  
100 Van Ness Avenue, 26th floor  
San Francisco, CA 94102

RECEIVED DEC 27 2011

Dear Mr. Schwartz:

Thank you for providing the opportunity for the Pacific Heights Residents' Association to comment on the draft Van Ness EIS/EIR. While in general we view the project and the document as creditable, we have some major general concerns with the scope of the project and the commitment of the City to address the major traffic impacts of the project if one of the build alternatives is adopted.

First, regarding scope of the project, we do not understand why the northern terminus of the project ends at Lombard instead of Bay. The justification for Lombard over Bay as the northern terminus is not addressed in the draft EIR.

O-1-1

Second, the report emphasizes that implementation of any of the build alternatives would result in significant and unavoidable impacts in one environmental category: traffic circulation. Traffic circulation impacts would occur by 2035 at 6 to 11 intersections in the corridor, depending on the build alternative selected, primarily along Franklin and Gough streets. If implemented, mitigation measures could reduce traffic impacts of the build alternatives to less than significant levels. However, the report also makes clear that the City may also choose not to mitigate traffic impacts at these locations for other policy and planning reasons.

O-1-2

Third, the standard traffic metric – Level of Service at Peak Period (am and/or pm) – is inadequate to assess impacts on the residential streets that surround the arterials. It does not appear that traffic diversion west of Gough or east of Hyde has been assessed or modeled. Yet our members know from personal experience that diversions to Octavia, Laguna and Webster occur when Van Ness and the bordering arterials are congested. It also is unclear how the DEIS/DEIR treats such foreseeable traffic impacts as CPMC- Cathedral Hill's afternoon shift changes, or the interaction with emergency vehicles in the Geary/Van Ness area. Absent this assessment, it is unclear that appropriate mitigations have been evaluated.

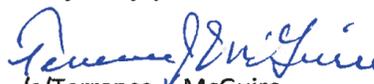
O-1-3

O-1-4

Our board would likely oppose any of the build alternatives unless the Bay street northern terminus is considered and if there is no commitment by the City to implement some of the measures necessary to mitigate the traffic congestion impacts of the build alternatives.

O-1-5

Very truly yours,



/s/Terrence V. McGuire

Board Member,  
Pacific Heights Residents Association

## Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Pacific Heights Residents Association

| Reviewer's Comment Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| O-I-1                     | <p>Please see Master Response #1 on the definition of project limits. The northern terminus of the project limits was defined as Lombard Street in the Draft EIS/EIR due to the fact that there is a significant decrease in traffic in the PM peak from the block between Greenwich and Lombard to the block between Lombard and Chestnut, as described in more detail in Master Response #1.</p> <p>The BRT routes (47 and 49) will continue to North Point Street. In addition, the Transit Effectiveness Project (TEP) is looking at transit improvements north of Lombard Street on Van Ness Avenue, including the potential for dedicated lanes and signal priority, as part of its environmental review.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| O-I-2                     | <p>Please see Master Response #9, which discusses traffic mitigation measures and feasibility issues associated with the measures. It explains that while traditional measures such as tow away zones and roadway widening (see Chapter 3.3) are possible engineering solutions to mitigate traffic impacts, the measures may ultimately be determined infeasible by the SFCTA Board. Feasibility Issues associated with these measures are discussed in Master Response #9 and in the EIS/EIR in Section 3.3.4. A finding regarding feasibility will be made by the SFCTA Board at the time the project is considered for approval. Besides these traditional measures, coordinated implementation with the BRT project of such measures as traffic calming and pedestrian improvements may be desirable from an overall transportation system management perspective. However, such measures would not be effective mitigations because they would not reduce the traffic delays shown in the EIS/EIR.</p>                                                                                                                                                                                                                         |
| O-I-3                     | <p>Please see Master Response #8 for a summary of traffic modeling, including diversions. The SF-CHAMP travel demand forecasting model predicted how traffic on Van Ness would be diverted off Van Ness as a result of the project. The SF-CHAMP model analysis is not confined to the parallel arterial streets within the study area, such as Franklin, Gough, Hyde and Larkin, but is a countywide model. It predicted the volume of traffic that would be diverted to all north-south streets east of Van Ness to The Embarcadero and west of Van Ness to the Great Highway. (Vehicular Traffic Analysis Technical Memorandum, CHS 2013, Appendix 5). The modeling showed that streets outside of the corridor (i.e., west of Gough and east of Hyde), may see a small increase in traffic volumes (i.e., approximately 200 vehicles in each direction with no street experiencing more than a 50 vehicles per hour increase in each direction) with the implementation of BRT. This increase represents a relatively small percentage of the overall volumes in these corridors, and therefore was not further analyzed using the Synchro model since this smaller volume change would not constitute a significant impact.</p> |
| O-I-4                     | <p>Please see Master Response #8, which explains that ABAG 2007 projections for employment and population growth for 2015 and 2035 are incorporated in the SF-CHAMP model. Planning distributes the ABAG employment and population growth projections within the City based on anticipated development. Additionally, for the 2035 SYNCHRO model analysis, as explained in the Technical Memorandum, traffic volumes for intersections in the vicinity of the proposed CPMC Cathedral Hill Hospital and Medical Office Building project were modified to reflect the projected vehicle trip generation for these two buildings as identified in the CPMC EIR. (EIS/EIR at 3-37.) Thus, the traffic modeling assumes the increase in employment from the CPMC project, and resulting traffic patterns. The traffic impacts, therefore, reflect traffic from the Cathedral Hill project.</p>                                                                                                                                                                                                                                                                                                                                           |

O-I-5 See Master Response #1 on the project limits. The northern terminus of the project limits was defined as Lombard Street in the Draft EIS/EIR due to the fact that there is a significant decrease in traffic in the PM peak from the block between Greenwich and Lombard to the block between Lombard and Chestnut (70% decrease northbound; 52% decrease southbound, based on 2007 traffic counts). The block north of Lombard Street has less than 600 vehicles per hour northbound and less than 425 vehicles southbound during the PM peak hour. These lower volumes of mixed traffic result in significantly less frequent and severe delays compared to the project area. Thus, full BRT treatments were not proposed for the corridor north of Lombard Street.

The BRT routes (47 and 49) will continue to North Point Street. While improvements north of Lombard Street are not part of this project, the Transit Effectiveness Project (TEP) is looking at transit improvements north of Lombard Street on Van Ness Avenue, including the potential for dedicated lanes and signal priority, as part of its environmental review.

Regarding whether traffic mitigation measures are feasible, please see Response to Comment O-I-2.



December 19<sup>th</sup>, 2011

Michael Schwartz, Project Manager  
Van Ness BRT Project  
San Francisco County Transportation Authority  
100 Van Ness Avenue  
26<sup>th</sup> Floor, SF CA 94102

Cc: Caltrans: Dan McElhinney ([dan\\_mcelhinney@dot.ca.gov](mailto:dan_mcelhinney@dot.ca.gov)), Lenka Culik-Caro ([helena\\_culik-caro@dot.ca.gov](mailto:helena_culik-caro@dot.ca.gov)), Lee Taubenak ([lee\\_taubeneck@dot.ca.gov](mailto:lee_taubeneck@dot.ca.gov)), and Nandini Shridhar ([nandini\\_shridhar@dot.ca.gov](mailto:nandini_shridhar@dot.ca.gov)).

SFMTA: Ed Reiskin ([Ed.Reiskin@sfmta.com](mailto:Ed.Reiskin@sfmta.com)), Tim Papandreou ([Timothy.Papandreou@sfmta.com](mailto:Timothy.Papandreou@sfmta.com)), Paul Bignardi ([Paul.Bignardi@sfmta.com](mailto:Paul.Bignardi@sfmta.com))

SFDPW: Mohammed Nuru ([Mohammed.Nuru@sfdpw.org](mailto:Mohammed.Nuru@sfdpw.org))

San Francisco Board of Supervisors/ SFCTA Board: [Scott.Wiener@sfgov.org](mailto:Scott.Wiener@sfgov.org);  
[Jane.Kim@sfgov.org](mailto:Jane.Kim@sfgov.org); [Mark.Farrell@sfgov.org](mailto:Mark.Farrell@sfgov.org); [David.Campos@sfgov.org](mailto:David.Campos@sfgov.org); [John.Avalos@sfgov.org](mailto:John.Avalos@sfgov.org)

Mayor Ed Lee: [mayoredwinlee@sfgov.org](mailto:mayoredwinlee@sfgov.org)

RE: Comments on DEIS/EIR for Van Ness Avenue Bus Rapid Transit Project

Dear Michael

The Hayes Valley Neighborhood Association (HVNA) has reviewed the Draft EIS/EIR for the Van Ness Avenue Bus Rapid Transit Project and it is with great pleasure that I report to you that HVNA finds the draft EIS/EIR complete and thorough. We urge swift certification in order to move this critical transit first project forward. We also encourage you to **select option 3B or, with reservation, option 4B as the locally preferred alternative**. In addition we ask that, as part of environmental mitigation, dedicated funding stream be directed towards preserving livability in adjacent areas of the Van Ness corridor. The following letter provides details of HVNA's support, analysis, and ideas about mitigation.

O-2-1

O-2-2

### ***Background of HVNA Support***

HVNA has long-supported bus rapid transit on Van Ness Avenue. HVNA promoted Van Ness BRT during the late 1990's, when San Francisco voters decided to remove part of the Central Freeway and build Octavia Boulevard. Van Ness BRT is crucial for providing optimal north-south transit in the central city since freeway removal. Between 2000 and 2008 HVNA consistently advocated for the adoption of the Market and Octavia Better Neighborhood Plan, which includes Van Ness Bus Rapid Transit. HVNA, along with a 75% majority of San Francisco voters, also approved the Prop K sales tax extension which explicitly called for Van Ness BRT. From 2006 to 2009 HVNA advocated for bus rapid transit multiple times during the MTA's Transit Effectiveness Project public input process. Since 2008 HVNA engaged in the environmental review process for Van Ness BRT, including active participation on the Van Ness BRT Community Advisory Committee, and the Market and Octavia Better Neighborhoods Plan Community Advisory Committee.

O-2-3

Our neighborhood is poised to add thousands of new housing units and residents in the next two decades, and it is imperative that transit, walking, and bicycling infrastructure be capable of absorbing this new growth. Options 3B and 4B in the Van Ness Bus Rapid Transit Draft EIS/EIR are both a step in that direction. Options 3B and 4B are especially warranted given that they are both multi-modal improvements with considerable time savings for transit passengers, significant reductions in Muni operating costs in the corridor, offer dramatic improvements for pedestrian safety, and will smooth the flow of automobile traffic on Van Ness because buses will no longer shift in-and-out of traffic. HVNA also recognizes that Van Ness BRT is not just a local concern but, rather, the benefits of BRT will ripple throughout the city's transit network.

O-2-4

### ***HVNA support of findings for Alternatives 3B or 4B***

The Van Ness Corridor is poised to be an exemplary transit first model for San Francisco, the Bay Area, and the nation. Yet today, although 46% of households in the corridor are car free, transit service is deplorable. Buses operate at 5.2 mile per hour, crawling along in mixed-traffic, and spending half of any given bus run in long dwell times at stops or at traffic signals.

Under options 3B and 4B buses would speed-up and each bus would complete runs in less time, saving up to 30% in operating resources compared to doing nothing. Fewer buses could provide the same service frequency and 1-2 more buses per hour could be added on both the 47 and 49 routes (4 buses) at no additional operating costs in 2015. Center BRT with restricted left turns is by far the most optimal, transit first solution analyzed in this Draft EIS/EIR. BRT in center lanes, with restricted left turns would carry 36% more people than each mixed traffic lane while offering an almost 30% savings in operating costs. The reduction of lanes from three to two can also smooth traffic flow for cars and trucks, because buses would no longer be shifting in-and-out of mixed traffic in the third outside lane.

O-2-5

If BRT is not built, transit (as a percentage of all trips) will decline in the corridor because automobile congestion will further erode transit travel times, thus taking San Francisco further from achieving transit first goals and the city's other environmental goals.

O-2-6

We urge careful consideration between option 3B and 4B with respect to the cost of maintaining a new kind of transit vehicle proposed in option 4B (double-sided boarding). If there is no economy-of-scale in acquiring and maintaining a new kind of bus, option 3B is superior. That said, option 3B should have a thoughtful and safe buffer between passenger waiting areas and Van Ness traffic.

O-2-7

### *HVNA suggestions for mitigations and preserving livability*

One of the expected impacts of Van Ness BRT is diversion of automobile traffic to other streets within the corridor. The traffic study results for Options 3B and 4B predict 50 to 100 cars per hour diverted to Franklin and Gough streets. This is *somewhat acceptable* given the benefits of BRT in the corridor. However, rather than accepting these diversions, we see BRT as an opportunity to get more people to choose transit over driving. 48% of car trips occur within the corridor and the mitigations for potential diversions should focus more on diverting these car trips to transit, walking, and bicycling within the dense, mixed-use, two-mile corridor. Moreover the regional transportation agency, MTC, should proactively pursue shifting regional car trips to transit by improving the Golden Gate Transit service in the corridor and improving transit access to jobs outside of the corridor.

O-2-8

The Draft EIS/EIR identified four intersections in 2015, and up to eleven intersections in 2035 that are considered “significantly” impacted in terms of delay. We point out that even with a no-build option, many of these intersections experience increased delay, and so the burden of delay is not on transit, but on increased automobile traffic. The Draft EIS/EIR discusses intersection Level of Service in excruciating detail and then correctly concludes that the minor level of delay at only a small handful of intersections (out of 139 intersections) is a significant but unavoidable impact. **We concur with this finding**, and agree with the language stating that intersection delay should not trump other city policies such as transit first and reducing greenhouse gases through reducing driving. As stated in the Draft EIS/EIR, the city should not consider removing parking or adding turn pockets at the very small handful of intersections identified as problematic. Rather, we urge that mitigations at these intersections focus on improving livability, including traffic calming, pedestrian enhancements, bicycle improvements, and transit priority treatments.

O-2-9

Specifically, we urge that the Van Ness BRT project include adequate funding to do the following mitigations:

O-2-10  
*continued*

- Improve pedestrian crosswalks and prioritize pedestrian signals for crossing at the intersection of Franklin/Market/Page Streets, which is identified as significantly impacted.
- Ensure that Page Street remains suitable as a future bicycle boulevard and allowing for safe high-capacity bicycle crossings at the intersection of Franklin/Market/Page Streets.
- Ensure that Market Street between Larkin Street and Octavia Boulevard remains a transit first street, and minimizing the ‘jog’ of automobile traffic across Market Street between Valencia, Gough, and Franklin Streets. Reduce the jog by one lane.

- Ensure that the Market Street right of way is preserved for a cycletrack, or separated bike lane, the full-length of Market Street including between Larkin and Octavia Boulevard.
- Reconfigure Grove Street, between Octavia and Hyde Streets, as a bicycle boulevard and pedestrian priority street linking the Civic Center BART Station to the Performing Arts venues, Hayes Valley, and the Western Addition, and increasing the attraction of BART, thus reducing the need for driving in this section of the Van Ness Corridor.
- Planning for the realigning of the Hayes 21 Bus to bi-directional service on Hayes Street, re-introducing inbound transit service to Hayes and removing it from Grove Street, and ensuring a high-quality transfer between the Hayes 21 Bus and Van Ness BRT.
- Making the intersection of Mission/ Van Ness/ and Otis into a significant gateway transit-oriented plaza and providing safe and dignified transfers for passengers between these two high-capacity transit corridors.
- Installing reverse-ramp metering at the Duboce/ Mission, 9<sup>th</sup> Street, and Octavia/Market off-ramp of the US 101/ Central Freeway. Using advanced information technology and complementing the SFGO program, regulate the flow of automobiles onto the city's surface streets by storing cars on the freeway rather than in our neighborhoods.

O-2-10  
continued

In conclusion HVNA endorses Options 3B enthusiastically and 4B with reservation, and asks that funding be allocated to preserve the livability of adjacent areas. The mitigation for Van Ness BRT should include a dedicated funding stream to implement the above mitigations and to monitor mitigations over time. Lastly, there will be multiple moving parts in this corridor, including a much hoped-for cordon congestion pricing proposal that could overlap within the corridor, future removal of the remaining Central Freeway stub, the Page Street Bicycle Boulevard, major bicycling improvements to Market Street, and thousands of new housing units added to this area over the next two decades. Careful coordination will be needed to ensure that center-lane BRT is a great project that is synchronized with these other important projects.

Sincerely,

Jason Henderson  
Chair, Transportation and Planning Committee,  
Hayes Valley Neighborhood Association  
300 Buchanan Street, #503  
San Francisco, CA  
94102  
(415)-255-8136  
[jhenders@sbcglobal.net](mailto:jhenderson@sbcglobal.net)

**Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

Reviewer: Hayes Valley Neighborhood Association

Reviewer's  
 Comment  
 Number

Response

- O-2-1      Please see Chapter 10 of the Draft EIS/EIR and the LPA Report for the analysis supporting the LPA.
  
- O-2-2      Please see response to comments 2-8 and 2-10 below.
  
- O-2-3      On September 27, 2010 the SFCTA hosted an open house and workshop to present initial study findings and seek public input on potential transportation solutions emerging from the Central Freeway and Octavia Circulation Study. The Van Ness Avenue BRT was identified as a key project that would meet the transit needs identified in the Study. Additionally, the Van Ness Avenue BRT Project would help meet the goals of improving circulation and building a multi-modal network, shifting travel to transit and non-motorized modes, and improving safety and walkability, as identified in the Study.  
  
 The Van Ness Avenue BRT Project was also presented at meetings of the Market and Octavia Better Neighborhoods Plan Citizens Advisory Committee and the Hayes Valley Neighborhood Association on multiple occasions during the environmental review process.
  
- O-2-4      Support for Alternatives 3 and 4 with Design Option B is noted. Each of the build alternatives, including the LPA (with or without the Vallejo Northbound Station variant), would accommodate existing and planned residential and commercial growth, as discussed in Section 4.3 Growth.  
  
 Each of the build alternatives, including the LPA (with or without the Vallejo Northbound Station variant), would substantially improve pedestrian conditions, as described in Section 3.4 Non-motorized Transportation.  
  
 Each of the build alternatives, including the LPA (with or without the Vallejo Northbound Station variant), would result in reductions in Muni operating cost, as discussed in Chapter 9 Financial Analysis. Compared with the vehicle operations cost of the No Build Alternative, Build Alternative 2 would offer a vehicle operating cost savings of 17 percent; Build Alternatives 3 and 4 would result in a 28 percent saving compared to the No Build Alternative. Incorporation of Design Option B into Build Alternative 3 or 4 (or the LPA) would result in a 32 percent operating cost savings versus the No Build Alternative.  
  
 Operating cost and pedestrian conditions are factors considered in the LPA selection process, as discussed in Chapter 10 Alternatives Analysis and the Locally Preferred Alternative.  
  
 Please see Chapter 10 of the Final EIS/EIR and the LPA Report for the analysis supporting the LPA.
  
- O-2-5      Each of the build alternatives, including the LPA, would operate in a transitway separated from auto traffic, and BRT buses would not have to pull in and out of stations because the station platforms would offer level or near level boarding to buses directly from the transitway. Mixed flow traffic would benefit from the elimination of the 47 and 49 buses pulling to and from the curb as in current conditions, which causes traffic delays. In addition, north-south traffic would benefit from the implementation of Transit Signal Priority. However, Build Alternative 2 would have more opportunities for conflicts with mixed flow traffic because cars would be allowed to enter the transitway to parallel park and to complete right turns.

- O-2-6 As discussed in Section I.3.2.I Transit Performance Needs, despite the above-mentioned high existing and projected ridership demand, transit speeds and reliability are sub-optimal in the Van Ness Avenue corridor. Degradation in transit performance is a projected citywide problem that is largely contributing to a decline in transit mode share. The Authority's 2004 CWTP found that the City's 17 percent transit mode share among city residents will decline by 2025 if measures are not taken to provide a competitive transit alternative to auto travel in major corridors such as Van Ness Avenue. A key need for transit service on Van Ness Avenue is to close the performance gap, in reliability and in travel time, between transit and automobile travel. Thus transit travel time and reliability are factors considered in the LPA selection process, as noted in Section IO.2.4.I.
- O-2-7 The LPA would utilize vehicles with standard right-side doors only. Please see Chapter 10 of the Final EIS/EIR and the LPA Report for the analysis supporting the LPA. Selection of the LPA takes into account the challenges of procuring a left-right door vehicle, particularly because the 47 route would require a diesel hybrid vehicle while the 49 route would require an electric trolleybus, meaning the Build Alternative 4 would have required two sub-fleets of specialized vehicles. The LPA would involve the procurement and operation of standard right-side door vehicles. Station platforms under Alternative 3B and the LPA would include a barrier railing as well as information/advertising panels in the shelter area between passenger waiting areas and Van Ness Avenue traffic. See the Visual Simulation of the station platforms under each of these alternatives in Section 4.4 of the EIS/EIR.
- O-2-8 Please see Master Response #8 for discussion about how traffic diversion was considered. While the Van Ness Avenue BRT, by reducing lanes for vehicles on Van Ness could divert some traffic to other streets, the Van Ness Avenue BRT would reduce the overall amount of vehicular traffic projected in the future compared to the No Project. (See Chapter 3.I for projected volumes along the corridor). Nevertheless, the Van Ness Avenue BRT is intended to function together with other efforts to improve transit service and provide attractive alternatives to driving. In addition to improving the performance of Muni routes 47 and 49, the BRT will provide the benefit of a dedicated transitway to improve the speed and reliability of Golden Gate Transit service. Since the project would decrease, not increase, the total traffic volumes in San Francisco, additional measures beyond the project description to encourage a mode shift from driving to transit, bicycling, or walking would take place through other, parallel efforts.
- For example, the Transit Effectiveness Project, led by SFMTA, will improve transit travel times and reliability on major corridors citywide, providing a more competitive transit alternative to the auto. Additional City efforts are underway, such as implementation of the Bicycle Plan and WalkFirst, which are intended to improve pedestrian and bicycle conditions in San Francisco. In addition, pedestrian improvements along Franklin and Gough streets are being implemented as part of the Proposition B Road Repaving and Street Safety Bond. Finally, the MTC has prioritized Van Ness Avenue BRT as one of the regional Small Starts priorities through Resolution 3434.
- O-2-9 Support for policies to reduce greenhouse gases through reducing driving is noted. Regarding the feasibility of traffic mitigation measures, please see Response to Comment O-1-2.
- O-2-10 If the Van Ness Avenue BRT were to be implemented, traffic patterns would be monitored closely as part of standard SFMTA traffic engineering. In addition, a \$248 million Road Repaving and Street Safety Bond Program (Proposition B) to improve city infrastructure, including repaving streets, pedestrian and bicycle safety improvements, traffic flow improvements, ADA upgrades includes near-term plans for the repaving of Gough, Franklin, and Polk streets, along with installation of pedestrian enhancements to be determined through planning and design. See Chapter 2 of the EIS/EIR for more information on the Proposition B program.

From: Kevin Lee [kev88kitl@gmail.com]  
Sent: Wed 12/21/2011 5:39 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Van Ness BRT EIR Comments

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Kevin Lee <kev88kitl@gmail.com>

Hello,

My name is Kevin Lee, and I am the Vice Chair for the SFMTA Muni Accessibility Advisory Committee.

I would like to provide the following comments on the Draft EIR for the proposed Van Ness BRT Project.

Comment 1:

Can we provide a longer crossing time on Van Ness Ave.? Right now the crossing times are very short, and this poses a difficulty for many of our senior and disabled residents who are often not able to cross Van Ness Ave. in one crossing cycle.

**O-3-1**

Comment 2:

Can we look into the provision of more accessible parking for the disabled (Blue Zones) along this corridor?

**O-3-2**

I also would like to comment that the existing push to talk features located at many intersections along Van Ness are set with the volume too low -- Are we able to see if we can set these to a higher volume?

**O-3-3**

Thank you very much for your time.

Sincerely,

Kevin Lee  
Vice Chair  
SFMTA Muni Accessibility Advisory Committee

## Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: SFMTA Muni Accessibility Advisory Committee, Kevin Lee

| Reviewer's Comment Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| O-3-1                     | <p>Please see Master Response #13 for information on how crossing conditions on Van Ness Avenue would improve with the project. In summary, although crossing time would not be adjusted, crossing conditions and distances to refuges would be greatly improved over existing conditions. For example, locations that already have curb bulbs would be provided a pedestrian refuge at the median with a protective nose cone. Also, under Build Alternatives 3 and 4, and the LPA, which feature center-lane configurations, bus patrons would only need to cross half of the street to arrive at/debark from a BRT station.</p> <p>Van Ness Avenue BRT would increase the number of intersections with signal timing that meets FHWA and City targets for pedestrian crossing speed, allowing additional time to cross Van Ness Avenue at several intersections. The project would also improve pedestrian crossing safety by reducing average crossing distances and constructing additional median refuges, which provide a safe space to wait for those who are unable to cross the entire street during one light cycle. With or without the BRT project, countdown pedestrian signals will be installed at all intersections along Van Ness Avenue. In addition, the BRT project includes installation of Accessible Pedestrian Signals (APS) at all intersections. For a full analysis of the project impacts on pedestrian conditions, including universal design impacts, please refer to Section 3.4.3.1 of the EIS/EIR.</p> |
| O-3-2                     | <p>The Van Ness Avenue BRT project does not currently propose additional disabled parking spaces in the corridor. The project would result in parking space losses at some locations in the corridor and parking space gains in other locations. The number of displaced parking spaces affected (blue zones) ranges from zero to one space depending on the project alternatives, as detailed in Appendix B of the EIS/EIR. Where parking spaces can be retained on a block, the project team has assumed that colored parking spaces will be given priority. Section 3.5.2.2 and Appendix B of the EIS/EIR detail the project's expected parking impacts. The exact parking supply, and particularly the locations of specific colored parking spaces that will result with the project, will be determined during final design of the project. Final design will include additional opportunities for public input, including assisting in determining where colored curb spaces are needed and can be most suitably placed. Under the LPA (with or without the Vallejo Northbound Station variant), it is expected that it will be feasible to retain all disabled parking spaces on the same or adjoining blockside.</p>                                                                                                                                                                                                                                                                                                            |
| O-3-3                     | <p>The Van Ness Avenue BRT Project proposes audible pedestrian signals that meet national and citywide audibility standards at all intersections along the corridor, wherever they do not already exist. As to the condition of existing pedestrian crossing aids, the SFMTA Department of Parking and Traffic sets and maintains the City's audible pedestrian signals (APS). The commenter may call them at 415-550-2736 to inform them which APS signals require adjustment.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |



December 22, 2011

Board of Supervisors  
San Francisco City Hall  
1 Dr. Carlton B. Goodlett Place  
San Francisco, California 94102

Dear Supervisors:

Walk San Francisco is writing in strong support of the Van Ness Avenue Bus Rapid Transit (BRT) project. Walk San Francisco is a pedestrian advocacy group that promotes walking as a safe and sustainable form of transportation.

O-4-1

Van Ness Avenue is a major transportation corridor connecting several neighborhoods in the center of San Francisco. Van Ness Avenue carries the #47 and #49 Muni lines that run through several neighborhoods around one of the busiest areas of the city. Traffic moves quickly up and down this street carrying a high traffic volume of cars, trucks, and buses. Thousands of pedestrians must walk along or cross Van Ness Avenue to get to their residences or places of business near the area on a daily basis.

O-4-2

Walk San Francisco supports this project because transit performance will be significantly improved through the project's use of a dedicated bus lane separated from other traffic, and because pedestrian safety will be enhanced through reduced crossing distances at BRT stations exist and large platforms for waiting passengers.

O-4-3

Regarding specific BRT project designs, we support Building Alternatives 3 and 4, which would result in the creation of a center-lane BRT with either single or dual medians. We also support reducing the amount of left-hand turns available to cars, which slow transit and pose greater risks to pedestrians.

O-4-4

In contrast, Alternative 1 would not significantly improve the pedestrian safety or transit efficiency landscape and Alternative 2 with a side-running BRT lane would still allow for unprotected left-hand turns and still pose a considerable risk to pedestrian safety.

O-4-5

Finally, as the BRT project may lead to additional traffic on other streets around Van Ness, we also support implementing pedestrian safety measures such as bulb-outs and traffic calming on these other streets to help mitigate any increased risk to pedestrian safety that might result from the project.

O-4-6

In summary, we at Walk SF fully endorse the potential benefits of the Van Ness BRT and encourage you to move this project forward with all possible speed. Thank you for your consideration in this matter.

Sincerely,

Elizabeth Stampe  
Executive Director, Walk San Francisco

## Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Walk SF

| Reviewer's Comment Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| O-4-1                     | Support for project is noted. Each of the build alternatives, and the LPA (with or without the Vallejo Northbound Station variant), would improve the pedestrian comfort and safety in the Van Ness Avenue corridor, as described in Section 2.2.2 Project Alternatives and 3.4.3 Environmental Consequences (for Non-motorized Transportation).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| O-4-2                     | Section 3.4 Non-motorized Transportation describes existing pedestrian and bicycle conditions in the Van Ness Avenue corridor, and how the project would affect these conditions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| O-4-3                     | Transit performance is considered in the LPA selection process, as discussed in Section 10.2.4.1. Each of the build alternatives, and the LPA (with or without the Vallejo Northbound Station variant), would improve transit performance, to varying degrees. Each of the build alternatives, and the LPA, would reduce crossing distances for pedestrians crossing from one side of Van Ness Avenue to the other compared to existing conditions. Build Alternative 2 would provide the greatest number of opportunities for pedestrian curb bulbs. Crossing distance is a factor considered in the LPA selection process, discussed in Section 10.2.4.3 Access and Pedestrian Safety. Section 10.2.4.2 Passenger Experience discusses how the size of the station platform and the amount of buffer between the platform and auto traffic are factors considered in the LPA selection process. Each of the build alternatives and LPA would increase the size of bus patron waiting area over existing conditions, meeting the SFCTA threshold of 5 square feet per passenger. |
| O-4-4                     | Support for Build Alternatives 3 and 4, including Design Option B is noted. Please see Chapter 10 of the Final EIS/EIR and the LPA Report for the analysis supporting the LPA. The LPA would result in center-running BRT with single median and dual platforms while limiting the left turn opportunities to one in each direction.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| O-4-5                     | <p>The build alternatives, including the LPA (with or without the Vallejo Northbound Station variant), would offer pedestrian improvements over the No-Build Alternative including curb bulb upgrades, provision of nose cones at all east-west crosswalks, and countdown signals and APS at all intersections.</p> <p>Each of the build alternatives, and the LPA (with or without the Vallejo Northbound Station variant), would reduce the number of left-turn movements off of Van Ness Avenue over existing conditions and the No-Build Alternative, and would allow left-turn movements only during a dedicated left-turn signal phase at the remaining left-turn pockets (note however, Alternative 2 may have both protected and permissive left turn movements). This would reduce the potential for conflicts between pedestrians and turning vehicles under each of the build alternatives, and the LPA, when compared with existing conditions and the No-Build Alternative.</p>                                                                                      |
| O-4-6                     | See response to Comment O-2-I0.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

# **POLK DISTRICT MERCHANTS ASSOCIATION**

12.22.11

Ms Rachael Hiatt  
San Francisco County Transportation Authority  
100 Van Ness Avenue  
26<sup>th</sup> Floor  
San Francisco, CA  
94102

## **Van Ness Avenue Bus Rapid Transit Draft Environmental Impact Report Responses**

### ***Designing and Building the Van Ness BRT to respect the Existing Van Ness Small Business Communities***

**Ms Hiatt:**

Thank you for the opportunity of responding to the Van Ness Avenue Bus Rapid Transit DRAFT Environmental Impact Report/Statement (VNA BRT DEIR).

The Van Ness Avenue area small business communities (including the Polk Street Merchants) have a huge stake in the approach that the City of San Francisco takes to the programming, design scheduling and construction of the Bus Rapid Transit (BRT) project planned for the Avenue. In fact, existing merchants along and on either side of the BRT route make up the San Francisco community group that has the most at stake... their very livelihood and way of life during and after construction is in the balance... the potential loss of the loyalty of their customer base, their temporary and permanent visibility and the accessibility for that base, the construction period dust and noise, etc. and, ultimately, the lack of security in the value of their capital investments when the project is completed (as the adjacent property owners can most likely anticipate).

Everything that can be done to mitigate the negative impacts (environmental AND social and economic) needs to be done to assure the continuing viability of the existing Van Ness area business community. The project has the potential of either reinforcing the existing business community, and the commercial spine as a whole, or it can serve to denigrate, and possibly destroy, the decades of work and investment expended by the existing local business owners. This is a strong statement but the Bayview's local business community's negative experience on Third Street during the same process for the T line has to be recognized and the same mistakes need to be avoided at all costs.

Some of the small business' concerns are environmental and should be addressed within the Final EIR. Other concerns are managerial, economic and social and would have to be addressed outside of the environmental review process. Nevertheless, the DEIR response process provides the best currently

# **POLK DISTRICT MERCHANTS ASSOCIATION**

available opportunity for the local business community groups, which to date, have not been contacted by the SFCTA staff, to discuss all these issues and concerns with them and the SFCTA commissioners.

**O-5-2**

## **Small Business' Goals for the BRT Project:**

- The BRT project should recognize the fact that Van Ness Avenue contains a number of diverse local commercial districts (3 or 4) that serve their adjacent neighborhoods well, in addition to the City as a whole. Each district has its own distinct qualities. Some businesses also serve the commuter traffic feeding downtown from the City's north side and from Marin. **O-5-3**
- The BRT project should recognize that the Van Ness Avenue BRT project as the potential for presenting a new a model for the eventual design and construction of the Geary BRT (and others that may emerge) and, as such, all aspects of it need to be considered carefully. Such care for the impact that the Third Street rail project would have on the local community, especially the local merchants, was apparently sorely lacking, so the SFCTA needs to be conscious of the potential for the Van Ness area's business community's current lack of confidence in the City's sincerity, capabilities and performance. **O-5-4**
- The BRT project should reinforce existing, local, community-serving small business establishments to maintain vital well-rounded and diverse commercial and residential communities along the BRT route. **O-5-5**
- The BRT project should enhance the nascent symbiotic relationships between the Van Ness Corridor businesses and the surrounding residential communities.
- The BRT project should reinforce a positive commercial (both economic and physical) environment for small locally-owned businesses in the Van Ness Avenue Corridor as the BRT project is executed.
- The City should design ***and maintain*** a handsome built environment with the BRT serving as its spine that's beneficial not only to the BRT but the small business communities and the residents along Van Ness.
- The City should enable the construction of the Van Ness BRT without the loss of the ***existing*** small businesses along the route. **O-5-6**

## **The DRAFT EIR:**

As indicated above, some of business' concerns are environmental and should be addressed within the Final EIR. Other concerns are managerial, economic and social and would have to be addressed outside of the environmental review process. Nevertheless, the DEIR response process provides the best opportunity for the local business community, which to date, has not been contacted by the SFCTA staff, to discuss all these issues and concerns with them and the SFCTA commissioners. Following are concerns that have arisen in our review of this draft document. To the degree we can, we have cited

# **POLK DISTRICT MERCHANTS ASSOCIATION**

sections where the subjects of our concerns are referenced and may be addressed. Other sections may also be relevant but we may have missed them in our review.

- Section 2.3 – This project’s planners and managers need to recognize the lessons learned from the Third Street MUNI project in construction management and scheduling as well as traffic management. Avoid design and project management mistakes like those that caused the loss of existing neighborhood serving businesses along Third Street when the light rail was constructed. **O-5-7**
- Section 2.3 – Develop **and enforce** a means of retaining a healthy business environment during the construction of the BRT project.
- Sections 2.7 and 4.4 - The report discusses the need for sidewalk improvements. Improvements to the Van Ness sidewalks need to be coordinated and built now to avoid later digging and repair that will negatively impact local businesses and the rest of the local community. This applies to furniture, signage, etc. which all need to be designed and installed while this project is underway. That will take coordination on a level seldom seen in interagency relations in San Francisco. **O-5-8**
- Section 3.3, 4.2 and others – Set parking **and freight transfer** policy and practices along Van Ness and on adjacent intersecting streets to encourage local commercial patronage and not downtown commuters from other districts. **O-5-9**
- Section 3.5 and others – The EIR apparently doesn’t discuss the phenomenon of “browsing for a parking spot” that exists and will probably be exacerbated by the loss of curb parking. The project needs to discuss providing the budgeting for and construction of appropriately located and contextually designed parking facilities along the route as necessary to avoid a substantive loss of parking for the local small businesses’ patrons. If the SFCTA’s projections are to be believed, the need for private motor vehicle use will ultimately decrease over time, but current demands need to be acknowledged. With the increase in business growth predicted in the next bullet, new parking garages need to be provided for. They should contain commercial uses on the first floor and the parking levels should be designed in such a way that the structure can be adapted into other residential or commercial uses (floor to ceiling height of 9’) because the San Francisco community will rely less and less on the need for car parking. **O-5-10**
- Section 4.2 - Employment in the Van Ness Avenue area is expected to increase by about 50% more than the rest of the City by 2035 (44% growth vs. 30% growth). We’re unclear as to the cause for this disparity. Is this extra growth anticipated to be small business growth or are newly arrived interstate or international companies anticipated to be the generator of those jobs. Residential growth in the area, at 28%, will not be keeping up with the business growth. The result will be radical a change in the mix of residential to business activity and the character of the neighborhood will change from a residential oriented area into a business oriented area. There is no discussion of how City planning, traffic and overall transit policy and action need to be altered to address these changes. **O-5-11**
- Section 4.4 – The project should design the sidewalks, landscaping, bus stops and stations to complement enhance the surrounding businesses.
- Section 4.4 - The Van Ness Avenue Plan (1995) and the Civic Center Area Plan (1989) need to be updated to accommodate the new BRT reality, the changes reflected in the above and the

# **POLK DISTRICT MERCHANTS ASSOCIATION**

planning profession's new emphasis on enhanced urban community planning. This work will need funding at the SF Dept. of Planning to do this. Such additional study would provide another opportunity for local and small business input into environmental self determination that is absent in this report.

- Section 4.6 - Recent approval of AT&T sidewalk boxes for cell phone service without the benefit of an EIR process will work against improvement of the local environment and the future visibility of local businesses from moving vehicles. This is not addressed in the DRAFT EIR. **O-5-12**
- Sections 4.6 and 7.1 – The report identifies the source and scope of proposed utility projects but apparently does not address the need for fully coordinating the underground work on all proximate parallel and intersecting utilities that need updating. These need to be coordinated to avoid later digging and repair that will negatively impact local businesses. Any above ground utility lines that currently exist within the area need to be undergrounded as a part of this dig. **O-5-13**
- Section 8.2 – The City needs to establish a local small business advisory committee (or committees) for the BRT route (appointed by a party or body other than the SFCTA... the Mayor and/or the Board of Supervisors, perhaps... but officially advisory to the SFCTA and whoever is to oversee the construction) whose role is to identify and advocate for design and project management approaches that would enhance, or at least minimize the negative effect of the project on the local small businesses. **O-5-14**
- Section 8.2 - So far, the lack of local business groups in the community outreach effort is clear (Van Ness Avenue district merchants, Polk District Merchants, the SF Small Business Network, the SF Small Business Advocates, the San Francisco Locally Owned Merchants Alliance). Door to door merchant contact is not an adequate alternative to comprehensive business community interaction. Individual merchants will provide individual answers to questions posed. This also avoids interaction with the local neighborhood serving (non-sidewalk level) professional community. The need to discuss this project with business interest group(s) is paramount in order to get comprehensive business related criteria into the planning process. **O-5-15**
- Provide a strategy for evaluation of any negative economic impact the project will have on local businesses and develop a system for providing short term interest bearing financial assistance to otherwise healthy neighborhood serving local businesses that become stressed by the project and wind up in danger of failure because of the upheaval it presents. **O-5-16**

## **BRT Project design and management – interface with business**

The SFCTA project team needs to comprehensively plan for and manage the project to minimize the negative impact on the small business community.

- The SFCTA needs to develop and maintain a continuing interface procedure with Van Ness Avenue local businesses (perhaps a Van Ness Commercial District Advisory Committee?) to address concerns during -

**O-5-17**  
*continued*

# **POLK DISTRICT MERCHANTS ASSOCIATION**

- Project programming - provide for local business input for the SFCTA's choice of the location of dedicated BRT bus lanes and the related Van Ness Avenue design elements (sidewalks, landscaping, bus shelters, parking, etc.).
  - Project concept development and design - provide appropriate access to the SFCTA designers for local business input during programming and design... offer periodic review of the designs with the local businesses for their input.
  - Scheduling and logistics - provide appropriate access to the SFCTA staff before construction starts to develop mutual understanding of each others' scheduling and access needs. Show sensitivity to the critical needs of the merchants to maintain customer access and develop plans to avoid extended periods of obstructing pedestrian (and vehicular, to the extent possible) access to each and every shop.
  - Construction management – provide appropriate access to the SFCTA contractors' project personnel for local businesses with disruption concerns during construction. Together, develop a construction procedure that does the least damage to the vitality of the surrounding existing small and locally owned businesses.
  - Post-completion R.O.W. maintenance (during both the “shake-out” period, immediately after completion, and the regularized day-to-day operation of the R.O.W. into the future – provide access to the SFCTA, DP&T and DPW staffs for local businesses to raise their concerns and make productive suggestions after the project is complete - to establish maintenance standards, to develop an effective City monitoring system for the need for repairs and to address maintenance issues quickly.
- Assist in maintaining business customer access during and after construction:
    - develop standards for parking density and adjacency
    - develop triggers (demand standards) for the provision of new short term parking garages serving the existing local business community
    - assure visibility from moving vehicles and pedestrians of existing and reasonably located new business signage
    - develop business friendly standards for the amount, location and size of celebration banners
    - develop business friendly standards for the amount, location, density (transparency) and size of sidewalk and median landscaping
    - enable as much curb drop-off and parking as possible on Van Ness and on cross streets and alleys
  - Develop designs that enable efficient store servicing:
    - Design the BRT infrastructure to recognize the local merchants' needs for: the arrival of goods (freight unloading), ease of deliveries to customers (freight loading), and waste collection procedures (trash recycling) that minimize the disruption to merchants and their customers.
  - Maintain business visibility during and after construction. Work with the local merchants to:
    - Establish street and sidewalk lighting criteria and develop designs that meet those standards
    - Choose the best type and density of landscaping (trees and planters) to create a unified boulevard effect while not blocking the view of adjacent stores and advertising signs from the view of BRT customers
    - Minimize the size, complexity and opacity of new and replacement bus shelters that are placed on the sidewalks and will, in any case, partially block the presence of stores and signs
    - Minimize the unwarranted duplication of directional and parking signs posted on street light and utility standards

O-5-17

continued

# **POLK DISTRICT MERCHANTS ASSOCIATION**

- Insist on top quality design and materials of the Van Ness Avenue urban environment, including:
  - Bus station shelters that are sophisticated and unique to Van Ness Avenue but do not unnecessarily distract business customers' attention
  - Sidewalk materials and patterns that are more than just the normal San Francisco concrete sidewalk and will define Van Ness Avenue as a special place, unique within the Bay Area
  - Modern, well-designed, minimal, integrated, readable signage graphics that are recognizable to local and tourist alike as a part of the MUNI system and communicate well to the reader.
  - New appropriate focused and scaled lighting and light standards that set Van Ness Avenue apart from other City thoroughfares (similar to Third Street and Embarcadero) and, through adequate lumens, encourage pedestrian activity on the street.
  - Well-placed well-designed planters, benches, etc. that encourage pedestrians on the Avenue.
  
- Develop a strategy for attending to conditions that encourage local business commerce during construction...
  - Together with the local business community, develop a work plan to minimize the period of direct and indirect construction impact on each block. Minimize the length and duration of blocks or groups of blocks that are shut off to vehicular traffic and NEVER block off any stores to pedestrian traffic.
  - Develop a plan to assure that the contractors strictly conform to dust regulations and establish standards for strict debris removal throughout the construction process and enforce them.
  - Establish and maintain lighting and safety standards throughout the project. Existing standards for CA state highway construction projects in typical non-urban contexts may not be adequate.
  - Work with the local merchants to develop guidelines for the placement of temporary construction barriers. Review regularly whether those placed on the sidewalks remain necessary to the project and are not simply left uncollected out of convenience to the sub-contractors.
  - Conform to DPW standards for sidewalk condition to encourage pedestrian (store customer) safety.
  - Strictly conform to mandated construction noise standards and perform regular weekly audial tests in the areas of heaviest construction.
  - With the local merchants, develop a procedure for assuring continuous storefront and sign visibility and maintain those standards throughout the period of the project.
  
- The City needs to develop, on an interdepartmental basis, the proper environmental and finished site conditions after construction, including maintenance of:
  - The sidewalk, the street pavement and crosswalk, driving lane and curb parking markings, street and pedestrian lighting and all City signage and landscaping.
  - All publicly owned "street furniture"... benches, planters, etc.
  - Any privately owned "street furniture" such as tables and chairs, news racks, phone shelters, etc.
  - Bus shelters

O-5-17

*continued*

## **POLK DISTRICT MERCHANTS ASSOCIATION**

The local business community wants to work together with the SFCTA and other San Francisco City agencies to develop the best symbiotic relationship among all parties and we encourage you to reach out to all the local and citywide business community groups in order to begin that process. The Polk Merchants Association will do what it can to convene a meeting of the small business community in order to begin the process of providing useful further input.

If you have any questions or wish to begin the interactive process we propose in this letter, you may contact Stephen Cornell of the Polk Street Merchants Association at 415 673-8900 or at [stephen@brownieshardware.com](mailto:stephen@brownieshardware.com) .

Sincerely,

Bruce Bonacker  
for Stephen Cornell, President  
Polk Street Merchants Association

 **O-5-17**  
*continued*

**Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

Reviewer: Polk District Merchants Association

Reviewer's  
 Comment  
 Number

Response

- O-5-1      Please see Master Response #6 and Section 4.15.1.2 for information on construction impacts to businesses and residents. The EIS/EIR analyzes the effects of construction on the community in Section 4.15.2.1. The project development team recognizes the importance of maintaining access to and supporting businesses within the Van Ness Avenue corridor both during construction and during project operation. Long term, the project is not expected to adversely affect businesses in the Van Ness area. As stated in Section 4.2.1.2, which considers the effect of the project operation on community character and cohesion “because the proposed BRT project would be constructed along an existing transportation route, the communities and neighborhoods adjacent to the corridor would not experience a disruption...” The project does not displace businesses and is expected to improve transit and pedestrian access to the area, a potential benefit to businesses.
- O-5-2      Throughout the project, the Van Ness Avenue BRT Project team has performed outreach to residential, business, and neighborhood stakeholder groups. During and after the public review period of the Draft EIS/EIR, the project team has met with the Polk District Merchants Association as well as neighborhood groups that comprise merchants. Please see Chapter 8 of the Final EIS/EIR for a full list of groups that met with the project team.
- O-5-3      Sections 4.1 and 4.2 of the Draft EIS/EIR define Van Ness Avenue as having multiple neighborhoods and characteristics within the project limits.
- O-5-4      Please see Master Response #6 and Section 4.15.1.2 for information on construction impacts to businesses and residents. The EIS/EIR analyzes the effects of construction on the community in Section 4.15.2.1

One of the benefits of BRT versus light rail is the relatively shorter construction duration and intensity. Please see Chapter 4.15 of the Draft EIS/EIR for more details. Project staff met with the Polk District Merchants Association in May 2012, and plans to continue meeting with resident and business stakeholders alike throughout the remainder of project design and construction, if the project is approved.

The TMP would include 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 with any concerns. Complaints are logged and tracked to ensure they are addressed.
- O-5-5      The project development team recognizes the importance of maintaining and enhancing business in the Van Ness Avenue corridor. Implementation of the proposed BRT would increase ridership over 50% in the corridor and thus bring new potential consumers to existing businesses (See Section 3.2.2.2 for ridership forecasts). As stated in Section 4.15 Construction Impacts, most of the construction will be done during daylight hours and two lanes of traffic will be maintained in each direction. Some nighttime construction would occur that would close one additional lane of traffic. To ensure that access is maintained to businesses within the Van Ness Avenue corridor during construction, two lanes of traffic will be maintained in each direction during peak hours. Construction will also be phased in three block segments when a closure of a lane or closure of on-street parking is required (see Section 2.3.1). Sidewalk

access to businesses will be maintained. Please see Construction Master Response #6.

- O-5-6 Please see responses to comments O-5-1 to O-5-5 above.
- O-5-7 To ensure that access is maintained to businesses within the Van Ness Avenue corridor during construction two lanes of traffic will be maintained in each direction during peak hours. Construction will also be phased in three block segments when a closure of an additional lane or closure of on-street parking is required (see Section 2.3.1). Please see Master Response #6 for more details on construction impacts on businesses and residents.
- O-5-8 As stated in the project purpose and need in Chapter I, the build alternatives, including the LPA, are intended to improve conditions for pedestrians compared to the existing condition.
- These improvements will be refined during the design phase of the project and partial closure of sidewalks would be required only where curb bulbs would be constructed as part of the proposed project (See Chapter 4.15 for further information about construction plans). Please see Master Response #6, which explains that project construction will be coordinated among City departments to minimize disruption.
- O-5-9 Maintaining the multi-modal use of the Van Ness corridor is key component of the project purpose and need. As explained in Section I.3.2, accommodating private vehicles and commercial loading must be balanced with attainment of project objectives to maintain traffic and goods circulation and access within the corridor. The following mitigation measures to be implemented as part of the TMP address freight loading:
- As part of the TMP public information program, SFMTA will coordinate with adjacent properties along Van Ness Avenue to determine the need for colored parking spaces and work to identify locations for replacement spaces or plan construction activities to minimize impacts from the loss of these spaces.
  - As part of the TMP, adequate passenger and truck loading zones would be maintained for adjacent land uses, including maintaining access to driveways and providing adequate loading zones on the same or adjoining street block face.
- O-5-10 Changes in parking, including parking loss, is presented in Section 3.5. Section 4.2.4.2 describes how changes in parking could affect the economic and business environment, an analysis consistent with NEPA requirements. The proposed project would generally maintain curbside parking throughout the corridor, ranging from a gain of 3 percent of curbside parking under Build Alternative 4 with Design Option B, to a loss of 23 percent under the LPA (with and without the Vallejo Northbound Station Variant). Table 4.2-9 lists businesses and residential properties that could be adversely affected by displacement of colored parking spaces. Mitigation measures described in Section 4.2.5 explain steps the SFMTA will take to minimize impacts from displacement of curbside parking, including working with individually affected properties to identify replacement parking locations or other measures to minimize impacts to businesses. At the same time, BRT transit improvements, plus pedestrian enhancements would likely enhance the image and desirability of commercial areas in the Van Ness corridor and provide a more pedestrian-oriented environment, which would support access to businesses in the corridor.
- Creation of parking garages and modification of parking other than curbside parking is outside the scope of this project, as is redesign of commercial properties.
- O-5-11 Table 4.2.I illustrates the U.S. Census and Association of Bay Area Governments (ABAG) growth projections for the study area. The Planning Department then distributes the residential and employment growth to match existing plans and development proposals. The “cause” of the growth detailed in this table, therefore, is outside of the scope of the project; however, the goal of this project is to accommodate growth in transit ridership within the corridor. City policy in regard to the jobs/housing balance in the

corridor is also outside of the scope of this project and is addressed through the approval process considering those projects identified by the Planning Department as leading to growth.

- O-5-12 Approval of AT&T phone service boxes are not within the purpose and need or scope of this project. With implementation of the LPA, there would be little moving or replacement of utilities along the sidewalk, except in locations where new OCS support poles/streetlights are in conflict with existing utilities.
- O-5-13 In Section 4.6.4, mitigation measures M-UT-1 through 4 discuss the coordination with City agencies and local utilities that will occur throughout construction of the proposed project. Planned repaving of Gough, Franklin, and Polk streets will be coordinated to include street utility replacements, as needed, and also are anticipated to be completed before the start of construction of the Van Ness Avenue BRT Project.
- The OCS lines on Van Ness Avenue would continue to be placed above ground. Consideration of placing above ground utility lines underground on streets other than Van Ness Avenue is outside the scope of this project.
- O-5-14 The project would be designed and constructed by SFMTA if it is approved. The SFMTA would have advisory committees throughout design and construction; these committees would have community members as well as business representatives. Please see Master Response #6 for more details on construction impacts on businesses and residents.
- O-5-15 The project team met with the Polk District Merchants Association in May 2012, and will continue to hold regular meetings with this group and other small business groups throughout the remainder of the planning process. If the project is approved, the SFMTA would have advisory committees throughout design and construction; these committees would have community members and business representatives. Please see Master Response #6 for additional information about project construction.
- O-5-16 The EIS/EIR identifies construction impacts as well as all relevant, reasonable mitigation measures that will alleviate the environmental effects of the project. The mitigation measures do not include economic compensation of businesses, as no economic impacts of that nature were identified. The SFMTA will ensure customers have access to businesses throughout the construction period (see Master Response #6 and Section 4.15).
- O-5-17 The project team appreciates the support and effort from the Polk District Merchants Association in contacting small businesses.
- The EIS/EIR identifies construction impacts as well as all relevant, reasonable mitigation measures that will alleviate the environmental effects of the project.. These are detailed in Section 4.15 of the EIS/EIR. Community impacts and mitigation measures during the operation phase of the project, including impacts to businesses are explained in Section 4.2 of the EIS/EIR. Master Response #6 provides a summary of the project TMP; including associated mitigation measures intended to minimize disruption to local businesses.
- Recommendations of the commenter will be taken under consideration by the project team and plans to continue working with the commenter and other business stakeholders through the advisory committees as part of the design and construction phases.

# Transportation Solutions Defense and Education Fund

P.O. Box 151439 San Rafael, CA 94915 415-331-1982

“Solutions Is Our Middle Name”

December 23, 2011  
By E-Mail

Mr. Michael Schwartz  
San Francisco County Transportation Authority  
100 Van Ness Avenue, 26th Floor  
San Francisco, CA 94102

Re: Van Ness BRT EIS/EIR

Dear Mr. Schwartz:

TRANSDEF, the Transportation Solutions Defense and Education Fund, has been involved in sustainable transportation in the Bay Area for the past 18 years. We strongly support the development of BRT service on Van Ness Avenue, and believe that Alternative 4 will have the most beneficial urban design impacts. This project is exactly the kind of cost-effective infrastructure we have been recommending. We urge its approval and its full funding.

O-6a-1

We previously commented during the Scoping Process for the Van Ness BRT, and recommended then the study of a sub-alternative of Build Alternatives 3 and 4. We recommended that a sub-alternative be studied with 3 southbound travel lanes and one local service northbound lane. Such a configuration would allow an optimal timing of progressive traffic signals, because it would not be attempting the impossible: to optimize for flow in both directions. This would substantially increase the traffic capacity of Van Ness, which would provide needed support for the political compromise necessary to eliminate two travel lanes. Northbound traffic would be directed onto Franklin Street, which would become a couplet with Van Ness. We were unable to find any reference to this proposal in the DEIS/DEIR. As such the document is currently incomplete.

O-6a-2

Finally, we suggest that the EIR recognize the impact of the planting of palm trees in this corridor on San Francisco's urban identity as potentially significant. Palm trees are far too identified with Los Angeles. Given San Francisco's long-standing rivalry with Los Angeles, the time has come to draw the line on planting further palm trees for civic projects here. The mitigation for this significant impact should be the elimination of palm trees from the landscaping design.

O-6a-3

TRANSDEF

12/23/11

Page 2

We would have preferred to have been notified upon the release of the document, given our previous interest in this project. Also, for some odd reason, the PDF files in which the document was published exhibited an oddly blackened blurring that made much of the data unreadable. Thank you for this opportunity to comment on the DEIS/DEIR for the Van Ness BRT.

O-6a-4

Sincerely,

/s/ DAVID SCHONBRUNN

David Schonbrunn,  
President

**Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

Reviewer: TRANSDEF

Reviewer's  
 Comment  
 Number

Response

O-6a-1 Support for Build Alternative 4 is noted.

O-6a-2 Please see Master Response #2, Chapter 2 of the Draft EIS/EIR, and the Alternatives Screening Report on the project website ([www.vannessbrt.org](http://www.vannessbrt.org)) for further description of alternatives considered and withdrawn. Since Van Ness Avenue is US 101 in San Francisco, reducing northbound traffic to one lane while compensating through diverting the traffic to Franklin Street is not seen as a desirable way to balance traffic across the corridor. North-south traffic on Van Ness Avenue benefits from the transit signal priority as well as the increased signal time through the reduction in left turns (particularly through the LPA). Signal timing for all streets in the corridor are optimized to minimize traffic delay impacts.

O-6a-3 The tree types, including palm trees, depicted in the visual simulations is representative at this time, and is not a confirmed tree type in the project landscaping plan. Palm trees offer the benefit of minimized interference with the OCS wires and reduced maintenance compared with many other tree varieties. Opportunities and constraints for new tree plantings are documented in Section 4.4 of the EIS/EIR, for example:

- Build Alternative 3, featuring the narrowest (9-foot wide) median for tree planting, would require replacement trees with a narrow canopy. Some example trees could be palm trees as shown, or Italian Cypress, Skyrocket Juniper, Hillspire Juniper, and Red Maple.
- Selection of median tree type would consider tree canopy size and maintenance requirements to ensure a 5-foot clear zone between tree canopies and OCS wires.

The replacement tree palette will be developed in close coordination with the CAC, SFDPW and Bureau of Urban Forestry staff, with the overall goal of maintaining consistency with urban design goals set by the City for Van Ness Avenue. A project landscape design, including tree type, will require review and approval by the City Planning Department and the San Francisco Arts Commission, and future opportunities for public input on the design and tree type will be available during these review processes.

O-6a-4 We regret that your organization did not receive our email blast and mailings which were distributed to thousands of interested parties in the project area. However, the release of the Draft EIS/EIR was posted in the Federal Register, the San Francisco Examiner, Sing Tao, El Mensajero, Central City Extra, and Marina Times and there was also local news coverage of the release by the SF Chronicle, KCBS and KQED. Advertisements for the released document were posted on line 47 and 49 SFMTA buses as well as Golden Gate Transit buses, and the Notice of Availability was posted all along Van Ness Avenue. A radius mailing to properties along Van Ness Avenue, Polk and Gough streets was also distributed during the public review period. An electronic version of the document was also made available on the [www.vannessbrt.org](http://www.vannessbrt.org) website and was readable in both Adobe's free Acrobat Reader and Apple's free Preview program. Hard copies of the document were available in multiple libraries (listed in all public notices), the Authority and SFMTA offices, and at the Planning Department.

This is an enquiry e-mail via <http://www.sfcta.org> from:  
TRANSDEF <[info@transdef.org](mailto:info@transdef.org)>

You haven't provided a means to submit a file with our comments nicely formatted.  
We would appreciate the opportunity to provide the comments we submitted moments  
ago via this contact form, via a PDF attached to an email.

**O-6b-1**

Please provide us with an email address.

Thank you,

--David Schonbrunn

## Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: TRANSDEF

Reviewer's  
Comment  
Number

Response

O-6b-I      Comments could be emailed, with attachments, to [vannessbrt@sfcta.org](mailto:vannessbrt@sfcta.org).

On Fri, Dec 23, 2011 at 4:58 PM, TRANSDEF <[info@transdef.org](mailto:info@transdef.org)> wrote:  
This is an enquiry e-mail via <http://www.sfcta.org> from:  
TRANSDEF <[info@transdef.org](mailto:info@transdef.org)>

Sir,

Just yesterday, we were made aware of the publication of Recapturing Global Leadership in Bus Rapid Transit A Survey of Select U.S. Cities, by Annie Weinstock, Walter Hook, Michael Replogle, and Ramon Cruz, May 2011. It is available at [http://www.itdp.org/documents/20110526ITDP\\_USBRT\\_Report-HR.pdf](http://www.itdp.org/documents/20110526ITDP_USBRT_Report-HR.pdf)

Although I have not had a chance to read it yet, I understand that it contains a checklist to evaluate BRT projects. Please evaluate the Van Ness BRT alternatives using this book.

**O-6c-1**

Thank you,

--David Schonbrunn

## Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: TRANSDEF

Reviewer's  
Comment  
Number

Response

|        |                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| O-6c-I | Please see Chapter 10 of the Final EIS/EIR and the LPA Report for the analysis supporting the LPA. The evaluation criteria in Chapter 10 reflect the priorities for transit on Van Ness Avenue, and may not fit the broad goals of BRT internationally. Nevertheless, the criteria reflect some of the priorities in the checklist, and the LPA contains many of the features noted in the checklist. |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

From: David Schonbrunn <David@schonbrunn.org>  
Date: Fri, Dec 23, 2011 at 4:53 PM  
Subject: TRANSDEF's Comments on Van Ness BRT DEIS/DEIR  
To: Michael Schwartz <Michael.Schwartz@sfcta.org>

Mr. Schwartz,

Our comments are attached. It sure wasn't easy finding an email address for you. Most agencies that expect professional comments publish an email address with their NOA.

**O-6d-1**

--David

David Schonbrunn, President  
Transportation Solutions Defense and Education Fund (TRANSDEF)  
P.O. Box 151439  
San Rafael, CA 94915-1439

415-370-7250 cell & office

David@Schonbrunn.org  
www.transdef.org

## Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: TRANSDEF

Reviewer's  
Comment  
Number

Response

O-6d-I      The email address on the NOA was [vannessbrt@sfcta.org](mailto:vannessbrt@sfcta.org), which is a general email box that was accessible to Mr. Schwartz and other project staff at the SFCTA.

From: robert bardell [bbardell@comcast.net]  
 Sent: Fri 12/23/2011 3:12 PM  
 To: vannessbrt@sfcta.org  
 Subject: [vannessbrt] San Francisco County Transportation Authority: Draft EIS/EIR Comment

This is an enquiry e-mail via <http://www.sfcta.org> from:  
 robert bardell <bbardell@comcast.net>

Comments from members of Golden Gate Valley Neighborhood Association. (1) The project is too expensive for the projected savings in bus travel time. (2) The limited stop features of BRT will make it less accessible than the current system for people with mobility issues. The mobility challenged group includes but is not limited to seniors, handicapped, and individuals recovering from injuries or medical procedures. (3) The option to eliminate left turns from Van Ness except at Broadway SB and Lombard NB destroys the Avenue's function as a traffic circulator. (4) Severe restriction on left turns from Van Ness will worsen pedestrian safety at intersections along Van Ness, Franklin, and Polk as drivers, frustrated by the loss of left turns, execute rapid "around the block" maneuvers to reach streets that were once accessible from Van Ness by simple left turns. (5) Although the scope of the Draft EIS/EIR did not require modeling and evaluation of automobile traffic on streets outside of the narrowly defined Van Ness Avenue corridor, it should have. If traffic lanes are eliminated and left turns curtailed on Van Ness, significant numbers of automobiles will divert from from Lombard St. during the AM rush hours and on Friday and Saturday nights. These vehicles will avoid the Van Ness Avenue corridor entirely--except, perhaps, to cross it--and will travel along residential streets in Golden Gate Valley, Cow Hollow, and Pacific heights. This diversion problem will be particularly acute under Alternatives 3 and 4 which will reduce overall traffic capacity on Van Ness by nearly 1/3. Congestion-beating automobile diversions already cause accidents on residential streets. Changes to traffic patterns on Van Ness will only make matters worse. (6) The parameters and variables of the several traffic models employed in the Draft EIS/EIR are not presented in that report making evaluation of the adequacy of those models impossible. (7) The Draft EIS/EIR does not address the effect of Doyle Drive's reconstruction. In particular, it does not account for the effect on Lombard St. traffic from the de-emphasis of Marina Blvd. as a through route from Doyle Drive to downtown. Since Lombard functions as a feeder to Van Ness, failure to account for increased traffic on Lombard leads to underestimates of future traffic volume on the Van Ness corridor. (8) It is a mistake not to view Lombard and Van Ness as constituting a single traffic-carrying system. (9) Swerving traffic lanes in center-lane-running Alternatives 3 and 4 create a traffic hazard. (10) Traffic lanes adjacent to the sidewalk in center-lane-running Alternatives 3 and 4 eliminate the buffer of a parking lane and create a serious hazard for pedestrians. (11) Swerving traffic immediately adjacent to the sidewalk will make the intersection of Van Ness and Broadway particularly dangerous to pedestrians. (12) The proposed re-routing of Golden Gate Transit buses along Chestnut and Laguna--residential streets--will increase traffic congestion, noise, and air pollution along that route.

**O-7-1**

**O-7-2**

**O-7-3**

**O-7-4**

**O-7-5**

**O-7-6**

**O-7-7**

**O-7-8**

**O-7-9**

**O-7-10**

**Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

Reviewer: Golden Gate Valley Neighborhood Association

Reviewer's  
 Comment  
 Number

Response

O-7-1

Please see Master Response #4, which addresses the cost-effectiveness of the BRT project.

Cost effectiveness was a key consideration in evaluating BRT build alternatives for the Van Ness Avenue corridor in the DEIS/DEIR, and in selecting the LPA. Section 2.1 outlines the alternatives screening process and criteria, which included project benefits, capital cost, and operating cost. As part of the screening process, a wide range of alternatives was considered for further evaluation, including potentially lower-cost transit improvements such as Transit Preferential Streets (TPS) treatments without a dedicated bus lane, and more expensive alternatives including surface rail or a subway. As explained in greater detail in Master Response #2, alternatives were screened out from further environmental analysis if they indicated a “fatal flaw” or overall low performance in meeting the project purpose and need. (For additional information on the project purpose and need, see Chapter 1.) Transit improvements that did not include a dedicated bus lane were screened out due to low performance, while the rail options were eliminated from further consideration based on high capital and operating costs. Section 2.6 includes additional information on alternatives considered and withdrawn (and the rationale for withdrawing them from consideration). The BRT alternatives were advanced for additional environmental analysis because they meet all elements of the project purpose and need and are not prohibitively costly. More information on this process and the criteria used to screen alternatives can be found in the Alternatives Screening Report, which is on the Project website at [www.vannessbrt.org](http://www.vannessbrt.org). This report, indicating the three alternatives studied in the Draft EIS/EIR, was adopted by the Authority Board in 2008 (Resolution 08-71).

An express bus alternative was not included in the Alternatives Screening Report because it would not address many elements of the project purpose and need. New express buses in mixed traffic would be subject to congestion and other vehicle conflicts that increase travel times and significantly reduce transit reliability. They would also remain subject to signal delay. Express buses would not improve the passenger waiting or boarding experience, the safety and comfort of pedestrians, or the streetscape on Van Ness Avenue. While adding express buses would likely have a lower capital cost than BRT, the additional service would increase ongoing Muni operating costs.

Van Ness Avenue BRT has received the Federal Transit Administration’s highest cost-effectiveness rating several years in a row, an indication of its high benefit-to-cost ratio. The project does provide significant travel time and reliability benefits, meeting the purpose and need. Compared to the No Build Alternative, BRT would reduce travel times in the corridor by 15 to 32 percent and unexpected stops (a measure of reliability) by 28 to 52 percent, depending on the alternative. Chapter 3 provides additional information on the transportation performance of BRT relative to the No Build Alternative. Chapter 9 provides details on the capital and operating costs of the BRT alternatives. The capital cost estimates for BRT range from \$93 to \$136 million. However, BRT would provide annual operating cost savings because faster speeds and reduced travel times allow fewer vehicles to provide the same service frequency. These savings would range from \$1.2 to \$2.4 million annually.

O-7-2

Please see Master Response #5 for a discussion of stop spacing, the factors used to select stop locations, and impacts of the project on universal accessibility. In response to comments regarding wider stop spacing in the vicinity of the Van Ness Avenue and Vallejo Street intersection, which has higher grades

than other parts of the corridor, the LPA would include a southbound station at the intersection of Vallejo Street and Van Ness Avenue. A northbound transit station in this same location, referred to as the Vallejo Northbound Station Variant, could also be implemented, and will be decided upon at the time of project approval.

O-7-3

See Master Responses #8 and #9, and Section 3.3 of the EIS/EIR for explanation of how traffic diversion was considered. Also, the Vehicular Traffic Analysis Technical Memorandum provides detailed information on the traffic diversion analysis. As explained in Master Response #8, the traffic modeling takes into account the relative attractiveness of a travel route, including left-turn opportunities. Thus, the modeling performed reflects the traffic effects of eliminating left-turns. With the implementation of BRT, including the LPA, some localized circulating traffic wishing to make left turns on Van Ness Avenue under the No Build Alternative may choose streets other than Van Ness Avenue under the build alternatives. Alternatively, a similar number of through trips on parallel streets may choose to use Van Ness Avenue instead. This change in traffic pattern is consistent with Van Ness Avenue's role as US 101 in San Francisco. The transportation models show that there will be fewer turning vehicles overall on Van Ness Avenue, even when accounting for the increase in "triple-right" turns.

Regarding pedestrian safety, incorporation of Design Option B (elimination of most left turns) into Build Alternatives 3 or 4, and the LPA (with or without the Vallejo Northbound Station variant), would reduce conflicts with other vehicles and pedestrians due to the reduction in left turns, the number one cause of vehicle-pedestrian collisions along the corridor. While there could be an increase in right turns at some locations along Van Ness Avenue, the speed of these turns would be slowed with the implementation of bulbouts at numerous locations along the project study area. Also, as discussed in Section 3.4.2.I, wide medians serve as a refuge for pedestrians that are unable to finish crossing the street during one light cycle. For the center-running alternatives the average median widths are greatest with Design Option B (see Table 3.4-8). Each of the build alternatives, including Design Option B and the LPA, would incorporate median refuges with nose cones at all signalized intersections, substantially improving pedestrian crossing conditions. Please see Master Response #13 for a summary of how pedestrian crossing conditions on Van Ness Avenue would be improved.

O-7-4

See Master Response #8 the Transportation Technical Memorandum, and Chapter 3.1.2.3 regarding traffic diversions. The SF-CHAMP model analyzed changes in traffic volumes for all streets in San Francisco. Results indicated that there would not be significant traffic volume increases outside of the traffic study area with the implementation of BRT.

Chapter 3.1 of the EIS/EIR indicates that the peak traffic volumes occur during weekday PM peak periods, which is why the traffic impact analysis focused on that time period.

During the AM peak period, Lombard Street already only has two eastbound right turn lanes onto Van Ness Avenue, thus governing the capacity of traffic that can enter the roadway to two lanes, even under the No Build Alternative. For this reason, the project team anticipates Van Ness Avenue to be able to accommodate a similar amount of traffic in the north end of the corridor, especially when the traffic lanes do not have the friction of transit or left turns (which increases the signal time for the through movement). In locations where there are significant right turn movements (Market and Pine streets), the project is proposing right turn pockets on Van Ness Avenue to allow better capacity for the remaining two lanes.

The major constraint in the AM peak is the lone remaining left turn on Broadway, which is already the only left turn opportunity between Filbert and Washington (i.e., there would not be a significant reduction in major left turn opportunities in the area). The project is proposing to create a second dedicated left turn lane SB at Broadway on Van Ness Avenue to help increase the capacity of this left turn movement and reduce the potential for spillover outside of the turn pockets (see engineering drawings in Appendix A of EIS/EIR). Currently, the second lane is both a through lane and a left turn lane. This means there are already two through lanes at Broadway when there is someone trying to make a left turn in the second turn lane, thus blocking the through movement during the green phase of the cycle. Thus,

the capacity would be similar at Broadway and Van Ness Avenue with BRT as in the No Project.

If there is an assumption during the AM Peak that all people who would otherwise make left turns in the No Build Alternative (accounting for a conservative 28% growth in traffic volumes between now and 2015) at Filbert and Washington, and half of the people who would otherwise make left turns at Bush Street, decided after the project is implemented to use Broadway, there would be the potential for around 150-200 vehicles/hour (approximately 3 per minute) to divert to other streets. If evenly divided, that would mean up to 1 additional vehicle per minute on Gough, Octavia, and Laguna. These volumes are lower than those shown during the PM peak hour, and thus additional project impacts beyond those shown in Section 3.3 would not be anticipated.

- O-7-5 The Vehicular Traffic Analysis Technical Memorandum (CHS, 2013) includes the parameters around the Synchro traffic model as well as the validation report of the SF-CHAMP travel demand forecasting model. Additional explanation of the overall modeling approach and methodology has been included in this Final EIS/EIR in Section 3.3.
- O-7-6 Chapter 5, Cumulative Impacts, analyzes other projects including the Presidio Parkway Project (Doyle Drive Replacement), California Pacific Medical Center, the Geary Boulevard BRT, and Hayes Two-Way Street Conversion, along with several planned residential developments. In Section 3.3, the traffic models account for the Presidio Parkway's construction for Year 2035 analysis. Where adverse cumulative impacts are identified, measures to avoid, minimize, or mitigate these impacts are presented.
- O-7-7 There would be no swerving traffic or conflicts with parking and right-turning automobiles under Alternatives 3 and 4, or with the LPA, the center-running BRT in dedicated transit lanes (see Chapter 2 for a full description of these alternatives). Designs for all build alternatives, including the LPA (with or without the Vallejo Northbound Station variant), would meet SFMTA, Caltrans, and federal safety standards.
- O-7-8 The analysis of pedestrian impacts in Section 3.4.3.1 of the Draft EIS/EIR addresses the benefit on-street parking provides as a buffer between moving traffic and pedestrians on the sidewalk. The analysis identifies the negative effect of parking removal on pedestrians, but given the project's other planned improvements to sidewalk conditions, such as new curb bulb-outs, pedestrian lighting, and removal of existing bus shelters, the analysis finds an overall neutral to positive impact on sidewalk conditions and safety. Section 3.5 identifies measures that will be incorporated into project design to minimize loss of on-street parking and its negative effects on pedestrians.
- This factor was considered in the conceptual development of the LPA and will be further considered in design. Parking was retained along the corridor wherever possible. Chapter 3.5 indicates that there would only be 5 blocks that would not have parking along one side of the street for the entire block. This is higher compared to existing conditions, which has one block without parking along one side of the street.
- O-7-9 No swerving traffic is anticipated at Van Ness Avenue and Broadway with any of the build alternatives, including the LPA. The center-running alternatives (Build Alternatives 3 and 4 and the LPA, with or without the Vallejo Northbound Station variant) are in dedicated transit lanes and include a design option referred to as Design Option B. This design option would eliminate all but one NB left turn (at Lombard Street) and all but one SB left turn (at Broadway) in the project corridor. Broadway would operate as a double left-turn lane with one left-turn pocket (and a second, outside lane allowing left-turn and through traffic). No BRT station is proposed at Broadway under any of the build alternatives. The transitions to the left turn lanes for all build alternatives, including the LPA, would meet SFMTA and Caltrans safety standards for design speeds appropriate to Van Ness Avenue.
- O-7-10 The LPA does not propose routing Golden Gate Transit buses along Chestnut Street. GGT buses would maintain the same routes with the LPA as in the No Build Alternative, although they would be using the dedicated BRT lanes and BRT stations.

From: Robert Boden, San Francisco Transit Riders Union [rboden@sftru.org]  
Sent: Fri 12/23/2011 5:03 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Draft EIS/EIR Comment

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Robert Boden, San Francisco Transit Riders Union <rboden@sftru.org>

The San Francisco Transit Riders Union has reviewed the Van Ness Bus Rapid Transit Draft EIS/EIR and is providing the following public comments:

1. SFTRU strongly opposes the adoption of Alternative 2, "Side Lane BRT." Alternative 2 is a poor choice for transit riders. Compared to Alternatives 3 and 4, Alternative 2 has slower travel times and more unexpected stops, is less reliable, costs more to operate, and attracts fewer riders. Alternative 2 also forces pedestrians to walk the farthest, requiring them to cross the entire width of the street to reach the opposite platform, as well as causing buses to have more conflicts with bicyclists, right-turning vehicles, and double-parked vehicles. SFCTA and SFMTA should choose either Alternative 3 or 4 over Alternative 2.

O-8-1

2. Although SFTRU is not taking a position at this time between Alternatives 3 and 4, the environmental report underplays several advantages of Alternative 3. For example:

O-8-2

a. A tremendous benefit of Alternative 3 is its flexibility to operate with any transit vehicle in Muni's (or Golden Gate Transit's) fleet. This has both capital and operating cost ramifications, but the measure referring to "special events" does not capture this. The ability to operate with any transit vehicle has many benefits: Facilitating Owl service, special events, and new route and ballpark services, as well as reducing necessary spare ratios.

b. Alternative 4 would have slower net operating speeds than Alternative 3, primarily because the left-door buses in Alternative 4 would load and alight through two doors, while the right-door buses in Alternative 3 would have 3 doors. Buses with three doors, such as those in Alternative 3, can board and alight passengers faster.

O-8-3

c. The left-door buses in Alternative 4 would require ticket-vending machines (TVMs) at all locations because there will be no door near the bus driver. The right-door buses in Alternative 3 avoid the need for TVMs at all stops.

O-8-4

d. Whereas the environmental report cites many passenger amenities associated with the center loading in Alternative 4, the right-side boarding in Alternative 3 also has benefits that the report does not discuss. For example, conventional right-door buses have more seating for passengers than comparable left-and-right door buses.

O-8-5

Ultimately, SFTRU strongly supports the Van Ness BRT project. We strongly encourage SFCTA and SFMTA to move toward eventual adoption of either Alternative 3 or 4, to oppose Alternative 2, and to respond to the benefits of Alternative 3 discussed above that the environmental report did not address.

O-8-6

Sincerely,

Robert G. Boden  
On Behalf of the Executive Board  
San Francisco Transit Riders Union

## Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: SF Transit Riders Union

| Reviewer's<br>Comment<br>Number | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| O-8-1                           | Opposition to Build Alternative 2 is noted. Please see Chapter 10 of the Final EIS/EIR and the LPA Report for the analysis supporting the LPA. As discussed above (response 3-I), under Build Alternatives 3 and 4, and the LPA, which feature center-lane configurations, bus patrons would only need to cross half of the street to arrive at/debark from a BRT station.                                                                                                                                               |
| O-8-2                           | Please see Chapter 10 of the Final EIS/EIR and the LPA Report for the analysis supporting the LPA.<br><br>A factor considered for the LPA is the ability to operate standard, right-side door only vehicles. Performance indicator A-4, flexibility, serves as a proxy for the ability to serve the corridor with any vehicle. The additional vehicle spare ratio (and thus additional vehicles) required to operate a dedicated fleet was included as part of the capital and maintenance costs of Build Alternative 4. |
| O-8-3                           | The transit speed and reliability was modeled through the VISSIM model. The model was not sensitive enough to distinguish the small differences between the center-running alternatives, including the LPA. Nevertheless, the LPA would use all three doors on the right side of the bus.                                                                                                                                                                                                                                |
| O-8-4                           | All build alternatives in the Draft EIS/EIR, including the LPA, include ticket vending machines at selected station locations. One of the distinguishing features of BRT is the ability of transit customers to pre-pay for their tickets.                                                                                                                                                                                                                                                                               |
| O-8-5                           | The LPA will use right-side door only vehicles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| O-8-6                           | Please see Chapter 10 of the Final EIS/EIR and the LPA Report for the analysis supporting the LPA. The ability to use standard right side door vehicles was included as part of the decision-making process.                                                                                                                                                                                                                                                                                                             |

From: **Donna Morrison** <[morrison.donna@sbcglobal.net](mailto:morrison.donna@sbcglobal.net)>  
Date: Fri, Dec 2, 2011 at 10:54 PM  
Subject: FW: Better Rapid Transit Proposal  
To: [michael.schwartz@sfcta.org](mailto:michael.schwartz@sfcta.org)

Dear Michael,

I am writing to express my grave concerns that the BRT proposal to eliminate two lanes of traffic on Van Ness Avenue for buses only will be a very expensive venture for VERY little commuter time saved. And it will quite obviously push more frustrated drivers on to the residential side streets. I urge you to retain the 6 lanes (No Build) and consider instead the possibility of a dedicated right lane for buses during commute hours. Then if this proves to be of limited help in speeding bus time and attracting riders, it would be the LEAST expensive to undo.

**O-9-1**

**O-9-2**

Sincerely,

Donna Morrison  
Gough Street Property Owners Association  
2523 Gough Street  
San Francisco, California 94123

**Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

Reviewer: Gough Street Property Owners Association, Donna Morrison

Reviewer's  
Comment  
Number

Response

O-9-1 The FTA has rated the Van Ness Avenue BRT “medium-high” for project justification (the only Small Starts Project in the country to receive such a designation), and “high” for cost effectiveness; it is one of only two projects in the Bay Area identified for Small Starts funding through MTC’s Resolution 3434, in part due to its cost effectiveness. Recent research comparing the construction of BRT to Light Rail transit and Metro systems indicates that BRT is substantially faster and less disruptive to construct than light rail, and it shares the existing roadway (Deng and Nelson, Recent Developments in Bus Rapid Transit, Transport Reviews, Vol. 31, No.1, January 2011). Chapter 1 and 3.2 of the Draft EIS/EIR describes the benefits of the build alternatives (including the LPA), including transit travel time and reliability improvements, pedestrian safety enhancements, increased transit ridership, and reduction in transit operating costs.

Please see Master Responses #8 and #9 which provide an explanation of how traffic diversion from Van Ness Avenue onto parallel streets was analyzed. Please also see response to comment I-3 above.

O-9-2 Please see Master Response #2 on alternatives definition and screening, Chapter 2 of the EIS/EIR, and the Alternatives Screening Report (April, 2008). TPS treatments were looked at during screening, including peak-hour only bus lanes. Analysis showed that this treatment was not effective in meeting the project purpose and need because delays to transit caused by traffic on Van Ness Avenue occur during off-peak and weekends in addition to weekday peak periods.

From: Eric Baird [eric@relisto.com]  
Sent: Tue 12/6/2011 8:15 PM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] San Francisco County Transportation Authority: Draft EIS/EIR Comment

This is an enquiry e-mail via <http://www.sfcta.org> from:  
Eric Baird <[eric@relisto.com](mailto:eric@relisto.com)>

I support Alternative 3 Variation B...

As a business owner of a real estate rental and leasing firm, I see first hand the negative effects a slow transit system has on the San Francisco's economy.

**O-10-1**

People don't want to be on a crowded bus for 20-40 minutes to go 1-5 miles. Just yesterday, an individual declined an offer to lease because the property was "too far from downtown" based on commute times. He owned start up technology company and had entertained the idea of bringing his business to the Inner Richmond.

A truly rapid bus system will allow for San Francisco to spread the technology boom and other businesses across the whole city, not just downtown. Creating jobs and better living condition for everyone.

---

Alternative 3 Variation B- I support this option because it is the fastest option to select... A true barrier on either side of the bus lane will protect cars and trucks from using a bus lane to pass or park. Variation B also prevents left hand turns, again speeding the bus.

**O-10-2**

Thank you for your time and consideration

Eric Baird  
Managing Director  
ReLISTO  
[eric@relisto.com](mailto:eric@relisto.com)

**Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

Reviewer: ReLISTO, Eric Baird

Reviewer's  
 Comment  
 Number

Response

- |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| O-10-1 | <p>Support for a rapid bus system is noted. The following are two transit performance needs identified in Section 1.3.2 Project Need: 1) Separate Transit from Auto Traffic to Improve Travel Time and Service Reliability; and 2) Reduce Delays Associated with Loading and Unloading and Traffic Signals. These two needs are key to improving travel times and reliability, and providing a competitive transit alternative to auto travel in major corridors such as Van Ness Avenue, as discussed in Section 1.3 Project Purpose and Need.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| O-10-2 | <p>Support for Build Alternative 3 with Design Option B is noted. Please see Chapter 10 of the Final EIS/EIR and the LPA Report for the analysis supporting the LPA. Section 10.2.4.I Transit Performance describes how transit travel time is considered in the LPA selection process. As described in Section 10.2.4.I and 3.2.2.3, Transit Travel Time, Speed, Delay and Reliability, Build Alternatives 3 and 4 would have approximately the same travel time savings within the project limits, of approximately 28% when compared with existing conditions. Incorporation of Design Option B under either Build Alternative 3 or 4 would save approximately 33% versus existing conditions. This additional time savings with Design Option B is due to the removal of left-turn movements and the left-turn signal phases at those intersections along Van Ness Avenue, allowing for extended transit signal priority and north-south signal time. The LPA would have a barrier from traffic at station locations, and would have a similar travel time and reliability benefit as the center running alternatives with Design Option B presented in the Draft EIS/EIR.</p> |

From: Mel Lee [mel.lee@sfalsenior.com]  
Sent: Tue 12/13/2011 11:45 AM  
To: vannessbrt@sfcta.org  
Subject: [vannessbrt] Passenger Loading Zone (BRT)

Mr. Michael Schwartz

Please contact me to discuss the concern our current "White-Color Passenger Loading Zone" for our seniors located at 1035 Van Ness Ave?

The Avenue Assisted Living is a state licensed Residential Care for the Elderly. The majority of our seniors are either wheel-chair bound or assisted with walkers/canes. All 911 Emergencies for seniors must require loading and unloading at the current White-Color Passenger Zone and must be maintained at the current location. A meeting with your office is an urgent situation.

**O-11a-1**

Thank you,

Mel Lee  
The Avenue Assisted Living  
1035 Van Ness Ave.  
S.F., CA 94109  
(415) 776-1800  
www.theavenuesf.com

**Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR**

Reviewer: Avenue Assisted Living, Mel Lee

Reviewer's  
Comment  
Number

Response

O-IIa-1

The Avenue assisted living facility is noted in Table 4.2-9 as a property that may be significantly impacted by removal or relocation of a colored parking zone since it is a special use that requires an adjacent loading zone to serve elderly and infirmed people. As stated in Section 3.5.3, the SFMTA will give priority to retaining color-painted on-street parking spaces, such as white passenger loading zones and blue disabled parking. Section 4.2.5 states that the SFMTA will minimize impacts to affected businesses by identifying in coordination with businesses, those that would be affected by removal of colored parking spaces, confirming the need of the businesses for truck and passenger loading spaces and identifying appropriate replacement parking locations. As part of this process, the project team has identified design modifications that will avoid removal of the passenger loading zone that serves this special use. The special needs served by the passenger loading zone are acknowledged in Section 4.2.4.2 and Table 4.2-9. Under the LPA (with or without the Vallejo Northbound Station variant), all white colored parking spaces will be retained in front of the Avenue assisted living facility.

# The Avenue Assisted Living

1035 Van Ness Ave.  
San Francisco, CA 94109  
(415) 776-1800

December 15, 2011

Van Ness BRT EIS/EIR  
Attn: Michael Schwartz, Transportation Planner  
Project Manager for Planning and Environmental Review  
100 Van Ness Ave.  
San Francisco, CA 94102

Dear Mr. Schwartz,

Thank you for meeting with us at the Avenue Assisted Living yesterday, along with your colleagues Brynna McNulty of Parsons and Darton Ito of MTA.

The Avenue Assisted Living is a state licensed Residential Care for the Elderly. To reiterate the necessity and safety of retaining our existing **“White-Color Passenger Loading Zone”** for our seniors who are reliance on wheel chairs and walkers/canes, coupled with emergency (911 calls) vehicles from the San Francisco Fire Dept., ambulances and paratransits, the existing **Passenger Loading Zone** is a prerequisite for any senior facility.

O-11b-1

The existing Loading Zone is necessary to stay “as is” due to:

- Safety hazards.
- No alternatives to relocate to Myrtle Street (major street grade for ADA).
- Our only ADA entrance is on Van Ness Ave., there are no alternatives.

Referring to Alternatives 3 and 4, the proposed BRT passenger loading and unloading station is on Van Ness Ave. between Geary Blvd. and O’Farrell Street. We would suggest relocating the passenger loading and unloading station on Van Ness Ave. between O’Farrell and Ellis Streets. Rationale: This block is occupied by merely two retail motor vehicle sales facilities, no residents and “day use” only.

O-11b-2

Thank you for your considerations,

THE AVENUE ASSISTED LIVING



Mel Lee

cc: Teresa Wong, Administrator

## Organization Comments on the Van Ness Avenue BRT Project Draft EIS/EIR

Reviewer: Avenue Assisted Living, Mel Lee

| Reviewer's<br>Comment<br>Number | Response                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| O-IIb-1                         | Please see response above to comment O-IIa-1.                                                                                                                                                                                                                                                                                                                      |
| O-IIb-2                         | Please see the above response to comment O-IIa-1. The project has not proposed to relocate the Geary/O'Farrell station to the block further south because of the lack of connectivity to westbound Geary Boulevard and the proposed Geary BRT as well as the proposed CPMC hospital. See Master Response #5 for the criteria used to select BRT station locations. |

Mitigation Monitoring & Reporting Program  
for the  
Van Ness Avenue BRT Project

Appendix J

Intentional blank page.

# Appendix J

## Mitigation Monitoring & Reporting Program for the Van Ness Avenue BRT Project

City and County of San Francisco, California

By the

San Francisco County Transportation Authority and San Francisco  
Municipal Transportation Agency

July 2013

### **Introduction**

This Mitigation Monitoring and Reporting Program (MMRP) is for the Van Ness Bus Rapid Transit (BRT) Project. The California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) regulations require an enforceable mitigation monitoring program for projects. CEQA Section 21081.6 and CEQA Guideline 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 NEPA regulations, a monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation (40 CFR Section 1505.2(c) and 23 CFR 771.27A). 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 EIS/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 new facility and implementation of best management practices during construction. This MMRP will be kept on file in the offices of the San Francisco County Transportation Authority (Authority), 1455 Market Street, 22<sup>nd</sup> Floor, San Francisco, CA 94103.

### **Mitigation Monitoring & Reporting Program**

Analysis of each environmental factor in Chapters 3 through 7 of the Final EIS/EIR includes discussion of the affected environment, environmental consequences (including permanent/project operational impacts, construction impacts, and cumulative impacts), and avoidance, minimization, and compensation measures for each project alternative, including the LPA. This MMRP includes all feasible mitigation measures that are applicable to the adopted project, the LPA. The avoidance, minimization, and compensation measures are identified in the following two categories: “mitigation measures” and “improvement measures.” Mitigation measures are contained in Table A and are measures required to address a potentially significant impact. Improvement measures are contained in Table B. Improvement measures identified in the Final EIS/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 Van Ness Avenue BRT Project, and the milestones at which measures must be implemented. It also identifies the implementing, enforcing, and monitoring entities. The Authority, 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. The Authority will designate a Mitigation Monitoring Manager at the Authority 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. The 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 the Authority and SFMTA will require SFMTA to implement or, through contracts, ensure implementation of, the mitigation measures and improvement measures. The Authority (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, the Authority will also urge other agencies that will issue permits for the work, including the Department of Public Works and Caltrans to require compliance with the mitigation measures through their permits.

Table A (Mitigation Measures) and Table B (Improvement Measures) are organized by environmental discipline, or affected resource. They provide a summary of the mitigation measures or improvement measures identified in the Final EIS/EIR. Table A and Table B include 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 or Improvement Measures:** Provides a brief description of the mitigation or improvement measures. The MMRP includes all mitigation measures and improvement measures identified in the Final EIS/EIR that the Authority and the SFMTA found feasible and adopted as part of the CEQA Findings for the Project. The Authority will ensure that these measures are fully enforceable, in most cases by SFMTA, by making them conditions of project funding. Through agreements with SFMTA, the Authority will require SFMTA to incorporate the measures into design documents, construction specifications and project operational procedures. Other agencies may assist Authority in monitoring compliance with mitigation measures, such as the FTA, Department of Public Works, or Caltrans through their permitting and funding authority.
- **Implementation Procedure:** Describes by whom and when the mitigation and/or improvement measures must be implemented.
- **Implementation Responsibility:** Describes who is responsible for implementing the mitigation and/or improvement measures. In most cases it is the SFMTA or the Contractor.
- **Implementation Schedule:** Identifies the project phase or milestone at which the mitigation and/or 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 the SFMTA.
- **Report Recipient:** Identifies the agencies who will be notified that the mitigation measures have been implemented adequately. The Authority and the FTA are always reporting recipients.

**Table A. Mitigation Monitoring & Reporting Program for the Van Ness Avenue BRT Project (Mitigation Measures)**

| No.  | Affected Resource/s         | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                   | Implementation Procedure                                                         | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility                         | Reporting Recipient |
|------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------|-------------------------|---------------------------------------------------|---------------------|
| 1(M) | Aesthetics/Visual Resources | M-AE-1: Design sidewalk lighting to minimize glare and nighttime light intrusion on adjacent residential properties and other properties that would be sensitive to increased sidewalk lighting. | SFMTA, in coordination with SFPDW and SFPUC, with approval by SF Arts Commission | SFMTA, SFPDW, SFPUC           | Final Design            | SFMTA to oversee approval from SF Arts Commission | Authority<br>FTA    |

<sup>1</sup> The number coding is as follows: improvement (IM) or mitigation (M) measure – environmental resource – construction period includes (C) – numerical order within environmental resource.

| No.  | Affected Resource/s                              | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Implementation Procedure                                                                                                                                                                                                                             | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility                                                                                                    | Reporting Recipient                              |
|------|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| 2(M) | Aesthetics/Visual Resources & Cultural Resources | <p><u>M-AE-2</u>: Design and install a replacement OCS support pole/streetlight network that (1) retains the aesthetic function of the existing network as a consistent infrastructural element along Van Ness Avenue, (2) has a uniform aesthetic throughout the corridor and (3) carries visual character that is of similar caliber to the architectural style of the original OCS support pole/streetlight network.</p> <p>Within the Civic Center Historic District, design the OCS support pole/streetlight network to comply with the Secretary of Interior’s Standards for the Treatment of Historic Properties and be compatible with the character of the historic district as described in the Civic Center Historic District designating ordinance as called for by the San Francisco Planning Code.</p> | <p>SFMTA in coordination with SFPDW and SFPUC with approval by SF Arts Commission and, in Civic Center Historic District, HPC</p> <p>- Caltrans will review and approve final design of electrical plans (prior to issuing encroachment permit).</p> | SFMTA, SFPDW, SFPUC           | Final Design            | <p>SFMTA to oversee approvals by:</p> <p>-SFAC</p> <p>-SF HPC (within the Civic Center Historic District)</p>                | <p>Authority</p> <p>FTA</p> <p>City Planning</p> |
| 3(M) | Aesthetics/Visual Resources & Cultural Resources | <p><u>M-AE-3</u>: To the extent that the project alters sidewalk and median landscaping, design and implement a project landscape design plan, including tree type and planting scheme for median BRT stations and sidewalk plantings that replaces removed landscaping and re-establishes high-quality</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p>The project landscape design plan will require review and approval by the San Francisco Arts Commission, as well as review and approval by</p>                                                                                                    | SFMTA, SFPDW                  | Final Design            | <p>SFMTA to oversee approvals by:</p> <p>- SFAC</p> <p>- SFPDW</p> <p>-SFHPC (within the Civic Center Historic District)</p> | <p>Authority</p> <p>FTA</p>                      |

| No.  | Affected Resource/s                                | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                               | Implementation Procedure                                                                                                                                                                                                                                                                                                                                                                                                                          | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility                              | Reporting Recipient                           |
|------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------|--------------------------------------------------------|-----------------------------------------------|
|      |                                                    | landscaped medians and a tree-lined corridor. To the extent feasible, use single species street trees and overall design that provides a sense of identity and cohesiveness for the corridor. Place new trees close to corners, if feasible, for visibility. | the SFDPW as part of their permitting of work in the street ROW, which ensures consistency with the San Francisco Better Streets Plan. The median landscape design plan within the Civic Center Historic District will be reviewed by the San Francisco HPC and the City Hall Preservation Advisory Commission. A Certificate of Appropriateness must be obtained from the HPC for the landscape plans within the Civic Center Historic District. |                               |                         |                                                        |                                               |
| 4(M) | Aesthetics/Visual Resources & Biological Resources | <u>M-AE-4</u> : Design and landscape medians with consistent tree plantings to promote a unified, visual concept for the Van Ness Avenue corridor consistent with policies in the Van Ness Area Plan, Civic Center Area Plan, and San                        | See M-AE-3                                                                                                                                                                                                                                                                                                                                                                                                                                        | SFMTA, SFDPW                  | Final Design            | SFMTA to oversee approvals by:<br><br>- SFAC<br>-SFHPC | Authority<br><br>FTA<br><br>SFAC<br><br>SFHPC |

| No.  | Affected Resource/s                              | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Implementation Procedure                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility                                   | Reporting Recipient  |
|------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------|-------------------------------------------------------------|----------------------|
|      |                                                  | Francisco Better Streets Plan. This design goal for a unified, visual concept will be balanced with the goal of preserving existing trees; thus, new tree plantings would be in-filled around preserved trees.                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                               |                         |                                                             | SFDPW                |
| 5(M) | Aesthetics/Visual Resources & Cultural Resources | M-AE-5: Design and install a project BRT station and transitway design plan (including station canopies, wind turbines, and other features) that is consistent with applicable City design policies in the San Francisco General Plan and San Francisco Better Streets Plan; and for project features located in the Civic Center Historic District, apply the Secretary of Interior's Standards for the Treatment of Historic Properties, Planning Code Article 10, Appendix J pertaining to the Civic Center Historic District, and other applicable guidelines, local interpretations and bulletins concerning historic resources. | Review and approval processes supporting this measure include: (1) The San Francisco Art Commission approval of the station and transitway design plan as part of its review of public structures; (2) The SFDPW approval of the station and transitway design plan as part of its permitting of work in the street right-of-way, which it will include review for consistency with the San Francisco Better Streets Plan; (3) the HPC approval of the portion of the station and | SFMTA, SFDPW                  | Final Design            | SFMTA to oversee approvals by:<br>-SFDPW<br>-SFAC<br>-SFHPC | Authority<br><br>FTA |

| No.  | Affected Resource/s                              | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Implementation Procedure                                                                                                                                                                                                                           | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility                                      | Reporting Recipient         |
|------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------|----------------------------------------------------------------|-----------------------------|
|      |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>transitway design plan located within the Civic Center Historic District as part of granting a Certificate of Appropriateness; and (4) the City Hall Preservation Advisory Commission and City Planning Department advise on design to HPC.</p> |                               |                         |                                                                |                             |
| 6(M) | Aesthetics/Visual Resources & Cultural Resources | <p>M-AE-6: Context-sensitive design of BRT station features will be balanced with the project objective to provide a branded, cohesive identity for the proposed BRT service. The following design objectives that support planning policies described in Section 4.4.1 will be incorporated in the BRT station design and landscaping plans:</p> <ul style="list-style-type: none"> <li>Architectural integration of BRT stations with adjacent Significant and Contributory Buildings through station canopy placement, materials, color, lighting, and texture, as well as the presence of modern solar paneling and wind turbine</li> </ul> | See M-AE-3                                                                                                                                                                                                                                         | SFMTA, SFDPW                  | Final Design            | <p>SFMTA to oversee approvals by:</p> <p>-SFAC<br/>-SF HPC</p> | <p>Authority</p> <p>FTA</p> |

| No.  | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Implementation Procedure                                                                    | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility                                                                                                                        | Reporting Recipient |
|------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|      |                     | <p>features to harmonize project features with adjacent Significant and Contributory Buildings.</p> <ul style="list-style-type: none"> <li>• Integration of BRT stations and landscaping with existing and proposed streetscape design themes within the Civic Center Historic District, in conformance with the Secretary of Interior’s Standards for the Treatment of Historic Properties and compatible with the character of the historic district as described in the Civic Center Historic District designating ordinance as called for by the San Francisco Planning Code.</li> <li>• Marking the intersection of Van Ness Avenue and Market Street as a visual landmark and gateway to the city in design of the Market Street BRT station.</li> </ul> |                                                                                             |                               |                         |                                                                                                                                                  |                     |
| 7(M) | Air Quality         | <p><u>M-AQ-C1</u>: Require construction contractors to implement the BAAQMD <i>Basic Construction Mitigation Measures</i> listed in Table 4.15-7 and the applicable measures in the <i>Additional Construction Mitigation Measures</i>. This includes Measure 10 in the <i>Additional Construction Mitigation Measures</i>, which requires implementation of an off-road equipment emission reduction plan.</p>                                                                                                                                                                                                                                                                                                                                                | Contractors shall implement daily during project construction, per contract specifications. | Contractor                    | Construction            | SFMTA to conduct weekly monitoring to ensure implementation of measure. SFMTA to prepare weekly report throughout project construction duration. | Authority           |

| No.    | Affected Resource/s    | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                | Implementation Procedure                                                                                                                                                                        | Implementation Responsibility                                        | Implementation Schedule       | Monitoring Responsibility                                                                                                                        | Reporting Recipient               |
|--------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| 8(M)   | Air Quality            | <u>M-AQ-C2</u> : Require construction contractors to comply with BAAQMD Regulation 11 (Hazardous Pollutants) Rule 2 (Asbestos Demolition, Renovation, and Manufacturing), which for project demolition activities requires removal standards, reporting requirements, and mandatory monitoring and record keeping.                                                                            | Contractors shall implement daily during project construction, per contract specifications.                                                                                                     | Contractor                                                           | Construction                  | SFMTA to conduct weekly monitoring to ensure implementation of measure. SFMTA to prepare weekly report throughout project construction duration. | Authority                         |
| 9(M)   | Biological Environment | <u>M-BI-C1</u> : Have a certified arborist conduct a preconstruction tree survey to evaluate trees already identified for preservation during the design phase. Employ Best Management Practices (BMPs) identified in tree protection plans and tree removal permits required by SFDPW that will be implemented to preserve the health of those identified trees during project construction. | Per contract specifications, a qualified arborist will implement tree preservation BMPs leading up to/during project construction, including all tree relocations, per contract specifications. | Contractor will provide a qualified arborist to implement.           | Preconstruction/ Construction | SFMTA to oversee approvals from SFDPW<br><br>SFMTA to provide weekly report throughout project construction duration.                            | Authority<br><br>FTA<br><br>SFDPW |
| 10 (M) | Biological Environment | <u>M-BI-C2</u> : To comply with the Migratory Bird Treaty Act, avoid disturbance of nesting migratory birds during the breeding season by implementing the following procedures: (1) If feasible, schedule tree and shrub removal during the nonbreeding season (i.e. September 1 through January 31); (2) if tree and shrub removal is                                                       | Per contract specifications, a qualified wildlife biologist will implement pre-construction survey and exclusion structures and buffers as needed                                               | Contractor will provide a qualified wildlife biologist to implement. | Preconstruction/ Construction | SFMTA to provide weekly report throughout project construction duration.                                                                         | Authority<br><br>FTA              |

| No. | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Implementation Procedure                                                | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility | Reporting Recipient |
|-----|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------|-------------------------|---------------------------|---------------------|
|     |                     | <p>required during breeding season (i.e. February 1 through August 31), follow these measures:</p> <ul style="list-style-type: none"> <li>• Have a qualified wildlife biologist conduct preconstruction surveys of all potential nesting habitat within 500 feet of construction activities where access is available. Exclusion structures (e.g. netting or plastic sheeting) may be used to discourage the construction of nests by birds within the project construction zone. A preconstruction survey of all accessible nesting habitat within 500 feet of construction activities is required to occur no more than 2 weeks prior to construction.</li> <li>• If preconstruction surveys conducted no more than 2 weeks prior to construction identify that protected nests are inactive or potential habitat is unoccupied during the construction period, then no further mitigation is required. Trees and shrubs within the construction footprint that have been determined to be unoccupied by protected birds or that are located outside the no-disturbance buffer for active nests may be removed.</li> <li>• If active protected nests are found during preconstruction</li> </ul> | <p>prior to construction and monitor as needed during construction.</p> |                               |                         |                           |                     |

| No.   | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Implementation Procedure                                                                      | Implementation Responsibility                                    | Implementation Schedule | Monitoring Responsibility                                                           | Reporting Recipient               |
|-------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------|-----------------------------------|
|       |                     | <p>surveys, then create a no-disturbance buffer (acceptable in size to CDFW) around active protected bird and/or raptor nests during the breeding season, or until the qualified wildlife biologist determines that all young have fledged. Typical buffers include 500 feet for raptors and 50 feet for passerine nesting birds. The size of these buffer zones and types of construction activities restricted in these areas may be further modified during consultation with CDFG, and will 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; however, the "take" (e.g., mortality, severe disturbance to) of any individual protected birds will be prohibited. Monitoring of active nests when construction activities encroach upon established buffers may be required by CDFG.</p> |                                                                                               |                                                                  |                         |                                                                                     |                                   |
| 11(M) | Cultural Resources  | <p><u>M-CP-C1</u> Focused archival research will identify specific areas within the APE that are likely to contain potentially significant remains. Methods and findings will be documented as an addendum to</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p>Qualified archaeologist to conduct research during final design to inform construction</p> | <p>Authority to provide qualified archaeologist to implement</p> | <p>Final Design</p>     | <p>FTA to provide Addendum Survey Report to SHPO as part of ongoing Section 106</p> | <p>Authority<br/>FTA<br/>SHPO</p> |

| No. | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Implementation Procedure                                       | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility                                                                                          | Reporting Recipient        |
|-----|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------|
|     |                     | <p>the 2009 survey and sensitivity assessment. Research will be initiated once the project's APE map is finalized identifying the major Areas of Direct Impact (the stations and sewer relocation). Many documents, maps, and drawings cover long stretches of Van Ness, while other locations may be researched if documents indicate potential sensitivity in adjacent areas.</p> <p>The Addendum Survey Report will include the following:</p> <ul style="list-style-type: none"> <li>• A contextual section that addresses the development of urban infrastructure along Van Ness Avenue as well as widening and grading activities along the thoroughfare. This overview will provide a basis for evaluating potential resources as they relate to the history of San Francisco and to its infrastructure.</li> <li>• Documentary research that identifies the types of documents available for the identified station locations: street profiles for grading, street widening maps showing demolished building sites, utility work plans, and others as appropriate. This will include researching various archives and</li> </ul> | <p>planning and further consultation between FTA and SHPO.</p> |                               |                         | <p>consultation. SFMTA to provide final design and oversee archaeology approvals from the Planning Department.</p> | <p>Planning Department</p> |

| No. | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Implementation Procedure | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility | Reporting Recipient |
|-----|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------|-------------------------|---------------------------|---------------------|
|     |                     | <p>records of public agencies in both San Francisco and Oakland (Caltrans).</p> <ul style="list-style-type: none"> <li>• Locations apt to have historic remains present within select areas of the APE (i.e., not removed by later grading or construction).</li> <li>• A cut-and-fill reconstruction of the entire APE corridor, comparing the modern versus mid-1800s ground surface elevations, to fine-tune the initial prehistoric sensitivity assessment, and refine the location of high-sensitivity locations where prehistoric remains may be preserved.</li> <li>• Relevant profiles and plan views of specific blocks to illustrate the methods used in analyzing available documentation.</li> <li>• Summary and conclusions to provide detailed information on locations that have the potential to contain extant prehistoric archaeological and historic-era remains that might be evaluated as significant resources, if any.</li> <li>• Two results are possible based on documentary research:</li> <li>• No or Low Potential for Sensitive Locations – major Areas of Direct Impact have no</li> </ul> |                          |                               |                         |                           |                     |

| No.   | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Implementation Procedure                                                                                                                                             | Implementation Responsibility                                                                                                                                                 | Implementation Schedule | Monitoring Responsibility                                                                                                                           | Reporting Recipient                                                |
|-------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
|       |                     | <p>potential to retain extant archaeological remains that could be evaluated as significant resources. No further work would be recommended, beyond adherence to the Inadvertent Discovery Plan (M-CP-3).</p> <ul style="list-style-type: none"> <li>• Potentially Sensitive Locations – If the major Areas of Direct Impact contain locations with a 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 (see M-CP-2). The Phase I addendum report will be submitted to the SHPO for review and concurrence prior to initiation of construction.</li> </ul> |                                                                                                                                                                      |                                                                                                                                                                               |                         |                                                                                                                                                     |                                                                    |
| 12(M) | Cultural Resources  | <p><u>M-CP-C2</u>: The Testing/Treatment plan, if required, would 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, mitigation measures would be proposed.</p> <p>For historic-era resources, work</p>                                                                                                                                                                                                                                                                                                                         | Per contract specifications, qualified archaeologist to instruct construction crews on this procedure prior to start of construction and throughout construction, as | <p>Authority to provide qualified archaeologist to prepare Testing/Treatment Plan if required.</p> <p>Contractor or SFMTA to provide qualified archaeologist to implement</p> | Construction            | <p>FTA to consult with SHPO on a Testing/Treatment Plan to complete the Section 106 Process.</p> <p>SFMTA to monitor instruction and to provide</p> | <p>Authority</p> <p>FTA</p> <p>SHPO</p> <p>Planning Department</p> |

| No. | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Implementation Procedure                                                                     | Implementation Responsibility                   | Implementation Schedule | Monitoring Responsibility                                                                                                                                                                                 | Reporting Recipient |
|-----|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|     |                     | <p>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:</p> <ul style="list-style-type: none"> <li>• No Potentially Significant Remains. If no locations demonstrate the potential for significant remains, no further archaeological testing would be recommended.</li> <li>• 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, mitigation in the form of data recovery will take place immediately upon discovery should avoidance of the site not be possible.</li> </ul> | <p>needed. Construction crew members to implement if needed during project construction.</p> | <p>Testing/<br/>Treatment Plan if required.</p> |                         | <p>weekly reports of archaeological findings and procedures throughout project construction duration as well as verification of training of all relevant construction crew staff working on job site.</p> |                     |

| No.   | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Implementation Procedure                                                                                                                                                                                   | Implementation Responsibility                                     | Implementation Schedule | Monitoring Responsibility                                                                                                                             | Reporting Recipient                                       |
|-------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
|       |                     | <p>If required for prehistoric resources, a Treatment Plan would identify relevant research issues for resource evaluation, and pragmatic field methods to identify, evaluate, and conduct data recovery if needed. This could include a pre-construction geoarchaeological coring program or a compressed three-phase field effort occurring prior to construction, when the ground surface is accessible.</p> <p>The procedures detailed in the Treatment Plan would be finalized in consultation with the SHPO.</p> <p>A Phase 2 Test/Phase 3 Mitigation report will document all testing and data-recovery excavation methods and findings.</p> |                                                                                                                                                                                                            |                                                                   |                         |                                                                                                                                                       |                                                           |
| 13(M) | Cultural Resources  | <p>M-CP-C3: In the event buried cultural resources are encountered during construction activities, pursuant to 36 CFR 800.13, construction would be halted and the discovery area isolated and secured until a qualified professional archaeologist assesses the nature and significance of the find. Unusual, rare, or unique finds—particularly artifacts or features not found during data recovery—could require additional study. Examples of these would include the following:</p>                                                                                                                                                           | <p>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.</p> | <p>Contractor to provide qualified archaeologist to implement</p> | <p>Construction</p>     | <p>SFMTA to monitor instruction and to provide weekly reports of archaeological findings and procedures throughout project construction duration.</p> | <p>Authority<br/>FTA<br/>SHPO<br/>Planning Department</p> |

| No. | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Implementation Procedure | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility | Reporting Recipient |
|-----|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------|-------------------------|---------------------------|---------------------|
|     |                     | <ul style="list-style-type: none"> <li>• Any bone that cannot immediately be identified as non-human</li> <li>• Any types of intact features (hearths, house floors, cache pits, structural foundations, etc.)</li> <li>• Artifact caches or concentrations</li> <li>• Rare or unique items (engraved or incised stone or bone, beads or ornaments, mission-era artifacts)</li> <li>• Archaeological remains which are redundant with materials collected during testing or data recovery and which have minimal data potential need not be formally investigated. This could include debitage; most flaked or ground tools, with the exception of diagnostic or unique items (e.g., projectile points, crescents) shell; non-human bone; charcoal and other plant remains.</li> <li>• Diagnostic and unique artifacts unearthed during construction would be collected and their proveniences noted. Artifact concentrations and other features would be photographed, flotation/soils/radiocarbon samples taken (as appropriate),</li> </ul> |                          |                               |                         |                           |                     |

| No. | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Implementation Procedure | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility | Reporting Recipient |
|-----|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------|-------------------------|---------------------------|---------------------|
|     |                     | <p>and locations mapped using a GPS device.</p> <p>Upon discovery of deposits which may constitute a site, the agency official shall notify the State Historic Preservation Officer (SHPO) and any Indian tribe that might attach religious and cultural significance to the affected property. The notification shall describe the agency official's assessment of National Register eligibility of the property and proposed actions to resolve the adverse effects (if any). The SHPO, Indian tribe, and Advisory Council on Historic Preservation (the Council) shall respond within 48 hours of the notification. The agency official shall take into account their recommendations regarding National Register eligibility and proposed actions, and then carry out appropriate actions. The agency official shall provide the SHPO, Indian tribe, and the Council a report of the actions when they are completed.</p> <p>The above activities could be carried out quickly and efficiently, with as little delay as possible to construction work.</p> <p>The methods and results of any excavations would be documented, with photographs, in an Addendum</p> |                          |                               |                         |                           |                     |

| No.   | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Implementation Procedure                                                                                                                                                                                   | Implementation Responsibility                                     | Implementation Schedule | Monitoring Responsibility                                                                                                                             | Reporting Recipient                                                  |
|-------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
|       |                     | <p>Report. Any artifacts collected would be curated along with the main collection. Samples would be processed in a lab and analyzed, or curated with the collection for future studies, at the discretion of the project proponent.</p> <p>If major adjustments are made to the final project design, a qualified professional archaeologist should be consulted before work begins, to determine whether additional survey, research, and/or geoarchaeological assessments are needed.</p>                                                                                                                                                   |                                                                                                                                                                                                            |                                                                   |                         |                                                                                                                                                       |                                                                      |
| 14(M) | Cultural Resources  | <p><u>M-CP-C4</u>: If humans are discovered during project construction, the stipulations provided under Section 7050.5 of the State Health and Safety Code will be followed. The San Francisco County coroner would be notified as soon as is reasonably possible (CEQA Section 15064.5). There would be no further site disturbance where the remains were found and all construction work would be halted within 100 feet of the discovery. If the remains are determined to be Native American, the coroner is responsible for contacting the California Native American Heritage Commission within 24 hours. The Commission, pursuant</p> | <p>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.</p> | <p>Contractor to provide qualified archaeologist to implement</p> | <p>Construction</p>     | <p>SFMTA to monitor instruction and to provide weekly reports of archaeological findings and procedures throughout project construction duration.</p> | <p>Authority<br/>County Coroner<br/>NAHC<br/>Planning Department</p> |

| No.   | Affected Resource/s                   | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Implementation Procedure                                                  | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility                                                                                                                                       | Reporting Recipient  |
|-------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
|       |                                       | <p>to California Public Resources Code Section 5097.98 would notify those persons it believes to be the most likely descendants (MLD). Treatment of the remains would be dependent on the views of the MLD.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                           |                               |                         |                                                                                                                                                                 |                      |
| 15(M) | Geology/Soils /Seismicity/T opography | <p><u>M-GE-C1</u>: Shore all cuts deeper than 5 feet (AGS, 2009a). Consider surcharge load from nearby structures in shoring design of open excavations including an examination of the potential for lateral movement of the excavation walls as a result. Implement the following construction BMPs related to shoring and slope stability:</p> <ul style="list-style-type: none"> <li>• Keep heavy construction equipment, building materials, excavated soil, and vehicle traffic away from the edge of excavations, generally a distance equal to or greater than the depth of the excavation.</li> <li>• During wet weather, prevent storm runoff from entering the excavation. Excavation sidewalls can be covered with plastic sheeting, and berms can be placed around the perimeter of the excavated areas.</li> <li>• Adequately support sidewalks, slabs, pavement, and utilities adjacent to proposed excavations during construction.</li> </ul> | 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 5 feet throughout project construction duration. | Authority<br><br>FTA |

| No.   | Affected Resource/s       | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Implementation Procedure                                                                                                             | Implementation Responsibility | Implementation Schedule                    | Monitoring Responsibility                                                                                                                     | Reporting Recipient                         |
|-------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| 16(M) | Hazardous Waste/Materials | <p><u>M-HZ-C1</u>: Create a Worker Site Health and Safety Plan with the following components, in response to potential Recognized Environmental Conditions identified in the Phase II review or other follow-up investigations, and results from preconstruction lead-based paint (LBP) and aerially deposited lead (ADL) surveys specified in Sections 4.8.3 and 4.8.4:</p> <ul style="list-style-type: none"> <li>• A safety and health risk/hazards analysis for each site task and operation in the work plan;</li> <li>• Employee training assignments;</li> <li>• Personal protective equipment requirements;</li> <li>• Medical surveillance requirements;</li> <li>• Air monitoring, environmental sampling techniques, and instrumentation;</li> <li>• Safe storage and disposal measures for encountered contaminated soil, groundwater, or debris, including temporary storage locations, labeling, and containment procedures.</li> <li>• Emergency response plan; and</li> <li>• Spill containment program.</li> </ul> | Per contract specifications, plan (including special provisions) to be written by Contractor as part of construction planning phase. | Contractor                    | Construction (planning phase)              | <p>SFMTA to oversee approval from Caltrans.</p> <p>SFMTA to provide weekly reports on adherence to plan throughout construction duration.</p> | <p>Authority</p> <p>FTA</p> <p>Caltrans</p> |
| 17(M) | Hazardous Waste/Materials | <p><u>M-HZ-C2, IM-HY-C1 and IM-HY-5</u>: Coordinate preparation of a Storm Water Pollution Prevention Plan</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Per contract specifications, plan to be written                                                                                      | Contractor                    | Permitting & Construction (planning phase) | SFMTA to oversee approvals from                                                                                                               | <p>Authority</p> <p>FTA</p>                 |

| No. | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Implementation Procedure                                     | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility                                                                                                       | Reporting Recipient          |
|-----|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------|
|     |                     | <p>(SWPPP) required to comply with the National Pollutant Discharge Elimination System (NPDES) General Permit requirements with San Francisco Public Utilities Commission (SFPUC) and conform construction activities with SFPUC’s “Keep it on site” guide. Include in the project SWPPP the following measures to contain any possible contamination, including protection of storm drains, and to prevent any contaminated runoff or leakage either into or onto exposed ground surfaces:</p> <ul style="list-style-type: none"> <li>• Use of stormwater BMPs, including inlet protection devices, temporary silt fencing, soil stabilization measures, street sweeping, stabilized construction entrances, and temporary check dams.</li> <li>• Conducting drilling/piling operations in accordance with guidelines set forth by the City, including the Department of Public Health Local Oversight Program and Caltrans Construction Site BMP Manual.</li> <li>• Lining storage areas.</li> <li>• Proper and expeditious disposal of items to be removed, such as landscaping, curb bulb waste, existing bus stop shelters, and demolished OCS and signal</li> </ul> | <p>by contractor as part of construction planning phase.</p> |                               |                         | <p>Caltrans and RWQCB</p> <p>SFMTA to provide weekly reports outlining adherence to SWPPP throughout construction duration.</p> | <p>Caltrans</p> <p>RWQCB</p> |

| No.   | Affected Resource/s       | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                     | Implementation Procedure                                                                                                                                  | Implementation Responsibility | Implementation Schedule            | Monitoring Responsibility                                                | Reporting Recipient                   |
|-------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------|--------------------------------------------------------------------------|---------------------------------------|
|       |                           | <p>poles.</p> <p>In accordance with NPDES General Permit requirements the SWPPP will address water quality impacts associated with construction activities, including identification of all drainage facilities onsite, placement of appropriate stormwater and non-stormwater pollution controls, erosion and sediment control, spill response and containment plans, inspection scheduling, maintenance, and training of all construction personnel onsite..</p> |                                                                                                                                                           |                               |                                    |                                                                          |                                       |
| 18(M) | Hazardous Waste/Materials | <p><u>M-HZ-C3</u>: Implement public health and safety measures contained in Worker Health and Safety Plan (M-HZ-C1) during construction.</p>                                                                                                                                                                                                                                                                                                                       | <p>Per contract specifications, measures will be identified as part of M-HZ-C1 above, and will be implemented throughout construction specifications.</p> | Contractor                    | Construction                       | <p>SFMTA to provide weekly reports throughout construction duration.</p> | <p>Authority<br/>FTA<br/>Caltrans</p> |
| 19(M) | Hazardous Waste/Materials | <p><u>M-HZ-1</u>: Prior to construction, review Phase II study and conduct a follow-up investigation, if appropriate, for identified recognized environmental conditions (RECS). Required actions are:</p> <ul style="list-style-type: none"> <li>Field survey identified RECs to verify the physical locations of the REC sites with respect to the</li> </ul>                                                                                                    | <p>SFMTA shall implement M-HZ-1 following final design.</p>                                                                                               | SFMTA                         | Final Design/Construction Planning | <p>SFMTA to provide a report with findings.</p>                          | <p>Authority<br/>FTA<br/>Caltrans</p> |

| No. | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Implementation Procedure | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility | Reporting Recipient |
|-----|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------|-------------------------|---------------------------|---------------------|
|     |                     | <p>preferred build alternative project components and proposed construction earthwork, and observe the current conditions of the sites.</p> <ul style="list-style-type: none"> <li>• Conduct a regulatory file review for each identified REC to determine the current status of the sites and, if possible, the extent of the contamination.</li> <li>• If the aforementioned field survey and file review reveal a likelihood of encountering contaminated soil or groundwater during project construction, then conduct a subsurface exploration within the areas proposed for construction earthwork activities. Conduct the subsurface investigation within the project limits, adjacent to, or downgradient from the REC sites. If soil profiling reveals contaminant concentrations that meet the definition of hazardous materials, prepare and implement Construction Implementation Plan that addresses management of hazardous materials and hazardous waste that is consistent with the federal and state of California requirements pertaining to hazardous</li> </ul> |                          |                               |                         |                           |                     |

| No.   | Affected Resource/s       | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Implementation Procedure                                                                                                                                                                                    | Implementation Responsibility | Implementation Schedule            | Monitoring Responsibility                                                                                                                                                                                                              | Reporting Recipient                         |
|-------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
|       |                           | materials and wastes management.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                             |                               |                                    |                                                                                                                                                                                                                                        |                                             |
| 20(M) | Hazardous Waste/Materials | <p><u>M-HZ-2</u>: Test soils in landscaped medians that will be disturbed by project activities for aerially deposited lead according to applicable hazardous material testing guidelines. If the soil contains extractible lead concentrations that meet the definition of hazardous materials, obtain Caltrans approval of a Lead Compliance Plan prior to the start of construction or soil-disturbance activities. If lead levels present in surface soils reach concentrations in excess of the hazardous waste threshold, stabilize onsite or dispose at a Class 1 landfill such soils as specified in the Lead Compliance Plan.</p> | <p>SFMTA shall implement soil testing for ADL prior to construction to inform construction planning.</p> <p>Per contract specifications, Contractor shall adhere to Lead Compliance Plan, if necessary.</p> | SFMTA                         | Final Design/Construction Planning | <p>SFMTA to provide a report with findings and, if necessary, a Lead Compliance Plan.</p> <p>If necessary, SFMTA shall provide weekly reports on Contractor compliance with Lead Compliance Plan throughout construction duration.</p> | <p>Authority</p> <p>FTA</p> <p>Caltrans</p> |
| 21(M) | Hazardous Waste/Materials | <p><u>M-HZ-3</u>: Test for lead in paint used for traffic lane striping and on streetscape features, including the OCS support poles/streetlights, prior to demolition/removal to determine proper handling and disposal methods during project construction. If lead is detected, include appropriate procedures in the Construction Implementation Plan to avoid worker or public contact with these materials or</p>                                                                                                                                                                                                                    | <p>SFMTA shall implement LBP testing of structures to be demolished, prior to construction to inform construction planning.</p> <p>Per contract specifications,</p>                                         | SFMTA                         | Final Design/Construction Planning | <p>SFMTA to provide report outlining LBP and shall include procedures in Construction Implementation Plan</p> <p>SFMTA to provide weekly</p>                                                                                           | <p>Authority</p> <p>FTA</p> <p>Caltrans</p> |

| No.   | Affected Resource/s                                                         | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Implementation Procedure                                                                                                             | Implementation Responsibility              | Implementation Schedule                         | Monitoring Responsibility                                                                                                                       | Reporting Recipient                               |
|-------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
|       |                                                                             | generation of dust or vapors.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Contractor shall adhere to Construction Implementation Plan.                                                                         |                                            |                                                 | reports on adherence to Construction Implementation Plan throughout construction duration.                                                      |                                                   |
| 22(M) | Community Impacts/ Public Services & Land Use, Transportation & Circulation | <u>M-CI-C1</u> : During the design phase, with participation from local agencies, other major project proposers in the area (e.g., the California Pacific Medical Center [CPMC] Cathedral Hill Campus, the Better Market Street Project, and the Geary Corridor BRT projects), local communities, businesses associations, and affected drivers develop a Transportation Management Plan (TMP) that includes traffic rerouting, a detour plan, and public information procedures. Implement early and well-publicized announcements and outreach to help minimize confusion, inconvenience, and traffic congestion at the start of and during construction. | 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<br><br>SFMTA to provide weekly reports on adherence to TMP throughout construction duration. | Authority<br><br>FTA<br><br>Caltrans<br><br>SFDPW |
| 23(M) | Community Impacts/ Public Services & Land Use, Transportation &             | M-CI-C2: As part of the TMP, construction planning will minimize nighttime construction in residential areas and minimize daytime construction impacts on retail and commercial areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SFMTA to implement as part of construction planning phase.<br><br>Per contract specifications,                                       | SFMTA                                      | Construction Planning Phase, Construction Phase | SFMTA to oversee project approvals from Caltrans and SFDPW<br><br>SFMTA to                                                                      |                                                   |

| No.   | Affected Resource/s                                                               | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                      | Implementation Procedure                                                                                                                    | Implementation Responsibility | Implementation Schedule                            | Monitoring Responsibility                                                                                                                                                    | Reporting Recipient                               |
|-------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
|       | Circulation                                                                       |                                                                                                                                                                                                                                                                                                                                                                                     | Contractor to implement during construction.                                                                                                |                               |                                                    | provide weekly reports on adherence to TMP in Civic Center area throughout construction duration.                                                                            |                                                   |
| 24(M) | Community Impacts/<br>Public Services & Land Use,<br>Transportation & Circulation | <u>M-CI-C3</u> : Incorporate in the TMP applicable in the Civic Center area, consideration of major civic and performing arts events.                                                                                                                                                                                                                                               | SFMTA to implement as part of construction planning phase.<br><br>Per contract specifications, Contractor to implement during construction. | SFMTA                         | Construction Planning Phase,<br>Construction Phase | SFMTA to oversee project approvals from Caltrans and SFDPW<br><br>SFMTA to provide weekly reports on adherence to TMP in Civic Center area throughout construction duration. | Authority<br><br>FTA<br><br>Caltrans<br><br>SFDPW |
| 25(M) | Community Impacts/<br>Public Services & Land Use,<br>Transportation & Circulation | <u>M-CI-C4</u> : <sup>2</sup> As part of the TMP public information program, coordinate with adjacent properties along Van Ness Avenue to determine the need for colored parking spaces (for freight and passenger and disabled loading) for these uses and work to identify locations for replacement spaces or plan construction activities to minimize the loss of these spaces. | SFMTA to implement as part of construction planning phase.<br><br>Per contract specifications, Contractor to implement during construction. | SFMTA                         | Construction Planning Phase,<br>Construction Phase | SFMTA to oversee approvals from Caltrans and SFDPW.<br><br>SFMTA to provide weekly reports on adherence to TMP                                                               | Authority<br><br>FTA<br><br>Caltrans<br><br>SFDPW |

<sup>2</sup> M-CI-2 constitutes a mitigation measure under NEPA and an improvement measure under CEQA.

| No.   | Affected Resource/s                                                            | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                           | Implementation Procedure                                                                                                                    | Implementation Responsibility | Implementation Schedule                         | Monitoring Responsibility                                                                                                                       | Reporting Recipient                   |
|-------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
|       |                                                                                |                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                             |                               |                                                 | throughout construction duration.                                                                                                               |                                       |
| 26(M) | Community Impacts/<br>Public Services & Land Use, Transportation & Circulation | M-CI-C5: As part of the TMP public information program, coordinate with adjacent properties along Van Ness Avenue to ensure that pedestrian access to these properties is maintained at all times.                                                                                                                                                       | SFMTA to implement as part of construction planning phase.<br><br>Per contract specifications, Contractor to implement during construction. | SFMTA                         | Construction Planning Phase, Construction Phase | SFMTA to oversee approvals from Caltrans and SFDPW.<br><br>SFMTA to provide weekly reports on adherence to TMP throughout construction duration | Authority<br>FTA<br>Caltrans<br>SFDPW |
| 27(M) | Community Impacts/<br>Public Services & Land Use, Transportation & Circulation | M-CI-C6: As part of the TMP, SFMTA's process for accepting and addressing complaints will be implemented. 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 are logged and tracked to ensure they are addressed. | SFMTA to implement as part of construction planning phase.<br><br>Per contract specifications, Contractor to implement during construction. | SFMTA                         | Construction Planning Phase, Construction Phase | SFMTA to oversee approvals from Caltrans and SFDPW<br><br>SFMTA to provide weekly reports on adherence to TMP throughout construction duration. | Authority<br>FTA<br>Caltrans<br>SFDPW |
| 28(M) | Community Impacts/<br>Public Services & Land Use,                              | M-CI-C7. As part of the TMP, adequate passenger and truck loading zones will be maintained for adjacent land uses, including maintaining access to driveways                                                                                                                                                                                             | SFMTA to implement as part of construction planning phase.                                                                                  | SFMTA                         | Construction Planning Phase, Construction Phase | SFMTA to oversee approvals from Caltrans and SFDPW.                                                                                             | Authority<br>FTA<br>Caltrans          |

| No.   | Affected Resource/s            | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                          | Implementation Procedure                                                                                                                   | Implementation Responsibility | Implementation Schedule                         | Monitoring Responsibility                                                                                                                       | Reporting Recipient                               |
|-------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
|       | Transportation & Circulation   | and providing adequate loading zones on the same or adjoining street block face.                                                                                                        | Per contract specifications, Contractor to implement during construction.                                                                  |                               |                                                 | SFMTA to provide weekly reports on adherence to TMP throughout construction duration.                                                           | SFDPW                                             |
| 29(M) | Transportation and Circulation | <u>M-TR-C1</u> : Temporarily convert parking lanes to mixed-flow traffic lanes to generally maintain two open traffic lanes in each direction and minimize traffic impacts.             | SFMTA to implement as part of construction planning phase.<br><br>Per contract specification, Contractor to implement during construction. | SFMTA, Contractor             | Construction Planning Phase, Construction Phase | SFMTA to oversee approvals from Caltrans and SFDPW.<br><br>SFMTA to provide weekly reports on adherence to TMP throughout construction.         | Authority<br><br>FTA<br><br>Caltrans<br><br>SFDPW |
|       | Transportation and Circulation | <u>M-TR-C3</u> : Plan required closures of a second mixed-flow traffic lane and detours for nighttime or off-peak traffic hours and as in conformance with approved noise requirements. | SFMTA to implement as part of construction planning phase.<br><br>Per contract specification, Contractor to implement during construction  | SFMTA, Contractor             | Construction Planning Phase, Construction Phase | SFMTA to oversee approvals from Caltrans and SFDPW<br><br>SFMTA to provide weekly reports on adherence to TMP throughout construction duration. | Authority<br><br>FTA<br><br>Caltrans<br><br>SFDPW |

| No.   | Affected Resource/s            | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                 | Implementation Procedure                                                                                                                  | Implementation Responsibility | Implementation Schedule                         | Monitoring Responsibility                                                                                                                       | Reporting Recipient                               |
|-------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| 30(M) | Transportation and Circulation | <u>M-TR-C4</u> : Maintain one east-west and north-south crosswalk leg open at all times at all intersections.                                                                                                  | SFMTA to implement as part of construction planning phase.<br><br>Per contract specification, Contractor to implement during construction | SFMTA, Contractor             | Construction Planning Phase, Construction Phase | SFMTA to oversee approvals from Caltrans and SFDPW<br><br>SFMTA to provide weekly reports on adherence to TMP throughout construction duration. | Authority<br><br>FTA<br><br>Caltrans              |
| 31(M) | Transportation and Circulation | <u>M-TR-C5</u> : Install sufficient barricading, signage, and temporary walkways as needed to minimize impacts to pedestrians.                                                                                 | SFMTA to implement as part of construction planning phase.<br><br>Per contract specification, Contractor to implement during construction | SFMTA, Contractor             | Construction Planning Phase, Construction Phase | SFMTA to oversee approvals from Caltrans and SFDPW<br><br>SFMTA to provide weekly reports on adherence to TMP throughout construction duration. | Authority<br><br>FTA<br><br>Caltrans<br><br>SFDPW |
| 32(M) | Transportation and Circulation | <u>M-TR-C6</u> : Coordinate with the Golden Gate Bridge & Highway Transportation District (GGT) as part of the TMP to plan temporarily relocated transit stops as needed, and minimize impacts to GGT service. | SFMTA to implement as part of construction planning phase through coordination with GGT.                                                  | SFMTA, Contractor             | Construction Planning Phase & Construction      | SFMTA to oversee approvals from Caltrans and concurrence from GGT.<br><br>SFMTA to                                                              | Authority<br><br>FTA<br><br>Caltrans<br><br>GGT   |

| No.   | Affected Resource/s            | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Implementation Procedure                                                                                                                   | Implementation Responsibility | Implementation Schedule                                                                                    | Monitoring Responsibility                                                                                                                       | Reporting Recipient                   |
|-------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
|       |                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Per contract specification, Contractor to implement during construction.                                                                   |                               |                                                                                                            | provide weekly reports on adherence to TMP throughout construction duration.                                                                    |                                       |
| 33(M) | Transportation and Circulation | <u>M-TR-C7</u> : Develop and coordinate with other major projects in the area a Transportation Management Plan (TMP) outlining methods and strategies to minimize construction activity-related traffic delay and inconvenience to the traveling public. The TMP will include a public information program and wayfinding to provide local businesses and residents with information related to the construction activities and durations, temporary traffic closures and detours, parking restrictions, and bus stop relocations. The public information program will be coordinated with regional agencies, such as Caltrans and Golden Gate Transit. | SFMTA to implement as part of construction planning phase.<br><br>Per contract specification, Contractor to implement during construction. | SFMTA                         | Construction Planning Phase & Construction; TMP to be developed during the 30 percent project design phase | SFMTA to oversee approvals from Caltrans and SFDPW<br><br>SFMTA to provide weekly reports on adherence to TMP throughout construction duration. | Authority<br>FTA<br>Caltrans<br>SFDPW |
| 34(M) | Transportation and Circulation | <u>M-TR-1</u> : Add an additional vehicle to the fleet on Routes 47 and 49 if needed to decrease headways for each route sufficiently to bring the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SFMTA Transit Operations to implement as needed during                                                                                     | SFMTA                         | Operation                                                                                                  | SFMTA to provide quarterly reports on                                                                                                           | Authority<br>FTA                      |

| No.   | Affected Resource/s            | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Implementation Procedure                          | Implementation Responsibility | Implementation Schedule    | Monitoring Responsibility                                                                                                                                                                     | Reporting Recipient                                                    |
|-------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
|       |                                | load factors below SFMTA's maximum vehicle load standard of 0.85.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | project operation.                                |                               |                            | crowding for first 2 years of operation, annual reports for subsequent 5 years.                                                                                                               |                                                                        |
| 35(M) | Transportation and Circulation | <p><u>M-Traffic Management Toolbox:</u><br/> <u>Develop and implement a traffic management toolbox</u> to raise public awareness of circulation changes; advise drivers of alternate routes; and provide pedestrian improvements. Toolbox actions will include:</p> <ul style="list-style-type: none"> <li>• <u>Provide driver wayfinding and signage</u>, especially to assist infrequent drivers of the corridor who may not be aware of alternate routes, such as along the Larkin/Hyde and Franklin/Gough corridors. Coordinate with Caltrans to develop the driver wayfinding and signage strategy as part of mitigation measure and M-TR-C5. Continue to monitor traffic after construction and during project operation. If the above mentioned construction measures prove to be helpful in minimizing traffic delay impacts, consider implementing similar strategies on an as-needed basis during project operation.</li> </ul> | SFMTA to implement during and after construction. | SFMTA                         | Construction and Operation | <p>SFMTA to provide weekly reports on adherence to TMP throughout construction duration.</p> <p>SFMTA to prepare monthly monitoring reports for the first two years of project operation.</p> | <p>Authority</p> <p>FTA</p> <p>Caltrans</p> <p>Golden Gate Transit</p> |

| No. | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Implementation Procedure | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility | Reporting Recipient |
|-----|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------|-------------------------|---------------------------|---------------------|
|     |                     | <ul style="list-style-type: none"> <li data-bbox="485 264 863 1003">• <u>Public Awareness Campaign and Transportation Management Plan (TMP) during and after Project Construction.</u> As discussed as part of mitigation measure M-TR-C7, the TMP will implement a public awareness program of wayfinding during construction and will coordinate the public information program with regional agencies, including Caltrans and GGT. Continue to monitor traffic after construction and during project operation. If the above mentioned construction measures prove to be helpful in minimizing traffic delay impacts, the SFMTA may choose to implement similar strategies on an as-needed basis during project operation.</li> <li data-bbox="485 1011 863 1412">• <u>Pedestrian Amenities at Additional Corridor Locations.</u> After construction, during project operation, monitor travel in the corridor to identify additional locations for pedestrian improvements based on a combination of pedestrian and vehicle volumes, infrastructure capabilities, and collision history.<br/>Consider the potential for long-</li> </ul> |                          |                               |                         |                           |                     |

| No.   | Affected Resource/s           | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                        | Implementation Procedure                                                                                                                                                                                                                              | Implementation Responsibility | Implementation Schedule                      | Monitoring Responsibility              | Reporting Recipient |
|-------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------------------------------|----------------------------------------|---------------------|
|       |                               | term, pedestrian amenities, such as countdown signals and pedestrian curb bulbs, to help reduce the severity of automobile traffic delays through mode shift .                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                       |                               |                                              |                                        |                     |
| 36(M) | Utilities and Service Systems | <u>M-UT-1</u> : Closely coordinate BRT construction with concurrent utility projects planned within the Van Ness Avenue 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 & Construction (planning phase)   | SFMTA to oversee approvals from SFDPW. | Authority<br>FTA    |
| 37(M) | Utilities and Service Systems | <u>M-UT-2</u> : During the design phase, inspect and evaluate the sewer pipeline within the project limits to assess the condition of the pipeline and need for replacement. If repair or relocation is needed, during project construction, continue to coordinate such work with SFPUC and SFDPW working with the City's Committee for Utility Liaison on Construction and Other Projects (CULCOP). | SFMTA and SFPUC to conduct needed sewer inspections during final design.                                                                                                                                                                              | SFMTA, SFPUC                  | Final Design & Construction (planning phase) | SFMTA to oversee approvals from SFDPW. | Authority<br>FTA    |

| No.   | Affected Resource/s           | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Implementation Procedure                                                                                                                                                                                                               | Implementation Responsibility                       | Implementation Schedule     | Monitoring Responsibility                                                                                                                                                                              | Reporting Recipient         |
|-------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| 38(M) | Utilities and Service Systems | <p><u>M-UT-3</u>: Design the project to ensure that the proposed BRT transitway and station facilities do not prevent access to the underground auxiliary water supply service (AWSS) lines. Ensure that the design provides adequate access for specialized trucks to park next to gate valves for maintenance and that gate valves are not located beneath medians or station platforms.</p>                                                                                                                                                                         | <p>SFMTA, SFPDW, SFPUC, and the San Francisco Fire Department to coordinate and plan during final design, and again for construction planning.</p> <p>Per contract specifications, Contractor to implement during construction.</p>    | SFMTA, SFPUC, and the San Francisco Fire Department | Final Design & Construction | <p>SFMTA to oversee approvals from SFPUC and San Francisco Fire Department</p> <p>SFMTA to provide weekly reports on accessibility of AWSS lines and gate valves throughout construction duration.</p> | <p>Authority</p> <p>FTA</p> |
| 39(M) | Utilities and Service Systems | <p><u>M-UT-4</u>: In situations where utility facilities cannot be relocated, create an operations 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. Integrate into the plan signage for BRT patrons and safety protocols for Muni operators and utility providers.</p> | <p>SFMTA to coordinate with utility providers, SFPDW, the SFPUC and SF Fire Department during final design to ensure project design considers utility maintenance programs, including those overlapping with project construction.</p> | SFMTA                                               | Final Design, Construction  | <p>SFMTA to oversee approvals from SFPUC, SF Fire Department, and SFPDW.</p>                                                                                                                           | <p>Authority</p> <p>FTA</p> |

| No.   | Affected Resource/s | Mitigation & Improvement Measures <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                         | Implementation Procedure                                                                                             | Implementation Responsibility | Implementation Schedule            | Monitoring Responsibility                                                                                                                                   | Reporting Recipient                               |
|-------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| 40(M) | Community Impacts   | <u>M-CI-IM-1</u> <sup>3</sup> : Prior to construction, coordinate with all businesses that would be affected by removal of colored parking spaces, including short-term parking, to confirm the need for truck and/or passenger loading spaces and to identify and implement appropriate replacement parking locations to minimize the impacts to these businesses.                                                                                                    | SFMTA to implement as part of design phase<br>Per contract specifications, Contractor to implement relocated parking | SFMTA                         | Design and Construction            | SFMTA to oversee approvals from Caltrans and SFDPW.<br><br>SFMTA to provide weekly report on adherence to parking designs throughout construction duration. | Authority<br><br>FTA<br><br>Caltrans<br><br>SFDPW |
| 41(M) | Community Impacts   | <u>M-CI-IM-2</u> <sup>4</sup> : Apply parking management tools as needed to offset any substantial impacts from the loss of on-street parking, which may include adjustment of residential parking permits in the residential community north of Broadway, or use of SFpark, which is a package of real-time tools to manage parking occupancy and turnover through pricing (appropriate in areas of high-density commercial uses that rely on high parking turnover). | SFMTA to implement as part of post-construction project monitoring phase.                                            | SFMTA                         | Post-Construction Monitoring Phase | SFMTA to provide quarterly parking assessment for first 2 years of project operation.                                                                       | Authority<br><br>FTA                              |

<sup>3</sup> M-CI-IM-1 and M-CI-IM-2 constitutes a mitigation measure under NEPA and an improvement measure under CEQA

<sup>4</sup> M-CI-IM-1 and M-CI-IM-2 constitutes a mitigation measure under NEPA and an improvement measure under CEQA

**Table B. Mitigation Monitoring & Reporting Program for the Van Ness Avenue BRT Project (Improvement Measures)**

| No.       | Affected Resource/s <sup>5</sup> | Mitigation & Improvement Measures                                                                                                                                                                                                                                                                              | Implementation Procedure                                                                                                                              | Implementation Responsibility    | Implementation Schedule         | Monitoring Responsibility                                                                                 | Reporting Recipient |
|-----------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------|
| 1<br>(IM) | Aesthetics/Visual Resources      | <u>IM-AE-C1</u> : During construction, require the contractor to maintain the site in an orderly manner, removing trash and waste, and securing equipment at the close of each day's operation.                                                                                                                | Contractor to implement daily during project construction.                                                                                            | Contractor                       | Construction                    | SFMTA to conduct daily visual scans and prepare weekly report throughout project construction duration.   | Authority<br>FTA    |
| 2<br>(IM) | Aesthetics/Visual Resources      | <u>IM-AE-C2</u> : To reduce glare and light used during nighttime construction activities, require the contractor to direct lighting onto the immediate area under construction only and to avoid shining lights toward residences, nighttime commercial properties, and traffic lanes.                        | Contractor to implement nightly during project construction.                                                                                          | Contractor                       | Construction                    | SFMTA to conduct nightly visual scans and prepare weekly report throughout project construction duration. | Authority<br>FTA    |
| 3<br>(IM) | Biological Environment           | <u>IM-BI-1</u> : In compliance with local tree protection policies codified in the San Francisco Public Works Code, preserve mature trees and incorporate them into the project landscape plan as feasible. Incorporate the planting of replacement trees and landscaping into the landscape plan as feasible. | 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 SFDPW Bureau of Urban Forestry.     | Authority<br>FTA    |
| 4         | Biological                       | <u>IM-BI-2</u> : Have a certified arborist                                                                                                                                                                                                                                                                     | A qualified arborist                                                                                                                                  | Qualified Arborist,              | 30% design                      | SFMTA to                                                                                                  | Authority           |

<sup>5</sup> The number coding is as follows: improvement (IM) or mitigation (M) measure – environmental resource – construction period includes (C) – numerical order within environmental resource.

| No.    | Affected Resource/s <sup>5</sup>    | Mitigation & Improvement Measures                                                                                                                                                                                                                                         | Implementation Procedure                                                                                                                        | Implementation Responsibility                   | Implementation Schedule              | Monitoring Responsibility                                                                                           | Reporting Recipient |
|--------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------|
| (IM)   | Environment                         | complete a preconstruction tree survey to identify protected trees that will be potentially impacted by the proposed project, and to determine the need for tree removal permits and tree protection plans under San Francisco Public Works Code requirements.            | will conduct tree survey during 30% design, and then again during final design as needed.                                                       | SFMTA                                           | through final design                 | provide CER, final design and oversee project approvals from SFDPW Bureau of Urban Forestry.                        | FTA                 |
| 5 (IM) | Biological Environment              | <u>IM-BI-3</u> : In compliance with the Executive Order on Invasive Species, E.O. 13112, design and implement landscaping that does not use species listed as noxious weeds.                                                                                              | 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                     | Authority<br>FTA    |
| 6 (IM) | Geology/Soils/Seismicity/Topography | <u>IM-GE-1</u> : Perform localized soil modification treatments as needed at locations where station platforms would be located in areas of fill or areas mapped as a liquefaction area. Such soil modification may include soil vibro-compaction or permeation grouting. | 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.            | Authority<br>FTA    |
| 7 (IM) | Geology/Soils/Seismicity/Topography | <u>IM-GE-2</u> : Over-excavate fill soils and replace them with engineered fill as needed in areas where proposed project structures would be located in areas of fill or in liquefaction zones.                                                                          | 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 fill soils in areas of fill or liquefaction zones throughout project construction | Authority<br>FTA    |

| No.       | Affected Resource/s <sup>5</sup>    | Mitigation & Improvement Measures                                                                                                                        | Implementation Procedure                                                                                                                                                                                    | Implementation Responsibility | Implementation Schedule                    | Monitoring Responsibility                                                                                                                                                                                                                                                                | Reporting Recipient                               |
|-----------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| 8<br>(IM) | Geology/Soils/Seismicity/Topography | IM-GE-3: As needed; in areas of fill or areas mapped as a liquefaction area, design and construct deeper foundations for station platforms and canopies. | SFMTA to perform assessment during final design.<br><br>Per contract specifications, Contractor to implement during permitting and construction phase, in preparation of construction of station platforms. | Contractor                    | Final Design/Permitting /Construction      | duration.<br><br>SFMTA will oversee permit approval from SFDPW and Caltrans<br><br>SFMTA to provide weekly reports on compliance with foundational requirements throughout construction of foundations, then monthly reports on subsidence through the remainder of project construction | Authority<br><br>FTA<br><br>Caltrans<br><br>SFDPW |
| 9<br>(IM) | Water Quality and Hydrology         | IM-HY-C1. See M-HZ-C2.                                                                                                                                   | Per contract specifications, SWPPP to be written by contractor as part of construction planning phase.                                                                                                      | Contractor                    | Permitting & Construction (planning phase) | SFMTA to oversee approvals by: SFPUC and RWQCB<br><br>SFMTA to provide weekly reports outlining adherence to SWPPP                                                                                                                                                                       | Authority<br><br>FTA<br><br>RWQCB                 |

| No.        | Affected Resource/s <sup>5</sup> | Mitigation & Improvement Measures                                                                                                                                                                                                                                                                                                                               | Implementation Procedure                                                                                                                                                               | Implementation Responsibility | Implementation Schedule                    | Monitoring Responsibility                                                                                                                                   | Reporting Recipient       |
|------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| 10<br>(IM) | Water Quality and Hydrology      | <u>IM-HY-C2</u> : Coordinate with and obtain any needed permit approval from the SFPUC for any construction work that impacts the combined sewer system (CSS)                                                                                                                                                                                                   | SFMTA shall obtain any needed approval from SFPUC.                                                                                                                                     | SFMTA, SFPUC and contractor   | Permitting & Construction (planning phase) | SFMTA to oversee approvals from SFPUC<br><br>SFMTA to provide weekly reports on adherence to "Keep it on Site" guidelines throughout construction duration. | Authority<br>FTA<br>RWQCB |
| 11<br>(IM) | Water Quality and Hydrology      | <u>IM-HY-C3</u> : If groundwater is encountered during project excavation activities, pump the water from the excavated area, contain and treated it in accordance with all applicable State and federal regulations before discharging it to the existing local CSS. Obtain a batch discharge permit from SFPUC prior to commencement of discharge to the CSS. | SFMTA and SFPUC to implement as part of construction planning phase.<br><br>Per contract specifications, contractor shall implement during construction if groundwater is encountered. | SFMTA, SFPUC and contractor   | Permitting & Construction (planning phase) | SFMTA to oversee approvals from SFPUC and RWQCB                                                                                                             | Authority<br>FTA<br>RWQCB |
| 12<br>(IM) | Water Quality and Hydrology      | <u>IM-HY-1</u> : Design landscape areas provided by the project to minimize and reduce total runoff. Avoid the overuse of water and/or fertilizers on landscaped areas.                                                                                                                                                                                         | SFMTA and landscape architects to implement during landscape design. SFPDW to implement water and fertilizer usage during project operation                                            | SFMTA, SFPDW                  | Final Design & Operation                   | SFMTA to oversee approvals from SF Arts Commission, HPC, and Planning Department                                                                            | Authority<br>FTA          |

| No.     | Affected Resource/s <sup>5</sup> | Mitigation & Improvement Measures                                                                                                                                                                                                                                                                                                                                                                                                                                  | Implementation Procedure                                                                                                                                                                                   | Implementation Responsibility       | Implementation Schedule  | Monitoring Responsibility                                                                                                                                                                                                                                                    | Reporting Recipient         |
|---------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
|         |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <p>Contractor will implement landscape plan and follow watering/fertilizing guidelines during construction, as needed, and per contract specifications.</p>                                                |                                     |                          | <p>SFDPW to provide quarterly reports on fertilizer usage for first 5 years of operation.</p> <p>SFMTA to submit weekly reports on Contractor implementation of landscape plan and watering/fertilizing guideline adherence, as needed throughout construction duration.</p> |                             |
| 13 (IM) | Water Quality and Hydrology      | <p><u>IM-HY-2</u>: As project design progresses, investigate and as feasible incorporate in the design and implement stormwater management tools, such as permeable paving, infiltration planters, swales, and rain gardens, as set forth in the <i>San Francisco Better Streets Plan</i>. In determining the feasibility of implementing stormwater management tools, consider streetscape geometry, topography, soil type and compaction, groundwater depth,</p> | <p>SFMTA, SFPUC and SFDPW landscape architects to include in landscape design, and consult with SFDPW on maintenance aspects.</p> <p>Contractor to implement stormwater management tools, per contract</p> | SFMTA, SFPUC, SFDPW, and Contractor | Final Design & Operation | <p>SFMTA to oversee approvals from: SFAC, HPC, Planning Department, SFDPW, and SFPUC for final design.</p> <p>SFMTA to provide weekly reports on implementation</p>                                                                                                          | <p>Authority</p> <p>FTA</p> |

| No.     | Affected Resource/s <sup>5</sup> | Mitigation & Improvement Measures                                                                                                                                                                                                                                                                                                                                                                       | Implementation Procedure                                                                                                                                                                                                                                                                                                                  | Implementation Responsibility | Implementation Schedule  | Monitoring Responsibility                                                                                                                                                                                                                                                                  | Reporting Recipient               |
|---------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
|         |                                  | subsurface utility locations, building laterals, maintenance costs and safety, and pedestrian accessibility.                                                                                                                                                                                                                                                                                            | specifications.                                                                                                                                                                                                                                                                                                                           |                               |                          | of stormwater elements throughout construction duration.                                                                                                                                                                                                                                   |                                   |
| 14 (IM) | Water Quality and Hydrology      | <u>IM-HY-3</u> : In compliance with the City Integrated Pest Management Policy (City Municipal Code, Section 300), employ prevention and non-chemical control methods in maintaining landscaping in the Van Ness Avenue corridor, including monitoring for pests before treating, and using the least-hazardous chemical pesticides, herbicides, and fertilizers only when needed and as a last resort. | SFMTA and landscape architects to consider pest management requirements in landscape design, and the contractor to implement throughout the plant establishment period.<br>SFDPW to implement during project operation<br><br>Contractor to implement during construction, as needed and per contract specifications and City guidelines. | Contractor, SFMTA, SFDPW      | Final Design & Operation | SFMTA to oversee approvals from: SFAC, HPC, and Planning Department, for final design.<br><br>SFMTA to provide weekly reports on pest control elements throughout construction duration. SFDPW to provide quarterly reports on pest control management for the first 5 years of operation. | Authority<br><br>FTA<br><br>SFDPW |
| 15 (IM) | Water Quality and Hydrology      | <u>IM-HY-4</u> : Equip proposed BRT stations with trash receptacles to minimize the miscellaneous waste that may enter the storm drain system and clog storm drains or                                                                                                                                                                                                                                  | SFMTA to implement during final design.                                                                                                                                                                                                                                                                                                   | SFMTA                         | Final Design             | SFMTA                                                                                                                                                                                                                                                                                      | Authority<br><br>FTA              |

| No.        | Affected Resource/s <sup>5</sup> | Mitigation & Improvement Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Implementation Procedure                                                                                                                        | Implementation Responsibility | Implementation Schedule                    | Monitoring Responsibility                                                                                                                           | Reporting Recipient               |
|------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
|            |                                  | release pollutants.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                 |                               |                                            |                                                                                                                                                     |                                   |
| 16<br>(IM) | Water Quality and Hydrology      | <u>IM-HY-5</u> : See-M-HZ-C2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Per contract specifications, SWPPP to be written by contractor as part of construction planning phase. SWPPP will be implemented by Contractor. | Contractor                    | Permitting & Construction (planning phase) | SFMTA to oversee approvals from SFPUC and RWQCB<br><br>SFMTA to provide weekly reports on implementation of SWPPP throughout construction duration. | Authority<br><br>FTA<br><br>RWQCB |
| 17<br>(IM) | Noise and Vibration              | <u>IM-NO-C1</u> : During construction, implement the following best practices in equipment noise and vibration control, as feasible: <ul style="list-style-type: none"> <li>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.,</li> </ul> | Per contract specifications, Contractor to implement during construction.                                                                       | Contractor                    | Construction                               | SFMTA to provide weekly reports outlining adherence to standards throughout construction duration.                                                  | Authority<br><br>FTA              |

| No.     | Affected Resource/s <sup>5</sup> | Mitigation & Improvement Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Implementation Procedure                                                                                             | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility                                                                                                    | Reporting Recipient  |
|---------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------|----------------------|
|         |                                  | <p>mufflers and shrouding).</p> <ul style="list-style-type: none"> <li>• Perform all construction in a manner that minimizes noise and vibration. Utilize construction methods or equipment that will provide the lowest level of noise and ground vibration impact.</li> <li>• Turn off idling equipment.</li> <li>• When possible, limit the use of construction equipment that creates high vibration levels, such as vibratory rollers and hammers. When such equipment must be used within 25 feet of any existing building, select equipment models that generate lower vibration levels.</li> <li>• Restrict the hours of vibration-intensive equipment or activities, such as vibratory rollers, so that annoyance to residents is minimal (e.g., limit to daytime hours as defined in the noise ordinance).</li> </ul> |                                                                                                                      |                               |                         |                                                                                                                              |                      |
| 18 (IM) | Noise and Vibration              | <p><u>IM-NO-C2</u>: During project construction, conduct project 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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Per Contract specifications, Contractor to implement daily during project construction, per contract specifications. | Contractor                    | Construction            | SFMTA to provide weekly reports on adherence to noise and vibration minimization practices throughout construction duration. | Authority<br><br>FTA |

| No.        | Affected Resource/s <sup>5</sup> | Mitigation & Improvement Measures                                                                                                                                                                                                                                                                                                                        | Implementation Procedure                                                                                                                                                      | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility                                                                                                                                | Reporting Recipient               |
|------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| 19<br>(IM) | Noise and Vibration              | <u>IM-NO-C3</u> : Perform independent noise and vibration 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.<br><br>Contractor to implement modifications as needed during project construction, per contract specifications. | Contractor                    | Construction            | SFMTA to provide weekly reports on noise and vibration monitoring throughout construction duration.                                                      | Authority<br><br>FTA<br><br>SFDPH |
| 20<br>(IM) | Noise and Vibration              | <u>IM-NO-C4</u> : During construction, comply with the City noise ordinances and obtain all necessary permits, particularly in relation to nighttime construction work.                                                                                                                                                                                  | Per contract specifications. Contractor to implement throughout project construction.                                                                                         | Contractor                    | Construction            | SFMTA to provide weekly reports on compliance with City noise ordinance throughout construction duration.                                                | Authority<br><br>FTA              |
| 21<br>(IM) | Noise and Vibration              | <u>IM-NO-1</u> : Throughout project operation, maintain roadway surface to avoid increases in BRT noise and vibration levels.                                                                                                                                                                                                                            | SFMTA to ensure regular maintenance of roadway surface through Caltrans maintenance agreement.                                                                                | SFMTA/SFDPW                   | Operation               | SFMTA to provide final maintenance agreement with Caltrans and identify maintenance funding source for local contribution to BRT runningway maintenance. | Authority<br><br>FTA              |

| No.        | Affected Resource/s <sup>5</sup> | Mitigation & Improvement Measures                                                                                                                                                                                                                                    | Implementation Procedure                                                                                                                    | Implementation Responsibility | Implementation Schedule                                | Monitoring Responsibility                                                   | Reporting Recipient  |
|------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------|-----------------------------------------------------------------------------|----------------------|
| 22<br>(IM) | Traffic and Circulation          | <u>IM-NMT-1</u> : Include comprehensive wayfinding, allowing all users to navigate to and from the correct platform.                                                                                                                                                 | SFMTA to implement as part of construction planning phase.<br><br>Per contract specifications, Contractor to implement during construction. | SFMTA                         | Construction Planning Phase,<br><br>Construction Phase | SFMTA to prepare weekly report throughout duration of project construction. | Authority<br><br>FTA |
| 23<br>(IM) | Traffic and Circulation          | <u>IM-NMT-2</u> : For Build Alternative 4, bus vehicle design should incorporate an intuitive seating space for users requiring level boarding that is easily accessible to both the front door on the right side and the door behind the operator on the left side. | SFMTA to incorporate in vehicle procurement                                                                                                 | SFMTA                         | Operation                                              | SFMTA to provide periodic report on vehicle procurement                     | Authority<br><br>FTA |
| 24<br>(IM) | Traffic and Circulation          | <u>IM-NMT-3</u> : For Build Alternative 4, bus vehicle design should incorporate audible cues, such as stop announcements, of which door will open to avoid any confusion for passengers.                                                                            | SFMTA to incorporate in vehicle procurement                                                                                                 | SFMTA                         | Operation                                              | SFMTA to provide report on vehicle procurement                              | Authority<br><br>FTA |
| 25<br>(IM) | Traffic and Circulation          | <u>IM-NMT-4</u> : Provide sufficient information to educate less-ambulatory passengers that board at BRT stations that they would need to exit through the front, right doors for stops outside the Van Ness Avenue corridor.                                        | SFMTA to incorporate in vehicle procurement                                                                                                 | SFMTA                         | Operation                                              | SFMTA to provide report on vehicle procurement                              | Authority<br><br>FTA |

| No.        | Affected Resource/s <sup>5</sup> | Mitigation & Improvement Measures                                                                                 | Implementation Procedure                                                                                                                    | Implementation Responsibility | Implementation Schedule                         | Monitoring Responsibility                                                       | Reporting Recipient  |
|------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------|----------------------|
| 26<br>(IM) | Traffic and Circulation          | IM-TR-1: On-street parking will be created where bus stops are consolidated or moved to the center of the street. | SFMTA to implement as part of construction planning phase.<br><br>Per contract specifications, Contractor to implement during construction. | SFMTA                         | Construction Planning Phase, Construction Phase | SFMTA to prepare weekly report during applicable phase of project construction. | Authority<br><br>FTA |
| 27<br>(IM) | Traffic and Circulation          | IM-TR-2: Additional on-street parking will be provided where feasible by lane striping.                           | SFMTA to implement as part of construction planning phase.<br><br>Per contract specifications, Contractor to implement during construction. | SFMTA                         | Construction Planning Phase, Construction Phase | SFMTA to prepare weekly report during applicable phase of project construction. | Authority<br><br>FTA |
| 28<br>(IM) | Traffic and Circulation          | IM-TR-3: Infill on-street parking spaces will be provided where they do not exist today as feasible.              | SFMTA to implement as part of construction planning phase.<br><br>Per contract specifications, Contractor to implement during construction. | SFMTA                         | Construction Planning Phase, Construction Phase | SFMTA to prepare weekly report during applicable phase of project construction. | Authority<br><br>FTA |

| No.        | Affected Resource/s <sup>5</sup> | Mitigation & Improvement Measures                                                                                                                                                                                                                                                                                                                                                                                                         | Implementation Procedure                                                                                                                                                                         | Implementation Responsibility | Implementation Schedule                         | Monitoring Responsibility                                                                                                          | Reporting Recipient                               |
|------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| 29<br>(IM) | Traffic and Circulation          | <u>IM-TR-4</u> : SFMTA will give priority to retaining color-painted on-street parking spaces, such as yellow freight zones white passenger loading zones, green short-term parking, and blue disabled parking.                                                                                                                                                                                                                           | SFMTA to implement as part of construction planning phase.<br><br>Per contract specifications, Contractor to implement during construction.                                                      | SFMTA                         | Construction Planning Phase, Construction Phase | SFMTA to prepare weekly report during applicable phase of project construction.                                                    | Authority<br><br>FTA                              |
| 30<br>(IM) | Traffic and Circulation          | <u>IM-TR-5</u> : Blue handicapped parking spaces will be designed to provide a curb ramp behind each space.                                                                                                                                                                                                                                                                                                                               | SFMTA to implement as part of construction planning phase.<br><br>Per contract specifications, Contractor to implement during construction.                                                      | SFMTA                         | Construction Planning Phase, Construction Phase | SFMTA to prepare weekly report during applicable phase of project construction.                                                    | Authority<br><br>FTA                              |
| 31<br>(IM) | Utilities and Service Systems    | <u>IM-UT-C1</u> : For construction work involving utilities follow these requirements: <ul style="list-style-type: none"> <li>• Obtain authorization from utility provider before initiating work</li> <li>• Contact Underground Service Alert in advance of excavation work to mark-out underground utilities</li> <li>• Conduct investigations, including exploratory borings if needed, to confirm the location and type of</li> </ul> | SFMTA, SFPUC, and SFDPW to implement as part of construction planning phase, including coordination with utility providers, the Committee for Utility Liaison on Construction and Other Projects | SFMTA, SFPUC and contractor   | Permitting & Construction (planning phase)      | SFMTA to oversee approvals from SFDPW and Caltrans.<br><br>SFMTA to provide weekly reports on adherence to permitting requirements | Authority<br><br>FTA<br><br>Caltrans<br><br>SFDPW |

| No. | Affected Resource/s <sup>5</sup> | Mitigation & Improvement Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Implementation Procedure                                                                                                                                                                                      | Implementation Responsibility | Implementation Schedule | Monitoring Responsibility                                          | Reporting Recipient |
|-----|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------|--------------------------------------------------------------------|---------------------|
|     |                                  | <p>underground utilities and service connections</p> <ul style="list-style-type: none"> <li>• Prepare a support plan for each utility crossing detailing the intended support method</li> <li>• Take appropriate precautions for the protection of unforeseen utility lines encountered during construction</li> <li>• Restore or replace each utility as close as planned and work with providers to ensure its location is as good or better than found prior to removal</li> </ul> | <p>(CULCOP) and the San Francisco Street Construction Coordination Center.</p> <p>Per contract specifications and as outlined in approval permits, Contractor to implement planned approach to utilities.</p> |                               |                         | <p>with respect to utilities throughout construction duration.</p> |                     |