



# Memorandum

**Date:** March 24, 2014

**To:** Authority Board: Commissioners Avalos (Chair), Wiener (Vice Chair), Breed, Campos, Chiu, Cohen, Farrell, Kim, Mar, Tang and Yee

**From:** Lee Saage – Deputy Director for Capital Projects *LS*

**Through:** Tilly Chang – Executive Director *TC*

**Subject:** March 2014 Monthly Progress Report for Van Ness Avenue Bus Rapid Transit Project

## Summary

Van Ness Avenue Bus Rapid Transit Project comprises a package of transit improvements along a 2-mile corridor of Van Ness Avenue between Mission and Lombard Streets, including dedicated bus lanes, consolidated transit stops, and pedestrian safety enhancements.

On December 20, 2013 the Federal Transit Administration issued its Record of Decision, completing the environmental review process for the project. On December 31<sup>st</sup>, 2013 the SFMTA released a draft Conceptual Engineering Report (CER) to project stakeholders, with plans for a final CER by May 2014. SFMTA anticipates completing Final Design by the middle of 2015, with construction starting in early 2016 and revenue operations to begin in early 2018.

The team is focusing on addressing the scope, design and cost estimation comments received on the draft CER. SFMTA is working with its on-call consultant to provide project delivery, construction sequencing, and scheduling recommendations. The team is preparing an updated cost estimate which includes separate-but-related projects shown in the draft CER. Initial estimate data indicate a potential need for a budget increase on the order of 30% to 50%. The estimates are in process and still being reviewed by the SFMTA and the Transportation Authority. We have proposed a cost analysis workshop with SFMTA and SFDPW to discuss overall cost estimating trends that are affecting this and other transit projects. The next priority will be to establish cost-sharing agreements with the various partners for the separate-but-related projects.

The draft CER design includes standard red “seismic wave” shelters, but adds features such as railing, street furniture, landscaping, and sidewalk amenities. However at its review, the Arts Commission Civic Design Review Committee did not approve this design. The project task force for this issue, comprising SFMTA, SFDPW, SF Planning, Transportation Authority, and Arts Commission staff, continues to develop the design and is pursuing various options to resolve interagency disagreements.

SFMTA is currently recruiting for a new Citizens Advisory Committee for design and construction, with applications due by March 28.

## BACKGROUND

Van Ness Avenue Bus Rapid Transit (BRT) Project comprises a package of transit improvements along a 2-mile corridor of Van Ness Avenue between Mission and Lombard Streets. Key features include: dedicated bus lanes, level or near level boarding, consolidated transit stops, high quality stations, transit signal priority, elimination of most left turn opportunities for mixed traffic, and pedestrian safety enhancements. Van Ness Avenue BRT is a signature project in the Prop K Expenditure Plan, a regional priority through the Metropolitan Transportation Commission’s Resolution 3434, and a Federal Transit Administration (FTA) Small Starts program project. The project is a partnership between the Transportation Authority, which led the environmental review, and the San Francisco Municipal Transportation Agency (SFMTA), which is leading the preliminary and detailed design phases and will

be responsible for construction and operation of the facilities. SFMTA's preliminary engineering team includes internal SFMTA engineers with design support from the Department of Public Works (SFDPW), Public Utilities Commission (SFPUC), and Planning Department. SFMTA is also using its on-call consultant HNTB for some specialized tasks.

## **STATUS AND KEY ACTIVITIES**

On December 31, 2013, the SFMTA released a draft Conceptual Engineering Report (CER) to project stakeholders, with plans for a final CER by May 2014. Transportation Authority staff submitted formal comments on the draft on February 7. Final Design is anticipated to be completed by the middle of 2015, with construction starting in early 2016 and revenue operations to begin in early 2018.

The project engineering team is focusing on addressing the scope and design comments received for the draft CER, including key traffic, station, and landscaping features; associated utility work; overhead contact system (OCS) replacement; and other technical criteria. With Transportation Authority assistance, the Preliminary Engineering team continued to refine its cost estimate backup and to clarify core BRT project costs vs. separate-but-related project costs. Responses to Transportation Authority comments on the draft CER are expected by the end of March. (See the Current Issues and Risks section of this memo for more information on comments and cost estimate work.)

SFMTA on-call consultant HNTB has been engaged since December to provide analysis and recommendations for construction sequencing, schedule, and project delivery method. In January and February, the consultant prepared a preliminary construction sequence and incorporated feedback from other divisions of SFMTA. In March the team presented the initial plan to Caltrans and will continue to refine the plan to address Caltrans concerns regarding traffic impacts.

Schedule updates are in process, with an updated schedule sent to FTA in February. On February 6, the consultant conducted a project delivery workshop with agency staff from SFMTA, Transportation Authority, SFDPW, SFPUC, SF Planning, and Caltrans, and expects to issue a report in late March. The recommendations will be taken into account in the final CER, and will be incorporated into the schedule prior to establishing a revised baseline schedule with the FTA.

**Current Issues and Risks:** As discussed in previous Board Updates, the team presented the project at the February 10 **Arts Commission (SFAC) Civic Design Review** Committee meeting. The draft CER includes standard red "seismic wave" SFMTA shelters which received Civic Design approval in 2008, but adds significant features such as railings, street furniture, landscaping, and sidewalk amenities. The design does not yet have completely developed recommendations or outline a plan for elements like signage and branding. However there is a strong desire on the part of the SFMTA to use the "seismic wave" shelters as part of their branding so that the Van Ness BRT can share common design elements with the SFMTA's Rapid Network. In addition, the project team estimates that the use of the "seismic wave" shelters could save the project between \$8 and \$9 million. The team sought Phase I approval, the first of a three-step approval process; however, the Committee did not grant approval and requested more options for and some refinements to station and landscaping design. The project task force for station design and overall streetscape for the corridor, comprising SFMTA, Transportation Authority, SFDPW, SF Planning, and Arts Commission staff, will continue to develop the design and is pursuing various options to resolve interagency disagreements. Without approval from the Commission, deferral of these design details until after the CER phase could result in impacts to the CER cost estimate and schedule.

Also discussed in previous updates, a bus docking field test found challenges to maintaining a consistent **level boarding** between the platform and the vehicle floor. Bus floors are on average 14" high (without

kneeling), and use ramps to permit wheelchair access from lower-height boarding areas like sidewalks, which have approximately 6" curbs. If the platform heights were equal to the bus floor, the standard ramp would be blocked from deploying. This issue would be exacerbated if the bus floor sinks lower than the platform due to heavy passenger loads or suspension/tire pressure variances. Additionally, changes to the bus wheel design in newly procured vehicles have resulted in greater than expected horizontal gaps to the platform, making it likely that a ramp or bridge would be required to meet ADA regulations. Due to these challenges, the draft CER includes a 6" standard curb platform height. Deploying the ramp would be required whenever wheelchair access is needed, which will result in longer dwell times for passenger loading. Transportation Authority staff submitted comments on the recommendation, requesting stronger justification for 6" platforms over higher, near-level heights; and investigation of an additional option with middle-door bridge plates and a platform height of approximately 12". Although bridge plates would be an additional piece of vehicle equipment, they are faster to deploy than standard wheelchair ramps, and could allow roll-aboard access on the corridor and also support faster boarding for other passengers.

The design team is preparing a **new cost estimate** as part of the CER process. Initial data show that BRT costs are likely to increase on the order of 30% to 50%, but SFMTA is continuing to review the basis for these estimates with input from the Transportation Authority. Both agencies are working to ensure proper assumptions, definitions of the core BRT project scope, cost-sharing arrangements, and allocations of resources to complete the project. The final CER will include an updated cost and schedule, and discussion of funding options. The Transportation Authority has proposed a cost analysis workshop with SFMTA and SFDPW to discuss overall cost estimating trends that are affecting this and other transit projects.

**Agreements and Approvals:** The project team is finalizing a maintenance agreement with Caltrans, the final item needed for approval of the Project Study Report/Project Report (PSR/PR). The final PSR/PR, including the agreement, is being assembled for distribution and signature later this month.

SFMTA has general agreement on scope with the sewer replacement and other parallel projects, including water service replacement, green stormwater infrastructure, streetlight pole replacement, traction power upgrades, and SFgo signal work. These designs have been included in the draft CER and will be reviewed concurrently with the BRT project. The next priority will be to establish cost-sharing agreements with the various partners.

The SFMTA and SFPUC have a tentative agreement on cost sharing for sewer replacement work to be coordinated with the Van Ness Avenue BRT Project. A major outstanding issue is the cost of supplemental bus service during construction.

**Funding:** Appendix 1 shows the project funding plan. The project will use a mix of Prop K, FTA Small Starts, and other local funds. With approval of the 2014 Prop K 5-Year Prioritization Program update for the Bus Rapid Transit/Transit Preferential Streets/Muni Metro Network Expenditure Plan category anticipated in spring 2014, additional Prop K funds will be programmed for the project. Depending on the result of the CER cost analysis and establishment of cost-sharing agreements with separate-but-related projects, additional funding may need to be identified to close the funding gap.

**Outreach:** The environmental review phase Citizens Advisory Committee (CAC) held its final meeting in September 2013. The SFMTA is currently recruiting for a new CAC for design and construction, with an application deadline of March 28. Interested parties should visit the SFMTA website to apply: <http://www.sfmta.com/about-sfmta/organization/committees/van-ness-brt-community-advisory-committee>.

**Next Steps/Upcoming Key Milestones:** The environmental documentation phase was completed with the publication of the Federal Record of Decision on January 2, 2014. The Final CER will be completed in May 2014.

**PROJECT SCHEDULE AND BUDGET:**

Figure 1 shows the project schedule. The current phase of work continues to be on schedule, with completion of 30% design anticipated by May 2014. Final Design would be completed by mid-2015 with Construction beginning in early 2016. Revenue service is anticipated to begin in early 2018.

Table 1 shows the budget for the project by phase as well as expenditures to date. The cost for the current CER phase is \$7.6M, and the total cost for the project is \$125.6M. A cost estimate update is in process as part of the CER, which may require budget revision. See the “Current Issues and Risks” section of this memo for more detail.

**Figure 1: Van Ness Avenue BRT Project Schedule**

Activities	2013				2014				2015				2016				2017				2018	
	Q1	Q2	Q3	Q4	Q1	Q2																
1. Conceptual Engineering + Environmental Studies <sup>1</sup>	■	■	■	■																		
2. Preliminary Engineering (CER)		■	■	■	■	■	■	■														
3. Final Design							■	■	■	■	■	■										
4. Advertise + Award Contract											■	■										
5. Construction													■	■	■	■	■	■	■	■		
6. Testing/Startup																					■	■
7. Revenue Operations Begin																					■	■

<sup>1</sup> Conceptual Engineering and Environmental Studies began in 2007

**Table 1: Van Ness Avenue Bus Rapid Transit Budget and Expenditures to Date**

Project Name(in \$ millions)	Budget (\$ millions)	Estimate at Completion (\$ millions)	Expended to Date (\$ millions) <sup>1</sup>	% Complete
Conceptual Engineering + Environmental Studies	\$7.6	\$7.4	\$7.2	98%
Preliminary Engineering (CER)	\$7.6	\$7.6	\$3.9	51%
Final Design (PS+E)	\$8.0	\$8.0	\$0	0%
Construction (Including Testing/Startup)	\$102.4	\$102.6	\$0	0%
Total	\$125.6	\$125.6	\$10.8	8.6%

<sup>1</sup>As of February 28, 2014

Attachments (1)

1. Funding Plan

cc: E. Reiskin, T. Papandreou, V. Harris, J. Haley, P. Gabancho – SFMTA  
 TC, MEL, CF, AL, ES, STR, MS, RAM – Chron, File: Van Ness BRT