



# Memorandum

**DATE:** February 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:** February 2014 Monthly Progress Report for Van Ness Avenue Bus Rapid Transit Project

## Summary

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, 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 SFCTA. 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. 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, SFCTA, and Arts Commission staff, continues to develop the design and is pursuing various options to resolve interagency disagreements.

SFMTA anticipates forming a new Citizens Advisory Committee (CAC) for design and construction in early 2014.

## 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 candidate 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.

In December, SFMTA executed a task order with their on-call consultant HNTB 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 is now incorporating comments received on it from other divisions of SFMTA. Schedule updates are in process, with a new schedule due to FTA by the end of February. On February 6, the consultant conducted a project delivery workshop with agency staff from SFMTA, SFCTA, SFDPW, SFPUC, SF Planning, and Caltrans, and is preparing a report. The recommendations will be taken into account in the final CER.

**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” Clear Channel Communications 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 they 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, SFCTA, 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-on 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 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 SFCTA. 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.

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.

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.

**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 Five Year Prioritization Program Amendment for the Bus Rapid Transit/Transit Preferential Streets/Muni Metro Network Expenditure Plan Category (EP 1) 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. The project anticipates forming a new CAC for design and construction in early 2014.

**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																					■	■

1. Conceptual Engineering and Environmental Studies began in 2007

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

Project Name( <i>in \$ millions</i> )	Budget <i>(\$ millions)</i>	Estimate at Completion <i>(\$ millions)</i>	Expended to Date <i>(\$ millions)<sup>1</sup></i>	% Complete
Conceptual Engineering +	\$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	\$102.4	\$102.6	\$0	0%
Total	\$125.6	\$125.6	\$10.8	8.6%

<sup>1</sup>As of January 31, 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

**Attachment 1: Van Ness Bus Rapid Transit Funding Plan**  
**Updated: February 2014**

Source	Type	Status	Project Phases <sup>1</sup>			Total by Status	TOTAL
			ENV, CER/PE	PS&E	CON		
5309 Small Starts <sup>2</sup>	Federal	Allocated	\$7,818,310	\$6,371,063	\$810,627	\$15,000,000	\$75,000,000
		Programmed			\$30,000,000	\$30,000,000	
		Planned			\$30,000,000	\$30,000,000	
SHOPP <sup>3</sup>	State	Allocated				\$0	\$7,304,867
		Programmed				\$0	
		Planned			\$7,304,867	\$7,304,867	
PPM Funds <sup>4</sup>	Local	Allocated	\$197,907			\$197,907	\$197,907
		Programmed				\$0	
		Planned				\$0	
AB 664 Funds <sup>5</sup>	Local	Allocated	\$196,777			\$196,777	\$196,777
		Programmed				\$0	
		Planned				\$0	
Prop K <sup>6</sup>	Local	Allocated	\$6,977,180			\$6,977,180	\$36,302,454
		Programmed		\$1,594,280	\$12,367,440	\$13,961,720	
		Planned			\$15,363,554	\$15,363,554	
California Pacific Medical Center Contribution <sup>7</sup>	Local	Allocated				\$0	\$2,500,000
		Programmed			\$2,500,000	\$2,500,000	
		Planned				\$0	
Central Freeway Parcel Revenues <sup>8</sup>	Local	Allocated				\$0	\$4,130,995
		Programmed				\$0	
		Planned			\$4,130,995	\$4,130,995	
<b>Totals</b>		<b>Allocated</b>	<b>\$15,190,174</b>	<b>\$6,371,063</b>	<b>\$810,627</b>	<b>\$22,371,864</b>	<b>\$125,633,000</b>
		<b>Programmed</b>	<b>\$0</b>	<b>\$1,594,280</b>	<b>\$44,867,440</b>	<b>\$46,461,720</b>	
		<b>Planned</b>	<b>\$0</b>	<b>\$0</b>	<b>\$56,799,416</b>	<b>\$56,799,416</b>	
			<b>\$15,190,174</b>	<b>\$7,965,343</b>	<b>\$102,477,483</b>	<b>\$125,633,000</b>	

<sup>1</sup> Acronyms used for project phases include: ENV - Environmental Documentation, CER/PE - Conceptual Engineering Report/Preliminary Engineering (30% Design), PS&E - Plans, Specifications & Estimates or Final Design, CON - Construction. The construction phase includes the incremental cost for procuring new BRT vehicles for the project.

<sup>2</sup> \$15 million appropriated in the FY 2010/11 federal budget and \$30 million appropriated in FY 2011/12 federal budget.

<sup>3</sup> State Highway Operation and Protection Program (SHOPP) funding amount based on Caltrans Project Initiation Document, completed in fall 2013.

<sup>4</sup> PPM: Planning, Programming and Monitoring funds

<sup>5</sup> AB 664: Bridge tolls collected on the San Francisco-Oakland Bay, Dumbarton, and San Mateo-Hayward Bridges to further the development of public transportation near these toll bridges.

<sup>6</sup> Prop K amount includes \$420,900 in Authority operating funds in Fiscal Years 2009/10 and 2010/11.

<sup>7</sup> The development agreement with the California Pacific Medical Center was approved by the San Francisco Board of Supervisors through Ordinance 138-13 on July 11, 2013.

**Attachment 1: Van Ness Bus Rapid Transit Funding Plan**  
**Updated: February 2014**

<sup>8</sup>The amount of funding from Central Freeway Parcel Revenues for the core BRT project will be determined upon completion of the Conceptual Engineering Report scheduled to be completed in May 2014. \$12.7 million in Central Freeway Parcel Revenues is dedicated for Van Ness Avenue State of Good Repair improvements.