



# Memorandum

**Date:** September 22, 2015

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

**From:** Eric Cordoba – Deputy Director for Capital Projects 

**Through:** Tilly Chang – Executive Director 

**Subject:** September 2015 Quarterly Progress Report for Van Ness Avenue Bus Rapid Transit Project

## Summary

The 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. The Transportation Authority completed environmental review for the project in December 2013, and at that time transferred project lead to the San Francisco Municipal Transportation Agency (SFMTA).

The core Van Ness Avenue Bus Rapid Transit project is being developed in conjunction with several related, separately-funded projects for design, management, and eventual construction as a unified Van Ness Corridor Transit Improvements Project. Cost of the core BRT project is now estimated at \$162.8 million and a total of \$250 million for the unified Transit Improvements Project. SFMTA began final design in May 2014 and reached 100% design in September 2015. SFMTA is utilizing the Construction Manager-General Contractor (CMGC) project delivery method as opposed to traditional design-bid-build, and awarded the contract for pre-construction services to Walsh Construction in July 2015. SFMTA also received Phase 2 approval from the San Francisco Arts Commission Civic Design Review in July 2015, retiring a significant project risk.

Current pre-construction activities include finalization of interagency agreements and remaining approvals, including the California Department of Transportation (Caltrans) Encroachment permit, San Francisco Historic Preservation Commission certificate, tree removal permits, and sidewalk legislation. Meanwhile, the CMGC is conducting review of the design package, which may result in design changes that improve the value, constructability, and/or sequencing of the work. The primary benefit of these reviews will be improved cost and schedule certainty prior to construction, with overall cost, schedule, and construction impact reductions also possible. Under current assumptions, construction would begin in early 2016 and revenue service would begin in early 2019, a delay of about one quarter since the previous Board report. Budget, funding, and schedule updates will next be updated as agreement is reached on a Guaranteed Maximum Price (GMP) and baseline schedule prior to issuing construction Notice to Proceed.

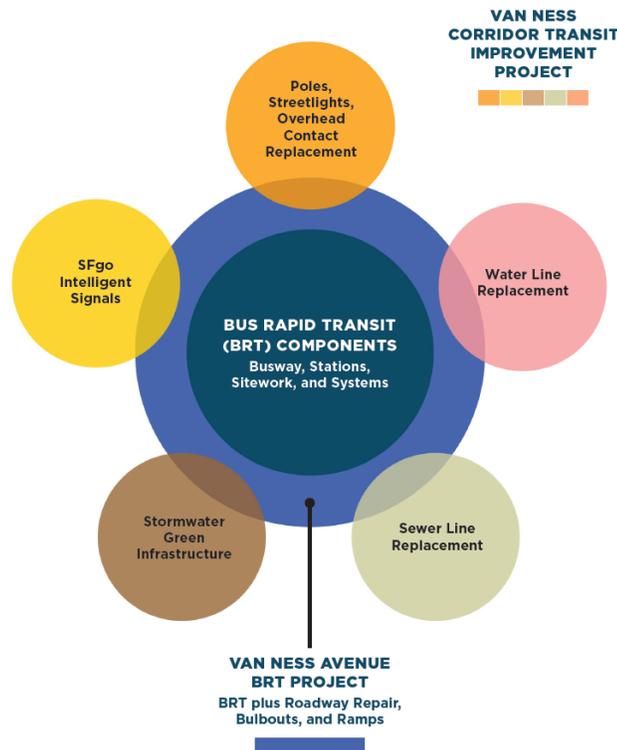
## BACKGROUND

The Van Ness Avenue Bus Rapid Transit (BRT) Project comprises a package of transit improvements along a two-mile corridor of Van Ness Avenue between Mission and Lombard Streets. Key features include: dedicated bus lanes, low-floor all-door 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 (SFPW), San Francisco Public Utilities Commission, and San Francisco Planning Department. SFMTA is also using its on-call consultant HNTB for some specialized tasks.

The core Van Ness Avenue BRT project has been combined with several parallel projects for design, management, and eventual construction. These projects overlap the geography and will result in lower overall cost and construction duration when combined, compared to if they were built separately. The projects include Overhead Contact System, Streetlights, and Poles replacement; SFgo traffic signal replacement; sewer line replacement; water line replacement; and stormwater “green infrastructure” installation. Meanwhile, pavement resurfacing, curb ramp upgrades, and sidewalk bulb outs have always been considered part of the core BRT project. The parallel projects have largely independent funding, but many scope items will be cost-shared with the BRT project. The design plans and specifications include all these projects as part of a single Van Ness Corridor Transit Improvements Project.

**Figure 1: Relationship of Van Ness BRT and Van Ness Corridor Transit Improvements Project**



**STATUS AND KEY ACTIVITIES**

SFMTA began final design in May 2014 and reached 100% level of design in September 2015, including the scopes of the parallel projects. SFMTA received Phase 2 approval from the San Francisco Arts

Commission Civic Design Review in July 2015, retiring a significant project risk to the design work. The 100% design package is currently in review by the California Department of Transportation (Caltrans), the Transportation Authority, and other stakeholders, to provide final comments in early October.

SFMTA is using the Construction Manager-General Contractor (CMGC) project delivery method as opposed to traditional design-bid-build. This method allowed SFMTA to award a contract before the completion of final design, in order to obtain valuable input from the contractor on design details and construction sequencing. SFMTA bid the CMGC contract in February, and selected Walsh Construction (Walsh) on a best value basis (in lieu of selection based solely on low cost), awarding the pre-construction services contract in July 2015. Walsh has been conducting reviews of the SFMTA design work and meeting with the design team to resolve questions. Their review may result in design changes that improve the value, constructability, and/or sequencing of the work. Walsh has also been meeting regularly with SFMTA to discuss alternate approaches to construction sequencing and traffic management.

The CMGC method does not lock in a total contract price until after design is complete, when SFMTA will negotiate a Guaranteed Maximum Price (GMP) and baseline schedule with the CMGC. If Walsh does not provide a satisfactory price and schedule, the work would be re-bid as a traditional contract. SFMTA has been meeting regularly with Walsh to lay the framework for these negotiations, based on the recent 100% design package. Any design changes agreed to by both parties would be included in the negotiations.

## **CURRENT ISSUES AND RISKS**

The project team held a Risk Assessment update with participation from the CMGC. The current top risks are delays in obtaining required Caltrans permits and other required approvals, and delays in reaching GMP and executing the contract change to issue construction Notice to Proceed. Discussion of risks during construction benefited from the CMGC inclusion, improving the planned approaches to management of particular risks like unforeseen underground conditions.

Under current assumptions, construction would begin in early 2016 and revenue service would begin in early 2019, a delay of about one quarter since the previous Board report. Budget, funding, and schedule updates will next be updated as agreement is reached on a Guaranteed Maximum Price (GMP) and baseline schedule prior to issuing construction Notice to Proceed.

## **ONGOING ACTIVITIES**

**Agreements and Approvals:** SFMTA is in the process of executing the Caltrans Maintenance Agreement (which requires Board of Supervisors Approval) and Caltrans Construction Cooperative Agreement (which requires Executive Director Approval). SFMTA meets regularly with Caltrans and continues to work to satisfy the requirements to ultimately obtain the Caltrans Construction Encroachment Permit.

SFMTA has general agreement on scope with the sewer replacement and other parallel projects, including water service replacement, green stormwater infrastructure, overhead contact system and pole replacement, and SFgo signal work. These designs have been included in the plans and specifications and will be reviewed concurrently with the BRT project. SFMTA has begun work to establish detailed cost-sharing agreements with the partners.

SFMTA is currently applying for a Certificate of Appropriateness from the San Francisco Historic Preservation Commission for the portions of the project within the Civic Center Historic District, and expects to appear before the Commission in October and receive the Certificate in November. SFMTA

is also in process of finalizing sidewalk legislation and obtaining removal permits for trees that are impacted by the project.

**Outreach:** The SFMTA Community Advisory Commission continues to meet monthly. As part of the process to obtain tree removal permits, SFMTA and SFPW posted notices on all trees that may be removed and held a hearing on the topic in August. Final issuance of the permits is pending based on incorporation of feedback from the public on specific trees. The project expects to replace trees at a nearly 2-to-1 ratio.

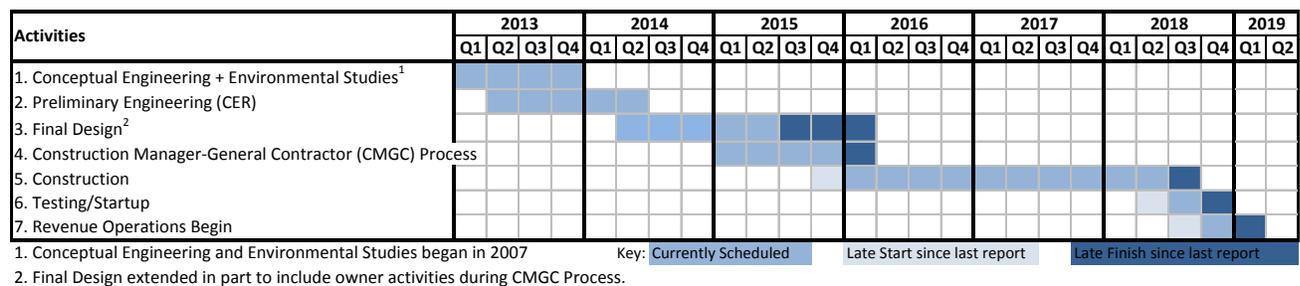
**Next Steps/Upcoming Key Milestones:** Final Design has reached the 100% level of design in September 2015, but additional changes are possible in response to suggestions from the CMGC related to value, constructability, and/or construction sequencing. Concurrent with these activities, SFMTA will work with Walsh to agree on a Guaranteed Maximum Price (GMP) and baseline construction schedule. Budget, funding, and schedule updates will next be updated in conjunction these agreements.

SFMTA has applied for the Federal Small Starts Grant Agreement (SSGA) in April 2015 and expects to secure the agreement in November 2015. The next application for Prop K sales tax funds will be to match these FTA funds for the construction phase.

## PROJECT SCHEDULE AND BUDGET

**Schedule:** Figure 2 shows the project schedule, which shows a delay of about one quarter since the previous Board Report. The Final Design phase of work has been modified to take into account the CMGC process. While 100% level of design has been reached in September 2015, additional pre-construction collaboration with the contractor has been added to the phase, extending the phase into early 2016. Using the CMGC project delivery method, construction could begin by early 2016, reflecting a delay of about one quarter since the previous Board Report. As analyzed in the Construction Sequencing report that is part of the CER, construction is expected to last approximately 2-1/2 years under aggressive but reasonable assumptions. Revenue service is now anticipated to begin by early 2019. A schedule revision is expected by January 2016, setting a baseline construction schedule for the CMGC.

**Figure 2: Van Ness Avenue BRT Project Schedule**



**Budget:** Table 1 shows the budget for the project by phase as well as expenditures to date for the Core BRT project based on the CER. Some increase is expected in the Final Design phase due to additional pre-construction activities associated with the CMGC process. A cost estimate update is in process based on the 100% design documents, and a budget revision is anticipated by December 2015 in conjunction with the fixing of a Guaranteed Maximum Price from the CMGC. See the “Current Issues and Risks” section of this memo for more detail.

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

<b>Phase Name</b>	<b>Budget (\$ millions)</b>	<b>Estimate at Completion (\$ millions)</b>	<b>Expended to Date (\$ millions)<sup>1</sup></b>	<b>% Complete</b>
Conceptual Engineering + Environmental Studies	\$ 7.44	\$ 7.44	\$ 7.44	100%
Preliminary Engineering (CER)	\$ 6.77	\$ 4.90	\$ 4.90	100%
Final Design (PS+E)	\$ 10.07	\$ 10.57	\$ 5.97	56%
Construction (Including Testing/Startup and	\$ 134.56	\$ 135.92	\$ 0.00	0%
Procurement (Contribution to Vehicles)	\$ 3.98	\$ 3.98	\$ 0.00	0%
<b>Total</b>	<b>\$ 162.81</b>	<b>\$ 162.81</b>	<b>\$ 18.31</b>	<b>11%</b>

<sup>1</sup>As of August 31, 2015.

**Funding:** Appendix 1 shows the project funding plan. The project will use a mix of Prop K, FTA Small Starts, and other local funds. SFMTA has included the project in its revenue bond program, bringing the project to full funding. Should additional contingency be needed, SFMTA expects to commit additional revenue bond proceeds.

Attachment:

1. Funding Plan

cc: E. Reiskin, T. Papandreou, V. Harris, J. Haley, P. Gabancho, D. Auyoung, R. Boomer – SFMTA  
G. Gillett – CCSF  
M. McDole – LS Gallegos  
TC, EC, MEL, CF, AL, JC, STR, MS – File: Van Ness BRT

**Attachment 1: Van Ness Avenue Bus Rapid Transit Funding Plan**  
**Updated: August 2015**

Source <sup>2</sup>	Type	Status	Project Phases <sup>1</sup>			Total by Status	TOTAL
			ENV, CER/PE	PS&E	CON		
FTA 5309 Small Starts <sup>3</sup>	Federal	Allocated	\$7,031,202	\$6,371,063	\$31,597,734	\$44,999,999	\$74,999,999
		Programmed			\$30,000,000	\$30,000,000	
		Planned				\$0	
SHOPP <sup>4</sup>	State	Allocated			\$0	\$0	\$7,304,868
		Programmed			\$7,304,868	\$7,304,868	
		Planned				\$0	
PPM Funds	Local	Allocated	\$197,907			\$197,907	\$197,907
		Programmed				\$0	
		Planned				\$0	
Prop K <sup>5</sup>	Local	Allocated	\$6,977,180	\$1,594,280	\$0	\$8,571,460	\$36,302,444
		Programmed			\$27,730,984	\$27,730,984	
		Planned				\$0	
SFMTA Revenue Bonds	Local	Allocated				\$0	\$26,347,524
		Programmed			\$26,347,524	\$26,347,524	
		Planned				\$0	
California Pacific Medical Center Contribution <sup>6</sup>	Local	Allocated		\$2,100,000	\$0	\$2,100,000	\$5,000,000
		Programmed			\$2,900,000	\$2,900,000	
		Planned				\$0	
Central Freeway Parcel Revenues <sup>7</sup>	Local	Allocated			\$0	\$0	\$12,654,135
		Programmed			\$12,654,135	\$12,654,135	
		Planned				\$0	
SFMTA Operating Funds	Local	Allocated	\$1,823			\$1,823	\$1,823
		Programmed				\$0	
		Planned				\$0	
	<b>Totals</b>	<b>Allocated</b>	<b>\$14,208,112</b>	<b>\$10,065,343</b>	<b>\$31,597,734</b>	<b>\$55,871,189</b>	<b>\$162,808,700</b>
<b>Programmed</b>		<b>\$0</b>	<b>\$0</b>	<b>\$106,937,511</b>	<b>\$106,937,511</b>		
<b>Planned</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		
			<b>\$14,208,112</b>	<b>\$10,065,343</b>	<b>\$138,535,245</b>	<b>\$162,808,700</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> Acronyms used for funding sources include: FTA - Federal Transit Administration, PPM - Planning, Programming and Monitoring, SFMTA - San Francisco Municipal Transportation Agency, SHOPP - State Highway Operation and Protection Program.

<sup>3</sup> \$15 million appropriated in the FY 2010/11 federal budget and \$30 million appropriated in FY 2011/12 federal budget.

<sup>4</sup> SHOPP funding amount programmed in the 2014 SHOPP, adopted by the California Transportation Commission.

<sup>5</sup> Prop K amount includes \$420,900 in Authority operating funds in Fiscal Years 2009/10 and 2010/11.

<sup>6</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.

<sup>7</sup> \$12.7 million in Central Freeway Parcel Revenues is dedicated for Van Ness Avenue State of Good Repair improvements.