





# Memorandum

**Date:** October 19, 2016

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

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

**Through:** Tilly Chang – Executive Director 

**Subject:** October 2016 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. We 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 BRT project is being developed in conjunction with several related, separately funded projects for design, management, and eventual construction as a unified Van Ness Transit Improvement Project. The cost of the core BRT project is now estimated at \$189.5 million and at a total of \$310 million for the unified Transit Improvement Project. The SFMTA completed negotiation of a Guaranteed Maximum Price (GMP) using the Construction Manager-General Contractor (CMGC) project delivery method, and in August amended its contract with Walsh Construction to include construction services. The SFMTA also received the Caltrans Encroachment Permit, which constitutes approval of the project design, including the traffic management plan. The project received tree removal and replacement permits, and successfully defended appeals, and received final approval from the San Francisco Arts Commission. Current activities include preparing to issue Notice To Proceed (NTP) to Walsh, and preparation to return to the Historic Preservation Commission for final approval of shelters within the Civic Center District, as well as plans to preserve some elements of the existing light poles. Under current assumptions, construction would begin in October 2016 and revenue service would begin in late 2019. The SFMTA hosted a construction open house on October 5.

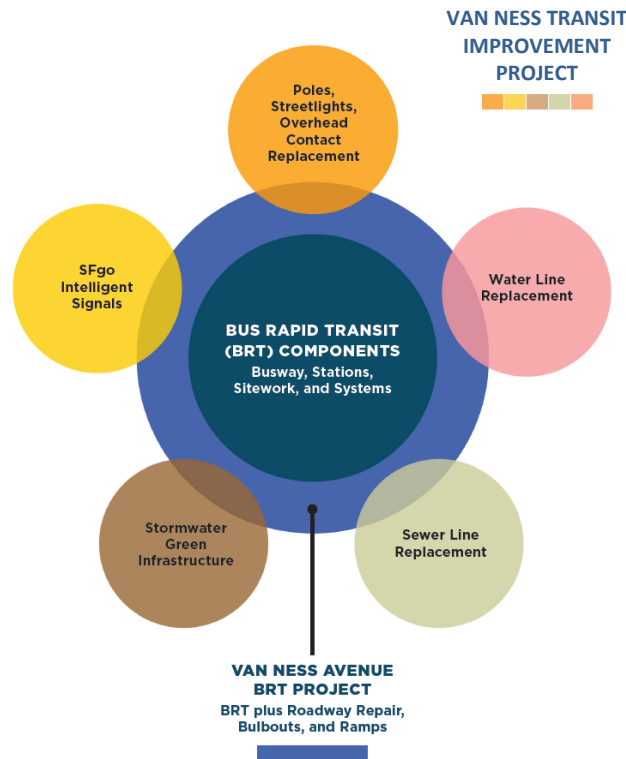
## BACKGROUND

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. The SFMTA's preliminary engineering team

includes internal SFMTA engineers with design support from the San Francisco Public Works (SFPW), San Francisco Public Utilities Commission (SFPUC), and San Francisco Planning Department. The 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 contacts, 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 Transit Improvement Project.

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



**STATUS AND KEY ACTIVITIES**

The project received several key approvals over the summer of 2016, but several took more time than anticipated.

The SFMTA reached 100% level of design in September 2015, including the scopes of the parallel projects, and by spring 2016 negotiated a Guaranteed Maximum Price (GMP) with Walsh Construction, under the Construction Manager General Contractor (CMGC) project delivery method. The GMP includes costs that will be performed by the core team of Walsh and the subcontractors who joined its proposal, as well as other elements of the work that will be sub-bid and awarded to the lowest responsive and responsible bid. During the GMP negotiation, SFPUC was a party due to its included, parallel projects. The subcontractor responsible for the sewer and water scopes of work, Synergy Construction, was not

able to provide an acceptable GMP for those components. Instead, those components of work will be sub-bid. Synergy filed an administrative appeal of this course of action, but the action was upheld. Due to the appeal, award of the construction services portion of the contract was delayed from May 2016 to August 2016. The contract amendment is now executed and Notice To Proceed (NTP) is expected in October 2016.

Also in August, the SFMTA received the Caltrans Encroachment Permit, which constitutes approval of the project design, including the traffic management plan, utility specifications, and right-of-way certifications. This permit was originally targeted for early 2016, but was delayed as SFMTA worked with Caltrans to resolve several issues rooted in differences between Caltrans standards and City & County of San Francisco standards, such as details of utility installations. Caltrans will continue to provide independent quality assurance during construction, as well as review traffic plans.

In March 2016, the project received its tree removal and replacement permit, and successfully defended against appeals of the permit in June and July. In July, the project received final "Phase 3" approval from the San Francisco Arts Commission. The main outstanding city requirement is a return to the Historic Preservation Commission (HPC) for a second Certificate of Appropriateness covering shelter design within the Civic Center District, as well as a treatment plan to preserve some elements of the existing light poles. In September, the Board of Supervisors passed a resolution calling on the SFMTA to make all efforts to investigate reuse and/or replication of the decorative elements of the existing street lamps. SFMTA is continuing to develop its treatment plan. There is a risk of delay if SFMTA cannot develop a treatment plan that is acceptable to the HPC, or if additional regulations are passed that change project requirements.

Lastly, the project reached several funding milestones. In July, the Transportation Authority Board allocated the \$21.5 million remaining programmed Prop K BRT funds, along with \$5.7 million in Prop K Guideways funds to support the overhead contact system parallel project. In August, the project was awarded \$7.3 million in road maintenance and \$3.9 million in active transportation funds by the California Transportation Commission. The next funding milestone will be execution of the Small Starts Grant Agreement (SSGA), which awards the balance of the \$75 million in Federal Transit Administration Small Starts funds, and is anticipated December 2016.

## **CURRENT ISSUES AND RISKS**

Now that the GMP has been negotiated, and most required permits have been obtained, the current top risks are interference from concurrent projects in the vicinity of Van Ness, complaints from businesses or residents that could cause delays, changes in regulations that affect project design, and the potential to encounter hazardous environmental conditions beyond the amounts already estimated. Discussion of risks during construction benefited from the CMGC inclusion, improving the planned approaches to management of particular risks like unforeseen underground conditions.

Appeals of the HPC Certificate and tree permit are indicators that the project may face further appeals of internal city approval actions. The SFMTA expects to return to the HPC in late 2016 with finalized designs for a second Certificate in accordance with the conditions of the first Certificate.

The project budget and schedule have been updated to reflect the GMP and the delays in starting construction. Both budget and schedule also include contingencies recommended by the risk management report. Under current assumptions, construction would begin in October 2016 and revenue service in late 2019.

## ONGOING ACTIVITIES

**Agreements and Approvals:** The SFMTA and Caltrans have executed the Maintenance Agreement and Construction Cooperative Agreement, and Caltrans has issued the Construction Encroachment Permit. Caltrans will continue to provide independent quality assurance during construction, as well as review traffic plans.

The SFMTA has reached final agreement on scope of sewer replacement and other parallel projects, including water service replacement, green storm water infrastructure, overhead contact system and pole replacement, and SFgo signal work. These final designs have been included in the plans and specifications and will be constructed concurrently with the BRT project. The SFMTA has established detailed cost-sharing principles with all agency partners, though cost share amounts with SFPUC will be adjusted and finalized once subcontractor bids have been reviewed and accepted.

**Outreach:** The SFMTA Community Advisory Committee continues to meet monthly. In 2016 the SFMTA also convened a Business Advisory Committee that meets monthly, to assist the SFMTA in establishing and maintaining responsiveness to local business concerns during construction. The SFMTA also issues Project Briefing newsletters monthly.

**Next Steps/Upcoming Key Milestones:** The SFMTA plans to issue Notice to Proceed to Walsh in October. Walsh will begin providing submittals, including a baseline construction schedule, and preparing sub-bid packages for eligible work. The first construction activities may begin by the end of October, including tree removals and median demolition needed to install temporary construction traffic patterns.

The SFMTA applied for the Federal Small Starts Grant Agreement (SSGA) in 2015, but approval was delayed pending Caltrans approvals and finalization of the GMP. The SSGA is now scheduled for execution by December 2016. Delay in execution of the SSGA should not prevent critical utility relocation work from starting, as this work is separately funded and allowable under FTA pre-award authority.

## PROJECT SCHEDULE AND BUDGET

**Schedule:** Figure 2 shows the project schedule, which indicates a delay of approximately two quarters since the previous Board Report. The delay encompassed completion of negotiations with Caltrans to secure an encroachment permit; completion of negotiations with Walsh and SFPUC to set the GMP; an unsuccessful protest by a subcontractor (Synergy) that was dismissed after being unable to provide an acceptable GMP for utility portion of the work; and an unsuccessful appeal of the project's tree removal & replacement permit. Construction is now anticipated to start in October 2016 and expected to last approximately 3 years. Revenue service is now anticipated to begin by late 2019. Walsh is expected to deliver a detailed baseline construction schedule by November 2016.

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

Activities	2013				2014				2015				2016				2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1. Conceptual Engineering + Environmental Studies <sup>1</sup>	■	■	■	■																								
2. Preliminary Engineering (CER)					■	■	■	■																				
3. Final Design <sup>2</sup>									■	■	■	■	■	■	■	■												
4. Construction Manager-General Contractor (CMGC) Process																												
5. Construction													■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
6. Testing/Startup																												
7. Revenue Operations Begin																												
1. Conceptual Engineering and Environmental Studies began in 2007																												
Key: <span style="background-color: #d9ead3;">■</span> Currently Scheduled <span style="background-color: #f4cccc;">■</span> Late Start since last report <span style="background-color: #e41e1c;">■</span> Late Finish since last report																												
2. Final Design extended in part to include owner activities during CMGC Process.																												

**Budget:** Table 1 shows the budget for the project by phase as well as expenditures to date for the Core BRT project. The budget for the final design has increased approximately \$2.5 million due to additional pre-construction activities associated with the CMGC process, and the delays in beginning the construction phase. The budget for construction has increased approximately \$24 million to conform with the negotiated GMP. The budget includes a contingency amount of \$20.3 million, or 12% above the cost estimate. This amount was determined by the most recent risk management plan.

**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	\$ 6.77	\$ 6.60	98%
Final Design (PS+E)	\$ 12.58	\$ 12.58	\$ 11.10	88%
Construction (Including Testing/Startup) Contingency)	\$ 158.74	\$ 158.74	\$ 0.00	0%
Procurement (Contribution to Vehicles)	\$ 3.98	\$ 3.98	\$ 0.00	0%
<b>Total</b>	<b>\$ 189.50</b>	<b>\$ 189.50</b>	<b>\$ 25.14</b>	<b>13%</b>

<sup>1</sup>As of September 26, 2016.

**Funding:** Appendix 1 shows the project funding plan. The project will use a mix of Prop K, FTA Small Starts, and other local funds. The SFMTA has committed additional revenue bond proceeds to the project to maintain full funding at the new budget levels.

Attachment:

1. Funding Plan

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

Attachment 1  
 Van Ness Improvement Funding Plan  
 Updated: September 2016

Source <sup>2</sup>	Type	Status	Project Phases <sup>1</sup>			Total by Status	TOTAL
			ENV, CER/PE	PS&E	CON		
<b>Bus Rapid Transit (BRT)</b>							
FTA 5309 Small Starts	Federal	Allocated	\$7,031,202	\$6,371,063	\$61,597,734	\$74,999,999	\$74,999,999
		Programmed				\$0	
		Planned				\$0	
FTA 5307 Vehicles	Federal	Allocated				\$0	\$3,303,400
		Programmed			\$3,303,400	\$3,303,400	
		Planned				\$0	
Lifeline Transportation Program - Prop 1B	State	Allocated				\$0	\$6,189,054
		Programmed			\$6,189,054	\$6,189,054	
		Planned				\$0	
PPM Funds	State	Allocated	\$197,907			\$197,907	\$197,907
		Programmed				\$0	
		Planned				\$0	
SHOPP	State	Allocated			\$7,300,000	\$7,300,000	\$7,300,000
		Programmed				\$0	
		Planned				\$0	
California Pacific Medical Center Contribution <sup>3</sup>	Local	Allocated	\$201,024	\$4,611,154	\$187,822	\$5,000,000	\$5,000,000
		Programmed				\$0	
		Planned				\$0	
Central Freeway Parcel Revenues <sup>4</sup>	Local	Allocated				\$0	\$12,654,135
		Programmed			\$12,654,135	\$12,654,135	
		Planned				\$0	
Prop K Sales Tax <sup>5</sup>	Local	Allocated	\$6,977,180	\$1,594,280	\$21,541,930	\$30,113,390	\$30,113,390
		Programmed				\$0	
		Planned				\$0	
SFMTA Operating Funds	Local	Allocated	\$1,823			\$1,823	\$1,823
		Programmed				\$0	
		Planned				\$0	
SFMTA Revenue Bonds	Local	Allocated			\$1,060,888	\$1,060,888	\$49,740,292
		Programmed			\$48,679,404	\$48,679,404	
		Planned				\$0	

Van Ness Improvement Funding Plan  
Updated: September 2016

Source <sup>2</sup>	Type	Status	Project Phases <sup>1</sup>			Total by Status	TOTAL
			ENV, CER/PE	PS&E	CON		
<b>Overhead Line Rehabilitation</b>							
FTA 5337 State of Good Repair	Federal	Allocated		\$1,308,633	\$22,562,807	\$23,871,440	\$23,871,440
		Programmed				\$0	
		Planned				\$0	
AB 664	Regional	Allocated			\$103,191	\$103,191	\$103,191
		Programmed				\$0	
		Planned				\$0	
Prop K Sales Tax	Local	Allocated			\$5,716,000	\$5,716,000	\$5,716,000
		Programmed				\$0	
		Planned				\$0	
<b>SFgo Signal</b>							
FTA CMAQ	Federal	Allocated		\$3,027,572	\$13,972,429	\$17,000,000	\$17,000,000
		Programmed				\$0	
		Planned				\$0	
California Pacific Medical Center Contribution <sup>3</sup>	Local	Allocated			\$5,995,751	\$5,995,751	\$5,995,751
		Programmed				\$0	
		Planned				\$0	
Prop B General Fund Set Aside	Local	Allocated				\$0	\$2,005,380
		Programmed			\$2,005,380	\$2,005,380	
		Planned				\$0	
Prop K Sales Tax	Local	Allocated			\$2,275,000	\$2,275,000	\$2,275,000
		Programmed				\$0	
		Planned				\$0	
<b>Water, Sewer, Streetlights, Green Infrastructure</b>							
SFPUC Funds	Local	Allocated				\$0	\$52,630,543
		Programmed		\$603,306	\$43,414,498	\$44,017,804	
		Planned			\$8,612,739	\$8,612,739	

**Van Ness Improvement Funding Plan**  
**Updated: September 2016**

Source <sup>2</sup>	Type	Status	Project Phases <sup>1</sup>			Total by Status	TOTAL
			ENV, CER/PE	PS&E	CON		
<b>Other (Auxiliary Water Supply System, MuniForward, Vision Zero)</b>							
Active Transportation Program	State	Allocated			\$3,897,110	\$3,897,110	\$3,897,110
		Programmed				\$0	
		Planned				\$0	
Prop B General Fund Set Aside	Local	Allocated				\$0	\$6,383,931
		Programmed		\$285,884	\$6,098,047	\$6,383,931	
		Planned				\$0	
	<b>Totals</b>	<b>Allocated</b>	<b>\$14,409,136</b>	<b>\$16,912,702</b>	<b>\$146,210,662</b>	<b>\$177,532,499</b>	<b>\$309,378,346</b>
		<b>Programmed</b>	<b>\$0</b>	<b>\$889,190</b>	<b>\$122,343,918</b>	<b>\$123,233,108</b>	
		<b>Planned</b>	<b>\$0</b>	<b>\$0</b>	<b>\$8,612,739</b>	<b>\$8,612,739</b>	
			<b>\$14,409,136</b>	<b>\$17,801,892</b>	<b>\$277,167,319</b>	<b>\$309,378,346</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 upgrading 15 motor coaches on the 47-Van Ness line from 40-footers to 60-foot articulated buses.

<sup>2</sup> Acronyms used for funding sources include: AB 664 - Assembly Bill 664 toll revenues, CMAQ - Congestion Mitigation and Air Quality, FTA - Federal Transit Administration, PPM - Planning, Programming and Monitoring, SFMTA - San Francisco Municipal Transportation Agency, SFPUC - San Francisco Public Utilities Commission, and SHOPP - State Highway Operation and Protection Program.

<sup>3</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>4</sup> \$12.7 million in Central Freeway Parcel Revenues is dedicated for Van Ness Avenue State of Good Repair improvements.

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