



SFMTA
Municipal
Transportation
Agency



Revenue Bond Oversight Committee Meeting

Radio System Replacement Project Status Update*

*All financial values based on June 30, 2016 data.

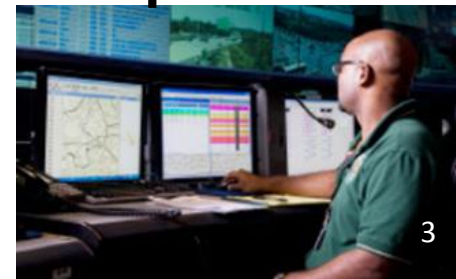
Brief Project Background

- **SFMTA's radio system provides voice and data communications to all SFMTA buses, transit operations and maintenance workers.**
- **The current radio system has only 11 radio channels serving approximately 1,100 buses/trains, 200 maintenance vehicles and 500 handheld radios.**
- **Built 30 plus years ago, the current radio system does not have sufficient voice channels or data bandwidth to support SFMTA's current operational needs. Additionally, the current radio system is obsolete and is no longer supported by any manufacturers.**
- **The new radio system will operate from four (4) radio base-station sites with 15 additional radio frequencies for a total of 26 radio frequencies channels (136% increase).**
- **The new radio system will provide sufficient radio channels and bandwidth to support current transit services plus anticipated future growth.**



Brief Project Background (Continued)

- In addition, the new radio system will add state of the art digital Intelligent Transportation System (ITS) features that the current analog system can not provide.
- ITS enhancement examples: integrated Automatic Passenger Counter (APC) and automatic visual and audio announcement of “next-stop” on MUNI trains for aboveground train stops for ADA compliance.
- Better voice and data communication coverage throughout the City especially in the metro subway and tunnels.
- Geographically redundant systems providing backup capability in the event of a primary site failure.



Current Project Status

- Completed construction of all 4 Radio base stations
- Completed construction at all 9 maintenance yards
- Completed construction at all 2 Central Control and one power control facilities
- Completed radio cable construction at 9 subway stations, Metro tunnel and Sunset Tunnel



Current Project Status

- Completed installation of 6 rubber tire buses, 2 cable cars, 2 non-revenue vehicles, and one LRV train
- Completed construction of all dispatching consoles at new Transportation Management Center
- Conducted preliminary radio coverage and mini-fleet drive test



Project Schedule

Milestone	Current Approved Schedule	Status
Contract NTP	June 2012	Completed
Detailed design	July 2015	Completed
Baseline wayside construction	June 2015	Completed
Software and mini-fleet testing	May 2016	Incomplete
Vehicle installation: rubber tire (bus)	September 2016	
Vehicle installation: rail	December 2016	
Cutover and Contract Closeout	March 2017	

Project Funding

Source	Amount Available (M)
Prop K (SFCTA)	\$61.76
Prop 1B Infrastructure Bond	\$26.00
FTA, USDOT	\$22.20
SFMTA Revenue Bond	\$13.06
SFMTA Operating Fund	\$4.46
AB 664 (Bridge Tolls)	\$0.55
Total	\$128.03

Bond Fund Status

Source	Revenue Bond Budget	Expenditure as of June 2016	Encumbrance as of June 2016	Balance as of June 2016
2012B	\$62,198	-	-	\$62,198
2013	\$2,000,000	\$2,000,000	-	-
2014	\$11,000,000	\$9,372,427	\$1,627,573	-
TOTAL	\$13,062,198	\$11,372,427	\$1,627,573	\$62,198

Project Cash Flow Projection

	Cash Flows			
Funding Source	Ending June 2016	FY 16/17	FY 17/18	Total
All funds	\$37,960,000	\$59,000,000	\$31,070,000	\$128,030,000
2012B Bond		\$62,198		\$62,198
2014 Bond		\$1,627,573		\$1,627,573

- Already spent \$11.37M in revenue bonds prior to June 2016

Thank you!