

Train Control Upgrade Project

SFMTA Board: Oct 4, 2022



Strategic Objectives | Project Phasing

Multi-year new surface and subway upgrade communicationsbased train control (CBTC) to improve Muni light rail service.



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Reduced delays: Customers no longer "stuck" on trains in-between stations due to subway congestion or slow-moving trains with a communication failure

Reduced travel times: Trips on Muni will be faster as trains will not have to wait for traffic lights on the surface – the train control system will talk to the signals and let them know a train is coming

Improved reliability: More consistent wait times that match the advertised frequency of trains, which makes trip-planning more reliable

Better service: the new system will give train controllers more flexibility to manage bunching and gaps



Applying Lessons Learned

Procurement Method

Ensure selection based on quality of supplier's product and expected long-term performance, not short-term construction issues

Harness Opportunities

Negotiate support terms while supplier is in competition with its peers

Supplier Partnership & Performance Incentives

Create contractual incentives for supplier to partner in the success of the system

Support-Focused/ Lifecycle Management

Treat the system as a technology product, hardware and software kept up-to-date

Risk Assessment

Anticipate risk points ahead of time with a comprehensive risk assessment process



Supplier

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System Design, Procurement and Support

Technology system procurement best fit for selection criteria and enables longterm performancebased support

SBE/DBE goal: 5%

Initial **RFP**

Installer(s)

System Installation

Contracts

Separating the installation contracts enables a more refined construction scope and allows us to maximize SBE/DBE

SBE/DBE goal: 100% (preliminary)

Multiple future RFPs

Consultant

Delivery Support

Technical consulting contract to support project management and leverage outside train control expertise to ensure we deliver the best system possible

SBE/DBE goal: 15% (preliminary)

Single future RFP

Benefits of including support contract with design RFP

Improves price and terms because firms are in competition with peers

Key elements linked to strategic goals:

- Performance-based support fee creates contractual elements for supplier to build reliability into initial design
- Vendor-Managed Spares Inventory designed to incentivize reduced parts replacement
- Regular software updates keeps hardware and software up to date



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SFMTA Board of Supervisors Ordinance Request

SFMTA requesting BOS approval for an ordinance allowing supplier contract to extend past 10 years and enabling negotiated procurement (i.e., best/final offer)

Proposed Duration

- Design/Implementation Phase: 8 years
- Initial Support Term: 10 years
- Additional Support Terms (2 options): 5 years each



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BOS Legislation Introduced

30-day waiting period initiated on 9/13

Budget and Finance Committee

Ordinance expected in committee 10/12

Board of Supervisors

First reading 10/26, second reading 11/1

Finalize RFP

Complete RFP documents and necessary reviews by mid-Dec

Approve/Advertise RFP

SFMTA Board approval action to advertise completed RFP package Jan 2023











Proposed Project Schedule

PHASE	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
System Design	Award E	Parky 2024									
Pilot	Award E	any 2024									
Subway Replacement											
Surface											
Support/Lifecycle Investment											→

Total Project Budget: \$560 million Support Costs: \$100 million over 10 years



Questions?

SFMTA Train Control Upgrade Project (TCUP)

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