



San Francisco Municipal Transportation Agency Needs to Improve Accountability and Collaboration in Its Capital Planning and Project Delivery Processes

Executive Summary

February 16, 2021

City Services Auditor, Office of the Controller

San Francisco Municipal Transportation Agency

WHY WE DID THIS AUDIT

The San Francisco Municipal Transportation Agency (SFMTA) oversees the public transportation network of the City and County of San Francisco (City) and engages in capital construction projects as part of its efforts to improve transit reliability and safety. SFMTA’s 20-year capital plan includes \$31 billion in capital needs. The capital planning process requires the participation of various SFMTA divisions and stakeholders. The audit assessed whether SFMTA’s collaboration, communication, and decision-making framework facilitates its divisions to effectively plan and deliver capital projects within expected scope, schedule, and budget.

HOW WE DID IT

The audit focused on four capital projects owned by the Transit Division:

Project	Description	Budget <i>(in Millions)</i>	Construction Timeline
Twin Peaks Tunnel Trackway Improvement (Twin Peaks Tunnel)	Replace the track structure in the Twin Peaks Tunnel between the West Portal and old Eureka Valley Stations and perform seismic strengthening and structural repairs.	\$86.9	May 2016 – February 2020
Green Light Rail Center Track Replacement (Green Center)	Replace worn tracks and switches, improve yard lighting, and construct new curb ramps.	\$54.1	January 2013 – December 2017
UCSF Platform and Track Improvement (UCSF Platform)	Reconfigure track alignment, install new transit signals, and construct a new boarding platform.	\$51.7	April 2018 – October 2019
5 Fulton Outer Route Fast Track Transit Enhancements (Fulton)	Part of the Muni Forward Transit Priority Projects, these projects involve bus bulbs (curb extensions), new traffic signals replacing stop signs, and pedestrian improvements.	\$6.1	February 2015 – May 2018

To conduct the audit, CSA gathered evidence using a variety of procedures and from a range of sources. Specifically, the audit team:

- Interviewed and surveyed employees in Capital Improvement Program (CIP) planning and capital projects delivery.
- Assessed project documentation for the selected capital projects.
- Analyzed documents relevant to CIP planning, project delivery, and governance.
- Contracted with Cumming Management Group, Inc., to assess cost estimates and preliminary engineering reports for the selected capital projects.

WHAT WE FOUND

The audit concluded that SFMTA’s communication and collaboration problems contributed to delays of up to 1.7 years and cost overruns of up to \$9 million for the four sample projects we looked at. SFMTA must reinforce agency and individual accountability and promote a culture of collaboration by improving these processes and making better use of its data and technology. The audit report includes 16 actionable recommendations to SFMTA.

SFMTA Inadequately Communicates and Collaborates, Adding to Delays and Cost Overruns

Impacts of inadequate communication among SFMTA divisions on project delivery:

Ineffective collaboration through project design and lack of comprehensive reviews . . .



↓ contributed to . . .



the **cancellation and subsequent rebidding** of the Twin Peaks Tunnel Project contract . . .

↓ which caused . . .

rebidding that added **\$35 million** and **1.2 additional years** to project completion.

During the design of the Twin Peaks Tunnel Project, SFMTA identified the need to test for and remove hazardous materials but **did not effectively and fully communicate** this, so the information . . .



↓ was not effectively carried through to the construction phase . . .



contributing to **insufficient testing and incomplete removal** of contaminated ballast (material supporting the tracks) . . .

↓ which contributed to . . .

\$523,000 in change orders. Further, the contractor estimated a potential cost increase of \$3 to \$9 million for 15 to 17 weekends of new tunnel closures to fully replace the ballast.



Although Public Works required collaboration and support from SFMTA to deliver the Fulton Project, including de-energizing Municipal Railway lines, Public Works records show SFMTA **did not provide** and **did not communicate its availability to provide** the necessary support . . .

↓ which caused . . .

SFMTA's delays in providing previously agreed-upon support that contributed to **620 days (1.7 years)** of project delays and **\$23,000** in change order costs.

Inadequate processes undermine collaboration, communication, and accountability



Ineffective Employee Performance Evaluation Process to hold senior managers accountable for effective collaboration with no specific examples of growth opportunities or strategies for improving collaboration.



Ineffective Decision-Making by a weakened Transportation Capital Committee due to absenteeism, proxy use, and little or no empowerment or timely information to better inform decision-making.



Inconsistent Design Reviews that left the Construction Division without adequate feedback from the Transit Division during project planning. Change orders due to design omissions or changes cost over \$2 million for the four sample projects.



Critical Safety and Service Issues That Were Unaddressed because of inadequate communication and collaboration across project delivery phases.



Lack of Training to Improve Collaboration for employees who must coordinate their work to plan and execute the capital program.

SFMTA's inadequate use of its data and tools hinders the capital planning and project delivery processes

- Inadequate evaluation of proposers' safety records allowed the Twin Peaks Tunnel project to be awarded to a contractor with a sustained serious or willful safety violation.
- Inaccurate cost estimates decrease the effectiveness of capital planning efforts.
- Poor document management may increase the City's liability in legal proceedings.



SFMTA does not effectively use its **strategic prioritization tool**. If it did, it could make more data-driven, effective capital planning decisions.



The **performance measures** of SFMTA's capital program are inadequate to target process improvement efforts.