

ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT

Train Control Upgrade Project Phase 1

Resolution SCCP-P-2526-03B

(to be completed by CTC)

1. FUNDING PROGRAM

- Active Transportation Program
- Local Partnership Program (Competitive)
- Solutions for Congested Corridors Program
- State Highway Operation and Protection Program
- Trade Corridor Enhancement Program

2. PARTIES AND DATE

- 2.1 This Project Baseline Agreement (Agreement) effective on **December 4, 2025** (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, **MTC and Caltrans D4**, and the Implementing Agency, **SFMTA**, sometimes collectively referred to as the "Parties".

3. RECITAL

- 3.1 Whereas at its **6/26/2025** meeting the Commission approved the **Solutions for Congested Corridors Program** and included in this program of projects the **Train Control Upgrade Project Phase 1**, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as **Exhibit A**, the Project Report attached hereto as **Exhibit B**, the Performance Metrics Form, if applicable, attached hereto as **Exhibit C**, as the baseline for project monitoring by the Commission.
- 3.2 The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

4. GENERAL PROVISIONS

The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:

- 4.1 To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.
- 4.2 To adhere, as applicable, to the provisions of the Commission:
- Resolution **[REDACTED]**, "Adoption of Program of Projects for the Active Transportation Program", dated **[REDACTED]**
 - Resolution **[REDACTED]**, "Adoption of Program of Projects for the Local Partnership Program", dated **[REDACTED]**
 - Resolution **G-25-41**, "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated **6/26/2025**
 - Resolution **[REDACTED]**, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated **[REDACTED]**
 - Resolution **[REDACTED]**, "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated **[REDACTED]**

- 4.3 All signatories agree to adhere to the Commission's Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.
- 4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.
- 4.5 San Francisco Municipal Transportation Agency agrees to secure funds for any additional costs of the project.
- 4.6 San Francisco Municipal Transportation Agency agrees to report to Caltrans on a quarterly basis; on the progress made toward the implementation of the project, including scope, cost, schedule, and anticipated benefits/performance metric outcomes.
- 4.7 Caltrans agrees to prepare program progress reports on a on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.
- 4.8 San Francisco Municipal Transportation Agency agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.
- 4.9 San Francisco Municipal Transportation Agency agrees to submit a timely Project Performance Analysis as specified in the Commission's SB 1 Accountability and Transparency Guidelines.
- 4.10 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits and performance metric outcomes during the course of the project, and retain those records for six years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.
- 4.11 The Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for six years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

5. SPECIFIC PROVISIONS AND CONDITIONS

- 5.1 Project Schedule and Cost
See Project Programming Request Form, attached as Exhibit A.
- 5.2 Project Scope
See Project Report or equivalent, attached as Exhibit B. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.
- 5.3 Performance Metrics
See Performance Metrics Form, if applicable, attached as Exhibit C.
- 5.4 Additional Provisions and Conditions *(Please attach an additional page if additional space is needed.)*

The state will not cover costs in the event of a cost overrun.

Attachments:

- Exhibit A: Project Programming Request Form
Exhibit B: Project Report
Exhibit C: Performance Metrics Form *(if applicable)*

SIGNATURE PAGE
TO
PROJECT BASELINE AGREEMENT

Project Name **Train Control Upgrade Project Phase 1**
Resolution **SCCP-P-2526-03B**

(to be completed by CTC)



Andrew Fremier
Executive Director, MTC
Project Applicant

October 23, 2025

Date



Bree Mawhorter
Chief Financial Officer
Implementing Agency

October 10, 2025

Date



[David Ambuehl \(Oct 24, 2025 13:01:58 PDT\)](#)
David Ambuehl
District Director (Acting)
California Department of Transportation

Date



Dina El-Tawansy
Director
California Department of Transportation

11/20/2025

Date



Tanisha Taylor
Executive Director
California Transportation Commission

02/11/2026

Date

ADDITIONAL SIGNATURE PAGE

TO

PROJECT BASELINE AGREEMENT

Project Title: SFMTA Train Control Upgrade Project Phase 1

Resolution: SCCP-P-2526-03B

(to be completed by CTC)

David Ambuehl

[David Ambuehl \(Oct 24, 2025 14:03:09 PDT\)](#)

David Ambuehl

Date

Acting District Director D4

Project Applicant

Date

Project Applicant

Date

Project Applicant

FACTSHEET



Train Control Upgrade Project (TCUP) Phase 1

Nominating Agencies: California Department of Transportation (Caltrans), Metropolitan Transportation Commission, and the San Francisco Municipal Transportation Agency (SFMTA); SFMTA will be the implementing agency

Contact: Cameron Oakes, Deputy District Director | cameron.oakes@dot.ca.gov | (510) 960-0741

Project Location

The Train Control Upgrade Project (TCUP) will modernize the entire SFMTA light rail “Muni Metro” system with Communications-Based Train Control (CBTC) technology. The TCUP Phase 1 (Project) will install CBTC on the Embarcadero and Third Street corridors in San Francisco, serving key destinations such as Oracle Park, Chase Center and the Mission Bay Biotech research and medical centers. This will serve as a technology demonstration.

Subsequent phases will replace the existing automatic train control system (ATCS) in the Market Street and Central subways and extend CBTC to the street segments of the J, K, L, M, N, and T lines, shown in Figure 1 above.



Figure 1: SFMTA Muni Metro System and TCUP Phases

Project Scope

The Project, Phase 1 of the 9-year, multi-phase TCUP, will design, install and test the performance of the new CBTC on the street segments along part of the N Judah and T Third Muni lines. Phase 1 is critical to the future success of the entire modernization project as it provides an opportunity to work out the kinks of the new system before expanding it to the Market Street and Central subways (Phase 2), which serve all 7 Muni Metro lines, and all remaining street segments (Phases 3-7). Ultimately, by implementing CBTC throughout the entire Muni Metro system, the SFMTA will achieve a 20% increase in tunnel capacity, increasing the number of trains moving through the Market Street subway from 30 per hour to 40, allowing for more frequent train service and improved passenger experience. TCUP is

the most cost-effective investment to increase system capacity, shift trips to transit, reduce congestion on highways, and lower greenhouse gas (GHG) emissions.

Project Schedule/Cost

The multi-phase TCUP began in 2021 with project development and is scheduled to be completed by 2034. The total cost of all 7 phases is \$700 million. The SFMTA is requesting \$41 million from SCCP Cycle 4 for Phase 1. These funds are matched by \$114 million in federal, local, and other State funding.

Air Quality

By significantly increasing ridership over the life of the project, Phase 1 will reduce GHG emissions by over 340,000 metric tons of CO2 equivalent. A modernized control system increases capacity by over 20%, attracting many more riders to transit.

Equity

The SFMTA's light rail system connects disadvantaged communities and neighborhoods of concern throughout San Francisco to the city's central business district, commercial corridors, and employment centers and, through connections with regional transit systems such as the Bay Area Rapid Transit (BART) and Caltrain, to the broader Bay Area. Phase 1 of TCUP extends from the Financial District south to Bayview/Hunters Point and Visitacion Valley, two of the most disadvantaged communities within San Francisco and designated Equity Priority Communities by the MTC.

TCUP PHASE	START	END	COST (M)
Project Development	Jan 2021	Jan 2025	\$22
Phase 0	Jan 2025	May 2026	\$107
Phase 1	Nov 2026	Jul 2028	\$155
Phase 2	Sep 2027	Feb 2030	\$175
Phase 3	May 2028	Aug 2030	\$56
Phase 4	Jan 2029	Jan 2031	\$36
Phase 5	Sep 2029	Jul 2031	\$45
Phase 6	Sep 2029	Dec 2031	\$35
Phase 7	May 2030	Jul 2034	\$69
Total			\$700

Outcomes and Other Benefits

Installing the CBTC throughout the entire Muni Metro system will provide multiple benefits, including:

- Increased capacity and improved reliability
- Reduced vehicle miles travelled and congestion on freeways and roadways
- Reduced GHG emissions
- Increased safety along the entire Muni Metro system
- Greater access to employment and education opportunities
- Smoother transition to BART and Caltrain and regional transit.



Figure 2: the SFMTA Muni Metro System

Amendment (Existing Project) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					Date	08/20/2025 16:30:28	
Programs <input type="checkbox"/> LPP-C		<input type="checkbox"/> LPP-F	<input checked="" type="checkbox"/> SCCP	<input type="checkbox"/> TCEP	<input type="checkbox"/> STIP	<input type="checkbox"/> Other	
District	EA	Project ID	PPNO	Nominating Agency			
04			2364Q	Caltrans District 4			
County	Route	PM Back	PM Ahead	Co-Nominating Agency			
San Francisco Count				Metropolitan Transportation Commission			
				MPO	Element		
				MTC	Mass Transit (MT)		
Project Manager/Contact			Phone	Email Address			
Dan Howard			415-646-4119	dan.howard@sfmta.com			

Project Title

Train Control Upgrade Project Phase 1

Location (Project Limits), Description (Scope of Work)

The Train Control Upgrade Program is a 9-year program of systemwide upgrades from Automatic Train Control (ATCS) to Communications Based Train Control (CBTC) and expansion of the train control system to surface light rail lines. Muni's current train control system is outdated and causing delays. The upgrade will happen in 7 phases starting with this phase. Phase 1 of the 9-year, multi-phase TCUP will design, install and test the performance of the new CBTC on the street segments along part of the N Judah and T Third Muni lines. Phase 1 is critical to the future success of the entire modernization project as it provides an opportunity to work out the kinks of the new system before expanding it to the Market Street and Central subways (Phase 2), which serve all 7 Muni Metro lines, and all remaining street segments (Phases 3-7).

Component	Implementing Agency
PA&ED	City & County of San Francisco
PS&E	City & County of San Francisco
Right of Way	City & County of San Francisco
Construction	City & County of San Francisco

Legislative Districts

Assembly:	17,19	Senate:	11	Congressional:	11
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Project Milestone	Existing	Proposed
Project Study Report Approved		
Begin Environmental (PA&ED) Phase		01/17/2021
Circulate Draft Environmental Document	Document Type CE/CE	
Draft Project Report		07/22/2024
End Environmental Phase (PA&ED Milestone)		01/15/2025
Begin Design (PS&E) Phase		05/01/2026
End Design Phase (Ready to List for Advertisement Milestone)		11/01/2026
Begin Right of Way Phase		09/01/2026
End Right of Way Phase (Right of Way Certification Milestone)		09/30/2026
Begin Construction Phase (Contract Award Milestone)		06/01/2027
End Construction Phase (Construction Contract Acceptance Milestone)		07/01/2028
Begin Closeout Phase		07/02/2028
End Closeout Phase (Closeout Report)		02/01/2029

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Purpose and Need

The SFMTA's light rail network now relies on an outdated though functional Automatic Train Control System (ATCS) to operate trains in the subway. The ATCS commands train movements, signals, and switches. On the surface, trains are operated manually by the train operator. As a result, the light rail network operates as two separate systems, causing several operational challenges. In the subway, communication failures between trains and the ATCS result in delays and tunnel congestion.

NHS Improvements YES NO Roadway Class NA Reversible Lane Analysis YES NO
Inc. Sustainable Communities Strategy Goals YES NO Reduce Greenhouse Gas Emissions YES NO

Project Outputs

Category	Outputs	Unit	Total
TMS (Traffic Management Systems)	Software and hardware systems	EA	1

Date 08/20/2025 16:30:28

Additional Information

Performance Indicators and Measures						
Measure	Required For	Indicator/Measure	Unit	Build	Future No Build	Change
Congestion Reduction	LPPC, SCCP, LPPF	Change in Daily Vehicle Miles Travelled	Miles	11,975,266	12,149,221	-173,955
			VMT per Capita	5.27	5.35	-0.08
	LPPC, SCCP, LPPF	Person Hours of Travel Time Saved (Only 'Change' required)	Person Hours	0	0	0
			Hours per Capita	0	0	0
	Optional	Percent Change in Non-Single Occupancy Vehicle Travel	%	0	0	0
System Reliability (Freight)	LPPC, SCCP, LPPF	Peak Period Travel Time Reliability Index (Only 'No Build' Required)	Index	0	0	0
	LPPC, SCCP, LPPF	Level of Transit Delay (if required)	% "On-time"	0	0	0
Air Quality & GHG (only 'Change' required)	LPPC, SCCP, TCEP, LPPF	Particulate Matter	PM 2.5 Tons	-15,438	0	-15,438
			PM 10 Tons	0	0	0
	LPPC, SCCP, TCEP, LPPF	Carbon Dioxide (CO2)	Tons	-346,024	0	-346,024
	LPPC, SCCP, TCEP, LPPF	Volatile Organic Compounds (VOC)	Tons	-12,962	0	-12,962
	LPPC, SCCP, TCEP, LPPF	Sulphur Dioxides (SOx)	Tons	0	0	0
	LPPC, SCCP, TCEP, LPPF	Carbon Monoxide (CO)	Tons	0	0	0
	LPPC, SCCP, TCEP, LPPF	Nitrogen Oxides (NOx)	Tons	-63,185	0	-63,185
Safety	LPPC, SCCP, TCEP, LPPF	Number of Fatalities	Number	30.5	37.5	-7
	LPPC, SCCP, TCEP, LPPF	Fatalities per 100 Million VMT	Number	0	0	0
	LPPC, SCCP, TCEP, LPPF	Number of Serious Injuries	Number	1,470	1,800	-330
	LPPC, SCCP, TCEP, LPPF	Number of Serious Injuries per 100 Million VMT	Number	0	0	0
Economic Development	LPPC, SCCP, TCEP, LPPF	Jobs Created (Only 'Build' Required)	Number	2,015	0	2,015
Cost Effectiveness (only 'Change' required)	LPPC, SCCP, TCEP, LPPF	Cost Benefit Ratio	Ratio	6	0	6
Vehicle Volume	LPPC, LPPF, SCCP	Existing Average Annual Vehicle Volume on Project Segment	Number	0	0	0
	LPPC, LPPF, SCCP	Estimated Year 20 Average Annual Vehicle Volume on Project Segment with Project	Number	0	0	0

District	County	Route	EA	Project ID	PPNO
04	San Francisco County				2364Q

Project Title
 Train Control Upgrade Project Phase 1

Existing Total Project Cost (\$1,000s)									Implementing Agency
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	
E&P (PA&ED)									City & County of San Francisco
PS&E									City & County of San Francisco
R/W SUP (CT)									City & County of San Francisco
CON SUP (CT)									City & County of San Francisco
R/W									City & County of San Francisco
CON									City & County of San Francisco
TOTAL									

Proposed Total Project Cost (\$1,000s)									Notes
E&P (PA&ED)									
PS&E			3,234	34,920				38,154	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				117,021				117,021	
TOTAL			3,234	151,941				155,175	

Fund #1:	Other State - Transit and Intercity Rail Capital Program (TIRCP) (Committed)								Program Code
Existing Funding (\$1,000s)									Funding Agency
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	
E&P (PA&ED)									City & County of San Francisco
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									

Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E				30,576				30,576	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL				30,576				30,576	

Fund #2:	Local Funds - Local Transportation Funds (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	Funding Agency
E&P (PA&ED)									City of San Francisco
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									TSF funds
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				2,765				2,765	
TOTAL				2,765				2,765	
Fund #3:	State SB1 SCCP - Solution for Congested Corridors Program (Uncommitted)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	Funding Agency
E&P (PA&ED)									City of San Francisco
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				41,000				41,000	
TOTAL				41,000				41,000	

Fund #4:	FTA Funds - State of Good Repair Formula Grants (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	Funding Agency
E&P (PA&ED)									City of San Francisco
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									
E&P (PA&ED)									FTA 5337 up to FY 29
PS&E			3,234	4,344				7,578	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				56,738				56,738	
TOTAL			3,234	61,082				64,316	
Proposed Funding (\$1,000s)									
E&P (PA&ED)									Revenue Bond
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				204				204	
TOTAL				204				204	

Fund #5:	Local Funds - Local Measure (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									
E&P (PA&ED)									Revenue Bond
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				204				204	
TOTAL				204				204	

Fund #6:	Local Funds - General Funds (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	Funding Agency
E&P (PA&ED)									City of San Francisco
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				5,216				5,216	
TOTAL				5,216				5,216	
Fund #7:	Other State - Transit (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	Funding Agency
E&P (PA&ED)									City of San Francisco
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									CA-SB1-SGR
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				11,098				11,098	
TOTAL				11,098				11,098	

I, Alberto Esqueda, Train Control Upgrade Project Planer, have been given full authority by SFMTA to prepare this report. I certify that the information and data contained in this report are true to the best of my knowledge and belief and I understand that disciplinary action may be taken in the event that the following information is found to be falsified.

Alberto Esqueda

Alberto Esqueda

Date

October 3, 2025

Title

Project Planner

Agency

SFMTA

I have reviewed the information contained in this report and find the data and information to be complete, current, and accurate.

D. Howard

Dan Howard, Project Manager

Date

October 3, 2025

Title

California Licensed Professional Engineer #TR 2865

Agency

SFMTA

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1. INTRODUCTION

Detailed Project Description/Scope: Describe the proposed project in detail. This should be the alternative that was selected during the environmental process.

Project Limit/Footprint	Caltrans District 4-San Francisco-I-280 There are no PM markers, this is an off-system transit project for the construction of the T-Third Street corridor from Muni Metro East yard to the Central Subway portal at 4th and Bryant, N Judah corridor from 6th & King along the Embarcadero to Ferry Portal
Total Project Cost	\$700 million
Outputs	Output description and quantity (Insert separate table if necessary) See attachment- Attachment D
Outcomes	Outcome description and quantity (Insert separate table if necessary) See attachment- Attachment D
Environmental Determination or Document	CEQA & NEPA CE

BACKGROUND

The Train Control Upgrade Project (TCUP) will modernize the entire SFMTA light rail Muni Metro system with CBTC technology. The TCUP Phase 1 (Project) will install CBTC on the Embarcadero and Third Street corridors in San Francisco, serving key destinations such as Oracle Park, Chase Center, and the Mission Bay biotech research and medical centers. This initial deployment will serve as a technology demonstration. Subsequent phases will replace the existing ATCS in the Market Street and Central subways and extend CBTC to the street segments of the J, K, L, M, N, and T lines (Figure 1).

The need for this project arises from the limitations of SFMTA's existing fixed-block ATCS, which was installed in the early 1980s and is now obsolete. The system no longer meets modern standards for reliability, capacity, and maintainability. It requires specialized parts that are increasingly difficult to procure and can cause extended service disruptions when failures occur. Moreover, the ATCS is limited to the subway, leaving surface segments of the Muni Metro controlled by manual, line-of-sight operations, which creates inefficiencies, irregular headways, and delays.

Recognizing these challenges, SFMTA initiated the TCUP to transition to CBTC, a state-of-the-art moving-block technology that improves safety, reliability, and throughput. Phase 1 provides a lower-risk opportunity to demonstrate the technology on the surface alignment, integrating it with surface operations where no ATCS currently exists. This phased approach allows lessons learned from Phase 1 to inform the more complex replacement of the ATCS in the subway and subsequent expansion systemwide.

The TCUP is therefore both a modernization effort and a strategic investment to address long-standing service and reliability issues, prepare the system for future demand, and align with regional goals of improving transit accessibility and reducing greenhouse gas emissions.

2. PURPOSE AND NEED

The purpose of TCUP is to modernize the train control infrastructure of the Muni Metro system to improve safety, reliability, and capacity. By implementing CBTC technology, the project aims to:

- Increase system capacity by 20%, enabling up to 40 trains per hour through the Market Street Subway
- Improve operational reliability and reduce delays caused by equipment failures and manual operations
- Enhance safety across both subway and surface segments
- Support seamless integration with regional transit systems such as BART and Caltrain
- Enable flexible and responsive service planning and contingency operations

Need:

a. Problem, Justification (purpose and need)

The current train control system is outdated and limited in scope. It only governs subway operations, leaving surface segments vulnerable to delays and inconsistent service. Communication failures between trains and the ATCS system frequently result in tunnel congestion and service disruptions. As ridership grows and demand for reliable transit increases, the limitations of the existing system pose a significant barrier to meeting future mobility needs. Without modernization, Muni Metro will continue to experience reliability issues, constrained capacity, and reduced rider satisfaction. The TCUP addresses these challenges by introducing a unified, modern control system that enhances performance across the entire network.

b. Regional and System Planning

TCUP is fully aligned with regional transportation and sustainability goals. It is included in:

- Plan Bay Area 2050 as part of the “SFMTA Muni Forward – Core Capacity” initiative (RTPID 21-T10-084)
- US 101 South Comprehensive Multimodal Corridor Plan (CMCP), where it is rated highly for improving reliability, multimodal access, and asset management
- ConnectSF Transit Investment Strategy, which identifies train control modernization as a top priority for improving Muni reliability

The project supports transit-oriented development, equity, and climate resilience, and is consistent with San Francisco’s Pro-Housing designation and land use efficiency indicators.

c. Traffic

TCUP is expected to significantly reduce traffic congestion and vehicle miles traveled (VMT) by shifting trips from personal vehicles to transit. Over the 25-year life of the project:

- VMT will be reduced by 1.1 billion miles
- GHG emissions will decrease by over 346,000 metric tons
- Fatal and injury crashes will be reduced by 7 fatalities and 330 injuries

The project improves transit reliability and frequency, encouraging mode shift and reducing congestion on parallel corridors such as I-280, US 101, and Third Street. Advanced Transit Signal Priority (TSP) will be implemented at 19 intersections along the T-Third corridor, reducing travel time and improving safety.

3. ENVIRONMENTAL CLEARANCE DESCRIPTION

The Train Control Upgrade Project (TCUP) Phase 1 has received environmental clearance through a Categorical Exclusion (CE) Type 07 under the National Environmental Policy Act (NEPA), as determined by the Federal Transit Administration (FTA). This classification applies to projects involving the acquisition, installation, rehabilitation, or replacement of equipment within existing facilities, with no substantial off-site impacts or changes in functional use.

The CE determination is documented within multiple FTA grant agreements, including:

CA-2019-103-01
CA-2021-119-00
CA-2022-225-00
CA-2024-074-00

The project scope involves upgrading legacy train control systems to a modern Communications-Based Train Control (CBTC) system within the existing Muni Metro right-of-way. No significant environmental impacts are anticipated, and the project does not require an Environmental Assessment (EA) or Environmental Impact Statement (EIS).

SFMTA is authorized to proceed with TCUP Phase 1 under NEPA compliance and will notify FTA of any scope changes that may affect the CE status. The project's delivery structure—comprising a Project Management Consultant (PMC), Hitachi Rail as the system designer, and one or more installation contractors—supports value analysis and minimizes implementation risk.

Attachments:

- CEQA Exemption from San Francisco Planning Department
- FTA Memorandum M2502 – NEPA Categorical Exclusion Determination (March 31, 2025)

4. CONSIDERATIONS REQUIRING DISCUSSION

4A. Hazardous Waste

No hazardous waste is anticipated as part of TCUP Phase 1 construction activities. The surface alignment does not involve removal of existing Automatic Train Control System (ATCS) equipment, since none is currently in place outside of the subway. Work will primarily consist of installing new Communications-Based Train Control (CBTC) equipment and associated infrastructure. Standard construction waste generated (e.g., packaging, wiring trimmings, conduit scrap) will be recycled or disposed of in accordance with Caltrans and SFMTA environmental compliance requirements. Should any hazardous materials be encountered unexpectedly during excavation or installation, the contractor will follow applicable federal, state, and local hazardous waste handling protocols.

4B. Value Analysis

A formal Value Analysis (VA) study was not conducted for TCUP Phase 1. However, an alternatives analysis completed in 2019–2020 evaluated the relative costs and benefits of upgrading to a new Communications-Based Train Control (CBTC) system versus continuing to maintain the existing Automatic Train Control System (ATCS). That study concluded that while implementing CBTC would require approximately 10 percent higher upfront costs, the benefits in terms of long-term reliability, lifecycle cost savings, and system performance far outweighed the marginal benefits of sustaining the legacy ATCS, which faces increasing maintenance and obsolescence challenges.

In addition, the project delivery approach incorporates a contract structure that achieves many of the goals of a formal VA by minimizing risk and ensuring independent oversight. The project is supported by three complementary contracts: (1) a Project Management Consultant (PMC) to provide oversight and confirm constructability, cost-effectiveness, and adherence to best practices; (2) a supplier contract with Hitachi, who will serve as the designer and technology provider for the CBTC system; and (3) one or more installation contracts, procured separately based on specialized expertise and project phase requirements.

This structure creates built-in checks and balances: Hitachi provides the technical design, the PMC independently reviews and validates the design, and the installers ensure proper implementation. By combining the earlier alternatives analysis with this carefully structured delivery model, SFMTA is maximizing lifecycle value, reducing delivery risk, and ensuring quality outcomes for public investment, even in the absence of a standalone VA study.

4C. Resource Conservation

On the surface alignment, there is no existing Automatic Train Control System (ATCS) in place; therefore, no legacy system needs to be removed or salvaged. TCUP Phase 1 construction will consist solely of adding the new Communications-Based Train Control (CBTC) system and associated infrastructure. Resource conservation will be achieved by minimizing construction waste, recycling materials such as wiring, conduit, and packaging where feasible, and incorporating sustainable construction practices consistent with Caltrans and SFMTA environmental policies. This ensures that, while most train control equipment is not being decommissioned (except for Vital Processor Interlocking and VETAG loop cables), the project still supports resource efficiency through careful materials management during installation of the new system.

4D. Right-of-Way Issues

No new right-of-way acquisition is required for TCUP Phase 1. All work will be completed within the existing SFMTA surface transit right-of-way. The project consists of installing new Communications-Based Train Control (CBTC) equipment, including wayside components, communication infrastructure, and power connections, within areas already dedicated to transit use. Utility coordination will be required to ensure proper installation and avoid conflicts with underground and overhead facilities, but no relocations of major utilities are anticipated. No railroad involvement is expected, as the alignment does not interface with freight or intercity rail operations until Phase IV of this project. Temporary construction easements are not anticipated, as staging and installation activities can be accommodated within the existing public right-of-way. In summary, TCUP Phase 1 can be delivered without property acquisition, railroad coordination, or new easements, minimizing risk and streamlining project delivery.

4E. Environmental Compliance

The Train Control Upgrade Project (TCUP) Phase 1 has satisfied all applicable environmental compliance requirements under both CEQA and NEPA.

Under CEQA, the San Francisco Planning Department, which has delegated authority, determined that the project qualifies for a Categorical Exemption pursuant to CEQA Guidelines Section 15301 (Existing Facilities) and Section 15302 (Replacement or Reconstruction). The exemption was granted because the project consists of installing new Communications-Based Train Control (CBTC) equipment within existing SFMTA transit right-of-way and does not have the potential to result in significant environmental impacts.

Under NEPA, the Federal Transit Administration (FTA) determined that the project qualifies for a Class II(c) Categorical Exclusion, Type 07 (Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment within existing facilities) pursuant to 23 CFR § 771.118. This CE determination is documented within multiple FTA award agreements associated with the project TCUPM2502 FTA NEPA Determination.

Given that TCUP Phase 1 is limited to technology upgrades within the existing right-of-way, no further CEQA or NEPA documentation is required. SFMTA will continue to ensure compliance with all applicable environmental regulations and will notify the relevant agencies should any future scope changes occur that could affect the CE determinations.

Attachments:

- CEQA Exemption from San Francisco Planning Department
- FTA Memorandum M2502 – NEPA Categorical Exclusion Determination (March 31, 2025)

4F. Air Quality Conformity

An air quality conformity analysis was not required for TCUP Phase 1. The project involves the installation of Communications-Based Train Control (CBTC) technology and associated equipment entirely within the existing SFMTA surface transit right-of-way. As the project does not add new roadway capacity, alter traffic patterns, or generate additional vehicle miles traveled (VMT), it does not result in increased emissions that would trigger conformity requirements under the Clean Air Act.

Furthermore, the project qualifies for a Categorical Exemption under CEQA and a Categorical Exclusion under NEPA, both of which confirm that it will not cause significant environmental impacts, including to air quality. While no conformity determination was necessary, the project is consistent with regional goals to improve transit efficiency and reliability, which supports long-term air quality improvements by encouraging transit use and reducing automobile dependence.

4G. Title VI Considerations

Yes, Title VI was taken into consideration. The Train Control Upgrade Project (TCUP) Phase 1 is being delivered by SFMTA, which maintains a Federal Transit Administration–approved Title VI Program to ensure compliance with Title VI of the Civil Rights Act of 1964. The project is limited to installing new Communications-Based Train Control (CBTC) technology within existing SFMTA right-of-way and does not involve service cuts, fare changes, or physical displacement of communities.

Given that the project scope is technology-based and focused on system reliability and safety, it does not create disproportionately high or adverse impacts on minority or low-income populations. On the contrary, improved train control will enhance service reliability across the Muni Metro network, which serves many transit-dependent and environmental justice communities. The project is therefore consistent with SFMTA's Title VI obligations and regional equity goals.

4H. Noise Abatement Decision Report

A Noise Abatement Decision Report was not developed for TCUP Phase 1. Based on the scope of work and environmental review, noise impacts are not anticipated. The project involves the installation of a new Communications-Based Train Control (CBTC) system and does not require removal of any existing Automatic Train Control System (ATCS) infrastructure on the surface. SFMTA's existing ATCS is confined to the subway, and no surface-level ATCS components are present that would generate noise during removal or installation.

The Federal Transit Administration (FTA) has issued a Categorical Exclusion (CE) Type 07 under NEPA for TCUP, confirming that the project does not have significant effects on air quality, noise, water resources, or environmental justice communities.

5. FUNDING, PROGRAMMING AND ESTIMATE

Funding

Discuss the project funding and include one of the following statements:

It has been determined that this project is eligible for Federal funding.

Programming

The Train Control Upgrade Project (TCUP) Phase 1 is fully funded with a total programmed cost of \$155.2 million. All project funds are committed through a mix of state, federal, and local sources, reflecting strong multi-agency support for this critical modernization effort.

The project's design phase (PS&E) totals approximately \$38.2 million, funded primarily by the Transit and Intercity Rail Capital Program (TIRCP, \$30.6 million) and Federal Transit Administration (FTA) Section 5337 State of Good Repair funds (\$7.6 million).

Construction costs total approximately \$117.0 million, supported by FTA Section 5337 (\$56.7 million), SB 1 Solutions for Congested Corridors Program (\$41.0 million), State of Good Repair (\$11.1 million), and local sources (\$8.2 million), including Transportation Sales Tax Funds (TSF), General Fund contributions, and revenue bond proceeds.

All funds are currently committed and programmed consistently with the project delivery schedule, which anticipates design completion in mid-2026, construction completion in 2028, and project closeout in early 2029.

SFMTA is the implementing agency responsible for all project components, ensuring the timely advancement of this foundational phase of Muni Metro's systemwide train control modernization.

Estimate

Funding Source	Committed / Uncommitted	PS&E (\$1,000s)	CON (\$1,000s)	Total (\$1,000s)
TIRCP	Committed	30,576	–	30,576
FTA Section 5337	Committed	7,578	56,738	64,316
Local Transportation Funds	Committed	–	2,765	2,765
SB1 – SCCP	Committed	–	41,000	41,000
Local Measure (Revenue Bond)	Committed	–	204	204
Local General Fund	Committed	–	5,216	5,216
SB1 – State of Good Repair	Committed	–	11,098	11,098
Total Project Cost		38,154	117,021	155,175

All amounts are shown in \$1,000s.

6. DELIVERY SCHEDULE

Phase 1 Milestones	Milestone Date (Month/Day/Year)	Milestone Designation (Target/Actual)
Project Study Report Approved	N/A	N/A
Begin Environmental (PA&ED) Phase	01/17/2021	Actual
Circulate Draft Environmental Document – Document Type (CEQA/NEPA CE)	7/22/2024 (Categorical Exemption)	Actual
Draft Project Report	07/22/2024	Actual
End Environmental Phase (PA&ED Milestone)	01/15/2025	Actual
Begin Design (PS&E) Phase	05/01/2026	Target
End Design Phase (Ready to List for Advertisement Milestone)	11/01/2026	Target
Begin Right of Way Phase	9/01/2026	Target
End Right of Way Phase (Right of Way Certification Milestone)	9/30/2026	Target
Begin Construction Phase (Contract Award Milestone)	06/01/2027	Target
End Construction Phase (Construction Contract Acceptance Milestone)	07/01/2028	Target
Begin Closeout Phase	07/02/2028	Target
End Closeout Phase (Closeout Report)	02/01/2029	Target

7. RISKS

As with any large-scale transit technology project, TCUP Phase 1 carries inherent risks related to design, integration, schedule, and construction. However, the project delivery approach has been structured specifically to minimize these risks.

The contract structure distributes responsibilities across three complementary contracts: (1) a Project Management Consultant (PMC) to provide independent oversight, schedule control, and risk management support; (2) a supplier contract with Hitachi, responsible for the design and provision of the Communications-Based Train Control (CBTC) system; and (3) one or more installation contracts procured based on expertise and project phase needs. This creates clear lines of accountability and built-in checks and balances, reducing the likelihood of design errors, integration issues, or construction delays going unaddressed. In addition to the contract structure, the project budget includes a healthy contingency allowance. This contingency was intentionally built in to address uncertainties such as market volatility, supply chain challenges, unforeseen site conditions, or coordination complexities with existing infrastructure. By incorporating contingency at the planning stage, SFMTA has proactively reduced financial risk and ensured the project has the flexibility to absorb unanticipated costs without jeopardizing delivery.

Other mitigation measures include early coordination with utility owners and City departments, phased implementation to allow for system testing before full deployment, and active risk management by SFMTA's internal project controls team. Collectively, these measures ensure that risks are identified early, responsibilities are well-defined, and corrective actions can be implemented promptly to safeguard both schedule and budget.

8. EXTERNAL AGENCY COORDINATION

The project requires the following coordination:

Delivery of TCUP Phase 1 will require coordination with several external agencies to ensure compliance and successful implementation. SFMTA will continue to coordinate closely with Caltrans, both through the SCCP program and through a forthcoming Project-Specific Agreement (PSA) for the two TIRCP grants that also support this work. Coordination with the Federal Transit Administration (FTA) will also continue as part of ongoing federal funding and oversight responsibilities.

Environmental compliance has already been established, with the San Francisco Planning Department—which has delegated CEQA authority—issuing a categorical exemption determination for the project. In addition, coordination with other City and County of San Francisco (CCSF) departments, such as Public Works and Utilities, will occur as needed to align construction activities with city standards and procedures.

Through these coordination efforts, all necessary agreements will be secured to support project funding, environmental compliance, and construction activities, ensuring that TCUP Phase 1 advances in alignment with local, state, and federal requirements.

9. ADDITIONAL INFORMATION

TCUP Phase 1 has already secured both CEQA and NEPA categorical exemptions, ensuring environmental clearance is complete. The scope of this phase is well-defined as the on-street technology demonstration, and no changes to the project scope are currently anticipated. The project cost estimate of \$143,729,000 reflects the most recent budget review and includes a healthy contingency to account for potential risks such as supply chain disruptions or inflationary pressures. The delivery schedule has been structured to align with subsequent TCUP phases, ensuring consistency and integration across the full program.

While most of the funding has been committed, a portion of Federal SGR 5337 funds (\$23,803,000) remains uncommitted but is expected to be secured through upcoming FTA formula allocations. With the environmental process complete, a strong funding base in place, and a contract strategy designed to minimize delivery risks, TCUP Phase 1 is positioned for successful implementation on schedule and within budget.

10. ATTACHMENTS (Number of Pages)

List attachments with the number of pages, such as:

- a. Electronic Project Programming Request ePPR
- b. Project Location Map
- c. Approved Environmental Documents
 - i. CEQA Exemption from San Francisco Planning Department
 - ii. FTA Memorandum M2502 – NEPA Categorical Exclusion Determination (March 31, 2025)
- d. Output and Outcome Tables

Attachment A

Amendment (Existing Project) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					Date	08/20/2025 16:30:28	
Programs <input type="checkbox"/> LPP-C <input type="checkbox"/> LPP-F <input checked="" type="checkbox"/> SCCP		<input type="checkbox"/> TCEP	<input type="checkbox"/> STIP	<input type="checkbox"/> Other			
District	EA	Project ID	PPNO	Nominating Agency			
04			2364Q	Caltrans District 4			
County	Route	PM Back	PM Ahead	Co-Nominating Agency			
San Francisco Count				Metropolitan Transportation Commission			
				MPO	Element		
				MTC	Mass Transit (MT)		
Project Manager/Contact			Phone	Email Address			
Dan Howard			415-646-4119	dan.howard@sfmta.com			

Project Title

Train Control Upgrade Project Phase 1

Location (Project Limits), Description (Scope of Work)

The Train Control Upgrade Program is a 9-year program of systemwide upgrades from Automatic Train Control (ATCS) to Communications Based Train Control (CBTC) and expansion of the train control system to surface light rail lines. Muni's current train control system is outdated and causing delays. The upgrade will happen in 7 phases starting with this phase. Phase 1 of the 9-year, multi-phase TCUP will design, install and test the performance of the new CBTC on the street segments along part of the N Judah and T Third Muni lines. Phase 1 is critical to the future success of the entire modernization project as it provides an opportunity to work out the kinks of the new system before expanding it to the Market Street and Central subways (Phase 2), which serve all 7 Muni Metro lines, and all remaining street segments (Phases 3-7).

Component	Implementing Agency
PA&ED	City & County of San Francisco
PS&E	City & County of San Francisco
Right of Way	City & County of San Francisco
Construction	City & County of San Francisco

Legislative Districts

Assembly:	17,19	Senate:	11	Congressional:	11
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Project Milestone	Existing	Proposed
Project Study Report Approved		
Begin Environmental (PA&ED) Phase		01/17/2021
Circulate Draft Environmental Document	Document Type CE/CE	
Draft Project Report		07/22/2024
End Environmental Phase (PA&ED Milestone)		01/15/2025
Begin Design (PS&E) Phase		05/01/2026
End Design Phase (Ready to List for Advertisement Milestone)		11/01/2026
Begin Right of Way Phase		09/01/2026
End Right of Way Phase (Right of Way Certification Milestone)		09/30/2026
Begin Construction Phase (Contract Award Milestone)		06/01/2027
End Construction Phase (Construction Contract Acceptance Milestone)		07/01/2028
Begin Closeout Phase		07/02/2028
End Closeout Phase (Closeout Report)		02/01/2029

Date 08/20/2025 16:30:28

Purpose and Need

The SFMTA's light rail network now relies on an outdated though functional Automatic Train Control System (ATCS) to operate trains in the subway. The ATCS commands train movements, signals, and switches. On the surface, trains are operated manually by the train operator. As a result, the light rail network operates as two separate systems, causing several operational challenges. In the subway, communication failures between trains and the ATCS result in delays and tunnel congestion.

NHS Improvements <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Roadway Class NA	Reversible Lane Analysis <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Inc. Sustainable Communities Strategy Goals <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Reduce Greenhouse Gas Emissions <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

Project Outputs

Category	Outputs	Unit	Total
TMS (Traffic Management Systems)	Software and hardware systems	EA	1

Date 08/20/2025 16:30:28

Additional Information

Performance Indicators and Measures						
Measure	Required For	Indicator/Measure	Unit	Build	Future No Build	Change
Congestion Reduction	LPPC, SCCP, LPPF	Change in Daily Vehicle Miles Travelled	Miles	11,975,266	12,149,221	-173,955
			VMT per Capita	5.27	5.35	-0.08
	LPPC, SCCP, LPPF	Person Hours of Travel Time Saved (Only 'Change' required)	Person Hours	0	0	0
			Hours per Capita	0	0	0
	Optional	Percent Change in Non-Single Occupancy Vehicle Travel	%	0	0	0
System Reliability (Freight)	LPPC, SCCP, LPPF	Peak Period Travel Time Reliability Index (Only 'No Build' Required)	Index	0	0	0
	LPPC, SCCP, LPPF	Level of Transit Delay (if required)	% "On-time"	0	0	0
Air Quality & GHG (only 'Change' required)	LPPC, SCCP, TCEP, LPPF	Particulate Matter	PM 2.5 Tons	-15,438	0	-15,438
			PM 10 Tons	0	0	0
	LPPC, SCCP, TCEP, LPPF	Carbon Dioxide (CO2)	Tons	-346,024	0	-346,024
	LPPC, SCCP, TCEP, LPPF	Volatile Organic Compounds (VOC)	Tons	-12,962	0	-12,962
	LPPC, SCCP, TCEP, LPPF	Sulphur Dioxides (SOx)	Tons	0	0	0
	LPPC, SCCP, TCEP, LPPF	Carbon Monoxide (CO)	Tons	0	0	0
	LPPC, SCCP, TCEP, LPPF	Nitrogen Oxides (NOx)	Tons	-63,185	0	-63,185
Safety	LPPC, SCCP, TCEP, LPPF	Number of Fatalities	Number	30.5	37.5	-7
	LPPC, SCCP, TCEP, LPPF	Fatalities per 100 Million VMT	Number	0	0	0
	LPPC, SCCP, TCEP, LPPF	Number of Serious Injuries	Number	1,470	1,800	-330
	LPPC, SCCP, TCEP, LPPF	Number of Serious Injuries per 100 Million VMT	Number	0	0	0
Economic Development	LPPC, SCCP, TCEP, LPPF	Jobs Created (Only 'Build' Required)	Number	2,015	0	2,015
Cost Effectiveness (only 'Change' required)	LPPC, SCCP, TCEP, LPPF	Cost Benefit Ratio	Ratio	6	0	6
Vehicle Volume	LPPC, LPPF, SCCP	Existing Average Annual Vehicle Volume on Project Segment	Number	0	0	0
	LPPC, LPPF, SCCP	Estimated Year 20 Average Annual Vehicle Volume on Project Segment with Project	Number	0	0	0

District	County	Route	EA	Project ID	PPNO
04	San Francisco County				2364Q

Project Title
 Train Control Upgrade Project Phase 1

Existing Total Project Cost (\$1,000s)									Implementing Agency
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	
E&P (PA&ED)									City & County of San Francisco
PS&E									City & County of San Francisco
R/W SUP (CT)									City & County of San Francisco
CON SUP (CT)									City & County of San Francisco
R/W									City & County of San Francisco
CON									City & County of San Francisco
TOTAL									

Proposed Total Project Cost (\$1,000s)									Notes
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	
E&P (PA&ED)									
PS&E			3,234	34,920				38,154	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				117,021				117,021	
TOTAL			3,234	151,941				155,175	

Fund #1:	Other State - Transit and Intercity Rail Capital Program (TIRCP) (Committed)								Program Code
Existing Funding (\$1,000s)									Funding Agency
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	
E&P (PA&ED)									City & County of San Francisco
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									

Proposed Funding (\$1,000s)									Notes
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	
E&P (PA&ED)									
PS&E				30,576				30,576	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL				30,576				30,576	

Fund #2:	Local Funds - Local Transportation Funds (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	Funding Agency
E&P (PA&ED)									City of San Francisco
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									
E&P (PA&ED)									TSF funds
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				2,765				2,765	
TOTAL				2,765				2,765	
Proposed Funding (\$1,000s)									
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				41,000				41,000	
TOTAL				41,000				41,000	

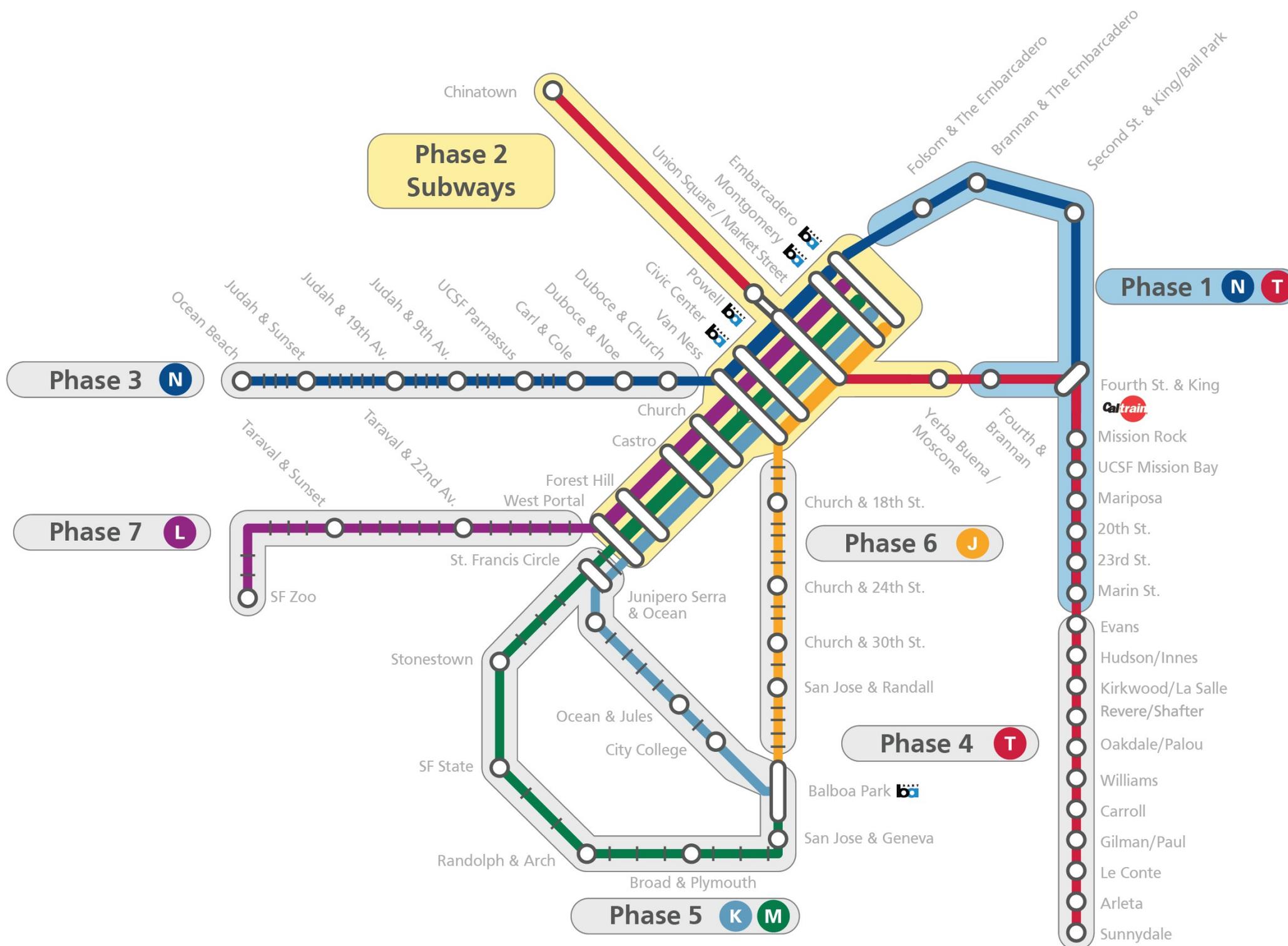
Fund #3:	State SB1 SCCP - Solution for Congested Corridors Program (Uncommitted)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	Funding Agency
E&P (PA&ED)									City of San Francisco
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				41,000				41,000	
TOTAL				41,000				41,000	

Fund #4:	FTA Funds - State of Good Repair Formula Grants (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	Funding Agency
E&P (PA&ED)									City of San Francisco
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									
E&P (PA&ED)									FTA 5337 up to FY 29
PS&E			3,234	4,344				7,578	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				56,738				56,738	
TOTAL			3,234	61,082				64,316	
Proposed Funding (\$1,000s)									
E&P (PA&ED)									Revenue Bond
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				204				204	
TOTAL				204				204	

Fund #5:	Local Funds - Local Measure (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									
E&P (PA&ED)									Revenue Bond
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				204				204	
TOTAL				204				204	

Fund #6:	Local Funds - General Funds (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	Funding Agency
E&P (PA&ED)									City of San Francisco
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				5,216				5,216	
TOTAL				5,216				5,216	
Fund #7:	Other State - Transit (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	24-25	25-26	26-27	27-28	28-29	29-30+	Total	Funding Agency
E&P (PA&ED)									City of San Francisco
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									CA-SB1-SGR
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				11,098				11,098	
TOTAL				11,098				11,098	

Attachment B





CEQA Exemption Determination

PROPERTY INFORMATION/PROJECT DESCRIPTION

Project Address		Block/Lot(s)
SFMTA Train Control Upgrade Project		
Case No.		Permit No.
2022-000870ENV		
<input checked="" type="checkbox"/> Addition/ Alteration	<input type="checkbox"/> Demolition (requires HRE for Category B Building)	<input type="checkbox"/> New Construction
<p>Project description for Planning Department approval.</p> <p>The San Francisco Municipal Transportation Agency (SFMTA) currently uses an automatic train control system (ATCS) to operate the Market Street Subway and Central Subway. The Train Control Upgrade Project (TCUP or “proposed project”) would replace the existing Muni Metro automatic train control system (ATCS) in the Market Street and Central subways with a new Communications Based Train Control (CBTC) system and expand modern CBTC train control benefits to the surface light rail portions of the Muni Metro system. Under CBTC, the Muni Metro system would be managed centrally under a single, modernized system, and would support existing transit service and allow for the increase of passenger or commuter service on the Muni Metro system’s rail lines . The CBTC technology uses WiFi or cellular connections to precisely track and continually communicate with every light rail train in service. The project would require installation of the following components: fiber optic cables in existing conduit alongside the existing trackway, small transponder tags between the tracks, CBTC radio and wireless access equipment (small boxes) in the subway and on City-owned light standards, as well as Overhead Contact System (OCS) poles, and CBTC equipment in cabinets along the surface routes and in existing City-owned equipment rooms in the subway. The</p> <p>FULL PROJECT DESCRIPTION ATTACHED</p>		

EXEMPTION TYPE

The project has been determined to be exempt under the California Environmental Quality Act (CEQA).	
<input type="checkbox"/>	Class 1 - Existing Facilities. (CEQA Guidelines section 15301) Interior and exterior alterations; additions under 10,000 sq. ft.
<input type="checkbox"/>	Class 3 - New Construction. (CEQA Guidelines section 15303) Up to three new single-family residences or six dwelling units in one building; commercial/office structures; utility extensions; change of use under 10,000 sq. ft. if principally permitted or with a CU.
<input type="checkbox"/>	<p>Class 32 - In-Fill Development. (CEQA Guidelines section 15332) New Construction of seven or more units or additions greater than 10,000 sq. ft. and meets the conditions described below:</p> <p>(a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.</p> <p>(b) The proposed development occurs within city limits on a project site of no more than 5 acres substantially surrounded by urban uses.</p> <p>(c) The project site has no value as habitat for endangered rare or threatened species.</p> <p>(d) Approval of the project would not result in any significant effects relating to traffic , noise, air quality, or water quality.</p> <p>(e) The site can be adequately served by all required utilities and public services.</p>
<input checked="" type="checkbox"/>	Other _____ Statutory Exemption per Public Resources Code Sections 21080(b)(10) and 21080(b)(11) (Specified Mass Transit Projects), and CEQA Guidelines section 15275(a).
<input type="checkbox"/>	Common Sense Exemption (CEQA Guidelines section 15061(b)(3)). It can be seen with certainty that there is no possibility of a significant effect on the environment.

ENVIRONMENTAL SCREENING ASSESSMENT

Comments:

Per Public Resources Code sections 21080(b)(10) and 21080(b)(11) (Specified Mass Transit Projects) and CEQA Guidelines section 15275(a), CEQA does not apply to mass transit projects that institute or increase passenger or commuter service on rail lines already in use, including the modernization of existing stations.

This project is statutorily exempt, therefore none of the categorical exemption checkboxes in this exemption checklist apply.

Planner Signature: Jennifer M Barbour Mckellar

PROPERTY STATUS - HISTORIC RESOURCE

PROPERTY IS ONE OF THE FOLLOWING:

<input type="checkbox"/>	Category A: Known Historical Resource.
<input type="checkbox"/>	Category B: Potential Historical Resource (over 45 years of age).
<input checked="" type="checkbox"/>	Category C: Not a Historical Resource or Not Age Eligible (under 45 years of age).

PROPOSED WORK CHECKLIST

Check all that apply to the project.

<input type="checkbox"/>	Change of use and new construction. Tenant improvements not included.
<input type="checkbox"/>	Regular maintenance or repair to correct or repair deterioration, decay, or damage to building.
<input type="checkbox"/>	Window replacement that meets the Department's <i>Window Replacement Standards</i> .
<input type="checkbox"/>	Garage work. A new opening that meets the <i>Guidelines for Adding Garages and Curb Cuts</i> , or replacement of a garage door in an existing opening that meets the Residential Design Guidelines.
<input type="checkbox"/>	Deck, terrace construction, or fences not visible from any immediately adjacent public right-of-way.
<input type="checkbox"/>	Mechanical equipment installation that is not visible from any immediately adjacent public right-of-way.
<input type="checkbox"/>	Dormer installation that meets the requirements for exemption from public notification under <i>Zoning Administrator Bulletin No. 3: Dormer Windows</i> .
<input type="checkbox"/>	Addition(s) not visible from any immediately adjacent public right-of-way for 150 feet in each direction; or does not extend vertically beyond the floor level of the top story of the structure, or does not cause the removal of architectural significant roofing features.
<input type="checkbox"/>	Façade or storefront alterations that do not remove, alter, or obscure character -defining features.
<input type="checkbox"/>	Restoration based upon documented evidence of a building's historic condition, such as historic photographs, plans, physical evidence, or similar buildings.
Note: Project Planner must check box below before proceeding.	
<input type="checkbox"/>	Project is not listed.
<input type="checkbox"/>	Project involves scope of work listed above.

ADVANCED HISTORICAL REVIEW

Check all that apply to the project.

<input type="checkbox"/>	<p>Reclassification of property status. (<i>Attach HRRER Part I relevant analysis; requires Principal Preservation Planner approval</i>)</p> <p><input type="checkbox"/> Reclassify to Category A</p> <p style="text-align: right;"><input type="checkbox"/> Reclassify to Category C</p> <p style="text-align: right;"><input type="checkbox"/> Lacks Historic Integrity</p> <p style="text-align: right;"><input type="checkbox"/> Lacks Historic Significance</p>
<input type="checkbox"/>	Project involves a known historical resource (CEQA Category A)
<input type="checkbox"/>	Project does not substantially impact character-defining features of a historic resource (see Comments)
<input type="checkbox"/>	Project is compatible, yet differentiated, with a historic resource.
<input type="checkbox"/>	Project consistent with the Secretary of the Interior Standards for the Treatment of Historic Properties
Note: If ANY box above is checked, a Preservation Planner MUST sign below.	
<input type="checkbox"/>	Project can proceed with EXEMPTION REVIEW. The project has been reviewed by the Preservation Planner and can proceed with exemption review.
Comments by Preservation Planner:	
Preservation Planner Signature:	

EXEMPTION DETERMINATION

<input checked="" type="checkbox"/>	No further environmental review is required. The project is exempt under CEQA.	
	<p>Project Approval Action: SFMTA Board approval of a contract</p>	<p>Signature: Jennifer M Barbour Mckellar 01/22/2024</p>
	<p>Supporting documents are available for review on the San Francisco Property Information Map, which can be accessed at https://sfplanninggis.org/pim/. Individual files can be viewed by clicking on the Planning Applications link, clicking the "More Details" link under the project's environmental record number (ENV) and then clicking on the "Related Documents" link.</p> <p>Once signed and dated, this document constitutes an exemption pursuant to CEQA Guidelines and Chapter 31 of the SF Admin Code. Per Chapter 31, an appeal of an exemption determination to the Board of Supervisors shall be filed within 30 days after the Approval Action occurs at a noticed public hearing, or within 30 days after posting on the Planning Department's website a written decision or written notice of the Approval Action, if the approval is not made at a noticed public hearing.</p>	

Full Project Description

The San Francisco Municipal Transportation Agency (SFMTA) currently uses an automatic train control system (ATCS) to operate the Market Street Subway and Central Subway. The Train Control Upgrade Project (TCUP or “proposed project”) would replace the existing Muni Metro automatic train control system (ATCS) in the Market Street and Central subways with a new Communications Based Train Control (CBTC) system and expand modern CBTC train control benefits to the surface light rail portions of the Muni Metro system. Under CBTC, the Muni Metro system would be managed centrally under a single, modernized system, and would support existing transit service and allow for the increase of passenger or commuter service on the Muni Metro system’s rail lines .

The CBTC technology uses WiFi or cellular connections to precisely track and continually communicate with every light rail train in service. The project would require installation of the following components: fiber optic cables in existing conduit alongside the existing trackway, small transponder tags between the tracks, CBTC radio and wireless access equipment (small boxes) in the subway and on City-owned light standards, as well as Overhead Contact System (OCS) poles, and CBTC equipment in cabinets along the surface routes and in existing City-owned equipment rooms in the subway.

The geographic scope of the project is the entire Muni Metro trackway, both underground and along surface streets, except the F-line on the surface of Market Street and the F-line trackway north of the Ferry Portal are not included. Installation would be geographically phased with an overall construction duration of approximately 6 years. See Attachment A to the Project Description memorandum, both attached.



Date: January 22, 2024
To: Jennifer McKellar, San Francisco Planning Department
From: Mark Hansen, San Francisco Municipal Transportation Agency (SFMTA)
Through: Marcus Barrango, SFMTA
Re: **Train Control Upgrade Project**
Case Number: 2022-000870ENV

SUMMARY

The Train Control Upgrade Project (TCUP or “proposed project”) would replace the existing Muni Metro automatic train control system (ATCS) in the Market Street and Central subways with a new Communications Based Train Control (CBTC) system and expand modern CBTC train control benefits to the surface portions of the Muni Metro light rail system. Under CBTC, the Muni Metro system would be managed centrally under a single, modernized system. The proposed project would support existing Muni service and allow for the increase of passenger or commuter service on the Muni Metro system’s rail lines.

BACKGROUND

The SFMTA is responsible for the management of the Municipal Railway public transit system. It operates a network of bus routes, the Muni Metro light rail system, and several historic cable car and streetcar lines. The Muni Metro system consists of Light Rail Vehicles (LRV) running on fixed guideway surface railways and underground tunnels and provides public transit service within San Francisco. The SFMTA currently uses an ATCS that first went into service in 1998. ATCS is a type of train control technology that controls trains in the 7-mile Market Street Subway and in the 1.6-mile long Central Subway. The ATCS controls the automatic movement of LRVs with electronic loop cables that permit communication between the trains and signal infrastructure in the subway. The system enforces a minimum safety separation between trains based on safe braking distances from the last known position of preceding trains. ATCS also permits trains to move through the tunnel at a faster pace than allowable when vehicles are operated entirely under human control. Current Muni Metro transit service is not possible without this technology.

When first introduced in 1998, the ATCS increased the throughput of trains in the Market Street Subway compared to the previous fixed-block train control system and greatly

improved the efficiency of the Muni Metro network. This system is now reaching the end of its useful life and must be completely overhauled or replaced.

As the ATCS approaches its end-of-life, reliability of the system has worsened. Trips on Muni Metro have highly variable travel times, due in part to frequent delays in the subway caused by congestion and train control system shortcomings. Following the 2019 Muni Reliability Working Group's identification of train control as a significant factor impacting rail service, SFMTA has made replacement of the ATCS system a top priority.

PROPOSED PROJECT

The TCUP is an SFMTA priority capital project to replace the nearly 30-year-old ATCS in the subways with a new Communications Based Train Control System (CBTC). The project would also expand CBTC control outside of the subways to the surface portions of the Muni Metro light rail system, where signals and switches are currently operated independently of the ATCS in a first come, first serve configuration. Under CBTC, the Muni Metro system would be managed centrally under a single, modernized system.

Unlike the existing ATCS, this newer CBTC technology uses WiFi or cellular connections to precisely track and continually communicate with every LRV in service. The existing ATCS cannot be used outside the subway. With the new technology, CBTC can manage train movements throughout the entire double-tracked Metro network. In the subway, CBTC would work like the existing ATCS and use automatic headway management to adjust the speed and dwell time of trains. On the surface, the CBTC system would communicate adjustments to LRV operators who would remain in control of the train. While Global Positioning Systems (GPS) is currently used to track LRVs on the surface, CBTC's telecommunications technology is more accurate and more directly accessible to the control center staff. The greater visibility CBTC provides to the SFMTA control center and operators would result in more effective train management and better LRV service for the entire Muni Metro system.

The SFMTA expects TCUP to confer the following benefits:

- Increase the capacity of the Muni Metro system
- Maintain the high standards of safety currently provided by the ATCS in the subway and extend modern safety protections to surface operations
- Enable shorter, more consistent travel times and wait times
- Provide a reliable train control system that supports Muni Metro at all times
- Support configurable and flexible service changes and contingency operations

- Continually update the new system to include the latest service-proven components and software

The proposed project would support existing transit service and allow for the increase of passenger or commuter service on the Muni Metro system's rail lines.

Project Scope

The upgrade would be performed along the entire Muni Metro trackway, both underground and along surface streets. The geographic scope of this project would not include the F-line on the surface of Market Street or the trackway north of the Ferry Portal (a portal is the entryway where a rail line transitions between the surface and a tunnel or subway) previously used by the currently suspended E-line. (See Attachment A for project area/geographic scope of the project.)

The proposed project is currently in the project planning phase, and SFMTA will be selecting a train control supplier to provide detailed design, procurement, implementation, support, and related services for a CBTC system. The SFMTA will then contract separately with third-party installers to provide installation services for CBTC equipment. However, generally the project would require the following types of physical improvements alongside the Muni Metro trackway (it is not anticipated that the trackway itself would be moved/removed or replaced):

1. The installation of fiber optic cables in existing conduit alongside the Muni Metro trackway. The detailed design will identify specific areas along the surface running portion of Muni Metro tracks where new conduit may be necessary. Where new conduit may be needed, excavation typically may be up to 36 inches deep and 24 inches wide. The surface running portion of Muni Metro is approximately 25 miles, which includes revenue trackway and non-revenue trackway. Excavation will not be required in the light-rail yards.
2. The installation of small transponder tags between the tracks at predetermined intervals, with no need for excavation.
3. The installation of CBTC radio and wireless access equipment (small boxes) along the subway portions of the Muni Metro system, which are approximately 8.6-miles in length.
4. The installation of CBTC radio and wireless access equipment (small boxes) on City-owned light standards, as well as Overhead Contact System (OCS) poles which support the system of wires that supply power to LRVs. This CBTC radio and wireless access equipment enables communication between trains under CBTC

and the central system and would not be installed on portions of the Muni Metro system not receiving CBTC, including the F line on the surface of Market Street and the trackway north of the Ferry Portal. The primary purpose of fiber optic cabling along or adjacent to the trackway is to connect this wayside equipment to the central CBTC servers. Wayside equipment would need to be connected to this fiber optic cabling via top-off conduits, which would require trenching up to 36 inches deep and 24 inches wide from the Muni Metro trackway to City-owned light standards or OCS poles on the sidewalk. No equipment is proposed on poles that are historic (e.g., Path of Gold poles along Market Street).

5. The installation of CBTC server, radio, or signaling equipment in existing electronics equipment cabinets near Muni Metro interlocking locations and signalized intersections in the public right-of-way. Interlocking locations are track junctions or crossings where signals and track switches prevent conflicting train movements. If existing equipment cabinets are unavailable, the project would require the construction of new CBTC electronic equipment cabinets in the public right-of-way along the Muni Metro trackway. These cabinets are typically 48 inches high, 50 inches wide, and 26 inches deep. (See Figure 1 below for an example). Any new cabinets would need a fiber optic connection and would require excavation similar to the scenario described in item 4 above.
6. The installation of new CBTC equipment in existing City-owned equipment rooms in the Market Street Subway and Central Subway.

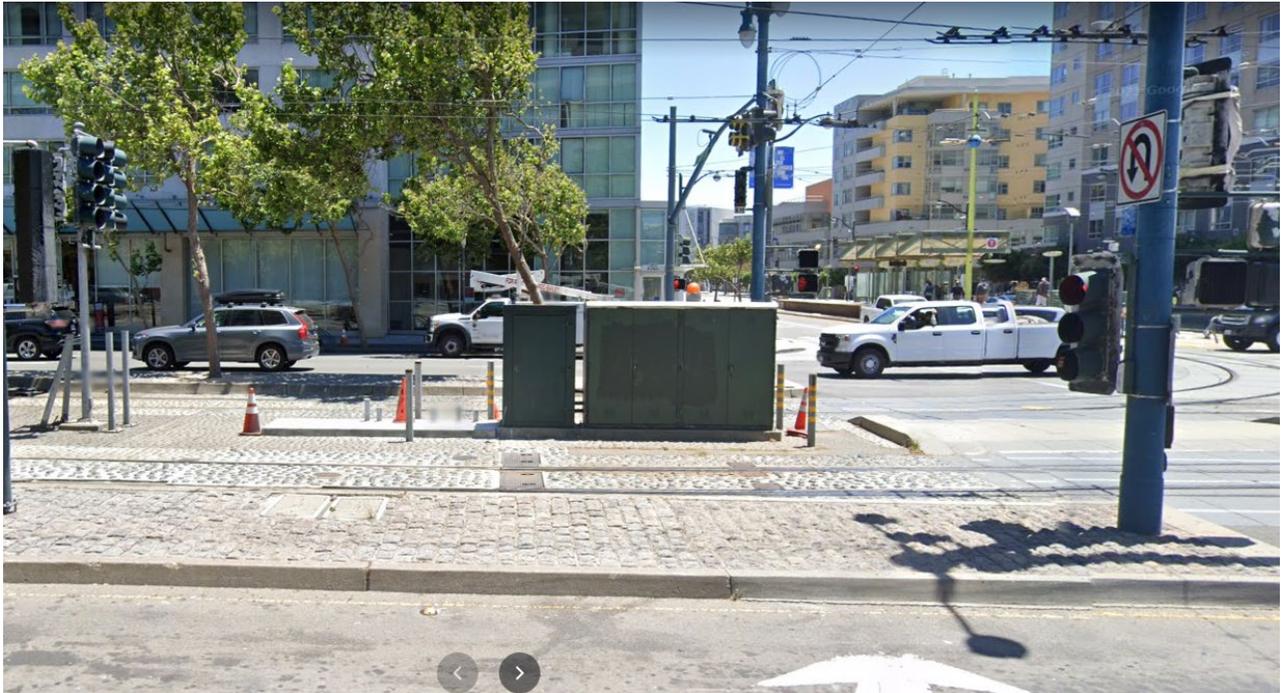


Figure 1. Example of Interlocking cabinet (left) at 4th & King streets.

Construction

Detailed design provided by the selected train control supplier will help determine the exact scope and phasing of construction activities. In general, construction activities would be necessary for the following types of work: the installation of fiber in existing conduits along the Muni Metro trackway, the installation of new conduit where needed, the installation of new CBTC wayside equipment, and connecting wayside equipment to conduit trunklines along the trackway.

Construction activities for the project are expected to be geographically phased. Phases may overlap, but the construction activities for each phase are only planned to occur on up to three city blocks at a time, to minimize impact to the public right-of-way. The longest individual phase is anticipated to be 24-28 months. The overall construction duration is anticipated to be approximately 6 years.

An initial “proving” or “pilot” phase would launch CBTC only on the surface trackway between the Ferry Portal (at Embarcadero & Folsom Street) and the Muni Metro East maintenance facility (at 25th Street and Illinois Street), as well as the surface trackway between the Central Subway Portal (at 4th and Bryant streets) and 4th and King streets. This phase also includes equipping the LRVs with CBTC equipment. This would allow for testing of the complete system and adjustments while minimizing delays and impacts to the system. The project would then move into the subways to replace the ATCS with the

new CBTC, which is the most challenging and technically complex part of the system. Finally, the project would expand to the remaining surface trackway on the rest of the system. Specific sub-phasing within the pilot, subway replacement, and surface expansion phases will be determined during detailed design.

Work under each phase may include storage tracks (short sections or pockets of track connected to the main trackway used to remove trains from service), wyes (sections of track used to turn around trains), terminal loops (the loop at the end of the trackway), and any other trackway where Muni Metro trains may travel while in service and that are controlled by the train control system.

A phased approach would minimize the risks associated with replacing the existing train control system while the system is in service and ensure that operations staff can become comfortable with the system as each phase is completed. Each phase would feature detailed design and construction, allowing the design and construction of subsequent phases to overlap.

Approval Action

The Approval Action as defined by San Francisco Administrative Code Chapter 31, Section 31.04(h)(2) would be SFMTA Board approval of a contract with a train control system supplier to design and furnish a new CBTC system. The approval action starts the 30-day appeal period for the environmental review determination under Administrative Code Section 31.16.

ATTACHMENT A

Phase Map: Pilot, Subway Replacement, Surface Expansion

Attachment C



Train Control Upgrade Project

Memorandum

M2502

Formal Recognition of FTA's Categorical Exclusion Determination

March 31, 2025

Dan Howard, Project Manager

A handwritten signature in black ink, appearing to read 'D. Howard'.

Purpose

The purpose of this memo is to document that the Train Control Upgrade Project (TCUP) has received a Categorical Exclusion (CE) Type 07 under the National Environmental Policy Act (NEPA) from the Federal Transit Administration (FTA). While no standalone official letter was issued by the FTA confirming this determination, the CE designation is explicitly referenced in multiple FTA award agreements associated with the project. This memo serves to memorialize the CE determination and ensure internal and external stakeholders have a clear reference to the documentation confirming TCUP's environmental status.

Background

TCUP is a critical infrastructure project designed to replace the aging Automatic Train Control System (ATCS) with a modern Communications-Based Train Control (CBTC) system, improving the efficiency, reliability, and safety of the Muni Metro network. As the project primarily involves technology upgrades within existing transit right-of-way, with no significant construction or environmental impact, it qualifies for a Class II(c) Categorical Exclusion (Type 07) under 23 CFR § 771.118.

The TCUP team worked with the SFMTA Environmental Review Team and Finance and Information Technology (FIT) staff to develop a strategy for obtaining a formal CE confirmation letter from the FTA. In 2023, the FTA indicated that TCUP qualified for an "off-the-shelf" Categorical Exclusion, with the NEPA determination incorporated into the Transit Award Management System (TrAMS). In 2024, the TCUP team requested documentation through the SFMTA FIT team, but FTA staff confirmed that a separate letter was unnecessary, as the Type C CE designation is processed through TrAMS. The FTA's determination is reflected within multiple grant award agreements, including Federal Award Identification Number (FAIN): CA-2019-103-01, CA-2021-119-00, CA-2022-225-00, CA-2024-074-00, which formally lists TCUP's CE status. These award letters and relevant email discussions are attached to this memo.

The FTA's CE determination confirms that TCUP does not:

- Induce significant environmental impacts to planned growth or land use.
- Require large-scale relocations or impact historically significant properties.
- Have significant effects on air quality, noise, water resources, or environmental justice communities.

Next Steps & Compliance

With this determination, SFMTA understands that it is authorized to proceed with TCUP in compliance with NEPA requirements. The project team will ensure continued compliance with all applicable environmental laws and will notify the FTA of any scope changes that could affect the CE determination, updating this memo accordingly.

Please reference the attached documentation for further details.



Attachments:

FTA Award Agreements:

1. CA-2019-103-01
2. CA-2021-119-00
3. CA-2022-225-00
4. CA-2024-074-00
5. Email Correspondence between SFMTA & FTA

Award

Federal Award Identification Number (FAIN)	CA-2019-103-01
Temporary Application Number	1697-2019-2
Award Name	FY2019 State of Good Repair Grant
Award Status	Active (Executed)
Award Budget Number	0

Period of Performance Start Date	8/22/2019
Original Period of Performance End Date	12/31/2027
Current Period of Performance End Date	12/31/2027 Revision #: 0 Approved?: Yes

Part 1: Recipient Information

Name: San Francisco, City & County Of

Recipient ID	Recipient OST Type	Recipient Alias	UEI	DUNS
1697	City	San Francisco Municipal Transportation Agency		956617435

Location Type	Address	City	State	Zip
Mailing Address	1 SOUTH VAN NESS AVE 7TH FLOOR	SAN FRANCISCO	CA	94103
Physical Address	1 S VAN NESS AVE	SAN FRANCISCO	CA	94103

Union Information

Union Name	BROTHERHOOD OF LOCOMOTIVE ENGINEERS
Address 1	1370 Ontario Street
Address 2	
City	Cleveland

State	Ohio
Zipcode	44113
Contact Name	D.M. Hahs
Telephone	2162412630
Fax	2162416516
E-mail	hahs@ble-t.org
Website	

Union Name	INT ASSO OF MACHINISTS & AEROSPACE WORKERS
Address 1	9000 Machinists Place
Address 2	
City	Upper Marlboro
State	Maryland
Zipcode	20772
Contact Name	Robert Roach Jr
Telephone	3019674500
Fax	3019674545
E-mail	rroach@IAMAW.org
Website	

Union Name	INT BROTHERHOOD OF ELECTRICAL WORKERS
Address 1	900 Seventh Street
Address 2	
City	Washington
State	DC
Zipcode	20001
Contact Name	Al Russo
Telephone	(202) 728-6018
Fax	
E-mail	railroad_dept@ibew.org
Website	

Union Name	INT FEDERATION OF PROFESSIONAL & TECHNICAL ENGINEERS
Address 1	8630 Fenton Street, Suite 400
Address 2	
City	Silver Spring
State	Maryland
Zipcode	20910
Contact Name	Gregory Junemann
Telephone	3015659016
Fax	3015650018
E-mail	gjunemann@ifpte.org

Website	
Union Name	O'DONNELL, SCHWARTS & ANDERSON
Address 1	1900 L Street, NW, Suite 707
Address 2	
City	Washington
State	District of Columbia
Zipcode	20036
Contact Name	Richard Edelman
Telephone	2028981824
Fax	2024298928
E-mail	redelman@odsalaw.com
Website	
Union Name	SERVICE EMPLOYEES' INTERNATIONAL UNION
Address 1	1313 L Street, NW
Address 2	
City	Washington
State	District of Columbia
Zipcode	20005
Contact Name	Andrew Stern
Telephone	2028983300
Fax	2028983402
E-mail	stern@seiu.org
Website	
Union Name	TRANSPORT WORKERS UNION
Address 1	1700 Broadway, 2nd Floor
Address 2	
City	New York
State	New York
Zipcode	10019
Contact Name	Michael O'Brian
Telephone	2122594900
Fax	2122654537
E-mail	m_o'brien@twu.org
Website	
Union Name	TRANSPORTATION-COMMUNICATIONS INTERNATIONAL UNION
Address 1	3 Research Place
Address 2	
City	Rockville
State	Maryland

Zipcode	20850
Contact Name	Robert Scardelletti
Telephone	3019484911
Fax	3019481369
E-mail	
Website	
Union Name	Smart Transportation Division
Address 1	24950 Country Club Blvd.
Address 2	Ste. 340
City	North Olmsted
State	OH
Zipcode	44070
Contact Name	Jeremy Ferguson
Telephone	(216) 228-9400
Fax	
E-mail	president_td@smart-union.org
Website	

Part 2: Award Information

Title: FY2019 State of Good Repair Grant

FAIN	Award Status	Award Type	Application Cost Center	Date Created	Last Updated Date	From TEAM?
CA-2019-103-01	Active (Executed)	Grant	Region 9	11/4/2021	11/4/2021	No

Award Executive Summary

This amendment adds \$13,220,000 of 2021 Fixed Guideway Funds to the SFO UZA in CA-2019-103 for LRV Replacements.

Purpose:

Maintain transit system assets in a state of good repair.

Activities to Be Performed:

Acquisition, construction, improvement and maintenance of facilities and equipment for use in transit, and include capital procurements, rolling stock purchases, design and construction costs, and the force account (personnel) expenditures required to support these capital project activities.

Expected Outcome:

Increased reliability and availability of transit buses, LRVs, and other transit equipment and infrastructure.

Intended Beneficiaries:

People of San Francisco and the greater Bay Area, visitors, and workers will all benefit from the

increased reliability of SFMTA transit service.

Subrecipient Activities:

None.

This FY2019 Section 5337 State of Good Repair grant for \$85,538,907 houses thirteen San Francisco Municipal Transportation Agency (SFMTA) transit-related projects.

Allowable capital project costs under this grant follow the guidelines and principles contained in OMB's Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal awards circular (Super Circular). Eligible costs are those associated with the acquisition, construction, improvement and maintenance of facilities and equipment for use in transit, and include capital procurements, rolling stock purchases, design and construction costs, and the force account (personnel) expenditures required to support these capital project activities.

The 5337 funds in this application are included in the investment prioritization section of SFMTA's TAM plan.

Frequency of Milestone Progress Reports (MPR)

Quarterly

Frequency of Federal Financial Reports (FFR)

Quarterly

Does this application include funds for research and/or development activities?

This award does not include research and development activities.

Pre-Award Authority

This award is using Pre-Award Authority.

Does this application include suballocation funds?

Recipient organization is suballocated these apportioned funds and can apply for and receive these funds directly.

Will this Grant be using Lapsing Funds?

No, this Grant does not use Lapsing Funds.

Will indirect costs be applied to this application?

This award is applying an approved Indirect cost rate(s).

Indirect Rate Details: FTA approved the SFMTA's indirect cost rates for FY2022 and a copy of the SFMTA's approved rates is attached to the SFMTA's Organization Documents. The approved rates of 116.3% for Transit Capital Projects and 67.7% for Sustainable Streets Capital Projects will be applied to the applicable activity line descriptions. Indirect Costs will apply to one or more activities contained within the scope of work.

Requires E.O. 12372 Review

No, this application does not require E.O. 12372 Review.

Delinquent Federal Debt

No, my organization does not have delinquent federal debt.

Award Description

Purpose*None provided.***Activities to be performed:***None provided.***Expected outcomes:***None provided.***Intended beneficiaries:***None provided.***Subrecipient Activities:***None provided.***Award Point of Contact Information**

First Name	Last Name	Title	E-mail Address	Phone
		catherine.luu@dot.gov	General Engineer	
		alexander.smith@dot.gov	Transportation Planner	
Mark	Lui	Pr Administrative Analyst	mark.lui@sfmta.com	(415) 646-2516

Award Budget Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$85,538,907
Local			\$21,384,727
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$106,923,634

Award Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2019-103-01-01	121-00 (121-A1) RAIL - ROLLING STOCK	\$1,042,907.00	\$260,727.00	\$1,303,634.00	1

CA-2019-103-01-01		12.14.30	REHAB/ REBUILD CABLE CARS	\$1,042,907.00	\$260,727.00	\$1,303,634.00	1
CA-2019-103-02-01	121-00 (121-A2)		RAIL - ROLLING STOCK	\$8,000,000.00	\$2,000,000.00	\$10,000,000.00	1
CA-2019-103-02-01		12.14.26	COMMUTER RAIL CARS USED	\$8,000,000.00	\$2,000,000.00	\$10,000,000.00	1
CA-2019-103-03-01	122-00 (122-A3)		RAIL TRANSITWAY LINES	\$16,736,000.00	\$4,184,000.00	\$20,920,000.00	1
CA-2019-103-03-01		12.24.03	REHAB/RENOV LINE EQUIP/ STRUCTURES	\$16,736,000.00	\$4,184,000.00	\$20,920,000.00	1
CA-2019-103-04-01	115-00 (115-A4)		ELECTRIFICATION/POWER DIST (BUS)	\$20,000,000.00	\$5,000,000.00	\$25,000,000.00	1
CA-2019-103-04-01		11.54.20	REHAB/RENOV MISC ELECT POWER DISTRIB EQUIPMENT	\$20,000,000.00	\$5,000,000.00	\$25,000,000.00	1
CA-2019-103-05-01	122-00 (122-A5)		RAIL TRANSITWAY LINES	\$8,640,000.00	\$2,160,000.00	\$10,800,000.00	1
CA-2019-103-05-01		12.24.03	REHAB/RENOV LINE EQUIP/ STRUCTURES	\$8,640,000.00	\$2,160,000.00	\$10,800,000.00	1
CA-2019-103-06-01	122-00 (122-A6)		RAIL TRANSITWAY LINES	\$4,000,000.00	\$1,000,000.00	\$5,000,000.00	1
CA-2019-103-06-01		12.24.20	REHAB/RENOV MISC RAIL EQUIPMENT	\$4,000,000.00	\$1,000,000.00	\$5,000,000.00	1
CA-2019-103-07-01	124-00 (124-A7)		SUPPORT EQUIP/FACILITIES (RAIL)	\$2,000,000.00	\$500,000.00	\$2,500,000.00	1

CA-2019-103-07-01		12.42.20	PURCHASE - MISC EQUIPMENT	\$2,000,000.00	\$500,000.00	\$2,500,000.00	1
CA-2019-103-08-01	129-00 (129-A8)		Fixed Guideway Associated Transit Improvements	\$1,000,000.00	\$250,000.00	\$1,250,000.00	1
CA-2019-103-08-01		12.93.05	CONSTRUCT PED ACCESS / WALKWAYS	\$1,000,000.00	\$250,000.00	\$1,250,000.00	1
CA-2019-103-09-01	122-00 (122-B4)		RAIL TRANSITWAY LINES	\$4,070,000.00	\$1,017,500.00	\$5,087,500.00	1
CA-2019-103-09-01		12.24.03	REHAB/RENOV LINE EQUIP/ STRUCTURES	\$4,070,000.00	\$1,017,500.00	\$5,087,500.00	1
CA-2019-103-10-01	124-00 (124-A9)		SUPPORT EQUIP/FACILITIES (RAIL)	\$4,100,000.00	\$1,025,000.00	\$5,125,000.00	1
CA-2019-103-10-01		12.42.06	PURCHASE - RAIL SHOP EQUIPMENT	\$4,100,000.00	\$1,025,000.00	\$5,125,000.00	1
CA-2019-103-11-01	112-00 (112-B1)		BUS TRANSITWAYS/LINES	\$1,830,000.00	\$457,500.00	\$2,287,500.00	1
CA-2019-103-11-01		11.24.01	REHAB/ RENOVATE - BUSWAY	\$1,830,000.00	\$457,500.00	\$2,287,500.00	1
CA-2019-103-12-01	114-00 (114-B3)		BUS: SUPPORT EQUIP AND FACILITIES	\$900,000.00	\$225,000.00	\$1,125,000.00	1
CA-2019-103-12-01		11.44.02	REHAB/ RENOVATE - MAINTENANCE FACILITY	\$900,000.00	\$225,000.00	\$1,125,000.00	1
CA-2019-103-13-01	121-00 (121-B2)		RAIL - ROLLING STOCK	\$13,220,000.00	\$3,305,000.00	\$16,525,000.00	4
CA-2019-		12.12.20	LIGHT RAIL CARS	\$13,220,000.00	\$3,305,000.00	\$16,525,000.00	4

103-13-01

Discretionary Allocations

This application does not contain discretionary allocations.

Sources of Federal Financial Assistance

PO Number	Project Number	Scope Name	Scope Number	Scope Suffix	UZA Code	Area Name	Account Class Code	FPC	Description	Amendment Amount	Cumulative Amount
CA-54-093	CA-2019-103-01-01	RAIL - ROLLING STOCK	121-00 (121)	A1	060060	San Francisco -Oakland, CA	2018.25.54.38.2	00	SGR - Fixed Guideway	\$0	\$1,042,907
CA-54-093	CA-2019-103-02-01	RAIL - ROLLING STOCK	121-00 (121)	A2	060060	San Francisco -Oakland, CA	2018.25.54.38.2	00	SGR - Fixed Guideway	\$0	\$7,398,658
CA-54-093	CA-2019-103-02-01	RAIL - ROLLING STOCK	121-00 (121)	A2	060060	San Francisco -Oakland, CA	2019.25.54.38.2	00	SGR - Fixed Guideway	\$0	\$601,342
CA-54-093	CA-2019-103-03-01	RAIL TRANSITWAY LINES	122-00 (122)	A3	060060	San Francisco -Oakland, CA	2019.25.54.38.2	00	SGR - Fixed Guideway	\$0	\$16,736,000
CA-54-093	CA-2019-103-04-01	ELECTRIFICATION/POWER DIST (BUS)	115-00 (115)	A4	060060	San Francisco -Oakland, CA	2019.25.54.38.2	00	SGR - Fixed Guideway	\$0	\$20,000,000
CA-54-093	CA-2019-103-05-01	RAIL TRANSITWAY LINES	122-00 (122)	A5	060060	San Francisco -Oakland, CA	2019.25.54.38.2	00	SGR - Fixed Guideway	\$0	\$8,640,000
CA-54-093	CA-2019-103-06-01	RAIL TRANSITWAY LINES	122-00 (122)	A6	060060	San Francisco -Oakland, CA	2019.25.54.38.2	00	SGR - Fixed Guideway	\$0	\$4,000,000
CA-54-093	CA-2019-103-07-01	SUPPORT EQUIP/FACILITIES (RAIL)	124-00 (124)	A7	060060	San Francisco -Oakland, CA	2019.25.54.38.2	00	SGR - Fixed Guideway	\$0	\$2,000,000
CA-54-093	CA-2019-103-08-01	Fixed Guideway Associated Transit Improvements	129-00 (129)	A8	060060	San Francisco -Oakland, CA	2019.25.54.38.2	00	SGR - Fixed Guideway	\$0	\$1,000,000
CA-54-093	CA-2019-103-09-01	RAIL TRANSITWAY LINES	122-00 (122)	B4	060060	San Francisco -Oakland, CA	2019.25.54.38.2	00	SGR - Fixed Guideway	\$0	\$4,070,000
CA-54-093	CA-2019-103-10-01	SUPPORT EQUIP/FACILITIES	124-00 (124)	A9	060060	San Francisco	2019.25.54.38.2	00	SGR - Fixed Guideway	\$0	\$4,100,000

		ES (RAIL)					-Oakland, CA						
CA-54-0093	CA-2019-103-11-01	BUS TRANSITS/LINES	112-00 (112)	B1	060060	San Francisco -Oakland, CA	2019.25.54.38.2	00	SGR - Fixed Guideway	\$0		\$1,830,000	
CA-54-0093	CA-2019-103-12-01	BUS: SUPPORT EQUIPMENT AND FACILITIES	114-00 (114)	B3	060060	San Francisco -Oakland, CA	2019.25.54.38.2	00	SGR - Fixed Guideway	\$0		\$900,000	
CA-54-0093	CA-2019-103-13-01	RAIL - ROLLING STOCK	121-00 (121)	B2	060060	San Francisco -Oakland, CA	2020.25.54.38.2	00	SGR - Fixed Guideway	\$13,220,000		\$13,220,000	

Part 3: Project Information

Project Title: Cable Car Renovation Program

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2019-103-01-01	1697-2019-2-P1	11/4/2021	1/1/2020	12/31/2023

Project Description

This is an on-going program to overhaul and/or reconstruct the SFMTA's approximately 40 existing cable cars to maintain system reliability and productivity. Cable cars operate on three lines: Powell/Mason, Powell/Hyde, and California. The estimated service life of a cable car is approximately 60-70 years; with a midlife major overhaul scheduled at 30 to 35 years in service and a minor overhaul scheduled for 15 years in service.

The major work is performed at Woods facility's Carpentry Shop and Special Machine Shop, with finish work for the vehicles completed at the Mason Street Cable Car Barn. The reconstruction process takes approximately 18 months and can include replacement or upgrades to all major vehicle components such as trucks, frame, woodwork, glass, roof, and floors. A major overhaul takes about nine months and can include upgrades to the frame and supports, woodwork replacement, metal parts refinishing, roof work, floors, electrical wiring and painting. Minor overhauls take about 6 months to complete and include replacement of any rotted wood, electrical work, and painting.

The SFMTA estimates that approximately one cable car can be rehabilitated with these funds. While this grant funding identifies only one vehicle that can be rebuilt, in actuality, this program relies on multiple fund sources that are combined to fund the overhaul and/or reconstruction of all cable cars, as necessary.

The TIP ID# associated with these grant funds is SF-970073. These are Section 5337 State of Good Repair funds, subject to a match ratio of 80%/20%.

Project Benefits

The purpose of this project is to overhaul the cable car fleet to extend the useful life of the vehicles.

Additional Information

None provided.

Location Description

Project is within the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 12/17/2018

Description: Not Provided

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$1,042,907
Local			\$260,727
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$1,303,634

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
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CA-2019-103-01-01	121-00 (121-A1)	RAIL - ROLLING STOCK	\$1,042,907.00	\$260,727.00	\$1,303,634.00	1
CA-2019-103-01-01		12.14.30 REHAB/REBUILD CABLE CARS	\$1,042,907.00	\$260,727.00	\$1,303,634.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.14.30 - REHAB/REBUILD CABLE CARS

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL - ROLLING STOCK (121-00)	12.14.30	REHAB/REBUILD CABLE CARS	REHAB/REBUILD - RAIL ROLL STOCK	1

Extended Budget Description

Costs to renovate and rehab cable cars.

Will 3rd Party contractors be used to fulfill this activity line item?

No, 3rd Party Contractors will not be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$1,042,907
Local			\$260,727
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$1,303,634

Milestone Name	Est. Completion Date	Description
Project Start Date	1/1/2020	
Project End Date	12/31/2023	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects called categorical exclusions (CEs) which are known not to have, either individually or cumulatively, a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. Class II(c) does not require documentation.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date	Description
	Class IIc CE Approved

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
RAIL - ROLLING STOCK (121-00)	12.14.30	REHAB/REBUILD CABLE CARS	1	\$1,042,907.00	\$1,303,634.00

Project Title: Historic Vehicle Rehabilitation

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2019-103-02-01	1697-2019-2-P2	11/4/2021	1/1/2020	12/31/2027

Project Description

These funds provide for the on-going, phased rehabilitation of the SFMTA’s Historic Rail Car fleet. The historic streetcar fleet is a collection of electric rail vehicles from the U.S. and around the world used on the F-Market and Fisherman Wharf routes. Due to their historic nature, the streetcar fleet is not replaced on a regular schedule, making a program of regular rehabilitation critical to the long-term operation of the fleet. The SFMTA provides for the rehabilitation program with funding from prior years and this year’s grant. The work involves rehabilitating the historic streetcars to like-new condition, including upgrading electrical and mechanical systems, body work, and ensuring systems meet CPUC and ADA requirements.

The TIP ID# associated with these grant funds is SF-170021. These are Section 5337 formula funds, subject to a match ratio of 80%/20%.

Project Benefits

Improve safe and reliable services, and extend the life span of historic streetcars.

Additional Information

None provided.

Location Description

This project is within the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
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060060

San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 12/17/2018

Description: Not Provided

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$8,000,000
Local			\$2,000,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$10,000,000

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2019-103-02-01	121-00 RAIL - ROLLING STOCK (121-A2)	\$8,000,000.00	\$2,000,000.00	\$10,000,000.00	1

CA-2019-103-02-01	12.14.26	COMMUTER RAIL CARS USED	\$8,000,000.00	\$2,000,000.00	\$10,000,000.00	1
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Project Budget Activity Line Items

Budget Activity Line Item: 12.14.26 - COMMUTER RAIL CARS USED

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL - ROLLING STOCK (121-00)	12.14.26	COMMUTER RAIL CARS USED	REHAB/REBUILD - RAIL ROLL STOCK	1

Extended Budget Description

Costs to rehab historic street cars.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$8,000,000
Local			\$2,000,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$10,000,000

Milestone Name	Est. Completion Date	Description
RFP/IFB Issue Date	1/1/2020	
Contract Completion Date	12/31/2027	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects called categorical exclusions (CEs) which are known not to have, either individually or cumulatively, a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. Class II(c) does not require documentation.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date Description	Date
Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
RAIL - ROLLING STOCK (121-00)	12.14.26	COMMUTER RAIL CARS USED	1	\$8,000,000.00	\$10,000,000.00

Project Title: Rail Replacement
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Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2019-103-03-01	1697-2019-2-P3	11/4/2021	1/1/2020	12/31/2027

Project Description

The Rail Replacement Program is an on-going program of phased replacement of sections of rail on the Light Rail or Cable Car systems. Sections of rail to be replaced are prioritized based on their potential for failure and derailments, the amount of noise and vibration experienced at surrounding structures, and to complement related projects by other city departments. Part of the design process for each re-railing project will include incorporating, as needed, accessibility features and critical track equipment. Rail grinding will also be performed, as needed. This program enhances system reliability and productivity and helps reduce operational problems.

Replacement rail is of higher strength and durability than the existing rail, and usually installed via the direct fixation method rather than tie and ballast to reduce vibration and decrease maintenance costs. The rail that is replaced would have reached or be close to reaching the end of its useful life.

The program allows for a systematic replacement cycle on average of about 35 years for most segments of the rail system. Rail replacement projects are organized in two ways: 1) a corridor wide replacement; or 2) the selected replacement of particularly vulnerable sections of curved rail and special work (track switches) which tend to wear out much faster than straight track. Corridor wide projects replace 1-2 miles of tangent (straight) track and any special work in that area. These projects are normally coordinated with the work of other City departments and utilities to upgrade the entire infrastructure along that corridor. One major corridor project is started about every four years and takes about 3 to 4 years to complete (including design). At least one project to replace selected portions of curved rail/special work will be under construction every year until the most problematic areas are all replaced.

Major existing projects include:

Special Trackwork Replacement in Subway: Replace track infrastructure in the subway at Castro, Duboce, Van Ness and Embarcadero stations. This includes replacing the double crossover at Castro, track left and track right turnouts at Duboce, double crossover and storage track turnout at Van Ness,

and double crossover at Embarcadero. The project will also upgrade the old tie support system to a new support system that is less vulnerable to water exposure.

M-Ocean View Track Replacement at 19th Ave. and Rossmoor Drive: Replace curved tracks crossing 19th Avenue (Caltrans) and Rossmoor Drive and additional tangent track up to Monte Vista Drive; replace two concrete OCS poles; upgrade traffic signal and install train detection to fully actuate the intersection; accessibility upgrades at track crossing including curb ramps crossing Rossmoor; safety and accessibility upgrades for the north crosswalk at Junipero Serra Blvd which includes a relocation of the pedestrian refuge area and signal modification.

L Taraval OCS and Track Replacement Project: Replace about 23,000 track feet of existing tie and ballast paved track along the L-Taraval between Forrest Side Avenue near West Portal to La Playa; replace worn OCS special work, trolley wire and trolley poles west of 15th Ave./Taraval St. In conjunction with the project, the SFMTA will incorporate Muni Forward changes to improve safety and reliability, and reduce travel time between Ulloa/15th and Taraval/46th. Muni Forward components include removing/relocating transit stops and stop signs; adding traffic calming medians, providing traffic signals with transit priority, installing transit and pedestrian bulbs, adding or modifying boarding islands and accessible platforms; painting transit-only lanes, reconstructing curb ramps, and relocating catch basins. Also, in coordination with the project, SFPUC will replace sewers at various locations; SFWD will install water mains on each side of the Muni tracks, and Public Works will restore pavement at locations not covered by the track, sewer, and water replacement scope of work.

Rail Grinding Project: Perform rail grinding to reduce both wheel wear on rolling stock and the likelihood of failure with welds, which are vulnerable to wheel impacts from cupping of the weld on the head of the rail. A high percentage of rails in the Muni Metro Tunnel and the Twin Peaks Tunnel are showing uneven wear. The useful life of the rail can be extended by rail grinding which can eliminate cupping at the welds and other forms of differential wear. Phase 1 shall address rail grinding from and including Castro Station to and including Embarcadero Station inside the Muni Metro Tunnel.

The TIP ID# associated with these grant funds is SF-95037B. These are Section 5337 funds requiring a match ratio of 80/20%.

Project Benefits

The program will enhance system safety, reliability and reduce the need for excess maintenance.

Additional Information

None provided.

Location Description

This project is located within the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 6/6/2019

Description: Not Provided

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$16,736,000
Local			\$4,184,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$20,920,000

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2019-103-03-01	122-00 RAIL TRANSITWAY LINES (122-A3)	\$16,736,000.00	\$4,184,000.00	\$20,920,000.00	1
CA-2019-103-03-01	12.24.03 REHAB/RENOV LINE EQUIP/STRUCTURES	\$16,736,000.00	\$4,184,000.00	\$20,920,000.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.24.03 - REHAB/RENOV LINE EQUIP/STRUCTURES				
Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity

RAIL TRANSITWAY
LINES (122-00)

12.24.03

REHAB/RENOV LINE
EQUIP/STRUCTURES

REHAB/RENOVATION 1

Extended Budget Description

Entry is for estimated costs to replace rail used beyond its useful life.

Will 3rd Party contractors be used to fulfill this activity line item?

No, 3rd Party Contractors will not be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$16,736,000
Local			\$4,184,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$20,920,000

Milestone Name	Est. Completion Date	Description
Start Date	1/1/2020	
End Date	12/31/2027	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects called categorical exclusions (CEs) which are known not to have, either individually or cumulatively, a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. Class II(c) does not require documentation.

Categorical Exclusion Description

Type 08: Maintenance, rehabilitation, and reconstruction of facilities that occupy substantially the same geographic footprint and do not result in a change in functional use, such as: improvements to bridges, tunnels, storage yards, buildings, stations, and terminals; construction of platform extensions, passing track, and retaining walls; and improvements to tracks and railbeds.

Date	Description	Date
	Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
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RAIL TRANSITWAY LINES (122-00)	12.24.03	REHAB/RENOV LINE EQUIP/ STRUCTURES	1	\$16,736,000.00	\$20,920,000.00
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Project Title: Overhead Lines Rehabilitation

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2019-103-04-01	1697-2019-2-P4	11/4/2021	1/1/2020	12/31/2027

Project Description

The Overhead Lines Rehabilitation Program is an ongoing phased replacement and upgrade of the traction power system that provides 615 volt D.C. current for the SFMTA's fleet of trolley coaches, light rail vehicles, and historic streetcars. This includes, but is not limited to, overhead contact wire, guy wire, special work (switches/curves/crossings), confirmer lights, and the support poles for the overhead system, as well as upgrades of feeders and substation equipment/structures required in conjunction with various overhead upgrades.

The work is generally grouped into 3 types of projects:

- 1) The overhead corridor projects consist of the replacement and upgrade of much of the overhead wire system, special work, and poles on a line or lines in close geographical proximity. A typical corridor project will involve selective replacement of about 1-3 miles of overhead wire, replacement and upgrade to current standards of 4-5 special work intersections and replacement of about 150 poles. The elements replaced would have reached or be close to the end of their useful life. One of these projects is constructed approximately every two years.

- 2) The feeder /substation projects involve a coordinated upgrade of substation equipment (circuit breakers/transformers) and feeder capacity in the street at selected locations. A study of the citywide capacity of this system relative to the new schedules generated by the Transit Effectiveness Project is also part of the overhead program.

- 3) The replacement and upgrade of much of the overhead wire system, poles/supports and associated controls within a facility that dispatches trolley coaches, light rail vehicles, and historic streetcars.

The TIP ID # associated with these grant funds is SF-970170. These are Section 5337 funds requiring a match ratio of 80%/20%.

Project Benefits

The projects included in this program are designed to reduce operational problems, reduce maintenance and increase system reliability, provide flexibility in addressing acute needs, and address areas of chronic service outages or emergency repairs.

Additional Information

None provided.

Location Description

This project is located within the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 6/6/2019

Description: Not Provided

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$20,000,000
Local			\$5,000,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$25,000,000

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2019-103-04-01	115-00 ELECTRIFICATION/POWER DIST (BUS) (115-A4)	\$20,000,000.00	\$5,000,000.00	\$25,000,000.00	1
CA-2019-	11.54.20 REHAB/ RENOV MISC ELECT	\$20,000,000.00	\$5,000,000.00	\$25,000,000.00	1

103-04-01	POWER DISTRIB EQUIPMENT
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Project Budget Activity Line Items

Budget Activity Line Item: 11.54.20 - REHAB/RENOV MISC ELECT POWER DISTRIB EQUIPMENT

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
ELECTRIFICATION/POWER DIST (BUS) (115-00)	11.54.20	REHAB/RENOV MISC ELECT POWER DISTRIB EQUIPMENT	REHAB/RENOVATATION	1

Extended Budget Description

This cost covers rehab work on the overhead electrical lines.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$20,000,000
Local			\$5,000,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$25,000,000

Milestone Name	Est. Completion Date	Description
Start Date	1/1/2020	
End Date	12/31/2027	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects called categorical exclusions (CEs) which are known not to have, either individually or cumulatively, a significant environmental impact on the human or natural environment

and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. Class II(c) does not require documentation.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date	Description
	Class IIc CE Approved

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
ELECTRIFICATION/POWER DIST (BUS) (115-00)	11.54.20	REHAB/ RENOV MISC ELECT POWER DISTRIB EQUIPMENT	1	\$20,000,000.00	\$25,000,000.00

Project Title: Wayside/Central Train Control & Trolley Signal Systems Rehab

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2019-103-05-01	1697-2019-2-P5	11/4/2021	1/1/2020	12/31/2026

Project Description

This on-going program consists of various projects to ensure that all command and control systems for safe and efficient operation of fixed guideway rail transit lines remain in supported and up-to-date industry configurations, and in a good state of repair. Current projects include:

ATCS Final Cut Over - Remove the conventional train control (legacy) redundancy system to be fully controlled by the Automatic Train Control System (ATCS) at five interlock locations (West Portal, Duboce, Castro, Van Ness and Embarcadero).

ATCS SMC Software Platform Upgrade - Upgrade the hardware and software of the System Management Center (SMC), a subsystem of the Advanced Train Control System (ATCS). In addition, this project will replace certain train management functionality that will be lost when the existing legacy train control system is removed.

The TIP ID# associated with these grant funds is SF-050024. These are Section 5337 Funds requiring a match ratio of 80%/20%.

Project Benefits

Replace existing train control and signal system at various locations to increase protection for transit vehicles from auto traffic, reduce derailments and travel time, and improve safety, reliability, and maintainability of the system.

Additional Information

None provided.

Location Description

This project is located within the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 6/6/2019

Description: Not Provided

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$8,640,000
Local			\$2,160,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0

Total Eligible Cost	\$10,800,000
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Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2019-103-05-01	122-00 RAIL TRANSITWAY LINES (122-A5)	\$8,640,000.00	\$2,160,000.00	\$10,800,000.00	1
CA-2019-103-05-01	12.24.03 REHAB/RENOV LINE EQUIP/STRUCTURES	\$8,640,000.00	\$2,160,000.00	\$10,800,000.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.24.03 - REHAB/RENOV LINE EQUIP/STRUCTURES
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Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL TRANSITWAY LINES (122-00)	12.24.03	REHAB/RENOV LINE EQUIP/STRUCTURES	REHAB/RENOVATION	1

Extended Budget Description

Costs for wayside train control and trolley signal systems rehab.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$8,640,000
Local			\$2,160,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$10,800,000

Milestone Name	Est. Completion Date	Description
Start Date	1/1/2020	

End Date	12/31/2026
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Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects called categorical exclusions (CEs) which are known not to have, either individually or cumulatively, a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. Class II(c) does not require documentation.

Categorical Exclusion Description

Type 08: Maintenance, rehabilitation, and reconstruction of facilities that occupy substantially the same geographic footprint and do not result in a change in functional use, such as: improvements to bridges, tunnels, storage yards, buildings, stations, and terminals; construction of platform extensions, passing track, and retaining walls; and improvements to tracks and railbeds.

Date	Description
	Class IIc CE Approved

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
RAIL TRANSITWAY LINES (122-00)	12.24.03	REHAB/RENOV LINE EQUIP/ STRUCTURES	1	\$8,640,000.00	\$10,800,000.00

Project Title: Cable Car Infrastructure Rehabilitation

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2019-103-06-01	1697-2019-2-P6	11/4/2021	1/1/2020	12/31/2025

Project Description

Funding is used for ongoing improvements to the guideway system and infrastructure projects throughout the SFMTA's cable car system. Projects include structural, mechanical and other improvements along with replacement/rehabilitation of fixed guideway infrastructure and components of the cable car system.

Major existing projects are:

Cable Car Curved Track Replacement Project: The project will replace three special track components (frogs); construct three new corner bulb-outs and one mid-block bulb-out; install additional electrical conduits for future traffic signals; improve track drainage for cable car track way.

Cable Car Gearbox Rehabilitation Project: Overhaul and refurbish all cable car gearboxes presently in use at the Cable Car Barn, as well as the spare unit presently in storage at 1580 Burke Street. The work includes replacing all wear and tear parts, primarily bearings, seals, and gaskets. Additional inspection of gears, shafts and other parts will be performed during gearbox tear down, and replaced as needed.

The TIP ID# associated with these grant funds is SF-99T002. These are Section 5337 funds requiring a match ratio of 80%/20%.

Project Benefits

The purpose of the project is to maintain efficient and reliable cable car operations.

Additional Information

None provided.

Location Description

This project is located within the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 6/6/2019

Description: Not Provided

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$4,000,000
Local			\$1,000,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0

Adjustment		\$0
Total Eligible Cost		\$5,000,000

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2019-103-06-01	122-00 RAIL TRANSITWAY LINES (122-A6)	\$4,000,000.00	\$1,000,000.00	\$5,000,000.00	1
CA-2019-103-06-01	12.24.20 REHAB/RENOV MISC RAIL EQUIPMENT	\$4,000,000.00	\$1,000,000.00	\$5,000,000.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.24.20 - REHAB/RENOV MISC RAIL EQUIPMENT

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL TRANSITWAY LINES (122-00)	12.24.20	REHAB/RENOV MISC RAIL EQUIPMENT	REHAB/RENOVATION	1

Extended Budget Description

This cost is for cable car system infrastructure rehab costs.

Will 3rd Party contractors be used to fulfill this activity line item?

No, 3rd Party Contractors will not be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$4,000,000
Local			\$1,000,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$5,000,000

Milestone Name	Est. Completion Date	Description
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Start Date	1/1/2020
End Date	12/31/2025

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects called categorical exclusions (CEs) which are known not to have, either individually or cumulatively, a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. Class II(c) does not require documentation.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date	Description
	Class IIc CE Approved

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
RAIL TRANSITWAY LINES (122-00)	12.24.20	REHAB/RENOV MISC RAIL EQUIPMENT	1	\$4,000,000.00	\$5,000,000.00

Project Title: Wayside Fare Collection Equipment

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2019-103-07-01	1697-2019-2-P7	11/4/2021	10/1/2019	12/31/2022

Project Description

This project replaces existing technically-obsolete fare collection systems with new state-of-the-art fare collection system. Funds will be used to procure and install faregates and ticket vending machines for the SFMTA's Muni Metro light rail system, install new control panels and displays for booth agents; and implement a central control data collection system. Funding may also be used to replace technically-obsolete fareboxes on the light rail vehicles and other transit vehicles.

The SFMTA is currently initiating the replacement of its 25-year-old fareboxes on its motor coaches, electric trolley coaches, light rail vehicles and historic streetcars with modern fare machines. Major elements of the project include: (a) Fareboxes, (b) a Revenue Transfer and Collection System, which includes mobile bins to collect revenues, (c) Ancillary Field Equipment for servicing fareboxes when vehicles are in revenue service and not in the divisions, and (d) a Data Collection and Reporting System, to track individual fare transactions and support analyses of farebox revenues.

The SFMTA currently is not pursuing new cash/credit card ticket vending machines at on-street transit stops, but will instead focus on increasing customer adoption of mobile payment options.

Allocation of this funding will improve transit operations by increasing passenger loading efficiency, reducing waste, and helping to improve security.

The TIP ID# associated with these grant funds is SF-030013. These are Section 5337 funds requiring a match ratio of 80%/20%.

Project Benefits

To replace fare collection equipment that has exceeded its useful life.

Additional Information

None provided.

Location Description

This project is located within the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 6/6/2019

Description: Not Provided

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$2,000,000
Local			\$500,000
Local/In-Kind			\$0

State		\$0
State/In-Kind		\$0
Other Federal		\$0
Transportation Development Credit		\$0
Adjustment		\$0
Total Eligible Cost		\$2,500,000

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2019-103-07-01	124-00 (124-A7) SUPPORT EQUIP/FACILITIES (RAIL)	\$2,000,000.00	\$500,000.00	\$2,500,000.00	1
CA-2019-103-07-01	12.42.20 PURCHASE - MISC EQUIPMENT	\$2,000,000.00	\$500,000.00	\$2,500,000.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.42.20 - PURCHASE - MISC EQUIPMENT

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
SUPPORT EQUIP/FACILITIES (RAIL) (124-00)	12.42.20	PURCHASE - MISC EQUIPMENT	ACQUISITION	1

Extended Budget Description

Entry is estimated cost to replace wayside fare collection equipment.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$2,000,000
Local			\$500,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0

Total Eligible Cost	\$2,500,000
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Milestone Name	Est. Completion Date	Description
Start Date	10/1/2019	
End Date	12/31/2022	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects called categorical exclusions (CEs) which are known not to have, either individually or cumulatively, a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. Class II(c) does not require documentation.

Categorical Exclusion Description

Type 08: Maintenance, rehabilitation, and reconstruction of facilities that occupy substantially the same geographic footprint and do not result in a change in functional use, such as: improvements to bridges, tunnels, storage yards, buildings, stations, and terminals; construction of platform extensions, passing track, and retaining walls; and improvements to tracks and railbeds.

Date Description	Date
Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
SUPPORT EQUIP/FACILITIES (RAIL) (124-00)	12.42.20	PURCHASE - MISC EQUIPMENT	1	\$2,000,000.00	\$2,500,000.00

Project Title: Station Area Pedestrian and Bicycle Access Improvements

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2019-103-08-01	1697-2019-2-P8	11/4/2021	1/1/2020	12/31/2023

Project Description

Funding will be used for citywide improvements within fixed guideway station areas aimed at improving pedestrian and bicycle access to the transportation stop/station. Improvements may include pedestrian bulb-outs, bicycle parking, bicycle street infrastructure.

The TIP ID# associated with these funds is SF-170006. These are Section 5337 funds, requiring a match ratio of 80%/20%.

Project Benefits

Provide more space to pedestrians, bicyclists, and transit patrons. Reduce negative impact to Muni bus operations. Improve safety to pedestrians and bicyclists.

Additional Information

None provided.

Location Description

This project is located within the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 6/6/2019

Description: Not Provided

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$1,000,000
Local			\$250,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$1,250,000

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2019-103-08-01	129-00 Fixed Guideway Associated Transit Improvements (129-A8)	\$1,000,000.00	\$250,000.00	\$1,250,000.00	1
CA-2019-103-08-01	12.93.05 CONSTRUCT PED ACCESS / WALKWAYS	\$1,000,000.00	\$250,000.00	\$1,250,000.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.93.05 - CONSTRUCT PED ACCESS / WALKWAYS

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
Fixed Guideway Associated Transit Improvements (129-00)	12.93.05	CONSTRUCT PED ACCESS / WALKWAYS	CONSTRUCTION	1

Extended Budget Description

This entry is for estimated construction costs for station area pedestrian access and walkways.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$1,000,000
Local			\$250,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$1,250,000

Milestone Name	Est. Completion Date	Description
Start Date	1/1/2020	
End Date	12/31/2023	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects called categorical exclusions (CEs) which are known not to have, either individually or cumulatively, a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. Class II(c) does not require documentation.

Categorical Exclusion Description

Type 12: Projects, as defined in 23 U.S.C. 101, that would take place entirely within the existing operational right-of-way. Existing operational right-of-way refers to right-of-way that has been disturbed for an existing transportation facility or is maintained for a transportation purpose. This area includes the features associated with the physical footprint of the transportation facility (including the roadway, bridges, interchanges, culverts, drainage, fixed guideways, mitigation areas, etc.) and other areas maintained for transportation purposes such as clear zone, traffic control signage, landscaping, any rest areas with direct access to a controlled access highway, areas maintained for safety and security of a transportation facility, parking facilities with direct access to an existing transportation facility, transit power substations, transit venting structures, and transit maintenance facilities. Portions of the right-of-way that have not been disturbed or that are not maintained for transportation purposes are not in the existing operational right-of-way.

Date Description	Date
Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
Fixed Guideway Associated Transit Improvements (129-00)	12.93.05	CONSTRUCT PED ACCESS / WALKWAYS	1	\$1,000,000.00	\$1,250,000.00

Project Title: L Taraval Improvement Project SGR

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2019-103-09-01	1697-2019-2-P9	11/4/2021	3/31/2014	2/28/2025

Project Description

Along L Taraval Line from Forrest Side Ave near West Portal to La Playa: Replace approximately 23,000 track feet of existing tie and ballast paved track with a new direct fixation track, new rails and fastening systems. Replace worn Overhead Catenary System special work, trolley wire and trolley poles west of 15th Avenue/Taraval Street.

Project Benefits

The L Taraval light rail line, part of Muni's Rapid Network, provides an important connection between the Sunset/Parkside district and downtown San Francisco and carries over 33,000 daily riders.

Additional Information

None provided.

Location Description

This project is located within the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: Not Provided

Description: Final federal approval is pending.

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$4,070,000
Local			\$1,017,500
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$5,087,500

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
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CA-2019-103-09-01	122-00 (122-B4)	RAIL TRANSITWAY LINES	\$4,070,000.00	\$1,017,500.00	\$5,087,500.00	1
CA-2019-103-09-01	12.24.03	REHAB/ RENOV LINE EQUIP/ STRUCTURES	\$4,070,000.00	\$1,017,500.00	\$5,087,500.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.24.03 - REHAB/RENOV LINE EQUIP/STRUCTURES
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Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL TRANSITWAY LINES (122-00)	12.24.03	REHAB/RENOV LINE EQUIP/STRUCTURES	REHAB/RENOVATION	1

Extended Budget Description

This entry covers the estimated cost of rail replacement along the L Taraval Line.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$4,070,000
Local			\$1,017,500
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$5,087,500

Milestone Name	Est. Completion Date	Description
Start Date	3/31/2014	
End Date	2/28/2025	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects called categorical exclusions (CEs) which are known not to have, either individually or cumulatively, a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. Class II(c) does not require documentation.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date	Description
	Class IIc CE Approved

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
RAIL TRANSITWAY LINES (122-00)	12.24.03	REHAB/RENOV LINE EQUIP/STRUCTURES	1	\$4,070,000.00	\$5,087,500.00

Project Title: Muni Metro East Facility Boiler Replacement

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2019-103-10-01	1697-2019-2-P10	11/4/2021	9/1/2018	12/31/2023

Project Description

At the Muni Metro East Facility: Replace the boiler and air-conditioning units with more modern, efficient, technologically improved ones. The existing heating boiler and two roof-mounted air conditioning units has failed and their warranty period has expired. The scope of the work will include the assessment, and replacement as necessary, of piping system components relating to the boiler and air conditioning units.

Project Benefits

The Muni Metro East (MME) site is a strategic and critical location for storage and maintenance of Light Rail Vehicles (LRV) and this project maintains this facility in a state of good repair.

Additional Information

None provided.

Location Description

This project is located within the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: Not Provided

Description: Final federal approval is pending.

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$4,100,000
Local			\$1,025,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$5,125,000

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2019-103-10-01	124-00 (124-A9) SUPPORT EQUIP/FACILITIES (RAIL)	\$4,100,000.00	\$1,025,000.00	\$5,125,000.00	1
CA-2019-103-10-01	12.42.06 PURCHASE - RAIL SHOP EQUIPMENT	\$4,100,000.00	\$1,025,000.00	\$5,125,000.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.42.06 - PURCHASE - RAIL SHOP EQUIPMENT

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
SUPPORT EQUIP/FACILITIES (RAIL) (124-00)	12.42.06	PURCHASE - RAIL SHOP EQUIPMENT	ACQUISITION	1

Extended Budget Description

This entry is the estimated cost to purchase and replace the facility boiler.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$4,100,000
Local			\$1,025,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$5,125,000

Milestone Name	Est. Completion Date	Description
Start Date	9/1/2018	
End Date	12/31/2023	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects called categorical exclusions (CEs) which are known not to have, either individually or cumulatively, a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. Class II(c) does not require documentation.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers

that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date	Description
	Class IIc CE Approved

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
SUPPORT EQUIP/FACILITIES (RAIL) (124-00)	12.42.06	PURCHASE - RAIL SHOP EQUIPMENT	1	\$4,100,000.00	\$5,125,000.00

Project Title: Van Ness SGR

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2019-103-11-01	1697-2019-2-P11	11/4/2021	12/31/2007	12/31/2023

Project Description

These FTA funds will be used exclusively to replace existing overhead lines as part of regular required maintenance and repair to keep the system in a state of good repair. The overhead line replacement is being integrated and coordinated with the larger Van Ness BRT Project.

FY 19 §5337 funds will be directed to SGR upgrades.

Project Benefits

To improve bus operations on the Van Ness corridor by reducing travel times, improving reliability, and minimizing the impact of traffic congestion on operations.

Additional Information

None provided.

Location Description

This project is located within the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: Not Provided

Description: Final federal approval is pending.

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$1,830,000
Local			\$457,500
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$2,287,500

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2019-103-11-01	112-00 (112-B1) BUS TRANSITWAYS/LINES	\$1,830,000.00	\$457,500.00	\$2,287,500.00	1
CA-2019-103-11-01	11.24.01 REHAB/RENOVATE - BUSWAY	\$1,830,000.00	\$457,500.00	\$2,287,500.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 11.24.01 - REHAB/RENOVATE - BUSWAY				
Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity

BUS REHAB/ REHABILITATION/RENOVATION -
 TRANSITWAYS/LINES 11.24.01 RENOVATE - BUS TRANSITWAY LINES 1
 (112-00) BUSWAY

Extended Budget Description

This entry is for the planned Van Ness BRT SGR project costs.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$1,830,000
Local			\$457,500
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$2,287,500

Milestone Name	Est. Completion Date	Description
Start Date	12/31/2007	
End Date	12/31/2023	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects called categorical exclusions (CEs) which are known not to have, either individually or cumulatively, a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. Class II(c) does not require documentation.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date Description	Date
Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
BUS TRANSITWAYS/LINES (112-00)	11.24.01	REHAB/ RENOVATE - BUSWAY	1	\$1,830,000.00	\$2,287,500.00

<p>Project Title: Fixed Guideway Facilities Condition Assessment Implementation Projects</p>

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2019-103-12-01	1697-2019-2-P12	11/4/2021	7/31/2016	8/31/2025

Project Description

Facilities Systemwide: Implement Facilities Deferred Maintenance Program repairs to address backlogged State of Good Repair investments on Fixed Guideway Facilities. These investments build on the agency's commitment to keeping its Fixed Guideway Facilities Assets in a State of Good Repair.

The 5337 SGR funds will specifically be used to do repairs and maintenance on the Fixed Guideway Facilities.

Project Benefits

The SFMTA's facilities are the most varied and old of all the transit operators in the Bay Area including the Fixed Guideway Facilities. Maintaining SFMTA's Fixed Guideway Facilities transportation assets in a state of good repair is key to keeping the aged facilities running efficiently, and thereby maintaining transit service levels across San Francisco.

Additional Information

None provided.

Location Description

This project is located within the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: Not Provided

Description: Final federal approval is pending.

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$900,000
Local			\$225,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$1,125,000

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2019-103-12-01	114-00 (114-B3) BUS: SUPPORT EQUIP AND FACILITIES	\$900,000.00	\$225,000.00	\$1,125,000.00	1
CA-2019-103-12-01	11.44.02 REHAB/RENOVATE - MAINTENANCE FACILITY	\$900,000.00	\$225,000.00	\$1,125,000.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 11.44.02 - REHAB/RENOVATE - MAINTENANCE FACILITY				
Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
BUS: SUPPORT EQUIP AND FACILITIES (114-00)	11.44.02	REHAB/RENOVATE - MAINTENANCE FACILITY	REHAB/RENOVATE BUS SUPPORT FACIL/EQUIP	1

Extended Budget Description

This entry records estimated cost to perform planned rehab on bus equipment and facilities.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$900,000
Local			\$225,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$1,125,000

Milestone Name	Est. Completion Date	Description
Start Date	7/31/2016	
End Date	8/31/2025	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects called categorical exclusions (CEs) which are known not to have, either individually or cumulatively, a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. Class II(c) does not require documentation.

Categorical Exclusion Description

Type 08: Maintenance, rehabilitation, and reconstruction of facilities that occupy substantially the same geographic footprint and do not result in a change in functional use, such as: improvements to bridges, tunnels, storage yards, buildings, stations, and terminals; construction of platform extensions, passing track, and retaining walls; and improvements to tracks and railbeds.

Date	Description	Date
	Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
BUS: SUPPORT EQUIP AND FACILITIES (114-00)	11.44.02	REHAB/RENOVATE - MAINTENANCE FACILITY	1	\$900,000.00	\$1,125,000.00

Project Title: LRV Replacement

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2019-103-13-01	1697-2019-2-P13	11/4/2021	1/1/2013	12/31/2023

Project Description

FTA §5337 funds are exclusively for replacement vehicles.

Fleet-wide: Procure 219 light rail vehicles to replace existing fleet. The contract with Siemens calls for an array of replacement vehicles. State-of-the-art vehicles will be equipped with innovative safety features, improved passenger amenities, and modern information systems.

Project Benefits

Replacement vehicles will maintain system state of good repair.

Additional Information

None provided.

Location Description

This project is located within the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: Not Provided

Description: Final federal TIP approval is pending.

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$13,220,000

Local			\$3,305,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$16,525,000

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2019-103-13-01	121-00 (121-B2) RAIL - ROLLING STOCK	\$13,220,000.00	\$3,305,000.00	\$16,525,000.00	4
CA-2019-103-13-01	12.12.20 LIGHT RAIL CARS	\$13,220,000.00	\$3,305,000.00	\$16,525,000.00	4

Project Budget Activity Line Items

Budget Activity Line Item: 12.12.20 - LIGHT RAIL CARS

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL - ROLLING STOCK (121-00)	12.12.20	LIGHT RAIL CARS	PURCHASE - REPLACE RAIL ROLLING STOCK	4

Extended Budget Description

Replace LRVs

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$13,220,000
Local			\$3,305,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0

Transportation Development Credit	\$0
Adjustment	\$0
Total Eligible Cost	\$16,525,000

Milestone Name	Est. Completion Date	Description
Start Date	1/1/2013	
End Date	12/31/2023	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects called categorical exclusions (CEs) which are known not to have, either individually or cumulatively, a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. Class II(c) does not require documentation.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date	Description	Date
	Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
RAIL - ROLLING STOCK (121-00)	12.12.20	LIGHT RAIL CARS	4	\$13,220,000.00	\$16,525,000.00

Part 4: Fleet Details

Fleet Type: Paratransit

Fleet Comments

The paratransit fleet consists of 151 vehicles.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	125

	B. Spares	25
	C. Total (A+B)	150
	D. Spare Ratio (B/A)	20%
II.	Inactive Fleet	
	A. Other	1
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	150

Fleet Type: Commuter Rail

Fleet Comments

This report represents the Historic vehicle fleet status.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	23
	B. Spares	18
	C. Total (A+B)	41
	D. Spare Ratio (B/A)	78.26%
II.	Inactive Fleet	
	A. Other	7
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	41

Fleet Type: Light Rail

Fleet Comments

SFMTA's current revenue fleet is 217.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	173
	B. Spares	44
	C. Total (A+B)	217
	D. Spare Ratio (B/A)	25.43%
II.	Inactive Fleet	
	A. Other	0
	B. Pending Disposal	0
	C. Total (A+B)	0

III.	Total (I.C and II.C)	217
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Fleet Type: Fixed Route

Fleet Comments

This category reflects our 40' and 60' Trolley coaches.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	197
	B. Spares	81
	C. Total (A+B)	278
	D. Spare Ratio (B/A)	41.12%
II.	Inactive Fleet	
	A. Other	0
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	278

Fleet Type: Other

Fleet Comments

This category reflects our Motor coaches.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	483
	B. Spares	142
	C. Total (A+B)	625
	D. Spare Ratio (B/A)	29.4%
II.	Inactive Fleet	
	A. Other	0
	B. Pending Disposal	57
	C. Total (A+B)	57
III.	Total (I.C and II.C)	682

Part 5: FTA Review Comments

Application Review Comments

Comment By Alexander Smith

Comment Type	Pre-Award Manager Returns Application
Date	11/30/2021
Comment	At the top of the executive summary, describe the initial grant and how this amendment modifies the grant. For example, we are adding/moving/changing the award of xxxx grant number, containing yyyy dollars for the following purpose.

Comment By Alexander Smith

Comment Type	Pre-Award Manager Returns Application
Date	12/22/2021
Comment	Please see email sent 12/22/21.

Comment By Alexander Smith

Comment Type	Pre-Award Manager Returns Application
Date	7/28/2022
Comment	TAM statement has been added to executive summary.

Application Review Comments

Comment By Mark Lui

Comment Type	Application Details
Date	6/25/2022
Comment	Please see responses to comments and questions on 6/24/22 message to Alex Smith.

Part 6: Agreement

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL TRANSIT ADMINISTRATION**

**GRANT AGREEMENT
(FTA G-29, October 1, 2021)**

On the date the authorized U.S. Department of Transportation, Federal Transit Administration (FTA) official signs this Grant Agreement, FTA has obligated and awarded federal assistance as provided below. Upon execution of this Grant Agreement by the Recipient named below, the Recipient affirms this FTA Award, enters into this Grant Agreement with FTA, and binds its compliance with the terms of this Grant Agreement.

The following documents are incorporated by reference and made part of this Grant Agreement:

- (1) "Federal Transit Administration Master Agreement," FTA MA(29), <http://www.transit.dot.gov>,
- (2) The Certifications and Assurances applicable to the FTA Award that the Recipient has selected and provided to FTA, and
- (3) Any Award notification containing special conditions or requirements, if issued.

WHEN THE TERM "FTA AWARD" OR "AWARD" IS USED, EITHER IN THIS GRANT AGREEMENT OR THE APPLICABLE MASTER AGREEMENT, "AWARD" ALSO INCLUDES ALL TERMS AND CONDITIONS SET FORTH IN THIS GRANT AGREEMENT.

FTA OR THE FEDERAL GOVERNMENT MAY WITHDRAW ITS OBLIGATION TO PROVIDE FEDERAL ASSISTANCE IF THE RECIPIENT DOES NOT EXECUTE THIS GRANT AGREEMENT WITHIN 90 DAYS FOLLOWING FTA's AWARD DATE SET FORTH HEREIN.

FTA AWARD

Federal Transit Administration (FTA) hereby awards a Federal Grant as follows:

Recipient Information

Recipient Name: San Francisco, City & County Of

Recipient ID: 1697

UEI:

DUNS: 956617435

Award Information

Federal Award Identification Number: CA-2019-103-01

Award Name: FY2019 State of Good Repair Grant

Award Start Date: 8/22/2019

Original Award End Date: 12/31/2027

Current Award End Date: 12/31/2027

Award Executive Summary: This amendment adds \$13,220,000 of 2021 Fixed Guideway Funds to the SFO UZA in CA-2019-103 for LRV Replacements.

Purpose:
Maintain transit system assets in a state of good repair.

Activities to Be Performed:
Acquisition, construction, improvement and maintenance of facilities and equipment for use in transit, and include capital procurements, rolling stock purchases, design and construction costs, and the force account (personnel) expenditures required to support these capital project activities.

Expected Outcome:
Increased reliability and availability of transit buses, LRVs, and other transit equipment and infrastructure.

Intended Beneficiaries:

People of San Francisco and the greater Bay Area, visitors, and workers will all benefit from the increased reliability of SFMTA transit service.

Subrecipient Activities:

None.

This FY2019 Section 5337 State of Good Repair grant for \$85,538,907 houses thirteen San Francisco Municipal Transportation Agency (SFMTA) transit-related projects.

Allowable capital project costs under this grant follow the guidelines and principles contained in OMB's Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal awards circular (Super Circular). Eligible costs are those associated with the acquisition, construction, improvement and maintenance of facilities and equipment for use in transit, and include capital procurements, rolling stock purchases, design and construction costs, and the force account (personnel) expenditures required to support these capital project activities.

The 5337 funds in this application are included in the investment prioritization section of SFMTA's TAM plan.

Research and Development: This award does not include research and development activities.

Indirect Costs: This award is applying an approved Indirect cost rate(s).

Suballocation Funds: Recipient organization is suballocated these apportioned funds and can apply for and receive these funds directly.

Pre-Award Authority: This award is using Pre-Award Authority.

Award Budget

Total Award Budget: \$106,923,634.00

Amount of Federal Assistance Obligated for This FTA Action (in U.S. Dollars): \$13,220,000.00

Amount of Non-Federal Funds Committed to This FTA Action (in U.S. Dollars): \$3,305,000.00

Total FTA Amount Awarded and Obligated (in U.S. Dollars): \$85,538,907.00

Total Non-Federal Funds Committed to the Overall Award (in U.S. Dollars): \$21,384,727.00

Award Budget Control Totals

(The Budget includes the individual Project Budgets (Scopes and Activity Line Items) or as attached)

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$85,538,907
Local			\$21,384,727
Local/In-Kind			\$0
State			\$0

State/In-Kind		\$0
Other Federal		\$0
Transportation Development Credit		\$0
Adjustment		\$0
Total Eligible Cost		\$106,923,634

(The Transportation Development Credits are not added to the amount of the Total Award Budget.)

U.S. Department of Labor Certification of Public Transportation Employee Protective Arrangements:

DOL Decision: DOL Concur - Certified
DOL Review Date: 7/30/2019
DOL Certification Date: N/A

Amendment 1 DOL Decision: DOL Concur - Certified
Amendment 1 DOL Review Date: 7/26/2022
Amendment 1 DOL Certification Date: 7/26/2022

Special Conditions

There are no special conditions.

FINDINGS AND DETERMINATIONS

By signing this Award on behalf of FTA, I am making all the determinations and findings required by federal law and regulations before this Award may be made.

FTA AWARD OF THE GRANT AGREEMENT

Awarded By:
Ray Tellis
Regional Administrator
FEDERAL TRANSIT ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION
Contact Info: ray.tellis@dot.gov
Award Date: 8/12/2022

EXECUTION OF THE GRANT AGREEMENT

Upon full execution of this Grant Agreement by the Recipient, the Effective Date will be the date FTA or the Federal Government awarded Federal assistance for this Grant Agreement.

By executing this Grant Agreement, the Recipient intends to enter into a legally binding agreement in which the Recipient:

- (1) Affirms this FTA Award,
- (2) Adopts and ratifies all of the following information it has submitted to FTA:
 - (a) Statements,
 - (b) Representations,
 - (c) Warranties,

- (d) Covenants, and
- (e) Materials,
- (3) Consents to comply with the requirements of this FTA Award, and
- (4) Agrees to all terms and conditions set forth in this Grant Agreement.

Executed By:

Mark Lui

Pr Administrative Analyst

San Francisco, City & County Of

8/12/2022

DOT

FTA

U.S. Department of Transportation

Federal Transit Administration

Award

Federal Award Identification Number (FAIN)	CA-2021-119-00
Temporary Application Number	1697-2021-6
Award Name	FY2021 Section 5337 State of Good Repair
Award Status	Active (Executed)
Award Budget Number	0

Period of Performance Start Date	7/23/2021		
Original Period of Performance End Date	12/31/2024		
Current Period of Performance End Date	12/31/2024	Revision #: 0	Approved?: Yes

Part 1: Recipient Information

Name: SAN FRANCISCO, CITY & COUNTY OF

Recipient ID	Recipient OST Type	Recipient Alias	UEI	DUNS
1697	City	San Francisco Municipal Transportation Agency		956617435

Location Type	Address	City	State	Zip
Mailing Address	1 SOUTH VAN NESS AVE 7TH FLOOR	SAN FRANCISCO	CA	94103
Physical Address	1 S VAN NESS AVE	SAN FRANCISCO	CA	94103

Union Information

Union Name	BROTHERHOOD OF LOCOMOTIVE ENGINEERS
Address 1	1370 Ontario Street
Address 2	
City	Cleveland

State	Ohio
Zipcode	44113
Contact Name	D.M. Hahs
Telephone	2162412630
Fax	2162416516
E-mail	hahs@ble-t.org
Website	

Union Name	INT ASSO OF MACHINISTS & AEROSPACE WORKERS
Address 1	9000 Machinists Place
Address 2	
City	Upper Marlboro
State	Maryland
Zipcode	20772
Contact Name	Robert Roach Jr
Telephone	3019674500
Fax	3019674545
E-mail	rroach@IAMAW.org
Website	

Union Name	INT BROTHERHOOD OF ELECTRICAL WORKERS
Address 1	900 Seventh Street
Address 2	
City	Washington
State	DC
Zipcode	20001
Contact Name	Al Russo
Telephone	(202) 728-6018
Fax	
E-mail	railroad_dept@ibew.org
Website	

Union Name	INT FEDERATION OF PROFESSIONAL & TECHNICAL ENGINEERS
Address 1	8630 Fenton Street, Suite 400
Address 2	
City	Silver Spring
State	Maryland
Zipcode	20910
Contact Name	Gregory Junemann
Telephone	3015659016
Fax	3015650018
E-mail	gjunemann@ifpte.org

Website	
Union Name	O'DONNELL, SCHWARTS & ANDERSON
Address 1	1900 L Street, NW, Suite 707
Address 2	
City	Washington
State	District of Columbia
Zipcode	20036
Contact Name	Richard Edelman
Telephone	2028981824
Fax	2024298928
E-mail	redelman@odsalaw.com
Website	
Union Name	SERVICE EMPLOYEES' INTERNATIONAL UNION
Address 1	1313 L Street, NW
Address 2	
City	Washington
State	District of Columbia
Zipcode	20005
Contact Name	Andrew Stern
Telephone	2028983300
Fax	2028983402
E-mail	stern@seiu.org
Website	
Union Name	TRANSPORT WORKERS UNION
Address 1	1700 Broadway, 2nd Floor
Address 2	
City	New York
State	New York
Zipcode	10019
Contact Name	Michael O'Brian
Telephone	2122594900
Fax	2122654537
E-mail	m_o'brien@twu.org
Website	
Union Name	TRANSPORTATION-COMMUNICATIONS INTERNATIONAL UNION
Address 1	3 Research Place
Address 2	
City	Rockville
State	Maryland

Zipcode	20850
Contact Name	Robert Scardelletti
Telephone	3019484911
Fax	3019481369
E-mail	
Website	
Union Name	Smart Transportation Division
Address 1	24950 Country Club Blvd.
Address 2	Ste. 340
City	North Olmsted
State	OH
Zipcode	44070
Contact Name	Jeremy Ferguson
Telephone	(216) 228-9400
Fax	
E-mail	president_td@smart-union.org
Website	

Part 2: Award Information

Title: FY2021 Section 5337 State of Good Repair

FAIN	Award Status	Award Type	Application Cost Center	Date Created	Last Updated Date	From TEAM?
CA-2021-119-00	Active (Executed)	Grant	Region 9	3/15/2021	3/15/2021	No

Award Executive Summary

This FY2021 Section 5337 State of Good Repair grant for \$44,918,308 is for Cable Car Infrastructure, Muni Rail Replacement, Wayside/Central Train Control & Trolley Signal Systems Rehabilitation, and Historic Streetcar & Cable Car Restorations. The required Local Share of \$11,229,577 will be funded with Local Sales Tax revenues.

The funds are allocated to the SFO UZA and are approved by the MTC in the following TIP numbers: SF170021, SF99T002, SF95037B, and SF050024.

Frequency of Milestone Progress Reports (MPR)

Quarterly

Frequency of Federal Financial Reports (FFR)

Quarterly

Does this application include funds for research and/or development activities?

This award does not include research and development activities.

Pre-Award Authority

This award is using Pre-Award Authority.

Does this application include suballocation funds?

Recipient organization is suballocated these apportioned funds and can apply for and receive these funds directly.

Will this Grant be using Lapsing Funds?

No, this Grant does not use Lapsing Funds.

Will indirect costs be applied to this application?

This award is applying an approved Indirect cost rate(s).

Indirect Rate Details: Indirect Rate Details: FTA approved the SFMTA's indirect cost rates for FY2021 and a copy of the SFMTA's approved rates is attached to the SFMTA's Organization Documents. The approved rates of 116.3% for Transit Capital Projects and 67.7% for Sustainable Streets Capital Projects will be applied to the applicable activity line descriptions. Indirect Costs will apply to one or more activities contained within the scope of work.

Requires E.O. 12372 Review

No, this application does not require E.O. 12372 Review.

Delinquent Federal Debt

No, my organization does not have delinquent federal debt.

Award Description

Purpose

None provided.

Activities to be performed:

None provided.

Expected outcomes:

None provided.

Intended beneficiaries:

None provided.

Subrecipient Activities:

None provided.

Award Point of Contact Information

First Name	Last Name	Title	E-mail Address	Phone
	catherine.luu@dot.gov	General Engineer		
	alexander.smith@dot.gov	Transportation Planner		
Mark	Lui	Pr Administrative Analyst	mark.lui@sfmta.com	(415) 646-2516

Award Budget Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$44,918,308
Local			\$11,229,577
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$56,147,885

Award Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2021-119-01-00	124-00 (124-A2) SUPPORT EQUIP/FACILITIES (RAIL)	\$1,617,000.00	\$404,250.00	\$2,021,250.00	1
CA-2021-119-01-00	12.44.20 REHAB/ RENOV - MISC RAIL EQUIPMENT	\$1,617,000.00	\$404,250.00	\$2,021,250.00	1
CA-2021-119-02-00	122-00 (122-A3) RAIL TRANSITWAY LINES	\$7,026,000.00	\$1,756,500.00	\$8,782,500.00	1
CA-2021-119-02-00	12.24.03 REHAB/ RENOV LINE EQUIP/ STRUCTURES	\$7,026,000.00	\$1,756,500.00	\$8,782,500.00	1
CA-2021-119-03-00	126-00 (126-A1) SIGNAL/COMMUNICATION (RAIL)	\$28,931,000.00	\$7,232,750.00	\$36,163,750.00	1
CA-2021-119-03-00	12.63.01 CONSTRUCT TRAIN CONTROL- SIGNAL SYS	\$28,931,000.00	\$7,232,750.00	\$36,163,750.00	1
CA-2021-119-04-00	121-00 (121-A4) RAIL - ROLLING STOCK	\$7,344,308.00	\$1,836,077.00	\$9,180,385.00	1

CA-2021-119-04-00	12.14.26	COMMUTER RAIL CARS USED	\$7,344,308.00	\$1,836,077.00	\$9,180,385.00	1
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Discretionary Allocations

This application does not contain discretionary allocations.

Sources of Federal Financial Assistance

PO Number	Project Number	Scope Name	Scope Number	Scope Suffix	UZA Code	Area Name	Account Class Code	FPC	Description	Amendment Amount	Cumulative Amount
CA-54-0116	CA-2021-119-01-00	SUPPORT EQUIP/FACILITIES (RAIL)	124-00 (124)	A2	060060	San Francisco-Oakland, CA	2021.25.54.38.2	00	SGR - Fixed Guideway	\$1,617,000	\$1,617,000
CA-54-0116	CA-2021-119-02-00	RAIL TRAILWAY LINES	122-00 (122)	A3	060060	San Francisco-Oakland, CA	2021.25.54.38.2	00	SGR - Fixed Guideway	\$7,026,000	\$7,026,000
CA-54-0116	CA-2021-119-03-00	SIGNAL/COMMUNICATION (RAIL)	126-00 (126)	A1	060060	San Francisco-Oakland, CA	2021.25.54.38.2	00	SGR - Fixed Guideway	\$28,931,000	\$28,931,000
CA-54-0116	CA-2021-119-04-00	RAIL - ROLLING STOCK	121-00 (121)	A4	060060	San Francisco-Oakland, CA	2021.25.54.38.2	00	SGR - Fixed Guideway	\$7,344,308	\$7,344,308

Part 3: Project Information

Project Title: Cable Car Infrastructure

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2021-119-01-00	1697-2021-6-P2	3/15/2021	1/1/2022	12/31/2024

Project Description

On the Cable Car System: Includes various guideway and infrastructure repair and improvement projects. Covers all street components of the Cable Car system, such as pulleys, switches and turntables. Replace track curves, frogs, sheaves, Barn 12KV, Switchgear, DC Motor, Mechanical, HVAC, and infrastructure upgrade for the space to comply with latest codes and ADA compliance.

Because this is an ongoing program, projects are in varying stages of conceptual design, design, and construction.

Project Benefits

The purpose of the project is to maintain efficient and reliable Cable Car operations.

Additional Information

None provided.

Location Description

This project will be implemented throughout the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060000	California
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 5/17/2021

Description: Cable Car Infrastructure TIP Approval

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$1,617,000
Local			\$404,250
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$2,021,250

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2021-119-01-00	124-00 (124-A2) SUPPORT EQUIP/FACILITIES (RAIL)	\$1,617,000.00	\$404,250.00	\$2,021,250.00	1
CA-2021-119-01-00	12.44.20 REHAB/RENOV - MISC RAIL EQUIPMENT	\$1,617,000.00	\$404,250.00	\$2,021,250.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.44.20 - REHAB/RENOV - MISC RAIL EQUIPMENT

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
SUPPORT EQUIP/FACILITIES (RAIL) (124-00)	12.44.20	REHAB/RENOV - MISC RAIL EQUIPMENT	REHAB/RENOVATION	1

Extended Budget Description

On the Cable Car System: Includes various guideway and infrastructure repair and improvement projects. Covers all street components of the Cable Car system, such as pulleys, switches and turntables. Replace track curves, frogs, sheaves, Barn 12KV, Switchgear, DC Motor, Mechanical, HVAC, and infrastructure upgrade for the space to comply with latest codes and ADA compliance.

Will 3rd Party contractors be used to fulfill this activity line item?

No, 3rd Party Contractors will not be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$1,617,000
Local			\$404,250
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$2,021,250

Milestone Name	Est. Completion Date	Description
Start Date	1/1/2022	
End Date	12/31/2024	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 08: Maintenance, rehabilitation, and reconstruction of facilities that occupy substantially the same geographic footprint and do not result in a change in functional use, such as: improvements to bridges, tunnels, storage yards, buildings, stations, and terminals; construction of platform extensions, passing track, and retaining walls; and improvements to tracks and railbeds.

Date Description	Date
Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
SUPPORT EQUIP/FACILITIES (RAIL) (124-00)	12.44.20	REHAB/RENOV - MISC RAIL EQUIPMENT	1	\$1,617,000.00	\$2,021,250.00

Project Title: Muni Rail Replacement

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2021-119-02-00	1697-2021-6-P3	3/15/2021	1/1/2022	12/31/2024

Project Description

Systemwide: Design and replacement of trackway and related systems serving the light rail and cable car lines as part of a regular replacement program and to mitigate excessive noise and vibration. The program seeks to rehabilitate and repair existing track work, including replacement and tamping of ties and ballast and installation of guardrail, enhance system safety and reliability, while reducing the need for excessive maintenance. This program is divided into 10 year segments, and work is ongoing on various phases of the program.

Project Benefits

The program will enhance system safety, reliability and reduce the need for excess maintenance.

Additional Information

None provided.

Location Description

This project will be implemented throughout the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
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060000	California
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 5/17/2021

Description: Rail Replacement TIP Approval

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$7,026,000
Local			\$1,756,500
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$8,782,500

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2021-119-02-00	122-00 RAIL TRANSITWAY LINES	\$7,026,000.00	\$1,756,500.00	\$8,782,500.00	1

	(122-A3)					
CA-2021-119-02-00	12.24.03	REHAB/ RENOV LINE EQUIP/ STRUCTURES	\$7,026,000.00	\$1,756,500.00	\$8,782,500.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.24.03 - REHAB/RENOV LINE EQUIP/STRUCTURES
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Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL TRANSITWAY LINES (122-00)	12.24.03	REHAB/RENOV LINE EQUIP/STRUCTURES	REHAB/RENOVATION	1

Extended Budget Description

Systemwide: Design and replacement of trackway and related systems serving the light rail and cable car lines as part of a regular replacement program and to mitigate excessive noise and vibration. The program seeks to rehabilitate and repair existing track work, including replacement and tamping of ties and ballast and installation of guardrail, enhance system safety and reliability, while reducing the need for excessive maintenance.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$7,026,000
Local			\$1,756,500
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$8,782,500

Milestone Name	Est. Completion Date	Description
Start Date	1/1/2022	
End Date	12/31/2024	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 08: Maintenance, rehabilitation, and reconstruction of facilities that occupy substantially the same geographic footprint and do not result in a change in functional use, such as: improvements to bridges, tunnels, storage yards, buildings, stations, and terminals; construction of platform extensions, passing track, and retaining walls; and improvements to tracks and railbeds.

Date	Description
	Class IIc CE Approved

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
RAIL TRANSITWAY LINES (122-00)	12.24.03	REHAB/RENOV LINE EQUIP/STRUCTURES	1	\$7,026,000.00	\$8,782,500.00

Project Title: Wayside/Central Train Control & Trolley Signal Systems Rehabilitation

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2021-119-03-00	1697-2021-6-P4	3/15/2021	1/1/2022	12/31/2024

Project Description

Systemwide: ATCS Wayside/Central Train Control & Rail/Bus Signal Systems Rehab/Replace Program includes but is not limited to (1) Final cutover of the new Advanced Train Control System (ATCS), remove the old signal system, and replace critical wayside equipment including station controllers, axle counters, and loop cables (2) Replace the UPS that provides power to the Central Control portion of the ATCS (3) Replace subway motor generators at Van Ness Station, which includes an Uninterruptible Power Supply (UPS) as backup for the wayside ATCS. (4) The Data Transmission System (DTS) provides remote control from Central Control of subway emergency ventilation fans, and monitors status of subway track switches, signal aspects, train traffic direction, and alarms, including fire and intrusion. The project replaces the deteriorated and obsolete system with a SCADA system and integrates it with other rail SCADA systems operated from Central Control. (5) Purchase a backup system for the Yard Departure Test Device (YDTD) at Muni's Metro Yard to minimize impacts on vehicle availability. (6) Signalize and electrify most switches in the Green Yard to enable control by LRV operators instead of current manual operations for more efficient operations. (7) Replace existing train control and signal system at various locations to increase protection for transit vehicles from auto traffic, reduce derailments and travel time, and improve safety, reliability, and maintainability of the system. (8) Rehab/replace miscellaneous trolley coach signalization systems. Funds in the 2020s will be invested in the ultimate change out of the ATCS with a new Communications-Based Train Control program.

Project Benefits

To rehabilitate or replace elements of the ATCS Wayside Train Control and signal systems once they have reached the end of their useful life.

Additional Information

None provided.

Location Description

This project will be implemented throughout the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060000	California
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 5/17/2021

Description: Train Control & Trolley Signals TIP Approval

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$28,931,000
Local			\$7,232,750
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$36,163,750

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2021-119-03-00	126-00 (126-A1) SIGNAL/COMMUNICATION (RAIL)	\$28,931,000.00	\$7,232,750.00	\$36,163,750.00	1
CA-2021-119-03-00	12.63.01 CONSTRUCT TRAIN CONTROL-SIGNAL SYS	\$28,931,000.00	\$7,232,750.00	\$36,163,750.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.63.01 - CONSTRUCT TRAIN CONTROL-SIGNAL SYS

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
SIGNAL/COMMUNICATION (RAIL) (126-00)	12.63.01	CONSTRUCT TRAIN CONTROL-SIGNAL SYS	CONSTRUCTION	1

Extended Budget Description

To rehabilitate or replace elements of the ATCS Wayside Train Control and signal systems once they have reached the end of their useful life.

Will 3rd Party contractors be used to fulfill this activity line item?

No, 3rd Party Contractors will not be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$28,931,000
Local			\$7,232,750
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$36,163,750

Milestone Name	Est. Completion Date	Description
Start Date	1/1/2022	
End Date	12/31/2024	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)**Class Level Description**

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 08: Maintenance, rehabilitation, and reconstruction of facilities that occupy substantially the same geographic footprint and do not result in a change in functional use, such as: improvements to bridges, tunnels, storage yards, buildings, stations, and terminals; construction of platform extensions, passing track, and retaining walls; and improvements to tracks and railbeds.

Date Description	Date
Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
SIGNAL/COMMUNICATION (RAIL) (126-00)	12.63.01	CONSTRUCT TRAIN CONTROL-SIGNAL SYS	1	\$28,931,000.00	\$36,163,750.00

Project Title: Historic Streetcar & Cable Car Restorations

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2021-119-04-00	1697-2021-6-P5	5/29/2021	1/1/2022	1/1/2025

Project Description

Fleet of historic streetcars: Rehabilitate vehicles. SFMTA operates a fleet of Presidents' Conference Committee streetcars (PCC) and other vintage streetcars 21 hours per day, 365 days a year. The PCCs carries approximately 20,000 people per day from Castro and Market Street along the Embarcadero to Fisherman's wharf. For the current F-Line service and envisioned E-Line service to Mission Bay and Fort Mason, the SFMTA needs to rehabilitate many of its historic streetcars to provide safe and reliable service.

Project Benefits

Improve safe and reliable services, and extend the lifespan of historic streetcars.

Additional Information

None provided.

Location Description

This project will be implemented throughout the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
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060000	California
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 5/17/2021

Description: Historics and Cable Car Restorations TIP Approval

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$7,344,308
Local			\$1,836,077
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$9,180,385

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2021-119-04-00	121-00 RAIL - ROLLING STOCK	\$7,344,308.00	\$1,836,077.00	\$9,180,385.00	1

	(121-A4)					
CA-2021-119-04-00		12.14.26	COMMUTER RAIL CARS USED	\$7,344,308.00	\$1,836,077.00	\$9,180,385.00
						1

Project Budget Activity Line Items

Budget Activity Line Item: 12.14.26 - COMMUTER RAIL CARS USED

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL - ROLLING STOCK (121-00)	12.14.26	COMMUTER RAIL CARS USED	REHAB/REBUILD - RAIL ROLL STOCK	1

Extended Budget Description

Fleet of historic streetcars: Rehabilitate vehicles. SFMTA operates a fleet of Presidents' Conference Committee streetcars (PCC) and other vintage streetcars 21 hours per day, 365 days a year. The PCCs carries approximately 20,000 people per day from Castro and Market Street along the Embarcadero to Fisherman's wharf. For the current F-Line service and envisioned E-Line service to Mission Bay and Fort Mason, the SFMTA needs to rehabilitate many of its historic streetcars to provide safe and reliable service.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$7,344,308
Local			\$1,836,077
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$9,180,385

Milestone Name	Est. Completion Date	Description
RFP/IFB Issue Date	1/1/2022	
Contract Award Date	1/1/2023	
Initial Delivery Date	1/1/2024	
Final Delivery Date	1/1/2025	
Contract Completion Date	1/1/2025	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date Description	Date
Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
RAIL - ROLLING STOCK (121-00)	12.14.26	COMMUTER RAIL CARS USED	1	\$7,344,308.00	\$9,180,385.00

Part 4: Fleet Details

Fleet Type: Paratransit

Fleet Comments

The paratransit fleet consists of 151 vehicles.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	125
	B. Spares	25
	C. Total (A+B)	150
	D. Spare Ratio (B/A)	20%
II.	Inactive Fleet	
	A. Other	1
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	150

Fleet Type: Commuter Rail

Fleet Comments

This report represents the Historic vehicle fleet status.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	23
	B. Spares	18
	C. Total (A+B)	41
	D. Spare Ratio (B/A)	78.26%
II.	Inactive Fleet	
	A. Other	7
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	41

Fleet Type: Light Rail

Fleet Comments

SFMTA's current revenue fleet is 217.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	173
	B. Spares	44
	C. Total (A+B)	217
	D. Spare Ratio (B/A)	25.43%
II.	Inactive Fleet	
	A. Other	0
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	217

Fleet Type: Fixed Route

Fleet Comments

This category reflects our 40' and 60' Trolley coaches.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	197

	B. Spares	81
	C. Total (A+B)	278
	D. Spare Ratio (B/A)	41.12%
II.	Inactive Fleet	
	A. Other	0
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	278

Fleet Type: Other

Fleet Comments

This category reflects our Motor coaches.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	483
	B. Spares	142
	C. Total (A+B)	625
	D. Spare Ratio (B/A)	29.4%
II.	Inactive Fleet	
	A. Other	0
	B. Pending Disposal	57
	C. Total (A+B)	57
III.	Total (I.C and II.C)	682

Part 5: FTA Review Comments

Application Review Comments

Comment By Alexander Smith

Comment Type Pre-Award Manager Returns Application

Date 6/9/2021

Comment Returned at grantee request.

Comment By Alexander Smith

Comment Type Pre-Award Manager Returns Application

Date 7/1/2021

Comment

Unable to complete the financial confirmation of funds because the Federal amount requested in the Executive Summary does not match Federal funds identified in the Application Control Totals, Uploaded MTC Split Letter and MTC Concurrence Letter, and the Project Budget. The amount in the Executive Summary is \$37,574,000. The other amount is \$44,918,308. The difference is \$7,344,308 which are the funds allocated for the Streetcar and Cable Car Restorations.
Also, noted that the Local Share amount \$11,229,577 and source of the local share is not mentioned in the Executive Summary. Lastly, Indirect Costs are to be applied to this application so I will seek approval for that.

Application Review Comments

Comment By Mark Lui

Comment Type Application Details

Date 6/30/2021

Comment Added MTC POP and Concurrence Letter as requested.

Comment By Mark Lui

Comment Type Application Details

Date 7/1/2021

Comment Revised Executive Summary amount and added statement about Local Share funding.

Part 6: Agreement

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL TRANSIT ADMINISTRATION**

**GRANT AGREEMENT
(FTA G-28, February 9, 2021)**

On the date the authorized U.S. Department of Transportation, Federal Transit Administration (FTA) official signs this Grant Agreement, FTA has obligated and awarded federal assistance as provided below. Upon execution of this Grant Agreement by the Recipient named below, the Recipient affirms this FTA Award, enters into this Grant Agreement with FTA, and binds its compliance with the terms of this Grant Agreement.

The following documents are incorporated by reference and made part of this Grant Agreement:

- (1) "Federal Transit Administration Master Agreement," FTA MA(28), February 9, 2021, <http://www.transit.dot.gov>,
- (2) The Certifications and Assurances applicable to the FTA Award that the Recipient has selected and provided to FTA, and
- (3) Any Award notification containing special conditions or requirements, if issued.

WHEN THE TERM "FTA AWARD" OR "AWARD" IS USED, EITHER IN THIS GRANT AGREEMENT OR

THE APPLICABLE MASTER AGREEMENT, "AWARD" ALSO INCLUDES ALL TERMS AND CONDITIONS SET FORTH IN THIS GRANT AGREEMENT.

FTA OR THE FEDERAL GOVERNMENT MAY WITHDRAW ITS OBLIGATION TO PROVIDE FEDERAL ASSISTANCE IF THE RECIPIENT DOES NOT EXECUTE THIS GRANT AGREEMENT WITHIN 90 DAYS FOLLOWING FTA's AWARD DATE SET FORTH HEREIN.

FTA AWARD

Federal Transit Administration (FTA) hereby awards a Federal Grant as follows:

Recipient Information

Recipient Name: SAN FRANCISCO, CITY & COUNTY OF

Recipient ID: 1697

UEI:

DUNS: 956617435

Award Information

Federal Award Identification Number: CA-2021-119-00

Award Name: FY2021 Section 5337 State of Good Repair

Award Start Date: 7/23/2021

Original Award End Date: 12/31/2024

Current Award End Date: 12/31/2024

Award Executive Summary: This FY2021 Section 5337 State of Good Repair grant for \$44,918,308 is for Cable Car Infrastructure, Muni Rail Replacement, Wayside/Central Train Control & Trolley Signal Systems Rehabilitation, and Historic Streetcar & Cable Car Restorations. The required Local Share of \$11,229,577 will be funded with Local Sales Tax revenues.

The funds are allocated to the SFO UZA and are approved by the MTC in the following TIP numbers: SF170021, SF99T002, SF95037B, and SF050024.

Research and Development: This award does not include research and development activities.

Indirect Costs: This award is applying an approved Indirect cost rate(s).

Suballocation Funds: Recipient organization is suballocated these apportioned funds and can apply for and receive these funds directly.

Pre-Award Authority: This award is using Pre-Award Authority.

Award Budget

Total Award Budget: \$56,147,885.00

Amount of Federal Assistance Obligated for This FTA Action (in U.S. Dollars): \$44,918,308.00

Amount of Non-Federal Funds Committed to This FTA Action (in U.S. Dollars): \$11,229,577.00

Total FTA Amount Awarded and Obligated (in U.S. Dollars): \$44,918,308.00

Total Non-Federal Funds Committed to the Overall Award (in U.S. Dollars): \$11,229,577.00

Award Budget Control Totals

(The Budget includes the individual Project Budgets (Scopes and Activity Line Items) or as attached)

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$44,918,308
Local			\$11,229,577
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$56,147,885

(The Transportation Development Credits are not added to the amount of the Total Award Budget.)

U.S. Department of Labor Certification of Public Transportation Employee Protective Arrangements:

DOL Decision: DOL Concur - Certified

DOL Review Date: 7/22/2021

DOL Certification Date: N/A

Special Conditions

There are no special conditions.

FINDINGS AND DETERMINATIONS

By signing this Award on behalf of FTA, I am making all the determinations and findings required by federal law and regulations before this Award may be made.

FTA AWARD OF THE GRANT AGREEMENT

Awarded By:
Ted Matley

Supervisory Transportation Program Specialist
FEDERAL TRANSIT ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION
Contact Info: ted.matley@dot.gov
Award Date: 7/23/2021

EXECUTION OF THE GRANT AGREEMENT

Upon full execution of this Grant Agreement by the Recipient, the Effective Date will be the date FTA or the Federal Government awarded Federal assistance for this Grant Agreement.

By executing this Grant Agreement, the Recipient intends to enter into a legally binding agreement in which the Recipient:

- (1) Affirms this FTA Award,
- (2) Adopts and ratifies all of the following information it has submitted to FTA:
 - (a) Statements,
 - (b) Representations,
 - (c) Warranties,
 - (d) Covenants, and
 - (e) Materials,
- (3) Consents to comply with the requirements of this FTA Award, and
- (4) Agrees to all terms and conditions set forth in this Grant Agreement.

Executed By:

Mark Lui

Pr Administrative Analyst

SAN FRANCISCO, CITY & COUNTY OF

7/23/2021

DOT

FTA

U.S. Department of Transportation

Federal Transit Administration

Award

Federal Award Identification Number (FAIN)	CA-2022-225-00
Temporary Application Number	1697-2022-2
Award Name	FY2022 5337 State of Good Repair
Award Status	Active (Executed)
Award Budget Number	0

Period of Performance Start Date	9/21/2022		
Original Period of Performance End Date	12/31/2026		
Current Period of Performance End Date	12/31/2026	Revision #: 0	Approved?: Yes

Part 1: Recipient Information

Name: SAN FRANCISCO, CITY & COUNTY OF

Recipient ID	Recipient OST Type	Recipient Alias	UEI	DUNS
1697	City	San Francisco Municipal Transportation Agency	GSL6KW4Z5UE1	956617435

Location Type	Address	City	State	Zip
Mailing Address	1 SOUTH VAN NESS AVE 7TH FLOOR	SAN FRANCISCO	CA	94103
Physical Address	1 S VAN NESS AVE	SAN FRANCISCO	CA	94103

Union Information

Union Name	BROTHERHOOD OF LOCOMOTIVE ENGINEERS
Address 1	1370 Ontario Street
Address 2	
City	Cleveland

State	Ohio
Zipcode	44113
Contact Name	D.M. Hahs
Telephone	2162412630
Fax	2162416516
E-mail	hahs@ble-t.org
Website	

Union Name	INT ASSO OF MACHINISTS & AEROSPACE WORKERS
Address 1	9000 Machinists Place
Address 2	
City	Upper Marlboro
State	Maryland
Zipcode	20772
Contact Name	Robert Roach Jr
Telephone	3019674500
Fax	3019674545
E-mail	rroach@IAMAW.org
Website	

Union Name	INT BROTHERHOOD OF ELECTRICAL WORKERS
Address 1	900 Seventh Street
Address 2	
City	Washington
State	DC
Zipcode	20001
Contact Name	Al Russo
Telephone	(202) 728-6018
Fax	
E-mail	railroad_dept@ibew.org
Website	

Union Name	INT FEDERATION OF PROFESSIONAL & TECHNICAL ENGINEERS
Address 1	8630 Fenton Street, Suite 400
Address 2	
City	Silver Spring
State	Maryland
Zipcode	20910
Contact Name	Gregory Junemann
Telephone	3015659016
Fax	3015650018
E-mail	gjunemann@ifpte.org

Website	
Union Name	O'DONNELL, SCHWARTS & ANDERSON
Address 1	1900 L Street, NW, Suite 707
Address 2	
City	Washington
State	District of Columbia
Zipcode	20036
Contact Name	Richard Edelman
Telephone	2028981824
Fax	2024298928
E-mail	redelman@odsawalaw.com
Website	
Union Name	SERVICE EMPLOYEES' INTERNATIONAL UNION
Address 1	1313 L Street, NW
Address 2	
City	Washington
State	District of Columbia
Zipcode	20005
Contact Name	Andrew Stern
Telephone	2028983300
Fax	2028983402
E-mail	stern@seiu.org
Website	
Union Name	TRANSPORT WORKERS UNION
Address 1	1700 Broadway, 2nd Floor
Address 2	
City	New York
State	New York
Zipcode	10019
Contact Name	Michael O'Brian
Telephone	2122594900
Fax	2122654537
E-mail	m_o'brien@twu.org
Website	
Union Name	TRANSPORTATION-COMMUNICATIONS INTERNATIONAL UNION
Address 1	3 Research Place
Address 2	
City	Rockville
State	Maryland

Zipcode	20850
Contact Name	Robert Scardelletti
Telephone	3019484911
Fax	3019481369
E-mail	
Website	
Union Name	Smart Transportation Division
Address 1	24950 Country Club Blvd.
Address 2	Ste. 340
City	North Olmsted
State	OH
Zipcode	44070
Contact Name	Jeremy Ferguson
Telephone	(216) 228-9400
Fax	
E-mail	president_td@smart-union.org
Website	

Part 2: Award Information

Title: FY2022 5337 State of Good Repair

FAIN	Award Status	Award Type	Application Cost Center	Date Created	Last Updated Date	From TEAM?
CA-2022-225-00	Active (Executed)	Grant	Region 9	8/1/2022	8/1/2022	No

Award Executive Summary

The SFMTA will use a total of \$144,252,435 in FY 2022 5337 State of Good Repair funds for Wayside/Central Train Control & Trolley Signal Systems, Light Rail Vehicle Replacement Procurements, Cable Car Restorations, Muni Rail Replacement, Overhead Line Rehabilitation, and Cable Car Infrastructure. The required Local Share of \$36,063,109 will be funded with Local Sales Taxes, Developer Fees, and Fare Revenues.

Please note that the LRV Replacement Project is ONLY for replacing existing LRV fleet vehicles with planned retirements. The funds will NOT be used to expand the LRV Fleet and the schedule of planned LRV retirements and related book values is attached to the project documents in this grant application.

Purpose:

This grant will allow SFMTA to Improve Safety/Rail Service Efficiency, LRV/Cable Car Reliability, Rail Track Safety, Overhead Line Reliability, and Cable Car System Reliability.

Activities to be Performed:

Procure Train Control/Trolley Signal System Services, LRVs, Cable Car Restoration Services, Rail Replacement Services, Overhead Line Rehab Services, and Cable Car Infrastructure Services.

Expected Outcomes:

Transit infrastructure and operating systems will maintain and improve safety, reliability, and efficiency of San Francisco's critical transit service system.

Intended Beneficiaries

The residents of San Francisco as well as the community of the greater Bay Area rely on affordable, accessible, and dependable transit service. Without this service, many people would not be able to travel to work, shop for food, or obtain needed medical care.

Subrecipient Activities:

There will be no subrecipients for this project.

Allowable capital project costs under this grant follow the guidelines and principles contained in OMB's Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal awards circular (Super Circular). Eligible costs are those associated with the acquisition, construction, improvement and maintenance of facilities and equipment for use in transit, and include capital procurements, rolling stock purchases, design and construction costs and the force account (personnel) expenditures required to support these capital project activities.

The funds are allocated to the SFO UZA and are approved by the MTC in the following TIP numbers: SF050024 \$24,272,000, SF090012 \$108,635,101, SF970073 \$2,293,334, SF95037B \$3,639,000, SF970170 \$2,930,000, and SF99T002 \$2,483,000.

The 5337 funds in this application are included in the Investment Prioritization Section of SFMTA's TAM Plan.

Frequency of Milestone Progress Reports (MPR)

Quarterly

Frequency of Federal Financial Reports (FFR)

Quarterly

Does this application include funds for research and/or development activities?

This award does not include research and development activities.

Pre-Award Authority

This award is using Pre-Award Authority.

Does this application include suballocation funds?

Recipient organization is suballocated these apportioned funds and can apply for and receive these funds directly.

Will this Grant be using Lapsing Funds?

No, this Grant does not use Lapsing Funds.

Will indirect costs be applied to this application?

This award does not include an indirect cost rate.

Indirect Rate Details: N/A

Requires E.O. 12372 Review

No, this application does not require E.O. 12372 Review.

Delinquent Federal Debt

No, my organization does not have delinquent federal debt.

Award Description

Purpose

None provided.

Activities to be performed:

None provided.

Expected outcomes:

None provided.

Intended beneficiaries:

None provided.

Subrecipient Activities:

None provided.

Award Point of Contact Information

First Name	Last Name	Title	E-mail Address	Phone
	catherine.luu@dot.gov	General Engineer		
	alexander.smith@dot.gov	Transportation Planner		
Mark	Lui	Pr Administrative Analyst	mark.lui@sfmta.com	(415) 646-2516

Award Budget Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$144,252,435
Local			\$36,063,109
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$180,315,544

Award Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2022-225-01-00	126-00 (126-A1) SIGNAL/COMMUNICATION (RAIL)	\$24,272,000.00	\$6,068,000.00	\$30,340,000.00	1
CA-2022-225-01-00	12.63.01 CONSTRUCT TRAIN CONTROL-SIGNAL SYS	\$24,272,000.00	\$6,068,000.00	\$30,340,000.00	1
CA-2022-225-02-00	121-00 (121-A2) RAIL - ROLLING STOCK	\$108,635,101.00	\$27,158,775.00	\$135,793,876.00	32
CA-2022-225-02-00	12.12.20 LIGHT RAIL CARS	\$108,635,101.00	\$27,158,775.00	\$135,793,876.00	32
CA-2022-225-03-00	122-00 (122-A3) RAIL TRANSITWAY LINES	\$3,639,000.00	\$909,750.00	\$4,548,750.00	1
CA-2022-225-03-00	12.24.20 REHAB/RENOV MISC RAIL EQUIPMENT	\$3,639,000.00	\$909,750.00	\$4,548,750.00	1
CA-2022-225-04-00	121-00 (121-A6) RAIL - ROLLING STOCK	\$2,293,334.00	\$573,334.00	\$2,866,668.00	1
CA-2022-225-04-00	12.14.30 REHAB/REBUILD CABLE CARS	\$2,293,334.00	\$573,334.00	\$2,866,668.00	1
CA-2022-225-05-00	112-00 (112-A4) BUS TRANSITWAYS/LINES	\$2,930,000.00	\$732,500.00	\$3,662,500.00	1
CA-2022-225-05-00	11.24.03 REHAB/RENOVATE - LINE EQUIP/STRUCTURES	\$2,930,000.00	\$732,500.00	\$3,662,500.00	1
CA-2022-225-06-00	122-00 (122-A5) RAIL TRANSITWAY LINES	\$2,483,000.00	\$620,750.00	\$3,103,750.00	1
CA-2022-225-06-00	12.24.20 REHAB/RENOV MISC RAIL EQUIPMENT	\$2,483,000.00	\$620,750.00	\$3,103,750.00	1

Discretionary Allocations

This application does not contain discretionary allocations.

Sources of Federal Financial Assistance

PO Number	Project Number	Scope Name	Scope Number	Scope Suffix	UZA Code	Area Name	Account Class Code	FPC	Description	Amendment Amount	Cumulative Amount
CA-54-0132	CA-2022-225-01-00	SIGNAL/COMMUNICATION (RAIL)	126-00 (126)	A1	060060	San Francisco-Oakland, CA	2022.2J.54.38.2	00	SGR - Fixed Guideway	\$24,272,000	\$24,272,000
CA-54-0132	CA-2022-225-02-00	RAIL - ROLLING STOCK	121-00 (121)	A2	060060	San Francisco-Oakland, CA	2022.2J.54.38.2	00	SGR - Fixed Guideway	\$108,635,101	\$108,635,101
CA-54-0132	CA-2022-225-03-00	RAIL TRANSITWAY LINES	122-00 (122)	A3	060060	San Francisco-Oakland, CA	2022.2J.54.38.2	00	SGR - Fixed Guideway	\$3,639,000	\$3,639,000
CA-54-0132	CA-2022-225-04-00	RAIL - ROLLING STOCK	121-00 (121)	A6	060060	San Francisco-Oakland, CA	2022.2J.54.38.2	00	SGR - Fixed Guideway	\$2,293,334	\$2,293,334
CA-54-0132	CA-2022-225-05-00	BUS TRANSITWAYS/LINES	112-00 (112)	A4	060060	San Francisco-Oakland, CA	2022.2J.54.38.2	00	SGR - Fixed Guideway	\$2,930,000	\$2,930,000
CA-54-0132	CA-2022-225-06-00	RAIL TRANSITWAY LINES	122-00 (122)	A5	060060	San Francisco-Oakland, CA	2022.2J.54.38.2	00	SGR - Fixed Guideway	\$2,483,000	\$2,483,000

Part 3: Project Information

Project Title: Wayside/Central Train Control & Trolley Signal Systems

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2022-225-01-00	1697-2022-2-P1	8/1/2022	3/31/2023	3/31/2026

Project Description

SFMTA: Systemwide: ATCS Wayside/Central Train Control & Rail/Bus Signal Systems Rehab/Replace Program includes but is not limited to (1) Final cutover of the new Advanced Train Control System (ATCS), remove the old signal system, and replace critical wayside equipment including station controllers, axle counters, and loop cables (2) Replace the UPS that provides power to the Central Control portion of the ATCS (3) Replace subway motor generators at Van Ness Station, which includes an Uninterruptible Power Supply (UPS) as backup for the wayside ATCS. (4) The Data Transmission System (DTS) provides remote control from Central Control of subway emergency ventilation fans, and monitors status of subway track switches, signal aspects, train traffic direction, and alarms, including fire and intrusion. The project replaces the deteriorated and obsolete system with a SCADA system and integrates it with other rail SCADA systems operated from Central Control. (5) Purchase a backup

system for the Yard Departure Test Device (YDTD) at Muni's Metro Yard to minimize impacts on vehicle availability. (6) Signalize and electrify most switches in the Green Yard to enable control by LRV operators instead of current manual operations for more efficient operations. (7) Replace existing train control and signal system at various locations to increase protection for transit vehicles from auto traffic, reduce derailments and travel time, and improve safety, reliability, and maintainability of the system. (8) Rehab/replace miscellaneous trolley coach signalization systems. Funds in the 2020s will be invested in the ultimate change out of the ATCS with a new Communications-Based Train Control program.

Project Benefits

This project will improve the safety and reliability of the rail system.

Additional Information

None provided.

Location Description

This project is located throughout San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 5/13/2022

Description: Wayside/Central Train Control & Trolley Signal Systems

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$24,272,000
Local			\$6,068,000
Local/In-Kind			\$0
State			\$0

State/In-Kind	\$0
Other Federal	\$0
Transportation Development Credit	\$0
Adjustment	\$0
Total Eligible Cost	\$30,340,000

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2022-225-01-00	126-00 (126-A1) SIGNAL/COMMUNICATION (RAIL)	\$24,272,000.00	\$6,068,000.00	\$30,340,000.00	1
CA-2022-225-01-00	12.63.01 CONSTRUCT TRAIN CONTROL-SIGNAL SYS	\$24,272,000.00	\$6,068,000.00	\$30,340,000.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.63.01 - CONSTRUCT TRAIN CONTROL-SIGNAL SYS

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
SIGNAL/COMMUNICATION (RAIL) (126-00)	12.63.01	CONSTRUCT TRAIN CONTROL-SIGNAL SYS	CONSTRUCTION	1

Extended Budget Description

SFMTA: Systemwide: ATCS Wayside/Central Train Control & Rail/Bus Signal Systems Rehab/Replace Program includes but is not limited to (1) Final cutover of the new Advanced Train Control System (ATCS), remove the old signal system, and replace critical wayside equipment including station controllers, axle counters, and loop cables (2) Replace the UPS that provides power to the Central Control portion of the ATCS (3) Replace subway motor generators at Van Ness Station, which includes an Uninterruptible Power Supply (UPS) as backup for the wayside ATCS. (4) The Data Transmission System (DTS) provides remote control from Central Control of subway emergency ventilation fans, and monitors status of subway track switches, signal aspects, train traffic direction, and alarms, including fire and intrusion. The project replaces the deteriorated and obsolete system with a SCADA system and integrates it with other rail SCADA systems operated from Central Control. (5) Purchase a backup system for the Yard Departure Test Device (YDTD) at Muni's Metro Yard to minimize impacts on vehicle availability. (6) Signalize and electrify most switches in the Green Yard to enable control by LRV operators instead of current manual operations for more efficient operations. (7) Replace existing train control and signal system at various locations to increase protection for transit vehicles from auto traffic, reduce derailments and travel time, and improve safety, reliability, and maintainability of the system. (8) Rehab/replace miscellaneous trolley coach signalization systems. Funds in the 2020s will be invested in the ultimate change out of the ATCS with a new Communications-Based Train Control program.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$24,272,000
Local			\$6,068,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$30,340,000

Milestone Name	Est. Completion Date	Description
Start Date	3/31/2023	
End Date	3/31/2026	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date Description	Date
Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
SIGNAL/COMMUNICATION (RAIL) (126-00)	12.63.01	CONSTRUCT TRAIN	1	\$24,272,000.00	\$30,340,000.00

CONTROL-
SIGNAL SYS

Project Title: Light Rail Vehicle Replacement Procurements

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2022-225-02-00	1697-2022-2-P2	8/2/2022	12/31/2022	12/31/2026

Project Description

Procure light rail vehicles with an option for an additional vehicles to replace existing fleet.

Please note that the LRV Replacement Project is ONLY for replacing existing LRV fleet vehicles with planned retirements. The funds will NOT be used to expand the LRV Fleet and the schedule of planned LRV retirements and related book values is attached to the project documents in this grant application.

Project Benefits

State-of-the-art vehicles will be equipped with innovative safety features, improved passenger amenities and modern information systems.

Additional Information

None provided.

Location Description

This project provides service throughout San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 6/8/2022

Description: Light Rail Vehicle Replacement Procurements

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$108,635,101
Local			\$27,158,775
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$135,793,876

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2022-225-02-00	121-00 RAIL - ROLLING STOCK (121-A2)	\$108,635,101.00	\$27,158,775.00	\$135,793,876.00	32
CA-2022-225-02-00	12.12.20 LIGHT RAIL CARS	\$108,635,101.00	\$27,158,775.00	\$135,793,876.00	32

Project Budget Activity Line Items

Budget Activity Line Item: 12.12.20 - LIGHT RAIL CARS

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL - ROLLING STOCK (121-00)	12.12.20	LIGHT RAIL CARS	PURCHASE - REPLACE RAIL ROLLING STOCK	32

Extended Budget Description

Procure 219 light rail vehicles with an option for an additional 45 vehicles to replace existing fleet and expand service. The contract with Siemens calls for an array of replacement (151) and expansion vehicles (113). State-of-the-art vehicles will be equipped with innovative safety features, improved passenger amenities and modern information systems. \$16.8M of funding for vehicles to serve Central Subway accounted for in TIP ID SF-010037 (Central Subway Project).

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$108,635,101
Local			\$27,158,775
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$135,793,876

Milestone Name	Est. Completion Date	Description
RFP/IFB Issue Date	12/31/2022	
Contract Award Date	12/31/2022	
Initial Delivery Date	12/31/2022	
Final Delivery Date	12/31/2025	
Contract Completion Date	12/31/2026	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date	Description	Date
	Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
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RAIL - ROLLING
STOCK (121-00)

12.12.20

LIGHT RAIL
CARS 32

\$108,635,101.00 \$135,793,876.00

Project Title: Muni Rail Replacement

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2022-225-03-00	1697-2022-2-P3	8/2/2022	12/31/2022	12/31/2025

Project Description

Design and replacement of trackway and related systems serving the light rail and cable car lines as part of a regular replacement program and to mitigate excessive noise and vibration. The program seeks to rehabilitate and repair existing track work, including replacement and tamping of ties and ballast and installation of guardrail, enhance system safety and reliability, while reducing the need for excessive maintenance. This program is divided into 10 year segments, and work is ongoing on various phases of the program.

Project Benefits

Design and replacement of trackway and related systems serving the light rail and cable car lines as part of a regular replacement program and to mitigate excessive noise and vibration. The program seeks to rehabilitate and repair existing track work, including replacement and tamping of ties and ballast and installation of guardrail, enhance system safety and reliability, while reducing the need for excessive maintenance. This program is divided into 10 year segments, and work is ongoing on various phases of the program.

Additional Information

None provided.

Location Description

Project is located throughout San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 6/8/2022

Description: Muni Rail Replacement

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$3,639,000
Local			\$909,750
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$4,548,750

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2022-225-03-00	122-00 (122-A3) RAIL TRANSITWAY LINES	\$3,639,000.00	\$909,750.00	\$4,548,750.00	1
CA-2022-225-03-00	12.24.20 REHAB/RENOV MISC RAIL EQUIPMENT	\$3,639,000.00	\$909,750.00	\$4,548,750.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.24.20 - REHAB/RENOV MISC RAIL EQUIPMENT				
Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL TRANSITWAY LINES (122-00)	12.24.20	REHAB/RENOV MISC RAIL EQUIPMENT	REHAB/RENOVATION	1

Extended Budget Description

Design and replacement of trackway and related systems serving the light rail and cable car lines as part of a regular replacement program and to mitigate excessive noise and vibration. The program seeks to rehabilitate and repair existing track work, including replacement and tamping of ties and

ballast and installation of guardrail, enhance system safety and reliability, while reducing the need for excessive maintenance. This program is divided into 10 year segments, and work is ongoing on various phases of the program.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$3,639,000
Local			\$909,750
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$4,548,750

Milestone Name	Est. Completion Date	Description
Start Date	12/31/2022	
End Date	12/31/2025	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date	Description	Date
	Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
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RAIL TRANSITWAY LINES (122-00)	12.24.20	REHAB/RENOV MISC RAIL EQUIPMENT	1	\$3,639,000.00	\$4,548,750.00
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Project Title: Cable Car Vehicle Renovation Program
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Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2022-225-04-00	1697-2022-2-P4	8/2/2022	12/31/2022	12/31/2025

Project Description

SFMTA: Cable car fleet: Overhaul and reconstruct the cable car fleet to maintain system reliability and productivity. Project is phased. Currently each car is unique and parts must be fabricated for each individual car. One goal of the renovation program is to start to standardize major vehicle components. Minor overhauls are scheduled every 15 years, major overhauls at 30-35 years and reconstruction at 60-70 years. At any one time, a total of four cars may be undergoing renovation. Reconstruction takes 18 months, major overhaul takes 9 months, and a minor overhaul takes 6 months. Includes major rehabilitation of 17 Powell Cars and 11 California Cars, and minor rehabilitation of 10 Powell Cars and 2 California Cars.

Project Benefits

Will enable the SFMTA to rehabilitate the Cable Car Fleet to continue safe and reliable service.

Additional Information

None provided.

Location Description

Project provides service throughout San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 6/8/2022

Description: Cable Car Vehicle Renovation Program

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$2,293,334
Local			\$573,334
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$2,866,668

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2022-225-04-00	121-00 (121-A6) RAIL - ROLLING STOCK	\$2,293,334.00	\$573,334.00	\$2,866,668.00	1
CA-2022-225-04-00	12.14.30 REHAB/REBUILD CABLE CARS	\$2,293,334.00	\$573,334.00	\$2,866,668.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.14.30 - REHAB/REBUILD CABLE CARS				
Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL - ROLLING STOCK (121-00)	12.14.30	REHAB/REBUILD CABLE CARS	REHAB/REBUILD - RAIL ROLL STOCK	1

Extended Budget Description

SFMTA: Cable car fleet: Overhaul and reconstruct the cable car fleet to maintain system reliability and productivity. Project is phased. Currently each car is unique and parts must be fabricated for each individual car. One goal of the renovation program is to start to standardize major vehicle components.

Minor overhauls are scheduled every 15 years, major overhauls at 30-35 years and reconstruction at 60-70 years. At any one time, a total of four cars may be undergoing renovation. Reconstruction takes 18 months, major overhaul takes 9 months, and a minor overhaul takes 6 months. Includes major rehabilitation of 17 Powell Cars and 11 California Cars, and minor rehabilitation of 10 Powell Cars and 2 California Cars.

Will 3rd Party contractors be used to fulfill this activity line item?

No, 3rd Party Contractors will not be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$2,293,334
Local			\$573,334
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$2,866,668

Milestone Name	Est. Completion Date	Description
Project Start Date	12/31/2022	
Project Completion Date	12/31/2025	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date Description	Date
Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
RAIL - ROLLING STOCK (121-00)	12.14.30	REHAB/REBUILD CABLE CARS	1	\$2,293,334.00	\$2,866,668.00

Project Title: Overhead Line Rehabilitation

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2022-225-05-00	1697-2022-2-P5	8/2/2022	12/31/2022	12/31/2025

Project Description

Design and construction of Muni Trolley Poles, Overhead Contact System, and Rail Traction Power improvements that provides power to Muni, based on evaluation of the Muni Track and Traction Power Condition Assessment, which serves light rail and trolley coach lines.

Project Benefits

The projects included in this program are designed to reduce operational problems, reduce maintenance and increase system reliability, provide flexibility in addressing acute needs, and address areas of chronic service outages or emergency repairs.

Additional Information

None provided.

Location Description

Project serves people throughout San Francisco

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 6/8/2022

Description: Overhead Line Rehabilitation

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$2,930,000
Local			\$732,500
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$3,662,500

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2022-225-05-00	112-00 (112-A4) BUS TRANSITWAYS/LINES	\$2,930,000.00	\$732,500.00	\$3,662,500.00	1
CA-2022-225-05-00	11.24.03 REHAB/RENOVATE - LINE EQUIP/STRUCTURES	\$2,930,000.00	\$732,500.00	\$3,662,500.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 11.24.03 - REHAB/RENOVATE - LINE EQUIP/STRUCTURES

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
BUS TRANSITWAYS/LINES (112-00)	11.24.03	REHAB/RENOVATE - LINE EQUIP/STRUCTURES	REHABILITATION/RENOVATION - BUS TRANSITWAY LINES	1

Extended Budget Description

Design and construction of Muni Trolley Poles, Overhead Contact System, and Rail Traction Power improvements that provides power to Muni, based on evaluation of the Muni Track and Traction Power Condition Assessment, which serves light rail and trolley coach lines. The projects included in this program are designed to reduce operational problems, reduce maintenance and increase system

reliability, provide flexibility in addressing acute needs, and address areas of chronic service outages or emergency repairs.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$2,930,000
Local			\$732,500
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$3,662,500

Milestone Name	Est. Completion Date	Description
Start Date	12/31/2022	
End Date	12/31/2025	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date	Description	Date
	Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
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BUS TRANSITWAYS/LINES (112-00)	11.24.03	REHAB/ RENOVATE - LINE EQUIP/ STRUCTURES	1	\$2,930,000.00	\$3,662,500.00
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Project Title: Cable Car Infrastructure
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Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2022-225-06-00	1697-2022-2-P6	8/2/2022	12/31/2022	12/31/2025

Project Description

On the Cable Car system: Includes various guideway and infrastructure repair and improvement projects. Covers all street components of the Cable Car system, such as pulleys, switches and turntables. Replace track curves, frogs, sheaves, Barn 12KV, switchgear, DC Motor, mechanical, HVAC, and infrastructure upgrade for the space to comply with latest codes and ADA compliance. Because this is an ongoing program, projects are in varying stages of conceptual design, design, and construction.

Project Benefits

Improved system of safety and reliability.

Additional Information

None provided.

Location Description

Project serves people throughout San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
12	California
14	California

Program Plan Information

STIP/TIP

Date: 6/8/2022

Description: Cable Car Infrastructure

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A
 Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$2,483,000
Local			\$620,750
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$3,103,750

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2022-225-06-00	122-00 RAIL TRANSITWAY LINES (122-A5)	\$2,483,000.00	\$620,750.00	\$3,103,750.00	1
CA-2022-225-06-00	12.24.20 REHAB/RENOV MISC RAIL EQUIPMENT	\$2,483,000.00	\$620,750.00	\$3,103,750.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.24.20 - REHAB/RENOV MISC RAIL EQUIPMENT

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL TRANSITWAY LINES (122-00)	12.24.20	REHAB/RENOV MISC RAIL EQUIPMENT	REHAB/RENOVATION	1

Extended Budget Description

On the Cable Car system: Includes various guideway and infrastructure repair and improvement projects. Covers all street components of the Cable Car system, such as pulleys, switches and turntables. Replace track curves, frogs, sheaves, Barn 12KV, switchgear, DC Motor, mechanical, HVAC, and infrastructure upgrade for the space to comply with latest codes and ADA compliance. Because this is an ongoing program, projects are in varying stages of conceptual design, design, and construction.

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$2,483,000
Local			\$620,750
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$3,103,750

Milestone Name	Est. Completion Date	Description
Start Date	12/31/2022	
End Date	12/31/2025	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date Description	Date
Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
RAIL TRANSITWAY LINES (122-00)	12.24.20	REHAB/RENOV MISC RAIL EQUIPMENT	1	\$2,483,000.00	\$3,103,750.00

Part 4: Fleet Details

Fleet Type: Paratransit

Fleet Comments

The paratransit fleet consists of 151 vehicles.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	125
	B. Spares	25
	C. Total (A+B)	150
	D. Spare Ratio (B/A)	20%
II.	Inactive Fleet	
	A. Other	1
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	150

Fleet Type: Commuter Rail

Fleet Comments

This report represents the Historic vehicle fleet status.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	23
	B. Spares	18
	C. Total (A+B)	41
	D. Spare Ratio (B/A)	78.26%
II.	Inactive Fleet	
	A. Other	7
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	41

Fleet Type: Light Rail

Fleet Comments

SFMTA's current revenue fleet is 217.

		Current Value

I.	Active Fleet	
	A. Peak Requirement	173
	B. Spares	44
	C. Total (A+B)	217
	D. Spare Ratio (B/A)	25.43%
II.	Inactive Fleet	
	A. Other	0
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	217

Fleet Type: Fixed Route

Fleet Comments

This category reflects our 40' and 60' Trolley coaches.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	197
	B. Spares	81
	C. Total (A+B)	278
	D. Spare Ratio (B/A)	41.12%
II.	Inactive Fleet	
	A. Other	0
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	278

Fleet Type: Other

Fleet Comments

This category reflects our Motor coaches.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	483
	B. Spares	142
	C. Total (A+B)	625
	D. Spare Ratio (B/A)	29.4%
II.	Inactive Fleet	
	A. Other	0

	B. Pending Disposal	57
	C. Total (A+B)	57
III.	Total (I.C and II.C)	682

Part 5: FTA Review Comments

Application Review Comments

Comment By Alexander Smith

Comment Type	Pre-Award Manager Returns Application
Date	8/15/2022
Comment	Need a statement in Executive Summary about consistency with TAM plan as required.

Comment By Alexander Smith

Comment Type	Pre-Award Manager Returns Application
Date	8/23/2022
Comment	<p>Office of Financial Management Indirect Costs Review INCOMPLETE. The Applicant is not approved for indirect costs in FY 2023. The Applicant's PROVISIONAL FY 2022 rates are extensions of the FY 2021 PROVISIONAL rates. The FMOC has recommended a significantly lower rate for Transit Capital Projects and a significantly higher rate for Sustainable Streets Capital Projects in its Draft Report of its review of the SFMTA's FY 2021 indirect cost rate proposal. The recommended rates for FY 2021 may be Predetermined, pending the SFMTA's response to my email on 8/16/2022. Thereafter, the SFMTA will need to re-submit its FY 2022 indirect cost rate proposal and will need to submit a proposal for FY 2023. Finally, the SFMTA will need to perform a reconciliation to determine over- or under-charges to FTA grants to date. To facilitate the award of this grant application, I recommend that the SFMTA remove its request for and all associated information of indirect costs. When FYs 2022 and 2023 rates are approved, the SFMTA may submit an Amendment(s) to request indirect costs</p>

Comment By Alexander Smith

Comment Type	Pre-Award Manager Returns Application
Date	8/24/2022
Comment	<p>1. The project description for Project 2 Light Rail Vehicle Replacement Procurements discusses expansion vehicles and expanding service. Although SGR is generally not available for expansion of capacity or service, FTA does permit expansion of capacity within replacement projects to meet current or projected short-term service needs (e.g., replacing a maintenance facility with a larger facility, or replacing a bus with a larger bus). Circular 5300.1, p. III-3. But for any expansion elements included in a replacement project, such as this, the grantee needs to address how the project meets current or short term service levels if the vehicles will expand capacity or service. Circular 5300.1, p. III-3 to III-4. FTA must reviews the reasonableness of such expansion elements when</p>

reviewing the grant.

2. Project 2 also discussed replaces light rail vehicles, but I dont see any identification of the vehicles that are being replaced. Please confirm this information is available (either in grant or attachment), and if replaced vehicles still have federal interest that needs to be accounted for, the supporting documents should be in grant application.

Comment By Alexander Smith

Comment Type Pre-Award Manager Returns Application

Date 8/31/2022

Comment Grantee to improve response to last comments.

Application Review Comments

Comment By Mark Lui

Comment Type Application Details

Date 8/24/2022

Comment Removed Indirect Costs and will amend grant to add these costs back in when Indirect Cost Rates are approved by the FTA.

Comment By Mark Lui

Comment Type Application Details

Date 8/26/2022

Comment Added LRV Breda Retirement Summary Chart to the Project Documents.

Comment By Mark Lui

Comment Type Application Details

Date 8/31/2022

The following text was added to the Executive Summary and the Project Description.

Comment Please note that the LRV Replacement Project is ONLY for replacing existing LRV fleet vehicles with planned retirements. The funds will NOT be used to expand the LRV Fleet and the schedule of planned LRV retirements and related book values is attached to the project documents in this grant application.

Part 6: Agreement

FEDERAL TRANSIT ADMINISTRATION

**GRANT AGREEMENT
(FTA G-29, October 1, 2021)**

On the date the authorized U.S. Department of Transportation, Federal Transit Administration (FTA) official signs this Grant Agreement, FTA has obligated and awarded federal assistance as provided below. Upon execution of this Grant Agreement by the Recipient named below, the Recipient affirms this FTA Award, enters into this Grant Agreement with FTA, and binds its compliance with the terms of this Grant Agreement.

The following documents are incorporated by reference and made part of this Grant Agreement:

- (1) "Federal Transit Administration Master Agreement," FTA MA(29), <http://www.transit.dot.gov>,
- (2) The Certifications and Assurances applicable to the FTA Award that the Recipient has selected and provided to FTA, and
- (3) Any Award notification containing special conditions or requirements, if issued.

WHEN THE TERM "FTA AWARD" OR "AWARD" IS USED, EITHER IN THIS GRANT AGREEMENT OR THE APPLICABLE MASTER AGREEMENT, "AWARD" ALSO INCLUDES ALL TERMS AND CONDITIONS SET FORTH IN THIS GRANT AGREEMENT.

FTA OR THE FEDERAL GOVERNMENT MAY WITHDRAW ITS OBLIGATION TO PROVIDE FEDERAL ASSISTANCE IF THE RECIPIENT DOES NOT EXECUTE THIS GRANT AGREEMENT WITHIN 90 DAYS FOLLOWING FTA's AWARD DATE SET FORTH HEREIN.

FTA AWARD

Federal Transit Administration (FTA) hereby awards a Federal Grant as follows:

Recipient Information

Recipient Name: SAN FRANCISCO, CITY & COUNTY OF

Recipient ID: 1697

UEI: GSL6KW4Z5UE1

DUNS: 956617435

Award Information

Federal Award Identification Number: CA-2022-225-00

Award Name: FY2022 5337 State of Good Repair

Award Start Date: 9/21/2022

Original Award End Date: 12/31/2026

Current Award End Date: 12/31/2026

Award Executive Summary: The SFMTA will use a total of \$144,252,435 in FY 2022 5337 State of Good Repair funds for Wayside/Central Train Control & Trolley Signal Systems, Light Rail Vehicle Replacement Procurements, Cable Car Restorations, Muni Rail Replacement, Overhead Line Rehabilitation, and Cable Car Infrastructure. The required Local Share of \$36,063,109 will be funded with Local Sales Taxes, Developer Fees, and Fare Revenues.

Please note that the LRV Replacement Project is ONLY for replacing existing LRV fleet vehicles with planned retirements. The funds will NOT be used to expand the LRV Fleet and the schedule of planned LRV retirements and related book values is attached to the project documents in this grant application.

Purpose:

This grant will allow SFMTA to Improve Safety/Rail Service Efficiency, LRV/Cable Car Reliability, Rail Track Safety, Overhead Line Reliability, and Cable Car System Reliability.

Activities to be Performed:

Procure Train Control/Trolley Signal System Services, LRVs, Cable Car Restoration Services, Rail Replacement Services, Overhead Line Rehab Services, and Cable Car Infrastructure Services.

Expected Outcomes:

Transit infrastructure and operating systems will maintain and improve safety, reliability, and efficiency of San Francisco's critical transit service system.

Intended Beneficiaries

The residents of San Francisco as well as the community of the greater Bay Area rely on affordable, accessible, and dependable transit service. Without this service, many people would not be able to travel to work, shop for food, or obtain needed medical care.

Subrecipient Activities:

There will be no subrecipients for this project.

Allowable capital project costs under this grant follow the guidelines and principles contained in OMB's Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal awards circular (Super Circular). Eligible costs are those associated with the acquisition, construction, improvement and maintenance of facilities and equipment for use in transit, and include capital procurements, rolling stock purchases, design and construction costs and the force account (personnel) expenditures required to support these capital project activities.

The funds are allocated to the SFO UZA and are approved by the MTC in the following TIP numbers: SF050024 \$24,272,000, SF090012 \$108,635,101, SF970073 \$2,293,334, SF95037B \$3,639,000, SF970170 \$2,930,000, and SF99T002 \$2,483,000.

The 5337 funds in this application are included in the Investment Prioritization Section of SFMTA's TAM Plan.

Research and Development: This award does not include research and development activities.

Indirect Costs: This award does not include an indirect cost rate.

Suballocation Funds: Recipient organization is suballocated these apportioned funds and can apply for and receive these funds directly.

Pre-Award Authority: This award is using Pre-Award Authority.

Award Budget

Total Award Budget: \$180,315,544.00

Amount of Federal Assistance Obligated for This FTA Action (in U.S. Dollars): \$144,252,435.00

Amount of Non-Federal Funds Committed to This FTA Action (in U.S. Dollars): \$36,063,109.00

Total FTA Amount Awarded and Obligated (in U.S. Dollars): \$144,252,435.00

Total Non-Federal Funds Committed to the Overall Award (in U.S. Dollars): \$36,063,109.00

Award Budget Control Totals

(The Budget includes the individual Project Budgets (Scopes and Activity Line Items) or as attached)

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$144,252,435
Local			\$36,063,109
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$180,315,544

(The Transportation Development Credits are not added to the amount of the Total Award Budget.)

U.S. Department of Labor Certification of Public Transportation Employee Protective Arrangements:

DOL Decision: DOL Concur - Certified

DOL Review Date: 9/20/2022

DOL Certification Date: 9/20/2022

Special Conditions

There are no special conditions.

FINDINGS AND DETERMINATIONS

By signing this Award on behalf of FTA, I am making all the determinations and findings required by federal law and regulations before this Award may be made.

FTA AWARD OF THE GRANT AGREEMENT

Awarded By:
Ray Tellis

Regional Administrator
FEDERAL TRANSIT ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION
Contact Info: ray.tellis@dot.gov
Award Date: 9/21/2022

EXECUTION OF THE GRANT AGREEMENT

Upon full execution of this Grant Agreement by the Recipient, the Effective Date will be the date FTA or the Federal Government awarded Federal assistance for this Grant Agreement.

By executing this Grant Agreement, the Recipient intends to enter into a legally binding agreement in which the Recipient:

- (1) Affirms this FTA Award,
- (2) Adopts and ratifies all of the following information it has submitted to FTA:
 - (a) Statements,
 - (b) Representations,
 - (c) Warranties,
 - (d) Covenants, and
 - (e) Materials,
- (3) Consents to comply with the requirements of this FTA Award, and
- (4) Agrees to all terms and conditions set forth in this Grant Agreement.

Executed By:

Mark Lui

Pr Administrative Analyst

SAN FRANCISCO, CITY & COUNTY OF

9/21/2022

Award

Federal Award Identification Number (FAIN)		CA-2024-074-00
Temporary Application Number	1697-2023-3	
Award Name	FY2023 5337 Cable Car Infrastructure, Muni Rail Replacement Program, Wayside/Central Train Control & Trolley Signal Systems, Overhead Line Rehabilitation, and Historic Streetcar & Cable Car Restorations	
Award Status	Active (Executed)	
Award Budget Number	0	

Period of Performance Start Date	7/1/2024		
Original Period of Performance End Date	12/31/2028		
Current Period of Performance End Date	12/31/2028	Revision #: 0	Approved?: Yes

Budget Period Start Date	7/1/2024		
Budget Period End Date	12/31/2028		

Part 1: Recipient Information

Name: CITY & COUNTY OF SAN FRANCISCO

Recipient ID	Recipient OST Type	Recipient Alias	UEI	DUNS
1697	City	San Francisco Municipal Transportation Agency	GSL6KW4Z5UE1	956617435

Location Type	Address	City	State	Zip
Mailing Address	1 SOUTH VAN NESS AVE 7TH FLOOR	SAN FRANCISCO	CA	94103
Physical Address	1 S VAN NESS AVE	SAN FRANCISCO	CA	94103

Union Information

Union Name	BROTHERHOOD OF LOCOMOTIVE ENGINEERS
Address 1	1370 Ontario Street
Address 2	
City	Cleveland
State	Ohio
Zipcode	44113
Contact Name	D.M. Hahs
Telephone	2162412630
Fax	2162416516
E-mail	hahs@ble-t.org
Website	
Union Name	INT ASSO OF MACHINISTS & AEROSPACE WORKERS
Address 1	9000 Machinists Place
Address 2	
City	Upper Marlboro
State	Maryland
Zipcode	20772
Contact Name	Robert Roach Jr
Telephone	3019674500
Fax	3019674545
E-mail	rroach@IAMAW.org
Website	
Union Name	INT BROTHERHOOD OF ELECTRICAL WORKERS
Address 1	900 Seventh Street
Address 2	
City	Washington
State	DC
Zipcode	20001
Contact Name	Al Russo
Telephone	(202) 728-6018
Fax	
E-mail	railroad_dept@ibew.org
Website	
Union Name	INT FEDERATION OF PROFESSIONAL & TECHNICAL ENGINEERS
Address 1	8630 Fenton Street, Suite 400
Address 2	
City	Silver Spring

State	Maryland
Zipcode	20910
Contact Name	Gregory Junemann
Telephone	3015659016
Fax	3015650018
E-mail	gjunemann@ifpte.org
Website	

Union Name	O'DONNELL, SCHWARTS & ANDERSON
Address 1	1900 L Street, NW, Suite 707
Address 2	
City	Washington
State	District of Columbia
Zipcode	20036
Contact Name	Richard Edelman
Telephone	2028981824
Fax	2024298928
E-mail	redelman@odsalaw.com
Website	

Union Name	SERVICE EMPLOYEES' INTERNATIONAL UNION
Address 1	1313 L Street, NW
Address 2	
City	Washington
State	District of Columbia
Zipcode	20005
Contact Name	Andrew Stern
Telephone	2028983300
Fax	2028983402
E-mail	stern@seiu.org
Website	

Union Name	TRANSPORT WORKERS UNION
Address 1	1700 Broadway, 2nd Floor
Address 2	
City	New York
State	New York
Zipcode	10019
Contact Name	Michael O'Brian
Telephone	2122594900
Fax	2122654537
E-mail	m_o'brien@twu.org

Website	
Union Name	TRANSPORTATION-COMMUNICATIONS INTERNATIONAL UNION
Address 1	3 Research Place
Address 2	
City	Rockville
State	Maryland
Zipcode	20850
Contact Name	Robert Scardelletti
Telephone	3019484911
Fax	3019481369
E-mail	
Website	
Union Name	Smart Transportation Division
Address 1	24950 Country Club Blvd.
Address 2	Ste. 340
City	North Olmsted
State	OH
Zipcode	44070
Contact Name	Jeremy Ferguson
Telephone	(216) 228-9400
Fax	
E-mail	president_td@smart-union.org
Website	

Part 2: Award Information

Title: FY2023 5337 Cable Car Infrastructure, Muni Rail Replacement Program, Wayside/Central Train Control & Trolley Signal Systems, Overhead Line Rehabilitation, and Historic Streetcar & Cable Car Restorations

FAIN	Award Status	Award Type	Application Cost Center	Date Created	Last Updated Date	From TEAM?
CA-2024-074-00	Active (Executed)	Grant	Region 9	4/27/2023	4/27/2023	No

Award Executive Summary

The SFMTA will use a total of \$51,322,226 in FY 2023 5337 State of Good Repair funds for Cable Car Infrastructure, Muni Rail Replacement, Wayside/Central Train Control & Trolley Signal Systems, Overhead Line Rehabilitation, and Historic Streetcar & Cable Car Restorations.

Allowable capital project costs under this grant follow the guidelines and principles contained in OMB's Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal awards circular (Super Circular). Eligible costs are those associated with the acquisition, construction, improvement and maintenance of facilities and equipment for use in transit, and include capital procurements, rolling stock purchases, design and construction costs and the force account (personnel) expenditures required to support these capital project activities.

The funds are allocated to the SFO UZA and are approved by the MTC in the following TIP numbers: SF99T002, SF95037B, SF050024, SF970170, and SF170021.

The 5337 funds in this application are included in the Investment Prioritization Section of SFMTA's TAM Plan.

In addition to FTAs Buy America Act, which requires that the steel, iron, and manufactured goods used in an FTA-funded project are produced in the United States (49 U.S.C. 5323(j)(1)), the Build America, Buy America Act (BABA) (Public Law 117-58, div. G 70914(a)) now requires that construction materials used in infrastructure projects are also produced in the United States. Refer to terms and conditions in FTAs Master Agreement Section 15. The BABA requirement applies to this grant, in addition to the Buy America requirements, except to the extent a waiver of either requirements may apply.

Frequency of Milestone Progress Reports (MPR)

Quarterly

Frequency of Federal Financial Reports (FFR)

Quarterly

Does this application include funds for research and/or development activities?

This award does not include research and development activities.

Pre-Award Authority

This award is using Pre-Award Authority.

Does this application include suballocation funds?

Recipient organization is suballocated these apportioned funds and can apply for and receive these funds directly.

Will this Grant be using Lapsing Funds?

No, this Grant does not use Lapsing Funds.

Will indirect costs be applied to this application?

This award is applying an approved Indirect cost rate(s).

Indirect Rate Details: FTA approved the SFMTA's Provisional Indirect Cost Rates for FY2024 and a copy of the SFMTA's approved rates is attached to the SFMTA's Organization Documents. The approved rates of 126.0% for Transit Capital Projects and 79.9% for Sustainable Streets Capital Projects will be applied to the applicable activity line descriptions. Indirect Costs will apply to one or more activities contained within the scope of work.

Requires E.O. 12372 Review

No, this application does not require E.O. 12372 Review.

Delinquent Federal Debt

No, my organization does not have delinquent federal debt.

Award Description

Purpose

The SFMTA will use a total of \$51,322,226 in FY 2023 5337 State of Good Repair funds for Cable Car Infrastructure, Muni Rail Replacement, Wayside/Central Train Control & Trolley Signal Systems, Overhead Line Rehabilitation, and Historic Streetcar & Cable Car Restorations.

Activities to be performed:

Rehabilitate Overhead Lines, Replace Muni Rails, Rehabilitate Cable Car Infrastructure, and Procure LRVs.

Expected outcomes:

Overall transit system will maintain and/or improve reliability and safety.

Intended beneficiaries:

The residents of San Francisco as well as the community of the greater Bay Area rely on affordable, accessible, and dependable transit service. Without this service, many people would not be able to travel to work, shop for food, or obtain needed medical care.

Subrecipient Activities:

There will be no subrecipients for this project.

Award Point of Contact Information

First Name	Last Name	Title	E-mail Address	Phone
	catherine.luu@dot.gov	General Engineer		
	alexander.smith@dot.gov	Transportation Planner		
Mark	Lui	Pr Administrative Analyst	mark.lui@sfmta.com	(415) 646-2516

Award Budget Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$51,322,226
Local			\$12,839,057
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$64,161,283

Award Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2024-074-01-00	122-00 (122-A1) RAIL TRANSITWAY LINES	\$3,247,000.00	\$812,000.00	\$4,059,000.00	1
CA-2024-074-01-00	12.24.20 REHAB/RENOV MISC RAIL EQUIPMENT	\$3,247,000.00	\$812,000.00	\$4,059,000.00	1
CA-2024-074-02-00	122-00 (122-A2) RAIL TRANSITWAY LINES	\$3,837,000.00	\$960,000.00	\$4,797,000.00	1
CA-2024-074-02-00	12.24.20 REHAB/RENOV MISC RAIL EQUIPMENT	\$3,837,000.00	\$960,000.00	\$4,797,000.00	1
CA-2024-074-03-00	126-00 (126-A3) SIGNAL/COMMUNICATION (RAIL)	\$30,071,560.00	\$7,517,890.00	\$37,589,450.00	1
CA-2024-074-03-00	12.63.01 CONSTRUCT TRAIN CONTROL-SIGNAL SYS	\$30,071,560.00	\$7,517,890.00	\$37,589,450.00	1
CA-2024-074-04-00	112-00 (112-A4) BUS TRANSITWAYS/LINES	\$2,500,000.00	\$625,000.00	\$3,125,000.00	1
CA-2024-074-04-00	11.24.03 REHAB/RENOVATE - LINE EQUIP/STRUCTURES	\$2,500,000.00	\$625,000.00	\$3,125,000.00	1
CA-2024-074-05-00	121-00 (121-A5) RAIL - ROLLING STOCK	\$5,666,666.00	\$1,424,167.00	\$7,090,833.00	6
CA-2024-074-05-00	12.14.26 COMMUTER RAIL CARS USED	\$5,666,666.00	\$1,424,167.00	\$7,090,833.00	6
CA-2024-074-05-00	127-00 (127-A6) OTHER CAPITAL ITEMS (RAIL)	\$6,000,000.00	\$1,500,000.00	\$7,500,000.00	6
CA-2024-	12.72.08 FORCE ACCT CONSTRUCTION	\$6,000,000.00	\$1,500,000.00	\$7,500,000.00	6

074-05-00

Discretionary Allocations

This application does not contain discretionary allocations.

Sources of Federal Financial Assistance

PO Number	Project Number	Scope Name	Scope Number	Scope Suffix	UZA Code	Area Name	Account Class Code	FPC	Description	Amendment Amount	Cumulative Amount
CA-54-0155	CA-2024-074-01-00	RAIL TRANSITWAY LINES	122-00 (122)	A1	060060	San Francisco-Oakland, CA	2023.2J.54.38.2	00	SGR - Fixed Guideway	\$3,247,000	\$3,247,000
CA-54-0155	CA-2024-074-02-00	RAIL TRANSITWAY LINES	122-00 (122)	A2	060060	San Francisco-Oakland, CA	2023.2J.54.38.2	00	SGR - Fixed Guideway	\$3,837,000	\$3,837,000
CA-54-0155	CA-2024-074-03-00	SIGNAL/COMMUNICATION (RAIL)	126-00 (126)	A3	060060	San Francisco-Oakland, CA	2023.2J.54.38.2	00	SGR - Fixed Guideway	\$30,071,560	\$30,071,560
CA-54-0155	CA-2024-074-04-00	BUS TRANSITWAYS/LINES	112-00 (112)	A4	060060	San Francisco-Oakland, CA	2023.2J.54.38.2	00	SGR - Fixed Guideway	\$2,500,000	\$2,500,000
CA-54-0155	CA-2024-074-05-00	OTHER CAPITAL ITEMS (RAIL)	127-00 (127)	A6	060060	San Francisco-Oakland, CA	2023.2J.54.38.2	00	SGR - Fixed Guideway	\$6,000,000	\$6,000,000
CA-54-0155	CA-2024-074-05-00	RAIL - ROLLING STOCK	121-00 (121)	A5	060060	San Francisco-Oakland, CA	2023.2J.54.38.2	00	SGR - Fixed Guideway	\$5,666,666	\$5,666,666

Part 3: Project Information

Project Title: Cable Car Infrastructure

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2024-074-01-00	1697-2023-3-P2	6/28/2023	12/31/2024	6/30/2028

Project Description

On the Cable Car system: Includes various guideway and infrastructure repair and improvement projects. Covers all street components of the Cable Car system, such as pulleys, switches and turntables. Replace track curves, frogs, sheaves, Barn 12KV, switchgear, DC Motor, mechanical, HVAC, and infrastructure upgrade for the space to comply with latest codes and ADA compliance. Because this is an ongoing program, projects are in varying stages of conceptual design, design, and construction.

Project Benefits

Improved system of safety and reliability.

Additional Information

None provided.

Location Description

Project serves people throughout San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060000	California
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
11	California
15	California

Program Plan Information**STIP/TIP**

Date: 6/8/2023

Description: SFMTA Cable Car Power & Guideway 5337 TIP

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$3,247,000
Local			\$812,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$4,059,000

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2024-074-01-00	122-00 (122-A1) RAIL TRANSITWAY LINES	\$3,247,000.00	\$812,000.00	\$4,059,000.00	1
CA-2024-074-01-00	12.24.20 REHAB/RENOV MISC RAIL EQUIPMENT	\$3,247,000.00	\$812,000.00	\$4,059,000.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.24.20 - REHAB/RENOV MISC RAIL EQUIPMENT				
Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL TRANSITWAY LINES (122-00)	12.24.20	REHAB/RENOV MISC RAIL EQUIPMENT	REHAB/RENOVATION	1

Extended Budget Description

On the Cable Car system: Includes various guideway and infrastructure repair and improvement projects. Covers all street components of the Cable Car system, such as pulleys, switches and turntables. Replace track curves, frogs, sheaves, Barn 12KV, switchgear, DC Motor, mechanical, HVAC, and infrastructure upgrade for the space to comply with latest codes and ADA compliance. Because this is an ongoing program, projects are in varying stages of conceptual design, design, and construction.

This project will use a total of \$3,247,000 in FY2023 5337 State of Good Repair Funds for Cable Car Infrastructure. The required minimum 20% match of \$812,000 will be provided with sales tax revenues.

SUMMARY

Amount: \$3,247,000

Year: 2023

Program: 5337 State of Good Repair

Activity: Cable Car Infrastructure

Match: 20%

Match Source: Sales Tax

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$3,247,000
Local			\$812,000
Local/In-Kind			\$0
State			\$0

State/In-Kind		\$0
Other Federal		\$0
Transportation Development Credit		\$0
Adjustment		\$0
Total Eligible Cost		\$4,059,000

Milestone Name	Est. Completion Date	Description
RFP Issue Date	12/31/2024	
Contract Award Date	6/30/2025	
Initial Delivery Date	12/31/2026	
Final Delivery Date	6/30/2027	
Select row 6 Contract Completion Date	6/30/2028	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date Description	Date
Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
RAIL TRANSITWAY LINES (122-00)	12.24.20	REHAB/RENOV MISC RAIL EQUIPMENT	1	\$3,247,000.00	\$4,059,000.00

Project Title: Muni Rail Replacement Program

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2024-074-02-00	1697-2023-3-P3	6/28/2023	10/1/2023	4/30/2028

Project Description

Design and replacement of trackway and related systems serving the light rail and cable car lines as part of a regular replacement program and to mitigate excessive noise and vibration. The program seeks to rehabilitate and repair existing track work, including replacement and tamping of ties and ballast and installation of guardrail, enhance system safety and reliability, while reducing the need for excessive maintenance. This program is divided into 10 year segments, and work is ongoing on various phases of the program.

Project Benefits

Design and replacement of trackway and related systems serving the light rail and cable car lines as part of a regular replacement program and to mitigate excessive noise and vibration. The program seeks to rehabilitate and repair existing track work, including replacement and tamping of ties and ballast and installation of guardrail, enhance system safety and reliability, while reducing the need for excessive maintenance. This program is divided into 10 year segments, and work is ongoing on various phases of the program.

Additional Information

None provided.

Location Description

Project is located throughout San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060000	California
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
11	California
15	California

Program Plan Information

STIP/TIP

Date: 6/8/2023

Description: SFMTA Rail Replacement 5337 TIP

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$3,837,000
Local			\$960,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$4,797,000

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2024-074-02-00	122-00 (122-A2) RAIL TRANSITWAY LINES	\$3,837,000.00	\$960,000.00	\$4,797,000.00	1
CA-2024-074-02-00	12.24.20 REHAB/RENOV MISC RAIL EQUIPMENT	\$3,837,000.00	\$960,000.00	\$4,797,000.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.24.20 - REHAB/RENOV MISC RAIL EQUIPMENT				
Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL TRANSITWAY LINES (122-00)	12.24.20	REHAB/RENOV MISC RAIL EQUIPMENT	REHAB/RENOVATION	1

Extended Budget Description

Design and replacement of trackway and related systems serving the light rail and cable car lines as part of a regular replacement program and to mitigate excessive noise and vibration. The program seeks to rehabilitate and repair existing track work, including replacement and tamping of ties and ballast and installation of guardrail, enhance system safety and reliability, while reducing the need for excessive maintenance. This program is divided into 10 year segments, and work is ongoing on various phases of the program.

This project will use a total of \$3,837,000 in FY2023 5337 State of Good Repair Funds for Muni Rail Replacement. The required minimum 20% match of \$960,000 will be provided with sales tax revenues.

SUMMARY

Amount: \$3,837,000

Year: 2023

Program: 5337 State of Good Repair

Activity: Muni Rail Replacement

Match: 20%

Match Source: Sales Tax

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$3,837,000
Local			\$960,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$4,797,000

Milestone Name	Est. Completion Date	Description
RFP Issue Date	10/1/2023	
Contract Award Date	4/30/2024	
Initial Delivery Date	10/31/2024	
Final Delivery Date	10/31/2027	
Contract Completion Date	4/30/2028	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers

that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date	Description
	Class IIc CE Approved

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
RAIL TRANSITWAY LINES (122-00)	12.24.20	REHAB/RENOV MISC RAIL EQUIPMENT	1	\$3,837,000.00	\$4,797,000.00

Project Title: Wayside/Central Train Control & Trolley Signal Systems

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2024-074-03-00	1697-2023-3-P4	6/28/2023	10/1/2023	4/30/2028

Project Description

SFMTA: Systemwide: ATCS Wayside/Central Train Control & Rail/Bus Signal Systems Rehab/Replace Program includes but is not limited to (1) Final cutover of the new Advanced Train Control System (ATCS), remove the old signal system, and replace critical wayside equipment including station controllers, axle counters, and loop cables (2) Replace the UPS that provides power to the Central Control portion of the ATCS (3) Replace subway motor generators at Van Ness Station, which includes an Uninterruptible Power Supply (UPS) as backup for the wayside ATCS. (4) The Data Transmission System (DTS) provides remote control from Central Control of subway emergency ventilation fans, and monitors status of subway track switches, signal aspects, train traffic direction, and alarms, including fire and intrusion. The project replaces the deteriorated and obsolete system with a SCADA system and integrates it with other rail SCADA systems operated from Central Control. (5) Purchase a backup system for the Yard Departure Test Device (YDTD) at Muni's Metro Yard to minimize impacts on vehicle availability. (6) Signalize and electrify most switches in the Green Yard to enable control by LRV operators instead of current manual operations for more efficient operations. (7) Replace existing train control and signal system at various locations to increase protection for transit vehicles from auto traffic, reduce derailments and travel time, and improve safety, reliability, and maintainability of the system. (8) Rehab/replace miscellaneous trolley coach signalization systems. Funds in the 2020s will be invested in the ultimate change out of the ATCS with a new Communications-Based Train Control program.

Project Benefits

This project will improve the safety and reliability of the rail system.

Additional Information

None provided.

Location Description

This project is located throughout San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
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060000	California
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
11	California
15	California

Program Plan Information

STIP/TIP
 Date: 1/5/2024
 Description: Not Provided

UPWP
 Date: N/A
 Description: N/A

Long Range Plan
 Date: N/A
 Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$30,071,560
Local			\$7,517,890
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$37,589,450

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2024-126-00	SIGNAL/COMMUNICATION (RAIL)	\$30,071,560.00	\$7,517,890.00	\$37,589,450.00	1

074-03-00	(126-A3)						
CA-2024-074-03-00		12.63.01	CONSTRUCT TRAIN CONTROL-SIGNAL SYS	\$30,071,560.00	\$7,517,890.00	\$37,589,450.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 12.63.01 - CONSTRUCT TRAIN CONTROL-SIGNAL SYS

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
SIGNAL/COMMUNICATION (RAIL) (126-00)	12.63.01	CONSTRUCT TRAIN CONTROL-SIGNAL SYS	CONSTRUCTION	1

Extended Budget Description

SFMTA: Systemwide: ATCS Wayside/Central Train Control & Rail/Bus Signal Systems Rehab/Replace Program includes but is not limited to (1) Final cutover of the new Advanced Train Control System (ATCS), remove the old signal system, and replace critical wayside equipment including station controllers, axle counters, and loop cables (2) Replace the UPS that provides power to the Central Control portion of the ATCS (3) Replace subway motor generators at Van Ness Station, which includes an Uninterruptible Power Supply (UPS) as backup for the wayside ATCS. (4) The Data Transmission System (DTS) provides remote control from Central Control of subway emergency ventilation fans, and monitors status of subway track switches, signal aspects, train traffic direction, and alarms, including fire and intrusion. The project replaces the deteriorated and obsolete system with a SCADA system and integrates it with other rail SCADA systems operated from Central Control. (5) Purchase a backup system for the Yard Departure Test Device (YDTD) at Muni's Metro Yard to minimize impacts on vehicle availability. (6) Signalize and electrify most switches in the Green Yard to enable control by LRV operators instead of current manual operations for more efficient operations. (7) Replace existing train control and signal system at various locations to increase protection for transit vehicles from auto traffic, reduce derailments and travel time, and improve safety, reliability, and maintainability of the system. (8) Rehab/replace miscellaneous trolley coach signalization systems. Funds in the 2020s will be invested in the ultimate change out of the ATCS with a new Communications-Based Train Control program.

This project will use a total of \$30,071,560 in FY2023 5337 State of Good Repair Funds for Wayside/Central Train Control & Rail/Bus Signal Systems. The required minimum 20% match of \$7,517,890 will be provided with sales tax revenues.

SUMMARY

Amount: \$30,071,560

Year: 2023

Program: 5337 State of Good Repair

Activity: Wayside/Central Train Control & Rail/Bus Signal Systems

Match: 20%

Match Source: Sales Tax

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
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5337 - State of Good Repair Grants	5337	20525	\$30,071,560
Local			\$7,517,890
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$37,589,450

Milestone Name	Est. Completion Date	Description
RFP Issue Date	10/1/2023	
Contract Award Date	4/30/2024	
Initial Delivery Date	10/31/2024	
Final Delivery Date	10/31/2027	
Contract Completion Date	4/30/2028	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date	Description
	Class IIc CE Approved

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
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SIGNAL/COMMUNICATION (RAIL) (126-00)	12.63.01	CONSTRUCT TRAIN CONTROL- SIGNAL SYS	1	\$30,071,560.00	\$37,589,450.00
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Project Title: Overhead Line Rehabilitation
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Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2024-074-04-00	1697-2023-3-P5	6/28/2023	10/1/2023	4/30/2028

Project Description

Design and construction of Muni Trolley Poles, Overhead Contact System, and Rail Traction Power improvements that provides power to Muni, based on evaluation of the Muni Track and Traction Power Condition Assessment, which serves light rail and trolley coach lines.

Project Benefits

The projects included in this program are designed to reduce operational problems, reduce maintenance and increase system reliability, provide flexibility in addressing acute needs, and address areas of chronic service outages or emergency repairs.

Additional Information

None provided.

Location Description

Project serves people throughout San Francisco

Project Location (Urbanized Areas)

UZA Code	Area Name
060000	California
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
11	California
15	California

Program Plan Information

STIP/TIP

Date: 6/8/2023

Description: SFMTA Overhead Line 5337 TIP

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A
 Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$2,500,000
Local			\$625,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$3,125,000

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2024-074-04-00	112-00 (112-A4) BUS TRANSITWAYS/LINES	\$2,500,000.00	\$625,000.00	\$3,125,000.00	1
CA-2024-074-04-00	11.24.03 REHAB/RENOVATE - LINE EQUIP/STRUCTURES	\$2,500,000.00	\$625,000.00	\$3,125,000.00	1

Project Budget Activity Line Items

Budget Activity Line Item: 11.24.03 - REHAB/RENOVATE - LINE EQUIP/STRUCTURES				
Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
BUS TRANSITWAYS/LINES (112-00)	11.24.03	REHAB/RENOVATE - LINE EQUIP/STRUCTURES	REHABILITATION/RENOVATION - BUS TRANSITWAY LINES	1

Extended Budget Description

Design and construction of Muni Trolley Poles, Overhead Contact System, and Rail Traction Power improvements that provides power to Muni, based on evaluation of the Muni Track and Traction Power Condition Assessment, which serves light rail and trolley coach lines. The projects included in this program are designed to reduce operational problems, reduce maintenance and increase system

reliability, provide flexibility in addressing acute needs, and address areas of chronic service outages or emergency repairs.

This project will use a total of \$2,500,000 in FY2023 5337 State of Good Repair Funds for Overhead Line Restoration. The required minimum 20% match of \$625,000 will be provided with sales tax revenues.

SUMMARY

Amount: \$2,500,000

Year: 2023

Program: 5337 State of Good Repair

Activity: Overhead Line Restoration

Match: 20%

Match Source: Sales Tax

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$2,500,000
Local			\$625,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$3,125,000

Milestone Name	Est. Completion Date	Description
RFP/IFB Issue Date	10/1/2023	
Contract Award Date	4/30/2024	
Initial Delivery Date	10/31/2024	
Final Delivery Date	10/31/2027	
Contract Completion Date	4/30/2028	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date Description	Date
Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
BUS TRANSITWAYS/LINES (112-00)	11.24.03	REHAB/ RENOVATE - LINE EQUIP/ STRUCTURES	1	\$2,500,000.00	\$3,125,000.00

Project Title: Historic Streetcar & Cable Car Restorations

Project Number	Temporary Project Number	Date Created	Start Date	End Date
CA-2024-074-05-00	1697-2023-3-P6	6/28/2023	10/1/2023	3/31/2028

Project Description

Fleet of historic streetcars: Rehabilitate vehicles. SFMTA operates a fleet of Presidents' Conference Committee streetcars (PCC) and other vintage streetcars 21 hours per day, 365 days a year. The PCCs carries approximately 20,000 people per day from Castro and Market Street along the Embarcadero to Fisherman's wharf. For the current F-Line service and envisioned E-Line service to Mission Bay and Fort Mason, the SFMTA needs to rehabilitate many of its historic streetcars to provide safe and reliable service.

Project Benefits

Improve safe and reliable services, and extend the lifespan of historic streetcars.

Additional Information

None provided.

Location Description

This project will be implemented throughout the City and County of San Francisco.

Project Location (Urbanized Areas)

UZA Code	Area Name
060000	California
060060	San Francisco-Oakland, CA

Congressional District Information

District	State
11	California
15	California

Program Plan Information

STIP/TIP

Date: 8/20/2023

Description: Not Provided

UPWP

Date: N/A

Description: N/A

Long Range Plan

Date: N/A

Description: N/A

Project Control Totals

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$11,666,666
Local			\$2,924,167
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$14,590,833

Project Budget

Project Number	Budget Item	FTA Amount	Non-FTA Amount	Total Eligible Amount	Quantity
CA-2024-074-05-00	121-00 (121-A5) RAIL - ROLLING STOCK	\$5,666,666.00	\$1,424,167.00	\$7,090,833.00	6
CA-2024-074-05-00	12.14.26 COMMUTER RAIL CARS USED	\$5,666,666.00	\$1,424,167.00	\$7,090,833.00	6

CA-2024-074-05-00	127-00 (127-A6)	OTHER CAPITAL ITEMS (RAIL)	\$6,000,000.00	\$1,500,000.00	\$7,500,000.00	6
CA-2024-074-05-00	12.72.08	FORCE ACCT CONSTRUCTION	\$6,000,000.00	\$1,500,000.00	\$7,500,000.00	6

Project Budget Activity Line Items

Budget Activity Line Item: 12.72.08 - FORCE ACCT CONSTRUCTION
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Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
OTHER CAPITAL ITEMS (RAIL) (127-00)	12.72.08	FORCE ACCT CONSTRUCTION	FORCE ACCOUNT	6

Extended Budget Description

Fleet of Cable Cars: Rehabilitate vehicles. SFMTA operates a fleet of Cable Cars for regular service along several routes. SFMTA needs to regularly rehabilitate many of its Cable Cars to continue providing safe and reliable service.

This project will use a total of \$6,000,000 in FY2023 5337 State of Good Repair Funds for restoration of Cable Cars. The required minimum 20% match of \$1,500,000 will be provided with sales tax revenues.

SUMMARY

Amount: \$6,000,000

Year: 2023

Program: 5337 State of Good Repair

Activity: Cable Car Restorations

Match: 20%

Match Source: Sales Tax

Will 3rd Party contractors be used to fulfill this activity line item?

No, 3rd Party Contractors will not be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$6,000,000
Local			\$1,500,000
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$7,500,000

Milestone Name	Est. Completion Date	Description
Start Date	10/1/2023	
End Date	3/31/2028	

Budget Activity Line Item: 12.14.26 - COMMUTER RAIL CARS USED

Scope Name / Code	Line Item #	Line Item Name	Activity	Quantity
RAIL - ROLLING STOCK (121-00)	12.14.26	COMMUTER RAIL CARS USED	REHAB/REBUILD - RAIL ROLL STOCK	6

Extended Budget Description

Fleet of historic streetcars: Rehabilitate vehicles. SFMTA operates a fleet of Presidents' Conference Committee streetcars (PCC) and other vintage streetcars 21 hours per day, 365 days a year. The PCCs carries approximately 20,000 people per day from Castro and Market Street along the Embarcadero to Fisherman's wharf. For the current F-Line service and envisioned E-Line service to Mission Bay and Fort Mason, the SFMTA needs to rehabilitate many of its historic streetcars to provide safe and reliable service.

This project will use a total of \$5,666,666 in FY2023 5337 State of Good Repair Funds for restoration of historic streetcars. The required minimum 20% match of \$1,424,167 will be provided with sales tax revenues.

SUMMARY

Amount: \$10,542,385
Year: 2023
Program: 5337 State of Good Repair
Activity: Motor Coach & Trolley Coach Midlife Overhauls
Match: 20%
Match Source: Sales Tax

Will 3rd Party contractors be used to fulfill this activity line item?

Yes, 3rd Party Contractors will be used for this line item.

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$5,666,666
Local			\$1,424,167
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$7,090,833

Milestone Name	Est. Completion Date	Description
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RFP/IFB Issue Date	10/1/2023	
Contract Award Date	3/31/2024	
Initial Delivery Date	3/31/2025	
Final Delivery Date	3/31/2027	
Contract Completion Date	3/31/2028	

Project Environmental Findings

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date	Description	Date
	Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
RAIL - ROLLING STOCK (121-00)	12.14.26	COMMUTER RAIL CARS USED	6	\$5,666,666.00	\$7,090,833.00

Finding: Class II(c) - Categorical Exclusions (C-List)

Class Level Description

Class II(c) consists of projects that do not have a significant environmental impact on the human or natural environment and are therefore categorically excluded from the requirement to prepare an environmental assessment or an environmental impact statement. FTA requires a sufficient project description to support a CE determination. The project may require additional documentation to comply with other environmental laws.

Categorical Exclusion Description

Type 07: Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

Date	Description	Date
	Class IIc CE Approved	

Scope Name / Code	Line Item Number	Line Item Name	Quantity	FTA Amount	Total Eligible Cost
OTHER CAPITAL ITEMS (RAIL) (127-00)	12.72.08	FORCE ACCT CONSTRUCTION	6	\$6,000,000.00	\$7,500,000.00

Part 4: Fleet Details

Fleet Type: Paratransit

Fleet Comments

The paratransit fleet consists of 151 vehicles.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	125
	B. Spares	25
	C. Total (A+B)	150
	D. Spare Ratio (B/A)	20%
II.	Inactive Fleet	
	A. Other	1
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	150

Fleet Type: Commuter Rail

Fleet Comments

This report represents the Historic vehicle fleet status.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	23
	B. Spares	18
	C. Total (A+B)	41
	D. Spare Ratio (B/A)	78.26%
II.	Inactive Fleet	
	A. Other	7

	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	41

Fleet Type: Light Rail

Fleet Comments

SFMTA's current revenue fleet is 217.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	173
	B. Spares	44
	C. Total (A+B)	217
	D. Spare Ratio (B/A)	25.43%
II.	Inactive Fleet	
	A. Other	0
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	217

Fleet Type: Fixed Route

Fleet Comments

This category reflects our 40' and 60' Trolley coaches.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	197
	B. Spares	81
	C. Total (A+B)	278
	D. Spare Ratio (B/A)	41.12%
II.	Inactive Fleet	
	A. Other	0
	B. Pending Disposal	0
	C. Total (A+B)	0
III.	Total (I.C and II.C)	278

Fleet Type: Other

Fleet Comments

This category reflects our Motor coaches.

		Current Value
I.	Active Fleet	
	A. Peak Requirement	483
	B. Spares	142
	C. Total (A+B)	625
	D. Spare Ratio (B/A)	29.4%
II.	Inactive Fleet	
	A. Other	0
	B. Pending Disposal	57
	C. Total (A+B)	57
III.	Total (I.C and II.C)	682

Part 5: FTA Review Comments

Application Review Comments

Comment By Alexander Smith

Comment Type Pre-Award Manager Returns Application

Date 5/13/2023

Comment Returned at grantee request.

Comment By Alexander Smith

Comment Type Pre-Award Manager Returns Application

Date 6/16/2023

Comment

1. STIP Approval Date: Since SFMTA intends to utilize Pre-Award Authority for this grant award, the STIP information must include the approval date that the LRV procurement project was initially programmed into the STIP. Otherwise, the ALIs contract award (10/1/2022) took place ahead of the STIP approval date of 4/21/2023, under which the grantee would not be allowed to use pre-award authority.
2. Extended Budget Description (EBD) needs to include the following, in accordance with the information provided in the Application Development Toolkit (Part 2).
 - a. Amount of FTA funds applied
 - b. Year of funds
 - c. Program of funds
 - d. Brief Description of the activity
 - e. Match ratio
 - f. Source of non-federal share
 - g. Useful Life
 - h. VIN information for the railcars to be replaced.
3. Milestones: The 5 milestones should include RFP/IFB, Contract Award, 1 vehicle delivered, final vehicle delivered, and Contract Closeout.

4. Quantity: Please ask the grantee to identify the best estimate of the quantity of LRVs that this grant would fund. They may need to revise the quantity information and provide better description regarding that large/overall LRV procurement contract and how this grant would be in tandem with other FTA grants to collective fund the vehicle purchase.

Comment By Alexander Smith

Comment Type Pre-Award Manager Returns Application

Date 7/13/2023

Comment Returned at recipient request.

Comment By Alexander Smith

Comment Type Pre-Award Manager Returns Application

Date 8/6/2023

Comment

1. STIP Approval Date: The approval date that the LRV procurement project was initially programmed into STIP in the attached documents shows 4/21/2023, but TrAMS shows 4/20/23. Please update.

2. Extended Budget Description (EBD) needs to include the following *for all contracted projects*, in accordance with the information provided in the Application Development Toolkit (Part 2).

- a. Amount of FTA funds applied
- b. Year of funds
- c. Program of funds
- d. Brief Description of the activity
- e. Match ratio
- f. Source of non-federal share
- g. Useful Life
- h. VIN information for the railcars to be replaced.

3. Milestones: The 5 milestones should include RFP/IFB, Contract Award, 1 vehicle delivered, final vehicle delivered, and Contract Closeout. Please discuss with FTA if you do not have all dates for each contracted project.

Comment By Alexander Smith

Comment Type Pre-Award Manager Returns Application

Date 4/30/2024

Comment Please update the period of performance end date to 3 months beyond the last milestone date (I think this is 3/31/28 plus 3 months?). Confirm that this application will use indirect costs. Update milestones to include 5 for 3rd party contracts and procurements.

Application Review Comments

Comment By Mark Lui

Comment Type Application Details

Date 8/16/2023

I have transmitted a different application 2023-6 to expedite the award of funds for the LRV Replacement Procurement Project.

Comment That application will later be amended to include Indirect Costs and the remaining SGR projects programmed to these funds.

Comment By Mark Lui

Comment Type Application Details

Date 5/22/2024

Comment Changed POPED and added 5 milestone dates for all contracted services.

Part 6: Agreement

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL TRANSIT ADMINISTRATION**

**GRANT AGREEMENT
(FTA G-31)**

On the date the authorized U.S. Department of Transportation, Federal Transit Administration (FTA) official signs this Grant Agreement, FTA has obligated and awarded federal assistance as provided below. Upon execution of this Grant Agreement by the Recipient named below, the Recipient affirms this FTA Award, enters into this Grant Agreement with FTA, and binds its compliance with the terms of this Grant Agreement.

The following documents are incorporated by reference and made part of this Grant Agreement:

- (1) "Federal Transit Administration Master Agreement," FTA MA(31), <http://www.transit.dot.gov>,
- (2) The Certifications and Assurances applicable to the FTA Award that the Recipient has selected and provided to FTA, and
- (3) Any Award notification containing special conditions or requirements, if issued.

WHEN THE TERM "FTA AWARD" OR "AWARD" IS USED, EITHER IN THIS GRANT AGREEMENT OR THE APPLICABLE MASTER AGREEMENT, "AWARD" ALSO INCLUDES ALL TERMS AND CONDITIONS SET FORTH IN THIS GRANT AGREEMENT.

FTA OR THE FEDERAL GOVERNMENT MAY WITHDRAW ITS OBLIGATION TO PROVIDE FEDERAL ASSISTANCE IF THE RECIPIENT DOES NOT EXECUTE THIS GRANT AGREEMENT WITHIN 90 DAYS FOLLOWING FTA's AWARD DATE SET FORTH HEREIN.

FTA AWARD

Federal Transit Administration (FTA) hereby awards a Federal Grant as follows:

Recipient Information

Recipient Name: CITY & COUNTY OF SAN FRANCISCO

Recipient ID: 1697

UEI: GSL6KW4Z5UE1

DUNS: 956617435

Award Information

Federal Award Identification Number: CA-2024-074-00

Award Name: FY2023 5337 Cable Car Infrastructure, Muni Rail Replacement Program, Wayside/Central Train Control & Trolley Signal Systems, Overhead Line Rehabilitation, and Historic Streetcar & Cable Car Restorations

Award Start Date: 7/1/2024

Original Award End Date: 12/31/2028

Current Award End Date: 12/31/2028

Award Executive Summary: The SFMTA will use a total of \$51,322,226 in FY 2023 5337 State of Good Repair funds for Cable Car Infrastructure, Muni Rail Replacement, Wayside/Central Train Control & Trolley Signal Systems, Overhead Line Rehabilitation, and Historic Streetcar & Cable Car Restorations.

Allowable capital project costs under this grant follow the guidelines and principles contained in OMB's Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal awards circular (Super Circular). Eligible costs are those associated with the acquisition, construction, improvement and maintenance of facilities and equipment for use in transit, and include capital procurements, rolling stock purchases, design and construction costs and the force account (personnel) expenditures required to support these capital project activities.

The funds are allocated to the SFO UZA and are approved by the MTC in the following TIP numbers: SF99T002, SF95037B, SF050024, SF970170, and SF170021.

The 5337 funds in this application are included in the Investment Prioritization Section of SFMTA's TAM Plan.

In addition to FTAs Buy America Act, which requires that the steel, iron, and manufactured goods used in an FTA-funded project are produced in the United States (49 U.S.C. 5323(j)(1)), the Build America, Buy America Act (BABA) (Public Law 117-58, div. G 70914(a)) now requires that construction materials used in infrastructure projects are also produced in the United States. Refer to terms and conditions in FTAs Master Agreement Section 15. The BABA requirement applies to this grant, in addition to the Buy America requirements, except to the extent a waiver of either requirements may apply.

Research and Development: This award does not include research and development activities.

Indirect Costs: This award is applying an approved Indirect cost rate(s).

Suballocation Funds: Recipient organization is suballocated these apportioned funds and can apply for and receive these funds directly.

Pre-Award Authority: This award is using Pre-Award Authority.

Award Budget

Total Award Budget: \$64,161,283.00

Amount of Federal Assistance Obligated for This FTA Action (in U.S. Dollars): \$51,322,226.00

Amount of Non-Federal Funds Committed to This FTA Action (in U.S. Dollars): \$12,839,057.00

Total FTA Amount Awarded and Obligated (in U.S. Dollars): \$51,322,226.00

Total Non-Federal Funds Committed to the Overall Award (in U.S. Dollars): \$12,839,057.00

Award Budget Control Totals

(The Budget includes the individual Project Budgets (Scopes and Activity Line Items) or as attached)

Funding Source	Section of Statute	CFDA Number	Amount
5337 - State of Good Repair Grants	5337	20525	\$51,322,226
Local			\$12,839,057
Local/In-Kind			\$0
State			\$0
State/In-Kind			\$0
Other Federal			\$0
Transportation Development Credit			\$0
Adjustment			\$0
Total Eligible Cost			\$64,161,283

(The Transportation Development Credits are not added to the amount of the Total Award Budget.)

U.S. Department of Labor Certification of Public Transportation Employee Protective Arrangements:

DOL Decision: DOL Concur - Certified
DOL Review Date: 6/28/2024
DOL Certification Date: 6/28/2024

Special Conditions

There are no special conditions.

FINDINGS AND DETERMINATIONS

By signing this Award on behalf of FTA, I am making all the determinations and findings required by federal law and regulations before this Award may be made.

FTA AWARD OF THE GRANT AGREEMENT

Awarded By:
Ray Tellis
Regional Administrator
FEDERAL TRANSIT ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION
Contact Info: ray.tellis@dot.gov
Award Date: 7/1/2024

EXECUTION OF THE GRANT AGREEMENT

Upon full execution of this Grant Agreement by the Recipient, the Effective Date will be the date FTA or the Federal Government awarded Federal assistance for this Grant Agreement.

By executing this Grant Agreement, the Recipient intends to enter into a legally binding agreement in which the Recipient:

- (1) Affirms this FTA Award,
- (2) Adopts and ratifies all of the following information it has submitted to FTA:
 - (a) Statements,
 - (b) Representations,
 - (c) Warranties,
 - (d) Covenants, and
 - (e) Materials,
- (3) Consents to comply with the requirements of this FTA Award, and
- (4) Agrees to all terms and conditions set forth in this Grant Agreement.

Executed By:
Mark Lui
Pr Administrative Analyst
CITY & COUNTY OF SAN FRANCISCO
7/1/2024

Esqueda, Alberto

From: Smith, Alexander (FTA) <Alexander.Smith@dot.gov>
Sent: Friday, December 20, 2024 5:38 PM
To: Lui, Mark
Cc: Esqueda, Alberto; Robles, Felipe; Delumo, Jenny; Hassall, William; Goldberg, Joel; Studwell, Kathryn
Subject: RE: FTA Train Control Project NEPA

EXT

Hi Mark,

If there are no significant ground disturbances, this project appears to qualify for a C-type CE, which can be done within TrAMS.

Thanks,
Alex

From: Lui, Mark <Mark.Lui@sfmta.com>
Sent: Friday, December 20, 2024 9:44 AM
To: Smith, Alexander (FTA) <Alexander.Smith@dot.gov>
Cc: Esqueda, Alberto <Alberto.Esqueda@sfmta.com>; Robles, Felipe <Felipe.Robles@sfmta.com>; Delumo, Jenny <Jenny.Delumo@sfmta.com>; Hassall, William <William.Hassall@sfmta.com>; Goldberg, Joel <Joel.Goldberg@sfmta.com>; Studwell, Kathryn <Kathryn.Studwell@sfmta.com>
Subject: Re: FTA Train Control Project NEPA

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Good Morning Alex-,

Hoping you got this but just in case just following up to see if you have any guidance for us on this.

Thank you,

Mark

From: Lui, Mark <Mark.Lui@sfmta.com>
Sent: Tuesday, December 17, 2024 6:24 PM
To: Alex Smith (Alexander.Smith@dot.gov) <Alexander.Smith@dot.gov>
Cc: Esqueda, Alberto <Alberto.Esqueda@sfmta.com>; Robles, Felipe <Felipe.Robles@sfmta.com>; Delumo, Jenny <Jenny.Delumo@sfmta.com>; Hassall, William <William.Hassall@sfmta.com>; Goldberg, Joel <Joel.Goldberg@sfmta.com>
Subject: Fw: FTA Train Control Project NEPA

Thanks Alex,

The following is the previously approved project description in 2024-074:

Project Description

SFMTA: Systemwide: ATCS Wayside/Central Train Control & Rail/Bus Signal Systems Rehab/Replace Program includes but is not limited to (1) Final cutover of the new Advanced Train Control System (ATCS), remove the old signal system, and replace critical wayside equipment including station controllers, axle counters, and loop cables (2) Replace the UPS that provides power to the Central Control portion of the ATCS (3) Replace subway motor generators at Van Ness Station, which includes an Uninterruptible Power Supply (UPS) as backup for the wayside ATCS. (4) The Data Transmission System (DTS) provides remote control from Central Control of subway emergency ventilation fans, and monitors status of subway track switches, signal aspects, train traffic direction, and alarms, including fire and intrusion. The project replaces the deteriorated and obsolete system with a SCADA system and integrates it with other rail SCADA systems operated from Central Control. (5) Purchase a backup system for the Yard Departure Test Device (YDTD) at Muni's Metro Yard to minimize impacts on vehicle availability. (6) Signalize and electrify most switches in the Green Yard to enable control by LRV operators instead of current manual operations for more efficient operations. (7) Replace existing train control and signal system at various locations to increase protection for transit vehicles from auto traffic, reduce derailments and travel time, and improve safety, reliability, and maintainability of the system. (8) Rehab/replace miscellaneous trolley coach signalization systems. Funds in the 2020s will be invested in the ultimate change out of the ATCS with a new Communications-Based Train Control program.

And here is additional information about the entire project:

Overview of the Train Control Upgrade Project (TCUP)

- TCUP is an SFMTA capital project to replace the nearly 30-year-old Automatic Train Control System (ATCS) with a new Communications-Based Train Control (CBTC) system.
- CBTC will expand train control coverage beyond the subways to include the surface portions of Muni Metro, currently operating with independent, first-come, first-serve signals and switches.
- Under CBTC, Muni's entire rail network will be centrally managed through a single, modernized system.
- The CBTC system will maintain the excellent safety record of the ATCS while significantly increasing the subway's efficiency and reliability.

Current State of the Muni Metro System

- The ATCS, in service since 1998, is the backbone of Muni's light rail network, enabling safe, high-frequency service in the core system.
- The SFMTA Muni Metro system relies on an Automatic Train Control System (ATCS) to operate trains in the 7-mile Market Street Subway and the new 1.6-mile Central Subway.
- The ATCS is now outdated and at the end of its useful life, causing increased delays due to daily communication failures, train timeouts, and component malfunctions.

Need for the Train Control Upgrade Project

- Upgrading the train control system represents the most impactful investment to improve Muni Metro rail service.
- Replacing the aging ATCS with modern technology is critical for maintaining safety, efficiency, and reliability.

Categorical Exclusion Justification

The TCUP involves the replacement of the existing Automatic Train Control System (ATCS) with a modern Communications-Based Train Control (CBTC) system. The scope of work is largely confined to:

- Replacing existing train-mounted and central communications equipment.
- Upgrading or installing minor infrastructure elements, such as sensors and signal systems, within existing rights-of-way (ROW).
- Conducting installation and testing in areas already developed for transit use.

These activities are consistent with actions eligible for CEs, particularly as they do not involve significant ground disturbance, displacement of communities, or changes to land use.

Project Impact Analysis

While the environmental impacts of the TCUP are minimal, a high-level review of potential indirect and long-term impacts will ensure thorough documentation:

- **Traffic and Transportation:** During installation, short-term disruptions to Muni Metro service may occur, but these will be mitigated through careful scheduling and public communication. Upon completion, the CBTC system will improve operational efficiency and reduce delays.
- **Utilities and Infrastructure:** Temporary adjustments to power or communication lines may be required for equipment upgrades, but these changes will be minor and localized.

About half of the \$700 million project will be coming from FTA and the project is expected to take over 10 years to complete.

Please let us know if you need additional information about this to answer our questions.

Thank You,

Mark

From: Smith, Alexander (FTA) <Alexander.Smith@dot.gov>

Sent: Friday, December 6, 2024 12:53 PM

To: Lui, Mark <Mark.Lui@sfmta.com>

Cc: Robles, Felipe <Felipe.Robles@sfmta.com>; Esqueda, Alberto <Alberto.Esqueda@sfmta.com>; Delumo, Jenny <Jenny.Delumo@sfmta.com>; Hassall, William <William.Hassall@sfmta.com>;

Goldberg, Joel <Joel.Goldberg@sfmta.com>

Subject: RE: FTA Train Control Project NEPA

EXT

Hi Mark,

Please describe the project scope, especially any ground disturbing or construction potential impacts. It would be helpful to see the scope and grant number of the approved project relative to the scope of the broader project. Also, we would like to know which funds will be applied to this and when.

Thanks,

Alex

From: Lui, Mark <Mark.Lui@sfmta.com>

Sent: Friday, December 6, 2024 12:45 PM

To: Smith, Alexander (FTA) <Alexander.Smith@dot.gov>

Cc: Robles, Felipe <Felipe.Robles@sfmta.com>; Esqueda, Alberto <Alberto.Esqueda@sfmta.com>; Delumo, Jenny <Jenny.Delumo@sfmta.com>; Hassall, William <William.Hassall@sfmta.com>; Goldberg, Joel <Joel.Goldberg@sfmta.com>

Subject: Fw: FTA Train Control Project NEPA

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Good Afternoon Alex- Not sure if you saw this so checking to see if you can provide us with guidance on this. Thank you, Mark

From: Lui, Mark

Sent: Wednesday, November 27, 2024 2:11 PM

To: Alex Smith (Alexander.Smith@dot.gov) <Alexander.Smith@dot.gov>

Cc: Robles, Felipe <Felipe.Robles@sfmta.com>; Esqueda, Alberto <Alberto.Esqueda@sfmta.com>; Delumo, Jenny <Jenny.Delumo@sfmta.com>; Hassall, William <William.Hassall@sfmta.com>; Goldberg, Joel <Joel.Goldberg@sfmta.com>
Subject: FTA Train Control Project NEPA

Hello Alex,

We are in the middle of our preconstruction process of our Train Control Project that has a significant amount of FTA funding both now and in the future. We have received the NEPA CE approval on our most recent batch of funds for FY23 through the TrAMS Application Process.

We want to find out if it is possible to get NEPA CE approval on a larger scale that includes the entire project. The project is estimated to be about a total of \$700 million with \$375 million coming from FTA.

Thank you for your guidance and support on this.

Mark S. Lui

Principal Administrative Analyst

Transportation Funding Services

Budget & Capital Finance



415.646.2516

mark.lui@sfmta.com

San Francisco Municipal Transportation Agency

1 South Van Ness Avenue, 8th floor

San Francisco, CA 94103



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From: [Hue, Melinda](#)
To: [Smith, Alexander \(FTA\)](#)
Cc: [Howard, Dan](#); [Hansen, Mark](#); [Goldberg, Joel](#); [Wang, David](#)
Subject: RE: SFMTA - Train Control Upgrade Project w/ FTA
Date: Thursday, March 9, 2023 11:14:52 AM
Attachments: [image001.png](#)
[image005.png](#)

Got it. Thanks so much Alex!

From: Smith, Alexander (FTA) <Alexander.Smith@dot.gov>
Sent: Thursday, March 9, 2023 10:54 AM
To: Hue, Melinda <Melinda.Hue@sfmta.com>
Cc: Howard, Dan <Dan.Howard@sfmta.com>; Hansen, Mark <Mark.Hansen@sfmta.com>; Goldberg, Joel <Joel.Goldberg@sfmta.com>; Wang, David <David.Wang@sfmta.com>
Subject: RE: SFMTA - Train Control Upgrade Project w/ FTA

EXT

Hi Melinda,

From the sounds of it, this would clearly qualify for one of our off-the-shelf CEs, with the NEPA determination made at the time of the trams grant award. Please discuss this with Joel if needed. We would want to avoid the use of the term "construction" for the kind of work you describe below.

Thanks,
Alex

Alex Smith

Federal Transit Administration, Region IX
90 Seventh Street, Suite 15-300
San Francisco, CA 94103-6701
Phone Number: 415-734-9472
Email: alexander.smith@dot.gov

From: Hue, Melinda <Melinda.Hue@sfmta.com>
Sent: Thursday, March 9, 2023 10:50 AM
To: Smith, Alexander (FTA) <Alexander.Smith@dot.gov>
Cc: Howard, Dan <Dan.Howard@sfmta.com>; Hansen, Mark <Mark.Hansen@sfmta.com>; Goldberg, Joel <Joel.Goldberg@sfmta.com>; Wang, David <David.Wang@sfmta.com>
Subject: RE: SFMTA - Train Control Upgrade Project w/ FTA

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Thanks Alex! Below is a short description of the scope of work:

The Train Control Upgrade Project (TCUP) proposes to replace the nearly 30-year-old ATCS (automatic train control system) in the Muni subways with a new CBTC (Communications Based Train Control System). The project would also expand CBTC control outside of the subways to the surface portions of Muni Metro, where signals and switches are currently operated independently of the ATCS in a first come, first serve configuration. Under CBTC, the Muni Metro system would be managed centrally under a single, modernized system.

The project would involve the installation of equipment on trains and wayside. Most of this work would not involve any construction. There may be a potential that construction would be needed (though given that we don't have a design yet, we do not know the extent of construction activities.) Examples of potential construction activities may include:

- The installation of conduits for fiber optic cables in existing conduit alongside the Muni Metro trackway if we can't use existing conduits
- Construction of new CBTC electronic equipment cabinets in the public right-of-way along the Muni Metro trackway if existing equipment cabinets are not available
- Connecting wayside equipment to conduit trunklines along the trackway may require excavation if needed.

Again, we don't know the extent of this work until after the first contract where we would contract for design services. If you want more information regarding installation of equipment that does not require construction, please let us know.

Let me know if you want me to give you a call (I will most likely have Dan and Mark with me as they are the project managers and probably know more of the technical ins and outs of this than I do and can better answer any project questions you may have).

Thanks!

Best,

Melinda

From: Smith, Alexander (FTA) <Alexander.Smith@dot.gov>

Sent: Wednesday, March 1, 2023 11:47 AM

To: Hue, Melinda <Melinda.Hue@sfmta.com>

Cc: Howard, Dan <Dan.Howard@sfmta.com>; Hansen, Mark <Mark.Hansen@sfmta.com>; Goldberg, Joel <Joel.Goldberg@sfmta.com>; Wang, David <David.Wang@sfmta.com>

Subject: RE: SFMTA - Train Control Upgrade Project w/ FTA

Hi Melinda,

No need for any NEPA with the first contract with no construction (other than a simple CE with the grant award).

As for the installation (if we can call it that?), it sounds possible that a simple CE would suffice. If you could better describe the scope of the work we might be able to skip a meeting. Or, feel free to call my mobile at 415-370-9857.

Thanks,
Alex

Alex Smith

Federal Transit Administration, Region IX
90 Seventh Street, Suite 15-300
San Francisco, CA 94103-6701
Phone Number: 415-734-9472
Email: alexander.smith@dot.gov

From: Hue, Melinda <Melinda.Hue@sfmta.com>

Sent: Wednesday, March 1, 2023 11:33 AM

To: Smith, Alexander (FTA) <Alexander.Smith@dot.gov>

Cc: Howard, Dan <Dan.Howard@sfmta.com>; Hansen, Mark <Mark.Hansen@sfmta.com>; Goldberg, Joel <Joel.Goldberg@sfmta.com>; Wang, David <David.Wang@sfmta.com>

Subject: RE: SFMTA - Train Control Upgrade Project w/ FTA

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Hi Alex,

One of the reasons we wanted to meet with you is to talk through the issue we have regarding construction. Our first contract for TCUP will be for design, procurement of equipment, and long-term support. It is with this contract where designing the project would let us know what construction would be involved. Once we have the design, our subsequent contracts would be for construction/installation of equipment.

We plan on using some FTA funds for our first contract (which would not involve any construction) and wanted to confirm that we will not need NEPA completed in order to use FTA funds for our first contract given that no construction would occur.

It would be great if we can have a brief chat about this as a group (we can skip the project overview and get into questions)?

Thanks!

Best,

Melinda

From: Smith, Alexander (FTA) <Alexander.Smith@dot.gov>
Sent: Tuesday, February 28, 2023 6:14 PM
To: Hue, Melinda <Melinda.Hue@sfmta.com>
Cc: Howard, Dan <Dan.Howard@sfmta.com>; Hansen, Mark <Mark.Hansen@sfmta.com>; Goldberg, Joel <Joel.Goldberg@sfmta.com>; Wang, David <David.Wang@sfmta.com>
Subject: RE: SFMTA - Train Control Upgrade Project w/ FTA

EXT

Hi Melinda,

We might be able to avoid a meeting on this topic. Unless this project involves construction or effects to human or natural environment, one of those CEs mentioned below would likely apply. Maybe you could write a brief description of the scope activities to be performed and we can see if we need a meeting?

Thanks,
Alex

Alex Smith

Federal Transit Administration, Region IX
90 Seventh Street, Suite 15-300
San Francisco, CA 94103-6701
Phone Number: 415-734-9472
Email: alexander.smith@dot.gov

From: Hue, Melinda <Melinda.Hue@sfmta.com>
Sent: Tuesday, February 28, 2023 2:30 PM
To: Smith, Alexander (FTA) <Alexander.Smith@dot.gov>
Cc: Howard, Dan <Dan.Howard@sfmta.com>; Hansen, Mark <Mark.Hansen@sfmta.com>; Goldberg, Joel <Joel.Goldberg@sfmta.com>; Wang, David <David.Wang@sfmta.com>
Subject: SFMTA - Train Control Upgrade Project w/ FTA

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Hi Alex,

I am working with Dan Howard and Mark Hansen on SFMTA's Train Control Upgrade Project and we were hoping to loop back with you regarding a few questions we had. I don't recall the last time the project team and FTA met (maybe pre pandemic?) so I think SFMTA can present an overview of the project and discuss the following:

1. Type of NEPA document anticipated for the project
2. Timing of when NEPA will need to be completed as required by our funding

Here are the dates/times the SFMTA team are available for a meeting:

- March 24: 9am-10am, 3pm-4pm
- April 6: 11am-12pm; 1pm-3pm
- April 12: 3pm-4pm

Please let me know what dates/times work best for your team. Also, please let me know what information you think would be useful for SFMTA to provide in advance to facilitate this meeting.

I have taken a preliminary look at the Categorical Exclusion information on FTA's website – "FTA's NEPA regulations outline two lists for the types of projects that are categorically excluded. The C-list (23 CFR 771.118(c)) is a specific list of CEs that normally require minimal documentation."

Looking at 23 CFR 771.118(c), it seems maybe the following Categorical Exclusion types may apply to TCUP? Happy to discuss further at our meeting.

23 CFR 771.118(c)(1): Acquisition, installation, operation, evaluation, replacement, and improvement of discrete utilities and similar appurtenances (existing and new) within or adjacent to existing transportation right-of-way, such as: Utility poles, underground wiring, cables, and information systems; and power substations and utility transfer stations.

23 CFR 771.118(c)(5): Activities, including repairs, replacements, and rehabilitations, designed to promote transportation safety, security, accessibility and effective communication within or adjacent to existing right-of-way, such as: The deployment of Intelligent Transportation Systems and components; installation and improvement of safety and communications equipment, including hazard elimination and mitigation; installation of passenger amenities and traffic signals; and retrofitting existing transportation vehicles, facilities or structures, or upgrading to current standards.

Thanks!

Best,

Melinda

Melinda Hue

Environmental Review Team Planner
Streets



Office 415.646.2842

San Francisco Municipal Transportation Agency
1 South Van Ness Avenue, 7th floor
San Francisco, CA 94103



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Attachment D

Exhibit D

Output	Description & Quantity
Installation of CBTC	Deployment of Communications-Based Train Control (CBTC) technology on Embarcadero and Third Street corridors (Phase 1 demonstration).
Travel Time Savings	26,492,352 person-hours saved over 25 years on the light rail system.
Throughput Improvement	Increase from 77 to 94 passengers per vehicle revenue hour by 2030 (+17).
Emissions Reduction – CO ₂	Reduction of 346,024 metric tons of CO ₂ compared to no-build.
Emissions Reduction – PM2.5	Reduction of 15,438 pounds of fine particulate matter (PM2.5).
Emissions Reduction – VOC	Reduction of 12,962 pounds of volatile organic compounds.
Emissions Reduction – NOx	Reduction of 63,185 pounds of nitrogen oxides.
Jobs Created	Approximately 2,015 jobs created through project construction and delivery.
Outcome	Description & Quantity
VMT Reduction	Daily VMT reduced by 173,954 miles (1.08 billion miles over 25 years).
Transit Delay	Median transit delay reduced by 1.5 minutes per trip.
Safety – Fatalities	Prevents approximately 7 fatalities over project life.
Safety – Injuries	Prevents approximately 330 serious injuries over project life.
Accessibility	710,000 jobs become more accessible by rail transit.
Equity	40% of low-income/disadvantaged residents live within ½ mile of a rail station or high-frequency stop.
Cost Effectiveness	Cost-benefit ratio of 6.0, demonstrating high value relative to project cost.

**California Transportation Commission
2024 Solutions for Congested Corridors Program**

Appendix C: Performance Indicators and Measures

Measure	Metric	Project Type	Build	Future No Build	Change	Increase/Decrease
Congestion Reduction	Change in Daily Vehicle Miles Traveled (VMT) on roadways in SF	Light Rail Transit	Daily VMT = 11,975,266 VMT Per Capita =5.27	Daily VMT =12,149,221 VMT Per Capita: 5.35	Daily VMT =-173,955 Per Capita: -0.8	Decrease
	Person Hours of Travel Time Saved on Light Rail System		Person Hours (over 25 yrs): 26,492,352	Person Hours (over 25 yrs): 52,984,704	Person Hours (over 25 yrs): 26,492,352	Decrease
Throughput	(Optional) Passengers Per Vehicle Service Hour on Light Rail	Light Rail Transit	By 2030, 94 passengers per revenue hour per train.	As of 2023, 77 passengers per revenue hour per train.	17 passengers per revenue hour per train	Increase
	Level of Transit Delay	Light Rail Transit	Median Minutes of Delay: 1.5 min	Median Minutes of Delay: 3	Median Minutes of Delay: 1.5	Decrease
Safety	Number of Fatalities	Light Rail Transit	30.5	37.5	-7	Decrease
	Rate of Fatalities per 100 Million VMT		.006	.006	none	n/a
	Number of Serious Injuries		1,470	1,800	-330	Decrease
	Rate of Serious Injuries per 100 Million VMT		.303	.303	none	n/a
Economic Development	Jobs Created	All	2015	0	2015	Increase
Air Quality and Greenhouse Gases	Particulate Matter (PM 10)	Light Rail Transit	Tons: N/A	Tons: N/A	Tons: N/A	N/A
	Particulate Matter (PM 2.5)		Metric Tons: -15,438 v. no-build	n/a	Metric Tons: 15,438	Decrease
	Carbon Dioxide (CO2)		Tons: -346,024 v. no-build	n/a	Metric Tons: 346,024	Decrease

**California Transportation Commission
2024 Solutions for Congested Corridors Program**

Measure	Metric	Project Type	Build	Future No Build	Change	Increase/Decrease
	Volatile Organic Compounds (VOC)		Metric Tons: --12,962 v. no-build	n/a	Tons: -12,962	Decrease
	Sulphur Oxides (SOx)		Tons: N/A	n/a	Tons: N/A	N/A
	Carbon Monoxide (CO)		Tons: N/A	n/a	Tons: N/A	N/A
	Nitrogen Oxides (NOx)		Tons: -63,185 v. no-build	n/a	Tons: 63,185	Decrease
Accessibility	(Optional) Number of Jobs Accessible by Mode	Light Rail Transit	710,000	N/A	710,000	Increase
	(Optional) Percentage of Population Defined as Low Income or Disadvantaged within ½ mile of a rail station, ferry terminal, or high-frequency bus stop	Light Rail Transit	40%	40%	0%	0
Cost Effectiveness	Cost-Benefit Ratio	Light Rail Transit	6.0	N/A	6.0	Increase

**California Transportation Commission
2024 Solutions for Congested Corridors Program**

Appendix D: Performance Measures Required Back-Up Information

Congestion Reduction

Metric Name:	Change in Daily Vehicle Miles Traveled (VMT)
Source Data:	CARB Benefits Calculator for the Transit and Intercity Rail Infrastructure Program (TIRCP) for Cycle 7; Appendix D2, VMT Projections
Base Numbers & Calculation for “No Build” Estimate	
San Francisco County Transportation Authority SF CHAMPS and Plan Bay Area 2050; SFCTA calculated Daily VMT in SF as 10,783,262 miles and a Population and Jobs total of 1,791,108 in 2030 for a VMT/capita of 6.02. (No Build Baseline) By 2054, SFCTA projects (based on PBA 2050 projections) Daily VMT to be 12,149,221 and per capita VMT to be 5.35 (No Build Project)	
Base Numbers, Trends or Assumptions, and Calculation for “Build” Number	
Interpolation of PBA projections out to 2054. Based on CARB VMT reductions for 25 year life of the project (1,085,416,670), calculated daily VMT reduction (using 305 work days per year). By 2054, Daily VMT is reduced by 173,954 miles to 11,975,266. Per Capita VMT is reduced to 5.27.	
Change	
1,085,416,670 VMT reduction over 25 years of project. Daily VMT is reduced by 173,954 and per capita VMT is reduced by .077 miles.	

System Reliability

Metric Name:	Level of Transit Delay
Source Data:	SFMTA Transtat dashboard and San Francisco Housing Element Update 2022 EIR Appendix G3, Transportation Modeling Results. See tab, TSP Time Savings Map, in BCA Workbook, Appendix F2.
Base Numbers & Calculation for “No Build” Estimate	
Assumption is 3 minute delay for No Build	
Base Numbers, Trends or Assumptions, and Calculation for “Build” Number	
SFMTA TRANSTAT (data collection and analysis of transit performance) for T-Third line, 2024.	
Change	
Decrease by 1.5 minutes per person per trip	

Safety

Metric Name:	Number of Fatalities
Source Data:	Collisions on I-280 in San Francisco: TIMS - SWITRS Crash Summary & Map, Query October 28, 2024; Fatal and injury crashes estimated using USDOT and Caltrans fatality rate per million miles. See BCA Workbook, Appendix F2 Tab, Crash.Cost.Rates.
Base Numbers & Calculation for “No Build” Estimate	
Assumption is 0 decrease in No Build	
Base Numbers, Trends or Assumptions, and Calculation for “Build” Number	
The primary safety benefit resulting from the project is the reduction in fatal and injury vehicle collisions on local and regional roads and highways as riders shift from personal vehicles to	

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transit. Over the life of the project, VMT will be reduced by over 1 billion miles. ¹ According to the USDOT, the rate of fatal collisions is .006 per million miles of travel and the rate of injury collisions is .303 per million miles. This reduction in VMT will save nearly 7 lives and prevent over 329 injuries. (See worksheet, "Crash.Cost.Rates").
Change
Decrease of 7 fatalities

Metric Name:	Rate of Fatalities per 100 Million VMT
Source Data:	Fatal crash rates estimated using fatality rate divided by USDOT numbers for average fatalities per fatal crash.
Base Numbers & Calculation for "No Build" Estimate	
Assumption is a rate of .006 fatalities per million miles traveled.	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
The primary safety benefit resulting from the project is the reduction in fatal and injury vehicle collisions on local and regional roads and highways as riders shift from personal vehicles to transit. Over the life of the project, VMT will be reduced by over 1 billion miles. ² According to the USDOT, the rate of fatal collisions is .006 per million miles of travel and the rate of injury collisions is .303 per million miles. This reduction in VMT will save nearly 7 lives and prevent over 329 injuries. (See worksheet, "Crash.Cost.Rates").	
Change	
No Change	

Metric Name:	Number of Serious Injuries
Source Data:	Injury crash rates estimated by subtracting fatal crash rate from Caltrans's number for fatality + injury crash rate.
Base Numbers & Calculation for "No Build" Estimate	
Assumption is 0	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
The primary safety benefit resulting from the project is the reduction in fatal and injury vehicle collisions on local and regional roads and highways as riders shift from personal vehicles to transit. Over the life of the project, VMT will be reduced by over 1 billion miles. ³ According to the USDOT, the rate of fatal collisions is .006 per million miles of travel and the rate of injury	

¹ 1,085,416,670 VMT reduction is output generated by CARB Benefits Calculator for the Transit and Intercity Rail Infrastructure Program (TIRCP) for Cycle 7, based on Y1 Ridership increase of 3,168,599 and YF Ridership increase of 6,996,263.

² 1,085,416,670 VMT reduction is output generated by CARB Benefits Calculator for the Transit and Intercity Rail Infrastructure Program (TIRCP) for Cycle 7, based on Y1 Ridership increase of 3,168,599 and YF Ridership increase of 6,996,263.

³ 1,085,416,670 VMT reduction is output generated by CARB Benefits Calculator for the Transit and Intercity Rail Infrastructure Program (TIRCP) for Cycle 7, based on Y1 Ridership increase of 3,168,599 and YF Ridership increase of 6,996,263.

https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/calsta_fircp_FinalQM_cycle7.pdf

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collisions is .303 per million miles. This reduction in VMT will save nearly 7 lives and prevent over 329 injuries. (See worksheet, "Crash.Cost.Rates").
Change
Decrease of 330 injuries prevented

Metric Name:	Rate of Serious Injuries per 100 Million VMT
Source Data:	USDOT Average
Base Numbers & Calculation for "No Build" Estimate	
Rate of Fatalities per 1 Million VMT	0.006, and .6/100 Million VMT
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
Rate of Fatalities per 1 Million VMT	0.6 Million VMT
Change	
No Change	

Economic Development

Metric Name:	Jobs Created
Source Data:	FHWA Employment Impacts of Highway Infrastructure Investment performance-measurement-guidebook-final-draft.pdf (ca.gov)
Base Numbers & Calculation for "No Build" Estimate	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
Assumption that each dollar creates .000013 jobs. For step 2, multiply the total project cost by .000013. Since the cost of Phase 1 is \$155 million, 2015 are the resulting jobs created.	
Change	
2015 Jobs created	

Metric Name:	Particulate Matter (PM 2.5)
Source Data:	CARB Benefits Calculator for the Transit and Intercity Rail Infrastructure Program (TIRCP) for Cycle 7. See Appendix F2, BCA Workbook for Co-Benefits
Base Numbers & Calculation for "No Build" Estimate	
Assumption is 0 decrease in No Build	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
Change 15,438 lbs reduced	
Tons: 15,438 Decrease	

Metric Name:	GHG Emissions (CO2)
Source Data:	CARB Benefits Calculator for the Transit and Intercity Rail Infrastructure Program (TIRCP) for Cycle 7. See Appendix F2, BCA Workbook for Co-Benefits
Base Numbers & Calculation for "No Build" Estimate	
Assumption is 0 decrease	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	

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Change
346,024 MTCO2 decrease

Metric Name:	ROG Emission Reduction
Source Data:	CARB Benefits Calculator for the Transit and Intercity Rail Infrastructure Program (TIRCP) for Cycle 7. See Appendix F2, BCA Workbook for Co-Benefits

Base Numbers & Calculation for “No Build” Estimate
Assumption is 0 decrease

Base Numbers, Trends or Assumptions, and Calculation for “Build” Number

Change
LBS: 12,962 Decrease

Metric Name:	Nitrogen Oxides (NOx)
Source Data:	CARB Benefits Calculator for the Transit and Intercity Rail Infrastructure Program (TIRCP) for Cycle 7. See Appendix F2, BCA Workbook for Co-Benefits

Base Numbers & Calculation for “No Build” Estimate

Base Numbers, Trends or Assumptions, and Calculation for “Build” Number

Change
LBS: 63,185 decrease

Cost Effectiveness

Metric Name:	Cost-Benefit Ratio
Source Data:	See Appendix F, Cost Benefit Analysis

Base Numbers & Calculation for “No Build” Estimate
See Appendix F, Cost Benefit Analysis

Base Numbers, Trends or Assumptions, and Calculation for “Build” Number
See Appendix F Cost Benefit Analysis

Change
Cost-Benefit Ratio of 6

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