THIS PRINT COVERS CALENDAR ITEM NO.: 10.6

SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY

DIVISION: Capital Programs and Construction

BRIEF DESCRIPTION:

Approving Modification Number Four to Contract Number 1270, Sunset Tunnel Trackway Improvement Project, with ProVen Management Inc., to compensate the Contractor for direct and indirect costs resulting from: SFMTA delays to the project; appeal and suspension of the Contractor's night work permit; and, time impact costs related to performance of additional work, all of which increase the Contract amount by \$4,050,000, for a total amount not to exceed \$23,316,025, and to extend the Contract term by 892 days to 1,282 days.

SUMMARY:

- The SFMTA Board of Directors awarded Contract Number 1270, Sunset Tunnel Trackway Improvement Project to ProVen Management Inc., on January 21, 2014, in the amount of \$16,123,600, for a term of 390 days, to replace N-Line trackwork and overhead lines, and provide seismic upgrades and other infrastructure improvements to the tunnel and portals.
- Substantial completion of the Project was delayed a total of 892 calendar days, of which the Contractor may claim 813 days of compensable delay costs. Additional work required to replace corroded elements of the traction power system in the Sunset Tunnel delayed the Project 554 days, for which the City is responsible.
- The City is also responsible for 338 days of Project delay due to inability to provide the Contractor access to the Sunset Tunnel, and due to an appeal of the Contractor's night work permit, which effectively suspended the Project. The SFMTA and Contractor are equally responsible for 79 days of delay, for which Contractor is not due compensation.

ENCLOSURES:

- 1. SFMTAB Resolution
- 2. Contract Modification Number Four
- 3. Project Budget & Financial Plan

APPROVALS:		DATE
DIRECTOR	THER	1/8/2018
SECRETARY_	R. Boomer	1/8/2018

ASSIGNED SFMTAB CALENDAR DATE: January 16, 2018

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PURPOSE

The purpose of this calendar item is to approve Modification Number Four to Contract No. 1270, Sunset Tunnel Trackway Improvement Project, with ProVen Management Inc., to compensate the Contractor for direct and indirect costs resulting from: SFMTA delays to the project; appeals and suspension of the Contractor's night work permit; and, time impact costs related to performance of additional work, all of which increase the Contract amount by \$4,050,000, for a total amount not to exceed \$23,316,025, and extending the Contract term by 892 days to 1,282 days.

STRATEGIC PLAN GOALS AND TRANSIT FIRST POLICY PRINCIPLES

The Work to be performed under Contract 1270 will assist in the implementation of the following goals, objectives and initiatives in the SFMTA Strategic Plan:

- Goal 1: Create a safer transportation experience for everyone.
 - Objective 1.3 Improve the safety of the transportation system.
- Goal 2: Make transit, walking, bicycling, taxi, ridesharing & carsharing the preferred means of travel
 - Objective 2.2 Improve transit performance
- Goal 3: Improve the environment and quality of life in San Francisco

Objective 3.1	Reduce the Agency's and the transportation system's resource
	consumption, emissions, waste and noise
Objective 3.2	Increase the transportation system's positive impact to the economy
Objective 3.3	Allocate capital resources effectively
Objective 3.4	Deliver services efficiently

The Work to be performed under Contract 1270 will assist in the implementation of the following goals, objectives and initiatives in the San Francisco's Transit-First Policy:

- 1. To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods.
- 3. Decisions regarding the use of limited public street and sidewalk space shall encourage the use of public rights of way by pedestrians, bicyclists, and public transit, and shall strive to reduce traffic and improve public health and safety.
- 4. Transit priority improvements, such as designated transit lanes and streets and improved signalization, shall be made to expedite the movement of public transit vehicles (including taxis and vanpools) and to improve pedestrian safety.

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DESCRIPTION

The Sunset Tunnel Trackway Improvement Project includes upgrade and reconstruction of aging N Line railway infrastructure in the Sunset Tunnel, which includes replacement of track work, overhead contact system components, feeder cables, the curve signal system, and firefighting standpipe components; cleaning drain lines; and addition of conduit for the emergency blue light telephone system.

The Sunset Tunnel Trackway Improvement Project (the Project) has three main objectives: enhance system reliability and efficiency; reduce infrastructure maintenance; and, upgrade the seismic performance of the portal retaining walls.

The N-Line trackway in the Sunset Portals and Tunnel were installed in 1975, and needed to be replaced due to rail wear and settlement of the supporting substructure (as described in the Biennial Tunnel Inspection Report, issued by the Capital Programs and Construction Division in December 2011).

The Overhead Contact System (OCS) provides power to electric transit vehicles. The Sunset Tunnel OCS, including poles, supports and special work, was originally installed in the late 1970's. Some of those OCS components, including supports and poles, had shown signs of severe rust and extensive water damage, and needed to be replaced. Existing trolley and messenger wires were also aged and due for replacement.

In February 2012, Anil Verma Associates, Inc., a consultant to the SFMTA, inspected the Sunset Tunnel (and other SFMTA tunnels) and described their findings in a report, "Tunnel Seismic Vulnerability Study Report." Anil Verma Associates recommended that the retaining walls at both portals to the Sunset Tunnel be further evaluated for earthquake loading. Results of the subsequent analysis indicated that the portal walls needed to be upgraded and reinforced to meet California Building Code and Bay Area Rapid Transit (BART) Earthquake Safety Design standards.

Scope of Contract:

The work in the Sunset Tunnel and along the N-Line under the Contract included:

- Replace existing tie and ballast tracks
- Replace the existing OCS, including messenger wires, trolley wires and various components
- Install seismic upgrades for the Sunset Tunnel portal retaining walls
- Upgrade the traction power cable infrastructure
- Install improvements to transit vehicle signal priority systems at nine intersections along the N-line route
- Perform other miscellaneous work, including upgrades to the curve signal system, fire standpipe valves, cleaning the drain lines and painting the portal walls

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The SFMTA Board of Directors adopted Resolution Number 14-021 on January 21, 2014, which awarded Contract Number 1270 to ProVen, in the amount of \$16,123,600, and for a term of 390 days. The SFMTA issued the Notice to Proceed with the work effective April 21, 2014. The Project was substantially completed and a Notice of Substantial Completion was issued on October 23, 2017.

To minimize the impacts to weekday commuter service, the Project was scheduled to be performed during 15 weekend shutdowns along with three spare weekend shutdowns of the N-Line, from 8:00PM Friday evening to 3:30AM Monday morning, with the Contractor working continuously through day and night hours. The tunnel portal areas at Duboce Park in the east and Richard Gamble Park in the west became areas of intense and noisy construction activity.

During construction, neighbors living next to the West Portal of the Tunnel objected to nighttime noise levels and appealed the Contractor's night construction permit to the City's Board of Appeals, thereby suspending night work. To avoid further delay to the Project and resolve the appeal, the SFMTA agreed to amend contract specifications and permit requirements to include new night noise restrictions. These changes were memorialized in Contract Modification One, dated February 24, 2015, and Contract Modification Two, dated May 4, 2015, which revised the Contract Technical Specifications for Construction Noise Control to include the following:

- Nighttime work hours were revised to 10:00PM through 6:00AM.
- Contractor had to modify its procedures for removal and handling of gravel ballast by limiting ballast removal activities to the West Portal, adjust work schedule to have ballast installation work occur concurrently with East Portal activities to the extent feasible, and limit ballast delivery to daytime hours between 6:00AM and 9:59PM.
- Contractor had to install mufflers on construction equipment used for nighttime work
- Contractor had to install and utilize lower-frequency back-up beeper alarms that did not exceed 87 decibels
- Contractor had to take continuous automatic noise monitoring and recordings of all nighttime work, which was to be made available to the public upon request.
- All impact tools such as jackhammers were to be equipped with intake and exhaust mufflers and acoustically mitigating shields or shrouds.
- Contractor had to use electrical powered rather than diesel-powered construction equipment whenever possible.
- Revisions to the Construction Noise specifications were made in accordance with conditions imposed by neighbors' appeal of the Contractor's Night Noise Permit.

On September 20, 2016, the SFMTA Board of Directors approved Contract Modification Number 3 under Resolution Number 16-131. Contract Modification Number Three approved additional work due to unforeseen site conditions that required design and installation of new conduits and raceways and associated support structures to replace elements of the traction power system that were discovered to be corroded and unusable. The SFMTA directed ProVen to perform the additional work, the direct costs of which increased the Contract by \$3,142,425. The parties were not able at that time to determine the time impacts of the additional work, which costs are now included in this Contract Modification Number Four, as well as the direct and indirect costs resulting from delays for

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which the City is responsible, as follows:

Contract Modification Number Four (Direct and Indirect Costs due to Time Extension of contract)

Contract Modification Number Four increases the term of the contract by 892 calendar days. The number of compensable delay days requested by the Contractor were reduced by 98 days due to delays attributable to the Contractor. The 892 days of delay is broken into two distinct delay periods, Period One – Base Contract Work, and Period Two – Additional Work:

• Period One Base Contract Work – 338 days of delay (May 15, 2015 to April 17, 2016)

SFMTA was to provide 15 weekend shutdowns along with three spare weekend shutdowns between September 20, 2014 and May 15, 2015. Due to night noise permitting issues and the limited capabilities of SFMTA Operations to staff the shutdowns, 23 shutdowns were cancelled and SFMTA was not able to provide the last shutdown until April 17, 2016. During Period One, there were 79 Days where SFMTA could not provide a weekend shutdown or where the Contractor was not ready to work even if the shutdown was provided. In summary, there were 338 total Days of delay due to the inability of SFMTA to provide the weekend shutdowns as specified in the Contract. Of the 338 Days, 79 Days are non-compensable and 259 Days are compensable.

Provides a 338-day compensable extension for owner-caused delay due to SFMTA restricting access to the Sunset Tunnel and not providing weekend shutdowns as originally scheduled to complete trackwork. The SFMTA restricted access due to schedule conflicts with special events in San Francisco and lack of resources available to provide substitute bus service.

• Period Two – Additional Work - 554 days of delay (April 18, 2016 to October 23, 2017)

Elements of the traction power system in the tunnel, including cable raceways and conduit, were discovered to have hidden corrosion and needed to be replaced. The parties executed Contract Modification Three to authorize the Contractor to perform that additional work and compensate the Contractor for its direct costs. The Contractor's indirect (overhead) costs, were not reimbursed through that Modification since they could not be determined at that time. Contractor commenced the additional work in March 2016 and continued until October 23, 2017 (date of substantial completion). During that time, the SFMTA limited Contractor's access to the tunnel to shortened work periods to avoid impacting transit service and to coordinate tunnel shutdowns with other SFMTA capital projects, which caused a total of 554 Days of delay to the Project. Contractor is entitled to its costs for that period of delay. This Contract Modification provides compensation to the Contractor of \$3,772,151 for indirect costs (continuing field office overhead) associated with those delays. Contract Modification Number Four provides \$296,866 compensation for direct costs for additional shutdowns scheduled to mitigate the impacts of the shortened work periods. Contract Modification

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Number 4 also provides \$361,966 compensation for direct costs associated with track horizontal and vertical alignment re-adjustments, due to differing site conditions. The SFMTA is credited \$200,000 to compensate SFMTA its cost for two last weekend shutdowns that the contractor cancelled on short notice (the Contractor is not compensated for the delays caused by Contractor's cancellation of shutdowns).

STAKEHOLDER ENGAGEMENT

This change order is to increase the final construction contract time and cost for the project. As such, there is no physical work being performed at the project site impacting the public so no community outreach was done.

ALTERNATIVES CONSIDERED

The contract time extensions were driven by concerns to provide safe and reliable transit service. The SFMTA needed time to ensure that resources were available to provide replacement transit service. Scheduling numerous shutdowns independent of other SFMTA projects would have created too much system wide disruption to transit services. Therefore, the time extensions were deemed the only possible option.

FUNDING IMPACT

The total cost of this Project is \$33,114,024. The Conceptual Engineering and Detailed Design Phase of the Project were funded with Federal Transit Administration (FTA) funds, with SFMTA operating funds and SFMTA Series 2012B Revenue Bonds serving as local match. FTA funds and SFMTA Series 2012B and Series 2013 Revenue Bonds funded the Construction Phase. Funding for the increase in the Contract amount of \$4,050,000 will come from the Cable Car Barn Turntable project which has been deferred and will begin construction in 2019 due to enhanced project coordination for all cable car projects.

The \$4,050,000 consist of \$1,820,000 in FY18 SFMTA operating fund balance and \$2,230,000 in FTA formula funds. The funding to backfill the \$4,050,000 removed from the Cable Car Barn Turntable project will be prioritized and identified as part of the overall FY19 & FY20 Capital Budget and FY19-FY24 Capital Improvement Program update that is currently underway and that will be presented to the SFMTA Board for approval in Spring 2018. The total cost of this Project is \$33,114,024. The Conceptual Engineering and Detailed Design Phase of the Project were funded with Federal Transit Administration (FTA) funds, with SFMTA operating funds and SFMTA Series 2012B Revenue Bonds serving as local match. FTA funds and SFMTA Series 2012B and Series 2013 Revenue Bonds funded the Construction Phase.

The budget and financial plan for this Project is presented in Enclosure Three.

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ENVIRONMENTAL REVIEW

The Sunset Tunnel Trackway Improvement Project is subject to the California Environmental Quality Act (CEQA). CEQA provides a categorical exemption from environmental review for the restoration or rehabilitation of deteriorated or damaged structures, facilities, or mechanical equipment to meet current standards of public health and safety as defined in Title 14 of the California Code of Regulations Section 15301.

On October 30, 2013, the Planning Department determined (Case Number 2013.0612E) that the Sunset Tunnel Trackway Improvement Project is categorically exempt from CEQA as defined in Title 14 of the California Code of Regulations Section 15301.

A copy of the CEQA determination (Case Number 2013.0612E) is on file with the Secretary to the SFMTA Board of Directors and may be found in the records of the Planning Department at 1650 Mission Street in San Francisco, and is incorporated herein by reference.

This Contract Modification does not modify the scope of the Project, and thus has no impact to the current CEQA determination.

OTHER APPROVALS RECEIVED OR STILL REQUIRED

The City Attorney's Office has reviewed this calendar item. No other approvals are required for this Contract Modification.

RECOMMENDATION

Staff recommends that the SFMTA Board of Directors approve Modification Number Four to Contract 1270, Sunset Tunnel Trackway Improvement Project, with ProVen Management Inc., to compensate the Contractor for direct and indirect costs resulting from: SFMTA delays to the project; appeal and suspension of the Contractor's night work permit; and, time impact costs related to performance of additional work, all of which increase the Contract amount by \$4,050,000, for a total amount not to exceed \$23,316,025, and extending the Contract term by 892 days to 1,282 days.

SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY BOARD OF DIRECTORS

WHEREAS, On January 21, 2014, the San Francisco Municipal Transportation Agency Board of Directors adopted Resolution No. 14-021, awarding Contract No. 1270, Sunset Tunnel Trackway Improvement Project, to Proven Management Inc., in the amount of \$16,123,600, for a term of 390 days, to replace N-Line trackwork and overhead lines, and provide seismic upgrades and other infrastructure improvements to the Sunset Tunnel and portals; and

WHEREAS, On April 21, 2014, the SFMTA issued to contractor written notice to proceed with the work; and,

WHEREAS, Substantial completion the project was delayed due to SFMTA restricting contractor access to the tunnel, the appeals and suspension of the contractor's night work permit, unexpected site conditions requiring additional work, and delays by the contractor; and,

WHEREAS, On September 20, 2016, this Board approved Contract Modification Number Three under Resolution No. 16-131; Modification Number Three added replacement of cable conduits to the scope of work, increasing the Contract amount by \$3,142,425 for the contractor's direct costs of such work; and,

WHEREAS, At the time Contract Modification Number Three was approved, the schedule impact for the extra work was unknown; therefore, this Modification Number Four includes indirect costs associated with the work performed under Contract Modification Number Three, as well as contractor's direct and indirect costs resulting from owner-caused delays; and,

WHEREAS, On October 30, 2013, the Planning Department determined that the Sunset Tunnel Trackway Improvement Project is categorically exempt from CEQA, pursuant to Title 14 of the California Code of Regulations Section 15301; and,

WHEREAS, A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors, and may be found in the records of the Planning Department at 1650 Mission Street in San Francisco, and are incorporated herein by reference; now, therefore, be it

RESOLVED, That the SFMTA Board of Directors approves Modification Number Four to Contract Number 1270, Sunset Tunnel Trackway Improvement Project, with ProVen Management Inc., to compensate the Contractor for direct and indirect costs resulting from: SFMTA delays to the project; appeal and suspension of the Contractor's night work permit; and, time impact costs related to performance of additional work, all of which increase the Contract amount by \$4,050,000, for a total amount not to exceed \$23,316,025, and to extend the Contract term by 892 days to 1,282 days.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of January 16, 2018.

Secretary to the Board of Directors San Francisco Municipal Transportation Agency

CONTRACT MODIFICATION NO. 04

San Francisco Municipal Transportation Agency Contract No. 1270 Sunset Tunnel Trackway Improvement Project

Contractor: ProVen Management

2000 5th Street

Berkeley, CA 94710 Page 1 of 4

The Contract is modified as follows:

1. Contract Time, Additional Work, and Credits

CM-4A

Unavoidable Delay

This Contract Modification Number Four increases the Term of the Contract 892 Days, broken into two as described below.

Period One – 338 Days of delay (May 15, 2015 to April 17, 2016) – Delay to Base Scope Contract Work

The Contractor was to perform the work during 15 weekend shutdowns between September 20, 2014 and May 15, 2015 (Period One). The SFMTA rescheduled and/or cancelled 14 weekend shutdowns. Proven cancelled three weekend shutdowns. Six weekend shutdowns were cancelled during the period that the Project was suspended by appeal of the contractor's night work permit. There were 79 Days of contemporaneous delay. In total, there were 338 Days of delay, of which 259 Days are attributable to the City and are compensable, and 79 Days of concurrent delay (during which both the City and the Contractor caused the delay) that are not compensable.

Period Two – 554 Days of delay (April 18, 2016 to October 23, 2017) – Delay to Additional Work (Modification Number Three)

The Project was delayed 554 Days caused by replacement of deteriorated traction power cable raceways, conduit and cables, which was Additional Work effected by Contract Modification Number Three. That Additional Work was necessary to correct hidden deterioration of traction power elements that was an unexpected site condition. Contractor commenced the Additional Work in March 2016 and continued until Substantial Completion on October 23, 2017. The Period Two delay began on April 18, 2016 and ended October 23, 2017 for a total of 554 Days of compensable delay.

Total Negotiated Lump Sum for all Contractor Delay Costs: \$3,772,151

CM-4B Three Make-Up Tunnel Shutdowns

For eight of the 23 weekend shutdowns, SFMTA reduced the work windows by five to ten hours due to limited availability of buses to provide substitute transit service during tunnel closure. To mitigate the impacts of the reduced work hours, SFMTA provided three additional weekend shutdowns for the Contractor to complete the work. Contractor completed all required base scope work within the three additional weekend shutdowns. (Contractor costs for extended overhead are compensated in CM-4A).

Total Negotiated Lump Sum for Contractor Direct Costs for Additional Three Shutdowns: \$296,866

CM-4C | Track Correction Work

Provide labor, material and equipment for track adjustments to account for differing field conditions per the Submittal 343B.

Total Lump Sum: \$180,983

CM-4D Contractor Cancellation of Weekend Shutdown

Contractor cancelled two weekend shutdowns on short notice. The SFMTA is credited \$100,000 for each cancellation, for a total of \$200,000 credit to the SFMTA.

Total Lump Sum Credit: (\$200,000)

2. The following new Pay Items are added to the Contract:

CM-4A	Unavoidable Delays	Lump Sum	\$3,772,151
CM-4B	Three Make-Up Tunnel Shutdowns	Lump Sum	\$296,866
CM-4C	Track Correction and Re-Surfacing work	Lump Sum	\$180,983
CM-4D	Credit for Last-Minute Cancellation of Weekend Shutdown	Lump Sum	(\$200,000.00)

Total Amount of this Contract Modification: Increase \$4,050,000.00

Previous Total of Contract: \$19,266,025

New Revised Total of Contract: \$23,316,025

Total Contract Time added by this Contract Modification:	892 Days
Previous Contract Substantial Completion Date:	05/15/2015
Stipulated Contract Substantial Completion Date:	10/23/2017

- 3. This Modification is made in accordance with Articles 6 and 7 of the Contract General Provisions. Except as provided herein all previous terms and conditions of the Contract remain unchanged. The effective date of this Contract Modification is the date that the SFMTA Board of Directors approves it.
- 4. Contractor acknowledges and agrees that the compensation stated herein for the delays and Additional Work described above shall be full accord and satisfaction of all current and prospective costs incurred in connection with said delays and Additional Work, without limitation, including any and all markups and overhead. As of the effective date of this Contract Modification Number Four, Contractor releases the City from all claims and costs associated with extension of Contract Time and the performance of the Additional Work up through the effective date of this Contract Modification Number Four, including but not limited to any and all markups, overhead costs, direct and indirect costs for labor, materials, equipment, mobilization, demobilization, disruption, lost productivity, loss of efficiency, lost profits, lost opportunity costs, escalation, delay, extended overhead, administration and extended performance time. Contractor acknowledges that in so waiving all claims arising from or related to the Contract and its performance of the Contract, Contractor also waives all rights to any claims of which it is not aware arising from or related to the Contract, and that it has read, considered and understand the provisions and significance of Section 1542 of the California Civil Code, which states:

SECTION 1542. GENERAL RELEASE. A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.

Contractor understands and acknowledges that a risk exists that it incurred or suffered or may incur or suffer, loss or damages as a result of the matters, facts, events, occurrences, transactions, causes and things referred to in this Contract Modification or the Contract which were unknown, unsuspected or unanticipated at the time this Contract Modification was executed. Contractor assumes this risk, and agree that the foregoing release shall in all respects be effective and not subject to termination or rescission.

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	ss Whereof, the parties have executed the day of January, 2018.	nis Modification in quadruplicate in San Francisco, California as
Pro	Ven Management Inc.	CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY
Ву:	Al MACIL	By:
	Abram McMickin Project Manager	Edward D. Reiskin Director of Transportation
		Authorized By:
		MUNICIPAL TRANSPORTATION AGENCY BOARD OF DIRECTORS
		Resolution No.
		Adopted:
		Attest:
		Secretary Date SFMTA Board of Directors
		APPROVED AS TO FORM: Dennis J. Herrera, City Attorney
		Ву:
		Robert K. Stone Deputy City Attorney

ENCLOSURE 3 SUNSET TUNNEL TRACKWAY IMPROVEMENT PROJECT

San Francisco Municipal Railway Contract No. 1270

Project Budget and Financial Plan

Cost	Amount
Conceptual Engineering Phase	\$275,544
Staff Support (SFMTA and Other Dept. Services)	
Detail Design Phase	1,628,480
Staff Support (SFMTA and Other Dept. Services)	
Construction Phase	31,210,000
Construction Contract, Contingency, and Staff Support	
Other Agency Cost Share	0
Total Cost	\$33,114,024

Funding	Amount
FTA Fixed Guideway Formula Funds	\$21,221,959
SFMTA Series 2012B and Series 2013 Revenue Bonds	9,710,474
SFMTA Operating	80,000
SFMTA Operating Fund Balance	2,101,591
Total Funding	\$33,114,024