2023 20-Year Unconstrained Capital Plan

For Fiscal Year 2025 to Fiscal Year 2044

San Francisco Municipal Transportation Agency

December 5, 2023

Contents

Introduction & Executive Summary

Before the San Francisco Municipal Transportation Agency (SFMTA) invests in bike lanes, upgrades its transit fleet or makes accessibility improvements, each project goes through a comprehensive capital planning process. This process starts with defining the SFMTA's potential investments first by how they may support the Agency's Strategic Plan values so that the SFMTA can make well-informed decisions when prioritizing future investments. That decision-making process starts with the SFMTA 20-Year Unconstrained Capital Plan.

Updated every two years, the Capital Plan is a comprehensive, financially unconstrained list and assessment of potential capital needs to help achieve the SFMTA's Strategic Plan goals over the next 20 years. For this Capital Plan, the agency identified $32.3 billion in capital needs in estimated expenditure year dollars from FY 2025 to FY 2044. In addition, the SFMTA is working with regional partners to support $23.4 billion in regional needs that could be owned and operated by agencies outside of the SFMTA or the City. Identification of a capital need in the Capital Plan is a preliminary step in the project development lifecycle but does not commit the agency to fund or approve a specific project or program.

This document provides an update to the 2021 20-Year Unconstrained Capital Plan and highlights the SFMTA's ambitious vision to support the Strategic Plan values of Equity, Economic Vitality, Environmental Stewardship and Trust. To accomplish that, the SFMTA updated its capital needs list to incorporate the latest information available, adjusting for inflation, updating the cost estimates, added previously unidentified needs, responded to regulations and developed new policy. With the completion of several major long-range planning efforts, the SFMTA expanded its visionary approach to long-range capital planning. The changes between the 2021 20-Year Unconstrained Capital Plan and the 2023 20-Year Unconstrained Capital Plan are primarily due to incorporating rail expansion recommendations from the City's ConnectSF program and the City's Climate Action Plan, increases in the costs associated with maintaining assets in a State of Good Repair and cost escalation based on recent projects and procurements. Analysis of the SFMTA's long-range future will occur in the update to the SFMTA Transportation 2050 forecast, which presents broad possible futures and actions to address transportation needs and priorities in San Francisco, and decisions about specific capital projects happen in the SFMTA 5-Year Capital Improvement Program (CIP), which is the funding-constrained list of specific capital projects in the next five years.

The Capital Plan is organized in the following sections:

1. **"Capital Planning at the SFMTA"** provides an overview of the 20-Year Unconstrained Capital Plan, how it informs the SFMTA 5-Year CIP and the SFMTA Transportation 2050 forecast and how each of the ten Capital Programs at the SFMTA help turn strategic goals into public benefit.
2. **"2023 Update to the Capital Plan"** describes the methodology for updating the capital needs list and how staff used this as an opportunity to inform stakeholders on how plans become projects.
3. **"2023 Capital Needs Summary"** summarizes the sources for added or expanded capital needs and updates to existing capital needs related to restoring, enhancing and expanding the transportation system in both the near-term and the long-term, and it analyzes how and why the capital plan changes over time.
4. **"Next Capital Plan"** lists potential future planning efforts for future iterations of the Capital Plan.
5. **"2023 Capital Needs and Assessment"** includes the updated Capital Needs Table and the Capital Needs Assessment highlighting which capital needs support which Strategic Plan values.
6. **"Appendix"** lists out the major changes to capital needs from 2021 to 2023 and the cost estimate information methodology for each capital need.

The SFMTA looks forward to collaborating with the Mayor, the Board of Supervisors, its partner city agencies, advocacy organizations and the public to create safe, reliable and affordable transportation for all.

Capital Planning at the SFMTA

20-Year Unconstrained Capital Plan

The SFMTA's capital planning and project delivery process is a multi-step process that identifies long-term needs for capital investments, develops projects to meet needs, matches funding to projects and establishes near-term capital budgets. The 20-Year Unconstrained Capital Plan is the first step in this process. Updated every two years, the Capital Plan is a financially unconstrained summary of the SFMTA's potential capital needs for the next twenty years.

Inclusion of a project or program in the Capital Plan does not guarantee funding or approval. Instead, the SFMTA uses this planning effort to identify all potential capital investments that are needed over the next twenty years to support its strategic goals and objectives. These investments include the replacement, renewal, improvement, expansion or acquisition of capital assets. The Capital Plan does not include the costs for ongoing operations and maintenance related to these assets and infrastructure.

The capital needs outlined in this document are identified through the development of several agency strategies, plans and programs, as well as staff-identified needs to address potential safety issues and comply with city, state or federal mandates. Collecting these capital needs into one document provides a clear and consistent starting point for the agency to advocate for, and secure, federal, state, regional and local funding. For example, the Capital Plan is an input to the SFMTA's Transportation 2050 forecast, which presents possible futures and actions to address transportation needs and priorities in San Francisco, as well as the San Francisco County Transportation Authority's San Francisco Transportation Plan, which encompasses every transportation mode and transit operator over a 30-year horizon.

Did you know?

The 2021 20-Year Unconstrained Capital Plan informed **Proposition A (2022): the Muni Reliability and Street Safety Bond**, which would have authorized the City to borrow up to $400 million in general obligation bonds to fund critical transit, safety programs and other infrastructure, which received a majority 65.11% of the vote, just short of the 66.67% share of the vote that was required for passage.

The purpose of the Capital Plan is to:

1. Identify long-range capital needs to provide a pathway to meet our strategic goals.
2. Use as an advocacy tool for our long-range capital needs with regional, local and statewide partners.
3. Summarize and forecast our long-range capital needs in one place to help coordinate the implementation of SFMTA plans, programs and strategies.
4. Provide a comprehensive list of capital investment needs which can inform development of the 5-year CIP and Transportation 2050.
5. Communicate our long-term capital needs comprehensively to create accountability and build trust with different stakeholders.

5-Year Capital Improvement Program (CIP)

All projects seeking capital funding must have at least one corresponding capital need in the Capital Plan to be eligible for inclusion in the financially constrained 5-Year Capital Improvement Program (CIP). Whereas the Capital Plan includes all potential capital investments, referred to as capital needs, the 5-Year CIP identifies which projects are prioritized and have the resources to be initiated in the next five years, along with projected funding sources, budgets and schedules for those projects. Once included in the CIP, those investments will not be included in the next cycle of the Capital Plan. Both the 20-Year Unconstrained Capital Plan and 5-Year CIP are dynamic documents that may be changed or adjusted as needs arise or conditions change.

Capital Programs

Given the diverse functions of the SFMTA, the agency established ten Capital Programs to categorize the capital investments and ensure all agency-wide needs are addressed. The ten Capital Programs, which incorporates capital investments that the SFMTA does not directly manage, allow for each functional area of the SFMTA to identify its capital needs and better coordinate across the agency. In addition to the ten Capital Programs, the Capital Plan also includes non-SFMTA programs, such as the BART joint maintenance agreement, and potential new regional transit expansion projects, such as new BART and Muni Station Transfers.

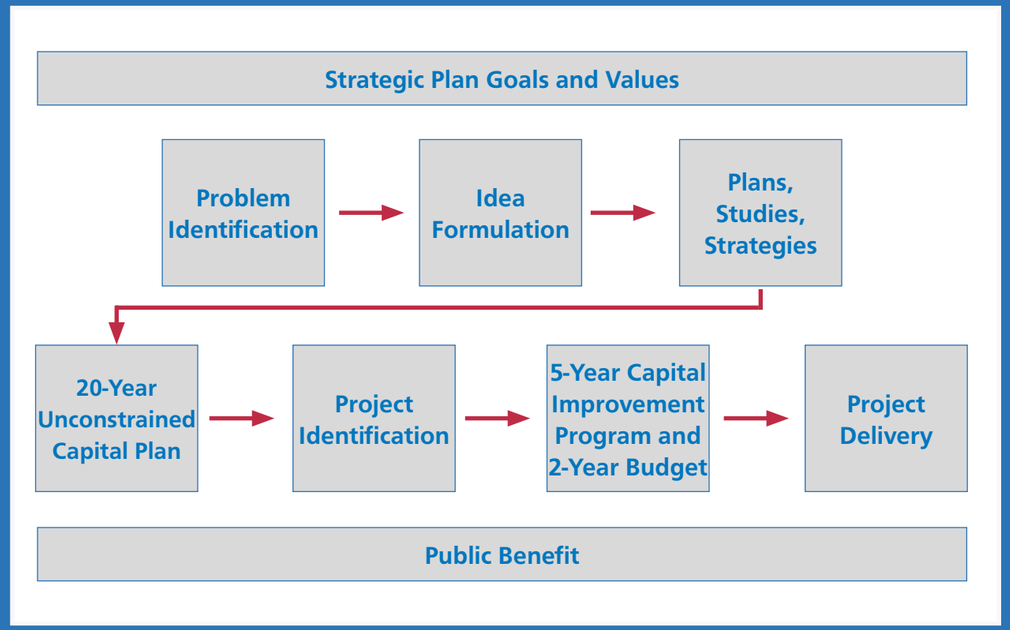
Embedded within these ten capital programs and non-SFMTA programs are investments needed to improve accessibility. Including these needs across existing capital needs allows the agency to incorporate accessibility-related investments as part of projects from the start rather than as standalone projects or improvements added to the scope of projects at a later date.

- **Communications & IT**
  This program supports the planning, design and implementation of IT infrastructure projects across the city, from Wi-Fi and telephony systems at SFMTA worksites, to the fiber network that provides the internal communication backbone of the Muni Metro system.
- **Facility**
  This program supports the modernization and expansion of agency facilities to make them safer, more efficient and able to accommodate both fleet expansion and the planned transition to an all battery-electric fleet. The Capital needs identified in this program will also ensure that all SFMTA employees have a safe, comfortable and optimal working environment.
- **Fleet**
  This program plans for the rehabilitation or replacement of vehicles as they near the end of their useful life, avoiding costly repairs and service interruptions caused by vehicle failures. This program also includes the expansion of the fleet that helps alleviate overcrowding and expand service, as well as procure new vehicles to transition to an all battery-electric fleet.
- **Parking & Curb Management**
  This program supports the planning, design, rehabilitation and construction to support the operation of public parking garages and lots and the street infrastructure and facilities related to public curbs.
- **Security**
  This program plans, designs and implements security initiatives, including in case of a natural disaster, terrorist attack, or other emergency situations.
- **Streets**
  This program brings together pedestrian, bicycle, traffic calming and school-related projects into an integrated list of investments to make city streets safe and enjoyable places for people to travel by all modes.
- **Taxis & Mobility Services**
  This program plans, designs and implements improvements to the taxis and mobility services system and that provide a better customer experience for all taxi and private or regulated mobility services users.
- **Traffic Signals & Signs**
  This program provides for upgrading, replacing and constructing new traffic signals and signal infrastructure to improve safety and manage traffic congestion.
- **Transit Fixed Guideway**
  This program helps maintain, replace and enhance Muni's fixed guideway systems, including light rail, trolley coach, historic streetcar and cable car lines. This includes investments in track replacement, maintenance of Muni's overhead wires and substations and the train control system.
- **Transit Optimization & Expansion**
  This program improves reliability, increases capacity and increases the safety and comfort of Muni transit service.
- **Non-SFMTA (Other Agencies)**
  New to this Capital Plan, non-SFMTA program capital needs are capital commitments that the SFMTA does not own or operate but contributes funding toward to benefit people traveling to, from and within San Francisco.
- **Regional Transit Expansion**
  The Capital Plan includes major regional transit capacity expansion projects in San Francisco that are likely to be designed, built and managed by other transit agencies.

For more information about the Capital Plan, please refer to the 2021 SFMTA 20-Year Unconstrained Capital Plan, which has more detail on the process.

Capital Planning: From Strategic Goals to Public Benefit

The capital planning process is rooted in the values outlined in the SFMTA Strategic Plan, such as equity, safety and climate action. These values guide capital planning decisions, including both critical needs intended to restore and enhance the existing transportation system and visionary needs intended to expand the transportation system. The graphic below outlines the capital planning process that guides how SFMTA uses the Strategic Plan values to guide investments that lead to public benefits, a process that is supported by a number of long-range planning documents.



Planning ideas on how to improve the transportation system can come from requests from elected and appointed officials, community members and organizations, from staff through observed data and in response to legislation and regulations. These ideas form the basis for the needs and potential projects included in various plans, studies and strategies, which in turn inform the capital needs identified in the Capital Plan. Through the agency's values and political, regulatory, resourcing, funding and community support considerations, capital needs inform which projects are identified to be included in the fiscally constrained 5-Year Capital Improvement Program. The 20-Year Unconstrained Capital Plan and 5-Year Capital Improvement Program are key milestones in this process that are necessary to turn identified long-range capital needs into shorter-term capital projects that are delivered within a 5-Year horizon.

2023 Update to the 20-Year Unconstrained Capital Plan

Revisions to the 2021 Capital Needs

The 2021 20-Year Unconstrained Capital Plan took a new approach at evaluating how capital needs move the SFMTA toward its Strategic Plan values by identifying what values each capital need supports. Building off that approach, the 2023 Unconstrained 20-Year Capital Plan updates the capital needs list. These updates reflect previously unidentified needs from long-range strategies and plans, updates to cost estimates from recent procurements, adjustments for inflation, and new regulations and policies. Staff evaluated what plans, studies and strategies have been completed since 2021, updated the SFMTA's "Restore" (State of Good Repair) needs based on the SFMTA Capital Asset Inventory and worked with respective staff within each capital program to update existing needs with the latest information. For new and significantly changed capital needs, staff then updated the corresponding assessment toward the Strategic Plan values. Cost estimates are reported in expenditure year dollars unless otherwise noted.

In summary, staff:

1. Updated capital needs to remove completed projects;
2. Added and revised needs to reflect previously unidentified needs from long-range strategies and plans, and responses to regulations and new policies;
3. Revised cost estimates using data from the SFMTA Capital Asset Inventory and from recent projects to better reflect the anticipated cost of implementation;
4. For new and significantly changed capital needs, updated the corresponding assessment toward advancing the Strategic Plan values.

For "Restore" (State of Good Repair) needs, staff primarily used the SFMTA Capital Asset Inventory, which uses both actual and modeled data on the SFMTA's assets, to project renewal and replacement costs over the next twenty years. These cost estimates use an assumed 3.5% annual escalation factor to estimate costs in the year when each asset should ideally be replaced or rehabilitated. Where condition data on an asset was not available, staff made a cost estimate based on asset acquisition date and the anticipated useful life of that asset. Asset classes that are regulated such as revenue vehicles, track and overhead lines have the highest quality data. Asset classes related to bike lanes, soft hit posts, street paint and IT infrastructure are either not represented in the inventory or modeled based on available data. Other assets like facilities, subway stations and tunnels have some, but not all, data on their individual components. Staff are currently working to improve the quality of data by further breaking down some of the large assets into discrete subsystems. "Restore" needs only include hard costs, not soft costs. Soft costs include project management, construction mitigation and transit support and are added to the cost estimate when projects are defined in the CIP development process. These changes are reflected in the "2023 Capital Needs Table" and "Cost Information Methodology" sections below. More information is in the 2021 State of Good Repair Report.

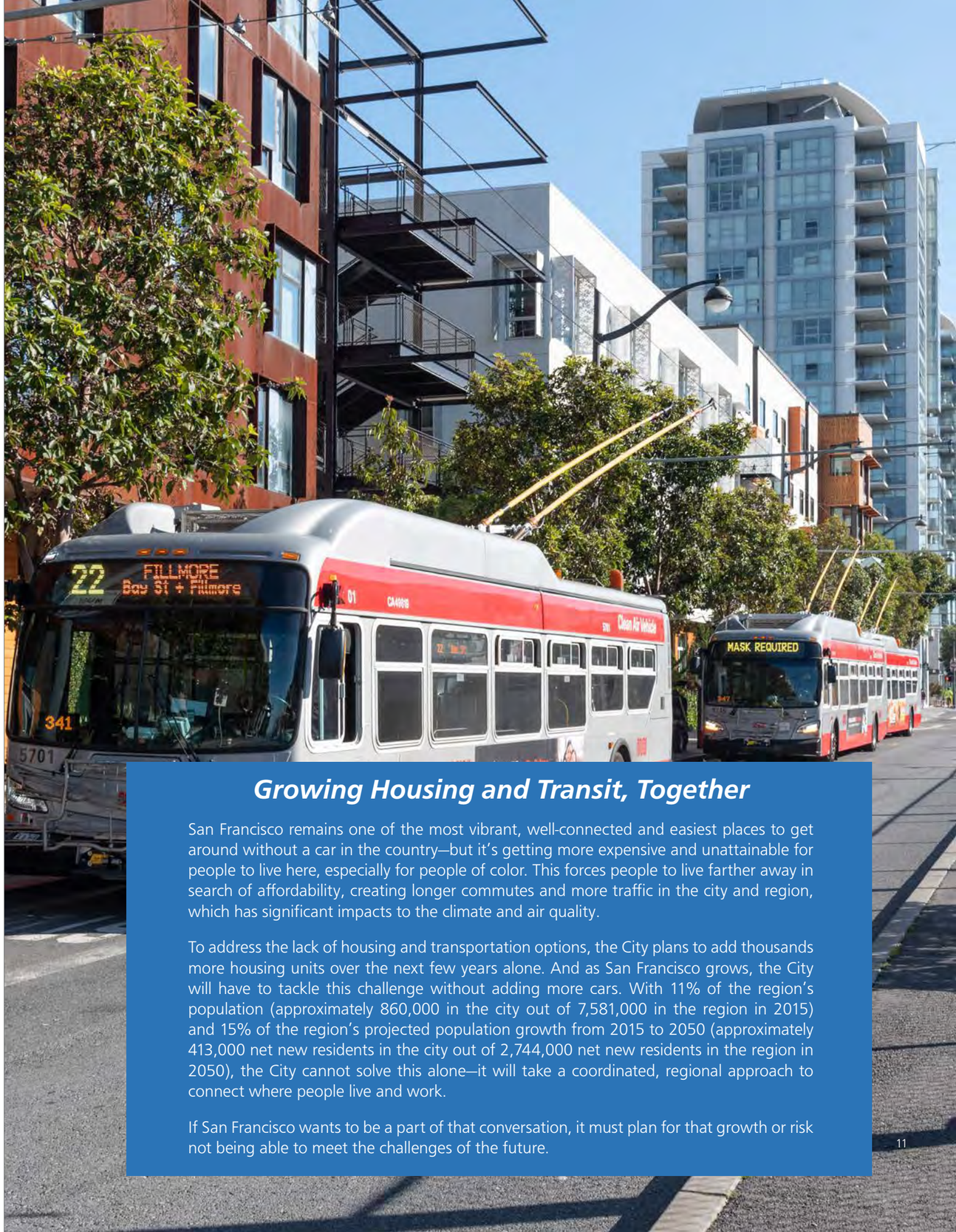
For "Enhance" and "Expand" needs, staff used the following criteria for updating needs from the 2021 20-Year Unconstrained Capital Plan and adding new needs. Staff reviewed each capital need in detail, including the description, timeframe, cost estimate and cost information methodology, and staff used the best available information to ensure that the criteria below were met. These changes are reflected in the "Major Changes from 2021 to 2023 by Capital Program" and "2023 Capital Needs Table" sections below.

1. **No Double Counting:** Ensures that we are not duplicating other capital needs.
2. **Transparency:** Capital need is clear as to what is needed and can be easily understood by a member of the public.
3. **Validity:** Capital need is necessary to achieve Strategic Plan goals, and description conveys necessity. Best practice is to refer to a plan or report that conveys that staff have done their due diligence in planning for that capital need.
4. **Accuracy:** The costs, description, etc. are accurate based on available information and can apply to the timeframe of the need.
5. **New Needs:** Are identified within a report or document and has planning-level cost estimates.

Based on the Annual Infrastructure Construction Cost Inflation Estimate from the Office of Resilience and Capital Planning in the City Administrator's Office, which reviews both national and local industry indices, fuel and construction materials costs, labor costs, the bid market and the local construction market, staff applied a **9.71% escalation factor over two years (3.5% for 2021-2022 and 6.0% for 2022-2023, compounded)** for planning-level cost estimates for capital needs from the 2021 20-Year Unconstrained Capital Plan.

Community Outreach and Engagement

Staff used the Capital Plan development to inform stakeholders on how plans become projects from strategic goals to public benefits. Staff presented to the SFMTA Youth Transportation Advisory Board (YTAB) and informed other advisory committees, including the SFMTA Citizens' Advisory Council (CAC), Multimodal Accessibility Advisory Committee (MAAC), and Transportation Authority Citizens Advisory Committee (TA CAC), via a memo and accompanying slides. Staff emphasized that decisions on what projects to advance include many factors: via elected and appointed officials who direct policy, via community organizations and members, via staff based on strategic goals and data and via legislation and regulations, among other ways. Staff noted that all plans and projects should first be rooted in the SFMTA's Strategic Plan values, with other considerations like political, community support, regulatory requirements, resource availability and funding factored in as well. Outreach and engagement happen through every step of the capital planning process from developing plans to project delivery. Additional outreach will accompany the development of the 5-Year CIP.



Growing Housing and Transit, Together

San Francisco remains one of the most vibrant, well-connected and easiest places to get around without a car in the country—but it's getting more expensive and unattainable for people to live here, especially for people of color. This forces people to live farther away in search of affordability, creating longer commutes and more traffic in the city and region, which has significant impacts to the climate and air quality.

To address the lack of housing and transportation options, the City plans to add thousands more housing units over the next few years alone. And as San Francisco grows, the City will have to tackle this challenge without adding more cars. With 11% of the region's population (approximately 860,000 in the city out of 7,581,000 in the region in 2015) and 15% of the region's projected population growth from 2015 to 2050 (approximately 413,000 net new residents in the city out of 2,744,000 net new residents in the region in 2050), the City cannot solve this alone—it will take a coordinated, regional approach to connect where people live and work.

If San Francisco wants to be a part of that conversation, it must plan for that growth or risk not being able to meet the challenges of the future.

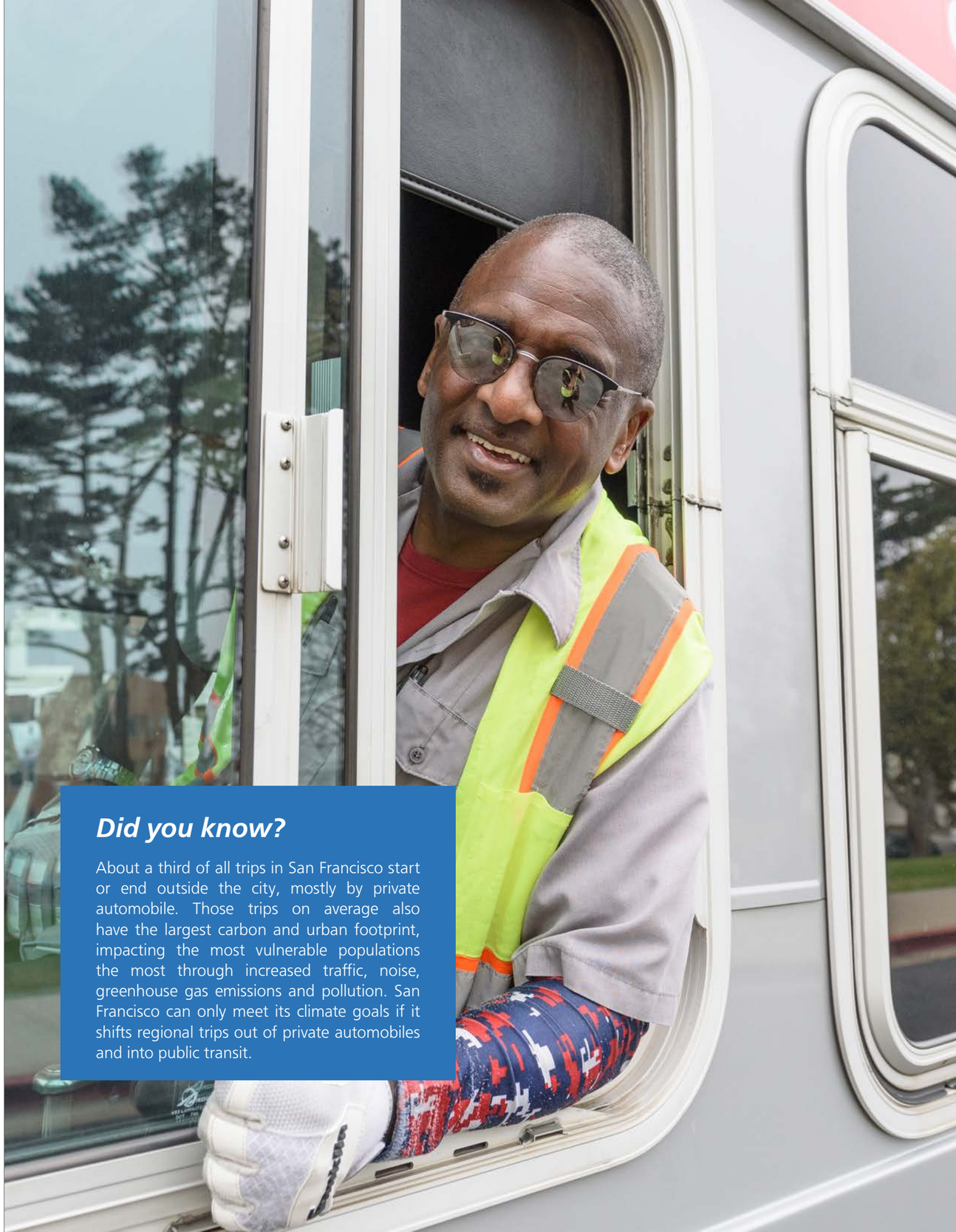
2023 Capital Needs Summary

Notable Additions to this Update

Since the first SFMTA 20-Year Unconstrained Capital Plan in 2011, the Capital Plan has gradually become more visionary to meet the City's goals, incorporating new city policies and plans.

As part of the update, staff added or expanded capital needs based upon the following:

- **Update of assets from the 2021 State of Good Repair Report:** Updated regularly, the 2021 State of Good Repair Report provides an overview of the SFMTA's rehabilitation and replacement needs and investments, plus outlines project prioritization, planning and delivery practices of the roughly $16 billion in capital assets that the department owns and manages. These needs are reflected in nearly all capital programs. Note: Unlike the Unconstrained Capital Plan, the State of Good Repair Report uses a constant annual escalation rate and only includes hard costs, not soft costs, consistent with industry standards.
- **Addition of specific long-range transit investments from the ConnectSF Transit Strategy:** Started in 2015, ConnectSF is a multi-agency collaboration process from the Planning Department, the San Francisco County Transportation Authority, the Office of Economic and Workforce Development and the SFMTA to build an effective, equitable and sustainable transportation system for the next 50 years. The ConnectSF Transit Strategy seeks to make the system work better with aggressive maintenance and restoration, deliver a five-minute network for reliable transit service City-wide, increase speed, reliability and capacity for a modern rail system and build rail where bus service is not sufficient to meet demands. The Transit Optimization & Expansion Program includes needs such as "Central Subway Extension", "Muni Metro Modernization Core Capacity" and "Muni Forward 2.0 on the Five-minute Network". In addition to those needs, there are also regional needs from regional partners that the SFMTA could support, including "Geary/19th Ave. Subway" and "Bayview Caltrain Station".
- **Addition of actions from the city's Climate Action Plan:** The Climate Action Plan from the San Francisco Environment Department charts a pathway to achieve net-zero greenhouse gas emissions and works toward addressing racial and social equity, public health, economic recovery, resilience and providing safe and affordable housing for all. As transportation accounts for nearly half of all greenhouse gas emissions in San Francisco, the city has goals to shift trips to low-carbon modes and electrify trips that require a vehicle. Recommendations include: major capital projects from the ConnectSF Transit Strategy, expanding publicly available electric vehicle charging stations in off-street parking facilities and potentially on-street parking spaces, gradually charging the right price for every parking space and expanding the bicycle network. Recommendations are in the Transit Optimization & Expansion, Parking & Curb Management and Streets Programs.
- **Addition of Community-based Transportation Plans including the Visitacion Valley & Portola Community-based Transportation Plan:** Community-based Transportation Plans are community-fueled planning and engagement efforts led by the SFMTA with support from members of the Board of Supervisors and strong local stakeholder partnerships to uplift communities by addressing lack of investment and historical harms that have fallen on specific communities. These needs include bicycle and pedestrian infrastructure and transit stop improvements, reflected in the Streets and Transit Optimization & Expansion Programs.
- **Addition of the BART Joint Maintenance Agreement:** The SFMTA has joint maintenance agreements with other transit agencies in San Francisco, including an agreement with BART to fund its shared BART and Muni stations in the Market Street Subway. This need is reflected in the new "Non-SFMTA (Other Agencies)" category.



Did you know?

About a third of all trips in San Francisco start or end outside the city, mostly by private automobile. Those trips on average also have the largest carbon and urban footprint, impacting the most vulnerable populations the most through increased traffic, noise, greenhouse gas emissions and pollution. San Francisco can only meet its climate goals if it shifts regional trips out of private automobiles and into public transit.

Notable updates to existing capital needs include:

1. The **Facility** Program updated the cost estimates of the "SFMTA Facility Condition Assessment Campaign", "2301 Stockton (Kirkland) Facility Modernization", "1940 Harrison Street (Flynn) Facility Modernization", "Enforcement Headquarters Construction at 1200 15th Street" and "Muni Metro Station Escalator Rehabilitation Program" based on the SFMTA Capital Asset Inventory, State of Good Repair Report and project-specific predevelopment reports.

2. The **Fleet** Program updated its cost estimates for all vehicle types across each of the rehabilitation, replacement and expansion programs to better reflect costs from recent procurements. These include cable cars, historic vehicles, light rail vehicles, motor coaches, trolley coaches, paratransit vehicles and non-revenue vehicles.

3. The **Parking & Curb Management** Program increased the cost estimates for "Electric Vehicle Charging Stations" to include expansion of charging stations and "Implement Parking, Loading, Bicyclist, Pedestrian and other Mobility Mode Movement and Stopping Detection Technology" to reflect the cost and scale, and it decreased the cost estimates for several other capital needs to reflect completion and project cost savings.

4. The **Streets** Program renamed "Neighborway Network" to "Slow Streets and Neighborway Network" to reflect the newly institutionalized Slow Streets Program, and it updated the cost of "Bicycle Network State of Good Repair Program" to reflect replacement costs from the SFMTA Capital Asset Inventory.

5. The **Taxis & Mobility Services** Program received "Commuter Shuttle and Private Transit Vehicle Stop and Pedestrian Safety Improvements" and "Permit Fees for Bike and Other Shared Mobility Device Rack Program" from the Streets Program and "Regulated Mobility Inspection Facility" from the Facility Program as those needs serve the Taxis & Mobility Services Program.

6. The **Traffic Signals and Signs** Program updated description, justification and cost estimate of "SFgo Program" to better represent how much of the capital need is intended to go toward traffic signals to move automobiles and how much is intended to go toward Transit Signal Priority to move transit vehicles.

7. The **Transit Fixed Guideway** Program restructured its capital needs to reflect programs as opposed to specific transit routes and updated cost estimates for all capital needs to reflect costs from recent procurements. These include those related to cable cars, surface network, Market Subway, Train Control System, substations and facility guideway infrastructure.

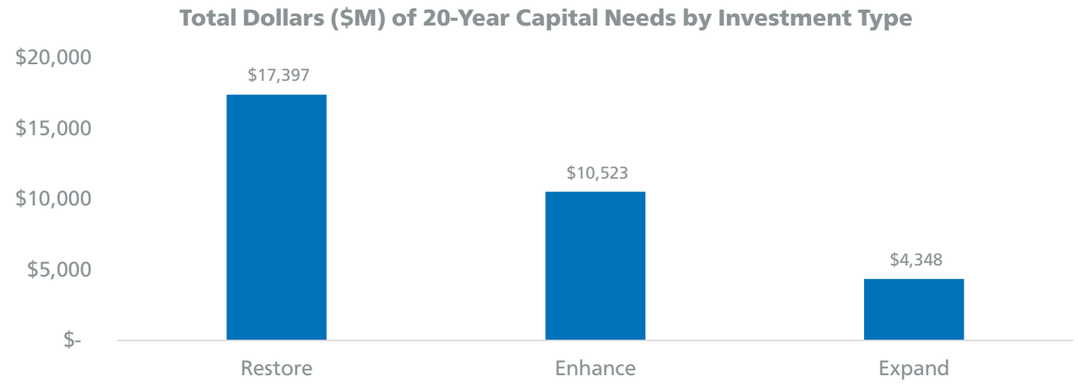
8. The **Transit Optimization & Expansion** Program updated description, justification, timeframe and cost estimates for capital needs of "Historic Street Car Fort Mason Expansion", "Muni Forward New Corridor Expansion", "Accessible Stop Spot Improvement Program", "Muni Metro Core Capacity", "Muni Forward 2.0 Projects on the Five-Minute Network" and "Transit Signal Priority" to reflect updated scale of those capital needs and removed some capital needs to reflect project completion and updated plans.

9. The **Regional Transit Expansion** Program includes revised descriptions and cost estimates for "Geary/19th Avenue Subway", "Bayview Caltrain Station" and "BART and Muni Station Transfers" based on the recently completed ConnectSF Transit Strategy.

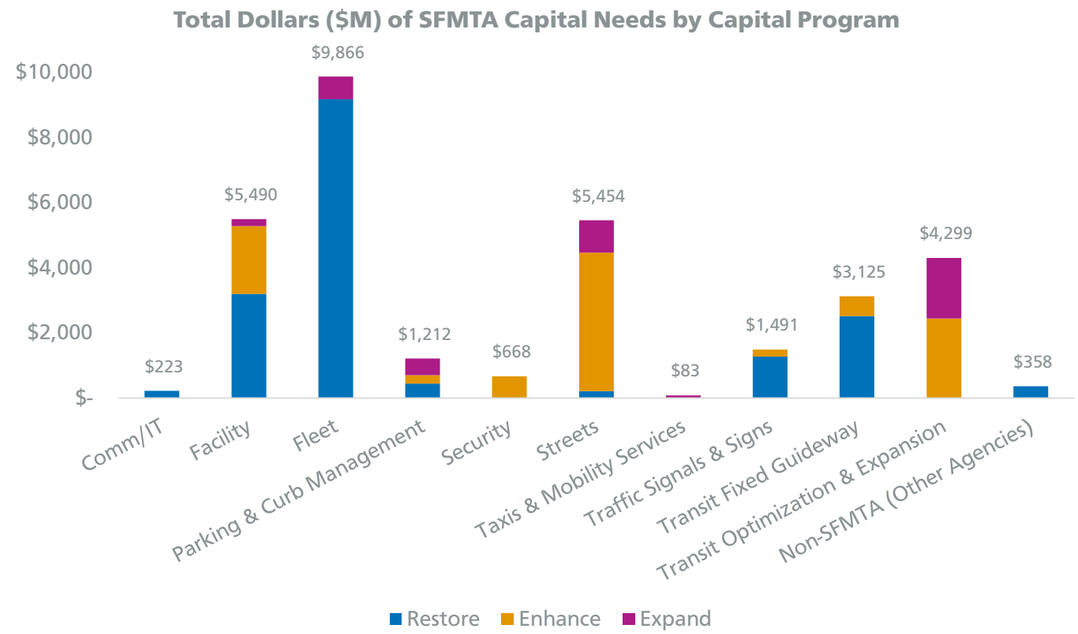
For more details about changes to capital needs, please view "Changes from 2021 to 2023 by Capital Program" in the Appendix.

2023 Capital Needs Summary

With the additions and revisions, the SFMTA has $17.4 billion in "Restore" needs, $10.5 billion in "Enhance" needs and $4.3 billion in "Expand" needs, over the next 20 years. In addition, the SFMTA is working with regional partners to support $23.4 billion in regional transit expansion needs that could be owned and operated by agencies outside of the SFMTA or the City.



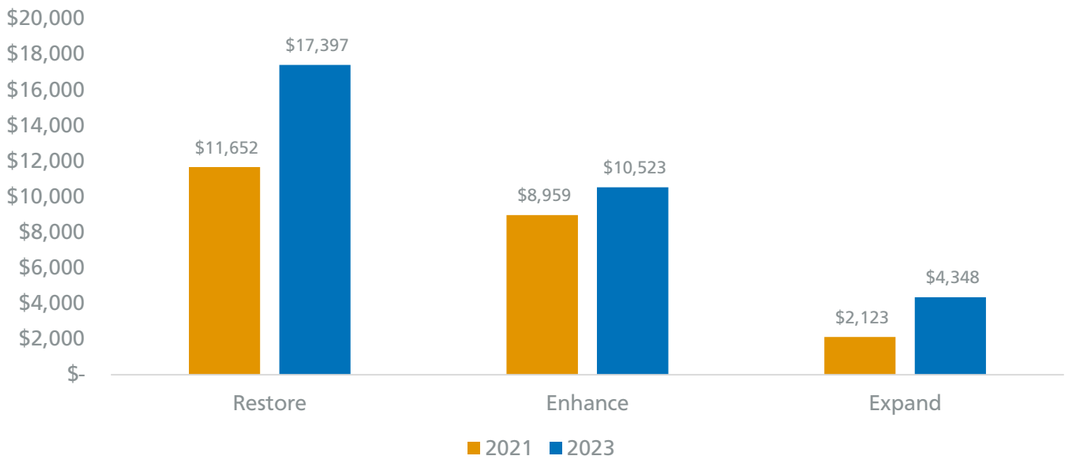
The majority of capital needs are in restoring and enhancing the fleet, facilities and streets, as well as enhancing transit and restoring transit fixed guideway. Transit Optimization & Expansion, Fleet, Facility, Streets and Transit Fixed Guideway Programs represent the largest programs and highlight how the SFMTA reaches its Strategic Plan goals to provide more transportation options in transit, walking and bicycling.



Comparison of 2021 vs. 2023 Capital Needs

Climate Action Plan), and as costs have escalated outside of the SFMTA's and the City's control, the estimated costs of SFMTA's capital needs have increased since the Capital Plan was last updated in 2021, illustrated in the following chart. For "Restore" needs, which include the replacement or rehabilitation of existing assets, capital needs have changed from $11.7 billion to $17.4 billion. This is primarily a result of updates to unit costs derived from recent projects. For "Enhance" needs, which enhance the functionality of the SFMTA's assets without adding to the total number of assets, the total cost estimate changed from $9.0 billion to $10.5 billion. Most of this increase is due to the cost escalation factor being applied. Lastly, the "Expand" needs that would be owned and operated by the SFMTA changed from $2.1 billion to $4.3 billion in needs. Most of this increase is due to new long-range plans and studies, cost escalation and refined cost estimates. The 2021 Capital Plan also included an additional $8.5 billion in regional "Expand" needs which are now grouped in a separate Regional Transit Expansion Program because needs could be owned and operated by agencies outside the SFMTA or the City. These needs are now included in the $23.4 billion in Regional Transit Expansion needs.

Total Dollars ($M) of 20-Year Capital Needs by Investment Type, 2021-2023



In total, the capital needs have increased from $31.3 billion in 2021 to $32.4 billion in capital needs in 2023, shown by Capital Program in the following chart. Some of the largest factors contributing to this change are the addition of specific recommendations like Central Subway Extension from the ConnectSF Transit Strategy in the Transit Optimization & Expansion Program, an update of Fleet and Transit Fixed Guideway needs based on more accurate information on the SFMTA's assets corresponding costs, addition of actions from the city's Climate Action Plan in the Parking & Curb Management Program and other programs and cost escalation.

Capital Program	Total Dollars
Communications & IT	$222.9M
Facility	$5,489.8M
Fleet	$9,865.7M
Parking & Curb Management	$1,212.4M
Security	$668.1M
Streets	$5,453.5M
Taxis & Mobility Services	$82.7M
Traffic Signals & Signs	$1,490.6M
Transit Fixed Guideway	$3,125.0M
Transit Optimization & Expansion	$4,298.9M
Non-SFMTA (Other Agencies)	$358.4M
Grand Total	**$32,368.0M**

Over time, the SFMTA has revised the Capital Plan to incorporate the latest information available. Cost estimates change year-to-year as the capital needs are removed, refined or added. Over time, the SFMTA has adjusted for inflation, updated the cost estimates, added previously unidentified needs, responded to regulations and developed new policy. For example, the jump from 2013 to 2015 primarily included refined cost estimates and state of good repair needs across the Facility, Transit Fixed Guideway, Parking & Curb Management and Transit Optimization & Expansion Programs. The jump from 2017 to 2019 reflected more accurate estimates and expanded scopes in several programs plus added costs to support new city policy and state regulations for transit electrification. The 2023 increase is due to inclusion of long-range plans, cost escalation and refined cost estimates, even as the SFMTA continues to advance on investing in its capital needs.

Over time, each Capital Plan has responded to regulation and become more visionary as the SFMTA plans for growth.

- ***2013-2015*: Expanded "Restore" needs and refined cost estimates**
- ***2017-2019*: Responded to state battery electric bus regulations**
- ***2021-2023*: Included new long-range plans and studies, cost escalation and refined cost estimates**

Next Capital Plan

The 20-Year Unconstrained Capital Plan feeds into the 5-year Capital Improvement Program (CIP) and 2-year Capital Budget, both of which immediately follow the Capital Plan.

Staff will continue to evolve the Capital Plan for the next update. Future updates of the Capital Plan may include the following:

- Future addition of recommendations from the SFMTA Waterfront Resiliency Transportation Assessment to improve the resilience of SFMTA assets, including facilities, streets and transit lines, from sea level rise and coastal flooding.
- Future addition of recommendations from the Active Communities Plan, the SFMTA's update to the bicycle plan, which is currently in development.
- Future addition of the Parking Facilities Assessment to better analyze the future of the SFMTA's off-street parking facilities.
- Future addition of green infrastructure costs in streetscape projects to reflect the Healthy Ecosystems Strategy from the City's Climate Action Plan and to better tap into available funding.
- Updated Capital Asset Inventory to improve the quality of data by further breaking down some of the large assets into discrete subsystems.
- Updates to the Capital Investment Packages from the 2021 20-Year Unconstrained Capital Plan to help inform a potential revenue measure.

Waterfront Resilience

The City and SFMTA face significant capital needs in the years ahead to create a resilient transportation system and shoreline that is responsive to risks from flooding and seismic activity. Focusing on the Port-owned stretch from Fisherman's Wharf to Heron's Head, which has been the subject of the Port's Waterfront Resilience Program and US Army Corps of Engineers Coastal Flood Study, the SFMTA has determined that significant investment will be needed to prepare for disruptions caused by the construction of a new coastal flood defense system and to help plan and design a more resilient network that can withstand seismic risk and a changing climate system.

The City will know more details about the future shoreline and the impacts to the multimodal transportation system in the years ahead. In the meantime, the City will need to identify funds to conduct further planning, pre-design, design and environmental review in developing alternatives and to ultimately support construction of the recommended projects. The SFMTA has started a preliminary planning and analysis and identified a suite of potential adaptation projects to respond to both the construction and build-out phase of the selected coastal flood defense system, with rough cost estimates ranging from $1 billion to $5 billion just for these adaptation measures alone.

2023 Capital Needs and Assessment

Capital Needs Table

Each capital need in the Capital Needs Table includes a number, program, name, description, justification, timeframe, investment type and planning-level cost estimate.

Communications & IT

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-CI01	State of Good Repair of Management Info Systems (MIS), Information Technology (IT), and Network Systems	State of good repair of MIS/IT/Network Systems. Provides for the replacement of various existing Communications/Information Technology assets, including SCADA, Bus On-Board Video, and the Incident Management/Tracking system.	Providing for the timely replacement of these systems supports a safe and reliable transit system.	0-20 Years	Restore	$191.4M
CN23-CI02	Disaster Recovery/Continuity plan	Planning and implementation of an IT server site to provide operations in the event of a disaster. This would be approached in two phases, implement and test key systems, then expand the site to support all systems. High Availability is not covered by this site and is already addressed with the agency's existing infrastructure.	The SFMTA currently uses Azure for disaster recovery. SFMTA plans to uses specialized consultant to develop Disaster recovery plan in the event of a disaster that renders both of its primary data centers inoperable it would not be able to operate any of its IT systems in any capacity. A Disaster Recovery site is required to enable the operation of key systems in the event of a disaster.	0-5 years	Restore	$3.2M
CN23-CI03	Phase 2 Radio Project – platform consolidation	The first phase of the computer-aided dispatch/automatic vehicle location (CAD/AVL) system, commonly known as the radio system, was completed in Spring 2019. A second phase is needed to consolidate additional vehicle networks. This would utilize the new CAD/AVL system as a unifying technology platform to provide a single network and technology interface on all vehicles. This is important to ensure future technologies onboard vehicles are compatible with one-another, reduce overall network communications costs and deploy future technologies that would utilize communications and networking through the CAD/AVL. 2. Implementing system improvements "detour" and "headway" modes to support multiple modes of service plan changes.	There are currently 11 networks and antennas on vehicles, which limits compatibility and expansion of systems. This will enable the consolidation of systems resulting in cost savings and expansion of future systems will be more cost effective with a single network on vehicles. This will provide more flexibility in service planning and support additional functions to accommodate multiple modes for service plans.	0-10 years	Restore	$1.7M
CN23-CI04	Trapeze Program	Implement new Trapeze modules. - Trapeze Timekeeping rules: Construct Improvement to timekeeping rules to comply with new MOU agreement and automate existing Manual activities. - Absence management and workers comp reporting: Develop an interface between worker's comp management and Transit operating management systems to assist department to obtain latest information of actual worker's comp claims. - Sign-in terminal: Install and design Trapeze Ops Sign in terminal allowing Transit to streamline communication to each operator at start of their shift. - Yard management: Improve daily maintenance and operations of transit revenue vehicles. - Transit supervisors /station agents into Trapeze	Application Enhancement based on Transit needs to improve daily operations for transit operators and revenue vehicle management	0-5 years	Restore	$14.3M
CN23-CI05	Project and Fund Management System Replacement	Replace existing CPCS applications that is at its end of life with new system that meets the agency's need to support project delivery	Replace current applications with ones that better meet the needs of client and integrate with Peoplesoft	0-5 years	Restore	$10.0M
CN23-CI06	Video Camera Refresh	Replace outdated surveillance infrastructure at various MTA facilities. Over the years various purchases were made to buy security cameras and much of this equipment is past its useful life. This project will be focused on upgrading the oldest equipment in around 15 locations and about 500 cameras.	During our video modernization project, we have identified a list of sites that have very old surveillance equipment. These sites are using predominantly analog cameras and we want to switch them over to modern IP based cameras for better integration and in most cases higher resolution.	0-5 years	Restore	$1.7M
CN23-CI07	Cybersecurity Modernization	Modernization of cybersecurity infrastructure. Cybersecurity threats keep evolving and there is a need to update key infrastructure like our firewalls to keep current.	Cybersecurity threats keep evolving and we need to update key infrastructure like our firewalls to keep current. Part of this project will also include a detailed risk assessment, so we make sure we are investing in the right places to secure critical infrastructure.	0-5 years	Restore	$0.6M

Facility

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-FC01	SFMTA Facility Condition Assessment Campaign Phase 1	A series of facility safety improvement projects at all SFMTA facilities, as appropriate. Projects include work like recurring HVAC, pigeon abatement, safety enhancements, emergency lighting, etc.	These projects improve the safety of the work environment. Investments in safety infrastructure also assist in promoting a culture of safety.	0-20 Years	Enhance	$223.4M
CN23-FC02	SFMTA Facility Condition Assessment Campaign Phase 2	Subway Station Rehabilitation Campaign includes a series of facility safety improvement projects at all nine SFMTA Muni Metro Stations between Embarcadero and West Portal as appropriate. Projects include but not limited to health/fire/life safety systems, plumbing and drainage systems, electrical and power systems, ventilation and Heating, Ventilating and Air Conditioning (HVAC) systems, station agent and inspector booths, passenger areas, restrooms on Muni levels or those designated for SFMTA use, and break or other rooms on Muni levels or designated for SFMTA use, safety enhancements, emergency lighting, rehabilitation of substructure, superstructure, signage for elevator outage, as well as painting and platform edge detection tile replacement.	Well-maintained subway station facilities will reduce the risk of safety hazards due to deteriorating systems. Timely replacement of assets allows for consistent and efficient station operations, i.e., replaces old systems with energy-efficient ones.	0-20 years	Enhance	$250M
CN23-FC03	Subway Station Rehabilitation Campaign	Provides for ongoing rehabilitation and improvement projects in the Metro Subway stations. It includes rehabilitation of substructure, superstructure, Heating, Ventilating, and Air Conditioning (HVAC) systems, electrical systems, plumbing systems, restrooms, as well as painting and platform edge detection tile replacement.	Well-maintained subway station facilities will reduce the risk of safety hazards due to deteriorating systems. Timely replacement of assets allows for consistent and efficient station operations, i.e., replaces old systems with energy-efficient ones.	10-20 years	Restore	$1,553.4M
CN23-FC04	1201 Mason (Cable Car Barn) Rehabilitation	Rehabilitate core and shell and major building systems and complete full tenant improvement of the Cable Car Barn, including full overhaul of the electrical system. This historic building houses the full cable car maintenance and operations function, including running repair of vehicles, cable and winding machines, and the Cable Car Museum, which is open to the public.	Maintaining existing cable car facility and fixed equipment in a state of good repair will help ensure safe and reliable transit service.	10-20 years	Restore	$271.0M
CN23-FC05	Operator Convenience Stations Renewal Campaign	Ongoing maintenance to preserve and improve 25 existing restroom facilities at 6 locations including operations Central Control (OCC), subway stations, etc.	This project will improve and enhance employee facilities, leading to healthier working environments.	0-20 years	Restore	$7.5M
CN23-FC06	Real Property Acquisition for SFMTA Facilities	Acquisition of real estate property (purchase or long-term lease) for needed Facilities expansion / relocation. This would include using funds to acquire real estate on existing leases where SFMTA holds a “right of first refusal” if the property is to be sold, or a “purchase option” as part of a lease, or other similar contract language.	Numerous facilities for transit operations, paratransit, streets shops, administration, etc. are located on short- and long-term leased property and it is in the strategic interest of SFMTA to secure permanent locations for these services. With the continued growth of Transit, Paratransit and Streets-related services, the SFMTA needs permanent locations, which intensifies in a constrained San Francisco real estate market.	5-20 years	Expand	$106.1M
CN23-FC07	SFMTA Real Estate Capital (Joint-Use Development)	The SFMTA has numerous sites in San Francisco that would be appropriate for joint-use development for housing or commercial purposes; however up front capital is sometimes needed for predevelopment and site preparation, or for a capital contribution for concurrent SFMTA operations on-site.	Fully utilizing existing SFMTA properties provides resources to operate and maintain the Muni fleet.	5-20 years	Expand	$22.3M
CN23-FC08	2301 Stockton (Kirkland) Facility Modernization	Complete rebuild of the Kirkland Division, including addition of full maintenance capacity at the division and electrical upgrade and site improvements to accommodate the battery-electric vehicle charging.	The division facility is over 60 years old and is obsolete and needs to be replaced. It is too small and is located among non-conforming interests. The resulting improvements will provide safer and healthier working conditions and will ensure that the transportation system is more efficient. Efficient and properly designed facilities are key to maintaining the Muni Fleet in a state of good repair.	10-20 years	Restore	$171.0M
CN23-FC09	2500 Mariposa (Potrero) Facility Modernization	Complete rebuild of the Potrero Division - fleet moves to pivot facility to remain in service while rebuild is underway. Three-level structured bus facility to serve 213 buses, centralize and streamline operator training, and centralize Muni street operations. Also includes renovations to accommodate the change of the bus fleet to all battery-electric vehicles. Project reference concept also includes joint development of street level commercial uses and up to 575 residential units.	The division facility is over 100 years old and is obsolete and needs to be replaced. The resulting improvements will provide safer and healthier working conditions and will ensure that the transportation system is more efficient. Efficient and properly designed facilities are key to maintaining the Muni Fleet in a state of good repair.	0-10 years	Restore	$446.8M

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-FC10	949 Presidio (Presidio) Facility Modernization	Complete rebuild of the Presidio Division - fleet moves to interim facility while rebuild is underway. Two-level structured bus facility with basement currently includes a PW street cleaning unit in the program. Also includes improvements to accommodate the change of the bus fleet to all battery-electric vehicles. Project early concepts are looking into potential for joint development, especially on southern (Geary Blvd) frontage of the site.	The division facility is over 100 years old and is obsolete and needs to be replaced. The resulting improvements will provide safer and healthier working conditions and will ensure that the transportation system is more efficient. Efficient and properly designed facilities are key to maintaining the Muni Fleet in a state of good repair.	5-10 years	Restore	$408.8M
CN23-FC11	1940 Harrison Street (Flynn) Facility Modernization	The scope of the proposed Flynn Bus Maintenance Facility Renovation project includes: lift upgrades for all in-ground lifts and hoists, new roof with solar power, exhaust fan upgrades, mechanical and HVAC replacement, air and diesel equipment replacement including air compressors, generators and fire pumps. Also includes improvements to accommodate the change of the bus fleet to all battery-electric vehicles.	Other than the new Islais Creek Bus Maintenance Facility, the Flynn Facility is the only location that the SFMTA can store and maintain 60 ft. motor coaches. The fleet is currently growing, and this facility needs to be modernized to maintain the new and growing fleet.	5-10 years	Restore	$250.0M
CN23-FC12	Rubber Tire Division Wash Rack Replacement (Sustainability - Water)	Provides new updated wash racks for two Rubber Tire Transit Divisions. Wash racks will be able to handle standard and/or articulated motor coaches depending on the division in which they are installed. Project includes water reclamation system and paving.	This project will result in cleaner buses, with the potential of improving customer satisfaction. It will also improve the working environment by providing more effective and modernized equipment that reduces water resource consumption and efficiently utilizes necessary cleaning chemicals.	5-10 years	Enhance	$22.3M
CN23-FC13	Enforcement Headquarters Construction at 1200 15th Street	Makes necessary improvements to a new headquarters for the Streets Enforcement Subdivision.	Improves coordination for the Security, Investigations and Enforcement (SIE) Group, and ends the short-term lease of their current facilities. Provides adequate space for SIE group job functions.	0-5 years	Enhance	$81.0M
CN23-FC14	Solar Panel Installation at Multiple SFMTA Facilities (Sustainability - Power)	Installation of solar panels at the MME and Green, Facilities. Each facility has open, clear roof space where solar panels could be installed. The resulting electrical generation could be used to power each facility and excess energy could be returned to the power grid.	This project will improve energy efficiency and would result in cost savings. It would also support the agency's sustainability goals by reducing SFMTA's use of non-renewable resources.	10-20 years	Enhance	$17.1M
CN23-FC15	1095 Indiana (Woods) Facility Modernization	Complete rebuild of the Woods Division, including relocation of the fleet to a temporary facility to enable construction. The new bus facility would be a structured operations and maintenance facility with improvements to accommodate the change of the bus fleet to battery-electric vehicles. The SFMTA would purpose potential for consolidation of other SFMTA uses (i.e. paratransit, potentially) and opportunities for housing on the site.	The division facility is over 60 years old and maintenance capacity is limited to 40' vehicles. The layout is awkward and significant investment will be required to transition to battery-electric vehicles. Rebuilding the site to a modern standard if more cost effective for the SFMTA and provides safer and healthier working conditions. Efficient and properly designed facilities are key to maintaining the Muni Fleet in a state of good repair.	10-20 years	Enhance	$446.8M
CN23-FC16	SFMTA Facility Elevator Rehabilitation Program	This need focuses on elevators within SFMTA operations and maintenance facilities and supporting shops and includes replacement of several components that are most prone to failure, including door operators, landing doors, cab doors, door tracks, sills and sill angles, thus extending their useful life and improving reliability. These upgrades are especially necessary for ensuring accessibility for seniors and people with disabilities.	The Capital Need will improve the reliability of station elevators and ensure consistent and safe access to stations for persons with disabilities.	0-20 years	Enhance	$102.4M
CN23-FC17	Muni Metro Station Escalator Rehabilitation Program	This need focuses on escalators within SFMTA Muni Metro transit stations, which will be rehabilitated or replaced to conform with current building codes and incorporate modern safety features. Capital Need includes the escalators that have not been completed or funded.	The project will improve the reliability of station escalators and ensure consistent and safe access to stations for persons with disabilities.	0-5 years	Restore	$85.9M
CN23-FC18	Muni Metro Elevator Expansion	This need focuses on elevators within SFMTA Muni Metro stations. Conduct study to determine scope of elevator expansion. Install new ADA compliant street and platform elevators at Muni Metro stations with level changes, including shared BART/Metro stations. Initially, elevators would be installed at stations that currently only provide one elevator, or where a fully ADA compliant elevator is not available. The full build-out would provide at least one ADA-compliant elevator at every Muni Metro access point.	The new elevators will ensure consistent and fully ADA compliant access to the underground Metro stations for people with mobility impairments and others needing the elevator for access to the stations.	0-20 years	Expand	$44.7M
CN23-FC19	Paratransit Facility	Build a paratransit facility that will enable electric paratransit vehicles on property owned or long-term leased by the City and County of San Francisco. The current cost estimate assumes the facility would share a location with a separately operated new or renovated SFMTA transit division.	Build a paratransit facility that would be leased to a paratransit service provider. The purpose behind building a facility of this type is to ensure paratransit service is met in SF, which may be problem if available spaces for leasing are not present at a future time.	5-10 years	Enhance	$150.8M

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-FC20	1 South Van Ness (SFMTA Headquarters)	Perform tenant improvements at 1 SVN replacing carpets and workstations to increase capacity and space use with existing square footage. Includes modernization conference and meeting room technology and other minor improvements to conference spaces.	The SFMTA has increased staff at 1 SVN (SFMTA Headquarters), however the Agency is working to optimize existing square footage, rather than purchase or lease additional space in the downtown area.	0-5 years	Enhance	$7.5M
CN23-FC21	eBus Facilities Conversion	Convert four SFMTA rubber tire maintenance and operations facilities from existing fleet propulsion technology to battery electric buses. This conversion need includes Kirkland, Woods, Islais Creek, and Flynn. This conversion need also includes off-site improvements to the SFMTA power supply to accommodate this transition. Presidio and Potrero are excluded because conversion of these facilities is included in complete rebuild projects (otherwise listed in this Capital Plan).	In May 2018, the SFMTA Board adopted a Zero Emission Vehicle Policy Resolution. Per the ZEV Policy, the SFMTA will begin procuring zero emission buses starting in 2025, with a goal of achieving a 100% battery electric vehicle fleet by 2035. The SFMTA is also mandated to pursue conversion to Zero Emissions buses by California Air Resources Board.	0-15 years	Enhance	$781.9M
CN23-FC22	Interim Trolley Coach Facility	Improve the existing bus acceptance facility and storage yard at 1399 Marin and/or other locations to serve as an interim trolley storage facility to accommodate fleets from Potrero and Presidio during major facility rebuild.	To enable rebuild of obsolete and deficient facilities but maintain SFMTA's Muni service, the SFMTA needs to complete interim improvements at other sites to accommodate displaced fleets.	5-10 years	Expand	$39.1M

Fleet

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-FT01	Cable Car Vehicle Rehabilitation Program	This program consists of a phased overhaul and reconstruction of the Cable Car fleet. Given the cultural significance and historical importance of the Cable Car system and Fleet, it is a priority to ensure that the Cable Cars' condition is consistent with the City's pride in our fleet. The expected life of a rebuilt Cable Car is approximately 20 years, with a minor rehabilitation every 5-7 years. This program includes major and minor rehabilitations of 26 Powell Cars and 14 California Cars to like-new condition.	This program will maintain a high level of system reliability, safety, and productivity, providing quality service to this top tourist attraction.	0-20 years	Restore	$157.5M
CN23-FT02	Historic Vehicle Rehabilitation Program	Historic Streetcar Rehabilitation Program is comprised of a suite of projects to support the lifecycle management of the historic streetcar fleet. Campaigns include mid-life refresh improvements of SFMTA's existing fleet of revenue ready streetcars, full original state restoration campaigns of historically significant cars and future potential vehicle standardization campaigns to improve the overall performance and reliability of the fleet.	This program will maintain a high level of system reliability, safety, and productivity, providing quality service to patrons. It is necessary to keep the cars in operation since they are not replaced.	0-20 years	Restore	$241.9M
CN23-FT03	Light Rail Vehicle Lifecycle Management Program	Light Rail Vehicle Lifecycle Management Program Includes the systematic rehabilitation and overhaul of 249 Siemens light-rail vehicles at key intervals (quarter-, mid-, three-quarter- life). This program includes repairs, upgrades or refurbishments to heating ventilating and air conditioning (HVAC), brakes, couplers, pantograph, propulsion, doors, car body, seats, and cab.	Systematic lifecycle management is integral to ensuring that the vehicles performance is predictable and reliable over their full useful lives of 25 years.	10-20 years	Restore	$930.3M
CN23-FT04	Light Rail Vehicle Replacement Program	Light Rail Vehicle Replacement Program includes the replacement of Siemens vehicles delivered between 2017 and 2020 when they reach the end of their useful life (25 years). Timely replacement of light rail vehicles ensure the fleet maintains an adequate state of good repair, ensuring reliability and operational capacity needs of the Metro light rail system.	This project will provide for the modernization of the existing light rail vehicle (LRV) fleet and will also allow for greater speed, reliability, and comfort.	10-20 years	Restore	$1,082.6M
CN23-FT05	Light Rail Vehicle Fleet Expansion	Includes the purchase of 30 expansion light rail vehicles to meet anticipated population growth and increased service demand. 30 Vehicle LRV option starting in FY2026	This project will provide for increased service along existing and under construction light rail lines. Expansion of the light rail fleet with modern vehicles should allow for greater speed, reliability and comfort.	0-10 years	Expand	$197.4M

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-FT06	Motor and Trolley Coach Midlife Overhaul Program	Provides for the systematic mid-life overhaul of all assumed vehicles in the motor coach, trolley coach and battery electric bus (BEB) fleets. The program includes rehabilitation and replacement of engines; batteries; transmissions; differentials; suspension systems; wheelchair lifts; passenger and driver seats; glass; and body repair and paint.	The primary focus of this program is to maintain the motor and trolley coach fleet in a state of good repair by replacing key components midway through the vehicle's useful life. Mid-life rehabilitation of the fleets ensure that the vehicles operate in a safe and secure manner, reducing safety hazards and vandalism. In addition, this rehabilitation program will allow each vehicle to reach its full useful life before needing to be replaced. Timely rehabilitation of the motor coach and trolley fleet reduces the number of breakdowns and improves service reliability.	0-20 years	Restore	$1,835.4M
CN23-FT07	Motor Coach Replacement Program	Entails the replacement of 30ft (30), 40ft (347) and (363) standard and (articulated) motor coaches. Coaches will be replaced by battery electric buses after 2025. This program seeks to replace the existing vehicles to keep the fleet in a state of good repair. Vehicles are replaced every 10 (30ft) and 12 (40ft and 60ft) years based on useful life standards.	The new coaches will offer greater reliability and safety with enhanced transmission-based brake retarders, composite materials, slip resistant flooring, and better mirrors. As a result, this project will improve agency safety and security, as well as improved transit reliability, on-time efficiency, and customer satisfaction.	0-20 years	Restore	$2,956.0M
CN23-FT08	Motor Coach Expansion Program	Expansion of the motor coach fleet, both in number of vehicles and vehicle capacity, to accommodate projected growth. Anticipated expansion of 84 vehicles will expanded service to planned major developments and forecasted housing growth.	The expansion of the motor coach fleet is needed to meet projected ridership demand. In addition, new fleet procurements will help meet operational needs for larger capacity vehicles and help meet zero emissions targets.	0-10 years	Expand	$486.3M
CN23-FT09	Trolley Coach Replacement Program	Trolley coach replacement program will replace 185 (40ft) and 93 (60ft) trolley coaches the have reached the end of the useful life. This program seeks to replace the existing vehicles to keep the fleet in a state of good repair. Vehicles are replaced every 15 years based on useful life standards.	Timely replacement of trolley coach vehicles reduces the number of incidents and breakdowns from vehicle deterioration and age, contributing to greater reliability and a cleaner and more comfortable experience for the customer and employee.	0-10 years	Restore	$1,055.8M
CN23-FT10	Paratransit Fleet Replacement Program	Paratransit Fleet Replacement Program consists of routine replacement of large Type B cutaway vans with Type A vans every five years. The capacity of the new Type A cutaway vans will be the same as the Type B vans, at two wheelchair users and twelve seated passengers.	This project will replace the current fleet of vehicles used to deliver ADA and non-ADA paratransit service (e.g. paratransit taxi & group van service), providing for newer, modern vehicles and better access for persons with disabilities who are unable to access the fixed route transit system.	0-20 years	Restore	$282.5M
CN23-FT11	Paratransit Fleet Expansion Program	Paratransit Fleet Expansion Program expand the number of vehicles in the Paratransit Fleet to accommodate expected growth in service demand. A total expansion of 20 vehicles is expected over the 20 year plan horizon.	This project will expand the current fleet of vehicles used to deliver ADA and non-ADA paratransit service (e.g. paratransit taxi & group van service), providing more vehicles and better access for persons with disabilities who are unable to access the fixed route transit system.	0-20 years	Expand	$8.5M
CN23-FT12	Non-Revenue Vehicle Replacement Program	Consists of the purchase and replacement of non-revenue vehicles, such as specialized maintenance vehicles, as well as light and heavy duty trucks and sedans that are used throughout the agency. This project will replace existing non-revenue vehicles at the end of their useful life. This program assumes vehicle upgrades as the City transitions to a zero-emissions fleet. This program also aligns with expected changes air emissions standards.	On-time replacement or upgrade of non-revenue vehicles ensures that employees can effectively support the operations of the transportation system and efficiently access locations where there are service incidents and perform corrective measures. Many vehicles have significantly exceeded their useful lives and their current condition presents challenges for maintaining effective operations.	0-20 years	Restore	$513.1M
CN23-FT13	Replacement of Other On-Board Equipment	Replacement of on-board monitoring and control equipment. Includes replacement of CCTV, automatic passenger counters, radio, and on-board ATCS equipment. Replacement required every five to six years when not provided with a new vehicle.	Replacement of on-board equipment is required to maintain safe and efficient operations. The equipment does not last as long as the vehicles on which it is placed.	0-20 years	Restore	$118.4M

Parking & Curb Management

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-PK01	Electric Vehicle Charging Stations Expansion	Upgrade and expand charging stations to at least 10% of spaces in municipally-owned parking garages and lots by 2030 and to approximately 25% by 2050, and study residential curbside charging.	Based on the city's Climate Action Plan and EV Roadmap, upgrading existing Level 2 EV chargers and adding additional Level 2 and DC fast chargers will address the growing public demand for EV charging and support the SFMTA's and the city's climate action and equity goals. Increasing EV charging is also one of the most cost-effective ways to reduce greenhouse gas emissions from the transportation sector.	0-20 years	Expand	$166.1M
CN23-PK02	Implement Parking, Loading, Bicyclist, Pedestrian and Other Mobility Mode Movement and Stopping Detection Technology	Implement detection technology to measure parking occupancy, loading zone usage, double parking, bicyclist movements and counts, pedestrian movements counts, and other mobility mode user movements and counts. This data will support demand-responsive meter rate adjustments, analysis of requested parking regulation changes, curb management, bicycle and pedestrian planning, engineering, Vision Zero initiatives, and transparency in decision-making.	Improving parking availability, curb management, and bicycle/pedestrian/ safety project implementation will help make our streets safer and more efficient.	0-20 years	Enhance	$140.0M
CN23-PK03	Parking Facilities State of Good Repair Program	Restoration of 38 parking facilities that provide nearly 15,000 parking spaces, 90,000 sq. ft. of retail space and generate over $90M in annual gross revenues. Includes major rehabilitation, preservation, and improvement of existing parking facilities to enhance parking infrastructure and improve parking management. Implements improvements to elevators, parking decks/drive aisles, energy efficient lighting, and mechanical systems (e.g., HVAC, sump pumps), CCTV surveillance systems, and bike parking as well as compliance with ADA regulations and various Planning, Building and Fire Codes.	When completed, this project will extend the useful life of major revenue-generating assets, enhance safety of public facilities, as well as help provide better services for those bicycling, carpooling and carsharing.	0-20 years	Restore	$250.0M
CN23-PK04	Parking Meters State of Good Repair Program	Replaces and modernizes equipment for all 27,000 metered parking spaces. All on-street parking meters were replaced in 2014. This estimate accounts for three additional replacements within the next 20 years. Assumes expansion of number of meters during replacements.	Modernizing existing parking meters will improve reliability and increase driver convenience by accepting non-cash forms of payment. Modernized meters will also allow for demand-responsive pricing.	0-20 years	Restore	$124.0M
CN23-PK05	Parking Access Revenue Control System	Upgrade of the Parking Access and Revenue Control Systems (PARCS) software, hardware, ticket dispensers, gate arms, registers, ticket acceptors, ticket readers, and pay stations at 20 SFMTA off-street parking garages.	The PARCS equipment is currently being replaced, to be completed in 2020. The equipment has a 5-7 year expected life, therefore it will need to be replaced about three times over a 20 year span.	0-10 years	Restore	$23.0M
CN23-PK06	Parking Facility Structural and Seismic Upgrades	Most of SFMTA's parking structures are at least 20 years old (oldest garage was built in 1941). Performing a structural analysis to assess the integrity of the SFMTA garages is the first and necessary step to ensure the viability of SFMTA parking assets. The second step is to implement structural and seismic upgrades, where needed.	Improving the seismic and structural integrity of existing parking structures increases the resiliency of the facilities in the event of a natural disaster.	10-20 years	Enhance	$116.3M
CN23-PK07	Gradually Charge the Right Price for Every On-street Parking Space	Gradually convert all on-street parking spaces to paid through expanding the Residential Parking Permit program area and converting parking those areas to paid parking for visitors. This will modernize the way San Francisco regulates approximately 250,000 parking spaces to optimize for availability and generates revenue for transit through new pay stations and associated enforcement vehicles, signage, and enforcement space.	Based on the city's Climate Action Plan, removing parking subsidies and charging the right price for every on-street space supports the city's equity, accessibility, climate action, livability, economic vitality, and safety goals by better managing limited street space and directly funding transit operations.	0-20 years	Expand	$346.5M
CN23-PK08	Parking Facility Elevator Modernizations	Eleven SFMTA-owned garages have elevators, which are an integral life-safety system that must be regularly maintained and also fully modernized every 20 years.	Elevators require full modernization every 20 years by industry standards. Towards the end of the modernization life-cycle, elevator operations becomes less reliable, resulting in customer service impacts when elevators are down and increasing maintenance costs to keep the cabs running.	0-20 years	Restore	$46.5M

Security

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-SC01	Threat and Vulnerability Assessment (TVA) and Implementation	This capital need addresses two major elements of threat and vulnerability assessment which includes review and mitigation implementation. Capital need CN-SC01 funds biennial or "as-needed" emergency management and security reviews of major threats and vulnerabilities to SFMTA's critical infrastructure, assets, and facilities. Based on these reviews or other sources (such as incident and exercise after-action reports), the capital need covers the implementation of high-priority mitigation and preparedness projects to protect critical SFMTA facilities, assets, and infrastructure. Project represented by this capital need address natural, manmade, or cyber-security threats of the SFMTA with an emphasis on Rail Transit Security.	Improves safety and security for employees and customers by planning for and implementing solutions to reduce impacts of natural, manmade, or cybersecurity disasters. The annual reviews and strategies developed from these reviews ensure the Agency meets its regulatory requirements.	0-20 years	Enhance	$74.8M
CN23-SC02	Incident Management Planning and Response	Fund continuous upgrades of emergency communications equipment (satellite phones, radios) and supplies for SFMTA Divisions; interagency common operating picture operations; post-disaster damage and safety assessment. The exact projects are driven by after-action reports from incident response activations and/or emergency management exercises.	Improves the Agency's emergency response capabilities while complying with regulations.	0-20 years	Enhance	$5.2M
CN23-SC03	Surveillance, Access Control, and Security System Enhancements	Annual high-priority security enhancement measures such as perimeter security enhancements, surveillance equipment, video analytics and monitoring, employee security access control, equipment, signs, training manuals, and cyber security systems.	Maintains the security of SFMTA facilities as mandated by regulations.	0-20 years	Enhance	$63.3M
CN23-SC04	Technology In Transportation Emergency Management	Implementation of technology projects from industry best practices to enhance rail system security and employee/customer protection during normal operations as well as to augment response capabilities for all-hazard disasters on the rail system. Systems include emergency command vehicles; disaster, evacuation, and recovery modeling systems; portable digital message boards; intelligent traffic signal management system, and redundant and interoperable communication systems.	Enhances the transportation operations and emergency management capabilities of SFMTA.	0-20 years	Enhance	$28.1M
CN23-SC05	Subway Tunnel Intrusion Detection and Deterrence Measures	This capital need funds the procurement, installation, and staff training of an upgraded video-based alert system in our subway that actively monitors and detects intrusions into secured areas. This system would monitor our subway stations, tunnels, platforms, and trackside protection assets. This capital need also funds security enhancements related to more traditional methods of intrusion detection and deterrence such as CCTV upgrades/expansion, site hardening, trackside protection reinforcement, lighting, alarms, and upgraded sensors.	This capital need reduces the potential service disruption and protects SFMTA passengers and employees while complying with regulatory requirements. Intentional or unintentional intrusion into our network has been identified as an issue which poses not only a safety and security risk, but a risk to the overall service delivery of the organization.	0-20 years	Enhance	$332.0M
CN23-SC06	Market Street Natural Hazard Mitigation	Implementation of the San Francisco Lifelines Council's recommendations outlined in the San Francisco Lifelines Council Interdependency Study to mitigate risks from natural hazards to SFMTA infrastructure assets above and below Market Street. Mitigation recommendations primarily are concerned with earthquake, but also recognize the significant impact of earthquake related flooding and fire as well as long-term needs for mitigation due to sea level rise and climate changes. These mitigation strategies include but are not limited to subway, surface rail, electric sub-station, and trolley bus related infrastructure.	The SF Lifelines Council is a private/public partnership sponsored by the San Francisco Office of Resilience and Recovery. The purpose of the Council is to focus on post-disaster reconstruction and recovery efforts. The "Interdependency Study" identified Market Street Corridor where many major components of many lifeline systems are collocated and interdependent. The corridor also represents an areas of Very High to Moderate risks of liquefaction. The study recommends coordinating post-disaster action plans in coordination with partner Lifeline Council members. SFMTA would work closely with other City agencies as well as BART and other regional transit partners.	0-20 years	Enhance	$111.3M
CN23-SC07	Subway Flooding Prevention, Preparedness, and Mitigation	Conduct an all-hazard review of the SFMTA subways to prevent, prepare, and mitigate risks, primarily of flooding. A systemwide review is needed every 5 to 10 years.	Maintains the integrity of SFMTA assets and prevents service disruption in the event of major natural disasters.	0-20 years	Enhance	$28.8M

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-SC08	Continuity of Operations	Implement measures to ensure that the SFMTA would continue its essential functions after a major disaster. One example would be to set up and/or maintain alternate site(s) for the Department Operation Center for coordinating rail and bus operations in a post-disaster situation. Similar needs also exist for other essential SFMTA functions should the SFMTA headquarters become inaccessible for safe operations.	Maintains essential SFMTA operations in the event of a major disaster.	0-20 years	Enhance	$7.6M
CN23-SC09	Traffic Signal Battery Backup System	Replacement or expansion of traffic signal battery backup system installed in FY17 or earlier. The useful life of the current backup system is about five years at this time.	Maintains traffic safety after a major power outage or natural/manmade disaster. Costs are offset by the otherwise need for PCOs staffing intersections and controlling traffic.	0-20 years	Enhance	$17.0M

Streets

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-ST01	Bicycle and Shared Mobility Parking Program	Includes the installation of 1,000 bicycle racks per year (e.g., sidewalk racks, on-street racks); wheel stops; bollards; corrals and other measures to facilitate parking for personal bicycles and other shared mobility options at various locations throughout San Francisco. Also includes the installation of 7 bicycle parking stations, one every three years, which are self-service or attended facilities that have controlled access for secure storage of a bicycle; and the installation of 160 bicycle lockers, 8 per year. Secure bicycle lockers provide flexible, shared use, on-demand bicycle parking options. Also includes a mobility hubs pilot in five locations where people can access active transportation options at major transit stops and destinations.	Protected bike lanes improve safety and add to the comfort of bicyclists, making San Francisco's bicycle infrastructure more accessible to a wider range of users. This will help the SFMTA achieve the strategic goal of creating a safer transportation experience for everyone, assist in meeting the Vision Zero goal, and implement the Community-based Transportation Plans.	0-20 years	Expand	$41.0M
CN23-ST02	Protected Bike Lane Network	Add new protected bike lanes and upgrade existing Class II bike lanes to physically protected facilities to create a safer citywide bicycle network of protected bike lanes suitable for a wide range of users. Specific protected bike lane infrastructure includes transit boarding islands to provide protection from bus passenger loading and buffer paint and traffic delineators. Additionally, implementation of concrete barriers to separate traffic from people bicycling, and signal and sign upgrades improves safety and increases ease of bicycling.	Protected bike lanes improve safety and add to the comfort of bicyclists, making San Francisco's bicycle infrastructure more accessible to a wider range of users. This will help the SFMTA achieve the strategic goal of creating a safer transportation experience for everyone, assist in meeting the Vision Zero goal, and implement the Community-based Transportation Plans.	0-20 years	Expand	$804.2M
CN23-ST03	Slow Streets and Neighborway Network	Provide a network of safe and comfortable local Slow Streets to connect people walking and biking to schools, parks and other local destinations. Specific improvements include treatments designed to reduce vehicle travel and volume to defined target levels via traffic barriers, new traffic signals and signs to prioritize pedestrian and bicycle travel, and concrete infrastructure like islands, speed humps, and traffic circles to slow down vehicle speed.	Neighborways and Slow Streets reduce the speed and amount of automobile traffic on local streets thereby improving user safety and comfort, promoting the residential character of streets and making them more accessible to bicyclists. These facilities will help the City achieve the Vision Zero goal.	0-20 years	Expand	$147.0M
CN23-ST04	Bicycle Network State of Good Repair Program	Replace signs, striping, green pavement, bike signals, and other bicycle facilities. Includes Spot Improvement upgrades to ensure that bicycle facilities are upgraded to meet evolving best practices.	Rehabilitates the bicycle network, improves safety and comfort, encourages bicycling and maintains the network in a State-of-Good-Repair. These investments contribute to meeting the Bicycle Program goals.	0-20 years	Restore	$215.5M
CN23-ST05	Pedestrian Safety	Pedestrian Core Projects will implement the key infrastructure needed to meet the City's Vision Zero goals, using proven pedestrian countermeasures at the highest need locations. The work will be guided on the City's high injury network, and range from intersection improvements such as bulb-outs to major corridor transformations, it additionally includes the costs to maintain existing safety infrastructure such as paint and signage in good condition. This reflects the need to improve 130 miles of San Francisco streets for Vision Zero.	Implementing these projects are the cornerstone of the City's Vision Zero program and Community-based Transportation Plans. The focus in this category on the highest need streets will makes streets safer, more accessible, and more comfortable for all users, specifically vulnerable citizens - seniors, people with disabilities, and children, who are more likely to be severely injured if involved in collisions. The goal of this programming is to fund the needed engineering improvements to get to zero traffic fatalities annually. The projects will reduce injuries and collisions City-wide, but especially in high-risk communities such as the Tenderloin and South of Market.	0-20 years	Enhance	$1,694.4M

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-ST06	Pedestrian Walkability and Neighborhood Enhancements	This category enhances the existing pedestrian environment and builds on the pedestrian safety projects by focusing on improving streets to make them more walkable. Projects include walkability improvements on neighborhood connections, such as wider sidewalks and green infrastructure, especially where people already walk. It further builds on local neighborhood corridors to promote walking and economic development, tapping into economic potential. Lastly, this category targets infrastructure deficiencies- locations where there are not high injuries but there are major impediments or barriers to walking, such as highway underpasses, rail crossings or lack of sidewalks in areas experiencing (and targeted for) new growth. This assumes that these improvements are needed on all streets, citywide.	In addition to safety, the SFMTA is committed to making walking a preferred mode choice. The focus on this category is to make key streets more walkable to increase the number of trips made by walking in the City and implementing Community-based Transportation Plans. This is through improving existing streets where people walk, improving local neighborhood shopping corridors and reducing the number of infrastructure real or perceived barriers to walking.	0-20 years	Enhance	$2,451.7M
CN23-ST07	Traffic Calming	The Traffic Calming Program responds to neighborhood concerns about traffic safety on local streets across San Francisco. Special traffic calming programs additionally address schools, seniors and people with disabilities, populations that have disparately poor outcomes when involved in a traffic collision. Traffic calming devices such as speed humps, pedestrian bulb-outs, traffic circles, median islands are considered and installed at various locations in the city. Some of the more intensive traffic calming projects may include features such as chicanes, traffic diverters, signalized pedestrian crosswalks and street closures. Program is comprised of Application-Based Residential Traffic Calming, and Proactive Residential Area Improvement sub-programs.	These projects will improve pedestrian and bicycle safety and comfort and promote walking and cycling for all school aged children in San Francisco and are key components of Community-based Transportation Plans.	0-20 years	Enhance	$99.7M

Traffic Signals & Signs

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-SG01	Automated Photo Traffic Enforcement	Provides for the replacement of photo enforcement for 23 existing approaches and adding an additional 10 approaches.	Automated Photo Enforcement systems improve intersection safety by improving compliance, reducing the number of vehicle crashes. Established systems include red light photo and illegal turn enforcement. Others, like speed, require state legislature approval.	0-20 years	Enhance	$10.1M
CN23-SG02	Signal Infrastructure State of Good Repair Program	Encompass upgrades of existing traffic control devices, including modifications to existing signals that lack a pedestrian countdown feature, mast arms, 12” signals, battery backup systems, accessible pedestrian signals, wireless detectors, or related amenities. The project also includes the upgrade or replacement of signal equipment that is at the end of its useful life (50 years).	Support the Vision Zero program by improving safety, including perceived safety, reducing the number of injuries through improved traffic control (e.g., where pedestrian countdown signals and signal visibility improvements are provided as part of a signal modification effort).	0-20 years	Restore	$1,188.4M
CN23-SG03	Sign Infrastructure State of Good Repair Program	Funded sign work in this category includes pavement marking installations and the graffiti program, where existing signs are regularly replaced with signs that have higher reflectivity, and a coating that eases graffiti removal.	Support the Vision Zero program by improving safety though improved visibility of pavement markings and traffic signs.	0-20 years	Restore	$17.9M
CN23-SG04	Traffic Management State of Good Repair Program	This includes street paint marking/striping, parking control curb painting.	Maintaining existing infrastructure in a state of good repair will help ensure a safe and reliable street network.	0-20 years	Restore	$8.0M
CN23-SG05	New Signals & Signs Program	Provides for installation of new traffic signals, signs, pavement markings and related traffic control hardware, with an emphasis on new locations. Over a 20-year period, this program anticipates installing a mix of 10 new signals and/or flashing beacons every other year and 1,500 new signs per year.	Support the Vision Zero project to improve safety, including perceived safety, at crash or other problem locations. This project reduces vehicle delays, travel time and injuries by improved traffic control, often where STOP signs are inappropriate, i.e., due to traffic volumes, intersection configuration, and other such factors.	0-20 years	Enhance	$122.9M

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-SG06	SFgo Program	The SFgo program manages the City's intelligent transportation system (ITS) and is responsible for 1) transit signal priority (TSP) and emergency vehicle preemption (EVP) for San Francisco's Fire Department; 2) Variable Message Signs (VMS) used to disseminate information to the public, including roadway incident alerts, roadway disruptions due to construction or planned special events, and public service announcements; and 3) CCTV cameras installed at locations strategically selected to more efficiently monitor traffic and field conditions, and to support various SFMTA's daily operations, as well as emergency operations, planned and unplanned street events, and monitoring construction site activities. SFgo is also responsible for managing the traffic signal communication network which allows for remote two-way communication and monitoring of TSP, VMS and CCTV equipment, as well as remote monitoring of other traffic signal devices managed by SFMTA's Traffic Signal Shop.	The SFgo Program will repair, replace and procure extended warranty services for existing transit signal priority (TSP) equipment, traffic signal controller equipment, networking and CCTV cameras equipment, and VMS equipment that is nearing the end of its useful life. Requested funds will also be used for network optimization at intersections already equipped with TSP radios and antennas to ensure that the full benefit of the capital improvement is achieved.	0-20 years	Enhance	$87.7M
CN23-SG07	Transit Only Red Lane Replacement	This need covers the ongoing replacement and renewal costs of the SFMTA Transit Only Red Lanes. This assumes that 12 new miles of red lanes will be built every five years as well as a 20% contingency of cost escalation every five years.	Transit Only Red Lanes improve transit travel time and reliability for Muni riders. Timely replacement of these transit only red lanes ensures that they may serve their intended purpose.	0-20 years	Restore	$55.6M

Taxis & Mobility Services

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-TA01	Accessible Taxi Rebate Program	Establish a rebate program for new purpose built accessible vehicles purchased by service provider companies, contractors, or medallion holders to incentivize the purchase of wheelchair accessible vehicles. This program will subsidize costs for these more expensive vehicle types in the taxicab fleet and participants of the Access for All Program's selected Access Providers. Further incentives may be provided to operators willing to purchase alternative fuel accessible vehicles.	Improve mobility options for those unable to use other transportation options for some or all trips. The SFMTA views transportation vehicles as capital investments, the need to offer accessible vehicles therefore is a capital expense as is needed for capital expense to assist the purchase and availability of accessible vehicles. This will also allow SFMTA to utilize Access For All Program funds as a Local Access Fund Administrator.	0-20 years	Expand	$11.7M
CN23-TA02	Increase Taxi Stands	In an effort to increase service to the outer city, additional taxi stands will be established around major hail hubs to better manage and direct taxi flow and utilization. This will also fund major refurbishments of existing taxi stands and improve wayfinding to such stands. Stands may also be relocated or rebuilt to accommodate Ramp taxis, which provide both Paratransit and general public wheelchair trips, are rear loading vehicles which require them to be located near a curb cut or blue zone.	Taxi stands establish locations so that taxis can be easier found throughout the city and aids in movement throughout the city for individuals or groups who chose, or require, taxis as their travel mode. Includes redesign and installation to accommodate Ramp taxis and disabled access.	0-10 years	Expand	$5.9M
CN23-TA03	Taxi Clean Fuel and All Electric Rebate Program	Rebate program to incentivize the purchase of clean fuel and eventually all electric and equivalent (such as hydrogen) vehicles. Greater incentives are provided to operators willing to purchase the cleanest vehicles available. This may also include electrification infrastructure improvements.	In an effort to make a 100% green taxi fleet; the SFMTA offers drivers a rebate incentive for the purchase of a clean fuel vehicle. This incentive is given to offset the increased costs of purchasing a non-clean fuel vehicle.	0-20 years	Expand	$41.6M
CN23-TA04	Taxi and Regulated Mobility Management System	Provide funding for the creation and implementation of a permit and fleet management system for taxicabs and regulated mobility vehicles. This system would include the ability to monitor vehicle location, affiliation, insurance and inspection status. There will also be an interface that allows the system to integrate driver information from other databases which will allow staff to track driver history, complaints, and compliments as well as allow staff to issue real-time citations to drivers in the field. There will also be a function that allows drivers and companies to pay fees through various user interface portals.	This project will help streamline taxicab and regulated mobility regulation management by allowing multiple functions to be managed in one database through one system. Currently there are numerous databases and paper files to track activity in the industry including vehicle management, and as the industry expands it is becoming increasingly difficult to manage the growth through paper files and various systems.	0-20 years	Expand	$5.0M

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-TA05	Taxi Safety Camera Management System	Require taxicabs to upgrade their existing individually maintained on-board camera system to one standardized system that can be centrally managed by SFMTA to ensure video footage can be used for safety purposes, are properly preserved, and readily available.	Currently, each vehicles may have a different on-board camera hardware, which is maintained by the vehicle owner or company. Video footage is manually pulled from the SD card upon request, which presents difficulties if the camera is not maintained, the card is not present, a request to provide video is refused, or there is significant delay in providing such footage. A management system selected and managed by SFMTA will allow better and faster access in response to complaints for enforcement for passenger and public safety.	5-10 years	Expand	$4.0M
CN23-TA06	Paratransit and Ramp Taxi Dispatch App	Create one standardized app platform for paratransit users and ramp taxi users to hail paratransit and wheelchair accessible ramp taxicab vehicles.	Improve mobility options for those unable to use other transportation options for some or all trips. This is to serve an unmet need for an underserved population.	5-10 years	Expand	$4.5M
CN23-TA07	Commuter Shuttle and Private Transit Vehicle Stop and Pedestrian Safety Improvements	Plans, installs, and upgrades Commuter Shuttle and Private Transit Vehicle stops, provides for ongoing maintenance and updates and upgrades, and improves the pedestrian access and safety of the surrounding areas used, funded by revenue from these operators.	This project clearly tracks and defines the work performed at exclusive and joint use Muni stops, and general vicinity pedestrian infrastructure improvements to connect to other transit and regional connections. This clearly allow SFMTA to better track work paid for by the program participants versus other work funded from other sources.	0-10 years	Expand	$5.0M
CN23-TA08	Permit Fees for Bike and Other Shared Mobility Device Rack Program	Plans, installs, and procures bike and other mobility device racks on an ongoing basis, funded by permit fee revenue from bikeshare, scootershare, and other permitted mode operators. Racks funded by this program primarily benefit the permittees and are located in the areas with high or likely usage. This effort funds continued maintenance as well as new racks throughout the city.	This project clearly tracks and defines the racks paid for by the rack fees versus other racks funded from other sources.	0-10 years	Expand	$5.0M
CN23-TA09	Regulated Mobility Inspection Facility	Setup and establish an inspection facility for Taxi, Commuter Shuttle, Private Transit Vehicle, Shared Mobility, Regulated Mobility Vehicles or Devices.	Improve public safety by inspecting each vehicle and shared mobility device introduced, involved in an incident, in response to complaints, and on a regular basis. This will require space, infrastructure, and equipment to handle such inspections.	10-20 years	Expand	$11.2M

Transit Fixed Guideway

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-TF01	Cable Car Infrastructure State of Good Repair Program	Cable Car Infrastructure State of Good Repair Program is intended for the repair, replacement and upgrade work required to keep the Cable Car network running reliably for generations to come. Overhauled last in the early 1980's with few subsystems receiving minor repairs over the last 40 years. This program identifies systematic upgrade and overhaul projects to cable car subsystems and fixed assets that support cable car operations that have surpassed their useful life. Continued investment over the next ten years and beyond will be required to ensure the system will continue to operate safely and reliably.	Maintaining cable car system in a state of good repair through timely repair and replacement of aging infrastructure is critical to providing safe, reliable cable car operation for our employees and customers.	0-20 years	Restore	$334.9M
CN23-TF02	Market Subway Infrastructure State of Good Repair Program	To ensure quality life cycle management for the Market Street Subway, the Market Street Subway State of Good Repair Program is intended for the repair, replacement and upgrade of infrastructure in transit fixed guideway systems and asset classes critical to the operations of the Market Street Subway. Systems include, track and wayside, traction power, and mechanical and electrical, fire and life safety and tunnel structure. Work identified in this program will ensure the reliable service is maintained and the subway remains in a continuous state of good repair	Maintaining Market Street Subway in a state of good repair through timely repair and replacement of aging infrastructure is critical to providing safe, reliable transit operation for our employees and customers.	0-20 years	Restore	$775.4M

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-TF03	Central Subway State of Good Repair Program	To ensure quality life cycle management for Central Subway, the Central Subway State of Good Repair Program is intended for the repair, replacement and upgrade of infrastructure in transit fixed guideway systems and asset classes critical to the operations of the Central Subway. Systems include, track and wayside, traction power, and mechanical and electrical, fire and life safety and tunnel structure. Work identified in this program will ensure the reliable service is maintained and the subway remains in a continuous state of good repair.	Maintaining Central Subway in a state of good repair through timely repair and replacement of aging infrastructure is critical to providing safe, reliable transit operation for our employees and customers.	0-20 years	Restore	$155.1M
CN23-TF04	Surface Network State of Good Repair Program	The Surface Network State of Good Repair Program is intended for the repair, replacement and upgrades of surface transit fixed guideway assets essential to the light-rail and trolley coach networks. Systems include track, traction power, mechanical and electrical, fire-life safety related assets and equipment. Investments made via this program will ensure safe and reliable service and operations of our surface portions of the light rail network and the trolley bus network.	Maintaining the surface transit network in a state of good repair through timely repair and replacement of aging infrastructure is critical to providing safe, reliable transit operation for our employees and customers.	0-20 years	Restore	$537.5M
CN23-TF05	Facility Guideway Infrastructure State of Good Repair Program	The Facility Guideway Infrastructure State of Good Repair Program is intended for the repair, replacement and upgrade infrastructure in transit fixed guideway asset classes in SFMTA Operation Yards and Facilities. This need focuses on the infrastructure primarily at the light rail and temporary trolley coach facilities. Future iterations of this need will consider state of good repair for infrastructure required to support a Battery Electric Bus (BEB) Fleet.	This work for the facilities guideway infrastructure is necessary to keep the guideways at the facilities/yards in a state of good repair. At some facilities reconstruction of trackwork can provide a more efficient path of travel for train accessing the facility supporting Muni rail service in a state of good repair.	0-20 years	Restore	$251.1M
CN23-TF06	Substation State of Good Repair	Replace and Upgrade Traction Power Substations. This program will update the aging traction power substation to improve the reliability of the system which is important in maintaining Muni rail service in a state of good repair in order to continue to serve our customers. The substations are a critical component of our system as they provide the power to operate the zero-emissions trolley and Light Rail systems.	This program will update the aging traction power substation to improve the reliability of the system which is important in maintaining Muni rail service in a state of good repair in order to continue to serve our customers. The substations are a critical component of our system as they provide the power to operate the zero-emissions trolley and Light Rail systems.	0-20 years	Restore	$465.0M
CN23-TF07	Train Control Upgrade Program	Design, procure, and install a next generation communications-based train control system for the surface and/or the subway rail network.	With new CBTC systems, the exact position of a train is known more accurately than with current signaling systems, resulting in a more efficient and safe way to manage LRV traffic. A new CBTC system will permit an increase in headways while maintaining or even improving safety. CBTCs can include high-resolution train location determination, independent from track circuits; continuous, high-capacity, bidirectional train-to-wayside data communications; and trainborne and wayside processors capable of implementing Automatic Train Protection (ATP) functions, as well as optional Automatic Train Operation (ATO) and Automatic Train Supervision (ATS) functions.	0-20 years	Enhance	$606.0M

Transit Optimization & Expansion

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-TO01	Central Subway Extension	Central Subway Extension would extend the Central Subway to Fisherman's Wharf to bring rail service to some of our most populous neighborhoods of Chinatown and North Beach and relieve crowding on several busy Muni routes, including lines 8 Bayshore, 30 Stockton and 45 Union/Stockton.	As recommended in the ConnectSF Transit Strategy and the San Francisco Climate Action Plan, Central Subway Extension would bring rail service to San Francisco's densest neighborhoods. The Stockton Street/Columbus Avenue corridor is projected to add almost 10% more residents and jobs per square mile in the years ahead, and daily transit trips would increase by nearly 90%. Buses in this corridor are already slow and overcrowded, 30% of p.m. peak hour trips and 40% of midday trips on the 30 Stockton were crowded in winter 2020. A subway extension would significantly improve service quality for the 44% of households in this corridor who do not own a car. Extending the Central Subway would provide a fast, high-capacity connection from Fisherman's Wharf and North Beach to Chinatown, local and regional transit along Market Street, and other neighborhoods along the T Third Line. People across the city and region would have a comfortable ride to jobs and destinations in North Bean and Fisherman's Wharf. This means increased access to destination, a more comfortable ride with 9% less crowding and faster service with a 25% time savings from Bayview to Fisherman's Wharf.	0-20+ years	Expand	$1,856.0M
CN23-TO02	Muni Metro Modernization Core Capacity	Expand capacity, improve performance, and bring major components into a state of good repair such as a more reliable T Third, longer trains on the N Judah, and subway-quality service on the surface M Ocean View line between West Portal and San Francisco State/Park Merced, and other speed and reliability improvements systemwide	As recommended in the ConnectSF Transit Strategy and the San Francisco Climate Action Plan, Muni Metro is a core part of the transit network, carried nearly a quarter of Muni riders in 2019 and would carry approximately 300,000 average weekday trips by 2050. About 40% of low-income residents and people in Equity Priority Communities live within a 1/2 mile of Muni Metro stations. In 2019, less than half of all Muni Metro trips were on time. Passengers experience delays due to an outdated train control system, trains stuck in traffic on the surface and backups from all surface lines converging in the subway. A modern rail system would relieve crowding in places like the Market Street subway and provide a comfortable ride that people can depend on. This means less waiting for the train, more capacity, faster and reliable service and convenient connections.	0-15 years	Enhance	$812.0M
CN23-TO03	Historic Street Car Fort Mason Extension	The project extends the current terminal west from Fisherman's Wharf to the Fort Mason Center through an abandoned railroad tunnel underneath Fort Mason.	A Fort Mason terminal provides access to Fort Mason and areas to the west, which have limited transit access options.	10-20 years	Enhance	$106.6M
CN23-TO04	Muni Forward New Corridor Expansion	Muni Forward aims to make getting around San Francisco safer and more reliable by creating a Rapid Network, improving reliability, using state-of-the-art technology to make the system run better, and enhancing safety and access to stops and stations. Muni Forward transit priority projects on the Rapid Network may include adding bus or pedestrian bulbs, transit lanes, transit signal priority, and other street design changes to reduce delay for transit and enhance pedestrian safety. The first generation of Muni Forward is already well underway, with over 80 miles of transit priority improvements approved. During the next phase of Muni Forward transit priority projects, priority will be given to lines that have high existing or projected ridership and Equity Strategy lines, such as the 1, 7, 8, 14R, 22, 29, 30, 43, and 44.	The improvements result in greater transit travel time reliability and on-time performance. Improved reliability and on-time performance should also result in decreased operational resource needs. Improved safety and comfort.	0-10 years	Enhance	$360.0M
CN23-TO05	Accessible Light Rail Stops Program	Design and construct approximately 20 new accessible light rail stops that have been identified in the Accessible Key Stop Feasibility Study (M679.0) or at other feasible, high-priority locations as they are identified.	This project will improve passenger access to light rail transit, particularly for people with mobility impairments. It will also improve safety and comfort of the transportation system.	0-20 years	Enhance	$34.0M

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-TO06	Accessible Stop Spot Improvement Program	Implement small light rail and bus and stop improvements, including the Flag Stop Conversion Program, to improve accessibility for persons with disabilities. Improvements could include: repair/replacement of damaged railings, signage and attenuators at Key Stops; installation of NextMuni/Push-to-Talk at transit shelters; improving crosswalks, and installing or upgrading curb ramps adjacent to transit stops.	This project will improve passengers' access, wayfinding, and safety to and comfort at transit stops, particularly for people with mobility impairments.	0-20 years	Enhance	$10.0M
CN23-TO07	Transit Stop Boarding Islands and Features Program	This includes the costs of installing activated beacons, leaning bars, and NextMuni signs at 80 mini-high platforms as they are reconstructed towards the end of their useful life.	Provide a safe and accessible transit system by keeping assets in a state of good repair. Enhance the customer experience.	10-20 years	Enhance	$0.6M
CN23-TO08	Raised or protected trackways on Muni Metro light rail surface lines	Create semi-elevated or protected rights of way on most surface segments of Muni Metro lines, similar to existing treatments on Judah Street between 9th and 19th avenues, and the T Third line on Third Street to support ConnectSF Transit Investment Strategy's Muni Metro Modernization. Areas for upgrades would include the J Church on San Jose Avenue; the K Ingleside on Ocean Avenue; the M Oceanview on West Portal Avenue and San Jose Avenue; and the L Taraval on Taraval Street.	Existing light rail lines are subject to delay due to mixed traffic operations on the surface portions of their routes. This project would fully separate the routes from traffic, allowing for more reliable transit service on some of Muni's most heavily used lines.	10-20 years	Enhance	$335.1M
CN23-TO09	3-car trains in the Muni Metro Tunnel and on the N-Judah	Muni will introduce the use of 3-car light rail trains in the Muni Metro Tunnel between West Portal and Embarcadero, and on the N-Judah line. Work will entail lengthening existing platforms and other engineering improvements to accommodate longer trains.	As recommended in the ConnectSF Transit Strategy for Muni Metro Modernization, this will increase capacity by 50% on the most crowded portion of the Muni Metro network, reducing crowding and supporting increased ridership as travel demand grows in the future.	10-20 years	Enhance	$89.4M
CN23-TO10	Muni Forward 2.0 Projects on the Five-Minute Network	The next generation of Muni Forward transit priority treatments identified as part of the Five-minute Network in the ConnectSF Transit Investment Strategy will build on the success of current improvements to deliver an even higher standard of reliability. Through a range of capital improvements, such as transit-preemption signals and additional dedicated right-of-way, Muni will provide Rapid service that travels between stops with very few if any delays. Improvements will be targeted to the Rapid Network as well as other high-priority lines identified in the Equity Strategy or based on ridership trends.	As recommended in the ConnectSF Transit Strategy and the San Francisco Climate Action Plan, the Five-minute Network would focus investments on the most used routes – those that carry 80% of Muni passengers, including passengers that depend on public transportation, would ensure investments benefit the most people given limited resources and would support 700,000 average weekday trips by 2050. The Five-minute Network would increase access to destinations with 50-75% less crowding, and 10-15% faster service. A high-quality citywide network would provide convenient access from Equity Priority Communities to all parts of San Francisco, supporting 96% of people in Equity Priority Communities by 2050. A network of frequent service and connector routes would ensure everyone in San Francisco has access to the transportation network, no matter where people are. Transfers would be a snap, as frequent service means you won't be waiting long for the next bus, and more of the city's destinations would be within easy reach. When buses stay in motion, they do not bunch up as much, which also means times are shorter and more consistent.	0-15 years	Enhance	$558.5M

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-TO11	Transit Signal Priority	This request will fund the purchase and installation of Transit Signal Priority (TSP) and network equipment to expand the system to intersections where recent projects installed new traffic signals and at certain intersections that were not upgraded when the larger corridor was equipped with TSP. The scope also includes a new service agreement with the TSP vendor, and implementation of new TSP technology, including a new central management software to monitor and analyze TSP performance that would allow engineers to optimize TSP timing and detection parameters to improve transit travel speeds and reliability more efficiently. Scope also includes the installation of new CCTV cameras at strategic locations to support transit.	The benefits from the proposed investment will include the following: (1) Improved transit performance - TSP is used to extend green lights or to bring up green lights earlier to prioritize transit vehicles that are approaching the intersection. TSP improves the odds that a transit vehicle sees a green light and will endure reduced red-light delay thus improving both reliability and travel times. (2) Remote monitoring – Installed equipment will allow SFMTA to remotely check into an intersection and observe current traffic signal timing and produce maintenance logs to review timestamped information on when TSP calls were made, and which bus number made the call. (3) A central management software to monitor and analyze TSP performance would allow engineers to optimize TSP timing and detection parameters more efficiently to improve transit travel speeds and reliability. (4) new CCTV cameras at locations strategically selected to support various SFMTA's daily operations, as well as emergency operations, planned and unplanned street events, and monitoring construction site activities. These cameras allow staff to assess each situation remotely, resulting in faster and more efficient trouble shooting and response times.	0-10 years	Enhance	$136.7M

Non-SFMTA (Other Agencies)

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-NP01	BART Joint Maintenance Agreement	The SFMTA updates its 5-year capital commitment to BART through a BART Joint Maintenance Agreement. Maintenance includes elevator/escalator maintenance and replacements, rehabilitation of street grates and vent shafts, Market Street canopies, fire alarm replacements, public address system improvements, fire suppression systems upgrades, sewage pumps replacement, CCTV replacements, water intrusion machine rooms, fire life safety, and emergency lighting.	The SFMTA shares some of its Muni Metro Stations with BART, which owns the stations. Maintenance of Muni Metro Stations is critical to reaching the SFMTA's goals.	0-20 years	Restore	$358.4M

Regional Transit Expansion

CN #	Name	Description	Justification	Timeframe	Investment Type	Estimated Cost
CN23-TO12	Geary/19th Avenue Subway	A subway line on Geary and 19th Avenue would service the city's most crowded bus corridor, connecting some of the busiest neighborhoods to downtown and regional destinations from downtown via Geary to Daly City via 19th Avenue.	As recommended in the ConnectSF Transit Strategy and the San Francisco Climate Action Plan, Geary/19th Avenue Subway would service the most crowded bus corridor. Pre-COVID-19, over 50,000 people got on the bus in the Geary corridor every day–the highest in Muni's bus system and would support 300,000 average weekday trips with the Geary/19th Avenue Subway. Ridership on routes in this corridor was growing before the pandemic and expected to continue to rise in the coming years. Although buses arrive as often as every two minutes, bus service in the corridor is at capacity, 28% of a.m. peak and 43% of p.m. peak trips on the 38R Geary Rapid were crowded in winter 2020. Rail investment along Geary/19th Avenue corridors would benefit a large number of households, especially those that are low income, which make up 25% of all households along the corridor and/or within an Equity Priority Community, which make up 50% of households along the corridor. Rail would support the city's economic recovery and growing number of people traveling in the Geary and 19th Avenue corridors. A regional rail connection would let people board a train along Geary or 19th Ave. and quickly reach destinations in the East Bay or beyond. This means more access to destinations, a more comfortable ride with 27% less crowding and faster service that's 48% faster during rush hour.	0-20+ years	Expand	$23,194.0M
CN23-TO13	Bayview Caltrain Station	Bayview Caltrain Station would be a new Caltrain station in the Bayview neighborhood to restore regional rail access to a community that was previously served and provide fast access to opportunities downtown and on the Peninsula	As recommended in the ConnectSF Transit Strategy and the San Francisco Climate Action Plan, Bayview Caltrain Station would restore the Bayview's access to Caltrain that was lost after the closure of the Paul Avenue station in 2005, supporting approximately 4,000 average weekday trips. Investing in a Bayview Caltrain Station would increase the number of jobs and activity centers that can be reached within 45 minutes from the Bayview via transit. A Bayview Caltrain station would help neighborhood residents connect to the regional transit network, provide a fast alternative route to downtown, and improve options for traveling to locations outside of San Francisco, including job centers on the Peninsula and in the South Bay. Caltrain estimates that electrified service and the DTX would increase San Francisco ridership by 184% over the next 20 years. A Bayview Station would ensure that all San Franciscans benefit from planned investments in Caltrain and California High Speed Rail. This means increased access to destinations, more frequent service, and faster service with a 15% time savings from the Bayview to Millbrae during morning rush hour.	0-20 years	Expand	$116.0M
CN23-TO14	BART and Muni Station Transfers	Remove physical, logistical, and cost barriers to transferring between BART and Muni in shared BART and Muni stations.	Based on the city's Climate Action Plan to improve transfers, improving transfers would reduce travel times to improve the user experience and make transit more attractive than driving.	0-20 years	Expand	$45.0M

Capital Needs Assessment

The "Values for the Transportation System", developed as part of the SFMTA Strategic Plan, are statements that are used to inform decision-making about how to best allocate the SFMTA's limited resources in order to uphold the highest public good. The 13 system values are sorted into four key themes: Equity, Economic Vitality, Environmental Stewardship and Trust in order to show how the values are linked together. They are straight-forward and actionable, linked with clear performance metrics and help the SFMTA assess the degree to which it measures progress toward achieving its goals. Since 2021, the SFMTA has used the Strategic Plan values to help answer the question, "To what degree does a specific capital need advance the SFMTA toward a specific value?". Using indicators of the Strategic Plan values, staff assessed each capital need based on whether it has a primary impact, a secondary impact, or little to no impact to advancing a given value. Please refer to the 2021 20-Year Unconstrained Capital Plan for a full description of the capital needs assessment process and indicators.

Values for the Transportation System

- **Equity**
  - ◊ Equity
  - ◊ Accessibility
  - ◊ Safety
  - ◊ Inclusivity
- **Economic Vitality**
  - ◊ Economic Vitality
  - ◊ Service Quality
  - ◊ Resiliency
- **Environmental Stewardship**
  - ◊ Environmental Stewardship
  - ◊ Livability
  - ◊ Climate Action
- **Trust**
  - ◊ Community Trust
  - ◊ Accountability
  - ◊ Transparency

Communications & IT

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	**Name**	**Equity**	**Accessibility**	**Safety**	**Inclusivity**	**Economic Vitality**	**Service Quality**	**Resiliency**	**Environmental Stewardship**	**Livability**	**Climate Action**	**Community Trust**	**Accountability**	**Transparency**
CN23-CI01	State of Good Repair of Management Info Systems (MIS), Information Technology (IT), and Network Systems	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact
CN23-CI02	Disaster Recovery/Continuity plan	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact
CN23-CI03	Phase 2 Radio Project – platform consolidation	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact
CN23-CI04	Trapeze Program	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact
CN23-CI05	Project and Fund Management System Replacement	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact
CN23-CI06	Video Camera Refresh	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact
CN23-CI07	Cybersecurity Modernization	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact

Legend

Primary impact toward advancing the Value for the Transportation System **Secondary impact** toward advancing the Value for the Transportation System **Little to no impact** toward advancing the Value for the Transportation System

Facility

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	**Name**	**Equity**	**Accessibility**	**Safety**	**Inclusivity**	**Economic Vitality**	**Service Quality**	**Resiliency**	**Environmental Stewardship**	**Livability**	**Climate Action**	**Community Trust**	**Accountability**	**Transparency**
CN23-FC01	SFMTA Facility Condition Assessment Campaign Phase 1	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact
CN23-FC02	SFMTA Facility Condition Assessment Campaign Phase 2	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact
CN23-FC03	Subway Station Rehabilitation Campaign	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FC04	1201 Mason (Cable Car Barn) Rehabilitation	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FC05	Operator Convenience Stations Renewal Campaign	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FC06	Real Property Acquisition for SFMTA Facilities	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FC07	SFMTA Real Estate Capital (Joint-Use Development)	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact
CN23-FC08	2301 Stockton (Kirkland) Facility Modernization	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact
CN23-FC09	2500 Mariposa (Potrero) Facility Modernization	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact
CN23-FC10	949 Presidio (Presidio) Facility Modernization	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact
CN23-FC11	1940 Harrison Street (Flynn) Facility Modernization	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact
CN23-FC12	Rubber Tire Division Wash Rack Replacement (Sustainability - Water)	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact
CN23-FC13	Enforcement Headquarters Construction at 1200 15th Street	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact

Legend

Primary impact toward advancing the Value for the Transportation System **Secondary impact** toward advancing the Value for the Transportation System **Little to no impact** toward advancing the Value for the Transportation System

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	**Name**	**Equity**	**Accessibility**	**Safety**	**Inclusivity**	**Economic Vitality**	**Service Quality**	**Resiliency**	**Environmental Stewardship**	**Livability**	**Climate Action**	**Community Trust**	**Accountability**	**Transparency**
CN23-FC14	Solar Panel Installation at Multiple SFMTA Facilities (Sustainability - Power)	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FC15	1095 Indiana (Woods) Facility Modernization	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact
CN23-FC16	SFMTA Facility Elevator Rehabilitation Program	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FC17	Muni Metro Station Escalator Rehabilitation Program	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FC18	Muni Metro Elevator Expansion	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FC19	Paratransit Facility	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact
CN23-FC20	1 South Van Ness (SFMTA Headquarters)	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact
CN23-FC21	eBus Facilities Conversion	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FC22	Interim Trolley Coach Facility	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact

Fleet

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	**Name**	**Equity**	**Accessibility**	**Safety**	**Inclusivity**	**Economic Vitality**	**Service Quality**	**Resiliency**	**Environmental Stewardship**	**Livability**	**Climate Action**	**Community Trust**	**Accountability**	**Transparency**
CN23-FT01	Cable Car Vehicle Rehabilitation Program	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FT02	Historic Vehicle Rehabilitation Program	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact

Legend

Primary impact toward advancing the Value for the Transportation System **Secondary impact** toward advancing the Value for the Transportation System **Little to no impact** toward advancing the Value for the Transportation System

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	Name	Equity	Accessibility	Safety	Inclusivity	Economic Vitality	Service Quality	Resiliency	Environmental Stewardship	Livability	Climate Action	Community Trust	Accountability	Transparency
CN23-FT03	Light Rail Vehicle Lifecycle Management Program	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FT04	Light Rail Vehicle Replacement Program	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact
CN23-FT05	Light Rail Vehicle Fleet Expansion	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact
CN23-FT06	Motor and Trolley Coach Midlife Overhaul Program	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact
CN23-FT07	Motor Coach Replacement Program	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FT08	Motor Coach Expansion Program	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FT09	Trolley Coach Replacement Program	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact
CN23-FT10	Paratransit Fleet Replacement Program	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FT11	Paratransit Fleet Expansion Program	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-FT12	Non-Revenue Vehicle Replacement Program	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact
CN23-FT13	Replacement of Other On-Board Equipment	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact

Legend

Primary impact toward advancing the Value for the Transportation System **Secondary impact** toward advancing the Value for the Transportation System **Little to no impact** toward advancing the Value for the Transportation System

Parking & Curb Management

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	Name	Equity	Accessibility	Safety	Inclusivity	Economic Vitality	Service Quality	Resiliency	Environmental Stewardship	Livability	Climate Action	Community Trust	Accountability	Transparency
CN23-PK01	Electric Vehicle Charging Stations Expansion	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact
CN23-PK02	Implement Parking, Loading, Bicyclist, Pedestrian and Other Mobility Mode Movement and Stopping Detection	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact
CN23-PK03	Parking Facilities State of Good Repair Program	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact
CN23-PK04	Parking Meters State of Good Repair Program	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact
CN23-PK05	Parking Access Revenue Control System	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact
CN23-PK06	Parking Facility Structural and Seismic Upgrades	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-PK07	Gradually Charge the Right Price for Every On-street Parking Space	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact
CN23-PK08	Parking Facility Elevator Modernizations	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact

Security

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	Name	Equity	Accessibility	Safety	Inclusivity	Economic Vitality	Service Quality	Resiliency	Environmental Stewardship	Livability	Climate Action	Community Trust	Accountability	Transparency
CN23-SC01	Threat and Vulnerability Assessment (TVA) and Implementation	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact
CN23-SC02	Incident Management Planning and Response	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact
CN23-SC03	Surveillance, Access Control, and Security System Enhancements	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact

Legend

Primary impact toward advancing the Value for the Transportation System **Secondary impact** toward advancing the Value for the Transportation System **Little to no impact** toward advancing the Value for the Transportation System

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	Name	Equity	Accessibility	Safety	Inclusivity	Economic Vitality	Service Quality	Resiliency	Environmental Stewardship	Livability	Climate Action	Community Trust	Accountability	Transparency
CN23-SC04	Technology In Transportation Emergency Management	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact
CN23-SC05	Subway Tunnel Intrusion Detection and Deterrence Measures	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact
CN23-SC06	Market Street Natural Hazard Mitigation	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact
CN23-SC07	Subway Flooding Prevention, Preparedness, and Mitigation	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact
CN23-SC08	Continuity of Operations	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact
CN23-SC09	Traffic Signal Battery Backup System	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact

Streets

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	Name	Equity	Accessibility	Safety	Inclusivity	Economic Vitality	Service Quality	Resiliency	Environmental Stewardship	Livability	Climate Action	Community Trust	Accountability	Transparency
CN23-ST01	Bicycle and Shared Mobility Parking Program	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-ST02	Protected Bike Lane Network	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-ST03	Slow Streets and Neighborway Network	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-ST04	Bicycle Network State of Good Repair Program	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-ST05	Pedestrian Safety	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact

Legend

Primary impact toward advancing the Value for the Transportation System **Secondary impact** toward advancing the Value for the Transportation System **Little to no impact** toward advancing the Value for the Transportation System

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	**Name**	**Equity**	**Accessibility**	**Safety**	**Inclusivity**	**Economic Vitality**	**Service Quality**	**Resiliency**	**Environmental Stewardship**	**Livability**	**Climate Action**	**Community Trust**	**Accountability**	**Transparency**
CN23-ST06	Pedestrian Walkability and Neighborhood Enhancements	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-ST07	Traffic Calming	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact

Traffic Signals & Signs

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	**Name**	**Equity**	**Accessibility**	**Safety**	**Inclusivity**	**Economic Vitality**	**Service Quality**	**Resiliency**	**Environmental Stewardship**	**Livability**	**Climate Action**	**Community Trust**	**Accountability**	**Transparency**
CN23-SG01	Automated Photo Traffic Enforcement	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-SG02	Signal Infrastructure State of Good Repair Program	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-SG03	Sign Infrastructure State of Good Repair Program	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-SG04	Traffic Management State of Good Repair Program	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-SG05	New Signals & Signs Program	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-SG06	SFgo Program	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact
CN23-SG07	Transit Only Red Lane Replacement	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact

Legend

Primary impact toward advancing the Value for the Transportation System **Secondary impact** toward advancing the Value for the Transportation System **Little to no impact** toward advancing the Value for the Transportation System

Taxis & Mobility Services

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	**Name**	**Equity**	**Accessibility**	**Safety**	**Inclusivity**	**Economic Vitality**	**Service Quality**	**Resiliency**	**Environmental Stewardship**	**Livability**	**Climate Action**	**Community Trust**	**Accountability**	**Transparency**
CN23-TA01	Accessible Taxi Rebate Program	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TA02	Increase Taxi Stands	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TA03	Taxi Clean Fuel and All Electric Rebate Program	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TA04	Taxi and Regulated Mobility Management System	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact
CN23-TA05	Taxi Safety Camera Management System	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	2 - Secondary Impact
CN23-TA06	Paratransit and Ramp Taxi Dispatch App	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact
CN23-TA07	Commuter Shuttle and Private Transit Vehicle Stop and Pedestrian Safety Improvements	1 - Little to No Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact
CN23-TA08	Permit Fees for Bike and Other Shared Mobility Device Rack Program	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact
CN23-TA09	Regulated Mobility Inspection Facility	1 - Little to No Impact	1 - Little to No Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact

Transit Fixed Guideway

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	**Name**	**Equity**	**Accessibility**	**Safety**	**Inclusivity**	**Economic Vitality**	**Service Quality**	**Resiliency**	**Environmental Stewardship**	**Livability**	**Climate Action**	**Community Trust**	**Accountability**	**Transparency**
CN23-TF01	Cable Car Infrastructure State of Good Repair Program	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TF02	Market Subway Infrastructure State of Good Repair Program	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact

Legend

Primary impact toward advancing the Value for the Transportation System **Secondary impact** toward advancing the Value for the Transportation System **Little to no impact** toward advancing the Value for the Transportation System

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	Name	Equity	Accessibility	Safety	Inclusivity	Economic Vitality	Service Quality	Resiliency	Environmental Stewardship	Livability	Climate Action	Community Trust	Accountability	Transparency
CN23-TF03	Central Subway State of Good Repair Program	2 - Secondary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact
CN23-TF04	Surface Network State of Good Repair Program	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TF05	Facility Guideway Infrastructure State of Good Repair Program	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TF06	Substation State of Good Repair	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact
CN23-TF07	Train Control Upgrade Program	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact

Transit Optimization & Expansion

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	Name	Equity	Accessibility	Safety	Inclusivity	Economic Vitality	Service Quality	Resiliency	Environmental Stewardship	Livability	Climate Action	Community Trust	Accountability	Transparency
CN23-TO01	Central Subway Extension	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TO02	Muni Metro Modernization Core Capacity	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TO03	Historic Street Car Fort Mason Extension	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TO04	Muni Forward New Corridor Expansion	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TO05	Accessible Light Rail Stops Program	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TO06	Accessible Stop Spot Improvement Program	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact

Legend

Primary impact toward advancing the Value for the Transportation System **Secondary impact** toward advancing the Value for the Transportation System **Little to no impact** toward advancing the Value for the Transportation System

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	**Name**	**Equity**	**Accessibility**	**Safety**	**Inclusivity**	**Economic Vitality**	**Service Quality**	**Resiliency**	**Environmental Stewardship**	**Livability**	**Climate Action**	**Community Trust**	**Accountability**	**Transparency**
CN23-TO07	Transit Stop Boarding Islands and Features Program	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TO08	Raised or protected trackways on Muni Metro light rail surface lines	3 - Primary Impact	2 - Secondary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TO09	3-car trains in the Muni Metro Tunnel and on the N-Judah	2 - Secondary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TO10	Muni Forward 2.0 Projects on the Five-Minute Network	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TO11	Transit Signal Priority	3 - Primary Impact	2 - Secondary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	2 - Secondary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact

Non-SFMTA (Other Agencies)

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	**Name**	**Equity**	**Accessibility**	**Safety**	**Inclusivity**	**Economic Vitality**	**Service Quality**	**Resiliency**	**Environmental Stewardship**	**Livability**	**Climate Action**	**Community Trust**	**Accountability**	**Transparency**
CN23-NP01	BART Joint Maintenance Agreement	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact

Regional Transit Expansion

Capital Need Information		Equity				Economic Vitality			Environmental Stewardship			Trust		
CN #	**Name**	**Equity**	**Accessibility**	**Safety**	**Inclusivity**	**Economic Vitality**	**Service Quality**	**Resiliency**	**Environmental Stewardship**	**Livability**	**Climate Action**	**Community Trust**	**Accountability**	**Transparency**
CN23-TO12	Geary/19th Avenue Subway	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TO13	Bayview Caltrain Station	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact
CN23-TO14	BART and Muni Station Transfers	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact	3 - Primary Impact	3 - Primary Impact	3 - Primary Impact	1 - Little to No Impact	1 - Little to No Impact

Legend

Primary impact toward advancing the Value for the Transportation System **Secondary impact** toward advancing the Value for the Transportation System **Little to no impact** toward advancing the Value for the Transportation System

Appendix

Changes from 2021 to 2023 by Capital Program

The 2023 Capital Needs Table derives from and updates the capital needs from the 2021 20-Year Unconstrained Capital Plan. Updates include:

Communications and Information Technology (IT)

- Removed "Customer Service Platform Project" as it is complete.
- Removed "Citation and Parking Permits Program" as it is complete.
- Updated cost estimate of "Trapeze Program" to about $14.0 million to incorporate scope changes to include non-operators.
- Removed "On-Premise SharePoint Upgrade" as it is complete.
- Removed "Digital Street Infrastructure Project" as it is complete.
- Updated cost estimate of "Project and Fund Management System Replacement" to $10.0 million to incorporate scope changes to replace existing CPCs with applications and systems.
- Removed "Network Infrastructure Replacement" as it is complete.

Facility

- Split the "SFMTA Facility Condition Assessment Campaign" into two capital needs to reflect both Phase 1 and Phase 2 of the program and updated costs from $203.6 million total to $223.4 million and $250.0 million, respectively.
- Updated cost estimate of "Subway Station Rehabilitation Campaign" from $1,544.3 million to $1,553.4 million to reflect estimates in the Capital Asset Inventory.
- Removed "SFMTA Facility Fire Life Safety System Campaign" as it is complete.
- Updated cost estimate of "Operator Convenience Stations Renewal Campaign" from $12.9 million to $7.5 million to reflect progress toward the program.
- Moved "601 25th Street (Muni Metro East) Expansion Project Phase I and Phase II" from the Facility Program to the broader "Facility Guideway Infrastructure State of Good repair" in the Transit Fixed Guideway Program.
- Updated cost of "2301 Stockton (Kirkland) Facility Modernization" from $99.8 million to $171.0 million based on predevelopment report.
- Updated cost of "1940 Harrison Street (Flynn) Facility Modernization" from $74.4 million to $250.0 million based on the SFMTA Capital Asset Inventory.
- Updated cost of "Enforcement Headquarters Construction at 1200 15th Street" from $49.1 million to $81.0 million to reflect more realistic costs.
- Updated cost of "Muni Metro Station Escalator Rehabilitation Program" from $34.8 million to $85.9 million as reflected in the State of Good Repair Report.
- Moved "Regulated Mobility Inspection Facility" from the Facility Program to the Taxis and Mobility Services Program.

Fleet

- Updated cost estimates of all capital needs to use more accurate costs from recent procurements instead of escalated costs from previous years.
- Updated description, justification and cost estimate for "Cable Car Vehicle Rehabilitation Program" from $42.4 million to $157.5 million to reflect project-level cost assumptions for 40 cable cars from the 2023 Historic Streetcar Fleet Management Plan.
- Updated description, justification and cost estimate for "Historic Vehicle Rehabilitation Program" from $165.1 million to $241.9 million to reflect projected mid-life timeline for per-vehicle overhead costs for 56 historic streetcars.
- Updated description, justification and cost estimate for "Light Rail Vehicle Replacement Program" from $754.4 million to $1,082.6 million based on per vehicle cost of the LRV4 procurement Phase II.
- Updated description, justification and cost estimate for "Light Rail Vehicle Fleet Expansion" from $207.9 million to $197.4 million based on per vehicle cost of the LRV4 procurement Phase II.
- Updated description, justification and cost estimate for "Motor and Trolley Coach Midlife Overhaul Program" from $923.1 million to $1,835.4 million based on per-unit estimates for 1,164 vehicles.
- Updated description, justification and cost estimate for "Motor Coach Replacement Program" from $1,901.9 million to $2,956.0 million based on per-vehicle costs of all-battery electric coaches and replacement of expansion vehicles.
- Updated description, justification and cost estimate for "Motor Coach Expansion Program" from $234.4 million to $486.3 million based on per-vehicle costs of all-battery electric coaches.
- Updated description, justification and cost estimate for "Trolley Coach Replacement Program" from $498.3 million to $1,055.8 million based on per-vehicle costs of all-battery electric coaches.
- Updated description, justification and cost estimate for "Paratransit Fleet Replacement Program" from $80.7 million to $282.5 million based on fleet size of 149 vehicles each with a 5-year useful life.
- Updated description, justification and cost estimate for "Paratransit Fleet Expansion Program" from $2.6 million to $8.5 million based on vehicle pricing list and assumed expansion of 20 vehicles.
- Updated description, justification and cost estimate for "Non-Revenue Vehicle Replacement Program" from $110.8 million to $513.1 million based on replacement value in inventory.

Parking & Curb Management

- Renamed the capital program to reflect the SFMTA sub-division's name of Parking and & Curb Management.
- Changed "Electric Vehicle Charging Stations" to "Electric Vehicle Charging Stations Expansion" from simply enhancing the existing electric vehicle charging stations to expanding them based on the city's EV Roadmap and Climate Action Plan and updated costs from $5.1 million to $166.1 million to reflect that change.
- Updated cost estimate of "Implement Parking, Loading, Bicyclist, Pedestrian and Other Mobility Mode Movement and Stopping Detection Technology" from $29.5 million to $140.0 million to reflect the true environment and scale of the capital need.
- Updated cost estimate of "Parking Facilities State of Good Repair" from $366.5 million to $250.0 million to remove work completed through 2022.
- Updated cost estimate of "Parking Access Revenue Control System" from $48.5 million to $23.0 million to reflect completion of full modernization in 2020 and two future cycles of restoration costs.
- Updated cost estimate of "Parking Facility Structural and Seismic Upgrades" from $122.2 million to $116.3 million to reflect true project costs.
- Removed "HDTV Monitoring Cameras for Off-street Metered Parking Lots" because the SFMTA can now power cameras with less expensive solar-powered Wi-Fi.
- Added "Gradually Charge the Right Price for Every On-street Space" to incorporate the action from the city's Climate Action Plan.
- Added "Parking Facility Elevator Modernizations" to reflect an existing need that was not in previous Capital Plans.

Security

- No major change

Streets

- Renamed "Neighborway Network" to "Slow Streets and Neighborway Network" to reflect the newly institutionalized Slow Streets Program and updated cost estimate from $230.1 million to $147.0 million to remove double-counting and revise costs.
- Updated cost estimate of "Bicycle Network State of Good Repair Program" from $149.7 million to $215.5 million to reflect replacement costs from the Capital Asset Inventory.
- Moved "Commuter Shuttle Stop and Infrastructure Improvements" and "Scooter and Shared Mobility Infrastructure" from the Streets Program to the Taxis and Mobility Services Program since the capital needs are in the service of permit programs in the Taxis and Mobility Services Program.

Taxis and Mobility Services

- Renamed the capital program to reflect the SFMTA Division's new name of Taxis, Access & Mobility Services, which better reflects the work to include the burgeoning mobility services sector, in addition to the taxi industry and disability access. Note: Accessibility is embedded into all 10 Capital Programs and does not have its own capital program.
- Moved "Commuter Shuttle Stop and Infrastructure Improvements" and "Scooter and Shared Mobility Infrastructure" from the Streets Program to the Taxis

and Mobility Services Program to reflect funding by respective permit programs, renamed them to "Commuter Shuttle and Private Transit Vehicle Stop and Pedestrian Safety Improvements" and "Permit Fees for Bike and Other Shared Mobility Device Rack Program" and updated corresponding description, justification, timeframe and cost estimates.

- Moved "Regulated Mobility Inspection Facility" from the Facility Program to the Taxi and Mobility Services Program.

Traffic Signals and Signs

- Updated description, justification and cost estimate of "SFgo Program" to better reflect the program's goals and responsibilities relative to the Transit Optimization and Expansion Program, moving $99.3 million to "Transit Signal Priority" in the Transit Optimization and Expansion Program. This change better represents how much of each capital need in each program is intended to go toward traffic signals to move automobiles and how much is intended to go toward Transit Signal Priority to move transit vehicles.

Transit Fixed Guideway

- Restructured how the capital needs in the Transit Fixed Guideway Program are organized to reflect programs as opposed to specific projects and updated costs to use costs from recent procurements instead of escalated costs from previous years.
- Updated cost estimates for "Cable Car Infrastructure State of Good Repair Program" from $276.8 million to $334.9 million.
- Combined "J-Line", "K & M-Lines" and "N-Line Rail Replacement between Arguello/Carl and La Playa" into "Surface Network State of Good Repair Program" and updated cost estimates from $621.0 million to $537.5 million.
- Combined "Rail State of Good Repair Program", "Subway System State of Good Repair (SOGR)" and "Overhead and Traction Power System Rehabilitation (Program)" into the "Market Subway Infrastructure State of Good Repair Program" and updated cost estimates from $365.0 million to $775.4 million.
- Added new "Central Subway State of Good Repair Program" to account for the new Central Subway.
- Removed "Automatic Train Control System Wiring Replacement" as it is complete.
- Updated cost estimate of "Train Control System Upgrade" (now "Train Control Upgrade Program") from $300.0 million to $606.0 million.
- Updated cost estimate of "Substation State of Good Repair" from $228.0 million to $465.0 million based on recent project costs for King Street and Civic Center Substations.
- Removed "Muni Metro Station Enhancements" as it is double-counted and included in the Facility Program.
- Changed "Cameron Beach Reconstruction of trackwork including pull in and pull outs and yard grading" to a broader "Facility Guideway Infrastructure State of Good Repair Program" and updated cost estimates from $77.4 million to $251.1 million.

Transit Optimization and Expansion

- Replaced "Rail Expansion" with "Central Subway Extension" and updated cost estimate to $1,856.0M based on recommendations from ConnectSF, in addition to adding two separate capital needs to a new "Regional Transit Expansion" Program.
- Removed "Better Market Street" as the project was rescoped and is currently being implemented.
- Changed "Historic Street Car Expansion" to "Historic Street Car Fort Mason Extension", edited description and expanded timeframe to 10-20 years.
- Removed "Geary Boulevard Improvement Project" as it is now complete.
- Changed "Muni Forward Capital Projects" to "Muni Forward New Corridor Expansion", updated cost estimates from $305.4 million to $360 million and updated the list of corridors.
- Removed "Bayshore Multimodal Facility" as it is outdated and was not prioritized in ConnectSF.
- Updated cost estimate of "Accessible Stop Spot Improvement Program" from $2.5 million to $10.0 million and updated timeframe to reflect current work.
- Changed "Muni Metro Subway Enhancements" to "Muni Metro Modernization Core Capacity", updated description to reflect expanded scope to include both subway and surface rail (as opposed to only subway) and updated cost estimate from $30.5 million to $812.0 million to reflect recommendations from ConnectSF.
- Changed name of "Muni Forward next generation and Five-minute Network" to "Muni Forward 2.0 Projects on the Five-Minute Network" and updated description to add detail.
- Updated description, justification and cost estimate of "Transit Signal Priority" to better reflect the program's goals and responsibilities relative to the Traffic Signals and Signs Program, moving $99.3 million from "SFgo Program" in the Traffic Signals and Signs Program. This change better represents how much of each capital need in each program is intended to go toward traffic signals to move automobiles and how much is intended to go toward Transit Signal Priority to move transit vehicles.

Non-SFMTA (Other Agencies)

- Added "BART Joint Maintenance Agreement" totaling $358.4 million, representing the SFMTA's share of capital needs related to the shared BART/Muni stations in Downtown.

Regional Transit Expansion

- Replaced "Rail Expansion" with "Geary/19th Avenue Subway" and "Bayview Caltrain Station" from ConnectSF and updated total cost estimate to $23,310.0M based on recommendations from ConnectSF, in addition to adding "Central Subway Extension" to the Transit Optimization & Expansion Program.
- Added "BART and Muni Station Transfers" to reflect recommendations from the Climate Action Plan.

Cost Information Methodology

The Capital Plan covers the SFMTA's capital needs over the next twenty years based on what we currently know would help the department reach its goals. Additional information is in the following appendix to show how the cost estimates were arrived for the capital needs presented in the Capital Plan. Except where noted, the cost estimates were derived from previous Capital Plans and escalated to expenditure year dollars.

CN#	Capital Need Name	Cost Information Methodology
CN23-CI01	State of Good Repair of Management Info Systems (MIS), Information Technology (IT), and Network Systems	Based on information in the SFMTA Capital Asset Inventory.
CN23-CI02	Disaster Recovery/ Continuity plan	Based on approximate estimate of current technology costs.
CN23-CI03	Phase 2 Radio Project – platform consolidation	Estimate based on past similar work.
CN23-CI04	Trapeze Program	Estimate based on past similar work.
CN23-CI05	Project and Fund Management System Replacement	Estimate based on past project cost to implement new applications
CN23-CI06	Video Camera Refresh	Estimate based on past similar work.
CN23-CI07	Cybersecurity Modernization	Estimate based on past similar work.
CN23-FC01	SFMTA Facility Condition Assessment Campaign Phase 1	Costs of the projects based on the information gathered in the Facilities Condition Assessment.
CN23-FC02	SFMTA Facility Condition Assessment Campaign Phase 2	Estimate based on Phase 1. Costs of the projects based on the information gathered in the Facilities Condition Assessment.
CN23-FC03	Subway Station Rehabilitation Campaign	• Based on needs identified by the agency's State of Good Repair database and staff assessment.
CN23-FC04	1201 Mason (Cable Car Barn) Rehabilitation	Based on Cable Car Barn's Pre-Development Report
CN23-FC05	Operator Convenience Stations Renewal Campaign	Average cost of each Convenience Station ($500,000), multiplied by 25 units needed.

CN#	Capital Need Name	Cost Information Methodology
CN23-FC06	Real Property Acquisition for SFMTA Facilities	Based on estimate included in the 2017 Facilities Framework, staff valuation, and marketplace conditions.
CN23-FC07	SFMTA Real Estate Capital (Joint-Use Development)	Estimate based on past similar work.
CN23-FC08	2301 Stockton (Kirkland) Facility Modernization	Based on 3.01.23 predevelop report, pg. 28
CN23-FC09	2500 Mariposa (Potrero) Facility Modernization	Based on estimate included in the addendum to the 2017 Facilities Framework.
CN23-FC10	949 Presidio (Presidio) Facility Modernization	Based on estimate included in the addendum to the 2017 Facilities Framework.
CN23-FC11	1940 Harrison Street (Flynn) Facility Modernization	Based on asset inventory escalated to 2022 dollars.
CN23-FC12	Rubber Tire Division Wash Rack Replacement (Sustainability - Water)	Based on estimate of similar work; approximate costs are $10M per facility
CN23-FC13	Enforcement Headquarters Construction at 1200 15th Street	Based on estimate included in the addendum to the 2017 Facilities Framework.
CN23-FC14	Solar Panel Installation at Multiple SFMTA Facilities (Sustainability - Power)	Approximately $20 per square foot for the base installation. No seismic upgrades required as part of additional weight loads on roof, plus and escalation of 5% per year for 20 years.
CN23-FC15	1095 Indiana (Woods) Facility Modernization	Based on estimate of similar work and staff assessment of needs.
CN23-FC16	SFMTA Facility Elevator Rehabilitation Program	Based on needs identified by the agency's State of Good Repair database and staff assessment.
CN23-FC17	Muni Metro Station Escalator Rehabilitation Program	Based on needs identified by the agency's State of Good Repair database and staff assessment.
CN23-FC18	Muni Metro Elevator Expansion	Estimate based on past similar work

CN#	Capital Need Name	Cost Information Methodology
CN23-FC19	Paratransit Facility	Based on estimate from our partner service provider.
CN23-FC20	1 South Van Ness (SFMTA Headquarters)	Based on a cost estimate from the San Francisco Department of Public Works to complete the scope of work to a city-owned building.
CN23-FC21	eBus Facilities Conversion	The cost estimate based on the current costs of the eBus Pilot Program, plus a contingency: • $100 million for each of the major facilities (Woods, Islais Creek, and Flynn) • $50 million for Kirkland • $350 million for electrical upgrades, trenching, off-site improvements and cost of internal operational changes.
CN23-FC22	Interim Trolley Coach Facility	Based on a cost estimate from the San Francisco Department of Public Works to complete the scope of work.
CN23-FT01	Cable Car Vehicle Rehabilitation Program	Based on per-vehicle estimate major and minor rehabilitations for 40 cable cars to like-new conditions.
CN23-FT02	Historic Vehicle Rehabilitation Program	Based on project-level cost assumptions associated with 2023 Historic Streetcar Fleet Management Plan for 56 historic streetcars.
CN23-FT03	Light Rail Vehicle Lifecycle Management Program	Based on the project mid-life timeline for Siemens cars, using per-vehicle overhaul cost.
CN23-FT04	Light Rail Vehicle Replacement Program	Based on average per vehicle cost of the LRV4 procurement Phase II, escalated to 2042 dollars.
CN23-FT05	Light Rail Vehicle Fleet Expansion	• Based on average per vehicle cost of the LRV4 procurement Phase II.
CN23-FT06	Motor and Trolley Coach Midlife Overhaul Program	Based on per unit estimates escalated over the 20 years for 1,164 vehicles.
CN23-FT07	Motor Coach Replacement Program	Based on the per vehicle cost of the all battery-electric coaches.
CN23-FT08	Motor Coach Expansion Program	Based on the per vehicle cost of the all battery-electric coaches.
CN23-FT09	Trolley Coach Replacement Program	Based on the per vehicle cost of the all battery-electric coaches.
CN23-FT10	Paratransit Fleet Replacement Program	Based on fleet size of 149 vehicles and assumes 5 year useful life with 4 to 5 replacement cycles in the 20 year Capital Plan window.

CN#	Capital Need Name	Cost Information Methodology
CN23-FT11	Paratransit Fleet Expansion Program	Based on vehicle pricing list and assumed 20 expansion vehicles.
CN23-FT12	Non-Revenue Vehicle Replacement Program	Based on replacement due and estimated replacement value in NRV inventory.
CN23-FT13	Replacement of Other On-Board Equipment	Estimate based on past similar work.
CN23-PK01	Electric Vehicle Charging Stations Expansion	<table><tr><th></th><th>L2 net new</th><th>DC Fast net new</th><th>L2 replacement</th><th>DC Fast replacement</th></tr><tr><td>2030 #</td><td>1,061</td><td>262</td><td>-</td><td>-</td></tr><tr><td>$/ charger</td><td>$ 9,899</td><td>$ 167,881</td><td>$ -</td><td>$ -</td></tr><tr><td>2040 #</td><td>828</td><td>136</td><td>1,061</td><td>262</td></tr><tr><td>$/ charger</td><td>$ 9,116</td><td>$ 149,103</td><td>$ 5,812</td><td>$ 74,006</td></tr><tr><td>2050 #</td><td>828</td><td>135</td><td>1,889</td><td>398</td></tr><tr><td>$/ charger</td><td>$ 8,426</td><td>$ 134,125</td><td>$ 5,122</td><td>$ 59,028</td></tr><tr><td>Total</td><td>$25,027,615</td><td>$82,369,705</td><td>$15,841,990</td><td>$42,882,716</td></tr></table> Assumes total cost for expansion and replacement of EV chargers, regardless if the funding comes from city revenues or a third party. Assumes 1,323 spaces by 2030 and 3,250 spaces by 2050 each with a 10-year functional lifespan per charger. Based on reports from the International Council on Clean Transportation which calculates hardware, installation, and grid upgrade costs over time, with hardware costs decreasing in constant dollars over time and grid upgrades being a one-time cost.
CN23-PK02	Implement Parking, Loading, Bicyclist, Pedestrian and Other Mobility Mode Movement and Stopping Detection Technology	280,000 sensors at $500 each over 20 years
CN23-PK03	Parking Facilities State of Good Repair Program	Based on a City and County of San Francisco Department of Public Works estimate, using SFMTA State of Good Repair analysis. Adjusted to remove work completed through 2022, then escalated to current dollars. (Note: 2019 double counting was fixed.)

<table>
<tr><th>CN#</th><th>Capital Need Name</th><th>Cost Information Methodology</th></tr>
<tr><td>CN23-PK04</td><td>Parking Meters State of Good Repair Program</td><td>Based on updated Parking Meter Calc from the asset inventory
<table>
<tr><th></th><th>2023</th><th>2033</th><th>2043</th><th>Total</th></tr>
<tr><td>Single Space</td><td>$ 660.00</td><td>$ 887.00</td><td>$ 1,588.00</td><td>$ 3,135.00</td></tr>
<tr><td>Housing</td><td>$ -</td><td></td><td></td><td>$ -</td></tr>
<tr><td>Lock</td><td>$ 200.00</td><td>$ 269.00</td><td>$ 482.00</td><td>$ 951.00</td></tr>
<tr><td>Pay Stations</td><td>$ 5,350.00</td><td>$ 7,190.00</td><td>$ 12,876.00</td><td>$ 25,416.00</td></tr>
<tr><td>SS Procured</td><td>$ 12,100.00</td><td>$ 12,100.00</td><td>$ 12,100.00</td><td>$ 36,300.00</td></tr>
<tr><td>MS procured</td><td>$ 2,350.00</td><td>$ 2,350.00</td><td>$ 2,350.00</td><td>$ 7,050.00</td></tr>
<tr><td>Total SS</td><td>$10,406,000.00</td><td>$13,987,600.00</td><td>$25,047,000.00</td><td>49,440,600.00</td></tr>
<tr><td>Total MS</td><td>$12,572,500.00</td><td>$16,896,500.00</td><td>$30,258,600.00</td><td>$59,727,600.00</td></tr>
<tr><td>Subtotal</td><td>$22,978,500.00</td><td>$30,884,100.00</td><td>$55,305,600.00</td><td>$ 9,168,200.00</td></tr>
<tr><td></td><td>$ 1,148,925.00</td><td>$ 1,544,205.00</td><td>$ 2,765,280.00</td><td>$ 5,458,410.00</td></tr>
<tr><td>Sales Tax (8.625%)</td><td>$ 1,981,895.63</td><td>$ 2,663,753.63</td><td>$ 4,770,108.00</td><td>$ 9,415,757.26</td></tr>
<tr><td>Total Cost</td><td>$26,109,320.63</td><td>$35,092,058.63</td><td>$62,840,988.00</td><td><b>$ 124,042,367.25</td></tr>
</table></td></tr>
<tr><td>CN23-PK05</td><td>Parking Access Revenue Control System</td><td>Full PARCS modernization completed in 2020. Actual costs for PARCS equipment was escalated to estimate the cost of two cycles of equipment replacement in Year 5 and Year 12, based on industry standard of 7-yr equipment life.</td></tr>
<tr><td>CN23-PK06</td><td>Parking Facility Structural and Seismic Upgrades</td><td>SF Public Works completed 30% design packages in 2014, which informed preliminary cost estimates for seismic upgrades to 5th & Mission and Sutter Stockton garages.</td></tr>
<tr><td>CN23-PK07</td><td>Gradually Charge the Right Price for Every On-street Parking Space</td><td>Cost estimates for meters, signs, vehicles, and enforcement space derived from estimates from SFMTA documents and consultation with relevant staff.

- Enforcement vehicles and LPR units: - $4,232,979 - 81 new vehicles * $52,259 (cost of LPR units)

- Signs and sign-related items (like poles, clamps, etc.): $1.5M – $60 per sign (assuming on existing street cleaning poles), 1 for every 10 spaces, 250,000 spaces

- Enforcement HQ space (likely rented): $184M – cost for a new facility as outlined in 2017 Facilities Framework ($92M) x 2.

- Meters: $148,087,500 – 3.3 per block (based on Hayes Valley), assuming 40 spaces a block and 250,000 spaces that need meters. Meters at $7,180 each including meter signs

- Meter Shop vehicles: $8,715,000, 3x current cost</td></tr>
<tr><td>CN23-PK08</td><td>Parking Facility Elevator Modernizations</td><td>Based on the actual cost of elevator modernization work at five garages from 2018-2020. Includes need to modernize 17 cabs ASAP and to restore 14 recently-modernized cabs toward the end of the 20-year timeframe.</td></tr>
</table>

CN#	Capital Need Name	Cost Information Methodology
CN23-SC01	Threat and Vulnerability Assessment (TVA) and Implementation	Cost estimate is based on similar consultant studies conducted by the City and County of San Francisco.
CN23-SC02	Incident Management Planning and Response	Equipment • Radios (all SFMTA Divisions) at $250,000 each plus escalation • Satellite phones at $10,000 each plus escalation • COP at $125,000 each plus escalation • Supplies (batteries; power packs, etc.) at $50,000 each plus escalation • Project Management at $150,000 plus escalation
CN23-SC03	Surveillance, Access Control, and Security System Enhancements	Estimate based on past similar work.
CN23-SC04	Technology In Transportation Emergency Management	Cost assumes $20,475,000 from 2015 estimates. It then adds $250,000 for ongoing replacement and overhaul costs.
CN23-SC05	Subway Tunnel Intrusion Detection and Deterrence Measures	Based on preliminary estimates from the Transit Maintenance of Way Team and the SFMTA Video Shop vendors. Estimates assume a useful life of 5 years for hardware and annual renewal of software packages to support the hardware. Cost estimates from vendor proposal for a 2-station pilot study, linearly extrapolated to 9 stations, plus in-house contract and project management and contingency.
CN23-SC06	Market Street Natural Hazard Mitigation	Based on estimate of similar work; assumes cost sharing among pertinent departments such as SFMTA, Public Works, Public Utilities Commission, et. al.
CN23-SC07	Subway Flooding Prevention, Preparedness, and Mitigation	Estimate of $950,000 to complete a study, with anticipated project costs of: $750,000 for pre-engineering, $1,000,000 for design, $3,000,000 for construction, and $750,000 for project management. Cost estimate to be updated as more information on the extent of vulnerability is determined.
CN23-SC08	Continuity of Operations	Based on estimate of similar facility setup costs. Cost estimate to be updated as more information on the location is determined.
CN23-SC09	Traffic Signal Battery Backup System	Estimate based on past similar work.

CN#	Capital Need Name	Cost Information Methodology
CN23-ST01	Bicycle and Shared Mobility Parking Program	Bike stations have a unit cost of $1,000,000/station, bike lockers $12,063/locker, bike racks $1,000/rack. 10% contingency and escalation factor added. Mobility Hubs pilot is based on actions from the Climate Action Plan plus escalation factor added. Approximately $1,000,000 per mobility hub (up to $2,000,000), based on MTC Mobility Hubs Playbook and the SFMTA's application for MTC Mobility Hubs program of $385K, which only included bike storage and plus $40K to provide complementary placemaking. The SFMTA Mobility Hubs would cost more to include EV charging.
CN23-ST02	Protected Bike Lane Network	Estimated 180 miles of protected bike lanes • 4 transit boarding islands per mile at $100,000 each • 2 signal modifications per mile at $250,000 each • 2 new traffic signals per mile at $1,000,000 each • Signing and striping $600,000 per mile • 20 concrete barriers, islands, and pedestrian refuges per mile at $30,000 each
CN23-ST03	Slow Streets and Neighborway Network	135 miles of Neighborway network at $1,088,926 per mile based on Wiggle Green Corridor cost estimates • 1 new RRFB per mile at $558,423.90 each • 4 concrete islands, diverters, and/or traffic circles per mile at $33,505.43 each • 8 speed humps per mile at $11,168.48 each • 4 curb extensions per mile at $55,842.39 each • Signing and striping at $83,763.56 per mile

CN#	Capital Need Name	Cost Information Methodology
CN23-ST04	Bicycle Network State of Good Repair Program	Based on AMU 2021 Capital Asset Inventory projected over 20 years.

Segment	Sum of Valuation	20-year investment
Green	$ 40,438,851.53	$ 215,517,878.24
11TH ST	$ 622,535.24	$ 3,347,266.19
13TH ST	$ 1,193,192.54	$ 6,327,848.42
2ND ST	$ 415,023.49	$ 2,193,131.00
5TH ST	$ 155,633.81	$ 794,612.68
7TH ST	$ 907,863.89	$ 4,965,385.65
8TH ST	$ 2,075,117.46	$ 11,528,206.80
ARGUELLO BLVD	$ 233,450.71	$ 1,233,636.19
BAY SHORE BLVD	$ 51,877.94	$ 293,667.09
BAY ST	$ 259,389.68	$ 1,324,354.47
BAYSHORE BLVD	$ 830,046.98	$ 4,445,454.02
BOSWORTH ST	$ 207,511.75	$ 1,134,945.29
CESAR CHAVEZ ST	$ 2,879,225.48	$ 14,700,334.59
DIVISION ST	$ 752,230.08	$ 3,975,049.93
DUBOCE AVE	$ 103,755.87	$ 567,472.65
FELL ST	$ 700,352.14	$ 3,830,440.36
FOLSOM ST	$ 3,605,516.59	$ 20,086,992.46
HARRISON ST	$ 466,901.43	$ 2,467,272.37
HOWARD ST	$ 311,267.62	$ 1,589,225.36
ILLINOIS ST	$ 207,511.75	$ 1,059,483.57
JERROLD AVE	$ 570,657.30	$ 3,230,338.04
LAGUNA HONDA BLVD	$ 363,145.56	$ 1,918,989.62
MARKET ST	$ 5,628,756.11	$ 29,344,112.21
MASONIC AVE	$ 3,475,821.75	$ 19,675,695.31
NORTH POINT ST	$ 466,901.43	$ 2,553,626.91
OAK ST	$ 700,352.14	$ 3,830,440.36
PAGE ST	$ 233,450.71	$ 1,233,636.19
POLK ST	$ 1,504,460.16	$ 7,681,255.91
POTRERO AVE	$ 233,450.71	$ 1,276,813.45
SAN JOSE AVE	$ 1,245,070.48	$ 6,809,671.75
SAN JOSE AVE ON RAMP	$ 311,267.62	$ 1,589,225.36
SCOTT ST	$ 518,779.37	$ 2,648,708.94
THE EMBARCADERO	$ 7,755,751.51	$ 39,692,525.72
TURK ST	$ 1,167,253.57	$ 6,607,509.62
VALENCIA ST	$ 285,328.65	$ 1,560,549.78
Grand Total	**$ 40,438,851.53**	**$ 215,517,878.24**

CN23-ST05	Pedestrian Safety	Estimated at $480,000,000 in 2013 WalkFirst scenario for a 20-year investment, escalated at 4% annually and apportioned costs over 20 years

<table>
<tr><th>CN#</th><th>Capital Need Name</th><th>Cost Information Methodology</th></tr>
<tr><td>CN23-ST06</td><td>Pedestrian Walkability and Neighborhood Enhancements</td><td>Estimated at $800,000,000 in 2013 WalkFirst scenario for a 20-year investment, escalated at 4% annually and apportioned costs over 20 years</td></tr>
<tr><td>CN23-ST07</td><td>Traffic Calming</td><td>This assumes current level of approximately $3,000,000 annually spent on TC including application-based, schools, pro-active and NTIP programming. It escalates at 4%.</td></tr>
<tr><td>CN23-SG01</td><td>Automated Photo Traffic Enforcement</td><td>Replacement of photo enforcement for 23 existing approaches ($300,000 per intersection), including an option for an additional 10 approaches.</td></tr>
<tr><td>CN23-SG02</td><td>Signal Infrastructure State of Good Repair Program</td><td><table><tr><th>Type of Signal Work</th><th>Cost</th></tr><tr><td>PCS Contract</td><td>$ 80,000,000</td></tr><tr><td>PCS Contract</td><td>$ 30,000,000</td></tr><tr><td>Signal Mod Contract</td><td>$ 140,000,000</td></tr><tr><td>Corridor Contract</td><td>$ 150,000,000</td></tr><tr><td>Corridor Contract</td><td>$ 75,000,000</td></tr><tr><td>State of Good Repair Contract</td><td>$ 300,000,000</td></tr><tr><td>State of Good Repair Contract</td><td>$ 150,000,000</td></tr><tr><td>Install Conduits & Poles</td><td>$ 80,000,000</td></tr><tr><td>12" Signal Visibility Upgrades</td><td>$ 12,000,000</td></tr><tr><td>Sensys</td><td>$ 6,000,000</td></tr><tr><td>BBS</td><td>$ 30,000,000</td></tr><tr><td>APS</td><td>$ 6,000,000</td></tr><tr><td>Controller Cabinets</td><td>$ 5,000,000</td></tr></table></td></tr>
<tr><td>CN23-SG03</td><td>Sign Infrastructure State of Good Repair Program</td><td>Work
• 2,000 Graffiti Program signs/year at $200/sign = $8,000,000 plus cost escalation
• 2,000 New Signs/year at $200/sign = $8,000,000 plus cost escalation</td></tr>
<tr><td>CN23-SG04</td><td>Traffic Management State of Good Repair Program</td><td>Estimate of 12 corridors per year for 20 years, at $30,000 per corridor.</td></tr>
<tr><td>CN23-SG05</td><td>New Signals & Signs Program</td><td>Estimate of installing a mix of 10 new signals and/or flashing beacons every other year and 1,500 new signs per year.</td></tr>
</table>

CN#	Capital Need Name	Cost Information Methodology
CN23-SG06	SFgo Program	SFgo Infrastructure • Fiber Category Total = $57,900,000 • Network Category Total = $74,000,000 • TSP Category Total = $74,000,000 • VMS Category Total = $13,000,000 • CCTV Category Total = $4,000,000 • Other Category Total = $8,900,000
CN23-SG07	Transit Only Red Lane Replacement	Based on needs identified by the agency's State of Good Repair database and staff assessment.
CN23-TA01	Accessible Taxi Rebate Program	Based on the per unit cost of accessible conversion packages for 100 ramp medallions with a 3-year life cycle.
CN23-TA02	Increase Taxi Stands	Estimate of $5,000 for the planning and installation of a new stand, and $2,500 annually to maintain each stand thereafter. Curb cuts to be built and evaluated during regular curb cut redesign process.
CN23-TA03	Taxi Clean Fuel and All Electric Rebate Program	Based on past utilization of the program.
CN23-TA04	Taxi and Regulated Mobility Management System	Based on costs of devices and fleet software for tracking and management, as well as back-end internal and public facing web-based systems.
CN23-TA05	Taxi Safety Camera Management System	Based on estimate of similar work to integrate devices into agency fleet software for tracking and management.
CN23-TA06	Paratransit and Ramp Taxi Dispatch App	Based on approximate cost of development, launch, and promotion for the app.
CN23-TA07	Commuter Shuttle and Private Transit Vehicle Stop and Pedestrian Safety Improvements	Estimate based on past similar work and revenue allocated for improvements.
CN23-TA08	Permit Fees for Bike and Other Shared Mobility Device Rack Program	Based on current $100 per rack fee
CN23-TA09	Regulated Mobility Inspection Facility	Estimate based on past similar work.
CN23-TF01	Cable Car Infrastructure State of Good Repair Program	Based on system/project level estimates generated between 2018 and 2023. Project level estimates include soft costs and 35% contingency. Total need estimate applies a 5% escalation factor and 5% program contingency/ uncertainty factor

CN#	Capital Need Name	Cost Information Methodology
CN23-TF02	Market Subway Infrastructure State of Good Repair Program	Reflects program of high level cost estimates associated with individual guideway infrastructure projects identified through the Subway Renewal Program and the FY23-27 CIP.
CN23-TF03	Central Subway State of Good Repair Program	Assumes approximately 20% of Market Street Subway State of Good Repair needs based on age/condition and proportion of similar asset types/quantities. Future study to develop lifecycle management strategy will refine this need for future plans.
CN23-TF04	Surface Network State of Good Repair Program	Based on project level cost assumption developed during the 23-27 Capital Improvement Program Cycle.
CN23-TF05	Facility Guideway Infrastructure State of Good Repair Program	Based on assumed replacement values recorded in SFMTA asset database for non-revenue track, OCS and fixed guideway related assets at SFMTA light rail facilities (Muni Metro East, Green and Cameron Beach). Cameron Beach track reconstruction is based on estimates provided in 2017 escalated to 2023.Based on needs identified by the agency's State of Good Repair database and staff assessment for assets related to fixed guideway and Cameron Beach trackwork reconstruction including pull in and pull outs, and yard grading. This includes non-revenue track assets for MME, Green and associated OCS. Cameron Beach track reconstruction is based on estimates provided in 2017 with escalation to 2023. $251,078,313 (166,178,313 + 84,900,000).Considerations: Rail / Traction Power- MME (exp)- CB- Green50M 5 track MME all in (2016) — does not include OCS 1/4 of MME Expansion Green probably good done 7 years 25 M (12)chargers (wood pilot) (what were CPC soft cost, PGE) (14M associated with CON)
CN23-TF06	Substation State of Good Repair	Assumes 1 substation every 2 years starting 2025 = 11 Substations @ ~ $30M per escalated 5% to year of $
CN23-TF07	Train Control Upgrade Program	Based on Train Control Upgrade Project October 2022 Approved budget.
CN23-TO01	Central Subway Extension	Based on recommendation from the ConnectSF Transit Strategy with cost escalation. 1.2 miles total.
CN23-TO02	Muni Metro Modernization Core Capacity	Based on recommendation from the ConnectSF Transit Strategy with cost escalation.
CN23-TO03	Historic Street Car Fort Mason Extension	The F-Line extension would cost approximately $80,000,000, and the E-Line track loop would cost approximately $10,000,000 in 2017, plus escalation to today's dollars.
CN23-TO04	Muni Forward New Corridor Expansion	Estimate based on past similar work, including contingency, for about 60 miles of improvements.
CN23-TO05	Accessible Light Rail Stops Program	Estimate based on past similar work; 20 accessible light rail stops at approximately $1,500,000 per stop, plus escalation.

CN#	Capital Need Name	Cost Information Methodology
CN23-TO06	Accessible Stop Spot Improvement Program	Estimating 50 front door bulbs
CN23-TO07	Transit Stop Boarding Islands and Features Program	Estimate based on past similar work.
CN23-TO08	Raised or protected trackways on Muni Metro light rail surface lines	Estimate based on past similar work.
CN23-TO09	3-car trains in the Muni Metro Tunnel and on the N-Judah	Estimate based on past similar work.
CN23-TO10	Muni Forward 2.0 Projects on the Five-Minute Network	Estimate based on past similar work.
CN23-TO11	Transit Signal Priority	Estimate based on past similar work.
CN23-NP01	BART Joint Maintenance Agreement	Based on the current 5-Year BART Joint Maintenance Agreement as of 2023 at approximately $89,600,000 capital commitment every five years over the 20-year period.
CN23-TO12	Geary/19th Avenue Subway	Based on recommendation from the ConnectSF Transit Strategy with cost escalation. 9.6-10 miles total. Does not include non-San Francisco portions of Link21.
CN23-TO13	Bayview Caltrain Station	Based on recommendation from the ConnectSF Transit Strategy with cost escalation.
CN23-TO14	BART and Muni Station Transfers	Based on actions from the Climate Action Plan. Based on comparable cost to SFMTA BART canopy agreement for all four combination BART/Muni Metro stations. Estimate to be further refined.

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