SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY SFMTA | CAPITAL FINANCIAL PLANNING AND ANALYSIS FINANCE AND INFORMATION TECHNOLOGY DIVISION

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CIP ID	CIP Name	CIP Scope
CI01-CF	Integrated Systems Replacement Project	Replace central control and subway communication systems, which include the Public Address system, Platform Display Sign system, and Facility SCADA system; and upgrade the Motive Power SCADA system. Also being performed are installations of new fiber broadband network and Uninterruptible Power Supply systems for critical communication systems.
CS050	Central Subway	The Central Subway Project will construct a modern, efficient light-rail line that will improve public transportation in San Francisco. This new 1.7-mile extension of Muni's T-Third Line will provide direct connections to major retail, sporting and cultural venues while efficiently transporting people to jobs, educational opportunities and other amenities throughout the city. This project is the second phase of the Agency's Third Street Light Rail Transit Project. Phase 1 of the project, which was completed in April 2007, constructed a 5.1-mile light-rail line along the densely populated 3rd Street corridor. Phase 2, the Central Subway, will extend the T-Third Line from the 4th Street Caltrain Station to Chinatown.
FC076	Kirkland Bus Washer Replacement	Install a drive-through bus wash system at the Kirkland Division. The work will include a wash water reclamation system including a brush bus wash system with top oscillating material scrubbers, high-pressure spray arch and wheel wash, undercarriage wash, tire guides, skid plates, pre-wetting/detergent, high-pressure front and wheel wash components, vertical brush and frame assembly, and final rinse.
FT085	Forklift Replacement	Replacement of more than 60 forklifts. The SFMTA fleet of forklifts is significantly outdated, leading to higher maintenance costs, reduced performance, safety, fuel efficiency, and Green House Gas emissions. The fleet consists of more than 60 forklifts of various makes, models, and sizes. A significant number of these vehicles are between 25 to 40 years old, have exceeded their schedule useful life and are in need of replacement. Replacement will help to reduce overall maintenance costs, improve reliability, and reduce emissions.
FC000	Reserve Facility	Funding set aside within the Facility Capital Program, intended to accommodate unforeseen project budget increases and emerging project priorities.
FC011	Facility & Life Safety System Renovation	Replace and upgrade obsolete life and fire safety systems at the Flynn, Kirkland, Scott, Metro Green and Potrero Facilities to remain code compliant and ensure the safety of employees and the public. Potential improvements include new control panels, new battery back-ups, new manual pull stations, new annunciator panels, monitoring of the automatic fire sprinkler system, new notification devices, and new smoke detectors. Existing systems are reaching the end of their useful lives and have become difficult and costly to maintain.
FC014	Facility Condition Assessment Implementation	Address backlogged State of Good Repair investments through the Facilities Deferred Maintenance Program. These investments build on the agency's commitment to keeping its assets in a State of Good Repair.
FC050	New Castro Station Elevator	Install a new three-stop elevator on the south side of Market Street at the Castro Muni Station. The top level of the new elevator structure will be located at Harvey Milk Plaza on Market Street, and it will service the concourse and platform levels of the Station below. The new elevator structure will integrate with the existing architectural and structural framework of the building. This project also includes creating an accessible path from the southwest corner of Market and Castro Streets to the Plaza-level elevator entrance.
FC051	Transit Operator Convenience Facilities Phase III	Procure seven new prefab units, construct foundations, and install utilities for new convenience facilities at various bus terminals across San Francisco. The goal of this project is to provide access to clean, convenient and safe restrooms for SFMTA transit operators.
FC053	Islais Creek Phase II	Construct a new 65,000 square foot motor coach maintenance and operations facility to alleviate current demand for adequate storage and maintenance space, and to better accommodate fleet expansion. This new facility will include light and heavy maintenance bays; warehouse space, operations and maintenance offices; and showers, galley room, locker rooms and training space.

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FC054	Presidio Lifts	Procure and install new Vehicle Lifts to enable SFMTA staff to perform vehicle maintenance. This project will help to maintain the transit fleet in a State of Good Repair by facilitating routine vehicle maintenance and mid-life fleet overhauls. The scope of work for this project also includes ADA accessibility upgrades, such as striping, signage and upgrading curb ramps surrounding the facility.
FC057	Burke Overhead Lines & Parts	Rehabilitate the Burke Warehouse facility to prepare it for new transit fleet maintenance functions, specifically the housing of overhead lines and increased storage capacity. Work will include the installation of a new roof, new building cladding, insulation, foundation improvements, new lighting, new HVAC systems, and interior improvements.
FC060	Escalator Rehabilitation	Upgrade and/or replace 17 escalators in the Muni Metro Subway stations to provide convenient and reliable access to the transit system. Escalators are scheduled to be upgraded at Powell, Van Ness, Church, Castro, Civic Center and Montgomery Stations.
FC066	1200 15th Street Renovation	Rebuild existing structure at 1200 15th Street as a mixed use development, consolidating Enforcement Operations on the first two floors and adding a mix of affordable and market rate housing on the upper floors. Enforcement space will include work areas, office space, locker rooms and storage areas with vehicle storage provided next door at the upper floors of the existing Scott Facility.
FC067	MME HVAC and Boiler Improvement	The existing heating boiler and two roof-mounted air conditioning units at the Muni Metro East Facility has failed and their warranty period has expired. The project will replace the boiler and air-conditioning units with more modern, efficient, technologically improved ones. The scope of the work will include the assessment, and replacement as necessary, of piping system components relating to the boiler and air-conditioning units.
FC068	Muni Metro East Expansion Phase II – Paving	The Muni Metro East Expansion Project will develop a vacant 4-acre lot east of the existing 13-acre Muni Metro East Facility. Improvements will include paving and fencing the site, extension of electrical and sewer utilities, and construction of temporary overhead electrical infrastructure for the temporary storage of trolley coach vehicles and the temporary operation of a trolley operations division to maintain Muni service during the rebuild of the Potrero and Presidio Divisions. This project also includes ancillary improvements to 1399 Marin to accommodate temporary trolley bus maintenance in that location, including repaving, temporary overhead electrical infrastructure, site fencing, and minor building improvements. In the future, these baseline improvements will be converted for the storage of up to 36 light rail vehicles, and possible construction of a maintenance building for light rail vehicles as the light rail fleet grows and additional fleet storage capacity for future expansion of both the bus and light rail fleets.
FC071	Muni Metro Escalator Rehabilitation Phase III	Replace 6 escalators, the 4 escalators at Embarcadero (from the platform to mezzanine), and the inbound and outbound escalators at West Portal. A temporary stair with the same egress capacity of 1 escalator will be added for the Embarcadero escalator undergoing replacement. Replacement will be done one escalator at a time. After all the Embarcadero escalators have been replaced, the temporary stairs may be left in place until a permanent stairway is constructed.
FC072	Presidio Facility Reconstruction	The Presidio Bus Maintenance Facility at 949 Presidio is beyond its useful life and needs to be replaced. To meet the transit needs of San Francisco the facility will be reconstructed with new maintenance bays and bus storage areas for Muni's new modern trolley and hybrid electric motor coach fleets.

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FC073	Woods Facility Rehabilitation	Replace the drive-through bus wash system at Woods Division. The work will include a wash water reclamation system including a brush bus wash system with top oscillating material scrubbers, high-pressure spray arch and wheel wash, undercarriage wash, tire guides, skid plates, pre-wetting/detergent, high-pressure front and wheel wash components, vertical brush and frame assembly, and final rinse. Work also includes the installation of electrical infrastructure and charging stations to power nine battery eletric vehicles being procured as part of the SFMTA's e-bus Pilot Project. Post installation, these buses will then be evaluated for long-term use in the Muni fleet.
FC074	Potrero Facility Reconstruction	The entire Potrero Maintenance facility will be rebuilt to provide a larger facility that services and stores trolley coaches and provides training. The facility will be decked and will possibly include transit oriented development, up to 11 floors, above at the Mariposa Street side of the facility cascading towards Franklin Square Park. The project will include vehicle storage, maintenance, bus wash, and development, all while potentially preserving the historic nature of the existing building.
FC075	Scott Lifts	Install above ground vehicle lifts at the Scott Garage to enable staff to maintain the Muni non-revenue fleet in good working order. This includes replacing four 4-post vehicle lifts at 30,000 lb capacity, and, if the construction bids are favorable, an option to replace two 2-post vehicle lifts at 20,000 lb capacity. Work will include demolition of the existing lifts and new footings for each post.
FT000	Reserve Fleet	Funding set aside within the Fleet Capital Program, intended to accommodate unforeseen project budget increases and emerging project priorities.
FT051	Paratransit Fleet Expansion	Procure replacement paratransit minivans and cutaways to retire an outdated vehicles that have reached the end of their useful life. These modern vehicles will provide more comfortable and reliable transportation for persons with disabilities that are unable to access the fixed route transit system.
FT052	40' & 60' Trolley Coach Fleet Replacement	Replace 333 outdated trolley coach vehicles (both 40' and 60' vehicles) that have reached the end of their scheduled useful lives. New vehicles will improve agency safety and security, transit reliability, on-time efficiency, and customer satisfaction. During replacement the mix of vehicle sizes may be adjusted to align with the Transit Fleet Management Plan projections of ridership, which could result fewer 40' vehicles. The scheduled replacement cycle for trolley coach vehicles is every 15 years.
FT053	Cable Car Renovation	Fund the phased rehabilitation of the cable car fleet. The project will enhance cable car vehicle by improving system reliability. The useful life of a cable car is approximately 60-70 years, and a major rehabilitation will extend the life of a cable car by anywhere from 30-35 years.
FT054	40' & 60' Motor Coach Fleet Replacement	Replace the outdated 40' and 60' motor coaches that have reached the end of their useful lives. The new motor coach fleet will be equipped with hybrid technology, enhanced regenerative braking, composite materials, slip-resistant flooring, low floor bus design, better seating configuration, and better exterior viewing mirrors. This project will improve agency safety and security, transit reliability, on-time efficiency, and customer satisfaction.
FT056	Farebox Replacement	Upgrade fareboxes and necessary support equipment to improve reliability, functionality, and overall customer experience. The project includes refurbishing at least 1,250 existing fareboxes, procuring new probing equipment, refurbishing existing vault equipment, procuring new fareboxes to serve as a float when in-use fareboxes are being refurbished, and purchase of a data collection system. The new fareboxes are intended to serve cash-paying customers with better technology capabilities for transfers and integration for current and future projects related to on-vehicle equipment. A new central computer and Driver Control Unit will also be purchased for reporting and data storage needs.

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FT057	PCC Streetcar Rehabilitations	Rehabilitate Presidential Commission Cars (PCCs) to like-new condition, including upgrading electrical and mechanical systems, performing bodywork, and ensuring systems meet California Public Utilities Commission (CPUC) and the Americans with Disabilities Act (ADA) requirements. Due to their historic nature, these vehicles are not replaced on a regular schedule, making a program of regular rehabilitation critical to the long-term operation of the fleet.
FT059	Light Rail Vehicle Fleet Replacement & Expansion	Procure 151 replacement LRVs and 69 additional LRVs to expand the fleet to 220 trains to replace LRV2 & LRV3 trains which manufactured by Breda and are nearing the end o their useful life. The expanded fleet of LRV4s are manufactured in California by Siemens, and these new trains will support transit service to Central Subway and expanded service citywide. These new state-of-the-art trains improve transit reliability, safety, and passenger comfort.
FT061	Milan & Vintage Streetcar Rehabilitations	Rehabilitate the Milan and Vintage fleet to like-new condition, including upgrading electrical and mechanical systems, performing body work, and ensuring systems meet CPUC and ADA requirements. The historic streetcar fleet is a collection of electric rail vehicles from the U.S. and around the world. Due to their historic nature, these vehicles are not replaced on a regular schedule, making a program of regular rehabilitation critical to the long-term operation of the fleet.
FT062	LRV2 & LRV3 Overhauls	Perform scheduled maintenance of truck components in accordance with manufacturer recommendations of the LRV2 and LRV3 fleet consisting of 151 trains. Each train of which is equipped with three trucks-two motor trucks and one trailer truck-that serve as suspension systems that support vehicle loads and provide a comfortable ride for passengers. Maintenance data shows that rehabilitation of the light rail vehicle trucks wi significantly improve vehicle reliability, help to reduce incidents of breakdowns, and prevent service interruptions and additional and costly repairs.
FT068	LRV2 & LRV3 Heating, Ventilation & Air Conditioning (HVAC) Refurbishments	Refurbish and replace heating, ventilation, and air conditioning (HVAC) units on the LRV2 and LRV3 fleet to improve the reliability of the units and reduce the amount of maintenance needed to keep the units in operation. The components inside the existing HVAC units are in need of refurbishment and in some cases, replacement. The HVAC units will be shipped to an HVAC remanufacturer to be refurbished and upgraded.
FT074	LRV4 Maintenance Equipment Procurement Phase I	Procure necessary equipment to maintain the LRV4s in a state of good repair. Equipment includes the purchase and installation of two state-of-the-art automated wheel measurement (AWS) systems, two new wheel truing machines, and overhead cranes systems for heavy overhaul work.
FT080	40' & 60' Motor Coach & Trolley Coach Midlife Overhauls	Perform scheduled maintenance on the 40' & 60' motor coach & trolley coach fleet in accordance with manufacturer recommendations. Maintenance data shows that rehabilitation of the fleet significantly improve vehicle reliability, helps reduce incidents or breakdowns, and prevent service interruptions and additional and costly repairs.



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FT082	Electric Bus Procurement	Procure and deploy nine battery electric buses into revenue service. The project will consist of procuring three types of 40' battery electric bus from three vendors and those vehicles and the necessary equipment will be stationed at the Woods yard. The buses will operate in revenue service for one year during which they will be monitored and evaluated based on their performance of various electric bus technologies. The findings of this pilot project will be used to evaluate the suitability of electric battery buses and develop a roadmap for introducing an expanded fleet into service.
FT083	35 Class-B Paratransit Van Replacement	Procure replacement paratransit vans to retire outdated vehicles that have reached the end of their useful life. These modern vehicles will provide more comfortable and reliable transportation for persons with disabilities that are unable to access the fixed route transit system.
OT000	Reserve Other	Funding set aside within the Other Capital Program, intended to accommodate unforeseen project budget increases and emerging project priorities.
OT050	Motorcycle Safety Education, Enforcement	This is a campaign to educate motorcyclists about safe driving behaviors and collect pertinent information about motorcycle related hazards. Research on the behaviors of motorcyclists would need to be compiled prior to campaign development. California saw a 63 percent increase in registered motorcycles between 1997 and 2006, while the number of fatal collisions doubled, and non-fatal injury collisions increased by 43 percent. Detailed knowledge about motorcyclists' riding habits, demographics, and other elements important to understanding these trends is lacking. Several motorcycle safety programs have been implemented around the country recently. The goals for this program are to decrease in fatal and severe injury among motorcyclists, raise awareness of campaign among motorcyclists, generate press around campaign and enact a new tool to achieve Vision Zero.
OT051	Long Term Youth Bicycle Safety Education Program	Two-week in-school bicycle safety Physical Education (PE) classes at SFUSD Elementary and Middle Schools. Train participating PE teachers at each of these schools to integrate the Bicycle Safety Education programs into their schools' PE curriculum in subsequent school years, in addition to providing Youth Bicycle Safety Education classes directly to middle and elementary school students. SFMTA, SFDPH and SFUSD are currently developing a long-term bicycle education plan for school children in San Francisco. The plan will identify the steps needed to develop a sustainable program for all students in San Francisco, including the appropriated phases and steps needed to reach this goal.
OT055	SF Existing Residents TDM Program	Develop, pilot and launch a program for working with residents of existing housing units in San Francisco. Through this program, SF will establish goals and evaluation metrics for the program; design and implement an initial residential pilot program; and then based on a successful evaluation of the pilot program, roll out an on-going resident- based information and education outreach program.
OT057	Targeted Counterterrorism Training and Multiagency Security/Emergency Preparedness	Enable SFMTA frontline transit employees to receive counterterrorism training approved by the Department of Homeland Security as well as to participate in multiagency emergency preparedness exercisesthrough August 2020. These training and exercises are designed to enhance SFMTA's capabilities in preventing, preparing for, responding to, and recovering from major natural, technological, and human-caused disasters.
OT064	Bike to Work Day	Become a sponsor for Bike To Work Day in the Bay Area.

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OT066	Interest Charged Pending Billing Reimbursement	Nearly all of SFMTA's grants operate on a reimbursement basis; it is only after eligible costs have been incurred that the grantor makes payment against promised grant funds. When costs are incurred against capital projects, there is a delay between the time that the costs are paid, when the SFMTA invoices the grantor, and when reimbursement is received. During this time, the City Treasury provides the funding to "float" those payments until reimbursement is received from the various funders. Meanwhile, SFMTA incurs interest costs during this loan period.
OT067	Programmatic Line: Safe Streets Project Evaluation Program	The SFMTA is committed to understanding, evaluating and reporting on how projects affect neighborhoods. This work, through the the Safe Streets Evaluation Program, further bolsters the city and agency's committment in achieving safer streets for all. Building on the initial FY17/18 Safe Streets Project Evaluation Program project, this ongoing program will help staff and stakeholders understand how street design projects can support San Francisco's Vision Zero goal to elminiate traffic fatalities by 2024. Future funding will be used to provide guidance and resources to ensure that the most important projects incorporate consistent, high quality evaluations. By using consistent metrics across projects, the program will illuminate how upgraded street designs impact safety and comfort, facilitate tracking trends over time, evaluate project performance, and improve the performance of future projects funded by Prop K dollars and other sources. With a robust evaluation framework, SFMTA will ensure that the projects developed have the best chance of success based on lessons from past efforts.
OT072	2020 Transportation Sector Climate Action Strategy	The next update of the CAS will build upon the 2017 CAS and include improved data collection and analysis, quantitative measurements and performance measures that track progress over time. Greenhouse gas quantification methodologies and performance measures and targets will be developed using research and best practices from the climate change field. The updated CAS will position SFMTA to clearly articulate goals, targets and performance against local, regional, and state emissions targets in a quantitative manner. Specific tasks include: quantifying emissions from various aspects of the sector, improved data collection, management and analysis, refinement of emission reduction strategies and development of performance indicators/ measures. Prop A requires that SFMTA develop a Transportation Sector Climate Action Strategy (TCAS) every two years.
OT073	Community Based Transportation Plans	Complete two Community Based Transportation Plans in underserved neighborhoods with a high concentration of low- income housing and minority residents. Specific neighborhoods will be identified based on overlap with Communities of Concern, Muni Service Equity Strategy, High Injury Corrridor network, and local/Supervisor support. A key objective of the plans are to work with community partners to identify transportation needs and create a blueprint for implementation by developing and prioritizing transportation capital improvements from the community's perspective. In order to assess needs, the study will include public outreach, data collection, and the development and evaluation of conceptual design alternatives. The SFMTA will use the community's input to develop a final conceptual plan that will include conceptual engineering drawings along with funding and implementation strategies.
OT074	Engineering Technical Feasibility and Cost Estimation for Planning Studies	Conduct concept-level technical investigations such as conceptual engineering, feasibility analysis, and cost estimation in support of potential new capital projects. Projects that have not initiated a formal planning phase, are part of a larger planning effort, or of particular interest to stakeholders or the public but not yet formal projects may require these services.

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OT078	TDM for Tourists	Launch and operate a five-year program implementing the findings of the TDM for Tourism program research (conducted FY18), work with hotels, travel agents, on-line travel services to provide materials, outreach, marketing to increase the number of people travelling from more than 250 miles away who use transit to come into SF and rely on non-automotive uses while visitng SF's many sites. The program will increase the use of bicycles, walking and transit and reduce the number of drivers on City Streets who are not familiar with San Francisco, reducing collisions and safety issues in support of Vision Zero.
ОТ080	TDM: Bicycle Outreach and Education	Provide encouragement and education in support of increasing the number of people who bicycle in SF and ensure the safe use of their apparatus. Based on the results of the evaluation of the current pilot program, continue implementation of the Bicycle Outreach and Education program when the current pilot program ends in November 2018. This program aims to increase the number of people bicycling in San Francisco and ensure that they are able to do so safely, both by understanding the rules of the road and expected bicycling behavior, but also with tips on how to keep themselves safe on streets with motor vehicles, even when they have the right-of-way. The outreach aspects of the program support the goal of encouraging the use of bicycle facilities in the city and as a safety education program, this program directly supports Vision Zero.
OT086	Travel Decision Survey	Conduct bi-annual surveys to measure performance on SFMTA's Strategic Goal of greater than 50% of trips to, from, and within San Francisco be made by a sustainable mode. Initial survey will be conducted by phone and one additional methodology to baseline performance from previous strategic plan to new strategic plan performance metric. The primary focus of the survey is determining travel behavior and mode of trip, but all opportunities to further understand mode choice and circumstances that contribute to performance outcomes will be investigated. Surveys will be a statistically valid sample of people traveling to, from, and within San Francisco. In addition to reporting to the Strategic Plan and inclusion in SFMTA annual reports, survey findings will be developed into a report formatted for the general public. Data developed from each survey will be used to inform policy recommendations, report on the Strategic Plan, and validate models. Work to be performed by consultants.
OT089	ConnectSF: Transit Corridors Study	The San Francisco Transit Corridors Study will build on the ConnectSF Transportation Vision to identify and prioritize the next generation of major transit improvements for San Francisco. It will identify 5-10 transit corridors, analyze multiple data sources, identify and develop appropriate transit projects for each corridor, perform public outreach both citywide and on individual corridors, estimate project costs and benefits, prioritize projects, and recommend an implementation strategy. The final report will be adopted by the SFMTA board and endorsed by the Planning Commission and SFCTA board. The recommendations of the study will be incorporated into San Francisco's submission to the next Plan Bay Area.
ОТ090	ConnectSF: Streets and Freeways Study Project	Plan and develop the long term projects and policies necessary to achieve the Vision established under the ConnectSF Program. Changes to freeway infrastructure and operational policies will be analyzed. Changes in street use and space allocation will be identified. The public and stakeholder groups will be engaged on tradeoffs in freeway and street projects, policies, and management approaches. Planning and analysis of project and policies considered will be coordinated with the ConnectSF: Transit Corridors Study.



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OT091	Place Based Planning Program	Plan and develop studies that focus on context sensitive planning to acheive better multi- modal connections at the neighborhood scale. Planning with a focus on place and neighborhood, rather than cooridor or intersection level, will enable for better coordination and identification of community gaps and needs. Changes in street use, space allocation, and best practice designs will be identified. Plans under this program will develop and execute unique outreach strategies to assess tradeoffs in street projects and policies and identify near and long term capital projects and policies.
OT092	Mobility Planning Program	Plan and develop mobility plans and policies at the citywide and regional scale. Issues regarding the mobility needs of visitors, residents, and businesses will be analyzed and addressed. The scope of these issues will generally be at the citywide scale, but may also extend or consider regional mobility issues. Each effort under this program will develop and execute unique outreach and engagement plans. These plans will often include participation and partnership from other city departments and regional transportation operators, managers, and planners.
OT093	Capital Finance Reserve	Close out federal grant-funded projects with retentions.
OT094	Safe Routes to School Non- Infrastructure Project	Administration of San Francisco's comprehensive Safe Routes to Schools Program to enable the city to meet the program's safety goal to reduce school-related collisions by 50% and mode shift goal to reduce single family vehicle trips from the current 48% to 30%, all by 2030.
OT095	Comprehensive Employee TDM Program	Develop, pilot and launch a program for working with employees of existing employers in San Francisco. Through this program, SF will establish goals and evaluation metrics for the program; design and implement an initial employer pilot program; and then based on a successful evaluation of the pilot program, roll out an on-going employer-based information and education outreach program.
OT097	CityWide Curb Management	Develop a curb management strategy that emphasizes access for people and goods rather than private car storage, and determines how to allocate curb space both across time and physical space, where to allocate space (proximity) for different users, and how to manage curb space across physical space and time. Scope includes Phase 1: data collection/analysis and development of a policy framework, Phase 2: development of tools, procedures and strategies, informed by pilot projects, and Phase 3: implementation and evaluation.
PK000	Reserve Parking	Funding set aside within the Parking Capital Program, intended to accommodate unforeseen project budget increases and emerging project priorities.
SG000	Reserve Traffic Signals	Funding set aside within the Traffic Signals Capital Program, intended to accommodate unforeseen project budget increases and emerging project priorities.
SG011	City Coordination Opportunities: New Traffic Signals	Design and construct new signal conduits in coordination with paving, curb ramp and streetscape projects. This funding will allow the SFMTA to leverage non-signal projects, such as paving work conducted by the Department of Public Works, in order to install new signal conduits in a timely and cost-efficient manner. It is not uncommon to recommend new traffic signals to address an urgent safety issue at locations that are undergoing paving or streetscape projects. This project will ensure that the city's five-year paving moratorium is honored and that the SFMTA can implement traffic signal improvements in a timely and cost-effective manner.
SG012	Grants & Development Opportunities: New Traffic Signals	Design and install new traffic signals or flashing signal systems at up to three locations citywide annually or biannually. These signals are at locations that are typically be funded by non-Prop K sources such as Private Developments, the Mayor's Office and Board of Supervisors or unique competitive grants, including the Highway Safety Improvement Program (HSIP).



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SG015	Traffic Signal Visibility Upgrades	Upgrade selected corridors from 8-inch signal heads to 12-inch heads. Up to 12 intersections per corridor may be funded through this program. 12-inch signal heads are now the industry standard according to the Manual on Uniform Traffic Control Devices (MUTCD). This project will prioritize multi-lane, 30 MPH or higher arterials where visibility could be improved using existing signal poles. Corridors include Alemany Boulevard, Outer Mission Street, 25th Avenue, Brotherhood Way and Sunset Boulevard.
SG017	Program: Traffic Signal Hardware Replacement	Replace signal hardware such as signal controllers, signal controller cabinets, and Accessible Pedestrian Signals (APS) that is nearing the end of its useful life or install new pedestrian countdown signals and APS where it is determined that the existing conduits and poles are in satisfactory condition to support the new signals. This project will ensure the SFMTA can implement traffic signal improvements in a timely and cost- effective manner. Final locations to be determined at a later time.
SG018	Program: Traffic Sign Replacement	Replace signs that are near the end of their useful life and need to be upgraded to current retroreflective standards. Examples of signs that need replacement are advance street name signs and regulatory signs such as stop and no left-turn signs. This project will ensure that SFMTA can replace signs in a timely, cost-effective manner. Final locations will be determined.
SG051	NoMa/SoMa Signal Retiming & Upgrades	Upgrade and retime up to 345 signalized intersections in the northeast quadrant of San Francisco, which includes 251 intersections in the North of Market (NoMa) neighborhood and 94 intersections in the South of Market (SoMa) neighborhood. This project will also replace aging controllers that are approaching the end of their service life cycles. Newer controllers will provide much-improved reliability and require less maintenance. This project will also allow the agency to retire older controllers that are prone to "clock drift", causing them to lose coordination with adjacent signals on the network, which typically leads to increased delays and congestion.
SG055	Mission Bay Variable Message Signs	Design and construct two variable message signs (VMS) in the Mission Bay Area; at the intersections of Mariposa and Minnesota streets and at 16th and Missouri streets. The work includes installing conduit, poles, foundations, VMS panels, new closed-circuit television (CCTV) cameras and electrical wiring. Network communication will also be upgraded to connect the VMS to SFMTA's IT system.
SG058	Gough Street Traffic Signal Upgrades	Design and replace traffic signal hardware at as many as 19 intersections along Gough Street, both above and below ground, with new equipment. This project will install new controller, foundation, vehicle and pedestrian countdown signals, poles, conduits, wiring, detection, signal interconnect and mast-arm signals as-needed. Signal operations will also be evaluated for improved safety and visibility. Ten of the 19 locations will include full upgrades and new pedestrian countdown signals (PCS).
SG059	Contract 64: New Traffic Signals	Design and construct new traffic signals at nine locations. New traffic signals will be installed at 7th Street/Minna, 15th Street/Dolores, Alemany/Foote, Bryant/Sterling, Campus/Owens, Ellis/Webster, Highland/Mission, Leavenworth/Washington, and Mariposa/Pennsylvania.



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CIP ID	CIP Name	CIP Scope
SG060	Contract 35: Traffic Signal Modifications	Design and construct signal improvements at 23 intersections citywide to address safety or operational concerns. Improvements will likely include installing new pedestrian countdown signals, installing new mast-arm signals to improve visibility, or implementing left-turn signals or other phasing improvements as-needed per review of a collision analysis. The locations are: 6th Avenue & Irving Street, 25th Avenue & Clement Street, 25th Avenue & Anza Street, 30th Avenue & Fulton Street, 36th Avenue & Fulton Street, 19th Street & Folsom Street, 21st Street and Folsom Street, 22nd Street & Folsom Street, 23rd Street & Folsom Street, 29th Street & San Jose Avenue, 30th Street & San Jose Avenue, Anza Street & Stanyan Street, Baker Street & Hayes Street, Evans Avenue & Phelps Street, Haight Street & Steiner, Holloway Avenue & Junipero Serra Boulevard, Portola Drive & Twin Peaks Boulevard, 16th Street & Sanchez Street, Alemany Boulevard & Sickles Avenue, California Street & Larkin Street, Geneva & Naples Street, Larkin Street & Post Street, and Masonic & Page Street.
SG061	Contract 65: New Traffic Signals	Design and construct new traffic signals and/or flashing signal systems at up to six locations citywide. Locations are to be determined.
SG062	Contract 66: New Traffic Signals	Design and construct new traffic signals and/or flashing signal systems at up to six locations citywide. Locations are to be determined.
SG063	Contract 36: Traffic Signal Modifications	Design and construct signal improvements at 14 intersections citywide to address safety or operational concerns. These locations have been selected primarily due to pedestrian safety concerns. Improvements will likely include installing new pedestrian countdown signals, installing new mast-arm signals to improve visibility, and/or implementing left-turn signals or other phasing improvements as-needed per review of a collision analysis.
SG064	Great Highway Traffic Signal Upgrades	Design and replace traffic signal hardware at up to eight intersections along the Great Highway between Lincoln Way and Vicente Street, both above and below ground, with new equipment. These signals are prone to corrosion and failure due to wind, water and sun exposure. This project will replace all signal infrastructure including pedestrian countdown signals (PCS), signal heads, mast-arms, conduits, poles, controllers, and accessible pedestrian signals (APS) push buttons.
SG065	Arguello Boulevard Traffic Signal Upgrades	Design and replace traffic signal hardware at six intersections along Arguello Boulevard, both above and below ground, with new equipment. The project includes new controllers, foundations, vehicle and pedestrian countdown signals, poles, conduits, wiring, detection, signal interconnect and mast-arm signals as needed. Signal operations will also be evaluated for improved safety and visibility.
SG070	3rd Street Video Detection Replacement Phase II	Implement Phase II of IV to systematically replace the video detection technology at 67 intersections along the 3rd Street light rail corridor. Video detection is not as reliable as wireless (Sensys) detection technology and the SFMTA has had problems maintaining the video cameras. It is not uncommon for the cameras to gather dirt and debris causing false detections to the controllers, which negatively affects the T Third and general traffic. This phase will replace detection at 12 intersections.
SG071	3rd Street Video Detection Replacement Phase III	Implement Phase III of IV to systematically replace the video detection technology at 67 intersections along the 3rd Street light rail corridor. Video detection is not as reliable as wireless (Sensys) detection technology and the SFMTA has had problems maintaining the video cameras. It is not uncommon for the cameras to gather dirt and debris causing false detections to the controllers, which negatively affects the T Third and general traffic. This phase will replace detection at 20 intersections.
SG072	3rd Street Video Detection Replacement Phase IV	Implement Phase IV of IV to systematically replace the video detection technology at 67 intersections along the 3rd Street light rail corridor. Video detection is not as reliable as wireless (Sensys) detection technology and the SFMTA has had problems maintaining the video cameras. It is not uncommon for the cameras to gather dirt and debris causing false detections to the controllers, which negatively affects the T Third and general traffic. This phase will replace detection at 20 intersections.

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SG073	T Third Signal Retiming & Sign Upgrades	Update traffic signal timing along all 60 signalized intersections of the T Third surface alignment, along 3rd Street and Bayshore Boulevard. Transit Signal Priority (TSP) features will be enabled and expanded in order to minimize signal delay for transit. Additional signal timing elements will be introduced in order to reduce the rate of illegal left-turn collisions along the corridor, including new and improved Flashing Train Coming signs (FTCs) at 51 of the intersections. Lastly, pedestrian signal timing features will be enabled to enhance the pedestrian environment along the corridor.
SG089	Western Addition Area - Traffic Signal Upgrades	Design and construct pedestrian countdown signals (PCS) and/or signal visibility improvements at 24 intersections and pedestrian activated flashing beacons at 9 intersections in the Western Addition area. These locations have been selected primarily due to safety concerns. Signal improvements will include adding installing PCS, larger 12 inch signals, mast arm signals, curb ramps, and Accessible Pedestrian Signals (APS). Signal hardware improvements include new poles, conduits, detection, and signal interconnect as needed. Beacon improvements will include upgraded curb ramps and speed feedback signs at selected locations.Installation of PCS and/or signal visibility improvements include the following locations: Broderick/Turk, Divisadero/Turk, Divisadero/O'Farrell, Divisadero/Golden Gate, Divisadero/McAllister, Divisadero/Fulton, Scott/Turk, Pierce/Turk, Steiner/Turk, Fillmore/Turk, Laguna/Turk, Golden Gate/Scott, Golden Gate/Pierce, Golden Gate/Steiner, Fillmore/Golden Gate, Golden Gate/Laguna, Fillmore/Hayes, Fillmore/Fulton, Fillmore/McAllister, Eddy/Fillmore, Laguna/Sutter, Fulton/Laguna, Fulton/Steiner, Buchanan/Eddy, Buchanan/Turk, Buchanan/Golden Gate, Buchanan/McAllister, Buchanan/Fulton, McAllister/Octavia, Golden Gate/Octavia, Octavia/Turk, Ellis/Fillmore, and Hayes/Webster.
SG093	Alemany Boulevard Pavement Renovation - Conduits	Install traffic signal conduits at Alemany and Rousseau as part of a paving project to comply with the paving moratorium and reduce future construction impacts to neighborhood from new signals at project location. The signals at Alemany and Rousseau will likely be part of a future new signal contract.
SG094		Design, provide construction support, and procure related signal equipment for new traffic signals at the intersection of 27th Street and Guerrero Street. CPMC will retain a contractor to construct the signal improvements under the oversight of the SFMTA and SFPW. CPMC's \$200,000 contribution will cover 100% of the design & construction support costs. Subject to the conditions of a Development Agreement between California Pacific Medical Center (CPMC) and the City dated August 8, 2013 and subsequently revised by letter from the City to CPMC dated January 27, 2016; CPMC is obligated to fund, construct, and install this signal. In fulfilling this obligation, CPMC will contribute \$200,000 to the SFMTA for the SFMTA's cost. No City funding will be used for this project.
ST000	Reserve Streets	Funding set aside within the Streets Capital Program, intended to accommodate unforeseen project budget increases and emerging project priorities.
ST026	Program: Bicycle Traffic Signal Upgrades	This project will design and construct traffic signal modifications to support bicycle safety and operations at intersections citywide. Typical installations could include exclusive bicycle phases, leading bicycle intervals, and bicycle turn movements at complex intersections. Upgrading "mixing zones" on protected bikeways to national best practices and improvements to signals on the high-injury network will be prioritized. Examples project locations could include 8th/Howard, 8th/Harrison, 17th/Church and 9th/Division.
ST028		Annual program that evaluates community-driven applications for traffic calming on various residential blocks across San Francisco. After evaluating, the program will design and construct traffic calming projects on those blocks that have been accepted into the Traffic Calming Program based on criteria that includes speeds, collisions, volumes, and adjacent land uses. A total of 80-100 applications are typically received by the SFMTA each year, and approximately 45-55 projects are typically constructed annually.

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CIP ID	CIP Name	CIP Scope
ST029	Program: Residential Streets Safety Spot Improvements	Annual program to implement spot improvements related to traffic safety and comfort on residential streets in San Francisco. Specific locations will be identified primarily through crash analysis and requests from stakeholders and elected officials. Potential improvements include: striping and signing changes, traffic calming installation, addition/modification of raised elements such as safe hit posts and concrete islands, and daylighting.
ST030	Program: Annual Traffic Calming Removal and Replacement	Annually fund the costs associated with the removal and replacement of some traffic calming devices across the City due to resident request and paving and utility projects. Covers the annual costs for SFMTA staff time and SFPW material and labor associated with the removal and replacement of legacy speed bumps with modern speed humps. It also covers the restoration of additional speed humps removed by older paving and utility projects. Locations will vary based on requests from SF residents. The funds are intended to cover one construction year, with additional time scheduled for design and project closeout. The program can deliver restoration and replacement of traffic calming devices on 3-5 blocks.
ST031	Program: Citywide Neighborway Design and Implementation	Plan, design and construct improvements to create a safe and accessible network of Neighborways throughout SF. Neighborways are local streets with low vehicle volumes and low speeds designed to facilitate safe and comfortable connections to local destinations for people walking and biking; and are a cost-effective tool for making bicycling accessible to a wider range of the population. The program allows the SFMTA to be responsive to community priorities and more nimbly take advantage of coordination opportunities (e.g., green infrastructure projects). Community outreach and engagement activities will be conducted for individual corridors and could include public open houses, pop-up events, community walkthroughs, and online surveys. Following community outreach, the project team will follow through with conceptual design, legislation, and implementation of proposed measures. Example streets could include 26th St, Anza St, Steiner St, Phelps St, and 34th Ave.
ST032	Program: Mission Streetscape Plan Implementation	
ST036	Upgrades	Annual program to design and construct bikeway improvements targeted to reduce injury collisions. The project will identify locations and treatments based on the recommendations from the Systemic Safety Analysis Report Program (SSARP) grant received by the SFMTA in 2016. SSARP identifies prevalent crash types and risk factors for bicycle crashes in San Francisco, allowing SFMTA to proactively identify sites for treatment prior to a crash pattern emerging. Specific crash types addressed by this program include dooring, right-hook and left-hook collisions, and stop-violations at unsignalized intersections.
ST037	Program: Speed Radar Sign Installation	Annual program to install up to four Speed Radar Signs (e.g., Vehicle Speed Feedback Signs) at various locations in San Francisco per year. The approval and installation of a Speed Radar Sign will follow agency policies and processes that provide clear guidance on location selection, placement guidelines and technical specifications.
ST038	Program: Community Response Implementation	Legislate, design, and implement transportation improvements that increase safety and livability in San Francisco's neighborhoods. The Community Response Team will work with supervisors' offices to determine feasible treatments at locations through the 11 districts. Improvements may include daylighting, parking changes, crosswalks, signage, painted safety zones, and other bike and pedestrian quick-and-effective improvements.

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CIP ID	CIP Name	CIP Scope
ST039	Program: Streets Coordination Improvements	This project provides funding on an annual basis to coordinate and implement projects to improve walking, bicycling, traffic calming, and safety within school zones. Specific locations will be identified primarily through the Notice of Intent (NOI) process, but also by participating with various committees that plan paving, curb ramp, and other construction-related work. Improvements include but are not limited to: striping and signing changes, signal hardware or timing modifications, addition/modification of raised elements like safe hit posts and concrete islands/bulb-outs, etc. This funding would support the installation of measures with an estimated 10-15 construction projects annually. This project will also formalize the method for analyzing and determining locations for traffic calming treatments within school zones.
ST040	Program: WalkFirst Quick & Effective Pedestrian Safety	Continue to implement paint and signal timing changes on all intersections on the High- Injury Corridors. Potential countermeasures include the following: advanced stop or yield lines, continental crosswalks, leading pedestrian intervals or other signal timing changes, red zones, or turn prohibitions. The goal of this project will be to have evaluated every intersection on the High-Injury corridor for near-term safety
ST041	Program: Bike Facility Maintenance: Delineators & Green Pavement	improvements within the CIP time frame. Identify locations and replace worn out or missing delineators and green paint on bikeways in San Francisco on an annual basis. Maintenance of green and/or separated bikeways is an important component of ensuring a safe and attractive bicycle network in San Francisco. The SFMTA will determine a list of priority locations for facility maintenance by soliciting locations from key stakeholders such as the Bicycle Advisory Committee and SF Bicycle Coalition. Staff will field check requests and examine other locations where green pavement and safe-hit posts exist to determine the locations that are in most need of replacement.
ST042	Program: Traffic Improvements Around Schools	Design and implement traffic calming projects and street safety measures within school zones. Treatments will likely include high-visibility crosswalks, school signage, speed limit signs and traffic calming elements such as speed humps. SFMTA staff will work with the San Francisco Unified School District (SFUSD) and community members to implement appropriate treatments.
ST043	Program: Proactive Local Traffic Calming Track	Implement traffic calming measures in residential locations identified by SFMTA staff. Criteria for selecting projects may include: projects that increase geographic equity; projects with the potential to increase walking and bicycling; and projects that improve safety near schools. SFMTA staff will finalize criteria and develop recommendations for projects, and will then conduct outreach, design, and construct traffic calming measures. Measures include but are not limited to speed humps, speed cushions, traffic islands, traffic diverters, signage and striping, traffic circles, chokers, chicanes, etc.
ST045	Program: Citywide Quick and Effective Bike Improvements	Implement quick and effective safety and comfort measures such as two-stage turn boxes, intersection guidance, buffered bike lanes, protected bike lanes, painted safety zones, upgraded traffic signal hardware, and updated traffic signal timing. Improvements for bicycle and pedestrian safety and comfort measures are identified through a bicycle spot improvement workshop, staff recommendations, and requests from the public (e.g., 311) and elected officials. Locations targeted for improvements include: Holloway Avenue between 19th Avenue and Lee Avenue, Stanyan Street/John F. Kennedy Drive, John Muir Drive/Skyline Boulevard, Lake Merced Boulevard, Laguna Honda Boulevard and Clarendon Avenue, Portola Drive between West Portal Avenue and Clipper Street, and 17th Street between Church Street and Castro Street.
ST047	Program: Long-term Bike Parking	This project will construct long-term bicycle parking facilities at 2 locations: mid-Market and West Portal. Capital costs could include facility purchase or entering into a long- term lease of commercial space and funding tenant improvements. Long-term bike parking facilities will be co-located with other services (eg, bike repair, coffee shop) to minimize operating expenses and maximize convenience for users.



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CIP ID	CIP Name	CIP Scope
07040	Dragram: Chart tarm Dike	Annual program to site, legislate and install short term his sale real/s throughout Con
ST048	Program: Short-term Bike Parking	Annual program to site, legislate and install short-term bicycle racks throughout San Francisco. Project includes responding to requests for racks and proactive siting of racks in under-served locations. The project will meet or exceed the SFMTA's goal of installing at least 600 new bicycle racks per year. Installation will be performed by SFMTA Shops using existing inventory of racks.
ST051	4th Street Pedestrian Bulb- outs	Implement phase one of improvements at the intersections of 4th/Bryant and 4th/Harrison, coordinating with Central Subway construction. The bulbouts at the SE corner of 4th/ Bryant, NE corner of 4th/ Harrison, and NW corner of 4th/ Harrison will be packaged for construction through the As-Needed Muni Forward contract (not to exceed \$600,000.) These bulbouts will improve pedestrian safety by providing pedestrian space through sidewalk extensions, and decrease the overall crossing distance.
ST052	5th Street Corridor Improvements	Install dedicated bicycle facilities in both directions on 5th Street between Mission and Townsend Streets. The project will upgrade the existing green-back sharrows with increased bicycle separation, which may include cycle tracks. The project will be ready for implementation with the completion of the Central Subway and the relocation of Muni service to 4th Street.
ST053	6th Street Streetscape	Improve street safety and create a more inviting pedestrian environment on 6th Street from Market Street to Brannan Street by removing one lane of vehicle travel in each direction. A broad scope of streetscape improvements will be implemented, including sidewalk widening, pedestrian safety bulb-outs, new traffic signals, improved crosswalks, landscaping, and pedestrian-scale lighting. Project will also remove peak- hour towaway lanes that restrict parking from 7 to 9 a.m. and 3 to 7 p.m. and restore full- time parking lanes between Folsom and Brannan Streets.
ST057	Bay Area Bike Share Expansion	Review legislation and permitting of station locations for expansion of Bay Area Bike Share from a 35-station pilot to a full citywide system with up to 450 stations. Project also includes ongoing coordination and oversight of program operations after full deployment. Capital equipment will be provided by the bike share operator; site design, engineering and outreach will be performed by contractors and paid for by the operator.
ST058	Cesar Chavez/Bayshore/Potrero Intersection Improvements Phase 1	Plan improvements to different segments of the Hairball Intersection Improvement Plan. The area where Cesar Chavez St., Potrero Ave. and Bayshore Blvd. meet underneath the Highway-101 overpass is known as "The Hairball." Initiate some immediate near term changes to the southeastern entry of the Hairball on Jerrold Avenue and Bayshore Boulevard. The near-term upgrades include a new curbside bike lane installed on westbound Jerrold Ave. from Barneveld Ave. to Bayshore Blvd., and a new bike lane installed adjacent to the existing parking on eastbound Jerrold Ave. from Bayshore Blvd. to Barneveld Ave. The existing northbound bike lane on northbound Bayshore Blvd. from Jerrold Ave. to Marin St. will also be widened to include a buffer with delineators protecting the bike lane from vehicle traffic. Lastly, intersection paint improvements are planned at Barneveld Ave. and Jerrold Ave., Jerrold Ave. and Bayshore Blvd., and Bayshore Blvd. and Marin St.
ST059	Cesar Chavez/Bayshore/Potrero Intersection Improvements Phase 2	In 2012, the San Francisco Planning Department published the Cesar Chavez East Community Design Plan, which divided the Hairball into 15 segments and recommended safety improvements. Phase 1 of the Cesar Chavez/Bayshore/Potrero Intersection Improvements project advances four of the key segments identified in the plan through implementation. Phase 2 of the Cesar Chavez/Bayshore/Potrero Intersection Improvements project will advance additional high priority segments identified in the plan through planning and preliminary engineering.

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CIP ID	CIP Name	CIP Scope
ST061	20th Avenue Bicycle Strategy	Plan, design, and construct upgrades or expansions to the bikeway network on 20th Avenue from Lincoln Way to Wawona Street. Staff will first investigate the corridor and relevant parallel or intersecting routes. Up to two community meetings will be held to inform and solicit feedback on the project, and additional specialized outreach to merchants and commercial stakeholders will take place. Mailers, direct phone contact, and web postings will also be used to alert residents, merchants and advocates. The project will then move into detailed design and construction.
ST065	Arguello Boulevard Bicycle Strategy	Plan, design, and construct upgrades or expansions to improve safety for people biking and walking on Arguello Boulevard from Fulton Street to West Pacific Avenue. The project team held two community meetings, and both near- and long-term improvements were approved by the SFMTA Board in August 2016 and January 2017, respectively. Near-term painted improvements including buffer zones on the existing bike lanes, new painted medians, and painted pedestrian islands were installed in September 2016. Arguello Boulevard will be repaved, at which point the SFMTA will install new concrete bulbouts, pedestrian islands, traffic signals, medians, and additional painted upgrades to the roadway.
ST066	Excelsior Neighborhood Traffic Calming	Plan, design, and construct upgrades to selected streets on bikeway and Green Connections network corridors. Corridors include: Alemany Boulevard/Cayuga Avenue from Cayuga Playground to Lyell Street; Brazil, Persia, or Russia Avenue from Mission Street to Dublin Street; Naples Street from Silver Avenue to Brunswick Street; and Brunswick Street from Naples Street to Acton Street. Staff will first interview internal and external stakeholders. Then, in collaboration with the community, staff will investigate the corridors and relevant parallel or intersecting routes. Up to 9 community meetings will be held to collaboratively plan street and sidewalk improvements, and additional specialized outreach to the community will take place at existing local events or venues. Mailers, posters, and web postings will also be used to alert residents, merchants, and advocates of collaborative planning opportunities.
ST067	Bicycle Strategy	Plan, design, and construct upgrades or expansions to the bikeway network on Battery Street from Market Street to the Embarcadero, Sansome Street from Market Street to the Embarcadero, Montgomery Street from Market Street to Columbus Avenue, and Kearny Street from Market Street to Columbus Avenue. Staff will first investigate the corridor and relevant parallel or intersecting routes. Up to 3 community meetings will be held to inform and solicit feedback on the project, and additional specialized outreach to merchants and commercial stakeholders will take place. Mailers, direct phone contact, and web postings will also be used to alert residents, merchants and advocates. The project will then move into detailed design and construction.
ST071	Page Street Neighborway (Webster to Stanyan)	Plan, design, and construct upgrades or expansions to the bikeway network on Page Street from Market Street to Stanyan Street. Staff will first investigate the corridor and relevant parallel or intersecting routes. Up to three community meetings will be held to inform and solicit feedback on the project, and additional specialized outreach to merchants and commercial stakeholders will take place. Mailers, direct phone contact, and web postings will also be used to alert residents, merchants and advocates. The project will then move into detailed design and construction.
ST074	Townsend Street Bicycle Strategy	Plan, design, and construct upgrades or expansions to the bikeway network on Townsend Street from 8th Street to the Embarcadero, and 3rd Street from Townsend to the Lefty O'Doul Bridge. Staff will first investigate the corridor and relevant parallel or intersecting routes. Up to three community meetings will be held to inform and solicit feedback on the project, and additional specialized outreach to merchants and commercial stakeholders will take place. Mailers, direct phone contact, and web postings will also be used to alert residents, merchants and advocates. The project will then move into detailed design and construction.

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ST076	Central SoMa Plan	Develop an implementation plan for transportation projects in the Central SoMA Area Plan. Locations under study include 4th Street (Market Street to Harrison Street), 3rd Street (Market Street to Townsend Street), Harrison Street (2nd Street to 6th Street), Bryant Street (2nd Street to 6th Street), and Brannan Street (2nd Street to 6th Street). Potential projects may include road diets, parking modifications, sidewalk widening, midblock crossings, bike facilities, transit-only lanes, and other safety treatments and transportation enhancements.
ST077	Civic Center Public Realm Plan	Implement recommended improvements in the City Hall/Civic Center area under the direction of the San Francisco Planning Department. With input gathered through a public engagement process, multiple design options will be generated including recommendations for roadway improvements. SFMTA will provide input on street design and roadway changes that correlate with the circulation and collision patterns of the area, as well as implement a series of near-term improvements based on analysis of key conflict areas and opportunities for quick and effective safety improvements.
ST079	Embarcadero Enhancement Project	Complete outreach, conceptual & detailed design, environmental review, and construction for a protected (Class IV) bikeway along the Embarcadero from Powell Street to AT&T Park (3.2 miles). Elements of the project may include sidewalk widening and narrowing, new signals & signal timing changes, traffic lane modifications, turn restrictions, and an enhanced one-way or two-way bikeway.
ST080	Folsom-Howard Streetscape	Develop conceptual designs, conduct public outreach, develop detail design plans and initiate construction of streetscape improvements on Folsom Street between The Embarcadero and 11th Street. Streetscape improvements may include: improved bicycle facilities, new corner bulbs and bus bulbs at intersections to reduce pedestrian crossing distances and improve Muni service, transit-only lanes, new signals at midblock locations or alleyways, traffic circulation changes, and construction of raised crosswalks at alleyways. Additional details are outlined in the Central SoMa Environmental Impact Report (EIR).
ST084	Lombard Street Streetscape	Design and construct traffic calming and pedestrian safety treatments at all intersections between Richardson Avenue/Francisco Street and Lombard Street/Franklin Street. Proposed treatments include: daylighting, leading pedestrian bulbs, advanced stop bars, continental crosswalks, upgrading signal conduit, bulb-outs, pedestrian islands, transit bulbs, and/or removal of actuated pedestrian buttons. This work is being coordinated with the San Francisco Public Utilities Commission (SFPUC) and the California Department of Transportation (Caltrans).
ST087	Octavia Boulevard Enhancements Phase II	Design and construct traffic calming and pedestrian safety improvements on Octavia Boulevard between Market and Hayes Streets, as well as Oak and Fell streets between Octavia Boulevard and Gough Street. Potential improvements include sidewalk widening, curb bulbs, new/revised medians, enhanced bicycle wayfinding, traffic diverter(s) and road closure(s) coordinated with adjacent parcel development and a trial closure project at Patricia's Green. Lane reductions with parking revisions and bulb-outs on Oak Street and Fell Street (Octavia Street to Gough Street) are also included.
ST088	Page Street Neighborway (Market to Webster)	Complete detailed design and construction for "Green Connections" improvements on Page Street between Market and Webster streets. Final design may include the following: pedestrian medians, sidewalk bulb-outs, landscaping/green infrastructure, traffic diversion/circulation changes, enhanced bicycle facilities, and accessibility improvements.
ST094	Taylor Street Streetscape	Working with Taylor Street residents, workers, local community groups and advocacy organizations, develop a new vision for Taylor Street that meets the city's Vision Zero goals of ending traffic fatalities for all road users. Solutions developed through this effort will immediately enter the engineering design phase to make the project ready for full implementation and will serve as a model on how to end traffic-related fatalities through streetscape improvements. The project will likely extend from Market Street to Sutter Street.

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CIP ID	CIP Name	CIP Scope
ST097	Upper Market Pedestrian Improvements	Design and construct pedestrian safety improvements along the Upper Market Street corridor from Castro Street to Octavia Boulevard. Specific measures have been
		identified by the Market/Octavia Citizens Advisory Committee (CAC) and include the following: installation of curb bulbs; Muni boarding island upgrades; bike upgrades including a parking-protected lane, buffers, green paint and green-backed sharrows; continental crosswalks; painted safety zones; signal timing change; and a circulation
07000		study.
ST098	WalkFirst Corridor	Plan and design pedestrian safety improvements on a pedestrian high-injury corridor as identified by the WalkFirst Strategy. Project will be geared towards streets that are determined to have corridor collision patterns. Solutions will require significant community planning and input and will be capital intensive.
ST100	Washington/Trenton Bulb-out	Construct bulb-out and install flashing beacons on Washington Street at Trenton Street.
	& Beacons	This represents the final element of the Chinatown Safe Routes to School (SRTS) project; implementation was delayed due to Central Subway construction impacts. The SFMTA will conduct limited outreach to remind stakeholders (Chinatown Community
		Development Center and Gordon Lau Elementary School) about the history of this project.
ST101	Western Addition Community Based Transportation Improvements	Design and construct traffic calming measures, painted safety zones and other safety improvements in response to community transportation priorities generated during the Western Addition Community Based Transportation Plan, an extensive nine month
ST105	Application Decod Decidential	planning and outreach process. Accept and review community-based traffic calming applications to select and then
51105	Application-Based Residential Street Traffic Calming FY17/18	design and construct traffic calming projects on residential streets citywide. Applications are evaluated based on criteria such as speeds, collisions, and volumes. SFMTA
		reviews and evaluates applications, informs applicants of whether or not their requested location will receive a traffic calming project the following year, and asks residents on accepted blocks to vote. Fifty percent of returned ballots must be in favor of the measure
07445		in order to move forward into design and construction.
ST115	Permanent Painted Safety Zone Conversion	Design permanent bulb-outs for the nearly 60 WalkFirst painted safety zones (PSZs) that have been implemented and analyze to determine which of those should be
		converted to permanent bulb-outs. The SFMTA anticipates that it will convert up to 20 of
		the PSZs, and only the highest priority PSZs with collision patterns will be recommended for permanent bulb-outs.
ST120	Brannan Street Safety Project	Install safety improvements on Brannan Street from The Embarcadero to Division Street. The new roadway configuration will be installed in conjunction with SFPW repaving project 2733J. The Brannan Street Safety Project will generally change the
		street from the existing four lane configuration to three lanes plus bike lanes, crosswalk
		upgrades and new right-turn pockets. Brannan Street is on the Vision Zero High-Injury Network, and lane reductions are a proven tool to improve the safety of all roadway
		users. Environmentally review and clear the proposed changes. Conduct public outreach
		meetings as needed. Funding covers costs beyond resurfacing project scope, including SFMTA construction support, signal modifications, meter relocations, street striping changes, and sign installation.
ST122	Rectangular Rapid Flashing Beacons	Project includes planning, design and construction of Rectangular Rapid Flashing Beacons (RRFB). RRFBs purchased through a separate funding source.
ST136	Mariposa Bike Connection	Plan and develop conceptual designs and cost estimates for a bicycle bridge paralleling the existing Mariposa Street overpass that travels under I-280 and over the Caltrain tracks, creating a safe and direct bicycle connection along the Mariposa corridor between Pennsylvania Street and Indiana Street and improving east-west bicycle connection between the Potrero Hill and Dogpatch neighborhoods on either side of I- 280.
ST140	Mission & Trumbull Street Intersection Upgrades	Design and construct an intersection improvement at Mission Street and Trumbull Streets by adding sidewalk extensions into Trumbull Street. Traffic signals and curb ramps at the intersection will be upgraded as part of this work, as recommended by the Better Streets Plan.

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CIP ID	CIP Name	CIP Scope
ST142	Alemany Interchange Improvement Project - Phase 1	Implement Phase 1 recommendations from the Alemany Interchange Improvement Study, including a road diet of reducing vehicle travel lanes from six to four, a buffered bike lane, painted bulb outs, a painted left-turn bike box, painted conflict markers, and upgraded sharrows. This project will improve multimodal accessibility, connectivity, and safety at this complex interchange.
ST145	7th & 8th Streets South of Folsom Streetscape Project	Deliver buffered bike lanes, new striping, sidewalk bulbs, and bus boarding islands on 7th and 8th Streets between Folsom and Townsend Streets in order to complement the existing streetscape project between Market and Harrison Streets. The preliminary engineering phase will refine conceptual designs for the corridor through meetings and outreach with internal and external stakeholders, in addition to updating the project?s environmental documentation.
ST149	Folsom Street & Howard Street Streetscape Near Term Improvements	Implement a parking-protected bike lane on Howard Street from 6th Street to 11th Street and on Folsom Street from 11th Street to 4th Street. The improvements will also include transit boarding islands at six existing bus stops, concrete gutter spot improvements to smooth out the riding service for bicyclists, and parking and loading changes. The near term improvements will inform the final design for the larger Folsom-Howard Streetscape Project and will realize some of the bicycle, pedestrian, and transit improvements on a quicker timeline compared to the larger streetscape project.
ST155	Move Western Addition Mid- Term Improvements	Implement the Near Term improvements identified in the Western Addition Community Based Transportation Plan (WACBTP). With close collaboration between MTA Planning and Livable Streets, this effort includes community reporting for recommended improvements at specific intersections. Improvements will include signal, paint and parking modifications at specified locations for continental crosswalks, daylighting, advanced limit lines and leading pedestrian intervals.
ST157	Sloat Skyline Alternatives Analysis	Configure the intersection of Sloat Boulevard/Skyline Boulevard/39th Avenue to improve operations and safety for pedestrians, cyclists, transit, and vehicular traffic, after evaluating several alternative options. Alternatives under consideration include 1) low-cost alternative; 2) roundabout reconfiguration; and 3) signalization reconfiguration. Stakeholder engagement will take a two-pronged approach. Initial engagement will inform the assessment of existing conditions with an understanding of community-identified assets and challenges related to the function of the intersection. The post-study outreach will communicate the findings of the study, assessment of findings related to initial outreach and proposed recommendations. The scope of work includes data collection of existing conditions, stakeholder outreach, existing conditions and literature review report, identifying design alternatives and preparing a technical report and intersection control evaluation (ICE), and a recommended preferred alternative.
ST158	Mission Street Excelsior	Study, plan and propose improvements for Mission Street between Geneva Avenue and Alemany Boulevard, and Geneva Avenue between Mission and Moscow streets to 1) provide safer, more comfortable walking and biking environments on Mission and Geneva, with upgrades along city guidelines, as well as programmatic and appropriate counter measures; 2) provide a safe, more predictable driving environment on Mission and Geneva, with appropriate measures; and 3) improve transit reliability for the Rapid network buses on Mission and Geneva.
		Planning phase will fund a multi-disciplinary team from Livable Streets, Transit Engineering, and Transit Planning, and will also provide initial funds for Public Works project management and landscape architecture support. Project will be coordinated with the Planning Department-led Outer Mission/Excelsior Strategy. Project will build on the prior project that focused on Geneva and on the initial plans recommended for Mission Street in the Transit Effectiveness Project.

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ST165	Valencia Street Bikeway Implementation Plan	Develop a Valencia Street Bikeway for Valencia Street between Market Street and Cesar Chavez Street. The study will conduct analysis and stakeholder outreach to identify issues and constraints for the various segments of the corridor. The resulting implementation plan will include near- and long-term recommendations for each segment of Valencia Street. Potential recommendations include, but are not limited to, protected bike lanes, parking and loading changes, and enforcement needs. Outreach will include merchants, TNCs, neighborhood groups and roadway users.
ST169	Terry Francois Boulevard Bikeway Improvements	Design, plan, and implement a two-way separated bikeway on Terry Francois Boulevard and the Third Street Bridge, linking waterfront access as part of the San Francisco Parks Alliance's Blue Greenway network. Located near the developing Mission Bay neighborhood, the project scope involves Terry Francois Boulevard, between Third Street and Illinois Street/Mariposa Street, as well as the Third Street Bridge between Terry Francois Boulevard and Berry Street. The completed bikeway will be approximately 1.1 miles.
ST172	Alemany Boulevard Buffered Bike Lane	Implement 1.6 Iane miles of buffered bike facilities on Alemany Boulevard between Lawrence Avenue and Seneca Avenue. San Francisco Public Works (SFPW) is installing buffered bikeways as part of an upcoming paving project on Alemany Boulevard between Congdon Street and Seneca Avenue. Capitalizing on follow-the- paving coordination and improving bike network connectivity, the SFMTA project will implement a continuation of the buffered bikeway by extending the facility .8 miles past the paving project limits, from Seneca to Lawrence Avenue. The stretch of Alemany from Seneca to Lawrence will not be paved, but currently lacks a buffered bikeway facility. SFMTA will coordinate with SFPW by providing the new striping design featuring the buffered bike lane.
ST177	13th St Protected Bike Lanes	Plan, design, and construct upgrades to protected bikeways on 13th Street from Folsom Street to Valencia Street, following the recommendations of the SF Planning Market Street Hub Plan. The project provides an important connection from Valencia Street to the existing protected bike lanes on 13th St, substantial signal modifications and key pedestrian safety elements. Long-term elements of the Hub Master Plan design, including sidewalk widening, re-paving, lighting and green infrastructure are not funded as part of this project.
ST179	The Embarcadero at Pier 39 / Fisherman's Wharf - Complete Street Improvements	Conduct comprehensive traffic assessment, public outreach, and environmental review for Complete Street improvements to The Embarcadero corridor between North Point and Jefferson streets, which will include consideration of a protected bikeway as well as potential circulation and curbspace management changes to the Jefferson, Powell, and Beach intersections as well as adjacent related roadway approaches. The SFMTA and Port of San Francisco will work collaboratively with area stakeholders to identify a preferred design and circulation scheme that will move into the detailed design and construction phases.
ST180	The Embarcadero SB Bike Lane Spot Improvements	Project will address a major gap in the bicycle network along the Embarcadero southbound between Broadway and Howard Streets. The current parking configuration and other constraints preclude striping of permanent bicycle lanes and other safety improvements for cyclists along this High Injury Corridor. Project includes targeted outreach and additional engineering analysis to confirm original scope, with consideration of pedestrian and bicycle safety improvements at Washington Street, which is the top collision location for non-motorized modes along the Embarcadero. Project design will be coordinated with the SF Port's Seawall Resiliency Program and Better Market Street project as necessary.
ST181	Lake Merced Pedestrian Safety	Improve pedestrian crossings across Lake Merced Boulevard between Font and Sunset. This segment is part of the High Injury Network, and would improve access to a major recreational site. Scope of planning phase will include community outreach to understand current walking patterns and barriers, as well as collision and traffic patterns. Recommendations from the planning phase could include new traffic signals or beacons, enhanced crosswalks, and pedestrian visibility improvements.

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CIP ID	CIP Name	CIP Scope
ST183	Ocean Avenue Safety Improvements Otis Street Improvement - Hub Master Plan	 Design and construct multimodal safety improvements on Ocean Avenue from Phelan St to San Jose Ave, based on recommendations from the SF Planning Ocean Avenue Corridor Master Plan. The project will leverage the recent streetscape improvements constructed on Ocean Avenue west of Phelan, and will provide improved connections to Balboa Park BART station along a designated high-injury corridor. Project implementation is complex, and includes substantial coordination with City College, Caltrans and Muni operations. Project will explore complete street improvements on Otis Street from South Van Ness Avenue to 13th Street. Between South Van Ness Avenue and Gough Street, project will explore a transit-only lane, a protected bikeway, and wider sidewalks, and pedestrian safety improvements at South Van Ness and Mission. Between Gough and 13th Streets project will explore a northbound travel lane to improve circulation and access from the Mission and the Central Freeway to Market and Franklin Streets. This project builds on
ST187	Upper Market Street Safety Project Curb Management	 recommendations included in the Hub Public Realm Plan. Plan, design, and implement curb management strategies on the Upper Market corridor (Market Street between Castro Street and Octavia Boulevard, including adjacent facing blocks of intersecting streets) to improve safety and convenience for people parking, loading and biking. Efficient, demand-responsive curb management reduces the
		hazards of double parking and meets the needs of residents, businesses, and the general public as they vary from block to block on the corridor. Curb management strategies include increasing the number of spaces for commercial loading, passenger loading, accessible parking, short-term parking, and the overall number of managed parking spaces. Other strategies include modifying time limits, hours of operation, and pricing for metered spaces. SFMTA will conduct at least two open houses and targeted door-to-door outreach within the project area to solicit specific feedback on proposed curb management strategies.
ST188	Valencia Bikeway Curb Management Plan	Conduct technical analysis and outreach on the Valencia Corridor from McCoppin to Cesar Chavez to recommend and implement curb regulation changes. Reallocate curb space to reduce demand for double-parking and/or illegal loading along the corridor. This may include include increasing white and/or yellow zones, or renovating existing color curbs to better match existing demand patterns. Project may include pavement marking enhancements to reduce parking in the bike lane. Will be done with SFMTA Shop labor. The project will be broken into segment areas, evaluating initial areas befor planning subsequent segments.
ST192	Monterey Street Safety Improvements	Plan, design and construct safety improvements to Monterey St, which is on the City's High Injury Network and serves as an important bicycle connection. The project will use an extensive community-based process to determine context-appropriate safety treatments for the corridor and may include both near-term and long-term recommendations. The project will implement near-term improvements.
ST193	Beale Street Bikeway	Plan, design, and construct a protected north-south bikeway that connects to or passes near the new Transbay Transit Center. The project will improve cycling comfort and safety while addressing transit issues and accessibility needs. Work may include the following: street markings, signs, raised elements along the bikeway, signal modifications or retiming, and curb ramps.
ST195	Bayview CBTP	Design and implement safety improvements recommended as part of the Bayview

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CIP ID	CIP Name	CIP Scope
ST196	Cesar Chavez East Bike and Pedestrian Improvement	Fund construction phase of improvements to southwestern entrance to the bicycle/pedestrian paths underneath the Highway 101 overpass where Cesar Chavez, Potrero Avenue, and Bayshore Blvd intersect (Segments F and G). Segment F is a shared pedestrian path through an undeveloped cityowned lot. Segment G is an eastbound pathway that travels down a steep grade under the Highway 101 southbound on-ramp. The project will create a safe pathway for bikes and pedestrians that minimizes conflict between users. Segments will be widened, regraded with proper drainage, with adequate clearance at the highway overpass and landscaped buffers between path and roadway. Segments F and G are led by SFPW; improvements will be managed and implemented by SFPW.
ST197	Bayview CBTP Near Term Implementation	The Bayview Community Based Transportation Plan is a two-year planning process, partnering with the community to determine and prioritize transportation infrastructure investment throughout the Bayview community. The project boundaries roughly encompass the Bayview district, excluding the Bayview Shipyards and Candlestick redevelopment areas. The plan process will include a high level of collaboration with the community and community-based organizations to identify, design, and prioritize investments that reflect community values and needs. The plan will result in transportation infrastructue investment, and will not include transit service changes or programmatic funding recommendations.
ST199	22nd Street Caltrain Station E- Lockers	Install electronic bicycle lockers (e-lockers) to accommodate up to 40 bicycles for long- term bicycle parking needs on Iowa Street at 22nd Street. This location and facility recommendation is supported by the SFMTA's 2013 Strategy for Long-Term Bicycle Parking, and Caltrain's 2014 Bicycle Access & Parking and 2017 Bicycle Parking Management Plans. This location is directly across from the 22nd Street Station entrance and a half a block from Muni's Woods Division. There are also Muni transit connections and neighborhood services within walking distance from Iowa Street. Associated changes to the street would include thermo-striping in the parking bay to outline the e-locker footprints, as well as flexible delineators where appropriate. There is no excavation associated with this project.
ST200	Alemany Interchange Improvement Project - Phase 2	Install a road diet with new curbside, delineator-protected bikeways on Alemany Boulevard through the US-101/I-280 interchange, and a new southbound buffered bike lane on San Bruno Avenue from Alemany Boulevard to Silver Avenue. Includes modifying shoulder striping, crosswalk upgrades, green conflict-zone treatments and two- stage bike turn queue boxes and a new ~80 foot long bike path to calm traffic and improve safety for all users. Requires signal timing adjustments and detector loop relocations at Caltrans signals and encroachment permit from Caltrans.
ST201	Geneva Avenue Traffic Signals	This project will add new traffic signals at the intersections of Geneva/London and Geneva/Athens. It will also add vehicle and pedestrian signal improvements at Geneva/Naples, Geneva/Paris, and Geneva/Moscow. Signal improvements will likely include the installation of new pedestrian countdown signals, new accessible pedestrian signals, and new mast arm signals to improve signal visibility.
ST203	Annual Traffic Calming Removal and Replacement	Each year the Traffic Calming Program must fund the costs associated with the removal and replacement of traffic calming devices across the city due to resident request and paving and utility projects. This fund request covers the annual costs for SFMTA staff time and SFPW material and labor associated with the removal and replacement of legacy speed bumps with modern speed humps. It also covers the restoration of additional speed humps removed by paving and utility projects. Locations will vary based on requests from residents of the City of San Francisco, and the funds are intended to cover one annum.

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CIP ID	CIP Name	CIP Scope
OT096	Play Streets FY19/20	The Play Streets program temporarily closes city streets to traffic to provide a safe place for children, their families and neighbors to come together, play and get active. Play Streets promote walking and biking as safe, accessible, and fun modes of transportation both through education and by allowing people to become comfortable walking and playing in and near the street. Play Streets expand access to the public realm and make San Francisco a more inviting city for families. This supports a 5-year extension of the Play Streets program and expands the availability of low-cost temporary street closure permits, planning and enforcement support, and consulting services to build capacity and implement self-serve processes for residents to throw their own Play Streets.
ST205	Valencia Street Bikeway Near- Term Improvements Phase 2	Valencia Street is a vibrant commercial corridor with a diverse set of restaurants, shops, bars and services. Valencia also serves as a major north-south bike route for those who live, work, visit and travel through the neighborhood. As the street has become more popular, the city has heard increasing community concern about traffic safety and congestion. Ride-hailing services and commercial vehicles are frequently double-parking in the bike lane, posing safety concerns for all who travel on Valencia Street. Early implementation on corridor between Market and 15th Streets will make incremental improvements that: Improve safety for all who travel on Valencia Street; Provide an improved bikeway along the corridor; Improve passenger loading, commercial loading and curb management; and Reduce the number of conflicts between those who walk, bike and drive on the corridor. Phase 2 near term improvements include three blocks of bidirectional, parking-protected bikeways, three signal upgrades, two pedestrian islands, up to seven new curb ramps, and curb management/loading zone improvements.
ST207	Yerba Buena/Hazelwood Follow the Paving	Design and construct pedestrian safety and transit access improvements to the Yerba Buena/Hazelwood/Casitas intersection. In coordination with a Public Works sewer and paving project, the SFMTA will build additional curb ramps and either a corner bulbout or center island, with potential landscaping, to support shorter pedestrian crossings, improved accessibility, and enhanced bus waiting areas.
TA050	Alternative Fuel Vehicle Incentives Program	Provides incentives to taxi companies and medallion holders to replace older gas vehicles with alternative fuel vehicles to help lower the greenhouse gas emissions in San Francisco. The current taxi fleet consists of gas, hybrid, compressed natural gas (CNG) and bio-diesel vehicles. This project will help ensure that San Francisco continues to lead the nation as the greenest taxi city in America.
TA051	Taxi Stand Expansion and Renovation	Relocate, renovate, and/or upgrade existing Taxi Stands and construct new Taxi Stands at strategic locations throughout San Francisco. The project would create a public-facing online map of taxi stands, including temporary stands for special events. The project includes outreach to the business communities of various neighborhoods were new stands may be located, and education for taxicab drivers on the best practices for using taxi stands to ensure their efficacy for the public and the driver.



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CIP ID	CIP Name	CIP Scope
TA054	Ramp Taxi Vehicle Purchase Subsidy	Plan and subsidize the purchase of a purpose-built accessible vehicle or to fund the installation of a wheelchair ramp into a vehicle to be used as an accessible ramp taxi that is readily available on the market. An accessible vehicle cost approximately \$40,000. Because of this high cost, we want to offer the purchasers of this vehicle a subsidy of up to \$10,000 to encourage the purchase of a purpose built or fund the conversion of a minivan into an accessible vehicle. These vehicles are more costly than the average taxi vehicle because they typically must be modified with special equipment to accommodate passengers in wheelchairs by installing a rear facing ramp for wheelchairs. Similar projects from prior years suggested that \$10,000 is enough of an incentive for most companies and/or individual ramp medallion holders to purchase or fund the conversion of a new accessible ramp vehicle. As a result of that success, we propose to continue this progress by using what has already been established as an industry acceptable price point for the purchase. Currently, Taxis & Accessible Services operates 100 accessible ramp taxis. Those accessible ramp taxis need to be replaced. The taxi industry has expressed concerns about investing in new accessible ramp taxis due to the overall reduction in taxi service in San Francisco. These accessible ramp taxi vans provide an important mode of alternative transportation for persons, particularly wheelchair users, needing an accessible, on-demand vehicle for travel in the city.
TF000	Reserve Transit Fixed Guideway	Funding set aside within the Transit Fixed Guideway Capital Program, intended to accommodate unforeseen project budget increases and emerging project priorities.
TF01-CF	Advanced Train Control System Final Cut Over	Remove the legacy conventional train control system to allow the Advanced Train Control System (ATCS) to fully control train movements in the subway. Remove the conventional system hardware and control wiring along the wayside from West Portal to Folsom Portal.
TF010	Surface Track Pavement State of Good Repair (SGR) Program	Replace surface track citywide to maintain rail network in a state of good repair. Maintenance work includes removing broken pavement, tamping the existing track work and restoring concrete track pavement and asphalt pavement, as needed and at various locations.
TF011	Ultrasonic Rail Testing Program	Perform ultrasonic rail testing on open trackway to evaluate the condition of the rail network. The testing determines the overall quality of the trackway, including the subway system, tunnels, and open ties and ballasts sections on exclusive right-of-way, by checking for any defects or cracks. Ultrasonic testing is used to monitor track integrity and informs the SFMTA's rail network state of good repair programs.
TF02-CF	Advanced Train Control System Management Center Software Platform Upgrade	Upgrade the Advanced Train Control System (ATCS) operating system from Disk Operating System (DOS) to Windows and install double-stopping features and local and central fallback. The System Management Center (SMC), a subsystem of ATCS, will also interface with an external client for passenger information and real-time Automatic Vehicle Location (AVL) for train arrival prediction.
TF03-CF	Balboa Park Station Eastside Connection	Improve the Balboa Park Station, led by BART. SFMTA is coordinating with BART during design and construction. The BART contract includes constructing a new accessible Muni Metro key stop on the east side of the Balboa Park Station. The project also includes a new key stop with an accessible path of travel, curb ramps, and boarding island along San Jose Avenue to meet ADA requirements. Construction of this new key stop is part of the Green Light Rail Center Track Replacement Project.
TF052	Cable Car Barn Turn Table	Replace the powered cable car turntable inside the cable car barn. A more powerful motor will replace the current model, which is currently operating beyond its capabilities and is vulnerable to overheating. This project will increase the reliability and consistency of cable car barn operations.



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CIP ID	CIP Name	CIP Scope
TF053	Cable Car Curved Track Replacement	Replace ten track curves on the Mason and Powell lines. The curved rails were installed in 1982 and are approaching the limit of allowable wear. In addition to replacing the track curves, the project will also replace pulley box covers and frames, replace slot rails at curves, restore pre-emption signaling systems demolished during rail replacement, provide bus substitution during construction, and train signal maintenance staff on new equipment.
TF054	Cable Car Gear Box Rehabilitation	Rehab all five gearboxes and procure one new gearset. Inspect idler shafts, sheaves and repaint all equipment assoicated with the gearbox and idler. Perform any repair on the shafts, sheaves and components as required. Replace all internal gaskets and oil fluids as required to return the system to service within the construction period. Procure two additional new gearsets for the Powell and Hyde gearboxes that will replace the old sets currently inside them.
TF055	Cable Car Sheave Rebuild	Complete disassembly of 21 street sheaves (14' diameter cable guidance pulleys). The work will include removal of the sheave wheel from the pedestal base, removal of all oiling appurtenances and seals, replacement of bearings and other worn components, and rehabilitation and repainting of the sheave wheel and complete reassembly. Incidental repairs and maintenance of the sheave pits and covers will be included as needed.
TF056	Divide Feeder Circuit Carl & 11th	Sectionalize Traction Power circuit Carl 11 into two circuits to reduce the chances of having a single point of failure, which would jeopardize service on both the J and N lines at the same time. This project will improve service reliability for Muni riders.
TF058	Fillmore Substation Upgrade	Replace and upgrade electrical equipment at Fillmore Substation, which was built in 1976 and has surpassed its useful life. Upgrading the substation will include replacing and upgrading the utility metering, AC and DC switchgear, rectifier transformer assemblies, fire alarm and security system, station battery system, supervisory control and data acquisition and communications systems, and the traction power cables. Investing in these Muni substations will increase the overall reliability and efficiency of the transit network.
TF059	Islais Creek Bridge Overhead Reconstruction	Modify the existing Overhead Catenary System and supporting structural frames along Islais Creek Bridge (located along 3rd Street between Marin Street and Cargo Street) to increase reliability and reduce maintenance. The work will consist of replacing work trolley wires and related supports, modifying and reconstructing Overhead Catenary System special work, and modifying and reconstructing structural support frames.
TF06-CF	Green Center Light Rail Center Track Replacement	Replace worn tracks and switches at the north and south ladder tracks in the Green Light Rail Center and some revenue tracks near the facility, conduct modifications to the overhead contact systems and track switch control systems, repair and improve the stormwater drainage system, and provide new pavement for the yard. Improvements in the Cameron Beach Yard will be necessary for temporary storage of the Light Rail Vehicles during construction. The construction contract also includes a new key stop with an accessible path of travel, curb ramps, and boarding island along San Jose Avenue to meet ADA requirements.
TF061	Marina Substation Upgrade	Replace and upgrade electrical equipment at the Marina Substation, which was built in 1981 and has surpassed its useful life. Upgrading the substation will include replacing and upgrading the utility metering, AC and DC switchgear, rectifier transformer assemblies, fire alarm and security system, station battery system, supervisory control and data acquisition and communications systems, and the traction power cables. Investing in these Muni substations will increase the overall reliability and efficiency of the transit network.



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CIP ID	CIP Name	CIP Scope
TF062	Market Street Track Pavement Repair	Repair track work along Market Street between Stuart Street and Castro Street at various locations. Repairs include removing broken pavement, tamping the existing track work, restoring concrete track pavement and asphalt pavement, replace fastening and track support structures over vent shafts.
TF063	Muni Metro Track Switch Machines State of Good Repair (SGR) Program	Replace track switch machines citywide to maintain the rail network in a state of good repair and improve transit reliability. On average, track switch machines replaced are 40 years old. These existing machines have become increasingly difficult to repair and replacement parts often requiring custom fabrication as the original manufacturer no longer carries certain components. New track switch machines are more reliable and require less maintenance due to their solid-state technology.
TF064	Muni Metro Twin Peaks Track Replacement	Conduct rail upgrades to bring the Twin Peaks Tunnel into a state of good repair. Project includes: replacing track with 115RE rail, composite ties, ballast, and new rail plates and fasteners; replacing the crossover between West Portal and Forest Hill Stations; replacing turnouts; replacing electrified switch machines and track switch controllers and providing a spare switch machine; replacing tie and ballast tracks with direct fixation embedded track; repairing damaged drain line; installing flood lighting; and adding seismic upgrades. Project also includes implementing cable upgrades in Twin Peaks Tunnel to Circuit Church 22.1 and Laguna Honda 23.1. The circuit currently relies on one cable to provide capacity to power trains. This project will add a second cable from the Eureka Gap Station to the crossover east of the Castro Station platform. This will increase reliability, as the current single cable is vulnerable to power issues (particularly when serving longer trains).
TF066	Rail Grinding	Perform rail grinding to reduce both light rail vehicle (LRV) wheel wear and the likelihood of weld failures. The rail network within the Muni Metro Tunnel is beginning to show uneven wear, and rail grinding increases the health and performance of the rail while also extending its useful life. Grinding will take place between Embarcadero Station and Castro Station.
TF067	Train Signal Upgrade Program	Modify train signal interlockings and install new equipment. Modifications include replacing sequential systems with a VETAG vehicle actuated system and various locations such Don Chee Way, Saint Francis Circle, Pier 39, among others. These investments will integrate traffic and train signals to improve the safety and reliability of the rail network and standardize signal operations.
TF068	4th & King Interlocking Reconfiguration	Reconfigure the existing interlocking by introducing two additional track circuits. The reconfiguration will improve safety and efficiency by providing separate signals for individual routes and routing train movements on a first-come first-served basis. The project scope includes relocating 4th and King Crossover Signals 5 and 6 to the west side of 4th Street, replacing the traffic intersection controller to allow for separate route requests, and adding add new T-Signals to the system.
TF069	Overhead Contact System (OCS) State of Good Repair (SGR) Program	Repair segments of the overhead contact system (OCS) to maintain the overhead network in a state of good repair. The OCS provides power to trolley coaches and vital to transit service. Occasional repairs and network improvements are developed based on periodic assessments of the network. Urgent mid-sized and smaller project may arise based on service needs to address chronic service outages or emergency repairs.

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CIP ID	CIP Name	CIP Scope
TF071	San Jose Substation Upgrade Phase I	Split the Metro Yard from one circuit into two separate circuits. The project will install a sectionalizing switch or tie-breaker for the purpose of providing an emergency cross-connect for safety, redundancy and ease of maintenance. In addition, the project will include the procurement of two feeder breakers.
TF072	San Jose Substation Upgrade Phase II	Replace and upgrade the electrical equipment at the San Jose Substation, which was built in 1976. The existing equipment has been in service for 38 years and is approaching or has exceeded its expected life cycle. Upgraded equipment will increase the reliability and efficiency of the transit network.
TF073	Subway Special Track Replacement	Replace track infrastructure in the subway at Castro, Duboce, Van Ness and Embarcadero Stations. This includes replacing the double crossover at Castro, track left and track right turnouts at Duboce, double crossover and storage track turnout at Van Ness, and double crossover at Embarcadero. The project will also upgrade the old tie support system to a new support system that is less vulnerable to water exposure.
TF074	Special Trackwork & Surface Rail State of Good Repair (SGR) Program	Perform miscellaneous repairs of special track work along the surface alignment to maintain the rail network in a state of good repair. Improvements include the procurement and installation of crossovers, replacing curve track, major overhauls of track work such as replacing and tamping of ties and ballast and installation of guardrails.
TF075	Subway Electrical & Mechanical Systems State of Good Repair (SGR) Program	Replace existing lighting, electrical backup systems, service panels, and mechanical equipment among other infrastructure in the subways. The system is 40 years old and has reached the end of its useful service. The project will identify and replace broken and outdated equipment, including subway lighting, emergency battery backup systems, fire life safety systems, electrical service panels, pumps, exhaust and supply fans, and drainage improvements.
TF077	Subway Replacement Wiring Phase I	Replace wireway, conduits, and cables at Van Ness Platform signal equipment room to west of the wayside. The project will also add conduits and cables for four axle counters, seven signal lamps, and termination panels. Current wiring in this area has been compromised by water infiltration and rodent damage. This project will ensure greater reliability of power and signaling systems in the Van Ness crossover and stub track, improving subway service consistency.
TF078	Subway Track Fastener & Rail Replacement State of Good Repair (SGR) Program	Replace rail fasteners in the subways, including at Duboce Portal. The current fasteners are 40 years old and are deteriorating. The replacement of fasteners will improve the safety and reliability of the subway. The project will include a survey and alignment adjustments, in addition to replacement of individual components of subway crossovers and turnouts.
TF08-CF	33 Stanyan: Pole Replacement and Overhead Reconstruction Phase II	Replace existing traffic signals, streetlights, trolley poles and Overhead Contact System (OCS) along 18th Street between Castro and Mission streets. The project will upgrade several curb ramps along 18th Street.
TF080	Traction Power State of Good Repair (SGR) Program	Repair traction improvements to the rail network based on findings based on periodic track and traction power condition assessments. Common repairs include duct banks, sectionalizing switches, manholes, substation equipment, SCADA systems and other key elements in the traction power system. These often small but sometimes mid-sized urgent projects will target acute problems with the rail network and will improve transit service by reducing service outages and the need for emergency repairs.

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CIP ID	CIP Name	CIP Scope
TF081	West Portal Advanced Train Control System Switch Activation	Modify the Automatic Train Control System (ATCS) software to integrate and activate a new crossover near West Portal Station that was completed under the Twin Peaks Tunnel Project. Activating the switch will help to address issues with ATCS functions at the portals.
TF083	Ultrasonic Rail Testing Phase II	Conduct ultrasonic rail testing on the running rails to establish and evaluate the state of the rails of SFMTA's Muni Light Rail System. The work shall include the subway system, tunnels, as well as open tie and ballast sections on exclusive right-of-ways, comprising of approximately 36.5 miles in total. Using currently available technology the work shall include verification of applicable ultrasonic test standards to check the quality of the running rails, and to determine if any defects or cracks exist within the running rails. The results from the ultrasonic rail testing will be used to upgrade and monitor track integrity within the rail system.
TF084	Manual Trolley Switch System Replacement Phase I	Replacement of Manual Switch System Phase 1 enhances the state of good repair of the traction power system and improves transit priority, safety, and accessibility. The first phase replaces existing pole-mounted manual trolley switches with new pad-mounted remote operable switch units at six locations: 1. Mission Street between 4th and 5th St, 2. Mission and Cesar Chavez Streets, 3. 79 Stevenson Street, 4. South Van Ness and 16th Street (NE Corner), 5. South Van Ness and 16 Street (NW Corner), and 6. Mission Street between Godeus and Eugenia Street. The work trenches from existing manholes to the new switch locations on the sidewalk, and installs four new conduits and traction power cables.
TF087	Track Support Structure Replacement	Rehabilitate and replace the rail support system, including potholing intersection, rebuilding the subgrade, replacing ties and ballasts, tie plates and the fastening system, rail grinding, welding, and profiling rails to repair the "cupping" effect at areas adjacent to the rail welded joints.
TF089	Procurement & Replacement of Track Switch Machines for Muni Metro Phase II	Replace all 38 heavy rail switch machines in our system: 11 in the MMT, 4 at the Embarcadero Double Crossover, 2 at Duboce Junction; 5 at the Van Ness Crossover; 4 at Castro Crossover; 4 at 4th and King; 4 at 6th and King; 4 opposite SF State; and other priority locations that may arise. Parts for the new machines will be easier to procure and their solid state circuitry should be more reliable and require less preventive maintenance. Track Switch Machine replacement will coordinate with installation of new wiring.



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TF090	Special Track Work Replacement	Overhaul track work, including replacement and tamping of ties and ballast, subgrade rehabilitation, installation of guardrail, grinding and profiling of rails, trackway realignment and replacement, and/or repair of special track work at various locations along the existing Light Rail Vehicle (LRV) lines. Special track work replacement includes items such as single crossovers, curve tracks, railroad tie and ballast, among others.
		Locations for this project will include: 1) M-Line at 19th Avenue between Holloway Avenue and Junipero Serra Boulevard; 2) J-Line between 18th Street and 20th Street; 3) single crossover at Niagara Avenue; 4) single crossover at Plymouth Avenue; 5) curved rail at San Jose Avenue & Broad Street.
		This list is not in order of priority and the schedule replacement program depends on the availability of resources such as materials, labor and funding. Additionally, other locations may be identified as priorities and will then supersede some of the listed locations.
TF095	Cable Car Barn 12 KV Service and Electrical Upgrade	Replace Cable Car Barn 12KV service, switchgear, DC motor, and controller. Elements include: replacement and relocation of obsolete 12KV service and switchgear in the Barn; replacement of DC motors and controllers with AC motor and Variable Frequency Drive (VFD) controller (as recommended from a feasibility study); architectural, structural, mechanical (HVAC), electrical (lighting, fire detection and alarm) system work to accommodate the equipment; ancillary upgrades required for compliance with building code and ADA regulations; and PLC/Data system upgrade.
TF10-CF	Light Rail Vehicle Control Center Support	Update the Vehicle Control Center (VCC) from old 286 16-bit technology to current technology that is easily supported and hardware-compatible with the Central Subway VCC. VCC is the vital, safety-critical system of the Advanced Train Control System (ATCS), managing and executing all train movements in the subway. Should the VCC fail, all train movements will terminate. A fault-tolerant (or backup VCC) system which includes a fault-tolerant computing system (hardware, software, and timing), interface, and data communication is necessary to provide continuous, safe train movements. A fault-tolerant VCC system will provide continuous, safe operation in the presence of faults by detecting errors caused by faults, assessing the damage caused by the fault, recovering from the error, and isolating the fault.
TF105	Upgrade Supervisory Control & Data Acquisition (SCADA) to Fiber Optic	Replace existing SCADA (Supervisory Control and Data Acquisition) communication lines from the existing copper wire to fiber optic. This SCADA is a centralized computer system used to monitor and control power distribution for electrical transit vehicles. The change could use pre-existing DT infrastructure, which may be pre-installed in some locations. Pre-existing infrastructure will have to be evaluated for structural integrity before installation of fiber optic cable. Deployment of new fiber optic cable can be dependent on priority.
TF107	Train Control System Upgrade	Design and procure a next-generation communications-based train control (CBTC) system for the rail network, including surface and subway alignments. Investing in a new CBTC system will bring the train control system into a state of good repair and will result in a more efficient and safe way to manage LRV traffic. The CBTC system will improve transit service my increasing transit headways and improve overall system safety.



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TF112	Cable Car Barn Rehabilitation and Upgrade	Rehabilitate and rejuvenate the Cable Car Barn, including substantial investments to upgrade the heating, ventilation and air conditioning (HVAC) Fire/Life Safety Systems, office spaces, roof, 10- and 40-ton cranes, cable rewinder & holdback machinery, restrooms and other miscellaneous upgrades.
TF113	Backup Batteries Replacement for Substation SCADA & Subway Track	Replace 12 battery back-up systems including battery chargers: Two for Subway Track Switch and Signal systems (within Embarcadero Station and Van Ness Station) and ten for the Substation SCADA system (within existing MTA substations). The new batteries
	Switch & Signals	will have longer life and capacity, and reduce boil-over and gassing. The project will also install a battery monitoring system for the Track Switch/Signal batteries to monitor them remotely via SFMTA's network and SCADA systems. The existing Track Switch/Signal and Substation SCADA backup batteries are approximately 12 years old and more than 25 years old and are beyond their rated life. During Tri-enniel Audit, California Public Utilities Commission identified these locations as continually deferred maintenance, and requested confirmation we would complete these replacements or face possible findings.
TF114	Roadway Worker Protection Early Warning Alarm System	Procure and install an early warning alarm system for roadway worker protection. The project will include researching, testing, procuring, training of staff and implementing an early warning alarm system for the protection of staff working within the trackway, as required by the California Public Utilities Commission (CPUC).
TO000	Reserve Transit Optimization & Expansion	Funding set aside within the Transit Optimization & Expansion Capital Program, intended to accommodate unforeseen project budget increases and emerging project priorities.
TO010	Program: Collision Reduction Program: Spot Improvements	Design and implement transit bulbs, striping modifications, and/or signal work to address potential conflicts and known safety issues between transit vehicles and other users of the transportation network. These improvements will improve the overall safety of the transportation system for all users.
TO011	Program: Muni Metro Subway Station Enhancements	Design and construct improvements to Muni Metro subway stations. Improvements may include lighting and signage upgrades to improve wayfinding and customer experience; enhancements to Station Agent Booths; and other state of good repair needs. Phase 1 includes all wayfinding signage upgrades at all nine stations; architectural and lighting upgrades to Powell, Church and Castro. Phase 2 (a separate project) includes architectural and lighting upgrades to the remaining six stations (Embarcadero, Montgomery, Civic Center, Van Ness, Forest Hill and West Portal).
TO013	Program: Accessible Light Rail Stops	Project includes outreach, design and construction for new accessible stop locations (2 ramps/platforms per locations). Examples include new platforms on the J line (OB - San Jose @ Nantucket, IB San Jose @ San Juan) and M line (IB & OB, Dedicated ROW & Ocean Ave) that were identified in the Key Stop Feasibility Study, or other locations to be identified. The proposed new platforms will fill gaps between widely spaced existing accessible platforms.
TO014	Program: Accessible Stops Spot Improvements	Design and construct small-scale spot improvements to transit stops in order to provide greater access to customers with mobility impairments. Improvements may include engineering treatments such as stop changes, concrete curb changes, curb ramps and other tools to improve accesibiliity. This requires assessments of the condition of existing bus stops to consider whether adequate accessibility is provided and identify improvements. To be successful, these considerations must be viewed in a holistic setting taking into consideration user safety, comfort and accessibility.

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TO050	Surface Signaling on The Embarcadero & Third Street	Upgrade the rail signal system on The Embarcadero between Harrison and Bryant Streets, including associated train signals, train detection, and additional signals between the Ferry Portal and 4th/King. The project includes surveying by Department of Public Works, traction power study, track work, overhead work, electrical work and traffic control work. The goal of the project is to improve the capacity of the Muni rail
TO051	Embarcadero Pocket Track	network and to better accommodate special event traffic. Design and construct a pocket track along The Embarcadero to provide greater operational flexibility and improve the reliability of the Muni rail network. Potential locations include between Bryant and Brannan and south of the Bryant Street Station (before Townsend). Pocket track would provide for four-car storage, or two two-car train
TO053	14 Mission: Inner Mission Transit & Streetscape Enhancements	sets with independent exit tracks to inbound and outbound trackways. Plan, design and implement modifications to the existing dedicated transit lane on 3rd Street from Townsend Street to Mission Street. This project aims to reduce transit trave time and improve transit reliability for the 30, 45, 8, 8AX, and 8BX bus lines, as well as enhance pedestrian safety along a major corridor that links regional transit services, shopping centers, and major destination neighborhoods. The current project scope includes a relocated dedicated transit lane, construction or expansion of three transit bulbs, relocation of some stops, and a variety of pedestrian improvements including bulk outs and new and enhanced crosswalks.
TO054	14 Mission: Outer Mission (South of Randall) Transit Priority Project	Design and construct transit and streetscape improvements to reduce travel times for the 14 Mission between Randall Street and San Jose Avenue in Daly City. Mission Street is a Rapid Corridor and carries some of the heaviest loads in the Muni system. Improvements will include new transit-only lanes and enhancements to existing transit- only lanes, transit bulbs and pedestrian improvements, signalized transit queue-jump lanes and turn pockets, and optimized transit stop placements.
TO055	14 Mission: Downtown (11th Street to Spear) Transit Priority Project	Design and construct transit and streetscape improvements to reduce travel times for the 14 Mission on Mission Street between First Street and 11th Street. Mission Street is a Rapid Corridor and carries some of the heaviest loads in the Muni system. Improvements will include new transit-only lanes and enhancements to existing transit- only lanes, transit bulbs and pedestrian improvements, signalized transit queue-jump lanes and turn pockets and optimized transit stop placements. This project will also relocate overhead catenary system (OCS) trolley wires to a center-running transit lane on Mission Street outbound between Sixth Street and First Street and inbound between First Street and Fifth Street.
TO057	22 Fillmore: 16th Street Transit Priority Project	Design and construct transit priority and pedestrian safety improvements for the 22 Fillmore route along 16th Street, including transit-only lanes, transit bulbs and islands, new traffic signals, and several pedestrian safety upgrades. The project will transform and shape the 16th Street corridor by improving transit reliability, travel time, safety, and accessibility for all users while meeting the needs of current and future residents, workers, and visitors to this growing regional destination.
TO058	Muni Forward OCS Spot Improvements	Design and construct changes to the Overhead Catenary Wire (OCS) systems at select intersections to improve transit capacity and safety for the buses traveling through. The first two locations identified for improvements are: Mission/30th Street and Church/Duboce. At Mission Street/30th Street, the changes would extend the existing by-pass wires and relocate the existing left turn switch northwards along Mission Street closer to 30th Street. This includes reconfiguration and replacement of existing OCS poles as needed. This improvement would allow the 24 Divisadero bus to bypass the 14 Mission and 49 Van Ness/Mission trolley coaches and other traffic congestion near Cortland Street. At Church Street/Duboce Avenue, this project would modify the alignment of the existing 22 Fillmore OCS along Church St and Duboce Ave to allow the inbound trolley coaches to board and alight at the transit island similarly to the J Church and bypass traffic queues at the stop sign.

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TO059	28 19th Avenue Rapid Project	Implement traffic engineering changes and related improvements on 19th Avenue for the
	(South of Golden Gate Park)	28 19th Avenue and 28R 19th Avenue Rapid lines. The project will improve reliability, travel times and pedestrian safety by implementing various enhancements throughout the corridor, including 21 transit bulbs and 33 pedestrian bulbs on 19th Avenue between Lincoln Way and Holloway Avenue.
TO06-CF	14 Mission: Mission Street and South Van Ness Avenue Transit Priority Project	Construct pedestrian bulb-outs, a new shifted center median, a new bus boarding island, and painted bicycle lanes to improve the bicycling, transit, and pedestrian experience at the intersection of South Van Ness Avenue and Mission Street.
TO060	30 Stockton: Chestnut Street Transit Priority Project	Implement traffic engineering changes to reduce travel time and improve service reliability of the 30 Stockton route along Chestnut Street from Van Ness Avenue to Broderick Street. Transit enhancements will likely include: transit stop placement optimization, bus bulbs, pedestrian safety improvements, boarding islands, and traffic/turn lane modifications. As a part of Muni Forward, these improvements seek to improve service reliability, enhance street safety, reduce travel time, and improve customer experience.
TO065	30 Stockton: Van Ness Transit Priority Project	Construct a transit bulb on Van Ness Avenue at Bay Street as part of the Van Ness Bus Rapid Transit Project. This project will reduce dwell times and improve reliability for the 30 Stockton, 47 Van Ness and 49 Mission-Van Ness routes. The transit bulb will also make it easier for operators to stop at the bus zone.
TO066	7 Haight-Noriega: Haight Street Transit Priority Project	Design and construct traffic engineering changes and other related improvements to reduce travel times on the 7/7R Haight Noriega along Haight Street between Buchanan Street and Stanyan Street. Haight Street is a Rapid Corridor and carries heavy passenger loads, operating at an average travel speed of just 7 miles per hour. This project would improve reliability and travel times by implementing various enhancements throughout the corridor, including bus bulbs, pedestrian improvements, turn pockets, traffic signals and optimized transit stop placements
TO067	8 Bayshore: Visitacion Valley (Santos to Arleta) Transit Priority Project	Design and implement traffic engineering changes to reduce travel time and improve transit reliability for the 8 Bayshore route through the Visitacion Valley neighborhood from Santos to Arleta. This project would improve transit reliability and travel time by implementing various enhancements throughout the corridor, including: transit stop optimization, bus bulbs, traffic signal upgrades, and pedestrian facilities to improve street safety. This project will also integrate with the Geneva-Harney Bus Rapid Transit improvements planned for Geneva Avenue east of Santos Street.
TO068	L Taraval Improvement Project	Replace approximately 23,000 track feet of existing tie and ballast paved track along the L Taraval between Forrest Side Avenue near West Portal to La Playa with a new direct fixation track, new rails and fastening systems. Replace worn Overhead Catenary System special work, trolley wire and trolley poles west of 15th Avenue/Taraval Street.
TO07-CF	5 Fulton: East of 6th Ave (Inner) Rapid Project	Install traffic signals, pedestrian islands, traffic circles, and pedestrian and transit bulbs along the 5 Fulton line between Stanyan and Laguna Streets. The 5 Fulton trolley-bus line, as identified in the Transit Effectiveness Project report, is a Rapid Network route. It is an important connector between the Richmond District and Downtown. The SFMTA believes that this work will further enhance safety, improve reliability, and reduce bus travel time by implementing engineering changes to this route with a goal of improving the travel times by 15% and increasing ridership by 5%.
TO070	27 Bryant: Transit Reliability Project	Install up to ten transit bulbs for the 27 Bryant and 31 Balboa in the Tenderloin and through SoMa. Transit signal priority would also be added at approximately 20 intersections. Improvements will reduce travel times and improve reliability for Muni riders.

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TO074	Cable Car Traffic Calming &	Design and construct safety improvements on the California and Powell-Hyde cable car
10074	Safety Improvements	lines. Improvements include: red-transit only lanes and turn restrictions on California Street between Mason and Kearny, and installation of bulbs, speed tables, and other traffic calming devices along the Powell-Hyde cable car route (Powell between Geary and Jackson, Jackson between Powell and Hyde, Washington between Powell and
		Hyde, Hyde between Washington and Beach). These improvements are designed to improve safety by reducing the risk of collisions.
TO077	Transit Reliability Spot Improvements	Construction of transit bulbs, new signals, and other travel time reliability toolkit measures. Projects will be coordinated with repaying, streetscape, utility or other city projects.
TO078	Better Market Street	A comprehensive program to re-envision the City's premier cultural, civic and commercial corridor, the Better Market Street project will implement capital improvements along Market Street from Steuart Street to Octavia Boulevard. The project will increase core transit capacity along the region's most important transit street, in addition to improving street design and re-invigorating public life along the corridor. The
		work will include complete repaving of Market Street, including the transit and mixed-use lanes, sidewalks, and a protected bike facility. This work would also replace Muni traction power duct banks, rail, support structures over BART vents and overhead lines, as well as constructing new transit stations/stops and boarding islands. For more information, visit www.bettermarketstreetsf.org.
TO080	Geary Rapid Project (Market to Stanyan)	Plan, design and construct transit and pedestrian safety improvements along the Geary corridor, including full roll-out of dedicated bus-only lanes along Geary Street. Additional improvements will include pedestrian and bus bulbs, high-amenity stations, and signal improvements. The project aims to reduce travel time, improve transit reliability, and enhance street safety along a major corridor that connects housing, retail centers, and Priority Development Areas. Phase I, also referred to as 'Near-Term', will deliver
TO081	Geary Boulevard Improvement Project (Phase 2)	improvements along Geary between Kearny and Stanyan Streets. Complete a conceptual engineering report and preliminary detail design for the full Geary BRT project. The project aims to reduce travel time, improve transit reliability, and enhance street safety along a major corridor that connects housing, retail centers, and Priority Development Areas. Phase II, also referred to as the 'Full Project', will deliver improvements along Geary between Stanyan and 34th Avenue.
TO082	Geneva Harney Bus Rapid Transit	Complete environmental clearance, design, and construction of dedicated transit lanes and pedestrian/bicycle facilities along Geneva Ave from US 101 to Santos Street. The project aims to reduce travel time, improve transit reliability, and enhance street safety along a major corridor that links regional transit services, Priority Development Areas, regional shopping centers, and two major college campuses. This project is coordinated with improvements being planned and constructed through the 8 Bayshore Muni Forward project and those being constructed by the Candlestick/Hunters Point Shipyard developer.
TO083	Muni Subway Expansion Project	Complete environmental clearance and preliminary design for the proposed Muni Subway Expansion project. The project would construct a new light-rail tunnel between West Portal and Parkmerced and redesign 19th Avenue between Eucalyptus Drive and Brotherhood Way. Early phase scope includes initiating a professional services contract for engineering and environmental clearance; SFMTA, SFCTA, DPW, and SF Planning staff project management; oversight; public outreach; review and coordination.
TO084	Van Ness Bus Rapid Transit	Construct a package of transit, streetscape and pedestrian safety improvements along a two-mile corridor of Van Ness Avenue between Mission and Lombard Streets. Key features include conversion of two mixed-flow traffic lanes into dedicated bus lanes, consolidated transit stops, high quality stations, transit signal priority, all-door low floor boarding, elimination of most left turn opportunities for mixed traffic, and pedestrian safety enhancements.

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T0085	E/F Line Improvements:	Placeholder to support matching funds of a future federal grant for the proposed F-line
10005	Extension to Aquatic Park	extension from Fisherman's Wharf to Fort Mason. The F-line streetcar extension was environmentally cleared through the National Environmental Policy Act (NEPA) in 2013. Future project phases (i.e. design and construction) are contingent upon funding availability.
TO086	Muni Forward Programmatic Corridors: Planning & Conceptual Engineering	Preliminary engineering for up to eleven Muni Forward transit corridor projects that include a variety of reliability, speed, and safety-enhancing improvements, including bus bulbs, pedestrian bulbs, boarding islands, queue jump lanes, traffic lane and signal changes, stop optimizations, and route realignments. Corridors include: 5 Fulton from Arguello to 25th; 14 Mission; 22 Fillmore; 30 Stockton on 3rd Street and 4th Street; and up to six additional projects. Project will include comprehensive, targeted outreach.
TO087	Mission Bay Loop	Complete construction of the Mission Bay Loop, a short rail track extension that will provide turn-around capabilities for the T Third Street light rail line via a connection of trackway from Third Street to 18th, Illinois, and 19th Street. The loop will allow trains to turn around for special events and during peak periods to accommodate additional service between Mission Bay and the Market Street Muni Metro. Scope includes duct bank work.
TO088	Red Transit-Only Lane Lifecycle Replacement and Implementation	Refresh the paint on approximately 21,000 linear feet of red transit only lanes that were installed between 2013 and 2014. Transit only lanes improve transit travel time and reliability for Muni riders.
TO089	UCSF Platform and Track Improvement Project	Construct a new light-rail center boarding platform in the vicinity of the UCSF Medical Center and the proposed Golden State Warriors Arena. The project will allow maximum operational flexibility to accommodate events at the proposed Arena, as well as to meet future growth in transit demand.
TO091	King Street Substation Upgrades	Upgrade the existing King substation to provide sufficient electrical power for the light rail vehicles. Due to anticipated housing development and projects in the surrounding area, including the Central subway, and the proposed Warriors Arena. Light rail service is expected to increase the demand thereby potentially overloading the existing electrical feeder circuits. This project will address this issue by upgrading the electrical distribution circuits and create a spare electrical circuits for future needs. Through this project, it will also procure a mobile electrical 12KV sub-station that will power this and future substations while they are under construction. Existing traction power cables will be respliced and labelled ease future maintenance. The project will also re-route fiber optic network from King Substation RTU to Power Control Center via Muni Metro East for SCADA system, and provide new overhead feed spans, tanget spans, equalized spans, and jumper spans.
TO192	Van Ness Bus Rapid Transit: Associated Improvements	Implement transit and streetscape elements to support the Van Ness BRT Core Project.
TO194	Muni Roadway Elevation Improvements	Modify roadway elevations at several locations along Muni routes to allow new low floor Muni vehicles to provide service along bus routes without damaging the undercarriage of the vehicles. Ten priority locations have been identified that require immediate topographic survey, detailed design and construction. More locations may be identified as new vehicles are rolled out.
TO198	Bus Transit Signal Priority	Purchase and deploy Transit Signal Priority (TSP) devices and communications equipment for intersections on the Local Muni Bus TSP network (non-Rapid Routes, approximately 300 intersections) and replace aging traffic signal controllers and cabinets. The new cabinets are larger than the previous generation cabinets due to the need to add networking capabilities. Replacing aging controllers nearly the end of their useful life will help provide much-improved reliability, require less maintenance and allow the implementation of pedestrian safety features such as pedestrian head starts and exclusive pedestrian phases. Transit signal priority has proven to improve travel time and service reliability for Muni riders.



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TO202	Geneva/San Jose M-Line Terminal	Plan and construct new terminal for the M-Line at Balboa Park Station. As part of Geneva Avenue/San Jose Avenue Intersection Study, options will be developed to enhance the M-Line terminal on San Jose Avenue at Geneva Avenue. Currently, the terminal (both last drop-off and first pick-up stops) lacks boarding/alighting facilities that meet current standards. Possible modifications include new bulb-outs, new boarding islands, traffic signal modifications, accessible boarding facilities, modifications to Cameron Beach Yard gates for pedestrian crossing and LRV track modifications as necessary to accommodate the new boarding facilities. Exact features will be determined through an outreach and planning process. The Planning Phase was
TO203	Bayshore Caltrain Station Upgrades	funded by an NTIP Grant and does not include environemental review. Preliminary engineering and environmental review of upgrades for connectivity between the Bayshore Caltrain Station and other transit links. In anticipation of dramatic proposed growth in nearby land uses and transit services, including improving transit service on the Geneva corridor and the developing the Candlestick area, better connectivity to this station is an important transportation goal.
TO204	Cable Car Traffic Signal Preempts	This programmatic line provides for installation of new traffic signal preempts at Columbus & Mason, California & Hyde, and Hyde & Washington, and Powell & Sutter, in response to documented safety issues at these locations. Work includes traffic signal design and construction. Provides for modifications to traffic signals including new signal heads to support new transit or other phases, conduit running, and electrical work. Also provides for replacement of mechanical switches with new magnetic switches. This replacement would involve cutting out the slot rail, installing brackets, mounting switch, installing wiring, and restoring pavement.
TO205	Equity Strategy Improvements	Planning, design and construction of engineering improvements designed to facilitate transit routes in underserved communities identified by the Equity Strategy. The project improves travel times and reliability, addresses safety hazards and improves infrastructure to improve the customer experience. The Muni Service Equity Strategy targets service and capital improvements to routes most critical to neighborhoods with high concentrations of residents of color, low income, and to routes that are most used by people with disabilities.
TO206	1 California Transit Priority Project	Outreach, design and implement engineering changes to reduce travel time and improve reliability on the 1 California corridor between Geary/33rd Ave and Clay/Drumm along California Street, Clay Street, and Sacramento Street. The 1 California corridor faces significant congestion and other obstacles that affect transit reliability. This project would improve reliability and travel times by implementing various enhancements throughout the corridor, such as transit stop placement optimization, bus bulbs, pedestrian improvements, and traffic and turn lane modifications. As a part of Muni Forward, these improvements seek to improve service reliability, reduce travel time on transit, and improve customer experiences and service efficiency. Transit riders will not only benefit from faster and more reliable trips, but will also experience enhanced transit safety and overall effectiveness.
TO207	22 Fillmore: Fillmore Street Transit Priority Project	Outreach, design and implement engineering changes to reduce travel time and improve reliability on the 22 Fillmore corridor along Church and Fillmore Streets between Church/Duboce and Bay/Fillmore. The 22 Fillmore corridor along Fillmore Streets faces significant congestion and other obstacles that frequently prevent efficient transit vehicle movement. This project would improve reliability and travel times by implementing various enhancements throughout the corridor, such as transit stop placement optimization, bus bulbs, pedestrian improvements, and traffic and turn lane modifications. As a part of Muni Forward, these improvements seek to improve service reliability, reduce travel time on transit, and improve customer experiences and service efficiency. Transit riders will benefit from faster and more reliable trips and experience enhanced transit safety and overall effectiveness.

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TO208	30 Stockton: 3rd Street Transit Priority Project	Plan, design and implement modifications to the existing dedicated transit lane on 3rd Street from Townsend Street to Market Street and extend the dedicated transit lane onto Kearny Street from Market Street to Sutter Street. This project aims to reduce transit travel time and improve transit reliability for the 30, 30S, 45, 8, 8AX, and 8BX bus lines, as well as enhance street safety along a major corridor that links regional transit services, shopping centers, and major destination neighborhoods. The current project scope includes a center-left running dedicated transit lane, construction of 5 new boarding islands, removal of a bus bulb, shifting of overhead wires, upgrade of sidewalks as-needed, and the installation of transit-priority signal infrastructure.
TO209	5 Fulton: Arguello to 25th Ave Rapid Project	Outreach, design and implement engineering changes to reduce travel time and improve reliability on the 5 Fulton corridor along Fulton Street between Arguello and 25th Avenue. The 5 Fulton is a Rapid Network route and an important connector between the Richmond District and Downtown. This project would improve reliability and travel times by implementing various enhancements throughout the corridor, including new bus bulbs, transit stop optimization, and other improvements. As a part of Muni Forward, these improvements seek to improve service reliability, reduce travel time on transit, and improve customer experiences and service efficiency. Transit riders will not only benefit from faster and more reliable trips, but will also experience enhanced transit safety and overall effectiveness.
TO210	7 Haight-Noriega: West of Stanyan Transit Priority Project	Outreach, design and construct traffic engineering changes and other related transit improvements to reduce travel times on the 7 Haight-Noriega line between Haight/Stanyan and the western end of the line at Noriega/48th Avenue. The 7 line is on the Muni high-frequency network, but operates at an average travel speed of just 7 miles per hour. This project would improve reliability and travel times by implementing various enhancements including bus bulbs, pedestrian improvements, turn pockets, traffic signals and optimized transit stop placements.
TO211	J Church Muni Forward	Design and implement engineering changes to reduce travel time, improve reliability and enhance safety on the J Church corridor between the intersection of 16th Street/Church Street and Balboa Park Station. The J Church corridor faces significant congestion and other obstacles that frequently prevent efficient transit vehicle movement. This project would improve reliability and travel times by implementing various enhancements throughout the corridor, such as the removal of all-way STOP-controlled intersections, pedestrian bulbs, transit stop optimization, transit stop removal, transit bulbs, boarding island extensions, and other related work including curb ramps, relocated catch basins and relocated fire hydrants. As a part of Muni Forward, these improvements seek to improve service reliability, reduce travel time on transit, and improve customer experiences and service efficiency. Transit riders will not only benefit from faster and more reliable trips, but will also experience enhanced transit safety and overall effectiveness.
TO212	K Ingleside Transit Priority Project	Outreach, design and implement engineering changes to reduce travel time and improve reliability on the K Ingleside corridor between Balboa Park Station and West Portal Station. The K Ingleside corridor faces significant congestion and other obstacles that frequently prevent efficient transit vehicle movement. This project would improve reliability and travel times by implementing various enhancements throughout the corridor, such as transit stop placement optimization, transit boarding islands, pedestrian improvements, traffic signals, and traffic and turn lane modifications. As a part of Muni Forward, these improvements seek to improve service reliability, reduce travel time on transit, and improve customer experiences and service efficiency. Transit riders will not only benefit from faster and more reliable trips, but will also experience enhanced transit safety and overall effectiveness.

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TO213	M Oceanview Muni Forward	Outreach, design and implement engineering changes to reduce travel time and improve reliability on the M Ocean View corridor between Junipero Serra/19th Ave and Balboa Park Station. The M Ocean View corridor faces significant congestion and other obstacles that frequently prevent efficient transit vehicle movement. This project would improve reliability and travel times by implementing various enhancements throughout the corridor, such as traffic signals, transit stop placement optimization, pedestrian improvements, and other improvements. As a part of Muni Forward, these improvements seek to improve service reliability, reduce travel time on transit, and improve customer experiences and service efficiency. Transit riders will not only benefit from faster and more reliable trips, but will also experience enhanced transit safety and overall effectiveness.
TO214	N Judah: Judah Street Transit Priority Project	Outreach, design and implement engineering changes to reduce travel time, improve reliability and enhance safety on the N Judah between 9th Avenue and La Playa. Improvements include new traffic signals, transit stop changes, new transit bulbs, extending or adding boarding islands, and other related elements such as curb ramps and utility relocations. As a part of Muni Forward, these improvements seek to improve service reliability, reduce travel time on transit, and improve customer experiences and service efficiency. Transit riders will not only benefit from faster and more reliable trips, but will also experience enhanced transit safety and overall effectiveness.
TO216	Rail Transit Signal Priority	Purchase and deploy Transit Signal Priority (TSP) devices and communications equipment for intersections on the rail network. The necessary equipment includes: rail vehicle detection loops, conduit, cabinets, controllers and electrical wiring. Transit signal priority has proven to improve travel time and service reliability for Muni riders.
TO217	8 Bayshore: Geneva Avenue Transit Priority Project	Develop and implement transit travel time and reliability improvements on Geneva Avenue, east of Prague Street to City limits as part of the Muni Forward program. Includes pedestrian and bicycle upgrades in support of Vision Zero. This will follow the Mission (Excelsior) Safety Project which will address transit improvements west of Prague Street. This project would improve reliability and travel times by implementing various enhancements throughout the corridor, including transit stop optimization, bus bulbs, traffic signal upgrades and transit-only lanes.
TO218	Major Corridor Project Development	Conduct planning and project development for To Be Determined major transit expansions identified or prioritized via city-wide long-range transportation planning efforts (e.g. ConnectSF). Tasks could include analysis of opportunities and constraints, development of conceptual alignments, stakeholder and public outreach, conceptual design, environmental review, funding and implementation strategy development, and other planning and policy tasks.
TO219	M-Line Park Merced Surface Realignment	Complete environmental clearance and preliminary design for the proposed Muni Subway Expansion project. The project would construct a new light-rail tunnel between West Portal and Parkmerced and redesign 19th Avenue between Eucalyptus Drive and Brotherhood Way. Early phase scope includes initiating a professional services contract for engineering and environmental clearance; SFMTA, SFCTA, DPW, and SF Planning staff project management; oversight; public outreach; review and coordination.
TO220	Transit Stop Enhancement Program	There are roughly 3600 transit stops in San Francisco, the majority of which lack basic signage and customer information. While this isn't a problem for people who ride the same route every day, it frustrates those who may want to explore Muni for trips outside their daily commute. It also makes communicating service changes challenging. This project addresses this issue by adding basic route information and signage to every Muni stop. Most stops will be upgraded with new transit stop poles, which include distinctive solar-powered lanterns and more legible signage.

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CIP ID	CIP Name	CIP Scope
TO221	Better Market Street: Quick Implementation	As part of Better Market Street program, SFMTA will perform an early implementation prior to the larger BMS construction phase. Work includes but not limited to installation of new turn restrictions, painted safety zones, conversion and extension of red Muni only lanes, protected cycle track, conversion of one-way and two way traffic, safe hit posts, refresh existing crosswalk and pavement markings, and adjust signal timing on Market Street.
OT098	NTIP Program Support	Enable the SFMTA Community Response Team to support SFCTA Commissiners' efforts to identify potential Neighborhood Transportation Improvement Program (NTIP) planning and capital projects and develop proposed scope, schedule, and budgets to support allocation of NTIP grants. Also includes ongoing support of the NTIP program including regular communications with the district supervisors' offices regarding progress of NTIP grants.
TO222	29 Sunset Muni Forward	Plan, design and implement transit reliability, transit travel time and pedestrian safety improvements on the 29 Sunset route from Richmond to Bayview. Improvements include stop consolidation, transit bulbs, traffic signal upgrades and other Muni Forward elements. Project limits are along the bus route from El Camino Del Mar/25th Ave to the outbound terminal with certain segments excluded where other capital projects are currently planned.
TO223	Powell Street Plaza & Transit Reliability Improvements	The Powell Streetscape project covers two blocks at the southern end of Powell Street between Ellis and Geary Streets. The project will make temporary vehicle restrictions permanent using decorative pavers to delineate a shared street, and will permanently widen the sidewalk on Powell, replacing the existing temporary safety zones and parklets. It will upgrade signals at three intersections and create a transit bulb for the 38 Geary at Powell and O'Farrell.
TO224	30 Stockton: 3rd Street TPP Early Implementation	Plan, design and implement modifications to the existing dedicated transit lane on 3rd Street from Townsend Street to Mission Street. This project aims to reduce transit travel time and improve transit reliability for the 30, 45, 8, 8AX, and 8BX bus lines, as well as enhance pedestrian safety along a major corridor that links regional transit services, shopping centers, and major destination neighborhoods. The current project scope includes a relocated dedicated transit lane, construction of two transit boarding islands, relocation of some stops, and a variety of pedestrian improvements including painted safety zones and enhanced crosswalks.