

13. Transportation

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13. TRANSPORTATION

SFMTA: San Francisco Municipal Transportation Agency

SFO: San Francisco International Airport

PORT: Port of San Francisco

SFCTA: San Francisco County Transit Authority

Caltrain: Peninsula Corridor Joint Powers Board

TJPA: Transbay Joint Powers Authority

The COVID-19 pandemic has greatly impacted the transportation sector. Ridership losses, cautionary decreases in transit service delivery, and reduced parking and traffic enforcement mark the main areas in which the COVID-19 crisis has adversely impacted revenue streams generated by transit, parking and traffic operations. During this crisis, transportation has been critical to maintaining mobility for essential workers and ensuring access to essential services, while prioritizing the health of transportation workers and the public. Transportation will continue to be just as critical during the recovery ahead, as workers and visitors return, children go back to schools, and cultural activities resume. Transportation infrastructure will be a driver of the regional recovery and the backbone of the city's social fabric. It is critical that the City provide high quality transportation service for all, including neighborhoods with high populations of people of color and low-income people, as well as youth, older adults, and people with disabilities.

This chapter describes projects and programs to improve San Francisco's transportation network, mitigate losses due to the COVID-19 crises, and build resilience in the sector over the next 10 years. It is critical that San Francisco takes care of our transportation needs so that the city remains accessible and livable for generations to come.

Overview

San Francisco sits at the center of the Bay Area, both geographically and economically. To support residents, workers, and visitors, the City maintains a vast system of transportation infrastructure ranging from cross-town buses and Muni trains to the San Francisco International Airport, one of the busiest in the United States prior to COVID-19. Regional transportation assets like BART and Caltrain also run through the city, connecting San Francisco to the surrounding counties.

While addressing the operational challenges brought on by the COVID-19 pandemic, San Francisco is also in the midst of implementing several major capital initiatives that will improve its transportation system for years to come. From the Salesforce Transit Center downtown, Better Market Street, bus rapid transit (BRT) lines on major thoroughfares, and terminal expansions at the Airport, San Francisco is adding capacity that will dramatically improve mobility. These projects will expand the transit network and provide benefits

throughout the city, and are estimated to create nearly 58,000 jobs over the next 10 years.

San Francisco Municipal Transportation Agency

The San Francisco Municipal Transportation Agency (SFMTA) manages all City-owned ground transportation infrastructure. Related operations include running the San Francisco Municipal Railway (Muni), managing parking and traffic, facilitating bicycling and walking, regulating taxis, and planning and implementing strategic community-based projects to improve the transportation network and prepare for the future.

The SFMTA has a number of short-term and long-term processes in place to identify and prioritize its capital projects. Once every two years the SFMTA develops its own fiscally unconstrained Capital Plan, last published in 2019, to identify needs for projects and programs over the next 20 years. This Capital Plan is overseen by the Transportation Capital Committee, which is comprised of representatives from all the agency's



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functional divisions. The plan identifies the agency's capital investment needs and establishes priority investments.

Over the next 10 years, the SFMTA's total capital need is approximately \$4.8 billion.

This City-wide Capital Plan summarizes SFMTA's capital needs at a high level. For a detailed description of SFMTA's capital projects, please see the SFMTA's published plans at sfmta.com/reports-documents.



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San Francisco International Airport

Owned by the City and County of San Francisco, and located within unincorporated San Mateo County, the San Francisco International Airport (SFO) manages a large and diverse infrastructure portfolio that includes four runways, 91 operational gates, and four terminals that total 4.4 million square feet. It also oversees 32 miles of roadways, six parking garages, the AirTrain transit system, a rental car facility, a new 351-room hotel, leased cargo and maintenance facilities, a waste treatment plant, and more than 274 miles of pipelines, ducts,



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power, and pump stations for water, sewage, storm drainage, industrial waste, and gas, in addition to electrical and telecommunications distribution systems.

To help manage its assets, the Airport previously maintained a five-year and a 10-year Capital Plan. The Airport currently reports and tracks its capital spending against an adopted capital improvement plan (CIP), currently totaling \$7.8 billion. A major objective of the Airport's current Capital Plan is to meet increased infrastructure demands driven by historic levels of passenger growth. Prior to COVID-19, the Airport was ranked the fifth most active airport



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in the United States in terms of overall origin and destination passengers and the seventh most active airport in the United States in terms of domestic origin and destination passengers, according to Fiscal Year 2018-19 U.S. Department of Transportation statistics. The Airport accounted for approximately 66.7% of the total air passenger traffic at the three San Francisco Bay Area airports during Fiscal Year 2018-19. The Airport has also prepared a long-range planning document (ADP) that is currently undergoing environmental review. The ADP includes proposed projects to be implemented as demand warrants to support growth to 71.1 million annual passengers. In FY 2018-19, the Airport

reached 58 million annual passengers. As the Airport and the general economy returns to pre-COVID levels and as traffic rebounds, projects in the ADP could be considered for inclusion in the CIP.

The Airport's Capital Plan identifies \$1.4 billion in infrastructure needs through FY2031. This chapter contains a high-level summary of the Airport's capital needs. For a more in-depth description of the Airport's capital projects, please see the five-year and 10-year Capital Plans published on the Airport's website: <http://www.flysfo.com/about-sfo>.

Port of San Francisco

The Port of San Francisco is the hub of the local and regional commuter, special event, and tourist water transportation network in the Bay Area. The Port constructs and provides land and water areas to support ferries and excursion vessels that are operated by external agencies such as the Water Emergency Transit Agency (WETA) and the Golden Gate Bridge and Ferry District. Though it does not operate any such vessels itself, the Port works in close collaboration with these critical agencies. The expansion

of both publicly and privately operated ferries has helped to address congestion in the Bay Area while continuing to build an emergency response network. Prior to COVID-19, WETA ridership had grown significantly and is expected to continue to grow again in the coming years.

San Francisco County Transportation Authority

The San Francisco County Transportation Authority (SFCTA) is the sub-regional transportation planning and programming agency for the City. The SFCTA is responsible for the City's long-range transportation planning, coordinating with federal, state, and other local transportation agencies. In this capacity, SFCTA helps to plan, fund, and deliver improvements for San Francisco's roadway and public transportation networks. The SFCTA is funded through a combination of local funds including San Francisco Sales Tax revenues and Vehicle Registration Fees, as well as grants from the State of California and federal government.

Peninsula Corridor Joint Powers Board (Caltrain)

San Francisco, along with San Mateo and Santa Clara counties, is a representative member of the Peninsula Corridor Joint Powers Board (JPB), which operates and maintains Caltrain, one of the oldest commuter rail services in Northern California. Caltrain provides peak and off-peak connections along the Peninsula rail corridor between San Francisco and Gilroy. Per the 1996 Joint Powers Agreement, funding for system-wide capital improvements are shared equally among the three member counties, while local improvements are, in general, borne by the county in which the improvements are located. More information on the JPB's future projects and programs can be found at <http://www.caltrain.com/projectsplans.html>.

Transbay Joint Powers Authority

The Transbay Joint Powers Authority (TJPA) was created to manage the financing, design, development, construction, and operation of the Transbay Program, including the

Salesforce Transit Center and the Caltrain Downtown Extension (DTX). Phase One of the Transbay Program included constructing the Salesforce Transit Center, a \$2.2 billion modern transit hub that replaces the seismically deficient terminal in downtown San Francisco. Now complete, the Salesforce Transit Center helps to unify a fractured regional transportation network by connecting eight Bay Area counties and the State of California through 11 transit systems: AC Transit, BART, Caltrain, Golden Gate Transit, Greyhound, Muni, SamTrans, WestCAT Lynx, Amtrak, Paratransit, and the future California High-Speed Rail. The project is split in two phases. Phase 1 saw the opening of the Salesforce Transit Center in August 2018; Phase 2 encompasses construction of the Caltrain Downtown Extension, a new Fourth and Townsend Street Caltrain station, the Transit Center's train station and pedestrian connection to BART and Muni, and a new intercity bus facility.

A related effort overseen by San Francisco's Office of Community Investment and Infrastructure will create a new mixed-use transit-oriented

neighborhood surrounding the Transit Center. For more information on this neighborhood development, please refer to the Office of Community Infrastructure and Investment Section in the Economic and Neighborhood Development chapter of this Plan.

Bay Area Rapid Transit

Since its opening in 1972, Bay Area Rapid Transit (BART) has become essential to the mobility, economy, and livability of the Bay Area for riders and non-riders alike. Prior to the COVID-19 crisis, BART carried 440,000 passengers on a typical weekday. Pre-COVID forecasts suggest that demand for BART will increase as the region grows, with 600,000 daily riders projected to use BART by 2040. However, after 48 years of service, BART faces major challenges including aging infrastructure, crowded conditions for riders, and revenue declines due to COVID-19.

BART improvements within San Francisco will include ADA compliance projects to improve accessibility, station modernizations, and escalator replacements.



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Renewal Program

As all of the agencies covered in the Transportation chapter are either enterprise departments or external agencies, there are no General Fund expenditures expected for renewals. SFMTA, SFO, and Caltrain each has its own state of good repair and other various renewal programs, which are described by the agencies here.



Roof Repair at SFO

SFMTA - Renewals

The SFMTA currently has approximately \$15 billion worth of capital assets, including bike routes and lanes, traffic signals, subway infrastructure, stations, maintenance and operations facilities, taxi facilities, fixed guideway track,

overhead wires, and parking garages. SFMTA has been tracking its capital planning efforts through its Asset Management Program, ensuring that current assets receive needed maintenance, rehabilitation, and replacement. This effort is detailed in the

SFMTA 2019 Transit Asset Management Plan. The SFMTA is also focusing on the renewal and modernization of its yards and facilities in its Building Progress Program.

SFO - Renewals

Passenger traffic has declined significantly due to the COVID-19 pandemic and consequent restrictions on air travel. However, the Airport remains an essential facility and as passengers continue to utilize the Airport, the facilities that support passenger travel must be maintained to high safety standards. The Airport considers renewals to be general repair and replacement of building systems and fixtures, such as a roof repair, that do not enhance the value or change the use of an asset. These projects typically have a small scope and are completed in less than a year. These projects are usually funded through the Airport's

annual operating budget, unlike capital improvements which are often multi-year projects financed with capital funds.

The cost of SFO's renewal program is approximately \$178.3 million through FY2031.

Caltrain - Renewals

Pursuant to the Joint Powers Agreement, each member of the Joint Powers Board is responsible for contributing a one-third share towards Caltrain's local match for its capital projects that are designed to maintain Caltrain assets in a state of good repair. Examples of these projects include replacement of track, bridges, and various civil structures; rail vehicle overhaul and major component replacement; station rehabilitation; and signal and communication systems rehabilitation. Current projects in the City of San Francisco include the rehabilitation/replacement of the Marin Avenue and Napoleon Avenue rail bridges. Construction on this project is anticipated to be complete in late 2021.

The cost of Caltrain's state of good repair program is estimated at \$651.8 million through FY2031.

BART - Renewals

In November 2016, voters approved Measure RR which authorized BART to issue \$3.5 billion in G.O. Bonds to fund projects throughout its system. The Bond was put to the voters in three counties: San Francisco, Alameda, and Contra Costa. Its projects include replacement of 90 miles of track, renewal of mechanical infrastructure, repair of tunnels and stations, and many other initiatives that will modernize the BART system. The result of the Bond's program will be shorter wait times, fewer delays, and more comfortable rides for passengers.



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Enhancement Projects

Project Name	Description
SFMTA – Communications & IT Infrastructure	<p>The SFMTA maintains a wide array of IT assets across the city, from Wi-Fi installation at SFMTA worksites, to a fiber network that provides the internal communication backbone of the Muni Metro system, to the customer information systems that provide real-time public transit information. In addition to system maintenance, IT supports SFMTA's infrastructure upgrades and replacement on our aging systems. Upgrades are planned to the core network to support an upgrade of the Agency's video analytic system to monitor safety footage, upgrade routers on fleet vehicles to support remote video streaming and increased cameras to enforce Transit Only Lane violations. A major commitment to a new customer information system is also planned in this plan timeframe.</p> <p>The funding for SFMTA's Communications & IT Infrastructure projects is approximately \$39.3 million through FY2031.</p>
SFMTA – Facilities	<p>The Facilities Program at SFMTA supports the modernization and expansion of outdated facilities to make them safe and efficient, as well as acquiring new facilities to accommodate fleet growth. Over the next five years, the Agency will carry out projects to make sure that all SFMTA employees experience a safe, comfortable, and efficient working environment. Within the Facilities portfolio, the Potrero Yard Modernization Project and Presidio Facility Reconstruction will reach significant project milestones.</p> <p>The funding for SFMTA's Facilities Program is approximately \$909.2 million through FY2031.</p>
SFMTA – Fleet Capital Program	<p>The Fleet Capital Program ensures that vehicles operated by the SFMTA are safe, comfortable, clean, and reliable. Rehabilitating or replacing vehicles as they near the end of their useful life helps avoid costly repairs and service interruptions caused by vehicle failures. Expansion of the fleet alleviates overcrowding on busy routes and enables the transit system to carry more passengers. Planned enhancement projects in this program include the expansion and replacement of the light rail vehicle fleet, as well as preparation for the transition to battery powered fleet to meet the zero emission fleet mandate set by the California Air Resources Board.</p> <p>The funding for the SFMTA's Fleet Capital Program is approximately \$1.5 billion through FY2031.</p>
SFMTA – Parking	<p>The SFMTA Parking Program supports the planning, design, rehabilitation, and renovation of public parking garages, as well as street infrastructure and facilities related to public parking. A major priority for the Parking Program will be the implementation of the Parking Meter Replacement project which will upgrade the inventory of parking meters in San Francisco, reducing meter jams and enabling the public to more reliably pay for parking.</p> <p>The funding for the SFMTA's Parking Program is approximately \$50 million through FY2031.</p>
SFMTA – Security	<p>SFMTA Security Program funds are used to plan, design, and implement emergency/security initiatives in case of natural disasters, terrorist attacks, or other emergency situations. The program also provides security and emergency preparedness training and exercises for frontline transit employees.</p> <p>The funding for the SFMTA's Security program is approximately \$19.2 million through FY2031.</p>
SFMTA – Streets Program	<p>San Francisco is a national leader in complete streets design that accommodates all transportation modes and prioritizes safety for vulnerable users. The SFMTA is implementing enhancement projects that make walking and bicycling safer in the city, supporting the Vision Zero goal of eliminating traffic-related deaths and severe injuries by 2024.</p> <p>The funding for the SFMTA's Streets Program is approximately \$467.4 million through FY2031.</p>

Project Name	Description
SFMTA – Taxi	<p>The SFMTA Taxi Program strives to make comfortable, efficient, and environmentally friendly taxis available throughout the city. Program funds are used to plan, design, and implement improvements to the taxi system and to provide a better customer experience for all taxi users. Current projects include continued incentive programs for “green” taxi technology such as the Alternative Fuel Taxi Vehicle Incentive Program.</p> <p>The funding for the SFMTA’s Taxi program is approximately \$2.5 million through FY2031.</p>
SFMTA – Traffic and Signals	<p>The Traffic and Signals Program provides funding for upgrading, replacing, and constructing new traffic signals and signal infrastructure. The SFMTA is replacing outdated signals with Intelligent Transportation Systems (ITS) tools to enhance traffic analysis, provide transit signal priority, and expedite maintenance procedures. ITS tools include advanced traffic signal controllers, traffic cameras, video detection, variable message signs, and a communications network. This program also funds the design and construction of new and upgraded traffic signals to improve safety in line with Vision Zero. The agency is also conducting a traffic signal condition assessment to update existing maintenance models and more accurately forecast capital needs for the traffic signal asset portfolio.</p> <p>The funding for the SFMTA’s Traffic and Signals program is approximately \$136.5 million through FY2031.</p>
SFMTA – Transit Fixed Guideway	<p>Muni’s Transit Fixed Guideway systems, which include light rail, trolley coach, streetcar, and historic cable car lines, are a crucial component of San Francisco’s transportation infrastructure. The SFMTA plans to do major state of good repair work on its overhead catenary, train control signal, and subway fire life safety systems. A key component of the fixed guideway planned investments is the upgrade of the Automatic Train Control System which enhances safety and capacity of the transit system.</p> <p>The funding for the SFMTA’s Transit Fixed Guideway program is approximately \$761.4 million through FY2031.</p>
SFMTA – Transit Optimization and Expansion	<p>The Transit Optimization and Expansion program is a series of projects that will make Muni more efficient, reliable, safe, and comfortable for its existing passengers – as well as to prepare the system for future growth. Included in this program is Muni Forward, an initiative designed to enhance service on certain bus and light rail lines and construct new accessible light rail stops to eliminate significant gaps. These projects address the root causes of delay and passenger frustration like traffic congestion, stops that are spaced too close together, narrow travel lanes, and slow boarding times. The L-Taraval Project, Better Market Street, and continuation of the Van Ness BRT Project are a major part of the programmed investments.</p> <p>The funding for SFMTA’s Transit Optimization and Expansion program is approximately \$924 million through FY2031.</p>
SFO – Airfield Enhancements	<p>Major airfield-related projects include various runway and taxiway improvement projects including Runway 10L-28R Rehabilitation and Taxiway A & B Reconstruction. The reduction in passenger traffic activity as a result of the COVID-19 pandemic created an opportunity to accelerate certain airfield projects that would otherwise be more impactful to the Airport under full operations. The Airport has begun reconstruction of the Runway 10L-28R Rehabilitation Project, with the first phase scheduled for completion by the end of November 2020.</p> <p>The funding for SFO’s Airfield Enhancements is approximately \$65.1 million through FY2031.</p>

Enhancement Projects

Project Name	Description
SFO – Airport Support Projects	<p>Major ongoing airport support projects include the Airport Security Infrastructure Program, renovation of the Superbay Hangar, and various technology improvements. In addition, many Airport Support projects have recently been completed such as the Consolidated Administration Campus, Superbay Fire Suppression System, and construction of a new Fire House No. 3 and South Field checkpoint relocation. The Airport expects to have approximately 78% of Airport Support projects completed by the start of FY2022.</p> <p>The funding for SFO’s Airport Support projects is approximately \$264.7 million through FY2031.</p>
SFO – Groundside Projects	<p>Major groundside projects include construction of the new Airport-owned Hotel, which opened in October 2019. Other groundside projects include the completion of a new second long-term parking garage, which opened in February 2019 and the extension of the AirTrain system to the long-term parking garages, which is anticipated to be completed in Spring 2021.</p> <p>The funding for the balance of SFO’s Groundside projects is approximately \$2.3 million for FY2031.</p>
SFO – Terminal Redevelopment, Harvey Milk Terminal 1 and Terminal 3	<p>The largest terminal projects are the redevelopment of Harvey Milk Terminal 1 (Terminal 1) and the renovation and reconfiguration of the eastern and western side of Terminal 3. The Terminal 1 renovations include a new 25-gate Boarding Area B, seismic and building systems improvements, construction of a new baggage handling system, renovation of the central and southern portions of the departures hall, construction of a consolidated security checkpoint, and construction of secure and sterile connectors from Terminal 1 to the International Terminal. Eighteen gates are currently open.</p> <p>With the renovation of Terminal 3 East complete, the reconfiguration and renovation of the western side of Terminal 3 focuses on increasing gate flexibility, improving seismic stability, upgrading building and baggage handling systems, improving passenger flow, and enhancing passenger amenities.</p> <p>Other significant terminal projects include upgrades to the International Terminal, which improves operational efficiency and also includes an outdoor terrace at Boarding Area G to improve the customer experience; the Courtyard 3 Connector project, which will construct a post-security passenger connector between Terminal 2 and Terminal 3 and a new multistory office block; the Gate Enhancement project to meet increased gate demands; the Terminal 2 office space build-back, including office, concession, airline club space, and a brand new outdoor SkyTerrace that opened in February 2019; and improvements to the International Terminal baggage handling system.</p> <p>The funding for SFO’s Terminal Redevelopment projects is approximately \$838.3 million through FY2031.</p>
SFO – Utilities Enhancements	<p>Major utilities-related projects include “net zero” energy use-related improvements to the terminals and other major Airport facilities and systems, waste water system improvements, energy and efficiency improvements, and water system improvements.</p> <p>The funding for SFO’s Utilities Enhancements projects is approximately \$91.5 million through FY2031.</p>
TJPA – Transbay Transit Center Phase 2	<p>Phase 2 of the Transbay Transit Center will build the 1.95-mile Downtown Extension (DTX) for Caltrain commuter and high-speed rail. The DTX will extend from the current Caltrain terminus at Fourth and King streets into the lower level of the new Transit Center. Phase 2 includes a new Caltrain station at Fourth and Townsend streets, an intercity bus facility to house Greyhound and Amtrak intercity bus service, and potentially a block-long pedestrian tunnel between the lower level of the Transit Center and the Embarcadero BART/Muni Metro station. The funding plan for Phase 2 includes a mix of local, regional, state, and federal funds. Construction will begin once Phase 2 is fully funded.</p> <p>The total capital cost of Phase 2 is estimated at approximately \$3.9 billion through FY2031, including costs incurred in prior years.</p>

Enhancement Projects

Project Name	Description
Port – Mission Bay Ferry Landing	<p>The Mission Bay Ferry Landing will provide critical Transbay and regional ferry service to and from the fastest growing southern waterfront neighborhood of San Francisco, the financial district and the East and North Bay. The landing will include capacity to berth two ferries simultaneously and may include a nearby water taxi landing to provide regional access to UCSF Mission Bay, the Golden State Warriors arena, and the surrounding neighborhoods. These amenities are essential to alleviate current regional transportation overcrowding and to provide transportation resiliency in the event of an earthquake, BART or Bay Bridge failure, or other unplanned event.</p> <p>The estimated cost for the Mission Bay Ferry Landing is approximately \$58.4 million, including \$9.4 million in unfunded future expenses. Construction funding is anticipated from external sources, including Regional Measure 3 and private contributions.</p>
SFCTA – Treasure Island and I-80/ Yerba Buena Island Interchange and Mobility Projects	<p>The SFCTA is working with the Treasure Island Development Authority (TIDA) to improve mobility in this emerging neighborhood. The SFCTA is taking the lead on Southgate Road Realignment Improvements on the east side of Yerba Buena Island. Construction started in June 2020. On the west side of the island, the West Side Bridges Project will retrofit one seismically-deficient bridge, and demolish and replace seven seismically-deficient bridges that are located in proximity to each other along Treasure Island Road. The project selected a Construction Manager/General Contractor and the project is in final design. This part of the project is scheduled to start construction in the spring of 2021 after the Southgate Road Realignment Improvements and TIDA’s Macalla Road reconstruction are completed in order to avoid traffic circulation delays. These projects are all scheduled to be completed by the end of 2024.</p> <p>The cost of these projects is approximately \$281 million through FY2031, including prior years' funding. Funds for these projects are provided by the Federal Highway Bridge Program and State Proposition 1B.</p>
SFCTA – Treasure Island Mobility Management Program	<p>In its role as the Treasure Island Mobility Management Agency, the SFCTA is responsible for implementing a comprehensive and integrated transportation program to manage travel demand on Treasure Island as the Treasure Island Redevelopment Project proceeds. The centerpiece of this effort is an integrated and multimodal congestion pricing demonstration program that applies motorist user fees to support enhanced bus, ferry, and shuttle transit, as well as bicycling options, to reduce the traffic impacts of development. The capital elements of the program include the upfront cost of tolling infrastructure and ferry vessel purchase. All work is timed to support new development on Treasure Island, with sales of the first 1,000 housing units expected in FY2022.</p> <p>The capital cost of the Treasure Island Mobility Management Program is approximately \$43.5 million through FY2031, including prior years' funding.</p>
SFCTA – Quint-Jerrold Connector Road	<p>The Caltrain rail bridge over Quint Street was over 100 years old and in need of replacement. The Quint Street Bridge Replacement project replaced the rail bridge with a berm that will facilitate construction of a potential future Caltrain station at Oakdale Avenue. The SFCTA and Public Works are working collaboratively on the Quint-Jerrold Connector Road Project, which will link Quint Street just north of Oakdale Avenue to Jerrold Avenue via a new road along the west side of the Caltrain tracks.</p> <p>The cost of the Quint-Jerrold Connector Road project is approximately \$19.5 million through FY2031, including prior years' funding.</p>
Caltrain – Caltrain Electrification	<p>In May 2017, the Peninsula Corridor Joint Powers Board (JPB) achieved the final milestone to fund the Caltrain electrification project—execution of the Full Funding Grant Agreement with the Federal Transit Administration. With the finalization of this \$667 million grant, the JPB secured all of the financial commitments necessary to embark on this project that will install a 25KV overhead catenary system along the Caltrain line between San Francisco and San Jose and purchase 96 new electric multiple units (EMUs), replacing up to 75% of Caltrain’s aging fleet of diesel locomotives and passenger cars. The project is underway with planned completion in 2022.</p> <p>The cost of the Caltrain Electrification project is approximately \$2.0 billion through FY2031, including prior years' funding.</p>

Enhancement Projects

Project Name	Description
Caltrain – Peninsula Corridor Electrification Expansion	<p>Caltrain received a 2018 Transit Intercity Rail Capital Program grant for \$163 million. This grant, along with a \$39 million local match, will allow Caltrain to procure up to 37 additional EMUs, improve wayside bicycle facilities (bike sharing and bike parking), and install a broadband communications system that expands onboard Wi-Fi and enhances reliability. Combined, these improvements will further agency goals to improve passenger capacity and system performance while reducing greenhouse gas emissions.</p> <p>The cost of Caltrain’s Electrification Expansion Project is \$203.6 million through FY2031, including prior years’ funding.</p>
BART – Rail Cars Program	<p>BART’s fleet of 669 rail cars is one of the oldest in the United States and requires constant maintenance and repair. Rehabilitation and upgrade of BART’s rail cars in the late 1990s helped prolong the life of these essential vehicles, but they are now in need of replacement.</p> <p>BART has embarked on a project to replace the existing fleet and eventually enlarge the fleet to 1,200 cars. The first ten train cars went into service January 2018 following safety and reliability testing, and regulatory approval. BART already has 775 new cars on order, with a goal to order 1,081 new cars. This will provide enough cars to run 10 car trains on all peak service into San Francisco, and will increase the number of seats in the fleet by 60%. The balance of new cars is expected to be delivered by spring 2022.</p> <p>The funding for BART’s Rail Cars Program is approximately \$493.2 million through FY2031.</p>
BART – Station Programs	<p>BART will repair and rehabilitate existing station assets and modernize stations, enhance and expand station access facilities, improve wayfinding and the customer experience, and improve capacity to accommodate more riders at the system’s busiest stations.</p> <p>The funding for BART’s Station Programs is approximately \$139.2 million through FY2031.</p>
BART – Traction Power	<p>BART trains run on electric power. The infrastructure that distributes electricity throughout the system and propels BART trains by providing electricity to BART’s third rail is supported through a set of 118 substations, over 700 high voltage circuit breakers and switchgears, and over 1.5 million linear feet of cabling. Most of this infrastructure is original to the system and requires either replacement or major rehabilitation. This program area includes four programs that will replace, renovate, and upgrade power infrastructure to maintain and improve service reliability.</p> <p>The funding for BART’s Traction Power projects is approximately \$243.3 million through FY2031.</p>
BART – Train Control & Communications Programs	<p>BART’s train control system consists of both hardware and software that are used to control speed and movement on the rail network, keeping trains running smoothly and eliminating any possibility of a collision. BART’s communications systems support train control and other operational functions. They include the Operations Control Center, supporting fiber optic cable network, trunked radio system, and CCTV cameras.</p> <p>The funding for BART’s Train Control & Communication Programs is approximately \$210 million through FY2031.</p>

Enhancement Projects

Project Name	Description
BART – Track and Structures Program	<p>The Track & Structures program area includes four programs that will replace, rehabilitate, and upgrade the BART system's rail rights-of-way, including trackway infrastructure, tunnels, and aerial structures. Most of these components are original to the system and worn from decades of use.</p> <p>The funding for BART's Track and Structures Program is approximately \$251.5 million through FY2031.</p>
BART – System Support	<p>System Support programs invest in areas other than mainline railroad and station assets. They support BART District operations and promote strategic plan goals in a variety of areas including the Transbay Core Capacity Plan, Information Technology, Sustainability, Real Estate, BART to OAK Airport, Climate Adaptation and Resilience, and BART Police.</p> <p>The funding for BART's System Support Programs is approximately \$105 million through FY2031.</p>
BART – Maintenance Shops, Yards, Other Facilities	<p>A range of buildings and facilities that are not visible to BART riders support system operations. These include BART's four rail car maintenance facilities in Hayward, Richmond, Concord, and Daly City, and other facilities. Five programs in this area will repair and upgrade these facilities.</p> <p>The funding for BART's Maintenance Shops, Yards, and Other Facilities projects is approximately \$68.7 million through FY2031.</p>
BART – Electrical & Mechanical Programs	<p>BART system operations depend on a wide range of electrical and mechanical infrastructure, including backup power supplies, HVAC equipment, fire suppression equipment, water management infrastructure, and many other facilities. This program area includes three programs that will replace, renovate, and upgrade electrical and mechanical infrastructure to maintain safe and reliability operations.</p> <p>The funding for BART's Electrical & Mechanical Programs is approximately \$57.4 million through FY2031.</p>
BART – System Expansion Programs	<p>BART is working to complete ongoing system expansion projects and working with partners to study the possibility of future expansion. Current planned system expansion efforts include a new Transit Operations Facility to serve a larger system, investments to complete current projects, and planning processes and studies.</p> <p>The funding for BART's System Expansion Programs is approximately \$42.9 million through FY2031.</p>
BART – Seismic Programs	<p>In 2004, BART District voters approved Proposition AA, a general obligation bond to fund BART's Earthquake Safety Program (ESP). Since that time, BART has been steadily investing in crucial seismic upgrades to its core infrastructure, including elevated structures, stations, maintenance facilities, and other buildings. Remaining Earthquake Safety Program work will focus on the Transbay Tube. Beyond the 2004 Earthquake Safety Program, investment will be required to address a set of risks to operations in the Caldecott BART Tunnel resulting from incremental movement of the Hayward Fault.</p> <p>The funding for BART's Seismic Programs is approximately \$50.8 million through FY2031.</p>

Deferred Projects

Project Name	Description
SFMTA	<p>Modern maintenance and storage facilities are vital to ensuring reliable transit service and that SFMTA's fleet is in a state of good repair. The SFMTA's Building Progress facility capital program supports upgrades to obsolete facilities to make them safe and efficient. The most urgent of these capital needs have been prioritized, but others remain unfunded.</p> <p>The SFMTA has also deferred major corridor projects that assist Vision Zero pedestrian and bicycle safety goals; numerous Muni Forward corridor projects to make transit more effective; the full build out and replacement of station elevators; audible pedestrian signals to enhance accessibility; seismic retrofits and routine state of good repair upgrades of its parking garages; the full expansion of its light rail vehicle fleet; major track overhauls on the M-Ocean View line; a new train control system to improve on time performance; the full realization of the Rail Capacity Strategy; and other system wide state of good repair projects.</p> <p>The cost of SFMTA's deferred projects is approximately \$10.9 billion through FY2031.</p>
SFO	<p>As a result of the COVID-19 pandemic and the resulting economic uncertainty, the Airport has reprioritized its capital projects to determine which projects will move forward and which projects will be suspended. As of July 2020, the Director has suspended \$1.37 billion in capital projects from its CIP, including the Terminal 3 West project, and has reduced its available program reserve by \$168 million, from \$318 million to \$150 million. Other notable project suspensions include the International Terminal phase II project (\$53 million reduction), power and lighting improvements (\$53 million reduction), NetZero Energy projects (\$48 million reduction), and airfield improvements (\$47 million reduction). The Airport continues to monitor passenger traffic and operations to inform its decisions to restart suspended projects, if at all.</p>

Emerging Projects

Project Name	Description
SFMTA – Barrier Removal: Access to Transportation and Wayfinding	<p>Accessible vertical access to the metro system is a primary requirement to ensure an accessible path of travel. Currently, the majority of San Francisco’s stations have only one elevator to provide access to each of the street and concourse levels, and these elevators are frequently out of service. When one elevator is out of service, it renders the entire station inaccessible to persons with disabilities, who then are unable to reach their destination. From 2015-2020, SFMTA Accessible Services received 208 citizen-initiated complaints related to the five underground stations that are solely operated by the City (i.e., Van Ness, Church, Castro Forrest Hill, West Portal), related to the elevator or escalator feature being out of service or unusable by people with disabilities.</p> <p>The provision of Accessible Pedestrian Signals (APS) is another key component of accessible travel in San Francisco. While the City has a plan to ensure APS is added to an intersection whenever new construction occurs in that intersection area, the funding need to address requests for APS at specific intersections by residents who are blind or low vision far exceeds the amount of funding currently available for the APS program. APS is a critical safety feature needed within the disability community. To date, SFMTA has provided APS features at 27% of its total signalized locations, and adds them whenever new construction is scheduled. SFMTA has 77 outstanding APS request complaints from blind and low vision individuals. Of these, 53 will be addressed in work that is scheduled within the next 1-2 years.</p>
SFMTA – Line Extension Projects	<p>In addition to the renewal and enhancement programs, emerging needs at the SFMTA include the T-Third line extension to Fisherman’s Wharf, the F-Line Extension to the Fort Mason Center, and major upgrades to the M-Ocean View line, as well as planning for sea level rise and increasing rail capacity. Other further emerging major corridor projects are being identified in the Transit Corridors Study in ConnectSF.</p>
Multiple Departments – ConnectSF	<p>In addition to strengthening and adapting vulnerable infrastructure, the City is also working to make sure that the development of the transportation network supports San Franciscans’ vision for the future. With the help of thousands of residents who participated in focus groups, surveys, and targeted outreach, ConnectSF developed a vision, goals, and objectives that will guide the city’s long-range transportation planning. In the next phase of work, the City and partner agencies will make sure that plans, policies, and investments support the ConnectSF vision through the Transit Corridors Study, the Streets and Freeways Study, and the San Francisco Transportation Plan 2050.</p>
SFO – Emerging Projects	<p>The Airport completed a recommended Airport Development Plan (ADP) in September 2016. The recommended ADP defines a series of recommended projects that would accommodate potential growth up to approximately 71.1 million annual passengers, serves as a roadmap to guide long-term Airport development, and supports the Airport’s overarching strategic objectives. Recommended ADP projects include a new terminal concourse, replacement of the Central Garage, and improvements to the International Terminal Complex.</p> <p>The recommended ADP is currently undergoing required environmental review which started in July 2017. Projects included in the recommended ADP will not necessarily be undertaken, but could be added to future capital improvement plans when and as they are warranted by traffic growth or other factors, subject to all applicable approvals.</p>
SFCTA – I-280 Interchange Improvements at Balboa Park	<p>Recommendations from the Balboa Park Station Area Circulation Study, adopted by the SFCTA in June 2014, include realignment of the southbound off-ramp from I-280 to Ocean Avenue and closure of the northbound on-ramp from Geneva Avenue. Both provide extensive pedestrian and safety benefits while minimizing traffic impacts to I-280 and the surrounding areas. The rough order of magnitude estimate for planning, design, and implementation is up to \$21 million for the southbound ramp and up to \$7.3 million for the northbound ramp.</p>

TABLE 13.1 - TRANSPORTATION FINANCIAL SUMMARY

PROGRAMS/PROJECTS (Dollars in Thousands)	Prior Years	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027 - 2031	Plan Total	
SPENDING PLAN									DEFERRED
Municipal Transportation Agency (SFMTA)	545,083	505,691	488,929	435,890	600,228	631,964	2,126,800	4,789,502	10,888,405
International Airport (SFO)	6,603,762	789,097	492,532	28,303	17,000	17,510	95,752	1,440,194	-
San Francisco Bay Area Rapid Transit (BART)	-	265,886	180,231	245,743	308,162	165,098	496,790	1,661,909	989,306
Interagency Initiatives	2,174,190	664,030	496,911	403,606	758,931	915,829	3,222,687	6,461,993	-
TOTAL	9,323,036	2,224,704	1,658,603	1,113,541	1,684,320	1,730,400	5,942,028	14,353,597	11,877,712
REVENUES									
Transportation Bond 2014	135,562	93,836	-	-	-	-	-	93,836	
Transportation Bond 2022	-	-	62,500	62,500	62,500	112,500	50,000	350,000	
Local	818,508	374,689	420,445	517,869	1,240,080	237,980	1,241,286	4,032,348	
Regional	89,479	160,522	124,931	109,482	491,109	90,069	307,844	1,283,957	
State	618,796	259,503	47,352	97,955	68,268	447,385	703,782	1,624,245	
Federal	1,062,047	488,548	240,966	309,863	1,370,089	304,288	1,152,132	3,865,888	
Other	6,593,424	822,936	517,028	45,445	93,475	67,600	122,315	1,668,798	
TOTAL	9,317,816	2,200,035	1,413,221	1,143,114	3,325,521	1,259,822	3,577,359	12,919,073	
<i>Total San Francisco Jobs/Year</i>		9,854	6,330	5,120	14,895	5,643	16,023	57,865	
<i>Annual Surplus (Deficit)</i>	(5,219)	(24,669)	(245,381)	29,573	1,641,201	(470,579)	(2,364,669)	(1,439,744)	
<i>Cumulative Surplus (Deficit)</i>	(5,219)	(29,888)	(275,270)	(245,697)	1,395,504	924,926	(1,439,744)		