



ConnectSF

TRANSIT STRATEGY



What is ConnectSF?

ConnectSF is a multi-agency collaborative process to build an effective, equitable, and sustainable transportation system for San Francisco's future.

ConnectSF identifies policies, major transportation investments, and land use opportunities that help us reach our priorities, goals, and aspirations as a city.

The Transit Strategy (this document) describes the major capital projects and programs that will help our city's transit system meet the existing and future travel needs of residents, workers, and visitors.



December 2021

All photos courtesy of the SFMTA unless otherwise noted.

Table of Contents

TRANSIT KEEPS OUR CITY MOVING. 4

 What Are Our Transit Challenges? 6

 Investing in Transit Will Benefit All San Franciscans 8

INVESTMENT STRATEGIES..... 10

1. MAKE THE SYSTEM WORK BETTER 12

 Tackle the Backlog12

 Restore Service Equitably13

2. DELIVER A FIVE-MINUTE NETWORK..... 16

 Implement Transit Priority16

 Support Regional Transit Connections.....20

 Build on Success..... 24

3. RENEW AND MODERNIZE OUR RAIL SYSTEM..... 28

 Implement Muni Subway Renewal Program.....30

 Improve Muni Metro Reliability on the Surface31

4. BUILD MORE RAIL TO SAN FRANCISCO’S BUSIEST PLACES..... 34

BENEFITS 42

GETTING IT DONE, TOGETHER..... 46

 Partnerships 47

 Funding 48

 Next Steps..... 49

ENDNOTES..... 51

APPENDIX A: RELATED PLANNING EFFORTS..... 53

Transit Keeps Our City Moving

The City and County of San Francisco (City) is rebuilding San Francisco's transit system to provide better and more effective transportation for all.

WHY IS TRANSIT IMPORTANT?

San Francisco depends on an efficient transportation system for access to jobs, education, healthcare, services, and opportunities. Transit is a cost-effective way to move large numbers of people around our growing city, supporting existing and planned housing and commercial developments. A strong transit system helps businesses attract workers and makes it more affordable to live in San Francisco. Transit helps us reach our equity, climate, and safety goals.

San Francisco is a transit-first city.

CHANGING TRANSPORTATION NEEDS

Much of today's Muni system reflects a historic focus on bringing people to daytime jobs in downtown San Francisco. It was not originally designed to connect people traveling between neighborhoods or outside weekday business hours. Well before the COVID-19 pandemic, an increasing number of jobs and services were located outside the downtown financial district, and many people worked outside the traditional hours of 9 a.m. to 5 p.m. The pandemic has enabled some workers to have more flexibility in when and where they travel and highlighted that essential workers commute to virtually all parts of the city. These travel patterns will likely continue, even as the economy recovers. Transit must evolve to meet people's changing travel behavior.



OUR SHARED VISION

For the past four years, the ConnectSF team worked with residents, community and business groups, youth organizations, and other stakeholders to create a vision for San Francisco: a growing, diverse, equitable city with transportation options that are accessible and affordable to all. Transit is an essential part of this vision.

WHAT DID WE HEAR ABOUT TRANSIT?

San Franciscans told us that making the current transit system work well is a top priority, along with increasing service and making physical changes that enable new or better transit options. San Franciscans emphasized that we should be prioritizing transit improvements for riders who depend on it the most.

We heard you and have developed a strategy aimed at creating impactful, achievable improvements to existing transit services while growing and strengthening the system to meet future demand.



INVESTING IN TRANSIT

The Transit Strategy identifies a set of high-priority, cost-effective capital improvements for bus and rail transit in San Francisco. The priorities described in this document will guide us as we build our public transit system over the next three decades. These investments were developed to provide you and all San Franciscans with a convenient, high-quality transit experience given limited resources and funding.

What Are Our Transit Challenges?

The Transit Strategy addresses the challenges that separate you from the rapid, reliable, and safe transit experience you need.



DELAYS AND BREAKDOWNS DISRUPT TRAVEL

When our system is down, it can have a big impact on your day. We need to upgrade our infrastructure and vehicles to make transit a reliable option you can count on.



TRAINS AND BUSES ARE CROWDED

This makes your travel less comfortable, with longer waits on the platform and more time in transit. Making room for more passengers is critical to serving the needs of our growing city.



CONNECTIONS ARE TIME- CONSUMING

Getting where you need to go can require changing transit lines. We need to make these connections fast and convenient, and the places you transfer safe and easy to use.



TRANSIT NEEDS TO WORK BETTER FOR PEOPLE WHO RELY ON IT

It's more important than ever that we serve essential workers and others who depend on transit. We need to focus investments to address racial and social inequities and provide access to jobs, housing, and other opportunities.



TRANSPORTATION EMISSIONS CONTRIBUTE TO CLIMATE CHANGE AND POOR AIR QUALITY

Across the city, especially in marginalized communities, we need to reduce emissions from car travel to meet our climate targets and improve quality of life for all San Franciscans.



EXISTING TRANSIT FUNDING ISN'T SUSTAINABLE

The Transit Strategy is a bold program of solutions to make our bus and rail transit system work for you. We need stable funding to deliver on the strategy.



TRANSIT CHALLENGES MAKE THE HOUSING CRISIS WORSE

San Francisco is working to preserve affordable housing and build more housing to meet recent and projected growth, as outlined in the City's Draft 2022 Housing Element. An effective transit system is critical to providing access between neighborhoods and to good, living-wage jobs and other economic opportunities. When transit is not working well, it compounds tough choices people have to make about where to live and work.



This map shows the delay riders experienced in early 2020, before the COVID-19 pandemic, while traveling to their jobs, homes, and other destinations across the city.

*Transit delay is the additional time it takes a bus or train to travel on a slow day compared to a relatively fast day. Higher delay means transit travel is less reliable. Passenger delay is the cumulative delay of each person riding transit (delay multiplied by the number of passengers on the bus or train). Data is from January and February 2020, between 6 a.m. and 7 p.m. in the outbound (e.g., westbound/southbound) direction.

Investing in Transit Will Benefit All San Franciscans

A better transit experience

- Fewer breakdowns and delays
- Reliable travel all across the city
- Faster bus and rail service



Equitable transit

- Convenient essential trips citywide
- Increased access to regional transit
- Service focused on people who depend on transit
- Access to opportunity, including jobs, education, and services



EQUITY PRIORITY COMMUNITIES

Formerly called “Communities of Concern,” Equity Priority Communities are census areas that have a significant number of people who have historically and continue to face disadvantage and underinvestment due to their background or socioeconomic status. These include people of color; low-income individuals; people with limited English proficiency; zero-vehicle households; people over 75 years of age; people with a disability; single-parent families, and rent-burdened households. These geographies were used to analyze how transit investment options would benefit people in San Francisco. (Source: [MTC](#), [SFCTA](#))

Transit that gets you where you need to go

- More reliable service to your home, work, school, and other destinations
- Better connections to support walking and biking
- A new connection across the Bay



Climate action

- Reduced emissions and cleaner air

CREATING AN EQUITABLE TRANSPORTATION SYSTEM

The Transit Strategy is an opportunity to connect San Franciscans to jobs, education, and services. This is especially crucial for marginalized individuals and communities, who have been historically overlooked or unfairly burdened by slow, overcrowded transit service that has not met their needs.

As the City implements the Transit Strategy's recommendations, it must develop and deploy strategies and dedicated funding to advance the equity values of the SFMTA Strategic Plan and address transportation needs identified in the ConnectSF Statement of Needs. The Transportation Element update and San Francisco Transportation Plan (SFTP 2050) will develop policies and a funding blueprint to move the city toward a sustainable, equitable, and affordable transportation system.



Investment Strategies



Make the System Work Better

with aggressive renewal and restoration

- Tackle the capital backlog
- Restore service equitably



Deliver a Five-Minute Network

with reliable service every five minutes on key bus and rail lines

- Implement transit priority, street safety, and accessibility improvements
- Support regional transit connections



Renew and Modernize our Rail System

with increased speed, reliability, and capacity

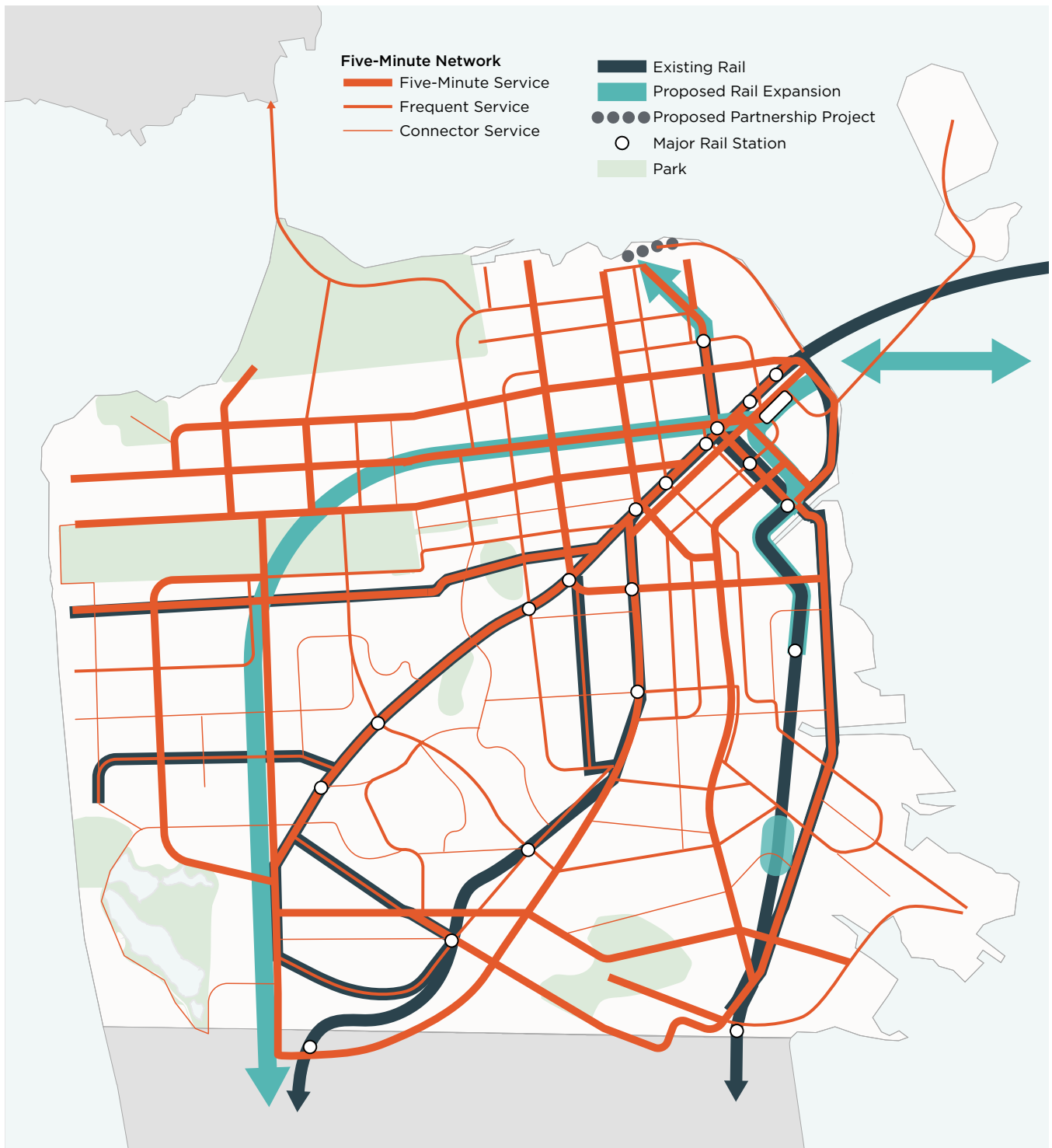
- Implement Muni Subway Renewal Program
- Improve Muni Metro reliability on the surface
- Support BART and Caltrain upgrade programs



Build More Rail

to San Francisco's busiest places

- Add new rail in the Geary / 19th Avenue corridors
- Extend Central Subway to Fisherman's Wharf
- Add a new Bayview Caltrain station, and complete the Downtown Rail Extension (DTX) and Pennsylvania Avenue Extension (PAX)
- Collaborate on regional study of a new Transbay Rail Crossing (Link21)



In addition to proposed concepts, this map includes some capital projects that are already planned or underway, including Van Ness BRT, 16th Street Improvement Project, Geneva-Harney BRT, F Market extension (partnership project), Central Subway, Downtown Rail Extension (DTX), and Pennsylvania Avenue Extension (PAX).

This map shows what our transit system could look like with these strategic investments.

1 Make the System Work Better

We will address capital investment backlogs for our existing rail and bus systems and strategically restore service.

Tackle the Backlog

Problems resulting from deferred capital investments disproportionately affect people who depend on transit. A portion of the SFMTA's roughly \$500 million annual capital budget goes toward maintaining or replacing capital infrastructure.¹ The current capital renewal backlog is \$3.8 billion; a figure that will continue to grow unless we shift more resources towards strengthening our system.²

Strengthening our current system includes repairing and replacing our most heavily used infrastructure and vehicles while addressing our multi-year backlog of maintenance work, which includes:

- Fix the most heavily used parts of our rail and trolley bus systems: tracks and switches, train turnarounds, overhead wires, and electrical systems.
- Replace antiquated systems like the automatic train control system in the subway—nearly 30 years old—that still runs on floppy disks.
- Continue to replace our aging rail fleet with new models (underway since 2019).

Muni's new light rail cars have averaged between 17,000 and 27,000 miles between breakdowns in recent months, several times farther than the old cars – this means more reliable trains to help you get where you need to go.



We will need to hire additional staff and invest an average of nearly \$600 million per year—a total capital cost of almost \$12 billion, before inflation—to bring our system into a state of good repair within the next 20 years.⁴

This work will improve our system's resilience and prepare it for the demands of the future.

We are repairing today to prepare for tomorrow.

Restore Service Equitably

We need to continue to restore and improve service after reducing it in response to the pandemic. We'll focus on routes that essential workers and transit-dependent people rely on and then expand service for all San Franciscans.

CHARTING OUR PATH FORWARD FROM THE PANDEMIC

When the pandemic began, we had to reduce Muni service. Equity was at the core of our decision-making as we completely transformed our service in a matter of weeks. We made tough decisions and put some dramatic changes in place.

Those strategies are paying off. We are serving people who depend on transit with buses that travel faster and are less crowded compared to pre-COVID days.

We have bridged gaps with programs like the Essential Trip Card, which helps seniors and people with disabilities use taxis at a discounted rate, and the COVID Ambassador program, where staff at bus stops help people comply with health practices and navigate the changing system.

As San Francisco reopens and more people return to transit, the City will need more resources to run more programs like these that quickly respond to passenger needs.



INCREASING ACCESS TO JOBS

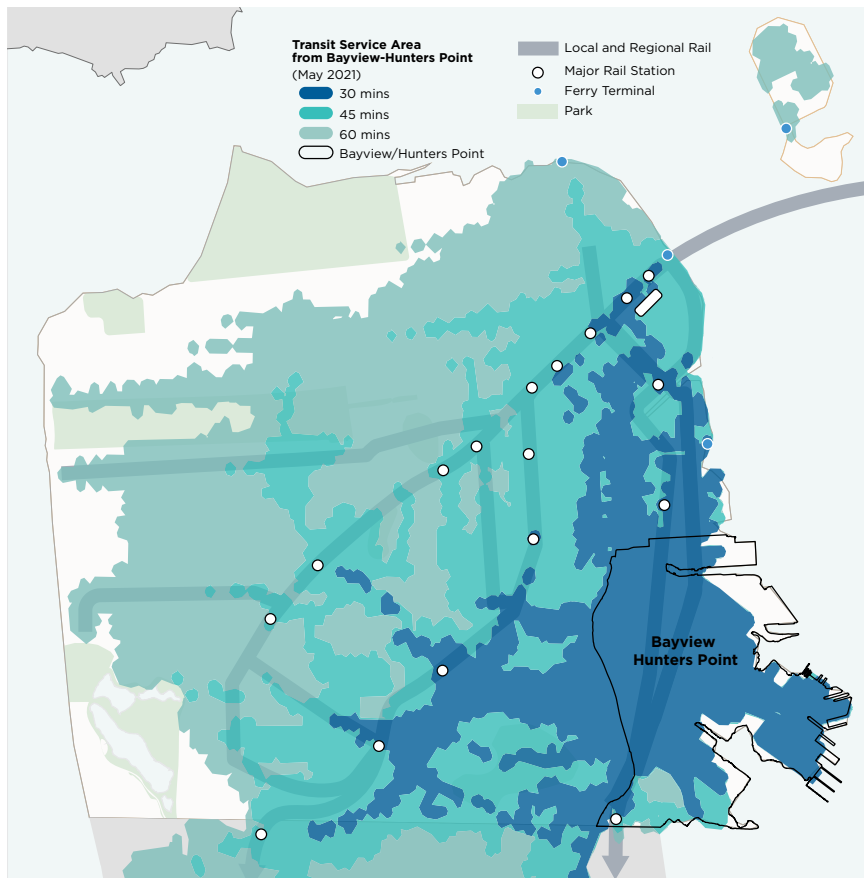
The implementation of Muni's service changes in 2021 gave San Franciscans convenient transit access to more jobs. This includes some significant increases in job access for Equity Priority Communities. For example, job access increased for residents of Hunters Point. The table below shows the number of jobs that Hunters Point residents could access by transit in January 2021 compared to August 2020. The introduction of the 15 Express, which connects to downtown, drove the large increase.⁵ With this new service, residents could reach close to 330,000 jobs (including those in essential industries⁶) within 45 minutes on transit, an increase of over 800%.⁷

Hunters Point Job Access via Transit

Commute Time	August 2020	January 2021	Percent Change
30 mins	3,500	14,500	> 300%
45 mins	34,000	327,000	> 800%
60 mins	310,000	633,000	> 100%

Source: SFMTA Equity Toolkit - Transit Assessment, January 2021 Analysis. Note: Due to a change in methodology, job access results comparing August 2020 and January 2021 are not directly comparable with analyses for more recent time periods.

As the SFMTA has continued to restore service throughout 2021, job access has improved even further. The map below shows the area accessible by transit from Hunters Point within 30, 45, and 60 minutes (as of May 2021). Increasing citywide access to opportunity will continue to be a key consideration as we rebuild the transit network and support an equitable economic recovery.



Source: SFMTA Equity Toolkit - Transit Assessment

Paratransit

Paratransit is an important service for people who have difficulty riding Muni and other fixed route transit options. In the future, paratransit demand is expected to grow as the baby boom generation ages.

Technology will play a larger role in paratransit service, allowing riders to request trips using new electronic methods or by phone. Riders will be able to manage advance reservations on SF Access Van using a smartphone and online, and receive real time information on their vehicle's arrival. We also expect e-hailing of on-demand taxis to be standard and riders will be able to use the SF Paratransit taxi debit card to pay for trips. We will also continue programs like the Essential Trip Card, which we started during the pandemic to help seniors and people with disabilities use taxis at a discounted rate.



As our paratransit fleet grows to meet increased demand, we will make it more environmentally friendly and sustainable by transitioning to electric powered vehicles and developing a City-owned or leased paratransit facility within city limits. This will lower our costs to provide the service and help it serve riders more reliably into the future.

2 Deliver a Five-Minute Network

We will make cost-effective improvements to our transit network so buses and trains arrive frequently, move quickly, and run on-time.

Implement Transit Priority

Transit is convenient and easier to use for more trips when you don't have to wait too long for the bus. This strategy includes street improvements that would support a network of bus and rail routes running every five minutes to provide quick, convenient access to all parts of San Francisco, including commercial districts, jobs, and housing. This is consistent with the [2021 SFMTA Community Survey](#), which confirmed that a majority of riders want faster, more reliable service, even if it is a bit farther away.⁸

Focusing investment on our most used routes – those that carry 80% of Muni passengers, including passengers who depend on public transportation –

would ensure investments benefit the most people given limited resources.⁹ A high-quality citywide network would provide convenient access from Equity Priority Communities to all parts of San Francisco.

CONNECTIONS TO THE FIVE-MINUTE NETWORK

A network of frequent service and connector routes would ensure everyone in San Francisco has access to the transportation network, no matter where you are. Transfers would be a snap, as frequent service means that you won't be waiting long for the next bus, and more of the city's destinations would be within easy reach.



We will keep buses moving with improvements like transit lanes and smart traffic signals that hold green lights for transit. When buses are not stuck in traffic, you get where you're going faster.



The corridors on this map show what a five-minute network could look like.

Recent analysis shows that frequent routes spaced $\frac{1}{4}$ to $\frac{1}{2}$ mile apart provide transit access to a greater number of people, which means people would have more options for where they live, work, and play.¹⁰

We will make on-street improvements that keep buses moving between bus stops.

Striping, signage, and traffic light adjustments allow buses to move through intersections ahead of cars. We will make investments to keep buses moving and minimize unnecessary stops. When buses stay in motion, they do not bunch up as much, which also means wait times are shorter and more consistent.

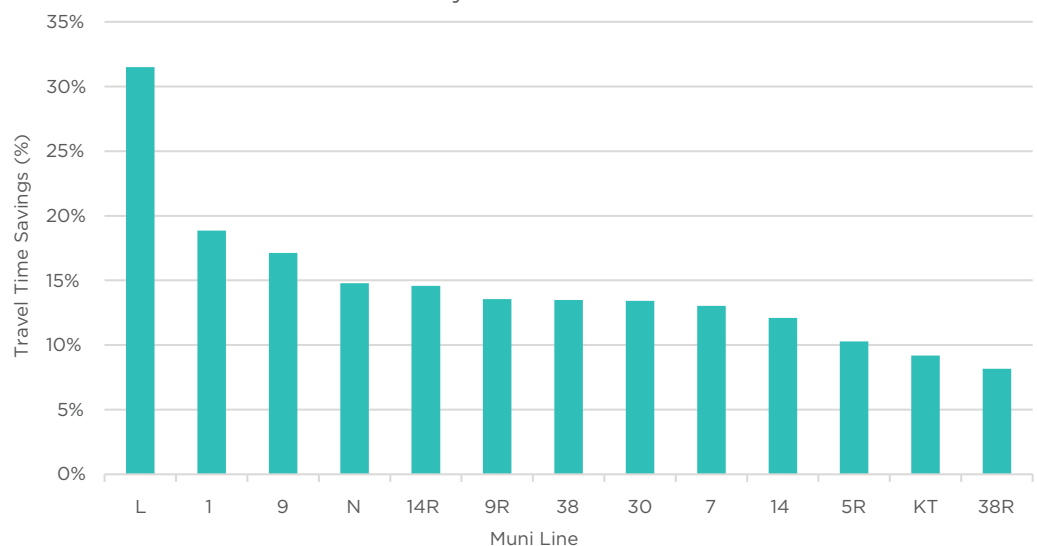
These are proven treatments that have worked on bus lines that serve many parts of San Francisco. The chart below shows the time savings riders experience when buses are not stuck in traffic, which was the case in the early months of the pandemic when there was less congestion.

We will continue to make these upgrades quickly so passengers see results sooner, while we work on larger improvements to our system. These improvements will keep existing residents moving even as the city grows and will help us serve future residents of new housing developments.



The early days of the COVID-19 pandemic showed how much time passengers save when buses and trains are not stuck in traffic—10% to 20% or more.¹¹

Travel Time Savings by Line During Afternoon Peak Hours
February 2020 to March 2020



Speeding Up Transit on Geary Boulevard

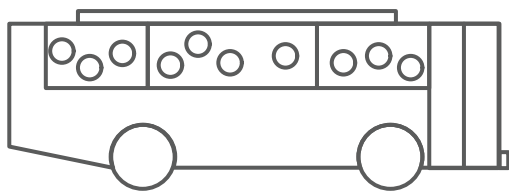
On Geary Boulevard, we quickly delivered time savings for transit riders using targeted, cost-effective street improvements.

Between November 2020 and February 2021, we installed new transit lanes on segments of Geary Boulevard between Stanyan Street and 33rd Avenue as part of the Temporary Emergency Transit Lanes program.

We placed temporary wooden sidewalk extensions (known as bus bulbs) at bus stops at 6th, 20th, and 25th Avenues. Bus bulbs are a low-cost way to allow buses to stop without pulling in and out of traffic and provide more space for people waiting. To give buses a head start on general traffic, we installed special Muni-priority traffic signals at the intersections of 15th, 20th, and 25th Avenues.



A recently completed evaluation shows that the new transit lanes and quick build transit treatments have improved 38 Geary bus performance, making transit trips on the corridor up to 13% faster, with minimal traffic impacts to Geary Boulevard or parallel streets.¹² And a majority of people who took our evaluation survey support the recent decision to make the transit lanes permanent.



Up to 13% faster

Even as traffic volumes increased.



Support Regional Transit Connections

When riders need a speedier connection over a long distance, they can rely on express routes and regional rail services. Existing transit lanes on Mission Street are used by Golden Gate Transit and SamTrans, and the new transit lanes on Lombard Street and Park Presidio Bypass would help people riding Muni and Golden Gate Transit. Building out a complete network of high-occupancy vehicle lanes gives transit priority on freeways and highways, and adding more dedicated lanes and other transit priority treatments keeps buses moving on city streets. Together, these improvements would increase the speed and reliability of local and regional transit service running to, from, and within San Francisco.



The corridors on this map show what enhanced express and regional bus service could look like.

An Integrated Regional Transit System

Transit riders deserve a seamless, integrated transit system that serves the entire Bay Area.

Regular riders know that regional connectivity often falls short, particularly when crossing county lines. It should be equally easy for you to ride transit whether your bus is operated by AC Transit or Muni, or your train is operated by BART or Muni Metro.

The economic success of our city and the Bay Area depends on our region's transit operators working together. Since early 2020, City agencies have met weekly with regional transit operators to share strategies that address the pandemic and make transit easier for you to use. Our coordination efforts have already yielded improvements including:



Photo Credit: Nelson\Nygaard

- Working with SamTrans and Golden Gate Transit to provide local coverage in areas where our services overlap.
- Coordinating with Caltrain to optimize connections at stations in San Francisco.
- Synchronizing regional providers' schedule updates, so that you don't have to keep up with as many changes to your routine.

In future efforts, City agencies and our regional partners will:

- Continue to improve passenger information and coordination of schedules, so you can count on regional connections for longer trips.
- Make fare payment, discount policies, and transfers simple and transparent, so you can ride the many transit systems in the Bay Area like one combined system.

How do street improvements make transit work better?

THEY MAKE TRAVEL FASTER

Faster transit means you spend less time getting where you need to go and more time being there. Improvements like transit-only lanes (A) can make bus and rail travel as fast as driving, attracting new riders and saving time for those who already ride.



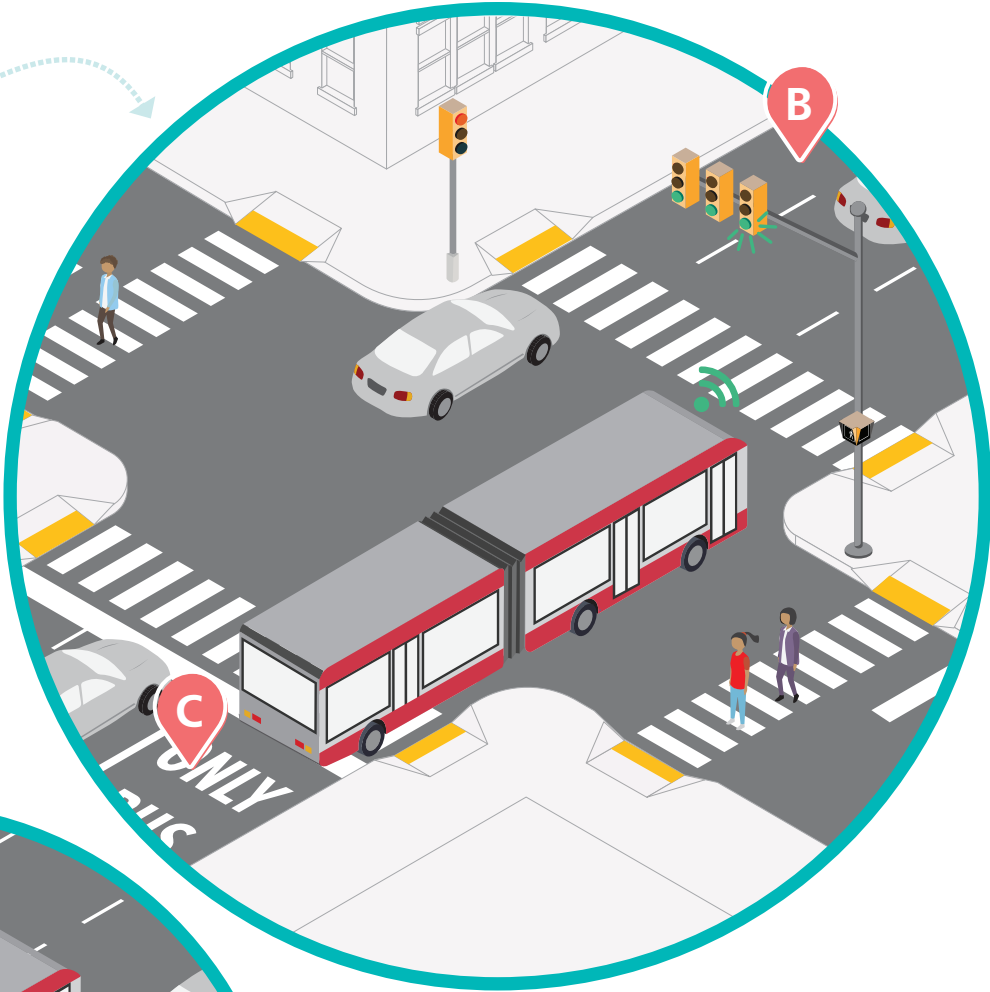
FASTER TRANSIT CAN ARRIVE MORE OFTEN AT LESS COST

When the bus or train arrives more frequently, it is less likely to be crowded, you spend less time waiting, and transfers are quick and painless. Transit that arrives reliably on connecting lines lets you access more places around the city.



RELIABILITY BUILDS CONFIDENCE

Features such as traffic signal adjustments (B) and queue jumps (C) help the bus move through intersections with fewer stops and delays. Consistent, reliable service means you don't have to plan extra travel time into your day.

**BETTER STOPS IMPROVE YOUR WALK AND YOUR RIDE**

Transit bulbs are sidewalk extensions at stops that allow Muni vehicles to stop for passengers without having to pull over. This means buses and trains no longer have to merge in and out of traffic at transit stops, and you can board more quickly and easily since the steps line right up with the curb. They also provide more space for you to wait for the bus or train and make it safer to cross the street.



Many of these low-cost changes can be put in place quickly so that you see results sooner, while we work on larger improvements to our system.

Build on Success

The five-minute network would expand the benefits of recent initiatives to improve the busiest routes across the city and keep buses and trains moving.

MUNI FORWARD

Muni Forward is an improvement program to make getting around San Francisco faster, more reliable, and safer. Applying our toolbox of speed and reliability improvements (see p. 22-23) in our highest-ridership bus corridors is the fastest, most cost-effective way to deliver reliable transit to our customers. After we made improvements:

- Ridership on the Rapid Network (Muni's most heavily used core routes) increased 14% between 2016 and 2018.
- Riders on the J Church, the 5R Fulton Rapid, 14/14R Mission, and 22 Fillmore saw travel time savings of 10% to 15%, while the 7 Haight/Noriega, 9/9R San Bruno, and 10/12 Folsom/Pacific saw travel time savings of 20% and above.¹³



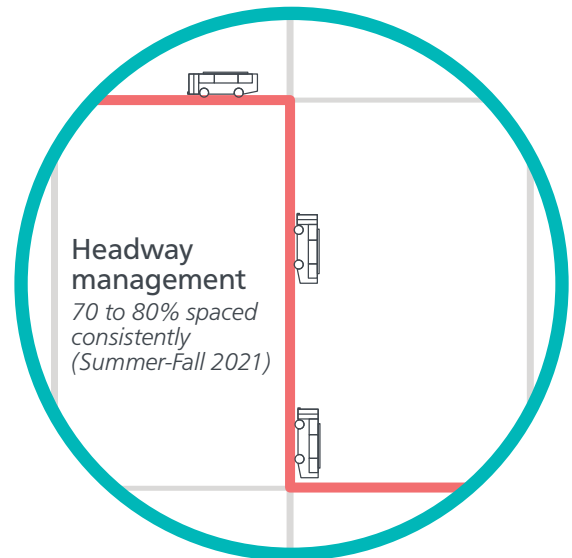
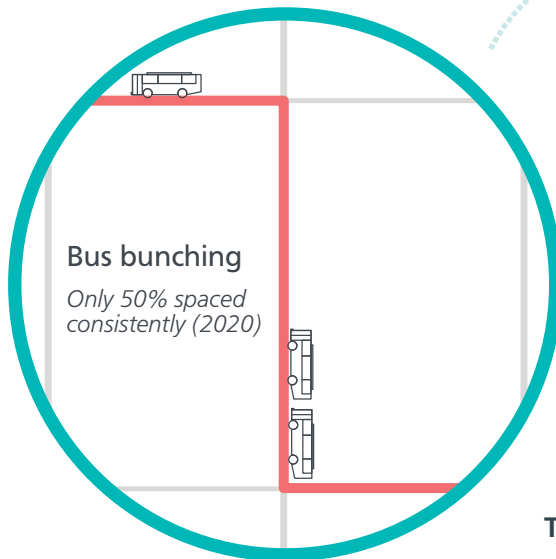
Muni Forward pedestrian safety improvements are an essential part of the City's **Vision Zero** commitment to eliminate traffic fatalities.



Muni Forward upgrades include red transit lanes that keep your bus from getting stuck in traffic, bus bulbs for faster boarding, and traffic signals that stay green for transit.

HEADWAY MANAGEMENT

In 2020, the SFMTA began managing transit service to adhere to headways (the amount of time between bus arrivals) rather than schedules.¹⁴ Displays on buses and trains help Muni operators keep vehicles evenly spaced. The results? You don't have to wait as long for the bus, and when it arrives it is less crowded.



TEMPORARY EMERGENCY TRANSIT LANES

- Over twelve miles of transit lanes were installed between September 2020 and July 2021.
- Customers experienced 18% to 20% shorter travel times after part-time transit lanes were converted to full-time transit lanes on Mission Street from 3rd Street to 11th Street.¹⁵
- Riders on the 19 Polk enjoyed a 20% improvement in on-time performance after transit-only lanes were installed on 8th Street in October 2020.¹⁶



4th Street Bridge improvements decreased transit delay by over 60% and reduced median travel time by 22% on this segment of the T Third line.¹⁷

Five-Minute Network

Strategic, cost-effective street improvements on Muni's highest ridership routes that create a reliable citywide bus and rail network.

HOW IS THIS PROGRAM EQUITABLE?



Equitable investment:

Who lives within a short distance of this project today?



Equitable outcomes:

How many additional jobs can be reached by transit, in under 45 minutes?

People with
low incomes

People in
Equity Priority Communities

180,000 260,000

Within a quarter-mile of five-minute network and frequent network bus routes, 2019. Source: ACS

+88,000 +87,000

Future Bay Area jobs, by San Francisco residents with low incomes or in Equity Priority Communities. Source: SF-CHAMP

WHY IS THIS PROGRAM IMPORTANT?

- The routes that make up the five-minute network and frequent network carry 80% of Muni riders.¹⁸
- Nearly 93% of low-income residents and 96% of people in Equity Priority Communities live within 1/4 mile of five-minute network and frequent network bus routes.¹⁹
- 20% of all trips on potential five-minute network routes were crowded during peak hours in winter 2020.²⁰ Muni Forward reduces crowding by increasing service and making it more reliable.
- Recent projects have demonstrated that low-cost, quick-build improvements can save 10-15% of travel time.²¹ Collectively, small improvements work together to create a reliable citywide bus and rail network.
- When buses run faster and are not stuck in traffic, Muni can serve more people with the same number of vehicles and drivers. This saves money that can be reinvested in the system.

WHAT ARE THE NEXT STEPS?

- Conduct public outreach.
- Advance planned Muni Forward projects, such as making Temporary Emergency Transit Lanes (TETLs) permanent.
- Develop five-minute network implementation plan (service and capital).
- Complete additional dedicated bus lanes and other transit priority improvements.
- Implement street safety and accessibility improvements that promote walking, biking, and taking transit.

HOW MANY DAILY TRANSIT TRIPS WOULD BE TAKEN ON THE FIVE-MINUTE NETWORK?

700,000

(+/- 20%)

Future daily (weekday) transit trips on five-minute network and frequent service bus routes. Source: SF-CHAMP

Five-Minute Network

- Five-Minute Service
- Frequent Service
- Connector Service

- Local and Regional Rail
- Neighborhood Commercial District
- Major Rail Station
- Ferry Terminal
- Park



WHAT WOULD THIS PROGRAM COST?

\$500 M

Preliminary capital cost estimate
+/- 25% (2020 \$)

\$0.15

Capital cost per rider
Over the life of the improvements (2020 \$)

This map includes capital projects that are already planned or underway, such as the Geary Boulevard Improvement Program, 16th Street Improvement Project, and Geneva-Harney BRT.

HOW WOULD THIS PROGRAM IMPROVE YOUR EXPERIENCE AS A TRANSIT RIDER?

Access to destinations



More convenient transit connections across the city and to regional transit services

A more comfortable ride

50-75%
LESS CROWDING

Less than 5% of trips crowded compared to 10-20% of trips before improvements, based on past Muni Forward projects

Faster service



Transit priority treatments and frequent, limited stop Rapid routes get you where you need to go faster and reliably

Example time savings

10-15%
FASTER

Based on past Muni Forward projects such as on Church, Mission, and Fulton

3 Renew and Modernize Our Rail System

As we rebuild our aging rail network, we are expanding the critical infrastructure that keeps the rail system moving, making it possible to run longer trains and provide more reliable service.

We will make Muni Metro a modern rail system by making improvements such as a more reliable T Third, longer trains on the N Judah, and subway-quality service on the surface M Ocean View line between West Portal and San Francisco State/Parkmerced. We will explore reconfiguration of our rail lines to alleviate delays in the subway and improve reliability systemwide.

We will lay the groundwork for the next generation of subway service for San Francisco by planning for a major subway renewal that addresses crowding and congestion. Upgrades to the Muni Metro subway, such as a new train control system, would allow for four-car trains and consistent, predictable service.

Supporting Regional Rail Upgrade Programs

The City is working with BART and Caltrain to bring improved regional rail service to San Francisco.

The [BART Transbay Corridor Core Capacity Program](#) will reduce average time between trains from 2.5 minutes to 2 minutes during rush hour to serve growing transit demand over the next 10 to 15 years. The program includes new vehicles, station improvements, a new train control system, and other upgrades to make service more comfortable and reliable.

The [Caltrain Modernization Program \(CalMod\)](#) will electrify the service by 2024 and prepare for the extension of Caltrain and future high speed rail service to Salesforce Transit Center. The [Caltrain 2040 Business Plan](#) calls for building new passing tracks and running more frequent trains to reduce travel times and overcrowding.



What does a modern Muni Metro mean for you?

- Improvements to stops and stations would make our system more accessible for seniors and people with disabilities.
- Optimized service patterns and an upgraded train control system would allow the system to carry more people with less crowding and fewer delays.
- Planned upgrades would support longer trains, including three cars on the N Judah and four-car subway shuttles, which means more room for everyone on board.



- Intersection priority and protection from traffic would help trains run on schedule to improve reliability and provide subway-quality service.
- Updates to aging infrastructure, including tracks and maintenance facilities, would keep the system running in good condition.

Proposed improvements to Muni Metro could increase subway capacity by up to 30%.²²

Implement Muni Subway Renewal Program

The SFMTA's 10-year investment program will strengthen and upgrade critical components of the system to increase speed, improve reliability, and prepare the system for future growth and demand.

A new, modern train control system is needed to reliably manage the speed and spacing between trains in the subway and on the surface. Safely operating trains with more cars would provide you with frequent, evenly spaced service and a comfortable ride.

New service patterns that require fewer trains to turn around downtown would reduce bottlenecks and let trains go back into service more quickly.



Upgrading Muni subway stations with better lighting, ventilation, access, wayfinding, and passenger information would provide you with a safe, comfortable, and modern transit experience.

Upgrading systems like subway electrical and fire and life safety, as well as replacing track, switch machines, and overhead wire, would provide reliable service free of disruption.



Improve Muni Metro Reliability on the Surface

Improving Muni Metro operations on the surface will ensure trains entering the subway are evenly spaced and operate with minimal delay.

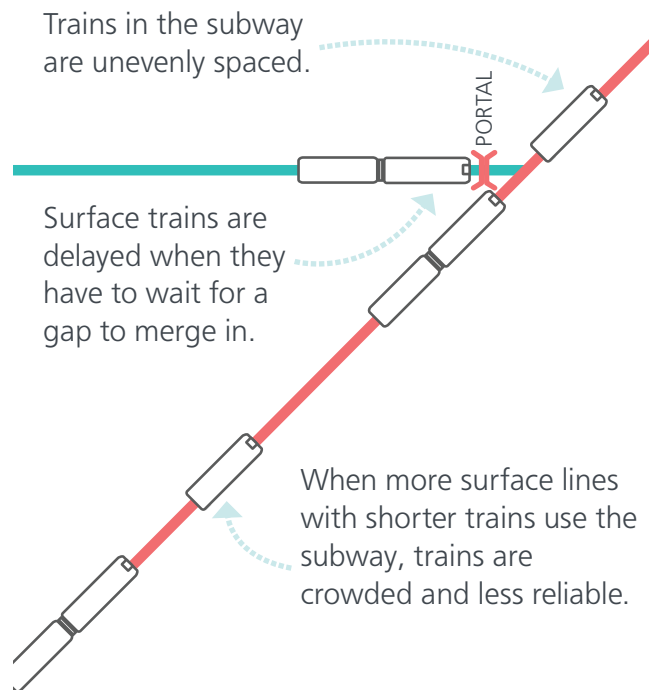
Expanding transit priority through Muni Forward improvements, including signal priority and dedicated lanes, reduces delay to trains that operate on the surface.

Protecting transit on the surface from traffic as much as possible, including physically separating areas of dedicated right-of-way, results in more reliable, predictable operation.

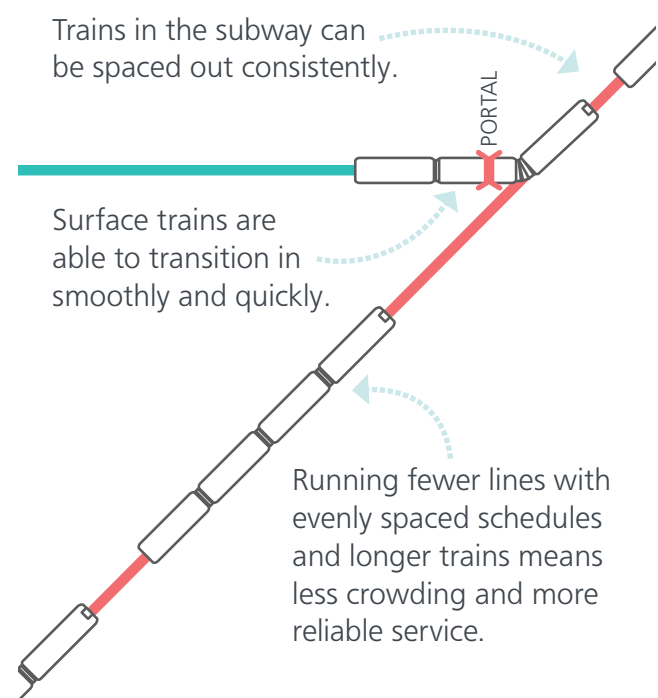
Lengthening surface station platforms, restricting some traffic movements, and improvements to train tracks are needed to enable longer trains in the subway.

High-quality transfer facilities, including wayfinding signage, real-time arrival information, and station access improvements, let you change seamlessly between surface lines and subway stations.

CURRENT TRAIN CONTROL SYSTEM AND SERVICE PATTERN



NEW TRAIN CONTROL SYSTEM AND OPTIMIZED SERVICE PATTERN



Modern Muni Metro

Expand capacity, improve performance, and bring major components into a state of good repair.

HOW IS THIS PROGRAM EQUITABLE?



Equitable investment:

Who lives within a short distance of Muni Metro?

People with
low incomes

People in
Equity Priority Communities

73,000 110,000

Within a half-mile of the project, 2019. Source: ACS



Equitable outcomes:

How many total jobs can be reached by transit, in under 45 minutes?

740,000 790,000

Future Bay Area jobs, by San Francisco residents with low incomes or in Equity Priority Communities. Source: SF-CHAMP

WHY IS THIS PROGRAM IMPORTANT?

- Muni Metro is a core part of the transit network and carried nearly a quarter of Muni riders in 2019.²³ About 40% of low-income residents and people in Equity Priority Communities live within a 1/2 mile of Muni Metro stations.²⁴
- In 2019, less than half of all Muni Metro trips were on time.²⁵ Passengers experience delays due to an outdated train control system, trains stuck in traffic on the surface, and backups from all surface lines converging in the subway.
- To improve the speed and reliability of your ride, we plan to enhance and expand critical components, increase transit priority, and optimize service patterns. Creating predictable, evenly spaced trains that arrive at regular intervals helps avoid overcrowding and long waits.
- A modern rail system would relieve crowding in places like the Market Street subway and provide a comfortable ride that you can depend on.

WHAT ARE THE NEXT STEPS?

- Install a next-generation communications-based train control system to keep trains evenly spaced and prevent a long wait for your train.
- Reconfigure the system so that longer trains run in the subway, including four-car shuttles. The subway could carry 30% more people, depending on service configuration, so that there is space for you when your train arrives.²⁶
- Improve surface lines through Muni Forward, so that your train moves efficiently through places like West Portal; there are more wheelchair-accessible stops on all lines; and three-car N Judah trains relieve crowding.
- Complete the Subway Renewal Program to make subway stations modern, comfortable, and accessible.

HOW MANY DAILY TRANSIT TRIPS WOULD BE TAKEN ON MUNI METRO?

300,000
(+/- 20%)

Future daily (weekday) transit trips on the project. Source: SF-CHAMP
There were approximately 170,000 daily weekday trips on Muni Metro in 2019.

-  Muni Metro
-  BART/Muni Subway Station

Existing Services

-  BART / Caltrain with Downtown Rail Extension (DTX) and Pennsylvania Avenue Extension (PAX)
-  Muni Rapid Route
-  Other Muni Bus Route
-  Muni Tunnel

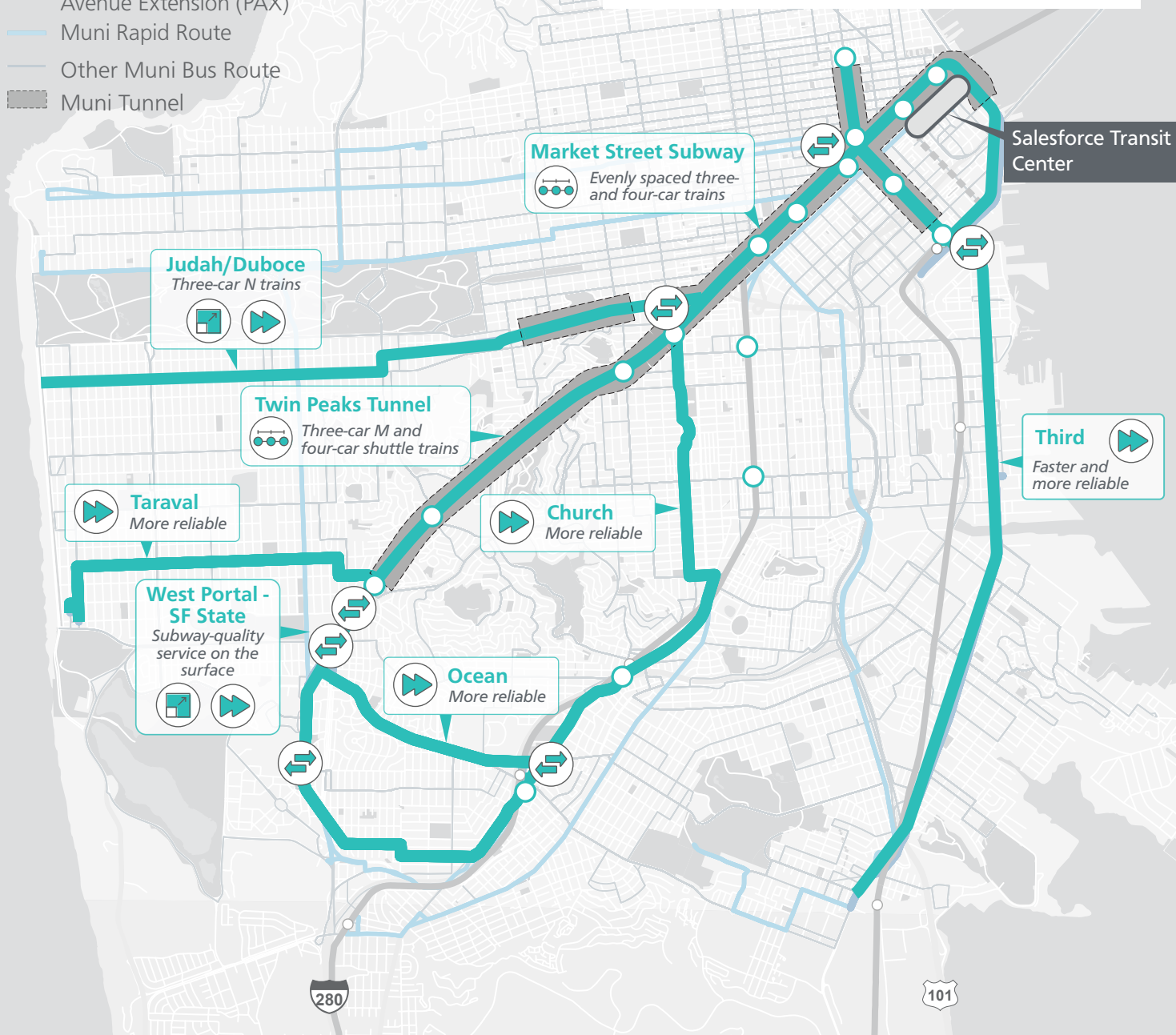
WHAT WOULD THIS PROGRAM COST?

\$700 M

Preliminary capital cost estimate
+/- 25% (2020 \$)

\$0.30

Capital cost per rider
Over the life of the improvements (2020 \$)



HOW WOULD THIS PROGRAM IMPROVE YOUR EXPERIENCE AS A TRANSIT RIDER?

Less waiting
for the train



A modern train control system and a new service pattern mean predictable arrivals in the subway and on the surface

More capacity



Track improvements and longer platforms enable three-car trains and less crowding

Faster, reliable
service



Expanding transit priority makes trains faster and more reliable

Convenient
connections



High-quality transfer facilities let you connect seamlessly between lines

4 Build More Rail to San Francisco's Busiest Places

We are planning ahead to expand the rail system where the city is growing most and bus services won't meet demand for transit.

There are a few places in San Francisco where buses struggle to keep up with demand. In those locations, we'll need new rail lines because trains can carry significantly more people than buses.

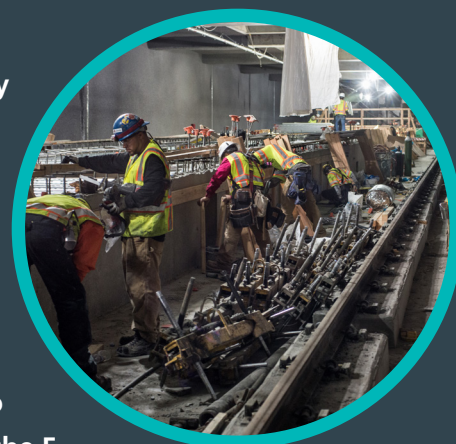
Major rail projects can take over a decade to design and build. The sooner the City can identify and get funding for these projects, the sooner they can be built. In parallel, the City will identify housing opportunities and anti-displacement strategies.



What's next? The map on the next page shows our proposed rail expansion strategy, which includes new rail investments that would serve more travelers and provide faster, more frequent connections between San Francisco and the region.

Rail Projects in the Works

The Downtown Rail Extension (DTX) is a regional federal funding priority and will extend Caltrain and future high-speed rail service from 4th and King Streets to the Salesforce Transit Center. Other projects in development include the related Pennsylvania Avenue Extension (PAX), which will continue Caltrain and high-speed rail south from 4th and Townsend Streets in a tunnel along Pennsylvania Avenue to eliminate street-level crossings along the rail corridor; and the Central Subway, which will extend the T-Third line to Chinatown. The City is also partnering with other entities to secure outside capital funds to extend the F Market line to Aquatic Park.





A DTX and PAX rail extensions to bring Caltrain and future high speed rail service underground to the Salesforce Transit Center.

B A subway line on Geary and 19th Avenue to serve the city's most crowded bus corridor, connecting some of our busiest neighborhoods to downtown and regional destinations.

C Extending the Central Subway to Fisherman's Wharf to bring rail service to some of our most populous neighborhoods and relieve crowding on several busy Muni routes, including lines 8 Bayshore, 30 Stockton, and 45 Union/Stockton.

D A Caltrain station in the Bayview neighborhood to restore regional rail access to a community that was previously served, and provide fast access to opportunities downtown and on the Peninsula.

E A new transbay rail crossing (under study by the Link21 program) to allow regional rail service to grow beyond the capacity of the existing BART tube, increasing access for residents throughout the Bay Area and the Northern California megaregion.

Geary/19th Avenue Subway

A subway serving the Geary/19th Avenue corridors, which would run from Downtown San Francisco to Daly City via 19th Avenue

HOW IS THIS PROJECT EQUITABLE?



Equitable investment:

Who lives within a short distance of this project today?



Equitable outcomes:

How many additional jobs can be reached by transit, in under 45 minutes?

People with
low incomes

26,000

Within a half-mile of the regional corridor, 2019. Source: ACS

People in
Equity Priority Communities

42,000

+81,000 +70,000

Future Bay Area jobs, by San Francisco residents with low incomes or in Equity Priority Communities. Source: SF-CHAMP

WHY IS THIS PROJECT IMPORTANT?

- Pre-COVID-19, over 50,000 people got on the bus in the Geary corridor every day—the highest in Muni's bus system.²⁷ Ridership on routes in this corridor was growing before the pandemic and is expected to continue to rise in coming years.
- Although buses arrive as often as every two minutes, bus service in the corridor is at capacity—28% of a.m. peak and 43% of p.m. peak trips on the 38R Geary Rapid were crowded in winter 2020.²⁸
- Rail investment along the Geary/19th Avenue corridors would benefit a large number of households, especially those that are low-income (25% of all households along the corridor) and/or within an Equity Priority Community (50% of all households along the corridor).²⁹
- Rail would support the City's economic recovery and the growing number of people traveling in the Geary and 19th Avenue corridors.
- A regional rail connection would let you board a train along Geary or 19th Avenue and quickly reach destinations in the East Bay or beyond.

WHAT ARE THE NEXT STEPS?

- The Geary Rapid Project and Geary Boulevard Improvement Project will improve bus service between Market Street and 34th Avenue in the near-term.
- A transportation-land use study of the Geary/19th Avenue corridors will identify long-term transit solutions.
- The project would be coordinated with, and service would potentially continue through, the proposed Link21 new transbay crossing.

HOW MANY DAILY TRANSIT TRIPS WOULD BE TAKEN ON THE GEARY/19TH AVENUE SUBWAY?

300,000

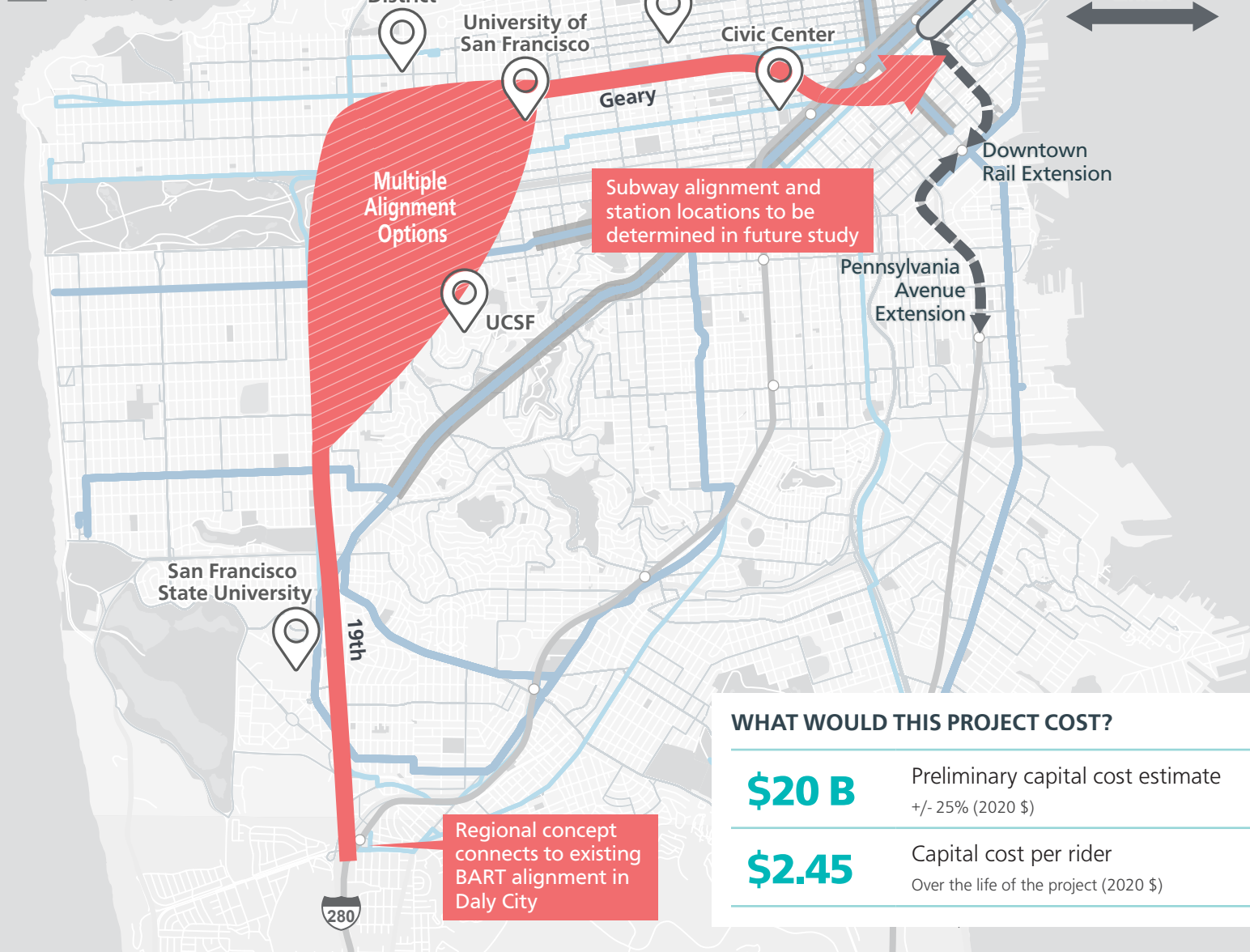
(+/- 20%)

Future daily (weekday) transit trips on the project (starting, ending, and/or passing through the Geary/19th Avenue corridors in San Francisco)
Source: SF-CHAMP

- Geary/19th Ave Subway Concept
- Downtown Rail Extension (DTX) and Pennsylvania Avenue Extension (PAX) - Planned

Existing Services

- BART / Caltrain
- Muni Metro
- Muni Rapid Route
- Other Muni Bus Route
- Muni Tunnel



WHAT WOULD THIS PROJECT COST?

\$20 B

Preliminary capital cost estimate
+/- 25% (2020 \$)

\$2.45

Capital cost per rider
Over the life of the project (2020 \$)

HOW WOULD THIS PROJECT IMPROVE YOUR EXPERIENCE AS A TRANSIT RIDER?

Access to destinations



Easier access to local and regional destinations

A more comfortable ride

27%
LESS CROWDING

On transit trips to, from, or within San Francisco

Faster service



Get where you need to go faster and more reliably

Example time savings

48%
FASTER

From Fillmore to San Francisco State University during rush hour

Central Subway Extension

Extension of Central Subway from Chinatown to North Beach/
Fisherman's Wharf

HOW IS THIS PROJECT EQUITABLE?



Equitable investment:

Who lives within
a short distance
of this project today?



Equitable outcomes:

How many additional jobs
can be reached by transit,
in under 45 minutes?

People with
low incomes

9,500

Within a half-mile of the project, 2019. Source: ACS

People in
Equity Priority Communities

18,000

+8,500

Future Bay Area jobs, by San Francisco residents with low incomes
or in Equity Priority Communities. Source: SF-CHAMP

+7,000

WHY IS THIS PROJECT IMPORTANT?

- The Stockton Street/Columbus Avenue corridor is projected to add almost 10% more residents and jobs per square mile in the years ahead, and total daily transit trips would increase by nearly 90%.³⁰
- Buses in this corridor are already slow and overcrowded; 30% of p.m. peak hour trips and 40% of midday trips on the 30 Stockton were crowded in winter 2020.³¹
- A subway extension would significantly improve service quality for the 44% of households in this corridor who do not own a car.³²
- Extending the Central Subway would provide a fast, high-capacity connection from Fisherman's Wharf and North Beach to Chinatown, local and regional transit along Market Street, and other neighborhoods along the T Third line.
- People across the city and the region would have a comfortable ride to jobs and destinations in North Beach and Fisherman's Wharf.

WHAT ARE THE NEXT STEPS?

- The Central Subway is scheduled to open in 2022, bringing the T Third line from 4th & King Station to Chinatown.
- City agencies studied various extension options in the T Third Phase 3 Concept Study (2015), and the SFMTA will continue to study options in the Central Subway Extension Alternatives Study.
- Later steps would include formal environmental review and preliminary design.

HOW MANY DAILY TRANSIT TRIPS WOULD BE TAKEN ON THE CENTRAL SUBWAY EXTENSION?

50,000

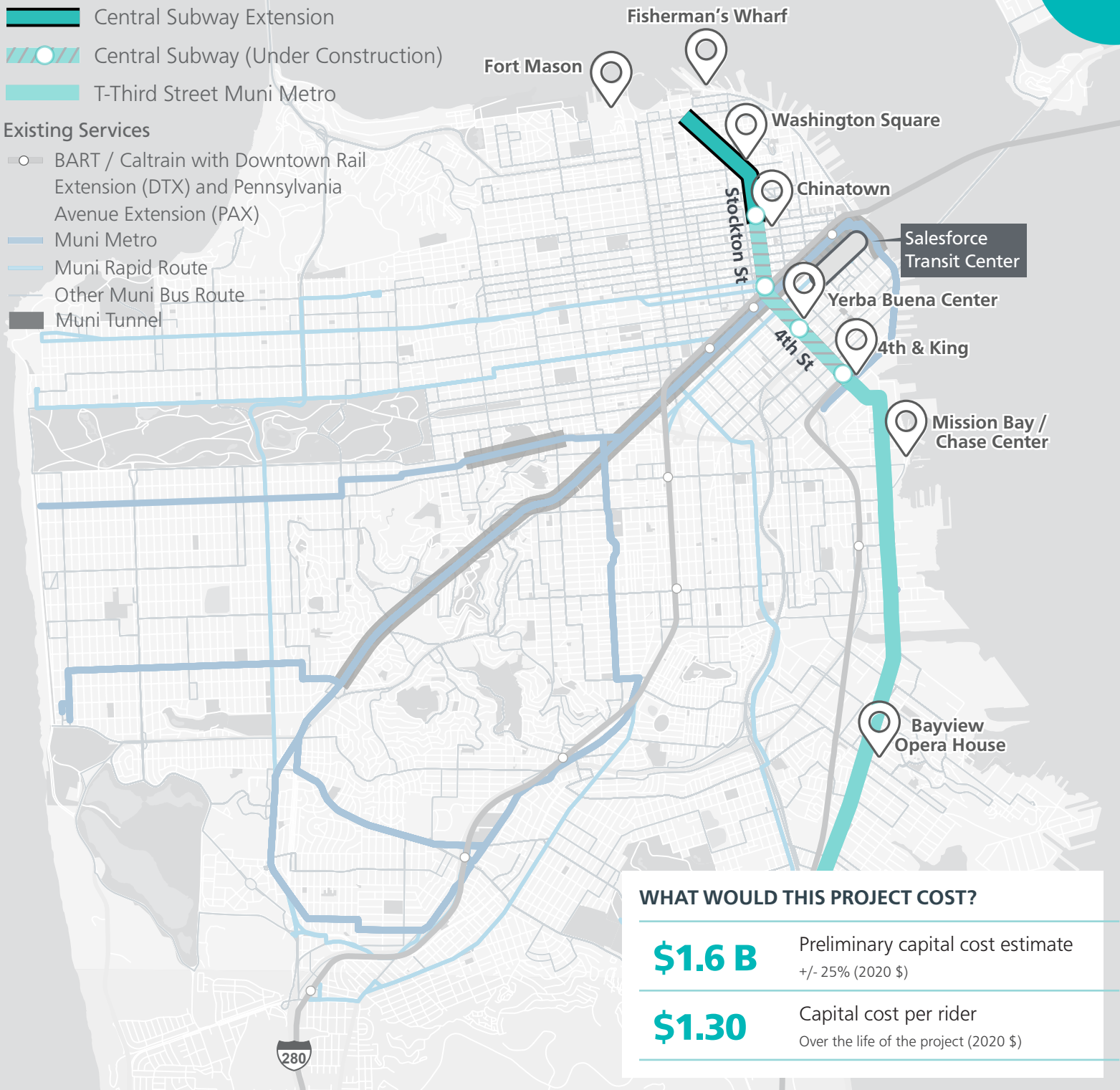
(+/- 20%)

Future daily (weekday) transit trips on the project
Source: SF-CHAMP

- Central Subway Extension
- Central Subway (Under Construction)
- T-Third Street Muni Metro

Existing Services

- BART / Caltrain with Downtown Rail Extension (DTX) and Pennsylvania Avenue Extension (PAX)
- Muni Metro
- Muni Rapid Route
- Other Muni Bus Route
- Muni Tunnel



WHAT WOULD THIS PROJECT COST?

\$1.6 B

Preliminary capital cost estimate
+/- 25% (2020 \$)

\$1.30

Capital cost per rider
Over the life of the project (2020 \$)

HOW WOULD THIS PROJECT IMPROVE YOUR EXPERIENCE AS A TRANSIT RIDER?

Access to destinations



Easier access to local and regional destinations

A more comfortable ride

9%

LESS CROWDING

This corridor-scale project improves conditions for a large share of transit riders in San Francisco

Faster service



Get where you need to go faster and more reliably

Example time savings

25%

FASTER

From Bayview to Fisherman's Wharf during morning rush hour

Bayview Caltrain Station

Addition of Bayview Caltrain Station, with completion of the Downtown Rail Extension (DTX) and an increase in service within San Francisco

HOW IS THIS PROJECT EQUITABLE?



Equitable investment:

Who lives within a short distance of this project today?



Equitable outcomes:

How many additional jobs can be reached by transit, in under 45 minutes?

People with
low incomes

2,500

Within a half-mile of a Bayview Station, 2019. Source: ACS

People in
Equity Priority Communities

6,500

+1,000

+2,500

Future Bay Area jobs, by San Francisco residents with low incomes or in Equity Priority Communities, with the addition of a Bayview Station. Source: SF-CHAMP

WHY IS THIS PROJECT IMPORTANT?

- This project would restore the Bayview's access to Caltrain that was lost after the closure of the Paul Avenue station in 2005.
- Investing in a Bayview Caltrain station would increase the number of jobs and activity centers that can be reached within 45 minutes from the Bayview via transit.
- A Bayview Caltrain station would help neighborhood residents connect to the regional transit network, provide a fast alternative route to downtown, and improve options for traveling to locations outside of San Francisco, including job centers on the Peninsula and in the South Bay.
- Caltrain estimates that electrified service and the DTX would increase San Francisco ridership by 184% over the next 20 years.³³ A Bayview Station would ensure that all San Franciscans benefit from planned investments in Caltrain and California High Speed Rail.

WHAT ARE THE NEXT STEPS?

- Continue to advance the extension of Caltrain and future High Speed Rail to Salesforce Transit Center; obtain funding for the Pennsylvania Avenue Extension consistent with the City's Rail Alignment and Benefits Study (2018).
- Develop a Caltrain station serving the Bayview, consistent with the Oakdale Station Study and as being studied by the Southeast Rail Stations Study.
- Coordinate with Caltrain and the California High-Speed Rail Authority to advance Caltrain's adopted Service Vision for 2040.

HOW MANY DAILY TRANSIT TRIPS WOULD BE TAKEN AT THE BAYVIEW STATION?

4,000

(+/- 20%)

Future daily (weekday) transit trips on the project. Source: SF-CHAMP

- Caltrain with New Bayview Station and Additional Service
 - Downtown Rail Extension (DTX) - Planned
 - Pennsylvania Avenue Extension (PAX) - Planned
 - New Bayview Station
 - Other Station
- Existing Services
- BART
 - Muni Metro
 - Muni Rapid Route
 - Other Muni Bus Route
 - Muni Tunnel



WHAT WOULD THIS PROJECT COST?

\$100 M

Preliminary capital cost estimate
+/- 25% (2020 \$)

\$1.45

Capital cost per rider
Over the life of the project (2020 \$)

HOW WOULD THIS PROJECT IMPROVE YOUR EXPERIENCE AS A TRANSIT RIDER?

Access to destinations



Easier access to jobs
and other destinations
served by the regional
rail system

Frequent service



More convenient and
less waiting time
if you miss your train

Faster service



Get where you need
to go faster and more
reliably

Example time savings

15%
FASTER

From Bayview to
Millbrae during
morning rush hour

Benefits

The Transit Strategy is crucial to addressing our key challenges and giving you and all San Franciscans a better travel experience.

Delivery on the City's commitment to equity.

The Transit Strategy will enhance Muni service for essential trips throughout the city and provide access to regional rail in the Bayview and the Geary/19th Avenue corridors. Shorter wait times and faster travel to your destination will improve your access to jobs, education, affordable housing, healthcare, errands, recreation, and other opportunities.



**SUPPORTS
EQUITABLE
ECONOMIC
RECOVERY**



**EXPANDS
HOUSING
CHOICES**



Fewer breakdowns and delays.

Clearing the capital replacement backlog will mean fewer breakdowns and delays. And cost-effective street improvements will keep buses and trains from getting bogged down in traffic, which means your transit vehicle arrives on time. This saves money and attracts more passengers, too.



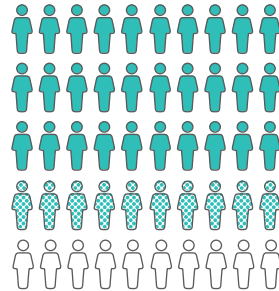
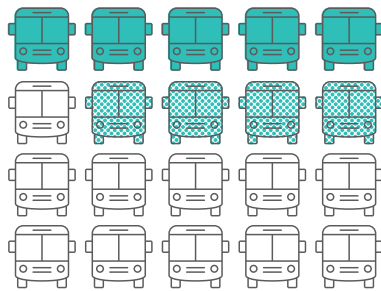
**REBUILDS AGING
INFRASTRUCTURE**



**HELPS
STABILIZE
FUNDING
SOURCES**

Service focused on people who depend on transit.

Improving frequency and reliability on core routes that carry 80% of Muni passengers is both equitable and strategic.³⁴ We will make our operating dollars go further while providing higher quality service for more of our passengers.



BEFORE: 25% of Muni's bus routes carried 60% of ridership

TRANSIT VISION: Focus frequent service on the 45% of Muni's bus routes that carry 80% of riders



**SUPPORTS
EQUITABLE
ECONOMIC
RECOVERY**



**HELPS
STABILIZE
FUNDING
SOURCES**



**MAKES
CONNECTIONS
FAST AND
CONVENIENT**



**EXPANDS
HOUSING
CHOICES**

Reliable travel all across the city.

When transit is less reliable, you have to schedule more travel time into your day to make sure you're not late. The Transit Strategy will reduce variability in travel times throughout the city, so you can spend that time on something else.



**REDUCES
CROWDING
AND SUPPORTS
GROWTH**



**MITIGATES
CLIMATE
CHANGE**

Better connections to support walking and biking.

The Transit Strategy is part of the City's efforts to make it easier to get around without a car. Slow Streets and Shared Spaces are already improving safety and quality of life in our neighborhoods and make it easier and safer to access transit. Better transit connections between neighborhoods let you take even more of your trips on foot or bicycle.



Faster transit citywide.

The average transit trip speed in San Francisco will increase by 10% overall, getting you where you need to go faster.³⁵



TRAVEL TIME SAVINGS:

- A** **48%** Fillmore to SF State
- B** **23%** Fillmore to Downtown Oakland
- C** **25%** Bayview to Fisherman's Wharf
- D** **31%** Bayview to the Mission
- E** **32%** UCSF Parnassus to Millbrae



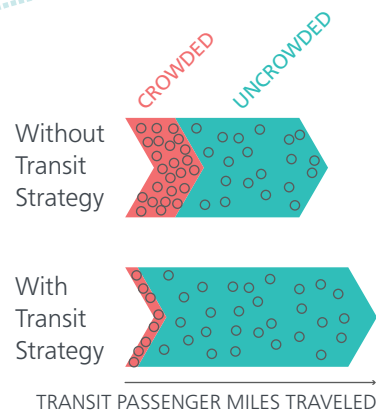
**SUPPORTS
EQUITABLE
ECONOMIC
RECOVERY**



**MAKES
CONNECTIONS
FAST AND
CONVENIENT**

Less crowding on Muni.

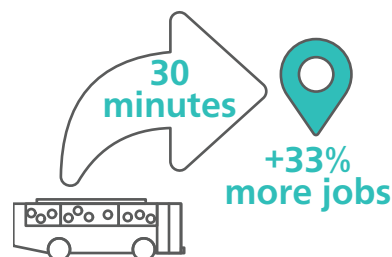
These projects will cut crowding on Muni by more than half³⁶ while allowing us to serve more passengers every day, giving you a comfortable, quality transit experience.



**REDUCES
CROWDING
AND SUPPORTS
GROWTH**

Access to opportunity.

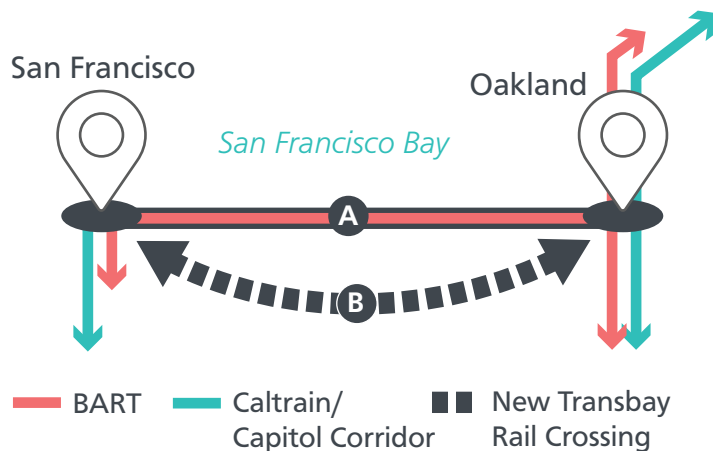
Faster, better connected transit means better access to employment, education, and services from where you live. Low-income San Franciscans will be able to get to 33% more jobs within a 30-minute trip from home.³⁷



**SUPPORTS
EQUITABLE
ECONOMIC
RECOVERY**

A new connection across the Bay.

A second transbay rail crossing will create more routing options in the transit system, help agencies maintain and upgrade infrastructure without interrupting service, and provide critical redundancy during emergencies. You'll have more options to access jobs, housing, and education, and it will be easier to visit family and friends around the Bay Area and throughout Northern California.



A The Bay Bridge, BART, and other transit services were over capacity prior to the pandemic. By June 2021, Bay Bridge crossings had returned to over 90% of pre-pandemic levels.³⁸

B Link 21 is studying transbay crossing options that could create new connections in the regional rail system.



REDUCES CROWDING AND SUPPORTS GROWTH



MAKES CONNECTIONS FAST AND CONVENIENT



EXPANDS HOUSING CHOICES

Reduced emissions and cleaner air.

San Francisco has made great strides in addressing climate change, but overall progress has recently slowed, and we need to do more to reduce transportation emissions. A stronger transit system that works for everyone is a necessity if we want to reach our goal of a zero-emissions transportation system by 2040.

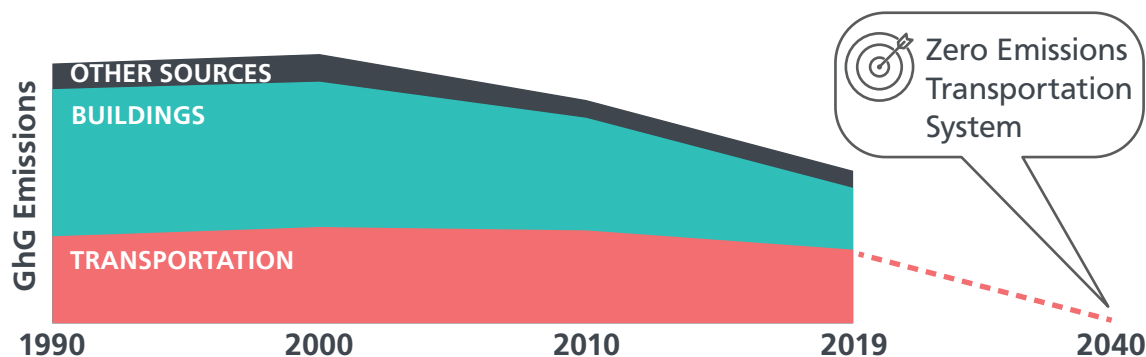
The Transit Strategy will shift more trips to transit and other low-carbon modes. Fewer vehicles on the road means better air quality and a reduction in greenhouse gas emissions, which is a benefit to all of us, no matter how we get around.



MITIGATES CLIMATE CHANGE



SUPPORTS EQUITABLE ECONOMIC RECOVERY



Source: <https://sfenvironment.org/carbonfootprint>

Getting It Done, Together

Transit is essential to San Francisco.

San Franciscans have given us the vision they want for our city's transportation future, which includes an effective, equitable transit system. Our Transit Strategy brings this vision to life by making the current system work better; building a citywide Five-Minute Network of frequent, fast, and reliable bus and rail service; strengthening aging infrastructure by renewing and modernizing our rail systems; and building new rail projects on busy corridors.

Efforts are already underway to make our transit system work better in the near-term (next 5 years), while we work to advance rail system expansion projects that may take up to 15 or more years to plan and complete.

The countywide transportation plan update—the San Francisco Transportation Plan (SFTP 2050)—will provide a funding blueprint to support implementation of the Transit Strategy.

TIMELINE

2021

2030

2040

Make the System Work Better

 Complete Critical System Upgrades and Infrastructure Replacement and Repair

 Restore Service Equitably

Implement a Five-Minute Network

 Advance Transit Priority Through Muni Forward Projects

Service would increase in tandem with capital improvements

Renew and Modernize our Rail System

 Muni Subway Renewal Program

 Surface Upgrades to Support Longer Trains

 BART Transbay Core Capacity Program

 Caltrain Modernization Program > Additional Caltrain Service Enhancement



SFMTA



Partner Agency

Build More Rail

  Geary/19th Avenue Rail

 Central Subway Extension

 Bayview Caltrain Station

 Downtown Rail Extension (DTX)

 Pennsylvania Ave Extension (PAX)

 Link21 Program Identification > Project Selection > Project Delivery

Major rail investments can up to 15 or more years to complete, depending on project scale and availability of funding. We will conduct community engagement and planning studies for each of the major rail projects identified in the Transit Strategy.

Partnerships

We will work with our partners to deliver projects that support an equitable and sustainable city and region.

Implementation of the Transit Strategy will require continued strong partnerships between the ConnectSF agencies and with regional partners such as BART, Caltrain, Capitol Corridor, California High Speed Rail, AC Transit, SamTrans, Golden Gate Transit, WETA, MTC, Caltrans, and the Transbay Joint Powers Authority (TJPA).

As San Francisco's transit agency, the SFMTA will lead Transit Strategy implementation. This includes work to develop sustainable transit funding sources, advance quick-build projects to complete the Five-Minute Network, and modernize our rail system. The SFCTA is a key partner, particularly in developing sustainable funding options and leading San Francisco's involvement in the DTX and PAX projects.

The San Francisco Planning Department will partner to coordinate land use and transportation investments and affordable housing along transit corridors. The ConnectSF partner agencies will work to mitigate potential gentrification and displacement.

For initiatives that carry riders beyond San Francisco borders—such as regional rail investments—collaboration with regional and state partners is essential and underway. For example, the SFCTA will continue to be part of the Integrated Project Management Team working with the TJPA to deliver the Downtown Rail Extension, and the ConnectSF partners will work with BART and Capitol Corridor to ensure coordination between Link21 and the Geary/19th Avenue Subway concept.

Linking Transportation and Housing

A growing, diverse, equitable city is the foundation of ConnectSF's vision for San Francisco. The Transit Strategy lays out how to build a frequent and reliable public transit system that will make it easier for people to participate in the economy and enjoy what San Francisco and the Bay Area have to offer.

At the same time, we recognize that transportation alone cannot redress historical inequities and the current obstacles many people face. Addressing the housing crisis is a critical imperative as well. Over the last few decades, the twin pressures of gentrification and displacement have increasingly challenged many San Francisco neighborhoods as prices increased beyond reach for many. Research indicates that displacement can happen in relation to major transit investments. This points to the importance for San Francisco to develop strategies to mitigate displacement at the onset of a project as well as throughout the life of a project. We will develop and deploy strategies to preserve existing affordable housing, increase housing production, and stabilize our communities while we invest in the city's transit system, as outlined in the City's Draft 2022 Housing Element.

Funding

New funding sources will be needed to make the vision a reality.

The ConnectSF Transit Strategy is designed to give San Francisco the transportation system it needs over the next 30 years. Completing all elements of the strategy will require identifying funding for over \$20 billion in new transit capital projects (from the City’s local revenues and other sources like federal and state grants) and additional funds to address our capital renewal backlog.

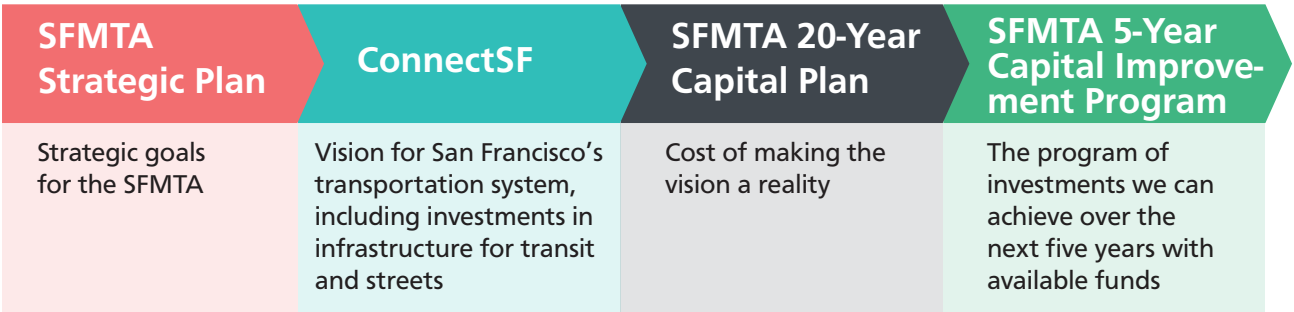
The pandemic strained local budgets and caused cuts to essential services like Muni, but even prior to 2020, the SFMTA identified a structural deficit of tens of millions of dollars per year. Over the last 20 years, our operating expenses (the cost of running our buses and trains) have grown faster than our revenues from transit fares and parking fees. As a transit-first city, we want to keep fares low so that transit is more affordable, but this has left us without all the funds we need to address our capital renewal needs, like vehicles and infrastructure.

To chart a path forward, the SFMTA is undertaking [Transportation 2050](#) (T2050), which is an effort to consider multiple possible futures and actions to address the agency’s transportation needs across

all modes over the next 30 years. Transportation 2050 evaluates the resources needed to achieve the community’s vision for transportation developed through the city’s [ConnectSF planning process](#), as well as infrastructure needs identified in the [SFMTA’s 20-Year Capital Plan](#). The cumulative operating and capital funding gap identified through T2050 is projected to be nearly \$50 billion over the next 30 years.³⁹

T2050 includes looking at new potential revenue sources to address the SFMTA’s structural deficit and put it on stronger financial footing. New funding sources being considered include dedicated taxes for transit, bonds, federal and state grants, and revenue from development.

In addition to the SFMTA’s needs identified in T2050, other City and regional agencies need funding to implement the Transit Strategy’s recommendations, such as the Downtown Rail Extension, Pennsylvania Avenue Extension, Geary/19th Avenue Subway, Bayview Caltrain Station, and Link 21, which all have funding needs that are above and beyond what is included in T2050.



In 2022, the City plans to bring three funding measures to voters that will help implement the Transit Strategy. These include:

- A \$400 million general obligation bond to fund critical transit, maintenance, and safety programs and infrastructure.⁴⁰
- A new expenditure plan for the existing transportation sales tax, which will help implement SFTP 2050 and include funding for SFMTA and regional investments consistent with

this Transit Strategy. It will prioritize \$2.4 billion over 30 years, with the majority of funding going to transit consistent with our [Transit-First Policy](#).⁴¹

- An additional revenue measure targeting street and transit operations.

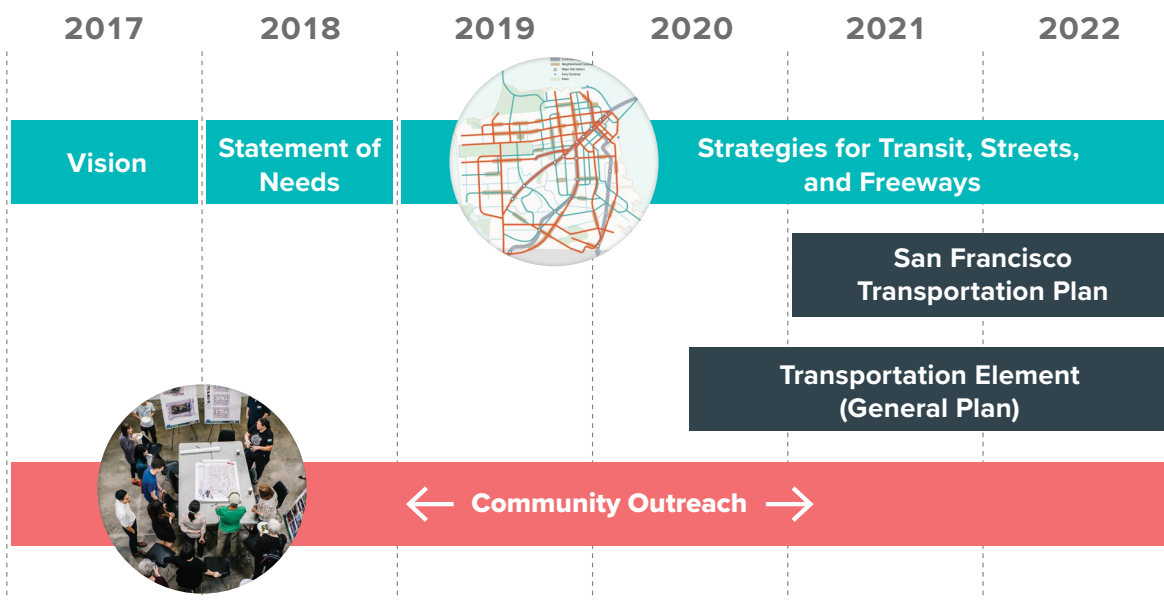
Local transportation funding sources are critical for local match for funds from regional, state, and federal sources like the federal Infrastructure Investment and Jobs Act that passed in 2021.

Next Steps

As a part of ConnectSF, the Transit Strategy will inform and be shaped by other ongoing studies and plans.

The Transit Strategy and its companion study, the Streets and Freeways Strategy, will help us build the transportation system envisioned in the first phase of ConnectSF. These two strategies will be integrated into other ConnectSF work, including updating the Transportation Element of the San Francisco General Plan and developing the countywide long-range transportation plan (SFTP 2050). As we continue to plan for the future, we are also taking action. Work is already underway to implement the Transit Strategy—including completing critical system upgrades and infrastructure improvements and implementing the Five-Minute Network capital improvements. Community engagement will continue as the ConnectSF effort advances and projects move towards planning and implementation. To stay involved please visit the [ConnectSF website](#).

THE CONNECTSF PROGRAM



Acknowledgements

BOARD AND COMMISSION MEMBERS

SFMTA Board of Directors

Gwyneth Borden
Amanda Eaken
Steve Heminger
Fiona Hinze
Sharon Lai
Manny Yekutieli

San Francisco Planning Commission

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Endnotes

1. SFMTA [Capital Improvement Program](#), Fiscal Year 2021-2025. See p. 5 (Capital Program Overview).
2. SFMTA [Annual State of Good Repair Report](#), 2020. See p. 23 (Reported Asset Backlog).
3. SFMTA Performance Metrics, “[Muni mean distance between failure](#),” March 2020. Siemens light-rail vehicles (LRVs) between March 2021 and November 2021, compared to Breda LRVs in the first three months of 2020 (prior to the COVID-19 pandemic).
4. SFMTA, “[Policy Level Scenario Summary](#),” 8/5/2021. Row 6, “Capital – ‘Constrained - State of Good Repair Focus Only’ - Total Needs.” Total needs for 2021-2030 and 2031-2040 periods, divided by 20 years.
5. SFMTA, [Bayview Hunters Point Express](#).
6. Essential industries are defined by the State of California and can be found at <https://covid19.ca.gov/essential-workforce>.
7. SFMTA, [Muni’s Equity Toolkit Helps Essential Employees Get to Work](#), 2021.
8. SFMTA [Community Survey](#), 2021. See p. 23.
9. Before the pandemic, in fiscal year (FY) 2019 and 2020, Muni Frequent and Rapid routes carried 60% of all bus passengers (and nearly 80% during FY 2021). The Transit Strategy would focus 5-minute and frequent service on routes that served 80% of pre-pandemic riders.
10. SFMTA [2022 Muni Service Network Planning](#). See p. 6. Analysis found that with the Frequent Alternative, the average San Franciscan can get to about 4,000 more jobs and educational opportunities in a 30-minute travel time, and 9,000 more jobs and educational opportunities in a 45-minute travel time.
11. Maximum difference between median p.m. peak travel times along directional route segments in late March 2020 compared to February 2020. See SFMTA blog post, “[Shelter-in-Place Allows Muni to Analyze Sources of Delay](#),” May 28, 2020, for more information.
12. Temporary Emergency Transit Lanes, [38 Geary Evaluation Scorecard](#), Spring 2021, and [38 Geary Evaluation Report](#), May 2021.
13. SFMTA [Board Presentation](#), April 2021. See p. 7.
14. Headway adherence across the Muni system has increased from 52% in early April 2020 to 71% in early May 2020 and 81% by September 2020. Even now, with increased traffic on city streets, it remains above 70%.
15. For more information, see SFMTA [Mission Street SoMa Transit Improvements](#) web page
16. SFMTA [Board Presentation](#), April 2021; see p. 18. Travel times held steady after the project was implemented, even though traffic volumes increased. See also SFMTA [19 Polk on 7th and 8th Streets Temporary Emergency Transit Lanes](#) web page for more information.
17. Transit delay reduction on the segment is the difference between travel time on a slow day compared to a relatively fast day (Source: SFMTA [Board Presentation](#), April 2021. See p. 20.). Median travel time savings of 28% northbound and 16% southbound between January/February 2020 and March-June 2021, between 7 a.m. and 7 p.m. (Source: SFMTA [4th Street Bridge TETL Project Evaluation Report](#), August 2021).
18. See Note #9.
19. Based on GIS analysis using data from the American Community Survey, 2015-2019 5-Year Estimates.
20. Based on analysis of Muni performance data from January/February 2020, for weekday a.m. and p.m. peak trips on selected routes.
21. [SFMTA Board Presentation](#), April 2021. See p. 7.

22. Based on three lines in the subway, each running every 6 minutes with 4-car, 3-car, and 2-car trains, respectively, compared to 5 total lines in the subway with 4 lines operating 2-car trains and 1 line operating 1-car trains, each running between every 7 to 9 minutes.
23. SFMTA performance data, "[Muni ridership](#)," 2019. Muni Metro served over 1.9 million annual trips out of over 8.4 million total trips on Muni buses and trains.
24. Based on GIS analysis using data from the American Community Survey, 2015-2019 5-Year Estimates.
25. SFMTA performance data, "[Muni on-time performance](#)," 2019.
26. See Note #22.
27. Based on analysis of Muni ridership data for January and February 2020.
28. Based on analysis of Muni performance data for January and February 2020, for weekday a.m. and p.m. peak trips.
29. Based on GIS analysis using data from the American Community Survey, 2015-2019 5-Year Estimates.
30. SF-CHAMP analysis for the [ConnectSF Statement of Needs](#).
31. Based on analysis of Muni performance data for January and February 2020, for weekday a.m. and p.m. peak trips.
32. Based on GIS analysis using data from the American Community Survey, 2015-2019 5-Year Estimates.
33. Based on projected change in ridership at Caltrain stations in San Francisco from 16,900 (existing) to 48,000 in the 2040 Baseline scenario. See Caltrain Business Plan [Local Policy Maker Group Presentation](#), March 2019, p. 66.
34. See Note #9.
35. SF-CHAMP travel demand model analysis. Individual travel time savings estimates based on a.m. peak.
36. SF-CHAMP travel demand model analysis.
37. SF-CHAMP travel demand model analysis.
38. Vehicle crossings in June 2021 compared to the same month in 2019 (Source: MTC, [Monthly Statistics](#)).
39. SFMTA Board Presentation, [Transportation 2050](#), August 2021, and [Supporting Data](#).
40. SFMTA Citizens' Advisory Council Presentation, [Transportation 2050 & General Obligation Bond](#), October 2021.
41. SFCTA, "[New Transportation Sales Tax Expenditure Plan](#)."

Appendix A: Related Planning Efforts

San Francisco and the Bay Area region have multiple efforts underway to build the effective, equitable, and sustainable transportation system envisioned in ConnectSF and address interrelated challenges including housing affordability and climate change.

The table below summarizes and provides links to projects or planning efforts that are related to ConnectSF and/or the Transit Strategy. The status of each effort is categorized as:

- Complete: Completed plan/effort and completion year
- Updated periodically: Plan that is updated annually or on a periodic basis
- Underway: Plan/effort that is in progress but not completed, or a program that is ongoing
- In development: Capital project that is in the late planning stages (e.g., has secured environmental approvals) but is not yet fully funded or under construction
- Upcoming: Plan/effort that has not yet started

Study Title	Purpose and Relationship to Transit Strategy	Status
ConnectSF		
ConnectSF Statement of Needs: Website Final Report	Developed during ConnectSF Phase 1 to identify the deficiencies that would be addressed by the Transit Strategy (this document) as well as the parallel Streets and Freeways Strategy.	Complete - 2019
ConnectSF Streets and Freeways Strategy (SFS)	Counterpart to the Transit Strategy that is focused on roadways; its recommendations will also be included in the San Francisco Transportation Plan (SFTP 2050) and Transportation Element.	Underway
Southeast Rail Station Study	Evaluates potential alternatives for a redesigned or relocated 22nd Street Station should the Pennsylvania Avenue Extension (PAX) tunnel require it; could influence preferred location for a new Caltrain station in the Bayview, which is a key recommendation of the Transit Strategy.	Underway
Modal Planning Framework	Tool that will help planners allocate limited roadway space between modes (like cars, transit, and bikes) in specific locations throughout San Francisco to support implementation of the investments in the Transit Strategy as well as other projects in the city.	Underway
Update of Transportation Element	Lays out how transportation is planned, designed, and implemented in San Francisco, including specific modes and services, access, and congestion management; will include the investments in the Transit Strategy, as well as the Streets and Freeways Strategy, among other inputs.	Underway
San Francisco Transportation Plan (SFTP 2050)	Provides a long-range investment strategy for all modes of surface transportation and all local and regional transit operators that serve the city.	Underway

Study Title	Purpose and Relationship to Transit Strategy	Status
Other San Francisco Efforts		
SFCTA Bayview-Oakdale Caltrain Station Study	Initial feasibility study and station concept report for a new Caltrain station to replace the former Paul Avenue station; formed the basis for concepts studied in the Transit Strategy.	Complete - 2005
SFMTA T Third Phase 3 Concept Study	Initial feasibility analysis of extending the Central Subway beyond the current Chinatown terminus; formed the basis for several concepts studied in the Transit Strategy.	Complete - 2015
San Francisco Vision Zero Action Strategy	Lays out the strategic actions needed to reach the City's Vision Zero goal of ending traffic fatalities in San Francisco; the Transit Strategy supports Vision Zero by prioritizing transit, walking, and bicycling and reducing vehicle miles traveled.	Complete - 2019
San Francisco Climate Action Plan (CAP)	Lays out the bold strategies and actions the City will need to take to meet our emission reduction targets; the Transportation & Land Use chapter of the CAP includes key components of ConnectSF.	Complete - 2021
SFMTA Strategic Plan	Establishes the vision, values, and goals of the SFMTA and guides the development of SFMTA plans, projects, policies, and programs; the investments in the Transit Strategy help to implement the elements of the Strategic Plan.	Updated approximately every 5 years
SFMTA State of Good Repair Report (see SFMTA Asset Management Program website for the most recent report)	Identifies the SFMTA's current rehabilitation and replacement needs and the level of investment required; the Transit Strategy includes investments to repair and replace critical transit infrastructure so that our system works reliably over the next several decades.	Updated annually
SFMTA 20-Year Capital Plan	A financially-unconstrained list and assessment of capital needs to achieve the SFMTA's vision, values, and goals over the next 20 years; the investments in the Transit Strategy are one of several inputs.	Updated every two years
The City and County of San Francisco's Capital Plan (FY 2020-2029)	Lists the recommended investments to replace, repair, and improve all of the city's capital infrastructure over the next 10 years; a compilation of relevant capital needs from the SFMTA's 20-Year Capital Plan as well as similar plans developed by other City agencies.	Updated every two years
Muni Forward program	Ongoing program to implement transit priority measures in Muni corridors across the city; will support and complement the Five-Minute Network identified in the Transit Strategy.	Underway
2022 Update of Housing Element	Determines how the City will address its housing needs over the next 8 years (2022-2030), by defining priorities and resource allocation for housing programs, development, and services; the investments in the Transit Strategy will need to be closely coordinated with the City's housing policy and planning.	Underway
Transportation 2050	Synthesizes the investment needs identified in ConnectSF (the Transit Strategy and the Streets and Freeways Strategy) with all of the projects in the SFMTA's 20-year Capital Plan, including capital renewal; will lay out a path to achieve full funding of these projects over time.	Upcoming

Study Title	Purpose and Relationship to Transit Strategy	Status
Regional Efforts		
MTC Bay Area Core Capacity Transit Study (CCTS)	Prioritizes regional investments to improve transit capacity to and from downtown San Francisco, forming the basis for several concepts evaluated in the Transit Strategy.	Complete - 2017
Caltrain Business Plan	Establishes a policy framework and 2040 service vision to support future passenger growth and integration with CA High Speed Rail; the service vision was an assumption of the Transit Strategy but is not yet fully funded.	Complete - 2020
Blue Ribbon Transit Recovery Task Force: Transit Transformation Action Plan	Features 27 near-term actions to re-shape the region's transit system as it recovers from the pandemic, including multiple actions that will be relevant for implementing the Transit Strategy.	Complete - 2021
Plan Bay Area 2050	Long range regional plan includes multiple strategies and a financially-constrained list of planned transportation projects, along with housing, economy, and environment elements; the investments in the Transit Strategy will be plugged into future cycles of the regional plan.	Updated every four years
BART Transbay Corridor Core Capacity Program	Capital investment program to implement many of the BART-related recommendations from the CCTS (see above); these near-term investments complement the longer-term recommendations of the Transit Strategy.	Underway
Caltrain Modernization (CalMod)	Electrifies Caltrain to improve system performance, curtails environmental impacts, lays groundwork for bringing Caltrain and HSR to the Salesforce Transit Center (see DTX below); the Transit Strategy supports these key regional rail enhancements.	Underway
California High-Speed Rail (HSR)	Initiative to construct a high-speed rail connection between San Francisco and Los Angeles, eventually extending to Sacramento and San Diego. The San Francisco to San Jose section would be a blended service with Caltrain and HSR sharing tracks; environmental clearance is underway.	Underway
Downtown Rail Extension (DTX)	Brings Caltrain and California High Speed Rail into the Salesforce Transit Center; it is a key recommendation of the Transit Strategy, but is not yet fully-funded.	In development
Pennsylvania Avenue Extension (PAX)	Builds a rail tunnel to remove conflicts, improve safety, and reconnect the community in the Caltrain/HSR corridor south of DTX (see above); it complements the Transit Strategy but is not yet fully funded.	Study underway
Link21	Reimagines and transforms the Northern California passenger rail network by building a second transbay tube and expanding rail service to major destinations throughout the megaregion; a second transbay tube is assumed in the Transit Strategy, and implementation of the Transit Strategy recommendations will require continued coordination with BART, Caltrain, and Capitol Corridor.	Study underway

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