

MUNI FORWARD



Implementation Workbook

DRAFT
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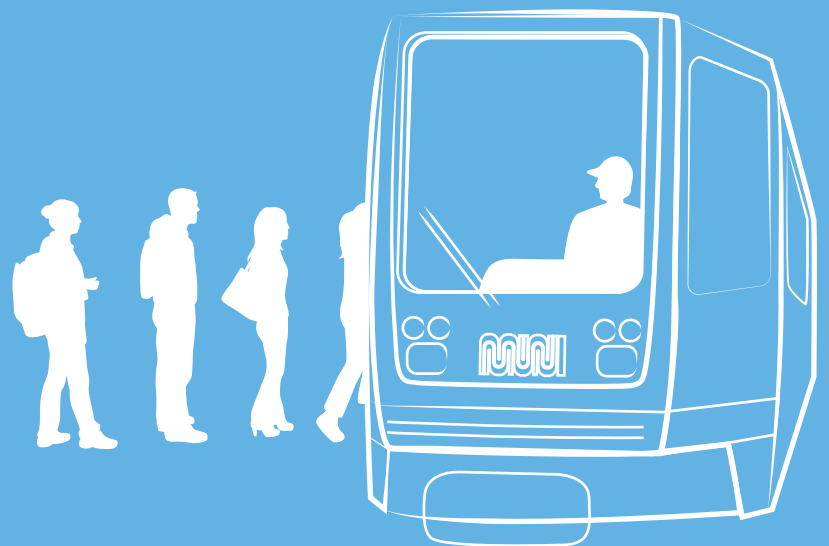
SFMTA
Municipal
Transportation
Agency



MUNI FORWARD

Implementation Workbook

Transit Priority Projects | Muni Service Changes



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About the SFMTA



Vision

San Francisco: great city, excellent transportation choices.

Mission Statement

We work together to plan, build, operate, regulate, and maintain the transportation network, with our partners, to connect communities.

Who We Are

The San Francisco Municipal Transportation Agency, a department of the City and County of San Francisco, is responsible for the management of all ground transportation in the city. The SFMTA keeps people connected through the San Francisco Municipal Railway (Muni), the nation's seventh largest public transit system. The agency's additional responsibilities include managing parking and traffic, bicycling, walking and the regulation of taxis. With a staff of more than 4,700, the SFMTA's diverse team of employees is one of the city's largest with representation by 18 labor organizations.

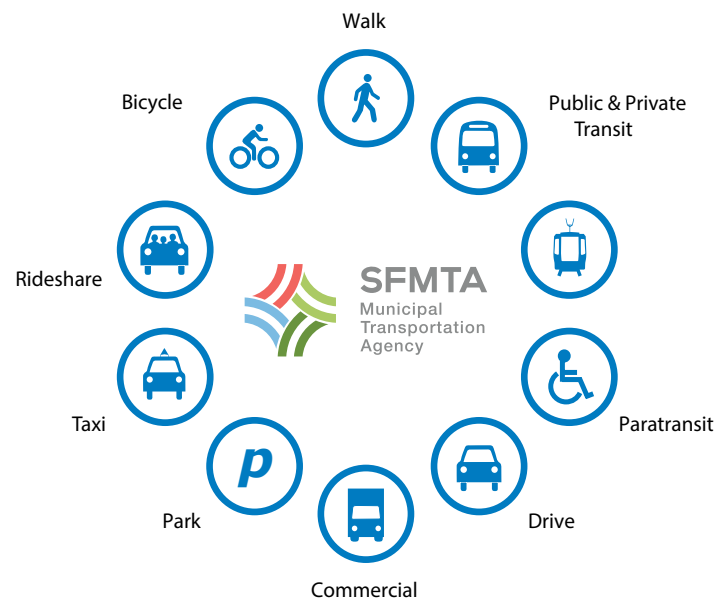
About the SFMTA

What We Do

The SFMTA plans, designs, builds, operates, regulates and maintains one of the most comprehensive transportation networks in the world. The agency directly manages five types of public transit in San Francisco (motor coach, trolley coach, light rail, historic streetcar and cable car) and promotes other forms of transportation including walking, bicycling, taxi and auto use. In addition to overseeing paratransit service for those unable to use fixed-route transit service, the agency also regulates the taxi industry and oversees on- and off-street public parking spaces.

With more than 3,500 transit stops, Muni keeps people connected, delivering more than 700,000 passenger boardings on an average weekday and offering unmatched accessible transit service to San Francisco's 800,000 residents and a workday population of approximately 1.2 million.

The SFMTA also manages 450,000 on and off-street parking spaces, 19 public parking garages and lots, more than 28,000 meters, nearly 282,000 street signs and 1,200 traffic signals on 946 miles of city streets. The agency is responsible for traffic calming, pedestrian and bicycle safety, traffic enforcement and the painting and striping of roads, including those that define 217 miles of the city's growing bicycle network. As a part of the SFMTA's pedestrian safety initiatives, the agency also manages the School Crossing Guard Program to keep children safe when crossing city streets.



The Transit Effectiveness Project



Introduction



San Francisco is more than just transit rich—it is transportation rich. It is a city where residents and visitors alike are empowered with the freedom to choose how they get around. Recent trends show more and more San Franciscans leaving their private cars behind, and weaving themselves into the public realm through overlapping networks of transit, taxi, bicycle, and pedestrian routes. This shift towards more sustainable transportation helps all San Franciscans—whether they live, work, or play here—by reducing greenhouse gas emissions, improving air quality, reducing congestion and noise pollution, and creating more active, more vibrant, more humane streets. These trends will move the city closer to its future vision of a more efficient, equitable, and environmentally sustainable transportation network, assuming of course that we can overcome near-term challenges that act as barriers to change. After all, it is difficult to imagine life without a personal vehicle and a two-car garage when Muni can be slow and unreliable, taxis are hard to find, and many streets still prioritize fast-moving cars over the movement of people in all modes.

The Transit Effectiveness Project (TEP), a multi-year planning effort has informed this Muni Forward Implementation Plan. The focus of the TEP was Muni: at once, the transit backbone of a transportation-rich system that connects all modes and all people, but also a system that needs updating to keep pace with an evolving San Francisco. The TEP represented the first major evaluation of San Francisco’s mass transit system in thirty years, and combined an extensive, data-supported planning process, engaged the community at various levels, and utilized critical lessons learned through the implementation of pilot projects, all resulting in solutions designed to improve the end-to-end customer experience—the walk, the wait, and the ride—for all Muni customers.

Project History

In 2006, the SFMTA and the Controller's Office undertook a detailed evaluation of the existing San Francisco Municipal Railway (Muni) system to identify ways to improve service, attract more passengers, and increase efficiency. During the initial planning phase, from October 2006 to November 2007, the SFMTA collected and analyzed extensive data, which included market research on customer preferences and priorities for Muni service, changing travel patterns within the City and through the region, and route-by-route Muni ridership data. Based on this detailed research, best practices from other cities, and input from stakeholders, the SFMTA developed a set of preliminary recommendations to update the transit network and reflect changing travel patterns. In 2008, the SFMTA conducted public outreach on its preliminary recommendations to refine and develop draft TEP recommendations for the SFMTA Board of Directors (SFMTA Board). The SFMTA Board endorsed the draft recommendations for environmental review in October 2008.

In April 2009, the SFMTA Board declared a fiscal emergency. The 2008 draft TEP recommendation helped SFMTA make strategic, targeted cuts that would allow Muni to reduce its operating costs while still protecting the vast majority of its ridership. The SFMTA Board approved an amended 2009-2010 Operating Budget and related actions, which included some route eliminations and transit service changes to route alignment, vehicle type, frequency, and hours of service; some frequency increase and route additions were also added at that time. These emergency changes helped SFMTA successfully weather the fiscal emergency. Service has largely been restored to pre-2009 levels, although some route changes have been retained, especially those that help Muni operate leaner and more efficiently.

In fall of 2011, the SFMTA initiated the environmental review (California Environmental Quality Act, or CEQA) process for the TEP, with the filing of a Notice of Preparation (NOA) on November 9, 2011. The TEP proposals initially developed in 2008 during the planning phase of the TEP were re-evaluated and refined in order to capture more recent land use and ridership trends, as well as integrate service changes that were implemented in 2009 and 2010. The first version of this implementation plan was also developed, which builds upon past planning documents and strategies to present current priorities, funding needs, and schedule for improvements. The implementation plan will be continually updated to reflect the most current needs and improvements.

The SFMTA published an initial environmental study in January 2013 and the Draft Environmental Impact Report (DEIR) in July 2013, and a Response to Comments (RTC) in March 2014. All potential near-term and long-term environmental impacts were analyzed and disclosed in these documents. On March 28, 2014, the SFMTA Board certified the Final TEP EIR. This decision by the SFMTA is the nexus to begin the implementation of the TEP proposals using the Muni Forward program (Muni Forward details described on upcoming pages) which combines TEP projects, TEP service recommendation, and other Muni projects that are currently or will improve Muni service reliability in the coming years.

More information on these processes can be found at <http://www.sfmta.com/tep>.

SFMTA's 2013 to 2018 Strategic Plan guided the development of the TEP proposals and continues to shape the implementation of Muni Forward projects. The six-year SFMTA Strategic Plan is a work-plan to meet the mid- and long-term goals of the Agency and is the basis for the two-year capital and operating budgets to meet the strategic goals and objectives. The plan is divided into the four overarching goals that shape how the Agency focuses its attention, resources, and staff.

1. Create a safer transportation experience for everyone.
2. Make transit, walking, bicycling, taxi, ridesharing, and carsharing the preferred means of travel.
3. Improve the environment and quality of life in San Francisco.
4. Create a workplace that delivers outstanding service.

Associated with each goal is a variety of objectives that enable actionable and measurable progress toward achieving the respective goal. The specific SFMTA Strategic Plan objectives that guide this implementation workbook include the following:

Goal 2 - Objective 2.2: Improve transit performance.

Goal 2 - Objective 2.3: Increase use of all non-private auto modes.

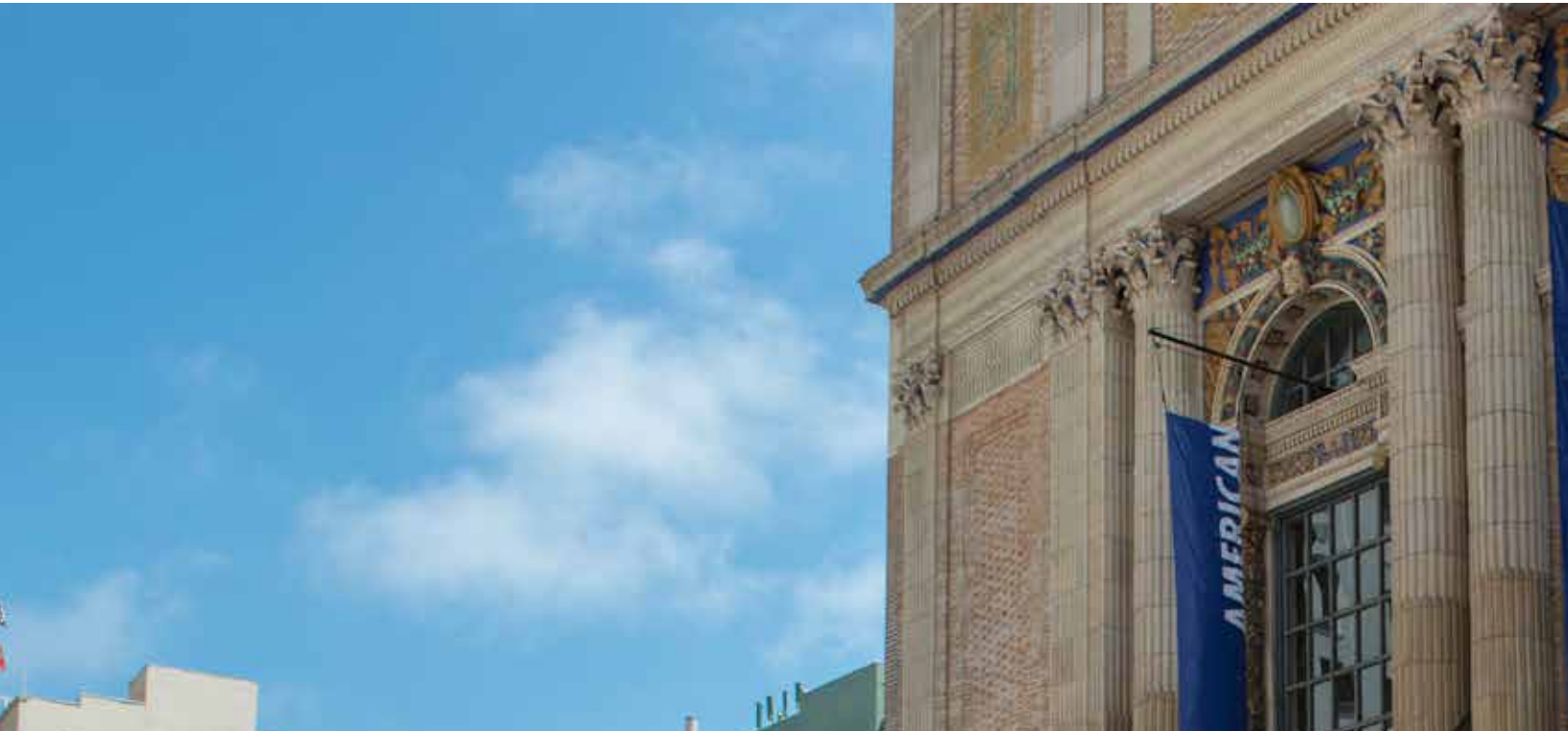
To improve transit speed, reliability and safety—thereby increasing the system's cost effectiveness, productivity, and attractiveness for customers— Muni Forward recommends redesigning routes; reducing travel time along high ridership corridors by optimizing transit stop locations, implementing traffic engineering changes, and constructing capital infrastructure projects to reduce stop delays; and improving safety at intersections by introducing changes (i.e. pedestrian bulbs, transit bulbs etc.) that lead to safer transit operations.

Goal 3 - Objective 3.1: Reduce the Agency's and the transportation system's resource consumption, emissions, waste, and noise.

Goal 3 - Objective 3.3: Allocate capital resources effectively.

Goal 3 - Objective 3.4: Deliver services efficiently.

Muni Forward projects will implement service modifications that include route restructuring, frequency improvements, vehicle type changes, and reducing hours of service and frequencies on low ridership routes while increasing frequencies on crowded routes, to improve the cost effectiveness of transit operations by improving network efficiency and to reduce system redundancy.



Muni Forward



Overview

Muni Forward (muniforward.com) aims to make getting around San Francisco safer and more reliable. Informed by the Transit Effectiveness Project, the SFMTA Strategic Plan Goals 2 & 3, and extensive community input, Muni Forward's upcoming route changes, service improvements, and transit priority projects will help reallocate limited resources where they are needed most to provide excellent transit service.

The **Implementation of a Rapid & Transit Priority Network** of core routes serving nearly 70% of all riders will provide a more reliable trip. Updating our transit fleet and making important safety and accessibility projects across the city, combined with the WalkFirst projects, will help us to better accommodate the needs of families, seniors, and the disabled, and **enhance comfort and safety** for all our customers. Using technology more effectively by improving the integration of our transit system with traffic signals and bringing more real-time information to our customers will **make our transit system smarter**, and more reliable. To clarify the intended purpose of each Muni Forward project, they are grouped into the following 4 categories.

- **Creating a Rapid Network** - We're planning a Rapid Network that will make it more efficient to travel on our most heavily used routes.
- **Improving Reliability** - We're working to modernize the Muni network to make it more reliable.
- **Enhancing Safety and Access** - We're working to improve the experience of riding Muni by making it easier, safer, and more pleasant to take our service.
- **Making the System Smarter** - We're improving our use of technology and infrastructure to make Muni smarter and more reliable.

By harnessing the combined benefits of Muni Forward projects, many of which are already underway, we are working to give back to our customers what they value most: their time.

This Implementation Workbook describes the plans to both Create a Rapid Network and Improve Reliability. These two objectives will be achieved with the combined implementation of the two primary implementation programs described on the following page.

Implementation Programs

The focus of this Implementation Book is two primary sets of changes to the transit network: (1) service and route restructuring, and (2) Transit Priority Projects. These changes necessitate new service categories that more clearly articulate Muni's different roles in the communities it serves, and how different routes can be designed to serve different needs.

Service Categories

SFMTA proposes a new framework that reorganizes Muni service into transit categories:

Metro/Rapid (10 mins or less & skip stop service): These heavily used bus and rail lines form the backbone of the Muni system. With vehicles arriving frequently and transit priority enhancements along the routes, the Rapid network delivers speed and reliability whether customers are heading across town, or simply traveling a few blocks.

Frequent Local (10 mins or less service): These routes combined with Muni Metro and Rapid Bus create the Rapid network. They provide high-quality, frequent service but with more stops along the route.

Grid (12 - 30 mins service): These citywide routes combine with the Rapid network to form an expansive core system that lets customers get to their destinations with no more than a short walk, or a seamless transfer. Depending on demand, they typically operate less frequently than the Rapid Network routes.

Connector (Over 30 min service): These bus routes predominantly circulate through San Francisco's hillside residential neighborhoods, filling in gaps in coverage and connecting customers to major transit hubs.

Historic: Historic Street Cars and Cable Cars.

Specialized: These routes augment existing service during specific times of day to serve a specific need, or serve travel demand related to special events. They include AM and PM commute service, owl service, weekend-only service, and special event trips to serve sporting events, large festivals and other San Francisco activities.

1 - Muni Service Changes

The service changes being implemented will reduce crowding, improve system-wide neighborhood connectivity and access to regional transit, and redirect finite public resources to where they are needed most. Combined, the changes represent a 12 percent increase in Muni service. The proposals, initially drafted by SFMTA, were presented to members of the community, and refined through an iterative process of public comment, additional data collection, and technical analysis. Specifically, these proposals include:

- Increasing frequency of transit service along heavily used corridors
- Creating new routes
- Changing existing route alignments
- Eliminating underutilized routes or route segments
- Introducing larger buses on crowded routes
- Changing the mix of local/limited/express service
- Expanding limited services

Implementation Programs

While many of these proposals can be delivered without capital changes, some of the service changes require capital investments, such as overhead wire and terminal expansions.

Muni Metro & Rapid	J Church, KT Ingleside/Third Street, L Taraval, M Ocean View, N Judah, 5R Fulton Rapid, 7R Haight/Noriega Rapid, 9R San Bruno Rapid, 14R Mission Rapid, 28R 19th Avenue Rapid, 38R Geary Rapid
Frequent Local	1 California, 7 Haight/Noriega, 8 Bayshore, 9 San Bruno, 14 Mission, 22 Fillmore, 28 19th Avenue, 30 Stockton, 38 Geary, 47 Van Ness, 49 Van Ness/Mission
Grid	2 Clement, 3 Jackson, 5 Fulton, 6 Haight/Parnassus, 9 San Bruno, 10 Townsend, 12 Folsom/Pacific, 18 46th Avenue, 19 Polk, 21 Hayes, 23 Monterey, 24 Divisadero, 27 Bryant, 29 Sunset, 31 Balboa, 33 Ashbury/18th, 43 Masonic, 44 O'Shaughnessy, 45 Union/Stockton, 48 Quintara/24th Street, 54 Felton, 55 Mission Bay Shuttle
Connector	11 Downtown Connector, 25 Treasure Island, 35 Eureka, 36 Teresita, 37 Corbett, 39 Coit, 52 Excelsior, 56 Rutland, 57 Park Merced, 66 Quintara, 67 Bernal Heights
Historic	California Cable Car, Powell/Hyde Cable Car, Powell/Mason Cable Car, F Market & Wharves
Specialized	NX Judah Express, 1AX California A Express, 1BX California B Express, 7X Noriega Express, 8AX Bayshore A Express, 8BX Bayshore B Express, 14X Mission Express, 30X Marina Express, 31AX Balboa A Express, 31BX Balboa B Express, 38AX Geary A Express, 38BX Geary B Express, 41 Union, 76X Marin Headlands Express, 81X Caltrain Express, 82X Levi Plaza Express, 83X Mid-Market Express, 88 BART Shuttle

2 - Transit Priority Projects

Muni Forward includes engineering improvements—also known as Transit Priority Projects (TPPs)—designed to address transit delay, improve reliability, and increase the safety and comfort of customers along the most heavily used Rapid routes. The TPPs include a variety of standard roadway and traffic engineering features that specifically address the root causes of delay and passenger frustration, including traffic congestion, transit stops that are spaced too close together, narrow travel lanes, and slow boarding times. These elements are referred to as the Transit Priority Features (TPF) and include lane modifications, traffic signal and stop sign changes, transit stop changes, parking and turn restrictions, pedestrian improvements, and many others.

Detailed proposals have been developed for eleven corridors and conceptual proposals were developed for an additional six. As the TPPs affect the allocation of scarce roadway space among different users by utilizing space for elements that prioritize transit, more than one alternative was typically proposed at locations with limited roadway space, each balancing different trade-offs. The precise components of each Muni Forward Transit Priority Project to be implemented will be decided by the SFMTA Board of Directors, who will consider the details of the project proposals as well as the results of the environmental impact analysis, following public outreach to be held for each individual Muni Route (outreach on some lines is already underway).

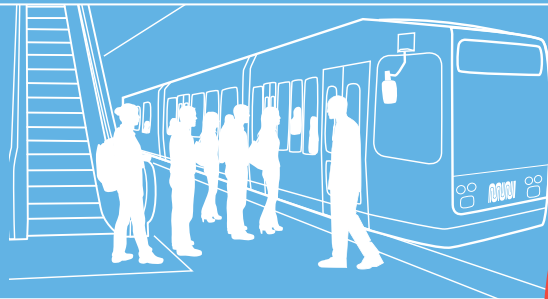
Muni Forward Transit Priority Projects

Muni Forward Transit Priority Projects will be implemented based on funding and resources available. As of December 2014, more than ten projects (40 miles of investment) are in the preliminary planning and engineering stages, and have funding strategies identified for construction. To minimize customer disruption and optimize financing, projects will be implemented in segments. More detail can be found on the individual route pages in the “Proposals by Route” chapter below.

The City and County of San Francisco’s 2014 Capital Plan and the San Francisco 2030 Transportation Task Force (T2030) have both recommended General Obligation Bond (GO Bond) funding for design and construction of many Muni Forward projects. On November 4, 2014, San Francisco voters approved Proposition A which includes \$150 million in funding proposed to design and build Muni Forward projects. Future funding is expected from other sources for a combined total funding of \$230 million. Vision Zero improvements, including bicycle and pedestrian capital improvements will be built in coordination with Muni Forward Transit Priority Projects to improve safe and easy access to transit.

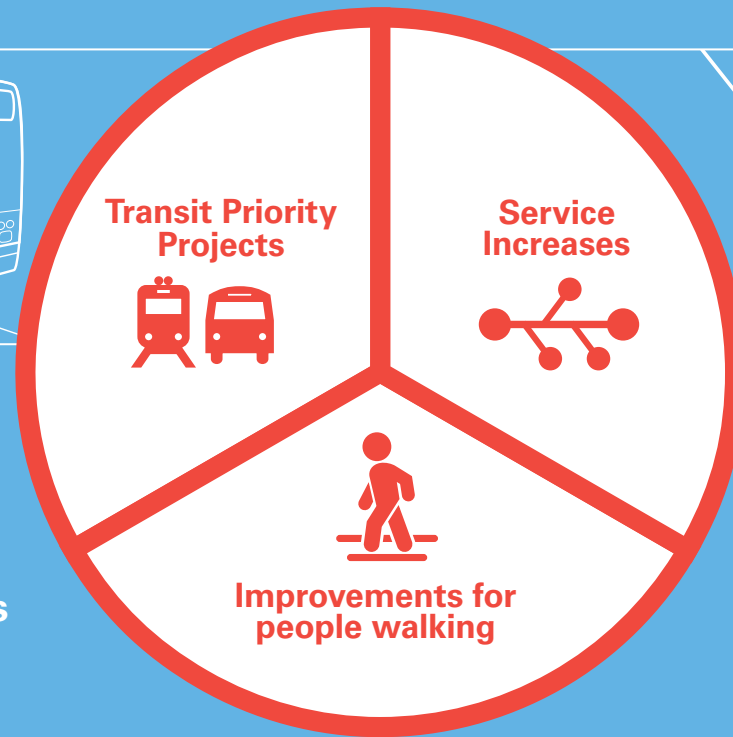
Muni Forward aims to make getting around San Francisco **safer** and **more reliable**.

THE CHALLENGE



Unreliable service
Crowded vehicles
 Frustrating **delays**
 Too many **traffic collisions**

THE SOLUTION



THE RESULTS



Predictable arrivals
Fewer delays
Less crowded trips
Shorter travel times
Safer streets

Muni Forward Transit Priority Projects

Muni Route	Route Segment	Project Status
N Judah	Arguello to 9th Ave	Approved: Waiting Construction
	28th Ave & Judah	Approved: Waiting Construction
	9th Ave to Beach (Outer)	Proposed: Future
5 Fulton	McAllister St at Fillmore & Divisadero	Implemented
	E of 6th (Inner)	Proposed: Outreach Underway
	6th Ave to 25th Ave (Mid Route)	Proposed: Future
	25th Ave to 46th Ave (Outer)	Approved: Construction Started
8 Bayshore	Geneva & Vis Valley	Proposed: Outreach Underway
	San Bruno Ave (Silver to Bayshore)	Proposed: Outreach Underway
	Kearny Street	Proposed: Outreach Underway
9 San Bruno	11th St & Bayshore	Approved: Waiting Construction
	Potrero Ave	Approved: Construction Started
10 Townsend	Sansome St	Approved: Waiting Construction
14 Mission	Mission & Silver (Bulbs)	Approved: Construction Started
	30th St Bulbs	Proposed: Outreach Underway
	11th St to Randall (Inner)	Proposed: Outreach Underway
	Mission & S Van Ness	Proposed: Outreach Underway
	Randall to Terminal (Outer)	Proposed: Outreach Underway
	Spears to 11th St (Downtown)	Proposed: Future
22 Fillmore	16th Street	Proposed: Outreach Underway
	Fillmore St	Proposed: Future
28 19th Avenue	S of GG Park	Proposed: Outreach Underway
	Lombard St	Proposed: Outreach Underway
30 Stockton	Stockton & Columbus (Bulbs)	Approved: Construction Started
	E of Van Ness	Proposed: Outreach Underway
	Stockton St	Proposed: Outreach Underway
	Chestnut (W of Van Ness)	Proposed: Outreach Underway
	OCS Terminal Upgrades	Proposed: Outreach Underway
7 Haight-Noriega	Stanyan to Laguna	Approved: Waiting Construction
	W of Stanyan	Proposed: Future
J Church	Surface Route	Proposed: Future
L Taraval	Surface Route	Proposed: Outreach Underway
K-T Ingleside	Surface Route	Proposed: Future
M Ocean View	West Portal to 19th Ave	Proposed: Outreach Underway
	Surface Route	Proposed: Future
1 California	Downtown & Outer	Proposed: Future
	Laurel Village	Proposed: Outreach Underway

Map: Muni Forward Transit Priority Projects

