



SFMTA
Municipal Transportation Agency

Mayor's 2030 Transportation Task Force

Current & Near Term Transportation Plans

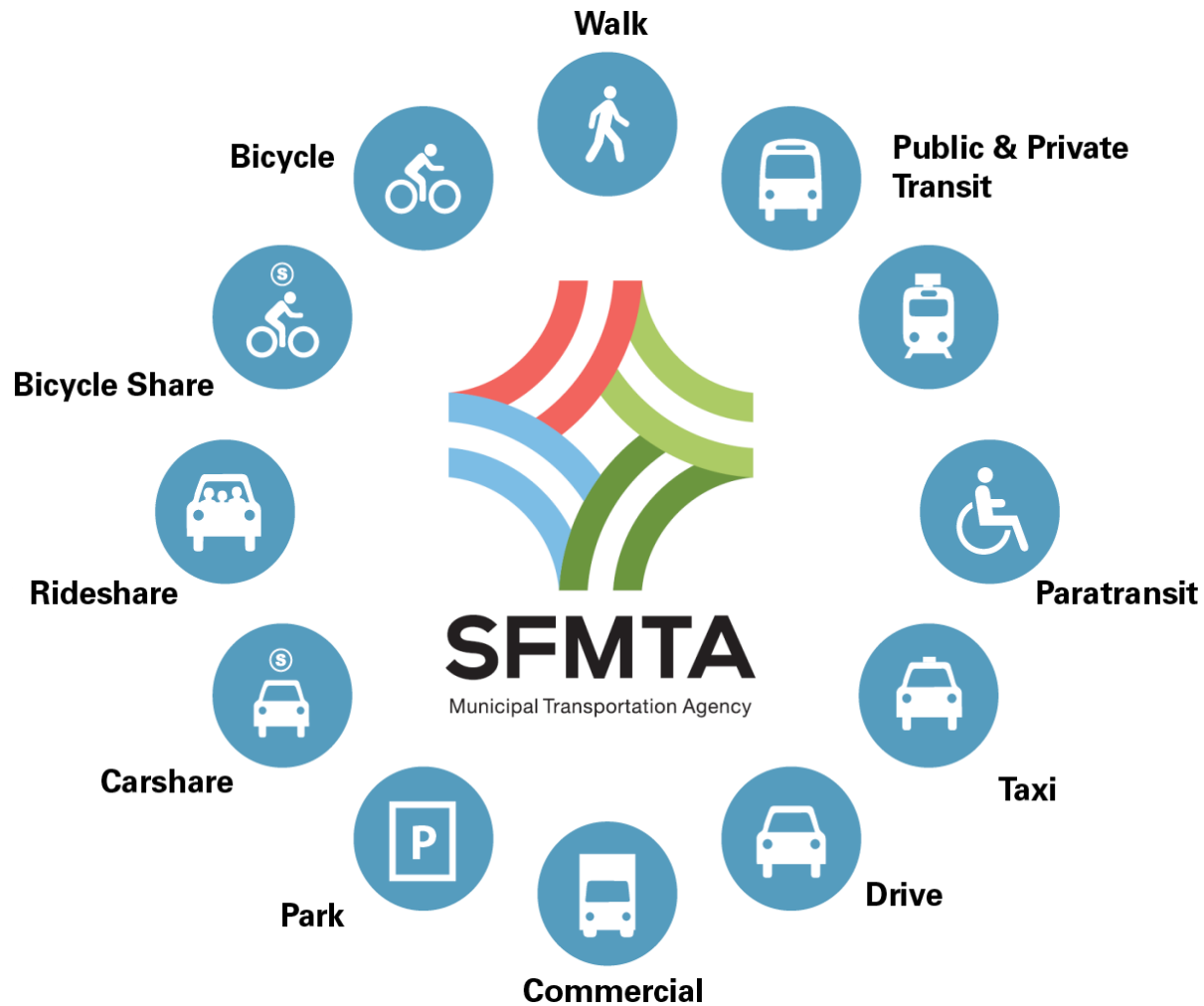
04 | 09 | 2013

SAN FRANCISCO, CALIFORNIA





Multimodal Transportation Agency





Overview

- **A well-functioning transportation system is foundational to the City's health and economic vitality**
- **Today's transportation system does not adequately meet current demand**
- **With expected growth, it is critical to improve the existing system and to make changes which move more people to transit, bicycling, walking and vehicle sharing**
- **Our focus is on:**
 - **Increasing operational efficiencies**
 - **Restructuring the transportation system to be better, faster, more reliable and more complete for transit, bicycling, walking, and vehicle sharing**



Transportation System

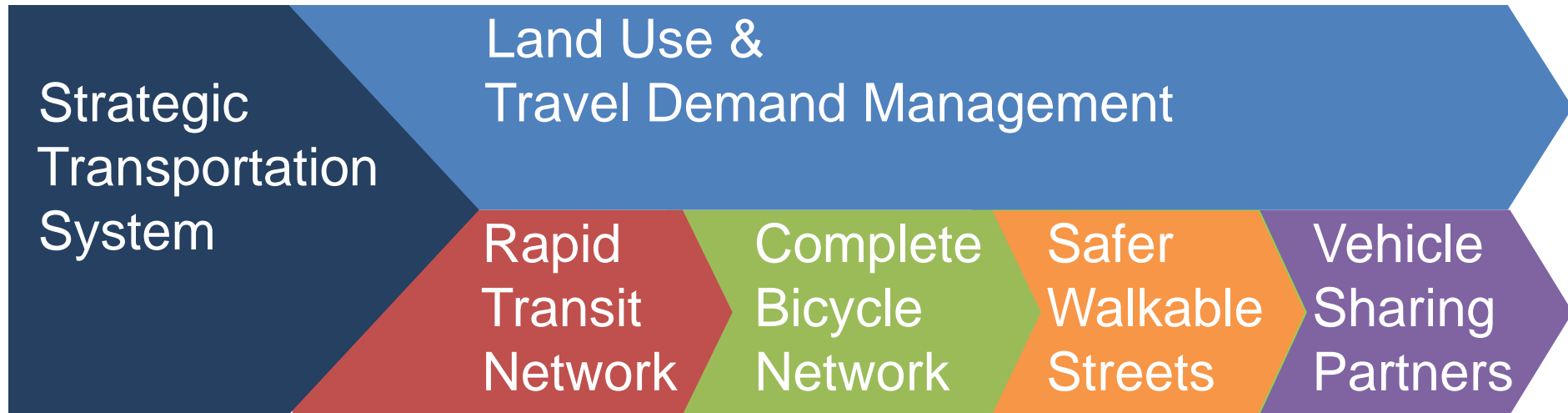
Muni Rapid

Bicycle

Walking

Vehicle Sharing

Transportation is vital to our City





Current Transportation System Opportunities



High ridership ratio (on par with NYC);
want to use the system



Cost effective mode that is growing
rapidly



One of the most walkable cities
(city of short trips)



Congested segments hamper transit's
reliability





Current Transportation System Challenges



Network, fleets and facilities in urgent need of upgrading



Fragmented network is perceived as unsafe by new users



High rate of collisions in northeast San Francisco

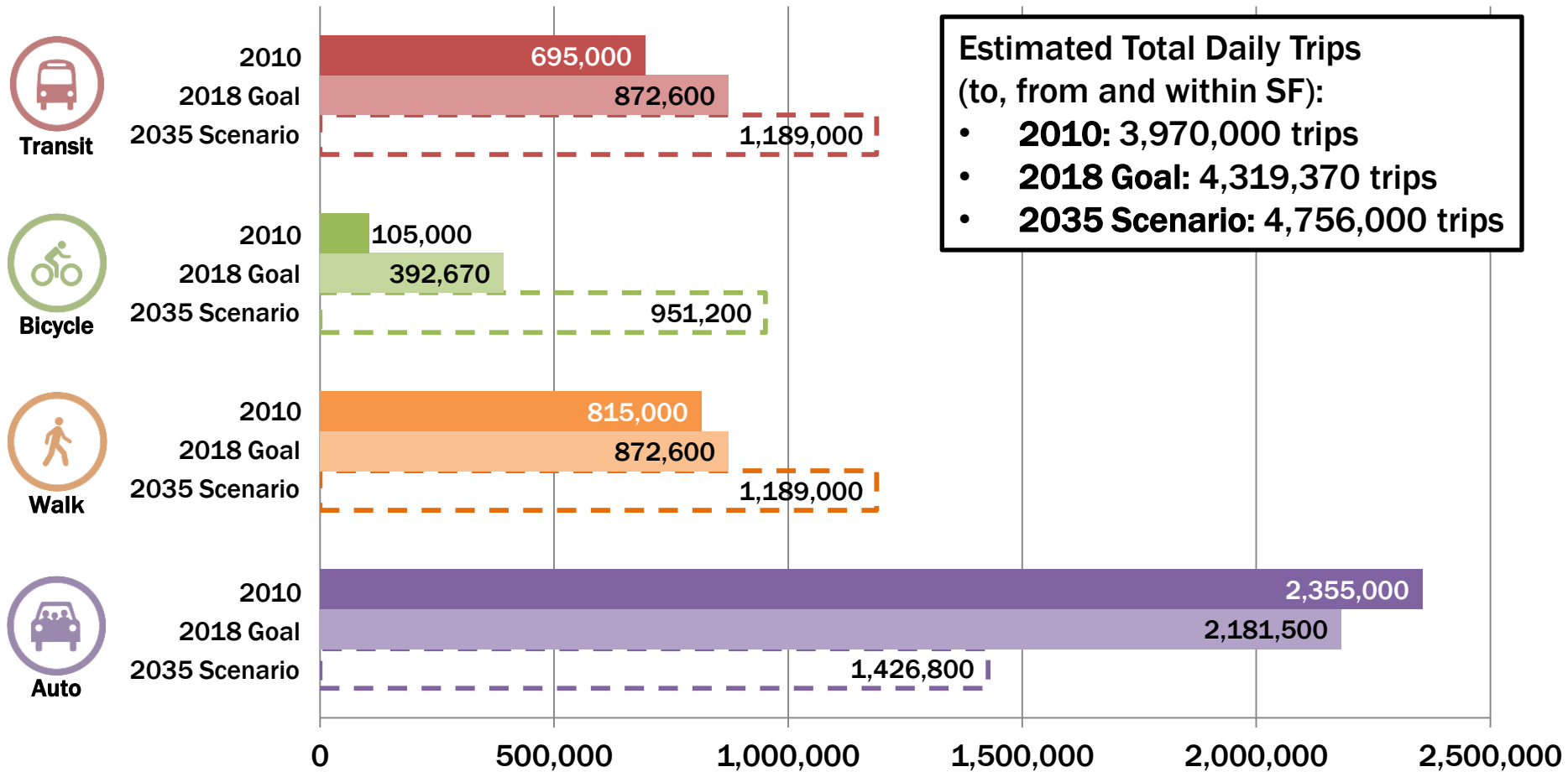


Need for transit & bicycle lanes; traffic calming for pedestrian safety





Mode Share Goals – 2018 & 2035 Scenario*



*Source: SFCTA Transportation Model (SF-CHAMP) output, 2010; 2018 numbers extrapolated from the difference between 2018 and 2035 projections



CURRENT LEVEL OF SERVICE

- **Operating Structural Deficit**
- **Capital Structural Deficit & State of Good Repair**



SFMTA Operating Structural Deficit

- **Gap between what is available (operating budget) and resources needed to fully and properly execute service plan and maintain assets**
- **Caused by budget shortfalls over time as costs rose faster than revenues**
 - **Reduced positions that support transit service (mechanics, car cleaners, custodians, etc.)**
 - **Reduced positions that maintain assets (signals, overhead lines, striping, etc.)**
 - **Reliance on grant/project money that doesn't fully meet our needs**
- **Inhibits delivery of quantity of service (charter requires 98.5%) and quality of service (e.g., clean, reliable vehicles)**



Transit Service: Annual Operating Structural Deficit - \$50M

For every 100 Transit Operators, we have...

Position	Current Ratio	Needed Ratio	Gap
Mechanics	31	37	6
Dispatchers	4	5	1
On-Street Supervisors	5	8	3
Station Agents	3	4	1
Track & Overhead Power Workers	1	9	8
Car Cleaners	5	10	5
Custodians & Groundskeepers	3	4	1
Trainers	2	4	2
Total:			27

Scaled for 2,000 Operators, we're short ~ \$50 million required to properly deliver our current service plan



Other Key Services: Annual Operating Structural Deficit - \$20M

Programs & Positions	Total Cost
Complete Streets Programs	\$4,777,000
Traffic Signals - Preventive Maintenance Program	\$4,274,700
Transportation System Safety	\$2,110,160
Maintenance & Operating Support for Implemented Capital Projects	\$6,828,000
Non-Operating Support Functions	\$2,612,000
Total:	\$20,601,860

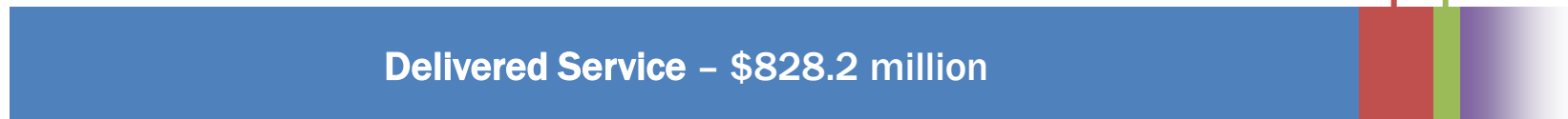


Shoring up the gap allows for expected level of service delivery but does not serve potential demand

➔ Less than a 10% increase in the operating budget will:

- Deliver higher quality scheduled transit service
- Institute preventative maintenance programs & project planning for the Traffic, Pedestrian and Bicycle Programs
- Fund needed safety, maintenance and support across the agency

Structural Deficit: \$70 million { Other Key Services: \$20M
Transit: \$50 M



- Basic Services; Declining Infrastructure
- Higher Quality Services; Maintain What We Have
- Reliable, Quality Services that Meet Growing Demand



Several Million in Operating Efficiencies Reinvested to Improve Service Delivery



All Door Boarding



Scheduling Efficiencies



Rehabilitation & Replacement



Dynamic Supervision



Customer-focused initiatives

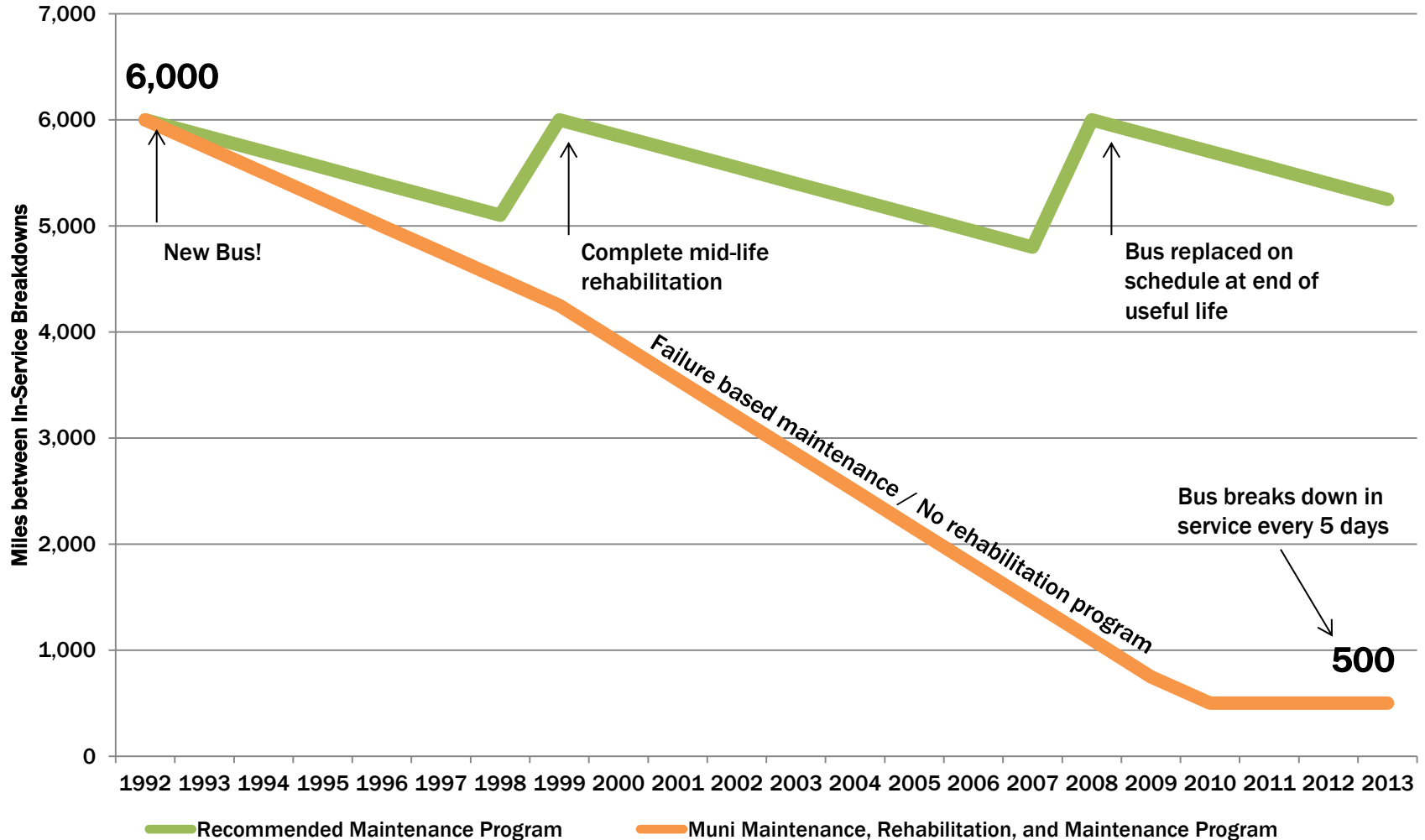


Safety & Security Initiatives

Ongoing personnel & administrative efficiencies to reduce overtime



Vehicle Maintenance - Lifecycle of a Trolley Bus





CURRENT LEVEL OF SERVICE

- **Operating Structural Deficit**
- **Capital Structural Deficit & State of Good Repair**

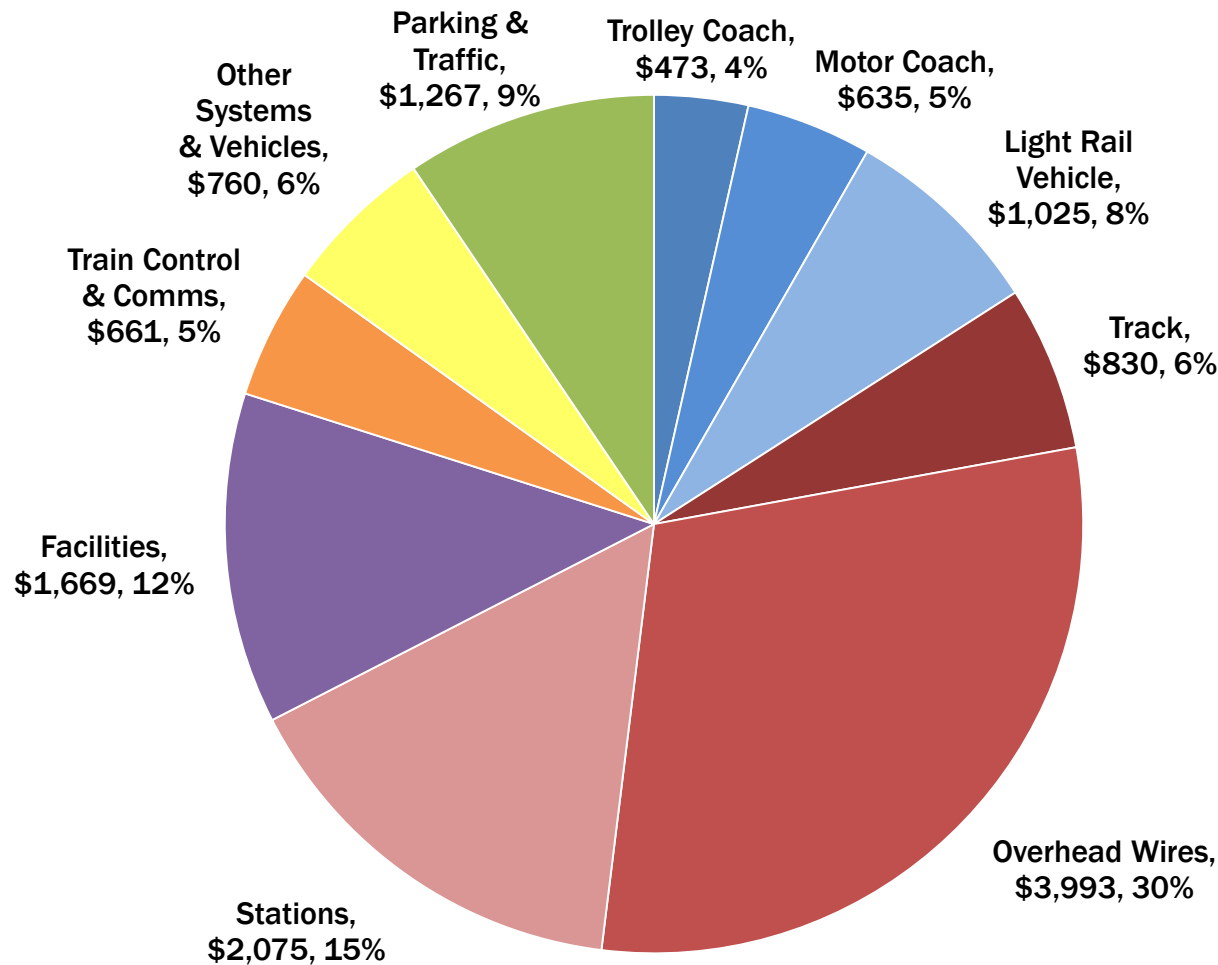


SFMTA Capital Programs

- **Accessibility**
- **Bicycle**
- **Central Subway**
- **Facility**
- **Fleet**
- **Parking**
- **Pedestrian**
- **Information Technology/**
- **Communication**
- **Safety**
- **School**
- **Security**
- **Taxi**
- **Traffic Calming**
- **Traffic/Signals**
- **Transit Fixed Guideway**
- **Transit Optimization/**
- **Expansion**



Total Current Value of SFMTA Assets = \$13.4 B

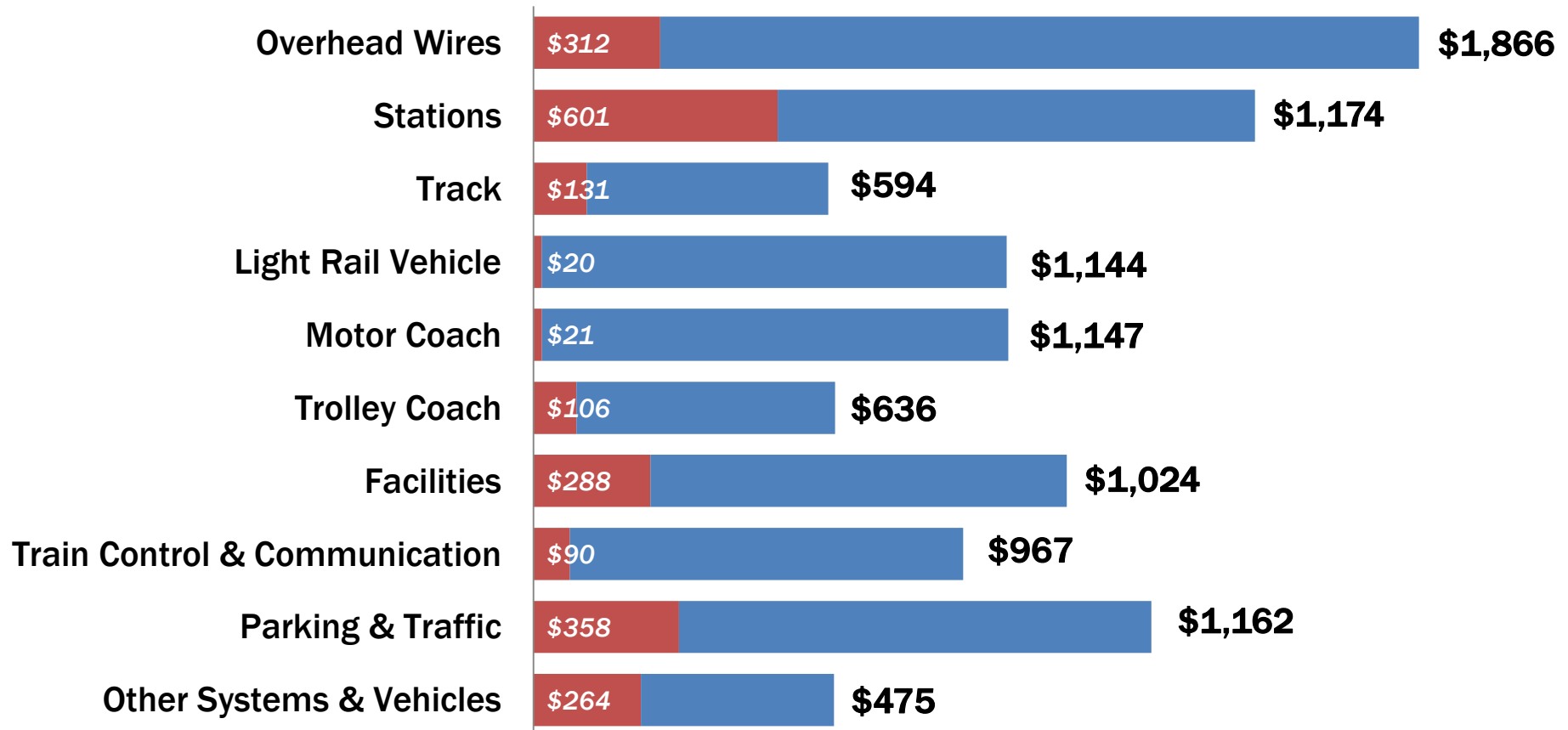


\$ millions



20-year Unconstrained Total Needs = \$10.2 B

■ State of Good Repair Backlog (as of 2010) ■ 20-Year Need





Asset Maintenance Currently Funded at ~50%

- A total of **\$510M** per year needed to maintain a State of Good Repair (SOGR) for all assets
- Less than half (**\$250M** per year) of the needed funding is projected
 - Ideally: **\$260M** additional funding per year for capital projects required to replace all assets based on scheduled life
 - Alternatively: **\$116M** additional funding to maintain the backlog at current levels



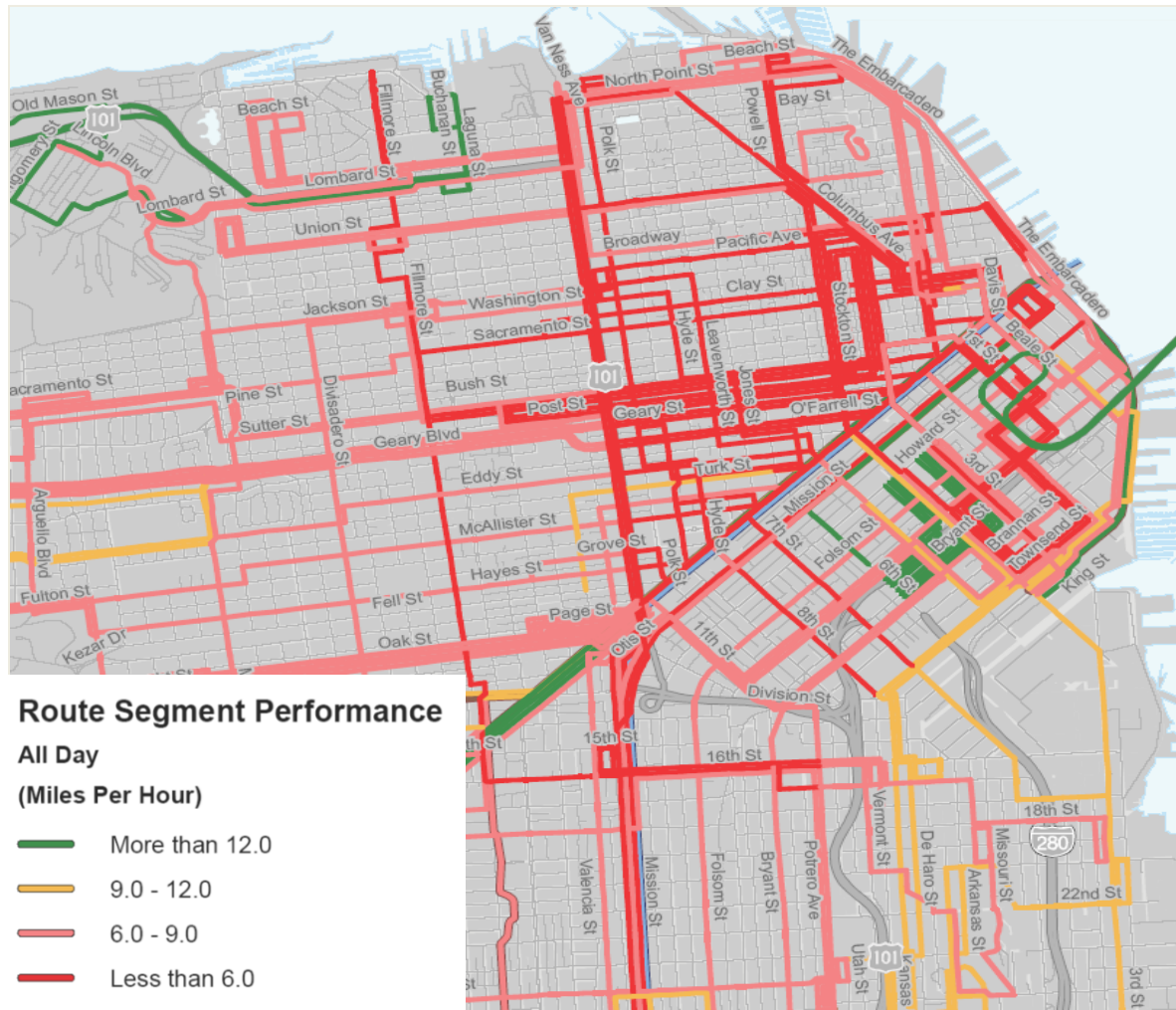
NEAR TERM TRANSIT PROJECTS: BUILDING A RAPID NETWORK

- **Transit Effectiveness Project (TEP)**
- **Central Subway**
- **Van Ness Bus Rapid Transit**



Existing Muni Transit Network

Congested, unreliable, under capacity



- Slow speeds and unreliable service shift some customers to driving, which increases congestion
- Existing transit network does not meet SF's evolving employment and housing needs



Transportation System

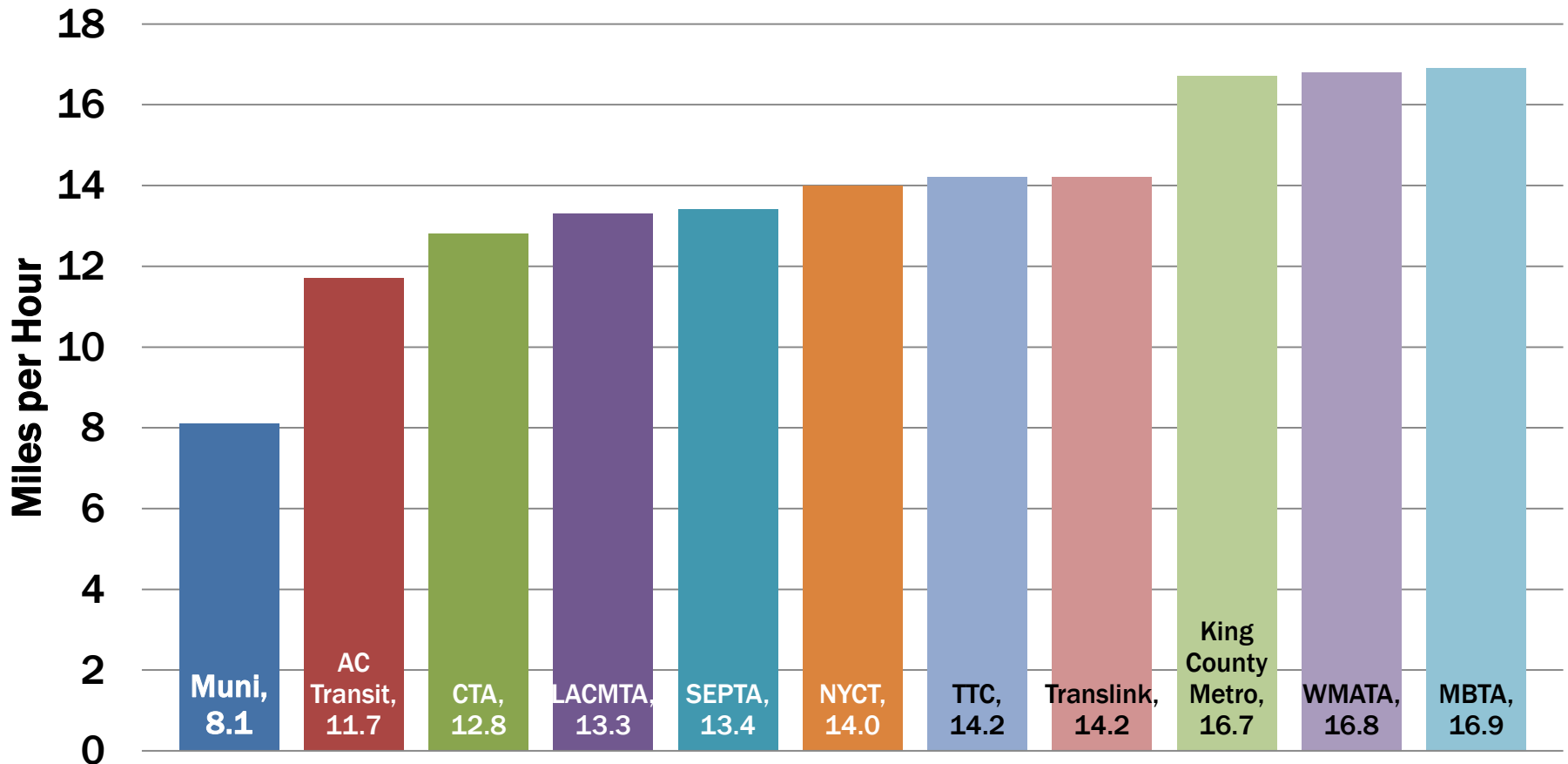
Muni Rapid

Bicycle

Walking

Vehicle Sharing

Average Transit System Operating Speed



Traffic protection, route design, crowding, fleet types major factors of travel speed



Muni's Challenges

- **Missing 3-5% of scheduled service daily or 250-500 daily trips**
- **Systemwide on-time performance is 60%**
- **Multiple subfleets**
- **Aging fleet and infrastructure**
- **Increasing demand & development but limited funding**



Service changes throughout the system provides more service where needed

Systemwide Improvements

- All door boarding
- Vehicle replacement & rehabilitation
- Real-time supervision
- Route performance audits
- Scheduling efficiencies

Customer Amenities

- Clipper
- New shelters
- NextMuni
- Customer First grants

Transit Effectiveness Proposals

- Establish Rapid Network
- Route restructuring and increased service on crowded routes
- Travel time reduction proposals on Rapid Network



Customer-First Grants (8X, N, 14/14L, 49)



\$28M grants awarded for customer and travel time improvements to be delivered by 2014



Customer First Grant Features

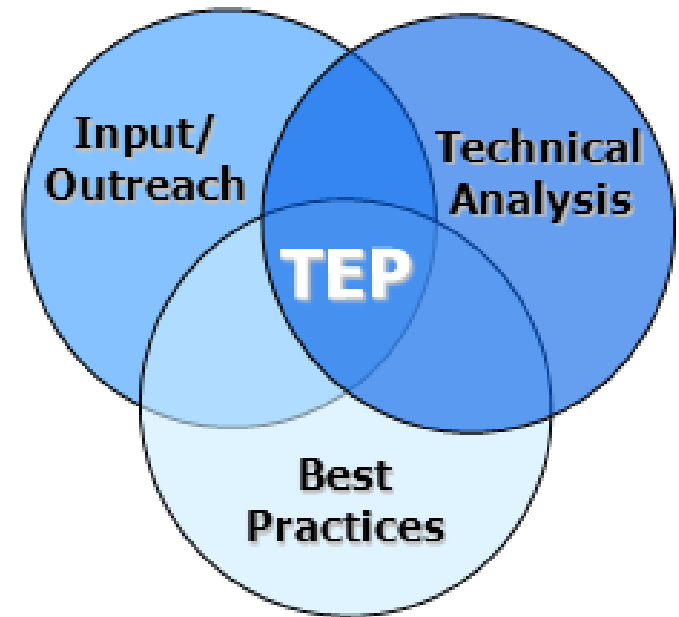
- Colorized Transit Lanes
- Transit Signal Priority
- Stop Enhancements including NextMuni
- Vehicle Branding
- Transit-Only Lane Enforcement (TOLE) Cameras





Transit Effectiveness Project (TEP)

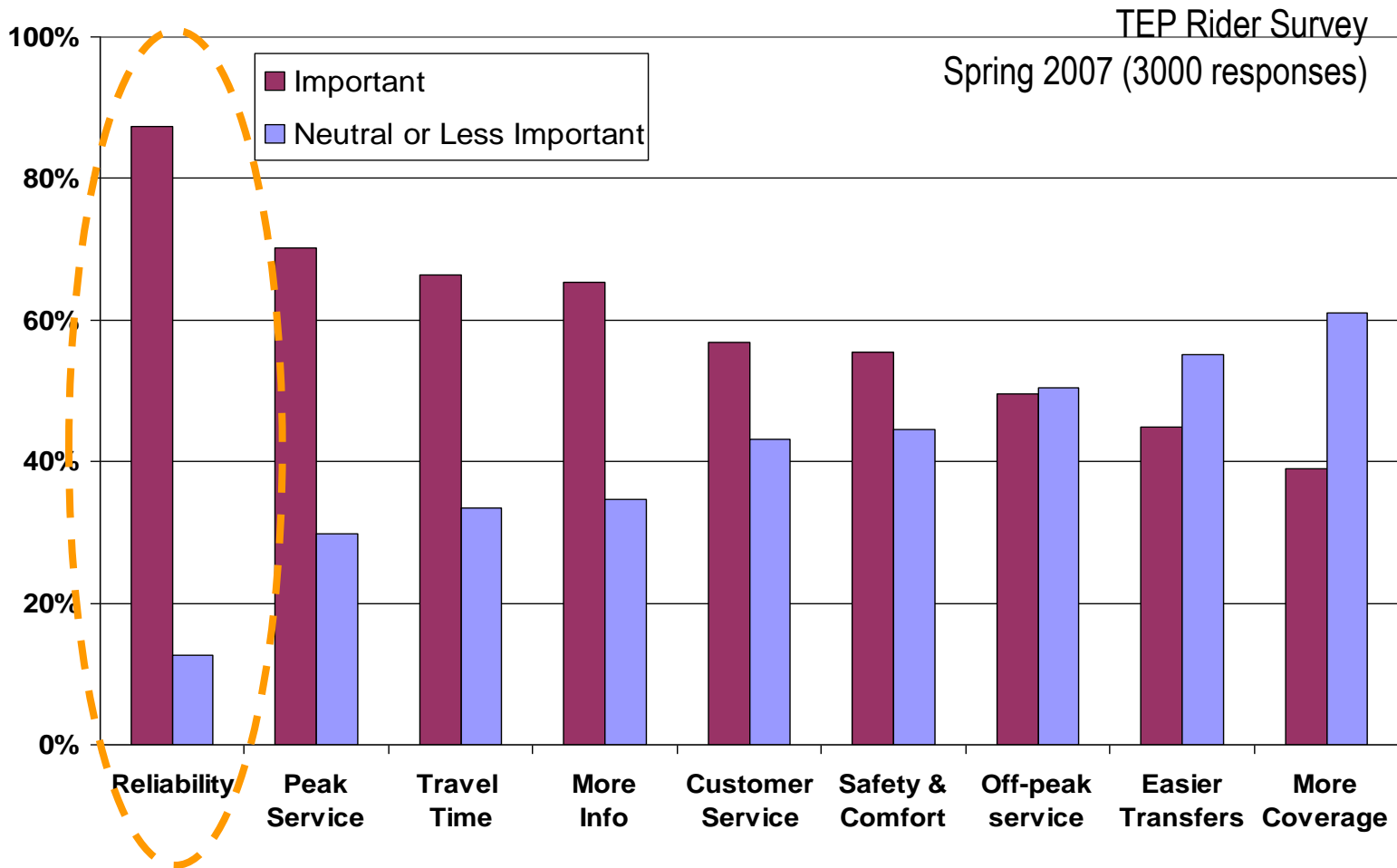
- First comprehensive review of Muni in a generation, aims to transform Muni service to better meet customer needs
- **TEP objectives:**
 - Improve service reliability
 - Reduce transit travel time
 - Improve customer experience
 - Deliver more efficient service
- Recommendations based on unprecedented data analysis and extensive community outreach





Customers want reliable service

Survey Results: How important is it to improve...





TEP Service Improvements

- **Increase total service up to 10% to better meet existing and near-term demand**
- **Redesign routes to better match travel patterns**
- **Modify or discontinuing low ridership routes or segments of routes**
- **Increase service frequency on busy routes**
- **Expand limited-stop service**



TEP Vision for Muni Rapid Network

- Customer oriented & easy to use
- Easily connects communities & other modes
- Everyday part of the city's way of life





Rapid & Frequent Routes



Rapid:

- J
- K
- L
- M
- N
- T
- 5L (new)
- 9L
- 14L
- 28L (new)
- 38L
- 49L (new)
- 71L (new)

Frequent:

- F
- 1
- 5
- 8X
- 9
- 14
- 22
- 28
- 30
- 38



Rapid Network - TEP Improvements

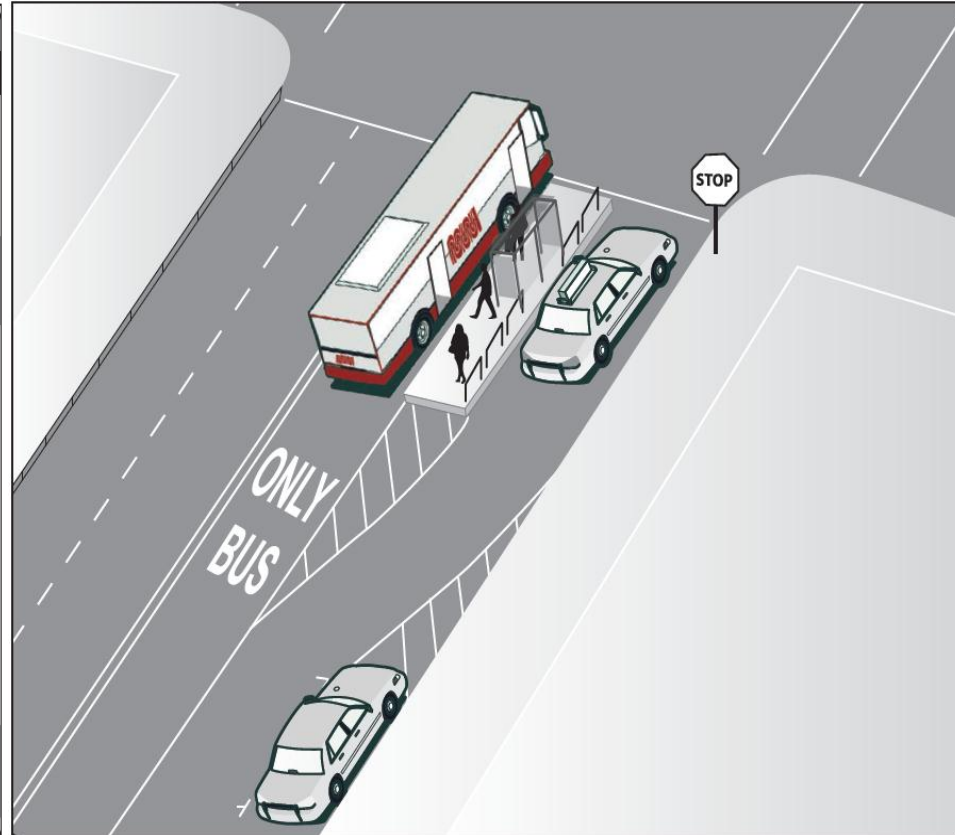
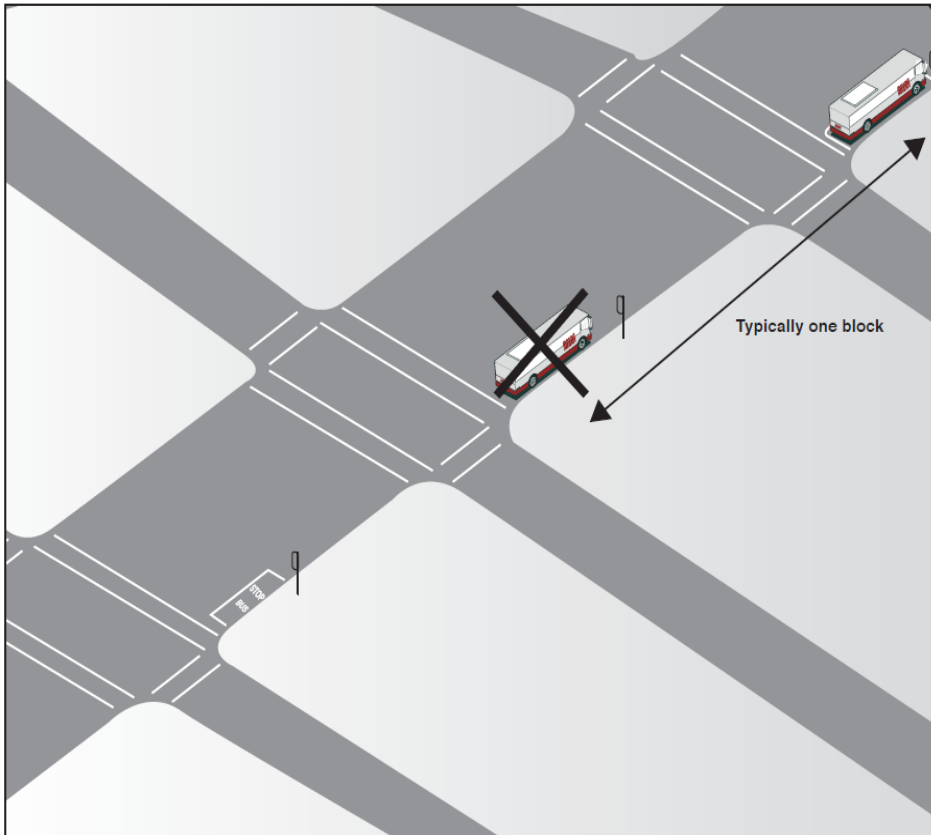
- Stop Consolidation
- Transit Stop Changes
- Transit Only Lanes
- Lane Modifications





Stop Consolidation

Transit Boarding Islands



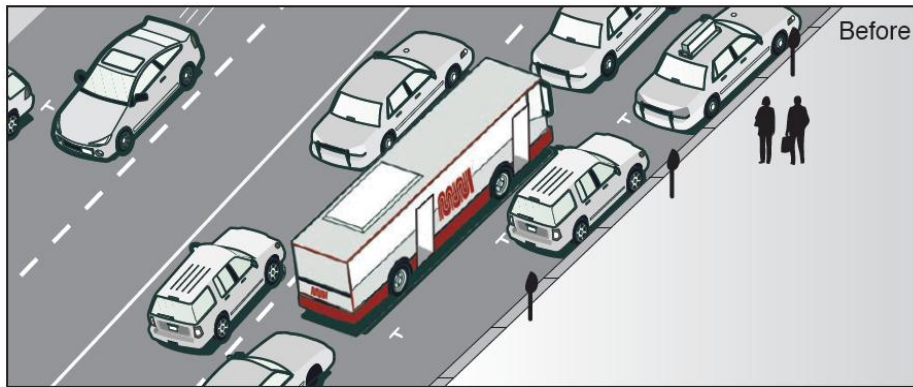
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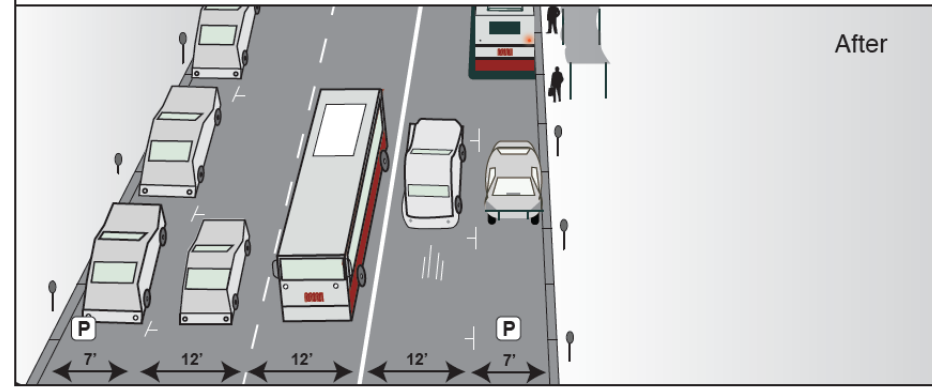
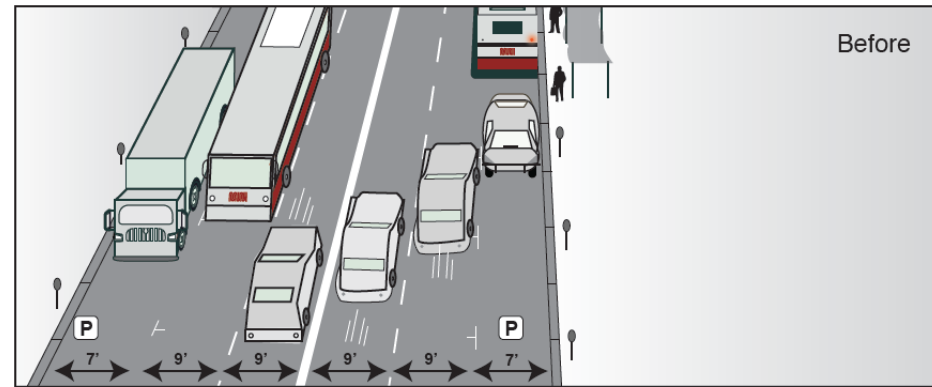


Transit Only Lanes

Importance of Lane Widths



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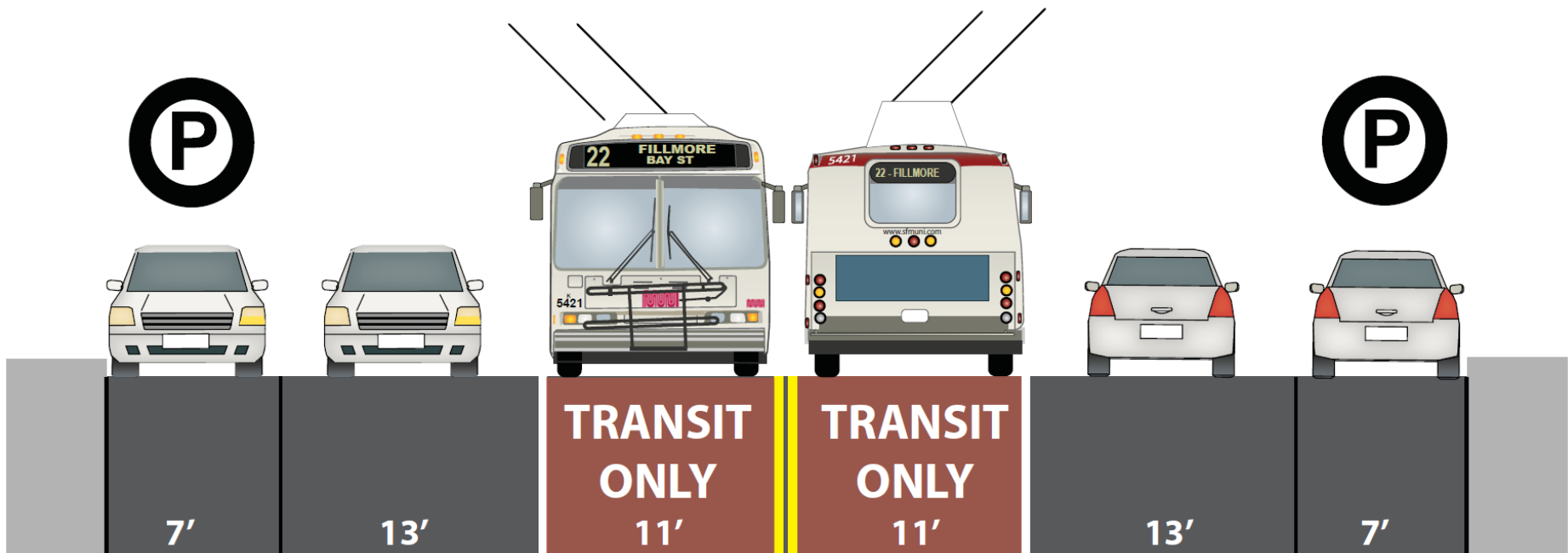


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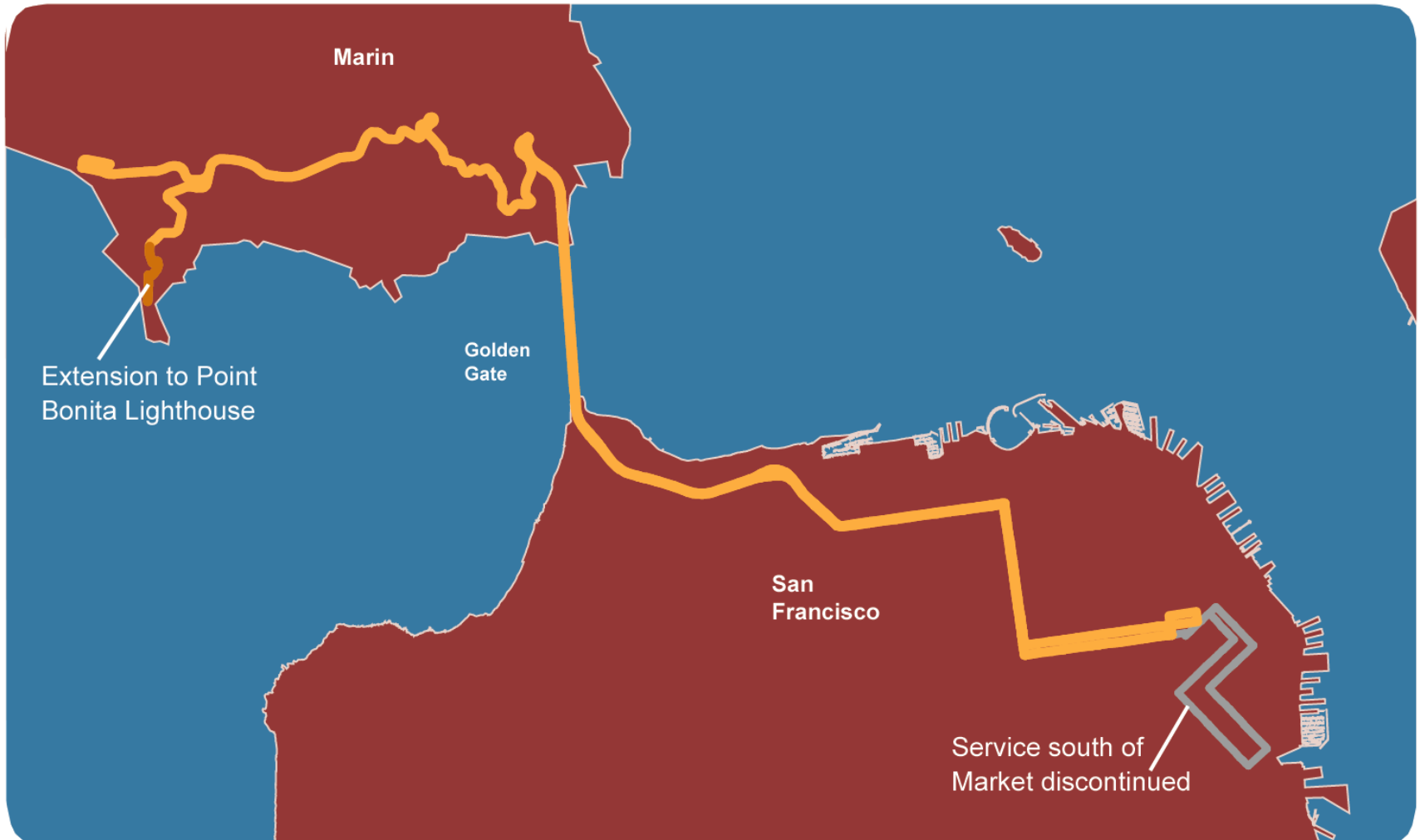
TEP Pilot - Transit Only Lane J Church and 22 Fillmore

- One transit lane and one mixed traffic lane in each direction – no parking impacts
- Transit-only 24/7 (taxis allowed)





76X Marin Headlands Express





TEP Next Steps

- **Continue near-term reliability initiatives**
- **Implement Church Street red lane pilot in Spring 2013**
- **Draft EIR expected in Summer 2013 and Final EIR in January 2014**
- **Begin dialogue about service as part of FY2015 budget discussions Fall 2013**
- **Implement Customer First projects by July 2014**



NEAR TERM TRANSIT PROJECTS: BUILDING A RAPID NETWORK

- Transit Effectiveness Project (TEP)
- **Central Subway**
- Van Ness Bus Rapid Transit



T-Third Phase 2: Central Subway

Opens in 2019; \$1.578B, Fully Funded





Projected Improvements in Operations:

- **Service Capacity:**
 - By 2030, T Third line projected to have 65,000 customers per day; 35,000 projected daily boardings in the Central Subway segment
- **Service Efficiencies:**
 - Reduce the 20-minute peak-hour trip from Stockton & Washington to 4th & King to less than 8 minutes
 - Connects to regional transit hubs
- **Operational Costs:**
 - Increase the overall operating budget by \$1.76 million; less than 0.25 percent
 - By 2030, the cost of operating the subway is projected to be \$6.89 million

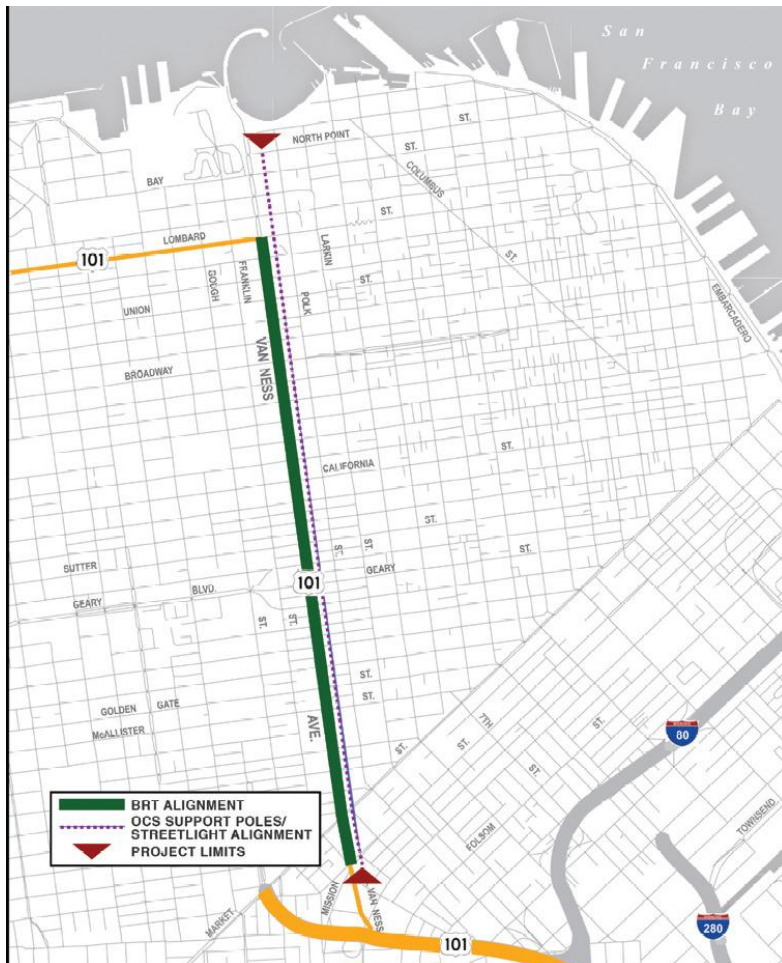


NEAR TERM TRANSIT PROJECTS

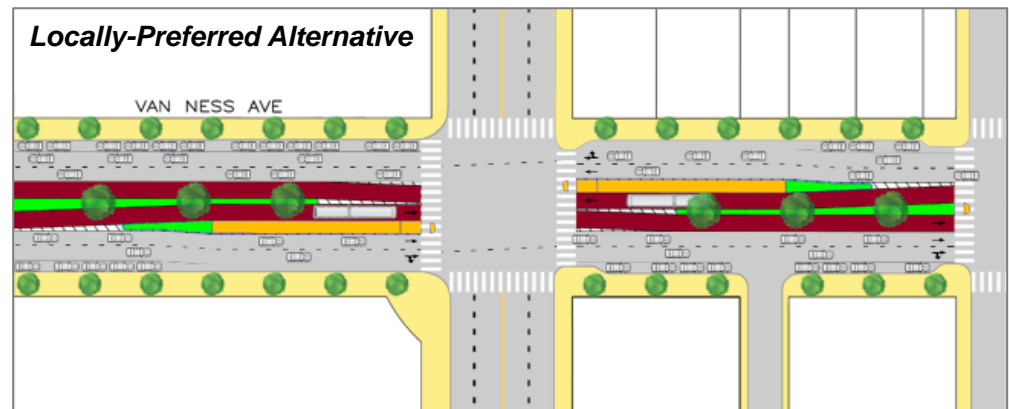
- **Transit Effectiveness Project (TEP)**
- **Central Subway**
- **Van Ness Bus Rapid Transit**



Van Ness Bus Rapid Transit *Opens in 2018*



- Dedicated bus lane
- All door, level boarding
- Pedestrian safety enhancements
- Transit Signal Priority
- Traffic Signal Optimization





Projected Improvements in Operations:

- **Service Capacity:**
 - Increased transit ridership on Muni 47 and 49 lines by up to 35%
- **Service Efficiencies:**
 - Reduced transit travel time by as much as 33%
 - Routes 47 and 49 will as much as 50% more reliable
 - Decrease in delays of more than 40%
- **Operational Savings:**
 - Reduced Muni operating costs of up to 30% for Van Ness Avenue service



Transportation System

Muni Rapid

Bicycle

Walking

Vehicle Sharing

NEAR TERM BICYCLE STRATEGY: UPGRADING & CLOSING GAPS



Bicycling in San Francisco



Cost effective mode that is growing rapidly



Network is fragmented, not legible and perceived as unsafe by new users



Transit and bicycling synergies that increase public transit's peak-period performance

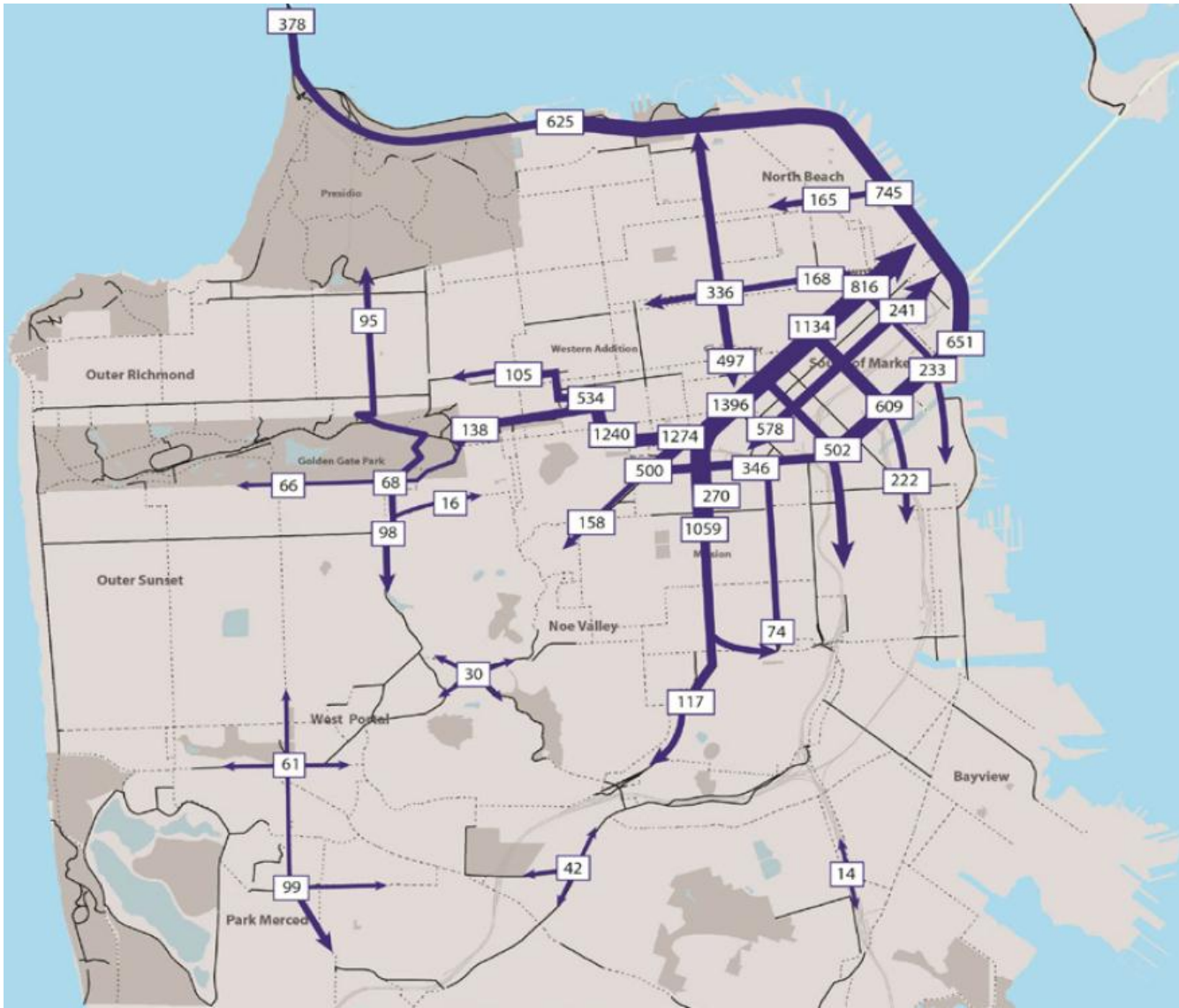


15.7 miles (7%) of the network has the facilities that meet the 8 to 80 principle.





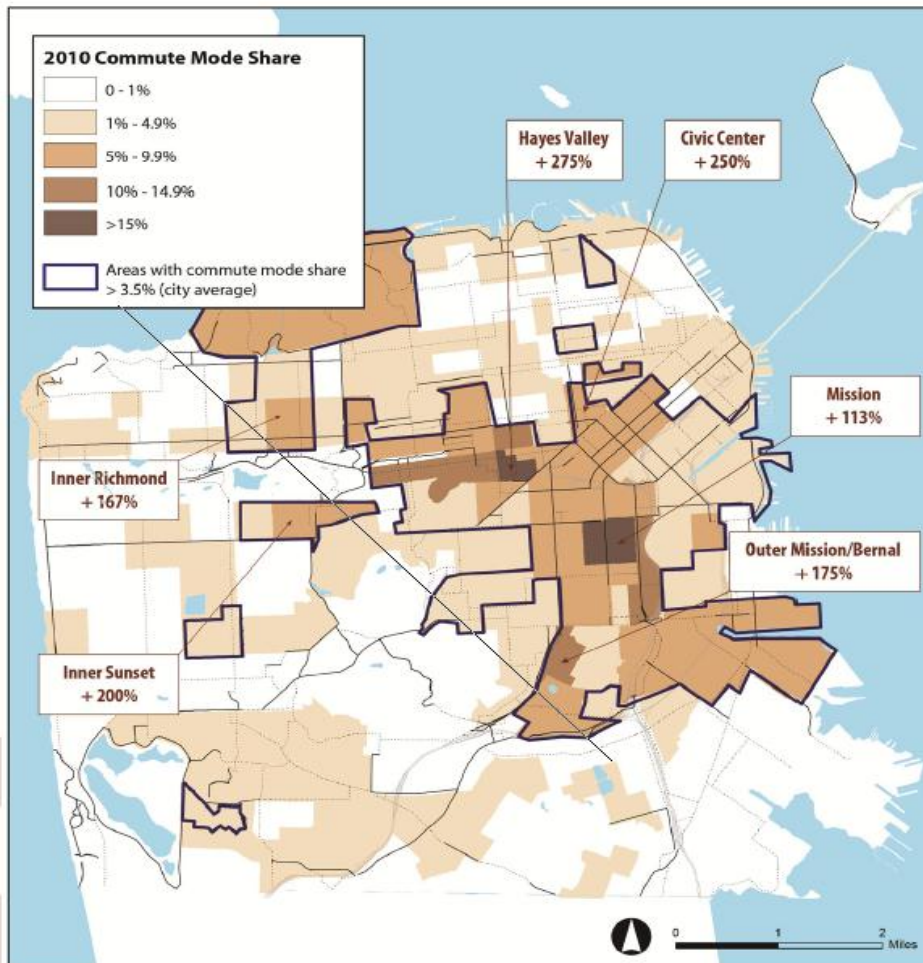
Key Travel Patterns



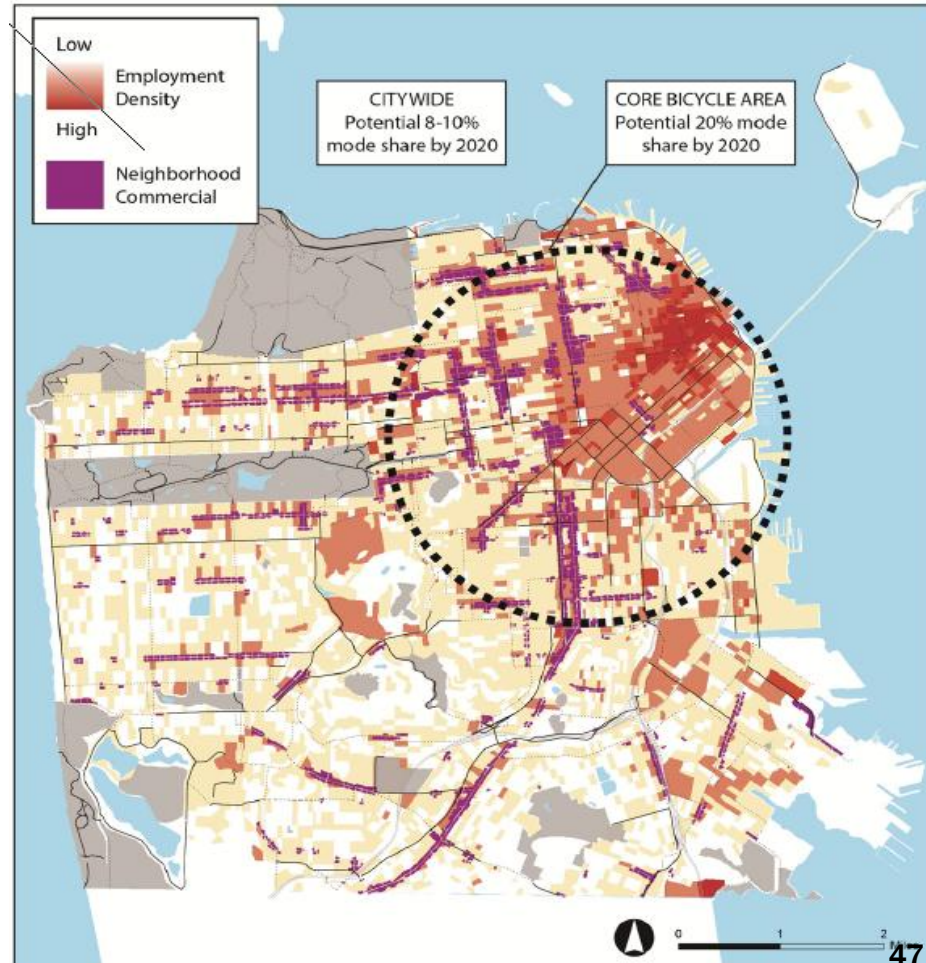


Emerging Bicycle Core Area

Bicycle Commute Mode Share (2010)



Destination Land Uses



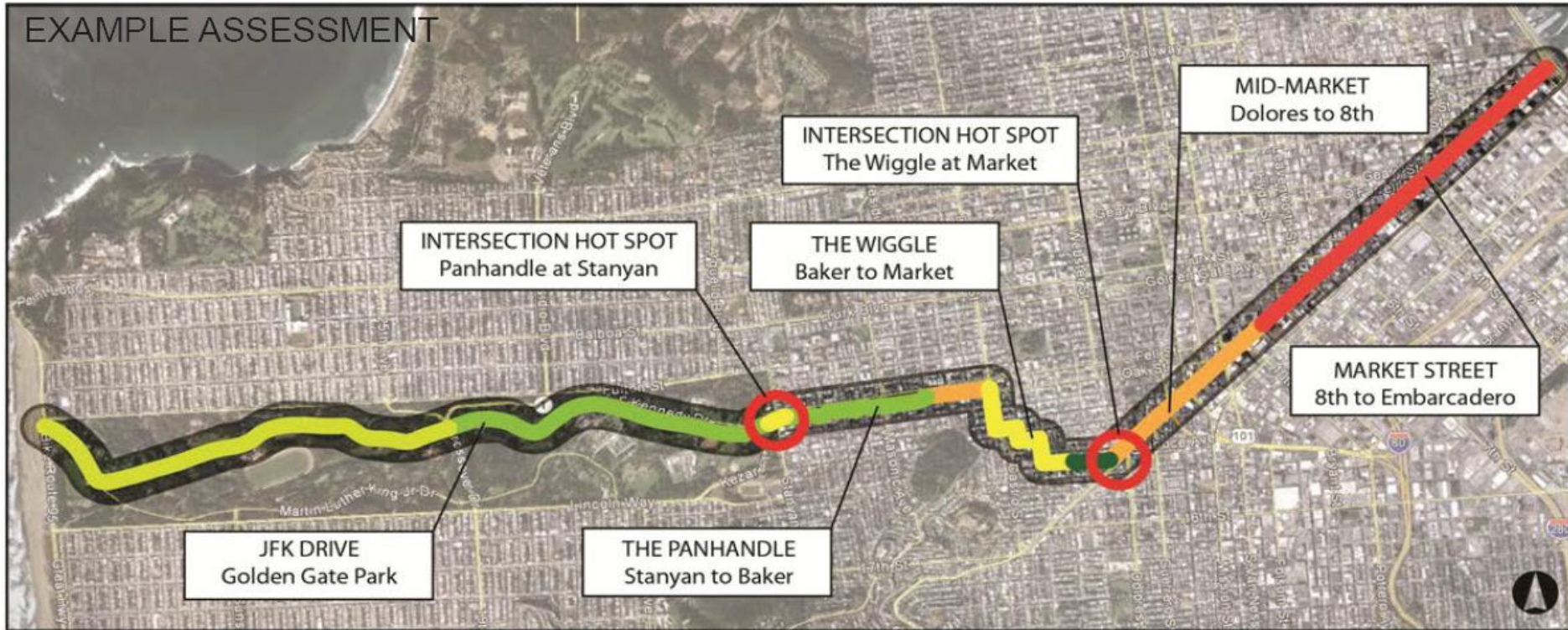


Bicycle Network Toolkit



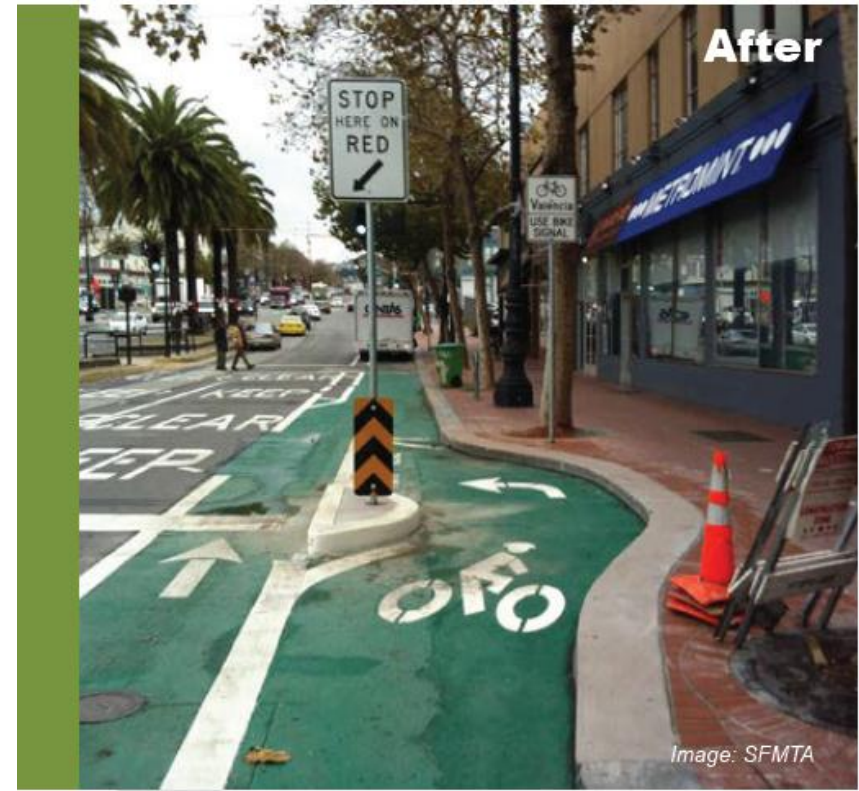
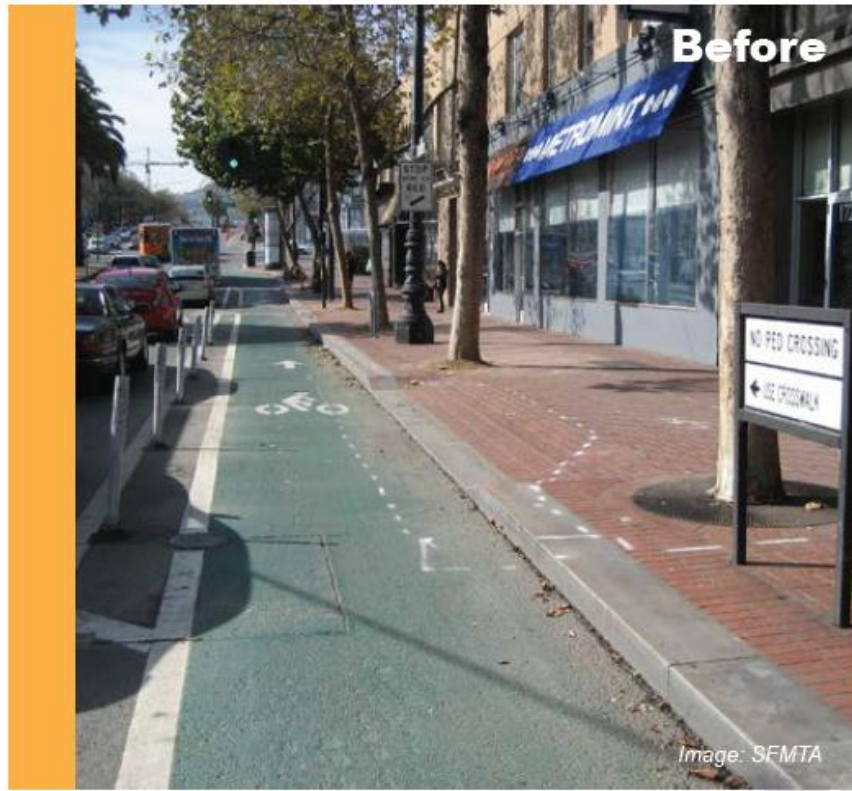


Example of Upgrade Analysis





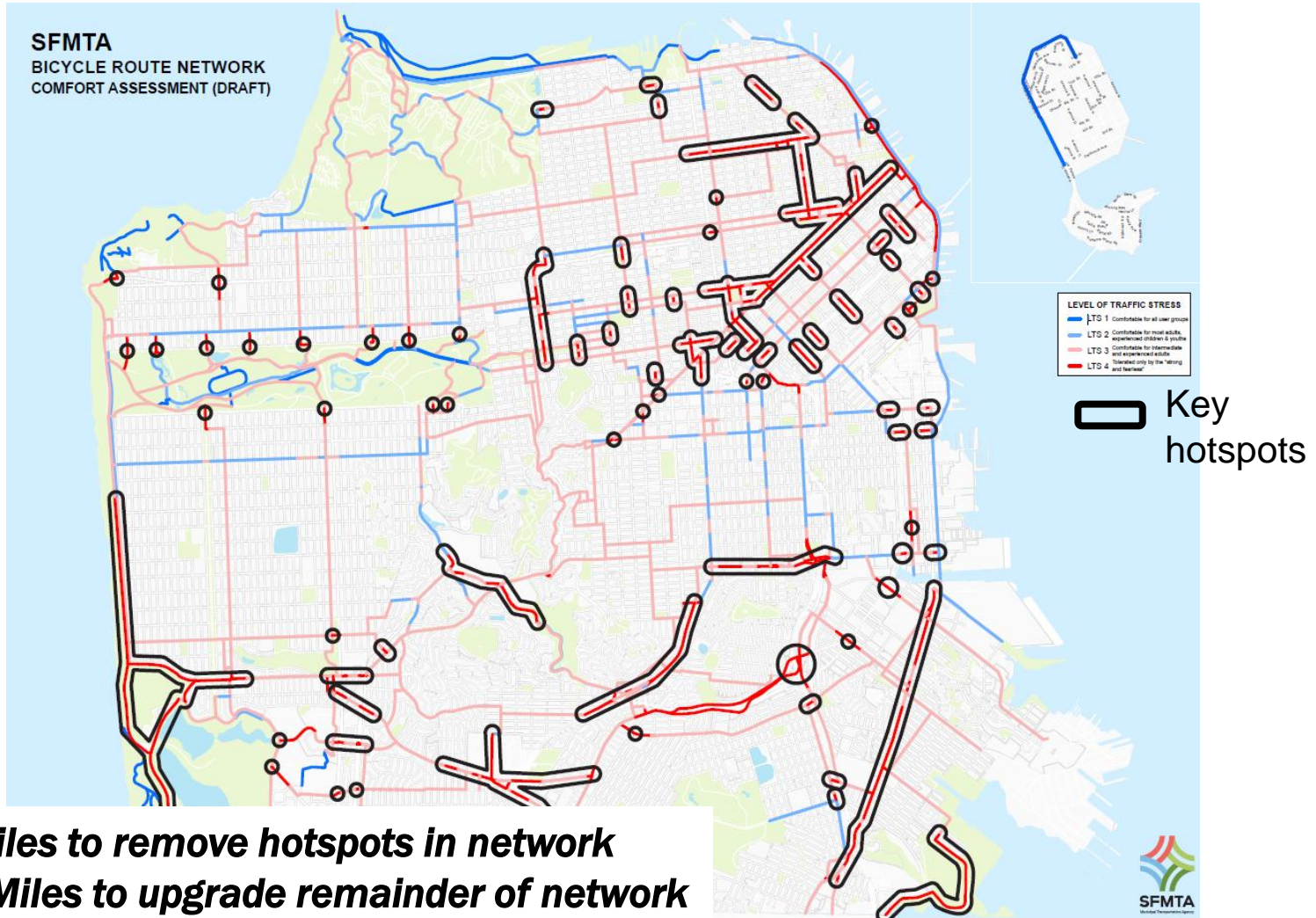
System Comfort & Connectivity Upgrades



Example of upgrade at Valencia and Market Intersection



Bicycle Network Upgrade Needs



>26 Miles to remove hotspots in network
>130 Miles to upgrade remainder of network



Bicycle Strategy Scenarios



Bicycle Plan Plus

Complete Bicycle Plan-Pilot Bike Share
Install bicycle parking and upgrade 10 intersections



Strategic Plan

Upgrade 50 miles to premium facilities
12 new miles of premium bicycle facilities
Bicycle Parking, bike share system program
Upgrade 50 intersections, marketing/wayfinding



System Build Out

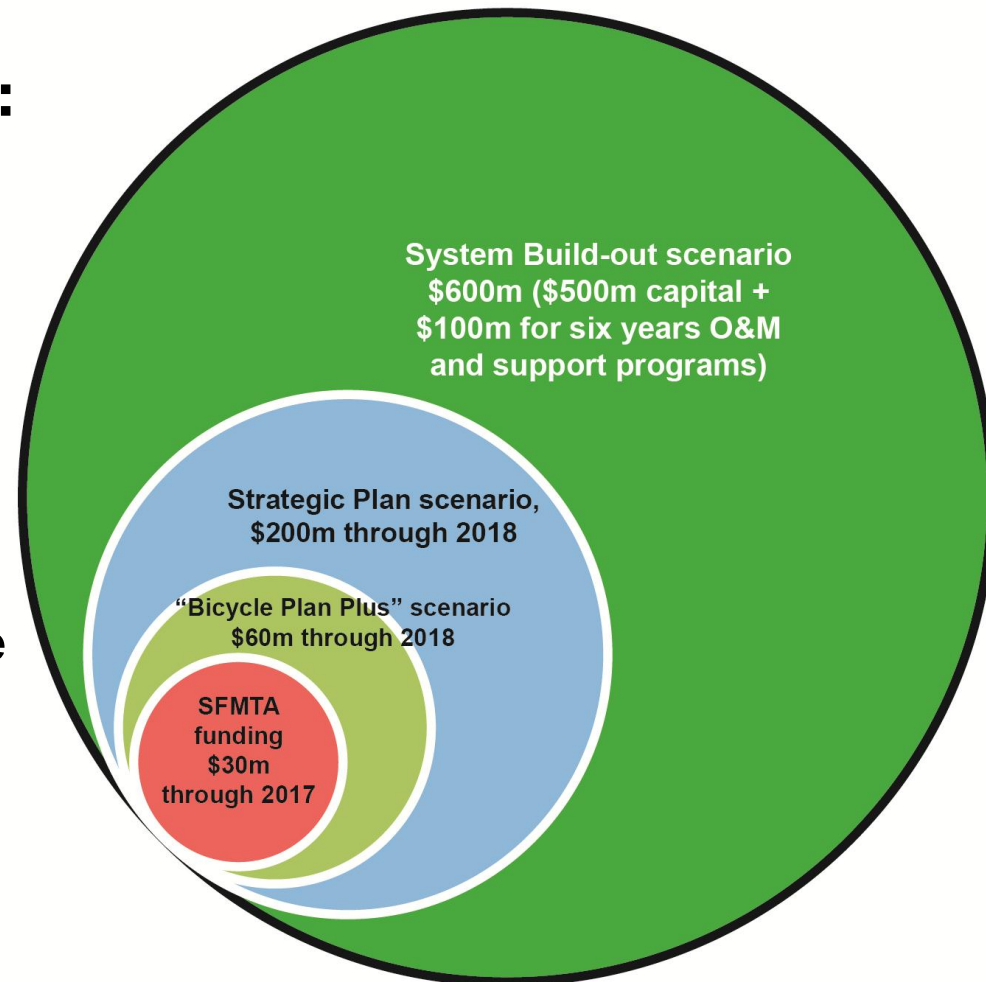
Upgrade 200 miles to premium facilities
35 new miles of premium bicycle facilities
Bicycle Parking, bike share system program
Upgrade 200 intersections, marketing/wayfinding





\$170M Funding Gap to Meet Strategic Plan Investment Scenario

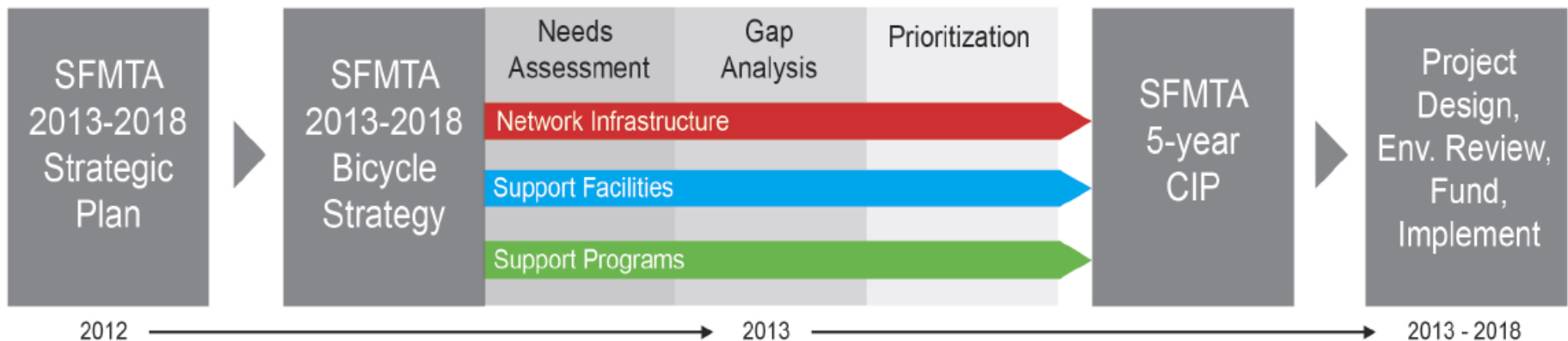
- **“Bicycle Plan Plus” Scenario:**
 - Total of \$60 million through 2018
- **Strategic Plan Scenario :**
 - Total of \$190 million through 2018
- **System Build-out Scenario:**
 - \$500 million for infrastructure
 - \$4 million/year for bicycle sharing
 - 10 million/year for support programs





Next Steps to Grow Bicycle Mode Share

- **Complete Needs Assessment**
- **Identify and prioritize upgrade projects for inclusion in the 5-Year Capital Improvement Program**
- **Identify funding plan for capital investments and maintenance needs**





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NEAR TERM PEDESTRIAN STRATEGY: IMPROVING SAFETY & WALKABILITY



Walking in San Francisco



One of the most walkable cities
(city of short trips)



Walking is increasing as city changes
form



Too many distracted people driving,
walking



Vehicle to pedestrian collisions
increasing

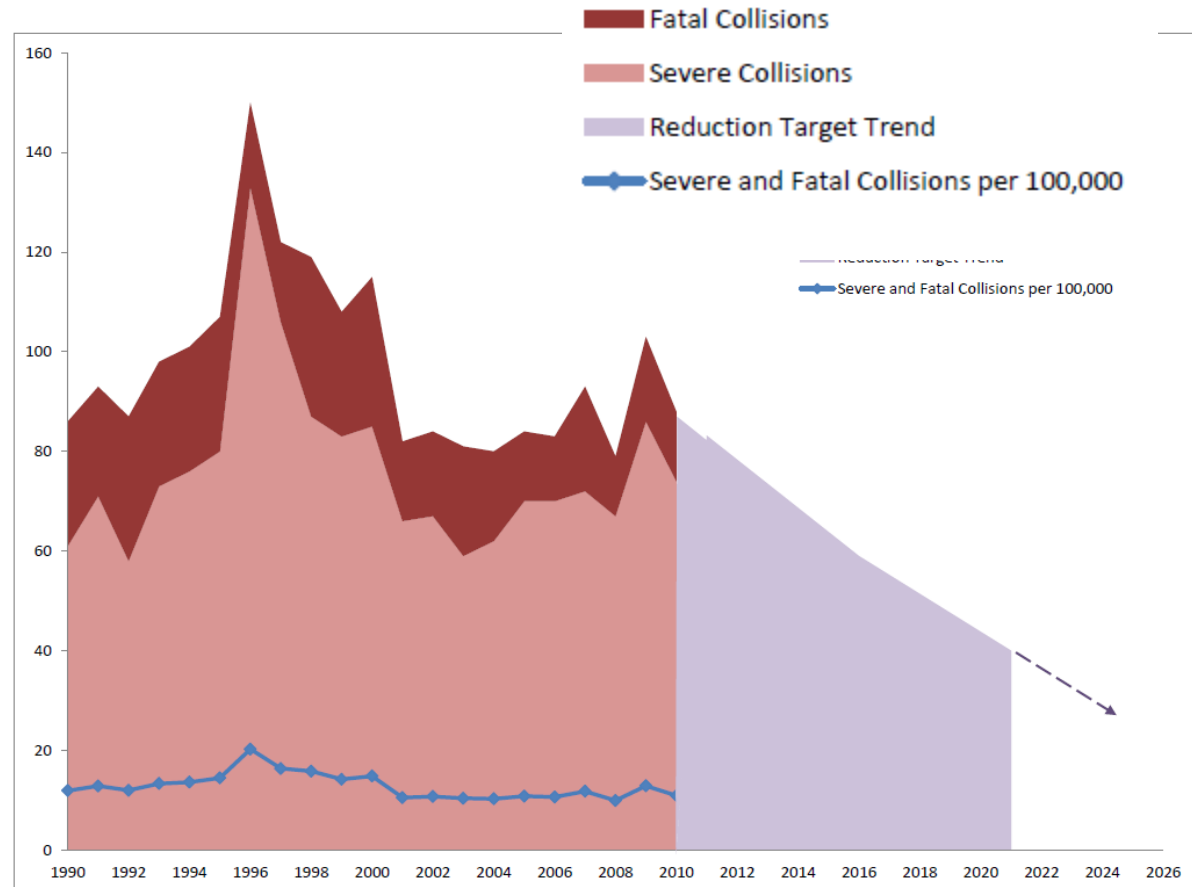




Pedestrian Strategy Background

Mayor's Executive Directive 10-03 (Dec 2010)

- Reduce fatal and severe injuries by 25% by 2016 and by 50% by 2021 and increase walking trips
- Complete near term pedestrian safety and walkability action items and develop Pedestrian Strategy with mid and long term action items





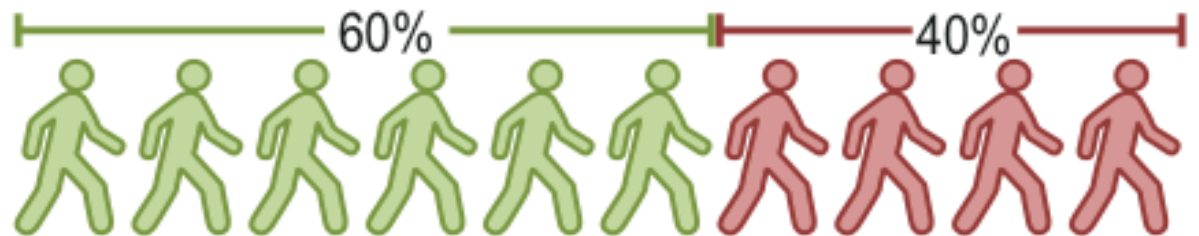
Slowing Down Arterial Traffic is Key

Vehicle Speed & Risk of Serious injury

If hit by a vehicle going:

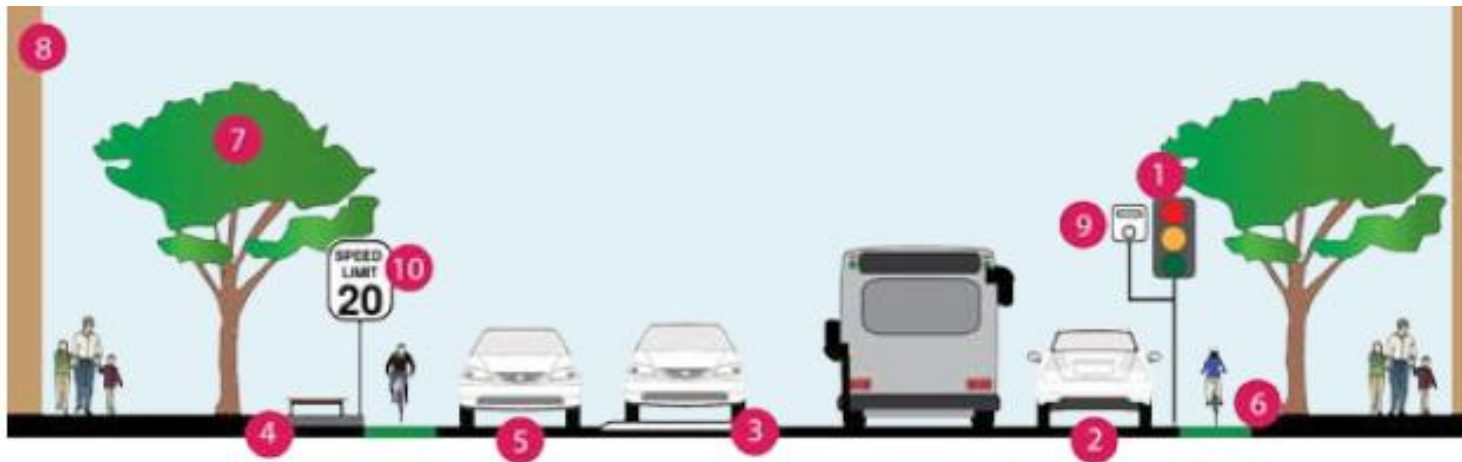
Survives the Collision

Sustains Fatal Injuries





Arterial Traffic Calming Toolkit



1. Signal Timing to Control Auto Speeds
2. Narrow Lane Widths
3. Traffic Calming Devices (e.g. speed tables)
4. Sidewalk Extensions, Bulbouts, Parklets
5. On-Street Parking
6. Bicycle Paths to Mix Traffic
7. Trees & Landscaping Treatments
8. Buildings with Activated Storefronts
9. Speed Enforcement Cameras
10. Posted Speed Limit Signs



pedestrian scaled lighting

buffered bike lane

wider medians for landscaping bioswales

plazas & parklets

bike corrals

activated storefronts



Pedestrian Taskforce Major Findings



Upgrade 44 miles of streets, 5 miles annually through 2021



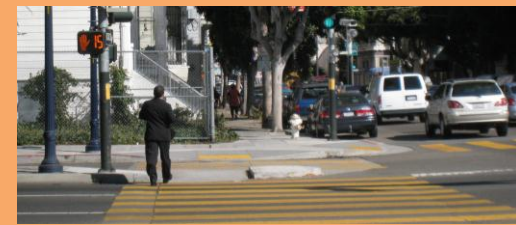
In the next 10 years: upgrade 13,000 curb ramps and re-open 2+ crosswalks per year



Targeted enforcement of high-risk corridors and intersections





Extra crossing time at 800 intersections, countdown signals at 184 intersections







Leverage Funds with Complete Streets Planning Process: Overlay of 44 miles of High Priority Streets with City Projects

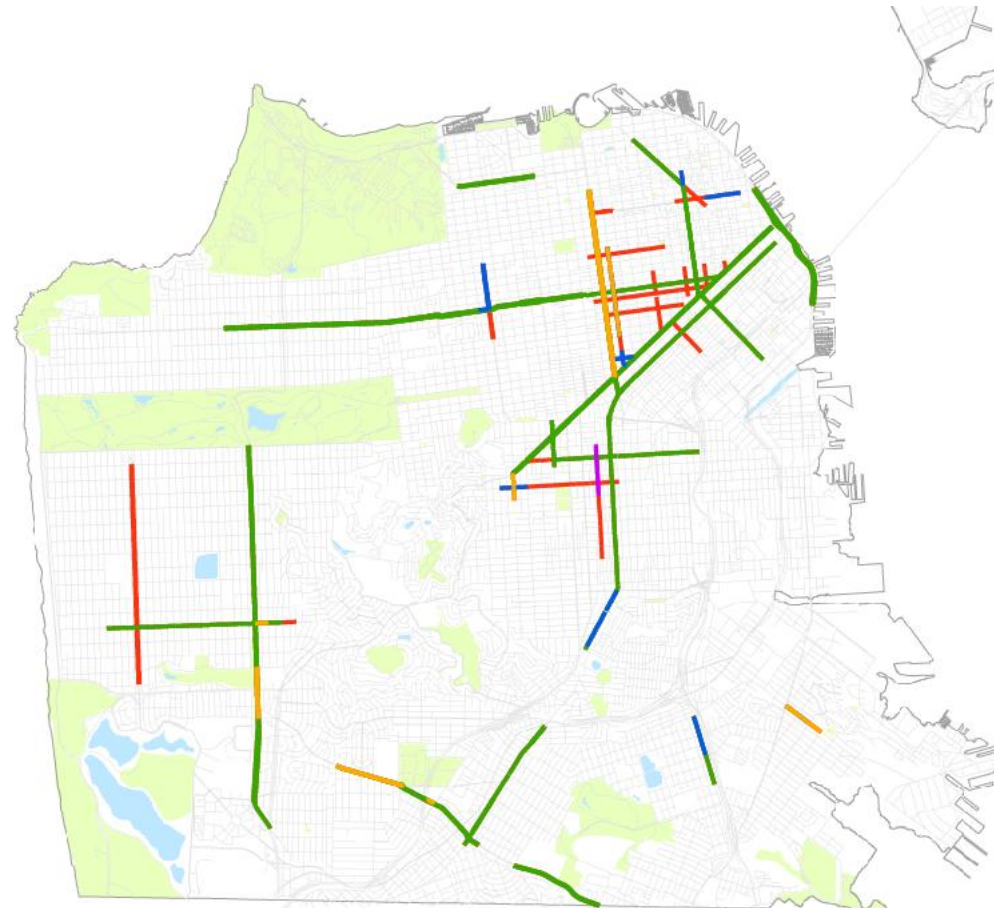
 High Priority Streets (HPS) that overlap with Streetscape Program and Transit Projects, funded, includes pedestrian treatments—5 miles

 HPS that overlap with Repaving Projects, funded but will require local/state/federal funds to include pedestrian treatments—3 miles

 HPS that overlap with Transit Projects, partial funding identified, will require local/state/federal funds to complete and include pedestrian treatments—but would require additional funding to include pedestrian treatments—27 miles

 Remaining HPS will require local/state/federal funds for design and implementation of pedestrian treatments, possibly with Traffic Calming—8.7 miles

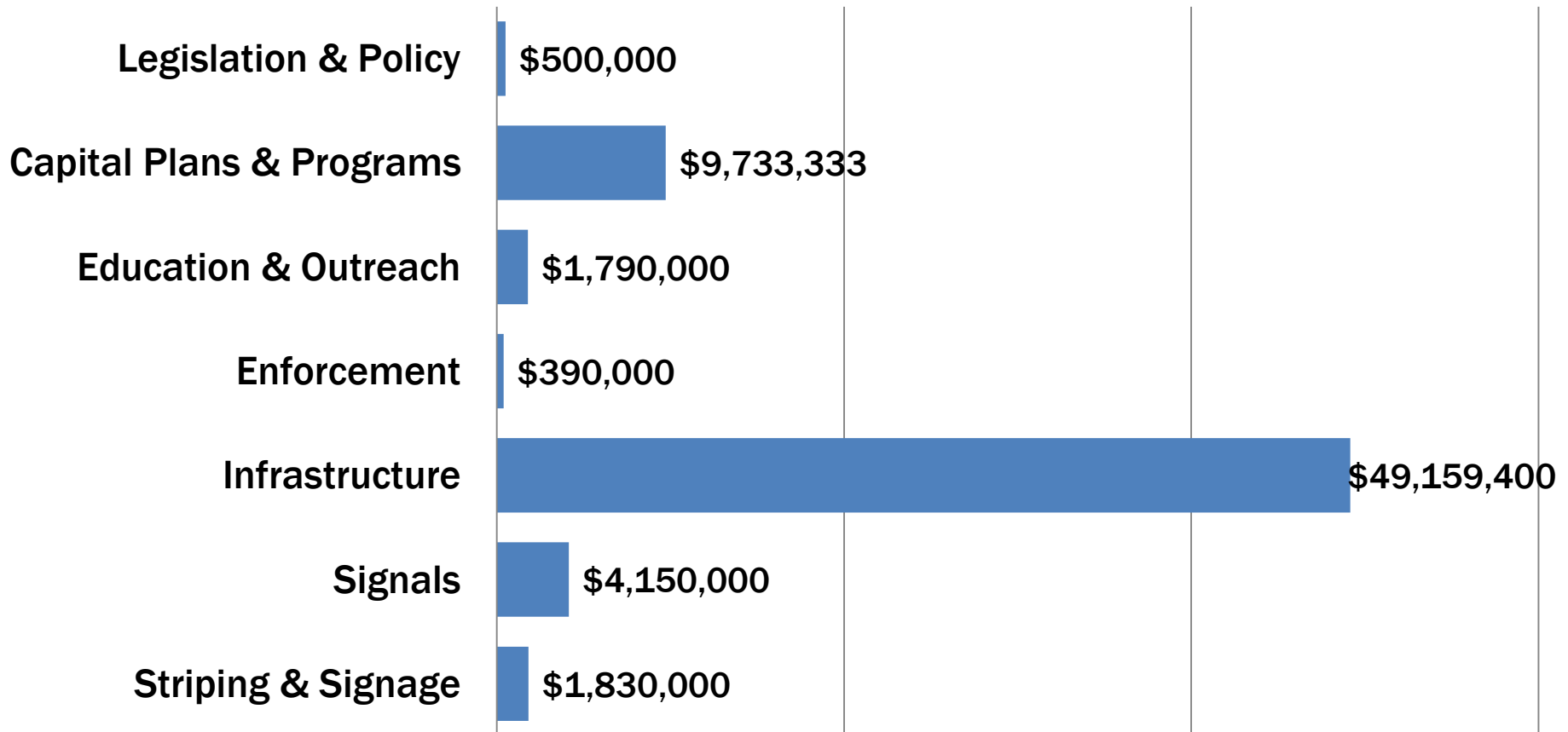
 Pedestrian Treatments Completed—0.4 miles



*0.4 miles completed, 34.9 miles have some analysis, 8.7 miles have no planned analysis*₆₁



10-year Pedestrian Safety Investment Needs by Type



Up to \$330 million shortfall to meet Pedestrian Safety Needs



VEHICLE SHARING PARTNERSHIPS

- **Muni Partners Program**
- **Bicycle Sharing**
- **Car Sharing**



Virtuous Cycle of Transportation Demand Management

Project Investment

investments in demand management and vehicle sharing programs



investments in transit reliability and frequency programs



investments in bicycling infrastructure, facilities & programs



investments in walking infrastructure, facilities & programs



Mode Shift Effect

Car/bike/scooter sharing, taxi demand grows

More comfortable bicycle facilities = more peak period transit capacity

More transit and bicycle trips = more walking = more community & economic development

Integration is key to our transportation network's success



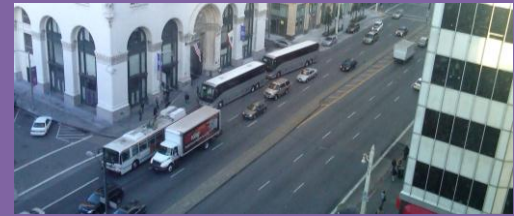
Muni Partners Program



Goal: Develop policies to integrate the private shuttles into transportation network



Pilot: Assess impacts of shuttles on Muni & safety for non-motorized street users



Findings: Decrease single occupancy vehicle trips & encourage walking & transit use



Next Steps: Partner with shuttle sponsors develop clear, operational guidelines





Bicycle Sharing Program



Bicycle Sharing is a membership-based system of short-term bicycle rental



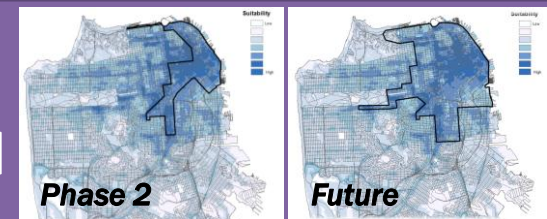
Summer 2013 launch of the pilot: 1,000 in 100 stations in the Bay Area



Benefit: Increases accessibility to transit and relieves overburdened transit



Conducting suitability analysis for program expansion next year and beyond

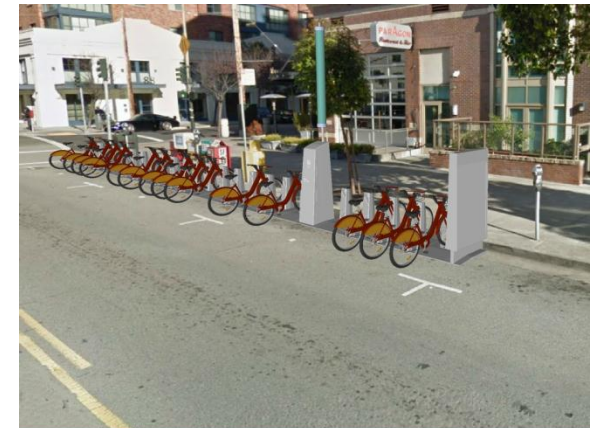
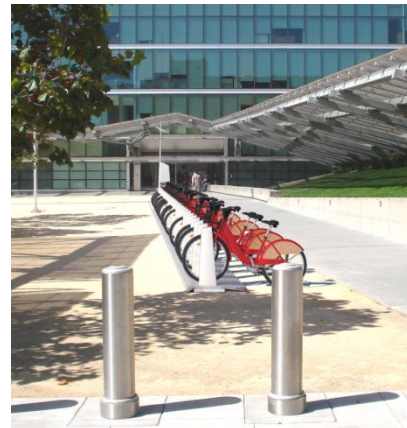




Phase 1: August 2013



- Funding for 35 stations and 350 bikes available now
- Additional \$1.3M shortfall for SF (capital & operations) to achieve 50 stations and 500 bikes
- Sponsorship and Grant Funds needed to fill funding gap





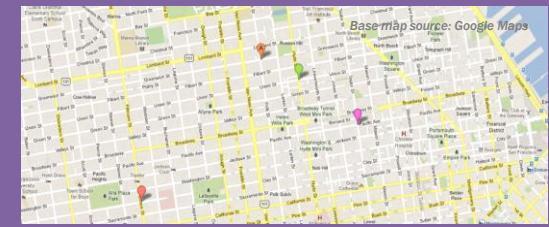
Car Sharing Program



Vehicle Sharing is a membership-based system of short-term car rental



SFMTA completed an on-street parking space pilot project



On-street spaces make car sharing highly visible and easy to use



Expanded pilot to evaluate solutions to policy and administrative issues





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IN SUMMARY



Transportation System Needs Investment...

- **A well-functioning transportation system is foundational to the City's health and economic vitality**
- **Today's system is under-resourced for current and future needs, despite ongoing efficiency improvements**
- **We need to change the infrastructure to make it possible to move faster and more reliably**
- **We need to make it safer and easier for people to use other forms of transportation**



...And Support

- **We need the support of this group, stakeholders, and the public to help us fund and achieve meaningful progress**
- **We have the vision; we need help to make it a reality**



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LOOKING AHEAD



Bus Facilities Site Visit: April 26, 2013

- **8:00 AM** - Pick up at SFMTA Headquarters, 1 South Van Ness at Market St.
- **8:15 AM** - Woods Division tour– New buses, rehab buses, and old buses
- **9:15 AM** - Transport to Potrero Division via Islais Creek
- **9:20 AM** - Brief Stop in front of Islais Creek
- **9:45 AM** - Arrive at Potrero Division – New buses, rehab buses, and old buses
- **10:45 AM** - Transport back to 1 South Van Ness
- **11:00 AM** - Tour ends at 1 South Van Ness



Rail Facilities Site Visit: May 17, 2013

- **8:00 AM**- Pick up at SFMTA Headquarters, 1 South Van Ness at Market St.
- **8:15 AM** - Green Division and Cameron Beach Yard Tour
- **9:30 AM** - Transport to Muni Metro East
- **9:45 AM** - Muni Metro East Tour,
- **10:45 AM** - Transport back to 1 South Van Ness via Overhead Lines Division
- **11:15-11:30 AM** - Tour ends at 1 South Van Ness
- **12:00 PM** - Arrive at Cable Car for a facility tour (lunch TBD)
- **1:30 PM** - transport back to 1 SVN