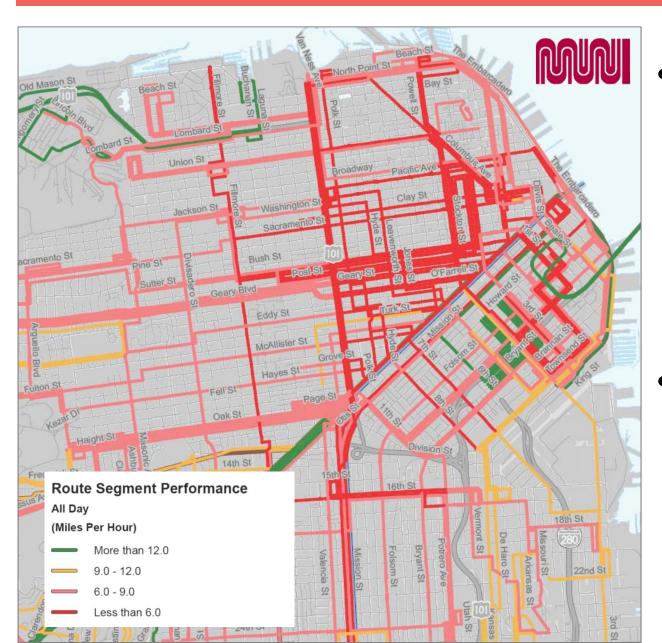




Implementing the Transit Effectiveness Project 5/5L Pilot

08 | 07 | 2013 SAN FRANCISCO, CALIFORNIA





 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



Muni's Challenges





Systemwide Improvements

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

Customer Amenities

- Clipper
- New shelters
- NextMuni
- Customer First
 grants

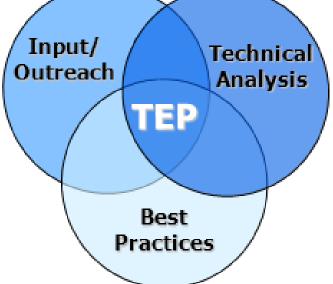
TEP Proposals

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



MNI Transit Effectiveness Project

- 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



TEP Recommendations

Improve Customer Experience and Grow Ridership

- Establish a tiered service network to guide service delivery and capital investments
- Restructure service and increase service hours up to 10 percent
- Reduce travel time on key corridors by up to 20 percent

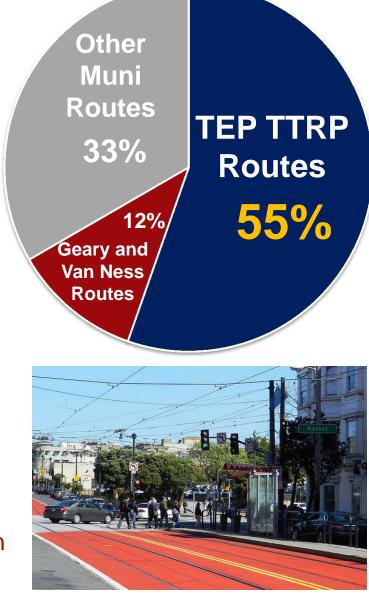


Key TEP Anticipated Outcomes

The Travel Time improvement proposals for 16 corridors (20 routes) will improve travel time by up to 20% for more than 50% of Muni Riders

Based on current pilots and analysis of existing corridor issues, reliability, safety and crowding would significantly improve along the corridors.

Church and Duboce Pilot: Transit experienced a significant improvement on reliability.





TEP Service Improvements

- Increase total transit 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
- Decrease service frequency on some routes with low passenger volumes



Rapid Network TEP Improvements

- Lane modifications
- Traffic signal and stop sign changes
- Transit stop changes
- Parking and turn restrictions
- Pedestrian improvements





TEP Pilots: Building on Small Successes





5L Fulton Limited (planned)



Church Street Red Carpet (on-going)



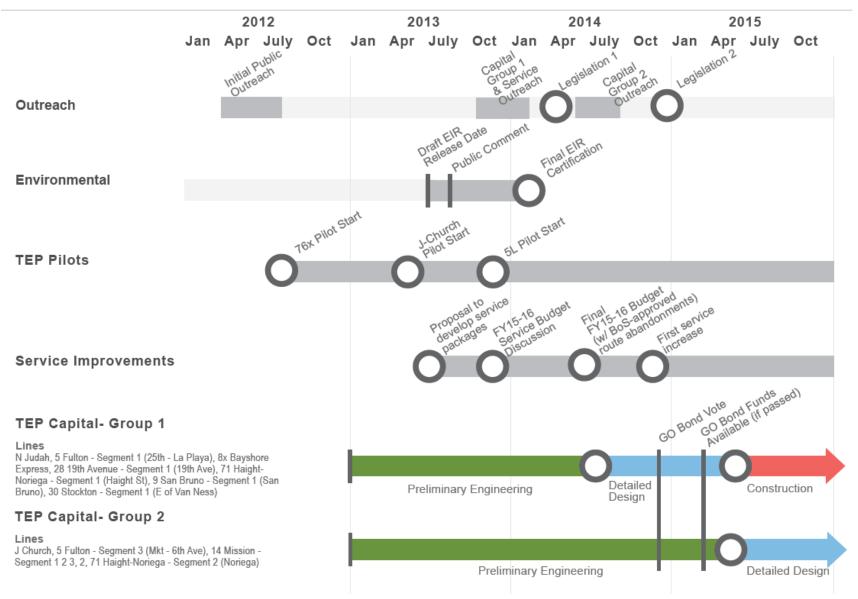


TEP CEQA Milestones

- Initial Study published Jan 23, 2013
 - Discloses potential impacts across 18 environmental review categories
- DEIR Released July 10, 2013 (http://tepeir.sfplanning.org)
 - Reports **impacts** on air quality, noise and transportation (NOT a decision document)
 - No Significant and Unavoidable Impacts were found related to Air Quality and Noise.



Planning & Implementation Timeline







5 Fulton Existing Overview

- Daily ridership ~ 19,500
- Average speed ~ 9 mph
- Average travel time ~ 50 minutes each way
- 48 stops in each direction









5 Fulton Existing Ridership









5 Fulton Existing Speed





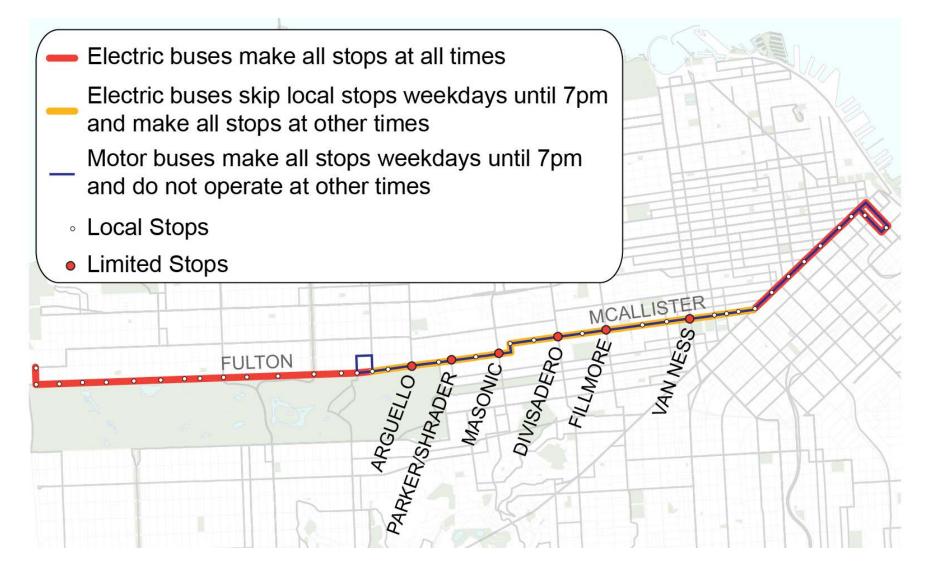


5/5L Pilot Project Overview

- New limited-stop service to reduce travel time
- Increased frequency in the inner part of the route to reduce crowding
- Low-cost capital improvements to further reduce travel time and improve safety



5/5L Pilot Service Proposal





5/5L Pilot Service Increase – Headways

Beach to 6 th Avenue		
	Existing	Proposed
AM Peak	5-8 min	6 min
Midday	8 min	10 min
PM Peak	4.5-9 min	7.5 min

6 th Avenue to Downtown			
	Existing	Proposed	
AM Peak	4-5 min	3 min	
Midday	8 min	5 min	
PM Peak	4.5 min	4 min	





5/5L Pilot Benefits

- Reduced crowding east of 6th Avenue
- 7% time savings for 5 Local
- 11% time savings for 5L Limited

– 17% savings between 6th Avenue and Market Street

- Improved transit and pedestrian safety with longer bus zones
- Improved safety for all modes with road diet





5/5L Pilot Tradeoffs

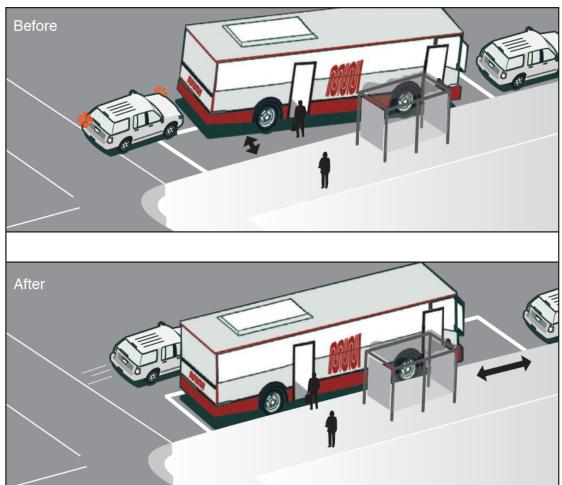
- Customers west of 6th Avenue need to transfer to access local stops east of 6th Avenue
- ~9% of customers would need to walk to a different bus stop
- Net parking removal ~30 spaces





TOOLKIT - Bus Zone Extensions

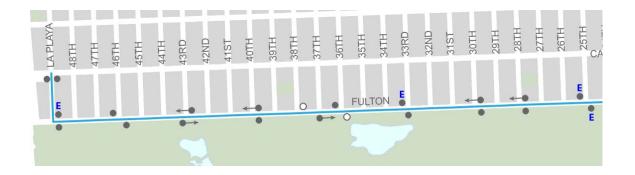
- Faster boarding when buses can pull to curb
- Allows both 5 and 5L to arrive at limited stops at same time
- Allows 5L to pass 5 at local stops

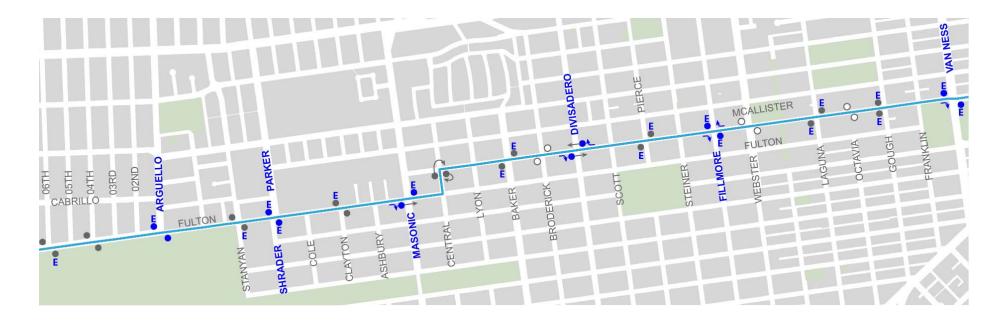






23 Proposed Bus Zone Extensions

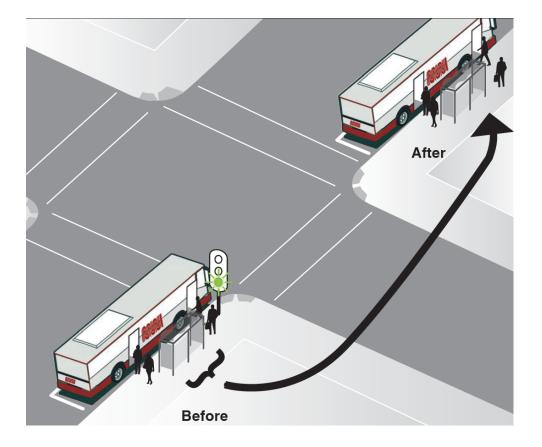






TOOLKIT - Bus Stop Optimizations

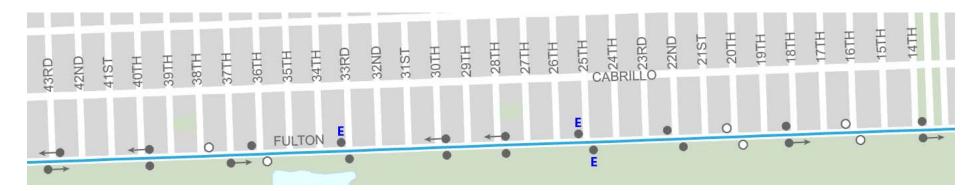
- Reduces the number of times a bus must stop
- Improves pedestrian safety at uncontrolled intersections

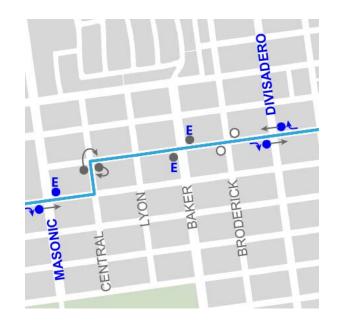






13 Proposed Bus Zone Optimizations



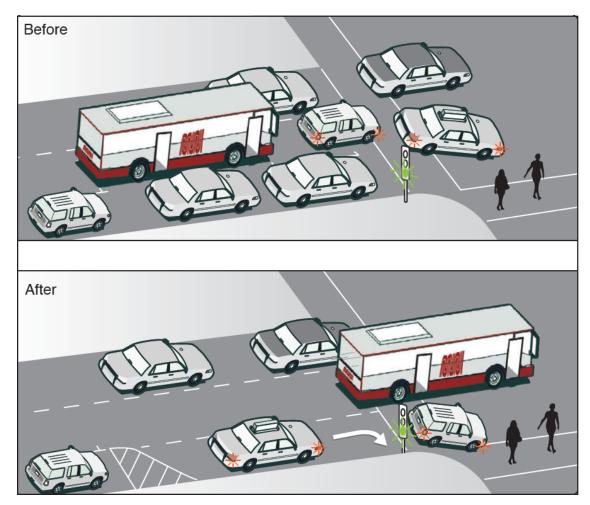






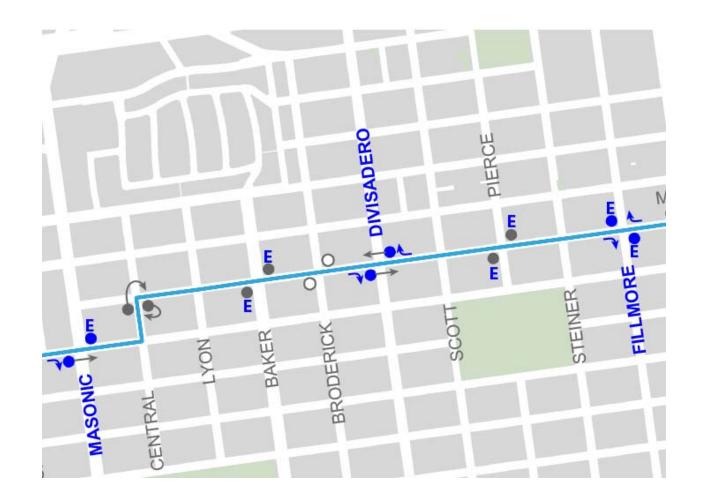
TOOLKIT - Right-Turn Pockets

• Helps buses bypass congestion





5 Proposed Right-Turn Pockets





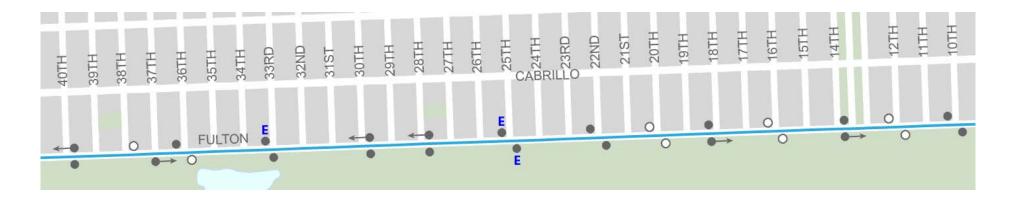
TOOLKIT - Bus Stop Removals

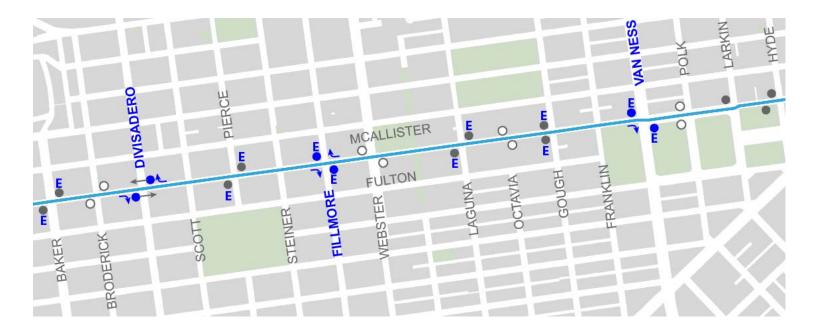
- Proposed removal of 8 stops in each direction
- Stop Spacing between La Playa and Arguello
 - Existing = 2.3 blocks (710')
 - Proposed = 3 blocks (930')
- Stop Spacing between Arguello and Market
 - Existing = 1.5 blocks (720')
 - Proposed = 2 blocks (960')
- ~9% of customers impacted by stop removals





16 Proposed Bus Stop Removals









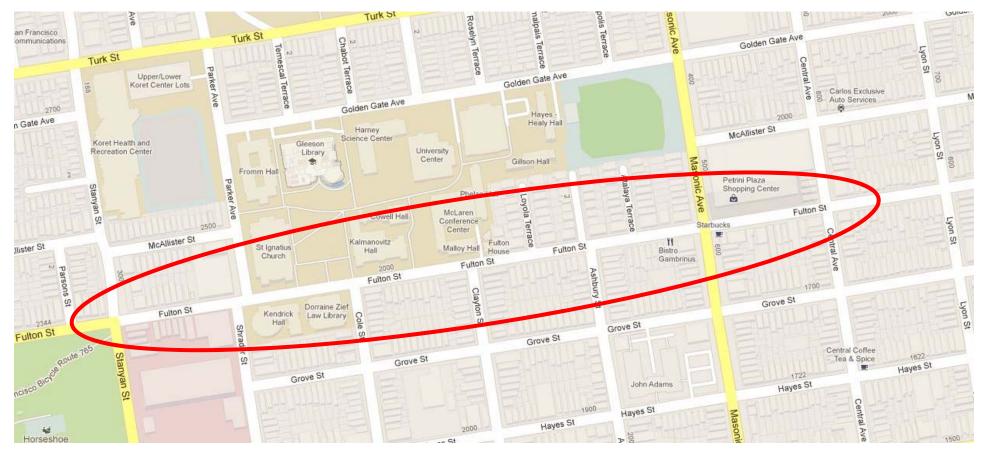
Proposed Tow-Away on Central





Proposed Fulton Road Diet

- Redesign roadway between Central and Stanyan
- Provide traffic calming adjacent to USF
- Address collision history for Muni and other modes







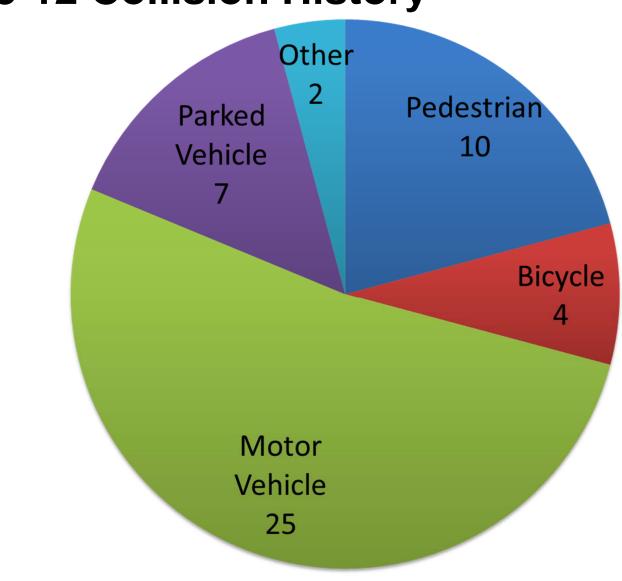
Fulton Road Diet





2008-12 Collision History

 70% of 51 Muni collisions in past 5 years were sideswipes

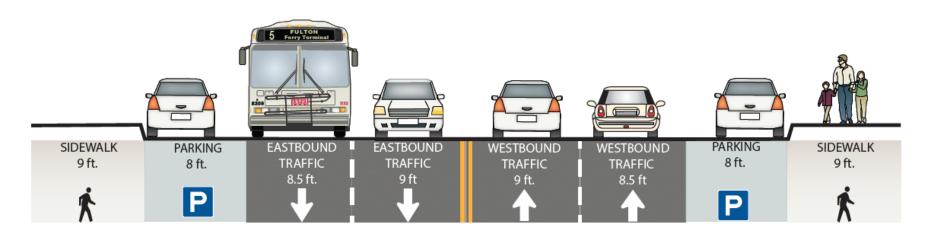




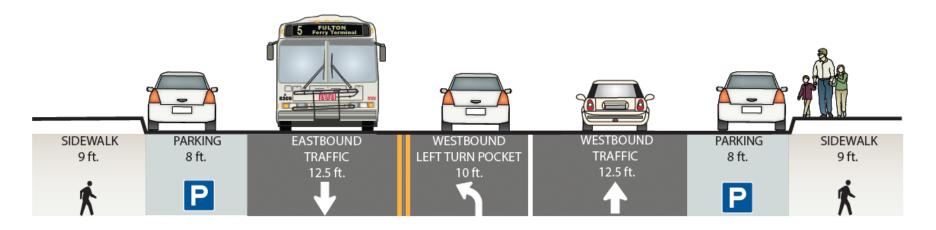


Fulton Road Diet

Existing, facing west



Proposed, facing west





Proposed Bus Bulbs and Traffic Signals

- Proposed with 2014 paving project west of 25th Avenue
- Bus bulbs proposed at 7 intersections
- Traffic signals proposed at 2 intersections with stop signs



