SFMTA Rail Capacity Strategy

July 19, 2016

SPUR Lunchtime Forum
Presentation Overview

- Rail Capacity Strategy
  - Purpose & Need
  - Scope
- Methodology
- System-wide Investments
- Near-Term Investments
- Workshops & Outreach
- Medium/Long-Term Investments
- Next Steps & Discussion
• Prioritized over next two CIP cycles (0-10 year)
  – Specific projects (scope, schedule, budget) that leverage SOGR opportunities and can be added to CIP

• Prioritized Mid & Long Term (10-20+ year)
  Capacity Improvement and Expansion Corridor Concepts
  – Order of Magnitude/Unit Cost Based Cost Estimates
Methodology

Assess
- Identify capacity constraints of existing system
- Quantify capacity shortfall at most crowded points

Develop
- Brainstorm potential capacity enhancing solutions
- Develop concept descriptions

Screen
- Screen concepts for high level feasibility
- Group concepts into tiers for further analysis
System-wide Investments

- Vetag switches/crossovers
- Terminal/Tail track
- Station/Platform Enhancement
- Switches/crossovers
- Transit “Red Carpet”/Raised Trackway
- Transit Signal Priority
## Near-term Investments

<table>
<thead>
<tr>
<th>NAME / PROJECT DESCRIPTION</th>
<th>BENEFITS</th>
<th>TIMELINE</th>
<th>COST</th>
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</table>
| West Portal Conflict Reduction:  
  - Restrict conflicting turn movements  
  - Replace magnetized rail segments |  
  - Improved Reliability  
  - Improved Travel Time | <3 Years | $1.5m |
| Muni Metro Extension Turnback Track:  
  - Construct pocket track east of Harrison Street |  
  - Improve Passenger Comfort  
  - Improve Reliability  
  - Improve Travel Time | 4–5 Years | $10.1m |
| Muni Metro Extension Surface Train Control System:  
  - Upgrade existing Transit Signal Priority along Embarcadero from Ferry Portal to 4th and King and south along 3rd Street to 16th Street |  
  - Improved Passenger Comfort  
  - Improved Reliability  
  - Improved Travel Time | 3–5 Years | $11.3m |
| Church & Duboce Portal Conflict Reduction:  
  - Analyze vehicle or turn prohibition and improved pedestrian and bicycle circulation |  
  - Improved Reliability  
  - Improved Travel Time | 2–5 Years | $0.5m (Planning only) |
Systemwide & Near-term Investments

RAIL CAPACITY STRATEGY
- West Portal Conflict Reduction
- Muni Metro Extension Turnback Track
- Muni Metro Extension Transit Signal Enhancements/Embarcadero Tramways
- Church and Duboce Portal Conflict Reduction

$20M

MUNI FORWARD
- 22 Filmore: 16th St Transit Priority Project
- 14 Mission: Downtown Mission Transit Priority Project
- L Taraval: Transit and Streetscape Enhancements
- See Muni Forward Implementation Plan for additional projects

$225M

MAJOR CORRIDORS
- Van Ness Bus Rapid Transit
- Geary Bus Rapid Transit
- Better Market Street
- M-Line/19th Avenue Core Capacity Project

$475M

SPOT IMPROVEMENTS
- Transit Spot Improvements & Red Lanes
- Overhead Catenary System

$115M

Total Need: $835M
Funding Gap: $144M
Estimated Revenue: $691M

FY 2017-2021

FY 2022-2026
Workshops & Online Feedback
Long-Term Investments

Current and Planned Transit System

- Muni Rapid Bus Network
- Historic Streetcar
- Muni Metro Network
- Planned High Speed Rail
- Treasure Island Ferry
- Regional Rail (BART/Caltrain)
- Planned Regional Rail

1/2 Mile Buffer
Long-Term Implementation Roadmap

**Rail Capacity Strategy**
- Tier 1: M-Line Muni Subway Expansion, Geneva LRT, Geary LRT, Central Subway Extension to Fisherman's Wharf
- Tier 2: See Section 3.3 for Full List of Projects
- Tier 3: See Section 3.3 for Full List of Projects

**SF Transportation Plan**
- Multi-modal long range investment plan for San Francisco

**Core Capacity**
- Infrastructure and policy recommendations to meet Transbay and downtown San Francisco transit demand

**San Francisco Long Range Transportation Planning Program**
- Multi-agency effort to establish a transportation vision for City

**SFMTA 20-Year Capital Plan**
- Identifies Unconstrained Needs for Capital Projects & Programs

**SFMTA 5-Year Capital Improvement Program**
- Identifies A Fiscally Constrained Five-Year Program of Projects

**City and County of San Francisco**
- General Fund, Developer Fees and Bonds

**US Dept of Transportation**
- Moving Ahead for Progress in the 21st Century (MAP-21)

**State of California**
- Proposition 1B and State Transportation Improvement Program

**Plan Bay Area**
- Integrated Land Use, Housing, and Transportation Strategy for the Bay Area through 2040

**Implementation**
- Planning, Design, & Construction
Our Customers

- Half of Muni customers (51%) live in low income households, a much higher proportion than the City average (31%)
- 58% of our customers self-identify as a minority
- 53% of our customers do not own or have access to a vehicle
Building on Affordability and Access

- All San Francisco residents within ¼ mile of a transit stop

- Systemwide Improvements
  - 10% service increase
  - New buses and trains
  - New service management tools

- Affordable Service
  - 80,000 people signed up for Free Muni for Low/Moderate Income Youth, Seniors and People with Disabilities
  - 20,000 people signed up for Lifeline Pass

- Muni Equity Strategy
Systemwide Investments Underway

- Replacing fleet – all new buses, expansion trains
- Implemented 10% service increase
- Launched Transportation Management Center and installing new radio system
- Implemented Transit signal priority at 350 intersections, more rolling out each month
- Building 40 miles of transit priority streets
- Investing in mid- to long-range land use/planning initiatives
Background

- SFMTA Board adopted the Muni Equity Policy in May 2014
- Builds on (but does not replace) existing Title VI annual monitoring
- Uses a neighborhood based approach to improving routes most critical to low-income/minority communities
- Was developed jointly with transportation equity and affordable housing advocates
Equity Strategy Principles

- Create transparency about service conditions by establishing a 2014 baseline and then reporting annually.
- Evaluate service at all times of day, to accommodate a range of jobs and other trip patterns.
- Distill large datasets down to 2-3 Key Needs; ground-truth key needs through collaborative outreach.
- Pursue recommendations that are deliverable in a 1-2 year timeline on routes in focus neighborhoods, as well as routes heavily used by seniors and people with disabilities.
<table>
<thead>
<tr>
<th>Accessibility</th>
<th>Bayview</th>
<th>Chinatown</th>
<th>Excelsior/Outer Mission</th>
<th>Inner Mission</th>
<th>Tenderloin/SOMA</th>
<th>Visitacion Valley</th>
<th>Western Addition</th>
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<tbody>
<tr>
<td>8 Bayshore</td>
<td>19 Polk</td>
<td>1 California</td>
<td>8/8AX/8BX Bayshore Express</td>
<td>9 San Bruno</td>
<td>12 Folsom</td>
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<td>5 Fulton</td>
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<td>9 San Bruno</td>
<td>23 Monterrey</td>
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<td>12 Folsom</td>
<td>14 Mission</td>
<td>9 San Bruno</td>
<td>5R Fulton Rapid</td>
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<tr>
<td>9R San Bruno</td>
<td>29 Sunset</td>
<td>10 Townsend</td>
<td>14R Mission Rapid</td>
<td>14 Mission</td>
<td>19 Polk</td>
<td>9R San Bruno</td>
<td>6 Parnassus</td>
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<td>14 Mission</td>
<td>24 Divisadero</td>
<td>12 Folsom</td>
<td>14X Mission Express</td>
<td>14R Mission Rapid</td>
<td>27 Bryant</td>
<td>56 Rutland</td>
<td>7 Haight/Noriega</td>
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<td>14R Mission Rapid</td>
<td>44 O’Shaughnessy</td>
<td>30 Stockton</td>
<td>29 Sunset</td>
<td>22 Fillmore</td>
<td>31 Balboa</td>
<td>T-Third</td>
<td>21 Hayes</td>
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<td>30 Stockton</td>
<td>54 Felton</td>
<td>43 Masonic</td>
<td>45 Union/Stockton</td>
<td>27 Bryant</td>
<td>38 Geary</td>
<td>90 Owl</td>
<td>22 Fillmore</td>
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<td>31 Balboa</td>
<td>T-Third</td>
<td>91 Owl</td>
<td>49 Mission/Van Ness</td>
<td>33 Stanyan</td>
<td>38R Geary</td>
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<td>55 Mission Bay</td>
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Transit Patterns by Seniors & People with Disabilities

Senior Clipper Card Tags

RTC Clipper Card Tags by People with Disabilities
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<th>Improvements Underway or Completed</th>
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| Improve service reliability on the 19 Polk, 27 Bryant, 31 Balboa, and 47 Van Ness | - Permanent reroute for 27 to avoid SoMa freeway, Apr 2015  
- Schedule adjustment for 27 implemented, Apr 2015  
- Bus bulbs and signal priority added to Polk Street complete streets project | - Adjust schedule for the 19 Polk (to address congestion variability through Tenderloin)  
- Shorten 19 Polk at SFGH proposed to reduce crowding and improve OTP, part of proposed 19/48 reroute (outreach planned Winter 2016)  
- Add bus bulbs on 31 Balboa in Tenderloin as part of DPW curb ramp project  
- Rebuild 47 schedule and run on Townsend instead of Harrison and Bryant  
- Implement travel time and reliability toolkit north of Market Street where 27 Bryant travel time is slowest |
| Reduce crowding on 38R Geary Rapid in the PM peak                       | - Service increase for 38R, Apr 2015  
- Transit signal priority added to the 38 Geary                                                                 | - Reinvest travel time savings from Phase 1 of Geary BRT into increased peak period service |
## VISITACION VALLEY

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| Improve reliability on the 8 Bayshore routes, and reduce crowding on 8AX inbound | - *Increased service and adjusted schedule on 8/8AX/8BX, Apr 2015*  
- *Signal priority along 8 Bayshore corridor, Fall 2013*                   | - Begin increased use of non-freeway route in AM Peak after Potrero construction is completed  
- Develop capital project to improve transit and walking conditions on Kearny  
- Increase service again on the 8AX Bayshore Express                      |
| Improve service reliability on 9/9R San Bruno Rapid                     | - *9/9R San Bruno restructuring and service increase, Fall 2015*  
- Construct Muni Forward project on Potrero (underway), 11th St, Bayshore  
- Construct Muni Forward transit and pedestrian project on San Bruno (outreach underway) | - Pending the effectiveness of improvements underway and completed, no additional recommendations |
SFMTA Board Approved Recommendations

• Almost $3 billion in capital investments underway that will benefit Equity Strategy focus populations

• An additional $21M in investments incorporated into two-year capital budget

  • Service increases and route extensions to be implemented through reinvesting travel time savings and through other service efficiencies
Add photos of innovative outreach.
Partnering With Community Leaders to Ensure Continued Success!

- Partner with community-based organizations to conduct future outreach
- Engage Operators who live/grew up in Equity neighborhoods to solicit feedback
- Evaluate service improvements annually
- Update Strategy every two years as part of the SFMTA budget process
Questions/Discussion?

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