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SFMTA Rail Capacity Strategy

April 21, 2015

SFCTA Plans & Programs Committee

Presentation Overview

- Rail Capacity Strategy
  - Purpose & Need
  - Scope
- Rail Capacity Technical Panel
- Near-Term Investments
- Workshops & Outreach
- Medium/Long-Term Investments
- Next Steps & Discussion

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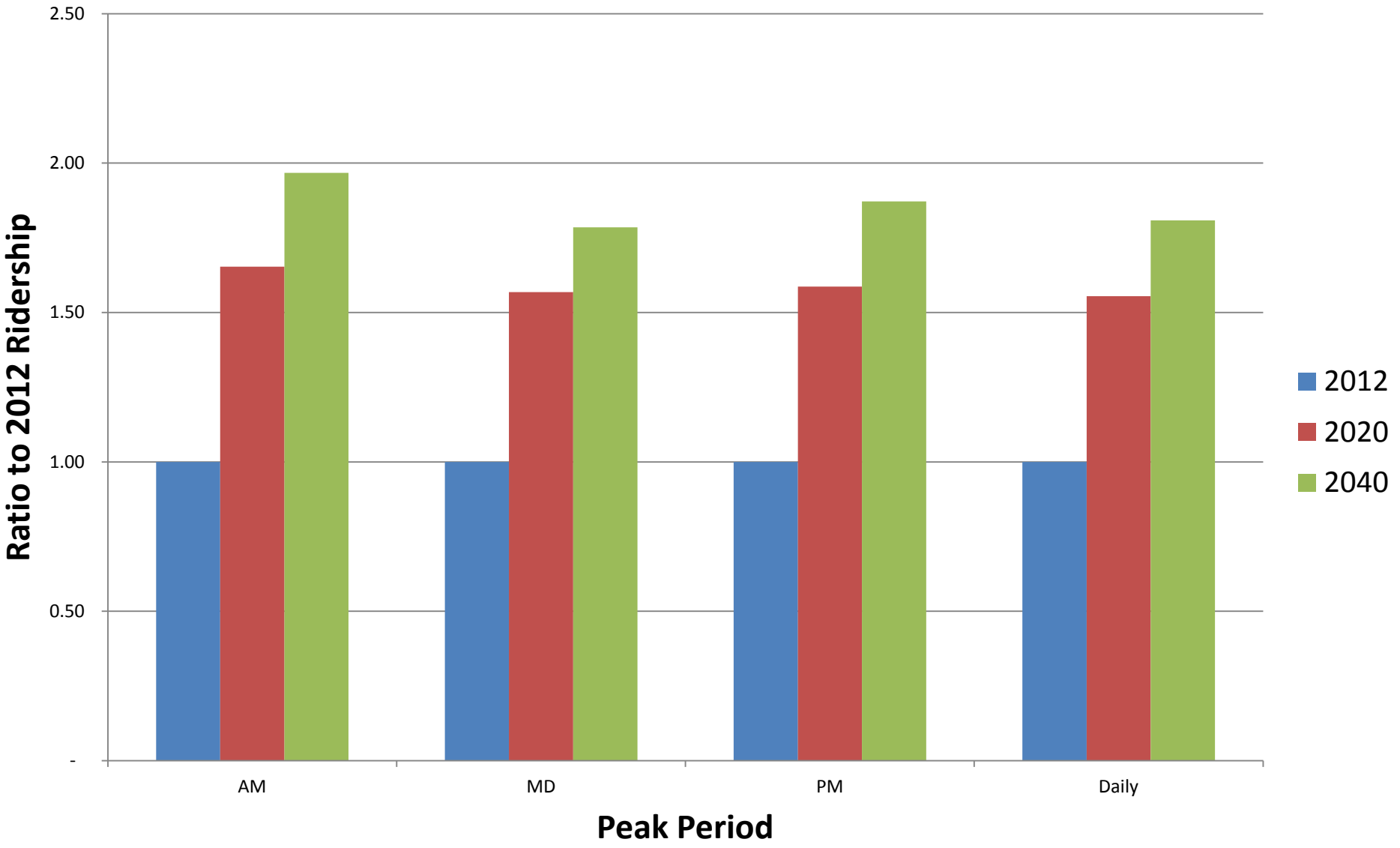
Forecasted Light Rail Boardings



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Adopted on May 20, 2014

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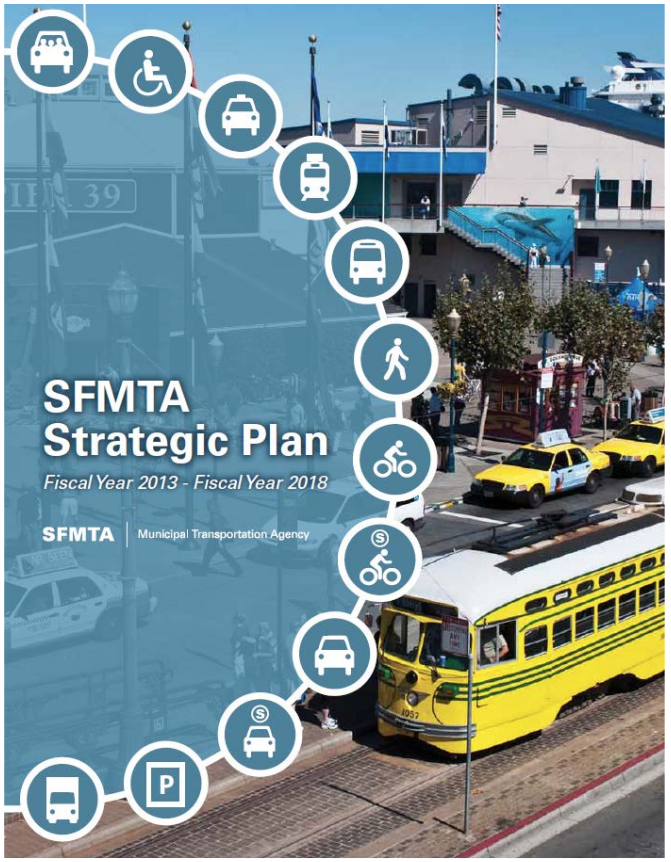

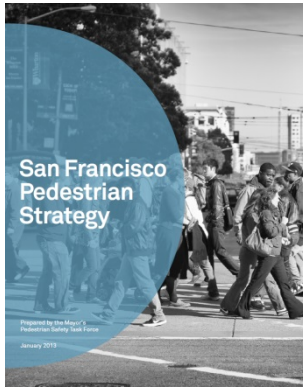

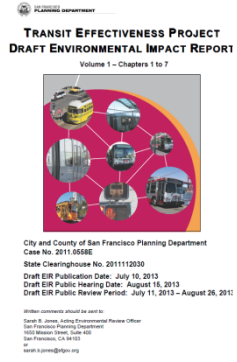

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Figure ES-8. Key Features of the Highest-Performing Alternative (Longer Subway and Bridge)

19TH AVENUE TRANSIT STUDY

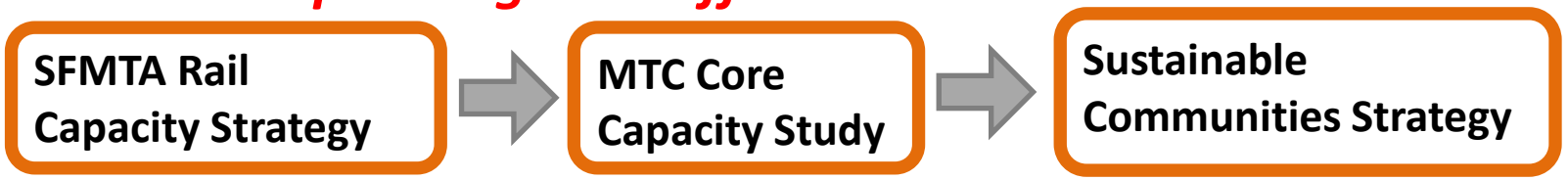
Waterfront Transportation Assessment

T-Third Phase 3

Rail Capacity Strategy Deliverables

- Prioritized over next two CIP cycles (0-10 year)
  - Conceptual Engineering (5%) for Highest Priority Near Term Projects
  - 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

Relationship to Regional efforts



Existing Constraints Major Themes

Infrastructure	Vehicles (fleet size, reliability) ATCS Equipment (counters, blocks, sensors, signals, etc.) Station/Stop Spacing System Flexibility (crossovers, loops, wyes, switches) Facilities (vehicle storage & Maintenance) Station/Terminal/Turnaround Car Capacity Overhead (capacity and resiliency)
Operations	Dwell Times Subway Intrusion ATCS at Portals and Non-Communicating Trains Modal Conflicts Transit Signal Priority/Traffic Control/At-Grade Crossings
Human Resources	Senior Staff Attrition/Institutional Knowledge Operator Availability

Top Priority 1-5 year Investments

Capacity Enhancement	Project Benefit
West Portal Conflict Reduction	Reduce conflicts and associated delay at one of the busiest LRV intersections in the Muni system
Muni Metro Extension (MMX) Pocket	Reduces Embarcadero turn-back bottleneck following opening of Central Subway.
MMX Transit Signal and Train Control/Tramway Enhancement	Reduce travel time between Folsom & 4th & King stations. Investigate Train Control System to allow for reverse running.
Church & Duboce Portal Conflict Reduction	Reduce conflicts and associated delay at Church & Duboce intersection

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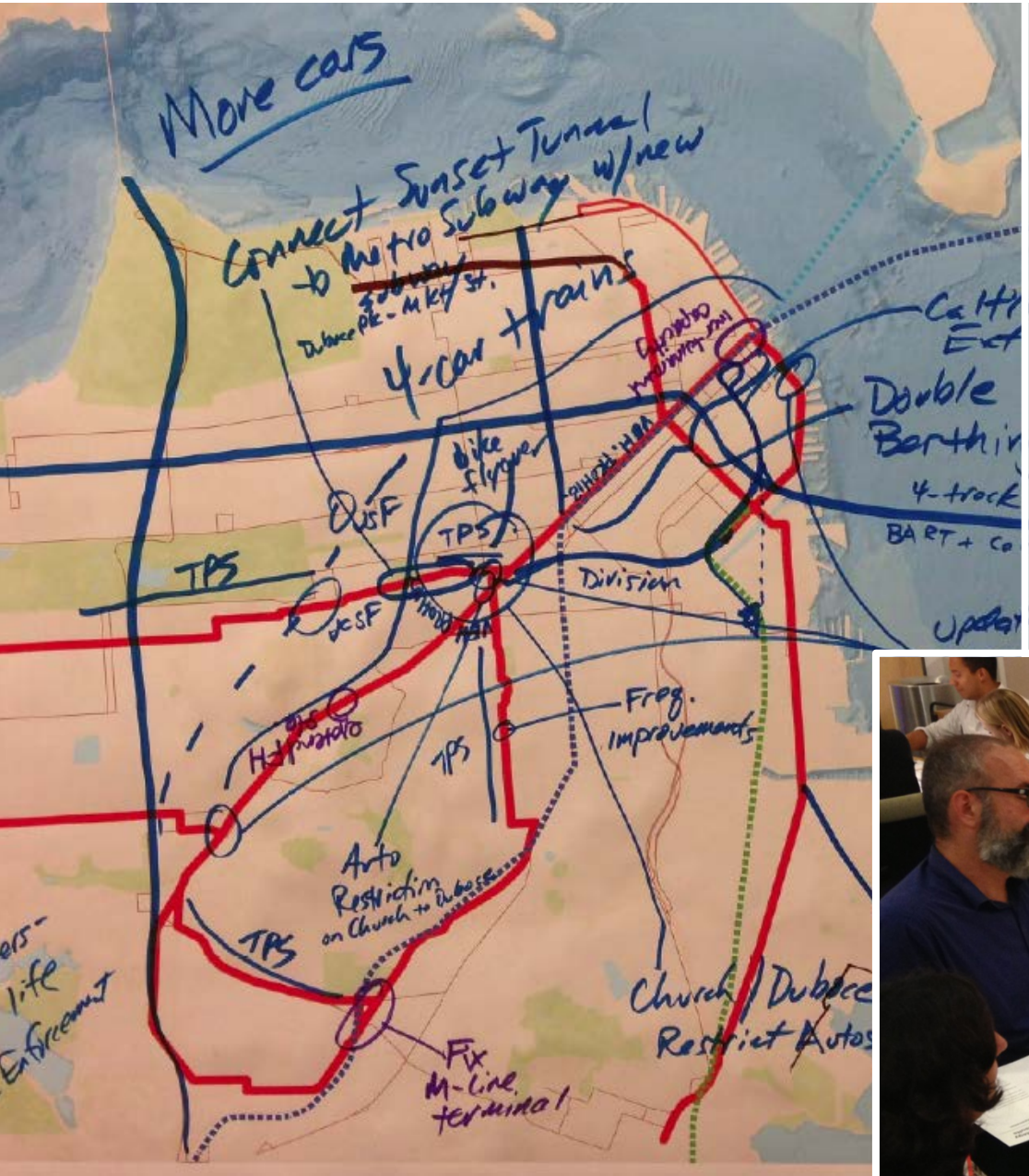
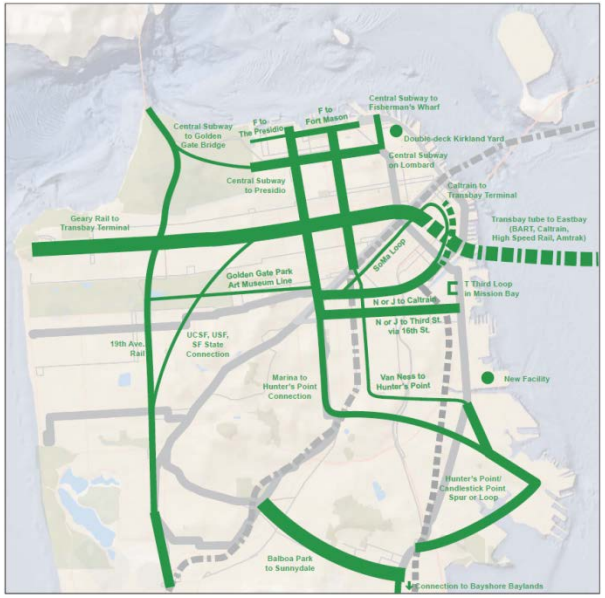
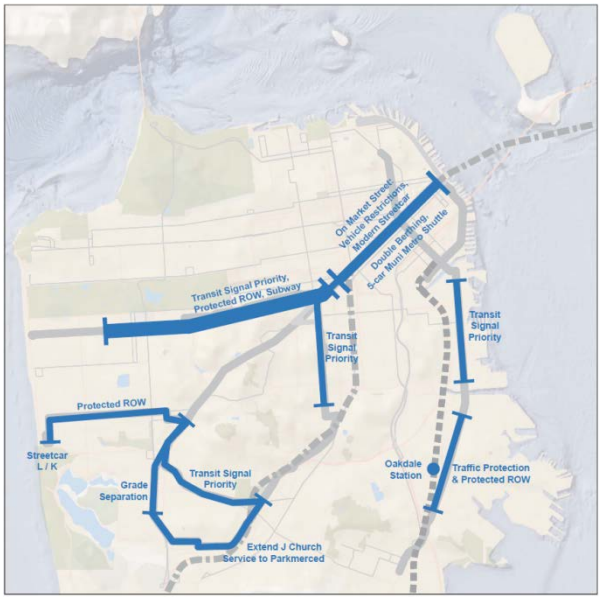


Bottlenecks

System Resiliency



System Expansion



System Enhancement

Next Steps

Deliverable	Date
Identify Mid-Term Prioritized Investments	March 2015
Scope and Order of Magnitude Cost Estimates	April 2015
Public Draft Rail Capacity Strategy	June 2015

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