SFMTA Operational Efficiency & Project Delivery

07 | 23 | 2013
SAN FRANCISCO, CALIFORNIA
Muni Today

• Missing 3-5% of scheduled service daily or 250-500 daily trips
• Systemwide on-time performance is 60%
• Aging fleet and infrastructure
• Aging workforce, limited hiring and work rule flexibility
• Increasing demand and development but limited funding

⇒ *Increasing operational efficiency will provide more reliable service and better communications with customers*
Bus Performance

- Rehabilitation underway on 80 buses
- Over 100 buses replaced over the next 1-2 years (20% of fleet)
- Entire bus fleet replaced within 5 years
Rail Performance

• Partial rehabilitation program completed on over 40% of light rail fleet
• Rehabilitation completed on half of the historic streetcars; remaining fleet rehabilitation expected to start by end of 2013
• Light rail fleet replacement and expansion vehicles expected to be in service starting in 2016
• Testing double berthing in late July
• Testing use of three car trains in subway to improve capacity; subject to vehicle availability
Service Management

• Standby trains added to fill in service gaps as needed (availability permitting)
• Troubleshooting program being rolled out to supervisors and operators to reduce delays
• Implementing service recovery and management techniques to improve service
Infrastructure Performance

- Upgrading automatic train control subway system
- Improving signal priority and timing along Third Street and King Street
- Track replacement projects underway which improve travel speeds and safety
Maintenance Support

• Filled over 100 maintenance positions in the last year
• Focusing on preventative maintenance
• Consolidating and realigning support shops to provide better service to fleet and infrastructure needs
Schedules

• Regular schedule adjustments to match current operating conditions to improve service reliability

• Use of new turnaround procedures at Embarcadero expected to improve subway turnaround capacity from 21 to 26 trains per hour
Customer Communications

• Real-time customer information provided on Twitter and NextBus signs on weekdays from 5am-9pm

• Subway audio and sign upgrades within the next 12 months

• Launch of new SFMTA website in May 2013
OPTIMIZING PROJECT DELIVERY
Managing Scope, Schedule and Budget
## Project Delivery Best Practices

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<th>Project Planning</th>
<th>Project Implementation</th>
<th>Ongoing Efforts</th>
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<td>Aligned priorities and resources</td>
<td>Cost/schedule integration</td>
<td>Transparency</td>
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<td>Defined project scopes</td>
<td>Timely access to data</td>
<td>Accountability</td>
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<td>Detailed and accurate estimates</td>
<td>Risk management</td>
<td>Quality assurance</td>
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<tr>
<td>Resource-loaded schedules</td>
<td>Change management</td>
<td>Standardized processes</td>
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<td>Progress reporting</td>
<td>Aligned goals &amp; objectives</td>
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<td>Trend analysis</td>
<td>Performance management</td>
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5-Year Capital Improvement Program

- **5-Year Capital Improvement Program**
  - Adopted by SFMTA Board in April 2012 for FY 2013 - 2017
  - Totals $3.16 billion
  - Funding from more than 30 different federal, state and local sources
  - Contains 350 projects in 16 Capital Programs

- **Major Capital Improvements and Programs**
  - **Communications/IT Projects**: Radio Replacement, Train Control & Communications, asset management system, CPCS
  - **Street Projects**: bike/pedestrian/signal and traffic calming
  - **Transit Infrastructure**: overhead systems and track
  - **Vehicles**: procurement and rehabilitation of busses and LRV
  - **Major Expansion**: Central Subway, Van Ness BRT
Working Environment

+ Positive
  • Multi-Modal Agency – combination of Streets and Transit
  • Very involved and interested public and community
  • Access to talented professionals in their specialties

- Negative
  • High levels of internal and external project review
  • High level of departmental coordination required
  • Processes and expectations can be unclear
  • Limited financial resources in comparison to expectations
  • Limited rights-of-way, constant re-prioritization
Assessment of Current Practices

*Spring 2010 began internal assessments of project delivery business process and identified the following:*

- Capital program policies and priorities not clearly specified or enforced.
- Project scope defined too late in the process; poor initial cost estimates.
- Project delivery goals and expectations not aligned amongst all divisions and sections.
- Personnel not provided with appropriate tools and data to properly manage project portfolios.
- Performance measures not completely formulated, impacting risk management.
## Business Process Re-Engineering

<table>
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<th>Issue</th>
<th>Improvement</th>
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<td>Capital program policies and priorities not clearly specified or enforced.</td>
<td>Developed new Capital Plan &amp; Program Policies and formed the Transportation Capital Committee (TCC).</td>
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<td>Project scope defined too late in the process; poor initial cost estimates.</td>
<td>Established Pre-Development phase to better define scope and prepare accurate cost estimates.</td>
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<td>Project delivery goals and expectations not aligned amongst all divisions and sections.</td>
<td>Introduced ‘complete-streets’ concept to align delivery objectives and utilize funds effectively.</td>
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<td>Personnel not provided with appropriate tools and data to properly manage project portfolios.</td>
<td>CRIS, CPCS, electronic funding request system and scope/schedule/budget template</td>
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Project Management System - CPCS

Primavera P6
SCHEDULE & RESOURCE CONTROL

EcoSys EPC
COST CONTROL

Oracle CM13
SCOPE CONTROL

SharePoint
ELECTRONIC DOCUMENT MANAGEMENT SYSTEM
Results

- Scope, schedule and budget controls in place
- Transparency and accountability in project delivery through CIP
- System development (CRIS, CPCS, etc.) establishes the foundation for monitoring performance
- Better intra-agency coordination (predevelopment planning and project integration policies)
- Better coordination with other departments and agencies (Streets Capital Group - DPW, Planning, PUC, SFCTA)