



SFMTA
Municipal Transportation Agency

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

Project Planning	Project Implementation	Ongoing Efforts
Aligned priorities and resources	Cost/schedule integration	Transparency
Defined project scopes	Timely access to data	Accountability
Detailed and accurate estimates	Risk management	Quality assurance
Resource-loaded schedules	Change management	Standardized processes
	Progress reporting	Aligned goals & objectives
	Trend analysis	Performance management



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

Capital program policies and priorities not clearly specified or enforced.

Developed new Capital Plan & Program Policies and formed the Transportation Capital Committee (TCC).

Project scope defined too late in the process; poor initial cost estimates.

Established Pre-Development phase to better define scope and prepare accurate cost estimates.

Project delivery goals and expectations not aligned amongst all divisions and sections.

Introduced 'complete-streets' concept to align delivery objectives and utilize funds effectively.

Personnel not provided with appropriate tools and data to properly manage project portfolios.

CRIS, CPCS, electronic funding request system and scope/schedule/budget template

Performance measures not completely formulated, impacting risk management.

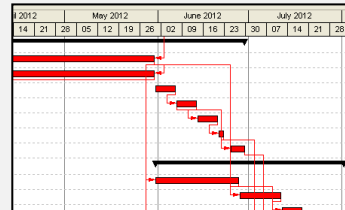
Performance measures of project delivery in the FY2013 –FY 2018 Strategic Plan



Project Management System - CPCS

Primavera P6

**SCHEDULE &
RESOURCE
CONTROL**



EcoSys EPC

**COST
CONTROL**

Project ID	Project	Cost Code	Original Price	Current Cost	Price Difference
41384	Golden Pass 12	01	0	0	0
41384	Golden Pass 13	01	0	0	0
41384	Golden Pass 14	01	0	0	0
41384	Golden Pass 15	01	0	0	0
41384	Golden Pass 16	01	0	0	0
41384	Golden Pass 17	01	0	0	0
41384	Golden Pass 18	01	0	0	0
41384	Golden Pass 19	01	0	0	0
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41384	Golden Pass 22	01	0	0	0
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41384	Golden Pass 100	01	0	0	0

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)