

BUILDING AN ORGANIZATIONAL CULTURE FOR STATE OF GOOD REPAIR

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**U.S. Department of Transportation
Federal Transit Administration**

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

Unified Infrastructure Division Created in May 2006 to:

- Create one team that is pulling in the same direction to improve SEPTA's infrastructure.
- Make better utilization of internal resources.
- Improve quality and coordination of third party design and construction efforts.
- Improve speed of third party design and construction efforts.



ENGINEERING, MAINTENANCE AND CONSTRUCTION DIVISION

**Assistant General Manager/Chief Engineer
Engineering, Maintenance & Construction**
J. Knueppel, PE

Administrative Assistant II
N. LaPorta

Director Administration & Finance
M. Honebrink

Project Manager
Planning, Project Coordination & Project Safety
K. Jurgelewicz

**Deputy Director Stations
Customer Service**
E. Wallace

**Chief Engineering Officer
Track**
A. Bohara, PE
(Acting)

**Chief Engineering Officer
B&B**
E. LaGuardia, PE

**Chief Engineering Officer
C&S**
M. Monastero

**Chief Engineering Officer
Power**
A. Gillespie, PE

**Sr. Director
Capital Construction**
R. Lund, PE

**Chief Officer
New Payment Technologies**
J. McGee

SEPTA's STRATEGIC BUSINESS PLAN

SEPTA, as an organization, has committed to focusing on seven key strategic objectives for the next five years:

- Customer Service
- Sustainability
- Ridership Growth for Transit
- Safety and Security
- New Technologies
- Rebuilding the System
- Human Capital Development.

The plan enables the organization to measure its progress toward the strategic objectives and serves as a management tool in directing the activities of the organization and producing an effective utilization of resources.



SEPTA's STRATEGIC BUSINESS PLAN

Capital Investment Strategy:

- **Safety First**
 - **Rapid Modernization of Signal Systems Ongoing**
 - **No Long Term Speed Restrictions Due to Track Conditions**
 - **Market-Frankford Line Rebuilt End-to-End.**
- **Limited Debt**
- **"Fix-It-First" Before Expansion**
- **Careful Selection of Projects**
- **No "All or Nothing" Mentality**
- **Maintain Strong In-House and Third Party Construction Programs including a Hybrid Approach that Utilizes Both.**



DELIVERING RESULTS

- **Maintenance Programs that Prolong Useful Line**
 - **Fleet Management/Vehicle Overhaul Program**
 - **Escalator/Elevator Preventive Maintenance Routines**
- **Innovation**
 - **Reverse Engineering of Vehicle Components**
 - **Norristown Substation Overhaul Approach**
- **Improved Speed of Delivery of Capital Projects**
 - **Time is Money!**
 - **American Recovery and Reinvestment Act Projects**
 - **Private Sector results on Public Agency Projects**



BUILD UPON SUCCESSES

Vehicle Management Information System (VMIS):

- Fleet management system which tracks all maintenance activities on vehicles.
- Used to trace trends in vehicle maintenance and make capital funding decisions.
- Implemented for bus fleet in June 1998.
- Implemented for subway/light rail locations in July 2006.
- Implemented for railroad locations in October 2009.
- Implementation for Customized Community Transportation (CCT) is currently in progress.



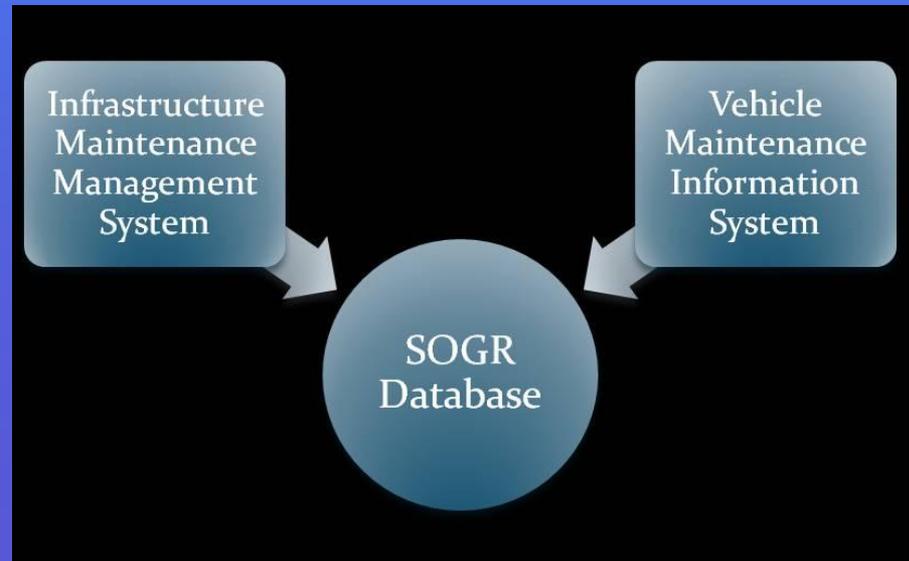
Roberts RRD Shop.
Welder using VMIS to sign onto a
work order.



MOVING FORWARD

Allocating Resources:

- IT Department has a staff of six for implementation, training, programming and maintaining the VMIS System.
- EM&C Planning, Project Coordination and Safety Department has hired a Senior Asset Management Analyst to oversee the State of Good Repair Database. This position and the one described below have been funded by the FTA grant received in 2010.
- EM&C Administration & Finance Department has hired a Senior Asset Management Analyst to oversee the Infrastructure Maintenance Management System.



TELLING OUR STORY

REGIONAL RAIL RIGHT-OF-WAY INFRASTRUCTURE ASSESSEMENT

Section of Railroad	BRANCHES						TRUNK						BRANCHES				
	Airport	Warminster	West Trenton	Media/Elwyn	Lansdale	Doylestown	Glenside to Wayne Junction	Wayne Junction to North Portal	Center City Tunnel	South Portal to 30th St. Station	30th St. Station to Arsenal Interlocking	30th St. Station through "K" Interlocking	Cynwyd	Manayunk/Norristown	Chestnut Hill East	Chestnut Hill West	Fox Chase
Number of Tracks	2	1	2	2	2	1	2	4	4	4	2	4	1	2	2	2	1
Signals RR = Reverse Running Capability ATC = Automatic Train Control	RR ATC	RR ATC	RR ATC	RR ATC	RR ATC	RR ATC	RR ATC	RR ATC	RR ATC	RR ATC	RR ATC	RR ATC	RR*		RR ATC	ATC	RR ATC
Communications FO = Fiber Optic Based		FO	FO		FO	FO	FO	FO	FO	FO	FO	FO					FO
Catenary																	
Traction Power Distribution/Substations								FAIRMOUNT WAYNE JUNCTION									
Signal Power (100 Hz) Distribution/Substations OLW = Open Line Wire		OLW	OLW	OLW		OLW						OLW	OLW			OLW	
Track T = Tie Concerns B = Ballast Concerns	T			B			T	T				T	T			T	
Interlocking/Control Point Switches (SS) = Spring Switch										SCHUYLKILL	WALNUT AND ARSENAL	WEST	JEFF (SS)	KALB AND ELM			
R.O.W. Structures (Culverts, Bridges, Retaining Walls, Tunnels, Rock Cuts, etc.)				VIADUCTS						BRIDGES	MARKET ST. TUNNEL					BRIDGE 0.35	
Catenary Structures																	
Average Score	2.4	2.2	2.3	1.3	2.7	2.2	2.6	2.4	2.4	2.1	1.9	2.1	1.9	1.6	2.0	1.6	2.4

EM&C R.O.W. INFRASTRUCTURE ASSESSMENT FOR THE REGIONAL RAILROAD

State-of-Good-Repair Condition/ no useful life concerns/ reliable system (3 pts)
 Serviceable Condition/ midway to end of useful life/ some reliability issues (2 pts)
 Useful-Life-Exceeded Condition/ useful life exceeded/ major reliability concerns (1 pt)

Assessment Date 05/17/12

RR* = Only Jeff to Cynwyd portion has reverse running capability with signals.

JDK, PE

TELLING OUR STORY

- **Transit is critical to economy**
 - **More than 70% of Center City trips by transit**
 - **Growing demand for transit in counties**
- **Significant needs to bring SEPTA system to a State of Good Repair (SGR)**
 - **FTA Study -- In excess of \$4 billion needed for SEPTA**
- **Current capital investment in transit infrastructure is inadequate**
 - **While SEPTA's ridership is at a 20-year high, SEPTA's capital funding level is at a 15-year low.**



TELLING OUR STORY

