SEPTA's Asset Management Program

Laura J. Zale

September 26, 2017

SEPTA
Philadelphia, PA

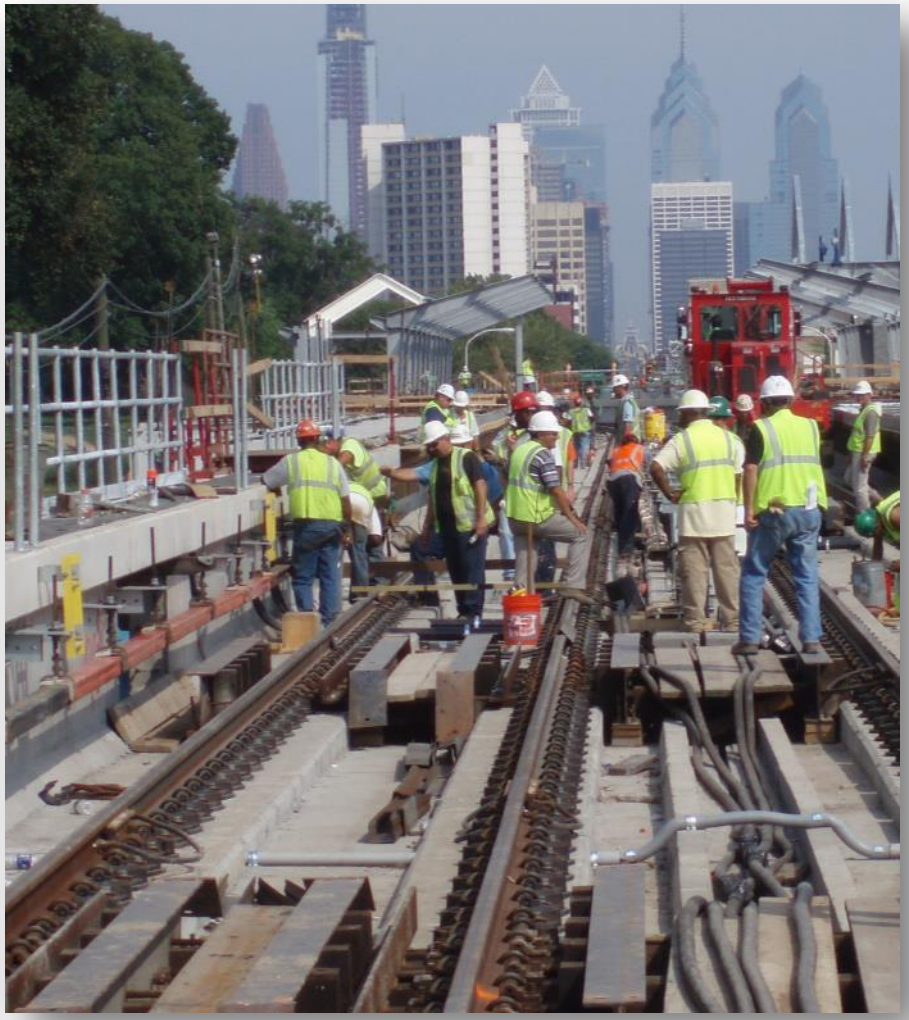
- Sixth largest public transportation agency in the country.
- Multimodal:
  - Heavy Rail
  - Commuter Rail
  - Light Rail
  - Bus
  - Trackless Trolley
  - Paratransit
- Utilizing infrastructure maintained and owned by Amtrak, freight, and the City

A Legacy Transit System

- Created by the consolidation of bankrupt transit providers between 1964 and 1983.
- Documentation on assets was lacking.

A Balance of Preventative Maintenance…

… and Rebuilding the System



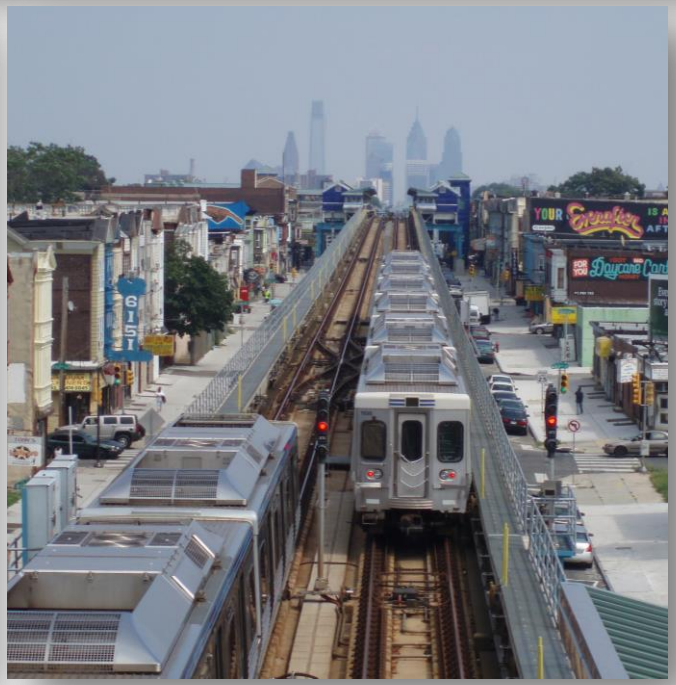
Expansive and Multimodal

A Diverse Asset Portfolio

With Diverse Inspection and Maintenance Requirements

- 4,000 Vehicles
- 345 Stations and Bus Terminals
- 23 Vehicle Maintenance Shops
- 400 miles of mainline track
- 364 bridges
- 77 Substations/ Switching Stations

A Data Rich Environment



Turning Data into Information

Gives the Assets a Voice in the Capital Planning Process

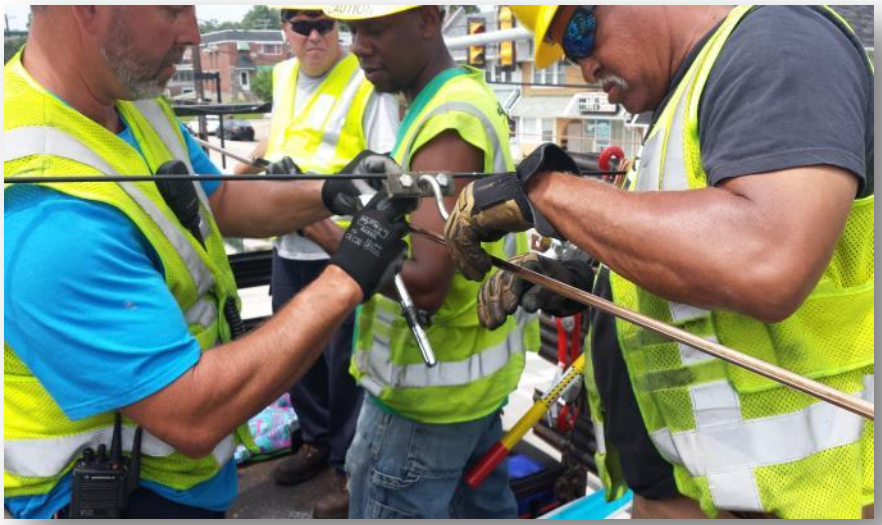
Asset Management Program

Implementation Strategy

- Develop Program Framework
- Identification of Existing Practices and Gap Analysis
- Procurement and Deployment of Software Tools
- Capital Needs Inventory and Assessment
- Asset Management Plan Development

Process Assessment: Strengths

- Maintenance practices well defined.
- KPIs and reporting metrics.
- Lifecycle management in planning.



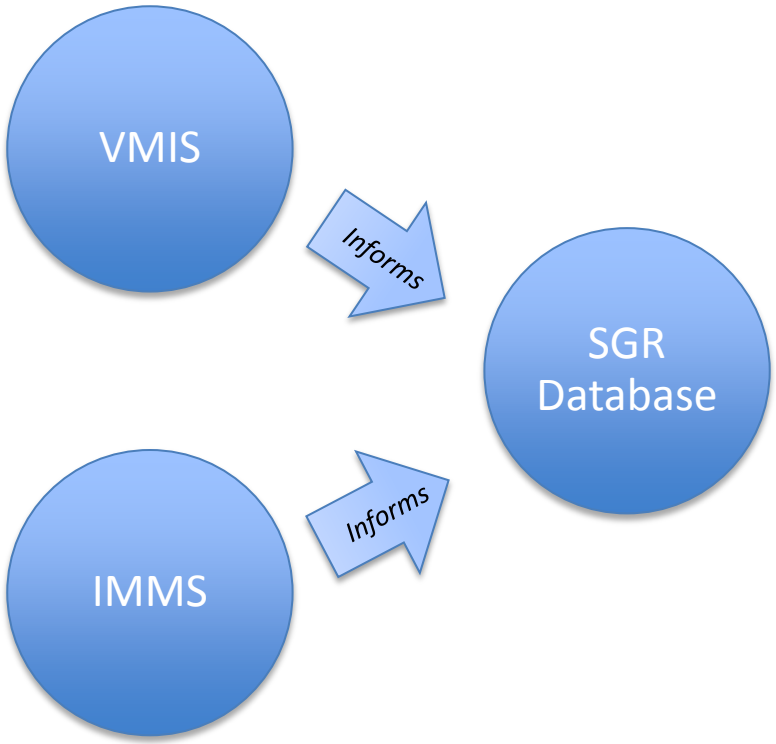
Process Assessment: Gaps

- Level of practice and granularity varied among asset mangers.
- Identified data collected by other business units.

Criteria for Selecting Tools

- Regulatory compliance.
- Ability to incorporate data collection into existing business processes as much as possible.
- Successful implementation at other transit agencies of similar size and complexity.
- Flexibility to be used across the business units that maintain assets.
- Build upon successes in legacy fleet management system.

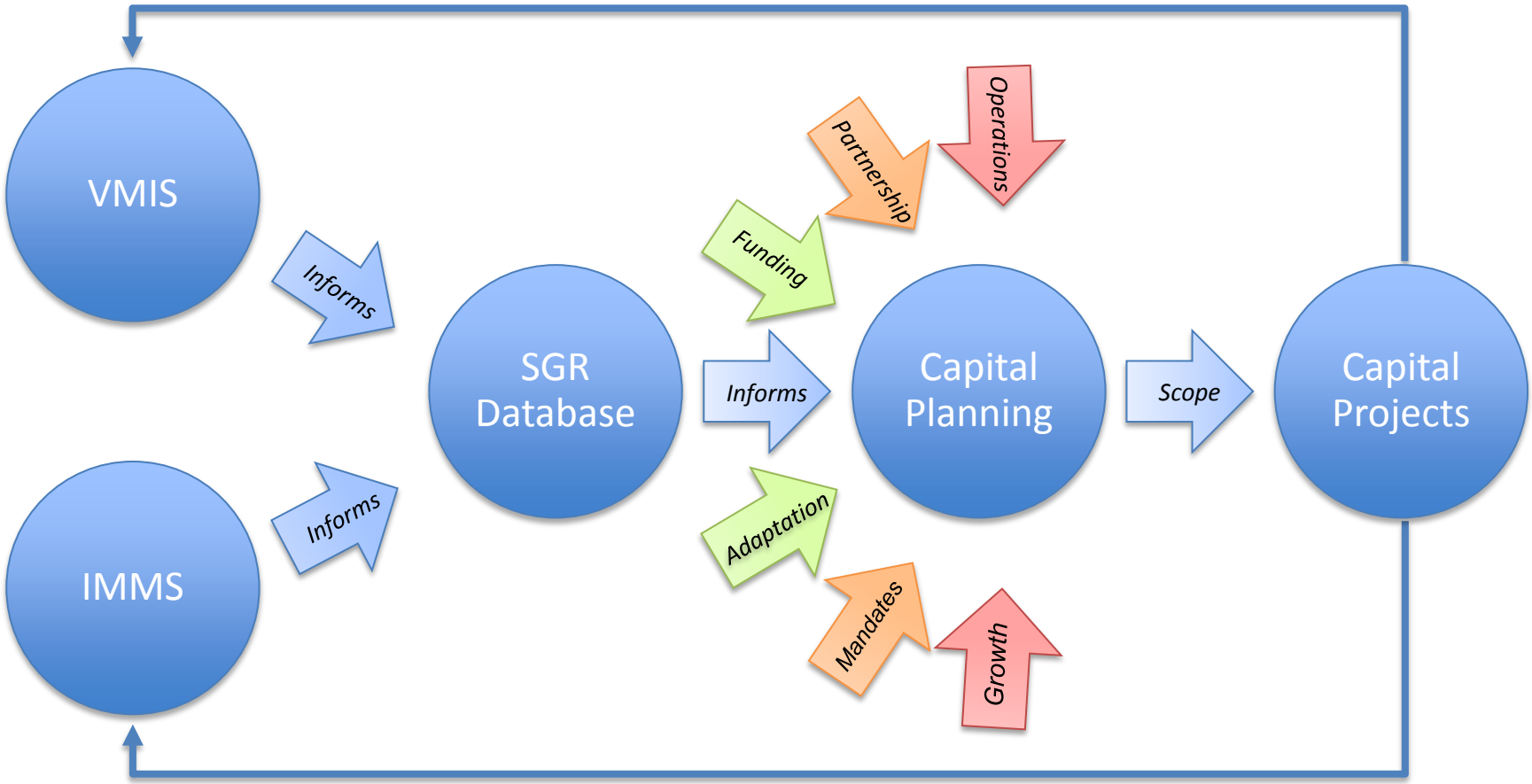
Data-Supported Decision Framework



Asset Maintenance Data

Capital Asset Data

Data-Supported Decision Framework



Asset Maintenance Data

Capital Asset Data

Project Development and Planning

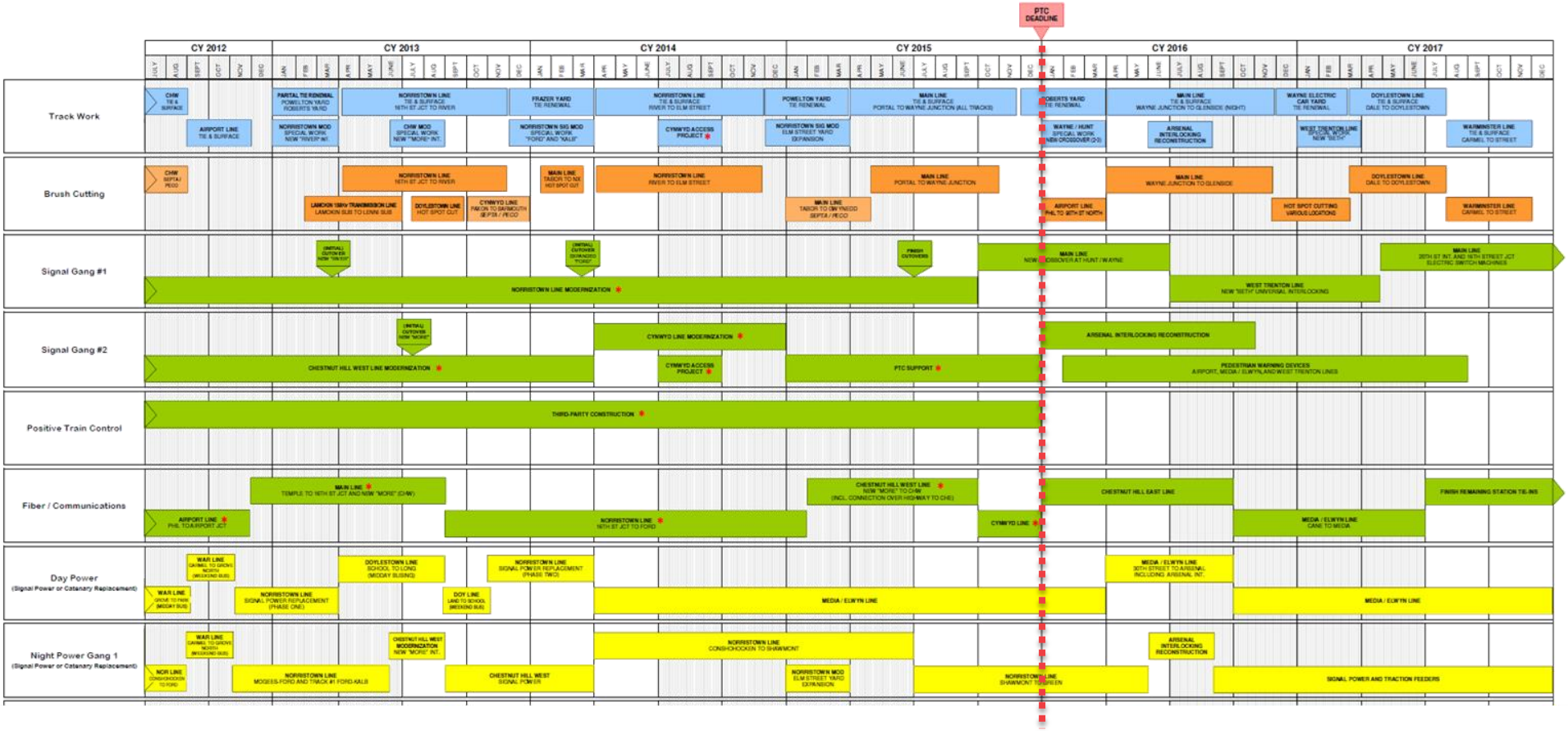
Program Deliverables

Tactical Asset Management

Basis in Data but Requires Balance

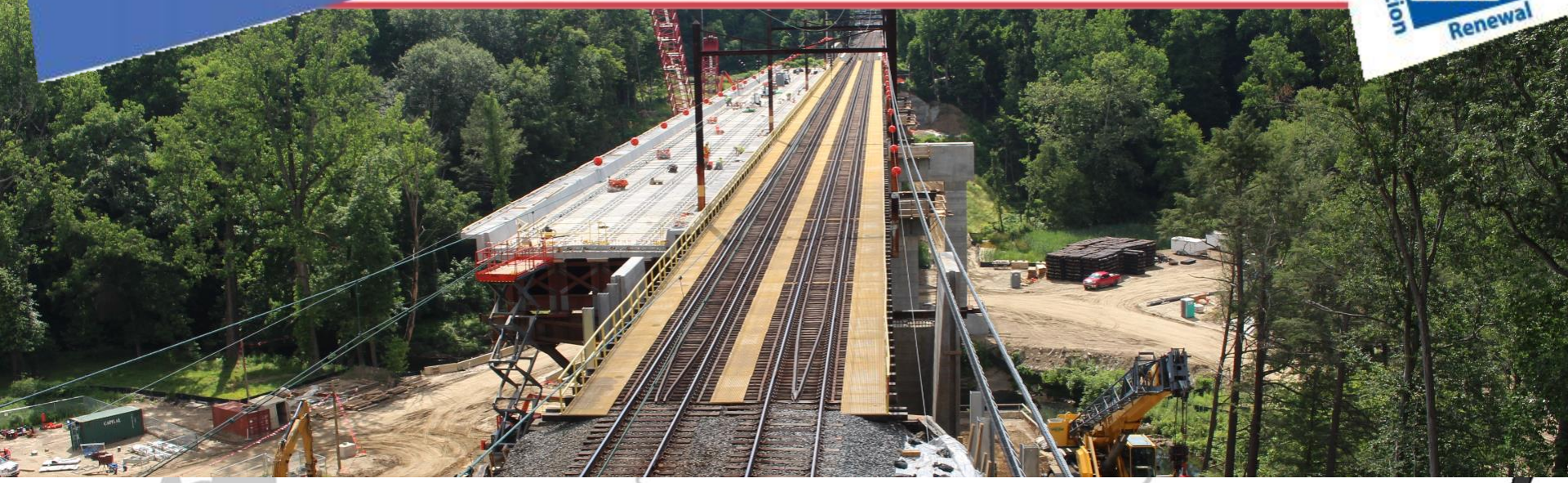
Lifecycle Data Drives Planning

Five Year Work Plan for the Regional Railroad



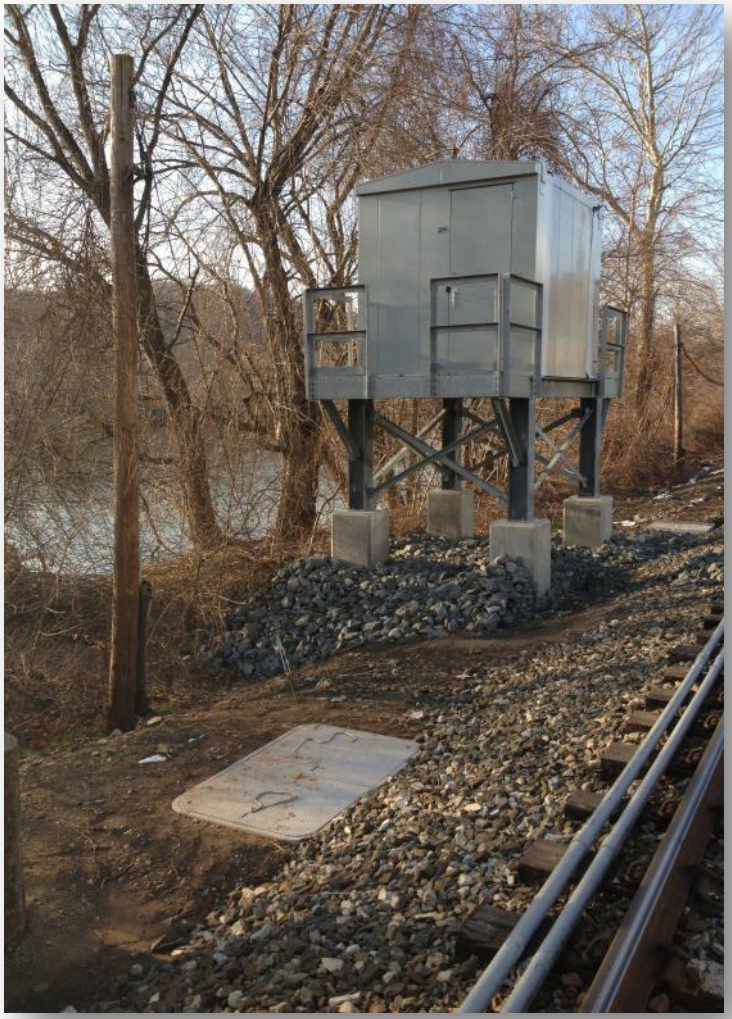
On the Commuter Railroad, drivers include Positive Train Control, Plant Rationalization, and Normal Replacement.

Media/ Elwyn Line



Plant Rationalization and Modernization

Fix and Fortify

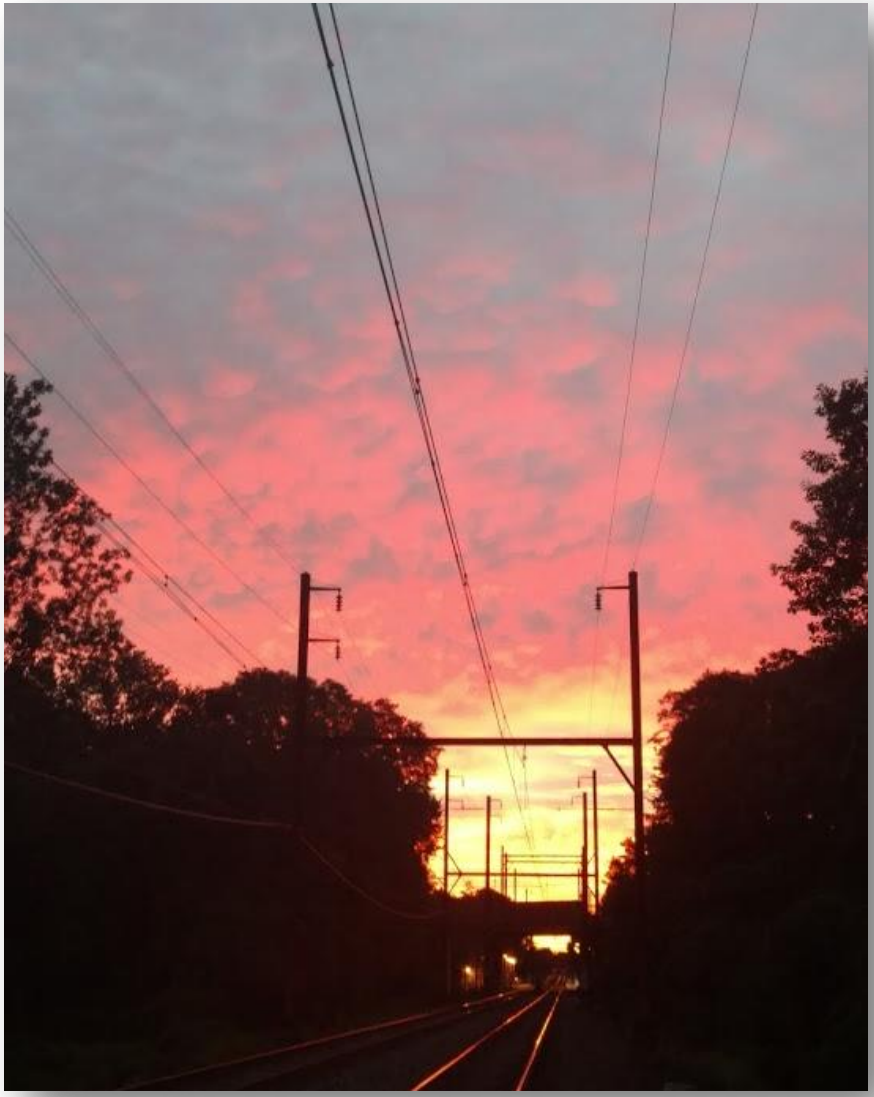


Moving Forward

- Map inventory to support new NTD reporting requirements
- Asset Management Plan Completion
- Develop of PMP to gather asset data for ongoing projects

A Journey, Not a Destination

- SEPTA is well positioned to address the FTA's Transit Asset Management requirements.
- The new framework will allow SEPTA to improve their decision making process.



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