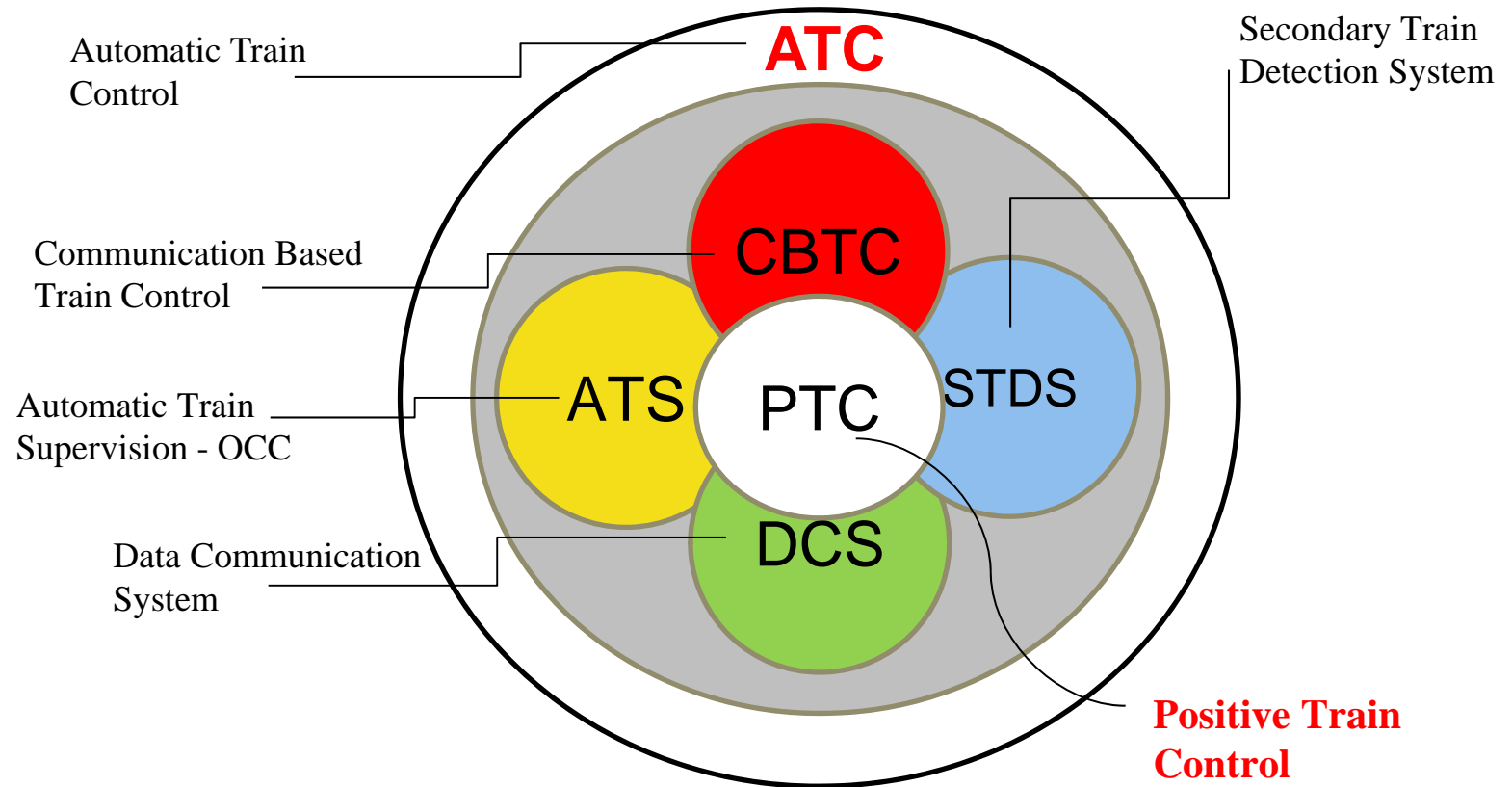


# **PATH Signal System Replacement Project Re-Authorization**

Committee on Capital Planning, Execution & Asset Management  
April 27, 2017

# Positive Train Control Overview

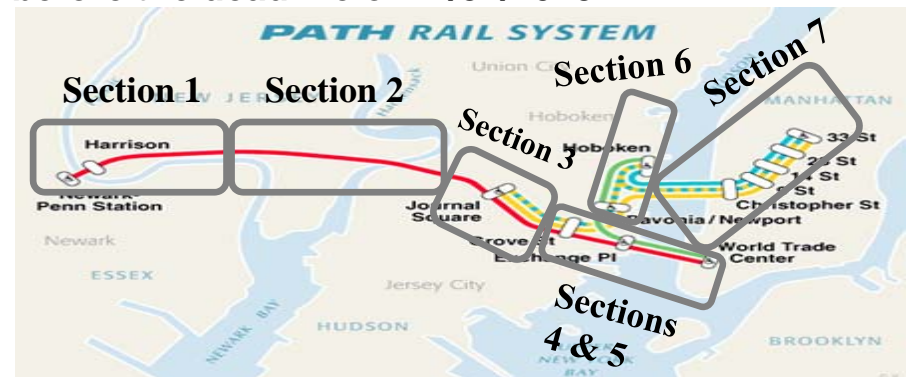
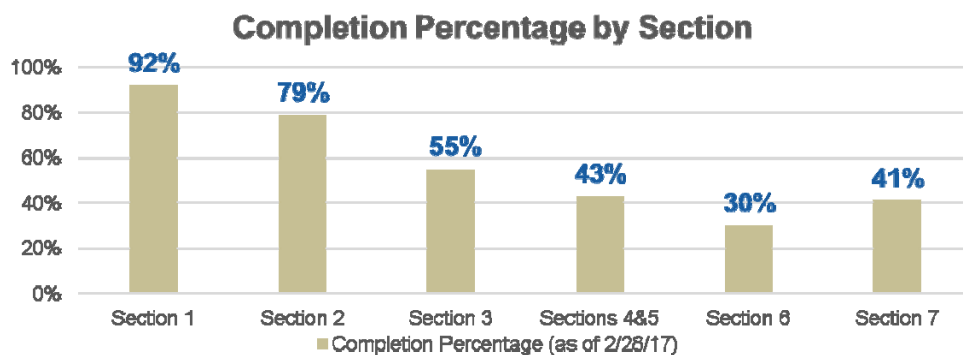


# Benefits of new Signal System

- The PATH Signal System Replacement Project will:
  - Increase safety, reliability, and efficiency of PATH train operations
  - Together with other system investments, will allow for shorter headways and approximately 20% increase in capacity on the PATH system
  - Replace the current 104-year-old antiquated signal system with state-of-the-art, computerized signal and train control system
  - Ensure that PATH is compliant with the Federal Railroad Administration (FRA) mandate for installation of Positive Train Control (PTC) by the deadline of December 31, 2018

# Project Progress

- Significant amount of work has been completed, which allows for revised projections with a high level of confidence
- FRA granted permission for Revenue Service Demonstration
- Section 1 was successfully cutover to Secondary Train Detection System (STDS) in February 2017, with complete cutover projected for Q2 2017
- Overall percentage of work completed is 58%
- Considerable progress has been made and PATH remains on track to be compliant with federally mandated implementation of PTC on or before the deadline of 12/31/2018

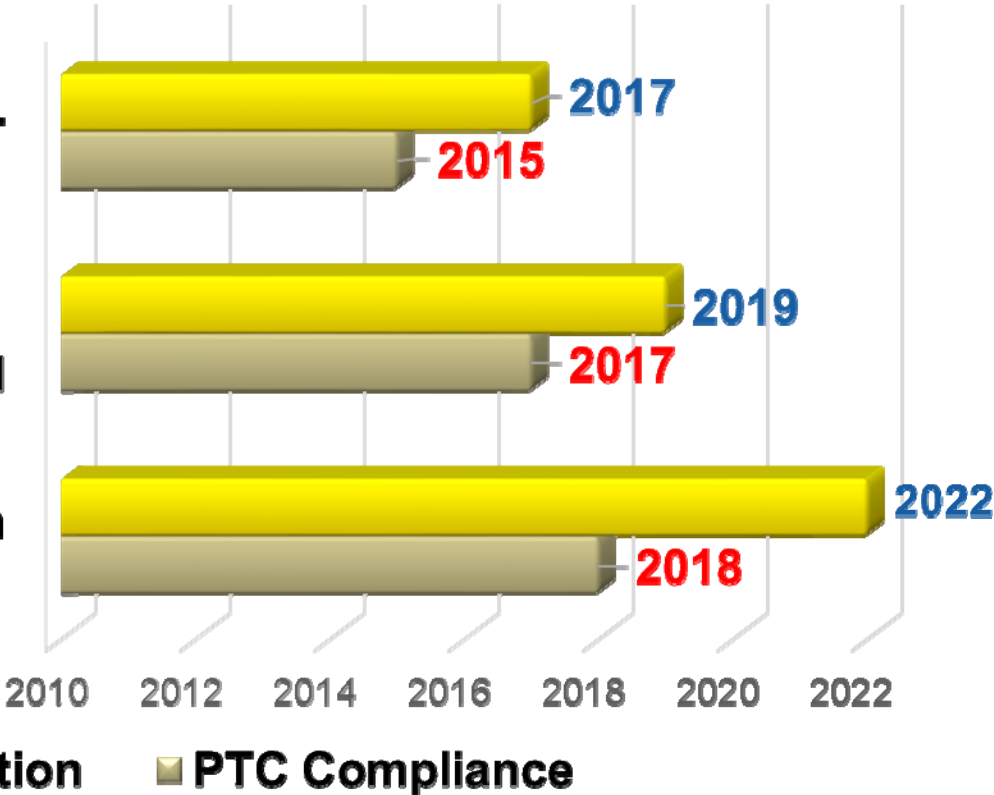


# Project Timeline

**2009 Original Contract Award/Re-Authorization - TPC: \$580M**

**2014 Contract Increase (Use of Project Contingency) - TPC: \$580M**

**2017 Requested Re-Authorization TPC: \$752.6M**



# Key Drivers for Project Increase

- Delays leading to extended project timeline

Program Track Rights Priority (green indicates top priority)										
	2009	2010	2011	2012	2013	Jan-May 2014	June-Dec 2014	2015	2016	2017
World Trade Center										
Security Project Management										
Superstorm Sandy										
Signal System Project										

- Additional PATH Facility Force work required for project implementation
- Increased FRA Safety Regulations Design/Build contract proved a poor fit on a 24/7 operating railroad given system complexities
- Unrealistic original schedule and funding

# Requested Authorization

- |  |                 |
|--|-----------------|
| ▪ Previously Authorized:                   | \$580.0M        |
| Increased Funding                          | <u>\$172.6M</u> |
| <b>Requested Project Re-authorization:</b> | <b>\$752.6M</b> |
- Included in the Approved 2017-2026 Capital Plan
  - PATH will be compliant with federally mandated implementation of Positive Train Control on or before the deadline of 12/31/2018
  - Forecast for Contract Substantial Completion: 12/31/2022