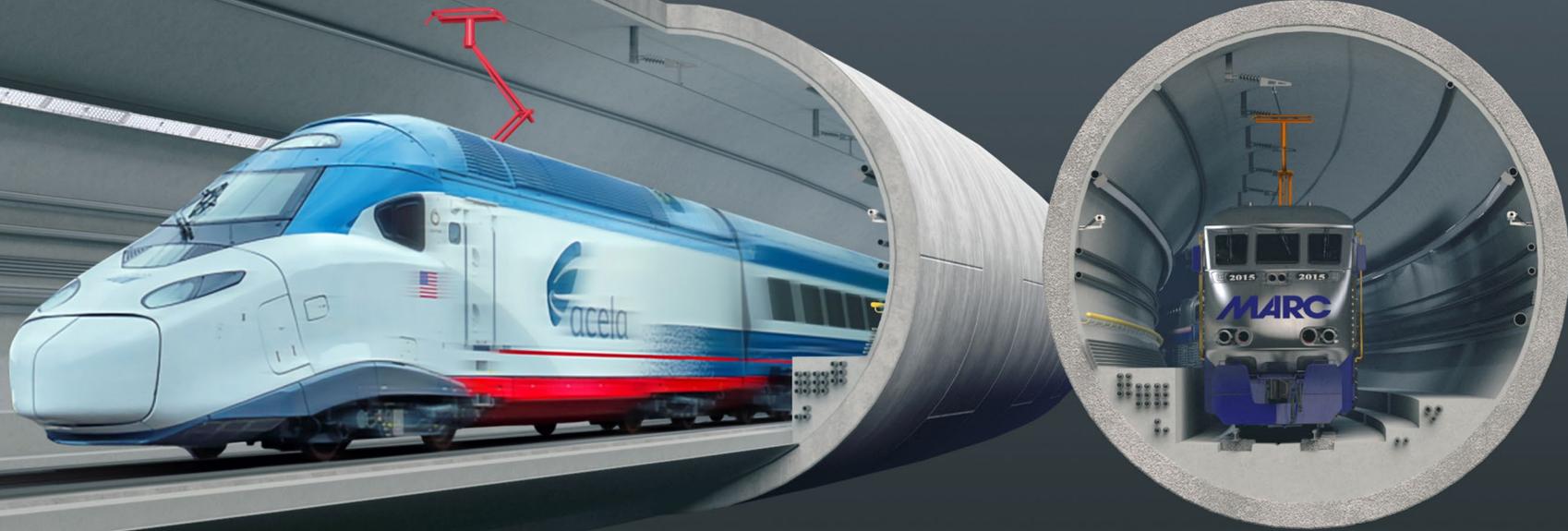


# Frederick Douglass Tunnel

## A New Era of Passenger Rail in America



# Speaker:

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**Luigi Rosa**

*Amtrak, AVP Frederick Douglass Tunnel Program*

- Responsible for ensuring the effective execution of the Frederick Douglass Tunnel Program and the realization of its benefits
- Assisting Amtrak in building their capabilities to manage current and future Capital Programs

# Agenda

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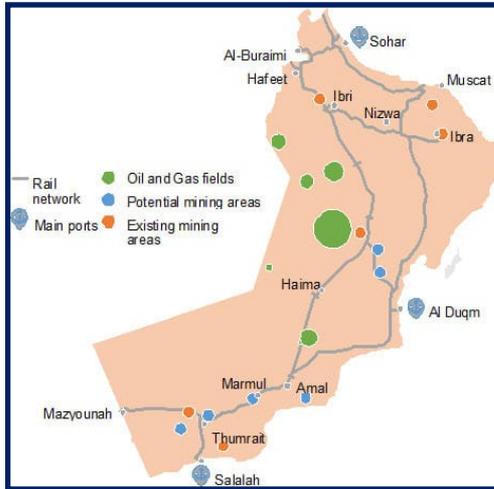
- ❖ My Projects
- ❖ Amtrak Frederick Douglass Tunnel Program (FDT)
  - ✓ FDT The People
  - ✓ FDT Why it is important and its Benefits
  - ✓ FDT Scope
  - ✓ FDT Challenges
  - ✓ FDT Schedule
  - ✓ Q&A

# My Key Projects

## High Speed Rail in Italy



## First Railroad Network in Oman



## Penn Station Access in NYC



“Everybody loves the sound of a train in the distance”  
Paul Simon, 1983

# High Speed Rail in Italy

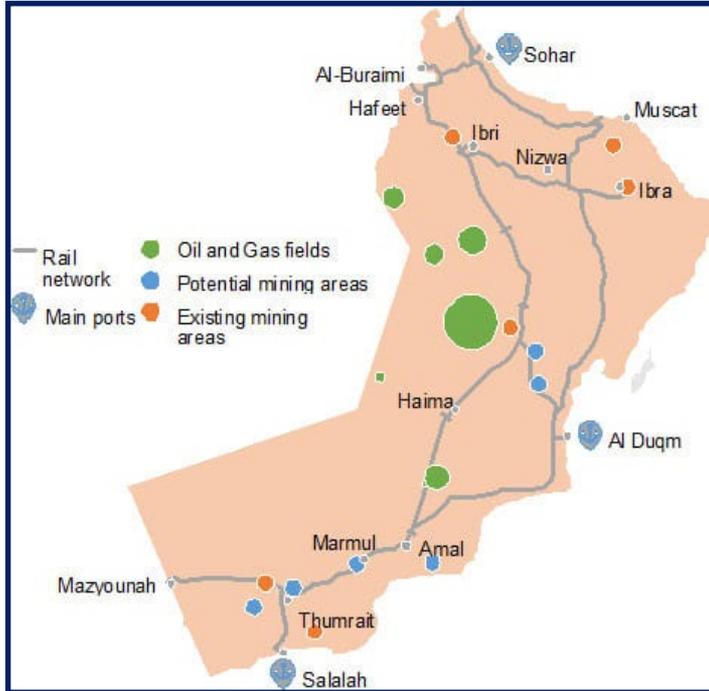


<https://www.youtube.com/watch?v=gyVjFKDcopc>

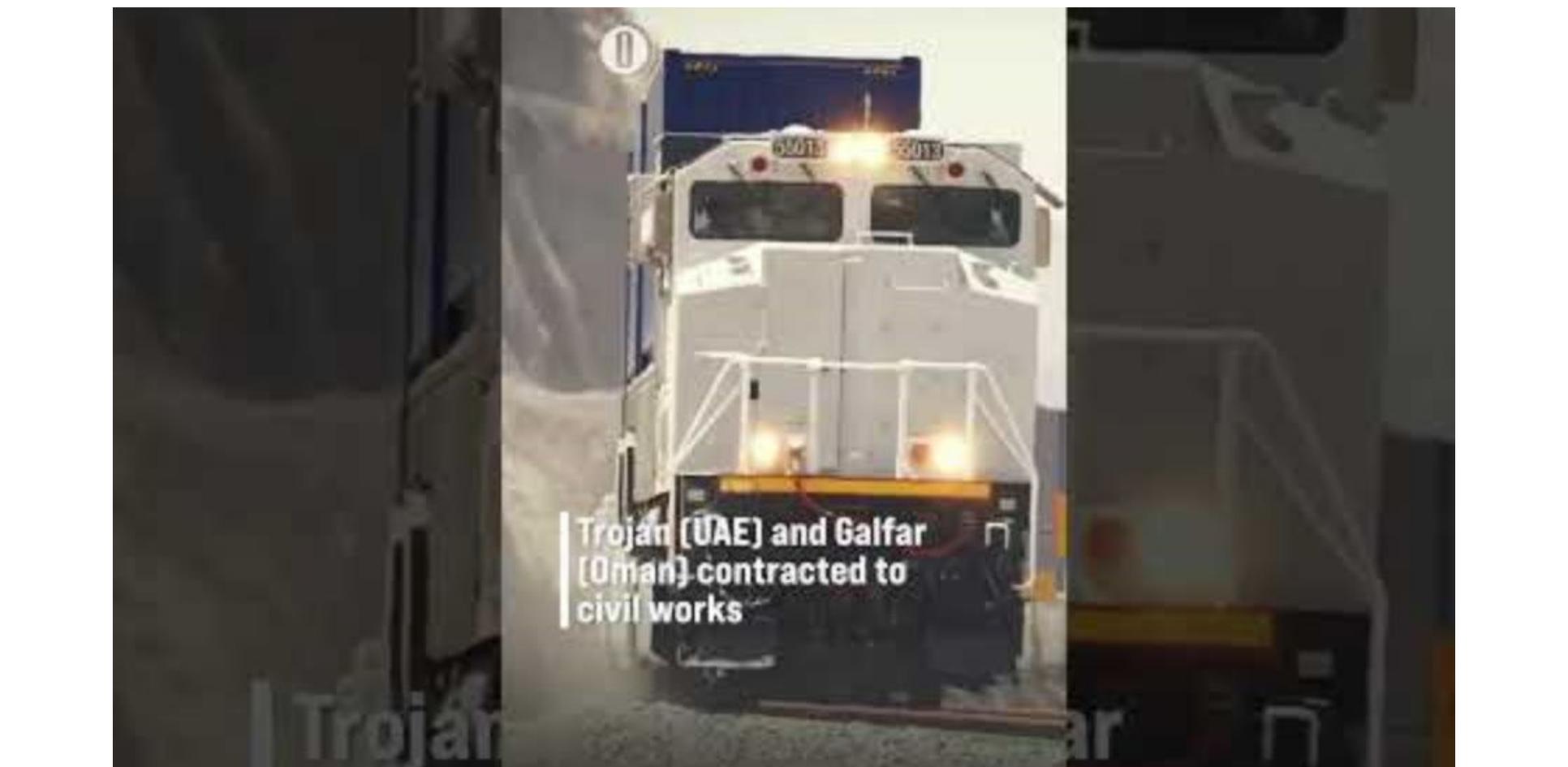


# Oman National Railroad Project

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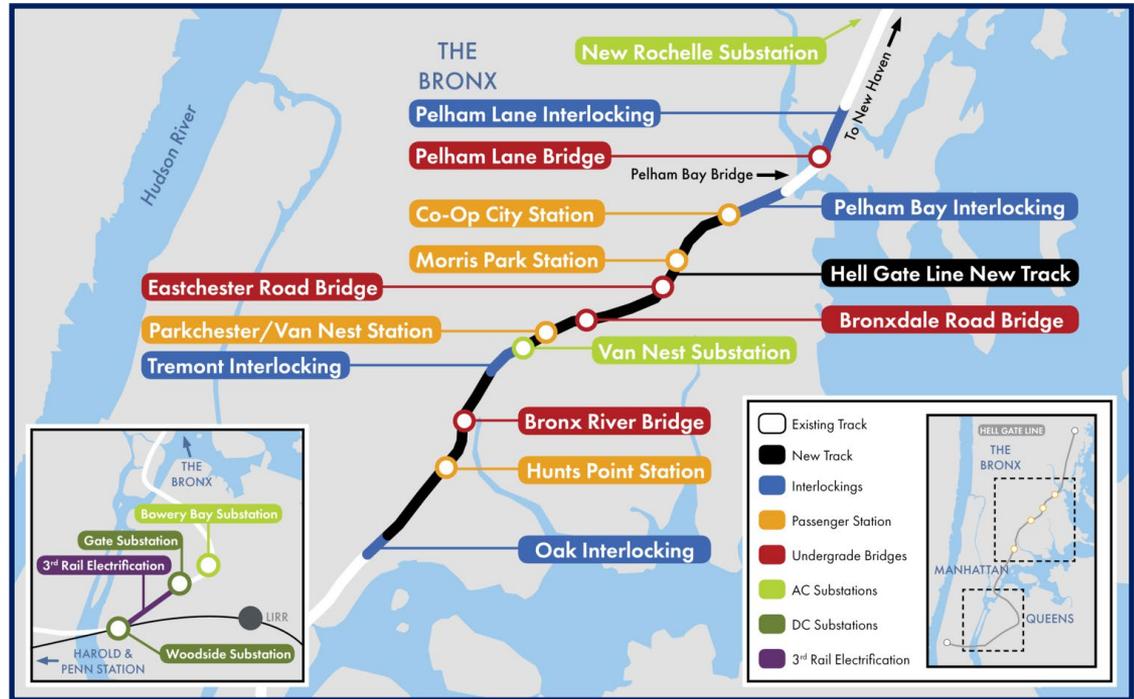
<https://www.youtube.com/watch?v=D4K852xbGdE>



Trojan (UAE) and Galfar  
(Oman) contracted to  
civil works

# Penn Station Access Project, New York

[https://www.youtube.com/watch?v=EAhJpmge\\_Z8](https://www.youtube.com/watch?v=EAhJpmge_Z8)



**We're bringing  
Metro-North  
to the East Bronx  
and Penn Station.**

# Frederick Douglass Tunnel Program - The People



*Projects move at the speed of trust. [A.B.]*





# FDT Program Benefits



\$50 million for **COMMUNITY INVESTMENTS**



Local jobs centers to train the **WORKFORCE**



Increased **ACCESS TO REGIONAL JOBS** for Baltimore City residents



Approximately **20,000 JOBS GENERATED** over the course of construction



Construction of a new **ADA-ACCESSIBLE** West Baltimore **MARC STATION**



**IMPROVEMENTS** to roadway and bridge **INFRASTRUCTURE**



**ENVIRONMENTAL SUSTAINABILITY** addition of electrified trains and solar powered facilities and stations



**ACCESS TO SALVAGE MATERIALS** for residents of Midtown Edmondson and Edmondson Avenue Historic Districts



**RELIABILITY, REDUNDANCY** and **RESILIENCY** for MARC and Amtrak trains



Construction of a **NEW TUNNEL**, named in honor of Frederick Douglass



**IMPROVED TRIP TIME.** Travel from Baltimore to Washington in under 30 minutes

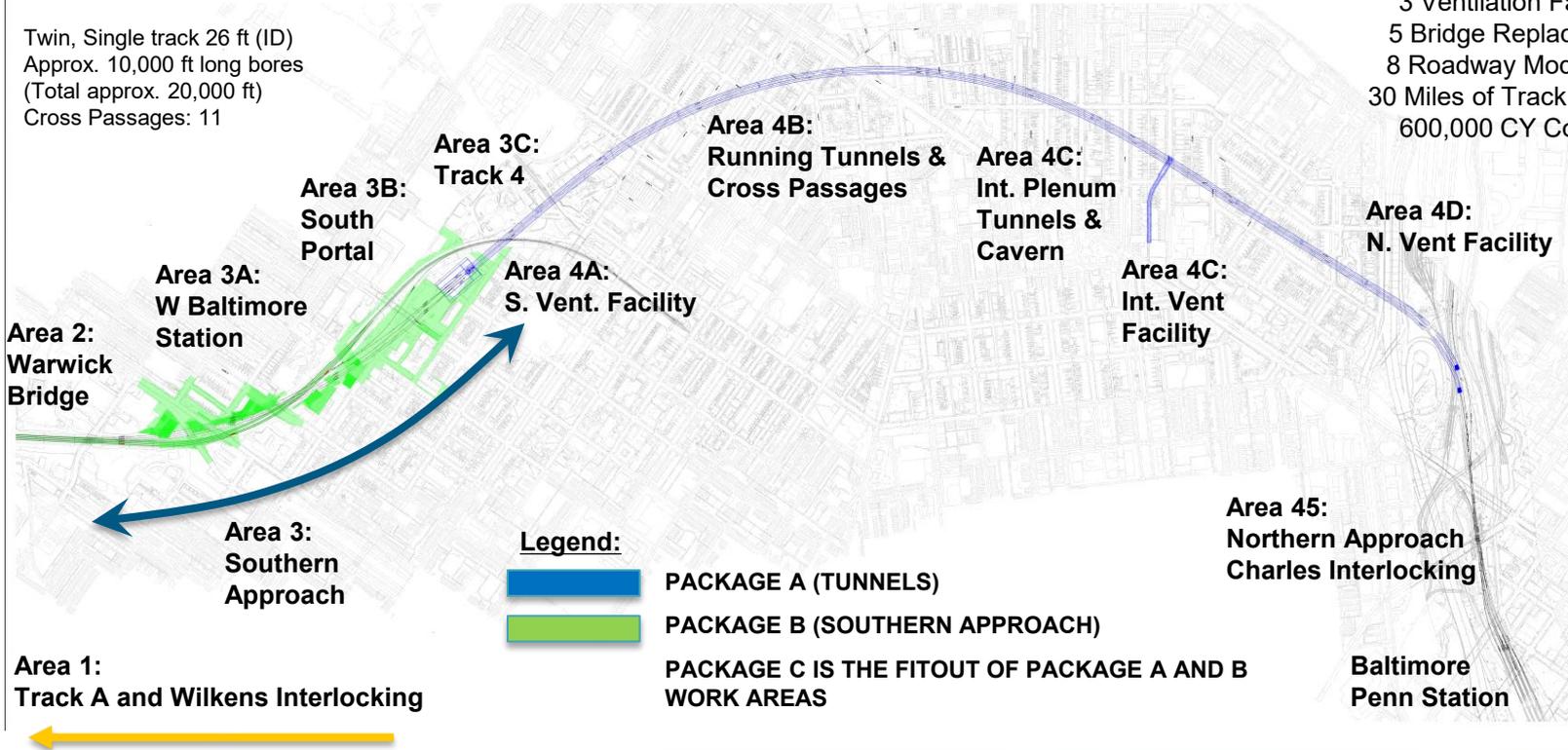


Complete **MODERNIZATION** of Amtrak's **NORTHEAST CORRIDOR** in West Baltimore

# FDT Scope of Work

## FDT Tunnel Fact Sheet

Twin, Single track 26 ft (ID)  
 Approx. 10,000 ft long bores  
 (Total approx. 20,000 ft)  
 Cross Passages: 11

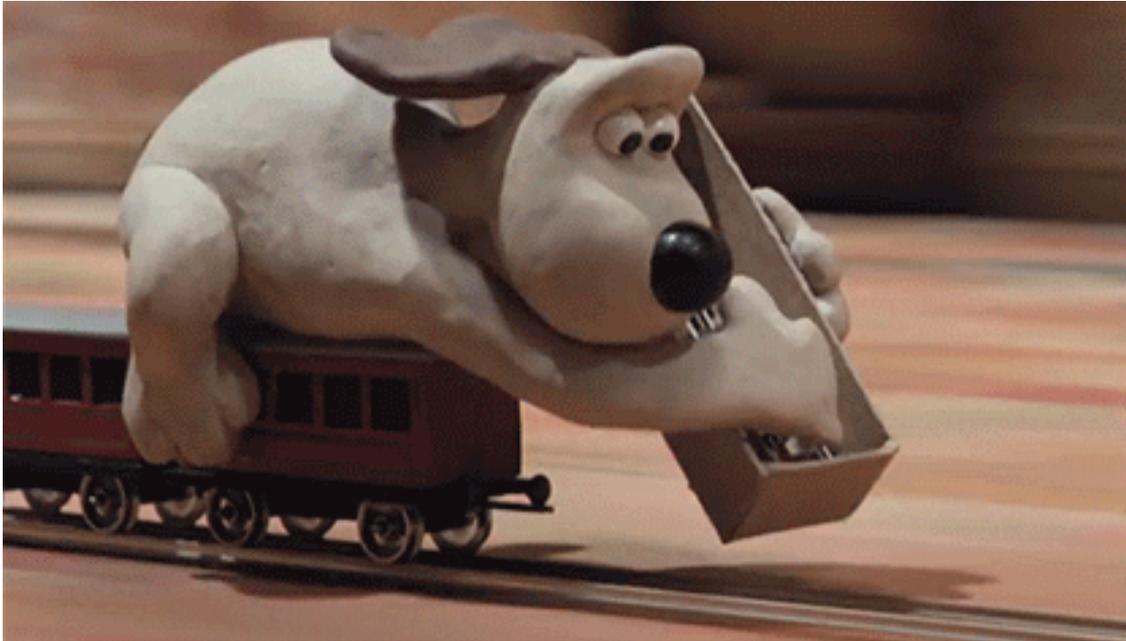


## FDT Program by the Numbers

- New MARC Station
- 2 Tunnel Bores
- 3 Ventilation Facilities
- 5 Bridge Replacements
- 8 Roadway Modification
- 30 Miles of Track and OCS
- 600,000 CY Concrete

# FDT Challenges

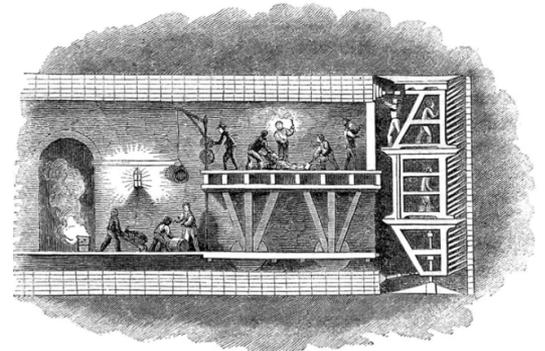
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**Building Tracks As The Train Approaches**



**High Complexity**



**Tunneling**

# FDT Construction Contract Packaging

## Key Stakeholders

- FRA
- Amtrak
- MDOT
- City of Baltimore
- BGE
- Verizon

### Package B (Area 3B, 3C, 4C, 4D)

- South Approach
  - Utility, Roadway Relocations
  - Structure
- Bridges
  - Lafayette, Edmondson
- RR Bridges
  - Warwick, Mulberry, Franklin
- Vent Facilities Utility Relocation

### Package A (Area 3B and 4)

- Running Tunnels & X-Passages
- South Ventilation Facility (Cut and Cover)
- North Portal
- Intermediate Vent Facility (Conventional Tunneling for cavern, plenum, shaft)
- North Vent Facility (Cut and Cover)
- Geotechnical & Structural Instrumentation

### Package C (Area 3B and 4/ 2 to 5)

- Frederick Douglass Tunnel Fit Out
- Ventilation Building (Above Ground)
- Railroad System

### Amtrak Force Account

- Track A Upgrade
- Wilkens Interlocking
- Charles Interlocking

# FDT Program Updates

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## Delivery Strategy

- Delivery Partner
- CMAR
- Amtrak F/A

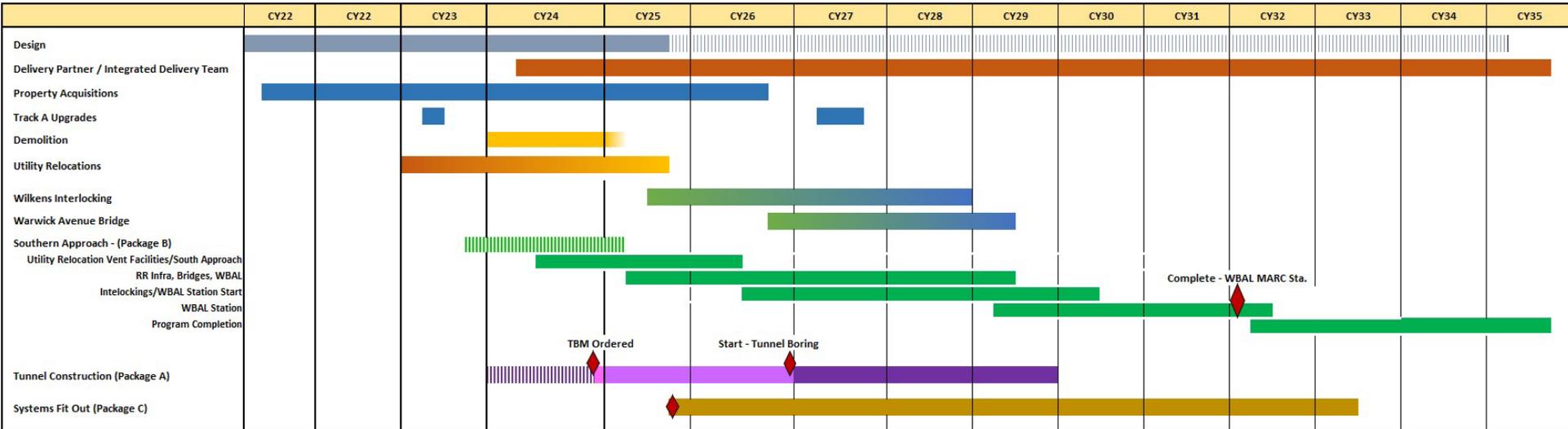
## Contracts Timeline

- DP
  - Mar 24 NTP
- CMAR PK A
  - Jan 24 NTP
- CMAR PK B
  - Oct 23 NTP
- PK C
  - 2025 NTP

## Construction Years

- 2024 - 2035
- Overall Budget
  - \$6B
- Funding
  - 80% FRA
  - 13.5% Amtrak
  - 7.5% MDOT

# FDT Program Schedule



\*Package C - Final scope and delivery method to be confirmed

**Legend**

- Phase 1 - Pre-Construction
- Phase 2 - Construction



Complete - WBAL MARC Sta.

TBM Ordered

Start - Tunnel Boring

Schedule is subject to change

# Thank You



[luigirosa2006@gmail.com](mailto:luigirosa2006@gmail.com)

# Q&A

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THANK YOU 

<https://www.amtrak.com/fdtunnel>

