

2014 FRA
Rail Program Delivery



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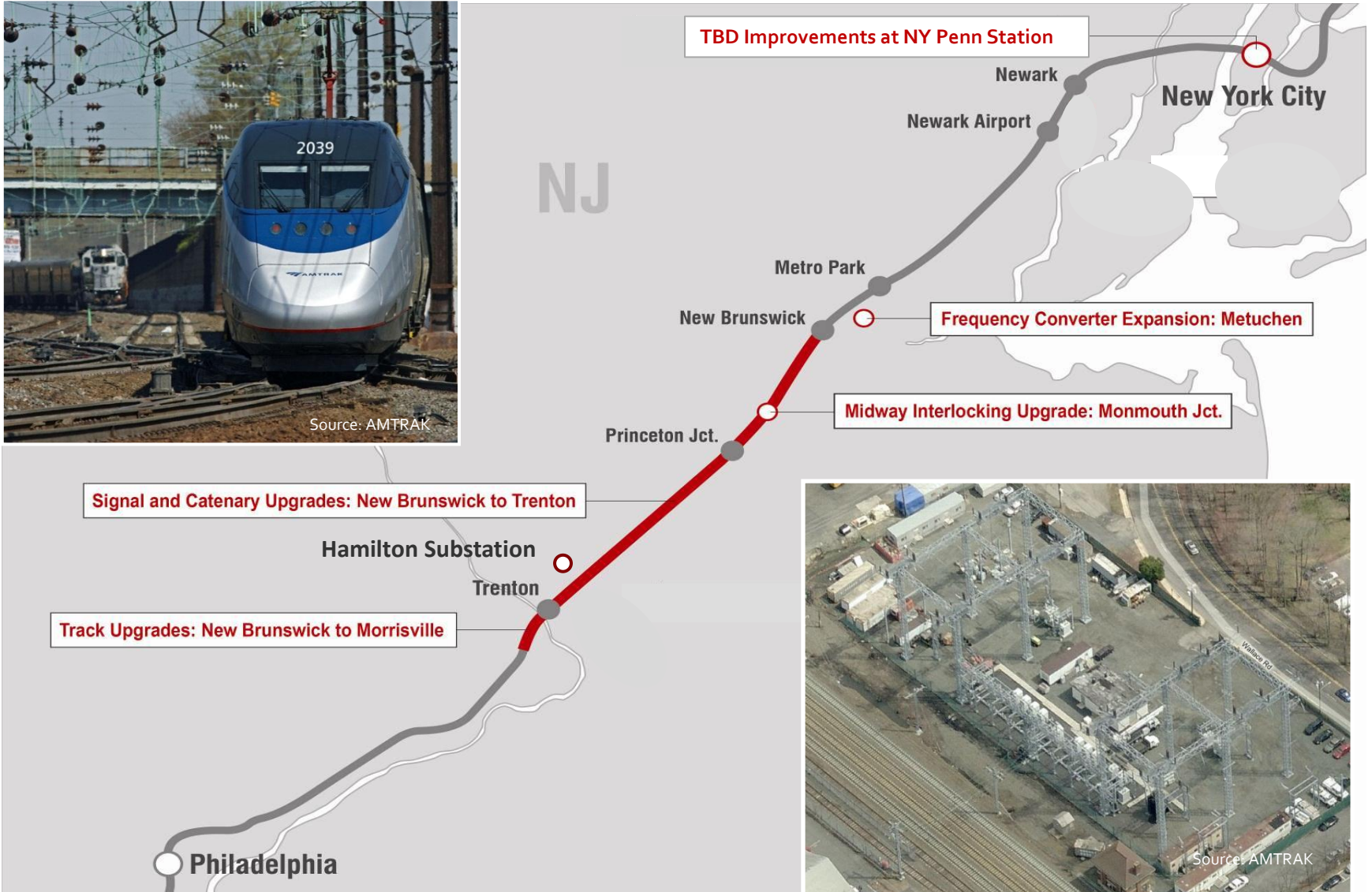
Source: AMTRAK

T.O 3 Mid Atlantic New York to Trenton, New Jersey High-Speed Improvements

Fast Facts

- **\$450M grant (ARRA/ HSIPR funding)**
- **Implements critical engineering improvements to a 23 mile “pilot” section of AMTRAK’s 457 mile Northeast Corridor**
- **Benchmark for future upgrades on the corridor (AMTRAK’s “stair step” approach)**
- **Capacity and speed (150 to 160 mph MAS) improvements anticipated**

Project Scope of Work



Signaling Upgrades

- New signaling system to support 160-mph on inner two tracks and 125-mph on outer tracks
- New control point, cabling, and “walk-in” signal cases
- New redundant signal power distribution



Track and Structure Upgrades

- **Structures**

- Upgraded lighting
- Safety barrier construction
- Incidental improvements
- Commuter rail stations temporary platforms

- **Track**

- High-speed interlockings
(requiring Buy America waiver)
- Universal crossover replacements
- Insulator joint replacements



Track and Structure Upgrades



Traction Power Upgrades

- Design and construct 60MW capacity expansion frequency converter
- New traction power substation – steps down voltage from 138-kV transmission line to 12-kV traction power
- Install 14 miles constant tension catenary and 9 miles upgraded fixed termination catenary



Source: AMTRAK

Project is Interesting Because...

- AMTRAK is the direct grantee
- FRA and AMTRAK collaborated in 2013 to bring project back on track
- Safety case prepared to permit 160-mph MAS
- Will result in new operating practices (CONOPS)
- Construction / outages taking place along a 4-track corridor with 2,000 daily trains