



# **Dulles Corridor Metrorail Project**

## **Silver Line Phase 2 Implementation**

Board Transportation Committee Update  
July 17, 2018

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# Project Status

## *Phase 1*

- Old Meadow Road Realignment – 90% design complete.
  - Construction completion scheduled for the end of 2018.
- VDOT punch list ongoing – MWAA and Bechtel to complete
  - Work on bus bays at Spring Hill and McLean started
- Phase 1 close out - \$2.982B (no change)

## *Phase 2*

- Overall Phase 2 – 83% complete
- Package A (Rail line, system, and stations) – 83%
  - Sections of the third rail have been energized.
- Package B (Rail yard at Dulles) – 84%
- Contractual Substantial Completion – August 2019
  - WMATA Board to establish Revenue Operations Date

## Phase 2 – Cost Summary

- Budget

• Total Budget	\$2.778B
• Total Forecast	\$2.778B
• Total Expenditures	\$1.758B

- Contingency Utilization

• Total Contingency	\$551.5M
• Total Contingency Utilized	\$236.7M
• Remaining Contingency	\$314.8M

## Phase 2 – Station Construction

- *Reston Town Center Station* – Mechanical/electrical/plumbing rough-in, roofing system, and pavilion area work ongoing.
- *Herndon Station* – Electrical installation, structural steel frame, and continued work on north and south pavilions.
- *Innovation Station* – Electrical and plumbing, platform pavers, and pedestrian bridge touch-up painting.



## Phase 2 – Station Construction

- *Dulles Airport Station* – HVAC and roof drain installation, tunnel tie-in work ongoing, and assembly of TPSS switch gear
- *Loudoun Gateway Station* – Precast erection, foundation and support walls, pedestrian bridge assembled, and roof steel erection.
- *Ashburn Station* - Station concrete work, precast detailing, pavilion work, and pedestrian bridge lighting conduits.



## Phase 2 – Universal Concrete Products (UPC)

- 1598 precast panels provided
  - 60 Panels rejected (42 installed 18 not installed). All rejected panels at the Herndon, Reston, and Innovation Stations have been replaced. Ashburn and Loudoun Gateway Stations have several panels to be replaced.
- United States and Commonwealth of Virginia have taken legal action against UPC in a whistleblower lawsuit claiming UPC falsified test results and documentation.
- MWAA commenced an independent evaluation of the panels and final results expected early August. WMATA also conducting a review of the testing.
- UPC panels are not structure panels but impact the 100 year durability of the panels.



## Phase 2 – Universal Concrete Products (UPC) cont.

- Issues with the panels
  - High water to cement ratio, air entrainment, insufficient concrete cover over the rebar, and may not meet non-reactivity to alkali-silica reaction (unknown until the whistleblower court documents unsealed)
- MWAA proposes a sinking fund to provide money to coat the panels. This would improve durability and life of the panels to meet the contract 100 year requirement. WMATA is working with MWAA on the proposed solution.
- The costs for the “fix” is the responsibility of the Phase 2 contractor



## Phase 2 – Aerial, Track, Utilities, Systems

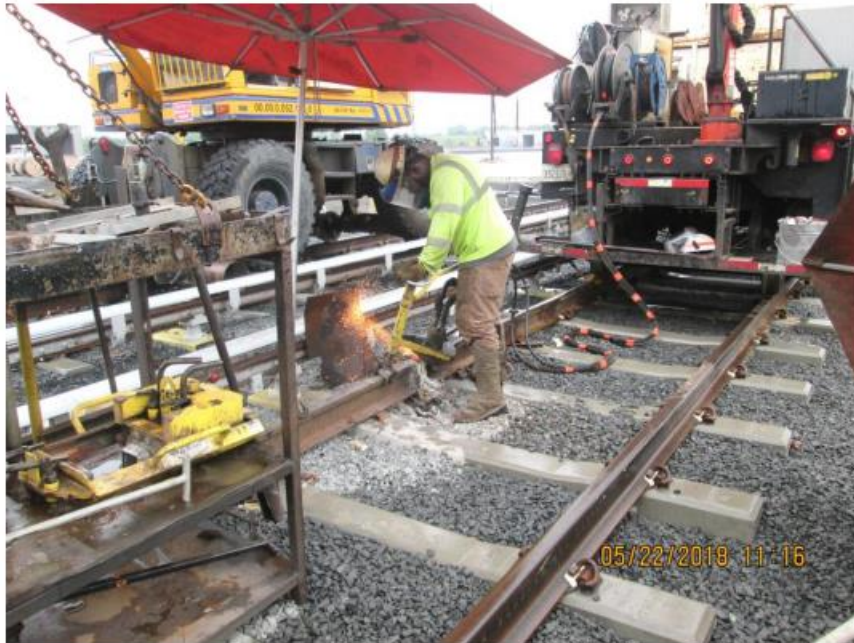
- Aerial guideway finish painting girder bearings and clean up work
- Power and communication lines relocation ongoing
- Completed all 34.5kV cable and conduit installation
- All primary and secondary feeders tested and energized from Dominion Energy substation to project.
- Rail and switches being installed along the at grade guideway in the DIAAH median through the Herndon and Reston stations and along the Greenway median





## Phase 2 – Rail Yard at Dulles Airport

- Interior work for Service and Inspection Building, Maintenance Way Building, and Transit Police Building. Construction continues at Train Wash Facility, Warehouse Facility, and Vehicle Storage Facility.
- Ongoing – Third rail installation and work at the installed Traction Power Substations



## Herndon Metrorail Garage

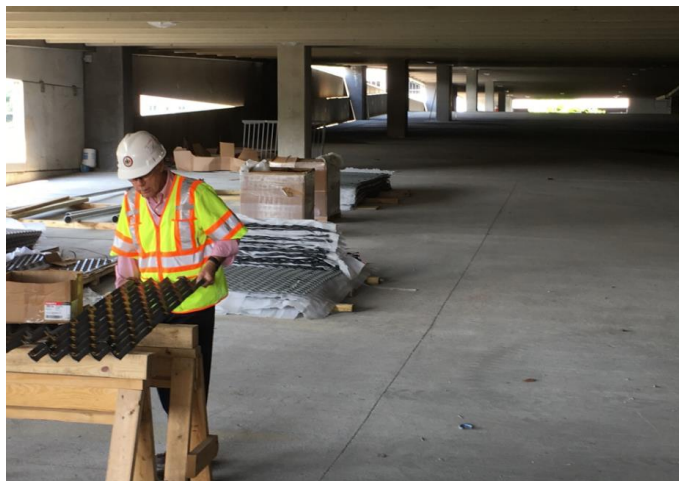
- Total Project Estimate: \$44.5M
- Construction Progress: 87% complete
- Existing garage repair work scope and cost under review

## Schedule

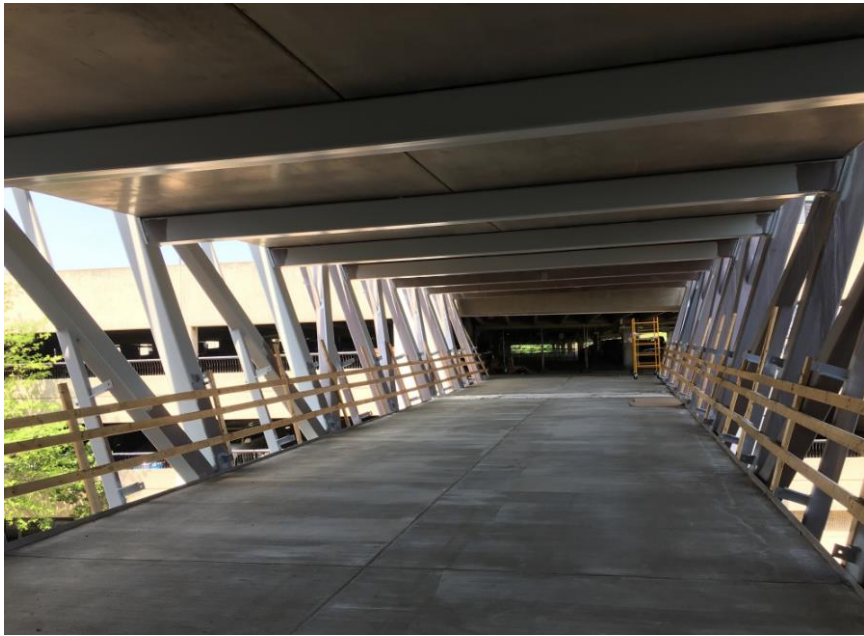
- Construction Award: October 2016
- Construction (new garage): November 2016 – March 2019
- Construction (existing garage): February 2019 – March 2019
- Ready for Occupancy: April 2019



# Herndon Metrorail Garage



# Herndon Garage Interior Construction





## Innovation Metrorail Garage

- Total Project Estimate: \$52 million
- Construction Progress: 62% complete
- Precast Fabrication: October 2017
- Precast Erection: April 5, 2018 (started)

## Schedule

- Construction Award: March 2017
- Construction: April 2017
- Ready for Occupancy: April/May 2019



# Innovation Metrorail Garage





# Reston Town Center Station



Installation of Standing Seam Roofing on Reston Station Vault Roof



Canopy Ceiling Framing in Reston Station Mezzanine

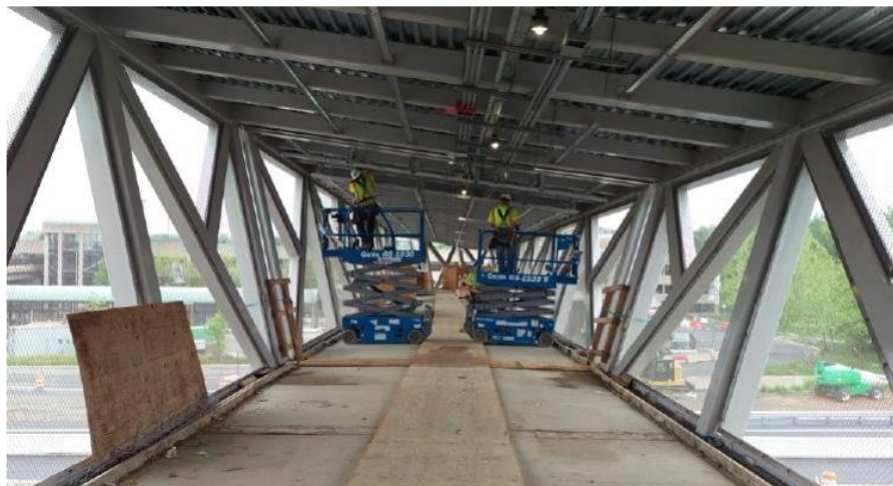




# Herndon Station



Herndon South Pedestrian Bridge Ceiling Framing





# Innovation Center Station



Innovation South Pavilion





# Dulles Airport Station

Dulles Station Platform, Canopy Roof and Guideway



Setting Granite Edge at Dulles Station Platform



Aerial Guideway Track Ready For Systems Installation





# Rail Yard Dulles Airport

SIB High Bay Shop Area



Installing a Track Signal



Installing Underground Storage Tanks (Gasoline, Diesel)



QUESTIONS?