

Dulles Metro is Coming

October 2011



Superstructures Soar, Tysons Tunnels Almost Done

Construction Surpasses the 50 Percent Mark and 'Stations Start to Look Like Stations'

Construction of Phase 1 of the Dulles Corridor Metrorail Project has passed the 50 percent mark, progress that has brought cheers from project support.

According to leaders at the Metropolitan Washington Airports Authority, the entity that owns and manages the project, and Dulles Transit Partners, the design-build contractor, construction continues at a rapid pace all along the 11.7-mile alignment from East Falls Church to Reston.

"The superstructure for the elevated rail has progressed significantly and will be completed in the early part of next year," according to Kevin Volbrecht, the project's Deputy Director.

Volbrecht, who oversees construction, says the project is just where he thought it would be at this point.

"Stations actually look like stations," he said. "The first escalators have been installed at the Wiehle Avenue Station."

Construction of the inbound and outbound tunnels is nearly



IN THE MEDIUM OF ROUTE 7: This photo shows the Sept. 29 view rising out of the Tysons Central 7 Metrorail Station looking west along the Tysons West Guideway. Photo by Stephen Barna, Dulles Corridor Metrorail Project

complete. This was one of the most challenging parts of the project, according to project officials.

These twin, parallel tunnels run beneath the highest natural point in Fairfax County, the intersection of Routes 7 and 123 in the heart of Tysons Corner, connecting the future Tysons Central 123 (on Route 123 between Tysons Corner Center and Tysons Galleria) and Tysons Central 7 (in the median of Route 7 in front of SAIC) stations.

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ESCALATOR ARRIVES: This escalator was delivered to the Wiehle Avenue Metrorail Station in October and has been installed. Photo by Shea Daugherty, Dulles Transit Partners



ABOVE ROUTE 7: Crews work to build bridges in the median of Route 7, using a large yellow and blue horizontal crane to lift concrete segments into place. Photo by Chuck Samuelson, Dulles Corridor Metrorail Project

For general information on the Dulles Corridor Metrorail Project, please visit our website at www.dullesmetro.com or call (703) 572-0506.

The NATM tunnels, so named because they were built using the New Austrian Tunneling Method, are completed, according to Volbrecht. Portions of the tunnel that will connect to the Tysons Central 7 Station are being completed with a cut-and-cover process.

Tunnel crews will turn the area over to a subcontractor to install the tracks by mid-December, according to the contractor.



AT WIEHLE AVENUE: Looking east from the west end of the station platform, the concrete cladding of the steel framing for the mezzanine is complete. Photo by Stephen Barna, Dulles Corridor Metrorail Project

The most visible parts of the project continue to be the superstructure bridges, which are being constructed using two large, blue-and-yellow horizontal cranes, commonly called trusses.

The long stretch of aerial guideway that runs from the median of the Dulles Connector Road near Old Chain Bridge Road to the east side of the Capital Beltway has been under construction since April 2010. One of the two trusses completed the portion over the main entrance to Capital One in October, and continues to move southwestward, from pier to pier, toward the Capital Beltway.

Aerial crews are expected to complete this guideway (bridge) by early 2012. When that happens, the truss will be disassembled and then reassembled in the median of the Dulles



SUPPORT SYSTEMS: Platform walls and deck and the train control room and walls of an ancillary room are complete along a section of trackway. Photo also shows installation of towers for a fan room. Photo by Stephen Barna, Dulles Corridor Metrorail Project

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The second truss in commission is currently building the guideway in the median of Route 7. It will connect the Tysons Central 7 Station with the Tysons West Station, which is located between Spring Hill Road and Westwood Center Drive/Tyco Road. The truss crossed over the Westpark Drive/Gosnell Road intersection in late September.

A third truss completed its work across the beltway and traditional cranes are being used to finish up that work.

“We’re using overhead trusses because they are the most efficient method,” said Shawn MacCormack, Dulles Transit Partners’ Task Manager for aerial structures.

“They are ideal in dense urban environments like Tysons Corner because they use a ‘top-down’ construction method and have little impact to the traveling public,” MacCormack said.

Significant progress is being reported at all five stations each month.

Other progress includes:

- The Tysons Central 7 Station is advancing. It is perhaps the most logistically complex of the five stations, because it is partially underground and partially above ground. It requires a considerably larger amount of excavation, concrete and man-hours because of this design, the contractor said.
- According to Volbrecht, track work is underway, two of the 11 pre-fabricated traction power substations, which will provide continuous power flow to the new line have been delivered and work on train control and communications room all along the alignment is well underway.

Working with the Washington Metropolitan Area Transit Authority (Metro), the Dulles construction team also successfully completed a lot of critical work at the tie-in with the Orange Line along the Interstate 66 median over the Columbus Day weekend in October.

However, more work again requiring shutdowns of Orange Line service between East Falls Church and West Falls Church stations will be required so crews could work safely. The Columbus Day weekend outage was the thirteenth of 16 planned outages during construction. Other outages will be needed for testing after construction is completed. The next planned outage is scheduled to occur over the Martin Luther King, Jr. holiday in January 2012.

Construction is far from over. Volbrecht simply said, “We are entering into another phase of construction now that so much has been done on the concrete and superstructure.”



POWER FOR RAIL: Pictured is Traction Power Substation 5 at the Tysons Central 7 Metrorail Station. It is being built below the station platform deck. Retaining walls on both sides are in various stages of completion in preparation for structural steel framing. Photo by Stephen Barna, Dulles Corridor Metrorail Project