

Dulles Development

D2 program components set to come on line later this decade



Washington Dulles International Airport's D2 program is nearing completion after seven years of construction.

Dulles International Airport (IAD) has been under construction since the early 1990s, with its current Dulles Development Program – more affectionately known as D2 – dating back to 2000.

Approaching the seven-year itch, Metropolitan Washington Airports Authority President and CEO Jim Bennett said D2 building and development is nearing completion.

“We are moving into the last part of a long program and projects are beginning to conclude and phase in,” Bennett said of the important milestone to bring program components on line. “Over the next couple of years, our customers are going to see some tremendous improvements in the facilities and services we can make available to them.”

Fourth runway

The D2 program is continuing to advance on schedule and within its established budget.

The next component of the Dulles program that will become operational will do so toward the third quarter of 2008, and that will be the fourth runway and the associated improvements with the Runway 1L-19C complex.

Lane Construction was successful in winning both the \$42 million Excavation and Grading package and the \$142 million paving and NAVAIDS package, commencing work in May 2006 and August 2006 respectively.

“This project is unique in that the NAVAIDS package is

usually installed under a separate contract by the Federal Aviation Administration. But it is included in this contract and being managed by the Airports Authority with coordination with the FAA,” said Lane Construction District Manager Farid K. Hamad.

Carter and Burgess served as the runway design contractor on the project that consists of 9,400 linear feet of runway with a parallel taxiway complex and a deicing pad.

APM

In the third quarter of 2009, MWAA anticipates its AeroTrain will go into service utilizing all of the stations and facilities related to that project phase.

“The AeroTrain-related construction is probably the most visible of the construction that folks have seen as they used the airport over these many years,” Bennett said.

The AeroTrain will set MWAA on a course to fulfill the ultimate master plan for Dulles.

“What we are introducing in 2009 is only the first piece of the AeroTrain,” Bennett said. “When the AeroTrain opens in 2009, it will be servicing basically two midfield concourses and the Main Terminal building. But the AeroTrain is designed to grow with the airport as we implement our master plan and ultimately add two additional midfield concourses as well as a new south landside terminal. So it is really designed to provide the conveyance over the years as the airport grows to meet demand.”

Washington Dulles

Bennett said the underground train at IAD is unique since it will have two train stations at each midfield concourse.

“Unlike Atlanta and Denver – which both have one train station in the center of each concourse – our train system at Dulles will have two stations at the quarter points of every concourse,” Bennett explained. “So regardless of the gate you fly into on those midfield concourses, your walking distance is minimized because of the two stations.”

Bennett said Dulles concourses are very long at 4,000 feet.

“If you arrive at the end gate of a concourse, you need only walk 1,000 feet to the nearest AeroTrain station because it is at a quarter point, instead of walking 2,000 feet to the center. Alternatively, if your airplane came to the very middle of the concourse, you can turn either right or left and find a train station within 1,000 feet.”

Bennett believes this setup will improve customer service and increase capacity on the dual-track train system.



IAD's fourth runway will be called "1L-19R" when complete, with the existing "1L-19R" renamed as "1C-19C." Upon completion, Dulles will have three parallel runways designated as left, center, and right.

2009 Debut

Lea+Elliott Associate Principal Russell Green said 29 train cars are in the first order of the manufacturing cycle, five of which are in transit to IAD from Japan-based manufacturer Sumitomo Corporation of America. The trains themselves are in the final phases of production, and most of the cars are scheduled to be delivered to MWA within the year.

The maintenance facility and all of the tunneling work

The first two AeroTrain cars roll out on to the factory test track in Mihara, Japan in September 2006. Five train cars currently en route to IAD from Japan-based manufacturer Sumitomo Corporation of America





Major excavation efforts enabled ample space for AeroTrain stations.

for the train system is complete, and Sumitomo and its subcontractors are on site actively installing the guideways, power systems, train control systems and all related infrastructure that is necessary to operate and maintain the train system.

The four first phase stations for the trains are under construction under the ground. Bennett said some stations are further along than others with finish work already going in on walls, ceilings and escalators.

Mobile lounges

Once the AeroTrain comes on line, it will become the primary passenger conveyance system replacing the existing mobile lounges.

However, the mobile lounge will continue to be a fabric of the Dulles operation.

Mobile lounges will become the secondary and tertiary passenger conveyance system for the daily flights that operate off of remote hardstands and international arrivals.

"Passengers arriving internationally still have to be secured upon arrival and transported in a secure manner to the customs hall for immigration formalities," Bennett said. "These passengers will continue to use mobile lounges because it will give us the ability to secure them as we transport them for the aircraft to the immigration facilities."

In recent months, MWAA has instituted a new audio system

on the mobile lounges as a customer service to provide more information to the customer.

B Concourse extension

A more immediate piece of the D2 program scheduled to complete at the end of this calendar year is a 12-gate extension of the B Concourse.

"We may transition into that at the first of next year as it sometimes is not wise to start operating out of a new facility during the Christmas and New Year holiday travel period," Bennett said. "Although the transition may run into next year, for all practicable purposes it will be finished by the end of this calendar year."

Bennett said this is the third expansion of Terminal B, which will basically be built out to its maximum footprint upon completion of the 12-gate addendum.

Rail intermodal capabilities

In addition to its airport construction program, MWAA is taking the lead on constructing an extension of the Metro mass transit rail system to IAD.

"We are working with the Commonwealth of Virginia, Fairfax County, Loudoun County and the Washington Metropolitan Area Transit Authority to make that a reality," Bennett said. "We have already negotiated a tentative agreement with a contractor to begin construction on the first phase of the project, and it is our goal to have the Metro system extended all the way out to the airport and beyond by 2015.

The first phase of the project would begin operation in the 2013 timeframe. ■