

### STRATEGIC PLANNING AND DEVELOPMENT COMMITTEE

# **Aviation Capital Construction Program Update**2013 Active Construction Projects

September 2013



### **Discussion Agenda**

- Program Safety Performance
- 2013 Construction Projects Update

**DCA** 

IAD



### Capital Construction Program Safety Performance

#### 2013 TO DATE\*

Labor Hours Worked = 353,298

Recordable Incident Rate (RIR) = 1.70

National Avg. RIR for Industry = 3.5

Lost Time Incident Rate (LTIR) = 1.13

National Average LTIR = 2.0

<sup>\*</sup> Estimated through August 12, 2013

# ME

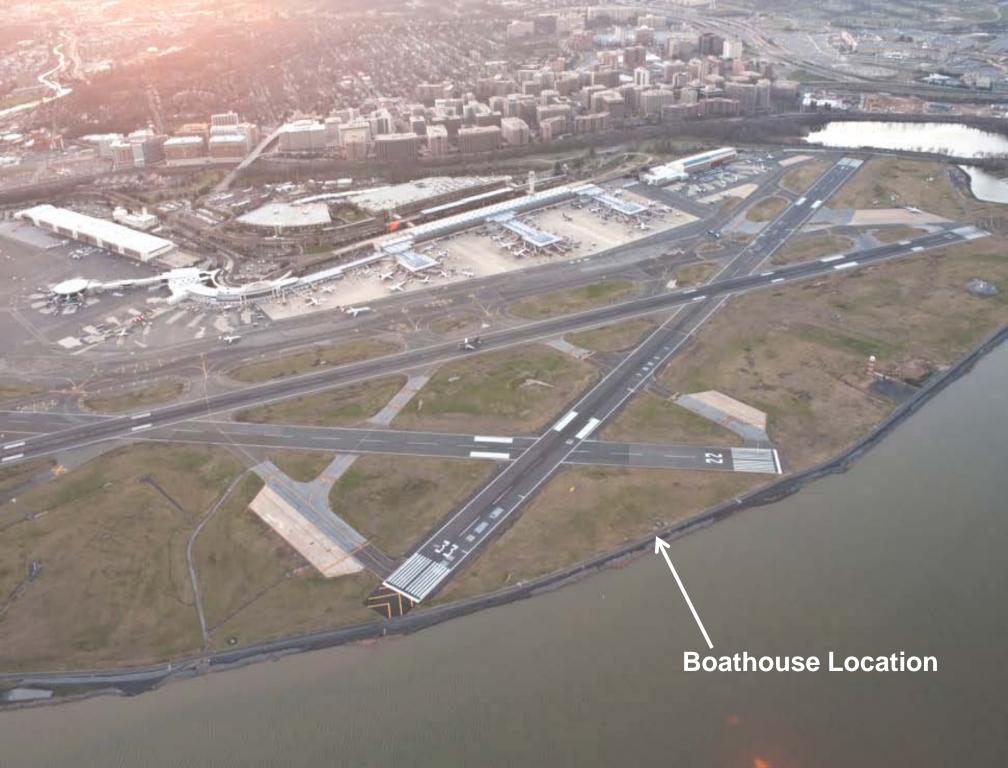
### **DCA**

**Active Construction Projects** 



### Capital Construction Program River Rescue Boathouse

- Scope is to construct a new river rescue support facility for rescue boat storage along with associated site work development.
- Project was completed August 11, 2013.
- Project turned over to Airports Authority River Rescue Squad mid-August.









### Terminal A Rehabilitation Outbound Baggage Facility

- Scope consists of designing and erecting a pre-engineered building and installing new baggage conveyors and devices to support outbound baggage requirements at Terminal A.
- The Outbound Baggage Building is complete.
- Baggage handling system installation continues on the bag bridge conveyor.
- Completion is forecast for October 2013.







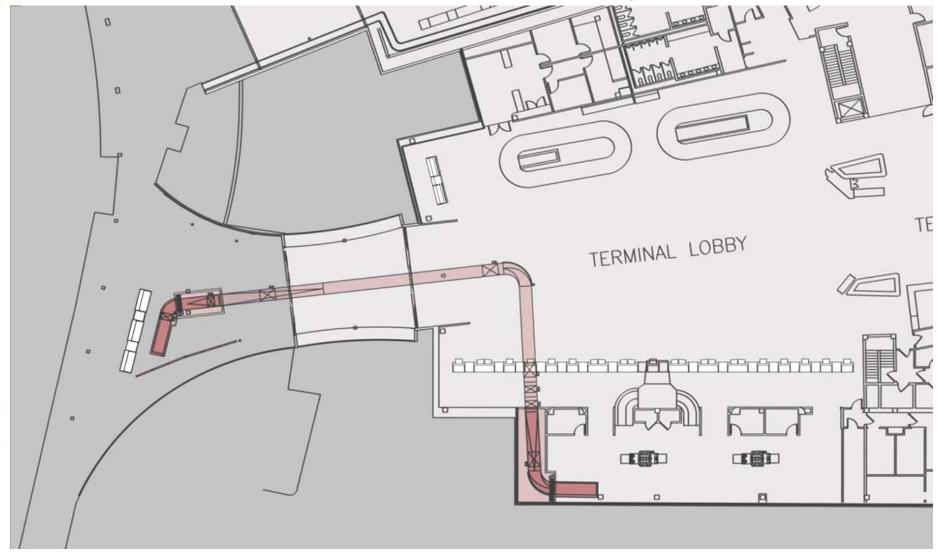


### Terminal A Rehabilitation Curbside Check-in System

- Scope consists of installing a new curbside baggage conveyance system which integrates into the TSA screening area behind the existing ticket counters at Terminal A. TSA inspected checked bags are then inserted into new Outbound Baggage System.
- TSA and ticket counter relocation is complete and construction on the curbside baggage system is underway.
- Completion is forecast for September 2013.



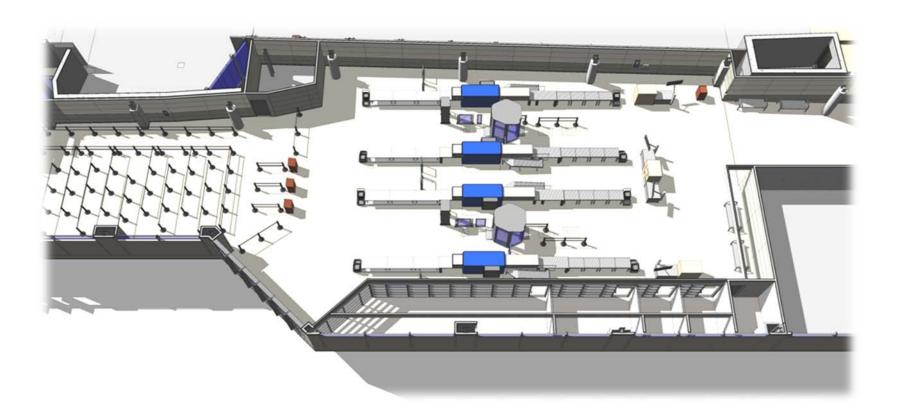
## Terminal A Rehabilitation Curbside Check-in System

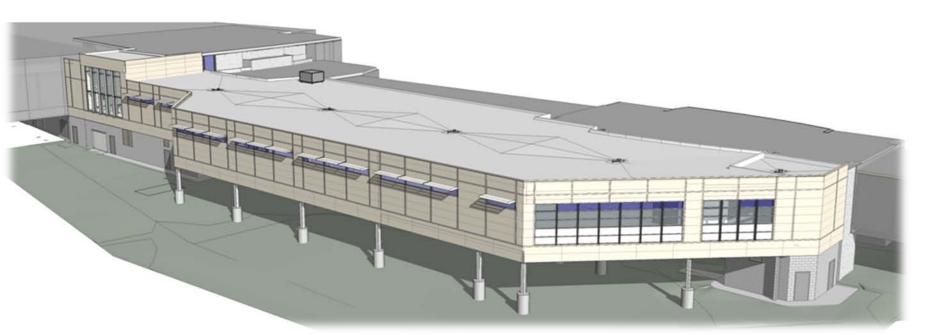




# Terminal A Rehabilitation Security Screening Checkpoint Expansion

- Scope consists of constructing a new building addition to the Terminal A gate corridor to accommodate a new, larger TSA passenger security screening checkpoint.
- Contract includes additional concession space and improved egress for arriving passengers.
- Contractor has completed preparatory work and is proceeding with structural steel erection.
- Completion is forecast for January 2014.









### Terminal A Rehabilitation Lobby Upgrades / Finishes

- Scope includes upgrading the main lobby wall and replacing the lobby floor, lighting improvements and new north glass window walls.
- Construction continues on the skylight modifications and installation of new lobby wall coverings.
- Replacement of the lobby flooring and installation of glass north walls are approximately 75 percent complete.
- Completion is forecast for September 2013.



### Terminal A Rehabilitation Lobby Upgrades / Finishes



**Existing Terminal A Lobby** 



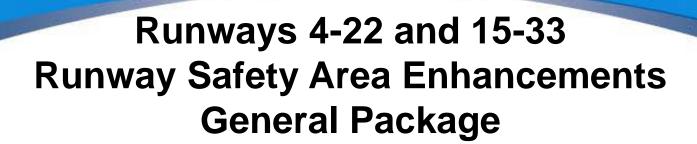
Terminal A Lobby with Improvements





# Runways 4-22 and 15-33 Runway Safety Area Improvements Earthwork Package

- Project scope is the construction of an earthwork embankment in the Potomac River to support the construction of runway safety areas for Runway 15-33.
- The contractor has mobilized and installed environmental protection to control turbidity in the river.
- Construction of the rock embankment has begun.
- Completion is forecast for December 2014.



- Project scope is the construction of Runway Safety Areas for Runways 15-33 and 4-22 to ensure compliance with FAA standards.
- Project includes three Engineered Material Arresting Systems (EMAS), runway and taxiway modifications, Navaids, and airfield signage systems.
- EMAS procurement in place.
- The contractor is mobilized and has begun preparatory work involving drainage improvements and utility work.
- Completion is forecast for January 2016.



### Runway 15-33 Runway Safety Area Enhancements

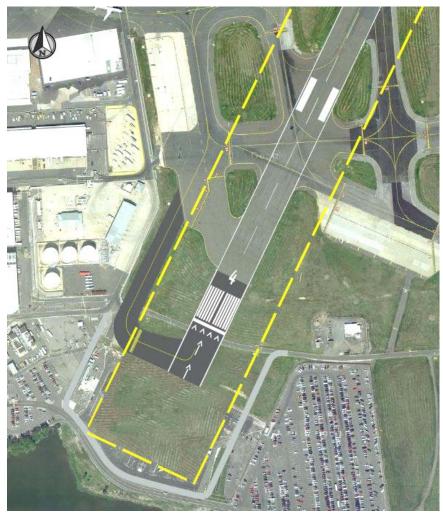






### Runway 4-22 Runway Safety Area Enhancements







### Power Distribution Upgrades North Substation Gear Replacement

- Project scope replaces 35kV, 5kV, and 480 Volt switchgear and electrical equipment at the North Substation to improve capacity and reliability of electrical power.
- The contractor is processing switchgear and equipment submittals in advance of fabrication.
- Completion is forecast for February 2014.



### Power Distribution Upgrades North Substation Gear Replacement





### Power Distribution Upgrades Combined Electrical System Upgrades

- Project scope upgrades transformers, switchgear, and existing stand-by generators distribution / system improvements at multiple campus locations to improve capacity and reliability.
- The contractor is processing technical and administrative submittals.
- Completion is forecast for April 2014.



# Power Distribution Upgrades Combined Electrical System Upgrades



Replaces three obsolete distribution transformers with new transformers and corrective circuitry

Terminal B/C Generator Control Upgrades



# ME

### **IAD**

**Active Construction Projects** 



### EDS In-line Baggage Screening East & West Bag Basements

- Scope includes implementation of a baggage handling and TSA checked baggage inspection systems in the existing Main Terminal East and West baggage basements to provide security screening enhancement of checked bags.
- Excavation for the new East Basement addition and expansion is complete.
- East Bag Building concrete construction is approximately 75 percent complete.
- Baggage handling conveyors installation and rerouting is ongoing and approximately 43 percent complete.
- Completion is forecast for July 2015.



# Main Terminal Commissioning Phase 2 IAB Mechanical Systems Renovation

- Scope consists of replacement and refurbishment of the original Heating, Ventilation and Air Conditioning (HVAC) systems of the original International Arrivals Building.
- The long-lead HVAC units have been fabricated and delivered to the site.
- The contractor has completed mechanical equipment pads and is beginning demolition of existing air-handling units.
- Completion is forecast for late November 2013.





### Concourse C/D Rehabilitation Restrooms and Switchbacks

- Scope provides interior improvements for Concourse C/D restrooms and gate walkway switchbacks. Improvements include new tile, lighting, fixtures and code upgrades.
- Contractor has completed 9 of the 11 restroom improvements and all the gate walkway switchbacks.
- Completion is forecast for December 2013.





### Concourse C/D Rehabilitation Concourse C/D Roof Rehabilitation

- Scope rehabilitates the 375,000 square foot Concourse C/D roof. Work includes complete membrane replacement, flashing, and replacement of deteriorated insulation panels.
- Contractor is 10 percent complete.
- Completion is forecast for October 2013.



## Concourse C/D Rehabilitation Concourse C/D Roof Rehabilitation





#### Cargo Buildings 1- 4 Rehabilitation Life Safety Upgrades

- Scope includes upgrade of sprinkler system, emergency lighting, exit signs, smoke / heat detectors, and fire alarm systems.
- Contractor is 75 percent complete. Fire alarm and emergency lighting in Cargo 3 and 4 are nearly complete. Fire sprinkler work in Cargo 4 is underway.
- Completion is expected this month.



- Work for this project is being performed in coordination with United Airlines' construction of maintenance hangar at Dulles International.
- The project scope consists of widening Taxilane Z1 to Group V
   Aircraft standards and extending utilities to the United Hangar site.
- The contractor has completed the majority of the utility work and the taxilane earthwork / final grading is complete. Pavement operations are scheduled for completion in early September.
- Completion is expected this month.





- Airfield Pavement Panel Replacement is the on-going program to maintain overall airfield pavement.
- This project scope consists of replacing deteriorated pavement on Taxiway Y at Taxiway B, to include modifications to utilities, and lighting / signage infrastructure.
- The contractor has completed the majority of the preparatory utility and subgrade work and began paving in mid-August.
- Completion is expected this month.





## High Temperature Hot Water Generator Replacement

- Project scope replaces three High Temperature Hot Water Generators (HTHW) with two new high efficiency Generators.
- The contractor is mobilized and completing preparatory work in the Utility Building in advance of installing the newly delivered generators.
- Start-up and testing of the new generators is scheduled for early December 2013.
- Completion is forecast for February 2014.





### Comprehensive Electrical Utility Rehabilitation Underground Ductbank and Electrical Feeder

- Project scope replaces two underground electrical ductbanks and installs two new 15Kv electrical feeders.
- The contractor is mobilized and has completed 20 percent of the ductbank and feeder construction.
- Completion is forecast for December 2013.

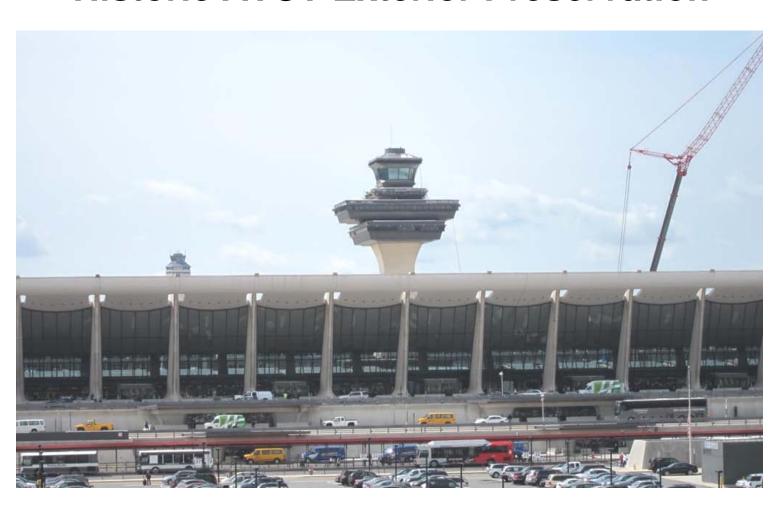




#### **Historic ATCT Exterior Preservation**

- Project scope rehabilitates and preserves the exterior of the historic air traffic control tower. Work includes rehabilitating the metal cladding and standing-seam roof, new widow gaskets, relocating communication and security equipment, concrete cleaning and restoration.
- The contractor is in the administration and submittal phase and will begin installing scaffolding this month.
- Completion is forecast for July 2014.

#### **Historic ATCT Exterior Preservation**



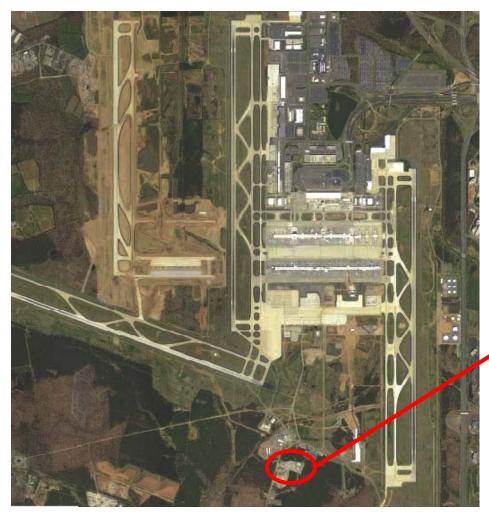


### Maintenance Equipment Storage Building Snow Equipment Storage Facility

- Project scope constructs a new 86,000 square foot snow equipment storage facility, associated paving and site work to stage and store snow removal equipment.
- The contractor is mobilized and performing site work.
- The pre-engineered metal building is approved and in fabrication.
- Completion is forecast for November 2013.



# Snow Equipment Storage Facility Project Location











METROPOLITAN WASHINGTON AIRPORTS AUTHORITY