

# Dulles Corridor Metrorail Project – Phase 2 Quarterly Update

**Keith Couch**  
*Capital Rail Constructors*

**July 2014**



## Project Team



**Kiewit**



**Clark Construction**

**JV**

**Kiewit Infrastructures South**

**JV**

**Parsons**

**Subcontractor-Design**

**Dewberry**

**Subcontractor-Design**

**SOM**

**Subcontractor-Design**

**Mass Electric Construction**

**Subcontractor-  
Electrical/System**

**PARSONS**



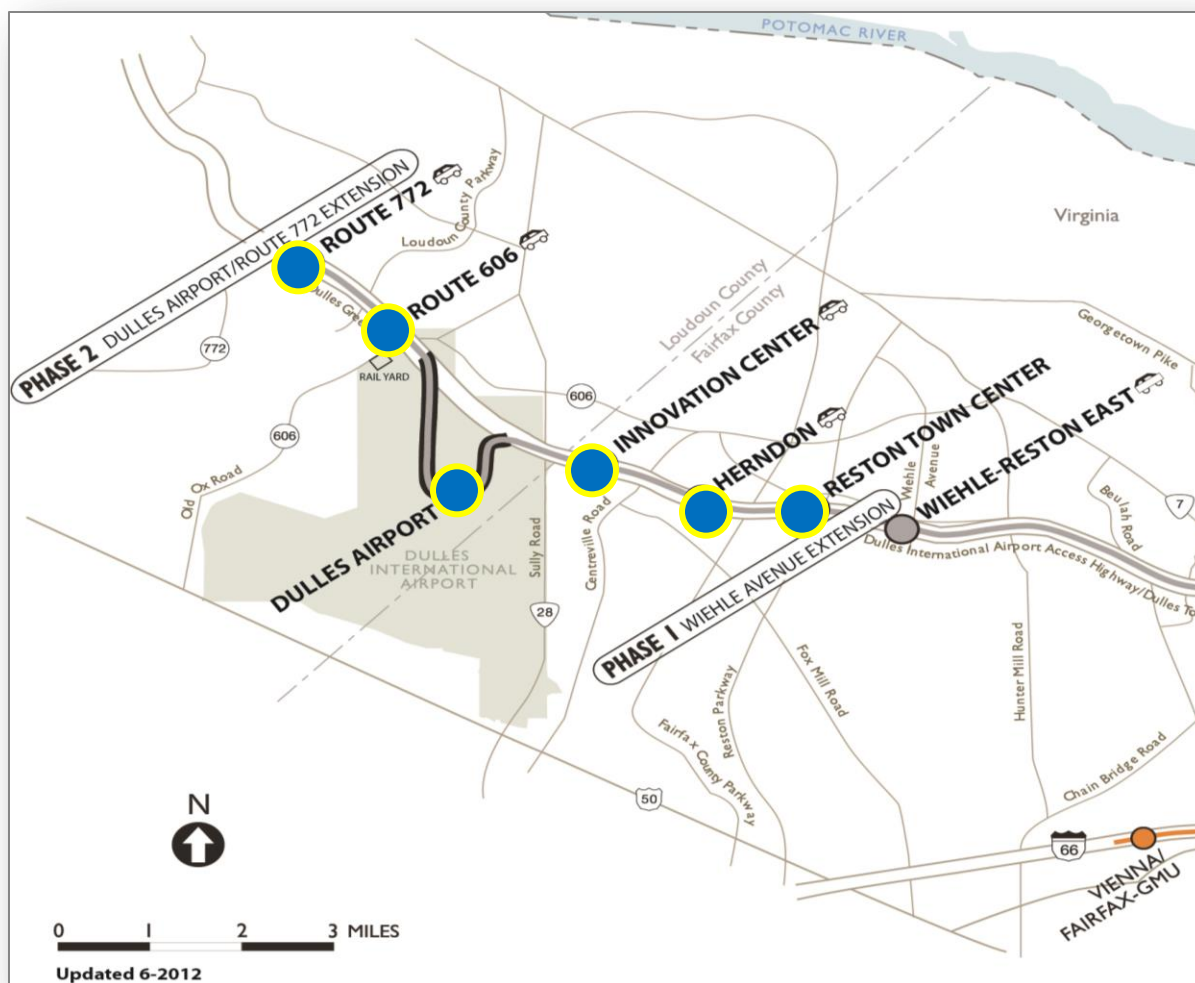
**Dewberry®**

**SOM**



## Phase 2, Package A– Overview

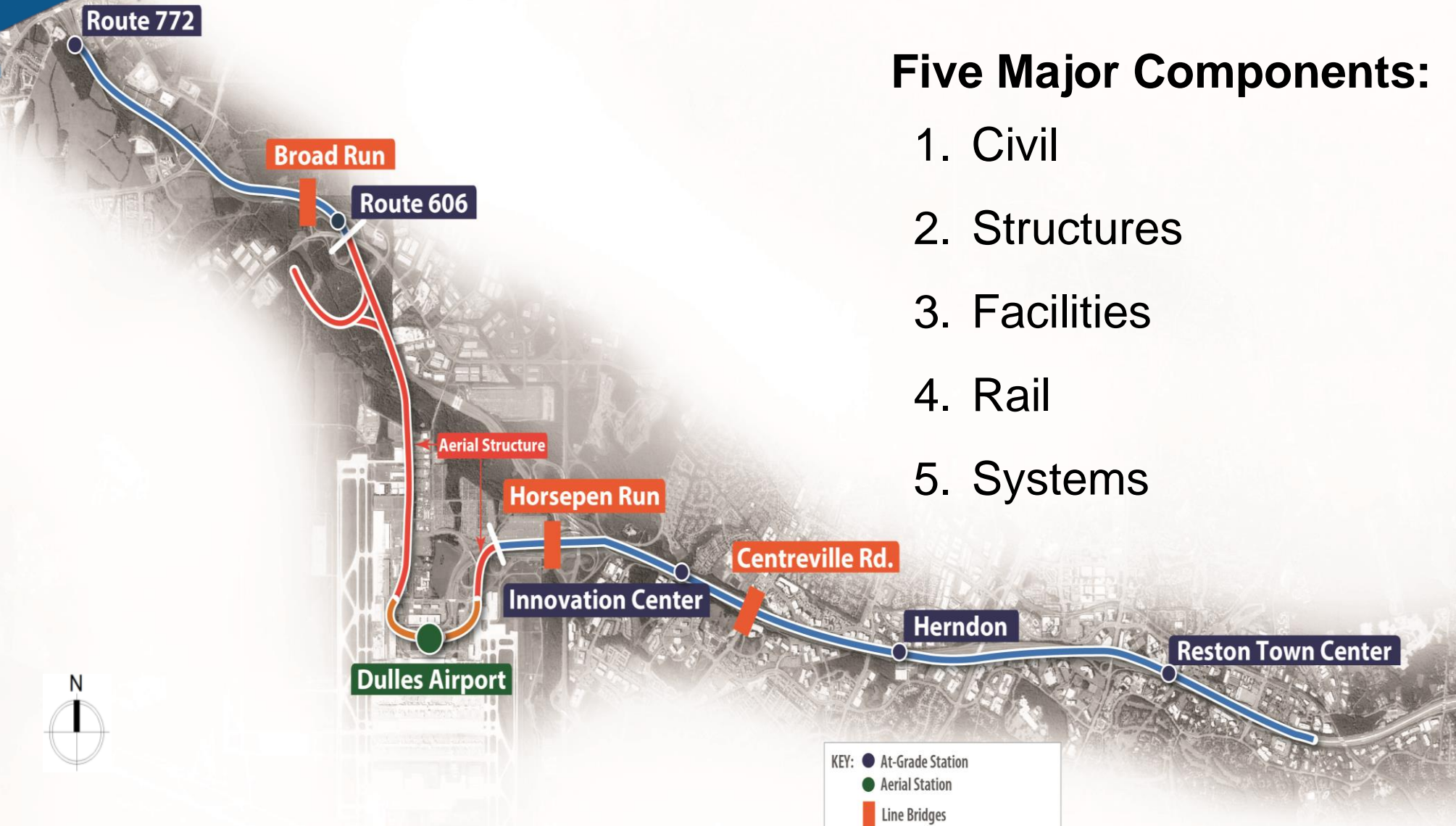
- **11.4 –mile extension** from Wiehle Avenue in Reston to Ashburn
- **6 stations:**
  - Reston Town Center
  - Herndon
  - Innovation Center
  - Dulles Airport
  - Route 606
  - Route 772/Ashburn
- **Value:** \$1,177,777,000
- **Contract Type:**
  - Lump Sum Design/Build
- **Schedule:** 5 years



# Scope of Work– Overview

## Five Major Components:

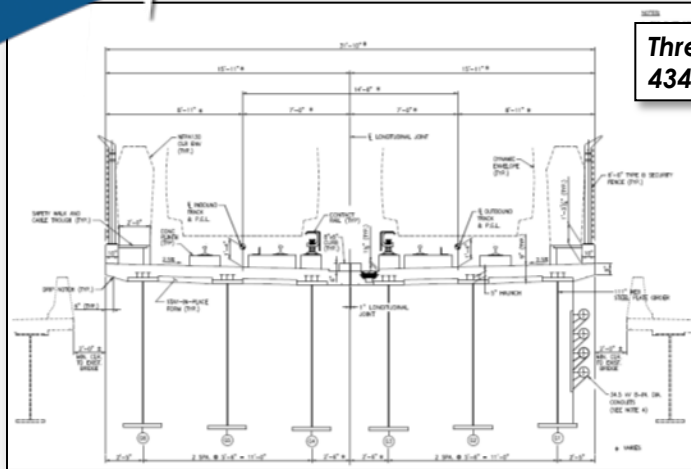
1. Civil
2. Structures
3. Facilities
4. Rail
5. Systems



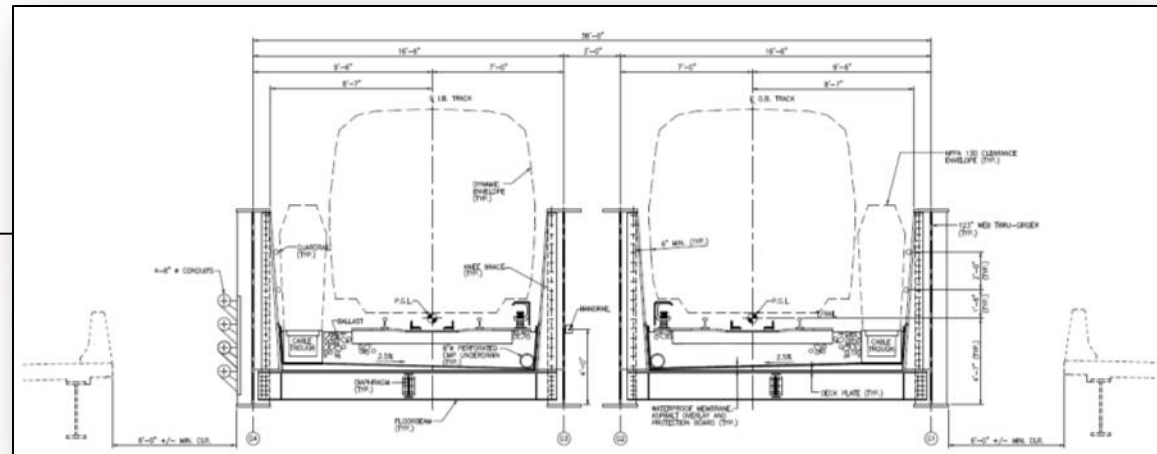




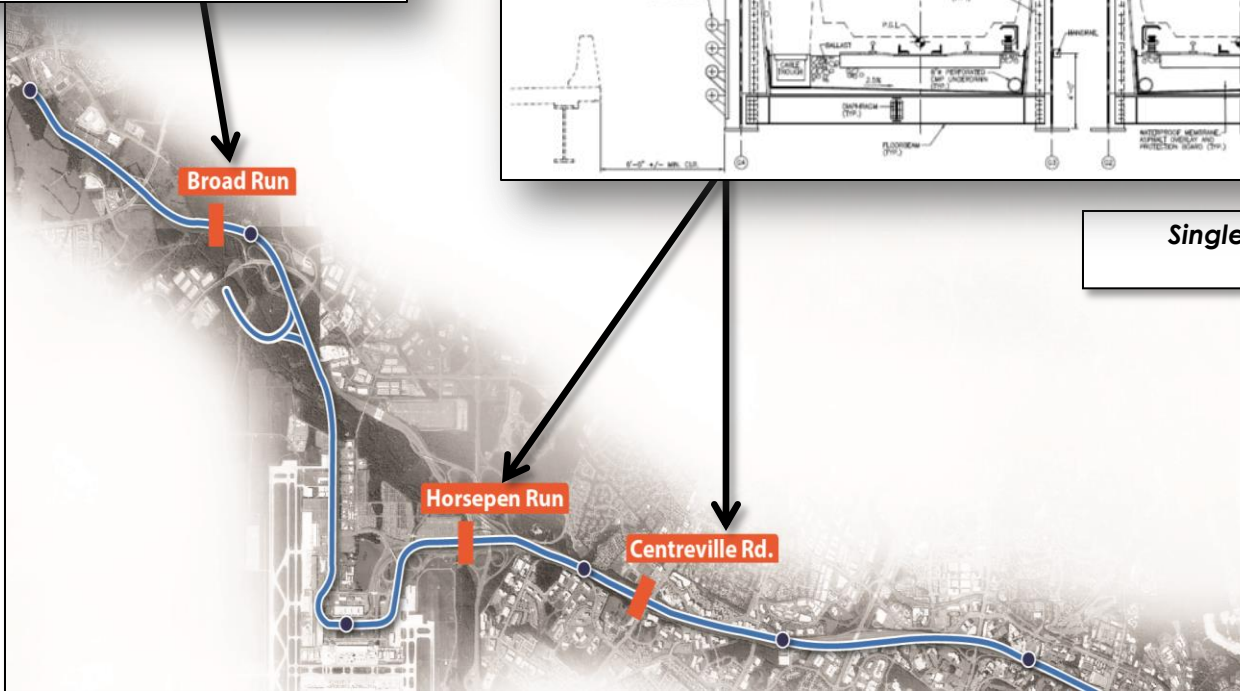
# Structures: Bridges



Three Span Plate Girder Bridge  
434'



Single Span Through Girder Bridge  
150'

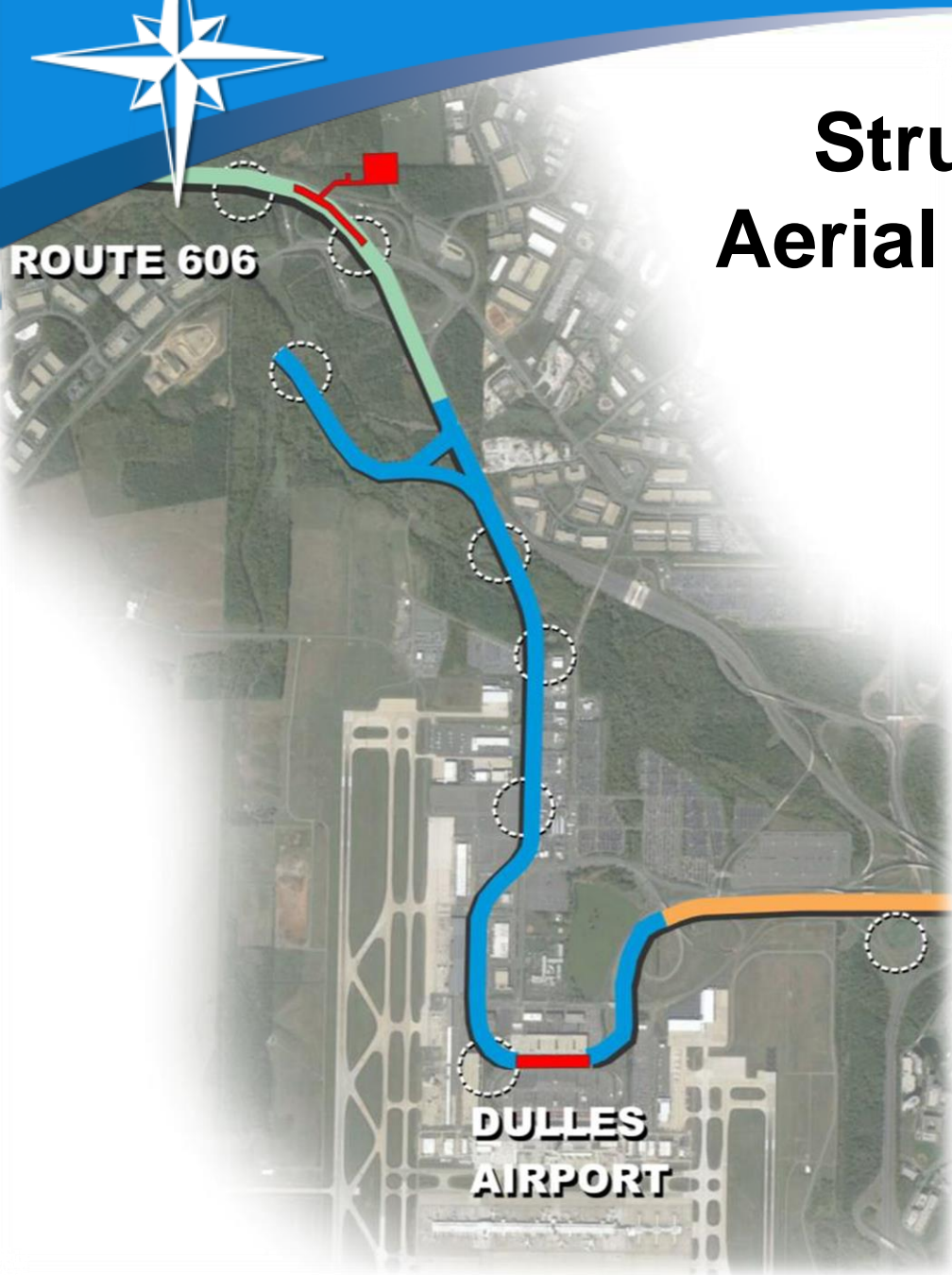




# Structures: Aerial Guideway

ROUTE 606

DULLES  
AIRPORT

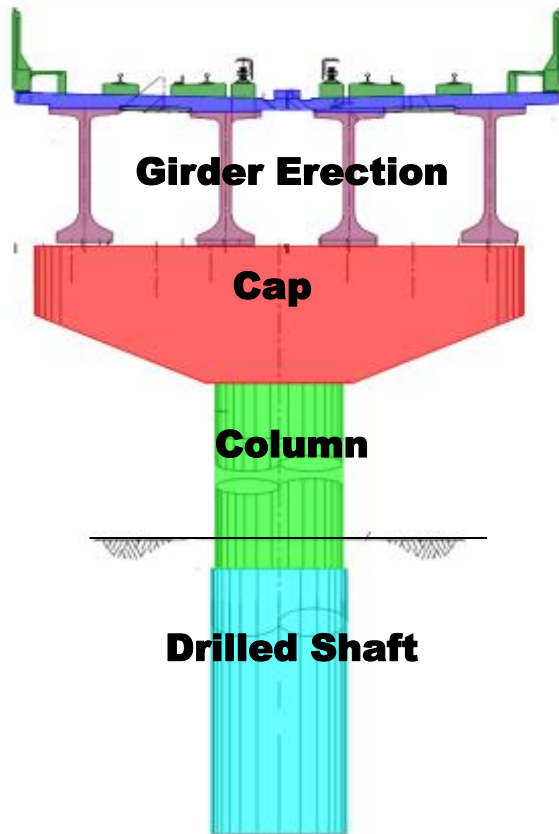






## Structures: Aerial Guideway

- Typical Span 110' – 150' / 305 Spans
- 119 Piers, 4 stages of construction





# Facilities

- 5 At-Grade Stations
- 1 Aerial Station at Dulles
- 9 Entrance Pavilions
- 9 Pedestrian Bridges





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# Facilities: Typical At-Grade Station







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## Facilities: Dulles Airport Station



# Rail

Direct Fixation Track



Ballasted Track



Direct Fixation Track

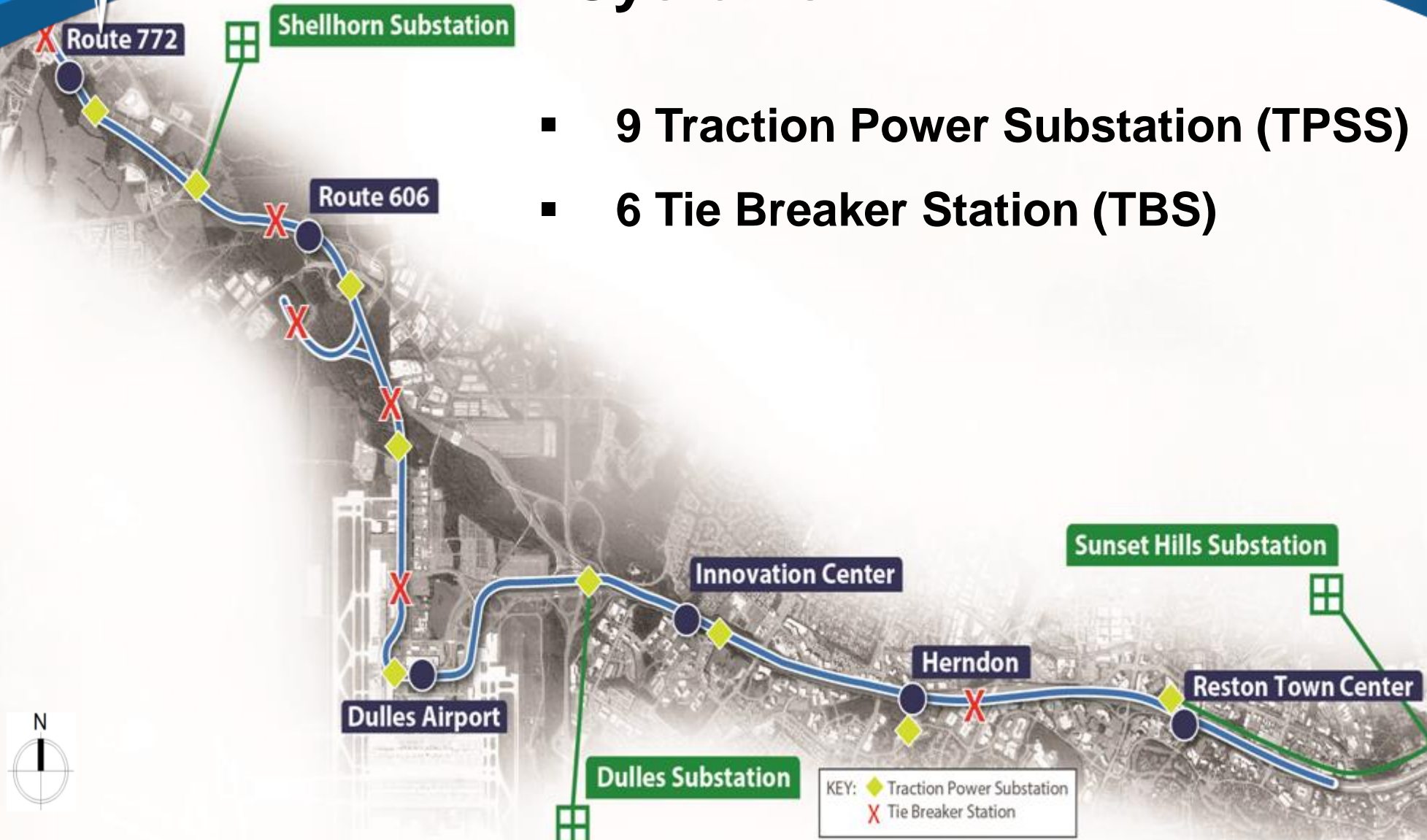
Ballasted Track





# Systems

- 9 Traction Power Substation (TPSS)
- 6 Tie Breaker Station (TBS)





# Safety

## Since Notice to Proceed (July 2013)

- Man-Hours: 500,000+
- No Environmental Enforcement Actions
- Lost Time Rate: 0.00 compared to industry rate of 1.4
- Recordable Incident Rate: 0.00 compared to industry rate of 3.7

## Current Program Focus:

- Work Zone Safety / Adjacent to Traffic
- Utility Relocation
- New Employees
- Lower Tier and Specialty Contractors
- Craft Involvement & Training



## Design-Build Status

### Design Status:

### 55% Complete

▪ Geotechnical Work	86% Complete
▪ Initial Survey Work	95% Complete
▪ Track Design	66% Complete
▪ Systems Design	43% Complete
▪ Civil Design	62% Complete
▪ Utilities Design	69% Complete
▪ Facilities Design (Stations)	40% Complete
▪ Wayside Design	55% Complete
▪ Structures Design (Aerial Guideway and 3 Bridges)	59% Complete
▪ Design Packages Issued	71
▪ Issued for Permit (IFP) Packages Issued	8
▪ Permits Received	4
▪ Issued for Construction (IFC) Packages Issued	4





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# Design-Build Status

Construction Status:  
Overall Project Status:

Starting Jun 2014  
10% Complete



# 12 Month Look Ahead Schedule

## **Dulles Segment:**

- **Aerial Structure**
  - Start Aerial Structure Drilled Shafts
  - Start Aerial Structure Column and Caps
  - Start Aerial Structure Girder Erection
  - Start Aerial Deck
- **Dulles Airport Station**
  - Start Dulles Station Excavation
  - Start Dulles Station Foundations
- **Utility Relocation**
- **GSE Demolition**
- **Tree Relocation**

# 12 Month Look Ahead Schedule

## East Segment:

- **Civil**

- Start Enabling Work (MOT and E&S)
- Start Jack and Bore
- Start Civil Work (earthmoving, drainage)

- **Stations**

- Start Innovation Station Foundations
- Start Herndon-Monroe Foundations
- Start Innovation Station Precast Erection

- **Bridges**

- Start Horsepen Run Bridge
- Start Centreville Road Bridge



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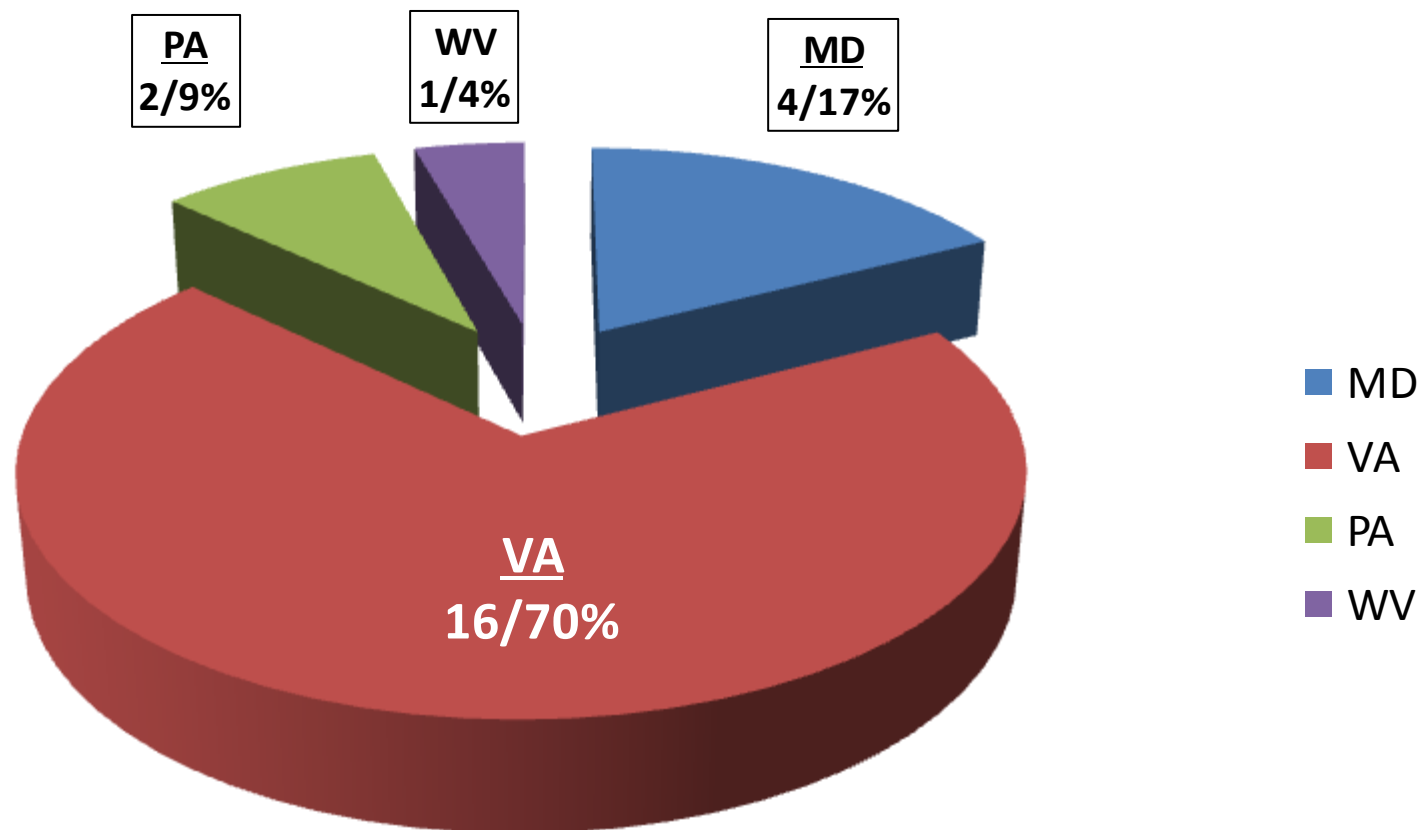
# Manpower

Professional Staff	273
Craft Labor – CRC and Subcontractors	23



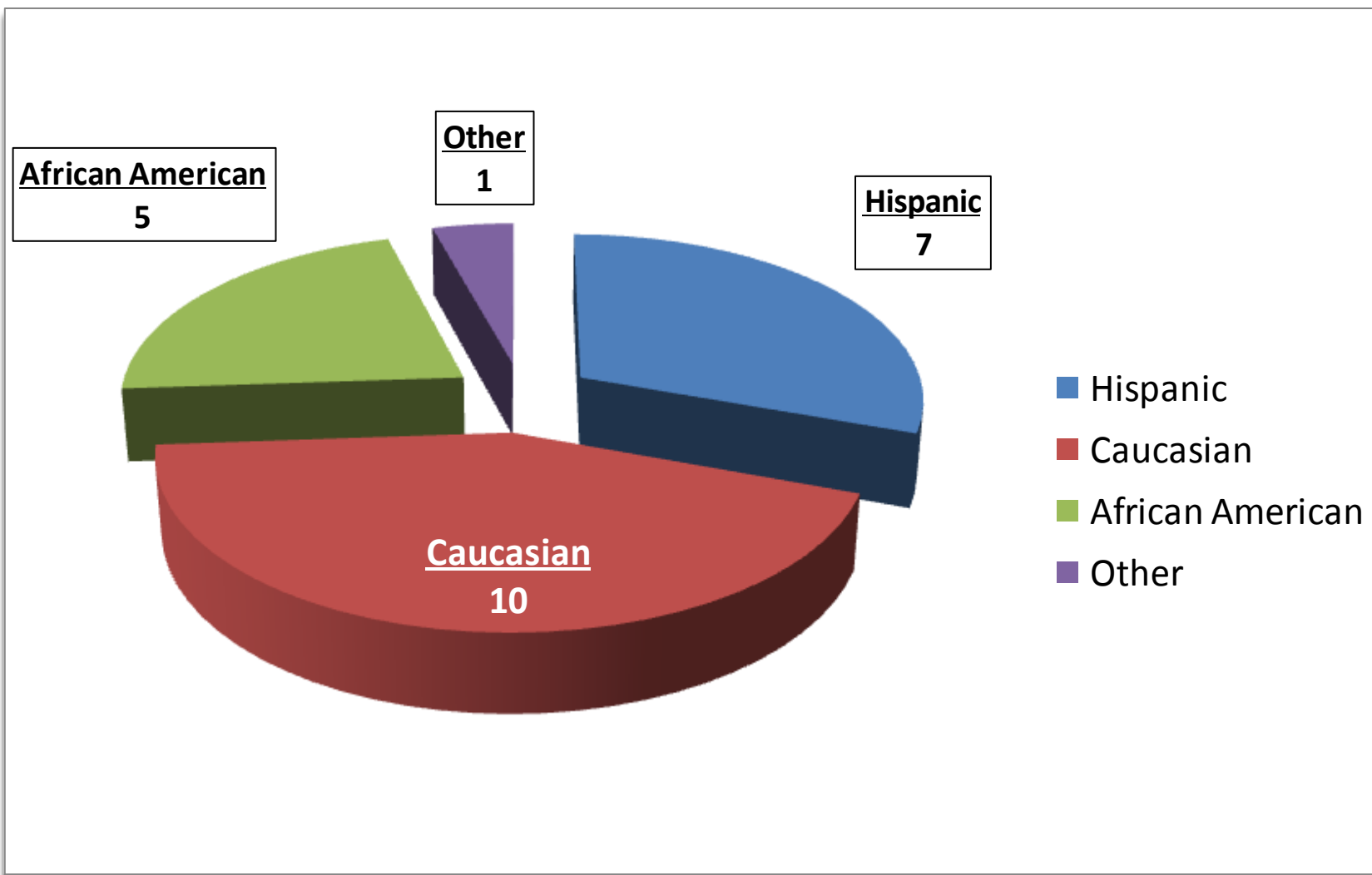


## Labor by State during May 2014



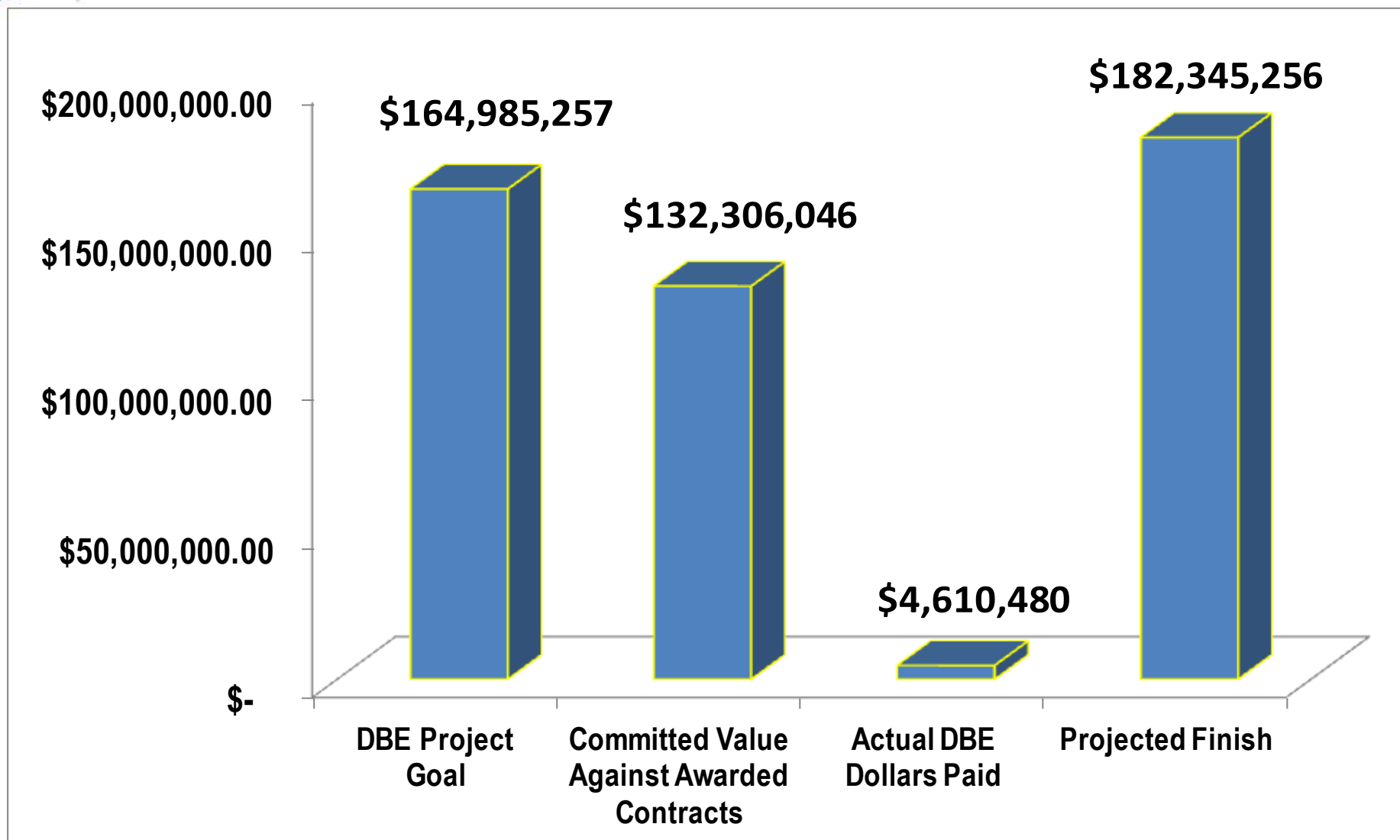


## Labor by Race/Ethnicity during May 2014





## DBE Goal Status as of May 2014



# **Office of Federal Contract Compliance Programs (OFCCP) Status as of May 2014**

## **Outreach**

- Attended the Herndon Festival in June
- Events for the year being scheduled
- Have engaged "Helmets to Hardhats" in attempt to partner.

## **Centralized Employment Assistance**

- Website under development to assist companies identify job seekers and vice versa. (Does not replace any company's normal hiring procedures.)
- Subcontractors will be required to utilize this tool as part of their good faith efforts.
- Walk-in Capital Rail Constructors (CRC) Employment Trailer at AP-4

## **Training - For Employees and for Companies**

- 16-Step training for subcontractors starts in June.
- Subcontractors asked to identify their Department of Labor-approved apprenticeship program or submit proof of equivalency.

## **Established Steering Committee**

- Monthly Meeting with OFCCP Mid-Atlantic Regional Director and appropriate CRC staff.



## Geotechnical Testing, Survey, Utility Location

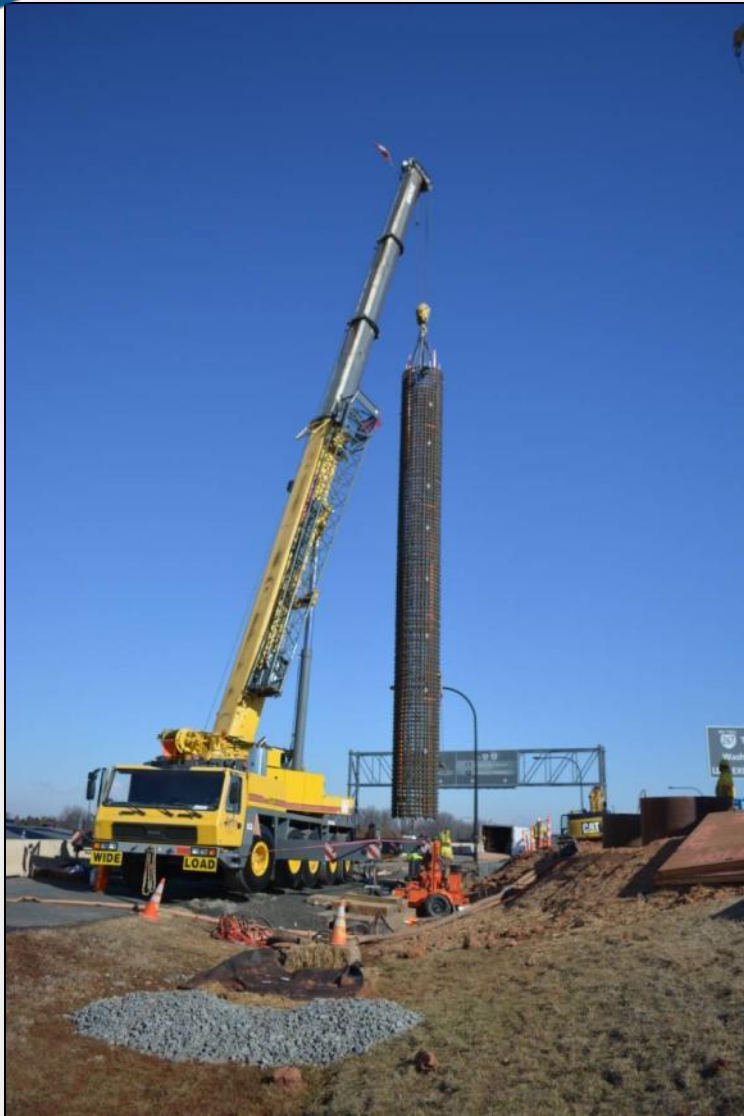






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## Test Shafts







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## Tree Removal – Autopilot Drive







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# Tree Relocation Saarinen Circle

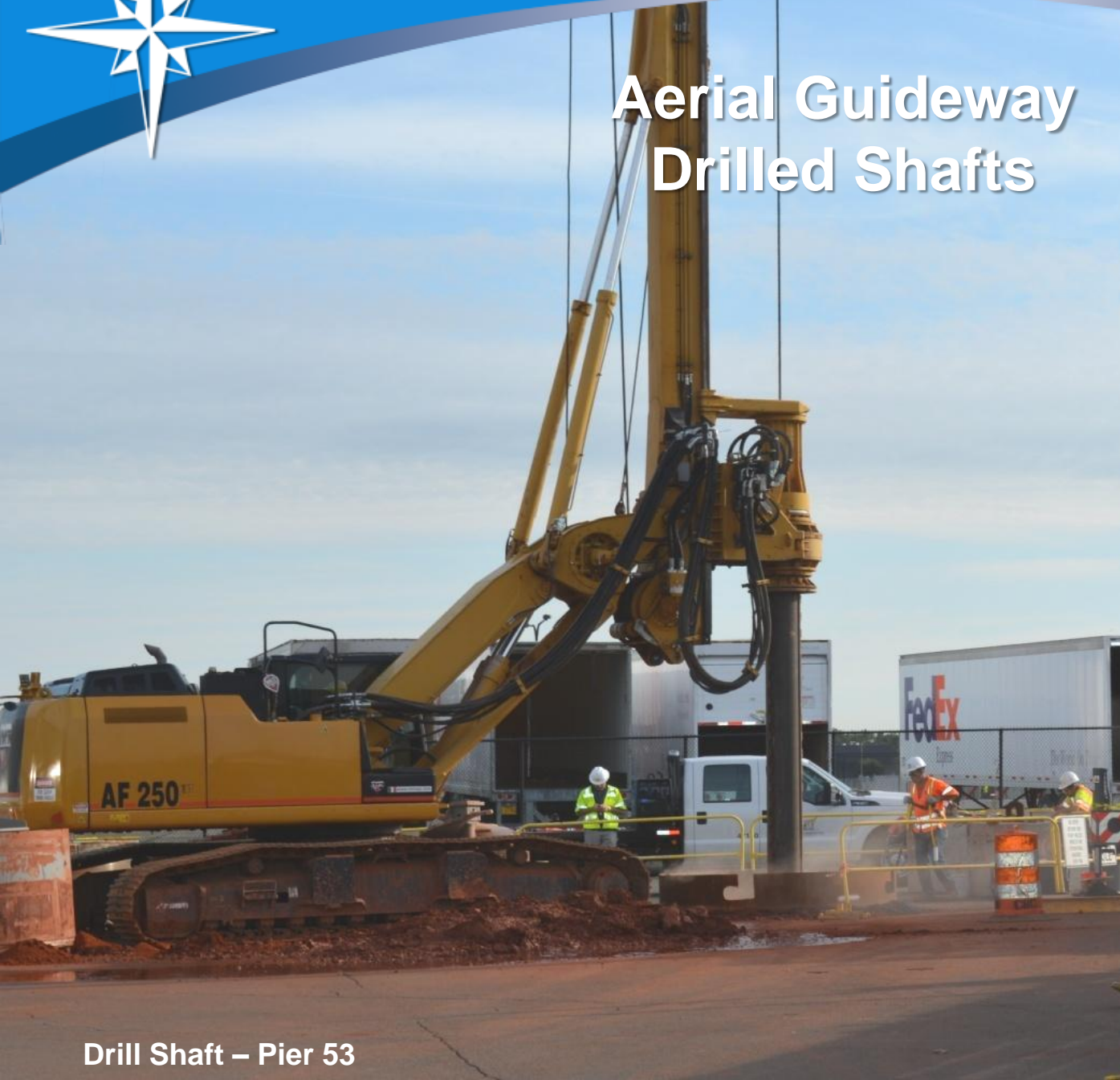






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## Aerial Guideway Drilled Shafts



Drill Shaft – Pier 53



Install Caisson



Pour Concrete





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# GSE Building Demolition Air Freight Lane





**Ronald Reagan Washington National Airport**



**Dulles Corridor Metrorail Project**



**Dulles Toll Road**



**Washington Dulles International Airport**



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