



#### **NORTHERN VIRGINIA PROGRAMS**

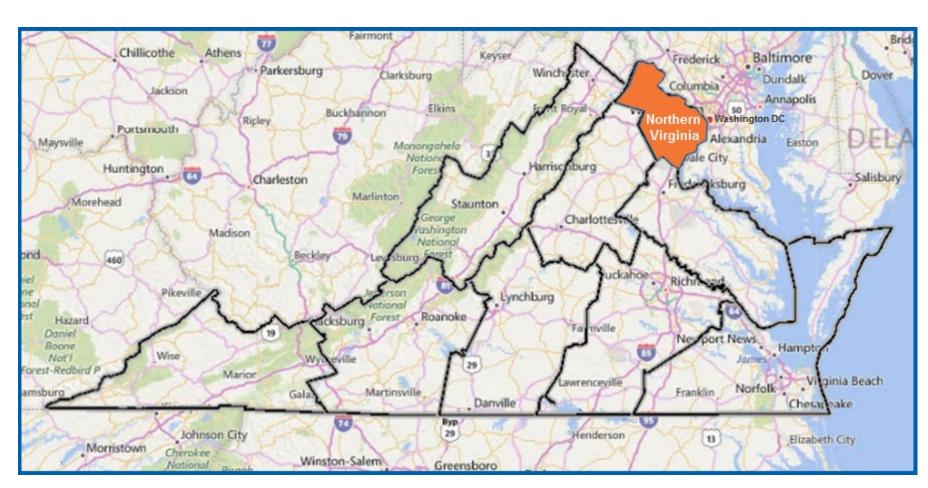
## **Agenda**

- Overview of Northern Virginia
- Program Highlights
  - Major Projects in Development
  - Major Projects under Construction
  - Mega Projects
  - O What's New?



## **Northern Virginia**

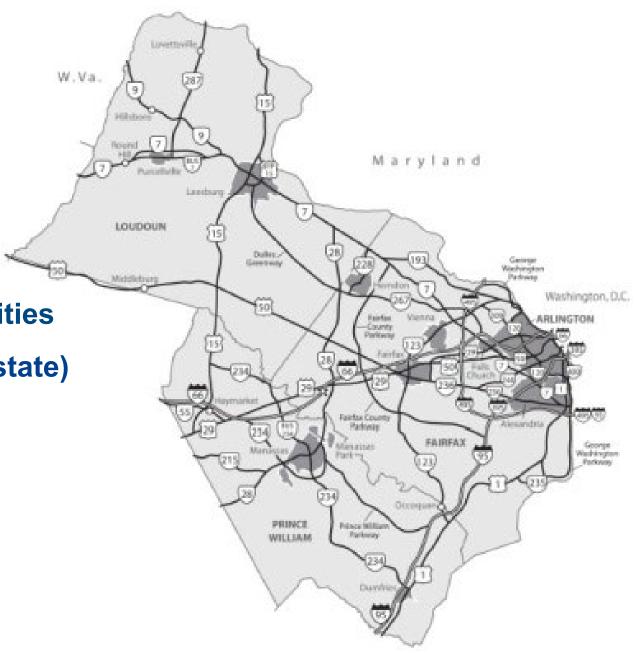
- One of 9 Districts in the Virginia Department of Transportation
- Part of the Washington Metropolitan Area
- Comprised of four counties Fairfax, Arlington, Prince William, and Loudoun – and fourteen cities and towns
- Approximately 30% of the state population – more than 2.4 million residents – live in Northern Virginia
- Approximately 3% of the land mass of the state





## **Northern Virginia District**

- 760 employees
- More than 14,000 lane miles
- 1,400+ traffic signals
- More than 500 miles of regional bike facilities
- 2,200 bridges and large culverts (10% of state)
- 250,000 signs
- 24 park-and-ride lots with 12,000 spaces
- 13,000 ancillary structures
- More than 100 miles of sound walls





## **Design and Construction**

 Administer or review/accept all design/work on state roads (developer, localities, utilities, etc.)

#### Traditional Projects

- Administering or overseeing over 70 projects under construction worth \$650 million in NOVA
- Administering or overseeing over 247 projects in design with a total project estimate of \$2.95 billion
- 60%-70% of projects are administered by local governments through the Local Assistance Program
- \$4+ billion Megaprojects program including:
  - 66 Express Lanes Beltway to Haymarket construction
  - 395 Express Lanes construction
  - 495 Express Lanes Northern Extension environmental, preliminary design





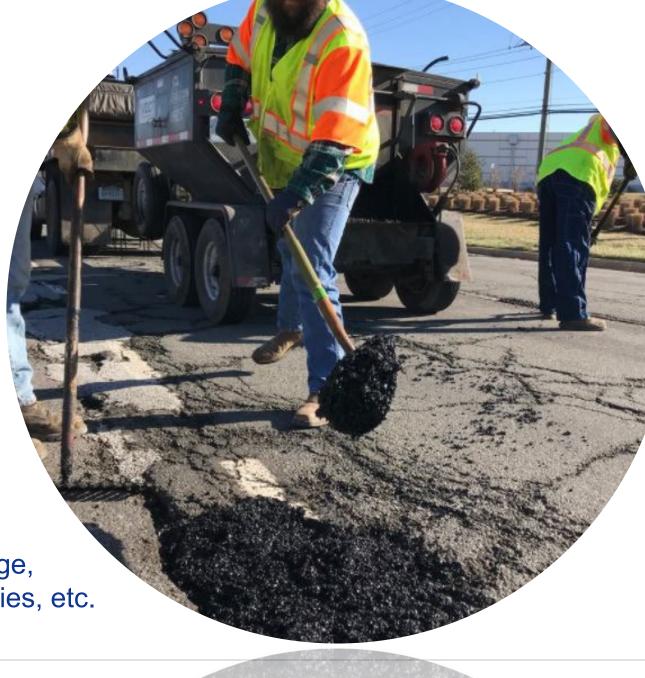
#### **Maintenance**

#### 18 area headquarters

Arlington 1 | Fairfax 9 | Loudoun 4 | Prince William 4

- Paving and patching
- Sweeping
- Guardrail
- Drainage, pipes
- Road, bridge, sidewalk and other repairs
- Mowing and trimming
- Litter pick-up
- Signs
- Sound walls
- Snow removal

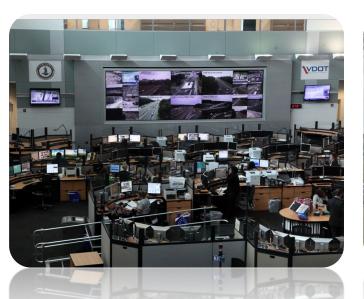
 Emergency response: infrastructure damage, flooding, support homeland security agencies, etc.





### **Operations**

- Work 24/7 with police/fire to clear incidents reopen lanes as quickly as possible
- Manage tolling/66 Express Inside the Beltway
- Manage HOV, shoulder lanes, message signs and 511
- Signal optimization, special events and traveler information
- Oversee signs, pavement markings, signals



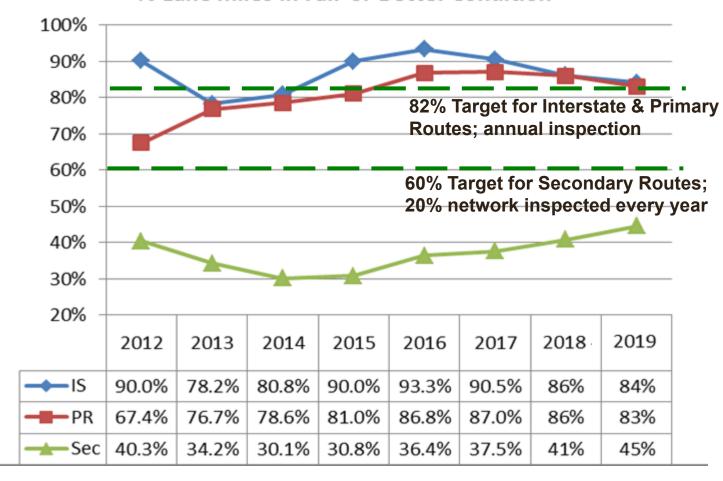






#### Northern Virginia District Pavement Ratings Status 2012-2019

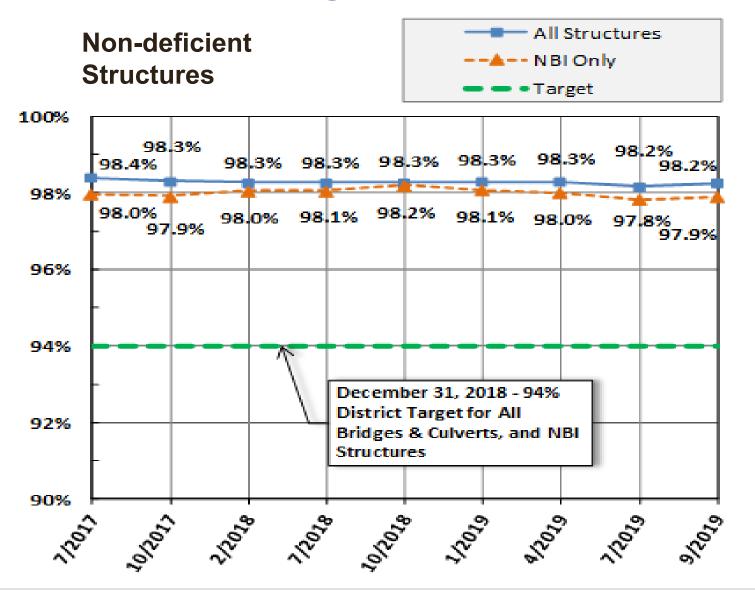
#### % Lane miles in Fair or Better Condition







# Northern Virginia Structure and Bridge Ratings









# New Load Ratings for Specialized Hauling Vehicles

Federal Highway Administration Memorandum (11/15/2013) directed states to consider the effects of these vehicles for all structures

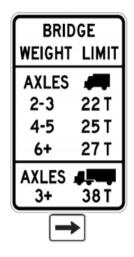
SU with 7 Axles



**SU** with 5 Axles



**Example of New Signs** 





- Program Highlights
  - Major Projects in Development



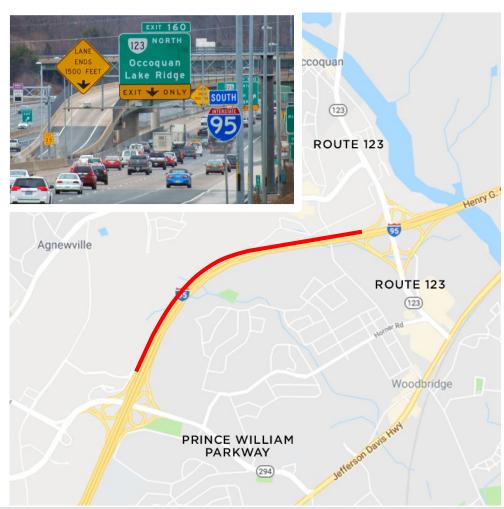
# In Development | *I-95 Southbound Auxiliary Lane*

#### Project Description

 Construct a 1.5-mile auxiliary lane on I-95 South between Route 123 (Gordon Boulevard) and Prince William Parkway (Route 294)

#### Project Benefits

- Alleviate pinch points and mitigate congestion in heavilycongested area of I-95
- Provide safer weaving movements between the on-ramp and off-ramp
- Noise analysis to identify necessary noise mitigation
- All improvements within existing VDOT right of way
- \$32 million funded by 95 Express Lanes
   Concession Fee, State, and Federal Sources
- Anticipate construction from spring 2021 to late 2022





#### In Development | Route 286 Widening & Popes Head Interchange

#### **VDOT Administered**

- Popes Head Interchange
  - Accommodates future Shirley Gate Extension and new entrance to Patriot Park
  - ±\$87 million in federal/state funds, including SMART SCALE & NVTA
  - Advertise in 2022; design-bid-build
- Route 286/Fairfax County Parkway Widening
  - ±\$203 million of improvements along five miles between Route
     29 and Route 123
  - Adding a third lane in each direction, improvements at Route
     123 and Burke Centre Parkway
  - Partially funded by NVTA; construction by phases: North in 2023, South targeted in 2026
- Concurrent design and public outreach; public hearing held Dec 12, 2020





# In Development | Richmond Highway Corridor Improvements

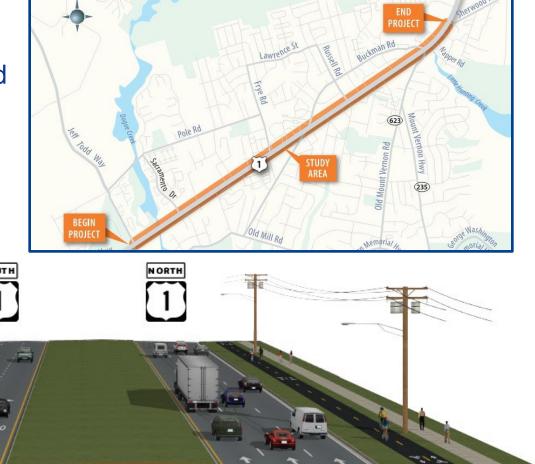
#### **VDOT Administered**

- \$372 million includes reconstruction for 3 lanes in each direction from Jeff Todd Way to Sherwood Hall Lane (3 mi)
- Reserves current footprint as median for future bus rapid transit (BRT)
- Major intersection improvements and new bike/ped facilities; Public Hearing held in March 2019
- \$156 million for right of way and utilities; 40% of overall estimate; 203 parcels, 104 relocations

Partially funded via federal, state, county, and NVTA

 Close coordination with Fairfax County for >\$700 million BRT & Embark initiative

Construction planned to begin in 2023



FAIRFAX COUNTY'S FUTURE BRT



#### In Development | Route 29 Improvements

#### **VDOT Administered**

 Reconstruct and widen 1.5 miles of Lee Highway from four to six lanes between Union Mill Road and Buckleys Gate Drive; last section of Rte 29 between Rte 28 & Fairfax City to be

widened

 Relieve a.m./p.m. bottleneck, particularly Stringfellow/Clifton Roads

- Improve vertical alignment for sight distance, add and improve shareduse paths with connection to trails at Fairfax County Parkway/West Ox
- \$86 million project financed with SMART SCALE & I-66 confession fee

Existing four-lane section of Route 29

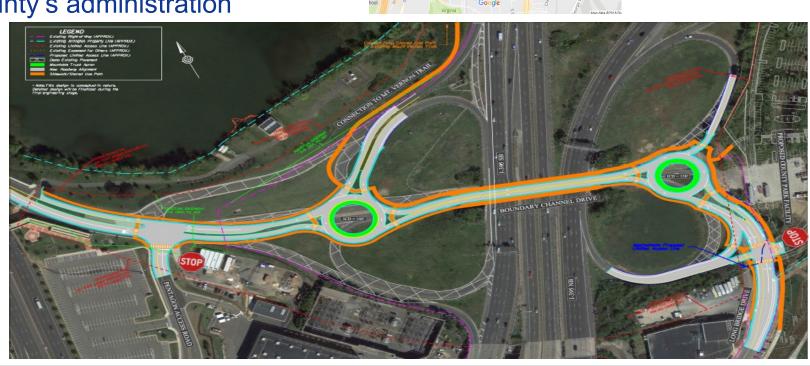
Public Hearing held June 10, 2019; design approved; construction planned in 2023

In Development | *I-395 & Boundary Channel Interchange* 

**VDOT Administered (Pending)** 

• Improve traffic flow at the interchange of I-395 and Boundary Channel Drive

- Improve bicycle and pedestrian connections to Long Park & the Mount Vernon Trail
- IMR prepared under Arlington County's administration
- Project administration changing to VDOT in spring 2020
- Design-build delivery w/ RFQ in fall 2020
- \$21 million estimate financed with NVTA and local funds



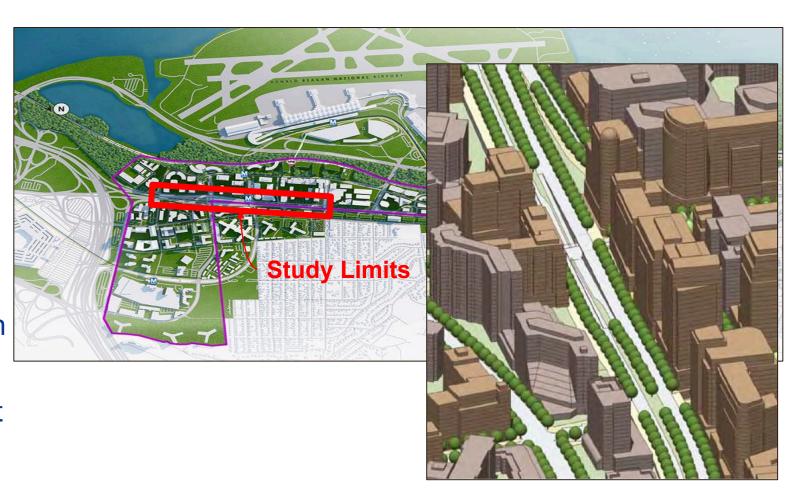
**Project** 

Location



# In Development | Route 1 Multi-modal Improvements

- Part of the Amazon HQ2 agreement
- \$2 million authorized in FY20-25 SYIP for traffic & pedestrian improvements on Route 1 in Crystal City between 12<sup>th</sup> & 23<sup>rd</sup> Streets
- Overall estimate \$250 million
- VDOT plans to initiate a study in late FY20
- RFP for consultant procurement likely in early 2020





In Development | Braddock Road Multimodal Improvements

**VDOT Administered** 

Design & construct access management
 & bicycle/pedestrian improvements
 within the corridor based on the
 Multimodal Study developed by Fairfax
 County DOT

- increase capacity
- improve bike & pedestrian access/safety with shared use paths & sidewalks including stream crossings & overpasses
- improve access to transit
- Partially funded ⇒ \$5.4 million (local funds from Fairfax County)
- RFP for consultant procurement in early 2020

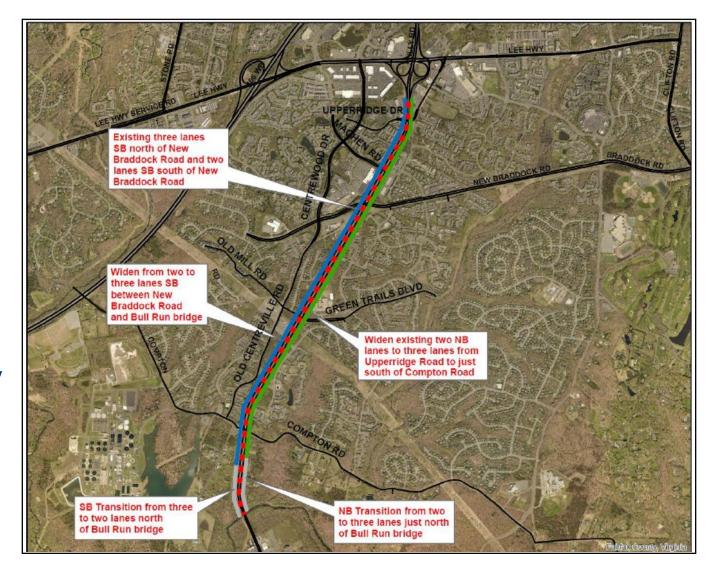




#### In Procurement | Route 28 Widening

**Locally Administered (Fairfax)** 

- Widen Route 28 from 4 to 6 lanes from Old Centreville Rd to PW line (2.3 miles)
- Design-Build project delivery, administered by Fairfax County Dept. of Transportation
- Provide intersection, pedestrian and bicycle improvements
- \$96 million estimate financed by federal, SMART SCALE, state and local funds
- RFP released in Sept 2019





# In Procurement | Interchange at Route 234 Bypass & Balls Ford Rd Locally Administered (Prince William)

- Administered by Prince William County
- Diverging Diamond Interchange
- \$145 million total project estimate financed with local funds and I-66 concession fee
- Design-Build delivery w/ RFP Sept 2019; CN complete spring 2023





#### In Development | Springfield CBC Garage

**Locally Administered (Fairfax)** 

- 6 level multi-use parking garage
  - 1000 parking spaces
  - bus transit center & 7 bus bays
  - commuter (slug) spaces
  - short-term parking area for pick up and drop off
  - pedestrian bridge over Old Keene
     Mill Road
  - bicycle storage
  - community areas for gatherings and events on the ground level and roof top
- \$64 million financed with federal, state and local funds
- Advertise in early 2020

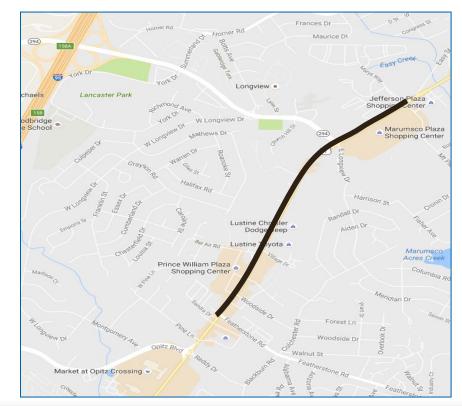


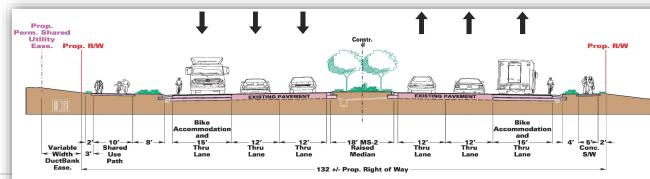


#### In Development | Route 1 Widening

**Locally Administered (Prince William)** 

- From Featherstone Rd to St. Mary's Way (1.32 miles)
- Will complete widening of Route 1 to 6 lanes in Prince William from Neabsco Road to the Occoquan approaches (≈ 4.5 miles)
- Abuts VDOT-administered Route 1
   widening & reconstruction project currently
   underway from St. Mary's Way to Annapolis
   Way
- Separate project for underground utilities currently under construction
- Advertise in 2020; \$85 million, financed with SMART SCALE, NVTA, RSTP







#### In Development | Northstar Boulevard

**Locally Administered (Loudoun)** 

- Eastern Loudoun
   County, west of Dulles
   International Airport
- Length: approximately
   1.7 miles from
   Shreveport Drive to
   Route 50
- Total project estimate= \$98M



- Allocation includes local and federal (\$25M TIGER) funds
- Design-Build delivery w/ RFP spring 2020; construction complete spring 2024

# In Development | Connector Bridge at Crystal City and Reagan National Airport

Locally Administered (Arlington)

- Part of the Amazon HQ2 agreement
- CC2DCA plan developed by the Crystal City BID
- Administered by Arlington County w/ VDOT oversight during the PE phase
- Development plan includes an EIS
- \$35 million estimate financed with CMAQ and local funds (TBD)
- Arlington likely to initiate consultant procurement in mid 2020

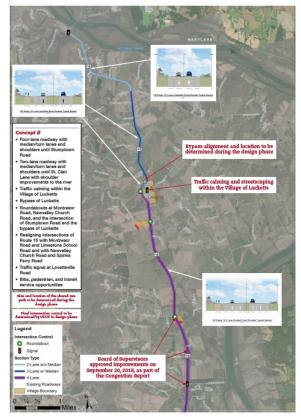




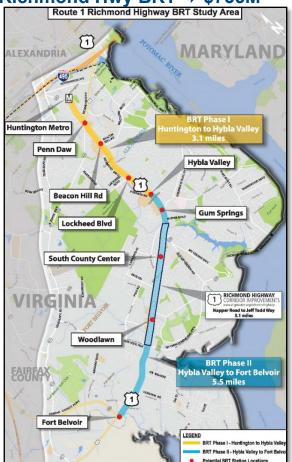
## **Local Projects In Development |**

**Loudoun County**Route 15 North of Leesburg ⇒ \$210M





Fairfax County
Richmond Hwy BRT ⇒ \$735M



Prince William County
Route 28 Bypass ⇒ \$300M

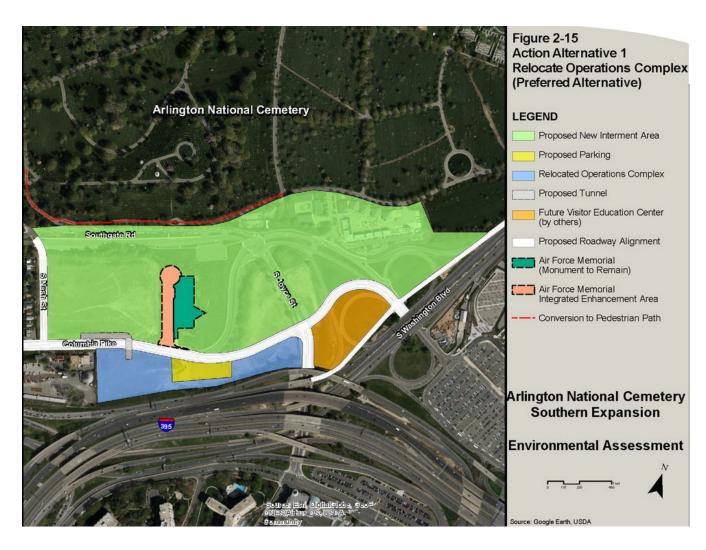


- Local "super" transportation projects with non-VDOT funding becoming more common
- Outside VDOT's Permit or Land Development review capabilities
- Future business transformation for NOVA ⇒ how to provide oversight for reviews and inspection?



# Local Projects In Development | Arlington National Cemetery Southern Expansion

- Adds approximately 40 acres for future interments
- Includes a Defense Access Road (DAR) project administered by EFL-FHWA
  - Realigns Columbia Pike (Rte 244)
     to S. Joyce Street & Pentagon
  - Reconfigures the interchange at Columbia Pike (Rte 244) and Washington Blvd (Rte 27)
  - \$50 million estimate
  - Design-bid-build delivery w/ advertisement in mid-2020





- Program Highlights
  - Major Projects in Construction



#### Northern Virginia District Construction Program Performance

VDOT Construction On-Time	FY20 (as of 12/11/2019)
District	90%
Minimum Target	77%
State	93%
Number of District Projects	31

VDOT Construction On-Budget	FY20 (as of 12/11/2019)
District	78%
Minimum Target	85%
State	85%
Number of District Projects to be completed this fiscal year	31

Construction Quality Improvement Program	FY20 (as of 12/11/2019)
District	93%
Target	91%
State	TBD

Environmental Commitments	FY20 (as of 12/11/2019)
District	100% (13/13)
Target	TBD
State	TBD



#### In Construction | Jones Branch Connector

**VDOT Administered** 

- Jones Branch over I-495 in Tysons, VA
- \$60 million
- Completion in Spring 2020



# In Construction | Route 1 Widening in Woodbridge, Virginia VDOT Administered

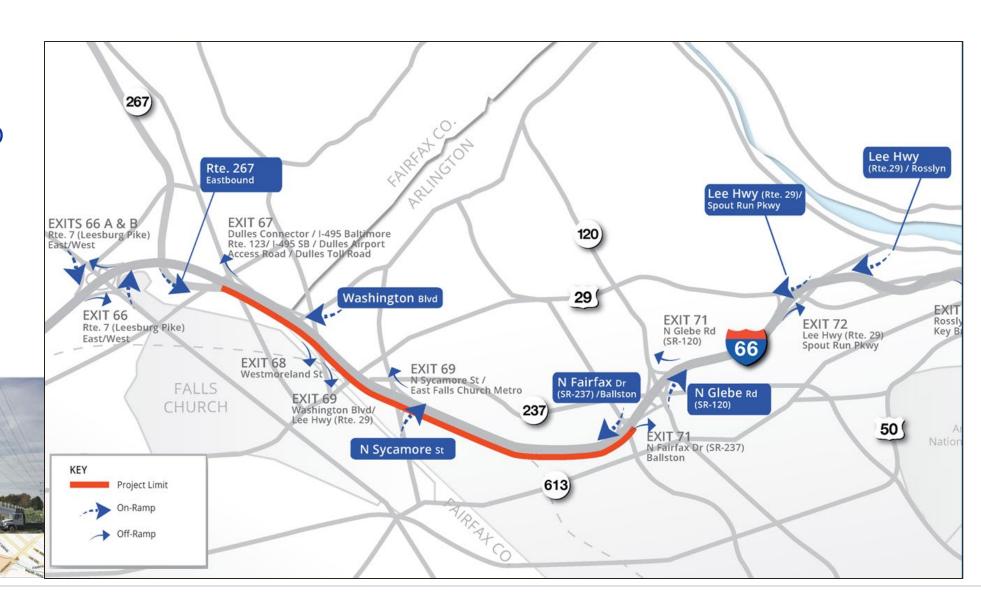
- 1.25 miles
   widening from 4
   to 6 lanes in
   Woodbridge, VA
- \$165 million
- Completion in late 2020



#### In Construction | I-66 Widening Inside the Beltway

#### **VDOT Administered**

- Eastbound widening, Metro Access at East Falls Church & W&OD Bridge over Rte 29
- \$86 million
- New Lane Opens Fall 2020
- Project Completion Fall 2021





# In Construction | Route 7 Corridor Improvements VDOT Administered

- 6.9 miles widening from 4 to 6 lanes
- \$314 million
- Final Design Late Summer 2018 to Summer 2020
- Right of Way Early 2019 to Early 2021
- Utility Relocation Spring 2019 to Summer 2023
- Construction Spring 2019 to Summer 2024
- Final completion by July 31, 2024

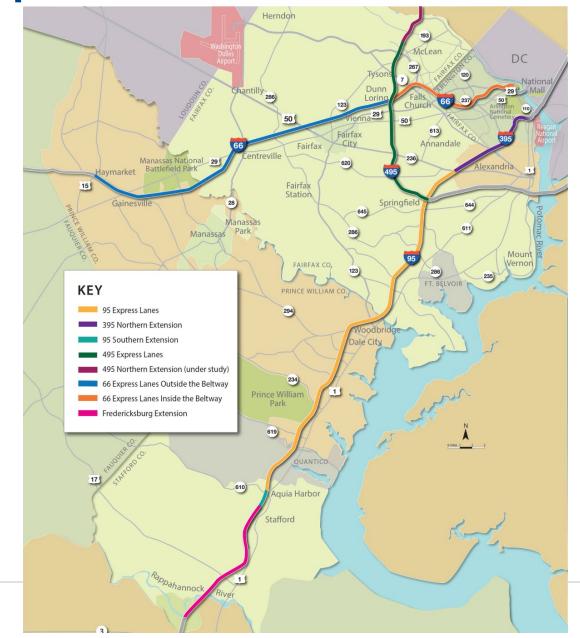


- Program Highlights
  - Mega Projects



# Northern Virginia Regional Express Lanes Network

- 90+ Mile express lanes network by late 2022
- ± 60 miles in service
  - I-95, I-495, I-66 Inside the Beltway,
     I-395 Northern Extension
- 22+ miles under construction
  - I-66 Outside the Beltway
- 10 miles in development
  - I-95 to Fredericksburg
- 3 miles under study
  - I-495 Northern Extension
- Three Individual Operators





## I-66 Outside the Beltway Project

- 22+ miles
- Two express lanes each direction from the Beltway to Gainesville (bus, HOV-3, dynamic toll payers)
- Three general purpose lanes
- Supporting expanded commuter bus service
- 4,000+ new park and ride spaces with express access
- Shared-use path; other bike/pedestrian improvements
- Safety, interchange and operational improvements

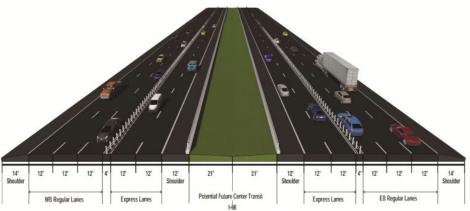
#### **Private Partners Express Mobility Partners (EMP)**

Equity Investors: Cintra Global LTD, Meridiam Infrastructure

North American Fund II

Design-Build Contractors: Ferrovial Agroman US Corp and

Allan Myers VA, Inc. (FAM Construction)



Flexible barriër with buffer, median for potential future transit (with auxiliary lanes, if needed)





**Transform 66 Outside the Beltway** 

- 12 interchanges
- 63 bridges and overpasses
- 3.1 million tons of asphalt
- 57 million pounds of steel
- 300+ pieces of heavy equipment
- 2.2 million linear feet of sound wall
- 2.3 million square feet of retaining wall
- 4,000 new park and ride spaces
- 18+ miles of new bike trail
- 1,000+ expected jobs needed to build





# I-495 Northern Express Lanes Extension Study (495 NEXT)

- April 2018: VDOT launched Environmental Assessment of 2.5-mile extension of 495 Express Lanes north to American Legion Bridge, including potential connections to GW Parkway
- January 2019: Framework Agreement between Virginia and Transurban
- November 2019: Capital Beltway Accord with Maryland for widening of American Legion Bridge

#### What's New?

- Continue P3 procurement process: Transurban to submit binding proposal
- Continue VDOT-led Environmental Assessment including traffic studies
- Public Hearing set for March 12, 2020
- Continued close coordination and compatibility with Maryland
- Independent, stand-alone project that will improve safety, reduce congestion and neighborhood cut-through traffic, improved connections and increased capacity

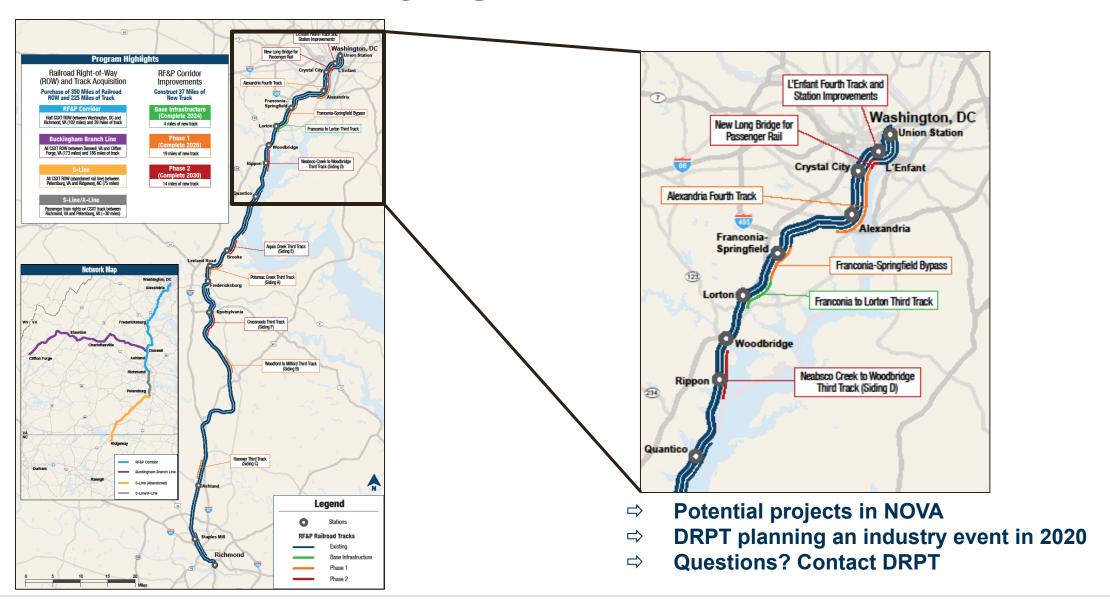




- Program Highlights
  - O What's New?



# **Virginia-CSX Preliminary Agreement**







12R (Electrician) AIT Graduation, March 2016
US Army Engineer School
Fort Leonard Wood, MO