



### I-495 SOUTHSIDE EXPRESS LANES STUDY

Metropolitan Washington Council of Governments Transportation Planning Board Update

# **Study Overview and Area**

- Environmental study to potentially extend express lanes system on 11 miles of southern section of I-495 (Capital Beltway)
- Last section of I-495 in Virginia without express lanes
- Aligned with region's approved Visualize 2045 Plan "Aspirational Initiatives" to expand express highway network







#### **Current Conditions in I-495 Southside Corridor**

- Heavily congested segment of I-495/Capital Beltway with significant regional mobility challenges
- Recurring traffic congestion and unreliable travel times
  - Mornings: Westbound I-495 peak travel times could double by 2050 (26→52 minutes)
  - Evenings: Eastbound I-495 peak travel times could more than double by 2050 (21→54 minutes)
- Limited travel choices
- No fast, reliable mass transit in the corridor for east-west trips to support current needs or future growth
- Limited bicycle and pedestrian connections in surrounding communities







# **Study Background and History**

# VDOT initiated an Environmental Assessment (EA) in 2022. Study is included in:

- VDOT's Six-Year Improvement Plan (SYIP)
- National Capital Region's Visualize 2045 Constrained Long Range Plan

Identified 10 alternatives, conducted analysis, and carried forward 2 "build" alternatives that best meet the transportation needs of the corridor, plus a "no-build" alternative

- Alternatives informed by Virginia Department of Rail and Public Transportation's (DRPT) I-495 Southside Transit/Transportation Demand Management Study (TDM)
- Transit study identified expanded bus service and TDM strategies as providing most effective solutions for corridor's transit needs

Environmental study is one early step in VDOT's established and proven project development process

# **Transportation Needs of I-495 Southside Corridor:**

- Additional travel choices
- Reduced congestion and improved travel reliability
- Improved safety
- Extension and continuity of the express lanes system
- Consistency with local and regional plans with transit and multi-modal improvements

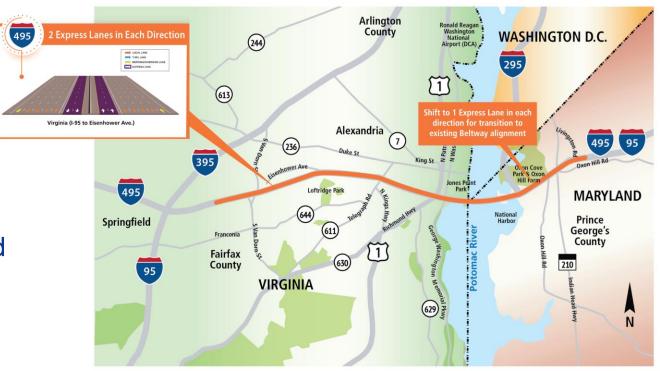




# Recommended Preferred Alternative: 2 Express Lanes

#### 2 Express Lanes in Each Direction

- 2 buffer-separated express lanes in each direction on I-495
- Fund new bus transit service
- Bike/pedestrian improvements
- Preserve space on Woodrow Wilson Memorial Bridge for future rail transit
- Potential funding source for new/expanded transit services and other improvements benefitting the corridor



Concurrence on recommended preferred alternative received from U.S. Army Corps of Engineers and Environmental Protection Agency





#### Benefits of Recommended Preferred Alternative: 2 Express Lanes

**Added capacity** to relieve congestion, manage demand and keep traffic moving (toll free for carpools and buses)

**Moves more people** through busy corridor:

- Up to 2,400 more people during peak hours
- Faster and more reliable travel in express lanes attracts more buses and carpools, moving more people with fewer vehicles

**Increases travel speeds** including faster average speeds on general-purpose lanes:

- 109% faster WB in AM peak
- 53% faster EB in PM peak

**Delivers faster travel times** including on general-purpose lanes:

 Travel times are up to 19 min. faster in local generalpurpose lanes and up to 10 min. faster in thru general-purpose lanes

Additional capacity to manage roadway operations and emergencies









#### **Transit Benefits**

#### **Promotes and increases bus transit and carpools:**

- Provides faster and more reliable travel in express lanes toll-free for buses and carpools with three or more occupants
- Moves more people in fewer vehicles
- Expected to develop a robust transit ridership across the Woodrow Wilson Bridge

#### **Funding transit services and projects:**

- Longstanding practice of incorporating transit payments from express lanes to fund transit services and projects benefitting the corridor
  - Over \$5 billion in transit benefits over the life of current express lanes project agreements
  - Over \$178 million in transit funding across 66 projects in Virginia since 2017









#### **Transit Commitment**

# Recommended Preferred Alternative includes new bus service between Central-West Prince George's County and Tysons

- Included in region's air quality conformity analysis
- Recommended by 2023 I-495 Southside Transit/Transportation Demand Management Study, completed jointly by Virginia and Maryland Transit Administration, as a lower cost, more flexible option to serve travel demand
- Dependent on project being procured as a public-private partnership



Virginia is in the early stages of determining financial feasibility of the I-495 Southside Express Lanes Project and does not yet have further details on additional transit investments. This information is developed once procurement is underway, the full project scope is known, and financial feasibility is determined.

If it is determined that no public subsidy is required for the project, Virginia commits to a formal agreement between Virginia and Maryland memorializing how investments will be prioritized and/or funds distributed to support transit investments benefitting corridor users.

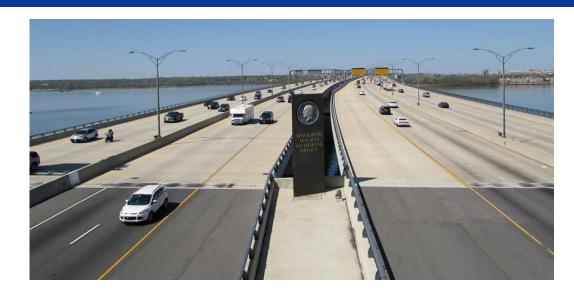


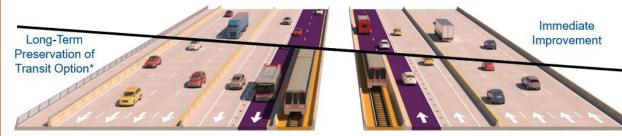
## Preservation of Future Metrorail on Woodrow Wilson Bridge

- Shared support of a multimodal future by not precluding future Metrorail extension across Woodrow Wilson Bridge
- 2 Express Lanes recommended preferred alternative offers feasible, near-term solution using unoccupied space on Woodrow Wilson Bridge that can be converted to rail transit in the future

**VDOT** commitment to preserve future conversion to Metrorail on the Woodrow Wilson Bridge to be included in:

- Environmental Assessment
  - Consistent with Record of Decision in 2000 stating unused space on Woodrow Wilson Bridge dedicated for future HOV, transit, or rail
- Terms of any future contract or concessionaire agreement
  - Requirement for conversion to rail transit when WMATA and the region are positioned to implement service across Woodrow Wilson Bridge
- Major business terms made public prior to start of procurement





I-495 Woodrow Wilson Memorial Bridge
\*Should future transit (i.e., rail) be provided by others





# **Local Road Impacts Study**

- VDOT agrees that the I-495 Southside Express Lanes Project should minimize impacts to adjacent local roadways through detailed traffic analysis and commitments to mitigate any project generated impacts
- An operational analysis is required to ensure the interstate (I-495) and adjacent, parallel roads perform in an acceptable manner
- Results of this operational analysis must be consistent with the preferred alternative approved through the environmental process in accordance with the National Environmental Policy Act (NEPA)
- VDOT initiates local road operational studies after preferred alternatives are identified, and more detailed design and traffic data are developed
- If VDOT identifies local road impacts, appropriate mitigation is identified and implemented as part of project

VDOT commitment to conduct a local road operational analysis and collaborate with stakeholders (including Maryland) to review impacts and mitigation strategies. VDOT's Environmental Assessment document or any subsequent re-evaluation document will memorialize any resulting project changes.

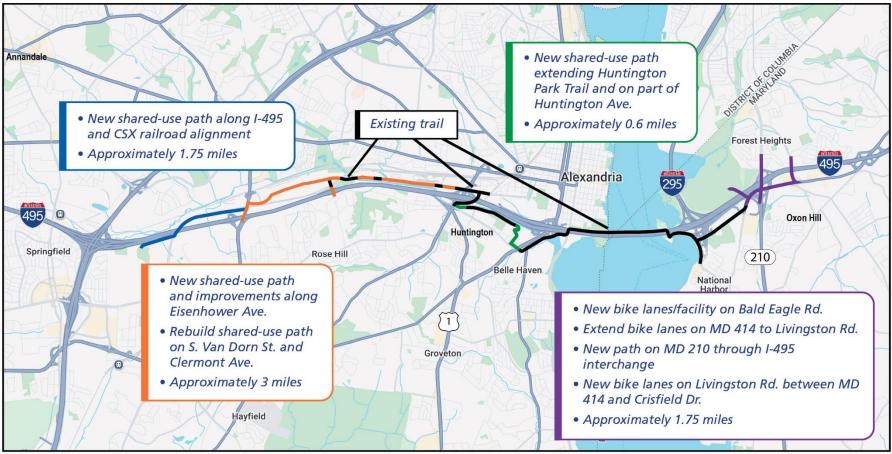




# **Bicycle and Pedestrian Connections**

Recommended Preferred Alternative includes improvements that build a trail network between Springfield and Oxon Hill through project additions, existing trails, and other trail projects.

Addition of over 7 miles of bicycle and pedestrian facilities







# **Engaging the Public and Obtaining Input**

- VDOT public involvement process
  - Public Hearings June 2, 4, 9, and 11, 2025
  - Public Information Meetings April 2025, Sept. 2023, May 2022
- Additional community meetings
  - Oxon Hill (2), Waldorf (Southern Maryland), Mount Vernon
- Online engagement and feedback
  - More than 900 online comment forms submitted as part of public meetings in 2022, 2023, 2025
- Public opinion survey of corridor users
  - Statistically valid sample of 620 area residents and corridor travelers 374 in Virginia (60%), 237 in Maryland (38%) using online panel coordinated by market research firm
  - 70% of respondents believe improvements are needed
  - 58% of respondents support adding express lanes
- Paid, geo-targeted ad campaigns including social media platforms and radio garnering nearly 1.8 million impressions
- Eblast notifications to stakeholder list of 1,100+









# Visualize 2050 Analysis of I-495 Southside Study

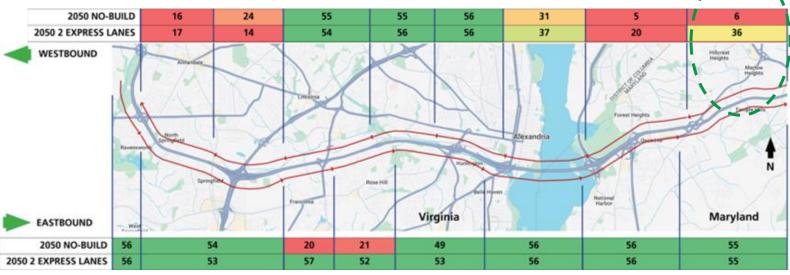
#### **Air Quality Conformity Analysis:**

- **No negative air quality impacts**: Adding project results in identical total and GHG emissions and slight reduction in PM<sub>2.5</sub> emissions when compared to analysis without the project
- **Positive traffic impacts:** No change in vehicle miles traveled and reduced vehicle delays per trip compared to analysis without the project

#### Analysis likely underestimates traffic and travel time benefits in Maryland

Regional models (like MWCOG/TPB model) are capacity-sensitive, but not capacity-constrained

- VDOT study supplements the regional travel model using a microsimulation model
- The result is a more focused and more realistic model that shows traffic on westbound I-495 between MD 5 and MD 210 during morning peak will be much worse without the project



Average travel speeds (MPH) in each segment during morning peak period





# Why Inclusion in Visualize 2050 is Critical

Supporting inclusion of I-495 Southside Express Lanes in Visualize 2050 allows Virginia to proceed with expenditure of millions of additional dollars to:

- ☐ Continue refining the project's scope through more detailed design and analyses
- Determine the project's financial feasibility
- Continue to seek regional consensus on project's implementation
- □ <u>Continue</u> progressing on a regionally-important project to deliver near-term congestion relief, expanded transit connections and travel reliability to commuters and travelers in Virginia, Maryland, and D.C.

Not supporting inclusion of I-495 Southside Express Lanes in Visualize 2050 results in:

□ Stopping work on region's only publicly identified, viable solution to address the transportation challenges and needs of the I-495 Southside corridor



