

VISUALIZE 2050

National Capital Region Transportation Plan

Agenda Item #8

UPDATE ON THE I-495 SOUTHSIDE EXPRESS LANES (SEL) PROJECT

Visualize 2050 & FY 2026-2029 TIP

Cristina Finch
TPB Transportation Planner

TPB Meeting
April 15, 2025



National Capital Region
Transportation Planning Board

Visualize 2050 & I-495 SEL Context

- **December 2023** – Member agency project inputs submitted
- **March 2024** – Comment period on projects for Air Quality Conformity (AQC) analysis
- **May 2024** – TPB approves AQC scope of work and projects, defers SEL decision to June
- **June 2024** – TPB members still have questions; TPB directs staff to conduct a second AQC analysis with the SEL to provide more time for additional technical work
- **April 2025** – Update to TPB from VDOT on I-495 SEL project
- **July 2025** – Update to TPB on conformity, performance analysis, and SEL update
- **September 2025** – TPB votes to continue plan development with or without SEL project
- **October/November 2025** – Comment period on draft plan and TIP
- **December 2025** – TPB action on Visualize 2050, FY 2026-2029 TIP, and AQC Report

495 SOUTHSIDE EXPRESS LANES STUDY

Metropolitan Washington Council of Governments
Transportation Planning Board Update

 Michelle Shropshire, P.E., Megaprojects Director
Virginia Department of Transportation

April 15, 2025

Northern Virginia Regional Express Lanes Network



- **94-Mile Network of Connected Express Lanes**
 - I-95, I-395 (reversible lanes)
 - I-495 (2 lanes each direction)
 - I-66 Outside the Beltway (2 lanes each direction)
 - I-66 Inside the Beltway (2 lanes, weekdays peak travel time, peak commute direction)
 - I-95 Express Lanes/Opitz Boulevard Ramp
- **3 Miles Under Construction**
 - I-495 Northern Extension (2 lanes each direction opening late 2025)
- **Under Study**
 - I-495 Southside Express Lanes
 - I-95 Bi-Directional Express Lanes

Study Overview

- 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



Virginia's 495 Southside Project Development & Delivery Process

Project Development

Led by VDOT

We are here:

Environmental Assessment

In compliance with National Environmental Policy Act (NEPA)

Establish purpose and need

Identify alternatives

Identify natural and human

environmental impacts including:

- Preliminary noise analysis
- Preliminary traffic analysis for I-495/I-95 (Capital Beltway)
- Limits of disturbance (preliminary property impacts)
- Natural and historic resources assessment

Preliminary design concepts

Public involvement / public hearing

Federal decision on preferred alternative

Interchange Access Report (IAR)

Detailed traffic analysis of I-495 Southside corridor and arterial roads

Procurement

Determine project delivery method

If public-private partnership:

- RFP process (business terms, including rail preservation and transit commitments)
- Select preferred proposer
- Project agreement reflecting final business terms and private partner commitments
- Financial close

Project Delivery

Led by VDOT

Oversight and Management

Public hearing on detailed project design

Commonwealth Transportation Board approval

Project management and construction oversight

Led by Private Partner

Detailed Design

Final property impacts

Final noise analysis

Obtain water quality permits and other approvals

Construction

Final design refinements

Federal approval on final air and noise analysis

Construction

Study Alternatives

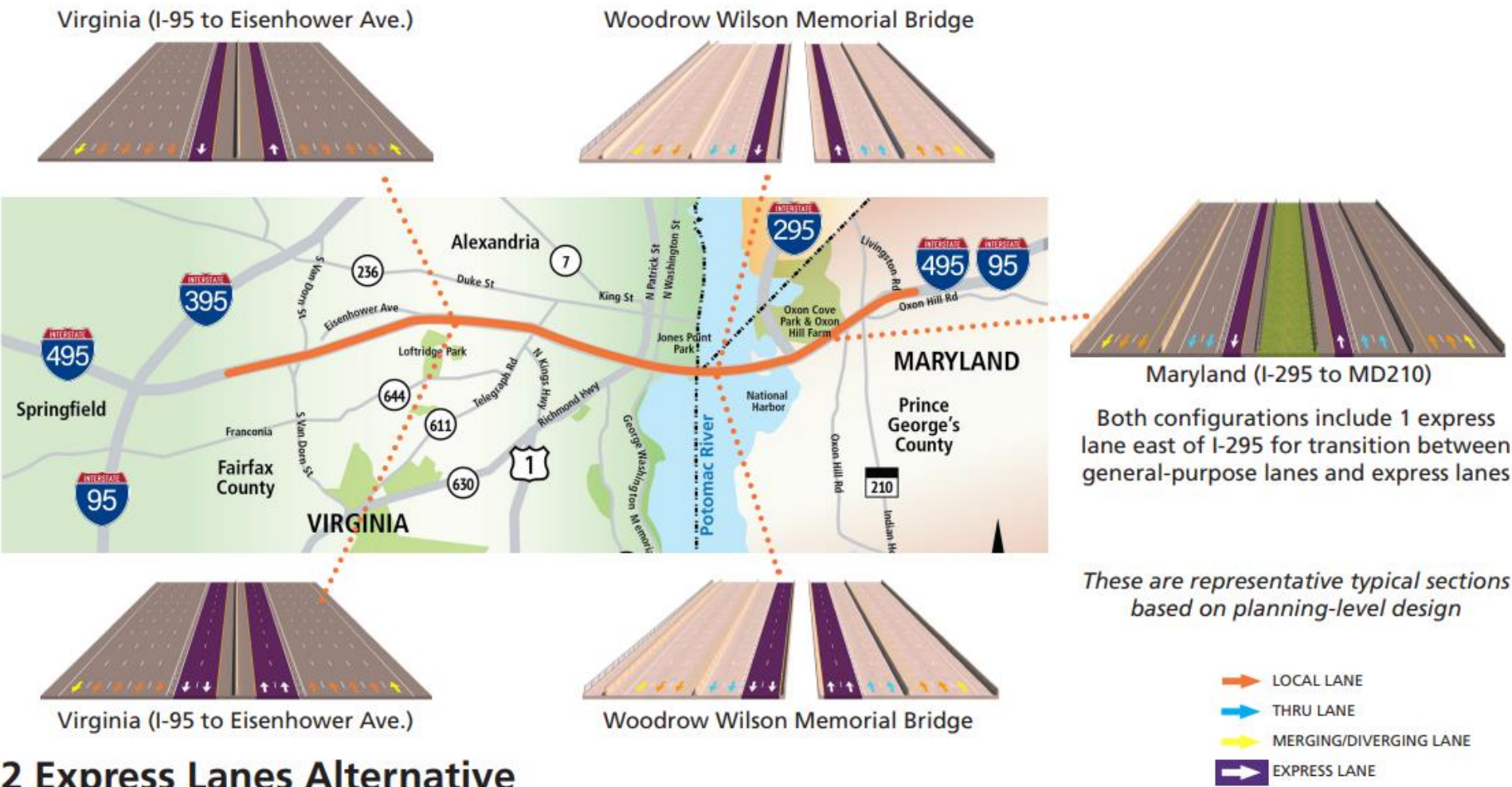
Range of alternatives being studied in detail in the Environmental Assessment

Alternative	Description
No-Build	Existing conditions; required by NEPA
1 Express Lane	Add one buffer-separated express lane in each direction on I-495
2 Express Lanes	Add two buffer-separated express lanes in each direction on I-495

Build alternatives include transit and bicycle/pedestrian improvements

Typical Sections for 1 and 2 Express Lane Alternatives

1 Express Lane Alternative

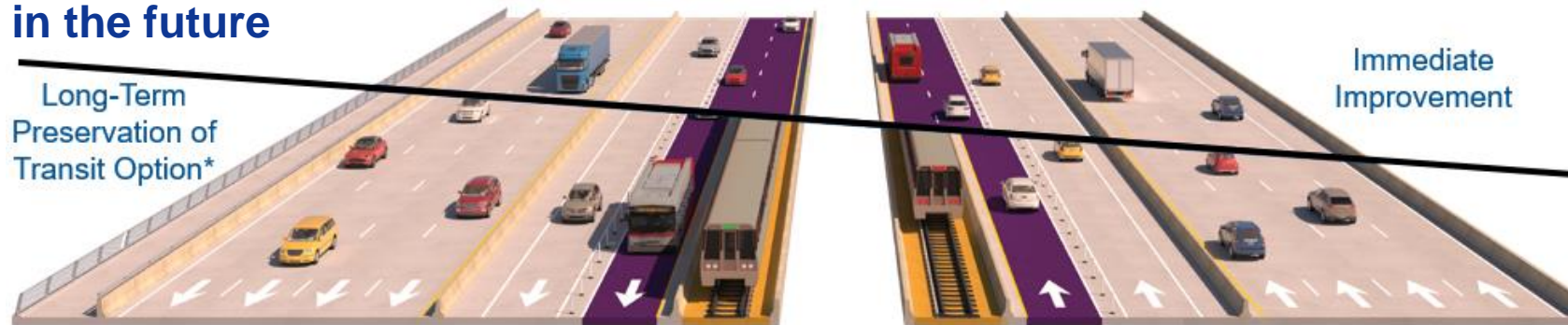


Preserving Space For Future Metrorail

- Alternatives under consideration incorporate rail preservation across the Woodrow Wilson Memorial Bridge through:
 - Retaining existing, unoccupied space, or
 - Incorporating a commitment to convert necessary space to rail transit in the future
- Rail preservation commitment would be incorporated as part of environmental (NEPA) process, which must receive federal approval
- Terms within any potential contract or concessionaire agreement would incorporate a requirement for conversion to rail transit in the future



Woodrow Wilson Bridge contains unused space dedicated for future HOV, transit or rail



I-495 Woodrow Wilson Memorial Bridge

**Should future transit (i.e., rail) be provided by others*

Traffic Analysis: Key Takeaways

Traffic conditions will get much worse if we do nothing (No-Build)

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)

1 Express Lane in Each Direction Alternative	2 Express Lanes in Each Direction Alternative
<ul style="list-style-type: none">• 1 express lane would move up to 1,600 more people during peak hours in 2050 than the No Build alternative• Travel times in local lanes up to 8 minutes faster compared to No Build alternative in 2050• Non-peak-direction travel times remain at 2022 levels, rather than getting worse• Provide travel at or near free flow in express lanes, with some delays westbound during morning peak	<ul style="list-style-type: none">• 2 express lanes would move up to 2,400 more people during peak hours in 2050 than the No Build alternative• Travel times in local lanes up to 19 minutes faster compared to No Build alternative in 2050• Non-peak-direction travel times remain at 2022 levels, rather than getting worse• Provide travel at or near free flow in express lanes

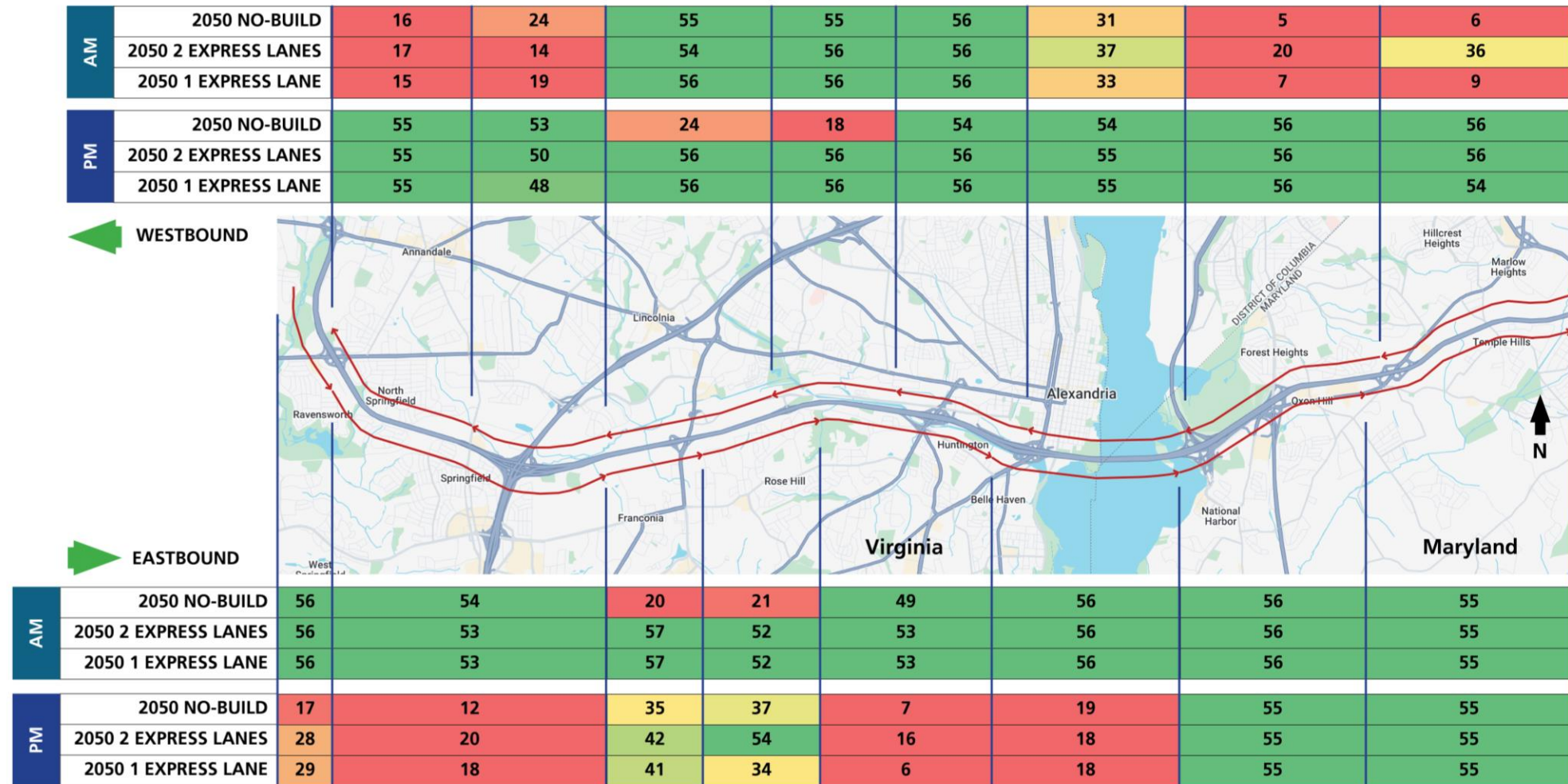
Existing and Future Traffic Conditions

Comparing Travel Times

Braddock Road in Virginia to MD 414 in Maryland

AM Peak	Morning Peak Hours					Afternoon Peak Hours				
	Travel Time (in minutes)	2022 Existing	2050 No-Build	2050 2ELs	2050 1EL	Travel Time (in minutes)	2022 Existing	2050 No-Build	2050 2ELs	2050 1EL
	Westbound Local	26	52	36	48	Westbound Local	18	23	17	17
	Westbound Thru	24	33	31	36	Westbound Thru	18	22	17	17
	Westbound ELs	-	-	19	23	Westbound ELs	-	-	16	16
	Eastbound Local	16	25	17	17	Eastbound Local	21	54	35	55
	Eastbound Thru	16	26	17	17	Eastbound Thru	25	31	21	25
	Eastbound ELs	-	-	16	16	Eastbound ELs	-	-	16	16

Comparing Travel Speeds in Local General Purpose Lanes



New Transit and Multimodal Options

- Express Lanes support public transit by providing added capacity, and faster and more reliable travel
- Annual transit and concession payments fund new and enhanced transit services and infrastructure benefitting the region
- Transit and Transportation Demand Management Study completed by DRPT in 2023 recommends express, commuter and local bus service, which would benefit from reliability of expanded express lanes network in I-495 Southside corridor
 - Demand estimated for a Metrorail extension found to be an amount that could be served by lower cost and more flexible bus modes
- New bus service from Central-West Prince George's County to Tysons identified as a new transit service as part of 495 Southside Express Lanes
 - Included in region's air quality conformity analysis
 - Dependent on project being procured as a public-private partnership



Monument Drive Parking Garage and Transit Center opened in June 2024, providing express lanes access to buses and carpools. Funded by concession fee payment from I-66 Express Mobility Partners.



New Fairfax Connector express bus launched in Sept. 2024, providing new connectivity between Tysons and Bethesda. Funded by Commonwealth and through annual transit payments from Transurban.

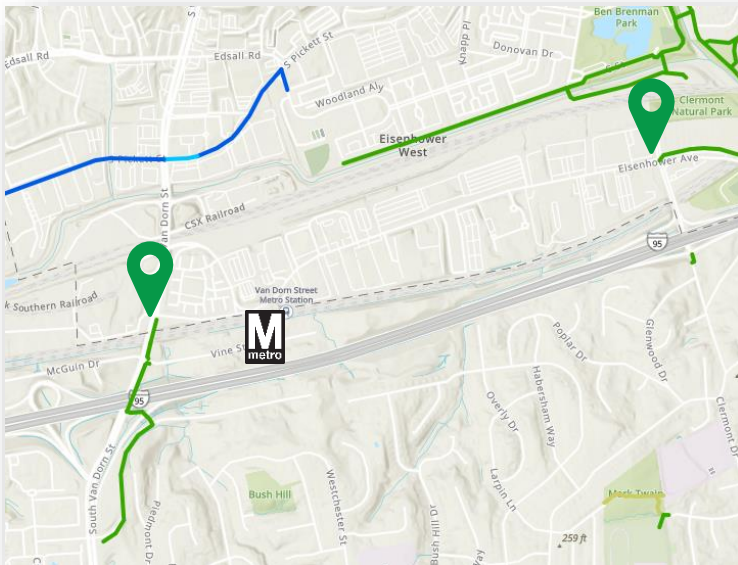
Potential Bicycle and Pedestrian Connections

- Bicycle and pedestrian facilities are being considered with the build alternatives as part of the 495 Southside Express Lanes Study
- Coordinating with Fairfax County, City of Alexandria, Prince George's County, and Maryland State Highway Administration

Map Legend

Existing Bike/Ped Routes

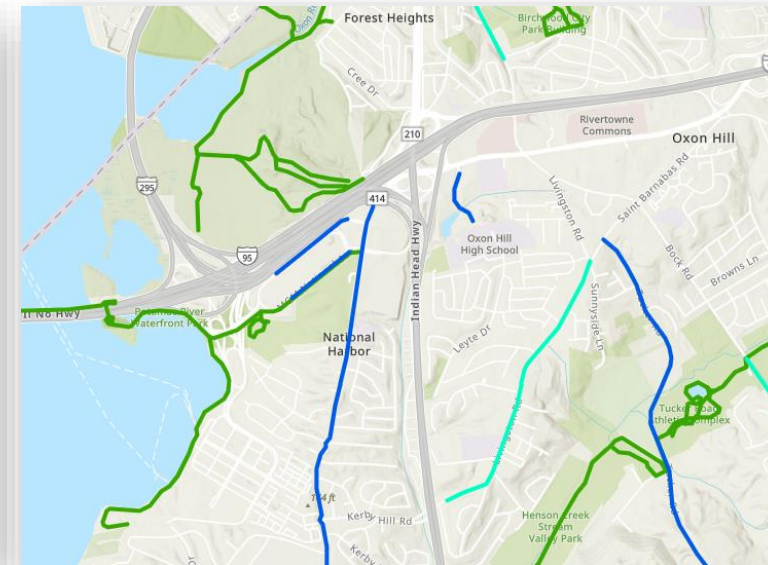
- Route Bike Lanes
- Climbing Lane
- Off Street Trail / Sidepath
- Bikeable Shoulder
- Shared Lane / Markings



Eisenhower Ave./Van Dorn Metro Trail Extension



Huntington Metro/Route 1 Trail Connections



Connections Being Considered in Oxon Hill Area

Public Information Meetings: Outreach and Results

- **Public Information Meetings (200+ attendees)**
 - April 1: West Potomac HS (Fairfax County)
 - April 2: Oxon Hill HS (Prince George's County)
 - April 7: Edison HS (Fairfax County)
 - April 9: Nannie J. Lee Rec Center (Alexandria)
- **Virtual Public Information Room**
- **Geo-targeted social media campaign, and extensive stakeholder and media outreach, driving meeting attendance and public input opportunities through multiple channels (in-person, online, email and mail)**
- **Public comment period open through April 21**
- **Public feedback themes include:**
 - Support for mass transit options including Metro as part of regional planning and future infrastructure
 - Concerns about toll prices and people's ability to benefit from express lanes vs. adding more general-purpose lanes
 - Questions about roles of Virginia and Maryland
 - Interest in bicycle and pedestrian improvements



Public Opinion Survey: Objective and Methodology

Survey Objective

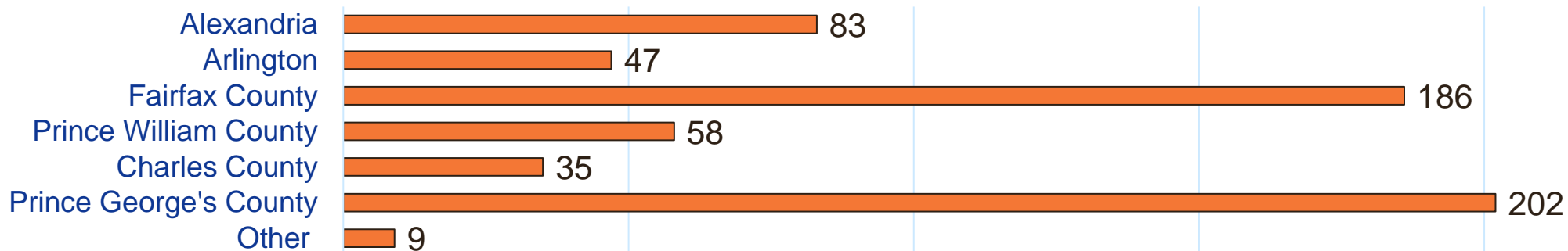
Evaluate public sentiment from a representative sample of corridor travelers and residents regarding travel conditions in I-495 Southside Study corridor, including awareness, perceptions and support for potential express lanes extension

Methodology

15-minute survey of area residents and corridor travelers between February 24 and March 3 using online panel coordinated by research firm S.I.R.

Statistically Valid Sample of 620 Participants

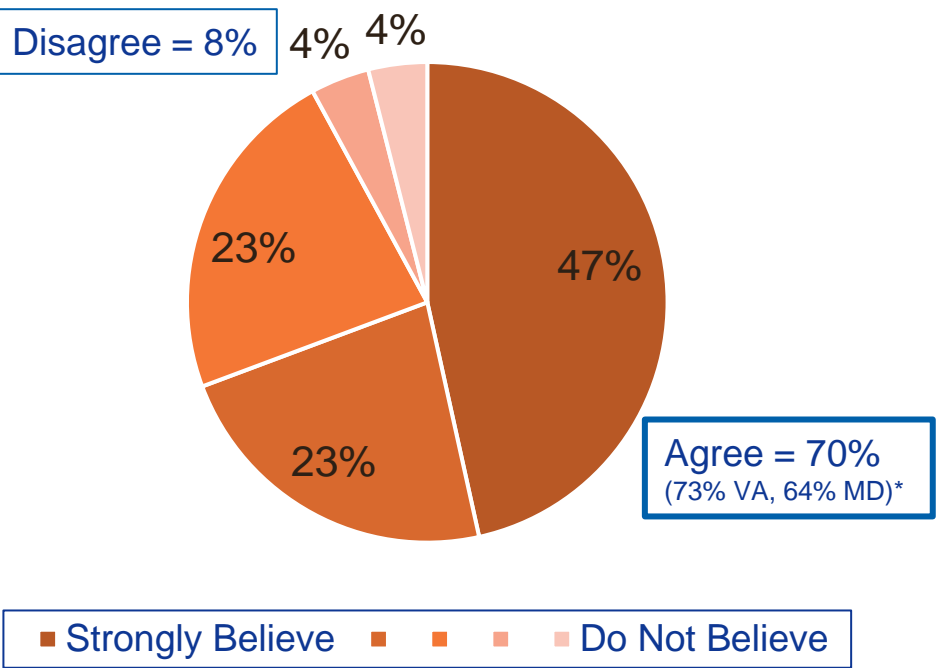
- 374 (60%) in Virginia, 237 (38%) in Maryland key jurisdictions
- 483 (78%) have traveled the study corridor in past 6 months



Public Opinion Survey Findings: Key Findings

Improvements are Needed

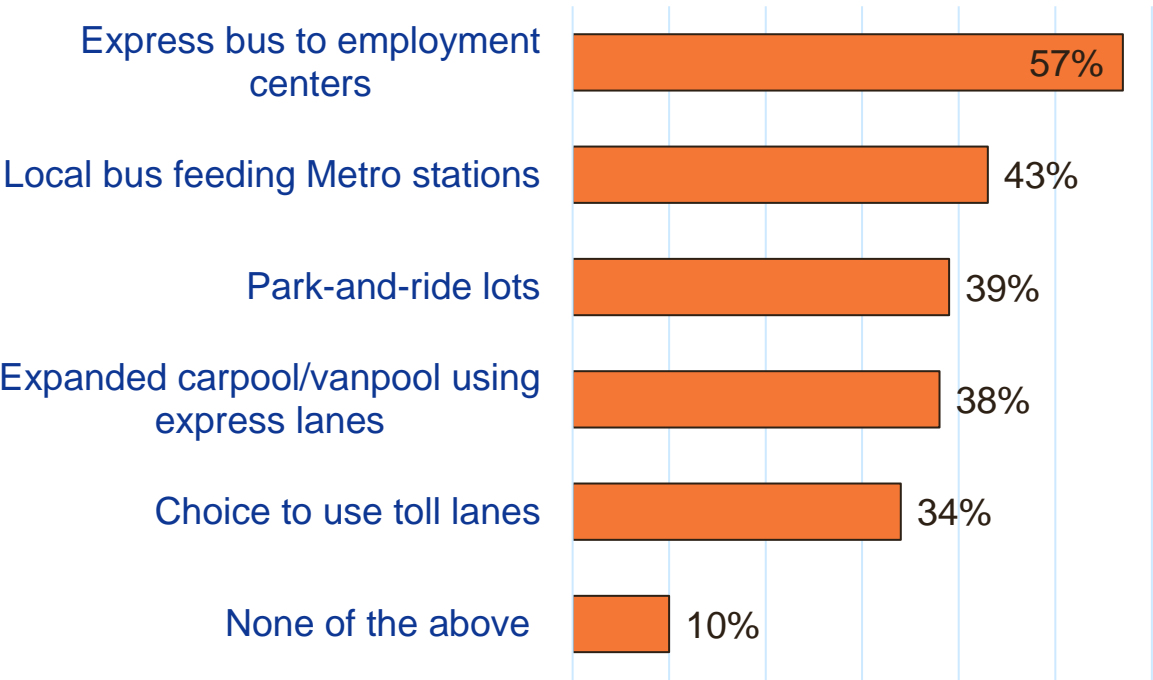
To what extent do you believe changes should be made to this section of I-495 to improve travel in the next 5-10 years?



*Statistically significant difference, $p < .05$

Support for More Travel Options

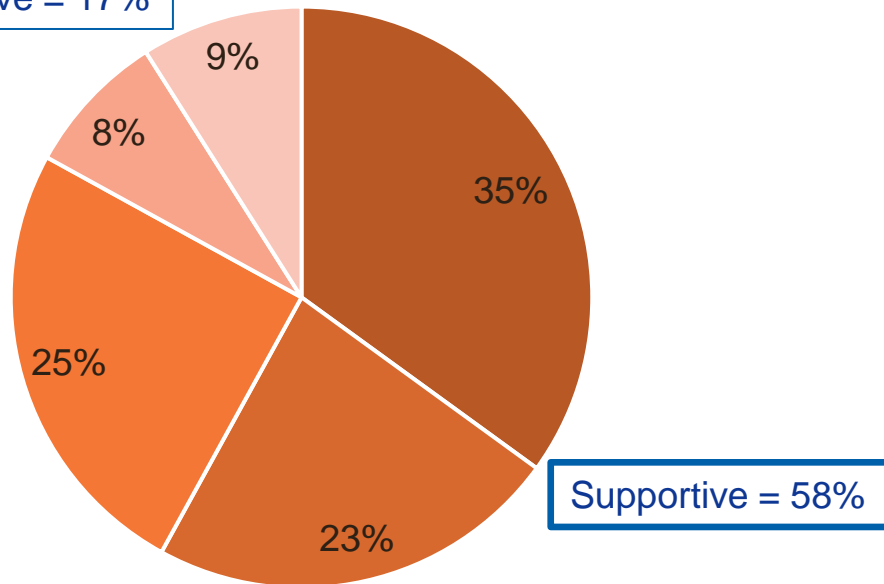
Which of the following changes would you like to see that could lead to traffic improvements on this section of I-495?



Public Opinion Survey Findings: Key Findings

Support for Express Lanes

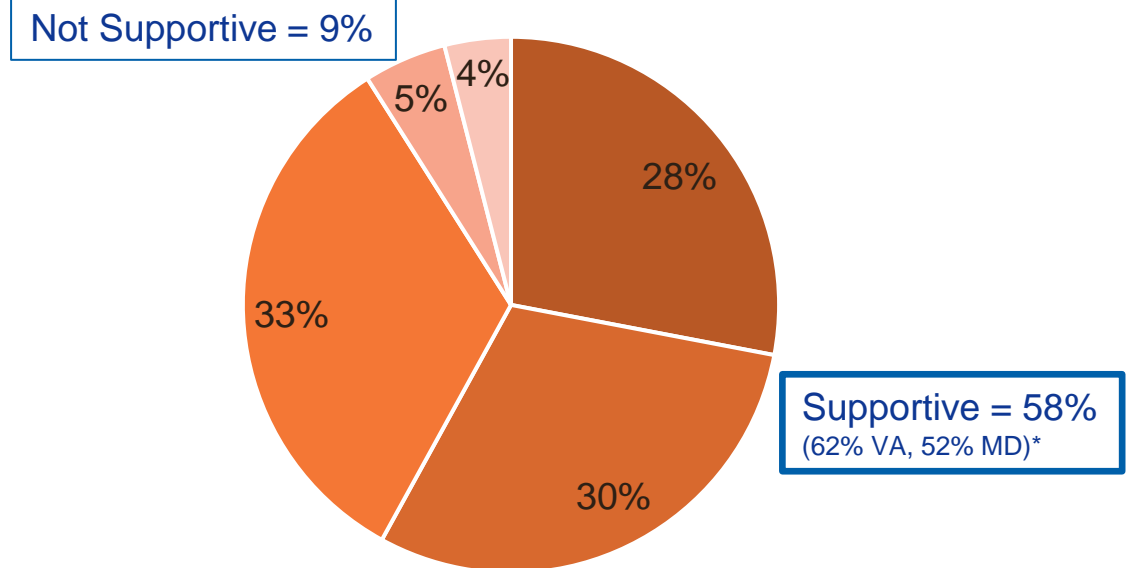
How supportive are you of adding express lanes to this section of I-495?



Very Supportive Supportive Not at all Supportive Not Supportive

Use the Unused Bridge Space

To what extent do you support or not support each of the following to be done with the currently unused space on the Woodrow Wilson Bridge:
Use the space for express lanes to provide additional capacity and options for travelers?



Strongly Support Supportive Not Support Not Supportive

*Statistically significant difference, $p < .05$

Key Decision Points

Date	Milestone
June 2024	Capital Region Transportation Planning Board (TPB) voted to include an additional scenario that includes 495 Southside project in the air quality conformity analysis for Visualize 2050
September 2025	Virginia Commonwealth Transportation Board decision on preferred alternative
September 2025	Capital Region TPB vote on including 495 Southside project in Visualize 2050
December 2025	Capital Region TPB vote on Visualize 2050
Early 2026	Federal decision on environmental assessment

