



MANAGED  
LANES STUDY

495

270



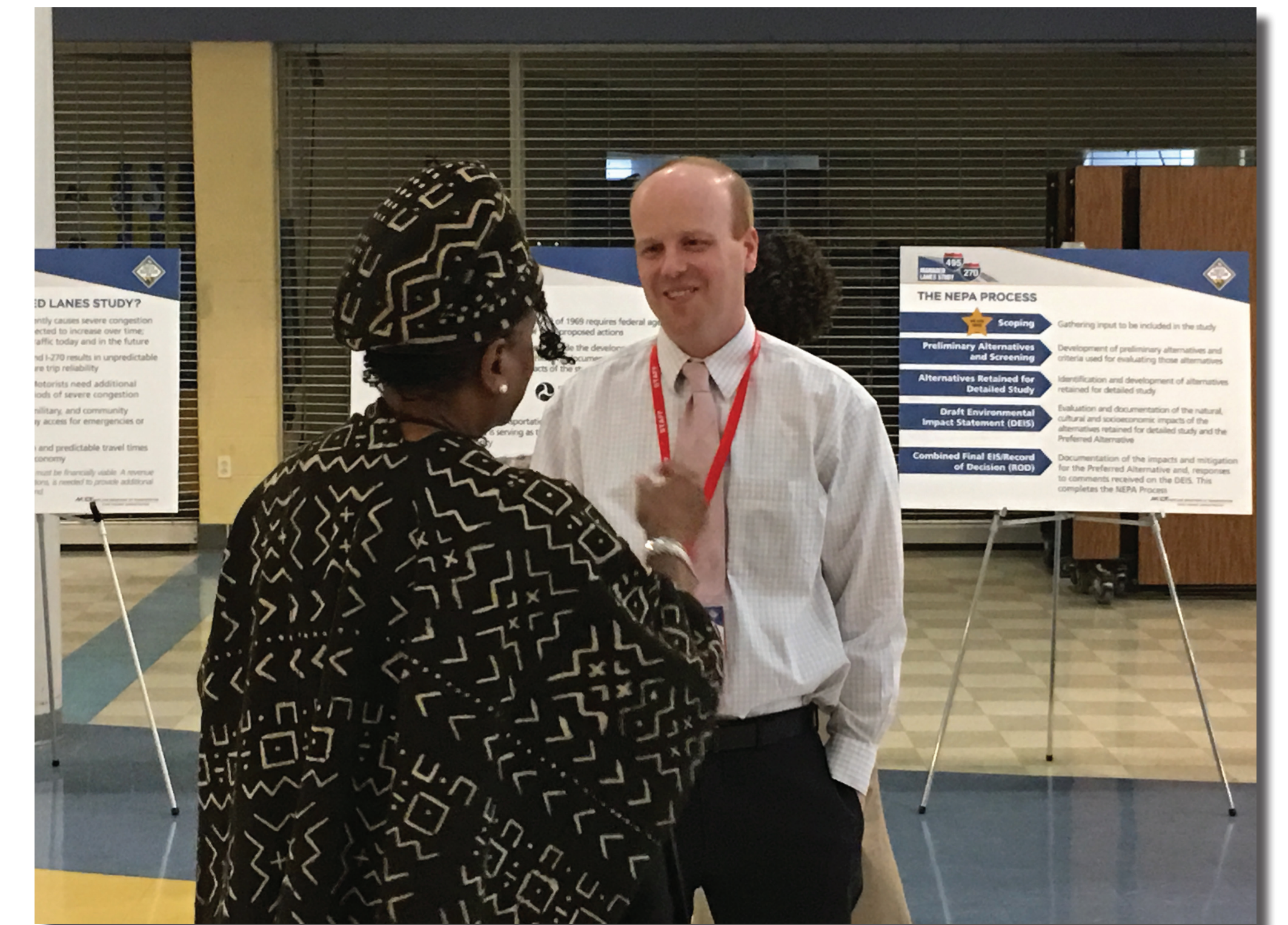
# WELCOME!

## Public Workshop for the I-495 & I-270 Managed Lanes Study



# PURPOSE OF TODAY'S PUBLIC WORKSHOP

- Present the engineering, traffic, and environmental analyses for the Screened Alternatives
- Present the recommendations for the Alternatives Retained for Detailed Study (ARDS) in the Draft Environmental Impact Statement

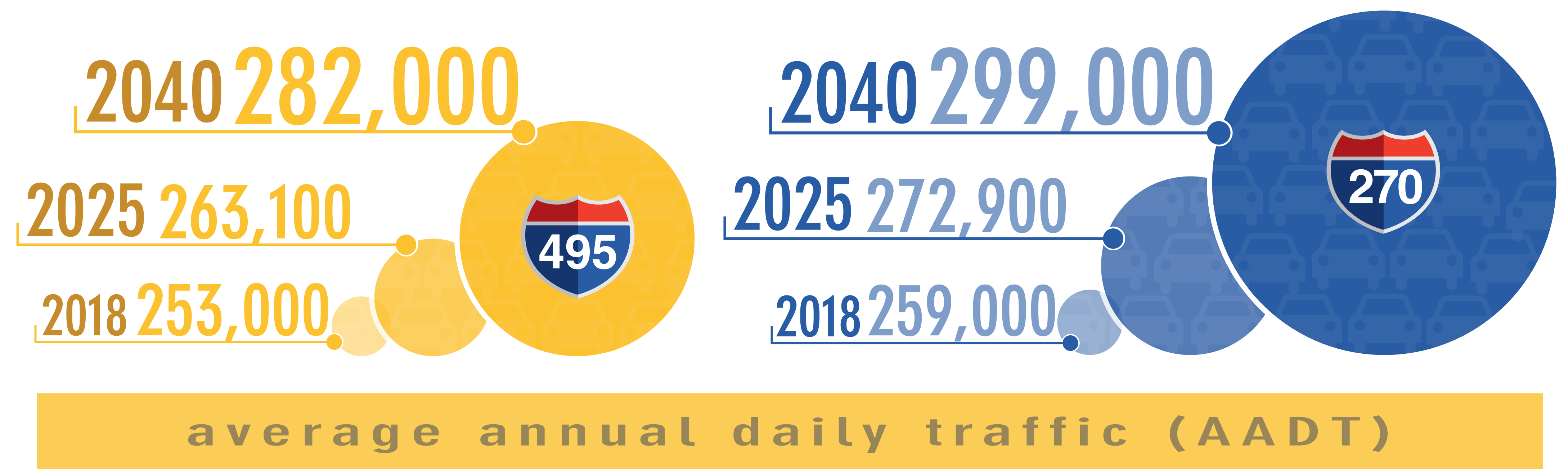




## PROGRAM NEED:

### *Address Existing and Future Traffic Congestion*

- Traffic congestion limits economic growth opportunities
- Traffic congestion diminishes the quality of life for Marylanders



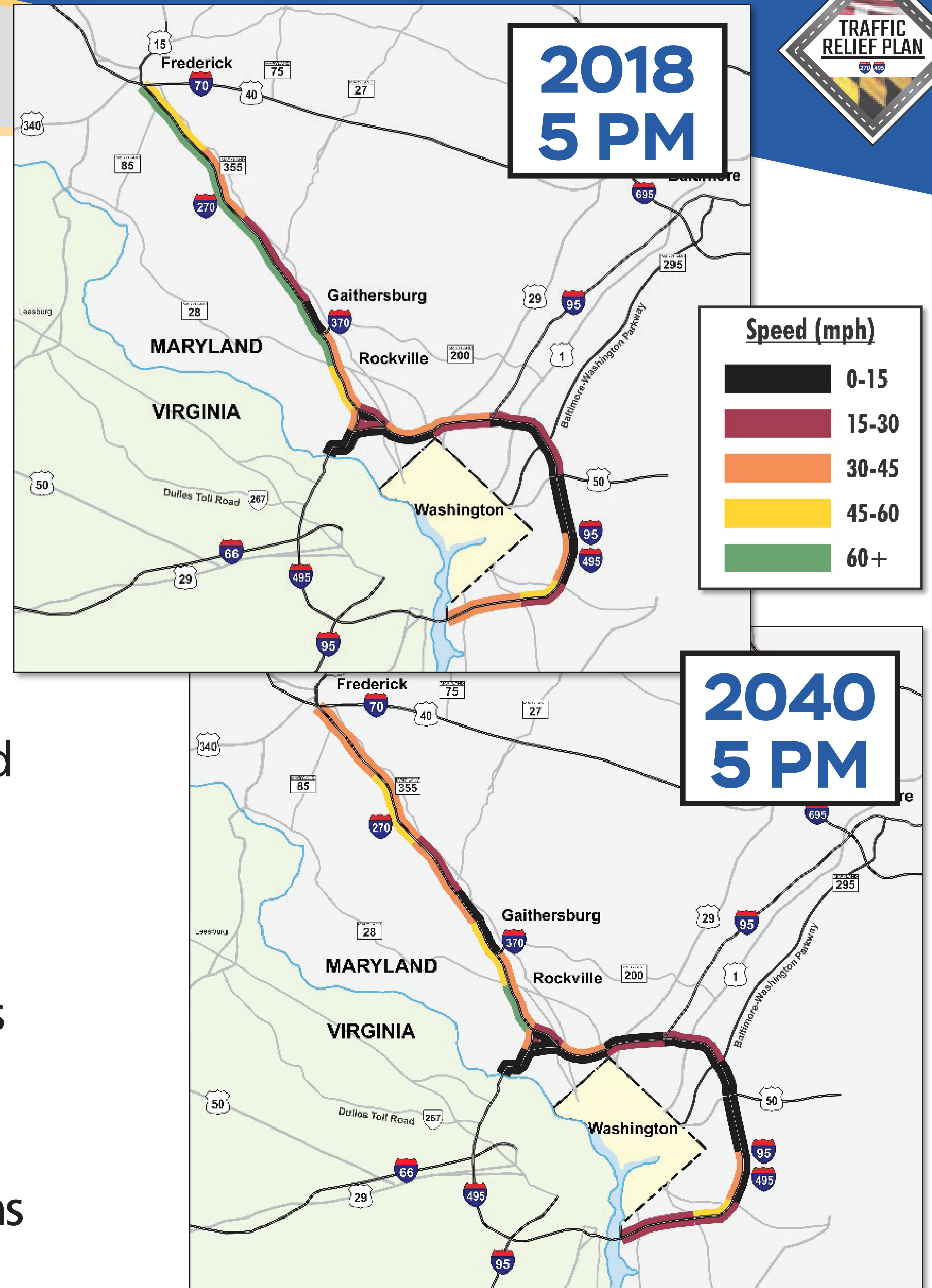
- 98% of Maryland weekday congestion occurs in the Baltimore/Washington region
- The average commuter in the National Capital Region loses 87 hours and over \$2,000 to congestion annually
- \$1.3 B\* cost of congestion in the Maryland National Capital Region in 2016 – 33% increase since 2013

\* 2017 MDOT SHA Mobility Report



## PROGRAM NEED: *Address Existing and Future Traffic Congestion*

- Top 5 highest volume highway sections in Maryland are within program area
- Today, on average, severe congestion lasts for 7 hours each day on I-270 and 10 hours each day on I-495
- Program area includes several of the most unreliable highway sections in Maryland (highly variable travel times day to day)
- Many sections experience speeds less than 15 mph under existing conditions and traffic is expected to deteriorate



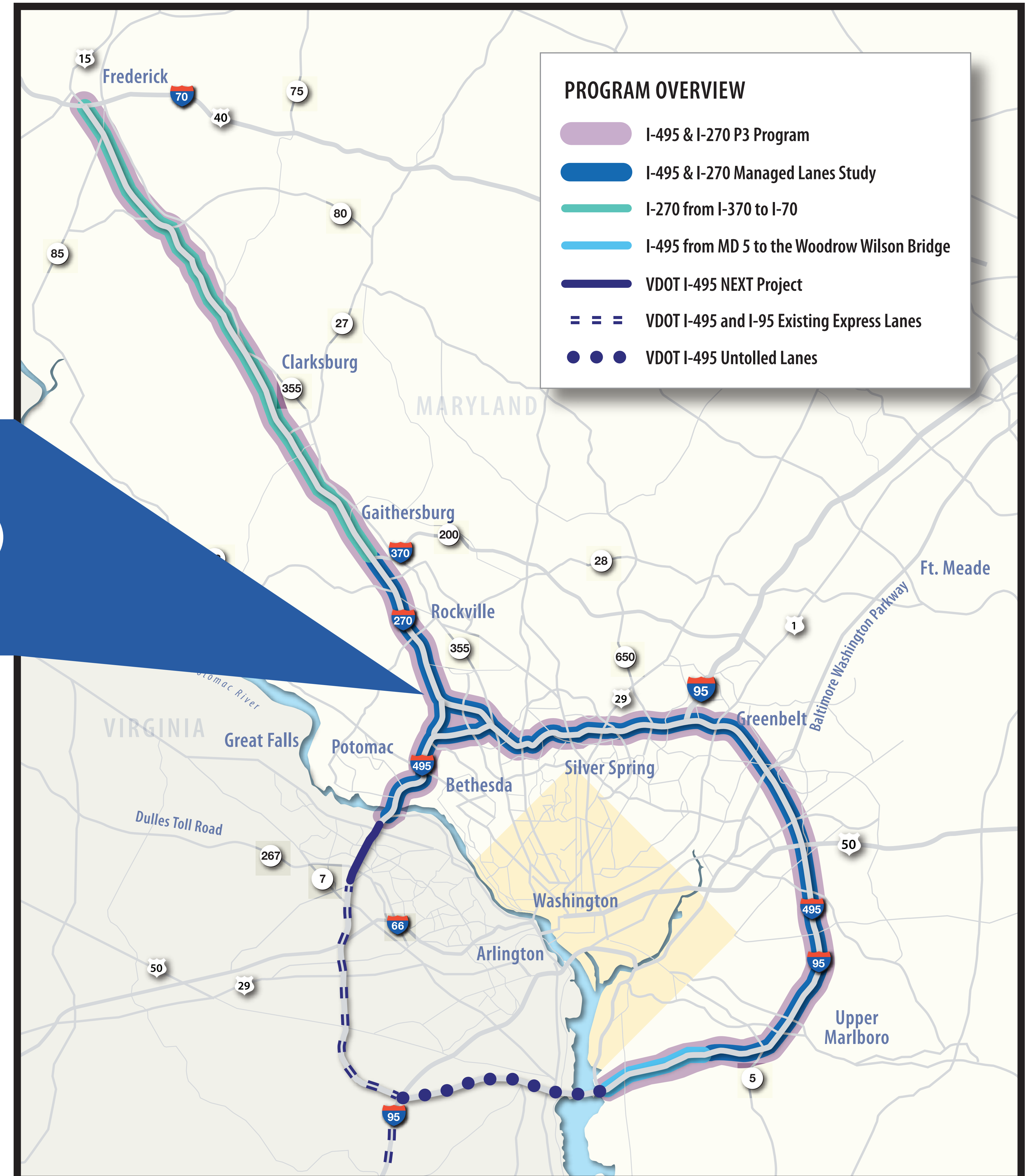


# I-495 & I-270 P3 PROGRAM

- I-495 & I-270 P3 Program includes over 70-miles of highway improvements

First Study: I-495 & I-270  
Managed Lanes Study (48 miles)  
➔ **CURRENT NEPA STUDY**

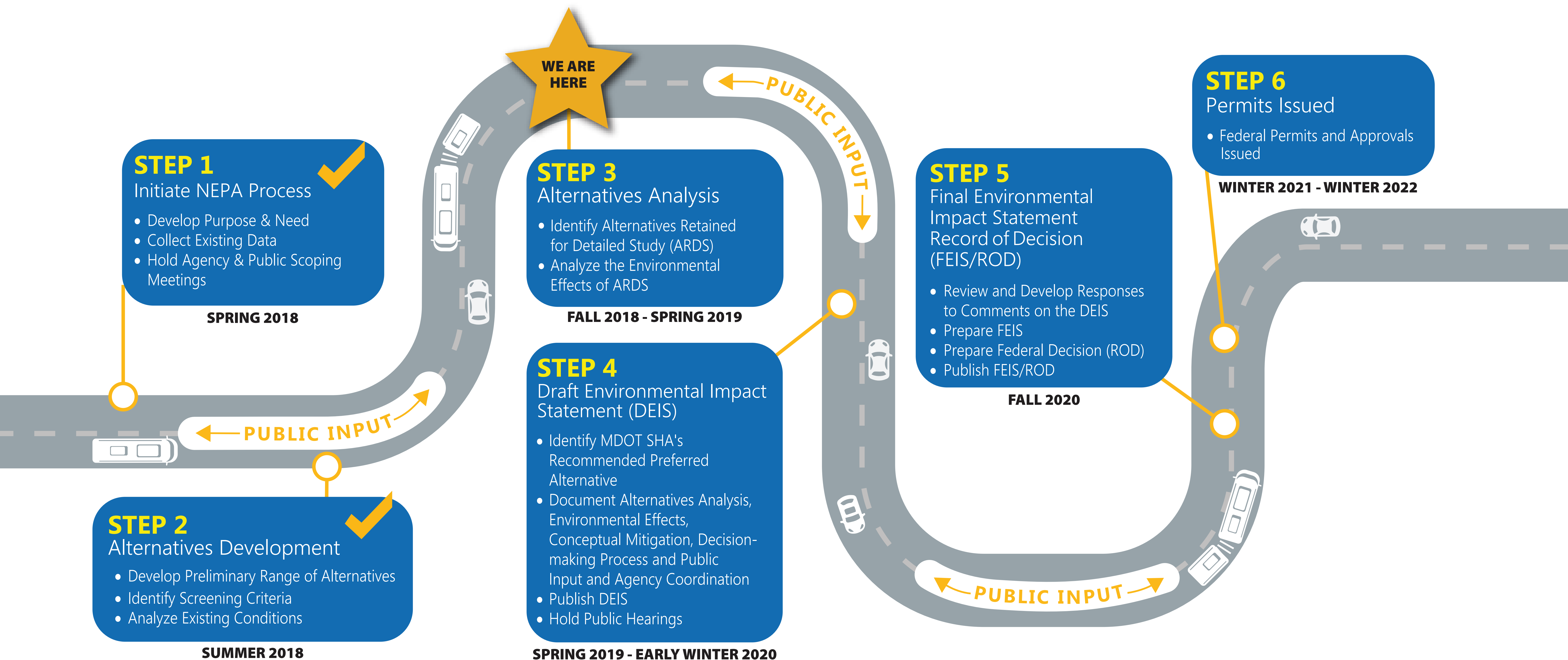
- Future NEPA Studies:
  - I-270 from I-370 to I-70
  - I-495 from MD 5 to the Woodrow Wilson Bridge
- VDOT I-495 NEXT Project: Environmental study underway independently





# THE NEPA ENVIRONMENTAL PROCESS

The National Environmental Policy Act (NEPA) of 1969 requires federal agencies to evaluate the environmental effects of their proposed actions





# PURPOSE & NEED

## PURPOSE

Develop a travel demand management solution(s) that addresses congestion, improves trip reliability on I-495 and I-270 within the study limits and enhances existing and planned multimodal mobility and connectivity.

## NEEDS

- Accommodate Existing Traffic and Long-Term Traffic Growth
- Enhance Trip Reliability
- Provide Additional Roadway Travel Choices
- Accommodate Homeland Security
- Movement of Goods and Services

## GOALS

- Financial Viability
- Environmental Responsibility





# SCREENING CRITERIA

Six screening criteria were used to evaluate, screen, and refine the Preliminary Range of Alternatives to the seven Screened Alternatives. These criteria were based on the transportation needs and goals outlined in the study's Purpose and Need and applied to each alternative:



## ENGINEERING

- Accommodating existing traffic and long-term traffic growth
- Enhancing travel time reliability
- Providing additional travel choice while retaining the general-purpose lanes
- Evaluating complex operating configurations that lead to driver confusion



## HOMELAND SECURITY

- Accommodating Homeland Security by providing additional capacity to assist in accommodating population evacuation and the ability to quickly coordinate a traffic response by allowing use by emergency responders



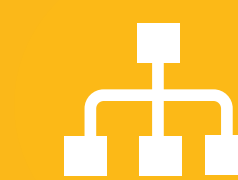
## FINANCIAL VIABILITY

- Evaluating potential construction costs compared to potential traffic in managed lanes



## MOVEMENT OF GOODS AND SERVICES

- Improving movement of goods via truck freight travel and enhancing the movement of services by improving access to employment centers



## MULTI-MODAL CONNECTIVITY

- Improving multi-modal connectivity by enhancing to and between existing transit facilities near the corridor and accommodating new or modified transit service within the alternative

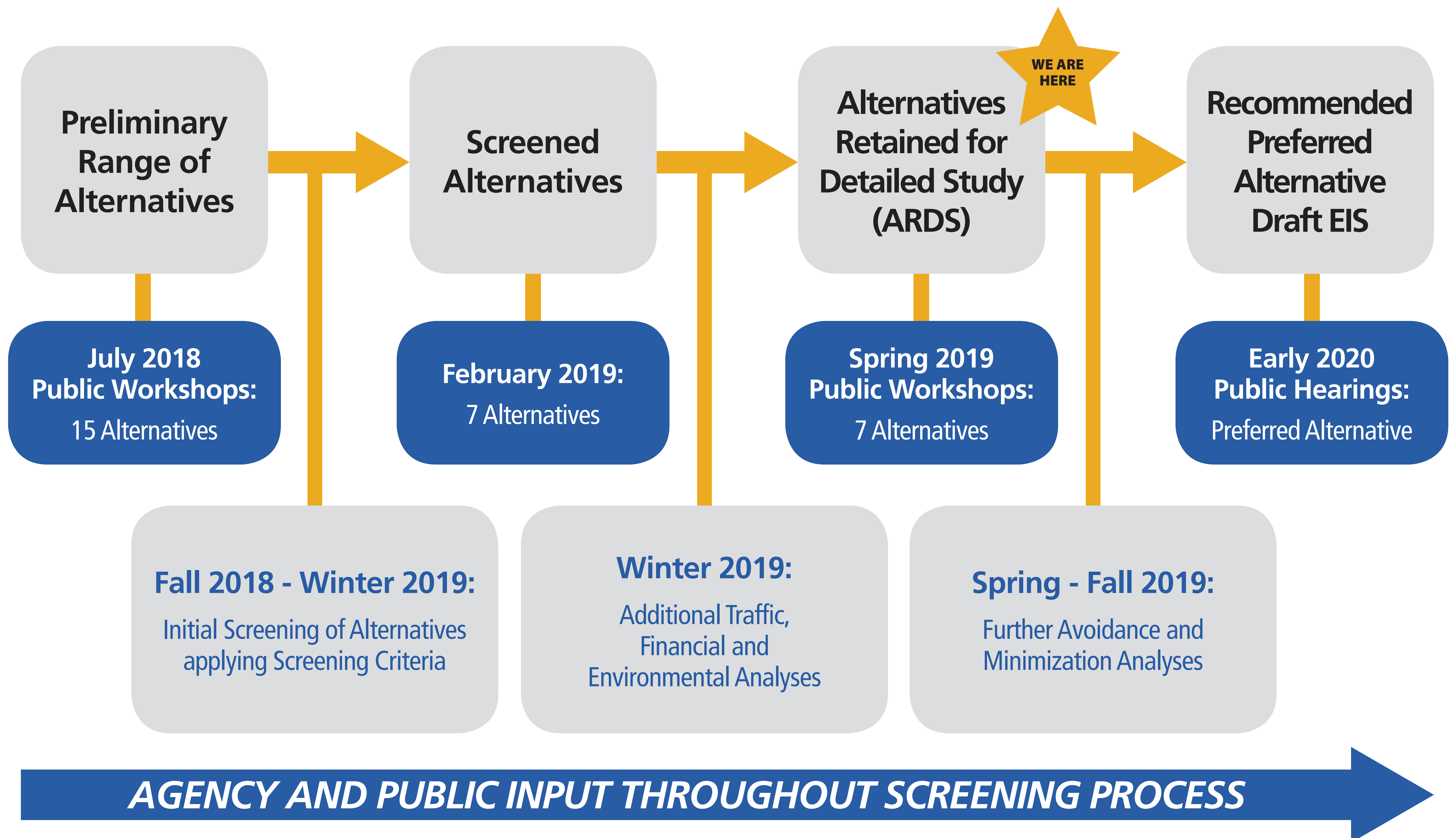


## ENVIRONMENTAL

- Considering key environmental resources: require additional property, and impact parks, historic properties, and wetlands and waters



# SCREENING PROCESS AND ALTERNATIVES DEVELOPMENT



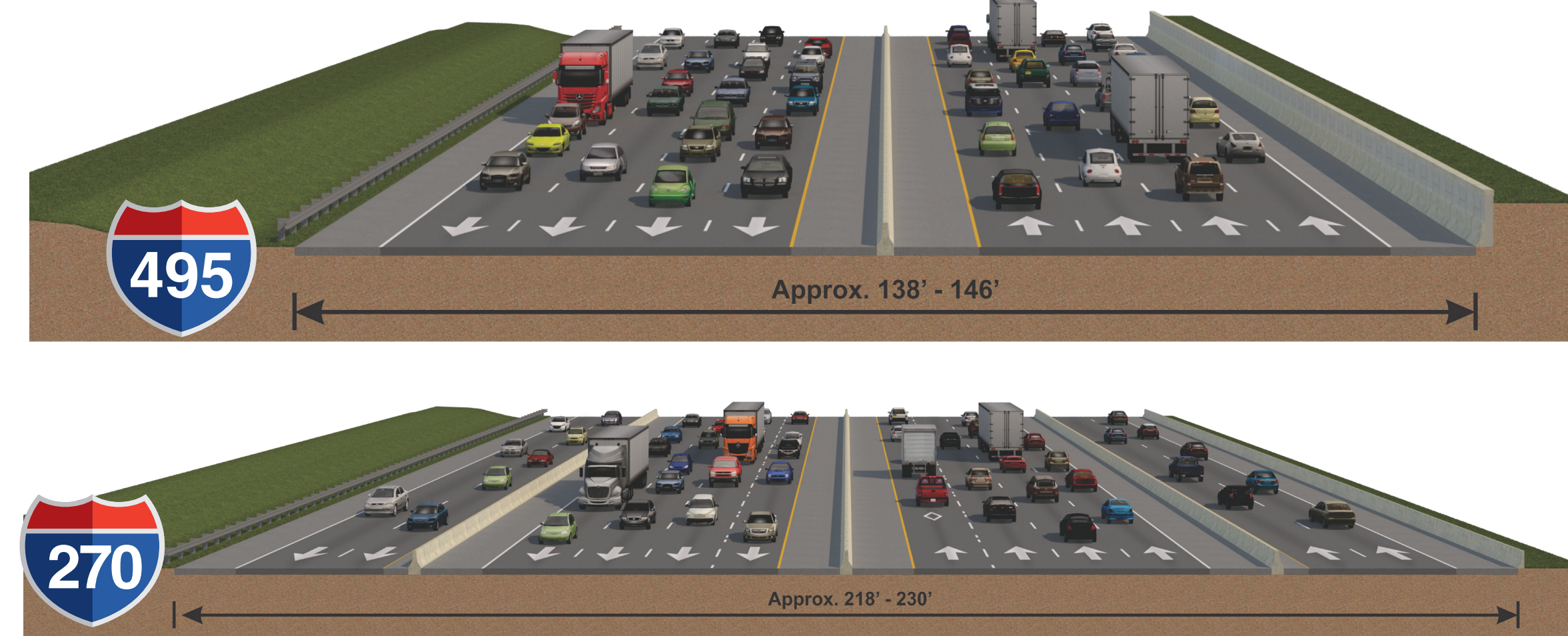


# RECOMMENDED ALTERNATIVES RETAINED FOR DETAILED STUDY (ARDS)

After additional traffic, financial and environmental analysis, all the Screened Alternatives are being recommended to be retained for detailed study in the Environmental Impact Statement because they each meet the Study's Purpose and Need to some extent.

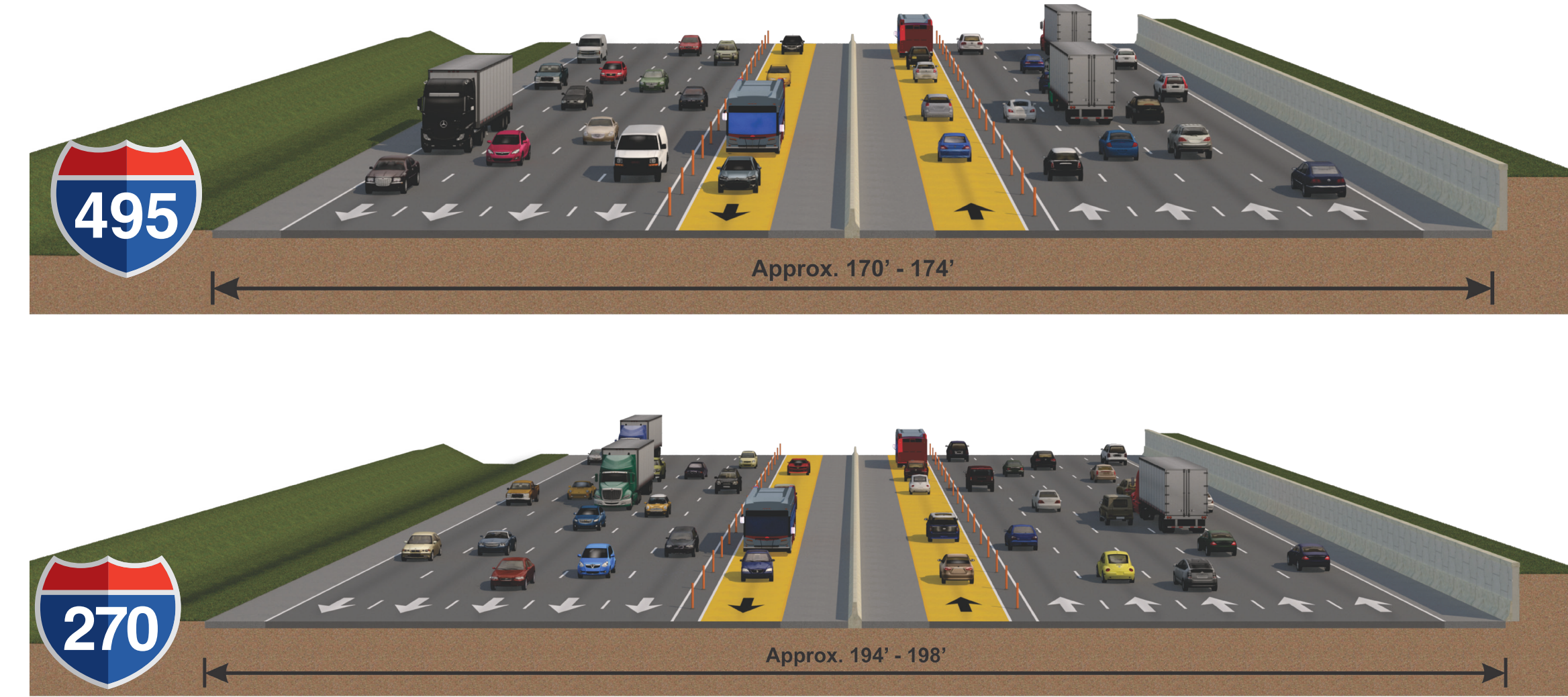
## ALT 1: No Build (Existing)

All projects in the Financially Constrained Long Range Transportation Plan (CLRP) including I-270 Innovative Congestion Management (ICM) Improvements, Purple Line, Corridor City Transitway BRT, and increased trip capacity and frequency along all MARC lines.



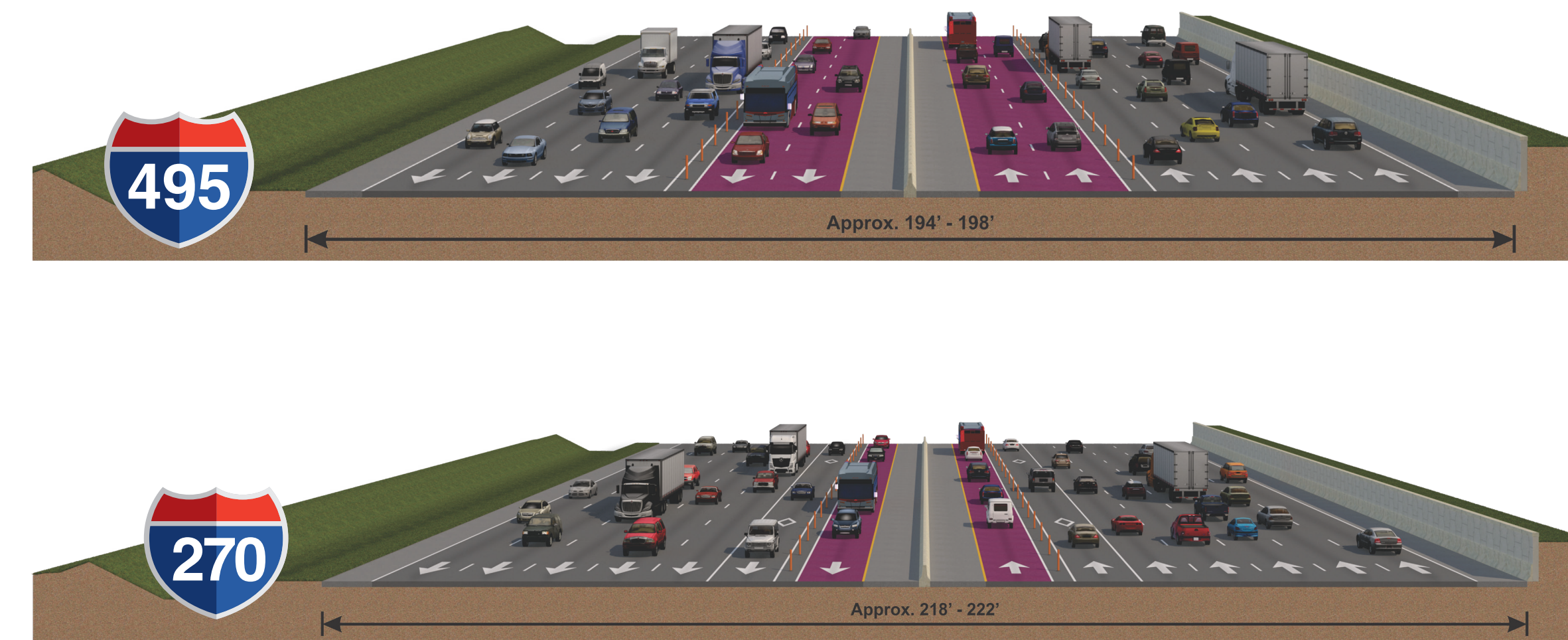
## ALT 5: 1 HOT Managed Lane

Add one HOT managed lane in each direction on I-495 and convert one existing HOV lane in each direction to a HOT managed lane on I-270



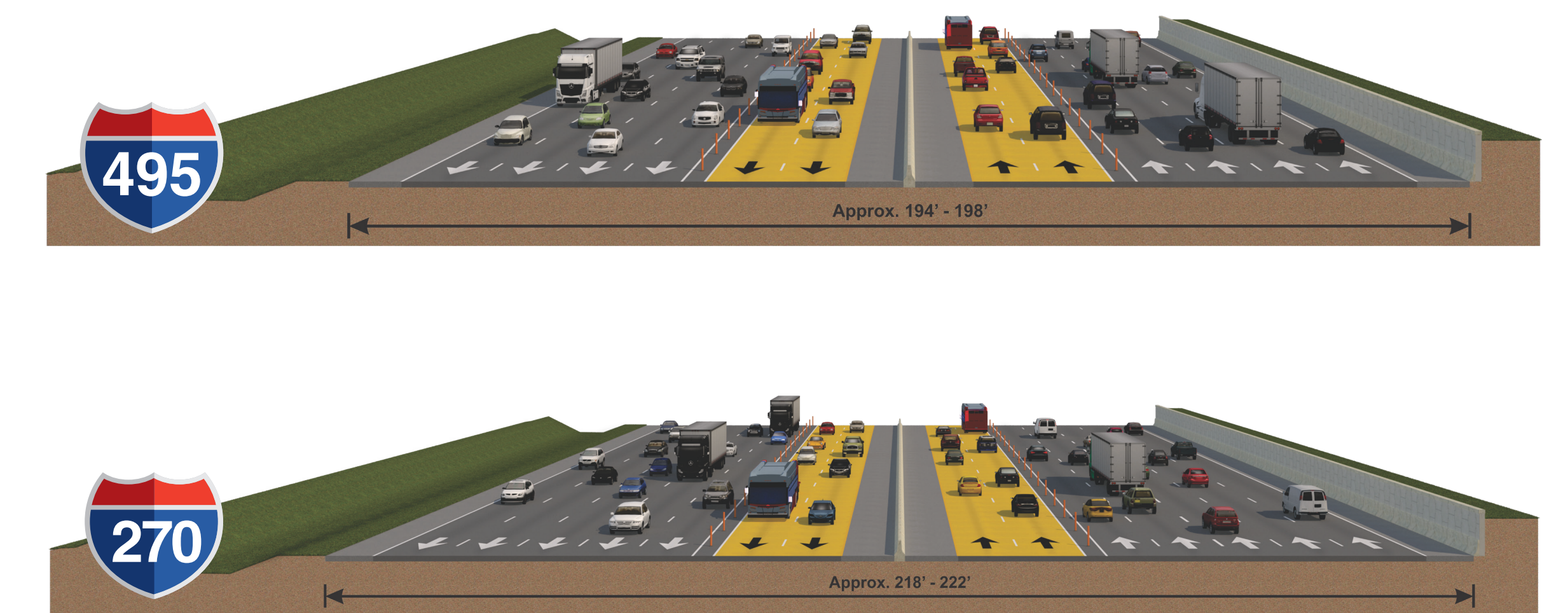
## ALT 8: 2 ETL Managed Lanes on I-495 1 ETL and 1 HOV Managed Lane on I-270

Add two ETL managed lanes in each direction on I-495 and add one ETL managed lane and retain one HOV lane in each direction on I-270



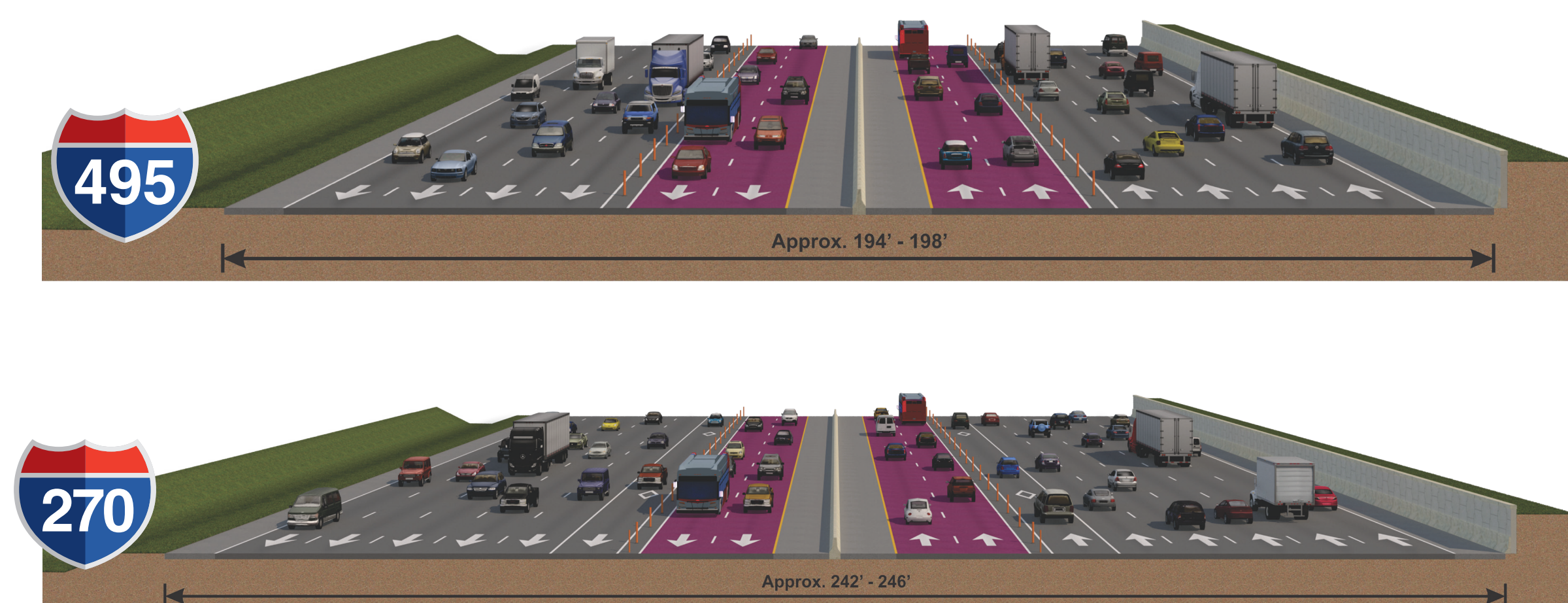
## ALT 9: 2 HOT Managed Lanes

Add two HOT managed lanes in each direction on I-495 and convert one existing HOV lane to a HOT managed lane and add one HOT managed lane in each direction on I-270



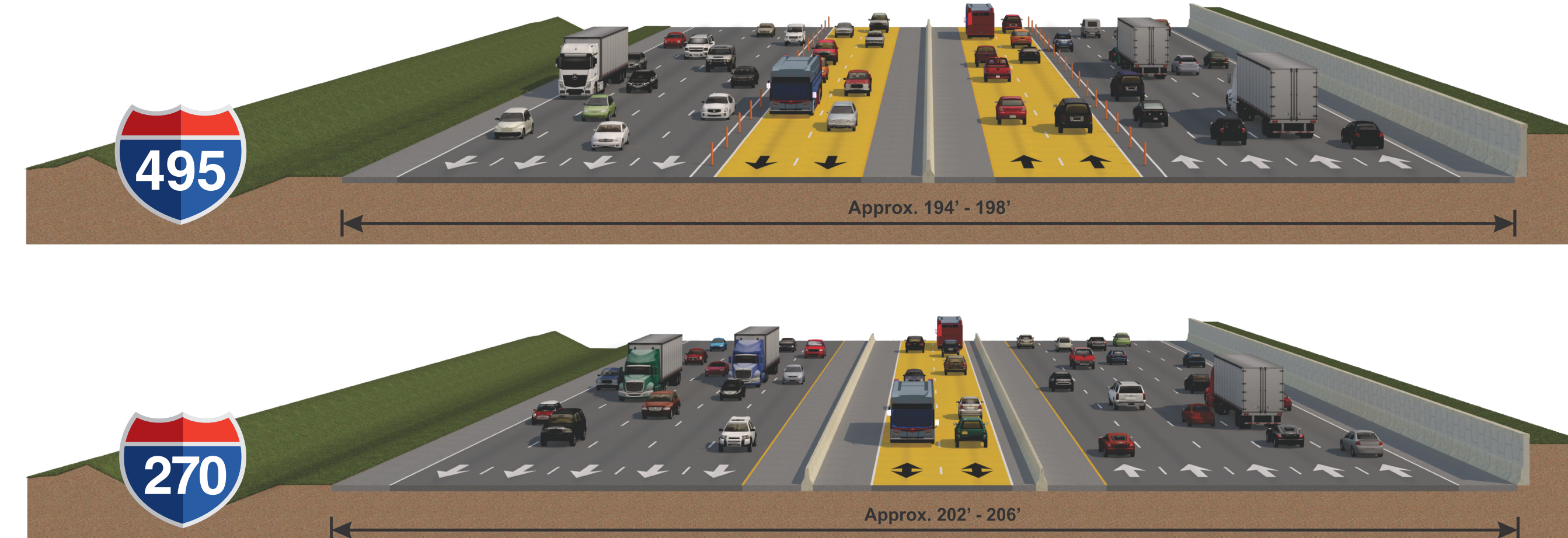
## ALT 10: 2 ETL Managed Lanes and 1 HOV Managed Lane (I-270 only)

Add two ETL managed lanes in each direction on I-495 and on I-270 and retain one existing HOV lane in each direction on I-270 only



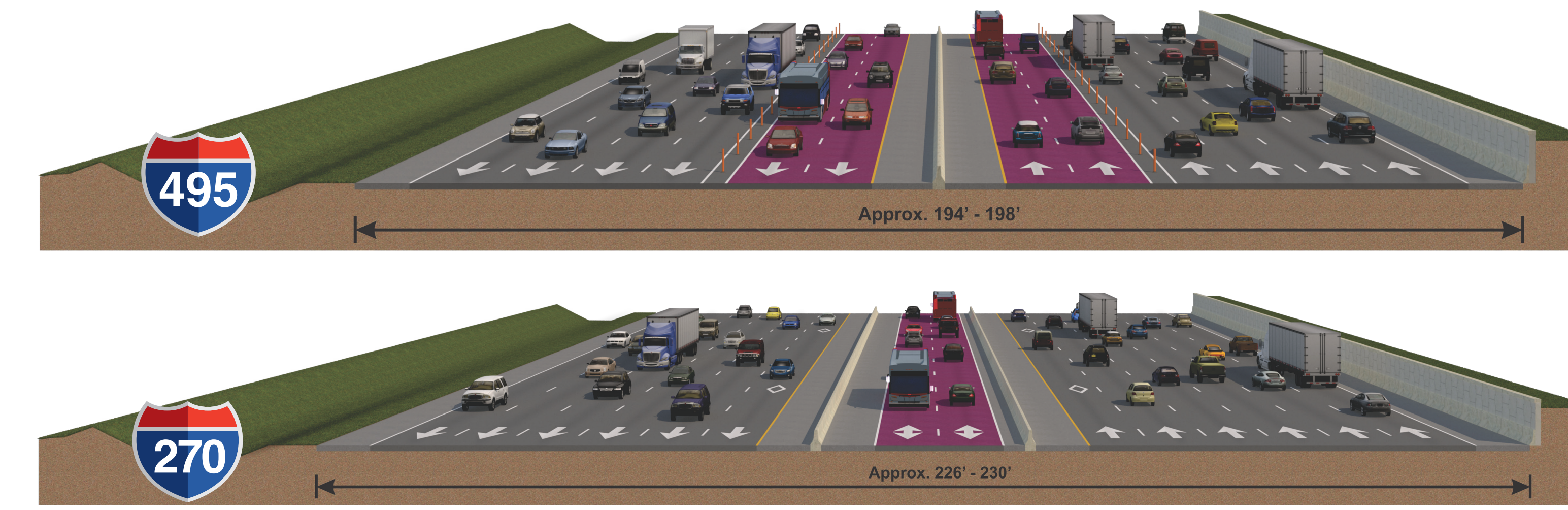
## ALT 13B: 2 HOT Managed Lanes on I-495 2 Reversible HOT Managed Lanes on I-270

Add two HOT managed lanes in each direction on I-495 and convert existing HOV lanes to two HOT managed reversible lanes on I-270 while maintaining General Purpose lanes



## ALT 13C: 2 ETL Managed Lanes on I-495 Reversible ETL Managed Lane plus 1 HOV Managed lane on I-270

Add two ETL managed lanes in each direction on I-495 and add two managed, reversible ETLs on I-270 while retaining HOV lanes adjacent to General Purpose lanes.



### What are High-Occupancy Toll Lanes (HOT)?

Dedicated managed lanes within highway rights-of-way that single-occupancy vehicle (SOV) motorists may use by paying a variably priced toll and high-occupancy vehicle (HOV) motorists may use by paying a discounted toll or no toll at all. Toll payments may vary by time of day and level of congestion.

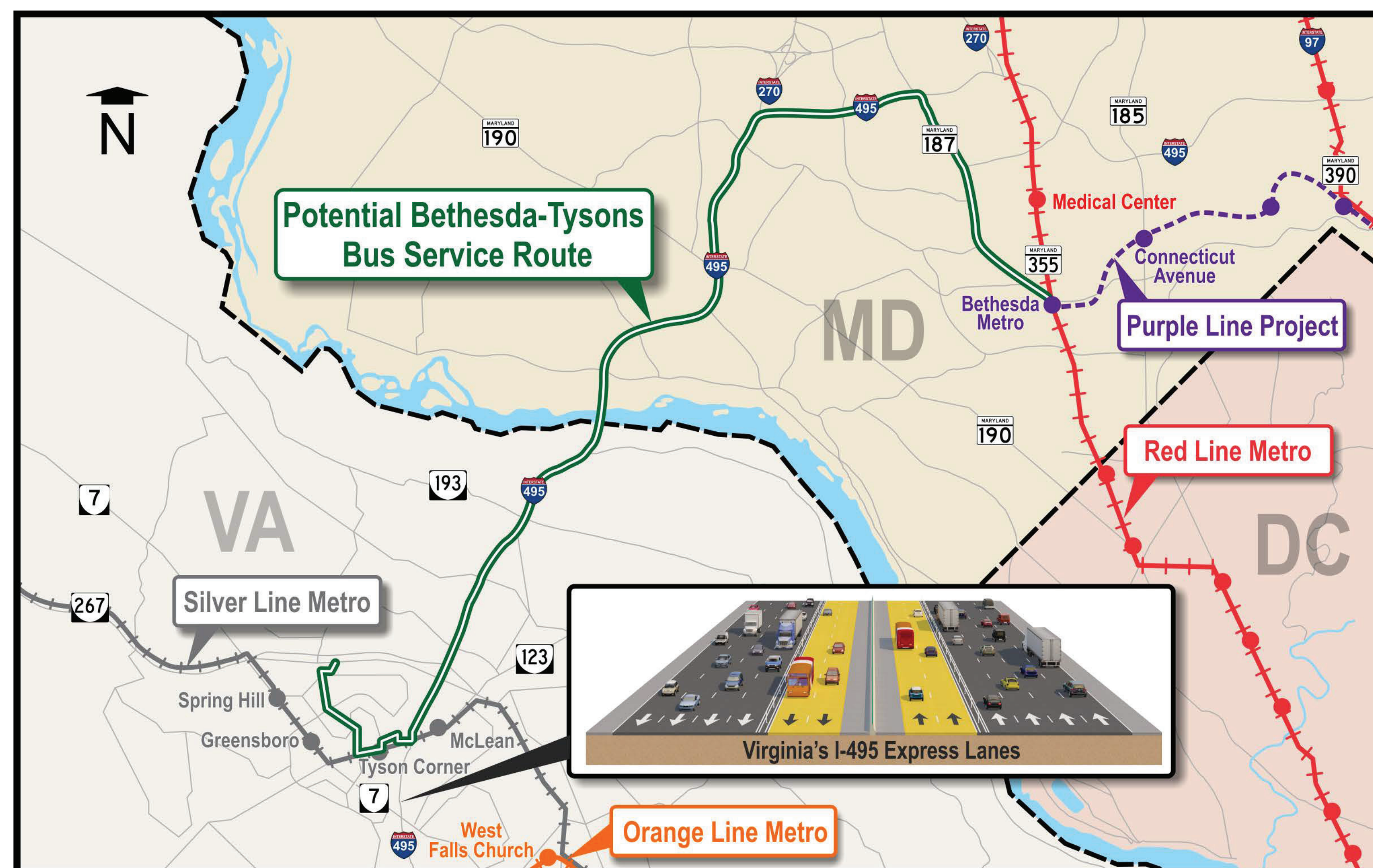
### What are Express Toll Lanes (ETL)?

Dedicated managed lanes within highway rights-of-way that any motorist, regardless of vehicle occupancy, may use by paying a variably priced toll.



## WHAT ABOUT TRANSIT ALTERNATIVES?

- Previous studies have concluded that no single solution, either transit or highway, would provide significant relief to the long-term traffic demand; therefore, both transit and highway improvements are needed.
- The Capital Beltway/Purple Line Study were originally one planning study. As the Purple Line is under construction, now we are studying the Beltway improvements.
- Although transit brings revenue through fares, it is not financially viable because it requires major government investment/subsidies and the state does not have these financial resources.
- While the National Capital Region Transportation Planning Board Constrained Long Range Plan proposes both highway and transit improvements, including the Purple Line, Corridor Cities Transitway Bus Rapid Transit, and increased train capacity/frequency along MARC lines, this study is focused on the highway aspect of the plan.



## MULTIMODAL CONSIDERATIONS

- Public buses will be allowed to use the managed lanes to enhance transit mobility and connectivity to existing and planned transit facilities.
- Improving the highway system will provide a less congested and more reliable route for bus transit.
- MDOT has committed to working with WMATA to consider the results of the Washington Area Transformation Bus Study.
- Direct and indirect access to existing transit stations and transit-oriented developments will be included at Greenbelt, New Carrollton, Branch Avenue, Silver Spring and Shady Grove metro stations.



# BENEFITS OF EXPRESS TOLL LANES (ETL) / HIGH-OCCUPANCY TOLL (HOT) LANES

## Provides Options

- Opportunity for travelers to choose to pay a toll which varies to maintain free flow travel at or above 45 mph and reliable/reduced travel times
- All unrestricted free lanes will remain free
- Provides reduced travel times for those who continue to use the free lanes

## Upgrades System

- New bridges and smoother pavement will be provided for all users at no cost to the Transportation Trust Fund, allowing funding that would have been needed to maintain state of good repair to be used for other vital transportation improvements

## Reduces Traffic on Local System

- Local roads outside the interstates will have less traffic

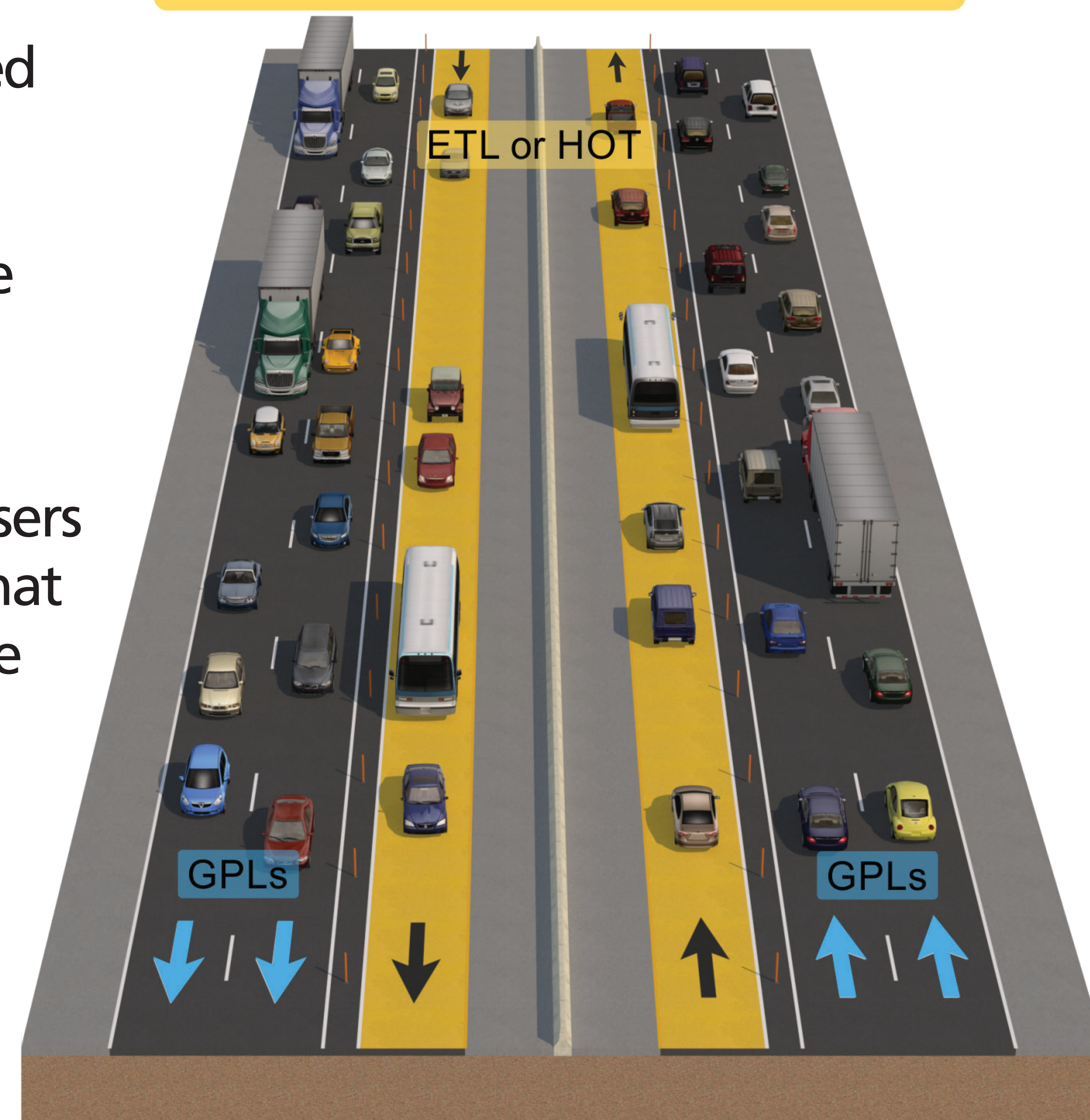
## Job Accessibility

- Improves access to jobs in the region

## Movement of Goods

- Improves reliability for the movement of goods through the region

ETL or HOT Lanes would be separated and tolled to maintain traffic speeds or throughput



General purpose lanes continue to function as unrestricted free lanes



# TRAFFIC OPERATIONS

## CONGESTION RELIEF ON I-495 AND I-270

- Average delay per vehicle quantifies the amount of time motorists are stuck in traffic congestion on the highways within the study area.
- All Build alternatives are projected to reduce delay by 20% or more compared to the No Build condition, as shown below.

Alternatives	Delay Reduction vs. No Build	
	AM Peak	PM Peak
2040 No Build	0%	0%
Alternative 5	20%	22%
Alternative 8	24%	33%
Alternative 9	34%	33%
Alternative 10	35%	35%
Alternative 13B	27%	22%
Alternative 13C	26%	35%

*\*Source: VISSIM Simulation Model. Values reflect delay in all lanes (GP & HOT/ETL) in the year 2040, and also include interchange ramps and junctions.*

### Legend

- |   |   |
|---|---|
|  > 30% decrease in average delay     |  20% - 25% decrease in average delay |
|  25% - 30% decrease in average delay |  < 20% decrease in average delay     |




## REDUCED DELAY ON LOCAL NETWORK

- By serving more traffic on I-495 and I-270, each of the build alternatives are projected to reduce demand on the surrounding local roadway system, resulting in delay savings for local travelers, as shown below.

Alternatives	Description	% Decrease Daily Delay Local Roads
Alternative 1	No Build	0%
Alternative 5	I-495: 1 HOT Lane I-270: 1 HOT Lane	3.2%
Alternative 8	I-495: 2 ETLs I-270: 1ETL & 1 HOV	6.3%
Alternative 9	I-495: 2 HOT Lanes I-270: 2 HOT Lanes	6.8%
Alternative 10	I-495: 2 ETLs I-270: 2 ETLs & 1 HOV	6.4%
Alternative 13B	I-495: 2 HOT Lanes I-270: 2 Reversible HOT Lanes	6.3%
Alternative 13C	I-495: 2 ETLs I-270: 2 Reversible ETLs & 1 HOV	6.2%

*\*Source: MWCOG Regional Forecasting Model*

### Legend

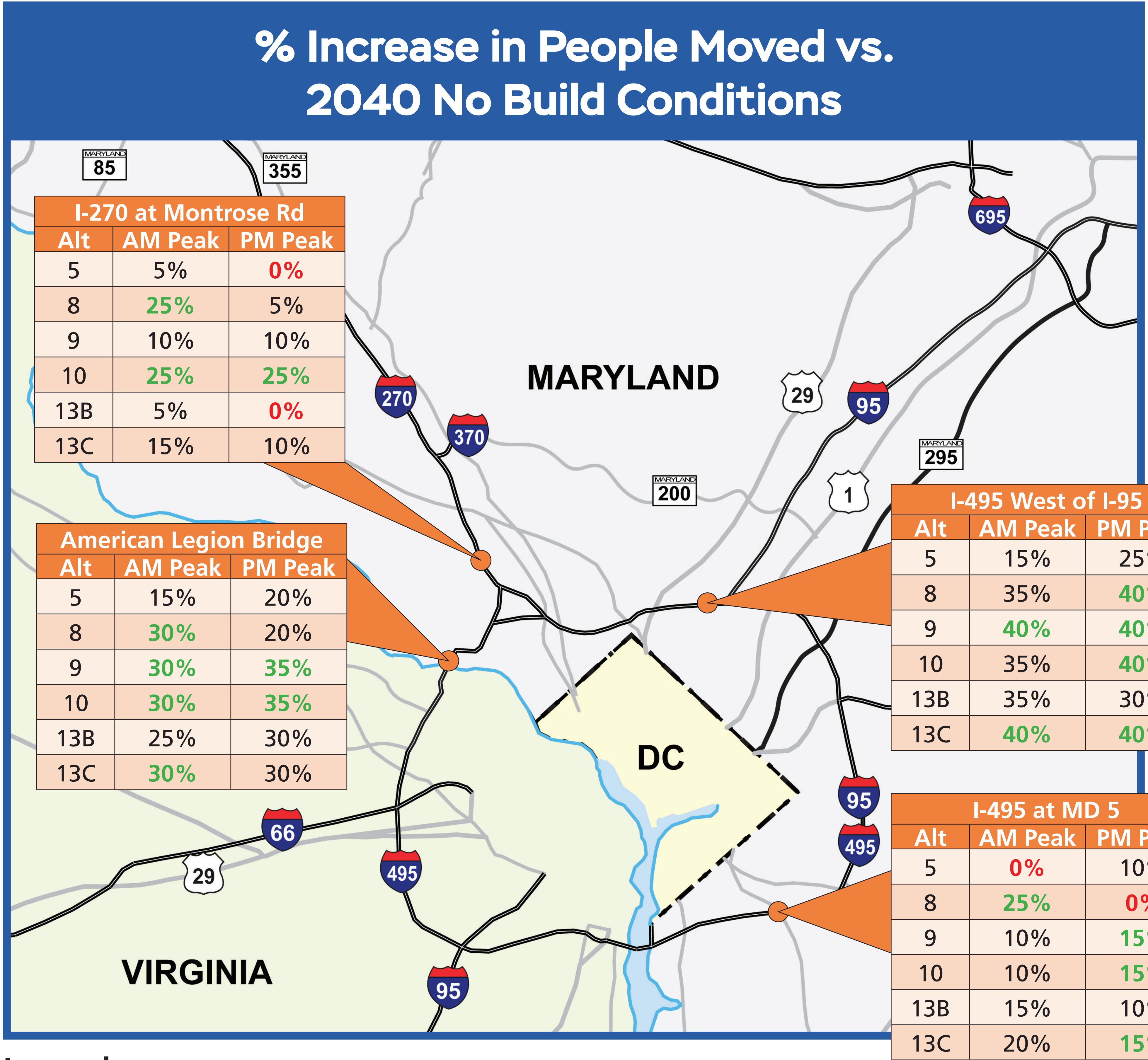
- |  |
|--|
|  No benefit vs. No Build                                |
|  < 5% reduction in daily delay on local roadway network |
|  > 5% reduction in daily delay on local roadway network |



# TRAFFIC OPERATIONS

MOVING PEOPLE  
THROUGH THE CORRIDOR

- “Person-throughput” quantifies the efficiency of the roadway network in getting people to their destinations.
- Equals the number of people that pass by a given point on the roadway in a set amount of time.
- Accounts for high-occupancy vehicles and buses.
- Higher numbers are better.
- Benefits of high “person-throughput” on the highway:
  - More efficient use of the roadway.
  - Reduced peak spreading (i.e., less congestion in the off-peak hours).
  - Reduced burden on the surrounding local roadway network (less cut-through traffic).



## Legend

XX%

Highest increase in “person-throughput” per location

XX%

No Benefit compared to 2040 No Build



# TRAFFIC OPERATIONS

## CORRIDOR TRAVEL TIME AND AVERAGE SPEED IN 2040

**GP** - General Purpose Lane  
**ETL** - Express Toll Lane  
**HOT** - High-Occupancy Toll Lane

Commute from College Park to Bethesda (AM Peak Period)					
Alternatives	Average Speed (mph)	Travel Time (min)	Time Savings (min)	Annual Savings Per Commuter*	
				Minutes	Hours
No Build	14	43	-	-	-
Alt 5 (GP)	29	21	22	5,720	95
Alt 8 (GP)	40	15	28	7,280	120
Alt 9 (GP)	37	16	27	7,020	115
Alt 10 (GP)	45	13	30	7,800	130
Alt 13B (GP)	29	21	22	5,720	95
Alt 13C (GP)	34	18	25	6,500	110
HOT/ETL (All Alts)	60	10	33	8,580	145

\*Assumes 260 commuting days in a year.

Commute from I-95 to Woodrow Wilson Bridge (AM Peak Period)					
Alternatives	Average Speed (mph)	Travel Time (min)	Time Savings (min)	Annual Savings Per Commuter*	
				Minutes	Hours
No Build	23	67	-	-	-
Alt 5 (GP)	29	54	13	3,380	55
Alt 8 (GP)	29	54	13	3,380	55
Alt 9 (GP)	30	52	15	3,900	65
Alt 10 (GP)	30	53	14	3,640	60
Alt 13B (GP)	31	50	17	4,420	75
Alt 13C (GP)	30	52	15	3,900	65
HOT/ETL (All Alts)	35	44	23	5,980	100

\*Assumes 260 commuting days in a year.

\*HOT/ETL speeds reduce below 45 mph due to the system transitioning to the existing roadway west of MD 5.

Commute from Suitland to Greenbelt Metro Station (AM Peak Period)					
Alternatives	Average Speed (mph)	Travel Time (min)	Time Savings (min)	Annual Savings Per Commuter*	
				Minutes	Hours
No Build	37	27	-	-	-
Alt 5 (GP)	57	17	10	2,600	45
Alt 8 (GP)	56	18	9	2,340	40
Alt 9 (GP)	56	17	10	2,600	45
Alt 10 (GP)	56	17	10	2,600	45
Alt 13B (GP)	56	17	10	2,600	45
Alt 13C (GP)	56	17	10	2,600	45
HOT/ETL (All Alts)	60	15	12	3,120	50

\*Assumes 260 commuting days in a year.

Commute from American Legion Bridge to ICC (PM Peak Period)					
Alternatives	Average Speed (mph)	Travel Time (min)	Time Savings (min)	Annual Savings Per Commuter*	
				Minutes	Hours
No Build	24	32	-	-	-
Alt 5 (GP)	29	26	6	1,560	25
Alt 8 (GP)	23	33	-	-	-
Alt 9 (GP)	33	23	9	2,340	40
Alt 10 (GP)	37	21	11	2,860	50
Alt 13B (GP)	42	18	14	3,640	60
Alt 13C (GP)	40	19	13	3,380	55
HOT/ETL (All Alts)	52	15	17	4,420	75

\*Assumes 260 commuting days in a year.

Commute from Silver Spring to Rockville (PM Peak Period)					
Alternatives	Average Speed (mph)	Travel Time (min)	Time Savings (min)	Annual Savings Per Commuter*	
				Minutes	Hours
No Build	27	28	-	-	-
Alt 5 (GP)	47	16	12	3,120	50
Alt 8 (GP)	48	15	13	3,380	55
Alt 9 (GP)	49	15	13	3,380	55
Alt 10 (GP)	37	20	8	2,080	35
Alt 13B (GP)	48	15	13	3,380	55
Alt 13C (GP)	40	19	9	2,340	40
HOT/ETL (All Alts)	53	14	14	3,640	60

\*Assumes 260 commuting days in a year.

Commute from Chevy Chase to Landover (PM Peak Period)					
Alternatives	Average Speed (mph)	Travel Time (min)	Time Savings (min)	Annual Savings Per Commuter*	
				Minutes	Hours
No Build	18	50	-	-	-
Alt 5 (GP)	32	29	21	5,460	90
Alt 8 (GP)	36	26	24	6,240	105
Alt 9 (GP)	36	26	24	6,240	105
Alt 10 (GP)	37	25	25	6,500	110
Alt 13B (GP)	40	23	27	7,020	115
Alt 13C (GP)	35	26	24	6,240	105
HOT/ETL (All Alts)	47	20	30	7,800	130

\*Assumes 260 commuting days in a year.

**HOT/ETLs would offer RELIABLE free-flow travel at or above 45 mph.**



Visit the “My Commute” station to calculate your travel time savings and the projected travel speed benefits along the highway, personalized to your specific route.



# OTHER CONSIDERATIONS

## CHALLENGES WITH REVERSIBLE LANES

- Daily maintenance and associated costs
- Downtime during changeovers
- Safety concerns
- Driver expectancy issues
- Less flexibility to adapt to incidents
- Does not serve demand in off-peak direction on I-270

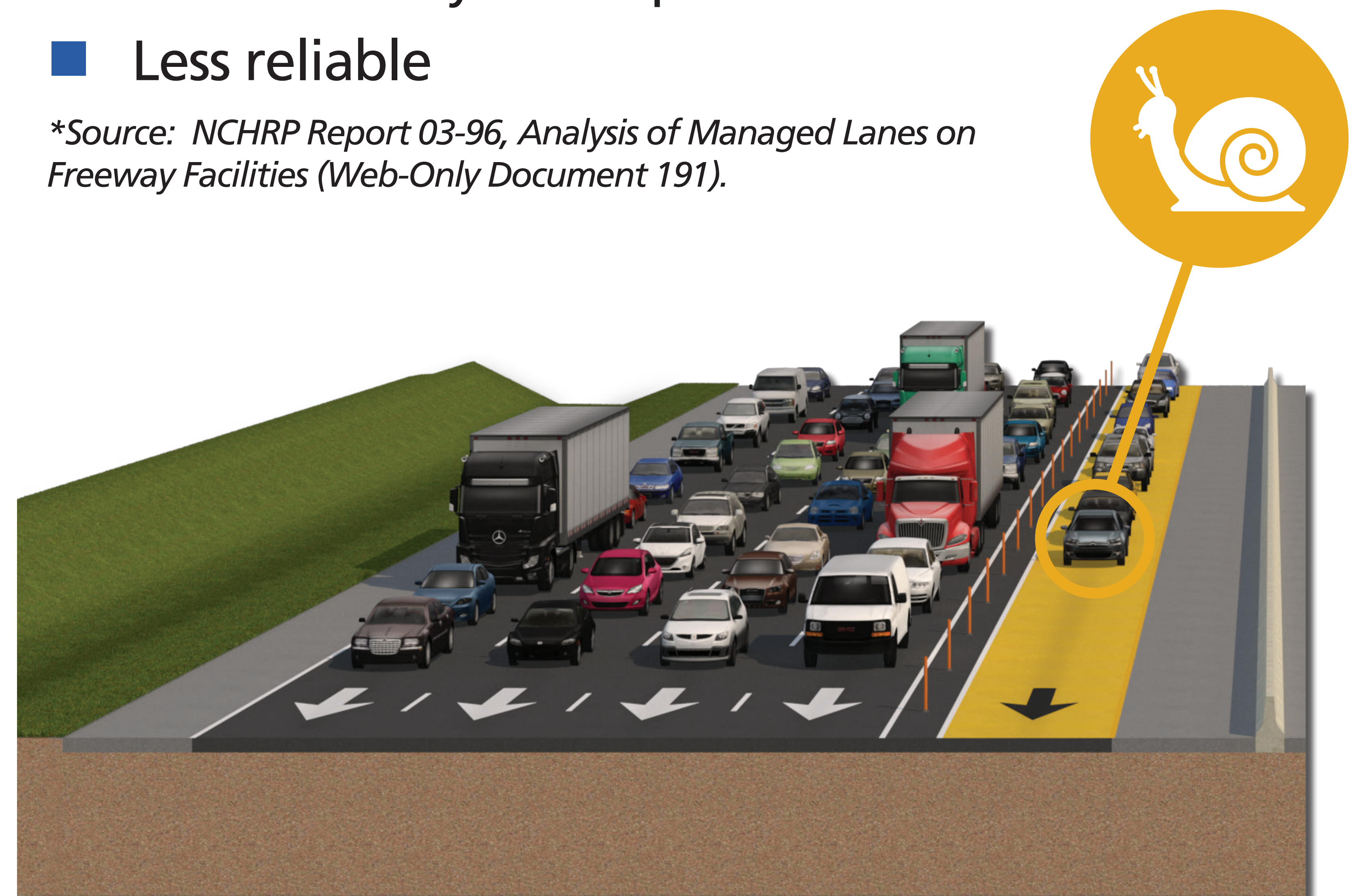


(Linda Davidson/The Washington Post)

## CHALLENGES WITH SINGLE-LANE SYSTEMS

- “Snail” effect – speed governed by slowest moving vehicle\*
- Lower speeds in managed lane
- Passing is constrained
- Less flexibility to adapt to incidents
- Less reliable

\*Source: NCHRP Report 03-96, Analysis of Managed Lanes on Freeway Facilities (Web-Only Document 191).





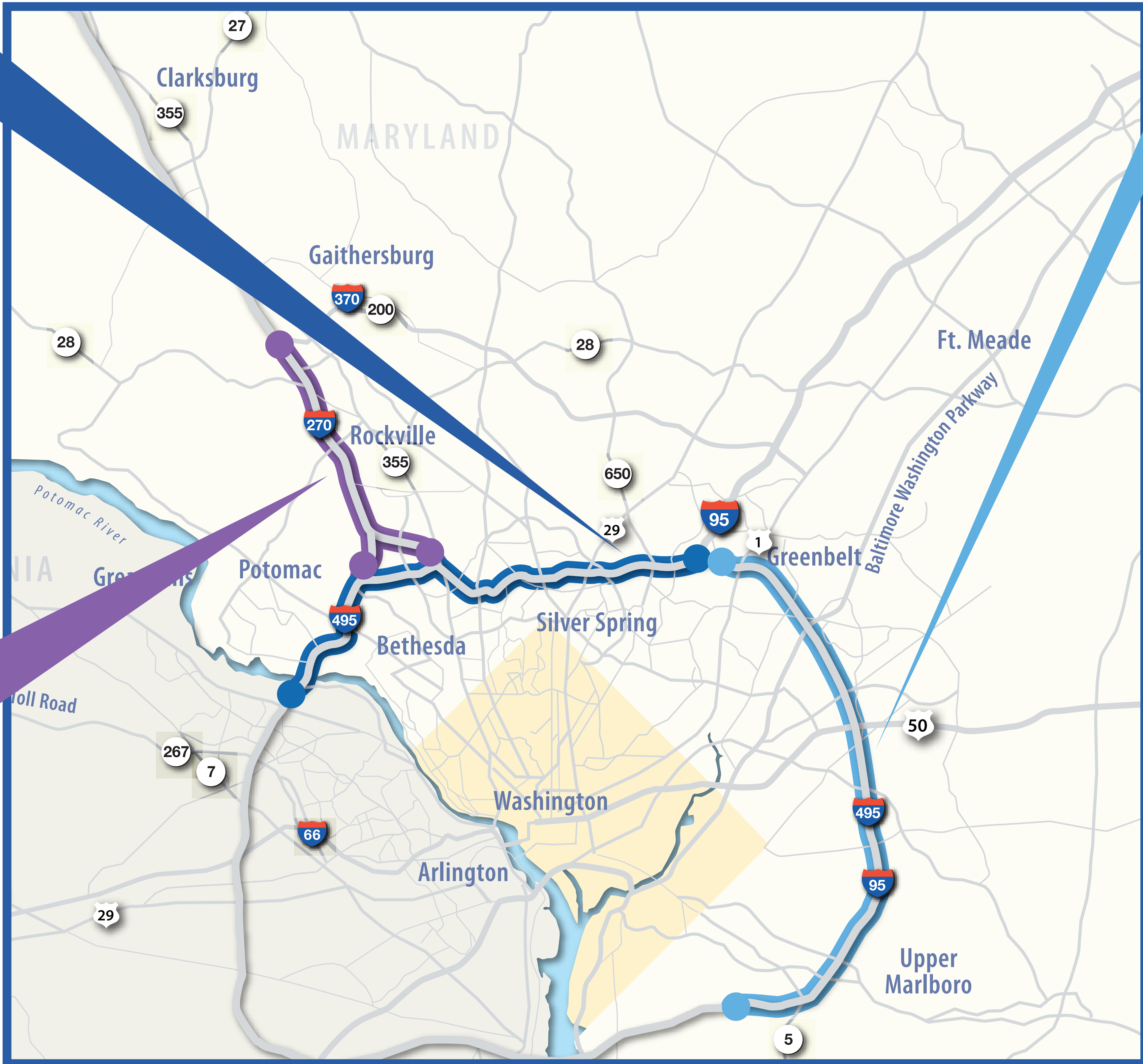
# PRELIMINARY EFFECTS COMPARISON OF SCREENED ALTERNATIVES BY PROGRAM PHASE

## PROGRAM PHASE 1: I-495 from the George Washington Parkway to I-95

	Resources	Alt 1 No Build	Alt 5	Alt 8	Alt 9	Alt 10	Alt 13B	Alt 13C
ENVIRONMENTAL	Number of Parks/ Recreation Facilities	0	17	18	18	18	18	18
	Number of National Register Historic Properties	0	9	9	9	9	9	9
	100-Year Floodplain (acres)	0	97	98	98	98	98	98
	Unique and Sensitive Areas (acres)	0	278	283	283	283	283	283
	Forest canopy (acres)	0	560	574	574	575	574	574
	Wetlands (acres)	0	4	4	4	4	4	4
	Waters of the US (miles)	0	11	11	11	11	11	11
	Noise Receptors Impacted	0	1714	2152	2152	2152	2152	2152
	Total Right-of-way Required (acres)	0	112	125	125	126	125	125
ENGINEERING	Number of Properties Directly Effected	0	463	552	552	554	552	552
	Number of Residential Relocations	0	25	34	34	34	34	34
	Number of Business Relocations	0	3	3	3	3	3	3
	Width of Pavement on I-495 (feet)	138-146	170-174	194-198	194-198	194-198	194-198	194-198
	Width of Pavement on I-270 (feet)	218-230	N/A	N/A	N/A	N/A	N/A	N/A

## PROGRAM PHASE 2A: I-270 from I-495 to I-370

	Resources	Alt 1 No Build	Alt 5	Alt 8	Alt 9	Alt 10	Alt 13B	Alt 13C
ENVIRONMENTAL	Number of Parks/ Recreation Facilities	0	12	12	12	12	12	12
	Number of National Register Historic Properties	0	8	8	8	8	8	8
	100-Year Floodplain (acres)	0	6	6	6	6	6	6
	Unique and Sensitive Areas (acres)	0	46	47	47	50	47	49
	Forest canopy (acres)	0	274	277	277	286	277	282
	Wetlands (acres)	0	2	2	2	2	2	2
	Waters of the US (miles)	0	3	3	3	3	3	3
	Noise Receptors Impacted	0	537	634	634	745	575	625
	Total Right-of-way Required (acres)	0	65	68	68	76	68	73
ENGINEERING	Number of Properties Directly Effected	0	178	197	197	234	197	213
	Number of Residential Relocations	0	0	0	0	0	0	0
	Number of Business Relocations	0	0	0	0	0	0	0
	Width of Pavement on I-495 (feet)	138-146	N/A	N/A	N/A	N/A	N/A	N/A
	Width of Pavement on I-270 (feet)	218-230	194-198	218-222	218-222	242-248	202-206	226-230



### NOTES:

- All alternatives follow the existing highways, therefore, the quantities are similar.
- Property and environmental needs are preliminary at this point in the Managed Lanes Study. As the study moves forward, further avoidance and minimization to reduce property and environmental needs will be evaluated and prioritized. This includes incentivizing the private sector through innovation.
- Preliminary impacts in tables assume total impacts; temporary and permanent impacts will be differentiated in the DEIS.
- The Air Quality Analysis for the Study is still ongoing. The methodologies and assumptions used in the assessment will be outlined in the DEIS and supporting documentation.
- Noise receptors are noise sensitive land uses which include residences, schools, places of worship, parks, among others.



## PROGRAM PHASE 2B: I-495 from I-95 to west of MD 5

	Resources	Alt 1 No Build	Alt 5	Alt 8	Alt 9	Alt 10	Alt 13B	Alt 13C
ENVIRONMENTAL	Number of Parks/ Recreation Facilities	0	15	15	15	15	15	15
	Number of National Register Historic Properties	0	8	8	8	8	8	8
	100-Year Floodplain (acres)	0	21	23	23	23	23	23
	Unique and Sensitive Areas (acres)	0	84	84	84	84	84	84
	Forest canopy (acres)	0	582	598	598	598	598	598
	Wetlands (acres)	0	14	15	15	15	15	15
	Waters of the US (miles)	0	14	14	14	14	14	14
	Noise Receptors Impacted	0	1410	1684	1684	1684	1684	1684
	Total Right-of-way Required (acres)	0	129	146	146	146	146	146
ENGINEERING	Number of Properties Directly Effected	0	587	708	708	708	708	708
	Number of Residential Relocations	0	0	0	0	0	0	0
	Number of Business Relocations	0	1	1	1	1	1	1
	Width of Pavement on I-495 (feet)	138-146	170-174	194-198	194-198	194-198	194-198	194-198
	Width of Pavement on I-270 (feet)	218-230	N/A	N/A	N/A	N/A	N/A	N/A

## POTENTIAL PHASING:

- To implement the improvements of a build alternative, a potential phasing plan would be considered. It would be proposed in three phases.
- Phase 1 would start on I-495 at the George Washington Parkway, include improvement of the American Legion Bridge, and extend to I-95.
- Phase 2A on I-270 would start at I-495 and extend to I-370.
- Phase 2B on I-495 would start at I-95 and extend to west of MD 5.
- This phasing would address the most congested freeway segments first and allow Phases 2A and 2B to be delivered concurrently.
- Phase 1 would be anticipated to begin shortly after approval of a Record of Decision and Phases 2A and 2B would be anticipated to begin within two years of beginning of Phase 1.



 Find address or place 



The information shown is for the purpose of determining preliminary cost estimates and environmental impacts and is subject to change during final design. Any reliance on these plans is made with the full understanding of their draft status. The proposed managed lane access points are based on preliminary traffic and revenue analyses and may change as more detailed analyses are completed.

☒ I understand the above.

## How to use this application

This mapping tool is designed to provide a snapshot of the screened alternatives that are under consideration for the I-495 & I-270 Managed Lanes Study. This tool is intended to provide a general overview of the proposed improvements to date.

The study information is in the draft stage and the content and project design is subject to change. The aerial imagery may not reflect current conditions and cannot be used to determine detailed property impacts due to the imprecise nature of the files.

Some of alternatives overlap each other. Please use the tools described below to turn on or off the limits of each alternative.

## How to find a property

If you wish to find a specific property, type these plans in the search box located in the top left hand corner of the map.

Find address or place

To explore the map, use your mouse to navigate. To pan your view of the map, click with your left mouse button anywhere on the map and hold, then drag the map across the screen. To change the scale (zoom in and out), rotate your mouse wheel or click the "+" and "-" buttons at the top right corner of the map.

As you zoom in, more information will be available to you. Use the widget ribbon



# PROPERTY NEEDS - FREQUENTLY ASKED QUESTIONS

Property and environmental needs are preliminary at this point in the Managed Lanes Study. As the study moves forward, further avoidance and minimization to reduce property and environmental needs will be evaluated and prioritized. This includes, incentivizing the private sector through innovation.

## What determines if my property is needed?

- Many factors are analyzed in developing a transportation facility such as environmental, traffic operations, safety and property effects. If the improvements are wider than MDOT SHA's property, your property is needed.

## What are my rights related to property acquisition?

- MDOT SHA complies with State and Federal laws to determine just compensation for impacts to your property.
- Just compensation is based on the fair market value of the property and includes the compensation for property needed plus any decrease in the value to any remaining property.
- For full details on the acquisition process, please refer to the MDOT SHA Your Land and Your Highways: Your Rights and Benefits Guide.

## How far in advance will I know that my property is needed?

- MDOT SHA will advise you well in advance of actual negotiations. A letter will be mailed to you explaining that your property will be appraised and you have the right to be present. The mere fact that a study is ongoing does not mean that transportation improvements will affect your property.

## What will I be paid for my property if it is needed?

- MDOT SHA will offer fair market value of your property which will include compensation for the property and decrease in value to the remaining property. Relocation assistance is a separate benefit that is provided if the owner is eligible.



# REDUCTION OF POTENTIAL PROPERTY NEEDS

Property and environmental needs are preliminary at this point in the Managed Lanes Study. As the study moves forward, further avoidance and minimization to reduce property and environmental needs will be evaluated and prioritized. This includes, incentivizing the private sector through innovation.

## How have we reduced potential property needs?

- At this early stage, considering the information available and level of design for each alternative, we have attempted to stay within existing rights-of-way to the extent possible to avoid and/or minimize potential property needs from residents and businesses.
- In locations where potential property needs were identified, a series of adjustments were applied to reduce the amount of potential property needed. This included reducing grass and grading areas next to the roadway and including retaining walls.

## How will we continue to reduce potential property needs?

- MDOT SHA is committed to working with residents and businesses to identify approaches that could further reduce potential property needs or mitigate any effects to property as this process moves forward.
- Further avoidance and minimization is a priority as the development process moves forward. This includes continuing to evaluate the reduction of property needs as the preferred alternative is identified and refined. Also, MDOT SHA will engage and incentivize the private sector through innovation to reduce property needs.



# WHAT HAPPENS IF MY PROPERTY IS DIRECTLY AFFECTED?

## TIMELINE OF THE ACQUISITION PROCESS

### SPRING 2019 TO SUMMER 2020

Further avoidance & minimization to reduce needs will be evaluated and prioritized including incentivizing the private sector through innovation

### FALL 2020

Complete National Environmental Policy Act (NEPA) Study



### IDENTIFICATION

During final design, MDOT SHA determines if property is needed to construct the project (No earlier than 2021)



### FORMAL NOTIFICATION

Property owner will receive a notification letter from MDOT SHA's Office of Real Estate (ORE)



### PRE-NEGOTIATION

MDOT SHA determines the amount of land that may be needed for the new improvement and the effects on your remaining property



### APPRAISAL

A qualified real estate appraiser will appraise your property and ORE's Appraisal Review Division will set the just compensation to be offered



### DISCUSSION

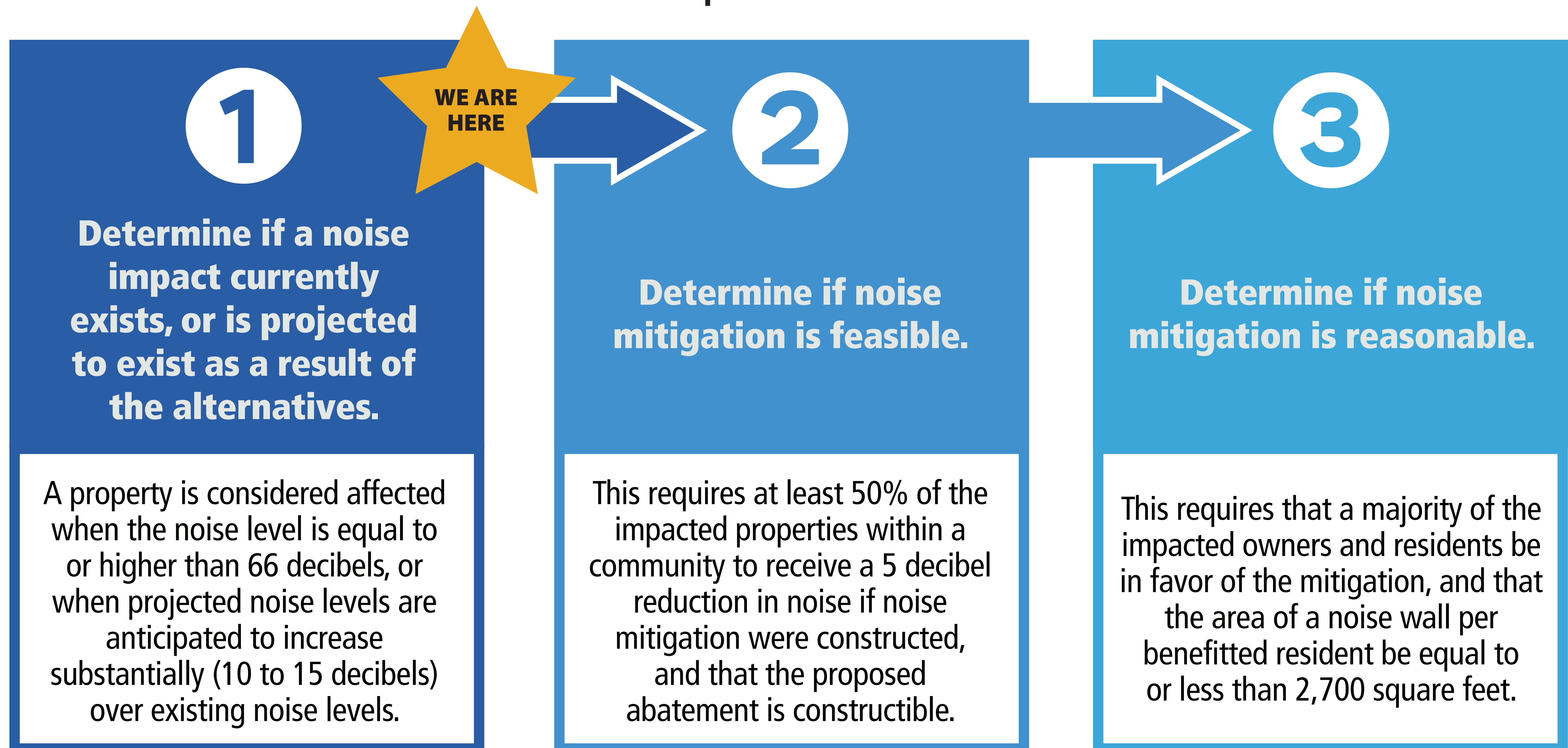
A real property specialist will contact you to set up an appointment to discuss the acquisition and the offer

[https://www.roads.maryland.gov/ORE/highway\\_brochure\\_2019.pdf](https://www.roads.maryland.gov/ORE/highway_brochure_2019.pdf)



## HOW DO WE STUDY NOISE IMPACTS?

As part of NEPA, MDOT SHA evaluates the need for noise mitigation when alternatives propose changes to the existing noise environment. This evaluation includes three requirements:



<https://www.roads.maryland.gov/Index.aspx?PageId=828>



# WHAT IS MDOT SHA'S NOISE MITIGATION POLICY?

The MDOT SHA Noise Policy requires mitigation be feasible and reasonable.

**FEASIBILITY:** Can effective mitigation be constructed?

**Acoustic Considerations:** Can mitigation reduce projected noise levels by at least 5 dB(A) at 50% of impacted sites? Reduction of noise levels may be limited where external noise sources exist, such as where aircraft flight paths exist. In these situations, noise barriers may not be feasible.

**Safety & Access Considerations:** Will noise mitigation block access for driveways, local streets or pedestrians? Will it cause unsafe conditions, for example by limiting sight distance? If so, mitigation is not feasible.

**Site Constraint Assessment:** Will construction of the noise mitigation require additional considerations, for example: a retaining wall; major utility conflicts; acquisition of right-of-way?

**REASONABLENESS:** Is it reasonable to construct noise mitigation in this location?

**Viewpoints of Benefited Property Owners & Residents:** If more than 50% of benefited residents in the impacted area are opposed to the noise mitigation, it is deemed not reasonable.

**Benefited Residences & Design Goal:** At least 50% of benefited residences must receive at least a 7 dB(A) reduction from the proposed abatement for the abatement to be considered reasonable.

**Cost Effectiveness:** A barrier system will be considered reasonable if the area of wall provided per benefited residence is equal to, or less than, 2,700 square feet.

**NOTE:** For full details please refer to the MDOT SHA Highway Noise Policy, August 2011  
<https://www.roads.maryland.gov/Index.aspx?pagelD=828>



# STAY CONNECTED

MDOT SHA is committed to keeping the public informed about this important study. Learn more about the study:


-  Visit **495-270-p3.com**
-  Call toll free **833-858-5960**
-  Email Study team  
**495-270-p3@sha.state.md.us**
-  Sign up for email notifications on  
the website **495-270-p3.com**

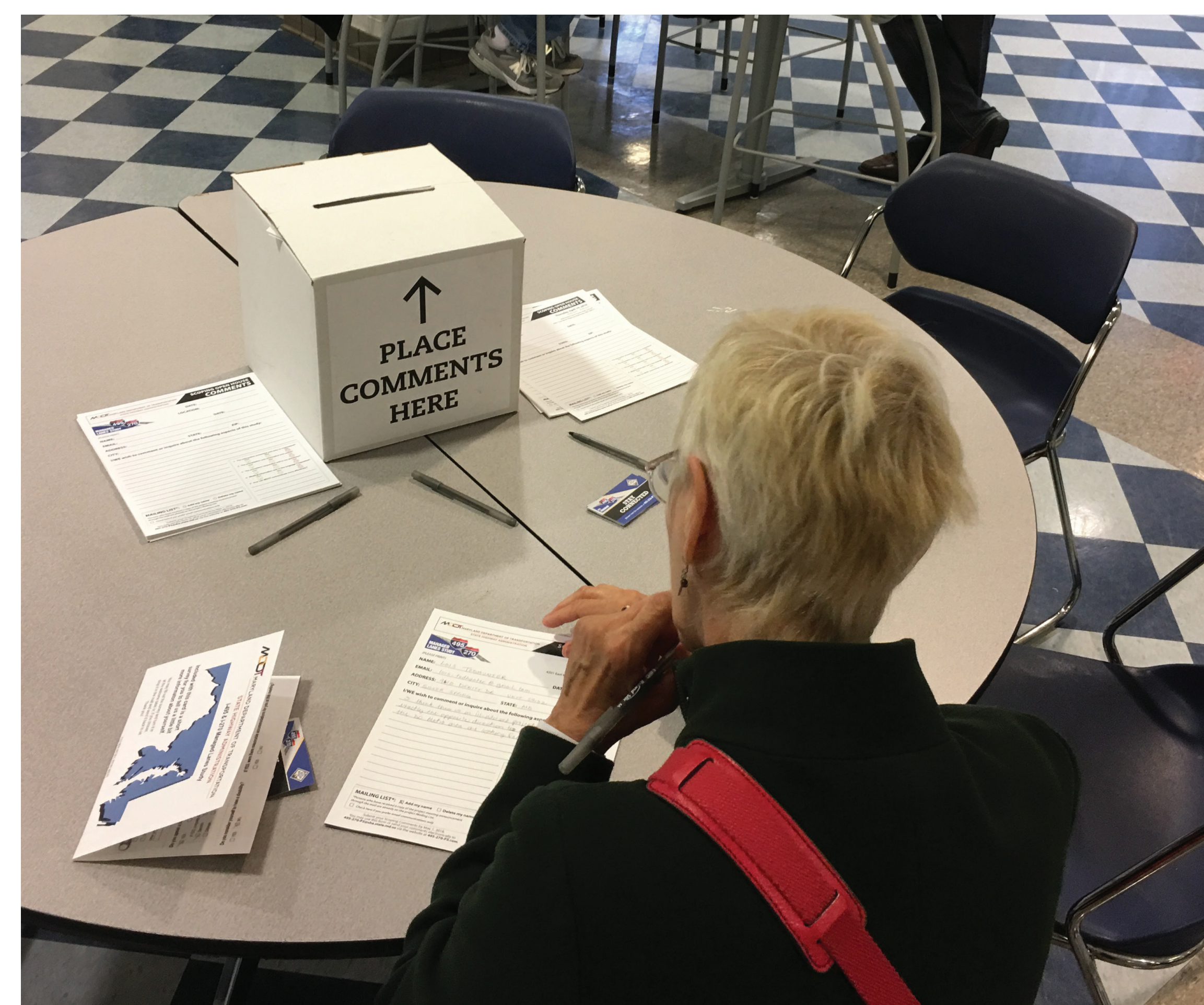




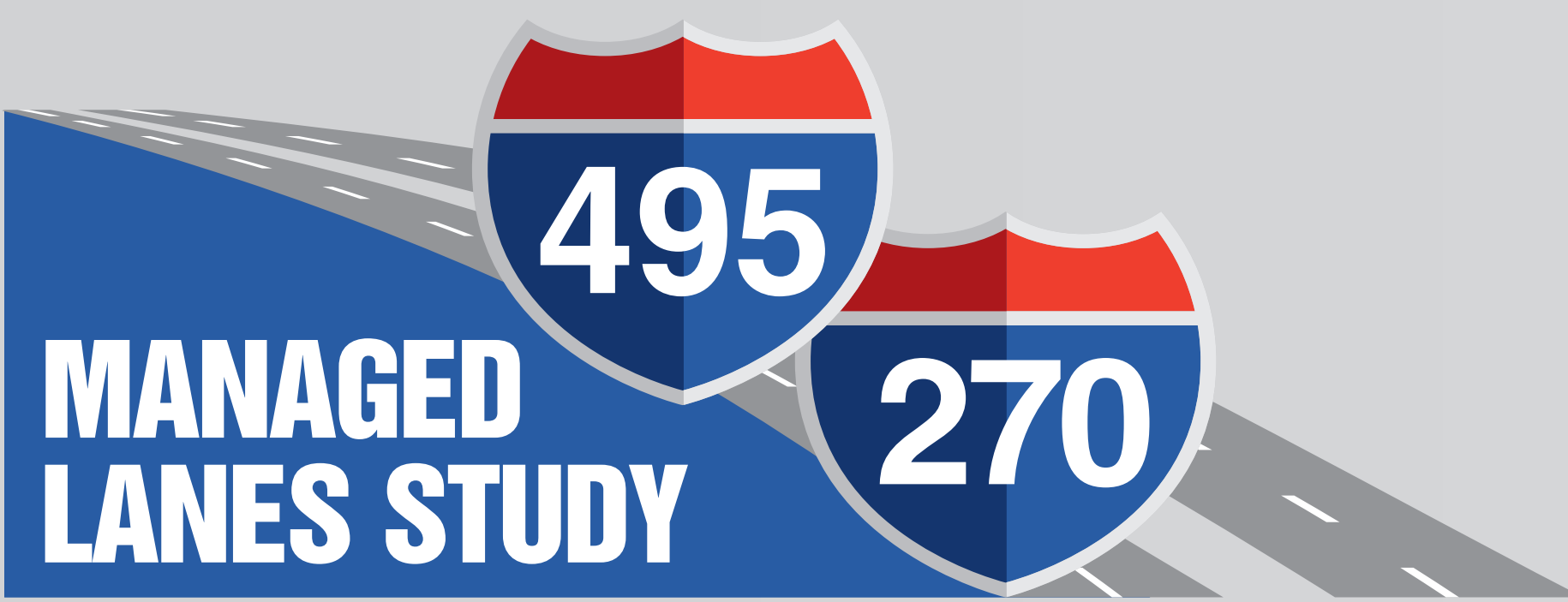
## PROVIDE FEEDBACK

We want your comments on the recommended Alternatives Retained for Detailed Study (ARDS). **Comments for the ARDS will be accepted through June 14, 2019.** Please comment through one of these methods:

-  Hard copy comment form that can be dropped off at the workshops or in the mail
-  Provide oral comments to the verbatim recorder
-  Online comment form **495-270-p3.com**
-  Email **495-270-p3@sha.state.md.us**
-  By mail at:  
 Maryland Department of Transportation  
 State Highway Administration  
 I-495 & I-270 P3 Office  
 707 North Calvert Street  
 Mail Stop P-601  
 Baltimore, MD 21202







# WE'RE WORKING OUR WAY AROUND THE STUDY AREA TO GET YOUR FEEDBACK

Since January, MDOT SHA has met with stakeholders and community members.

Four Cities Stakeholder Meeting (College Park, Berwyn Heights, Rockville, New Carrollton)	College Park	January 30, 2019
Suburban Maryland Transportation Alliance Meeting	Rockville	February 7, 2019
Carderock Citizens Association Meeting	Bethesda	February 10, 2019
Town of Cheverly Town Hall Meeting	Cheverly	March 14, 2019
Upcounty Citizens Advisory Board Meeting	Germantown	March 18, 2019
Montgomery County Council Meeting	Rockville	March 19, 2019
Village of North Chevy Chase Meeting	Chevy Chase	March 19, 2019
The Promenade Meeting	Bethesda	March 20, 2019
Locust Hill Citizens Association Meeting	Bethesda	March 21, 2019
Prince George's County Council Meeting	Upper Marlboro	March 25, 2019
Construction Management Association of America Meeting	Baltimore	March 26, 2019
Greater Bethesda Chamber of Commerce Meeting	Bethesda	March 27, 2019
Cabin John Citizens Association Meeting	Cabin John	March 27, 2019
Frederick Chamber Transportation Action Committee	Frederick	April 3, 2019
Gaithersburg City Council Meeting	Gaithersburg	April 8, 2019

Contact us if you'd like to schedule a meeting with your organization:

@ 495-270-p3@sha.state.md.us

833-858-5960 Toll-Free



# PUBLIC-PRIVATE PARTNERSHIPS (P3)

## WHAT IS A P3?

A Public-Private Partnership (P3) is an alternative delivery model that seeks to harness private sector expertise and innovation in the delivery of public infrastructure for the benefit of the public owner and users of the infrastructure. Constraints and authority, P3s can successfully leverage the respective strengths of the public and private sectors to deliver large, complex infrastructure projects in a cost-effective and timely fashion. Functions under a P3 delivery model may include designing, building, financing, operating, and maintaining an infrastructure facility.

## BENEFITS OF A P3



### Projects delivered faster:

P3 projects can move forward when the public owner does not have available funding.



### Provides equity and financing:

Without a P3, proposed improvements of this magnitude would take decades and would use Maryland's entire transportation budget.



### Operations and maintenance:

The P3 developer operates the facility and maintains it over the term of the agreement at a more economical cost.



### Transfer of risks:

The public owner and the private partner share the risks based on who can best manage each risk to provide the best value to the public owner, such as revenue risk, design and construction risks, long-term operations and maintenance risks.



## A P3 IS NOT

### ■ A Funding Source

Projects require user fees or tax dollars regardless if a P3 is used

### ■ Privatization

The private partner does not obtain any ownership. The State is still the owner

### ■ Transfer of State Responsibility

The State retains the ultimate responsibility to ensure the facility meets its intended public need. The private sector also cannot have decision making in the environmental process as it is a government function

