



# WELCOME

## I-495 & I-270 P3 Program & Managed Lanes Study

Spring Public Workshops  
April & May 2019



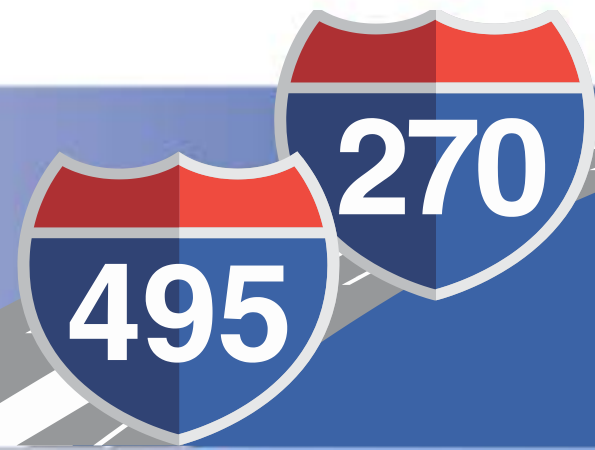


# Agenda

- Program Need
- National Environmental Policy Act (NEPA) Process
- Alternatives Development and Screening
- Next Steps
- Stay Connected



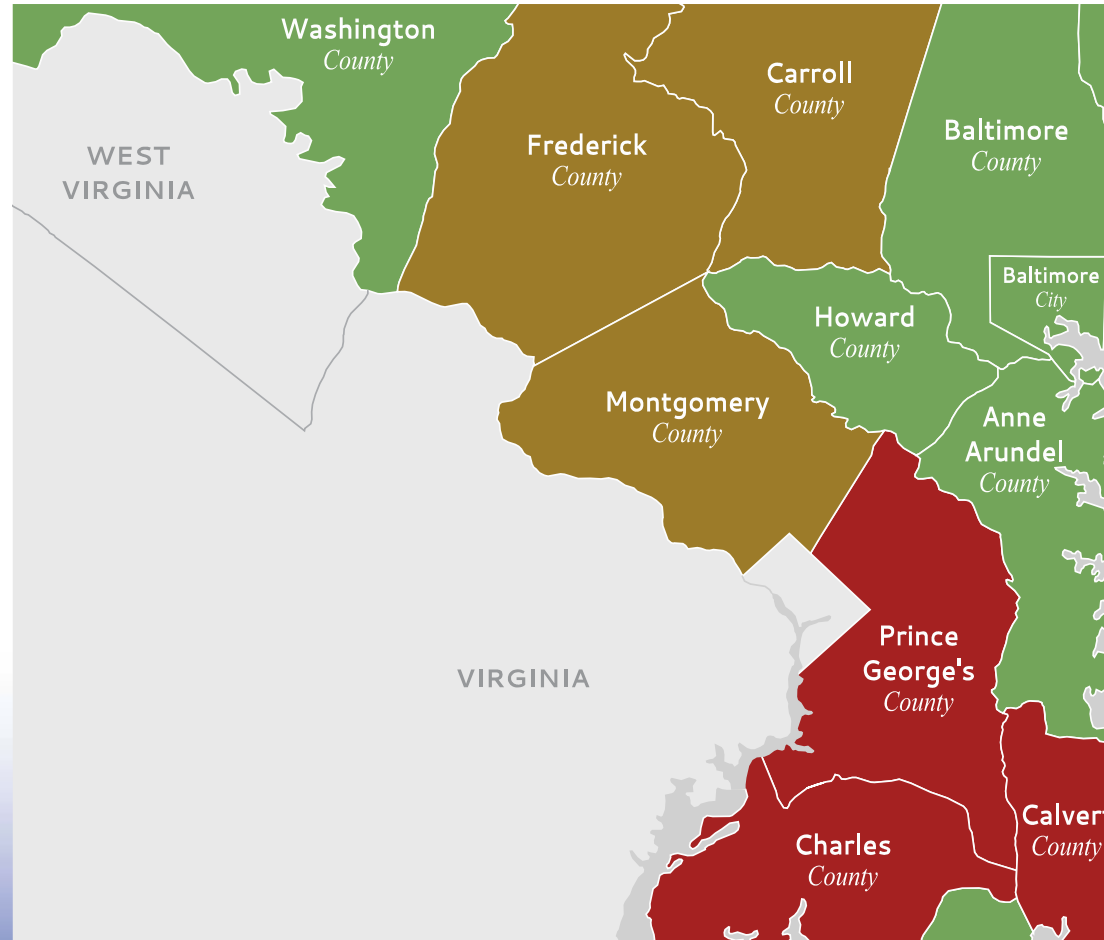
# PROGRAM NEED





# Address Traffic Congestion

- Congestion limits economic growth and diminishes the **quality of life**
- Top 5 **highest volume** freeway 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
- Many sections experience **speeds less than 15 mph** under existing conditions and traffic is expected to deteriorate
- 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



## AVERAGE COMMUTING TIME

- >26–32 Minutes
- >32–36 Minutes
- >36–43 Minutes

- Average commute time in Maryland = 32.3 minutes
- Tied for first place – longest commute time in the country
- Within the center of the State, commutes longer than State average

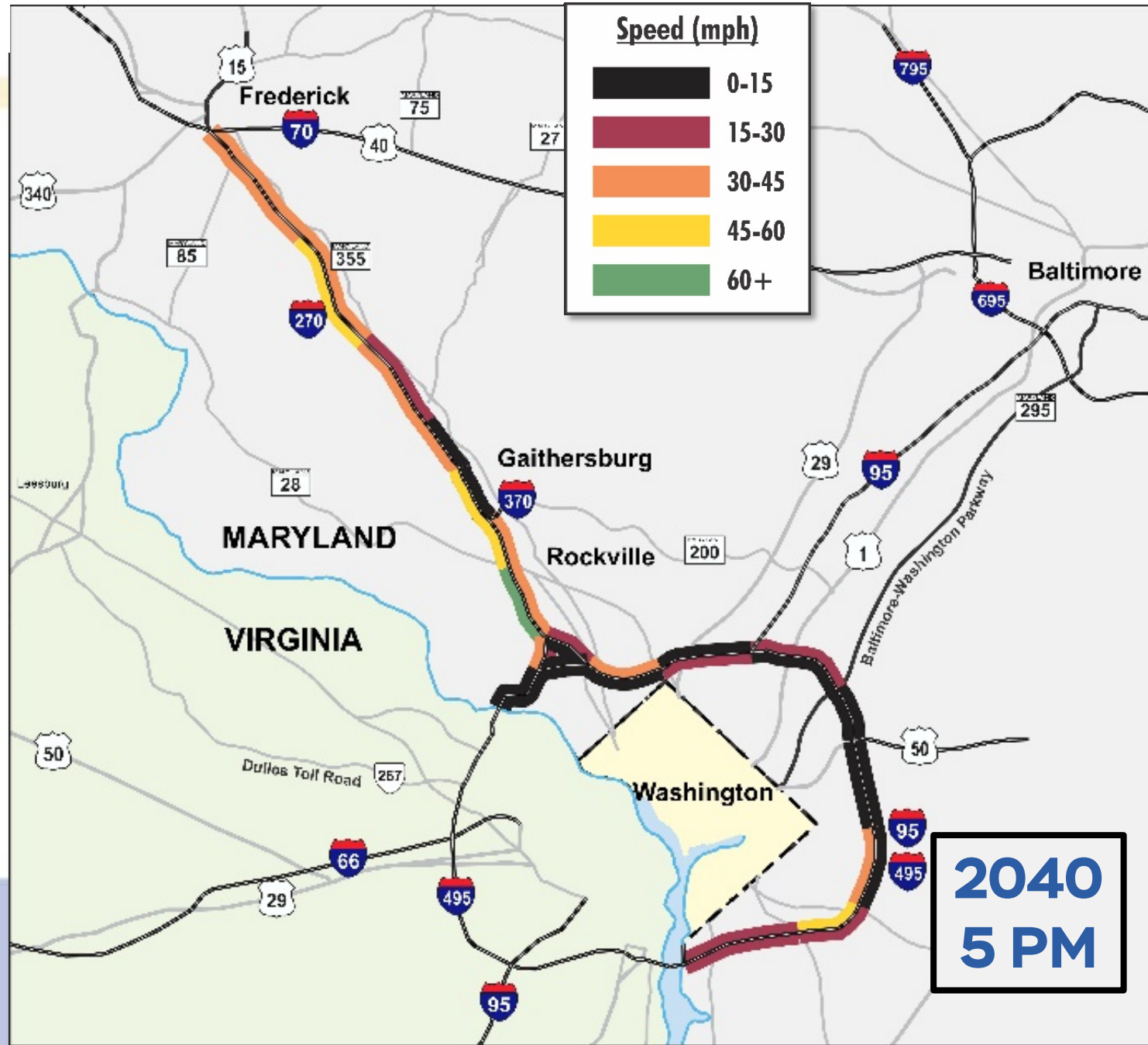




# Address Traffic Congestion

## Average Annual Daily Traffic (AADT)

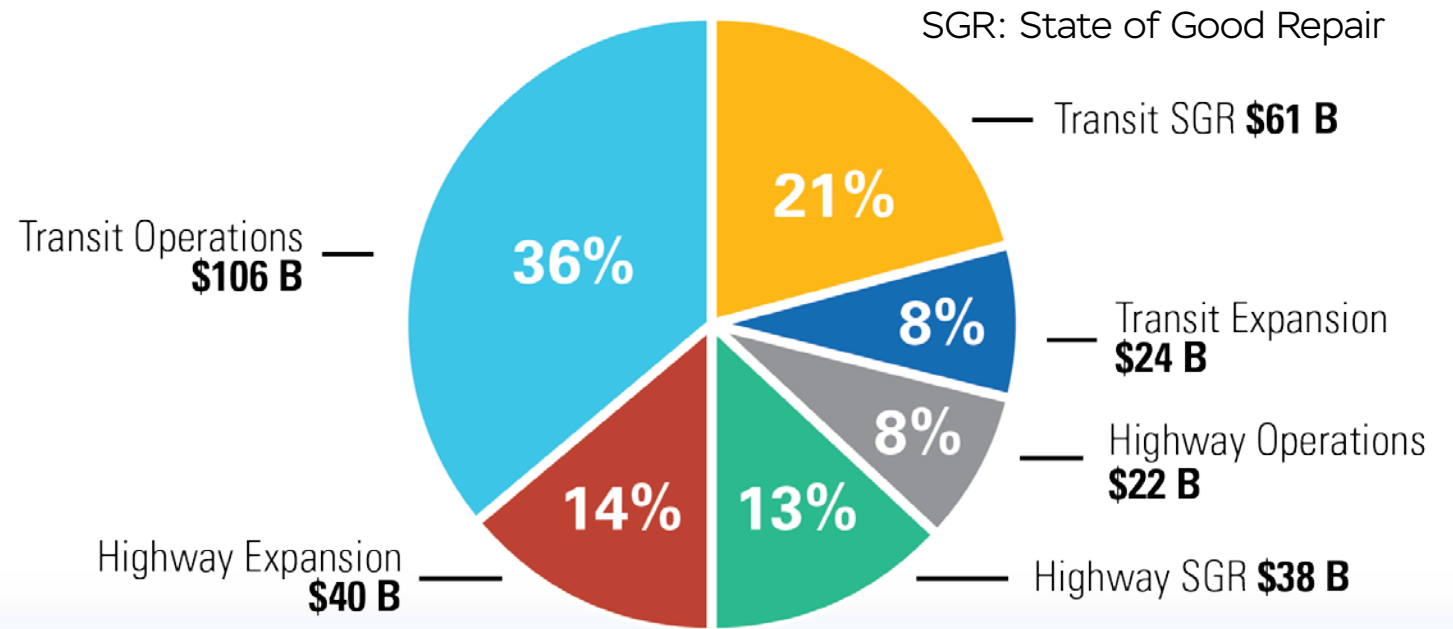
Location	2018	2040
I-270: I-370 to I-495	259,000	299,000
I-495: VA Line to I-270	253,000	282,000
I-495: I-270 to I-95	235,000	252,000
I-495: I-95 to MD 4	230,000	245,000





# Visualize 2045 – Regional Long Range Transportation Plan

- Planned Future Expenditures in the National Capital Region
  - 66% Public Transportation (\$191 B)
  - 34% Highways (\$100 B)



**Total: \$291.1 Billion**

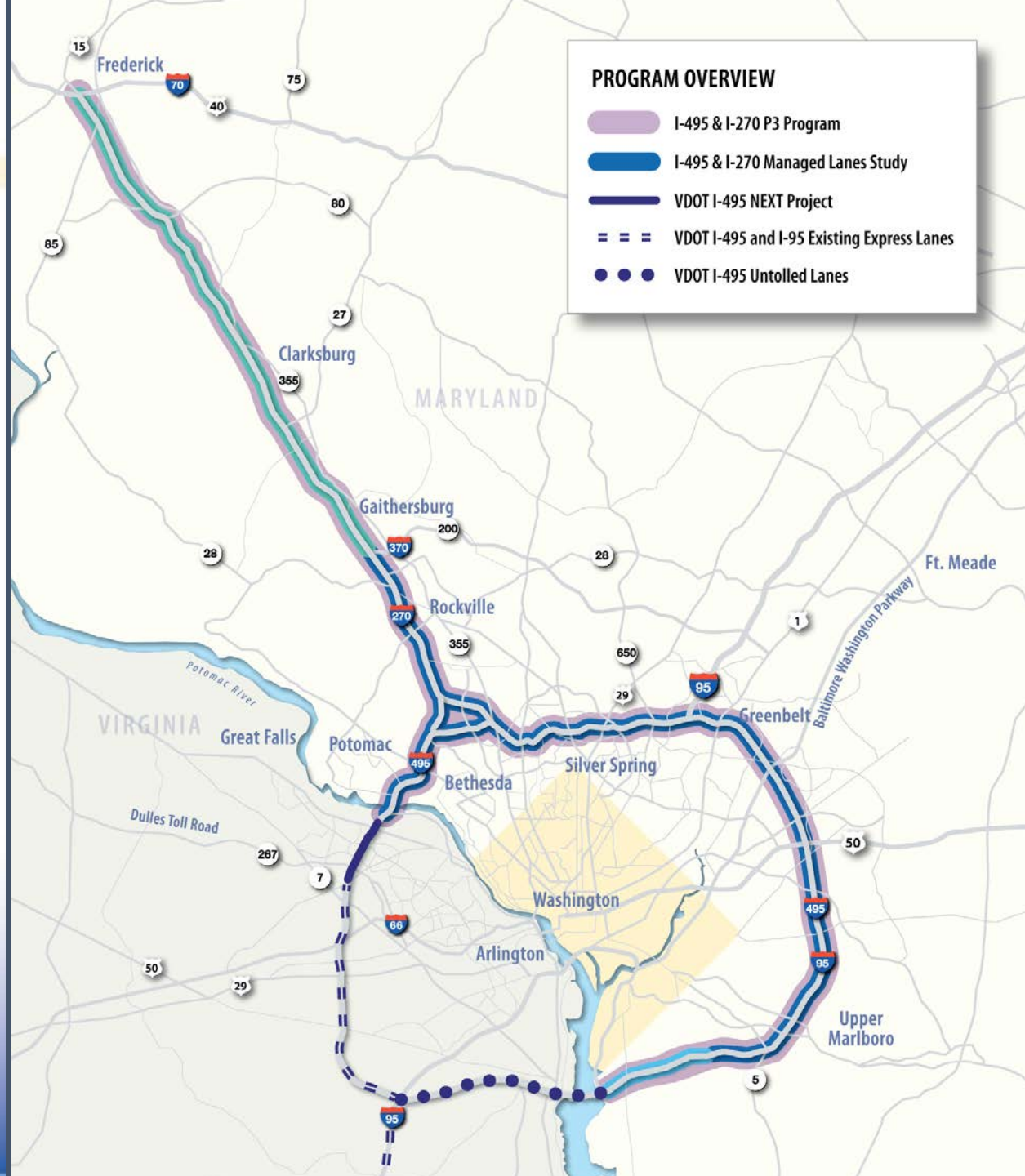
\*Units in Billions





# I-495 & I-270 P3 Program

- I-495 & I-270 P3 Program includes over 70-miles of interstate corridor
- First Study: I-495 & I-270 Managed Lanes Study (48 miles)
- Future Studies: I-270 from I-370 to I-70 and I-495 from MD 5 to the Woodrow Wilson Bridge
- VDOT I-495 NEXT Project: Environmental study underway independently





# Potential Phasing

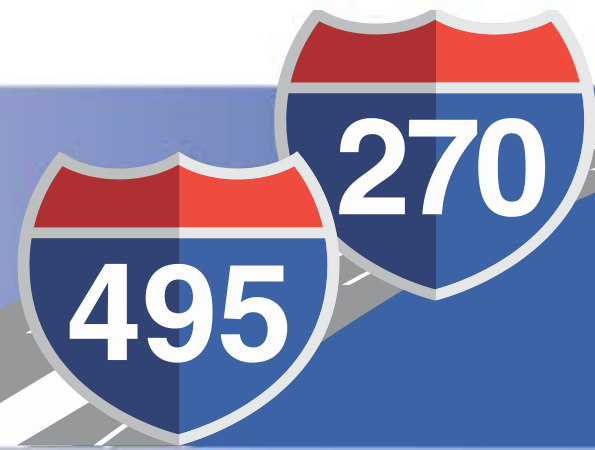
- ◆ **Phase 1** – I-495 from the George Washington Parkway in VA to I-95, including improvements to American Legion Bridge
- ◆ **Phase 2A** – I-270 from I-495 to north of I-370
- ◆ **Phase 2B** – I-495 from I-95 to west of MD 5
- ◆ **Phase 3A** – I-495 from west of MD 5 to the Woodrow Wilson Bridge
- ◆ **Phase 3B** – I-270 from I-370 to I-70





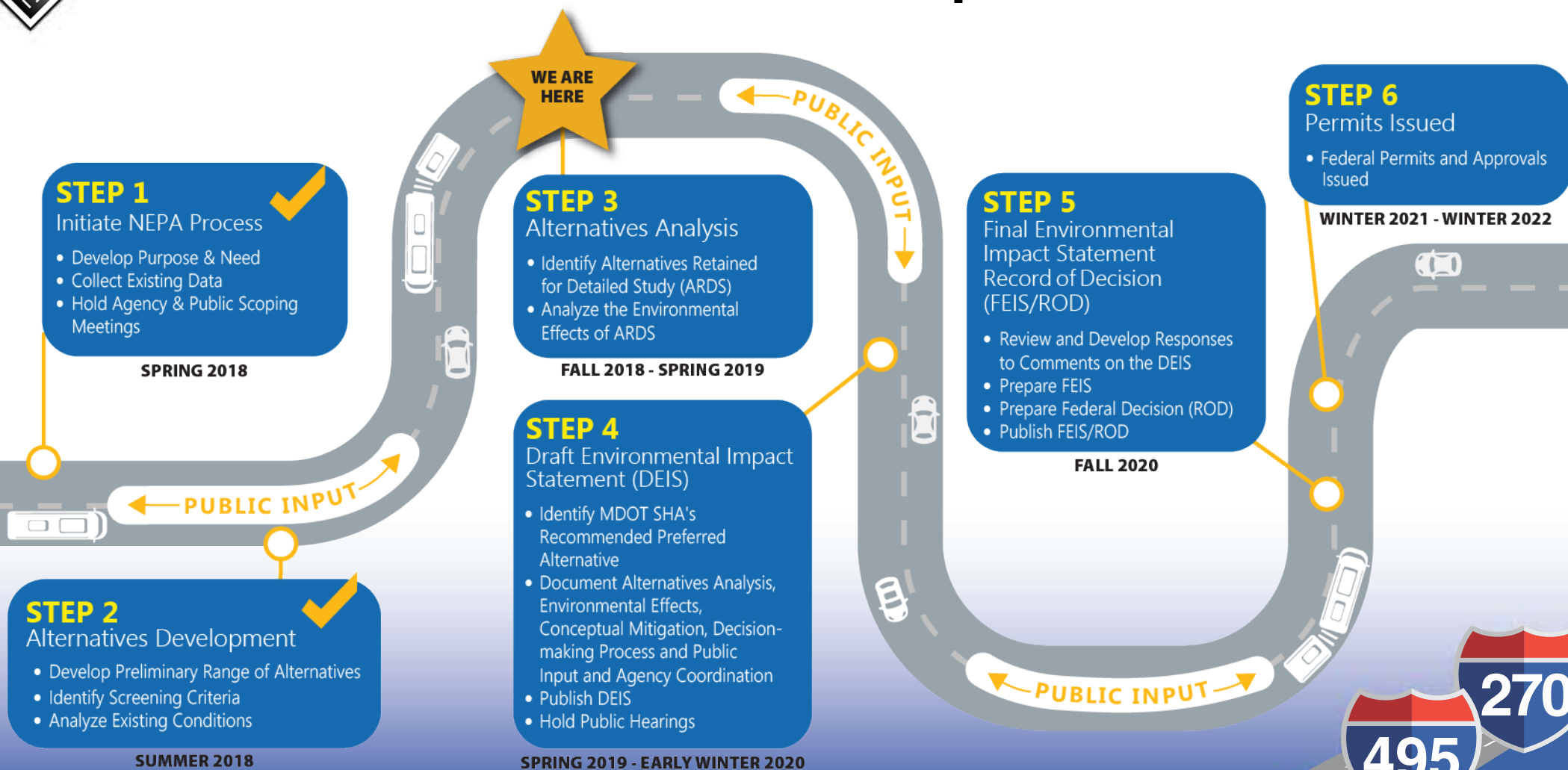
# National Environmental Policy Act (NEPA) PROCESS

I-495 & I-270 Managed Lanes Study





# What's Been Completed?





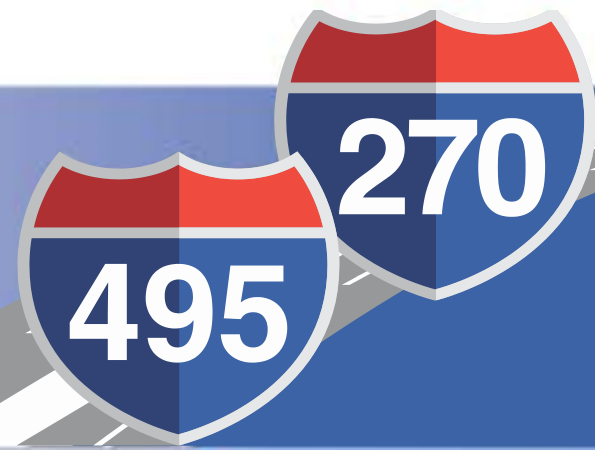
# I-495 & I-270 Managed Lanes Study Purpose and Need

- **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 LongTerm Traffic Growth
  - Enhance Trip Reliability
  - Provide Additional Roadway Travel Choices
  - Accommodate Homeland Security
  - Improve Movement of Goods and Services
- **Goals:**
  - Financial Viability
  - Environmental Responsibility



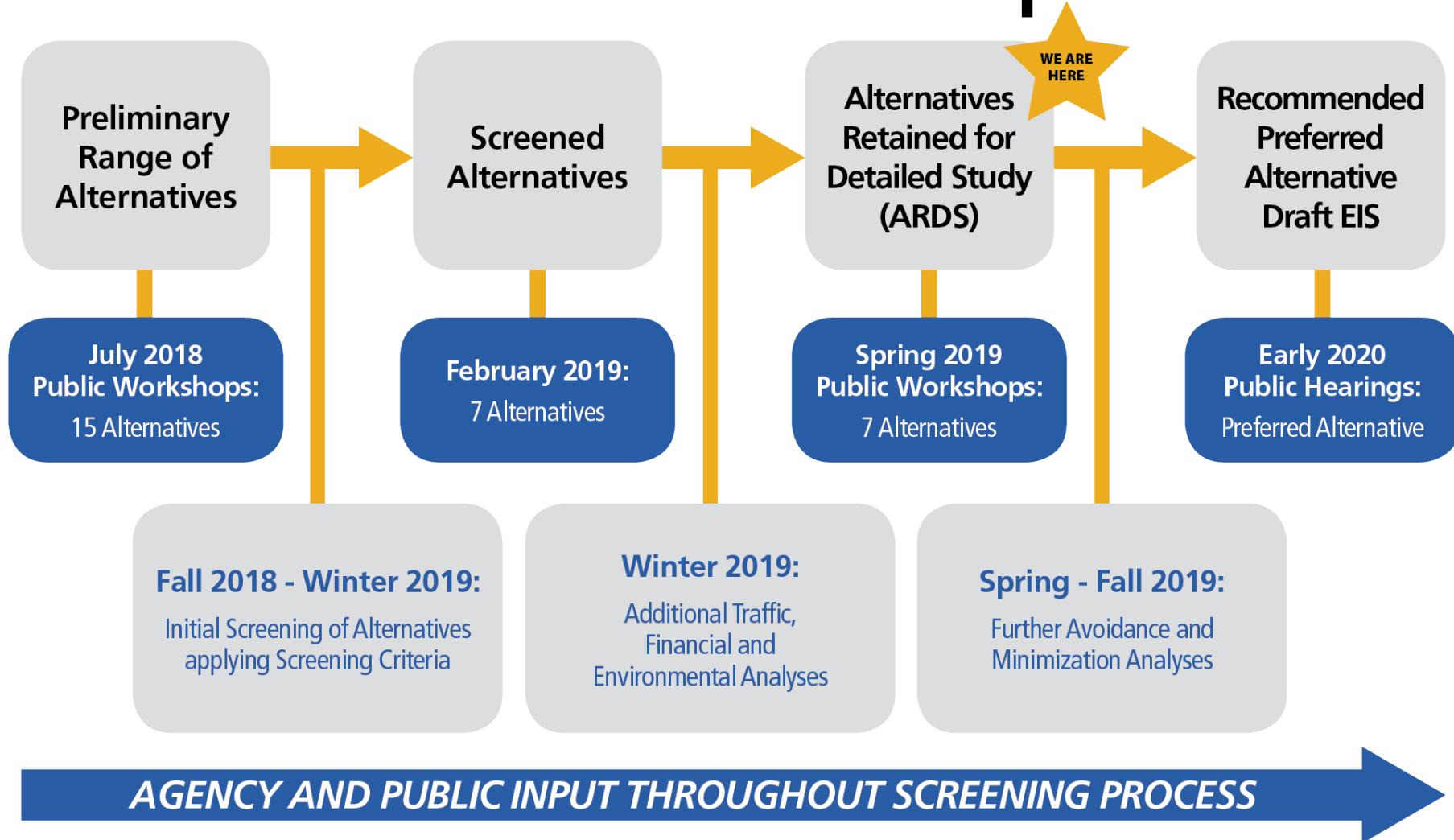
# ALTERNATIVES DEVELOPMENT AND SCREENING

I-495 & I-270 Managed Lanes Study





# Alternatives Development





# Screening Criteria to get to ARDS

Six screening criteria were based on the transportation needs and goals outlined in the Study's Purpose and Need:



## ENGINEERING

- Accommodate existing traffic and long-term traffic growth
- Enhance travel time reliability
- Provide additional travel choice
- Evaluate complex configurations that lead to driver confusion



## MOVEMENT OF GOODS AND SERVICES



## HOMELAND SECURITY



## ENVIRONMENTAL CONSIDERATIONS



## FINANCIAL VIABILITY



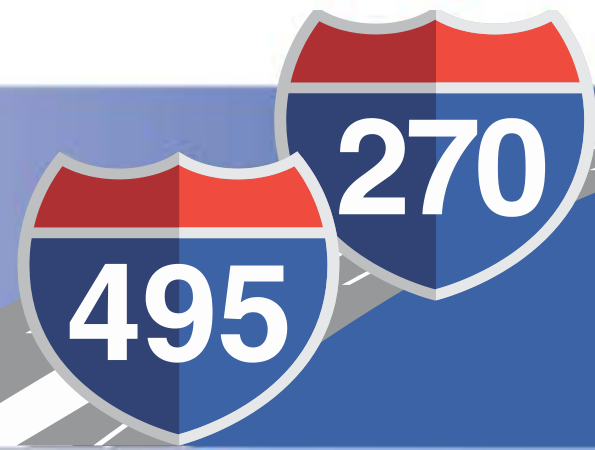
## MULTI-MODAL CONNECTIVITY

- Alternatives that **do not meet** the purpose and need are **not carried forward** for evaluation in the Draft Environmental Impact Statement (DEIS)
- **Reasonable** alternatives, those that **meet** the purpose and need and are, therefore recommended to be **carried forward** for detailed study in the the DEIS



# RECOMMENDED ALTERNATIVES RETAINED FOR DETAILED STUDY

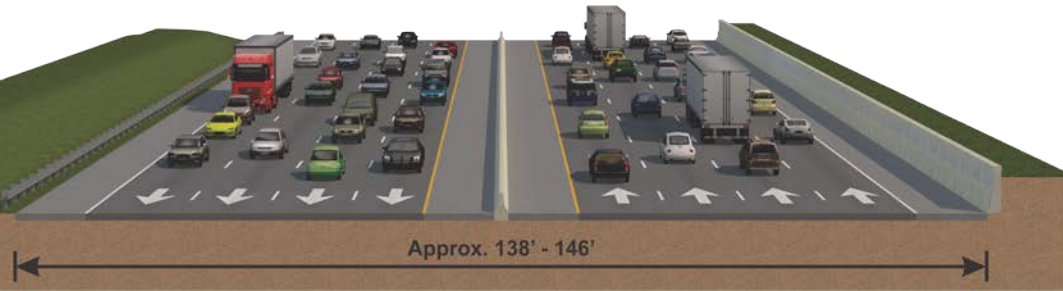
I-495 & I-270 Managed Lanes Study





# Alternative 1 – No Build

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



- No-Build does **not** meet the purpose and need
- Used as a baseline to compare the results of each build alternative

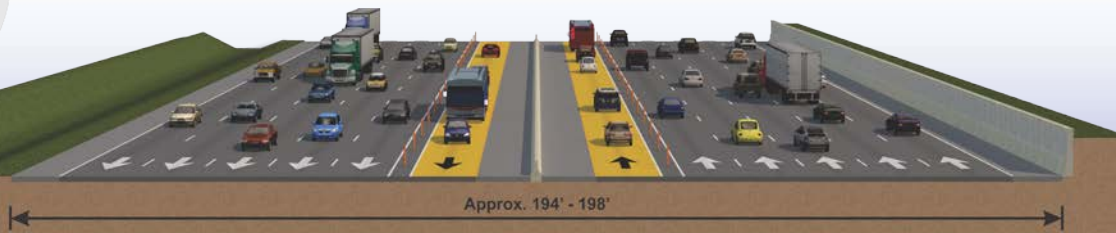






# Alternative 5

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



- Reduces delay versus the No Build by 20% in AM peak and 22% in PM peak
- Decreases daily delay on local roads by 3.2%
- Average savings per commuter is 45 hours and \$900 per year
- Single lane system would be constrained by the slowest moving vehicle, less reliable, and less flexible to adapt to incidents





# Alternative 8

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



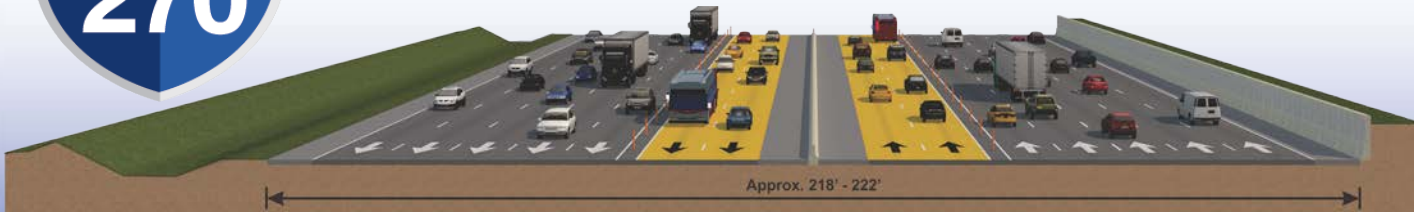
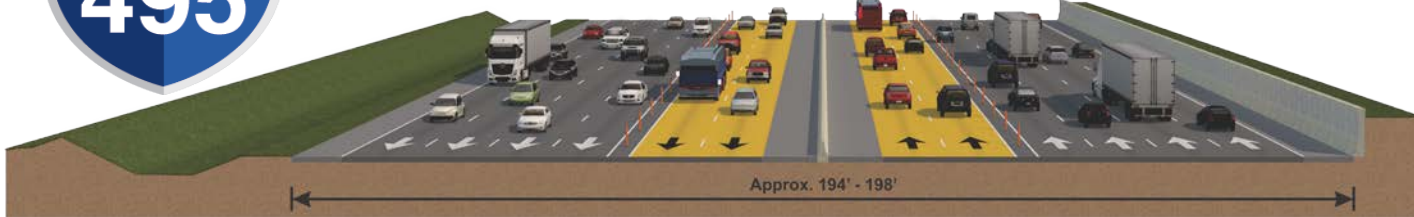
- Reduces delay versus the No Build by 24% in AM peak and 33% in PM peak
- Decreases daily delay on local roads by 6.3%
- Average savings per commuter is 59 hours and \$1,180 per year
- Similar to Alternative 5, a single lane system on I-270 would be constrained by the slowest moving vehicle, less reliable, and less flexible to adapt to incidents





# Alternative 9

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



- Reduces delay versus the No Build by 34% in AM peak and 33% in PM peak
- Decreases daily delay on local roads by 6.8%
- Average savings per commuter is 73 hours and \$1,460 per year
- Would allow for passing of slower moving vehicles, be more reliable, and more adaptable to incidents than single lane or reversible alternatives





# Alternative 10

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



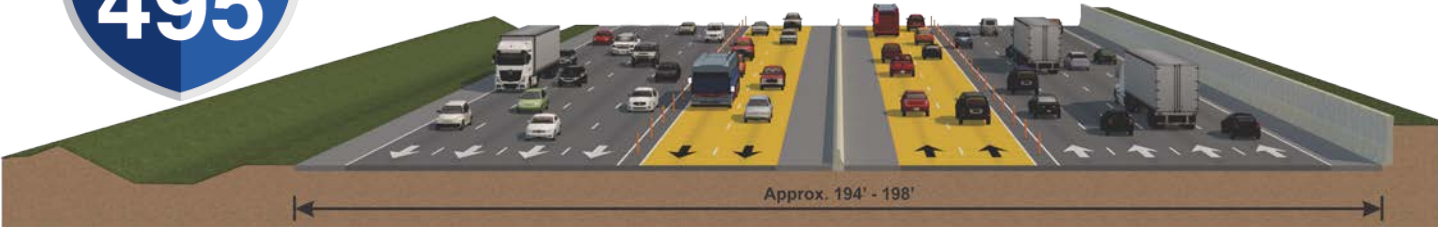
- Reduces delay versus the No Build by 35% in AM peak and 35% in PM peak
- Decreases daily delay on local roads by 6.4%
- Average savings per commuter is 72 hours and \$1,440 per year
- Would allow for passing of slower moving vehicles, be more reliable, and more adaptable to incidents than single lane alternatives





# Alternative 13B

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



- Reduces delay versus the No Build by 27% in AM peak and 22% in PM peak
- Decreases daily delay on local roads by 6.3%
- Average savings per commuter is 65 hours and \$1,300 per year
- Does not serve demand in off-peak direction of I-270, less flexible to adapt to incidents, and requires downtime for changeovers





# Alternative 13C

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



- Reduces delay versus the No Build by 26% in AM peak and 35% in PM peak
- Decreases daily delay on local roads by 6.2%
- Average savings per commuter is 64 hours and \$1,280 per year
- Does not serve demand in off-peak direction of I-270, less flexible to adapt to incidents, and requires downtime for changeovers





# Multimodal Considerations

## Multimodal Mobility and Connectivity

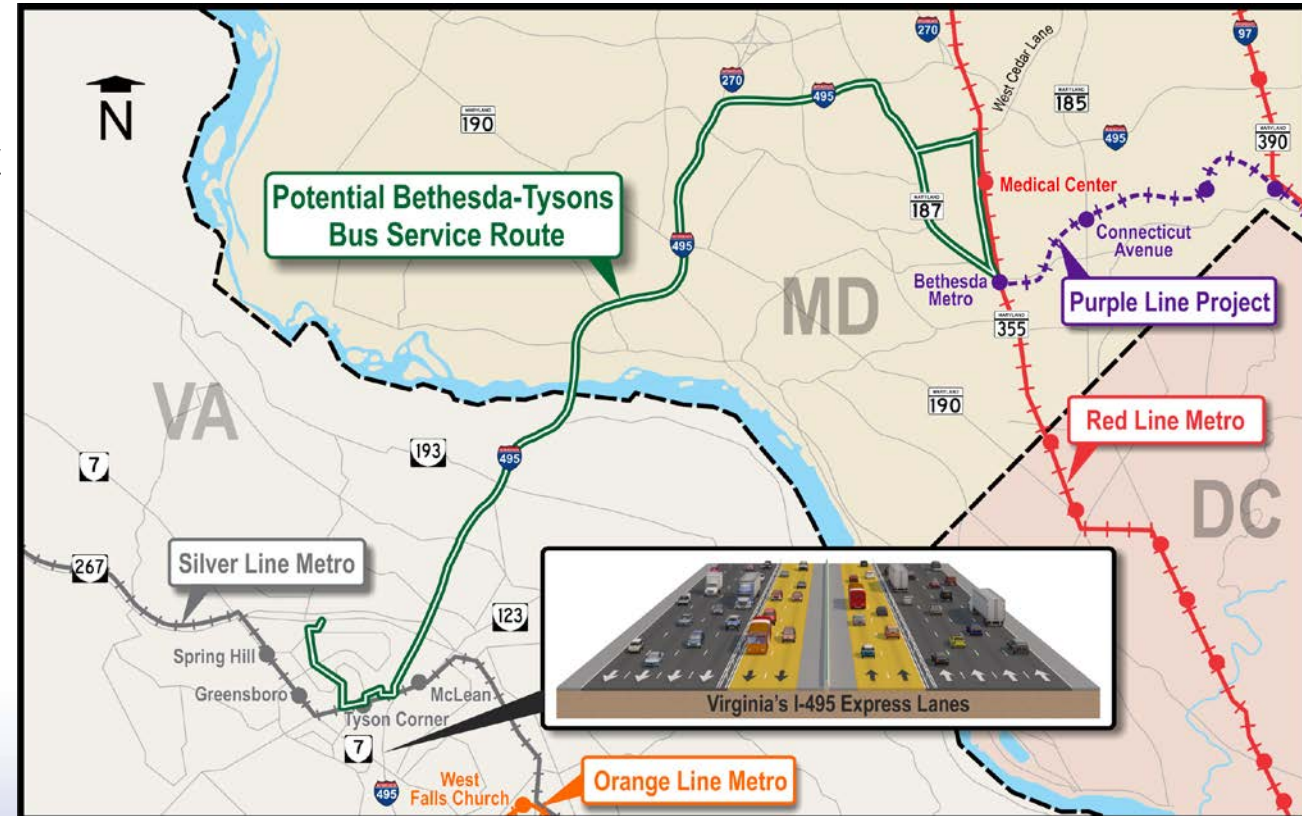
- Alternatives will include multimodal mobility and connectivity with other travel modes such as transit and pedestrian/bicycle connections

## Direct and Indirect Access

- Improved access to existing transit stations and transit oriented developments will be included in the alternatives including Greenbelt Metro, New Carrollton, Branch Avenue, Largo and Shady Grove

## Bus Usage of Managed Lanes

- Public bus usage of managed lanes will be allowed to enhance transit mobility and connectivity to existing and planned transit facilities
- MDOT has committed to working with WMATA to consider the results of the Washington Area Transformation Bus Study in the MLS improvements





## Benefits of Express Toll Lanes (ETL) / High Occupancy Toll (HOT) Lanes

### Provides Options

- Opportunity for travelers to choose to pay toll that 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

### System Upgrades

- 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 roads to be used for other transportation improvements

### Traffic on Local System

- Local roads outside the interstates will have less traffic

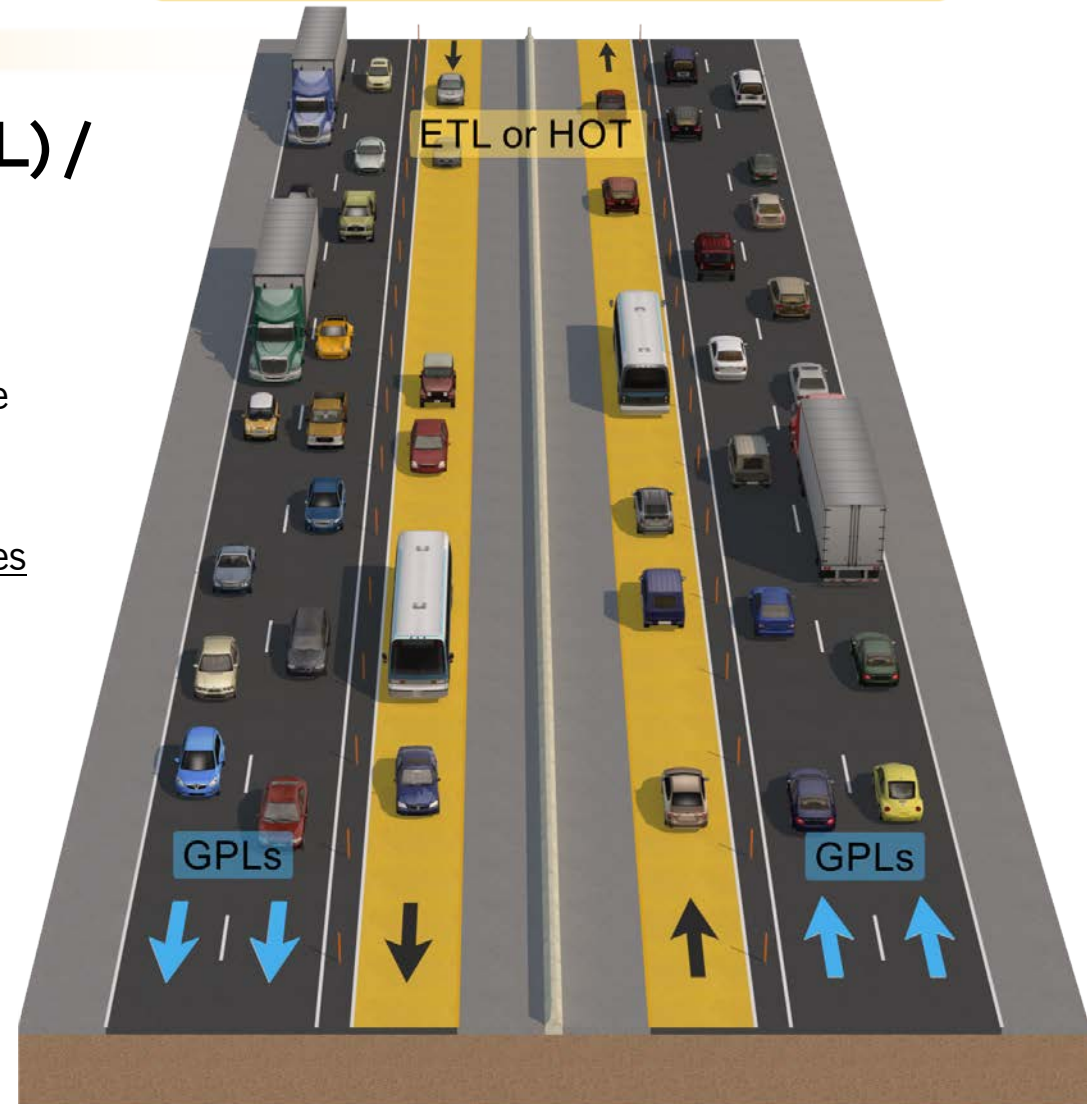
### Job Accessibility

- Would improve access to jobs in the region

### Movement of Goods

- Would improve reliability for the movement of goods through the region

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

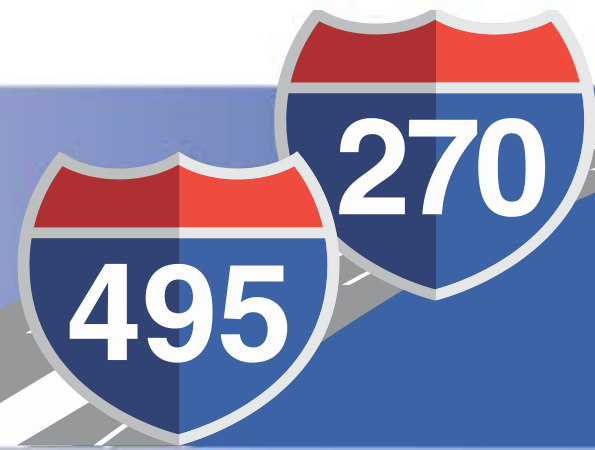


General purpose lanes (GPLs) continue to function as unrestricted free lanes



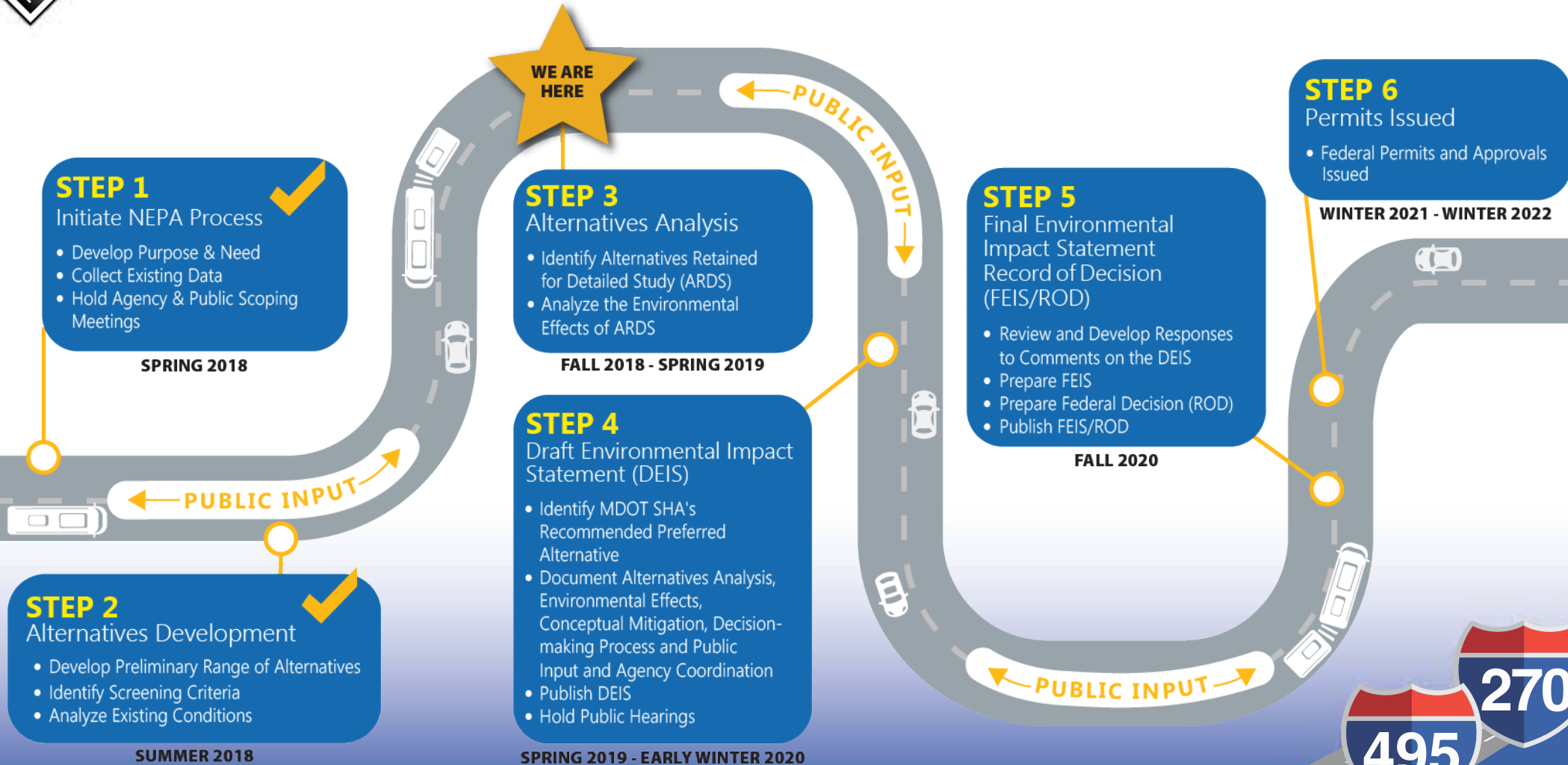
# NEXT STEPS

I-495 & I-270 Managed Lanes Study





# What's Next?





# Provide Feedback & Stay Connected



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](mailto:495-270-p3@sha.state.md.us)



By Mail at:  
Maryland Department of Transportation  
State Highway Administration  
I-495 & I-270 P3 Program Office  
707 N. Calvert Street  
Mail Stop P-601  
Baltimore, Maryland 21202



Have Questions? Call Toll-Free  
833-858-5960

**Please provide comments by June 14, 2019**





# We have technical staff here today to answer your questions and hear your feedback!

Station 1:  
Study Overview

Station 2:  
Alternatives  
Development and  
Screening Process

Station 3:  
Traffic Analyses

Station 4:  
Alternatives  
Retained for Detailed  
Study (ARDS)

Station 5:  
Potential Property  
Needs

Station 6:  
Noise

Station 7:  
Stay Connected

