National Capital Planning Commission

I-270 & I-495 Managed Lanes Study

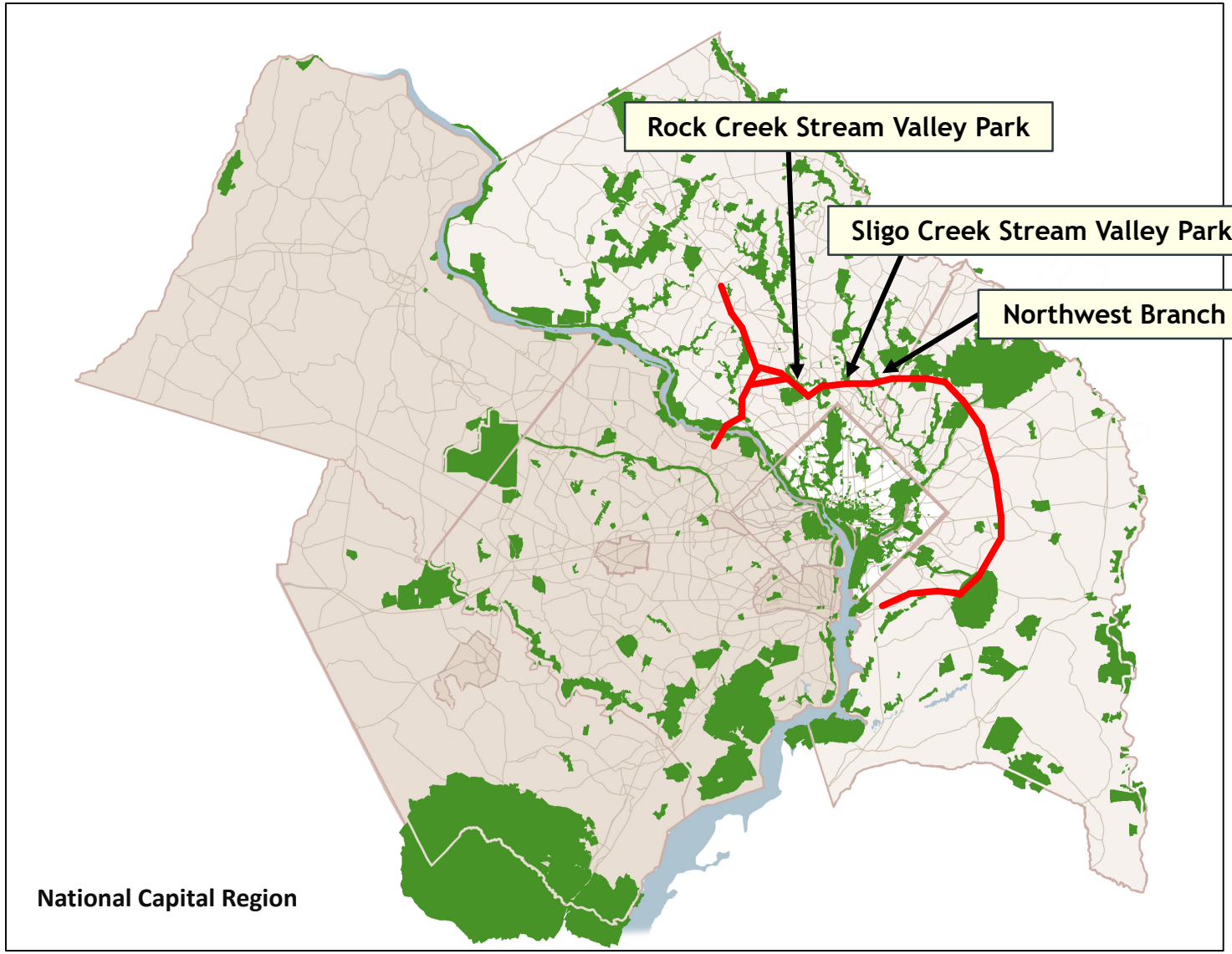
Maryland Department of Transportation

State Highway Administration

Information Presentation

Project Location

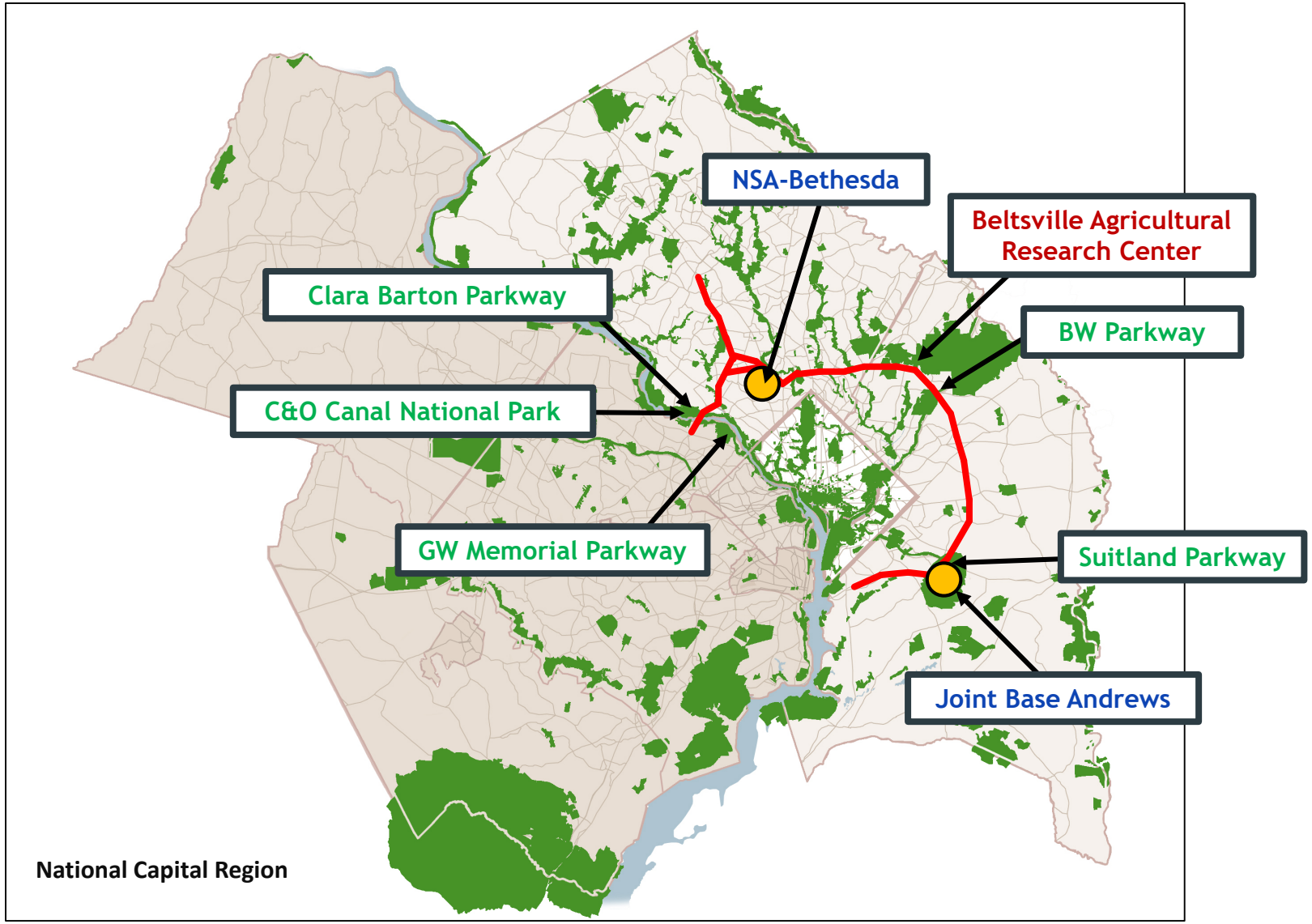
Federal Interest



Capper-Cramton Parkland

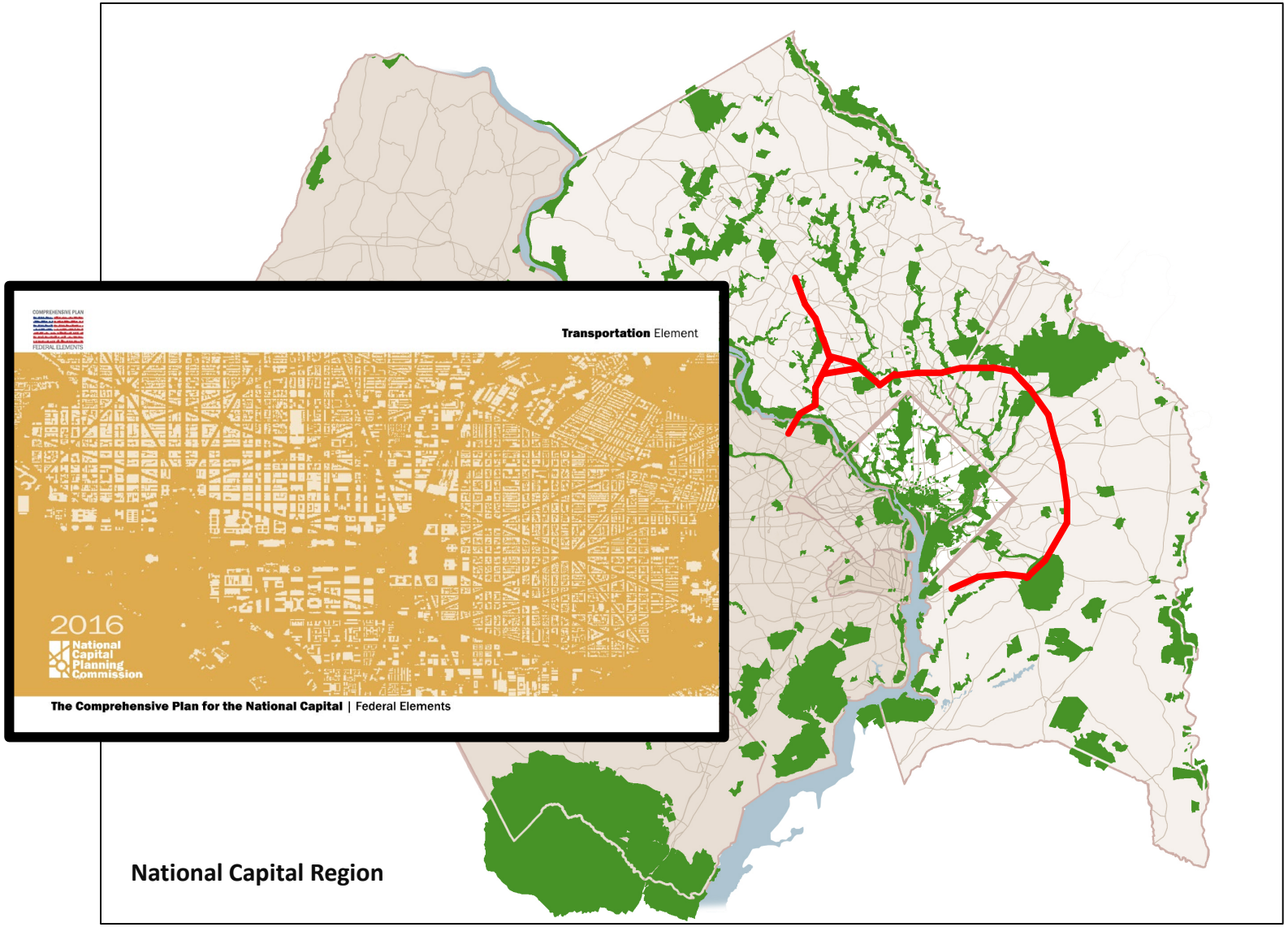
Federal Interest

Federal Interest



Federal Facilities and Parkways

Federal Interest



Regional Transportation Planning

Purpose of the Information Presentation:

1. Brief the Commission on the overall project and the identified federal interests.
2. Seek questions/comments from the Commission regarding staff's response to the six alternatives proposed for future study in the EIS.

Managed Lane Study Presenters:

Lisa Choplin, Director

Jeff Folden, Deputy Director

Caryn Brookman, Environmental Program Manager

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

TRAFFIC RELIEF PLAN

Program Overview

I-495 & I-270 P3 Program:

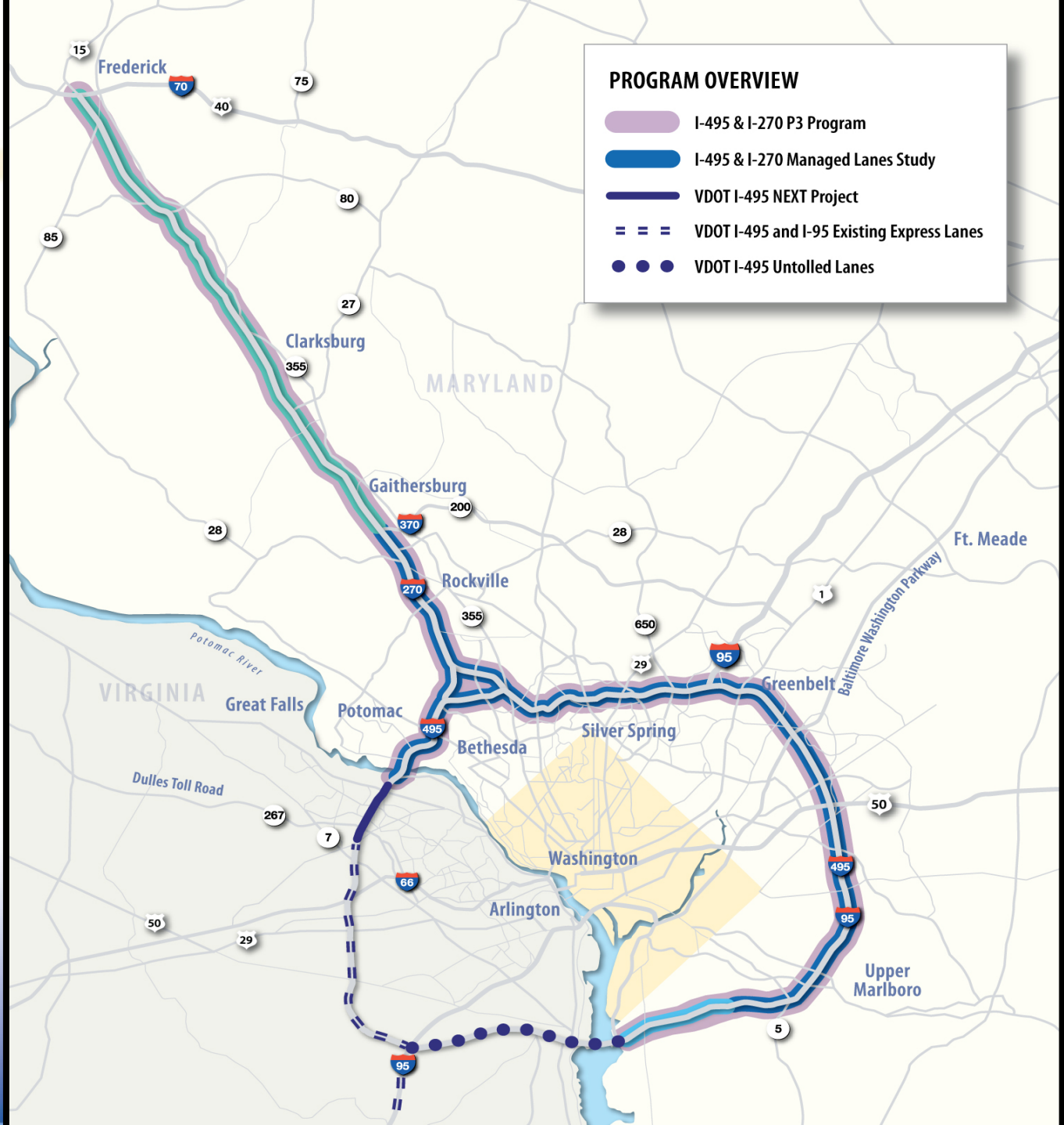
- Over 70-miles of interstate corridor

First Study:

- I-495 & I-270 Managed Lanes Study (48 miles)
- I-270 from I-370 to I-70 (Preliminary planning underway)
- VDOT I-495 NEXT Project Environmental Study underway independently

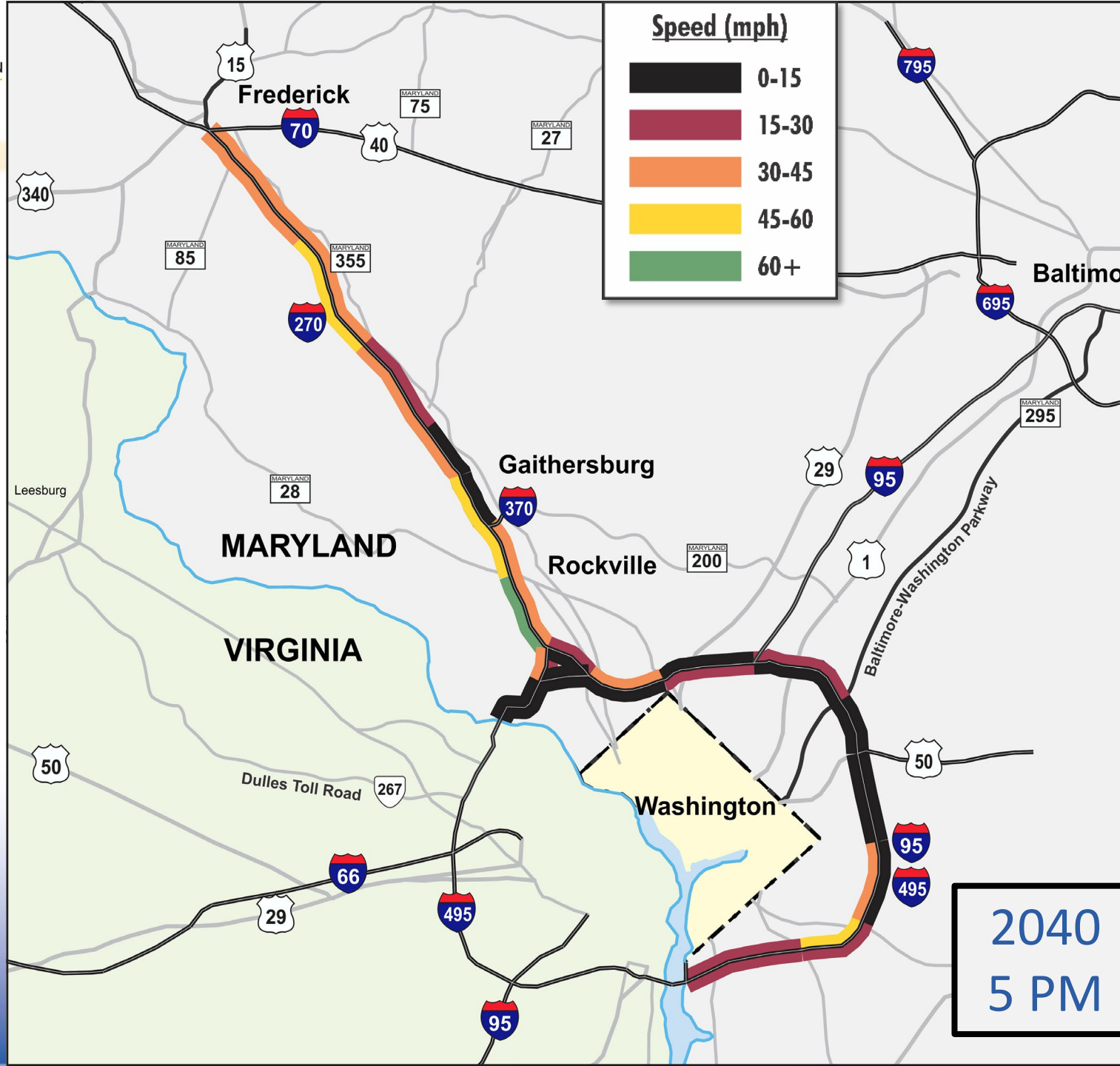
Future Studies:

- I-495 from MD 5 to the Woodrow Wilson Bridge



Program Need

- 2nd highest commuting times in the country
- On average, **severe congestion** lasts for 7 hours each day on I-270 and 10 hours each day on I-495
- The average commuter in the National Capital Region loses **87 hours** and **over $2,000** to congestion annually
- Congestion limits economic growth and diminishes the quality of life

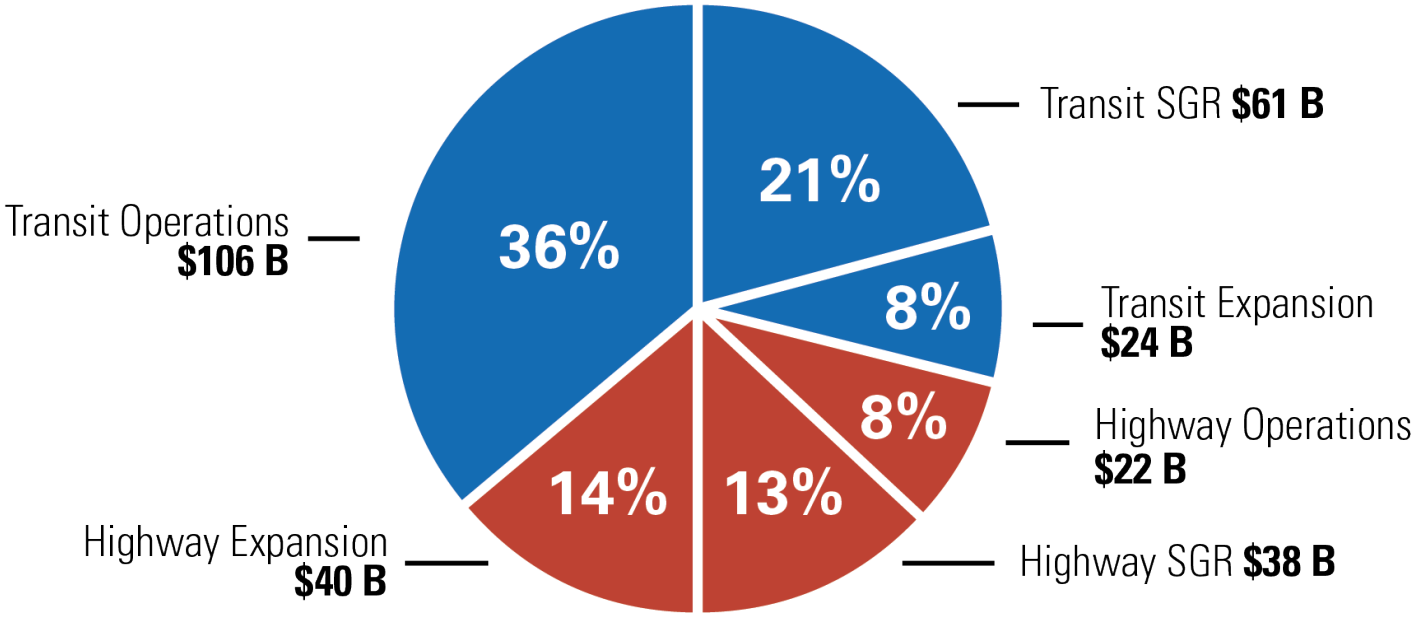


Visualize 2045 – Regional Long Range Transportation Plan

The Region's Plan calls for more spending on Transit than on highway investments

66% **Public Transportation** ($191 B)

34% Highways ($100 B)



Total: $291.1 Billion

*Units in Billions

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

Goals:

- Financial Viability
- Environmental Responsibility

Study Process

- First major transportation infrastructure project listed under Executive Order 13807
- Following One Federal Decision MOU/Guidance
  - ✓ Two-Year NEPA Schedule
  - ✓ Seeking concurrence from cooperating agencies at *three* study milestones
  - ✓ Federal Issue Resolution Process
  - ✓ One Record of Decision

NEPA Lead Agencies:

- Federal Highway Administration
- Maryland Department of Transportation State Highway Administration

NEPA Cooperating Agencies:

Federal Agencies

- National Capital Planning Commission
- US Army Corps of Engineers
- US Environmental Protection Agency
- National Park Service

State Agencies

- Maryland Department of Environment
- Maryland Department of Natural Resources
- Virginia Department of Transportation

Local Agencies

- Maryland-National Capital Park & Planning Commission

One Federal Decision

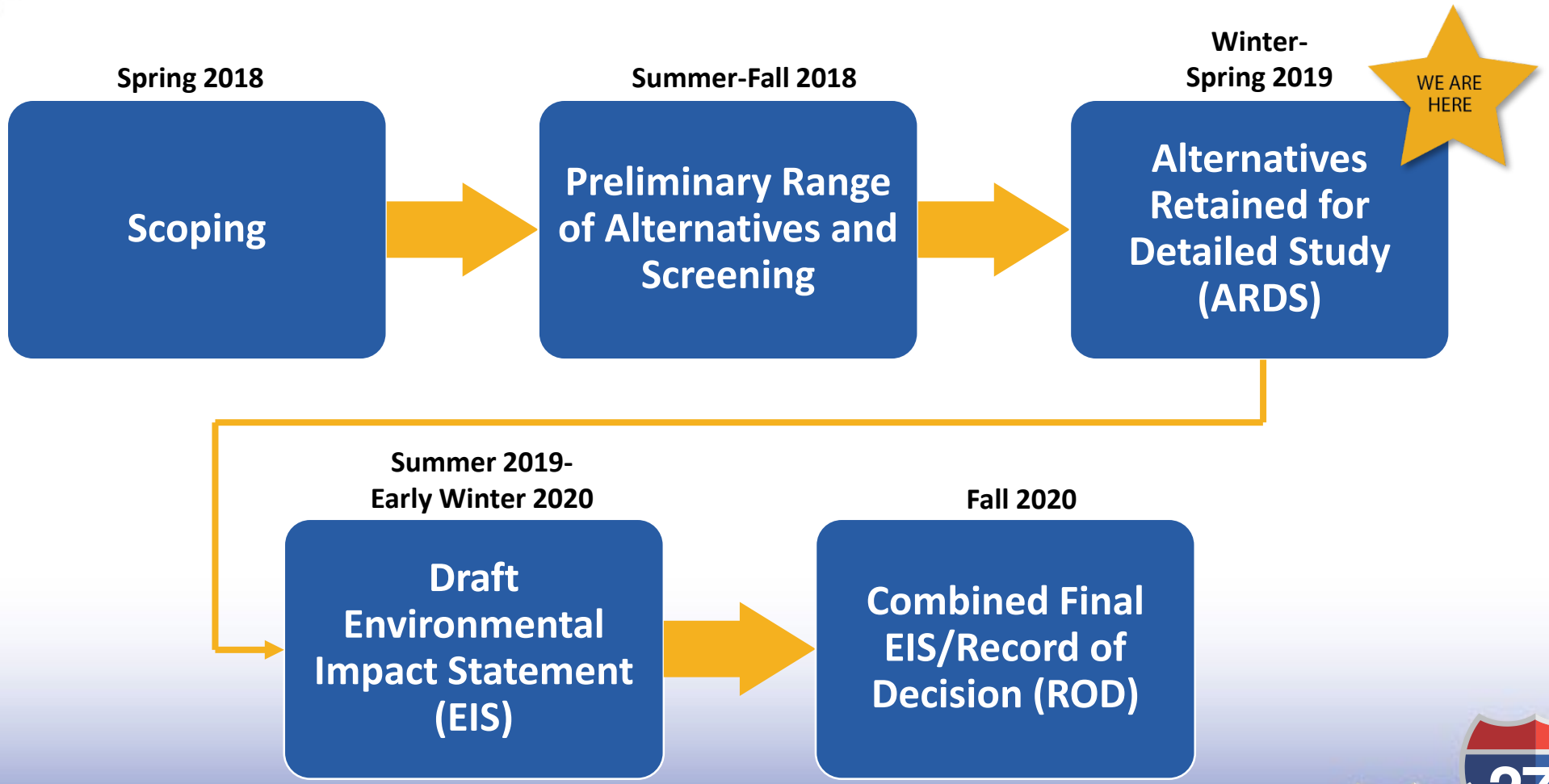
Intent: To streamline the federal environmental review process for major infrastructure projects

Milestones: Cooperating agencies should indicate "concurrence"

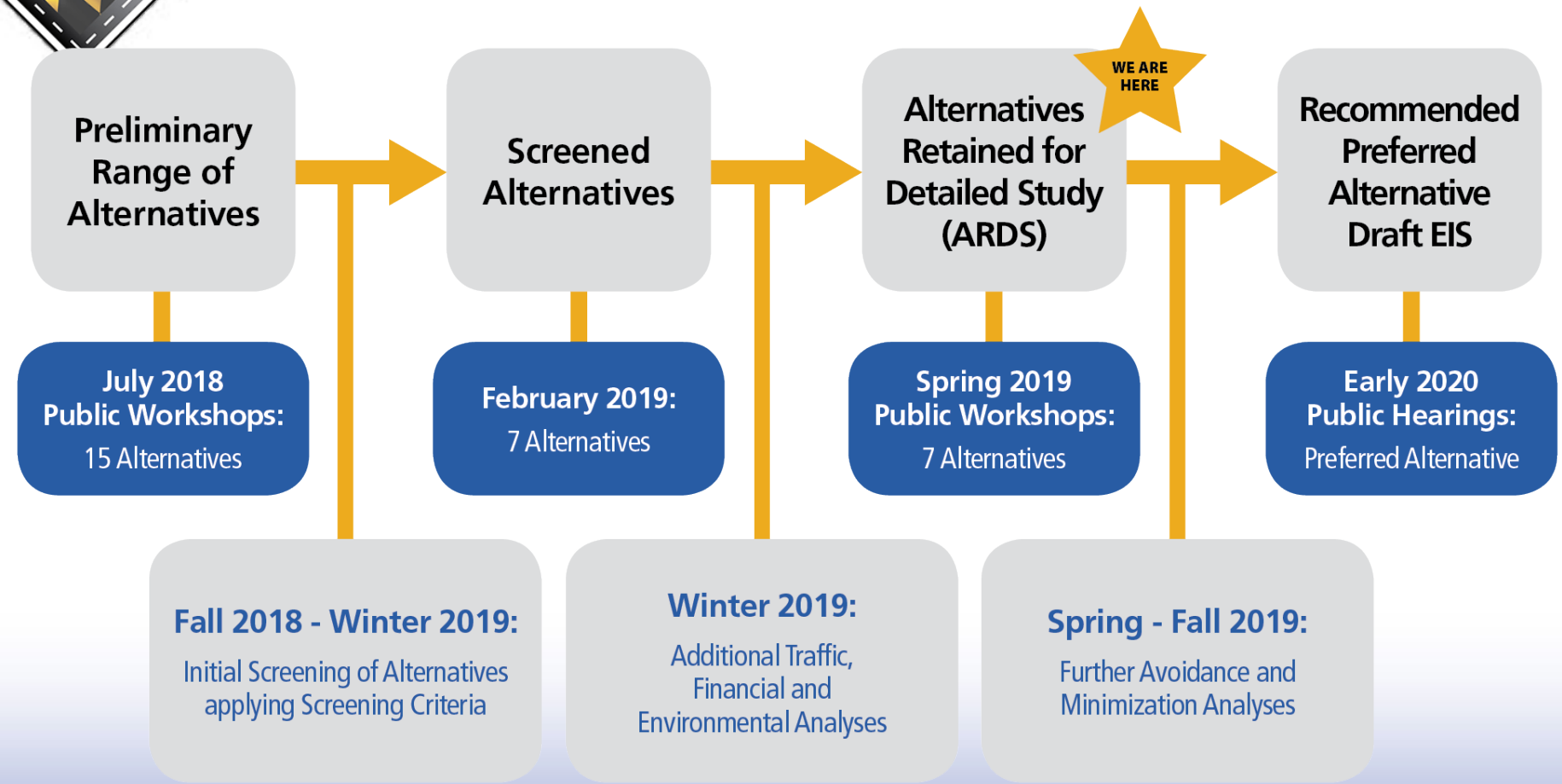
1. Purpose & Need
2. Alternatives Retained for Detailed Study (ARDS)
3. Preferred Alternative

Concurrence Definition: The Commission finds the information available to be sufficient at this stage to proceed into detailed analysis, which will be used by NCPC to comply with agency obligations.

Study Process



Alternatives Development



AGENCY AND PUBLIC INPUT THROUGHOUT SCREENING PROCESS

Managed Lanes

Managed lanes are a type of highway lane operated with a management scheme, such as variable tolling to optimize traffic flow, vehicle throughput, or both

High Occupancy Vehicle lanes are highway lanes reserved for use by vehicles with a minimum number of passengers

High Occupancy Toll lanes are high occupancy lanes that allow single occupancy vehicles (solo drivers) to use them at a tolled rate while HOV are free or tolled at a reduced rate.

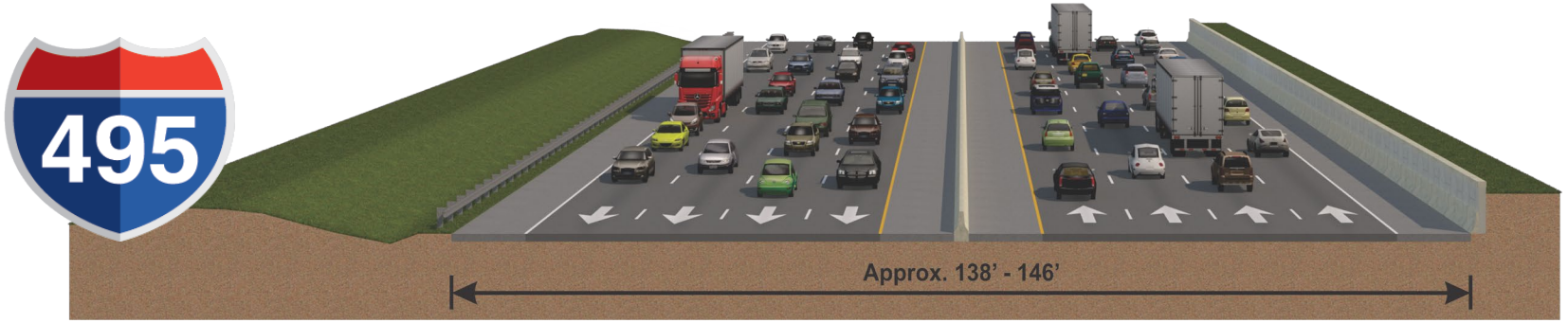
Express Toll Lanes are lanes restricted to toll paying vehicles

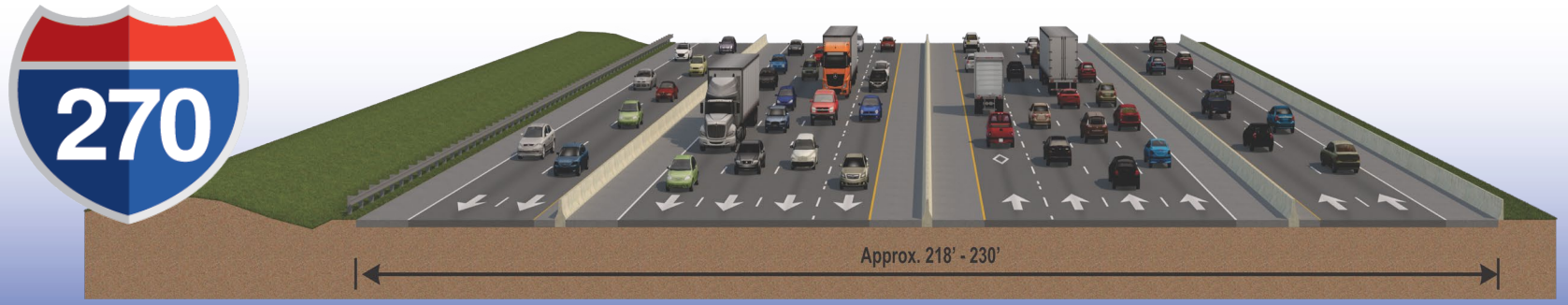
ETL or HOT Lanes would be separated and tolled to maintain traffic speeds or throughput

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

Alternative 1 –No Build

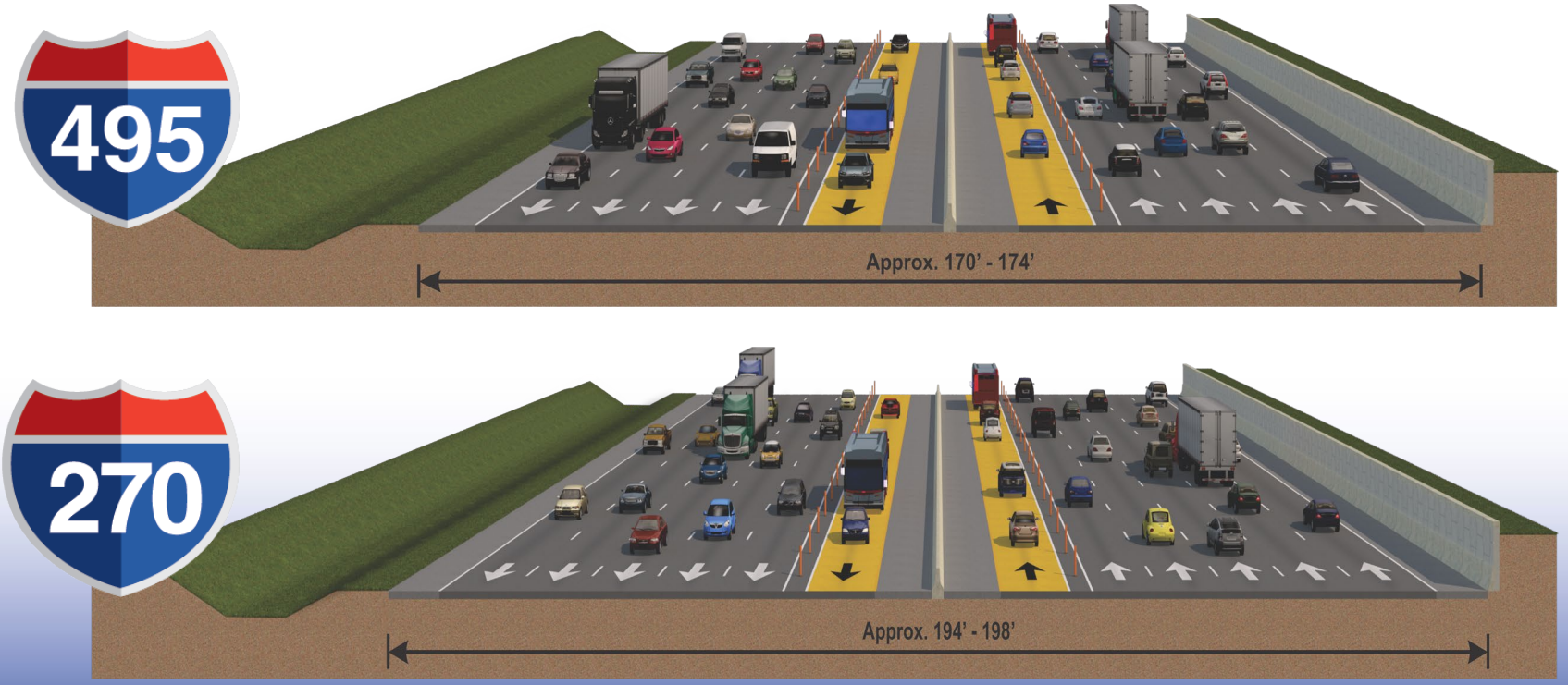
All projects in the Financially Constrained Long Range Transportation Plan (CLRP)





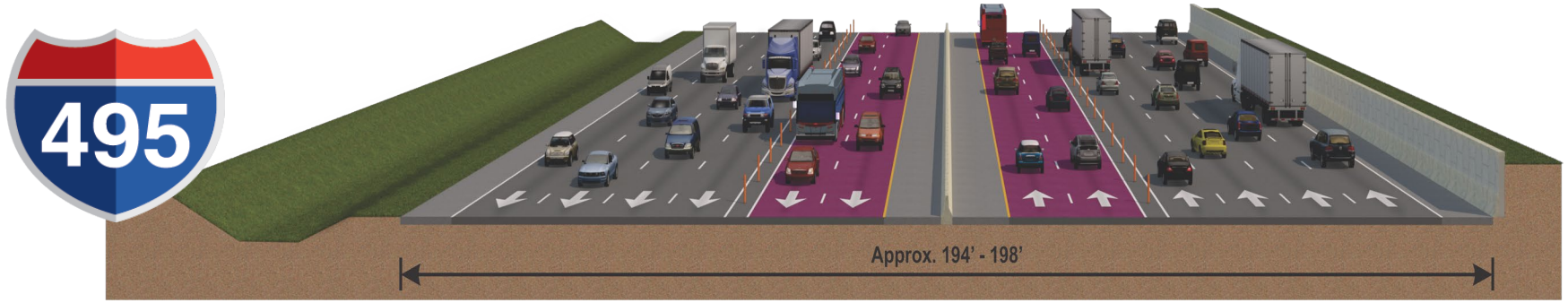
Alternative 5

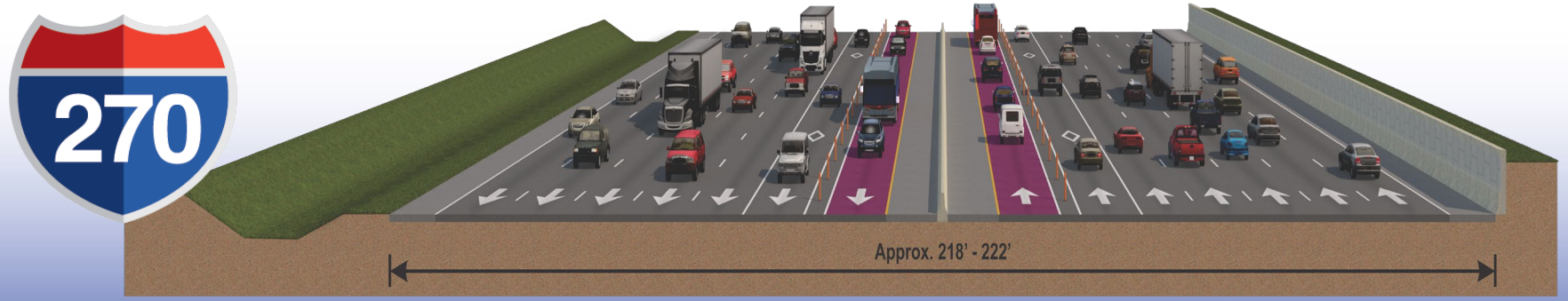
Add one High Occupancy Toll (HOT) managed lane in each direction on I-495 and convert one existing High Occupancy Vehicle (HOV) lane in each direction to a HOT managed lane on I-270



Alternative 8

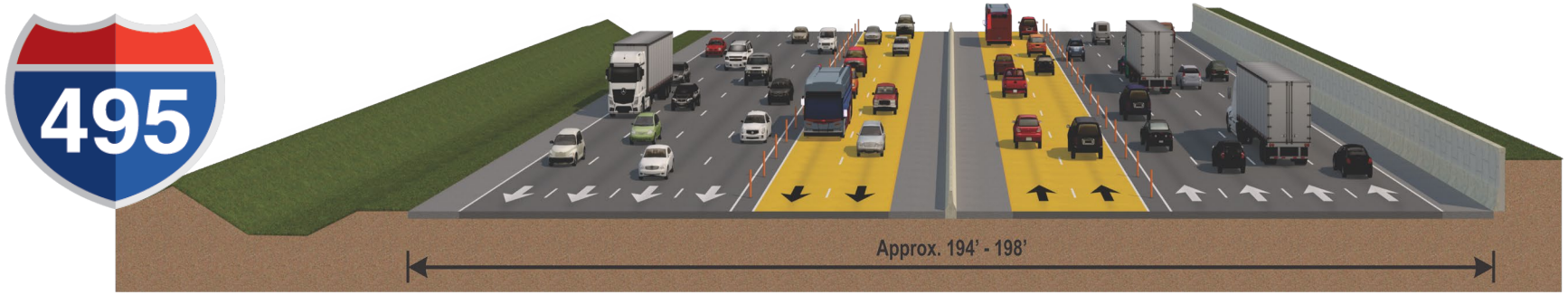
Add two Express Toll Lanes (ETL) managed lanes in each direction on I-495 and add one ETL managed lane and retain one HOV lane in each direction on I-270

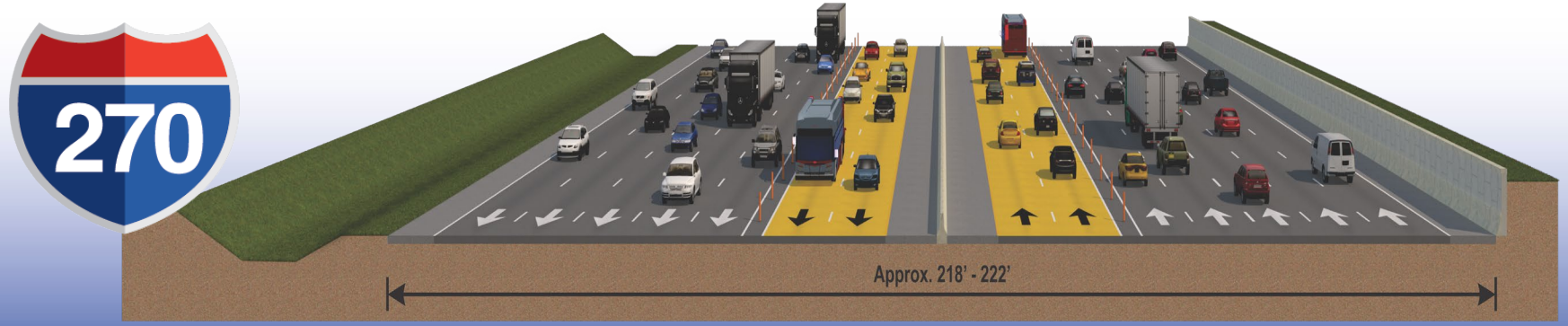




Alternative 9

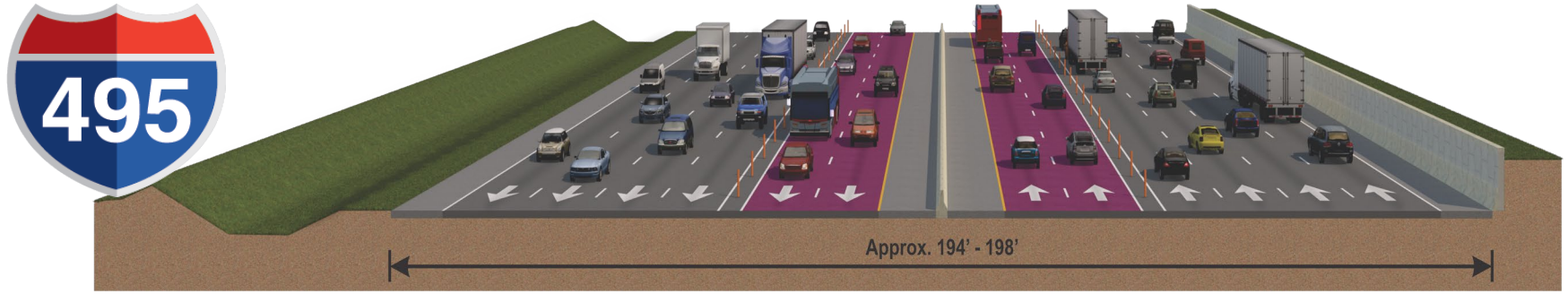
Add two HOT managed lanes in each direction on I-495 and convert one existing HOV lane to a HOT managed lane and add one HOT managed lane in each direction on I-270

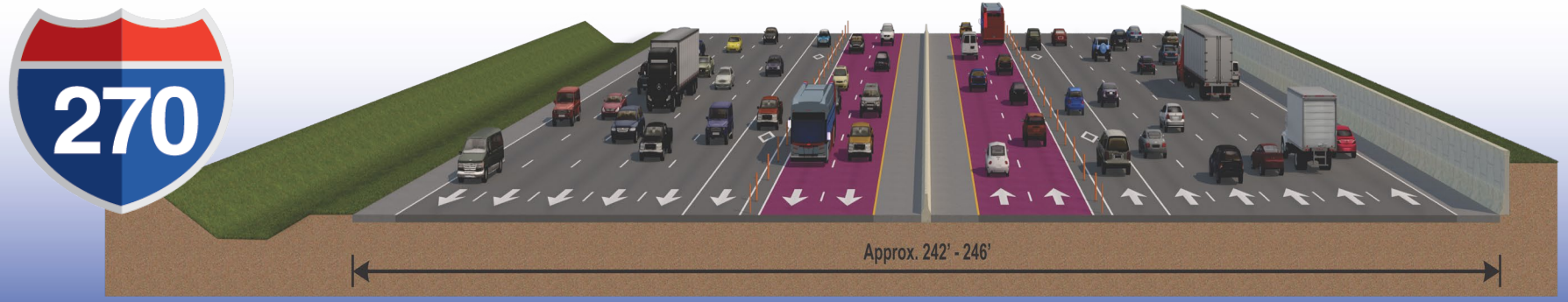




Alternative 10

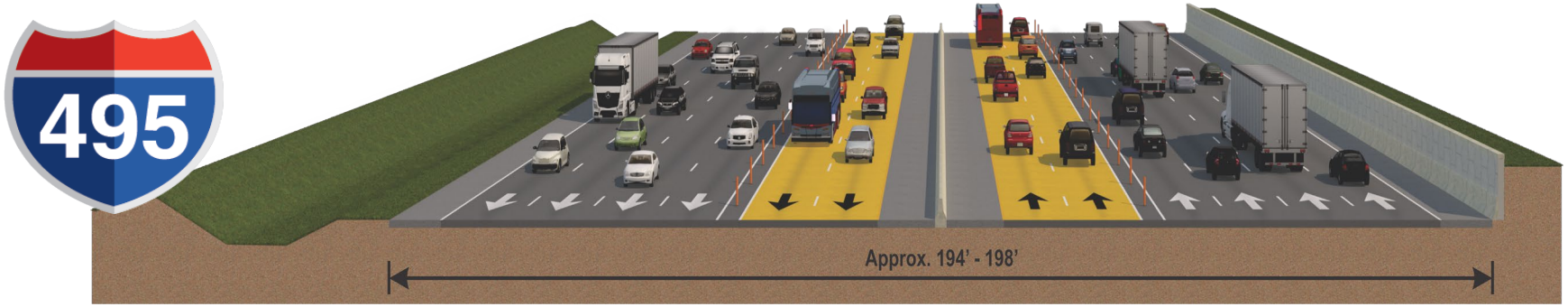
Add two ETL managed lanes in each direction on I-495 and on I-270 and retain one existing HOV lane in each direction on I-270 only

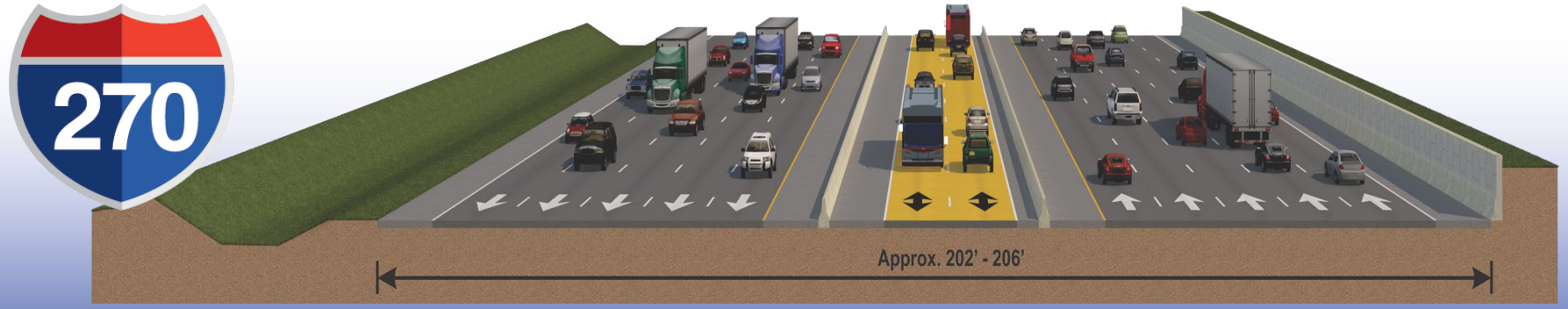




Alternative 13B

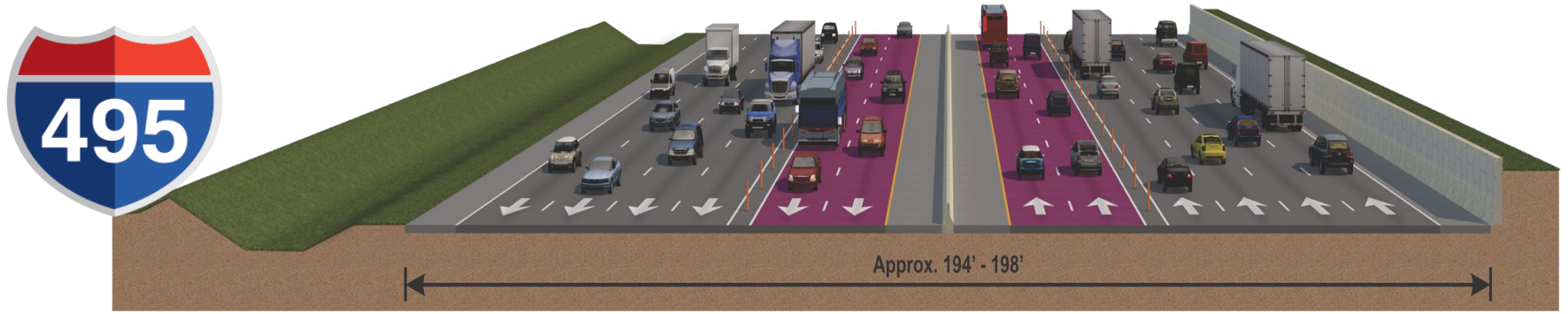
Add two HOT managed lanes in each direction on I-495 and convert existing HOV lanes to two HOT managed reversible lanes on I-270 while maintaining General Purpose lanes

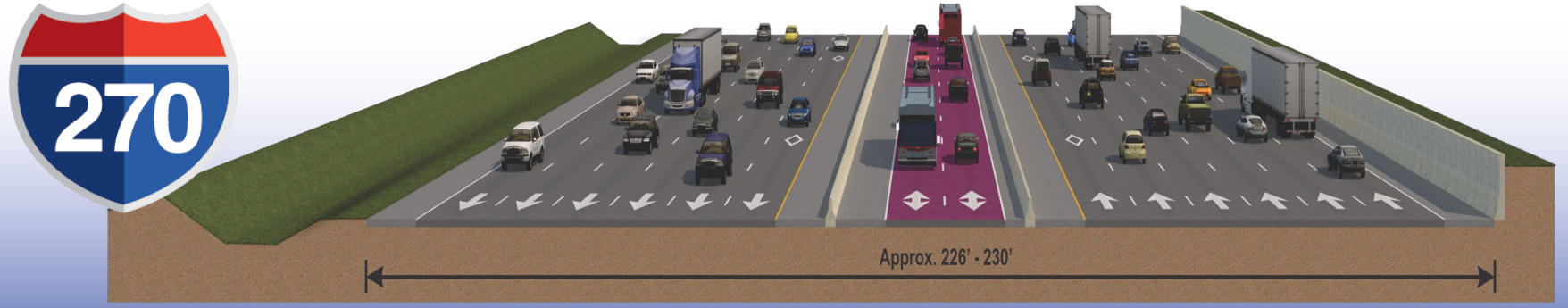




Alternative 13C

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





Transit Alternatives

- Standalone, circumferential heavy rail, light rail, and Bus Rapid Transit did not meet the purpose and need
- 2002 Capital Beltway/Purple Line Study looked at 42-mile circumferential rail corridor and concluded *no single highway or transit improvement* will provide significant relief to the long-term demand on the Capital Beltway
- Purple Line Study separated from highway improvements and is now under construction
- Under Purple Line Study:
  - ✓ The *number of daily vehicle trips* in 2040 with the Purple Line would be reduced *by 0.06%* relative to the no-build;
  - ✓ In 2040, *0.07% less vehicle miles* would be traveled each day in the region under the no-build.
- *Numerous transit improvements are already considered in no-build* for the I-495 & I-270 Managed Lanes Study including Purple Line Light Rail, multiple Bus Rapid Transit projects, and increased MARC frequency and capacity and severe congestion is still anticipated

Multimodal Mobility and Connectivity

Multimodal Mobility and Connectivity

- Alternatives will include consideration of **multimodal mobility** and **connectivity** including other travel modes such as **transit** and **pedestrian/bicycle** connections

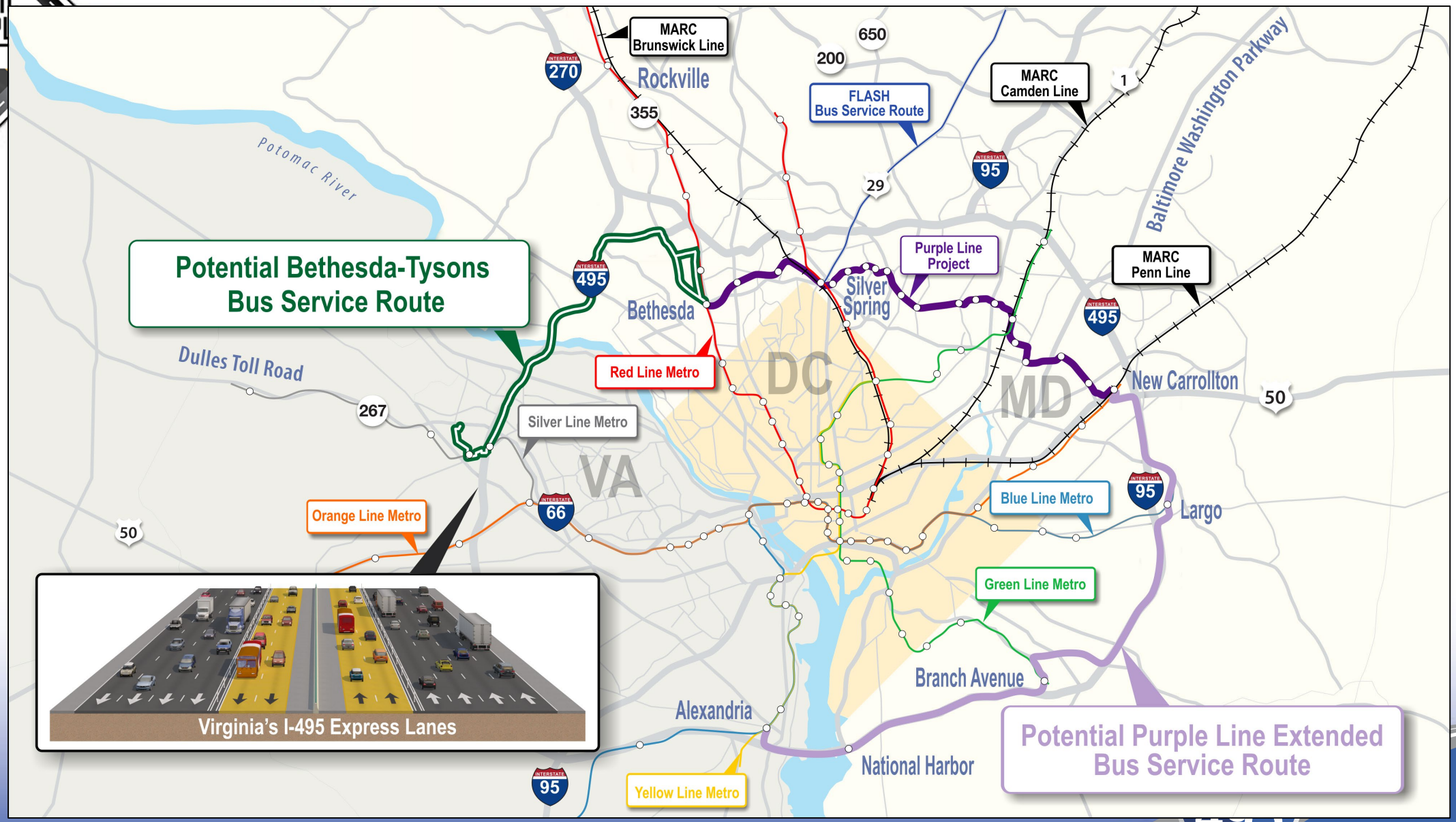
Direct and Indirect Access

- Improved access to existing transit stations and transit oriented developments will be included in the alternatives including: Shady Grove Metro, Twinbrook Metro, Medical Center Metro, Medical Center Metro/Kensington MARC, Silver Spring Metro/MARC, Greenbelt Metro/MARC, New Carrollton Metro/MARC/AMTRAK, Branch Avenue Metro, Largo Metro

Bus Usage of Managed Lanes

- *Free bus use* of managed lanes to provide a faster, free flow, and more reliable transit trip
- *Transit Working Group* underway with state and local transit providers to explore opportunities for enhanced transit connectivity and mobility through the use of managed lanes system

TRAFFIC RELIEF PL



Transportation System Management/ Transportation Demand Management

- *TSM/TDM as a standalone alternative did not meet the purpose and need*
- *Strategies are considered **short term improvements** that would only address a small fraction of the significant congestion challenges along both corridors*
- *TSM/TDM improvements alone would **not accommodate long-term traffic growth** and would **not enhance trip reliability** because it does not include new capacity*
- *TSM/TDM improvements would **not improve the movement of goods and services** as they would not address the significant congestion or enhance the reliability of trips*
- *TSM/TDM would **not enhance multimodal connectivity** as there would not be additional direct access to transit stations nor additional managed lane capacity for the free, fast movement of transit.*
- *TSM/TDM would **not provide a revenue source***

Transportation System Management
Transportation Demand Management

TSM/TDM Elements included in ARDS

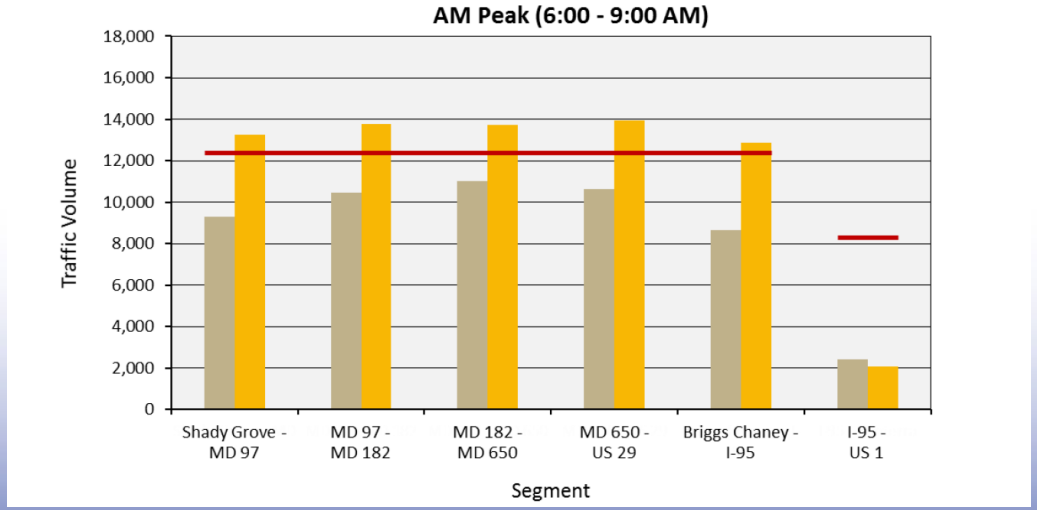
- *Managed lanes* and *congestion pricing*- Both demand management strategies
- New *direct and indirect access* to and from transit stations/centers
- *Free bus usage* of managed lanes
- *Adaptive ramp metering* on the interchange ramps along I-270 as part of MDOT SHA's I-270 Innovative Congestion Management project
- *Optimization of lane configurations* and *traffic signal timing* to provide adequate traffic flow along crossroads
- *Enhancements to acceleration and deceleration lanes* to improve traffic operations on mainline where current design is below standards
- Consideration of *pedestrian and bicycle enhancements*

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

TRAFFIC RELIEF PLAN

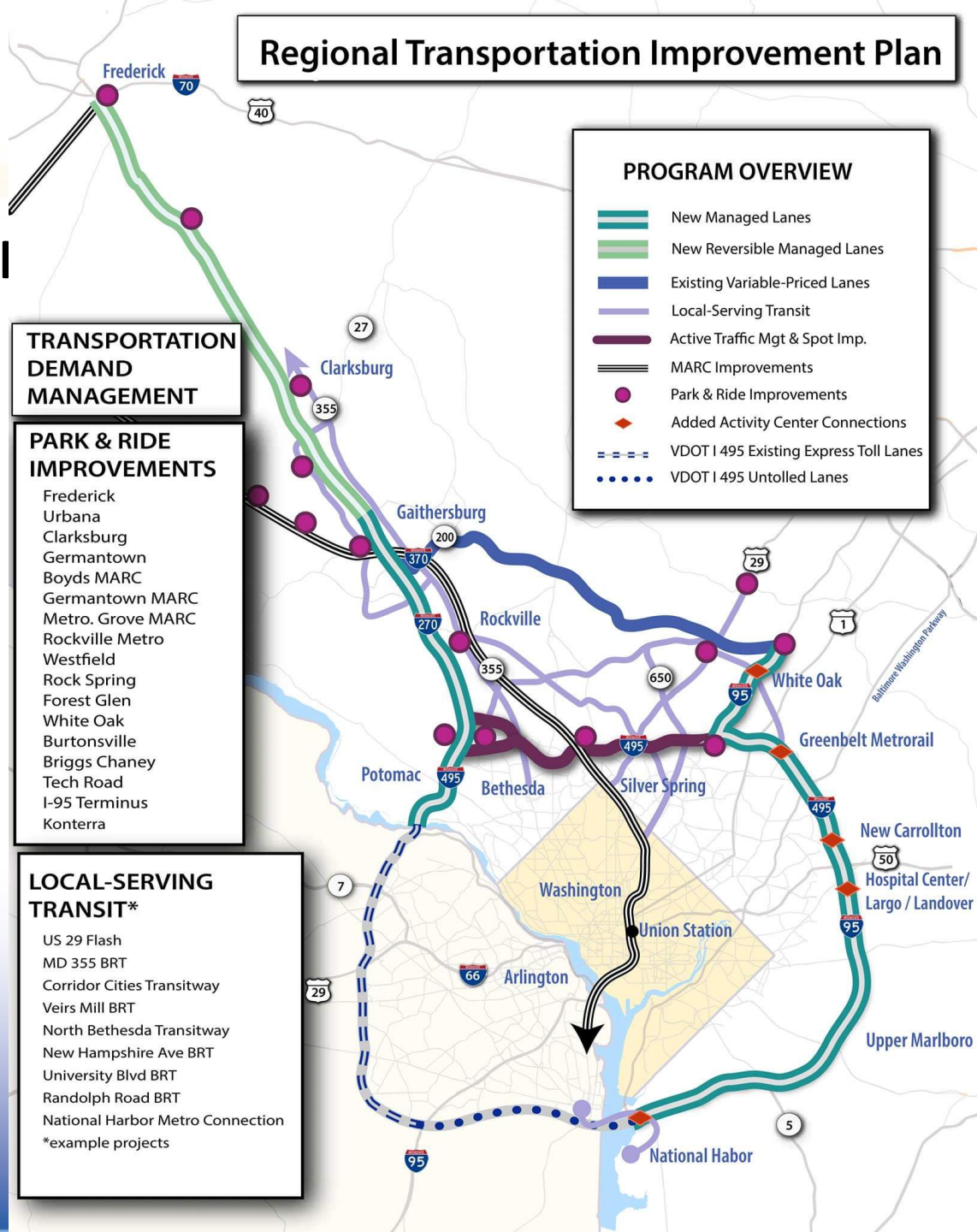
Proposed Montgomery County Regional Transportation Improvement Plan

- Plan calls for TSM improvements on I-495 between I-95 and I-270 and transit improvements (which are generally in CLRP)
- Plan assumes traffic from I-95 SB traveling to points west of I-270 (such as Northern Virginia) could divert to the ICC
- Publicly available study* for ICC shows it is projected to exceed capacity in the westbound in the morning peak in 2033



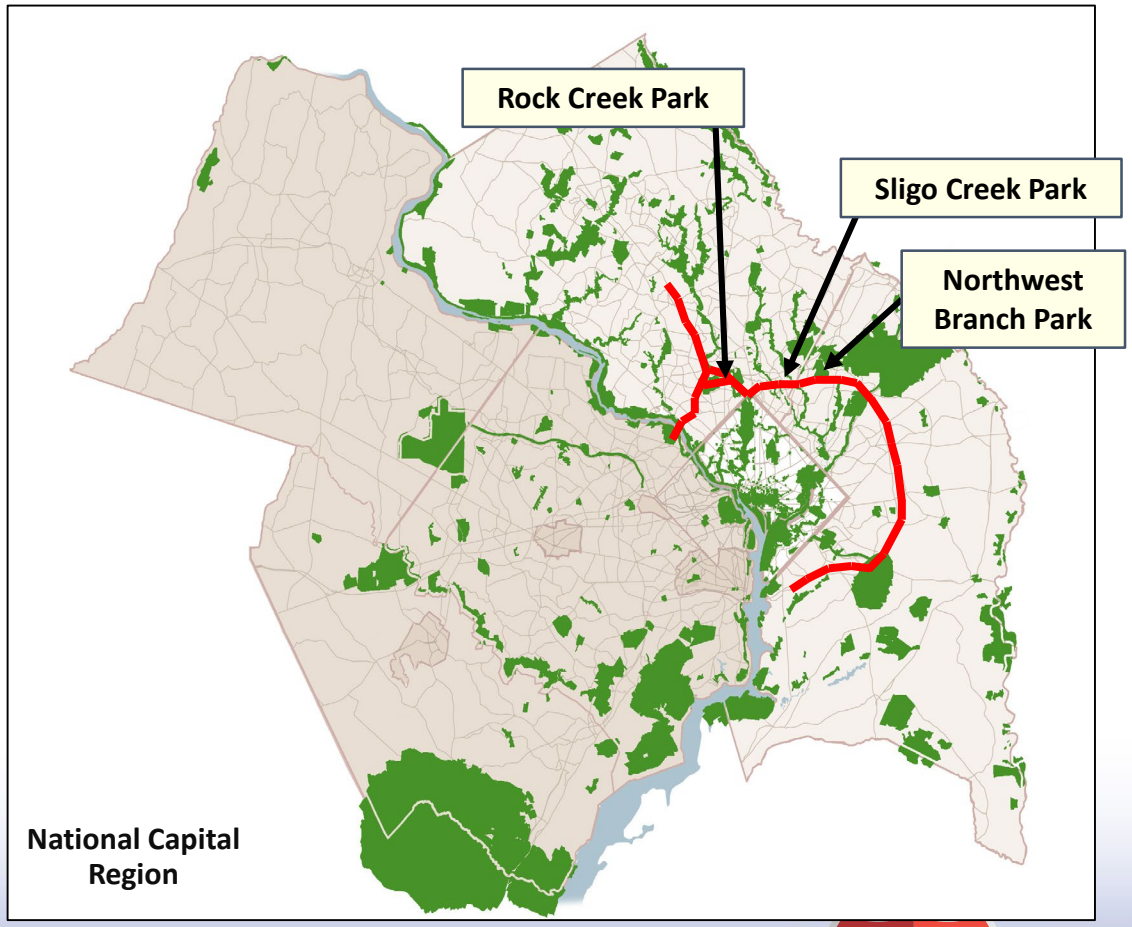
FY 2040 Estimated AM Period Segment Volumes

* https://mdta.maryland.gov/sites/default/files/Files/Financial_Forecast/ICC_2018_Forecast_Update_FINAL.PDF



Capper-Cramton Parks

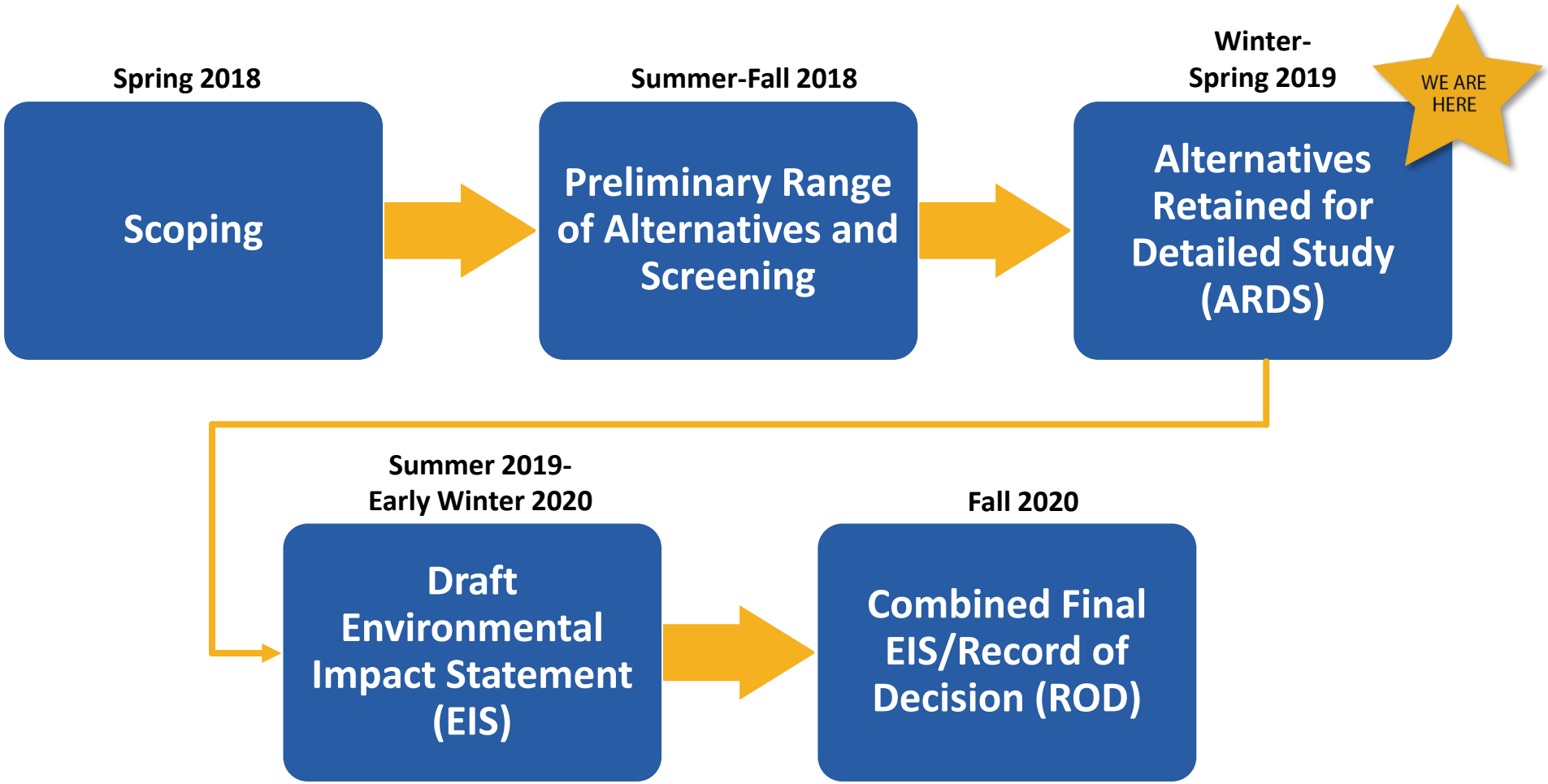
- Current estimate of park impacts is *preliminary*;
- *Avoidance and minimization efforts* to eliminate or reduce impacts to parkland is ongoing
- P3 Developer will be *further incentivized* to avoid and minimize park impacts
- More detailed information on park resources, potential impacts, and avoidance, minimization and mitigation measures will be provided in Section 4(f) Evaluation and Draft Environmental Impact Statement (DEIS).



Next Steps

- ✓ Continuing extensive public engagement efforts
- ✓ Finishing technical studies on ARDS
- ✓ Developing avoidance, minimization measures
- ✓ Identifying mitigation for unavoidable impacts
- ✓ Developing Draft Environmental Impact Statement and Section 4(f) Evaluation
- ✓ Identifying recommended preferred alternative and seeking concurrence from cooperating agencies
- ✓ Publishing DEIS December 2019
- ✓ Holding series of public hearings early 2020

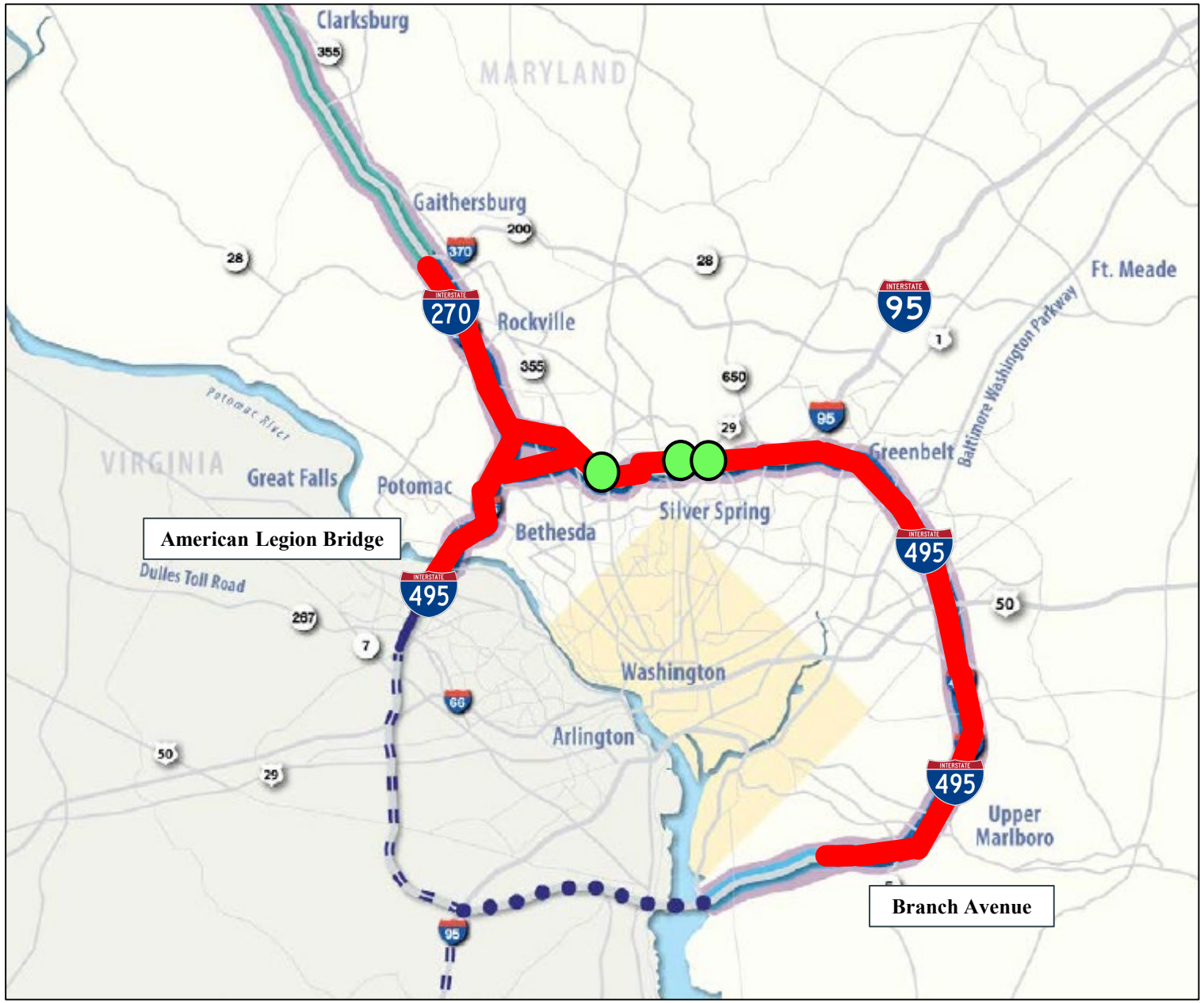
NCPC Staff Review



Additional Analysis

Capper-Cramton park

study area

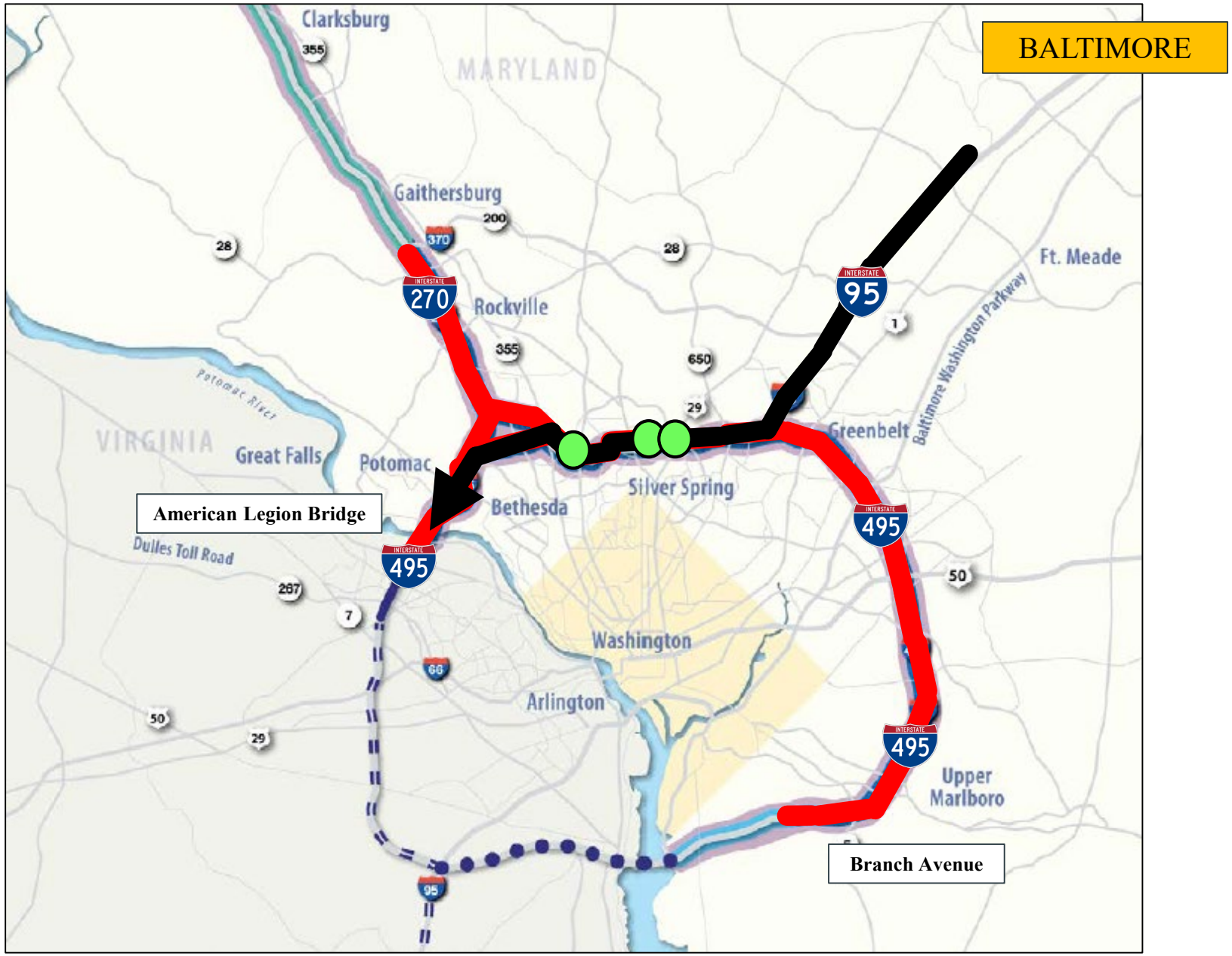


Additional Analysis

Capper-Cramton park

study area

regional “pass-through” travel route

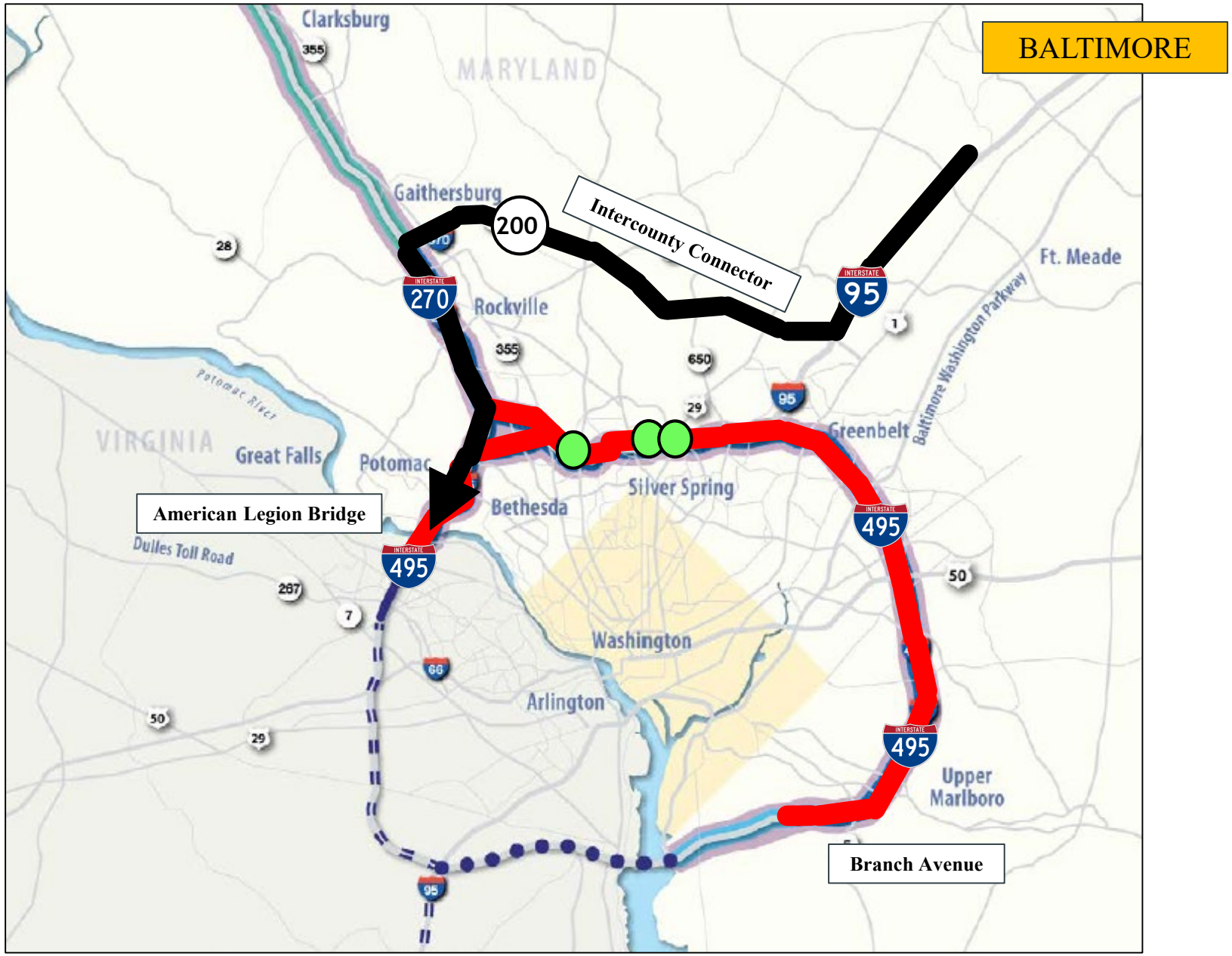


Additional Analysis

Capper-Cramton park

study area

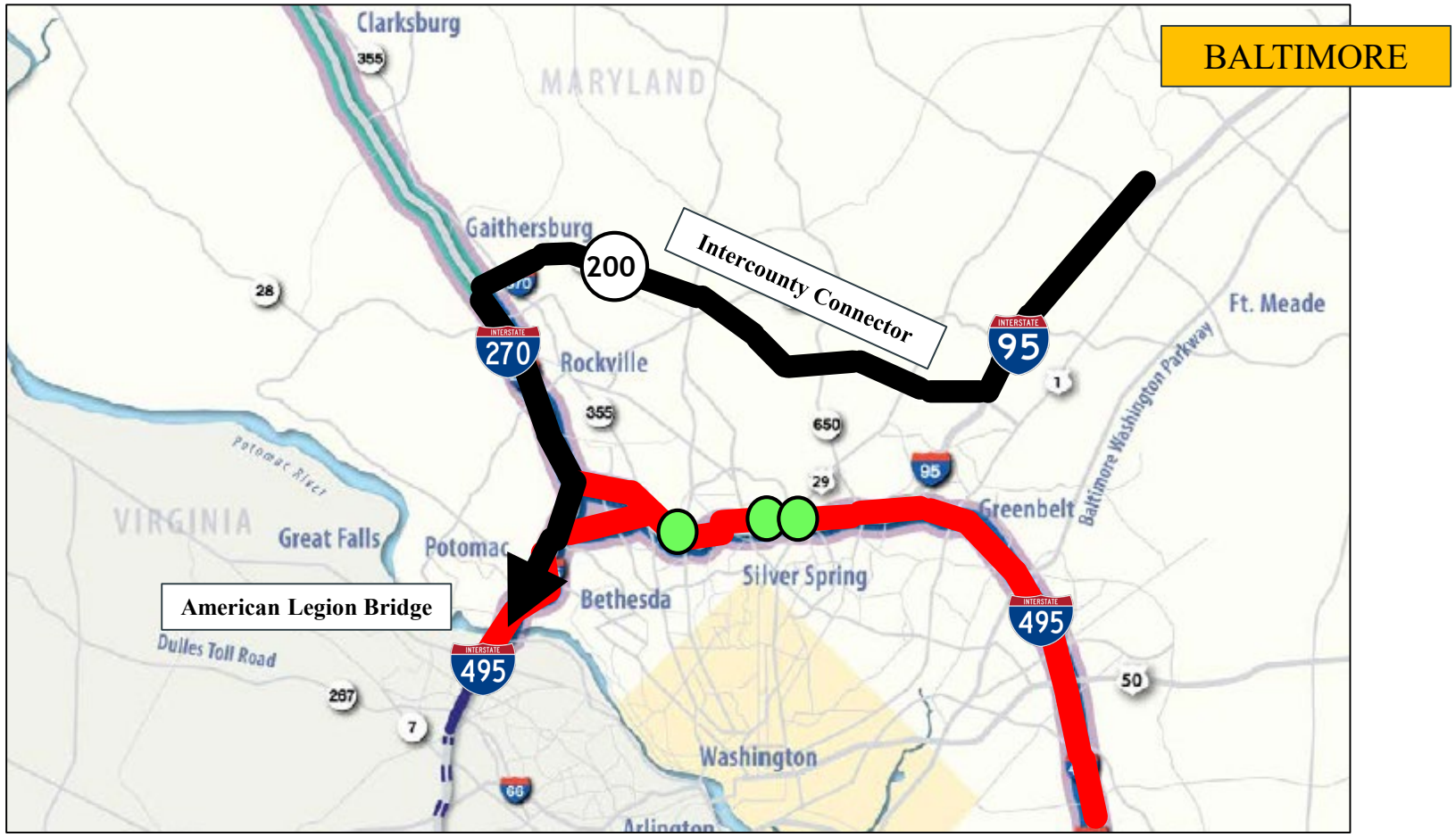
DIVERTED regional “pass-through” travel route



Staff Proposal

Capper-Cramton park

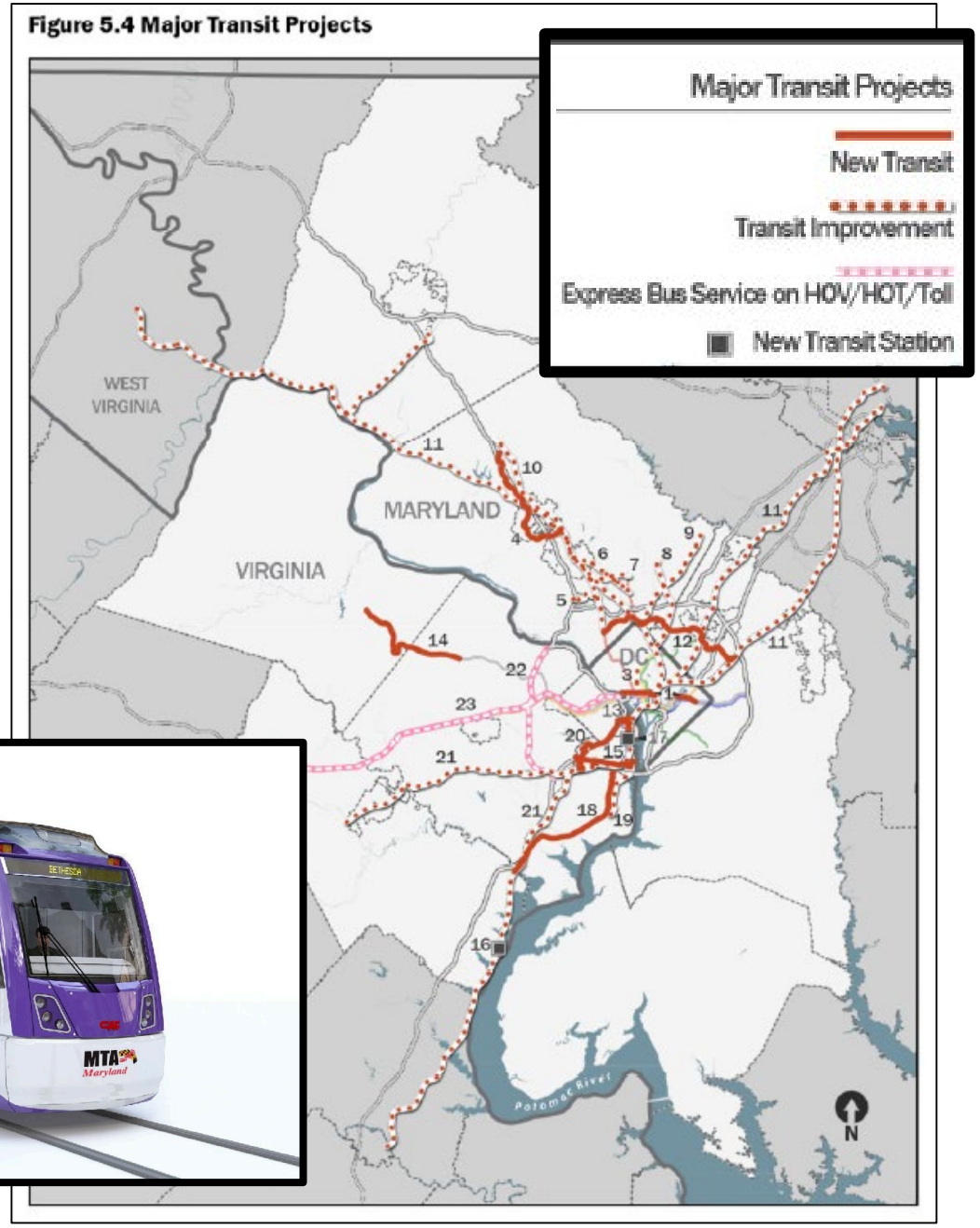
study area



Additional Intercounty Connector (ICC) traffic diversion EIS “build” alternative

Staff Proposal

Constrained Long-Range Plan (CLRP) transit projects



QUESTIONS?

Lisa Choplin, Director

Jeff Folden, Deputy Director

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