
495
270
MANAGED LANES STUDY
TRAFFIC RELIEF PLAN
WELCOME
Please take a seat
MDOT MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

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

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

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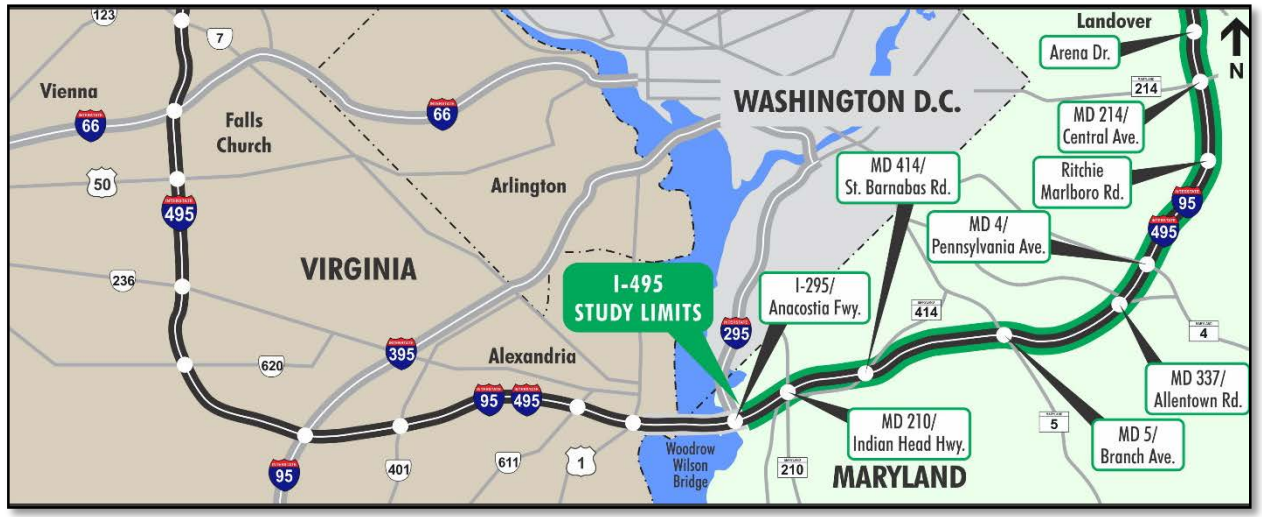
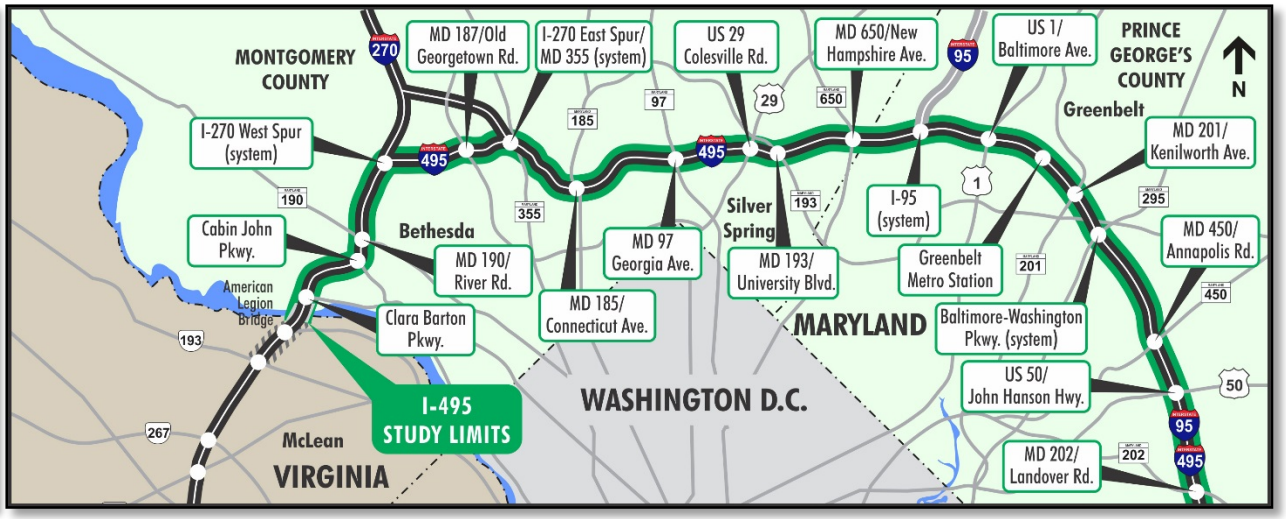
Purpose of Today's Workshop

- Provide update on Study Status and Schedule
- Provide summary of Purpose and Need
- Present Preliminary Range of Alternatives
- Present Screening Criteria to evaluate alternatives

Future meetings will focus on detailed alternatives and environmental/property information



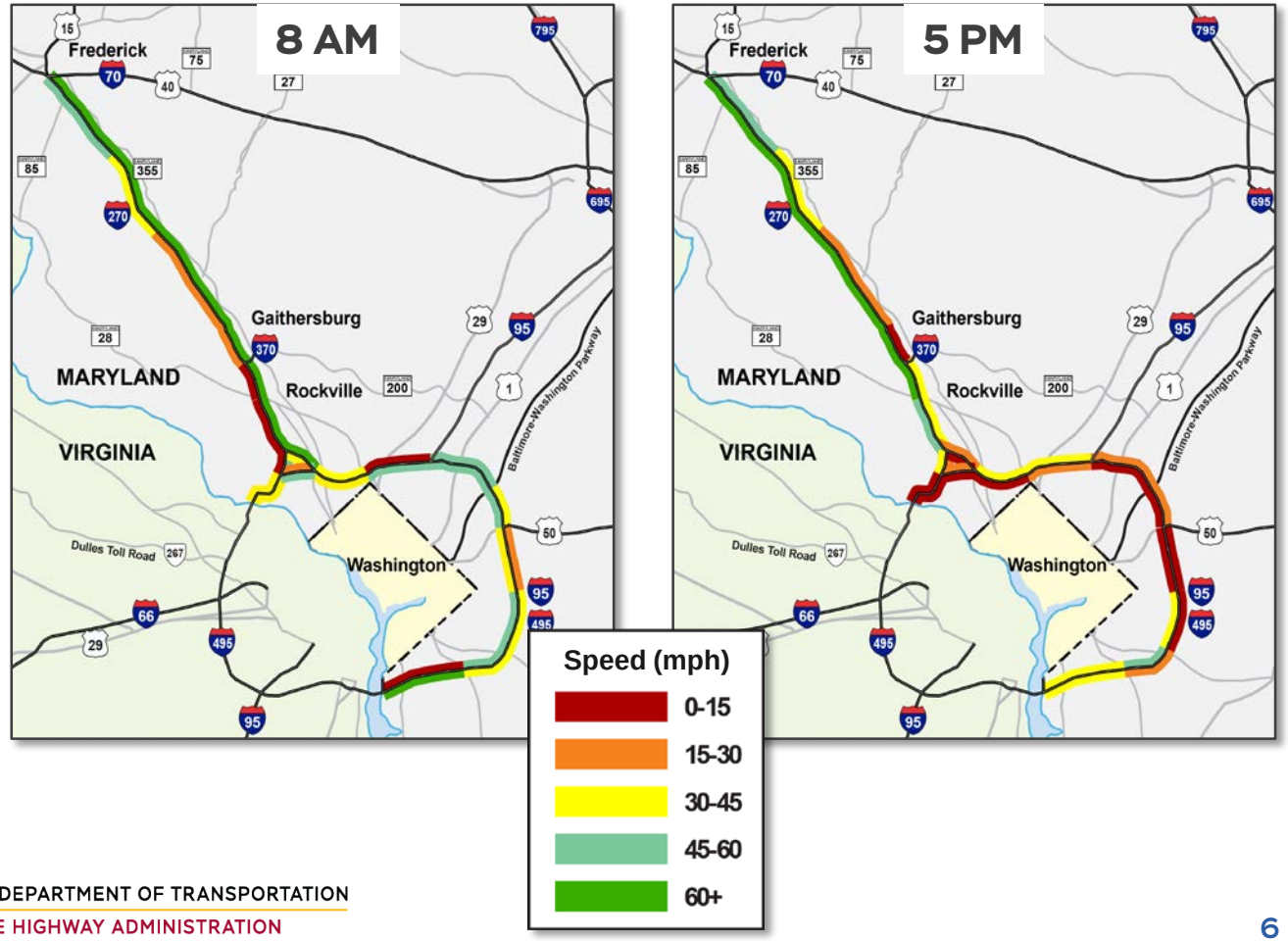


What is the Traffic Relief Plan (TRP)?

- To address Maryland's congestion, a balanced approach to transportation infrastructure improvements is needed for both transit and highways
- MDOT is moving forward with $5.6 B Purple Line LRT construction and providing over $1.5 B in funding for Metro
- The TRP is an ambitious plan to bring innovative solutions to address the transportation challenges on Maryland's most congested roads: I-495, I-270, MD 295, I-695, I-95, and other major corridors
- Congestion on these routes has a region-wide effect on other transportation modes, including transit

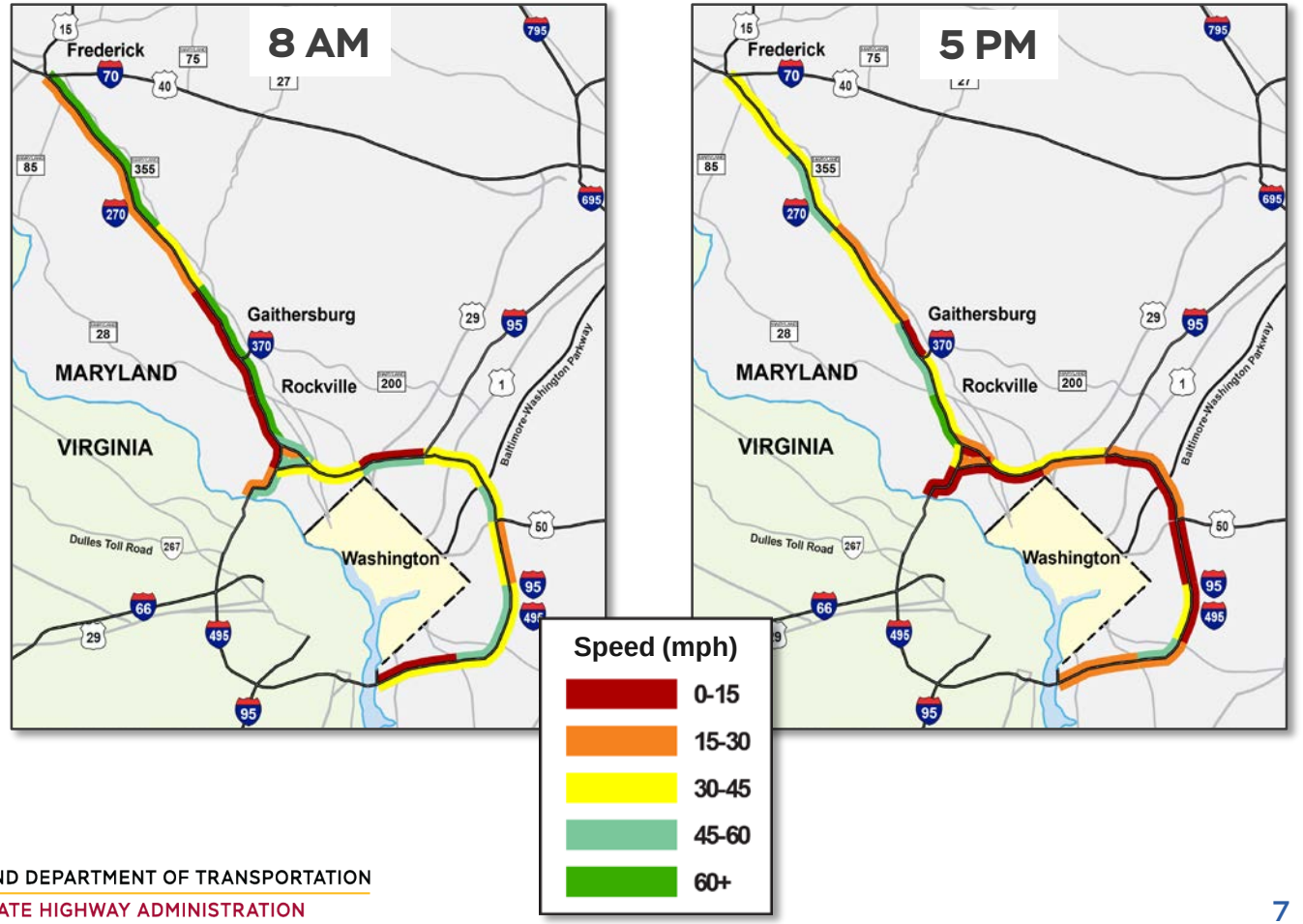
Traffic Conditions - Existing

- Top 5 highest volume freeway sections in Maryland are within study area
- Today, on average, severe congestion lasts for 7 hours each day on I-270 and 10 hours each day on I-495
- Study area includes several of the most unreliable freeway 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



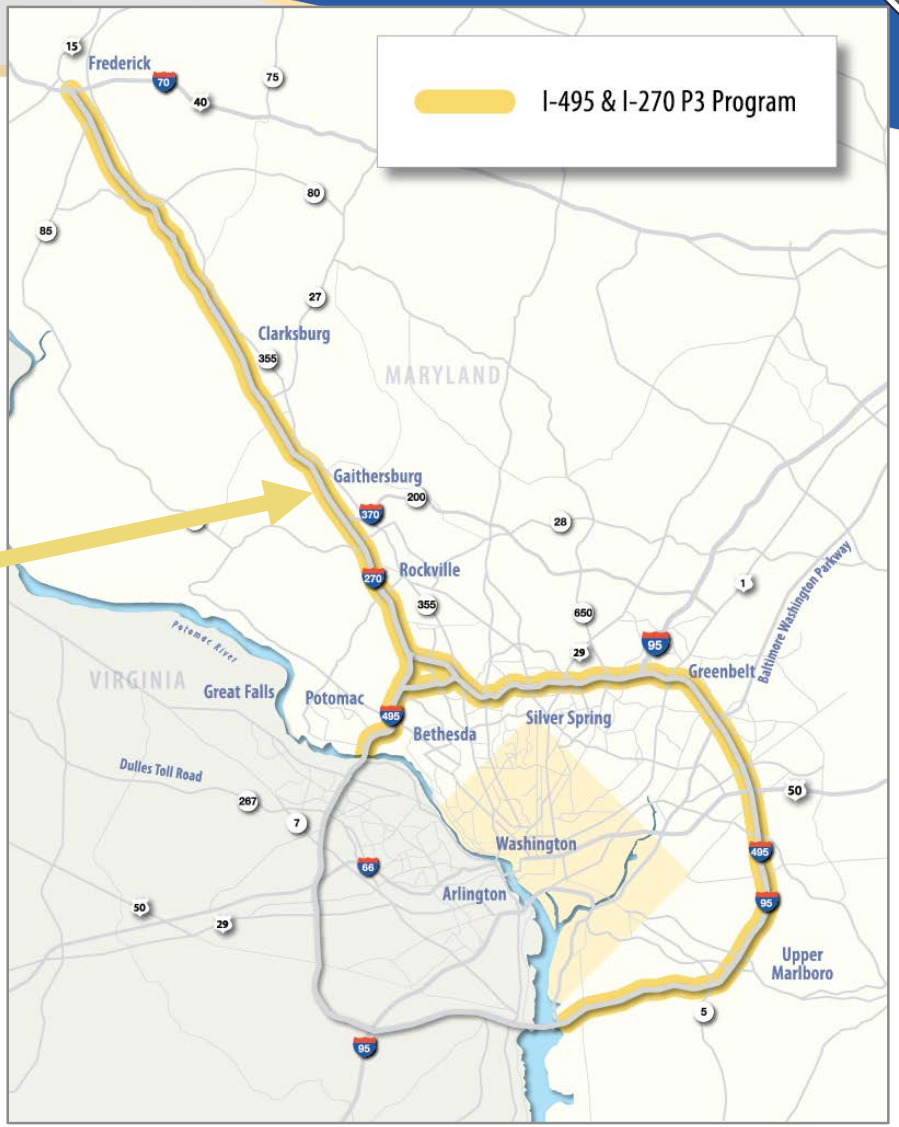
Traffic Conditions - No Build

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



I-495 & I-270 P3 Program

- I-495 (Capital Beltway) from south of the American Legion Bridge (ALB) to east of the Woodrow Wilson Bridge (WWB)
- I-270 from I-495 to I-70, including the east and west I-270 spurs
- Over 70 miles of interstate improvements in Maryland



Public-Private Partnership (P3)

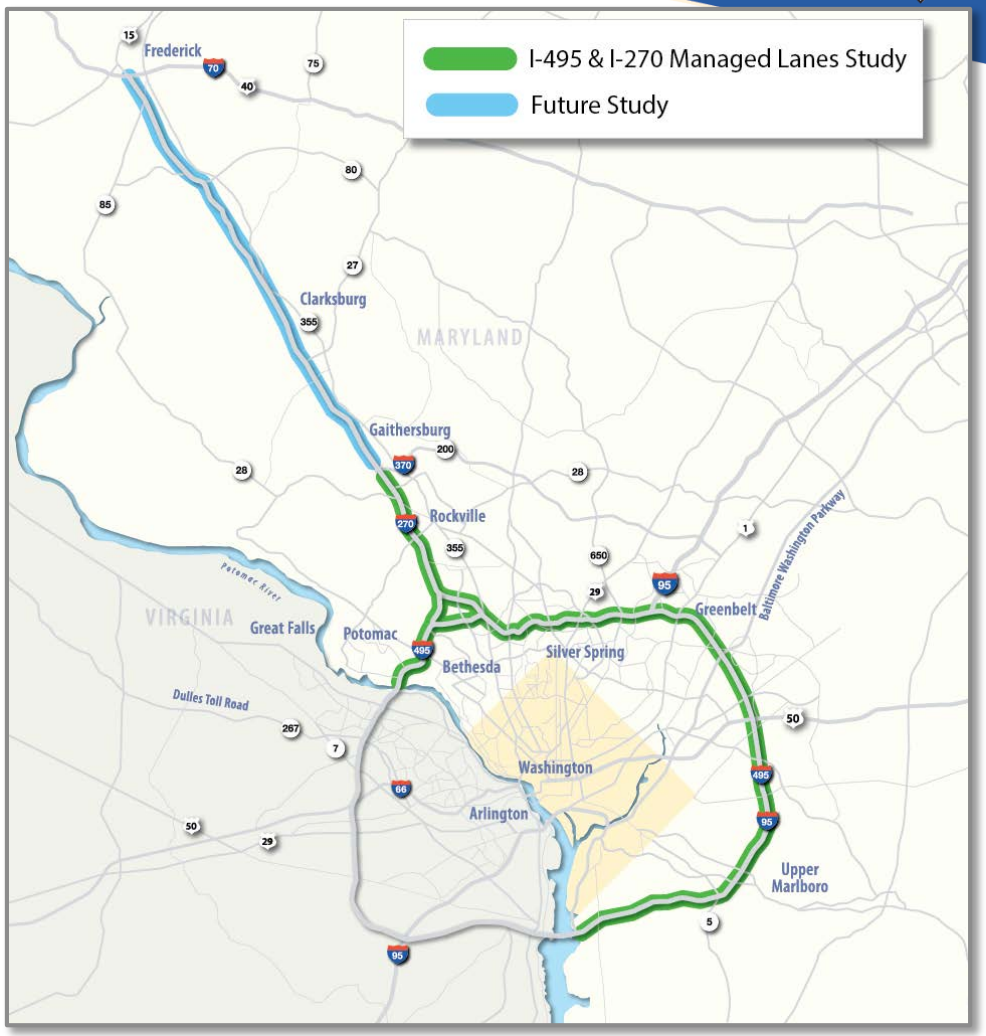
- A P3 is a single agreement with a private sector partner, known as a concessionaire, to perform functions under a single agreement that are normally completed through multiple contracts and/or public resources. Functions for a transportation facility may include:
  - **Designing**
  - **Building**
  - **Financing**
  - **Operating**
  - **Maintaining**
- Using a P3 can construct projects faster, better manage risks, provide operations and maintenance more efficiently, and be delivered with significantly lesser or no tax-payer funded contribution
- State will maintain ownership and function of transportation facilities and ensure they meet public functions

I-495 & I-270 MANAGED LANES STUDY

- I-495 from south of American Legion Bridge (ALB) to east of the Woodrow Wilson Bridge (WWB)
- I-270 from I-495 to I-370, including the east and west I-270 spurs

FUTURE STUDY

- I-270 from I-370 north to I-70, beginning in 2019



The National Environmental Policy Act (NEPA) Process

- NEPA requires federal agencies to evaluate the environmental effects of their proposed actions
- The I-495 & I-270 Managed Lanes Study will include the development of an Environmental Impact Statement (EIS), which will document the potential natural, cultural, and socioeconomic effects of the study's alternatives
- The Federal Highway Administration (FHWA) serves as the lead federal agency for the EIS
- The Maryland Department of Transportation State Highway Administration (MDOT SHA) is serving as the local project sponsor and joint lead agency

U.S. Department of Transportation
Federal Highway Administration

MDOT MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

The NEPA Process

Spring 2018

Scoping

- Introduction and Overview
- Public Input on
  - Scope
  - Purpose and Need
  - Potential Alternatives
  - Environmental Considerations
  - Evaluation Methods

Summer 2018

Preliminary Range of Alternatives and Screening

- Define Purpose and Need
- Develop Preliminary Range of Alternatives
- Develop Screening Criteria
- Public Workshops

WE ARE HERE

Fall 2018 - Winter 2018/2019

Alternatives Retained for Detailed Study (ARDS)

- Environmental Studies
  - Air
  - Noise
  - Natural Resources
  - Historic Resources
  - Indirect and cumulative effects
  - Socioeconomic and land use
  - Traffic Analysis
- Public Workshops

Winter - Fall 2019

Draft Environmental Impact Statement (EIS)

- Identifies MDOT SHA Preferred Alternative
- Results of Environmental Studies and Traffic Analysis for ARDS including MDOT SHA Preferred Alternative
- Public Hearing and Comment on Draft EIS

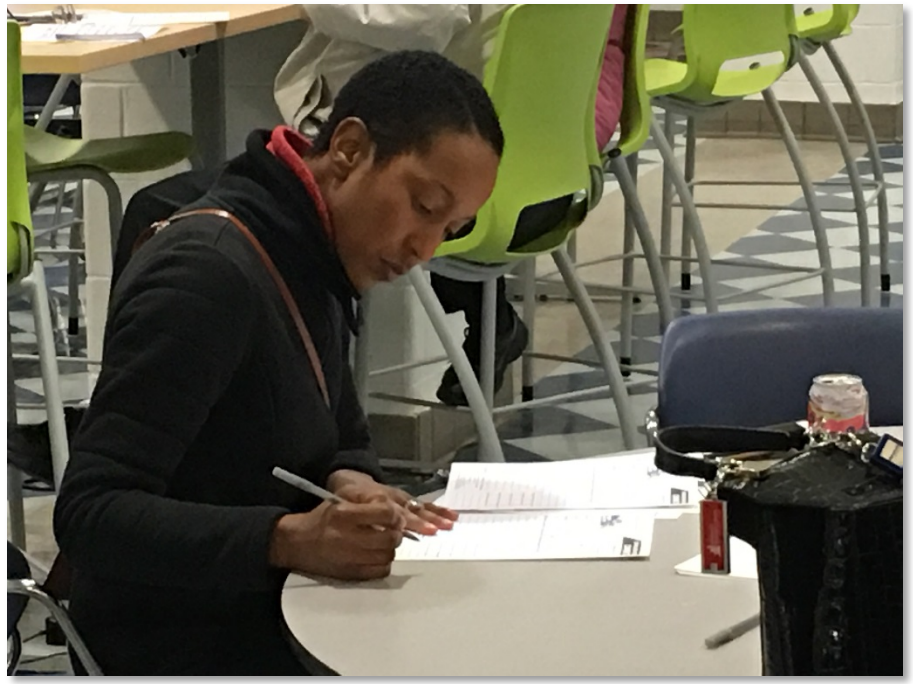
Fall 2019 - Spring 2020

Combined Final EIS/ Record of Decision (ROD)

- Addresses comments on Draft EIS
- Announces Proposed Action
- Record of Decision that indicates compliance with NEPA and that potential effects have been considered

Scoping Update from March/April 2018

- Notice of Intent (NOI) published in Federal Register (March 16, 2018)
- Launched study website:
  - Overview
  - Contact Information
  - Questions from Public
  - Surveys
- Hosted four (4) Open Houses to share study information and obtain feedback
- Participated in Local, State, and Federal Coordination Meetings



Public Scoping Comments (March 16 – May 1, 2018)

143
Written comments from Public Open Houses

126
Submitted via the P3 website, email and US mail

345
Comments via Study Survey

6
Submitted via Phone (toll-free #)

620
Total comments received

Major Themes from Public Scoping Comments

- Support for the study, specific recommendations, or fixing congestion
- Statements about tolls and the partnership with the private sector
- Concerns with effects to the environment, noise, air, and properties
- Support for improvements to transit
- Questions about the study timeline and initial outreach

Purpose and Need

- **Purpose** is to develop a travel demand solution that addresses congestion, improves trip reliability, and enhances existing and planned multimodal mobility and connectivity
- Study will address the following **Needs**:
  - Accommodate existing traffic and long-term traffic growth
  - Enhance trip reliability
  - Provide additional roadway travel choices
  - Accommodate homeland security and
  - Improve movement of goods and services
- Additional **Goals** of study include incorporating funding sources for financial viability and developing the study in an environmentally responsible manner

Preliminary Range of Alternatives

- A range of Reasonable Alternatives will be considered and objectively evaluated as part of the study
- The Preliminary Range of Alternatives are the high-level alternatives to be evaluated based on the Screening Criteria
- The alternatives that best meet the Screening Criteria will be carried forward for further, detailed study
- Public feedback is critical on the Preliminary Range of Alternatives and in determining the Alternatives Retained for Detailed Study

Preliminary Range of Alternatives: 15

- No-Build
- Transportation Systems Management/Travel Demand Management
- General Purpose Lanes
- Managed Lanes
  - High-Occupancy Vehicle
  - Priced
  - Bus
  - Contraflow
  - Reversible
- Transit

Definitions

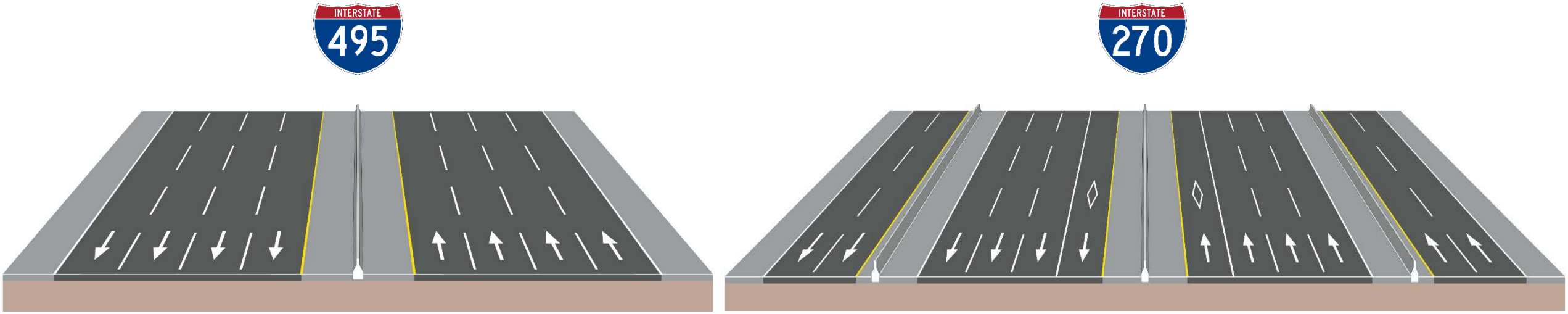
- General Purpose (GP) Lanes: freeway or expressway lanes open to all motor vehicles
- Managed Lanes: highway facility or set of lanes where operating strategies are used to control number of vehicles using the lanes
- Priced Managed Lanes combines two highway management tools:
  - *Congestion Pricing:* use of road user pricing that varies with the level of congestion and/or time of day to control traffic demand during peak periods, providing incentives for some motorists to shift trips to off-peak times, less-congested routes, or alternative modes
  - *Lane Management:* approach that restricts access to designated highway lanes based on occupancy or vehicle type in designated lanes to maintain a desirable level of traffic service
- High-occupancy Vehicle Lanes (HOV): lanes reserved for high-occupancy vehicles, a motor vehicle carrying at least two or more persons including carpools, vanpools, and buses

Definitions

- Contraflow Lanes: lanes operating adjacent to but in the opposite direction of the normal flow of traffic during peak-direction travel; usually separated by pylons or movable barrier
- Reversible Lanes: lanes where direction of traffic flow can be changed to match peak direction of travel, typically inbound in the morning and outbound in the afternoon
- Transportation Systems Management (TSM): operating strategies that improve the operation and coordination of transportation facilities
- Travel Demand Management (TDM): strategies or incentives to provide the most efficient and effective use of existing transportation services and facilities (e.g., rideshare and telecommuting promotion, managed lanes, preferential parking, road pricing, etc.)

1 No Build (Existing)

All projects in Constrained Long-Range Plan (CLRP) including I-270 Innovative Congestion Management (ICM) Improvements



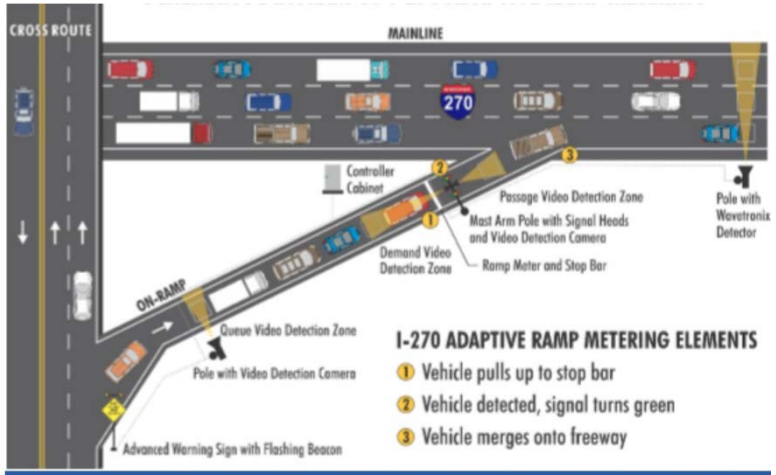
Legend

- New GP Lanes
- New HOV Managed Lanes
- New Priced Managed Lanes
- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

2 Transportation System Management (TSM) / Travel Demand Management (TDM)

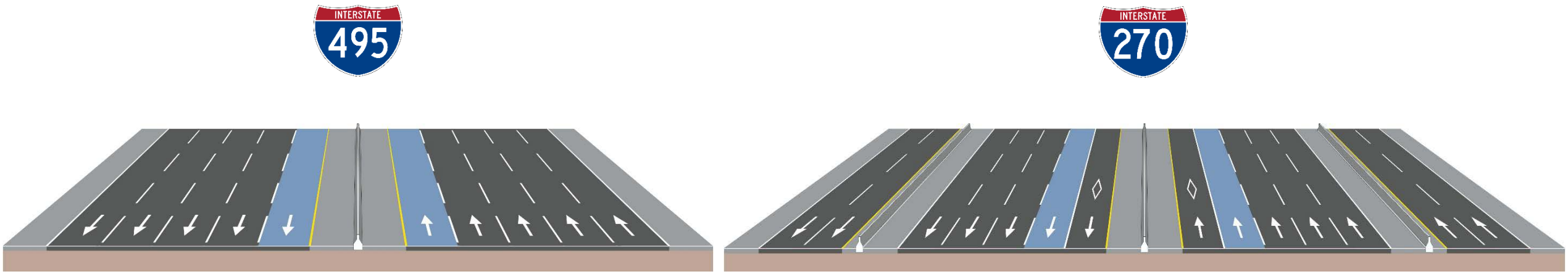
Solutions along I-495 and I-270: restriping within existing pavement, peak period shoulder use, ramp metering and Active Traffic Management (ATM) strategies



Adaptive Ramp Metering

3 Add 1 General Purpose (GP) Lane

Add one general-purpose lane in each direction on I-495 and I-270



Legend

- New GP Lanes
- New HOV Managed Lanes
- New Priced Managed Lanes
- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

4 1-Lane, High-Occupancy Vehicle (HOV) Managed Lane Network

Add one lane in each direction on I-495 and retain existing HOV lane in each direction on I-270

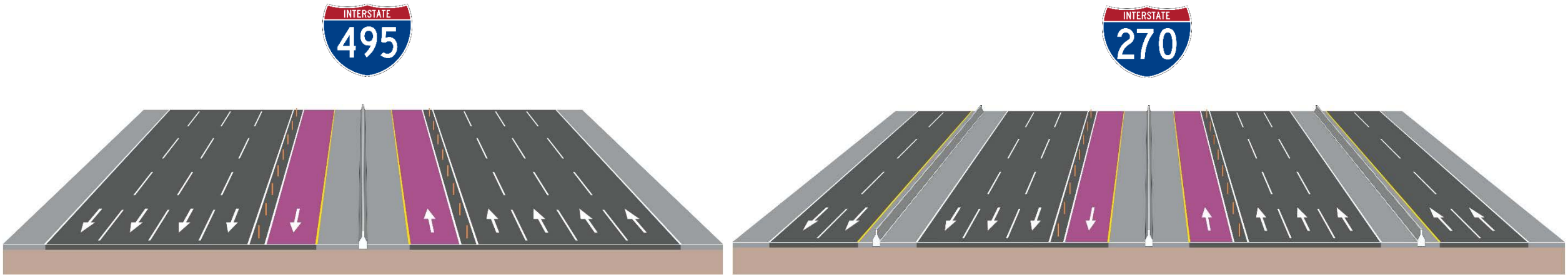
Legend

- New GP Lanes
- New HOV Managed Lanes
- New Priced Managed Lanes
- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

5 1-Lane, Priced Managed Lane Network

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



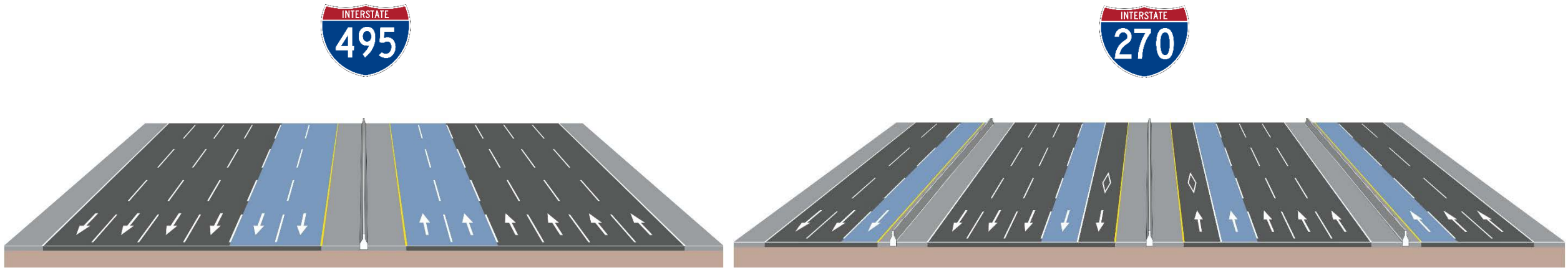
Legend

- New GP Lanes
- New HOV Managed Lanes
- New Priced Managed Lanes
- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

6 Add 2 General Purpose (GP) Lanes

Add two general-purpose lanes in each direction on I-495 and I-270



Legend

- New GP Lanes
- New HOV Managed Lanes
- New Priced Managed Lanes
- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

7 2-Lane, High-Occupancy Vehicle (HOV) Managed Lane Network

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

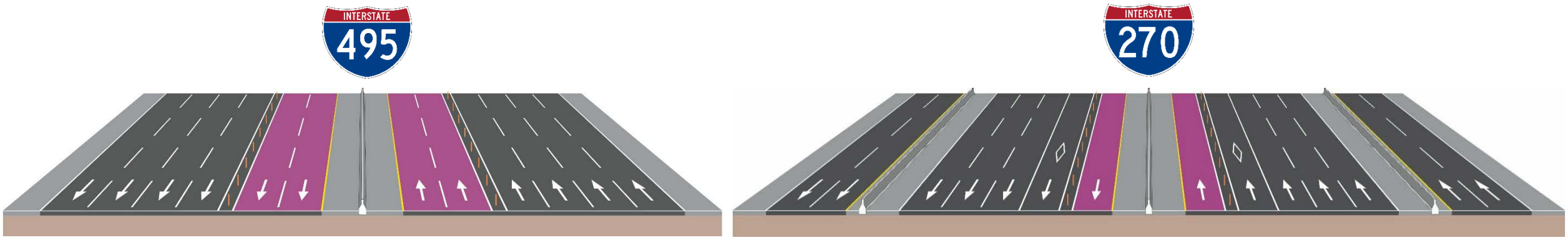
Legend

- New GP Lanes
- New HOV Managed Lanes
- New Priced Managed Lanes
- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

8 2-Lane, Priced Managed Lanes Network on I-495, 1-Lane Priced and 1-Lane, HOV Managed Lane Network on I-270 Only:

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



Legend

- New GP Lanes
- New HOV Managed Lanes
- New Priced Managed Lanes
- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

9 2-Lane, Priced Managed Lane Network

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

Legend

- New GP Lanes
- New HOV Managed Lanes
- New Priced Managed Lanes
- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

10 2-Lane,Priced Managed Lane Network and 1-Lane HOV Managed Lane Network on I-270 Only

Add two priced 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

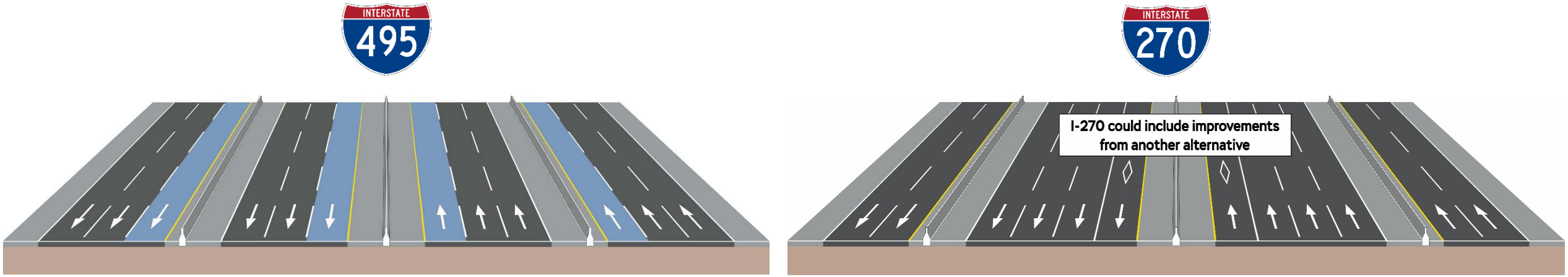
Legend

- New GP Lanes
- New HOV Managed Lanes
- New Priced Managed Lanes
- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

11 Collector/Distributor on I-495

Physically separate traffic using collector-distributor (C-D) lanes, adding two GP lanes in each direction on I-495; retain existing lanes and on I-270



Legend

- New GP Lanes
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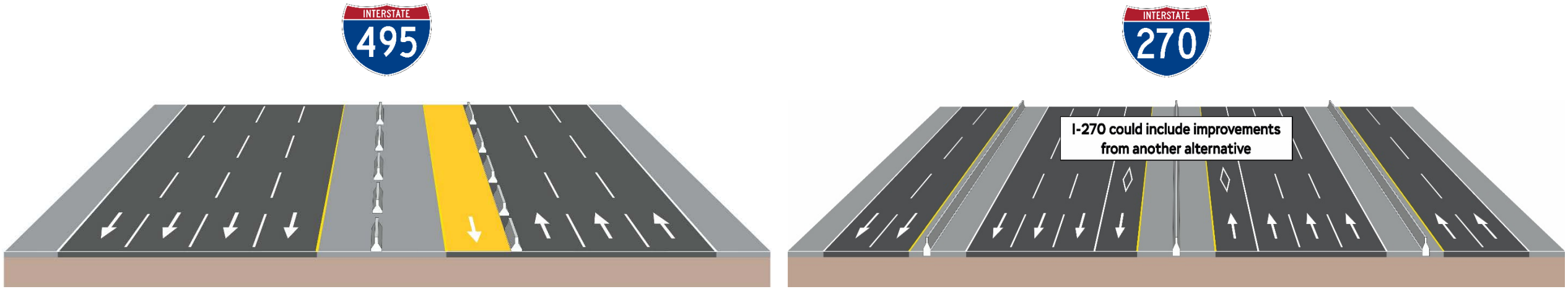
- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

12A Contraflow on I-495

Convert existing general-purpose lane on I-495 to contraflow lane during peak periods



Legend

- New GP Lanes
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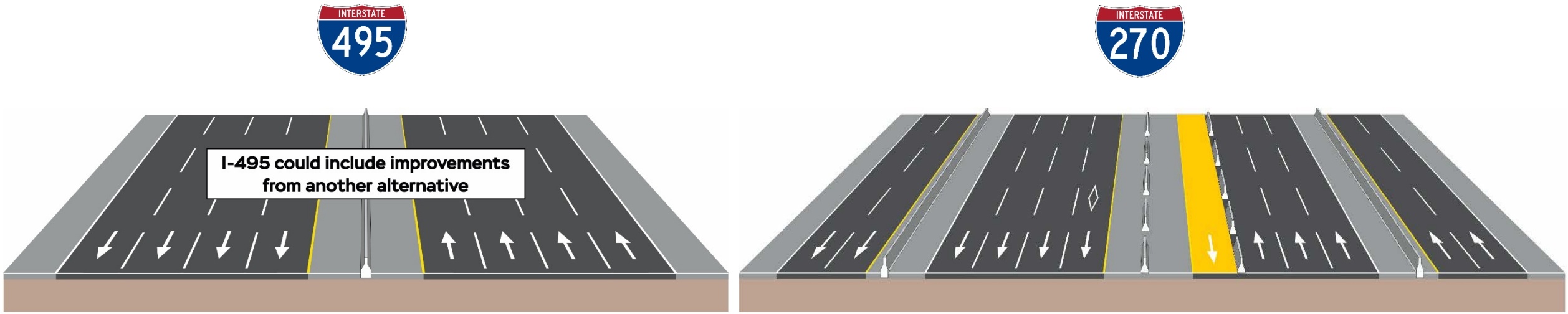
- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

12B Contraflow on I-270

Convert existing HOV lane on I-270 to contraflow lane during peak periods



Legend

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- New Priced Managed Lanes
- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

13A Priced Managed, Reversible Lane Network on I-495

Add two priced managed reversible lanes on I-495

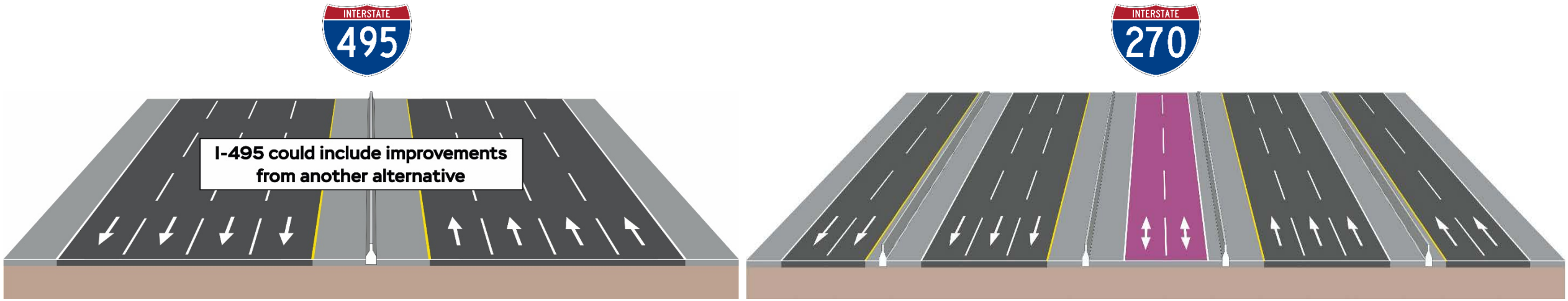
Legend

- New GP Lanes
- New HOV Managed Lanes
- New Priced Managed Lanes
- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

13B Price Managed, Reversible Lane Network on I-270:

Convert existing HOV lanes to two priced managed reversible lanes on I-270



Legend

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- Contraflow Lanes

* **Note:** Managed Lanes Could Include Buses

Rail and Bus Transit

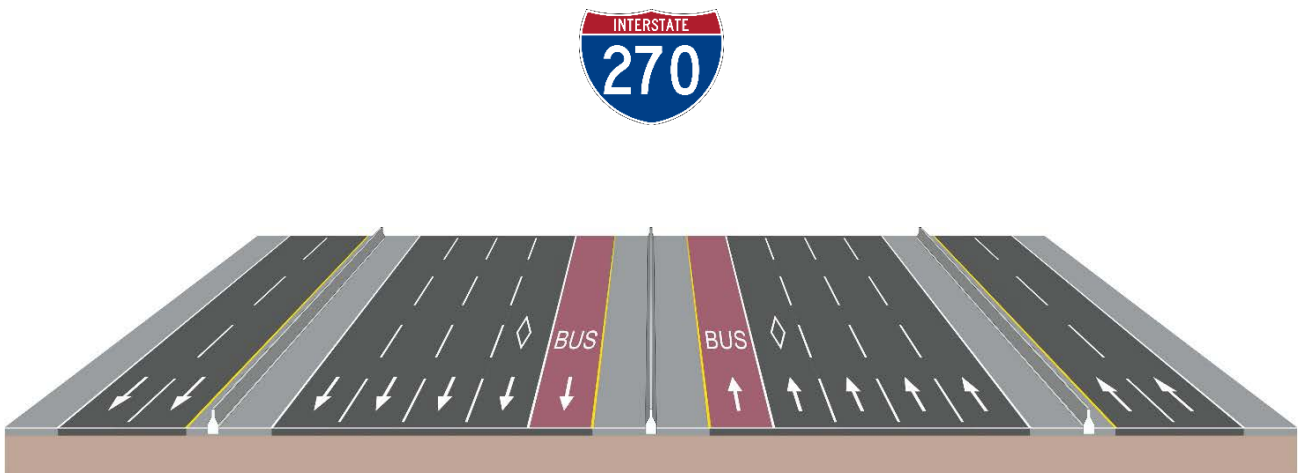
14A **Heavy Rail:** This alternative considers heavy rail transit parallel to the existing I-495 and/or I-270 corridors

14B **Light Rail:** This alternative considers light rail transit parallel to the existing I-495 and I-270 corridors, such as the Purple Line currently under construction

14C **Fixed Guideway Bus Rapid Transit (Off Alignment):** This alternative considers fixed guideway bus rapid transit (BRT) along a new alignment parallel to the existing I-495 and I-270 corridors

15 Dedicated Bus Managed Lane

Dedicated Bus Managed Lane on I-495 and I-270 Roadways



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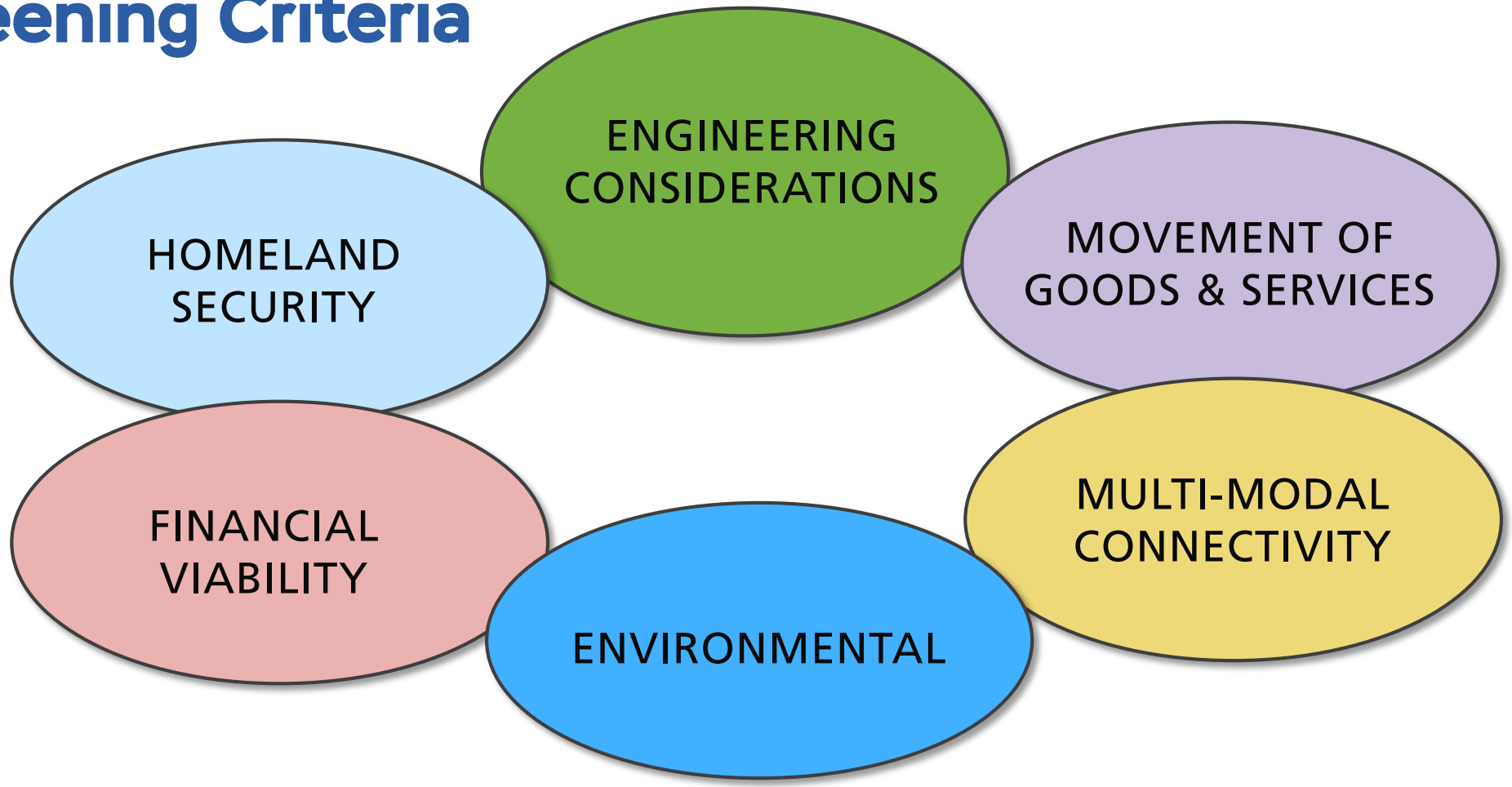
Screening Criteria



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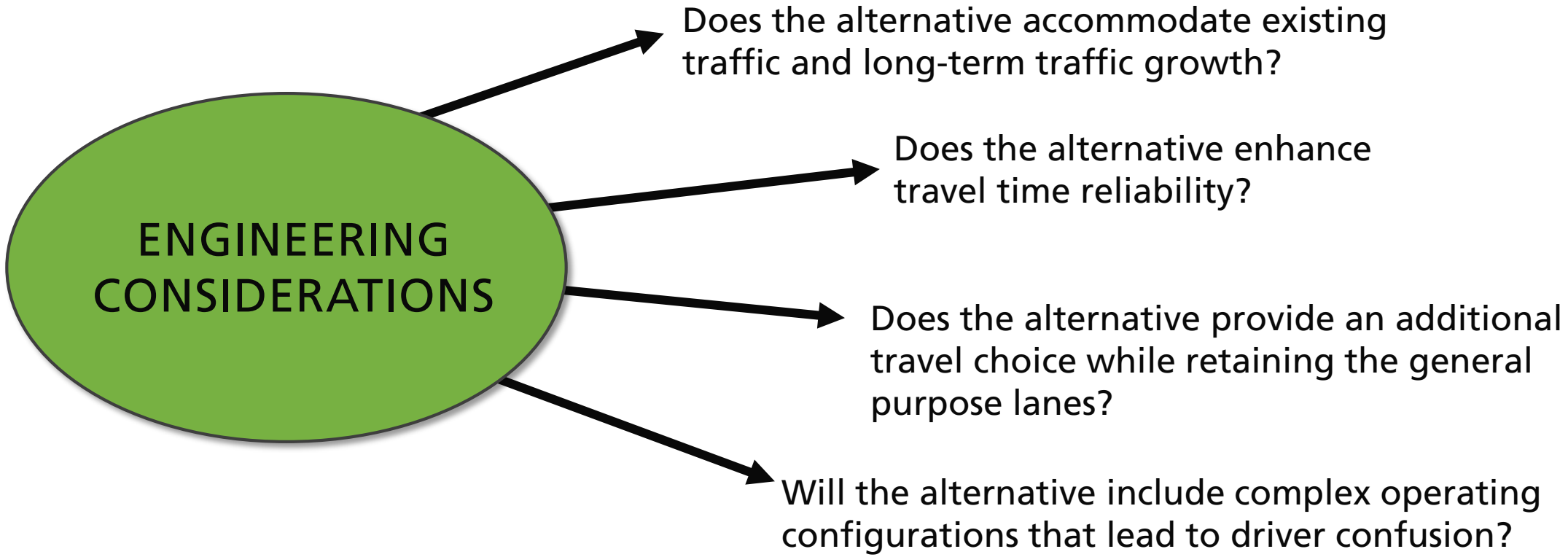

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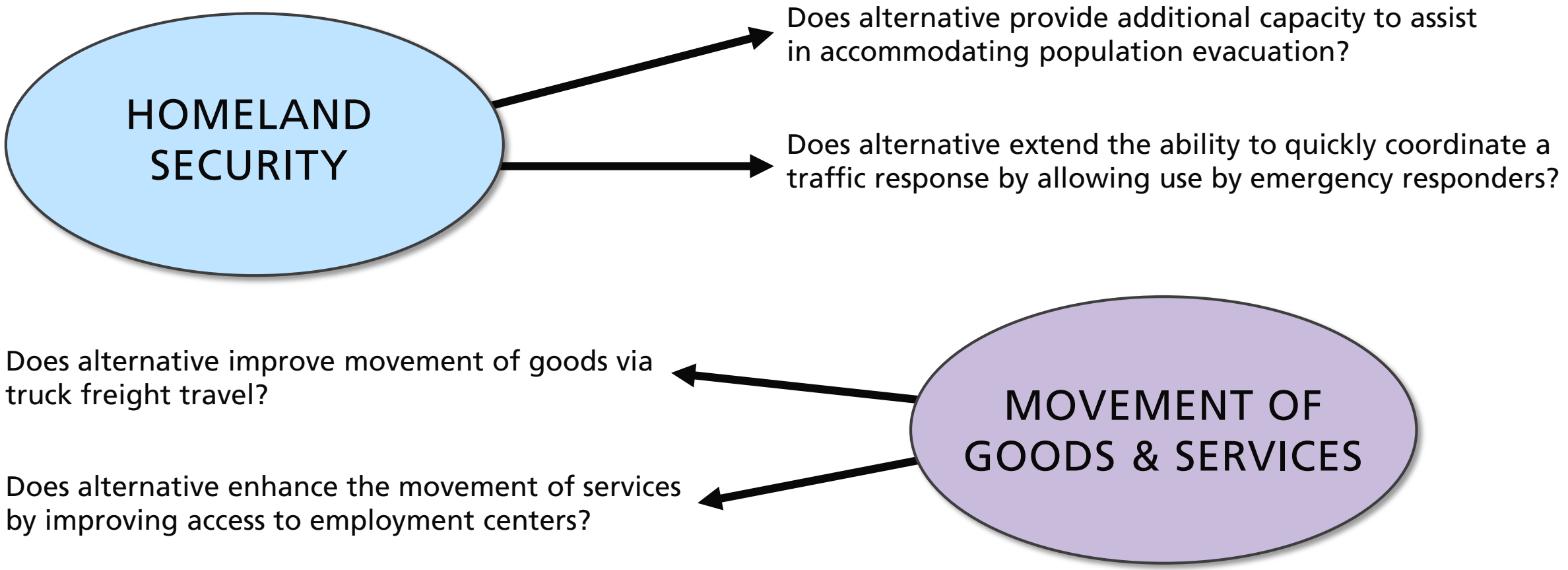

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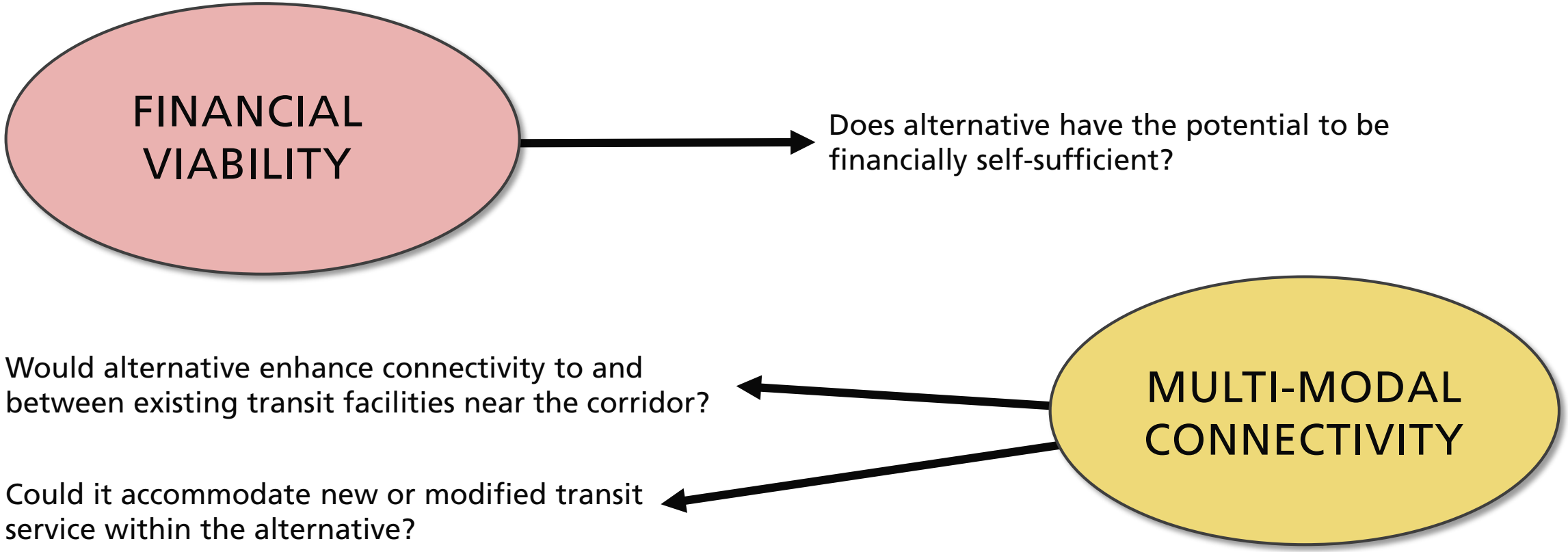

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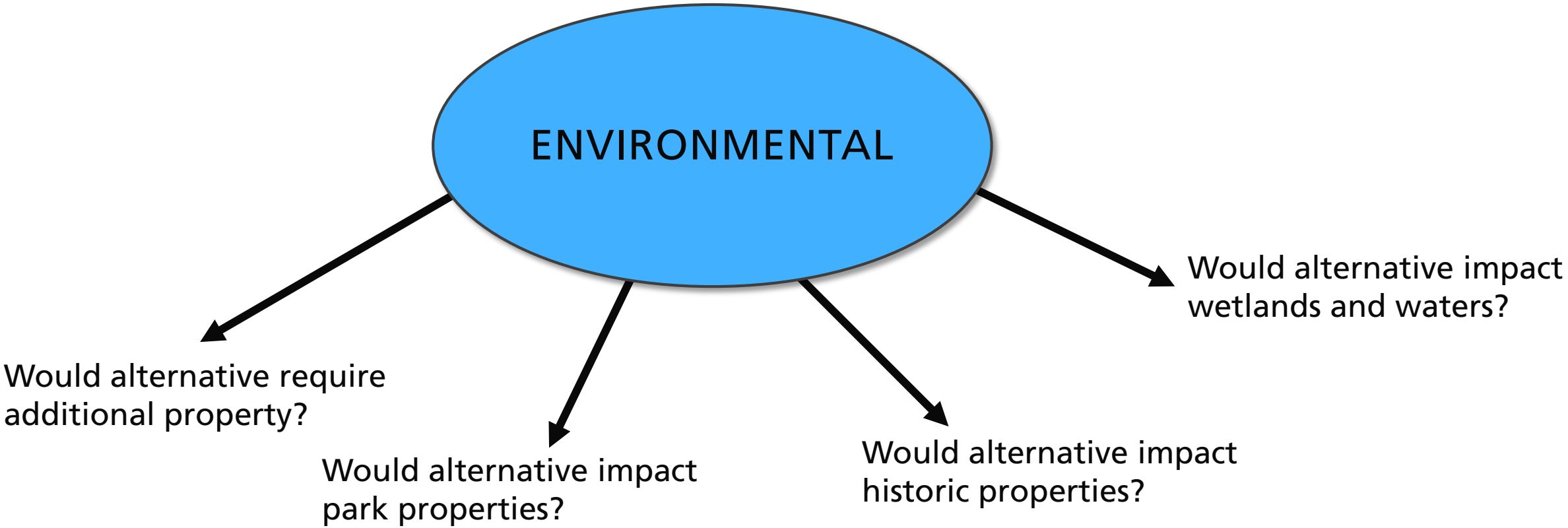
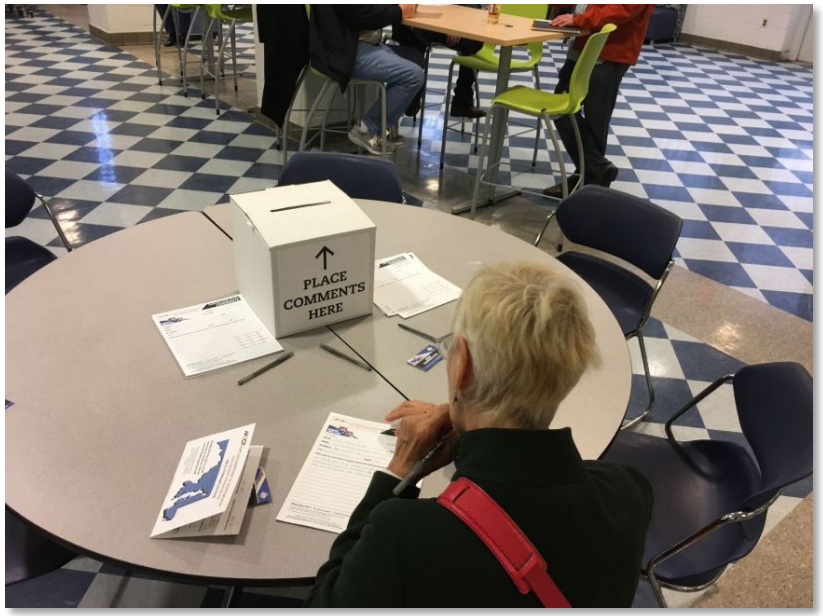


Next Steps

- Evaluate input from the public and environmental agencies and screen the Preliminary Range of Alternatives to the Alternatives Retained for Detailed Study (ARDS)
- Complete detailed environmental studies and traffic analysis on the ARDS
- Present the results of the analysis on the ARDS for public feedback in Winter 2018/2019 to help inform MDOT SHA in the identification of its Preferred Alternative at a later date

Your Feedback is Critical

- TONIGHT! Please go to Working Group Tables or Comment Table and provide your input
- AFTER TONIGHT, continue to reach out to us via:
  - Website: 495-270-P3.com
  - 495-270-p3@sha.state.md.us
  - Toll-free Number: 833.858.5960



Thank You

Please adjourn to the Displays and Workshop Tables, to offer your comments