

EXECUTIVE SUMMARY

Study Overview

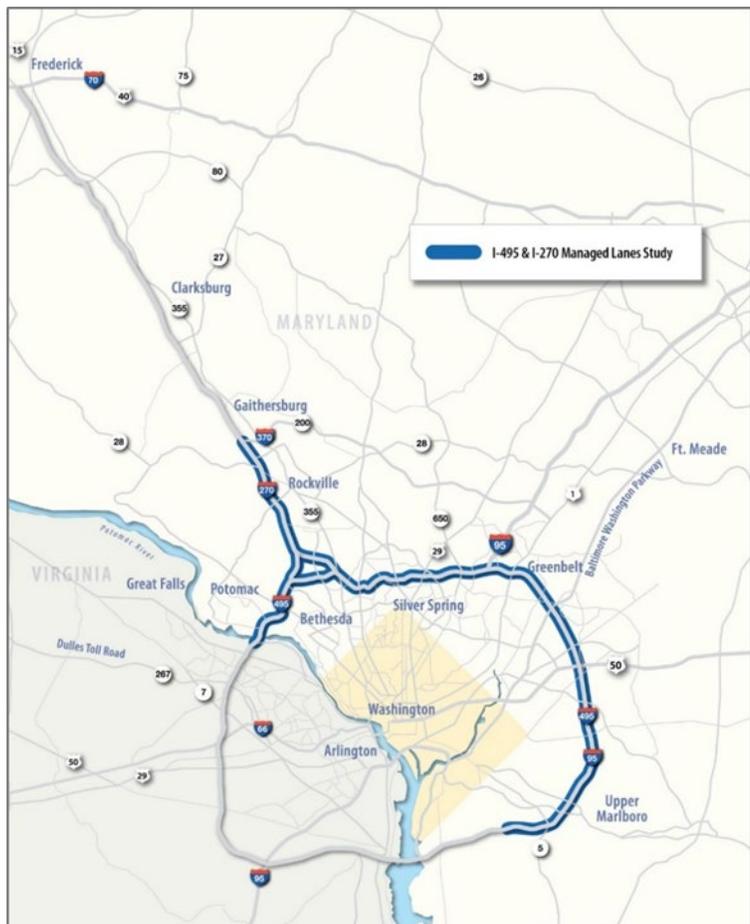
What Is the I-495 & I-270 Managed Lanes Study?

The I-495 & I-270 Managed Lanes Study (Study) is the first element of the broader I-495 & I-270 Public-Private Partnership (P3) Program. This Study is considering alternatives that address roadway congestion within the specific Study scope of 48 miles from I-495 from south of the George Washington Memorial Parkway in Fairfax County, Virginia, including improvements to the American Legion Bridge over the Potomac River, to west of MD 5, and along I-270 from I-495 to north of I-370, including the East and West I-270 Spurs. I-495 and I-270 in Maryland are the two most heavily traveled freeways in Maryland, each with an Average Annual Daily Traffic (AADT) volume up to 260,000 vehicles per day in 2018 (MDOT SHA, 2019) (refer to **Figure ES- 1**).

The Study evaluated rational end points, known as logical termini. The Study extends beyond the logical termini to include the area of influence for traffic and environmental analyses. There are three logical termini for the MLS as follows:

- Western Terminus:** on I-495, 0.4 miles south of George Washington Memorial Parkway interchange; allows outer loop mainline improvements that are carried to the George Washington Memorial Parkway to be merged and transitioned into the existing mainline lanes without causing congestion due to lane drops and merges. The managed lanes would connect directly into the proposed extension of the Virginia Express Lanes.
- Southern Terminus:** on I-495, 1.3 miles west of MD 5; allows inner loop mainline improvements that are carried to MD 5, a regional access controlled north-south highway, to be merged into the existing mainline lanes before the express-local system without causing congestion due to lane drops, weaving, and merging.

Figure ES- 1: I-495 & I-270 Managed Lanes Study Corridors



- **Northern Terminus:** on I-270, 0.6 miles north of I-370; allows northbound mainline improvements that are carried to I-370 to be merged and transitioned into the existing general purpose lanes and the high occupancy vehicle (HOV) lane safely, minimizing congestion due to lane drops and merges. I-370 links to MD 200, a major east-west tolled highway. The HOV lane from 0.6 miles north of I-370 will continue to its current terminus at MD 121 (Clarksburg Road), 8 miles north of I-370.

The traffic modeling and analysis has encompassed the next interchange beyond these three limits as the area of traffic influence. Furthermore, the logical termini for the area of environmental review and analysis area have been extended beyond these intersecting roadways to account for the necessary distance for the mainline improvements to tie into the existing roadway operations.

Who Is Leading the Study?

The Federal Highway Administration (FHWA), as the Lead Federal Agency, and Maryland Department of Transportation State Highway Administration (MDOT SHA), as the Local Project Sponsor, have prepared a Draft Environmental Impact Statement (DEIS) under the National Environmental Policy Act (NEPA) for the I-495 & I-270 Managed Lanes Study.



U.S. Department
of Transportation

**Federal Highway
Administration**

MDOT MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

What Other Agencies Are Involved in the Study?

FHWA and MDOT SHA have conducted extensive outreach with Federal, state, regional, and local agencies, in addition to interested stakeholders and the general public, throughout the duration of the Study. At the initiation of the Study, an Agency Coordination Plan was developed. The purpose of the Plan was to establish the structure and timing for coordination with the involved agencies during the Study (refer to **Chapter 7** and **Appendix P** of the DEIS for additional details).

Agencies actively involved in the Study include Cooperating and Participating Agencies. Cooperating Agencies are Federal agencies other than a Lead Agency that have jurisdiction by law or special expertise with respect to any environmental resources potentially impacted¹. Participating Agencies are any Federal, state, tribal, regional, and local agencies that may have an interest in the Study and the environmental review process². At the initiation of the Study, agencies were invited to be Cooperating, Participating, and Notified Agencies³. There are eight Cooperating, 18 Participating, and seven Notified Agencies for the Study. Refer to **Chapter 7, Table 7-1** for a complete list of these agencies and their roles.

The Cooperating Agencies for the Study are:

- US Army Corps of Engineers (USACE)
Baltimore District
- US Environmental Protection Agency (EPA)
- National Park Service (NPS)
- National Capital Planning Commission (NCPC)
- MD Department of Environment (MDE)
- Maryland Department of Natural Resources (MDNR)
- Virginia DOT (VDOT)
- Maryland-National Capital Park and Planning Commission (M-NCPPC)

¹ Cooperating Agency as defined in 40 CFR 1508.5. A State or local agency of similar qualifications or, when the effects are on lands of tribal interest, a Native American tribe may, by agreement with the lead agencies, also become a Cooperating Agency.

² Participating Agency as defined in 23 USC 139(d)

³ Notified Agencies have been defined for this Study to include all other agencies who could have an interest in the Study, or that have a role that is yet to be determined. These agencies would be notified of Study milestones concurrently with the public and those milestone notification points are part of the public involvement plan.

FHWA and MDOT SHA have held Interagency Working Group Meetings, as well as resource specific meetings with the agencies, and will continue to hold meetings with the Cooperating, Participating and other interested agencies to keep them informed and engaged in the environmental review process.

How Has the Public Been Engaged in the Study?

The public has been engaged at every step of the process, and are a key component of the NEPA process, including the review of this DEIS. To date, MDOT SHA has extensively engaged the public through the following ways, among others:

- Large Public Workshops
 - Four (4) Scoping Public Workshops
 - Four (4) Alternatives Public Workshops
 - Eight (8) Alternatives Retained for Detailed Study Public Workshops
- Community Association Meetings (21)
- Stakeholder/Large Landowner Meetings (85)
- Presentations to regional, state and local elected officials
- Actively maintaining public and elected officials mailing lists
- Program and Study Newsletters (3)
- Public and Elected Official Email Blasts
- Targeted Outreach to Underserved Communities
- Social Media
- Radio
- Regional and local newspapers
- P3 Program webpage (495-270-p3.com/)

How Has the Covid-19 Pandemic Impacted the Study?

MDOT SHA recognizes the substantial impact of the COVID-19 stay-at-home order on current transportation patterns throughout the region. We understand COVID-19 is impacting all Marylanders today – in how we work, in how we spend our free time, and in how we travel. While MDOT’s number one priority is the health and safety of Marylanders, we are continuing with our efforts to ensure transportation improvements are being developed to meet our State’s needs not only for today but for the next 20-plus years. We are aware of the reduced traffic on interstates such as I-495 and I-270 due to the COVID-19 stay-at-home order. MDOT SHA also acknowledges the uncertainty surrounding post-shutdown traffic levels and transit use. There is no definitive traffic model to predict how this unprecedented global pandemic will affect long-term future traffic projections and transit use. MDOT SHA is committed to tracking trends in travel behavior and monitoring traffic volumes over time as businesses and schools slowly begin to reopen. We will evaluate and consider all new information that becomes available to ensure the solutions will meet the needs of Marylanders now and in the future.

Draft Environmental Impact Statement

What Is the Draft Environmental Impact Statement?

The Draft Environmental Impact Statement (DEIS) provides a detailed description of the Study Purpose and Need, reasonable alternatives, the existing environmental conditions, and the analysis of the anticipated beneficial and adverse environmental effects and consequences of the alternatives, and potential mitigation. The DEIS provides a comparative analysis between the No Build Alternative and the Build Alternatives so that interested citizens, elected officials, government agencies, businesses, and other stakeholders can assess the potential social, cultural, and natural environmental effects of the Study. The DEIS is supported by 19 technical reports, which are listed in the adjacent text box and appended to the document.

After circulation of the DEIS, a Final Environmental Impact Statement (FEIS) will be developed. The FEIS will identify the Preferred Alternative and focus on any additional analysis and refinements of the data, as well as responding to substantive comments received on the Draft EIS. Upon completion of the EIS process, the Federal Lead Agency issues a Record of Decision (ROD) which identifies the Selected Action as a result of the Study, after considering a reasonable range of alternatives and all practicable means to avoid, minimize, or mitigate environmental harm.

What are the Supporting Technical Reports to the DEIS?

- A. Purpose and Need Statement
- B. Alternatives Technical Report
- C. Traffic Technical Report
- D. Environmental Resource Mapping
- E. Community Effects Assessment/
Environmental Justice Technical Report
- F. Draft Section 4(f) Evaluation
- G. Cultural Resources Technical Report
- H. Draft Section 106 Programmatic Agreement
- I. Air Quality Technical Report
- J. Noise Analysis Technical Report
- K. Hazardous Materials Technical Report
- L. Natural Resources Technical Report
- M. Avoidance, Minimization & Impacts Report (AMR)
- N. Draft Compensatory Mitigation Plan
- O. Indirect and Cumulative Effects Technical Report
- P. Public Involvement & Agency Coordination Technical Report
- Q. Conceptual Mitigation Plan
- R. Joint Permit Application
- S. Environmental Assessment Form

What Is the Format of the DEIS?

The DEIS provides a summary of the 19 technical reports and contains ten chapters. Detailed documentation of existing conditions, methodologies, assessments of effects, and conceptual mitigation, when applicable, are included in the Study technical reports appended to this DEIS (**Appendices A through S**).

- **Chapter 1** presents the Study's Purpose and Need. This chapter is supported by the *Purpose and Need Statement (Appendix A)*.
- **Chapter 2** presents the chronology of alternatives development and analysis for the Study. It includes a description of the alternatives considered and screening analysis, including the No Build Alternative. It also describes other common elements of the Build Alternatives such as, limits of disturbance (LOD),⁴ managed lanes access, stormwater management, construction and short-term effects, transit

⁴ The limits of disturbance are the proposed boundary within which all construction, staging, materials storage, grading, clearing, erosion and sediment control, landscaping, drainage, stormwater management, noise barrier replacement/construction, and related activities would occur.

elements, pedestrian and bicycle considerations, tolling, financial viability, and the benefits of managed lanes. This chapter is supported by the *Alternatives Technical Report (Appendix B)*.

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- **Chapter 3** presents the existing and future traffic conditions and the results from the traffic operational analyses conducted for each of the Build Alternatives. This chapter is supported by the *Traffic Technical Report (Appendix C)*.
- **Chapter 4** presents the existing environmental conditions (affected environment) identified along the study corridors, the anticipated effects to the resources (environmental consequences), and measures to avoid, minimize, and mitigate potential environmental effects, where applicable. This chapter is supported by **Appendices D through R**.
- **Chapter 5** presents a summary of the *Draft Section 4(f) Evaluation*, which discusses the potential effects to significant public parks, recreational areas, and historic properties in compliance with Section 4(f) of the US Department of Transportation (USDOT) Act of 1966. This chapter is supported by *Draft Section 4(f) Evaluation (Appendix F)*.
- **Chapter 6** presents the Executive Order 13807: *Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects*⁵ that requires Federal agencies to process environmental reviews and authorization decisions for major infrastructure projects as “One Federal Decision.”
- **Chapter 7** presents a summary of the public outreach and agency coordination for the Study that has occurred, to date. This chapter is supported by the *Public Involvement and Agency Coordination Technical Report (Appendix P)* and other resource-specific appendices.
- **Chapters 8 and 9** present the List of Preparers of the DEIS and the Distribution List of agencies, organizations, and persons to whom the DEIS was made available for review and comment.
- **Chapter 10** presents the references for the DEIS.

What Are Some Common Terms Used Throughout the DEIS?

- **Study corridors**, as defined in the Study scope, includes I-495 from south of the George Washington Memorial Parkway in Fairfax County, Virginia, including the American Legion Bridge crossing over the Potomac River, to west of MD 5 in Prince George’s County, Maryland; and I-270 from I-495 to I-370 in Montgomery County, including the east and west I-270 spurs north of I-495. (Refer to **Chapter 1** for additional details.)
- **Corridor study boundary** was defined as 48 miles long and approximately 300 feet on either side of the centerline of I-495 and I-270. It was used to define the data collection area for gathering information on existing environmental conditions. The corridor study boundary was used in the environmental resource investigations for Natural Resources, summarized in **Sections 4.11 through 4.20 of Chapter 4**, and parks and Section 4(f) Resources summarized in **Section 4.4 and Chapter 5**.
- **Limits of Disturbance (LOD)** were defined for each Build Alternative as the proposed boundary within which all construction, staging, materials storage, grading, clearing, erosion and sediment control,

⁵ <https://www.whitehouse.gov/presidential-actions/presidential-executive-order-establishing-discipline-accountability-environmental-review-permitting-process-infrastructure/>

landscaping, drainage, stormwater management (SWM), noise barrier replacement/construction, and related construction activities would occur (refer to **Chapter 2, Section 2.7.4**).

What Are The Ways to Comment on the DEIS and Draft Section 4(f) Document?

FHWA and MDOT SHA invite interested elected officials, state and local governments, other Federal agencies, Native American tribal governments, organizations, and members of the public to provide comments on the DEIS and Draft Section 4(f) Evaluation. The DEIS for the Study and technical reports can be viewed and downloaded from the project website at: <https://495-270-p3.com/DEIS/>

The public comment period opens on July 10, 2020 and will continue until October 8, 2020. *Written and oral comments will be given equal consideration*, and FHWA will review all comments, and consider and respond to all substantive comments received or postmarked by that date in the preparation of the FEIS. Comments received or postmarked after that date will be reviewed and considered to the extent practicable. A series of virtual and in-person public hearings will occur at least 30 days after the Notice of Availability. Refer to <https://495-270-p3.com/DEIS/> for the latest information on the Public Hearings dates and locations.

Comments on the DEIS may be made by:

- Oral testimony at one of the Public Hearings in the main hearing room
- Oral testimony to a court reporter at a Public Hearing in private in a separate room
- DEIS comment form at <https://495-270-p3.com/DEIS/>
- Email to MLS-NEPA-P3@mdot.maryland.gov
- Written comments on a comment form at a Public Hearing
- Letters to Lisa B. Choplin, DBIA, I-495 & I-270 P3 Program Director, I-495 & I-270 P3 Office, 707 North Calvert Street, Mail Stop P-601, Baltimore MD 21202

What Is the Study's Purpose and Need?

The Study Purpose and Need was developed through a comprehensive process that included the examination of past studies, a review of existing regional plans, and an analysis of the environmental and socioeconomic conditions in the region. The full Purpose and Need Statement that was concurred upon by the Cooperating Agencies⁶ in November 2018 is included in **Appendix A**.

The Study's purpose is to 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.

The needs for the Study are:

- 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

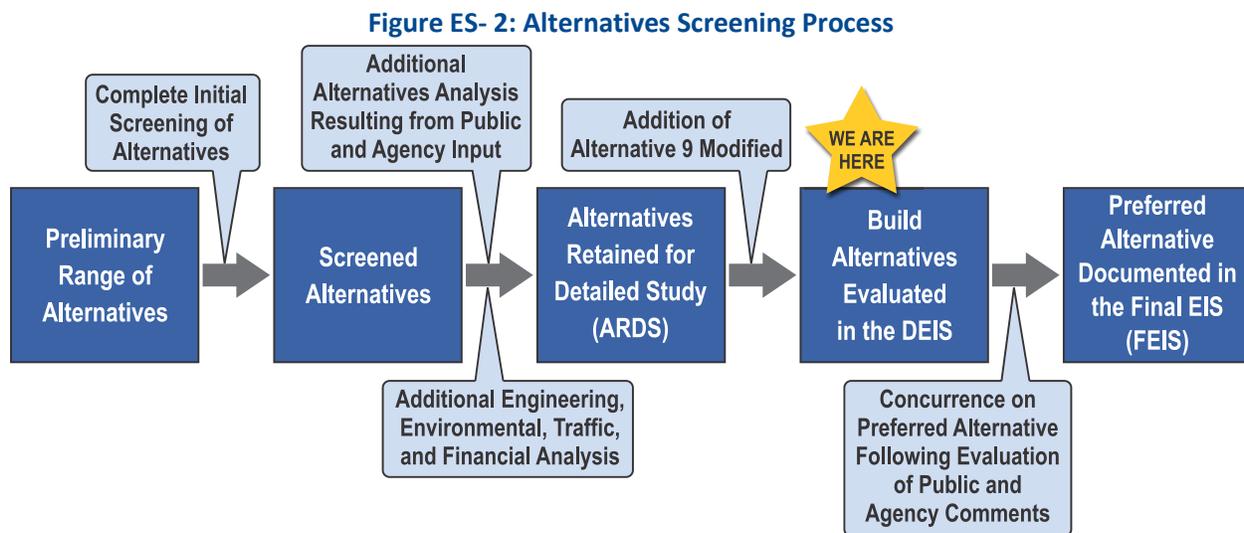
⁶ NCPC concurred on the Purpose and Need only; M-NCPPC did not concur on the Purpose and Need.

Two goals for the Study were identified in addition to the needs: (1) the use of alternative funding approaches for financial viability and (2) environmental responsibility. Refer to **Chapter 1** and **Appendix A** for additional information on the Study's Purpose and Need.

Alternatives Considered

What Is the Process to Screen the Alternatives Considered?

The alternatives development and screening can be described through a five-step process that narrows the Preliminary Range of Alternatives under consideration down to the Preferred Alternative (refer to **Figure ES- 2**). The first four steps are presented in this DEIS and the last step will be documented in the FEIS. This process was conducted in collaboration with agency partners and included public review. Through a series of analytical steps, as well as agency and public review, these Preliminary Alternatives were narrowed to the Screened Alternatives and then down to the Alternatives Retained for Detailed Study (ARDS) (refer to **Chapter 2**). Generally, in NEPA, the term ARDS refers to only those alternatives retained for detailed study; however, in this DEIS, additional alternatives were studied in detail and the substantial data analyzed is presented. Those alternatives which were studied in detail met the Purpose and Need and were determined to be reasonable are referred to as the Build Alternatives. As the level of design and analysis detail increased, the number of alternatives being considered decreased.



What Was the Preliminary Range of Alternatives Considered?

A range of 15 Preliminary Alternatives was identified based on previous, relevant studies and planning documents, and input received during the NEPA scoping process from the public and from Federal, state, and local regulatory agencies. The Preliminary Range of Alternatives included:

- Alternative 1: No Build
- Alternative 2: Transportation Systems Management / Transportation Demand Management (TSM/TDM)
- Alternative 3: Add one General Purpose (GP) Lane
- Alternative 4: Add one HOV lane in each direction on I-495 and retain existing HOV lane in each direction on I-270

- Alternative 5: Add one priced⁷ managed lane network in each direction on I-495 and convert one existing HOV lane in each direction to a priced managed lane on I-270
- Alternative 6: Add two GP lanes in each direction on I-495 and I-270
- Alternative 7: Add two HOV lanes in each direction on I-495 and retain one existing HOV lane and add one HOV lane in each direction on I-270
- Alternative 8: Add two priced managed lanes in each direction on I-495 and add one priced managed lane in each direction and retain one existing HOV lane in each direction on I-270
- Alternative 9: 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
- Alternative 10: 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
- Alternative 11: Physically separate traffic using C-D lanes, adding two GP lanes in each direction on I-495
- Alternative 12A: Convert existing GP lane on I-495 to contraflow lane during peak periods
- Alternative 12B: Convert existing HOV lane on I-270 to contraflow lane during peak periods
- Alternative 13A: Add two priced managed reversible lanes on I-495
- Alternative 13B: Convert existing HOV lanes to two priced managed reversible lanes on I-270
- Alternative 13C: Add two priced managed reversible lanes and retain one existing HOV lane in each direction on I-270
- Alternative 14A: Heavy Rail⁸ transit
- Alternative 14B: Light Rail⁹ transit
- Alternative 14C: Fixed guideway Bus Rapid Transit (BRT)¹⁰ off alignment of existing roadway
- Alternative 15: Add one dedicated bus lane on I-495 and I-270

The analysis of the Preliminary Range of Alternatives was completed by applying screening criteria to each alternative related to the Study's Purpose and Need, refer to **Chapter 2, Section 2.5**. A qualitative assessment of these criteria was made using readily available information (data available from existing sources). An alternative was dropped from further consideration at this stage in the process only if the available information demonstrated it clearly did not meet the Study's Purpose and Need. Screened Alternatives were identified as those that met the screening criteria or required additional analysis to determine their ability to meet the Purpose and Need. The initial screening of alternatives was documented in the *Alternatives Technical Report (Appendix B)*. Refer to **Chapter 2, Section 2.4** for additional details on the Preliminary Alternatives.

What Were the Screened Alternatives Considered?

The Screened Alternatives were presented to the public through the program website via written documentation and a video in February 2019 and included:

⁷ Based on public and agency input, MDOT SHA defined priced managed lanes as High-Occupancy Toll (HOT) lanes or Express Toll Lanes (ETL) and the descriptions of the alternatives were modified accordingly.

⁸ Heavy Rail is a mode of transit service (also called metro, subway, rapid transit, or rapid rail) operating on an electric railway with the capacity for a heavy volume of traffic. It is characterized by high speed and rapid acceleration passenger rail cars operating singly or in multi-car trains on fixed rails.

⁹ Light Rail is a mode of transit service (also called streetcar, tramway, or trolley) operating passenger rail cars singly (or in short trains) on fixed rails. Light rail vehicles are typically driven electrically with power being drawn from an overhead electric line via a trolley or a pantograph and driven by an operator on board the vehicle.

¹⁰ Bus Rapid Transit is a high-quality bus-based transit system that delivers fast and efficient service that may include dedicated lanes, busways, traffic signal priority, off-board fare collection, elevated platforms, and enhanced stations.

- Alternative 1: No Build – Though this alternative does not meet the Study’s Purpose and Need, consistent with NEPA requirements, it was carried forward for further evaluation to serve as a base case for comparing the other alternatives
- Alternative 5: One HOT Managed Lane Network
- Alternative 8: Two ETL Managed Lanes Network on I-495 and one ETL and one HOV Lane Network on I-270
- Alternative 9: Two HOT Managed Lanes Network
- Alternative 10: Two ETL Managed Lanes Network on I-495 and I-270 and Retain one HOV Lane on I-270 only
- Alternative 13B: Two HOT Managed Lanes Network on I-495 and two Reversible HOT Managed Lanes Network on I-270
- Alternative 13C: Two ETL Managed Lanes Network on I-495 and two Reversible ETL Managed Lanes Network on I-270, and retain one HOV Lane on I-270 only

Additional engineering, traffic, financial, and environmental analyses were completed, and used to determine the reasonableness of the Screened Alternatives to be carried forward as the ARDS. The Recommended Alternatives Retained for Detailed Study (ARDS) included all of the Screened Alternatives and they were presented at the Spring 2019 Public Workshops. Following these workshops, the Recommended ARDS were further analyzed, and Alternative 5 was dropped from further consideration.

Why Was Alternative 5 Dropped from Further Consideration?

Alternative 5 was identified as a Screened Alternative and considered adding one priced managed lane in each direction on I-495 and converting one existing HOV lane in each direction to a priced managed lane on I-270. In response to agency comments and public input, MDOT SHA and FHWA further assessed the detailed analysis of Alternative 5 and found it would perform the worst of the Screened Alternatives for most metrics used to evaluate existing traffic and long-term traffic growth and trip reliability and would perform the worst amongst the Screened Alternatives in system-wide delay, corridor travel time, density/level of service¹¹, and travel time (general purpose lanes). In addition, Alternative 5 failed to meet the goal of financial viability, as it would require a significant public subsidy to deliver. Based on the financial analysis results and the deficiencies in addressing the existing traffic and long-term traffic growth and trip reliability, FHWA and MDOT SHA determined that Alternative 5 was not a reasonable alternative as it did not meet the Study’s Purpose and Need, and it was not carried forward as an ARDS for the Study. However, to facilitate Cooperating Agencies’ decisions for their actions and to be transparent, Alternative 5 is included in the comparison of impacts in **Chapters 3 and 4** of this DEIS. The results of the screening of alternatives and the rationale for the identification of the ARDS are summarized in **Chapter 2, Sections 2.5 and 2.6** and documented in the *Alternatives Technical Report (Appendix B)*.

What Other Alternatives Have Been Considered?

MD 200 Diversion Alternative

Following the Spring 2019 Public Workshops and agency meetings, several Cooperating and Participating Agencies requested that MDOT SHA evaluate an alternative (the MD 200 Diversion Alternative) that would provide an alternative route for travelers to use MD 200 (Intercounty Connector) instead of the top side of I-495 between I-270 and I-95 to avoid or reduce impacts to significant, regulated resources and residential relocations.

¹¹ Level of Service (LOS) is a letter grade assigned to a section of roadway that measures the quality of traffic flow, ranging from LOS A to LOS F.

In the near term, the premise of this alternative has merit due to the currently available capacity on MD 200, a Maryland Transportation Authority (MDTA) facility. As such, MDOT SHA is working with MDTA to encourage through traffic from points north on I-95 that is destined for the American Legion Bridge or beyond (and the reverse movement) to utilize MD 200 to take advantage of the near-term spare capacity and potentially provide some relief to the top side of I-495. In an attempt to divert some of this traffic, MDOT SHA has proposed to MDTA to provide travel times for I-495 and MD 200 through the use of the existing dynamic messaging signs. If the travel times show the trip is shorter on MD 200 and the toll is amenable to travelers, then they may choose to divert to MD 200.

However, in addressing the Study's Purpose and Need, the MD 200 Diversion Alternative must also accommodate *long-term* traffic growth, enhance trip reliability, and improve the movement of goods and services. In the design year of 2040, the traffic analysis results indicated that the MD 200 Diversion Alternative would perform worse than most of the Screened Alternatives in many metrics used to evaluate the reasonableness of the alternatives. The MD 200 Diversion Alternative would not address the Study's Purpose and Need of accommodating long-term traffic growth, enhancing trip reliability or improving the movement of goods and services. A summary of the MD 200 Diversion Alternative analysis is included in **Chapter 2, Section 2.5.3.b** and documented in the *Alternatives Technical Report (Appendix B)*.

Alternative 9 Modified (9M)

MDOT SHA and FHWA evaluated an additional alternative after the ARDS were identified called Alternative 9 Modified (Alternative 9M) in response to public and agency comments on the ARDS. Alternative 9M would consist of a blend of Alternative 5 and Alternative 9 in an effort to avoid or reduce impacts to sensitive environmental resources and property relocations on the top side of I-495 (I-270 West Spur and I-95). The analysis was completed to determine if this alternative, which includes a reduction of lanes on the top side of I-495, would sufficiently meet the Study's Purpose and Need. Overall, Alternative 9M would be a blend of these two Screened Alternatives with the primary difference on the top side of I-495 between I-270 West Spur and I-95 being the addition of one HOT lane instead of two HOT lanes in each direction.

Alternative 9M was evaluated to the same level of detail as the Screened Alternatives and was found to meet the Study's Purpose and Need, and therefore is included as a reasonable alternative in this DEIS. A summary of the Alternative 9 Modified analysis is included in **Chapter 2, Section 2.6.4** and is documented in Appendix B of the *Alternatives Technical Report (Appendix B)*.

What Are the Alternatives Retained and Analyzed in the DEIS?

Preliminary engineering along with additional traffic, financial, and environmental analyses were considered to determine the reasonableness of the Screened Alternatives to be carried forward as the ARDS. This DEIS presents the additional analysis and comparison of impacts between the ARDS, hereinafter referred to as the **Build Alternatives**, and the No Build Alternative. The alternatives retained and analyzed in the DEIS are summarized in **Table ES- 1**. Refer to **Chapter 2** for additional discussion on the development of the alternatives for this Study.

Table ES- 1: Alternatives Retained and Analyzed in the DEIS

Alternative	Description
Alternative 1	No Build
Alternative 8	2-Lane, ETL Managed Lanes Network on I-495 and 1-ETL and 1-Lane HOV Managed Lane on I-270
Alternative 9	2-Lane, HOT Managed Lanes Network on both I-495 & I-270
Alternative 9 Modified (9M)	2-Lane, HOT Managed Lanes Network on west and east side of I-495 and on I-270; 1-Lane HOT Managed Lane on top side of I-495
Alternative 10	2-Lane, ETL Managed Lanes Network on I-495 & I-270 plus 1-Lane HOV Managed Lane on I-270 only
Alternative 13B	2-Lane, HOT Managed Lanes Network on I-495; HOT Managed, Reversible Lane Network on I-270
Alternative 13C	2-Lane, ETL Managed Lanes Network on I-495, ETL Managed, Reversible Lane Network and 1-Lane HOV Managed Lane on I-270

The No Build Alternative does not meet the Study's Purpose and Need but was retained for comparison with the other alternatives. The results of the screening of alternatives and the rationale for the identification of the alternatives retained and analyzed in the DEIS are summarized in **Chapter 2, Section 2.5** and documented in the *Alternatives Technical Report (Appendix B)*.

What Transit Components Are Included in the Build Alternatives?

While standalone transit alternatives were found to not meet the Study's Purpose and Need, each Build Alternative includes the following transit elements consistent with the project purpose of enhancing existing and planned multimodal mobility and connectivity:

- Allowing free bus usage in the managed lanes to provide an increase in speed of travel, assurance of a reliable trip, and connection to local bus service/systems on arterials that directly connect to activity and economic centers.
- Accommodating direct and indirect connections to existing transit stations and planned Transit-Oriented Development at the Silver Spring Metro/MARC (US 29), Shady Grove Metro (I-370), Twinbrook Metro (Wootton Parkway), Montgomery Mall Transit Center (Westlake Terrace), Medical Center Metro (MD 187 and MD 185), Kensington MARC (MD 185), Greenbelt Metro/MARC (Cherrywood Lane), New Carrollton Metro/MARC/Amtrak (US 50), Largo Town Center Metro (MD 202 and MD 214), and Branch Avenue Metro (MD 5).

These elements are also being considered by the *Transit Work Group*, which includes representatives from the transit and planning jurisdictions who were both directly and indirectly affected by the P3 Program, including Montgomery, Prince George's, Frederick, Howard, Anne Arundel and Charles counties, as well as MDOT MTA commuter bus, MARC and WMATA, MDOT Secretary's Office of Planning and Capital Programming, MDOT SHA, FHWA, Federal Transit Administration (FTA), and the MWCOG. Initiated in May 2019, the Transit Work Group met eight times to provide input on existing transit services and help identify feasible opportunities for transit to use the managed lanes (refer to **Chapter 2, Section 2.7.6**).

The *Transit Service Coordination Report* was made available to the public in June 2020 on the P3 Program website (<https://495-270-p3.com/transit-benefits/>) and it is being used to inform affected counties and transit providers about the significant transit opportunities offered by managed lanes such as strategies to maximize the benefits of reliability and speed; provide a basis for the evaluation and prioritization of

future capital and operating needs in the service area; and initiate discussions about ways to incorporate regional transit services into the P3 Program.

Is the Replacement of the American Legion Bridge Part of the Managed Lanes Study?

Yes, all Build Alternatives include the full replacement of the American Legion Bridge with a new, wider bridge (not widening of the existing bridge). The existing bridge is nearly 60 years old and would need to be replaced sometime over the next few decades regardless of this Study. The new bridge would be constructed in phases to maintain the same number of existing lanes at all times, and therefore the new bridge will be replaced in the same existing location.

How Have Public Comments on the Alternatives Been Considered?

To date, the public and stakeholders have been encouraged to provide comments on the scope of the Study, the Purpose and Need, range of alternatives, initial screening of alternatives, environmental and property avoidance and minimization measures, and potential mitigation measures. Through the public engagement process, MDOT SHA has taken a hard look at comments received and incorporated certain elements into the Study including, but not limited to: removing the existing Collector-Distributor lanes on I-270 to minimize right-of-way needs along I-270; committing to a pedestrian path along a new American Legion Bridge; eliminating or providing certain managed lanes direct access locations; avoiding relocation of the Rock Creek to significantly minimize impacts to this significant resource; committing to replacing all existing noise barriers; and incorporating certain transit elements while continuing to coordinate with local transit providers for additional opportunities to accommodate existing and planned multimodal connectivity and mobility. To address comments received from the public and agencies on the Recommended Alternatives Retained for Detailed Study (ARDS) and to avoid or minimize environmental and community impacts along the top side of I-495, MDOT SHA analyzed additional alternatives including MD 200 (ICC) Diversion Alternative and Alternative 9 Modified. The results of these analyses can be found in **Chapters 2, 3 and 4** as well as the *Draft Section 4(f) Evaluation* in **Appendix F**.

Tolling

Why Do the New Lanes Need to Be Tolled and Why Does the State Need a Developer to Build Them?

The State of Maryland does not have the funds to construct improvements of this magnitude with an estimated cost of approximately \$8 to 10 Billion. Additionally, even with the tolls to pay back loans, the State does not have enough bonding capacity to take out loans to pay for the improvements. Therefore, the State will select a Developer through a competitive process and will enter into a P3 agreement whereby the Developer would design, build, finance, operate, and maintain the managed lanes for a period of time using the toll revenue. MDOT SHA would continue to own all of the lanes on I-495 and I-270 and ensure the highway meets their intended transportation function.

How Will the Managed Toll Lanes Work?

All of the Build Alternatives would include dynamic tolling for the managed lanes (HOT or ETL) for the full length of the Study. The toll rates would be adjusted dynamically within the approved toll rate range and could change in response to real-time variations in traffic conditions every five to 15 minutes. The tolls would be collected electronically at highway speeds, with no toll plazas, no toll booths, and no cash payments. Through this approach, traffic flow would be managed, congestion would be reduced, and a minimum average operating speed of 45 mph would be maintained in the managed lanes.

How Will the Toll Rates Be Set?

The toll rate ranges will be set following the process outlined in the Code of Maryland Regulations (COMAR) 11.07.05 – Public Notice of Toll Schedule Revisions, including public input. In general, a recommended range of toll rates will be developed to manage the traffic and ensure the facilities can meet the necessary traffic performance requirements. The toll rate range would include an upper limit on the toll rate per mile. The recommended toll rate range will be presented to the MDTA Board Members for review. Public hearings and a minimum 60-day public comment period will be held so the public has the opportunity to provide comments on the toll rate range. The public comments will be summarized for the MDTA Board Members (including proposed revisions, if necessary) and the Board will vote on the toll rate range. Once the managed lanes are opened, the toll rates will be adjusted dynamically within the approved MDTA toll rate range to ensure the traffic and lane performance requirements are achieved.

What Could the Toll Rates Be?

The planning study and the DEIS do not recommend the final proposed toll rate ranges for the managed lanes; however, potential toll rates were estimated to meet the goals of the Study (manage traffic demand and congestion on the I-270 and I-495, and ensure 45 mph in managed lanes), and to determine if the Build Alternatives would be financially viable. Therefore, for planning purposes only, the estimated opening year (2025) average weekday toll rates per mile (in 2020 \$) for all time periods for passenger cars using an E-ZPass transponder were: \$0.70/mile for Alternative 8; \$0.69/mile for Alternative 9; \$0.77 for Alternative 9M; \$0.68/mile for Alternative 10; \$0.73/mile for Alternative 13B; and \$0.71/mile for Alternative 13C. Ultimately, the toll rate ranges will be set by the MDTA Board after public review and comment. It is not anticipated that the environmental and community impacts described in this DEIS would be substantially different once a final toll rate range is approved because the modeling process for estimating potential planning-level toll rates is similar to the modeling process to support analysis of toll rate ranges that will be presented to MDTA for consideration by the Board.

Transportation and Traffic

What Is a Managed Lane?

Highway facilities that use strategies, such as lane-use restrictions or congestion pricing, to optimize the number of vehicles that can travel the highway to maintain free-flowing speeds. Managed lanes are designed to operate at an acceptable level of service even when the adjacent general purpose lanes are congested. Because they are managed to control the number of vehicles using the lane to keep them flowing, managed lanes provide users with a more reliable option to reach their destination(s). Managed Lanes may include, but are not limited to: HOV lanes, HOT Lanes, ETLs, and bus-only lanes.

What Traffic Analysis Was Performed for the Study?

Detailed traffic operational analyses were performed for each of the Build Alternatives to evaluate their ability to meet the Study's Purpose and Need in the design year of 2040. The evaluation methodology included a three-step process. First, a regional forecasting model was developed for each of the Build Alternatives using the Metropolitan Washington Council of Governments Travel Demand Model (Metropolitan Washington Council of Governments (MWCOG) model), which is the model typically used by MDOT SHA and other transportation agencies to evaluate projects in the Washington, DC Metropolitan Area. MWCOG model Version 2.3.71 was used, which was the latest model version available when the analysis was initiated. Next, the outputs from the MWCOG model were used to develop balanced traffic volume projections for the design year of 2040 for each roadway segment and ramp movement within the Study limits for each Build Alternative during the peak periods. Finally, traffic simulation models for

each of the Build Alternatives were developed using VISSIM software to determine the projected operational performance of several key metrics during the AM peak period (6:00 AM to 10:00 AM) and the PM peak period (3:00 PM to 7:00 PM).

What Are the Results of the Traffic Operational Analyses?

The design year 2040 traffic operational evaluation for each Alternative are summarized below and presented in **Chapter 3** of this DEIS.

- **Alternative 1 (No Build)** would not address any of the operational issues experienced under existing conditions, and it would not be able to accommodate long-term traffic growth, resulting in slow travel speeds, delays, long travel times, and an unreliable network.
1.
 - **Alternative 5** was determined to not be a reasonable alternative, as it does not meet the Study's Purpose and Need due to deficiencies in addressing the existing traffic and long-term traffic growth and trip reliability. However, the results for Alternative 5 have been included in this DEIS for comparison purposes only. Refer to the *Alternatives Technical Report (Appendix B)* for more information.
 - **Alternative 8, Alternative 13B, and Alternative 13C** would all outperform the No Build Alternative in every metric. However, these alternatives would not rank first in any of the operational metrics studied and would therefore only be expected to provide moderate benefits.
 - **Alternative 9M** was not originally included as a Build Alternative, but it has been evaluated to the same level of detail. This alternative was studied as a blend of Alternative 5 and Alternative 9. Refer to **Chapter 2, Section 2.6.4** and the *Alternatives Technical Report (Appendix B)* for more information. Alternative 9M would outperform Alternative 1 in every metric, but it would not rank first in any of the operational metrics studied, similar to Alternative 8, Alternative 13B, and Alternative 13C.
 2.
 - **Alternative 9 and Alternative 10** would consistently perform well in all the operational metrics studied, and each alternative ranked first in three of the six key metrics. Alternative 9 would perform the best in terms of average speed, LOS, and effect on the local network. Alternative 10 would perform the best in terms of delay, travel time index, and throughput. These two alternatives would be expected to provide the best operational benefits to the I-495 and I-270 Managed Lanes Study area and the surrounding transportation network. Refer to **Chapter 3** and **Appendix C** for detailed information.

Environmental Resources, Consequences and Mitigation

What Environmental Resources Were Considered in the Analysis Documented in the DEIS and Supporting Technical Reports?

Chapter 4 of the DEIS presents the existing environmental conditions (affected environment) identified along the study corridors, the anticipated effects to the resources (environmental consequences), and measures to avoid, minimize, and mitigate unavoidable effects to those resources. Additional opportunities to avoid and minimize effects will be considered and documented in the FEIS. The environmental resources and topics analyzed were:

1. Land Use and Zoning
2. Demographics
3. Communities and Community Facilities
4. Parks and Recreational Facilities
5. Property Acquisitions and Relocations
6. Visual and Aesthetic Resources
7. Historic Architectural and Archeological Resources
8. Air Quality
9. Noise
10. Hazardous Materials
11. Topography, Geology and Soils
12. Waters of the US and Waters of the State, including Wetlands
13. Watersheds and Surface Water Quality
14. Groundwater Hydrology
15. Floodplains
16. Vegetation and Terrestrial Habitat
17. Terrestrial Wildlife
18. Aquatic Biota
19. Rare, Threatened and Endangered Species
20. Unique and Sensitive Areas
21. Environmental Justice and Title VI Compliance
22. Indirect and Cumulative Effects
23. Consequences of Construction
24. Commitment of Resources

What Are the Effects of the Build Alternatives on the Environmental Resources?

The environmental consequences presented in **Chapter 4** are described for the No Build and Build Alternatives. Because the Build Alternatives would either expand and/or reconfigure existing highways, in a constrained built environment, and because the engineering requirements are similar between all Build Alternatives, the total scope of impacts is anticipated to be very similar. At this stage of design, quantified impacts presented are assumed to be permanent or long-term effects in the DEIS (refer to **Tables ES- 2 and 4-1**). As design is advanced on a Preferred Alternative, the long-term effects will be refined, and the specific short-term, construction-related effects will be segregated and quantified and documented in the FEIS. The anticipated construction effects are discussed qualitatively throughout **Chapter 4** and in **Chapter 2, Section 2.7.3**. The summary of environmental effects comparison between the No Build and Build Alternatives is presented in **Table ES- 2**.

What Avoidance and Minimization Opportunities Have Been Considered for Effects to Environmental Resources?

At this stage in the NEPA Study, avoidance and minimization opportunities to parklands, wetlands, wetland buffers, waterways, forests, and the Federal Emergency Management Agency's 100-year floodplain have been identified and coordinated with the regulatory and resource agencies. Impacts were avoided and minimized to the greatest extent practicable in all areas at this preliminary stage of the Study, and avoidance and minimization techniques were specifically refined in some areas of sensitive or recreationally valuable resources. Refer to **Chapter 4, Draft Section 4(f) Evaluation (Appendix F)**, and **Avoidance, Minimization & Impacts Report (Appendix M)** for additional details. The effort to avoid, minimize and mitigate unavoidable impacts will continue through ongoing and future coordination with the applicable regulatory and resource agencies.

What Mitigation Is Being Considered for Unavoidable Environmental Effects?

Mitigation for unavoidable effects to environmental resources were considered based on the effects of the Build Alternatives. The proposed conceptual mitigation is discussed by applicable resource in **Chapter 4** and further detailed in the *Conceptual Mitigation Plan (Appendix Q)* for the following resources: wetlands; forests; rare, threatened, and endangered species; parkland; cultural resources; noise; air; properties; hazardous materials; topography, geology, soils; groundwater; environmental justice; visual

aesthetic; aquatic biota; and unique and sensitive areas. Further mitigation measures will be identified and refined as the Study progresses and in consideration of public, stakeholder, and agency comment.

What Is Section 4(f)?

Section 4(f) of the USDOT Act of 1966, as amended (49 U.S.C. 303(c)) stipulates that the USDOT, including the FHWA, cannot approve the use of land from a publicly-owned park, recreation area, wildlife or waterfowl refuge, or public or private historic site unless the following conditions apply:

- FHWA determines that there is no feasible and prudent avoidance alternative to the use of land from the property, and the action includes all possible planning to minimize harm to the property resulting from such use (23 CFR §774.3(a)(1) and (2)); or
- FHWA determines that the use of the Section 4(f) properties, including any measures to minimize harm committed to by the applicant, will have a *de minimis* impact on the property (23 CFR §774.3(b)).

What Are the Section 4(f) Impacts?

A “use” of (or impact to) Section 4(f) property occurs:

- (i) When land is **permanently incorporated** into a transportation facility;
- (ii) When there is a **temporary occupancy** of land that is adverse in terms of the statute’s preservation purpose as determined by the criteria in 23 CFR §774.13(d); or
- (iii) When there is a **constructive use** of a Section 4(f) property as determined by the criteria in 23 CFR §774.15.

3.

A total of 111 Section 4(f) properties were identified within the corridor study boundary including public parks and recreation areas and historic sites. Of the 111 Section 4(f) properties, 68 would have a Section 4(f) use (impact) and 43 would be avoided. Of the 68 Section 4(f) properties that have a use, 36 would result in minor Section 4(f) use, 22 require an evaluation of avoidance alternatives and analysis of least overall harm, and four properties meet the exception criteria. Refer to **Chapter 5, Section 5.5** and **Appendix F** for additional details on the *Draft Section 4(f) Evaluation*.



Table ES- 2: Summary of Effects Comparison of the Alternatives¹

	Resource	Alt 1 No Build	Alt 5 ²	Alt 8	Alt 9	Alt 9M	Alt 10	Alt 13B	Alt 13C
Environmental	Total Potential Impacts to Section 4(f) Properties including park and historic properties (acres)	0	141.7	146.8	146.8	144.7	149.0	145.5	146.7
	Number of Historic Properties with Adverse Effect ³ [Adverse effect cannot be determined] ⁴	0	13 [7]	13[7]	13[7]	13[7]	13[7]	13[7]	13[7]
	100-Year Floodplain (acres)	0	114.3	119.5	119.5	116.5	120.0	119.5	119.9
	Unique and Sensitive Areas (acres)	0	395.3	408.2	408.2	401.8	410.8	406.7	408.6
	Sensitive Species Project Review Area (acres)	0	151.7	155.0	155.0	153.7	155.0	155.0	155.0
	Forest canopy (acres)	0	1,434	1,497	1,497	1,477	1,515	1,489	1,503
	Wetlands of Special State Concern	0	0	0	0	0	0	0	0
	Wetlands, Field-Reviewed (acres)	0	15.4	16.3	16.3	16.1	16.5	16.3	16.1
	Wetlands 25-foot buffer (acres)	0	51.2	53.1	53.1	52.7	53.6	53.1	53.5
	Waters of the US (linear feet)	0	153,702	155,922	155,922	155,229	156,948	155,822	156,632
	Tier II Catchments (acres)	0	55.2	55.3	55.3	55.3	55.3	55.3	55.3
Noise Receptors Impacted ⁵	0	3,661	4,470	4,470	4,249	4,581	4,411	4,461	
Traffic	System-wide Delay Savings vs. No Build (AM/PM) ⁶	0	20%/22%	23%/33%	34%/33%	30%/30%	35%/34%	27%/22%	26%/34%
Engineering	Total Right-of-way Required ⁷ (acres)	0	284.9	323.5	323.5	313.4	337.3	318.9	329.3
	Number of Properties Directly Affected	0	1,240	1,475	1,475	1,392	1,518	1,447	1,479
	Number of Residential Relocations	0	25	34	34	25	34	34	34
	Number of Business Relocations	0	4	4	4	4	4	4	4
	Width of Pavement on I-495 (feet)	138–146	170–174	194–198	194–198	170-198	194–198	194–198	194–198
	Width of Pavement on I-270 (feet)	228–256	194–198	218–222	218–222	218-222	242–248	202–206	226–230
	Capital Cost Range [Construction & ROW] (billions)	N/A	\$7.8–\$8.5	\$8.7 – \$9.6	\$8.7 – \$9.6	\$8.5-\$9.4	\$9.0 – \$10.0	\$8.7 - \$9.6	\$8.8 - \$9.7

Notes: ¹ Preliminary impacts represented in this table assume total impacts; permanent and temporary impacts will be distinguished in the FEIS.

² MDOT SHA and FHWA determined Alternative 5 is not a reasonable alternative, but it is included in the DEIS for comparison purposes only.

³ Refer to Chapter 4, Section 4.7 and Appendix G, Volume 1 for additional details on the effects to historic properties.

⁴ Based on current design information, effects cannot be fully determined on these 7 historic properties. MDOT SHA will evaluate these properties further as design advances.

⁵ Noise receptors are noise-sensitive land uses which include residences, schools, places of worship, and parks, among other uses. Note that these numbers include receptors that do not have an existing noise wall as well as receptors that have an existing noise wall which is expected to be replaced

⁶ Previous versions of this table used a similar metric of Annual Average Hours of Savings per Commuter. System-Wide Delay Savings better reflects benefits to all road users.]

⁷ The right-of-way is based on State records research and filled in with county right-of-way, as necessary. With the Section 4(f) properties, some boundaries vary based on the presence of easements and differences in the size and location of historic and park boundaries.

What Permits, Approvals and Authorizations Will Likely Be Required?

In addition to NEPA compliance, many permits, approvals and authorizations are being coordinated concurrently with the NEPA process or would be obtained prior to construction of any improvements. **Table ES- 3** summarizes the Federal, state, and local permits, authorizations and approvals that will likely be required based on the current Study design assumptions and associated impacts. Refer to **Chapter 6, Section 6.5**.

Table ES- 3: Likely Permits and Approvals

	Permit/ Approval	Responsible/Permitting Agency
Concurrent with NEPA or within 90 days from the Record of Decision	National Environmental Policy Act (NEPA) Approval – Record of Decision ¹	Federal Highway Administration
	Section 4(f) Approval	Federal Highway Administration
	Endangered Species Act Consultation	US Fish and Wildlife Service / NOAA-NMFS
	Section 106 Programmatic Agreement	Federal Highway Administration
	Clean Water Act Section 404 and Section 10	US Army Corps of Engineers
	Maryland/Virginia State Waters (Section 401)	US Army Corps of Engineers / Maryland Department of Environment / Virginia Department of Environmental Quality
	Maryland Nontidal Wetlands and Waterways Permit	Maryland Department of Environment
	Virginia Wetland Protection Permit	Virginia Department of Environmental Quality
Prior to Construction	Special Use Permit - Construction in VA and MD	National Park Service
	Capper-Cramton Park Permits	National Capital Planning Commission
	Park Construction Permit - M-NCPPC	Maryland National Capital Park and Planning Commission
	Maryland Reforestation Law Approval	Maryland Department of Natural Resources
	State and County Forest Conservation Easement Revision Approvals	Maryland Department of Natural Resources / Maryland National Capital Park and Planning Commission
	General Permit for Stormwater Associated with Construction Activity - MD	US Environmental Protection Agency / Maryland Department of the Environment
	General Permit for Stormwater Associated with Construction Activity - VA	US Environmental Protection Agency / Virginia Department of Environmental Quality
	Stormwater Management/Erosion and Sediment Control	Maryland Department of Transportation - State Highway Administration Plan Review Division / Maryland Department of the Environment
	Stormwater Management/Erosion and Sediment Control	US Environmental Protection Agency / Maryland Department of the Environment / Virginia Department of Environmental Quality
	Clean Water Act Section 402 (MS4)	Maryland Department of the Environment
	Water Appropriation and Use Permit	Maryland Department of the Environment

Note: ¹The lead agency is responsible for preparing and publishing a single ROD for all Federal agencies with authorization responsibility for the project to support any necessary authorization decisions. The ROD will incorporate the decisions of each such agency, unless an exception to a single ROD is met as set forth in Section XIII or where Federal law provides for the lead agency to issue a combined FEIS/ROD. Memorandum of Understanding Implementing One Federal Decision Under Executive Order 13807, <https://www.whitehouse.gov/wp-content/uploads/2018/04/MOU-One-Federal-Decision-m-18-13-Part-2-1.pdf>

What is the One Federal Decision Executive Order?

The I-495 & I-270 Managed Lanes Study is following the “One Federal Decision” *Executive Order 13807: Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects*¹² requires Federal agencies to process environmental reviews and authorization decisions for major infrastructure projects as “One Federal Decision (OFD).” The Executive Order 13807 (EO) sets a goal of reducing the average time to complete environmental reviews under the National Environmental Policy Act and authorization decisions for major infrastructure projects to two years from the publication of the Notice of Intent (NOI). The EO also directs that, except under certain circumstances,¹³ the Federal lead agency and all Cooperating and Participating Agencies shall “record any individual agency decision in one Record of Decision (ROD)” and prepare a single Environmental Impact Statement (EIS). Provided the EIS includes adequate detail to inform the agency decisions, the EO requires obtaining permits and approvals within 90 days of the issuance of the ROD¹⁴. The EO also requires major infrastructure projects to be managed under a single permitting timetable covering environmental review and authorizations.

What Are the Next Steps for the Study?

This DEIS has been signed by FHWA and MDOT SHA and distributed to Federal, state, and local agencies, as well as organizations and other interested parties and is available for public review. There will be Public Hearings held during a 90-day review period for the DEIS; the comment deadline is October 8, 2020. During this 90-day review period, the DEIS is available in public locations throughout the study corridors and on the project website <https://495-270-p3.com/DEIS/>. Comments on the DEIS are considered equally regardless of whether received orally or in writing and may be made by:

- Oral testimony at one of the public hearings in the main hearing room
- Oral testimony to a verbatim recorder at a public hearing in private in a separate room
- Written comments on a comment form at a public hearing
- Letters to Lisa B. Choplin, DBIA, I-495 & I-270 P3 Program Director, I-495 & I-270 P3 Office, 707 North Calvert Street, Mail Stop P-601, Baltimore MD 21202
- DEIS comment form at <https://495-270-p3.com/DEIS/>
- Email to MLS-NEPA-P3@mdot.maryland.gov

Following the 90-day review period, the MDOT SHA and FHWA will review all comments and respond to all substantive comments received or postmarked by the end of the comment period in the preparation of the FEIS. Comments received or postmarked after that date will be reviewed and considered to the extent practicable. In addition to the disposition of all substantive comments, the FEIS will summarize

¹² Exec. Order No. 13807, 82 Fed. Reg. 40463 (August 15, 2017), <https://www.whitehouse.gov/presidential-actions/presidential-executive-order-establishing-discipline-accountability-environmental-review-permitting-process-infrastructure/>

¹³ The EO provides that a single ROD shall be issued, “unless the project sponsor requests that agencies issue separate NEPA documents, the NEPA obligations of a cooperating or participating agency have already been satisfied, or the lead Federal agency determines that a single ROD would not best promote completion of the project’s environmental review and authorization process.”

¹⁴ The lead Federal Agency may extend the 90-day deadline if it determines Federal law prohibits the agency from issuing its approval within 90 days or an extension would better promote completion of the project’s environmental review and authorization process or the project sponsors requests a different timeline. Exec. Order No. 13807, 82 Fed. Reg. 40463 (August 15, 2017). <https://www.whitehouse.gov/wp-content/uploads/2018/04/MOU-One-Federal-Decision-m-18-13-Part-2-1.pdf>

additional and updated information not refined or quantified in the DEIS, identification of the Preferred Alternative and factors that support the selection, and commitments and mitigation measures to be carried forth during final design and construction.

Public-Private Partnership (P3) Program

What Is a P3?

A Public-Private Partnership (P3) is an alternative model for delivery of a capital project. A P3 is a partnership between the public or governmental sector with private entities. The P3 seeks to harness private sector expertise, innovation and funding in order to deliver public infrastructure for the benefit of the public owner and users of the infrastructure. P3s seek to 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 agreement may include designing, building, financing, operating, and maintaining a transportation facility.

Why Is a P3 Being Considered for This Study?

There are several reasons for utilizing a P3:

- **Private Financing Results in Faster Construction:** P3 projects can move forward when the state does not have available funding because the private sector finances the improvements based on future funding or revenue. It would take more than 25 years to fund I-495 & I-270 P3 Program congestion relief improvements relying on state funds and would use all of MDOT's capital expansion budget for this one project.
- **Transfer of Risks:** The state and the private sector share the risks based on who can best manage each risk to provide the best value to the state.
- **Operations and Maintenance:** The state can benefit from having the private sector operate the highway and maintain it (for example, pavement repairs, grass mowing) at a more economical cost. Without the P3 Program, it is estimated that MDOT would need to invest \$1.7 billion in bridge replacement/rehabilitation and pavement rehabilitation over the next decade simply to just maintain the existing roadways on I-495 and I-270 in Montgomery and Prince George's Counties in a state of good repair, with no congestion relief.
- **Limited Government Funding:** Projects that include a future revenue source may be constructed with limited or no governmental funding upfront. In fact, the I-495 & I-270 P3 Program has a goal to implement the Program at no net cost to the state.

How Would the Project Be Constructed?

The focus of this DEIS is on addressing transportation needs within the 48-mile Study limits: I-495 from south of the George Washington Memorial Parkway in Fairfax County, Virginia, including improvements to the American Legion Bridge over the Potomac River, to west of MD 5, and along I-270 from I-495 to north of I-370, including the east and west I-270 spurs.

Due to the magnitude of the Study, MDOT SHA would need to construct any Build Alternative in phases. Phase 1 of the P3 Program would include that portion of the MLS along I-495 from the vicinity of the George Washington Memorial Parkway in Virginia, across and including the ALB, to its interchange with I-270 at the West Spur, and I-270 from its interchange with I-495 to its interchange with I-370. A Phase 1

P3 Agreement would also include I-270 up to I-70 which would be advanced through a separate, independent NEPA study.

The Maryland Board of Public Works approved the competitive solicitation process for Phase 1 to move forward for the selection of a Phase Developer to assist MDOT SHA with preliminary development and design activities, in accordance with federal regulations. No commitment will be made by MDOT SHA as to any alternative that is being or may be evaluated through the NEPA process.

It is expected that Phase 1 would be developed and delivered by a Phase 1 Developer, under a Phase 1 P3 Agreement. The southern portion of Phase 1 from I-495 in the vicinity of the George Washington Memorial Parkway to I-270 and I-270 from I-495 to I-370 would be developed, constructed, and delivered first. Additionally, given the magnitude of the improvements, the Phase Developer would be expected to develop and deliver the southern portion of Phase 1 in two or more sections, to be agreed upon with MDOT.