

FY 2024 MPDG GRANT APPLICATION

Location: Montgomery County, Maryland **MDOT UEI:** GASRKUGPZCC7

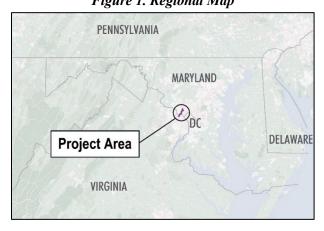
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PROJECT DESCRIPTION

Maryland's portion of I-495 along with I-270 are two of the most congested highways in the greater Washington Metropolitan area. The current traffic conditions continuously impede the efficient flow of people, goods and services, and hinder interstate freight and transit, specifically across the American Legion Bridge. The bridge opened in 1962 and is the critical connection between Maryland and Northern Virginia. While it is structurally safe, the bridge will require extensive repairs, including the rehabilitation of the deck, within the next decade. This type of construction will be highly disruptive to the flow of traffic, causing additional congestion on an already constrained link.

Figure 1. Regional Map

Consequently, the Maryland Department of Transportation State Highway Administration (SHA) is proposing to address these numerous safety, traffic, structural, multimodal, economic, and environmental issues with the American Legion Bridge + I-270 Multimodal Improvements project, shown on the regional map in Figure 1. The project corridor is an approximately 6.5-mile-long section interstate with significant regional and national implications. The project limits interchanges are shown in Figure 2.



Every day, hundreds of thousands of travelers rely on I-495 and I-270 to get to their jobs, access goods and services, enjoy recreational areas, and return safely to their homes. Both interstates are key elements in the regional and national transportation infrastructure system. Two of the top four freight bottlenecks along I-495 and I-270, and eight freight bottlenecks along the larger I-

Figure 2. Project Location Limits



495 network impede flows of people, commodities, and freight to local and regional markets¹. importance of interstates is recognized by their designations under the National Highway System and National Highway Freight Network. In addition to their civilian importance, the Department of Defense (DoD) classifies I-495 and I-270 as Strategic Highway Networks (STRAHNET)—routes that provide defense access. continuity, and emergency capabilities for the movement of

¹ https://www.mdot.maryland.gov/OPCP/MDOT State Freight Complete 2022 12 06.pdf

personnel and equipment in times of both peace and war,² including connections to numerous military installations in both Maryland and Virginia. The importance of maintaining these corridors will continue to sustain our country's economic vitality, improve freight and transit mobility, and safeguard the integrity of our national security.

As part of SHA's effort to address persistent mobility and traffic challenges, traffic count studies were performed in both corridors and found that the average annual daily traffic along the I-495 corridor is 253,000 and projected to increase to 289,000 by 2045. Along I-270, the average annual daily traffic is 259,000 and projected to increase to 308,000 by 2045. Additionally, according to the Metropolitan Washington Council of Governments (MWCOG) 2022 Congestion Management Report³, the I-495 at I-270 West Spur is among the top ten bottlenecks in the region.

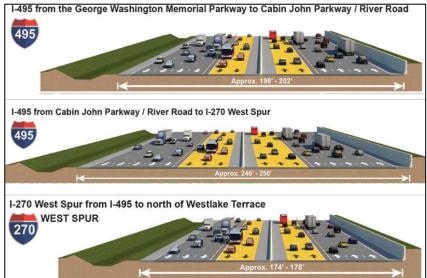
SHA completed the I-495 & I-270 Managed Lanes Study per the National Environmental Policy Act (NEPA) to address the mobility challenges along both corridors. In tandem with Virginia's I-495 Northern Extension (NEXT) project, which also focused on implementing multimodal strategies, SHA provided a comprehensive approach to improving mobility within the National Capital Region. In the Managed Lanes Study, SHA identified the first phase to be implemented as the section from south of the George Washington Memorial Parkway on I-495 (connecting to the 495 NEXT project) to north of Westlake Terrace on the I-270 West Spur.

The NEPA Study resulted in a Record of Decision in August 2022 with a Selected Alternative that included a two-lane High Occupancy Toll (HOT)-managed lane network on I-495 and I-270. The project will include the addition of two HOT lanes in both directions on I-495 and the

conversion of the existing High Occupancy Vehicle (HOV) lane plus additional HOT lane along the I-270 West Spur. The typical sections are shown in Figure 3.

SHA will maintain the existing free, generalpurpose lanes throughout the project limits. Transit vehicles and carpoolers with three or more occupants will be able to utilize the new HOT lanes at no charge, which will provide faster, more reliable transit service

Figure 3. High Occupancy Toll Lanes Typical Section



Source: Maryland State Highway Administration

² https://www.sddc.army.mil/sites/TEA/Functions/SpecialAssistant/STRAHNET/ STRAHNET%20101.pdf

³ https://www.mwcog.org/documents/2022/07/08/congestion-management-process-cmp-technical-reportcongestion-management-process/

while encouraging the use of car- and vanpooling in the region. Vehicles with less than three occupant that use the HOT lanes will be required to pay the toll. The resulting funds generated from these tolls will provide revenue for corridor-wide transportation improvements, as well as support expanded regional transit opportunities that would not otherwise be funded.

The Washington Metropolitan Area Transit Authority (WMATA)'s Better Bus service redesign initiative proposed medium-frequency, all day service and low-frequency overnight regional connector services that would operate along I-495 and use the American Legion Bridge, benefiting from dedicated and improved infrastructure. In addition, the Fairfax County Department of Transportation's Fairfax Connector Route 798 will provide express bus service beginning in 2024 between the Tysons and Bethesda WMATA rail stations.

SHA continues to identify deficiencies throughout on the American Legion Bridge and ultimately intends to reconstruct it. The bridge is currently rated in fair condition for the superstructure and substructure; however, it is anticipated to drop into poor condition within a three-year period unless the deck is replaced and the concrete deterioration is addressed. In addition, the bridge does not meet current roadway and structural design standards, nor does it accommodate the significant existing traffic demands. The new bridge, shown in Figure 4, will be widened to accommodate future traffic growth and designed to meet current standards, providing a facility in a state of good repair.

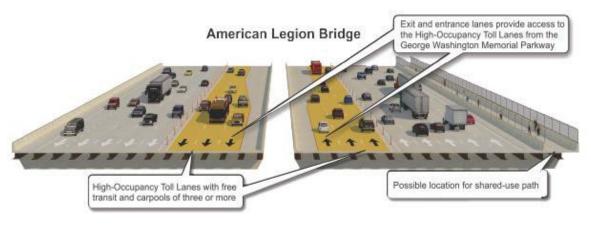


Figure 4. American Legion Bridge Typical Section

Source: Maryland State Highway Administration

Additionally, the improvements will broaden active transportation and multimodal opportunities by expanding bicycle and pedestrian connections between multimodal facilities in Maryland and Virginia. The new American Legion Bridge will serve as a conduit for people to access multiple parks, nationally and locally recognized historic sites, residential areas, and employment centers in the region. This expansion of multimodal connections is consistent with the improvements and priorities identified in the Montgomery and Fairfax counties' Master Plans.

Safety is of the utmost concern for SHA and this project. A crash analysis was performed within the project area as part of the Managed Lanes Study for the three-year period from 2016 through 2018. Approximately 1,000 crashes occurred within the project area, 75% were rear-ends and sideswipes on heavily congested roadways. The proposed project will reduce congestion levels

during peak periods and accommodate the future increase in traffic, thereby mitigating the unstable flow and stop/go conditions on the roadways, leading to a reduction in the potential for congestion-related crashes. Ultimately, the goal of the project is to ease travel burdens for all users, increase travel time reliability, and ensure a safe and efficient network for travelers.

SHA has studied the environmental, community, and historic impacts of the project and evaluated solutions to minimize impacts to these important resources. In the Managed Lanes Study, SHA considered multiple alternatives and published a Draft Environmental Impact Statement (DEIS) in 2020, which received 3,000 public comments. In response to public feedback, any additional alternatives were studied, resulting in the development of a Supplemental DEIS (SDEIS). The SDEIS reflected SHA's conscious effort to respond to stakeholder feedback and proactively address any community or environmental impacts—such as avoiding the historic Morningside Tabernacle No. 88 Moses Hall Cemetery, a historic African-American burial ground dating back to the 1800s. Thus, every effort was made to coordinate with the National Park Service (NPS) to minimize or avoid adverse impacts to three park service areas in Maryland and Virginia located within the vicinity of the American Legion Bridge. These NPS areas included the George Washington Memorial Parkway, the Clara Barton Parkway, and the Chesapeake & Ohio Canal National Historic Park. In addition to these NPS properties, SHA will make every effort to minimize the impacts to the Maryland-National Capital Park and Planning Commission (M-NCPPC) parkland located within the project area.

The Final EIS provided responses to over 5,000 comments on the DEIS and SDEIS and was published in June of 2022, with the Record of Decision issued by the Federal Highway Administration (FHWA) in August 2022. The project is currently in design; the final design and construction will be completed through two design-build contracts. Contract A will include the section from the George Washington Memorial Parkway to south of Seven Locks Road and will be advertised in June of 2025. The contract award/notice to proceed will be issued in July of 2026 to begin final design and construction. Contract B will run from south of Seven Locks Road to the project terminus north of Westlake Terrace. It will be advertised in March of 2026, with the respective contract award/notice to proceed to be issued in April of 2027. Based on the outlined scheduled, it is estimated that both contracts will be open to traffic by 2033.

Using the USDOT Equitable Transportation Community (ETC) Explorer,⁴ there are 12 census tracts identified that include, or are adjacent to, the project limits. These 12 census tracts are identified in Table 1. According to the ETC Explorer, each tract exhibits a range of burdens and vulnerabilities that are in the disadvantaged category. These vulnerabilities and burdens are found in the climate and disaster, environmental, health, and social categories. In addition, census tracts 24031700904, 24031700724, 2403170023, 24031700713, 2403700813, and 24031700830 in Montgomery County are identified by the Department of Housing and Urban Development as Opportunity Zones.⁵

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⁴ https://experience.arcgis.com/experience/0920984aa80a4362b8778d779b090723/page/ETC-Explorer---State-Results/

⁵ IRB 2018-28 (Rev. 07/09/2018) (irs.gov)

According US the Census, Montgomery County is the most populous county in Maryland, with over one million residents. The population grew over 28% from 1990 to 2010, and the growth is anticipated to grow by another 23% from 2010 to 2040. The population is concentrated around the I-495 and I-270 corridors as shown in Figure 5, with the darker, orange colors representing the highest population densities, highlighting the

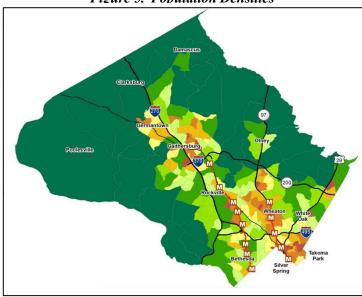
Table 1. Project Census Tracts

Census Tract	Location
51059470100	Fairfax County, Virginia
51059480100	Fairfax County, Virginia
24031706008	Montgomery County, Maryland
24031706009	Montgomery County, Maryland
24031705800	Montgomery County, Maryland
24031705902	Montgomery County, Maryland
24031706013	Montgomery County, Maryland
24031705901	Montgomery County, Maryland
24031704501	Montgomery County, Maryland
24031706012	Montgomery County, Maryland
24031701205	Montgomery County, Maryland
24031701206	Montgomery County, Maryland

importance of the corridors to residents' daily lives.

The US Census American Community Survey (ACS)⁶ shows approximately 48% of the employees in Montgomery County drive alone to work with a mean travel time of over 29 minutes. The ACS journey to work data⁷ identifies work trip origins and destinations. These daily work trips utilize I-495 and I-270 with almost 100,000 employees traveling to work into the District of Columbia from Montgomery County and over 22,000 employees traveling from





Montgomery County to Fairfax County, Virginia on a daily basis for work. The project will provide increased mobility efficiencies as well as increased modal opportunities for travelers.

Source: Montgomery County Planning

⁶ https://data.census.gov/table?q=DP03&t=Commuting&g=040XX00US24 050XX00US24031

⁷ https://www.census.gov/data/tables/2020/demo/metro-micro/commuting-flows-2020.html