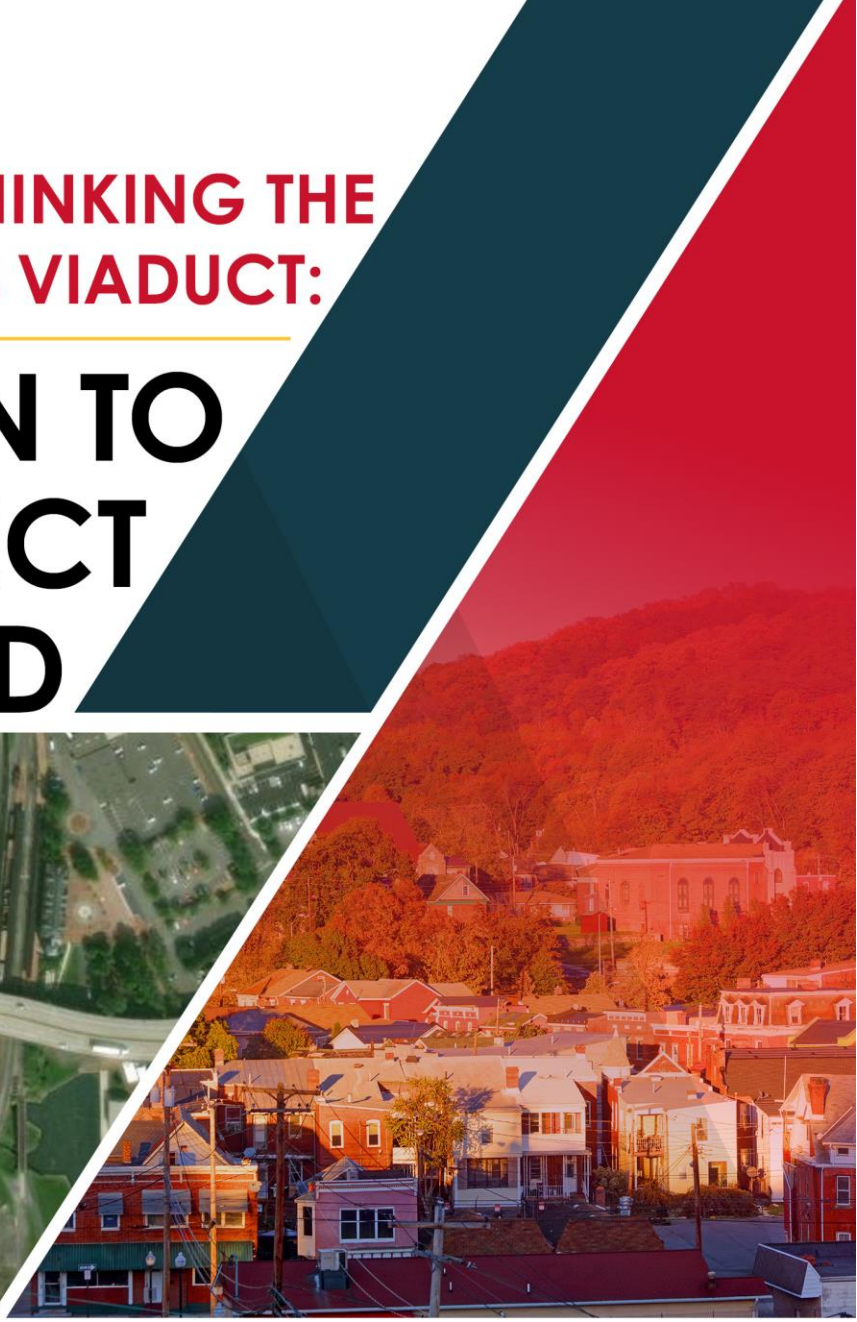
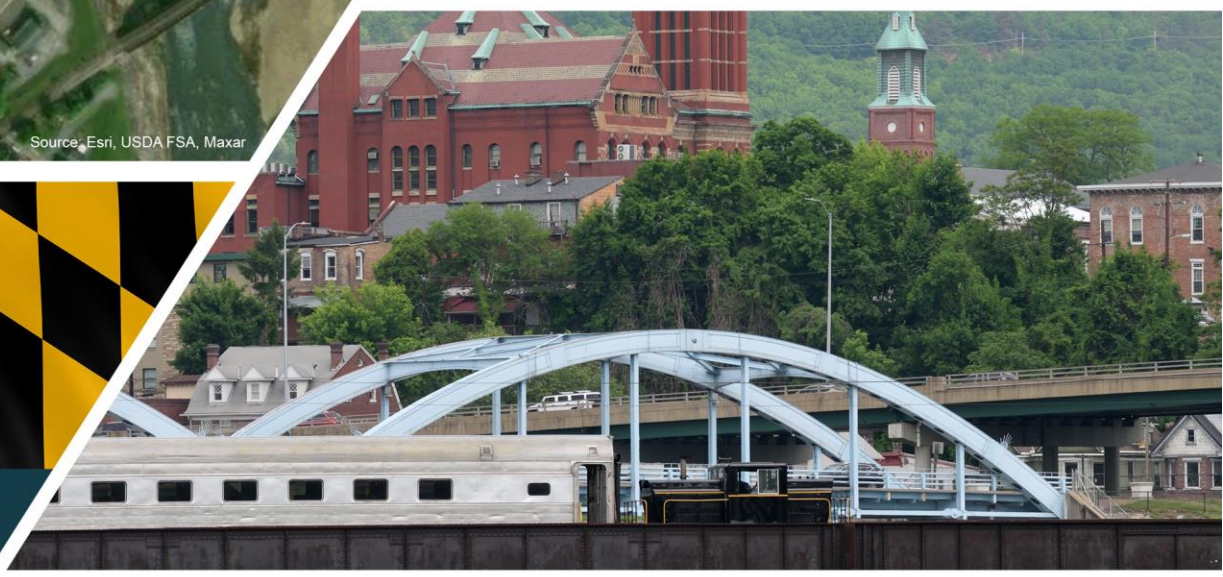
BRIDGE INVESTMENT PROGRAM (BIP)

RETHINKING THE I-68 VIADUCT:

A PLAN TO RECONNECT CUMBERLAND





FEBRUARY 19, 2024

MDOT MARYLAND DEPARTMENT OF TRANSPORTATION

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1.1. Project Description

The Maryland Department of Transportation (MDOT) is requesting $1.6 million from the Bridge Investment Program (BIP) to support ***Rethinking the I-68 Viaduct: A Plan to Reconnect Cumberland***. This $2 million project will support a Planning and Environmental Linkages (PEL) study of the Interstate 68 (I-68) Viaduct. Characterized by steep grade changes and sharp curves that have contributed to years of safety and congestion issues, the Viaduct serves as a physical, economic, and visual barrier, which divides the City of Cumberland in half. **MDOT has reached a pivotal moment of opportunity:** the largest Viaduct structure, (NBI # 100000010096010), is rapidly deteriorating, and MDOT has determined the structure will require a full deck replacement within the next 5 years **at a cost likely to exceed $100 Million. This $100 Million investment to extend the service life the bridge another 30-40 years would not address opportunities to enhance safety, accessibility, and equity issues. That cannot be allowed to happen.** Instead, MDOT is seeking $1.6 million to support a robust PEL study that would:

- Define further the project needs, goals and objectives;
- Develop conceptual alternatives to realign the Viaduct, improving its bridges and interchanges;
- Conduct a full traffic study of the Project Area; and
- Engage in a wide-reaching public engagement campaign to ensure community connectivity concerns are incorporated in preliminary conceptual alternatives.

Rethinking the I-68 Viaduct is an opportunity to propose innovative ideas to shape the future of Western Maryland, and Appalachian Development Highway System (ADHS), and the City of Cumberland. The project will directly address all six of the BIP Merit Criteria as shown below.

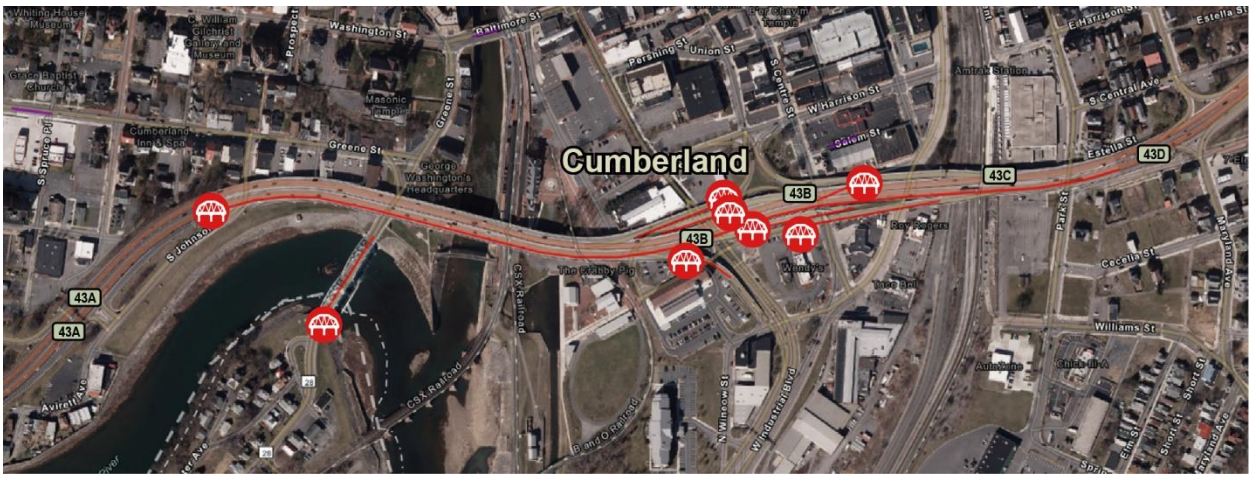
Table 1-1 | Merit Criteria Implementation Strategy Summary

Merit Criterion	Implementation Strategy
State of Good Repair	Plan a holistic study of the Cumberland Viaduct to develop viable long-term replacement alternatives
Safety and Mobility	Identify means of reducing crashes, targeting known safety concerns, and protecting users of all modes
Economic Competitiveness and Opportunity	Identify best practices to improve traffic, benefit regional initiatives, and promote land use changes
Climate Change, Sustainability, Resiliency, and the Environment	Determine optimal future investments to improve resilience and minimize environmental impacts
Equity and Quality of Life	Develop comprehensive outreach strategy to prioritize development of equitable alternatives
Innovation	Strategize approaches to incorporate innovative technologies, construction methods, and financing

1.2. Project Location

The Project Area is bounded by US 220 to the west and Maryland Route 639 (MD 639) to the east. The project is located in the Cumberland, MD-WV-PA urban area, and within Appalachia, as defined by the Appalachian Regional Commission, and a rural area, as defined by the United States Department of Transportation's (USDOT) Rural Eligibility Funding Tool (urban area with a population of less than 200,000). I-68 also provides a key link for mobility between western and central Maryland. Within those limits, the Viaduct, also known as the Cumberland Thruway or Crosstown Bridge, is a 3,200-foot bridge that spans over the CSX railroad, Willis Creek, and Bridge Street. There are seven total elevated structures that span the study area, including six ramp structures, collectively referred to in this application as **"The Viaduct,"** carrying I-68 through the center of Cumberland, Maryland near the West Virginia Border. These other six elevated structures may be impacted by preliminary conceptual alternatives for the I-68 realignment and are included in the limits of this study. Originally constructed between 1965 and 1970, the current configuration of I-68 requires westbound travelers to descend a steep grade as they approach Cumberland, before entering a series of sharp curves as the interstate crosses CSX Railroad, which also hosts Amtrak Long-distance Service, local roads, the Western Maryland Scenic Railroad (WMSRR), Bridge Street (providing access to Ridgely, West Virginia), and an additional freight rail spur. **The Project Area includes both Historically Disadvantaged Communities (Census Tracts: 11, 101, 8, 7, 4 and 10) and Areas of Persistent Poverty (Census Tracts: 11, 8, 7, 5, and 23).**

Figure 1-1 | Project Area: Structure Locations



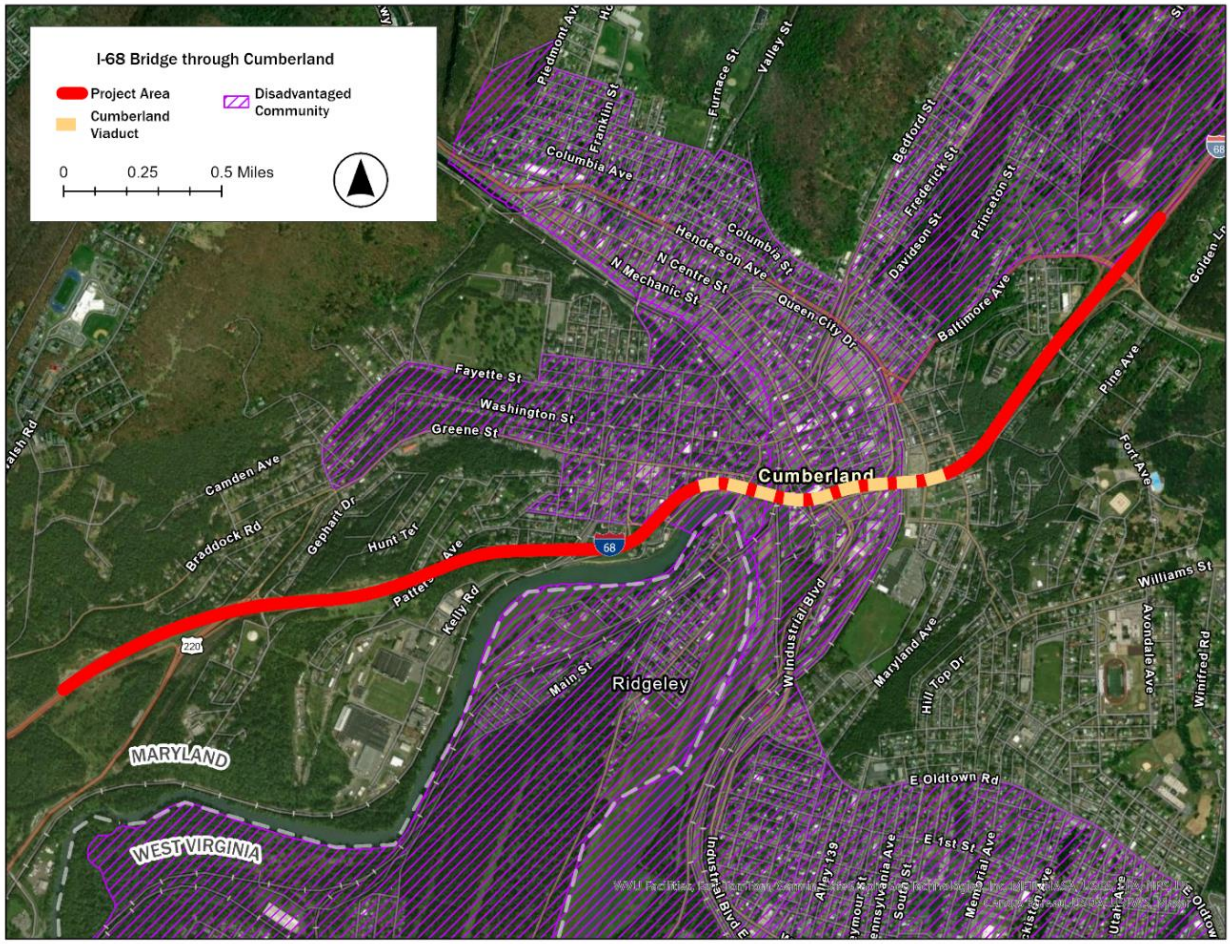
On the East side of Cumberland, a series of ramps and collector-distributor roads between Canal Street and Maryland Avenue create a massive barrier for the community, spanning more than 200 feet across at its widest points. Several of these ramps and roads are redundant, and a key interest of the PEL study funded by this grant would be identifying redundant structures and determining ways to consolidate or remove them, enhancing community connectivity and economic development opportunities adjacent to the Cumberland waterfront.

Contributing to the Functioning and Growth of the Economy

Once the second largest city in Maryland, Cumberland has been shrinking since 1940, falling from a peak of nearly 40,000 residents to less than 20,000 today. The Metropolitan Statistical Area

(MSA) is among the poorest in the country, ranking 252nd out of 280 MSAs in the 2010 Census with a per capita income of $16,409. Although the construction of I-68 provided essential connectivity between Cumberland, the ADHS, and the surrounding communities, it also erected a major barrier to future economic development by segregating the city. **This project is an opportunity to study the mistakes of the past and determine how to reshape the interstate to help Cumberland grow, retain its historic character and improve recreational opportunities and quality of life.**

Figure 1-2 | Project Area Map



Source: CEJST Tool. Census tracts that are overburdened and underserved are identified as Disadvantaged.

1.3. Lead Applicant

The Lead Applicant is the Maryland Department of Transportation (MDOT) State Highway Administration (SHA). MDOT has vast experience administering Federal funds and programs. On January 12, 2024, USDOT awarded the State's first ever Mega grant for the I-895 at Frankfurst Avenue Interchange Improvement Project. MDOT also received historic funding to support the Frederick Douglas Tunnel and Amtrak's Northeast Corridor from the Federal-State Partnership for Intercity Rail Program, and awards from ATTAIN, RAISE, CRISI, NEVI Set-aside, and RCE programs.

1.4. Other Public and Private Parties

There are no other public or private parties involved in the delivery or financing of this project. MDOT will work closely in partnership with the following entities throughout the PEL development process: **federal partners; the City of Cumberland, Maryland; Allegany County, Maryland; Cumberland Area Metropolitan Planning Organization (CAMPO); West Virginia Department of Transportation (WVDOT); Town of Ridgely, West Virginia; Mineral County, West Virginia; Amtrak; CSX; and WMSRR.** The PEL will include a robust public engagement process seeking input from stakeholders and members of the public in the project area, including West Virginia.

1.5. Additional Eligibility Requirements

The seven bridges supporting the Viaduct are currently owned and operated by MDOT. Any bridge or series of structures eventually proposed or constructed because of this project would also be maintained by MDOT's SHA. MDOT is a national leader in asset management. SHA is home to a dedicated Asset Management Office (AMO) responsible for guiding the SHA Asset Management Program toward optimal performance, using risk-based resource allocation to maintain all roadway assets in a good state of repair. SHA maintains more than 75 types of transportation assets across 14 asset classes with a total replacement value of $39 billion. This program continually prioritizes asset needs based on age, condition, criticality and risk. It implements standards, improves systems and data, fosters collaboration and strengthens institutional knowledge. Bridge asset management is the responsibility of SHA's **Office of Structures**.

Maryland is among the national leaders in bridge condition, with just 2.76 % of NBI deck area rated Poor in 2023. **This planning project is an example of MDOT putting its own asset management principles into practice, and the benefits of cross-modal coordination within MDOT.** The table below summarizes the ways in which this project will directly implement four strategies identified in MDOT's 2021 Transportation Asset Management Plan (TAMP) for monitoring risk, principles which are easily applied by SHA in advancing this project.

Table 1-2 | Risk Management Strategies in Practice

Risk Mitigation Strategy	Application in This Project
Avoid or minimize risk through proactive management strategies	• Identify and anticipate upcoming need for in-kind replacement of I-68 Viaduct • Apply for funding to begin planning an alternative investment
Assign higher priority to risk-prone assets that require replacement	• Recognize that replacement of the I-68 Viaduct will be complex, disruptive, and expensive • Prioritize early formulation of conceptual alternatives
Mitigate assets by clearly identifying performance measures and outcomes that impact asset resilience and exposure	• Outline a plan to measure, analyze, and mitigate existing performance issues including equity, access, resilience, and potential exposure to advanced deterioration or failure

Collaborate with partner agencies and stakeholders to manage and monitor risks	• Launch a robust public engagement plan to solicit meaningful feedback and collaboration

2. National Bridge Inventory Data

This project will support a Planning and Environmental Linkages (PEL) Study of the Viaduct, comprised of seven (7) bridge structures listed on the National Bridge Inventory. The overall realignment of I-68 as part of the preliminary conceptual alternatives may impact some bridges that are considered in good condition. The complete NBI data for all seven structures is included in the Project Application Template.

Figure 2-1 | Bridges in the Study Area

3. Project Budget – Grant Funds, Sources, and Uses of all Project Funding

The total future eligible cost of this project is estimated to be **$2 million**. That estimate includes the completion of a Planning and Environmental Linkages (PEL) study which will include:

- Further define the project purpose and need, including community driven goals and objectives;
- Development of concepts to move, raise, lower, or realign the Viaduct and its interchanges;
- Completion of a full traffic analysis of the Project Area, including the collection of turning movement counts for use in the development of a micro-simulation travel model;
- Development of 2045 traffic forecast; and
- Implementation of a hybrid public outreach approach to secure wide-reaching public input to secure feedback on the conceptual alternatives developed.
- Work closely with the City of Cumberland to develop conceptual alternatives consistent with the City's vision for redevelopment and connectivity;
- Analysis of the land uses around the project area, including an assessment of potential uses and reuses of MDOT-owned right of way beneath and adjacent to the existing Viaduct; and
- Initial assessment of the Environmental Impact Areas that could be triggered by construction:
  - National Environmental Policy Act (NEPA) requirements
  - Environmental justice and social impacts
  - Water quality
  - Air quality
  - Noise
  - Wildlife and threatened or endangered species
  - Historical and archaeological resources
  - Section 4(f)

3.1. Funding Sources

MDOT is requesting $1.6 million in Bridge Investment Program (BIP) funding to support the PEL study. MDOT SHA will allocate the remaining $0.4 million in non-federal match from existing programmed state funding sources already committed to Crosstown Bridge enhancements and state of good repair efforts. No other federal funds have been allocated to this project. If awarded, it is likely that MDOT would complete the PEL study, then initiate a formal NEPA process to develop viable alternatives for construction. Once a preferred alternative is identified, MDOT would likely pursue a future BIP construction grant to support design and implementation.

3.2. Satisfying Federal Requirements

This project satisfies the BIP statutory maximum federal involvement requirements. If awarded, BIP funds will support 80% of the budget, with other federal funds making up 0% and non-federal covering the remaining 20%. MDOT has budgeted **$200,000** to cover unanticipated cost increases. MDOT has determined this amount is sufficient to cover unanticipated cost increases based on the current understanding of the Viaduct's needs. Projects of similar size and scope have

succeeded with proportionate contingency funds set aside, which are most often used to account for change orders, incentives, disincentives, force account work, and other miscellaneous expenses that arise. In the unlikely event that the project budget evolves to exceed planned expenditures and contingency amounts, MDOT has developed the following three-part **Plan to Address Potential Cost Overruns.**

1. **Value Engineering |** In the event that a project exceeds a total cost threshold, MDOT will deploy a Value Engineering (VE) Study to conduct a comprehensive review of the proposed activities under this PEL to ensure the budget remains in line with expectations and available funds.
2. **Prioritizing Investments |** MDOT has several robust Project Prioritization Process in place which collectively provide a framework for allocating funds to address cost overruns for projects ready for letting. The Chapter 30 Technical Guide summarizes a legislatively mandated framework utilized by MDOT to evaluate and prioritize major projects. Those principles will be applied throughout the PEL supporting this project to evaluate potential cost overruns during both the Planning and Construction stages.
3. **Pursuing Additional Funding |** MDOT has developed a tested strategy for securing additional funds for major projects. In 2023, MDOT has secured approximately $164 million in discretionary grants awards. In the event of a major cost overrun, MDOT could pursue additional competitive programs to secure complete funding for this project and will likely do so to support construction.

The State of Maryland is a stable and reliable funding partner committed to maintaining the existing system and building new infrastructure to encourage economic growth. A broad range of State funding sources leverage federal funding support and are dedicated by the Maryland Transportation Trust Fund to fund public roadway projects, including State motor vehicle fuel taxes; Vehicle excise (titling) taxes; Motor vehicle fees (registration, licensing); State taxes on corporate income; Sales and use taxes on short-term rentals; and Operating and bond revenue.

Should this project be awarded, MDOT will commit $400,000 in matching non-federal funding.

3.3. How All Project Funds May Be Used

This grant application is seeking $1.6 million in BIP funds to support PEL study costs only. Working to protect and enhance these Maryland communities, prioritizing mobility, accessibility, safety, and reliability together with community partners requires ample time and resources. Total future eligible costs, including overhead and contingencies, are estimated to total $2 million. Table 3-1 | summarizes the anticipated costs by SF-424C Classification.

Planning and Environmental Linkages (PEL) studies are an innovative and cost efficient tool to help move NEPA forward by taking environmental, community, and economic goals into account early to be able to successfully carry each through full project development, design, and construction with streamlined decision-making, environmental awareness, and expedited delivery. Funding PEL studies can be used for assessing various long-term transportation needs encompassing detailed traffic operations, overall user safety, evaluating capacity needs, bolstering economic development, and emergency evacuation planning. Prior or current MDOT PEL studies include MD 90, MD 18, MD 404, MD 328 and MD 97. These studies are working to advance concepts to

improve structural and capacity needs, accommodating pedestrians and cyclists, and evaluating geometric improvements.

Table 3-1 | Breakdown of Costs for Classifications Used on Standard Form 424C

Field Item	Field Name	Total Cost	Costs Not Allowable for Participation	Total Allowable Costs
1	Administrative and Legal	$10,000	$0	$10,000
2	Land, Structures, Rights-of-Way, Appraisals, etc.	$0	$0	$0
3	Relocation Expenses and Payments	$0	$0	$0
4	Architectural and Engineering Fees	$1,200,000	$0	$1,200,000
5	Other Architectural and Engineering Fees	$490,000	$0	$490,000
6	Project Inspection Fees	$0	$0	$0
7	Site Work	$0	$0	$0
8	Demolition and Removal	$0	$0	$0
9	Construction	$0	$0	$0
10	Equipment	$0	$0	$0
11	Miscellaneous	$100,000	$0	$100,000
12	**SUBTOTAL (Lines 1-11)**	**$1,800,000**	**$0**	**$1,800,000**
13	Contingencies	$200,000	$0	$200,000
14	**SUBTOTAL**	**$2,000,000**	**$0**	**$2,000,000**
15	Project (Program) Income	$0	$0	$0
16	**TOTAL PROJECT COSTS**	**$2,000,000**	**$0**	**$2,000,000**

The primary elements of this PEL will include:

Developing conceptual alternatives includes a full understanding of what is AND isn't working across existing conditions. Changing the alignment of a single bridge over a short span, for example, would not necessarily address the primary challenges in the area because other structures, roads, and through traffic could be impacted. Similarly, simply elevating or burying the existing Viaduct may be cost prohibitive or even exacerbate divisions imposed on the community by the existing corridor. Putting funding towards studying how easier and safer access to surrounding communities and existing transportation network can be provided will allow exploring other ideas like different access ramps, altering the segments which are elevated and at-grade, incorporating additional travel types, and supporting non-vehicular travelers on transit or active transportation modes are all key considerations for this study.

Any construction that occurs at this site will require careful, thoughtful coordination of traffic patterns, and this PEL is a first step towards understanding them. The project area involves several complex interchanges and ramps that could be affected by a realignment of the Viaduct, so this PEL study will include a careful evaluation of traffic operations. The PEL study will include collection of traffic counts, development of MicroSim traffic models, projecting future travel and traffic conditions, and addressing other technical traffic and safety management needs.

Successful studies start and end with strong public outreach. Funding for lengthy public outreach will support the creation and dissemination of presentation materials catering to various audiences across age groups, education levels, preferred languages, and economic backgrounds. MDOT will leverage a hybrid approach deployed in other recent PEL's that includes both virtual and in-person events. Feedback from the public will shape how the corridor is transformed and developed to match citizen uses and prioritize specific needs across communities.

This project will give careful consideration to existing and potential land uses. The grant funds requested here will help pinpoint vital community assets as well as necessary changes to enhance services, productivity, and output across businesses, schools, and essential as well as recreational facilities. Catering to commercial, residential, and/or industrial needs necessitates different infrastructure and access options. Evaluating current zoning restrictions and exploring alternative land use options will inform design elements.

This project will prioritize reimagining the Viaduct with a focus on mobility, accessibility, safety, and reliability. To protect and enhance the affected communities, this PEL will fully assess environmental impact areas to ensure that natural resources are preserved potential environmental damage is mitigated and minimized. MDOT will leverage community resources, CAMPO, local businesses, and municipal partners to understand the local needs, priorities and common vision for the development of the Viaduct.

A detailed project schedule including start and end dates for all major milestones is included in Appendix A.2 of this application.

4. Merit Criteria

4.1. State of Good Repair

Restoring and Modernizing Core Infrastructure Assets

I-68 and the Viaduct that carries interstate traffic through Cumberland are both more than half a century old. The roadway was originally built as a U.S. Route, and a part of the historic National Road; it was later converted to an Interstate Route. Local and regional commercial activity heavily depend on this primary artery through western Maryland, especially truck traffic. MDOT has needed to conduct extensive rehabilitation work over the past twenty years to keep the Viaduct operating and the region moving, but recent inspections performed as part of the deck replacement project development identified fatigue cracks in the steel superstructure. Considering the overall age of the bridge and fatigue concerns, moving forward with the deck replacement may not be the most appropriate alternative from a life cycle perspective.

Looking to capture a prime opportunity to modernize a core regional infrastructure asset, reconnect communities, and harness economic opportunity, leveraging the current alignment can improve travel region-wide giving traffic a modernized thoroughfare which can boost regional multimodal reliability. A straighter alignment can increase safety and expedite trips as multiple new access points connect to more areas throughout communities. Reducing current conflicts with CSX Freight Railroad traffic can enhance regional commercial as well as intermodal activity.

Improving Long-Term Resiliency During Extreme Weather Events

Extreme weather threatens safety for users given poor travel surface and already weak support structure. As climate change continues to exacerbate regular weather events, the 3,200-foot bridge carrying I-68 across the Potomac River and CSX Rail Lines will have additional demands placed on it every day. Overturned trucks are currently an issue, and while large retention walls are in place to prevent runaway vehicles, the existing grade and geometry changes through the project area threatening travel along the alignment, especially in inclement weather. The river span is currently well above flood plains even with rising water levels and flooding is not yet an issue due to a massive flood control project completed by the U.S. Army Corps of Engineers. As storms worsen, flooding may cause drainage and other safety issues, further delaying traffic.

Modernizing the alignment with new stormwater runoff facilities to reduce chances of future flooding and other weather-related environmental issues can enhance widespread redundancy and improve long-term resiliency. Multiple drainage depositories and flooding mitigation assets installed at all crossings can help prevent new problems from occurring along the right-of-way. The Project will also look for opportunities to improve stormwater management as part of a deck replacement, allowing runoff to be treated on-site, thereby improving water quality. Other specific improvements, including new lighting and safety infrastructure assets, can better illuminate the alignment and multimodal intersection crossings during every weather event, alleviating dangerous present conflict with roadways and train tracks in addition to any pedestrian crossings. Safeguarding these multimodal crossings can further reduce conflict points. Offering smoother travel over elevation changes like highway interchanges, challenging roadways, and other natural features can foster safe and continuous mobility.

Reducing Construction or Maintenance Burdens

MDOT has remained vigilant of ongoing maintenance requirements to ensure the Viaduct stays in a state of good repair, but costs continue to escalate as necessary repairs and preservation work are required to maintain the bridge in this condition. Structures are kept in fair and operable conditions as MDOT has a strong and viligent agency practice to rehabilitate bridges before reaching poor condition which keeps construction as safe as possible. The scope and frequency of work will continue to increase as the bridge ages. It is anticipated that steel retrofits to address fatigue, as well as additional concrete substructure repairs will be required over the next twenty years regardless of if the deck is replaced. Regular seasonal upkeep is also an issue, as the absence of full shoulders along the entire length of the bridge hinders current snow removal efforts. A modernized asset combined with an ongoing maintenance plan can help manage maintenance needs to efficently address regular as well as urgent issues. Basic improvements like full length shoulders can maintain reilability to give these communities dependable instructure asset and help maintenance as well as operations needs. Improving traffic flow can decrease current delay times, expediting trips alongside reducing carbon emissions from congested traffic.

4.2. Safety and Mobility

One of the primary purposes of a PEL study is to inform transportation choices that meet mobility, environmental, and community needs. This is done through agency coordination and active engagement—particularly to disadvantaged communities—to help find sustainable solutions to

improve the existing bridges and reconnect Cumberland. The PEL study will also include a traffic analysis, with a full crash inventory, and a potential speed study to understand existing conditions. The following safety considerations will inform the development of conceptual alternatives:

- Improving roadway geometrics to reduce risk of serious injuries and fatalities;
- Deploying statewide educational campaigns and speed enforcement on I-68;
- Opening up the at-grade roadways to increase clearance and safety under the bridge, create economic opportunities for residents, and reconnect Cumberland neighborhoods;
- Implementing longer bridge spans and removing pillars, opening up space under the bridge for redevelopment opportunities for nonmotorized connections and green space;
- Evaluating the feasibility of removing parking from under the bridge, mitigating the risk of a potentially catastrophic fire that could damage the Viaduct and the traveling public; and
- Consolidating on/off ramps where feasible, reducing conflict points between I-68 through traffic and vehicles exiting and entering from the ramps, as well as reducing conflict points between vulnerable road users and vehicles entering and exiting I-68.

Reducing Crashes on the Roadway Network

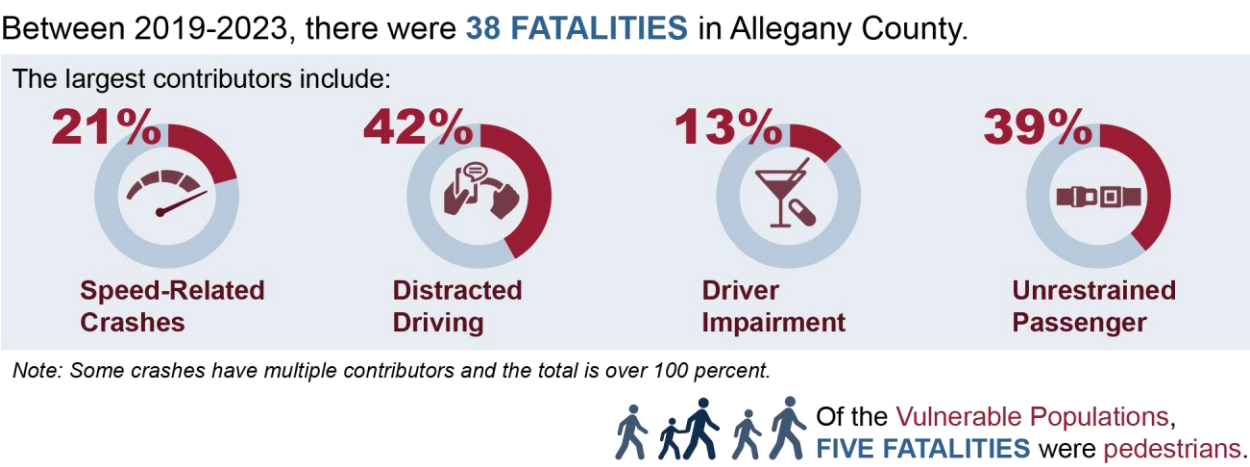
Maryland is a Vision Zero state, a USDOT Ally in Action for its National Roadway Safety Strategy, and set the goal of zero motor vehicle-related fatalities or serious injuries by 2030. Maryland DOT has incorporated Enhancing Safety and Security as a guiding principle in its Long Range Maryland Transportation Plan (MTP), or the Playbook, and adopted the 2021-2025 Maryland Strategic Highway Safety Plan (SHSP) (Dec. 2020) and Pedestrian Safety Action Plan (PSAP) (May 2023).

Maryland uses a multi-disciplinary approach to crash prevention and severity mitigation, including strategies that address roadway design, driving behaviors, technology, and policies through stakeholder coordination, a foundation of the PEL process. MDOT consulted and coordinated with Stakeholders during the development of the Vulnerable Roadway User (VRU) Safety Assessment, including presentations and surveys for attendees to provide input. MDOT will continue to coordinate with key Safety Stakeholders, including CAMPO, the City of Cumberland, and Allegany County Department of Public Works, during the PEL Study.

Targeting Known Safety Concerns

In its SHSP, Maryland identifies six emphasis areas and shares fatality data through an online crash dashboard as part of its data-driven approach to reach the goal of zero roadway fatalities and serious injuries. Between 2018-2022, there were a total of 94 crashes, one crash resulting in a fatality and 27 crashes resulting in 41 injuries within the project area. The Project Area is above the average statewide crash rate for crashes involving fixed objects (largely the median barrier/guardrail), parked vehicles, and truck related crashes. See **Appendix Item 4: Accident Data/Analysis** for more details. This project is an opportunity to conduct a further localized analysis of safety challenges in the Project Area to incorporate mitigation strategies in the project design, allowing for the implementation of those customized approaches to improve safety on I-68 and throughout the County.

Figure 4-1 | Contributing Factors to Crashes in Allegany County, 2019-2023

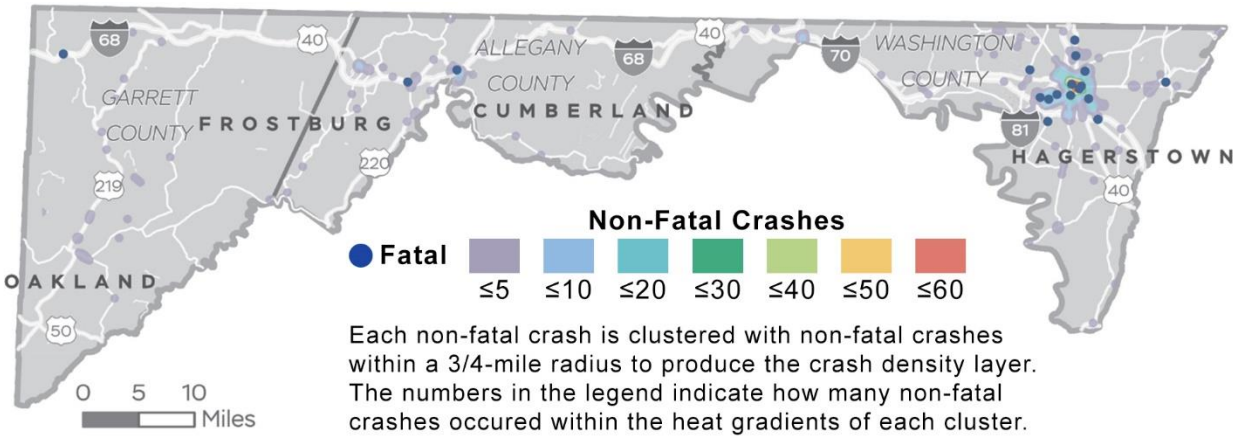


Maryland Highway Safety Office provides grants to target emphasis areas and tracks expenditures in an annual report. In 2022, the Allegany County Sherriff's Office (speed enforcement) and Cumberland Police Department (impaired driving and occupant safety) receive funding for enforcement directly related to the largest contributing factors of roadway fatalities.

Protecting Motorized and Non-Motorized Roadway Users

The PEL Study will look at the connectivity of the robust local multi-modal network and will consider Countermeasures identified in MDOT's Context Driven Toolkit.

Figure 4-2 | Pedestrian and Bicycle Crashes in the Project Area, 2016-2019



Source: District 6 | Pedestrian Safety Action Plan (arcgis.com).

There were five pedestrian fatalities in Allegany County between 2019-2023. Between 2016-2019, there was one fatal pedestrian crash between a vehicle in Cumberland in the general proximity of the proposed project. MDOT adopted the PSAP in May 2023. The proposed project limits fall within areas identified in the Equity Index and as a MDOT District 6 Area of Need in the Statewide Prioritization map. The PSAP also identifies ten policy strategies with associated action items that MDOT is committed to improve safety for pedestrians and bicyclists throughout Maryland.

Incorporating the National Roadway Safety Strategy

Maryland incorporates actions identified in the National Roadway Safety Strategy to address safety through education, emergency medical services, enforcement, and engineering. MDOT is identified as a National Roadway Safety Strategy's Ally in Action and has committed an initial $75 million to construct context-driven improvements at key locations based on historical data. MDOT and its partner stakeholders will continue to uphold their commitment to zero deaths by 2030 through the PEL Study and development of preliminary conceptual alternatives.

4.3. Economic Competitiveness and Opportunity

Improving Traffic Flow and Conditions

As part of I-68 and a key route across western Maryland and the Appalachian region, the Viaduct is instrumental in local and regional economic activity as the go-to thoroughfare for commercial traffic. Connecting to US 220, trucks and personal vehicles depend on this connection to reach destinations but are limited by current access ramps and slow travel speeds when navigating uneven pavement. Grade conflicts with CSX freight trains further hinder overall regional economic competitiveness. Addressing and solving current multimodal mobility challenges cannot happen along the existing Viaduct. Modernizing the alignment can recapture the value of this direct path across the region, expediting current traffic levels as well as allowing for increased volumes.

Benefiting the Regional and National Economy

The route helps Maryland stay competitive in the Mid-Atlantic region, offering a direct and reliable freight route to the Midwest, but cuts across the City of Cumberland, hindering growth despite continued investments as a key tourist and growing recreational destination. Being split by 3,200-foot Viaduct divides these at-risk communities by interrupting local travel with circuitous but necessary detours and has caused undue economic hardship. The proximity to the C&O Canal Towpath and the Allegheny Trail positions the alignment to capture and further support regional economic growth with current revitalization efforts at Canal Place and along Baltimore Street which will flourish with a revamped artery. With WMSRR's recent long-term lease agreement with the George's Creek Railway, there are new opportunities to expand regional tourism and freight-related job opportunities in small-town communities along George's Creek.

In recent years, WMSRR's ridership has almost doubled, from 47,000 in 2021 to 75,000 in 2023. The PEL Study will assess how to facilitate roadway to rail connections that serve the local and regional economy and reduce conflicts between the Viaduct and rail expansion efforts. A safer straighter vehicular connection also opens opportunity for multiple new ways to reach existing attractions and destinations like transit stops and parks and historic elements of Cumberland, complementing local efforts connecting Wills Creek and the Potomac through removing the dam. Improved abilities to reach facilities including schools, shopping centers, and new community outdoor gathering spaces can further increase the overall use, access, and travel possibilities, providing these communities an infrastructure asset they can depend on and help them to begin revitalizing the City of Cumberland.

Promoting Investments in Land Use Productivity

The Viaduct offers a key real estate opportunity across industrial and commercial land use as well as opportunities for public green space and community revitalization. As an elevated structure, revamping the land under the Viaduct enables the community to leverage potential opportunities to reconnect Cumberland. This includes studying the feasibility of removing parking from under the bridge right-of-way to reduce fire hazards and looking into the potential of transforming the land for revenue generating activities. Brownfields south of the bridge also open windows for further industrial growth given connections to the CSX freight railroad. There are also new opportunities to expand WMSRR's freight services and reactivate shipping customers along George's Creek.

4.4. Climate Change, Sustainability, Resiliency, and the Environment

One of the primary purposes of a PEL study is to inform transportation choices that meet mobility, environmental, and community needs through agency coordination, active engagement with disadvantaged communities, and environmental screening to help find sustainable solutions to improve the existing bridge. ***Rethinking the I-68 Viaduct: A Plan to Reconnect Cumberland*** directly addresses climate change, sustainability, resiliency, and the environment by aligning with Maryland's commitment to sustainable and resilient communities.

MDOT and the Cumberland Area MPO (CAMPO) incorporate environmental sustainability and other relevant goals into their respective Long Range Transportation Plans (LRTPs):CAMPO adopted its most recent LRTP in March 2021, 2050plan. Relevant goals include (1) sustain the environment and livable communities, (2) move people and goods efficiently, and (3) expand mobility options to advance equity. MDOT recently completed the statewide long-range transportation plan, or the MTP Playbook in January 2024. MDOT identified objectives and strategies to reduce GHG and improve air quality, protect and enhance the national environmental, and employ resource protection and conservation practices under its goal to Promote Environmental Stewardship. MDOT projects on-road transportation sector carbon emission reductions of 41.9% by 2031. Carbon emission reduction strategies, policies, and projects are identified in MDOTs recently adopted Climate Pollution Reduction Plan (2023) and Carbon Reduction Strategy (2023).

MDOT's Environmental Commitment Statement commits MDOT to Sustainable Practices and responsibly managing environmental resources to minimize harmful impacts of its activities on the environment through effective planning, project development, operations and maintenance.

MDOT has integrated the impact of climate change and related hazards into its planning process through two online interactive apps:

- MDOT SHA Climate Change Vulnerability Viewer (CCVV) – Interactive tool to mitigate against, avert, and adapt to potential impacts of climate change related hazards and
- MDOT SHA Climate Change Vulnerability – Planning tool to mitigate potential impacts of climate change on Maryland's roadways, including roadway assets & infrastructure.

Reducing Transportation-Related Air Pollution

The PEL Study will include a screening of air quality to coordinate with multiple agencies and the public to identify and mitigate any potential negative impacts. Maryland is committed to improving air quality by reducing Greenhouse Gas Emissions. MDOT is investing 64 percent of its Capital Program, over $9.7 billion, in projects that reduce GHG. Other key legislative actions to reduce GHG emissions and transportation-related air pollution include:

- In 2009, Maryland adopted the Greenhouse Gas Emissions Reduction Act (GGRA). Starting in 2015, MDOT has prepared Annual State Agency Reports detailing progress and performance, with the most recent Performance Report (2023)
- In 2022, Maryland adopted the Climate Solutions Now Act (CSNA), which set the most aggressive GHG emissions reduction goals in the nation: 60% reduction from 2006 levels by 2031 and achieving net-zero emissions by 2045.
- MDOT is the lead agency in Maryland's Zero Emission Electric Vehicle Infrastructure Council (ZEEVIC) and developed a National Electric Vehicle Infrastructure (NEVI) Plan in compliance with federal requirements.
- Maryland has established a robust network of Alternative Fuel Corridors (AFCs), designating corridors for all five alternative fuels. MDOT has officially moved forward with a Request for Proposals (RFP) seeking construction of Phase I NEVI sites, with responses due in April.

Figure 4-3 | Alternative Fuel Corridor Infrastructure in Maryland

I-68 is identified as an Alternative Fuel Corridor. This is reinforced in the MTP Playbook. Preliminary alternative concepts may include improvements to EV Charging Infrastructure throughout the state. MDOT identified Cumberland as a Short Trip Opportunity Area. Improving the connectivity and access of Cumberland through bicycle and pedestrian mobility will increase the opportunity of replacing short trips from SOVs with non-motorized trips, reducing GHG emissions.

Improving the Resilience of At-Risk Infrastructure

I-68 is a FEMA Hurricane Evacuation Route; both the current bridge structures and approaches from I-68 are elevated above the flood plain and not at risk of flooding but improving connectivity and circulation on local roadways around I-68 would improve the resilience of local roadways that access I-68 in the case of a major storm and evacuation is needed.

Within the City of Cumberland, there have been previous efforts to improve the impact of flooding. The US Army Corps of Engineers constructed flood protection measures along the upper Potomac River and Willis Creek, and the City of Cumberland's Sustainable Communities Program (approved 4/13/2022) improved the drainage systems to mitigate flooding and planted trees in urban areas.

One of the possible conceptual alternatives that may be explored during the PEL study is elevating the bridge to increase the clearance below the bridge, allowing for more use of the space, including possible green space. This could introduce more pervious surfaces near the River and Creek to buffer any major flooding events. Another possible conceptual alternative is the addition of shoulders on the full bridge. This would provide MDOT areas for plowed snow as the storms become more intense. Currently, there are no shoulders along the bridge.

Addressing Disproportionately Negative Environmental Impacts

MDOT is committed to an early and robust public involvement effort as it develops the Conceptual Project Alternatives with the community through the PEL Study process. Early public engagement and stakeholder involvement will identify and address any disproportionately negative environmental impacts on Disadvantaged Communities.

There are multiple disadvantaged census tracts adjacent to I-68 and within the project area. These include Areas of Persistent Poverty, Disadvantaged Census Tracts, and Census tracts in within high percentiles for low income, high unemployment rate, low life expectancy, and high rates of asthma in adults (EPA EJ Screen).The Conceptual Project Alternatives identified in the PEL process will be screened for possible impacts to Environmental Justice Areas and will follow MDOT's process for fostering inclusive public engagement. No public outreach with the communities has been conducted to date; the PEL study will provide an opportunity for input to hear concerns not only with I-68, but also the connectivity of the communities under the Viaduct.

Protecting Aquatic Species and Environments

The PEL Study will include a screening of endangered species, including flora, fauna, and aquatic species, and will incorporate key stakeholder coordination and public engagement efforts to identify and mitigate any potential negative impacts.

4.5. Equity and Quality of Life

Improving Quality of Life for Disadvantaged Groups

The City of Cumberland is one of the most economically disadvantaged areas in the country. Every census tract in the city is considered low-income, defined as people in households where income is less than or equal to twice the federal poverty level. Approximately 21.8 percent of residents are in poverty, nearly double the national average of 11 percent. Figure 1-2 shows the Climate and Economic Justice Screening Tool (CEJST) defined Disadvantaged Communities within the Project Area. The community faces compounding issues often associated with socioeconomic harms including surpassing national averages for heart disease, low life expectancy, unemployment, and residents that did not graduate from high school.

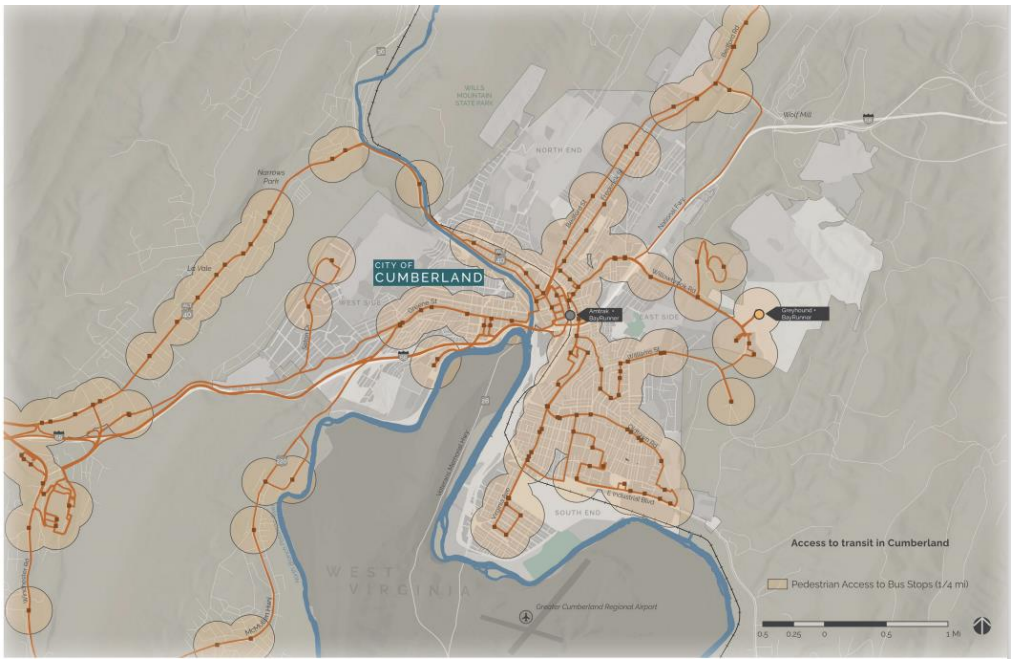
The Project seeks opportunities to address how the bridge can be redesigned to improve residents' quality of life. For example, the redesigned I-68 could incorporate nature-based solutions, reconfigure exit ramps to improve access to local businesses, recreational opportunities and essential destinations, and restrict freight travel through residential neighborhoods. These changes would impact residents' health, access to services and employment, and overall quality of life.

Expanding Access to Transportation and Community Services

The Project will explore how to best meet the transportation needs of the traveling public and residents while also supporting the economic development and community health of Cumberland. Currently, residents in Cumberland that live south of the interstate do not have access to any of the region's transit stops, which all originate in Downtown Cumberland. The fixed route system also does not provide weekend or evening service. **Figure 4-4** depicts pedestrians' access to transit, which illustrates a limited number of north to south lines where the I-68 Viaduct bifurcates the City. This makes it harder for residents who do not drive to access employment opportunities and medical services, particularly at the region's largest employer – West Maryland Health System – located in the southeast of the city.

I-68 also intersects the Great Allegheny Passage, a 150-mile rail trail from Pittsburgh to Cumberland. Currently the bridge makes it challenging for non-motorized users to enter or exit the trail networks and growing tourist attractions at Canal Place in Cumberland. The Project would examine how to improve access to this trail, including leveraging its north-south connections as a bicycle path for commuters as well as patrons of community services across the interstate.

Figure 4-4 | Transit Access Challenges in the Project



Source: Cumberland Area Metropolitan Planning Organization, Mountain Side 2050 plan.

Fostering Inclusive Public Engagement and Partnerships

MDOT has a decades long history of proactive, inclusive, public engagement with groups affected by the transportation planning and infrastructure development process, as outlined in the State's Public Participation Plan. This includes partnerships with state, local, community-based and private entities. For this project, SHA has already met with the City of Cumberland, and will meet with other stakeholders including the Greater Cumberland Committee (a community-based organization), CSX Railroad, Western Maryland Scenic Railroad, and the National Parks Service.

MDOT will also implement public engagement efforts with a concerted focus on engaging traditionally underrepresented groups. MDOT has a Title VI Implementation Plan which requires the agency to conduct outreach to individuals who do not speak English as their primary language, as well as those with a limited ability to read, write, or understand English due to physical, auditory, or visual impairments. As part of this, MDOT incorporates a variety of public involvement strategies including mail-outs, advertisements, public and targeted meetings, as well as non-traditional outreach that will be included in this Project, per the Maryland Action Plan.

4.6. Innovation

Innovative Technologies

A new Viaduct can allow for opportunities to leverage innovative transportation, communication, and safety technology common across modernized infrastructure assets. Solar lighting, automatic traffic counters, pavement sensors, and weather cameras can all help MDOT better care for a vital regional connection. Reducing carbon usage, identifying key repair spots, studying traffic flows, and leveraging tools to better understand maintenance needs, vehicular levels, and extreme weather events can lower operating costs, expedite trips, and safeguard travelers.

Innovative Project Delivery

Modern transportation projects leverage new project delivery techniques to reduce public risk, manage costs, and divide responsibilities. Varities across the Design-Build-Finance-Operate-and-Maintain family open up numerous possibilities to capture a variety of skills and assets from different parties. Depending on project difficulty, public funding levels, current maintenance burdens, and future needs, partnering with other public agencies and/or private partners can shorten construction times, reduce unforseen delays, and help manage future risks. Ranging from formal agreements including Public Private Partnerships (P3) or an inter-agency Memorandum of Agreement (MOA) across management and operations, strategic partnering can help deliver complicated projects on time and under budget by taking advantage of different resources.

Innovative Financing

Current stakeholders have a variety of financing capabilities at their disposal. Liaising available public resources across the City of Cumberland, the Greater Cumberland Committee, the National Park Service, and the U.S. Army Corps of Engineers can help work diligenty with key public stakeholders. Additionally, as a private operator and a federally-funded national passenger railroad, CSX and AMTRAK both have unique assets at their disposal which can further smooth and expedite project delivery, especially if an identified alternative may benefit their services and planned growth intiatives.MDOT recognizes that while the financing for this PEL study is relatively conventional, there will be a need to consider and develop innovative financing techniques to advance the construction phase of this effort. MDOT will consider and evaluate potentially useful financing schemes, including but not limited to pursuing additional grant funding, TIFIA, public-private-partnerships, and more during the PEL phase to lay a sturdy foundation for supporting the eventual construction in this project area.

5. Administration Priorities and Departmental Strategic Plan Goals

5.1. Safety

This project will provide substantial safety benefits by:

- **Identifying Safety Issues and Risks Within the Project Area |** The proposed PEL will include a comprehensive traffic analysis which will analyze all available safety data within the project limits to identify known safety issues and risks.
- **Developing Recommendations for Safety Issue Mitigation |** Although the PEL will not develop a Preferred Alternative for reconstruction of the I-68 Viaduct, it will identify existing safety issues and risks to be addressed throughout the remaining steps in the project development process including NEPA, Preliminary Engineering, and Final Design.
- **Determining the Impact on the Overall Safety of the Traveling Public |** This project will evaluate potential safety issues that the traveling public might encounter during later phases of the project to anticipate potential risks in need of mitigation.

5.2. Climate Change and Sustainability

This project will consider climate change and environmental justice, both in the planning stages and in project delivery, by:

- **Quantifying the Impact of Transportation Emissions in the Project Area |** This project will support a robust traffic analysis that will collect and process data on the number of vehicles, miles traveled (VMT), and hours traveled (VHT) within the project area. This step will allow MDOT to quantify the total impact of transportation on the air quality and harmful emissions within the Project Area, a critical step which will inform congestion mitigation and air quality improvement measure taken during later stages of project development.
- **Identifying Conceptual Alternatives to Improve Resiliency to Climate Change |** The PEL supported by this project will investigate and identify means to improve the resiliency of the existing I-68 Viaduct, with particular consideration of the route's location over the Potomac River and its status as an Evacuation Route for the surrounding area.
- **Advancing the Sustainability Principles and Goals of Other Planning Efforts |** This PEL will leverage the insights, objectives, and data produced by other state and local initiatives to support resiliency to climate change. Examples include Maryland's Greenhouse Gas Emissions Reduction Act (GGRA), annual MDOT Performance Reports, the 2022 Climate Solutions Now Act (CSNA), the 2023 Climate Pollution Reduction Plan (with the most aggressive GHG reduction goals in the nation), Maryland's Zero Emission Electric Vehicle Infrastructure Council (ZEEVIC), and Cumberland's role as a Short Trip Opportunity Area.

5.3. Equity

This project will include equity assessments to evaluate whether a project will create proportional impacts and removes transportation related disparities to all populations in a project area by:

- **Developing a Dynamic, Equity-Based Outreach and Public Involvement Strategy |** The Viaduct at the center of this project is a compelling example of the transportation industry's historical role in negatively impacting equity, access, connectivity, and environmental justice issues. The PEL supported by this application will develop a thoughtful, dynamic outreach strategy that prioritizes equitable access to transportation for the region, and equitable consideration of the priorities of local residents, business owners, and stakeholders, to include enhanced opportunities for economic development, tourism, and recreation.
- **Prioritizing Improvements in Access to Transit and Community Resources |** One legacy of the I-68 Viaduct construction is displacement. Residents that live south of the I-68 Viaduct in either Maryland or West Virginia lack access to transit stops located north of the corridor, as well as critical employment centers and recreational facilities. This project will support a PEL that prioritizes improvements in access for all transportation network users.

5.4. Workforce Development, Job Quality, and Wealth Creation

This project represents a critical first step towards the initiation of what will likely be a multi-hundred-million-dollar construction project which will provide good-paying jobs with a free and fair choice to join a union. MDOT and the whole State of Maryland are committed to protecting and enforcing collective bargaining rights and agreements. More than 30,000 Maryland State Employees have collective bargaining rights, and the State maintains a central repository of information to support and document bargaining units, representatives, and agreements.

In addition, if this project receives the requested BIP Planning funds and eventually leads to the reconstruction of the I-68 Viaduct, MDOT has prepared a complete appendix which directly addresses all of FHWA's Considerations to Support Good Paying Jobs and Strong Labor Standards.

Table 5-1 | Supporting Good-Paying Jobs and Strong Labor Standards Summary

Consideration	Strategy
Project labor agreements	A recent statewide Executive Order empowers MDOT to utilize Project Labor and Community Benefit Agreements (CBA) for transportation projects such as the I-68 Viaduct.
Local and economic hiring preferences	MDOT's work with the national Workforce Hub initiative and SHA's On-the-Job Training Program demonstrate commitment to enhancing diversity and equal employment.
Registered apprenticeships	This Project is an opportunity for the agency to expand opportunities with the MD Department of Labor, State Apprenticeship and Training Fund, Maryland Transit Administration, as well as MDOT's own Transportation Apprenticeship Workgroup and On-the-Job Training Program.
Training and placement programs	This project aims to utilize SHA's On-the-Job Training Program to foster equal employment opportunities, and increase participation of underrepresented groups, with a commitment to support workers in the construction phase.

Consideration	Strategy
Free and fair choice to join a union	Maryland's commitment to fair labor, evidenced by its high union membership rate and robust collective bargaining protections, is underscored by the state's recent Executive Order, empowering MDOT to utilize PLAs and CBAs.
Supportive services and cash assistance to address systemic barriers to employment	MDOT partnerships with the MD Department of Labor aim at providing support services and training opportunities for electrical workers involved in building Maryland's infrastructure.
Workforce programs that serve underrepresented groups.	Upon completion of the study, and pending federal awards, MDOT will collaborate with partners in Allegany County to secure PLAs and CBAs.
Comprehensive plan to promote equal opportunity	MDOT and its partners in this project such as the Cumberland Area MPO are Equal Employment Opportunity employers, compliant with state and federal regulations.
Create good-paying jobs with the free and fair choice to join a union	MDOT operates one of the most established Minority Business Enterprise programs in the country, ensuring equitable participation of small, minority-, and women-owned firms in both state and federally-funded projects, in accordance with state DBE goals.

6. DOT Priority Selection Considerations

In the absence of the Planning grant funding requested in this application, MDOT will be unable to fund and complete the PEL Study described in this application. The existing condition of several structures support the Viaduct, especially NBI # 100000010096010, is such that MDOT will have to initiate a full replacement of the existing deck within the next five years unless a viable alternative has been identified. Completion of the proposed PEL will be the first step in that alternative identification process, so absent BIP funding, MDOT will not have the time available to seek additional funding to initiate the PEL.

If MDOT does receive the funding requested, this project will support a PEL for a multi-mile stretch of interstate that will need to be completely replaced, realigned, and/or rehabilitated at an estimated cost well in excess of $100 million. **Therefore, the funding requested in this application will support beginning and completing the planning process for a Large Bridge Project that will replace, rehabilitate, preserve, or protect a bridge in poor condition on the NBI.**

A Appendices

A.1 Considerations to Support Good-Paying Jobs and Strong Labor Standards

MDOT is committed to supporting and upholding goo-paying jobs and strong labor standards. Although this project requests funding for a Planning and Environmental Linkages (PEL) study, this project is very likely to lead to a major construction project including multiple bridges, several interstate, local, and arterial roads, heavy bridge and pavement construction methods, traffic and environmental analyses, and a variety of other planning, engineering, and project management functions.

This project is an opportunity for MDOT and its state, federal, and local partners to renew their commitments to strong labor programs in Western Maryland, an area where historical industrialization, rural transportation networks, and untapped economic development opportunities all converge. The table below provides an overview of MDOT's commitments to support good paying jobs and strong labor standards throughout all phases of this project, and especially, where applicable, during the construction phase that is likely to follow the PEL study proposed in this application.

Rethinking the I-68 Viaduct: A Plan to Reconnect Cumberland

Table A-6-1 | Considerations to Support Good-Paying Jobs and Strong Labor Standards

Consideration	Strategy
The applicant has adopted or intends to adopt the use of project labor agreements in the overall delivery and implementation of the project.	This project will leverage the resources committed by Governor Wes Moore's 2023 Executive Order to promote workforce development in state public works projects. The order empowers MDOT to utilize Project Labor Agreements and/or Community Benefits Agreements for certain transportation projects. *Rethinking the I-68 Viaduct* will be an excellent opportunity to initiate the planning for development of effective PLAs and CBAs during the implementation stage of this project.
The applicant has adopted or intends to adopt the use of local and economic hiring preferences in the overall delivery and implementation of the project, subject to all applicable State and local laws, policies, and procedures.	MDOT is fully supportive of Maryland's designation as a Workforce Hub. Announced by President Biden in November, Hub collaborators, including MDOT, committed to a series of pathways to expand good-paying jobs. MDOT committed to assessing all projects above $20 million—which the construction phase of this project will undoubtedly exceed—to "determine workforce investments and policies, including PLAs or other strong labor standards, that can be implemented." The State Highway Administration's **On-the-Job Training Program** helps contractors develop full journeyperson status for minorities, females, the disadvantaged and disabled individuals in the highway construction industry. It helps individuals gain skills in crafts. It helps employers maintain or exceed the proposed workforce representation goals in their contracts. It thus meets the primary objective of equal employment opportunity. This effort aids the contractor's affirmative action initiatives as described in their contracts and promotes equal opportunity in the highway construction industry. The Maryland Department of Transportation State Highway Administration (MDOT SHA) requires full utilization of all training and skill-improvement opportunities to assure the increased participation of minority groups, the disadvantaged and women in all phases of the highway construction industry.
The applicant has adopted or intends to adopt the use of registered apprenticeships in the overall	This project's scale and complexity provides multiple engagement opportunities to give apprentices in training part of MDOT's Transportation Apprenticeship Workgroup a breadth of new valuable experience. Through its On-the-Job Training program, MDOT actively supports construction industry workers gaining skills in their respective crafts to advance through their

Consideration	Strategy
delivery and implementation of the project.	career and craft certification standards. The project also provides new openings for planning and engineering apprenticeships within MDOT SHA. • Renewed commitments with MDOT's apprenticeship program development and implementation through the Workgroup allows the strong partnership with the Maryland Department of Labor to continue to "assess and better understand the role of apprenticeship in the construction, maintenance, and operation of our State's transportation systems." Upon concluding its first year, the Workgroup established apprenticeship programs across five of MDOT's modal units: Transportation Secretary's Office, State Highway Administration, Port Administration, Transit Administration, and Transportation Authority. Apprenticeship programs are also in place IT Cybersecurity, Heavy Equipment Maintenance Technicians, Electric Vehicle Mechanics, and Bus Maintenance Mechanics. • The State Apprenticeship and Training Fund (Fund) law provides that contractors and certain subcontractors performing work on certain public work contracts are required to make contributions toward apprenticeship (§17-601 through 17-606, State Finance and Procurement, Annotated Code of Maryland). Contractors and subcontractors have three options where they can choose to make their contributions: (1) participate in a registered apprenticeship training program; (2) contribute to an organization that has a registered apprenticeship training program; or (3) contribute to the State Apprenticeship and Training Fund. The Maryland Transit Administration zero-emission bus (ZEB) plan seeks to convert MTA's bus fleet to 50% net-zero vehicles by 2030. As required by Senate Bill 61 (2022), MTA is actively developing and implementing workforce development programs to prepare its workforce for electrification. MTA plans to maintain its current workforce throughout the transition to a ZEB fleet through a training and retraining program. This program is under development and draws on best practices from large transit agencies operating ZEBs, industry groups, and vehicle manufacturers. The MTA has coordinated with the local chapter of the Amalgamated Transit Union (ATU), the International Leadership and Training Center (ILTC), and other U.S. transit agencies that have begun training their workforce

Consideration	Strategy
	to support ZEB maintenance to ensure that MTA's training program incorporates best practices from peer deployments and is developed with the needs of MTA's workforce in mind. Training and Standard Operating Procedure (SOP) development is a significant investment within the overall fleet transition plan, as the new fleet will impact thousands of employees and multiple departments within the MTA. **As a partner agency within MDOT, SHA will be monitoring the development of this program, ready to deploy lessons learned and adopt successful strategies in developing additional training programs.**
The applicant will provide training and placement programs for underrepresented workers in the overall delivery and implementation of the project.	The construction phase of this project would leverage the State Highway Administration's **On-the-Job Training Program** to help contractors develop full journeyperson status for minorities, females, the disadvantaged and disabled individuals in the highway construction industry. It helps individuals gain skills in crafts. It helps employers maintain or exceed the proposed workforce representation goals in their contracts. It thus meets the primary objective of equal employment opportunity. This effort aids the contractor's affirmative action initiatives as described in their contracts and promotes equal opportunity in the highway construction industry. The Maryland Department of Transportation State Highway Administration (MDOT SHA) requires full utilization of all training and skill-improvement opportunities to assure the increased participation of minority groups, the disadvantaged and women in all phases of the highway construction industry. While this grant would support a study, SHA would commit to supporting underrepresented workers and job opportunities in a future bridge replacement project and that would include potential Project Labor Agreements.
The applicant will support free and fair choice to join a union in the overall delivery and implementation of the project by investing in workforce development services offered by labor-management	Maryland maintains a strong commitment to fairness and dignity in its labor practices. According to the Bureau of Labor Statistics (BLS), union workers, on average, earn more than their non-union counterparts. Maryland is a strong union state, ranking in the top ten nationally in workforce union membership rate. States, like Maryland, with strong unionization maintain higher-on-average wages than states with lower unionization rates.

Consideration	Strategy
training partnerships or setting expectations for contractors to develop labor-management training programs.	Maryland maintains robust collective bargaining access and protections for public sector workers. Md. Code Ann., State Personnel and Pensions § 3-301:306 provides state employees the right to form, join, or participate in unions, maintain fair union representation before the State, engage in concerted activities for the purposes of collective bargaining, and be free from undue interference or coercion in the exercise of their rights. As new job and wealth-building opportunities are created, including by federally funded infrastructure projects, will continue to lead the nation in labor partnerships. This project will leverage the resources committed by Governor Wes Moore's 2023 Executive Order to promote workforce development in state public works projects. The order empowers MDOT to utilize Project Labor Agreements and/or Community Benefits Agreements for certain transportation projects. ***Rethinking the I-68 Viaduct*** will be an excellent opportunity to initiate the planning for development of effective PLAs and CBAs during the implementation stage of this project.
The applicant will provide supportive services and cash assistance to address systemic barriers to employment to be able to participate and thrive in training and employment, including childcare, emergency cash assistance for items such as tools, work clothing, application fees and other costs of apprenticeship or required pre-employment training, transportation and travel to training and work sites, and services aimed at helping to retain underrepresented groups such as mentoring, support groups, and peer networking.	MDOT understands that for workers of all backgrounds and skills to access well-paying and family-supporting jobs in the infrastructure industry, considerations must be made to ensure individuals of all backgrounds and means have the support they need to legitimately access the job opportunity. In partnership with the Maryland Department of Labor, MDOT is seeking approximately $300,000 in funding from the Ride and Drive Electric program, administered by the Joint Office, for the Maryland Electric Vehicle (EV) Jobs Collaborative, a multimember workforce partnership focused on supporting the electrical workers who will play a vital role in building out Maryland's EV charging infrastructure. The Collaborative will: 1. Identify and engage communities and job seekers with the most persistent barriers to employment, 2. Provide individualized supportive services to facilitate enduring connections to work and training, and 3. Provide high quality job training programs that align with the skilled labor needs of EV charging installation projects.

Consideration	Strategy
	Partnerships and our commitment to wrap-around-services will continue to be prioritized by MDOT, including in future BIP construction awards, for this project.
The applicant has documented agreements or ordinances in place to hire from certain workforce programs that serve underrepresented groups.	With the completion of the PEL study, contingent on a federal planning awards, MDOT will work closely with its partners in the construction industry and in the non-governmental organization space in Allegany County to secure such agreements. This includes MDOT's consideration of PLAs and CBAs, as authorized by Governor Wes Moore, for infrastructure projects with at least $20 million in state funding committed.
The applicant participates in a State/regional/local comprehensive plan to promote equal opportunity, including removing barriers to hire and preventing harassment on work sites, and that plan demonstrates action to create an inclusive environment with a commitment to equal opportunity, including: **a. Affirmative efforts to remove barriers to equal employment opportunity (EEO) above and beyond complying with Federal law;** **b. Proactive partnerships with the U.S. Department of Labor's (DOL) Office of Federal Contract Compliance Programs (OFCCP) to promote compliance with E.O. 11246 EEO requirements;**	MDOT participates in the development of a long-range statewide transportation plan, consistent with both state and federal laws (§ 2-103.1. (d) of the Maryland Code and 23 CFR § 450.216) of the US Department of Transportation Code for the Federal Highway Administration. The long-range transportation plan is a 20-year policy plan, expressed with goals and objectives to meet the federal planning factors, and updated every 4-5 years. MDOT recently completed the update of the 2050 Maryland Transportation Plan (MTP), also known as "the Playbook." The Playbook guides transportation investments in its policies, plans, programs and projects. The Cumberland Area Metropolitan Planning Organization (CAMPO) is the federal and state designated regional transportation planning body for the urbanized area in western Maryland; and includes the Cities of Cumberland and Frostburg, and Allegany County and Mineral County, West Virginia. CAMPO is responsible for the transportation planning process for the region. This is accomplished primarily through three related activities: the Unified Planning Work Program; the Transportation Improvement Program; and the Cumberland Area Long Range Transportation Plan. MDOT and its modal agency, SHA, are Equal Employment Opportunity employers. The State of Maryland has the Office of Statewide Equal Employment Opportunity that is responsible for enforcing the State of Maryland government's Equal Employment Opportunity Program. The State of Maryland has an EEO Officer and MDOT has an EEO policy, EEO Officer, and SHA has regional "district" EEO officers. These Maryland and MDOT EEO policies and programs indicate that both the State of Maryland and MDOT promote equal opportunity, including removing barriers to hire and preventing harassment on work sites, and that plan demonstrates action to create an

Consideration	Strategy
c. No discriminatory use of criminal background screens and affirmative steps to recruit and include those with former justice involvement, in accordance with the Fair Chance Act and equal opportunity requirements; **d. Efforts to prevent harassment based on race, color, religion, sex, sexual orientation, gender identity, and national origin;** **e. Training on anti-harassment and third-party reporting procedures covering employees and contractors; and** **f. Maintaining robust anti-retaliation measures covering employees and contractors.**	inclusive environment with a commitment to equal opportunity, including:(a) affirmative efforts to remove barriers to EEO, (b) proactive partnerships with labor (see below), (c) no discriminatory use of criminal background screens and affirmative steps to recruit, (d) efforts to prevent harassment, (e) training on anti-harassment and 3rd party reporting procedures, and (f) maintaining robust anti-retaliation measures. The Cumberland Area MPO (CAMPO), run by Allegany County, are all Equal Employment Opportunity (EEO) Employers. The Cumberland Urbanized Area Transportation Improvement Program, The CAMPO TIP is certified and developed in accordance with all applicable requirements of: 23 U.S.C. 134, 49 U.S.C. 5303 and 23 CFR 450 C; Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 200d-1) and 49 CFR 21; 49 U.S.C. 5332,; Section 1101(b) of the Fixing America's Surface Transportation Act (FAST Act - P.L. 114-94) and 49 CFR 26; 23 CFR 230; (6) The provisions of the American with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27,37 and 38; The Older Americans Act, as amended (42 U.S.C. 6101); 23 U.S.C. 324; Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794); AND 49 CFR 27.
The applicant has taken or intends to take other actions related to the project to create good-paying jobs with the free and fair choice to join a union and incorporate strong labor standards.	MDOT maintains a robust, multi-part Minority Business Enterprise (MBE) Program that includes: the Disadvantaged Business Enterprise (DBE) Program, the Airport Concessions Disadvantaged Business Enterprise (ACDBE) Program, and Small Business Enterprise (SBE) Program(s). The program was established in 1978 and is believed to be the oldest in the country. Its purpose is to ensure that small, minority- and women-owned firms can participate fully and fairly in both state and U.S. DOT federally funded projects. In 2014, the SBE program was introduced as a race-and-gender neutral program designed to provide contracting opportunities to small businesses on U.S. DOT federally aided projects with SHA, MTA, and Maryland Aviation Administration (MAA). MDOT administers both the State of Maryland MBE participation goal, as well as the DBE participation goal for contracts that receive assistance from USDOT. MDOT-Planning has proposed the following DBE Goal for FFYs

Consideration	Strategy
	2022-2024 for the Unified Planning Work Programs (UPWPs) of each Metropolitan Planning Organizations (MPOs), USDOT funded projects.

SHA FFYs 2023-2024	MAA DBE FFYs 2020-2022	MAA ACDBE FFYs 2021-2023	MAA ACDBE FFYs 2021-2023	MTA FFYs 2023-2025	MDOT-TSO Planning FFYs 2022-2024
Overall 26.39%	Overall 27.5%	Non-Car Rental Overall 30.32%	Car Rental Overall 3.56%	Overall 30.0%	Overall 26.2%
Race Conscious 22.90%	Race Conscious 26.11%	Race Conscious 25.80%	Race Conscious 3.35%	Race Conscious 26.98%	Race Conscious 19.2%
Race Neutral 3.49%	Race Neutral 1.39%	Race Neutral 4.52%	Race Neutral 0.21%	Race Neutral 3.02%	Race Neutral 7.0%

The applicant has not yet taken actions related to the project to create good-paying jobs with the free and fair choice to join a union and incorporate strong labor standards but will do so before beginning construction of the project. (Summary should describe why actions to improve good-paying jobs and strong labor standards have not been considered yet, such as stage of project development.)	**MDOT commits to fulfilling the same high standards of labor protection in the implementation phase of this project that it maintains in every project. Because this project is in the concept development stage, MDOT's ability to take specific actions related to this project have been limited to date. However, if this project is funded, MDOT commits to upholding and fulfilling the following:** • MDOT has an agreement with the Maryland Department of Labor to develop and provide apprenticeship programs. MDOT recently updated the agreement for the Maryland Highway or Capital Transit Construction Skills Training Program lead by the MD DOL Division of Workforce Development and Adult Learning to prepare for future workforce opportunities including future planned transportation projects. • The State of Maryland pays prevailing wage for state funded construction contracts. In government contracting, a prevailing wage is defined as the hourly wage, usually benefits and overtime, normally paid to the majority of workers, laborers, and mechanics within a particular

Consideration	Strategy
	area. Prevailing wages are established by regulatory agencies, such as government, for each public works trade and occupation, as well as by State Departments of Labor or their equals.
The applicant has not taken actions related to the project to improving good-paying jobs and strong labor standards and will not take those actions under this award.	This statement is not applicable to this project, as MDOT **will** commit to upholding and fulfilling the commitments itemized throughout this table in implementing this project.

A.2 Detailed Project Schedule

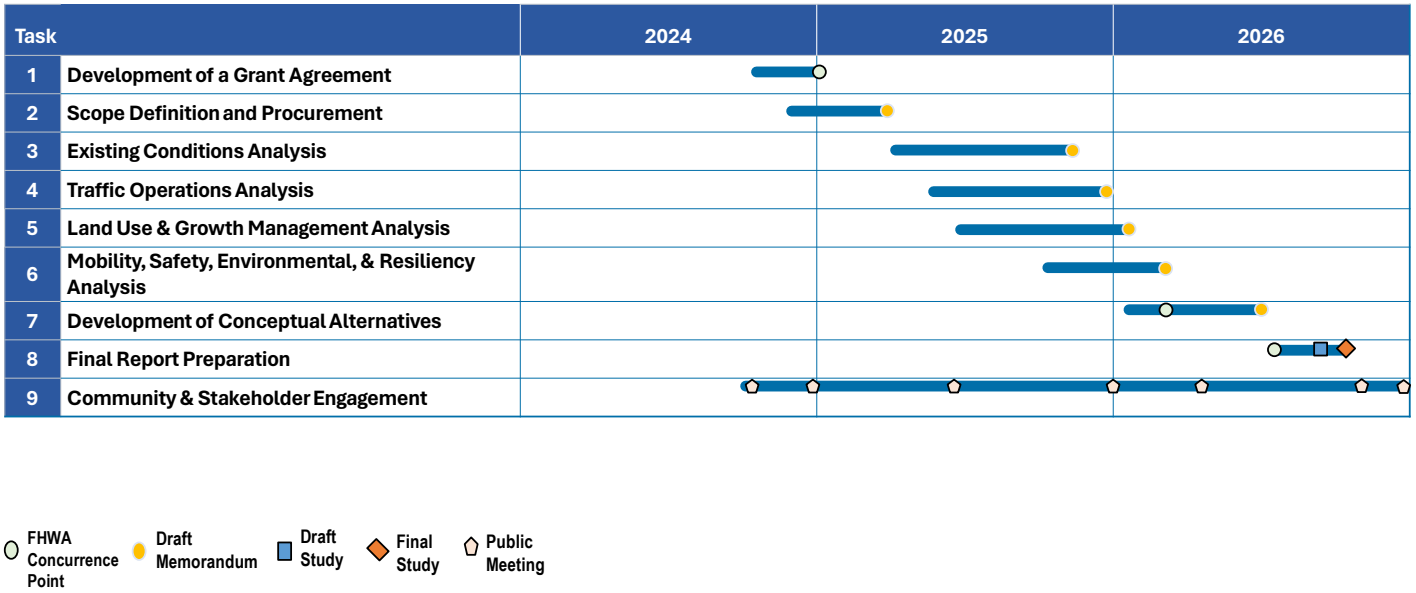
MDOT has developed the following schedule to reflect the expected completion of major milestones in this PEL study.

Table A-6-2 | Project Schedule Milestone Dates

	Task	Timeline
1	Development of a Grant Agreement*	August 2024 – January 2024
2	Scope Definition and Procurement	October 2024 – April 2025
3	Existing Conditions Analysis	April 2025 – October 2025
4	Traffic Operations Analysis	June 2025 – December 2025
5	Mobility, Safety, Environmental, & Resiliency Analysis	July 2025 – February 2026
6	Land Use & Growth Management Analysis	September 2025 – March 2026
7	Development of Conceptual Alternatives*	January 2026 – June 2026
8	Final Report Preparation*	June 2026 – October 2026
9	Community & Stakeholder Engagement	August 2024 – October 2026

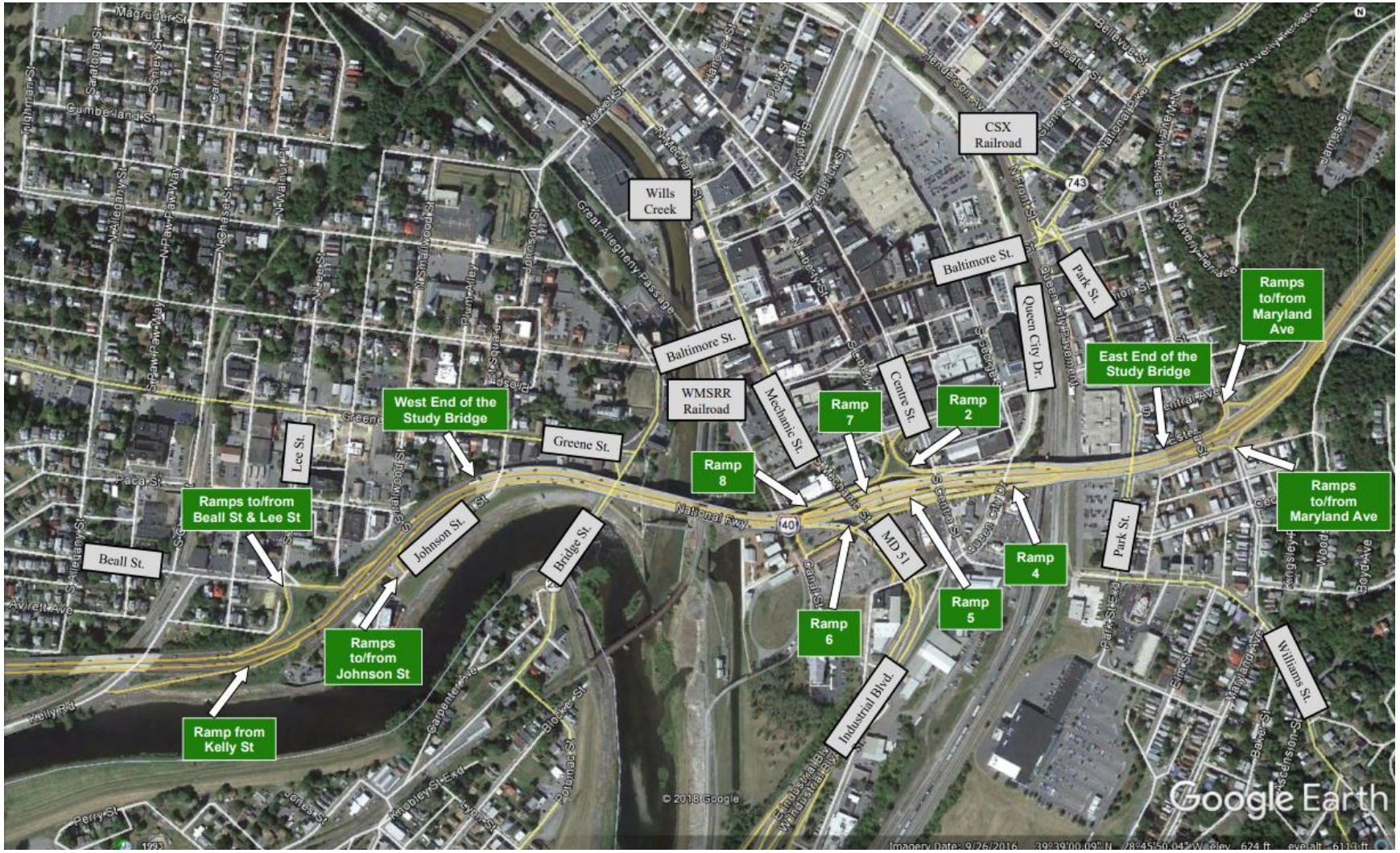
**Includes an FHWA Concurrence Point*

Figure A-6-1 | Project Schedule Chart



A.3 Detailed Project Location Map

Figure A-2 | Ramps, Bridges, and Notable Streets Within the Project Area



A.4 Accident Data Analysis for Project Location

44534

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Office of Traffic and Safety
Traffic Development & Support Division

Accident Data/Analysis Request Form

Request Date: February 15, 2024

Location:
County: Allegany
Town/Place: Cumberland
Route: I-68 (MD 220 to MD 51)
Log Mile:
☐ at
☒ from LM 10.36
to LM 13.66

Purpose Needed:
☐ Signal Study ☐ Surface Evaluation ☐ Pavement Marking Study
☐ Sign Study ☐ Lighting Study ☒ General Traffic Study
☒ Other (Explain) FHWA Grant

Originally Requested By: Christy Bernal
When Needed: ASAP

Work Requested:
☒ Accident Summary ☒ Accident History ☒ Accident Rates
☒ Study Worksheet ☒ Collision/Line Diagram ☐ Other (Explain in Remarks)

☐ One Year ☐ Two Years
☐ Three Years ☐ Combined Years
☒ Specific Date(s) 2018 to 2022

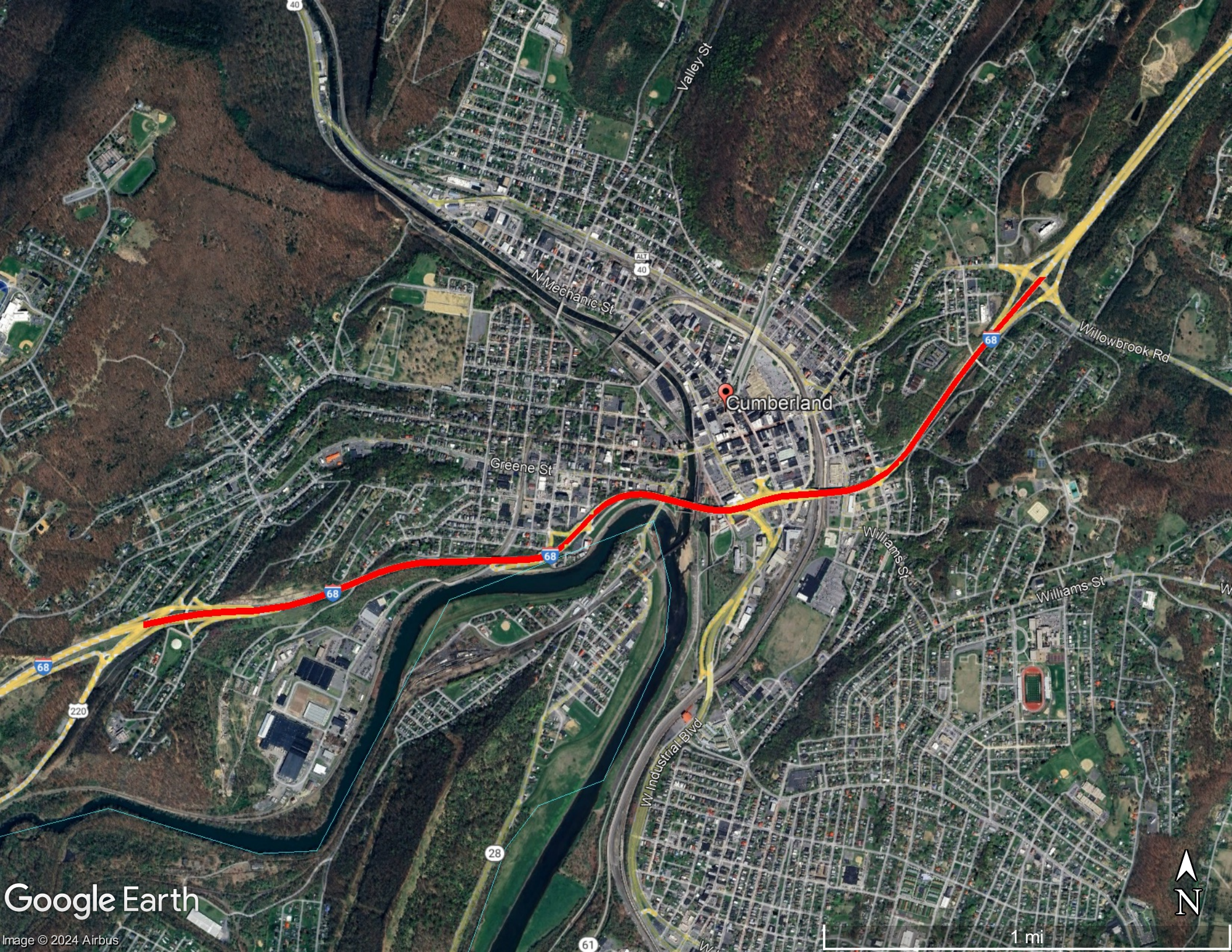
Additional Instructions or Remarks: FMIS # SP124B49

	AADT	2018	2019	2020	2021	2022
MP	12.38-12.69	49,700	50,000	40,300	52,200	52,700
	12.69-13.03	42,200	42,500	34,250	38,000	38,300

Requested by: Rana Shams
Title: Chief
Department: OPPE - TFAD
District:
Phone:
Fax:

Please indicate map coordinates of location to be studied.
ADC Map Book MD General Hwy. Grid Map

Send to: Traffic Development & Support Division, 7491 Connelley Drive
Hanover, Maryland 21076
Phone: (410) 787-5831
Fax: (410) 582-9469


Valley St
N Mechanic St
Cumberland
Willowbrook Rd
Greene St
Williams St
Williams St
W Industrial Blvd
68
68
68
220
28
61
40
ALT 40
Google Earth
Image © 2024 Airbus
N
1 mi

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Study Worksheet Output rev. 10/2017-1

Name: Matthew Jagg

Date: 02/15/2024

Location: I-68 (National Fwy) From: US 220 (McMullen Hwy) To: MD 639 (Willowbrook Rd) Logmiles: From 11.138 To 13.66 Length: 2.52

County: Allegany, D6 Period: January 01, 2018 To December 31, 2022 Note:

Type Controls: 1U-100%

*** Significantly Higher than Statewide**

YEAR >>	2018	2019	2020	2021	2022	Total	Study	StateWd
Fatal	0	0	1	0	0	1	0.5	0.5
No. Killed	0	0	1	0	0	1		
Injury	4	2	6	7	8	27	13.4	26.6
No. Injured	4	3	9	11	14	41		
Prop. Damage	2	10	23	18	13	66	32.7	72.5
Total Crashes	6	12	30	25	21	94	46.6	99.6
Severity Index	20	16	58	43	44	Avg 36		
RATE	14.3	28.5	88.0	60.1	50.0			
WAADT	45516	45804	36912	45190	45613			
VMT millions	41.9	42.2	34.1	41.6	42.0	201.7		
Opposite Dir.	0	0	0	0	0	0	0.0	0.4
Rear End	3	4	6	3	3	19	9.4	47.9
Sideswipe	0	2	4	6	4	16	7.9	17.1
Left Turn	0	0	0	0	0	0	0.0	0.1
Angle	0	0	0	0	0	0	0.0	0.4
Pedestrian	0	0	0	0	0	0	0.0	0.2
Parked Veh.	0	1	0	2	0	3	1.5 *	0.1
Fixed Object	1	5	17	11	12	46	22.8 *	16.3
Other	2	0	3	3	2	10	5.0	3.8
U-Turn	0	0	0	0	0	0		
Backing	0	0	0	0	1	1		
Animal	1	0	2	1	1	5		
Railroad	0	0	0	0	0	0		
Fire / Expl.	0	0	0	1	0	1		
Overturn	1	0	0	0	0	1		
Truck Related	1	4	10	6	6	27	13.4 *	7.9
Night Time	4	3	9	1	8	25	27 %	30 %
Wet Surface	1	2	12	5	3	23	24 %	21 %
Alcohol	2	0	0	1	2	5	5 %	8 %
Intersection	0	0	0	0	0	0		
Total Vehicles	9	22	47	38	30	146		
Total Trucks	1	5	10	6	6	28		
Truck %	11.1	22.7	21.3	15.8	20.0	19.2		

AADT's Rates are provided from: Requester & MDOT Annual Average Daily Traffic (AADT) Locator.

Comments:

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Summary Output rev. 10/2017-1

Name: Matthew Jagg

Date: 02/15/2024

Location: I-68 (National Fwy) From: US 220 (McMullen Hwy) To: MD 639 (Willowbrook Rd) Logmiles: From 11.138 To 13.66 Length: 2.52

County: Allegany, D6 Period: January 1, 2018 To December 31, 2022 Note:

SEVERITY	FATAL	INJURY	P-DAMAGE	TOTAL
Accidents	1	27	66	94
Veh Occ	1	41		
Pedestrian				

AVG Severity Index: 36

DAY OF THE WEEK

SUN	MON	TUE	WED	THU	FRI	SAT	UNK
12	11	14	17	18	14	8	

MONTH OF THE YEAR

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
7	6	5	7	13	8	9	8	9	11	6	5	

CONDITION	DRIVER	PED
Normal:	116	
Alcohol:	5	
Other:	22	

TIME	12	01	02	03	04	05	06	07	08	09	10	11	UNK
AM:		3	3	3	3	5	4	7	4	6	1	4	
PM:	6	7	7	6	5	4	4	1	4	1	3	3	

VEHICLES INVOLVED PER ACCIDENT

1	2	3	4	5	6+	UNK	TOTAL
54	32	6	1		1		146

VEHICLE TYPE

2	Motorcycle/Moped	19	Tractor Trailer
84	Passenger Vehicle		Passenger Bus
9	Sport Utility Veh		School Bus
7	Pick-Up Truck	5	Emergency Veh
9	Trucks (2+3 axles)	65	Other Types

SURFACE

23	Wet
58	Dry
7	Sno/Ice
	Mud
6	Other

MOVEMENTS

NORTH			SOUTH			EAST			WEST		
LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
							72	1		59	

OTHER MOVEMENTS 14

PROBABLE CAUSES

	Influence of Drugs	1	Improper Lane Change
3	Influence of Alcohol		Improper Backing
	Influence of Medication		Improper Passing
1	Influence of Combined Subst.		Improper Signal
	Physical/Mental Difficulty	1	Improper Parking
2	Fell Asleep/Fainted, etc.		Passenger Interfere/Obstruct.
10	Fail to give full Attention		Illegally in Roadway
	Lic. Restr. Non-compliance		Bicycle Violation
2	Fail to Drive in Single Lane		Clothing Not Visible
	Improper Right Turn on Red		Sleet, Hail, Freezing Rain
	Fail to Yield Right-of-way		Severe Crosswinds
	Fail to Obey Stop Sign		Rain, Snow
	Fail to Obey Traffic Signal	1	Animal
1	Fail to Obey Other Control		Vision Obstruction
	Fail to Keep Right of Center		Vehicle Defect
	Fail to Stop for School Bus		Wet
	Wrong Way on One Way		Icy or Snow Covered
1	Exceeded Speed Limit		Debris or Obstruction
	Operator Using Cell Phone		Ruts, Holes or Bumps
	Stopping in Lane Roadway		Road Under Construction
5	Too Fast for Conditions		Traffic Control Device Inop.
	Followed too Closely		Shoulders Low, Soft or High
	Improper Turn	66	Other or Unknown

COLLISION TYPES		FATAL	INJURY	PROP	TOTAL
Opposite Dir	Related:				
	UnRelated:				
Rear End	Related:				
	UnRelated:	1	7	11	19
Sideswipe	Related:				
	UnRelated:		5	11	16
Left Turn	Related:				
	UnRelated:				
Angle	Related:				
	UnRelated:				
Pedestrian	Related:				
	UnRelated:				
Parked Vehicle	Related:				
	UnRelated:		2	1	3
Other Collision	Related:				
	UnRelated:		1	9	10

F	Bridge	01			
I	Building	02			
X	Culvert/Ditch	03			
E	Curb	04			
D	Guardrail/Barrier	05	10	27	37
	Embankment	06		1	1
O	Fence	07			
B	Light Pole	08			
J	Sign Pole	09		1	1
E	Other Pole	10			
C	Tree/Shrubbery	11			
T	Contr. Barrier	12		1	1
S	Crash Attenuator	13	2	4	6
	Other Fixed Object				

WEATHER

62	Clear / Cloudy
	Foggy
22	Raining
5	Snow / Sleet
5	Other

ILLUMINATION

57	Day
9	Dawn/Dusk
24	Dark - Lights On
1	Dark - No Lights
3	Other

TOTALS

18-22	94

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC History Output rev. 10/2023-1 - Combined Year Listing

Name: Matthew Jagg

Date: 02/15/2024

Location: I-68 (National Fwy) From: US 220 (McMullen Hwy) To: MD 639 (Willowbrook Rd) Logmiles: From 11.138 To 13.66 Length: 2.52

County: Allegany, D6 Period: January 01, 2018 To December 31, 2022 Note:

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
IS68												
11.140		10062019	Property	12P	Day	Dry		06	FXOBJ	ES	--	Too fast for conditions
11.140		03192022	3 Injured	08P	Night	Dry			RREND	WS	WS	Other or Unknown
11.320		04242019	Property	03P	Day	Dry			RREND	WS	WS	Fail to give full attention
11.320		06272019	2 Injured	04P	Day	Dry			RREND	WS	WS	Other or Unknown
11.320		05202020	Property	01A	Night	Wet		05	FXOBJ	WS	--	Under influence of alcohol
11.320		06112020	Property	04P	Day	Dry			RREND	WS	WS	Other or Unknown
11.320		06252020	Property	02P	Day	Wet			RREND	WS	WS	Other or Unknown
11.320		03032021	2 Injured	08A	Day	Dry			PARKD	WS	WP	Improper parking
11.320		06292021	1 Injured	11A	Day	Dry			PARKD	WS	WP	Fail to give full attention
11.320		09012021	Property	06A	Day	Wet		05	FXOBJ	WS	--	Other or Unknown
11.430		08162018	1 Injured	04P	Day	Dry			RREND	ES	ES	Other or Unknown
11.430		07202020	Property	11A	Day	Dry			SDSWP	ES	ES	Fail to drive in single lane
11.450		05292019	1 Injured	02P	Day	Dry			SDSWP	ES	ES	Other or Unknown
11.450		10012022	1 Injured	04P		Wet		05	FXOBJ	ES	--	Other or Unknown
11.500		10072019	Property	09A	Day	Wet		05	FXOBJ	WS	--	Other or Unknown
11.500		08152021	Property	06P	Day	Dry		05	FXOBJ	WS	--	Other or Unknown
11.500		11212021	Property	02P	Day	Dry			OTHER	WS	--	Other or Unknown
11.520		04262019	Property	01P	Day	Wet		05	FXOBJ	ES	--	Other or Unknown
11.520		05282020	Property	05P	Day	Wet		05	FXOBJ	ES	--	Other or Unknown
11.520		12242020	Property	02P	Day	Wet		05	FXOBJ	ES	--	Other or Unknown
11.520		02102021	Property	06A	Day	Snow		05	FXOBJ	ES	--	Other or Unknown
11.520		01182022	3 Injured	04P	Day	Dry			RREND	ES	ES	Other or Unknown
11.520		05062022	Property	12P	Day	Wet		05	FXOBJ	ES	--	Other or Unknown
11.640		08262020	Property	07A	Day				OTHER	ES	--	Other or Unknown
11.640		11182020	Property	10P		Dry			OTHER	ES	--	Other or Unknown
11.680		07292022	3 Injured	12P	Day	Dry		05	FXOBJ	ES	--	Other or Unknown
11.750		10292020	Property	07A	Night	Wet			RREND	ES	ES	Other or Unknown
11.930		04272022	Property	10A	Day	Dry		12	FXOBJ	ES	--	Other or Unknown
12.000		10262018	Property	04A	Night	Dry			OTHER	ES	--	Other or Unknown
12.020		10292020	Property	01P	Day	Wet		05	FXOBJ	WS	--	Other or Unknown
12.130		09022021	Property	08A	Day	Dry			SDSWP	WS	WS	Fail to give full attention
12.130		02172022	Property	07A	Day	Dry			SDSWP	WS	WS	Other or Unknown
12.140		04132018	1 Injured	06A	Day	Dry	☐		RREND	WS	WS	Other or Unknown
12.140		05022021	Property	01P	Day	Dry			OTHER	WS	--	Other or Unknown
12.150		04292020	1 K, 3 I	05P	Day	Dry			RREND	ES	ES	Fail to obey other control
12.150		12202021	Property	05A	Day	Dry			RREND	ES	ES	Other or Unknown

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
12.160		10022020	1 Injured	11P	Night	Dry			SDSWP	WS	WS	Other or Unknown
12.160		04122022	Property	11P	Night	Dry		05	FXOBJ	ES	--	Too fast for conditions
12.160		09092022	1 Injured	04A	Night	Dry		05	FXOBJ	ES	--	Too fast for conditions
12.160		09122022	1 Injured	07P	Day	Wet		05	FXOBJ	ES	--	Other or Unknown
12.180		10042020	Property	10P	Night				SDSWP	ES	ES	Exceeded speed limit
12.220		08302018	Property	06P	Night	Wet		05	FXOBJ	ES	--	Too fast for conditions
12.220		03192019	Property	03P	Day	Dry			SDSWP	ES	ES	Other or Unknown
12.220		01272020	1 Injured	05A	Night	Dry		05	FXOBJ	ES	--	Fell asleep, fainted, etc.
12.220		09112020	Property	01A	Night	Dry		05	FXOBJ	ES	--	Other or Unknown
12.220		02202021	Property	01P	Day	Dry		05	FXOBJ	ES	--	Other or Unknown
12.230		02282021	1 Injured	11A	Day	Wet		05	FXOBJ	WS	--	Other or Unknown
12.270		12132019	Property	09A	Day	Ice			RREND	WS	WS	Fail to give full attention
12.320		04282020	Property	06A	Day	Wet			SDSWP	ES	ES	Other or Unknown
12.320		06052020	Property	06P	Day	Wet		05	FXOBJ	WS	--	Other or Unknown
12.380		05222020	Property	12P	Day	Wet		05	FXOBJ	WS	--	Other or Unknown
12.380		01032021	Property	03P	Day	Wet		05	FXOBJ	WS	--	Other or Unknown
12.380		07022021	4 Injured	08P	Day	Dry			SDSWP	WS	WS	Fail to give full attention
12.380		12092022	Property	09A	Day	Dry			SDSWP	WS	WS	Other or Unknown
12.450		06012019	Property	02A	Night	Dry		05	FXOBJ	ES	--	Other or Unknown
12.450		07162020	1 Injured	03A	Night	Dry		05	FXOBJ	ES	--	Other or Unknown
12.450		11112020	Property	01P	Day	Wet		05	FXOBJ	ES	--	Other or Unknown
12.450		08072021	Property	04A	Night	Wet		05	FXOBJ	ES	--	Other or Unknown
12.480		09282021	Property	11A	Day	Dry			SDSWP	ES	ES	Other or Unknown
12.490		05272018	1 Injured	02A	Night	Dry			RREND	ES	ES	Other or Unknown
12.560		03082019	Property	07A	Day	Dry			RREND	WS	WS	Other or Unknown
12.560		10132022	Property	09P	Night	Dry		05	FXOBJ	ES	--	Too fast for conditions
12.560		11152022	Property	01P	Day	Snow			RREND	WS	WS	Other or Unknown
12.630		08312021	Property	09A	Day	Wet		05	FXOBJ	WS	--	Other or Unknown
12.640		07122022	Property	01P	Day	Dry			SDSWP	WS	WS	Other or Unknown
12.650		06242021	Property	08A	Day				SDSWP	ES	ES	Other or Unknown
12.650		11292022	1 Injured	03P	Day	Dry			SDSWP	ES	ES	Improper lane change
12.670		05282020	Property	03P	Day	Dry		05	FXOBJ	ES	ES	Fail to give full attention
12.710		02202019	Property	05A	Night	Snow		13	FXOBJ	ES	--	Fail to give full attention
12.710		10042020	Property	03A	Night			05	FXOBJ	ES	--	Other or Unknown
12.730		07182020	1 Injured	01A	Night	Dry		05	FXOBJ	ES	--	Other or Unknown
12.750		05232022	1 Injured	05P	Day	Dry		13	FXOBJ	WS	--	Other or Unknown
12.750		06082022	Property	05A	Day	Snow	☐	13	FXOBJ	WS	--	Other or Unknown
12.840		03102018	1 Injured	03A	Night	Dry	☐		OTHER	ES	--	Under influence of alcohol
12.870		07192021	1 Injured	05A	Day	Dry		05	FXOBJ	WS	--	Fell asleep, fainted, etc.
12.890		01112020	1 Injured	09A	Day			13	FXOBJ	WS	--	Other or Unknown
12.890		01112022	Property	11P	Night			13	FXOBJ	WS	--	Other or Unknown
12.890		08022022	Property	08P	Night	Dry		13	FXOBJ	WS	--	Other or Unknown

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

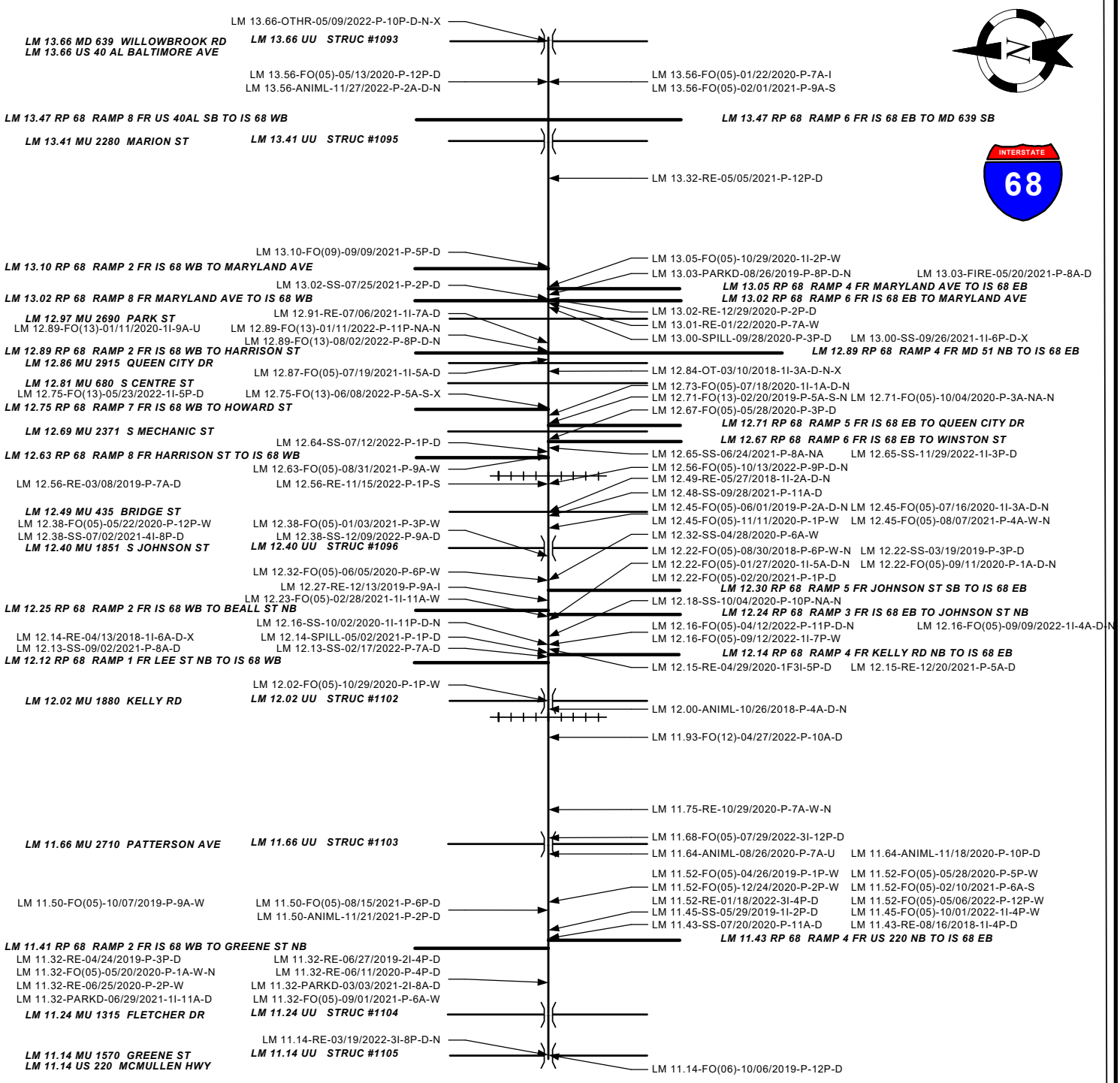
MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	Movement V1	Movement V2	Probable Cause
12.910		07062021	1 Injured	07A	Day	Dry			RREND	WS	WS	Fail to give full attention
13.000		09282020	Property	03P	Day	Dry			OTHER	ES	ES	Other or Unknown
13.000		09262021	1 Injured	06P	Day	Dry	☐		SDSWP	ES	ES	Under influence of combined substance
13.010		01222020	Property	07A	Day	Wet			RREND	ES	ES	Other or Unknown
13.020		12292020	Property	02P	Day	Dry			RREND	ES	ER	Other or Unknown
13.020		07252021	Property	02P	Day	Dry			SDSWP	WS	WS	Fail to drive in single lane
13.030		08262019	Property	08P	Night	Dry			PARKD	ES	EP	Other or Unknown
13.030		05202021	Property	08A	Day	Dry			OTHER	ES	--	Other or Unknown
13.050		10292020	1 Injured	02P	Day	Wet		05	FXOBJ	ES	--	Other or Unknown
13.100		09092021	Property	05P		Dry		09	FXOBJ	WS	--	Other or Unknown
13.320		05052021	Property	12P	Day	Dry			RREND	ES	ES	Fail to give full attention
13.560		01222020	Property	07A	Day	Ice		05	FXOBJ	ES	--	Other or Unknown
13.560		05132020	Property	12P	Day	Dry		05	FXOBJ	WS	WS	Fail to give full attention
13.560		02012021	Property	09A	Day	Snow		05	FXOBJ	ES	--	Other or Unknown
13.560		11272022	Property	02A	Night	Dry			OTHER	WS	--	Animal
13.660		05092022	Property	10P	Night	Dry	☐		OTHER	Wu	WS	Under influence of alcohol

Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence
08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety
Traffic Development & Support Division
Crash Analysis Safety Team

I-68 (National Fwy)
Location: From: US 220 (McMullen Hwy) To: MD 639 (Willowbrook Rd)
County: ALLEGANY
Study Period: 01/01/2018 to 12/31/2022
Analyst: Matthew Jagg Date: 02/15/2024



KEY:LogMile-CollisionType (FixedObjectStruck) -Date-Severity-Time-Surface-Illumination-Alcohol

template 12-14-23

F - Fatalities	SS - Sideswipe	FO - Fixed Object	OFFRD - Off Road	00 - Not Applicable	08 - Light Support Pole	N - Night
I - Injury	PARKD - Parked Vehicle	OOBJ - Other Object	RUNWY - Downhill Runaway	01 - Bridge or Overpass	09 - Sign Support Pole	X - Alcohol
P - Property Damage	PED - Pedestrian	OT - Overturn	FIRE - Explosion Fire	02 - Building	10 - Other Pole	D - Dry Surface
OD - Opposite Direction	BIKE - Bicycle	SPILL - Spilled Cargo	BCKNG - Backing	03 - Culvert or Ditch	11 - Tree Shrubbery	W - Wet Surface
LT - Left Turn	PEDAL - Other Pedalcycle	JCKKNF - Jackknife	UTURN - U-Turn	04 - Curb	12 - Construction Barrier	I - Icy Surface
RE - Rear End	CONVY - Other Conveyance	SPRTD - Units Separated	OTHR - Other	05 - Guardrail or Barrier	13 - Crash Attenuator	S - Snowy Surface
ANG - Angle	ANIML - Animal	NCOLL - Other Non Collision	UNK - Unknown	06 - Embankment	88 - Other	
				07 - Fence	99 - Unknown	