

SUSQUEHANNA RIVER PEDESTRIAN AND BICYCLE CROSSING FEASIBILITY AND COMMUNITY COORDINATION STUDY

Active Connections in the Upper Bay



ACTIVE TRANSPORTATION INFRASTRUCTURE INVESTMENT PROGRAM (ATIIP) GRANT

submitted to

**USDOT,
FEDERAL HIGHWAY ADMINISTRATION**

submitted by

**MARYLAND DOT,
STATE HIGHWAY ADMINISTRATION**

MDOT
MARYLAND DEPARTMENT
OF TRANSPORTATION

**STATE HIGHWAY
ADMINISTRATION**

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1. Basic Project Information

1.1 Project Description

The Maryland Department of Transportation (MDOT) is seeking \$2,000,000 from the Active Transportation Infrastructure Investment Program (ATIIP) to conduct the **Susquehanna River Bicycle and Pedestrian Crossing Feasibility and Community Coordination Project** (Project). The primary objective of the Project is to address the lack of bicycle and pedestrian access across the Susquehanna River in the Mid-Atlantic region between Perryville and Havre de Grace, Maryland (Figure 1).

Currently, the Susquehanna River links the communities of Havre de Grace, Perryville, Port Deposit, and Cecil and Harford Counties, but it also is a significant barrier for residents, workers, and visitors seeking to travel on foot or by bike. The four existing bridges in the vicinity have facilities for motor vehicles and for rail, but no dedicated bicycle or pedestrian facilities. This limitation not only affects local commuters but also impacts the connectivity of regional and national trails like the East Coast Greenway, the National 9/11 Memorial Trail, and the overall statewide bicycle network.

The nearest all-hours bicycle-accessible crossing requires a 23-mile detour north of the communities and requires use of a motor vehicle travel lane over the Conowingo Dam, while the nearest pedestrian-accessible crossing requires a 96-mile detour into Pennsylvania. To address this significant gap in the active transportation network, MDOT seeks to conduct a feasibility study and public outreach activities for a new bicycle and pedestrian crossing. Completion of this active transportation spine between Havre de Grace and Perryville would significantly **improve safety and connectivity** for pedestrians and bicyclists, connect residents and workers to **jobs and services** using active travel modes, support the **regional, state, and national tourism economy**, and meet a **long-standing community desire** for a bicycle and pedestrian river crossing. This project is identified as a priority in [MDOT's 2050 Statewide Bicycle and Pedestrian Master Plan](#) (BPMP).

Project History

The Susquehanna River in Northeast Maryland has not always been a barrier for pedestrians and bicyclists seeking to cross. Historically, the river had a railroad bridge that included pedestrian access since it was built in the 1870s. When this bridge was converted from rail to vehicular use in the 1920s, it retained the pedestrian element. It was not until its replacement with the current Thomas J. Hatem Memorial Bridge in 1943 that the Susquehanna River ceased to have a dedicated non-motorized crossing, and it has remained in that State for over 80 years.

For decades, there has been a growing desire and effort to establish a dedicated bicycle and pedestrian crossing of the river. Numerous state and local plans recommended pursuit of this missing connection, and there have been various studies addressing the potential crossing (described further

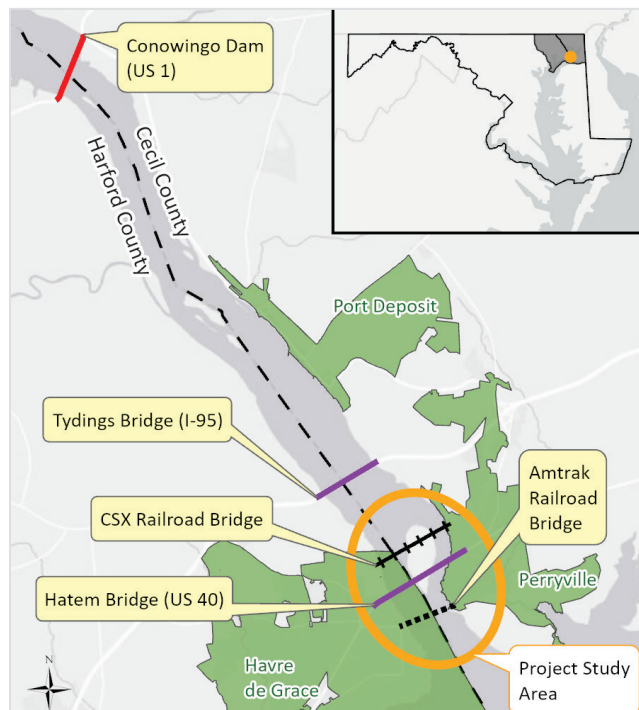


Figure 1: Project Location and Context

in **Appendix A**), including the MDOT-led 2002 Susquehanna River Pedestrian Bridge Crossing Feasibility Study. This study took a high-level look at potential crossing alternatives and found that adding a pedestrian or bicycle facility to the Hatem (US 40) or Tydings (I-95) Bridge would not be feasible. It also found that repurposing the existing abandoned piers south of the Amtrak bridge would be more costly than building new piers and recommended against this option.

More recently in 2014, a study done in conjunction with Amtrak’s planning and design to replace the Amtrak bridge crossing the Susquehanna River found that an independent bridge was feasible, whereas adding a bicycle and pedestrian facility to the new Amtrak bridge would not be feasible due to cost, constructability, and safety concerns being near an active, high-speed electrified railroad. With this option exhausted, a comprehensive assessment of feasible crossing options, along with community considerations, is needed. This Project aims to expand on the 2002 MDOT Feasibility Study, to further develop the feasible alternatives for a new crossing and engage the community in developing a preferred alternative. Previously incurred costs included the cost of the 2002 study, at approximately \$258,000 in current year dollars. Both the Amtrak Study and the 2002 study are also included in **Appendix A**.

In 2016, MDTA adopted a bicyclist access policy allowing riders to use the Hatem Bridge from dawn to dusk on weekends and holidays. However, in making this trip, bicyclists must use the right-most motor vehicle lane (posted speed of 45 mph), rely on an active signal to alert motorists of a cyclists’ presence, and traverse bridge expansion joints not designed for bicycle tires, shown in Figure 2. Pedestrians still have no facilities to cross the river in Maryland. **Appendix B** includes a figure with images of existing bridges across the river.



Figure 2: Existing Hatem Bridge Crossing

Project Improvements and Impacts

The primary objective of the Project is to address the lack of a bicycle and pedestrian connection across the Susquehanna River. **Appendix B** includes detailed information on existing lack of access across the Susquehanna River for bicyclists and pedestrians. Creating this active transportation spine between Perryville and Havre de Grace will:

- **Significantly increase safety** for bicyclists who currently use the Hatem bridge to cross the river, and provide a new, safe pedestrian connection between both communities.
- Dramatically improve access to **economic opportunities and community assets** in these communities, both of which are rich with natural, historic, and cultural resources, while also bolstering tourism and economic development by **connecting the East Coast Greenway, the Lower Susquehanna Heritage Greenway, and the National Park Service Chesapeake Gateways and Watertrails Network**.
- Present an opportunity to **reduce greenhouse gas (GHG) emissions**. [Research](#) has shown that transportation-related GHG emissions are determined by transport mode choice and usage. The Project will give travelers connecting across the river a new opportunity to choose a zero-emission mode of travel rather than using a car for the one-mile trip, including increased pedestrian access for Harford County residents to the MARC Perryville station, and an opportunity for short, tourism-related trips to be converted to non-motorized transportation.

1.2 Location

The Project area is located between Havre de Grace and Perryville, in Northeast Maryland (Figure 1) and is intended to provide a crossing between these two communities, creating a regional active transportation connection. The Project will evaluate crossing options between the I-95 bridge and the mouth of the Susquehanna River. **Appendix B** includes additional location/context maps, including river crossing access for walking and biking.

Existing Transportation Network—Between the Conowingo Dam to the north and its mouth, the Susquehanna River is spanned by three vehicular bridges (US 1, I-95, and US 40) and two rail bridges, yet options for bicycle crossings are scarce and unappealing, and pedestrian crossings are prohibited. Both local jurisdictions’ comprehensive plans, state plans, and nonprofit groups like the Lower Susquehanna Heritage Greenway, Inc. (LSHG) and the East Coast Greenway Alliance (ECG) are aligned in their goal of establishing a separate bicycle and pedestrian crossing to complete this critical missing link. US 40 is a designated [State Highway signed bicycle route](#) and also is part of the [U.S. Bicycle Route System](#). **Appendix B** includes maps of the existing network.

Community Profile—This Project connects the urban areas of Havre de Grace and Perryville, which themselves are the northeastern tip of the [Bel Air-Aberdeen, MD Urban Area](#), between the Philadelphia and Baltimore urban areas. The census tracts on both sides of the river are identified as disadvantaged census tracts by the USDOT Equitable Transportation Community Explorer.

Barriers to Community Connectivity—Currently, the Susquehanna River presents a major barrier between the Communities for people walking and biking. Pedestrians have no options for crossing the river south of the Norman Wood Bridge in Pennsylvania. Bicyclists are permitted on the Hatem Bridge (US 40) only during weekend and state holiday daylight hours. Weekday travel is not permitted for bicyclists. In addition to being a barrier to local community connectivity, the Project area is a significant gap in nine major regional and national trails that route through this scenic area, shown in **Appendix B**.

1.3 Parties

Lead Applicant—The Lead Applicant is the MDOT State Highway Administration (SHA). MDOT is responsible for numerous transportation projects annually. For example, the MDOT Consolidated Transportation Program (CTP) currently allocates SHA over \$1.6 billion to its Major Construction Program for FY 2024 alone. Capital transportation projects that include Federal funding such as the proposed Project are standard for the agency. MDOT has also received recent federal discretionary grants from the ATTAIN, RAISE, CRISI, NEVI Set-aside, SMART and RCE programs.

Other Public and Private Parties—There are no other public or private parties involved in the delivery or contracting of this project. MDOT will work closely in partnership with the Lower Susquehanna Heritage Greenway, City of Havre de Grace and Town of Perryville, and other community groups, particularly in conducting thorough and equitable public engagement.

2. Grant Funds, Sources, and Uses of all Project Funding

The **Susquehanna River Bicycle and Pedestrian Crossing Feasibility Study** (Project) is estimated to cost \$2,550,000. This funding will support the completion of the following activities:

- **Task 1.** Assessment of the Project’s feasibility and alternatives, recommending a preferred alternative (\$500,000).
- **Task 2.** Develop an Environmental Assessment (EA)/Finding of No Significant Impact (FONSI) consistent with Federal Highway Administration (FHWA) and MDOT requirements and practice, analyzing the action/no action alternatives (\$550,000).
- **Task 3.** Advance preliminary engineering (PE) to a design level of 30%, advancing permitting and mitigation activities identified in Task 2, and developing cost estimates (\$1,100,000).
- **Task 4.** Equity analysis and equitable public engagement throughout the course of the project (\$400,000). **Appendix C** includes an outline of the proposed scope of work.

Project Budget: The anticipated cost of the Project is \$2,550,000. MDOT is requesting \$2,000,000 million from ATIIP to conduct the Project. MDOT will contribute \$550,000 from its Transportation Trust Fund, shown as Non-Federal in Table 1; there are no restrictions on the timing of use of these funds. **Appendix D** includes a letter of funding commitment. While MDOT is confident the proposed budget is sufficient to cover the scope of work, MDOT has also budgeted a 10% contingency, allocating \$255,000 from its Recreational Trails Program (RTP) funds, shown as Other Federal Funds in Table 1. The RTP is a federal source of funding that, for the purposes of this competitive grant application, can be used to match the requested ATIIP funds, as described in the [Recreational Trails Program guidance](#). The total cost, including contingency, results in ATIIP funds covering 71% of the Project costs, with a 29% match from the Transportation Trust Fund and Recreational Trails Program funds. If the contingency is not needed, MDOT’s Transportation Trust Fund will cover 22% of the Project cost, still exceeding the 20% match requirement. The Project funding will be used to contract a team to complete the proposed scope of work.

Table 1: Project Budget by Source of Funds for ATIIP Request

Funding Sources	Task 1	Task 2	Task 3	Task 4	Contingency	Total Budget
ATIIP Funds	\$390,000	\$430,000	\$860,000	\$320,000	-	\$2,000,000
Non-Federal	\$110,000	\$120,000	\$240,000	\$80,000	-	\$550,000
Anticipated Feasibility Study Cost						\$2,550,000
<i>Other Federal Funds</i>	-	-	-	-	\$255,000	\$255,000
Total Cost (including Contingency)						\$2,805,000

3. Merit Criteria

3.1 Criterion #1: Mobility and Community Connectivity

This Project is an effort to work towards **completing an active transportation spine**—a new river crossing for pedestrians, bicyclists, and other non-motorists of all ages and abilities. It would close a critical network gap by connecting Havre de Grace and Perryville, their visitors, workers, and nearly 20,000 residents. These two municipalities are less than a mile apart as the crow flies, yet there is no way to walk between them, and bicycling options are limited to weekends and holidays on a highway bridge, inviting only the most fearless riders.

Connecting Communities: The Project will seek to determine a specific location for the crossing and will explore feasible options that maximize access and connectivity benefits for people walking and biking. Based on likely bridge location options (in the vicinity of the Hatem bridge, the CSX bridge, and the Amtrak Rail bridge), approximately 70% of the population of both cities live within one mile of a future crossing, indicating that this Project would serve potential trips for a large majority of the local population. As a dedicated crossing, separated from motor vehicle traffic, this project **aims to serve people of varying ages and abilities, including seniors, children, and people with disabilities**—a large portion of the local community. Approximately 20% of Havre de Grace and 21% of Perryville residents are under 18, and another 20% of Havre de Grace and 16% of Perryville residents are over 65. Moreover, approximately 13% of Havre de Grace and 15% of Perryville residents have a disability, compared with 11% of Maryland residents as a whole (2022 American Community Survey 5-year estimates). With the new crossing, these residents would be able to visit their neighboring town walking or biking, in a safe and enjoyable manner.

Integrating with Transit: Implementation of this crossing will significantly increase access to transit and the destinations it serves. For the first time, Havre de Grace residents will be able to access the MARC station in Perryville by walking or biking. The MARC station is proposed to have a MARC-SEPTA commuter rail connection that, when implemented, will provide further expanded access north to Wilmington and Philadelphia. In addition to MARC, Perryville residents will be able to access transit opportunities on the west side of the river, including MTA Commuter buses, the Harford LINK bus system, and the Aberdeen Amtrak Station four miles west of the Project area. Throughout the course of the feasibility study, the team will explore options to enhance connections and closely link with these transit systems. Existing transit systems are illustrated in **Appendix B**.

Providing New Active Transportation Access to Destinations and Jobs: With the crossing in place, local residents will be able to access a wealth of community destinations previously inaccessible by bike or walking, as shown in Figure 3, with a more detailed map included in **Appendix B**. These destinations include libraries, health facilities, grocery stores, multifamily residential areas, parks, and other government services. Moreover, residents will have expanded opportunities to access jobs across the river from their homes using active transportation modes, discussed in more detail in Criterion 5.

Expanding the Regional Active Transportation Network:

The Project will ultimately connect major regional trails, filling a gap in the State’s active transportation network and increasing access to cultural assets, local businesses, and recreational opportunities. Maps illustrating this network are included in **Appendix B**. The proposed crossing will:

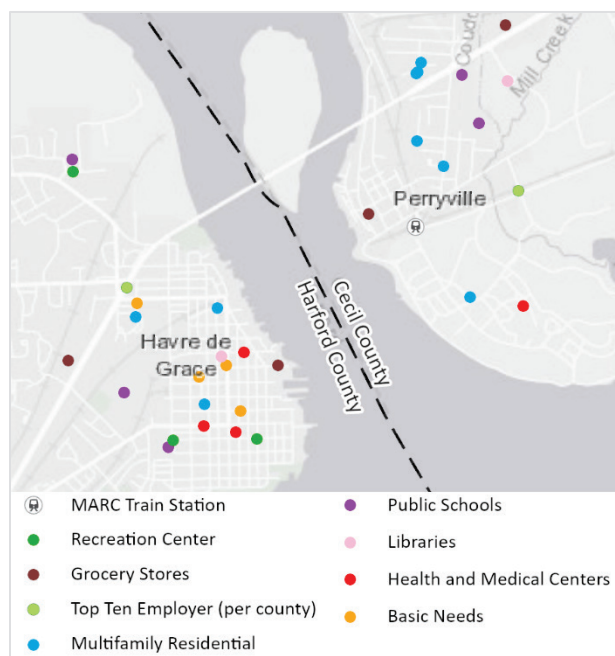


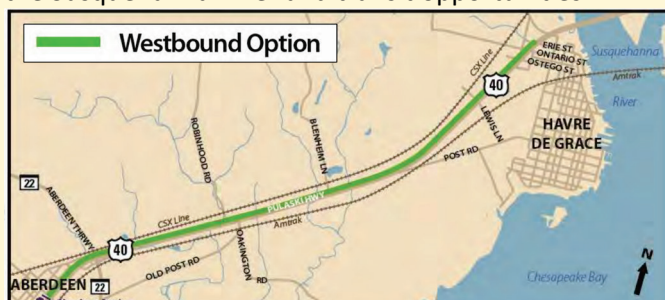
Figure 3: Key Community Assets

- Increase access to the [Lower Susquehanna Heritage Greenway Trails](#) including Canning House Run, Perryville Park & Veterans Loop and Havre de Grace as well as proposed trails along the river to the north.
- Complement and extend the proposed US-40 Shared Use Path linking the City of Aberdeen to the Town of Perryville (see sidebar on following page).
- Close the gap on major recreational trail routes, such as East Coast Greenway, Mason Dixon Trail, September 11th National Memorial, U.S. Bicycle Route 201, and three National Historic Trails—the Star Spangled Banner Trail, the Washington-Rochambeau Revolutionary Route, and the Captain John Smith Chesapeake National Historic Trail.

A new active transportation river crossing in this beautiful setting **will support the local tourist economy and help distribute the economic benefits resulting from visitors**. Havre de Grace is one of the top destinations within the Chesapeake Bay Region with 780,000 annual visitors. In August 2023, over 57,000 people visited the Havre de Grace promenade, a beautiful waterfront walking path. This indicates demand for walking facilities oriented to the water and surrounding scenery—and the potential for a pedestrian crossing of the Susquehanna River to further attract visitors to the area and its abundant cultural destinations on both sides of the river, including the Rodgers Tavern Museum in Perryville, Perryville Community Park, Tydings Park and Promenade, Concord Point Park, Harmer’s Town Art Center, the Maritime Museum, Friends-Concord Point Lighthouse, the Frank J. Hutchins Memorial Park, and restaurants and shops along St. John Street in Havre de Grace. Moreover, visitors will be able to arrive on the MARC train and walk or bike to Havre de Grace.

US 40 Shared Use Path in Harford County

In 2022, Baltimore Metropolitan Council developed a Concept Plan for Bicycle and Pedestrian Improvements along US 40 from the City of Aberdeen to the City of Havre de Grace. The plan was to develop a 5-mile long shared use path from the Aberdeen Train Station to Erie Street in Havre de Grace, which provides safe access to transit, businesses, and neighborhoods. In 2023, the concept plan was shared with the public to invite comments and suggestions. The project is now seeking funding. Once implemented, it will provide safe crossings on US 40 at major intersections and would link to a crossing of the Susquehanna River and transit opportunities.



3.2 Criterion #2: Community Support

A pedestrian and bicycle crossing of the Susquehanna River has long been a vision shared by local communities as well as visitors and advocates across the State and beyond. In conducting this Project, MDOT will build on this support and momentum as it seeks to further engage local disadvantaged communities, traditionally underrepresented groups, and other relevant stakeholders to maximize the benefits of the crossing. MDOT has a decades-long history of proactive, inclusive, public engagement with groups affected by the transportation planning and infrastructure development process.

History of Susquehanna River Crossing Planning: Over the past several decades, stakeholders have led ongoing planning for a new Susquehanna River crossing, with participation from local municipalities, MDOT, organizations such as the East Coast Greenway Alliance and Lower

Susquehanna Heritage Greenway, and the general public. **Appendix A** provides a summary of the prior planning efforts related to this Project, each of which included public engagement. Going forward with this Project, MDOT will ensure a process that brings together voices who may not have participated in prior efforts, per the Draft Scope of Work Outline in **Appendix C**.

Supportive Transportation Planning in Area: Other planning efforts in the area demonstrate a strong network of support for this Project. In addition to the plans calling for this crossing, local municipalities have invested in extensive efforts to develop high quality walking and bicycling facilities within their boundaries. For example, the City of Havre de Grace recently received funding through MDOT’s Kim Lamphier Bikeways Network Program, for a feasibility study, design, and quick-build of on-street bicycle facilities along several roads. Harford County also recently completed a Bikeways-funded \$60,000 study to determine low-stress routes between the Harford Community College (HCC) Connector and the Ma & Pa Trail in Bel Air.

US-40 Shared Use Path in Harford County is one example of recent successful progress developing active transportation connections, described in the sidebar in Criterion 1. This path, once implemented, will be connected to the future Susquehanna River Bicycle and Pedestrian Crossing. Together, these projects would create a low-stress path from Aberdeen to Perryville.

Finally, MDOT has identified this crossing in its recently [updated 2050 Statewide Bicycle and Pedestrian Master Plan \(BPMP\)](#). This plan included extensive public input and partnerships with stakeholders, as documented in section 1.3 of the Plan, and is aligned with the State’s federally required long-range transportation plan ([MTP](#)).

Broad Community Support: This Project enjoys extremely broad community support, evidenced by the 29 letters of support included in **Appendix E**. MDOT has long-standing relationships with these stakeholders and will leverage these existing partnerships in conducting the Project to ensure continued support and maximize benefits to disadvantaged communities and people most affected by the crossing. The Project will also build on the work of the Harford County Bicycle and Pedestrian Master Plan, which formed relationships with [Policy Implementation Partners](#) to carry out strategies to advance bicycle and pedestrian projects.

3.3 Criterion #3: Commitment to Increasing Walking, Biking, and Other Types of Active Transportation

Traffic Safety Improvements: Maryland is a [Vision Zero](#) state, a USDOT Ally in Action for its National Roadway Safety Strategy (NRSS), and set the goal of zero traffic-related fatalities or serious injuries by 2030. MDOT has incorporated Enhancing Safety and Security as a goal in its Long-Range Maryland Transportation Plan (MTP, or [the Playbook](#)), the updated BPMP, 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.

Maryland incorporates actions identified in the [NRSS](#) to address safety through education, emergency medical services, enforcement, and engineering and has committed \$100 million to construct context-driven improvements at key locations based on crash data and equity. MDOT’s efforts have already had successful results improving safety for active transportation, as shown by the example in the sidebar on the following page.

Supporting Regulations: In 2012, MDOT SHA established a [Complete Streets Policy](#) to increase the safety and efficiency of roads by providing facilities for walking, biking, and other community needs. In 2019, MDOT SHA launched the [Context Driven](#) initiative. Context Driven includes the Context Driven Guide, a planning and design resource offering guidelines centered on establishing safe and effective multimodal transportation systems, the Context Driven Toolkit, and the Pedestrian Safety Action Plan. **Most recently, in June 2024, MDOT updated its [Complete Streets Policy](#)**, which applies to all capital projects on MDOT right-of-way. The policy is focused on planning, designing, and constructing streets that are safe for all users, with a focus on under-represented populations and vulnerable users, including people walking and biking. The Complete Streets Policy requires projects to follow MDOT's [Context-Driven Guide](#).

Promising results by a Safety Initiative in Montgomery County, MD

In December 2022, MDOT SHA implemented protected bike lanes on MD 187 (Old Georgetown Road) in Montgomery County that led to a **threefold increase in people who were biking** on the route. An initial comparison of crash data in the project shows **no injury or fatal crashes** in the four-month period after project implementation, compared to several fatal and severe injury crashes in the same time period in prior years. **Appendix K** includes MDOT's Final Corridor Assessment documenting the results of this investment.

Financial Incentives: MDOT provides financial support to local agencies in implementing bikeways through the [Kim Lamphier Bikeways Network Program](#) (Bikeways Program), which provides grant support for projects that maximize bicycle access, fill missing links in the State's bicycle network, and enhance last-mile connections to work, school, shopping and transit. Since the program inception in FY2012 through FY2024, the Bikeways Program has funded over \$33 million of locally initiated projects to increase bicycle access and connections. MDOT has awarded six grants within this Project area, including the installation of wayfinding signage along the East Coast Greenway, the design of a bicycle network in Havre de Grace, and the design of a bicycle path to connect Harford Community College to the town of Bel Air.

For individuals, MDOT uses Transportation Demand Management (TDM) incentives that promote walking, biking, transit, and carpooling. [Commuter Choice Maryland](#) is a TDM program that provides up to \$315 per month pre-tax transit benefit for commuters. Transit incentives support people in choosing non-vehicle options and can create demand for walking and biking to access transit. [Guaranteed Ride Home](#) is a provision of up to six free rides home per year to commuters who regularly use transit, biking, walking, or carpooling at least twice a week. These incentives help to support and reward individuals choosing active transportation.

Community Design Policies: MDOT's recently updated [Complete Streets Policy](#) requires projects to follow MDOT's [Context-Driven Guide](#) and accompanying toolkit. Context Driven emphasizes that land use context should be a primary factor in the design of a transportation project and provides guidance on implementing designs and safety countermeasures that support the intended function, balancing access, and mobility. This guidance recognizes that past approaches prioritized auto mobility over all else, and guides practitioners to take a context-sensitive approach, including making improvements for active transportation.

MDOT is also currently partnering with [Smart Growth America \(SGA\)](#) on a technical assistance program called the [Complete Streets Leadership Academy \(CSLA\)](#) to educate local jurisdictions about

Complete Streets implementation. CSLA will help local practitioners to implement “quick-build” demonstration projects on state-owned roads to encourage more walking and biking. MDOT SHA staff will be responsible for selecting the sites, providing a process to permit these demonstration projects, and engaging with community members on the design of the quick-build demonstration.

3.4 Criterion #4: Financial Completeness

The Project is estimated to cost \$2,550,000. This funding will support the completion of the proposed scope of work included in **Appendix C**. MDOT is requesting \$2 million from ATIIP to support this work, and MDOT will contribute \$550,000, a 22% match, with funds from its Transportation Trust Fund. A Letter of Funding Commitment is included in **Appendix D**. MDOT has also allocated 10% contingency, funded by the Recreational Trails Program, a federal source that can be used as match funding for the ATIIP grant application, per the [Recreational Trails Program guidance](#). With the contingency funds, ATIIP funds would make up 71% of the total cost, with a 29% match. Project budget by task is shown in Table 1 (page 4 of this application).

3.5 Criterion #5: Equitable Development

Addressing existing disparities and providing access for low-income and disadvantaged communities is a key priority for the Project, in alignment with the BPMP, which uses prioritization metrics intended to address social and economic disparities. As part of the Project, a comprehensive analysis will be conducted to identify disadvantaged populations and any disparities in fatality rates, access to jobs and services, and opportunities for wealth creation. This analysis will inform a targeted plan to reduce the disparities faced by the identified population. This grant application includes a preliminary analysis, followed by an outline of what will be covered as part of the Project.

Preliminary Analyses

Demographics: A high-level preliminary review of the study area identified the presence of low-income and disadvantaged communities in both Harford and Cecil Counties. Census tracts 24025306200 and 24025306100 (Harford County) were identified as disadvantaged at the national level, while Census Tracts 24025306200 and 24025306100 (Harford County) and 24015031202 (Cecil County) were disadvantaged at the State level, based on USDOT’s ETC Explorer, shown in Figure 4. The preliminary review also included a buffer analysis with USDOT’s Screening Tool for Equity Analysis of Projects (STEAP) to examine the area around the proposed crossing.

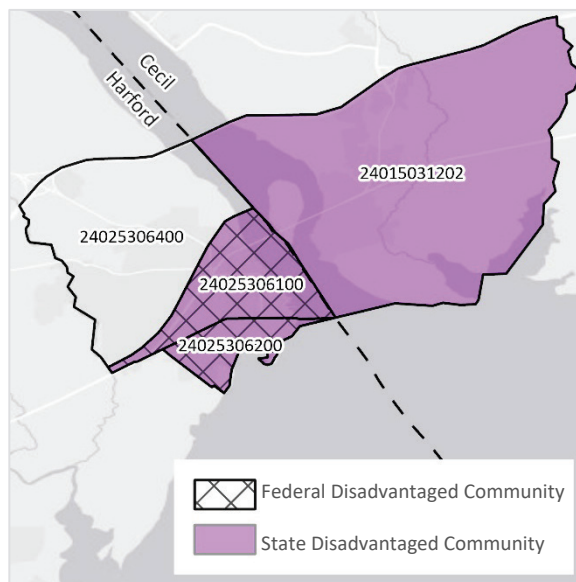


Figure 4: Disadvantaged Census Tracts

These analyses showed the following:

- In the two Havre de Grace census tracts closest to the Project (24025306200 and 24025306100), 38% and 27% of residents are at or below 200% of the Federal poverty line, respectively. In the STEAP buffer area, 9% of the population had an income below the poverty level; notably, this subset disproportionately skews female, being 55% female vs. 45% male.

- Of the total number households in the buffer area (6,533), 11% have no vehicle available to them. In the two Havre de Grace census tracts closest to the Project (24025306200 and 24025306100), 18% and 12% of residents do not have vehicle access, respectively.
- Of households that rent, 21% pay 50% or more of their income towards renting their home.

Appendix F includes additional details on demographic data of the Project area from the STEAP.

Safety: The proposed Project would provide a safe transportation option for residents of all ages and abilities on both sides of the Susquehanna River, with significant benefits to the disadvantaged census tracts directly connected by the new crossing. Because there is not an existing crossing serving potential demand, quantifying the safety benefits of this Project likely underestimates the value. Within the past five years, there were three crashes on the Hatem bridge involving people walking or biking as shown in Figure 5, a crash type that would be avoided if the crossing is implemented. Moreover, this Project would seek to improve safety on connecting facilities on either side of the river and would seek to route travelers along a safe route (e.g. future US 40 shared use path, or other local street connections), likely reducing pedestrian and bicycle crashes within Havre de Grace and Perryville also.

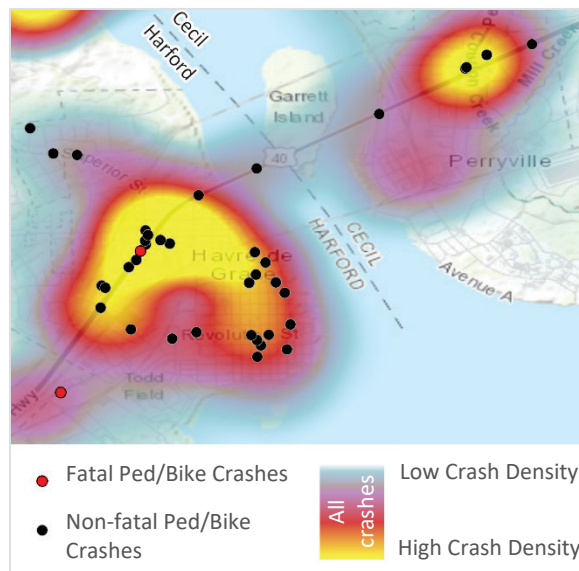


Figure 5: Crash History (1/1/2019 – 5/22/2024)

Another measure closely related to safety is bicycle level of traffic stress (LTS). LTS reflects the level of stress a bicyclist feels traveling on a roadway based on the traffic speeds, volumes and quality of bikeway available. LTS also correlates with the portion of the population that would likely travel on that facility—the lower the LTS, the more people who are likely to use the facility. A lower LTS would remove a barrier to biking and walking for people living in the disadvantaged communities adjacent to the bridge. Bicycle LTS on either side of the Susquehanna River generally indicates a low stress network traveling to and from destinations on the same riverside. However, if a trip needs to cross the Hatem Bridge (US 40) crossing, most of the route is identified as high LTS (LTS 4). **Appendix G** shows the level of traffic stress in the study area.

Access To Jobs And Key Destinations: Analysis of the Longitudinal Employer-Household Dynamics (LEHD) data shows that out of the 44,605 workers residing in Cecil County (east of the river), nearly 12% of them (5,330) worked in Harford County (west of the river). Of the 31,287 jobs in Cecil County, 10% are filled by people residing in Harford County. **Appendix H** shows maps of the employment locations of these workers.

Additionally, of workers earning \$1,250 per month or less employed in both counties, about 40% have education less than a bachelor's degree and women in the workforce are 15% higher than males. These workers would benefit substantially by having increased access to job opportunities within both counties, without having to drive. **Appendix H** includes a map of the home locations of these workers.

This analysis shows that the two counties surrounding the Susquehanna River crossing have important job linkages that would benefit and potentially grow after the crossing is made accessible for non-motorized travel. The crossing would provide access to jobs and services for low-income communities and give them the option to walk or bike to work and reduce the cost of commuting. This improved access supports economic competitiveness and wealth creation for these communities.

The Project would also improve access to other daily needs and key destinations, as well as enhance tourism by connecting the East Coast Greenway and other trail networks, as discussed in Criterion 1. Currently, the river is a barrier for residents, workers, and visitors seeking to travel on foot or by bike to these destinations. With the proposed crossing, these destinations, including essential daily services and jobs, will be accessible by walking or biking for these low-income, disadvantaged communities in the project area, as well as for people with disabilities. Connecting the trail network has the potential to further grow tourism in the area, generating new employment opportunities and local wealth creation.

Planned Feasibility Study Analyses

As part of the Project, MDOT will undertake the following tasks to ensure that the potential for equitable development benefits are realized and existing safety and access disparities are better understood and addressed.

Equity Analysis: As part of the Project, MDOT will do a comprehensive equity analysis that identifies vulnerable populations and disparities in bicycle and pedestrian safety and access to jobs, transit, and community facilities through both qualitative and quantitative methods. While currently available crash data does not provide information on demographic characteristics, MDOT will seek to better understand what disparities do exist. This data will support an evaluation of the benefits and burdens of the various crossing options against the existing conditions to identify which solutions best address those disparities in safety and access.

Public and Stakeholder Engagement: Public and stakeholder engagement that removes barriers to participation throughout the planning process analysis is vital to ensuring the preferred alternative meets the needs of the public. The study will utilize practices outlined in [MDOT's Title VI Implementation Plan](#), [Maryland Action Plan](#), and MDOT SHA's EJ-PIP Draft Action Checklist (included in **Appendix I**) which includes guidance on the development of an equitable engagement plan as well as evaluation measures to determine its success.

The Equity Analysis will provide information on vulnerable populations including children, elderly, disabled, limited English proficiency (LEP) populations, and zero-vehicle households. This data will allow for targeted planning process and development of engagement practices, selection of engagement methods, and identification of locations for engagement activities that are accessible to the study area population.

Bicycle and Pedestrian Access Study: Using available network data and drawing on methods in the BPMP, a network analysis will be completed to show destinations within a 15 to 30-minute walk or bike ride and to determine accessibility for vulnerable populations to jobs, transit, and other key community destinations. This analysis will allow MDOT to understand current disparities and ensure the crossing solutions will address such disparities.

This analysis of existing data will be paired with early public and stakeholder engagement to identify gaps and desired connections to key destinations on both sides of the river, and to ensure solutions address the needs of vulnerable populations. This public engagement will help identify other high-stress locations or network gaps that could be addressed in conjunction with the project, in order to maximize the impact of the investment in the crossing.

Metrics

The Project will select a broad set of metrics related to equitable development to inform the evaluation of crossing options and lead to a preferred option. These metrics will be used to evaluate each option's ability to reduce the existing disparities between disadvantaged population's access to transit, jobs, and community facilities. These metrics include:

- **Accessibility**—Total and percent increase in pedestrian, bike, and transit accessibility to key destinations, jobs and community facilities based on changes in bike/walk trip opportunities gained through implementation of the crossing.
- **Engagement/Public Input**—Demographic characteristics of individuals providing input to ensure a reflection of the disadvantaged or low-income communities.
- **Safety**—Estimated reduction in bike/ped-involved vehicular crashes for EJ, equity and disadvantaged populations. Improvements in connectivity of low-stress networks (using Level of Traffic Stress metric).

3.6 Criterion #6: Other DOT Goals and Priorities

An investment in the Susquehanna River Pedestrian and Bicycle Crossing Feasibility Study aligns with each of the other DOT goals and priorities.

Safety for Pedestrians and Cyclists

Improved safety for pedestrians and cyclists is a key goal and outcome of this Project, as described in Criteria 1, 3, and 5. **Appendix G** includes more information on crash history and current level of traffic stress, both of which would be significantly improved with this Project.

Access to Jobs and Key Destinations

Improved access to jobs and destinations using active transportation is one of the largest potential benefits of this Project. This improved access is described in Criteria 1 and 5.

Economic Competitiveness

Workforce Development: As the project moves to design and construction, it may include a Project Labor Agreement (PLA), in alignment with [Governor Moore's 2023 Executive Order](#), applying to projects over \$20 million. In consideration of the PLA, the project may incorporate apprenticeships, on-the-job training (OJT) to help the regional workforce develop technical and trade skills, and local hiring, particularly among individuals from marginalized communities. This will ensure a more robust, skilled construction workforce, while simultaneously helping to alleviate regional inequality.

This Project's scale and complexity provides multiple engagement opportunities to give apprentices in training as part of MDOT's [Transportation Apprenticeship Workgroup](#) a breadth of new valuable experience. Through its OJT program, MDOT actively supports construction-industry workers gaining skills in their respective crafts to advance through their career.

Hiring of Underrepresented Populations and Inclusive Economic Development: Hiring and training requirements set by MDOT procurement will help ensure greater access to good-paying jobs that will also strengthen the presence of underrepresented groups in the region’s economy. MDOT maintains a robust, multi-part Minority Business Enterprise (MBE) Program, one of the oldest and longest standing in the county, that includes: the Disadvantaged Business Enterprise (DBE) Program, the Airport Concessions Disadvantaged Business Enterprise (ACDBE) Program, and Small Business Enterprise (SBE) Program. Its purpose is to ensure that small, minority- and women-owned firms can participate fully and fairly in both state and federally funded projects. 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. The Project will incorporate a project-specific DBE goal for subcontractor participation, as determined by MDOT’s [Procurement Review Group](#). The statewide DBE goal is currently 29%, which will be updated in 2026.

In implementation of the crossing, MDOT will track workforce development (jobs created, training achieved), hiring (percent DBE), and inclusive economic development (participation of MBE firms).

Environmental Protection

The transportation sector stands as the primary contributor to emissions in Maryland accounting for 1,815 million metric tons of [carbon dioxide emissions in 2021](#). The 2023 MDOT [Climate Pollution Reduction Plan](#) (CPRP) has set ambitious targets, aiming for a 60% reduction in GHG emissions by 2031 and ultimately reaching "net zero" emissions by 2045. The CPRP and the 2023 [Carbon Reduction Strategy](#) identify key strategies to reduce GHG emissions, focusing on transportation technology, reducing vehicle miles traveled (VMT), mitigating congestion, and adopting sustainable design, materials, and practices.

Emissions Reductions: This Project, which is aimed at promoting active transportation trips, will reduce reliance on carbon-intensive modes of transportation, contributing to VMT reduction. By providing an alternative to driving and creating linkages to transit, the new crossing will create a shift toward active transportation modes and transit. Further, this type of investment can influence land-use patterns, encouraging development in areas with good active transportation networks, further aiding emission reduction efforts.

Avoiding Adverse Environmental Impacts: MDOT’s [Environmental Commitment Statement](#) commits MDOT to Sustainable Practices and responsibly managing environmental resources and minimize harmful impacts of its activities on the environment through effective planning, project development, operations and maintenance. As the lead agency on this Project, MDOT will follow this environmental commitment statement to minimize any impacts on the environment, including the Susquehanna River and the surrounding ecosystems. Part of this commitment will be exploring opportunities for to minimize lifecycle GHG emissions from the project materials and construction approaches, such as by using lower embodied carbon material for the bridge deck and/or steel. MDOT is applying to FHWA’s Low Carbon Transportation Materials grant to further enable implementation of these approaches.

Address Disproportionate Impacts: In 2024, MDOT adopted its [Transportation Resilience Improvement Plan](#), which provides a framework for a “whole-of-community approach to resilience” that incorporates equity considerations. MDOT has integrated the impacts of climate

change and related hazards into its planning process and has developed an easily-accessible online tool, the [MDOT SHA Climate Change Vulnerability Viewer](#) (CCVV), that gives planners access to a variety of climate and environmental data sets, allowing them to mitigate, avert, and adapt to potential impacts of climate change-related hazards. It also assists users in identifying potentially vulnerable assets and prioritizing areas of concern to identify and address disproportionate impacts and avoid future impacts. The Project will use this tool to identify opportunities to enhance climate resilience in the Project area. Providing an additional, resilient crossing opportunity will also provide the local communities with a higher likelihood of quick recovery in the event of natural disasters that may impact the transportation system.

Quality of Life

The Project will ultimately lead to a new dedicated active transportation crossing of the Susquehanna River that serves the needs of all users, including young children, older adults, and people with disabilities. The crossing will offer a low-stress facility, separate from motor vehicles, linking two communities and providing numerous connections to destinations, scenic areas, and the larger 9/11 Memorial Trail and East Coast Greenway network. The communities that would be directly served by this new connection are described further in Criteria 1 and 5.

4. Project Readiness and Environmental Risk

Technical Capacity

Experience with Federal Agencies: MDOT has previously engaged with Federal agencies, including FHWA, for the development, execution and maintenance of numerous transportation projects. For example, the MDOT Consolidated Transportation Program (CTP) currently allocates SHA over \$1.6 billion to its Major Construction Program for FY2024 alone. Capital transportation projects that include Federal funding such as the proposed Project are standard for the agency.

Title VI/Civil Rights Requirements: MDOT is committed to creating a diverse and inclusive workforce through policies and commitments to attain fairness and equality of opportunity. MDOT complies with Title VI of the Civil Rights Act of 1964 and other Federal nondiscrimination laws and authorities. MDOT also complies with Federal requirements for contract and procurement including Buy America Build America, the Americans with Disabilities Act, the Uniform Relocation Assistance and Real Property Acquisition Policies Act, and the Davis-Bacon Act. MDOT maintains a [Title VI Program Plan](#), [Title VI Policy and Assurances](#), and [Title VI Notice to the Public](#) in compliance to Title VI requirements. MDOT also has a [Title VI Implementation Plan](#) which directs the agency to conduct outreach to people who do not speak English as their primary language, as well as those with a limited ability to read, write, or understand English.

Previous Experience with DOT/FHWA Discretionary Grants: MDOT has vast experience receiving and administering Federal grants, shown in a [map of recent Federal Discretionary grants](#). On January 12, 2024, USDOT announced Maryland Transportation Authority (MDTA) was awarded the State's first ever MEGA grant for the I-895 at Frankfort Avenue Interchange Improvement project. MDOT has also received recent awards from the ATTAIN, RAISE, CRISI, NEVI Set-aside, and RCE programs and both MTA and the Maryland Port Administration have received several RAISE, BUILD, and TIGER awards over the past fifteen years.

Technical Experience/Resources for the Project: If awarded this grant, MDOT will program internal staff resources in alignment with the technical experience needed to complete the proposed scope

of work. MDOT will also draw on its federally procured A&E contracts to ensure sufficient allocation of expertise and resources to this Project.

Technical Feasibility

Prior studies, included in **Appendix A**, have concluded that an independent pedestrian and bicycle crossing of the Susquehanna River is feasible, whereas including this connection on one of the existing bridges is not. The scope and budget for this expanded feasibility study and community engagement process, included in **Appendix C**, has been developed by MDOT in consideration of the prior studies and based on similar past efforts. The proposed feasibility study and engagement process will include the development of design criteria to identify a preferred alternative. The budget includes a 10% contingency for this feasibility study to address unanticipated modifications to the scope of work. A schedule for completing the Project is shown in **Appendix J**.

5. Administration Priorities and Departmental Strategic Plan Goals

As described in prior parts of this application, this Project will advance administration priorities and departmental strategic plan goals of Safety, Climate Change and Sustainability, Equity, and Workforce Development, Job Quality, and Wealth Creation. Each priority is referenced below.

- **Safety:** Improved safety for pedestrians and cyclists is a key goal of this Project, as described in Criteria 1, 3, 5 and 6.
- **Climate Change and Sustainability:** This project will contribute positively to climate change and sustainability, as described in Criterion 6 (under Environmental Protection).
- **Equity:** This Project will be developed considering equity at all stages of planning and project delivery, as described in Criteria 2, 5, and 6. The Scope of Work included in **Appendix C** includes an equity analysis and public engagement to be done during the feasibility study.
- **Workforce Development, Job Quality, and Wealth Creation:** This Project will further workforce development, job quality, and wealth creation throughout the project delivery, as described in Criterion 6 (under Economic Competitiveness).

6. FHWA Priority Selection Considerations

Both priority selection considerations will be advanced by this Project.

First, this Project will advance an active transportation spine that connects the communities of Perryville and Havre de Grace, which lie on opposite sides of the Susquehanna River and currently do not have an active transportation facility connection. As such, **a crossing would connect people on either side to the key community institutions, destinations, and transit on the other side.**

Second, this Project **will provide substantial benefits to the disadvantaged communities on both sides of the river.** Low-income people in these communities currently lack safe, affordable transportation options to travel between the two sides of the river. This Project will link these communities with a safe crossing for walking and biking, providing access to daily needs as well as job opportunities. Both considerations are described in more detail in Criteria 1 and 5.

7. Letters of Support

Letters of Support are included in Appendix E.