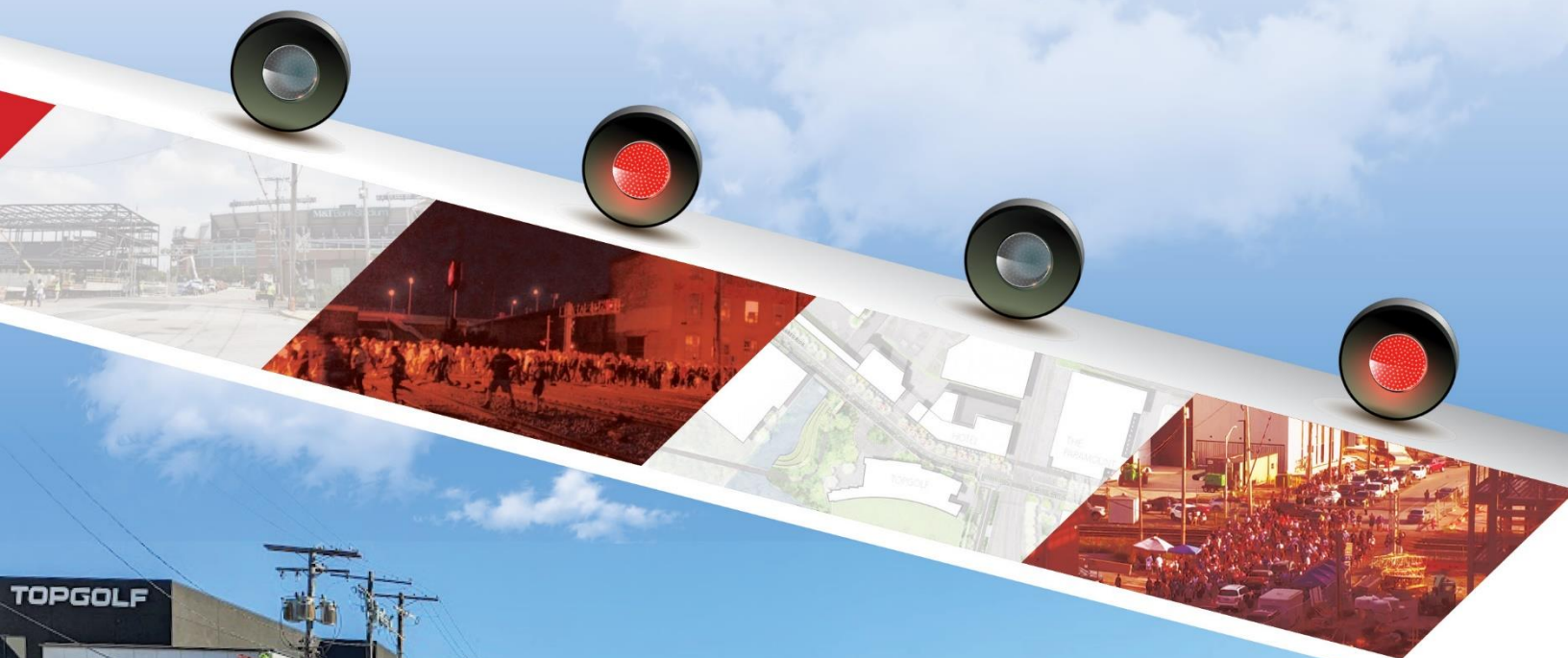


Warner Street Highway-Rail Grade Crossing



Submitted to:



U.S. Department of Transportation
Federal Railroad Administration

1 Cover Page

Project Title	Warner Street Highway-Rail Grade Crossing Project
Project Applicant	Maryland Department of Transportation Maryland Transit Administration (MDOT MTA)
Federal Funding Requested Under this NOFO	\$1,534,280
Proposed Non-Federal Match	\$383,570
Does some or all of the proposed Non-Federal Match for the total project cost consist of preliminary engineering costs incurred before project selection? If yes, how much?	No
Other Sources of Federal funding, if applicable	Not applicable
Total Project Cost	\$1,917,850
Was a Federal grant application previously submitted for this project?	No
City(-ies), State(s) Where the Project is Located	Baltimore, Maryland
Congressional District(s) Where the Project is Located	7th Congressional District of Maryland, effective from the 2022 election cycle
Is this project identified in the freight investment plan component of a State freight plan, as required under Section 70202(b)(9)?	No
Is this project identified in a State rail plan prepared in accordance with Chapter 227?	Yes, this will be in 2022 Update to State Rail Plan
Is this project identified in a State highway-rail grade crossing action plan, as required under section 11401(b) of Passenger Rail Reform and Investment Act of 2015 (title XI of Public Law 114-94)?	Yes. The February 2022 "Maryland Highway-Rail Grade Crossing State Action Plan (SAP)" identifies this Warner Street crossing as meeting Condition 1 of the FRA Final Rule for State Highway-Rail Grade Crossing Action Plans, which has one or more documented incidents within the last 3 years.
Is the Project Located in a Rural Area or on Tribal Land?	No
Is this project eligible for a funding set-aside in Section B.1?	No
If the Project is located in a Rural Area or Tribal Land, is the Project Located in a county with 20 or fewer residents per square mile, according to the most recent decennial census?	Not applicable
U.S. DOT Crossing Number(s)	140863B
Is the Project located on real property owned by someone other than the applicant?	The City of Baltimore ("City") owns and maintains Warner Street. Warner Street was laid out in a 1783 plat with the approval of the General Assembly of Maryland and has remained a public street since that time. CSX Transportation (CSX) is the owner and primary operator of the railroad that crosses Warner Street, which was approved for track laying in 1845 and under CSX ownership since 1987.

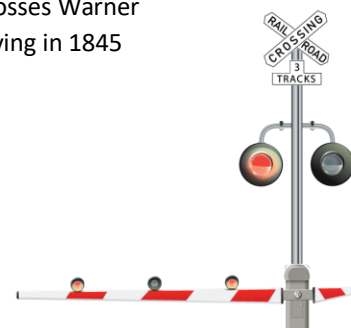


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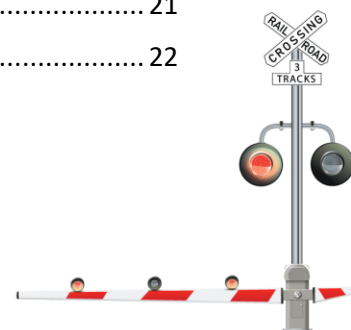
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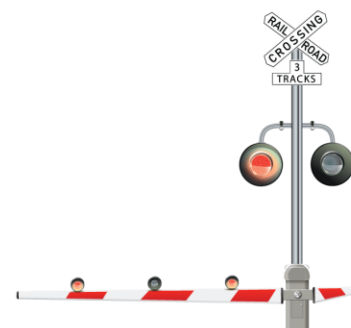


2 Project Summary

The Warner Street Highway-Rail Grade Crossing Project (“Project”) includes both a grade crossing elimination study and short-term improvements for the at-grade crossing that would resolve immediate safety issues posed by the conflicts between rail traffic and other ground transportation modes. The grade crossing elimination study will guide the final design of the short-term investments included in this project as well as the subsequent long-term grade separation design and construction. The highway-rail grade crossing currently lacks the sidewalks and traffic control devices that would enable safe, ADA-compliant, multimodal mobility between either side of the crossing. Three reported crashes and a trespassing incident resulting in death have occurred at the crossing in the last 10 years, yet ongoing local land development is expected to substantially increase the volume of pedestrian, bicycle, and motor vehicle traffic traversing Warner Street, which heightens a need to upgrade the crossing infrastructure. Overall, the Project provides short-term capital investments and advances long-term improvements that will benefit the safety of residents, employees, and visitors who will use Warner Street to access transit services, employment, recreation, goods and services, and other amenities. The Project will also benefit the safety and efficiency of MARC commuter rail service and CSX freight service as these rail operators continue to move goods and people through downtown Baltimore.



Figure 1: A CSX locomotive is shown traveling eastbound while the crossing gate arms are down and the flashing warning lights are activated. Large crowds of pedestrians are queued behind the gate arms as they head to M&T Bank Stadium. Cars are queued behind the gate arms



3 Project Funding

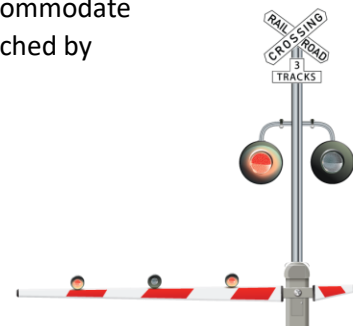
MDOT is requesting \$1,534,280 in RCE program funds to support the design and construction of short-term highway-rail grade crossing improvements as well as support of a rail crossing elimination study that includes an alternatives screening and feasibility analysis, concept design study, and environmental review for a subsequent long-term grade crossing elimination via grade separation. Non-federal funding sources will contribute \$383,570 (or 20% of the total cost) to support the completion of the Project, which has a total cost of \$1,917,850. The contribution amount by Baltimore City may vary depending on contribution by other project partners.

Table 1: Project Funding Table

Task No.	Task name/project component	Cost	Percentage of total cost
1	Rail Crossing Elimination Study	\$400,000	22%
2	Short-Term Highway-Rail Grade Crossing Improvements	\$1,517,850	78%
Total Project Cost		\$1,917,850	
Federal Funds Received from Previous Grant		\$0	0%
Federal Funding Request Under this NOFO		\$1,517,850	80%
Non-Federal Funding/Match		\$383,570	20%
MDOT MTA		\$100,000	
Baltimore City		Up to \$283,570	
Maryland Stadium Authority		Amount considered upon award	
Portion of Non-Federal Funding from the Private Sector		\$0	0%
Portion of Total Project Costs Spent in a Rural Area or on Tribal Lands		\$0	0%
Pending Federal Funding Requests		\$0	0%

3.1 Project Scalability

The Project seeks the ultimate elimination of the highway-rail grade crossing at Warner Street while also addressing the urgent safety risks and lack of accessibility that exist at the current at-grade crossing. The funding request provides the budget for both the rail crossing elimination study and the short-term crossing improvements. However, in the event of a partial award of Rail Crossing Elimination funds, the Project can be scaled to include only the Project’s alternatives screening and feasibility analysis, concept design study, and environmental review for the long-term rail crossing elimination. To accommodate this scaled project, a partial award of \$320,000 Rail Crossing Elimination funds will be matched by \$80,000 non-federal funding.



4 Applicant Eligibility

MDOT MTA meets FRA's applicant eligibility requirements for the Rail Crossing Elimination program outlined in the Notice of Funding Opportunity (NOFO). MTA is a division of the Maryland Department of Transportation (MDOT), which is a public agency established by the State of Maryland.

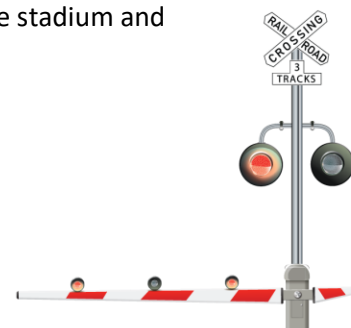
While MDOT MTA is the applicant, the agency is working closely with many partners who are making investments in the corridor and will benefit from the project. The Project will benefit Baltimore City DOT and CSX by separating rail traffic from other ground modes of transportation, reducing the likelihood of collisions while maintaining the movement of goods via freight service and the movement of passengers via commuter rail service through Baltimore. Other beneficiaries of the project include the Maryland Stadium Authority (MSA), for whom Warner Street is a commonly used corridor for people to travel between M&T Bank Stadium, Oriole Park at Camden Yards and other retail and recreational amenities, as well as Caves Valley Partners, the owner of numerous properties along the corridor with existing and planned economic investment in new land uses adjacent to the Warner Street crossing.

5 Detailed Project Description

The Maryland Department of Transportation Maryland Transit Administration (MDOT MTA) is requesting \$1,534,280 in federal funding from the Federal Railroad Administration (FRA) Railroad Crossing Elimination (RCE) program to implement short-term improvements and study long-term rail crossing elimination via grade separation for the highway-rail grade crossing on Warner Street in Baltimore, Maryland.

The Warner Street highway-rail grade crossing is located at milepost BAA 0.740 of CSX's Central Baltimore Terminal Subdivision line. This line hosts both freight and commuter trains connecting Baltimore to Washington DC. Warner Street is a multimodal street with rapidly increasing pedestrian activity that connects residents, employees, and visitors to transit services, recreation, and multiple new developments shown in Figure 2. As an indication to its importance to the pedestrian and bicycle network, Warner Street, including the highway-rail grade crossing, is part of the Gwynns Falls Trail, which is a 15-mile hiking and biking trail that connects users through 30 neighborhoods from the forested area of Gwynns Falls/Leakin Park in northwest Baltimore to the Inner Harbor and Middle Branch Patapsco River. Gwynns Falls Trail is also a component of the East Coast Greenway that has a goal of connecting pedestrians and bicyclists through entirely off-street trails and shared use paths from Maine to Florida.

During special events at the Horseshoe Casino, M&T Bank Stadium, and Oriole Park at Camden Yards, activity increases dramatically on Warner Street. The proximity of these facilities with respect to each other can have a synergistic effect on Warner Street. During Baltimore Ravens games, an average of 2,000 of the 4,220 spaces in the parking garage at Horseshoe Casino may be occupied. From this garage, spectators commonly walk along Warner Street to reach M&T Bank Stadium. About 30% of guests to M&T Bank Stadium enter through the venue's south gates that are closest to Warner Street. Spectators often gather in parking areas near the crossing to socialize prior to game events. These pre-game events can amass crowds of people who walk together along Warner Street in the direction of the stadium and have been observed unsafely crossing the railway.



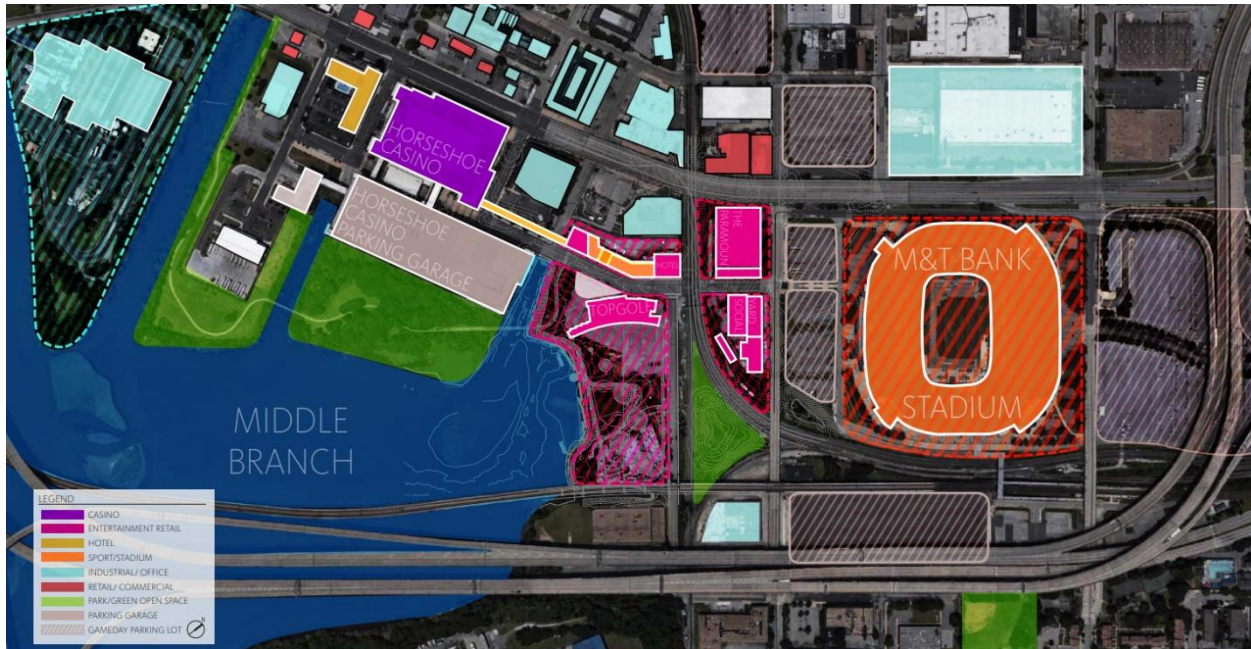


Figure 2: Recent Land Use Changes in Project Area

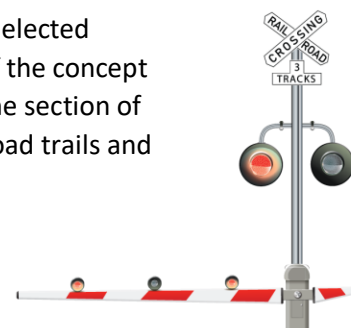
The Warner Street highway-rail grade crossing is one of five highway-rail grade crossings that bifurcate an area of Baltimore that is cordoned by CSX tracks to the north and west, Interstate 95 to the south, and Interstate 395 and the Middle Branch Patapsco River to the east. Other highway-rail grade crossings in this vicinity include crossings at Bayard Street, Bush Street, Ridgely Street, and Sharp Street. In addition, Russell Street (Maryland Route 295), while grade separated with a road-over-rail design, lacks multimodal facilities that connect people walking or traveling by bicycle between Worcester Street and West Hamburg Street. The lack of safe multimodal facilities contributes to the isolation of this area of Baltimore from other neighborhoods, restricts safe access to transit services, and harms the potential economic development of Baltimore City. Households without a vehicle and people with disabilities that are dependent on transit services and multimodal facilities face barriers to accessing amenities and employment. Therefore, this Project is an important solution to address these safety, mobility, and equity challenges.

5.1 Warner Street Highway-Rail Grade Crossing Project Components

The Warner Street Project comprises a rail crossing elimination study and short-term improvements:

- **Task 1: Rail Crossing Elimination Study**

The ultimate goal of the Project will be to advance a subsequent grade separation of Warner Street from the CSX railroad to eliminate the current highway-rail grade crossing. Feasible concepts for long-term improvements to eliminate the crossing through grade separation will chart the path to remove conflicts between rail traffic and other ground modes of transportation and therefore reduce the likelihood of serious injury or death. A preferred concept alternative for grade separation to be designed and construction will be selected through the process of an alternatives screening and feasibility analysis. Design of the concept alternative will consider the needs of each mode. For instance, the proximity of the section of the East Coast Greenway, which aims to entirely connect trail users through off-road trails and



paths, along Warner Street presents an opportunity to consider the separate mobility needs of pedestrians and bicyclists versus motor vehicle traffic for the grade separation improvements. The study will be completed first such that the configuration will inform the design for the short-term crossing improvements. The study will be separated into different subtasks as described in the attached Statement of Work (Appendix 2a), and will include a feasibility analysis; concept development; environmental review of each concept; and continual stakeholder, government agency, and rail carrier engagement.

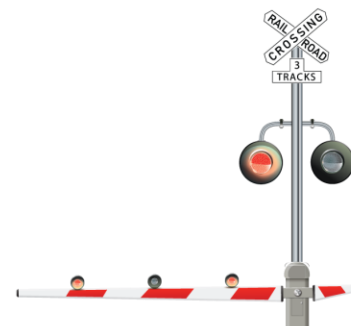
- **Task 2: Short-Term Crossing Improvements**

The current four-track highway-rail grade crossing features a cantilever flashing light signal, mast mounted flashing light signals, and vehicular crossing gate arms, but lacks facilities and traffic control devices that support the movement of pedestrians and bicycles across either side of the four tracks as shown in Figure 3. The short-term improvements will therefore include the installation of wider sidewalks, detectable warning surfaces, pedestrian gates, channelized railings or fencing, a roadway median barrier, and additional signage to provide the physical barriers and sensory cues to improve safety while facilitating the movement of people. These improvements will also include signal and communications upgrades, landscaping, and drainage. This combination of short-term improvements at the crossing will be informed by the long-term solutions for grade crossing elimination.



Figure 3: Existing conditions at Warner Street Rail Crossing

Related to this highway-rail grade crossing Project, in anticipation of increased land development in the vicinity of the rail crossing and subsequent increases in pedestrian, bicycle, and vehicular traffic, Baltimore City has developed plans (65 percent design) and a timeline of construction for streetscape improvements on Warner Street from Worcester Street to West Ostend Street and on Stockholm Street from Warner Street to Sharp Street. The proposed short-term improvements of the highway-rail grade crossing will be integrated with these streetscape plans to ensure a seamless network of ADA-compliant pedestrian facilities and bicycle paths along Warner Street. Thus, short-term improvements of the highway-rail grade crossing will address immediate safety issues in advance of subsequent long-term improvements.



5.2 Current Challenges, Project Outcomes, and Performance Measures

The Project is a critical piece to fulfill the potential for Warner Street to function as a multimodal street that is safe and accessible for all users, including residents, railroad employees and local land use employees, and visitors to the Project vicinity. The Project's goal of a Warner Street grade separated from the railroad provides a sustained solution to ongoing safety issues, including a recent history of documented rail crashes at the crossing. The proximity to recreational venues that generate large volumes of pedestrians traversing the crossing during peak events, such as concerts and sporting events, further intensifies near misses and the risk of incidents resulting in serious injury or death. Additionally, the assurance of a Warner Street that is seamlessly safe and accessible to pedestrians, bicyclists, and motorists along its entire extent is a vital antecedent to the prospect of economic growth in the Project vicinity that will result in increases in the number of residents and employees. The transformation of Warner Street into a multimodal thoroughfare is an important feature in connecting to the City's overall network and therefore providing job access and removing barriers for the underserved communities near the project area. These improvements will not only benefit non-railroad users, but will also preserve the mobility of people and goods through Baltimore by rail and ensure that a reduced risk of collisions can enhance the functionality and efficiency of the regional rail network.

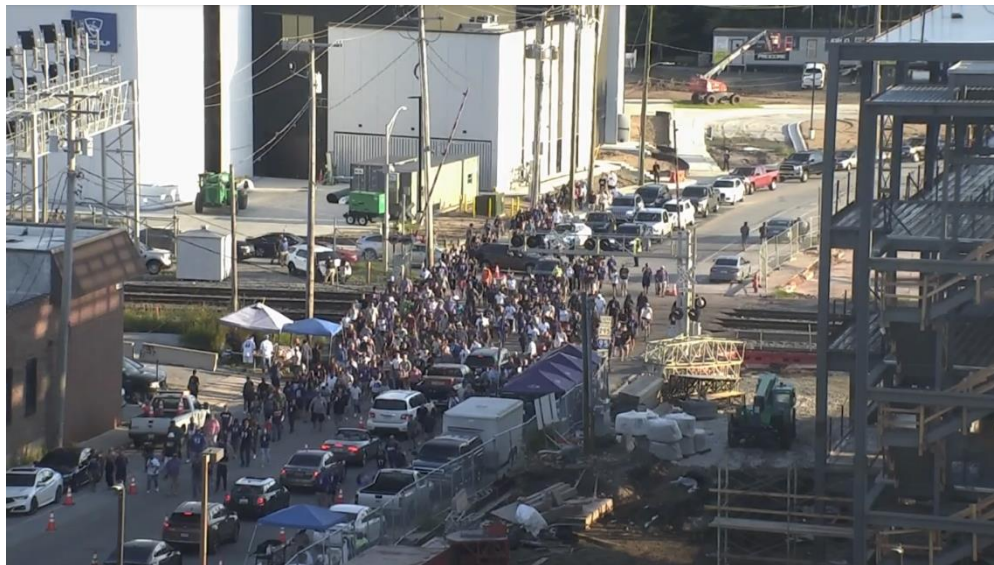
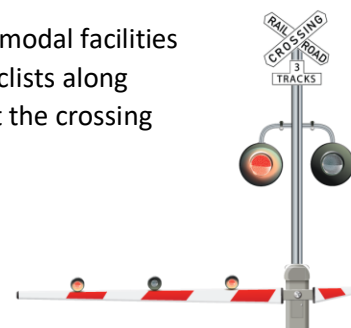


Figure 4: Warner Street Crossing pedestrian activity during a Baltimore Ravens Pre-Season Game (2022)

Overall, the Project provides short-term capital investments and advances subsequent long-term improvements that will benefit residents, employees, and visitors who will use Warner Street to access transit services, employment, recreation, goods and services, and other amenities. The Project will also benefit MARC commuter rail service and CSX freight service as these rail operators continue to move goods and people through downtown Baltimore. The current challenges the Project will address, the anticipated outcomes, and associated performance measures are described as follows:

5.2.1 Safety and mobility of pedestrians, bicyclists, and motorists

Challenge: The current highway-rail grade crossing infrastructure lacks the requisite multimodal facilities and traffic control devices to permit safe, ADA-compliant mobility of pedestrians and bicyclists along Warner Street and on either side of the crossing. Three reported crashes have occurred at the crossing



in the last 10 years and ongoing land development will lead to a substantial increase in pedestrian, bicycle, and motor vehicle traffic traversing Warner Street, which has increased the frequency of near-misses and potential for future crashes. During the 10-year period ending in the summer of 2022, there were three reported crashes at the highway-rail grade crossing and one trespassing incident involving a fatality. Table 1 presents a summary with details of these reported incidents at the crossing.

Table 2: Reported Accident/Incident and Trespassing Cases at Warner Street Crossing

Date	Description of Event	Consequences
7/28/2015	Pedestrian trespassed between train cars that were moving 3 miles per hour (mph)	The pedestrian and a CSX train driver were both injured
3/10/2019	A CSX train transporting hazardous materials struck an unoccupied car that was parked in the crossing	\$6,500 in property damage to the car
8/22/2021	A CSX train struck a pedestrian that had walked around the crossing gates into the moving train	The pedestrian was injured and transported to a hospital
1/28/2022	A pedestrian was found lying down on the tracks at the crossing	Fatality to the pedestrian who was exposed to cold temperatures

Apart from these confirmed incidents, near misses and illicit crossings when the safety apparatuses are activated behooves further intervention. Warner Street is positioned in an area of Baltimore near multiple recreational venues, including stadiums and a casino, and is used as a channel for moving people between these land uses and adjacent transit stations. Available footage¹ showing the times before and after major sporting events has provided anecdotal cases wherein throngs of pedestrians are noted to cross the railroad via Warner Street while flashing lights are indicated and railroad crossing arms are lowered. In some near miss cases, as the safety apparatuses are activated, footage has shown pedestrians climbing over rail car couplings of trains parked inside the crossing.

Upgrading Warner Street to be accessible is made urgent by the fact that the Census Bureau estimates that 15% of people 18 years or older living in Census tract 2101, which encompasses the Project’s area, have a disability. Three Census tracts that are adjacent to the Project are identified as disadvantaged areas according to the Justice40 Climate and Economic Justice Screening Tool and would be a focus of the U.S. Department of Transportation (DOT) Equity Action Plan, including Census tract 2102 that is one half-mile walking distance from the Project. Disability rates among people 18 years or older within those Census tracts, including 1803, 2102, and 2503.01 are 20%, 24%, and 48%, respectively. Lack of accessibility amenities can aggravate safety issues for persons with disabilities, therefore, including ADA-compliant components is a key tool for addressing this issue.

¹ A link to the video stream is available from here:
<https://app.oxblue.com/open/ClarkConstruction/theparamountbaltimore>

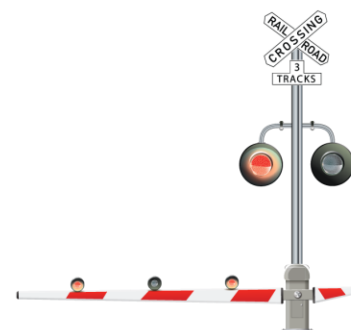




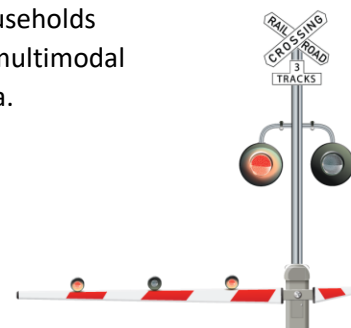
Figure 5: Large crowds are seen crossing the railroad at Warner Street after a Baltimore Ravens game while the flashing warning lights are activated

Outcome: The short-term improvements, integrated with the streetscape plans, will provide interim solutions to the highway-rail grade crossing on Warner Street and improve safety for pedestrians, bicyclists, and motorists who need it now. The installation of physical barriers (including a roadway median barrier, separate pedestrian gates, and channelized railings or fencing) and sensory cues (such as detectable warning surfaces) will enhance the visibility and tactile features of the crossing to pedestrians, bicyclists, and motorists while helping to limit the movement of people while safety apparatuses are activated. The rail crossing elimination study will identify a long-term solution to eliminate the rail crossing through grade separation that will entirely remove conflicts between rail traffic and other ground modes of transportation at this crossing and therefore reduce the likelihood of serious injury or death. Subsequent grade separation will also eliminate delays to vehicles normally idling behind lowered crossing gate arms, which can have a further effect of adding the emissions to the atmosphere that are harmful to human health.

Performance measure: Multi-modal traffic volume counts, number of crashes at the crossing, and frequency of trespassing events including when the railroad crossing arms are lowered. These performance measures are further detailed in the Statement of Work (Appendix 2d).

5.2.2 Multimodal system connectivity, access to jobs, and equity for underserved communities

Challenge: South of the Warner Street highway-rail grade crossing, this area of Baltimore is bounded by the CSX-owned railroad to the north and west, the Middle Branch Patapsco River and Interstate 395 to the east, and Interstate 95 to the south. The lack of safe multimodal facilities in combination with these geographic features isolates this area from other neighborhoods of Baltimore, access to transit services, access to employment, and harms the potential economic development of Baltimore. Households without a vehicle and people with disabilities that are dependent on transit services and multimodal facilities face barriers to accessing amenities and employment located in this growing area.



Further, the Project is located in an area that is expected to experience economic growth over the next several years. The [Baltimore Metropolitan Council’s Cooperative Forecast](#) of the traffic analysis zones (TAZ’s) within one half-mile of the Project estimates the residential population will increase from 7,792 in 2020 to 8,518 in 2025, a growth rate of 9%. The number of jobs within these same TAZ’s will increase from 16,861 in 2020 to 18,386 in 2025, also a growth rate of 9%. In combination with this projected economic growth, the Project is within a Census tract where 28% of households are estimated to travel to work by a means other than a private, personal automobile and 11% of households do not have a vehicle. As previously mentioned, 15% of residents in this same Census tract are reported to have a disability. The densely populated communities and connected grid network of streets and sidewalks contribute to the permeability of travel within the Project’s vicinity, as people move between neighborhoods. Since adjacent Census tracts have residential populations with disability rates ranging from 20% to 48%, accessibility between the Project area and the surrounding area is an important factor towards removing barriers for disadvantaged communities. Census tract 2102 is one half-mile walking distance from the Project, but its otherwise continuous network of streets is disconnected by the railroad tracks. Highway-rail grade crossings are located on Bayard Street and Bush Street within Census tract 2012 and highway-rail grade crossings are located on Ridgely Street and Sharp Street in addition to Warner Street within Census tract 2101. Reconnecting Warner Street through ultimate grade separation and streetscape improvements will help integrate the disadvantaged Census tract 2102 with adjacent areas.

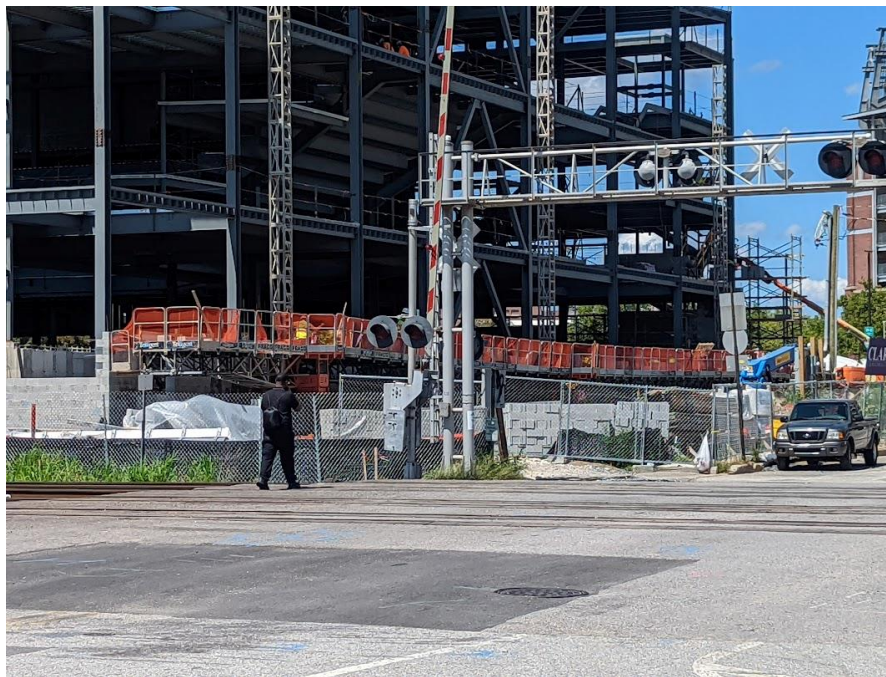
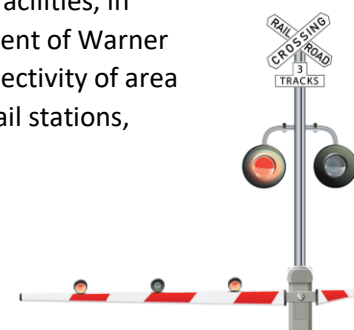


Figure 6: Looking north, construction cranes and fencing are set up for new land development as a pedestrian crosses the railroad along Warner Street.

Outcome: Long-term improvement of the crossing with adequate pedestrian and bicycle facilities, in combination with plans to upgrade the streetscape of Warner Street, will result in a segment of Warner Street between Worcester Street and West Ostend Street that can fulfill multimodal connectivity of area residents, employees, and visitors who use Warner Street to access commuter and light rail stations,



stadiums, the casino, and multiple city neighborhoods. This has the effect of connecting households without vehicles to an otherwise isolated area of Baltimore, reducing automobile dependence for all users, providing access to jobs, and removing barriers for and improve the equity for underserved communities and for people with disabilities. Reconnecting Warner Street through ultimate grade separation and streetscape improvements will help integrate the disadvantaged Census tract 2102 with adjacent areas.

Performance measures: Population and employment growth resulting from new land development around Warner Street.

5.3 Expected Users and Beneficiaries

With a population of 585,708 as of the 2020 Census, Baltimore is the largest city in Maryland, a regional center of employment and entertainment, and a critical link connecting passenger and freight rail service in the Northeast, Southeast, and Midwest of the United States. The railroad at the highway-rail grade crossing on Warner Street accommodates service by MARC commuter rail and CSX freight and is therefore located within a major multimodal system. MARC commuter rail, and specifically the Camden Line on which the Warner Street highway-rail grade crossing is situated, connects Washington, DC to Baltimore via 12 stations along 39 miles of railroad tracks. CSX is a Class I railroad providing freight service, with a network of over 20,000 miles that spans the eastern United States east of the Mississippi River and includes service in Ontario and Quebec. Maryland is moreover an important conveyor of freight traffic, with 55% of volume by tonnage shipped through the state in 2019 and 38% of volume by tonnage inbound to the state. Baltimore itself is a hub for regional freight rail service, with rail traffic often terminating or originating at the Port of Baltimore terminals, from where goods are imported and exported globally.

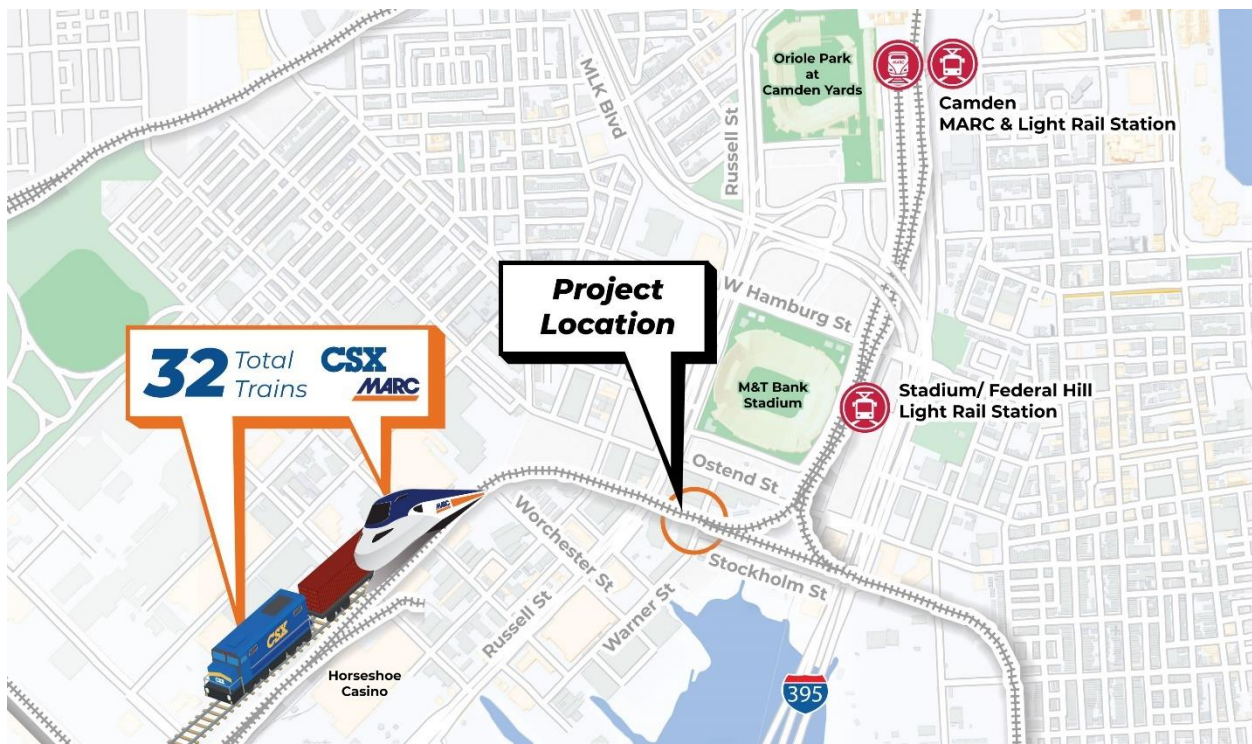
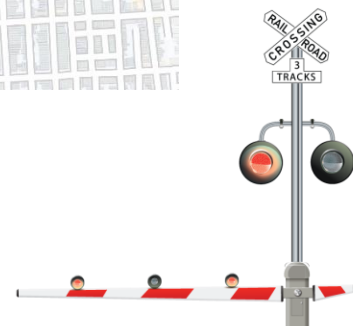


Figure 7: Project Context within City of Baltimore



According to the 2020 U.S. DOT Crossing Inventory Report, the Warner Street crossing carried an average of 32 total trains per day in 2020, traveling at a maximum speed of 25 mph. With reduced MARC commuter rail service during 2020 due to the COVID-19 pandemic, an average of 10 of the total 32 trains were passenger rail trains on the Camden Line. More recently in 2022, passenger rail trains per weekday doubled to 20 average trains crossing Warner Street as they transport people between Washington, DC and Baltimore on the MARC Camden Line. Based on 2019 data, prior to the COVID-19 pandemic, an annual weekday average of 4,379 passengers rode MARC trains on the Camden Line. From the start of the pandemic, ridership fell through 2021, but increased through the first eight months of 2022. January through August 2022, 975 passengers rode this same route during an average weekday, a rate more than double the 2021 average.

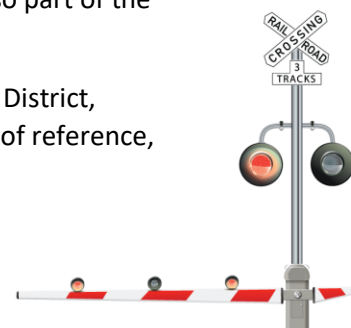
While the study will identify a solution for eliminating the grade crossing, the short-term crossing improvements will benefit these rail operators by preserving the movement of people and goods while reducing the likelihood of safety events that threaten life as well as economic activity that depends on efficient rail service. Freight service will continue to move goods through Baltimore as they travel to and from ports, warehouses, and distribution centers through the United States. MARC commuter rail will continue to move passengers on the Camden Line between Washington, DC and Baltimore. The long-term goal of highway-rail crossing elimination by grade separation will eliminate conflicts between rail traffic and other ground modes of transportation that can cause harm to life, congestion, and delays.

Residents, employees, and visitors who will use a multimodally-connected, grade separated Warner Street to access transit services, employment, recreation, goods and services, and other amenities will be beneficiaries of the Project. With 16,861 employees working in, and 7,792 residents living in TAZ's one half-mile from the Project, the Project's multimodal facilities, improvement of short-term conditions will enhance mobility and safety. In addition, with 28% of households depending on non-private automobile means of transportation, 11% of households without vehicles, and a range of 15-48% of residents in nearby Census tracts having disabilities, the Project will improve accessibility to amenities, jobs, and transit services while limiting car dependence in a densely populated area of Baltimore. Hundreds of thousands of visitors who spectate sporting events and patronize other local businesses per year will also benefit from an option to travel along Warner Street with a reduced risk of harm as they move between adjacent land uses, parking areas, or transit stations. Trail users of the Gwynns Falls Trail network, such as hikers, bicyclists, joggers, and people who use the trail for myriad other recreational and community purposes, will benefit from a trail that will be safer to travel for its entire duration.

6 Project Location

The Project is located in Baltimore, Maryland and is within the 7th Congressional District of Maryland. Its specific coordinate points are 39.27554° N, -76.62445° W based on the spatial reference from the World Geodetic System 1984 (WGS84). Its railroad milepost is BAA 0.740. Four railroad tracks cross Warner Street between West Ostend Street and Stockholm Street. Warner Street is also part of a the Gwynns Falls Trail network, which connects communities from Gwynns Falls/Leakin Park in northwest Baltimore to the Inner Harbor and Middle Branch Patapsco River. This section of Warner Street is also part of the East Coast Greenway, which connects Florida to Maine.

The map in Figure 8 below depicts the Project location in relation to the 7th Congressional District, effective from the 2022 election cycle. The map in Figure 7 presents more detailed points of reference,



including the Project location with respect to the CSX tracks, current train traffic, local roadways, and available transit services.

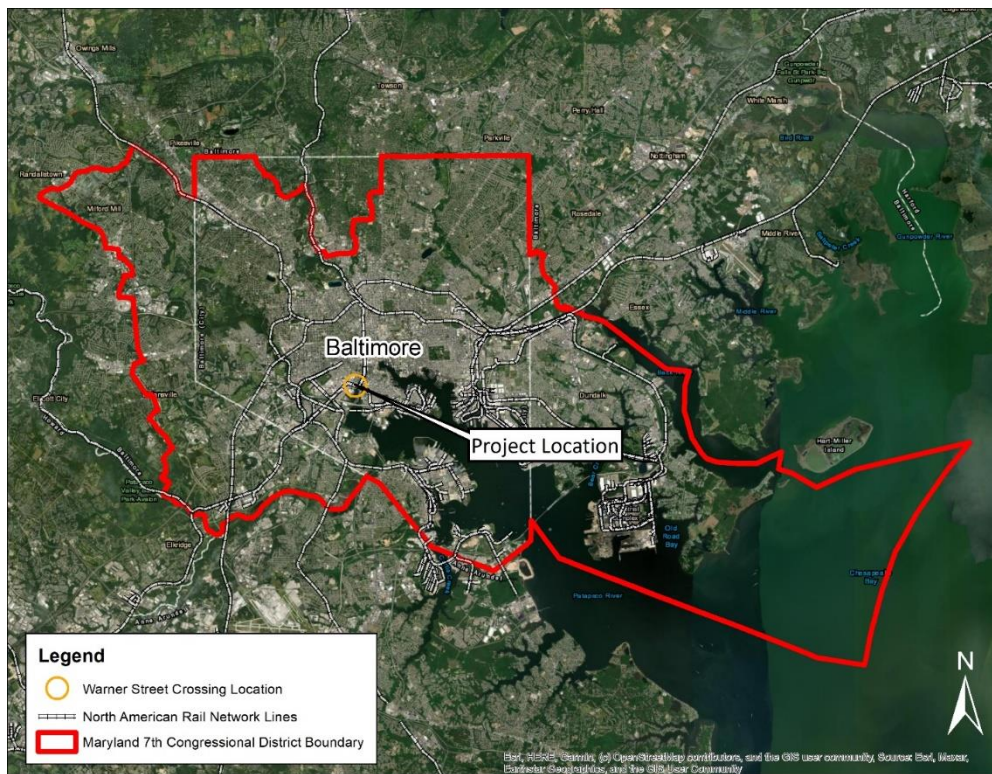


Figure 8: Project Context within Maryland’s 7th Congressional District

7 Grade Crossing Information

The crossing that is affected by the Project is identified by DOT Crossing Inventory Number 140863B. The railroad that traverses the crossing is owned and primarily operated by CSX freight service and also supports MARC commuter rail service. Warner Street is a public road with highway number MU 6659 and crosses this railroad at grade.

The City of Baltimore owns and maintains Warner Street. Warner Street was laid out in a 1783 plat with the approval of the General Assembly of Maryland and has remained a public street since that time. The railroad that is perpendicular to, and crosses, Warner Street was a segment of the Baltimore and Ohio (B&O) Railroad and was approved for track laying in 1845. In 1987, B&O railroad merged with the Chesapeake and Ohio (C&O) Railway, which itself merged with CSX later that same year. The railroad has been owned and maintained by CSX since that time.

In 2020, the crossing carried an average of 32 trains per day, 10 of which were MARC commuter rail trains. Presently, there are 20 MARC commuter rail trains per day. The crossing has four tracks, and MARC operates commuter trains on the northernmost two of the four tracks. These two northernmost tracks support a maximum speed of 15 mph for passenger rail trains. The southernmost two tracks support trains traveling at a maximum speed of 25 mph through this section. The Warner Street crossing is the first highway-rail grade crossing passenger trains encounter when enroute to Washington, DC



from Baltimore along the Camden Line, and the last highway-rail grade crossing in the opposite direction.

Warner Street is a two-lane local street with a statutory speed limit of 25 mph. Warner Street features one vehicular travel lane in each direction of traffic, on-street parking, as well as striped bike lanes and sidewalks on either side of the highway-rail grade crossing. The striped bike lanes represent an on-road section of the East Coast Greenway. Overhead streetlights are positioned on either side of the crossing along Warner Street's east side.

The crossing includes a range of traffic control devices. A two-quadrant gate configuration comprises the main barrier separating rail traffic from other ground transportation modes. A combination of active and passive devices comprises the warning control system, including one cantilevered flashing light structure; three mast mounted flashing light structures; seven pairs of flashing lights; two audible bells; advanced warning pavement markings; and posted signage including a crossbuck, Emergency Notification Systems (ENS) sign, the number of tracks, and a "Do Not Stop On Tracks" sign. The SAP ranks this crossing as the 12th highest priority in Maryland based on the Rail Crossing Assessment Tool (RCAT).

8 Evaluation and Selection Criteria

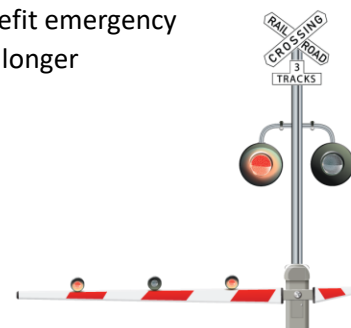
8.1 Evaluation Criteria

Project Benefits

The Warner Street Highway-Rail Grade Crossing Project will implement highway-rail grade crossing improvements that will provide immediate benefits and will study grade separation concepts to select a preferred alternative that provides long-term, sustained benefits to MARC, CSX, and the residents, employees, and visitors who use the Warner Street corridor.

The Project will result in the following benefits:

- **Improved Safety:** Short-term improvements that include wider sidewalks, detectable warning surfaces, pedestrian gates, channelized railings or fencing, a roadway median barrier, and additional signage at the highway-rail grade crossing. These improvements will immediately upgrade the physical space and the visual and tactile cues to pedestrians, bicyclists, and motorists that can reduce the likelihood of collisions with rail traffic and trespassing incidents
- **Proposed Long-Term Rail Crossing Elimination Solution:** Through the feasibility analysis and environmental review process, a preferred alternative that considers each mode of travel will be identified that can preserve the movement of passenger rail and freight rail service through Baltimore while removing conflicts between rail traffic and other ground transportation modes. This will set partners and stakeholders up to pursue subsequent design and construction of the crossing elimination solution.
- **Improved Mobility & Access to Emergency Services:** The identified solution for long-term grade separation will permit the free flow of vehicular travel on Warner Street that is otherwise delayed by the recurring passage of freight and passenger rail trains. This will benefit emergency vehicles so they can achieve rapid response to incidents that may otherwise have longer response times due to delays created by the highway-rail grade crossing.



- **Reduced Emissions:** The Project will preserve and upgrade the mobility of non-automotive modes of travel (including pedestrians and bicyclists) and improve accessibility by designing and constructing new facilities to be ADA-compliant. The Project will preserve the mobility of passenger and freight rail trains that cross Warner Street each day. The capacity for Warner Street to function as a multimodal corridor will reduce automobile dependence within a Census tract where 28% of households are estimated to travel to work by a means other than a private, personal automobile and 11% of households that do not have a vehicle.
- **Improved Access to Communities:** The short-term improvements will provide ADA accessible connections for surrounding communities, especially for persons with disabilities, within an otherwise walkable transportation system.
- **Provide Economic Benefit:** The short-term investment will enable economic competitiveness by encouraging redevelopment along the Warner Street corridor that benefits from high pedestrian traffic. Identifying a long-term solution for rail crossing elimination will instill confidence for long-term private investment in the area.
- **Competitive Contracting:** MDOT MTA will utilize its Disadvantaged and Minority Business Enterprise Programs to improve participation in contracts for design and construction activities.

Technical Merit

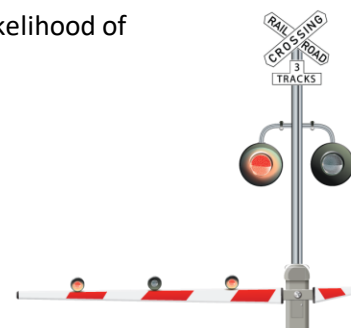
- **Innovation:** MDOT MTA is committed to incorporating innovative designs into the physical infrastructure of the Project to contribute to reductions in greenhouse gases and minimizing other environmental impacts. This approach will be in support of a 2017 Executive Order by the Governor of Maryland that established a sustainable materials management (SMM) policy for Maryland. The SMM policy focuses on the lifecycle of materials during every step from extraction to the management of the materials' end-of-life stage in an effort to minimize environmental impacts.
- **Multimodal Mobility:** The Project will improve the mobility for ground transportation modes, including pedestrians, bikes, and vehicles. Short-term improvements will enhance the infrastructure of the highway-rail grade crossing to include ADA-compliant features and wider sidewalks to be integrated with streetscape plans for Warner Street. MDOT MTA has experience working with Baltimore City DOT to design and construct multimodal 'complete streets' projects, including the recently completed \$27.3 million North Avenue Rising Project that included streetscaping, sidewalk, and dedicated bicycle facilities along a five mile corridor of Baltimore City.

8.2 Selection Criteria

A. Safety

A key purpose of the Project will be to reduce the risk to all ground modes of transportation that currently use the highway-rail grade crossing. The rail crossing elimination study will focus on developing a grade separation concept alternative that can eliminate the risk of injury or death by separating rail traffic from pedestrian, bicycle, and vehicular traffic. Short-term improvements will provide interim solutions including physical barriers and sensory cues to reduce the likelihood of serious harm or death while facilitating the movement of people.

B. Equitable Economic Strength and Improving Core Assets



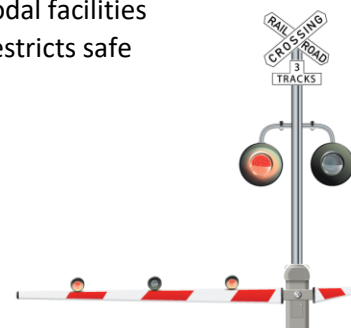
The Project is located in an area that is undergoing economic growth. The Baltimore Metropolitan Council's Cooperative Forecast of the traffic analysis zones (TAZ's) within one half-mile of the Project estimates the residential population will increase from 7,792 in 2020 to 8,518 in 2025, a growth rate of 9%. The number of jobs within these same TAZ's will increase from 16,861 in 2020 to 18,386 in 2025, also a growth rate of 9%. New developments in the vicinity of the Project include new recreational and service uses such as a performing arts theater, restaurants, and a golf driving range. These uses have potential to generate a substantial increase in pedestrian, bicycle, and vehicular traffic. An outcome of the Project will be its role in reconnecting the adjacent areas and improve mobility. Improving mobility, especially for more vulnerable modes such as pedestrians and bikes, will aid in the economic progress of this area by improving the area's attraction to patrons who benefit from a safe, accessible, and well-connected network to travel to and from this area. This will benefit residents, employees, and visitors who use Warner Street to access commuter and light rail stations, stadiums, the casino, multiple city neighborhoods, and future land development.

C. Equity and Barriers to Opportunity

The Project is located within Census tract 2101, where 28% of households are estimated to travel to work by a means other than a private, personal automobile and 11% of households do not have a vehicle. Throughout Baltimore, an average of 29% of households do not have access to a vehicle, but this can be as high as 66% in historically disadvantaged and underserved neighborhoods. Approximately 15% of residents in this same Census tract are reported to have a disability. Adjacent Census tracts have residential populations with disability rates ranging from 20% to 48%.

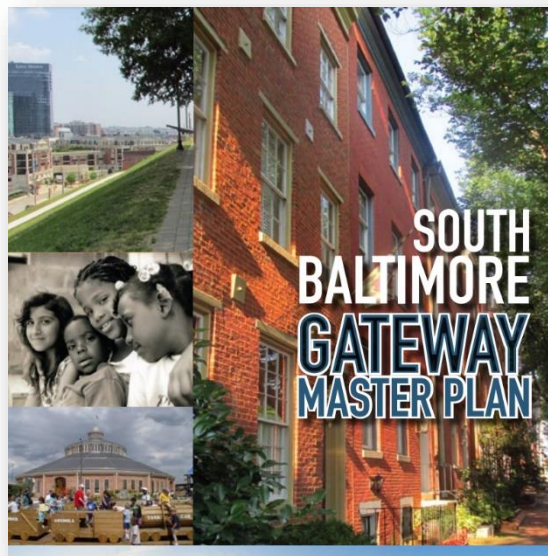
The Project is in the vicinity of densely populated communities and a connected grid network of streets and sidewalks that facilitate the movement of people move between neighborhoods. The Environmental Protection Agency (EPA) National Walkability Index reviews the available mix of housing, types of employment, density of street intersections, and mode splits for work commutes. For Census tract 2101, as well as surrounding Census tracts immediately to the north and east, the National Walkability Index classifies the area as being in the highest quartile of walkability, or "Most Walkable", with an index of 16.5 out of 20. The EPA's Access to Jobs and Workers Via Transit tool indicates that 18% of low-wage earners in the Baltimore-Columbia-Towson Core Based Statistical Area (CBSA) can reach Census tract 2101 by transit. Walking and biking are common "last mile" modes of transportation that link employees from transit services to jobs. Providing the necessary facilities for people to travel safely without a vehicle is therefore paramount.

While Census tract 2101 and surrounding Census tracts are within walkable areas according to the National Walkability Index, they are otherwise disconnected from each other by the railroad tracks. The Warner Street highway-rail grade crossing is one of five highway-rail grade crossings that cordon an area of Baltimore that is generally bounded by CSX tracks to the north and west, Interstate 95 to the south, and Interstate 395 and the Middle Branch Patapsco River to the east. In addition to the other highway-rail grade crossings, Russell Street (Maryland Route 295), while grade separated with a road-over-rail design, lacks multimodal facilities that could connect people walking or traveling by bicycle between Worcester Street and West Hamburg Street. The lack of safe multimodal facilities contributes to the isolation of this area of Baltimore from other neighborhoods and restricts safe access to transit services.



D. Climate Change and Sustainability

MDOT MTA is committed to strategic infrastructure investments and operations that increase sustainability and can address and reduce harmful impacts of climate change. The Project will support goals laid in the Maryland Department of Environment (MDE) 2030 Greenhouse Gas Emissions Reduction Act (GGRA) Plan² and the Baltimore Sustainability Plan³. The EPA reports that the transportation sector, which includes emissions from sources such as passenger cars and light-duty trucks, heavy-duty trucks, and railroads, is the leading contributor to greenhouse gas (GHG) emissions in the United States. The GGRA confirms that the transportation sector is the leading source of GHG emissions in Maryland as well. A key tenant of the GGRA is to address climate change by promoting clean and reliable transportation options including investments and pedestrian and bike infrastructure.



The Baltimore Sustainability Plan’s transportation strategies to support sustainability and address climate change include the promotion of policies that invest in infrastructure of alternative transportation modes away from single occupancy vehicles. Specifically, the South Baltimore Gateway Master Plan supports improving the pedestrian and bicycle network with a recommendation for bridging the railroad tracks crossing Warner Street to “provide a safe connection between M&T Bank Stadium, the Gwynns Falls Trail, and Horseshoe Casino.”⁴

The Project would directly respond to these by promoting a multimodal and ADA-compliant approach to its short-term crossing improvements as well as grade separation. The Project’s provision of a multimodal connection can contribute to a mode shift that would reduce vehicle miles traveled and therefore contribute to a reduction in GHG emissions.

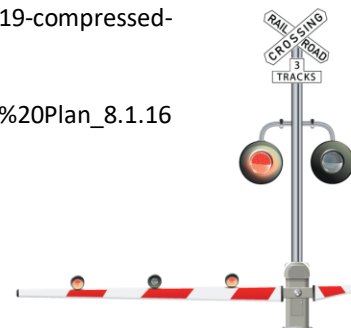
E. Transformation of Our Nation’s Transportation Infrastructure

The Project addresses a need to restore Warner Street at the highway-rail grade crossing to a state of good repair. The crossing’s pedestrian infrastructure lacks ADA-compliant facilities such as detectable warning surfaces and the existing crossing warning system is insufficient to prevent trespassing incidents. CSX maintains the private right-of-way for the railroad tracks and Baltimore

² Access the following link details of the 2030 Greenhouse Gas Emissions Reduction Act (GGRA) Plan:
<https://mde.maryland.gov/programs/air/ClimateChange/Documents/2030%20GGRA%20Plan/THE%202030%20GGRA%20PLAN.pdf>

³ Access the following link for details of the Baltimore Sustainability Plan:
https://www.baltimoresustainability.org/wp-content/uploads/2019/02/Sustainability-Plan_01-30-19-compressed-1.pdf

⁴ Access the following link for details of the South Baltimore Gateway Master Plan:
https://planning.baltimorecity.gov/sites/default/files/South%20Baltimore%20Gateway%20Master%20Plan_8.1.16_Final.pdf



City maintains the transportation infrastructure in the public right-of-way that includes Warner Street. The Project's short-term improvements will include railroad and roadway design components that update the infrastructure to a state of good repair. Grade separation will incorporate short-term improvements to maintain a state of good repair while preserving the movement of freight and passenger rail traffic to maintain railroad capacity.

F. Eliminating Crossings and Making Corridor-Wide Improvements

The rail crossing elimination study will identify a preferred concept alternative for grade separation. The preferred alternative will consider all modes of travel, and provide a vision for the long-term future of the crossing.

G. Geographic Diversity

The Project is located in Baltimore, Maryland, is part of the Baltimore-Columbia-Town CBSA, and is within the 7th Congressional District of Maryland.

9 Safety Benefit

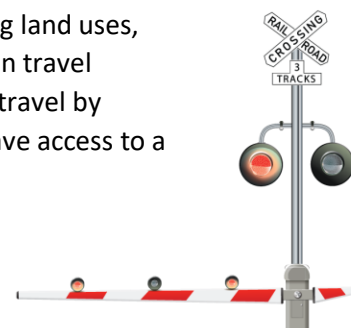
A key purpose of the Project is to address both immediate and long-term safety conditions. Based on the FRA's Grade Crossing Database Dashboard Tool (GX Dash!), there have been 23 highway-rail grade crossing collisions throughout Baltimore City from 2013 through 2021, resulting in 10 injuries and 2 fatalities. The FRA's Trespass and Suicide Dashboard reports a case in January 2022 in which an individual was found on the Warner Street highway-rail grade crossing who had died from exposure to cold temperatures. Along the CSX tracks within a quarter-mile of the crossing, two other trespassing incidents occurred over the most recent 10 year-period in which the involved pedestrians sustained injuries.

The Project's short-term crossing improvements will reduce the risk of crashes and trespassing incidents in Baltimore by including physical barriers to limit the movement of other ground transportation users while the crossing warning system is activated, including separate pedestrian gates and railings or fencing. The short-term improvements also reduce the risk of inadvertent harm to people with disabilities by introducing detectable warning surfaces. The rail crossing elimination study will identify a long-term solution to prevent serious injuries and fatalities to all road users and railroad employees and prevent the risk of a crash involving hazardous materials that can harm life in the immediate surrounding area.

10 U.S. DOT Strategic Goals

10.1 Impacts to Climate Change, Sustainability

An anticipated outcome of the Project will be the secondary effects towards climate change and sustainability by designing the improvements to be multimodal in harmony with the City's related planned streetscape project along Warner Street and Stockholm Street. The transformation of Warner Street to a multimodal corridor that improves pedestrian and bicycle access to neighboring land uses, transit services, and other amenities will provide a foundation to encourage a mode shift in travel patterns. Reducing automobile dependency within a Census tract where 28% households travel by means other than a personal, private automobile and where 11% of households do not have access to a



car can be a contributor to a reduction in greenhouse gases that exacerbate global climate change. The EPA reports that the transportation sector, which includes emissions from sources such as cars, trucks, and railroads, is the leading contributor to greenhouse gases in the United States. Additionally, the location of the Project within the National Hurricane Center’s Storm Surge Risk for categories 2 through 4 hurricanes is indicative of the self-preservation needs of the Project area to prevent the likelihood of extreme weather events aggravated by climate change. Therefore, the Project’s location within one of the most densely populated cities in the United States, with access to transit services operated by MDOT MTA, is ideally suited to reduce car dependence. Vehicles that use Warner Street and that idle behind lowered crossing gate arms may also contribute fewer emissions by permitting free-flow travel on Warner Street through grade separation.

10.2 Improving Equity and Barriers to Opportunity in Project Planning

As a recipient of the RCE grant, MDOT MTA will coordinate with Baltimore City DOT and all other involved stakeholders to ensure that federal grant regulatory standards are being met and exceeded. Baltimore City’s [Complete Street Manual](#) dictates how community engagement shall be centered on equity, with policies and actions related to race/gender/culture, income, age, and accessibility (page 158). MDOT MTA collaborates with Baltimore City DOT across many studies and capital projects, and uses the MDOT MTA Equity Index to guide both project prioritization and public engagement.

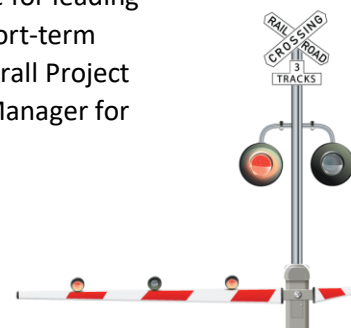
MDOT MTA’s technical capacity engaging persons with disabilities has increased through the development of its Inclusive Transportation Planning program, and MDOT MTA is committed to continuing this inclusive approach for this project as well. Through this program, MDOT MTA has applied a human-centered design approach to building relationships with members of the disability community to collaboratively develop, test, and refine solutions for improved customer experience. This approach considers the myriad experiences of persons with disabilities, such as positioning visual and tactile cues at boarding areas, providing American Sign Language (ASL) interpreters at in-person and virtual events, and incorporating accessible color palettes and alternative text in presentations and major reports. This approach has been utilized in project examples such as designing and printing braille transit route flip books for MDOT MTA service; prototyping and testing wayfinding signage at Charles Center Metro Station and a cycle track along North Avenue in Baltimore.

Further, MDOT MTA will utilize its Disadvantaged and Minority Business Enterprise Programs to facilitate participation in the Project’s contracts. According to the [2022 Evaluation of the Minority Business Enterprise Program](#) that evaluated programs across 29 states, Maryland has the second highest participation goal for a combined women and minority business enterprise program at 29 percent (page 23).

11 Project Implementation and Management

11.1 Team Organization

MDOT MTA will lead the Warner Street Project in continued coordination with project partners Baltimore City DOT, CSX, and Maryland Stadium Authority. MDOT MTA will be responsible for leading the rail crossing elimination study and overseeing design and the NEPA process for the short-term crossing improvements. MDOT MTA has designated the MARC Deputy Director as the overall Project Manager responsible for oversight and implementation, with a different Deputy Project Manager for



both the rail crossing elimination study and the short-term crossing improvements. The Warner Street Project will be managed by a dedicated team composed of a Chief Facilities Officer, a Chief Transportation Officer, a Safety Compliance Officer, an Environmental Planning Manager, a Chief of Engagement, and a Manager of Facilities Engineering, ADA & Sustainability. The project team will be responsible for Project Contracting, Oversight, and Change Order Management. The project team will report to the Deputy Project Managers, the MARC Deputy Director, the MTA Director of Planning and Capital Programming, and the MTA Chief Engineer. MDOT MTA will work closely with CSX and Baltimore City to ensure that design and construction of the short-term crossing improvements will comply with standards established in CSX Corporation's Public Projects Manual dated April 2022 and be consistent with the Baltimore City's current streetscape project on sections of Warner Street and Stockholm Street adjacent to the Project area. MDOT MTA will design and construct streetscape elements including drainage, sidewalk, and landscaping. Streetscape designs for the short-term crossing improvements will be provided to CSX, which will design and construct railroad-specific elements of the Project. Consultants will supplement MDOT MTA personnel as required for the project. As the grant recipient, MDOT MTA will coordinate with the Baltimore City and all other involved stakeholders to ensure that federal grant regulatory standards are being met.

11.2 Project Contracting and Oversight

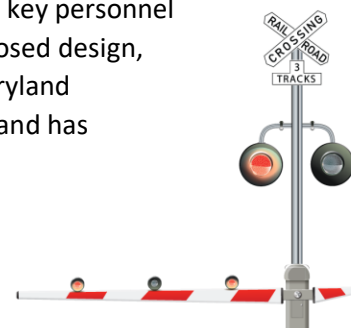
MDOT MTA will hold regular meetings to review the schedule, the effectiveness of public outreach, and the deliverables status on both the rail crossing elimination study and the short-term crossing improvement design. These meetings will involve the relevant agency staff, key project stakeholders, and technical consultants. MDOT MTA's technical consultants will be responsible for developing the risk register and master budget and schedule. MDOT MTA's technical consultants will be responsible for managing risk through updates at each milestone. These updates will identify project risks, describe cost and schedule impacts, propose mitigation measures, determine the person and/or team responsible for mitigation, and document when the risk is resolved. The technical consultants will also be required to update the schedule and budget at each key milestone. The schedule will account for items such as review and comment periods, deliverables, milestones, and the critical path which will be distinguishable from non-critical activities. It will also depict activities, descriptions, durations, start and finish dates, and the logical relationships between activities.

11.3 Federal Reporting

The MDOT MTA Office of Planning and Programming, led by the Capital Program Manager, will submit the required FTA progress reports, including FTA quarterly progress reports, Federal financial quarterly reports, and the final performance report.

11.4 Technical, legal, and financial capacity

As the lead agency and grant recipient, MDOT MTA will coordinate with its key participants to ensure that all federal grant regulatory standards are being met. MDOT MTA has the legal, financial, and technical capacity to carry out the Warner Street Project. The City would continue its ownership of Warner Street and control over the current use of the non-railroad equipment and facilities and has the willingness and capability to maintain the non-railroad equipment and facilities. Proposed key personnel have the technical qualifications, experience, and resource capacity to complete the proposed design, construction, and NEPA requirements for the Project. MDOT MTA is supported by the Maryland Transportation Trust Fund. MDOT MTA is the 13th-largest transit operator in the country and has



extensive experience executing and successfully completing U.S. DOT grants and projects in compliance with Federal grant requirements.

11.5 Past Experience

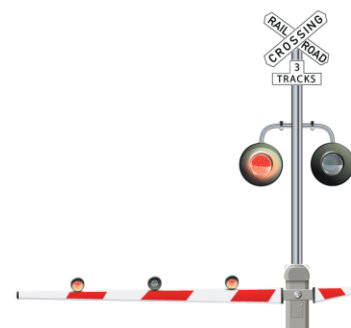
MDOT MTA has the experience required to effectively complete this project with a proven track record of delivering large rail construction projects within budget and on schedule. MDOT MTA has experience with NEPA, ADA compliance, and the planning, design, and construction of large capital projects that required coordination with the project partners involved with the Warner Street Project. The \$27.3 million North Avenue Rising project, constructed in 2021, included streetscape improvements across a 5-mile length of North Avenue and required MDOT MTA to coordinate design reviews and manage construction activities on right of way that is owned and maintained by Baltimore City. In 2019, MDOT MTA joined Maryland Stadium Authority for the opening of the MARC Camden Station which is the next station north of the Warner Street Crossing. The Camden Station Replacement Project exhibits successful collaboration between MDOT MTA and MSA, as the two agencies coordinated on design and MSA managed construction of the new station that is located adjacent to CSX owned railway. MDOT MTA also has experience providing oversight of track infrastructure capital projects such as interlockings, undercutting, and other capital ROW improvements as part of oversight of joint venture projects with both Amtrak and CSX on their respective rights-of-way.

11.6 Project Schedule

MDOT MTA will sequence the rail crossing elimination study (Task 1) and the short-term crossing improvements (Task 2) such that the design of the short-term improvements is informed by the long-term crossing elimination solutions identified by the alternatives screening and feasibility analysis that considers grade separation for each mode of travel on Warner Street. Assuming an executed grant agreement in November 2023, each task will immediately begin with a Detailed Project Work Plan, Budget, and Schedule. The rail crossing elimination study will be completed by September 2024, and the short-term crossing improvements will be completed by November 2026. A detailed description of the project schedule is included in the attached Statement of Work (Appendix 2b).

11.7 State and Local Approvals

If awarded this RCE grant to support the rail crossing elimination study and short-term improvements for the Warner Street highway-rail grade crossing, MDOT MTA will work closely with the Baltimore Region Transportation Board (BRTB) and MDOT to incorporate the Project into local, regional, and state plans expeditiously, as well as to secure the environmental approvals as quickly as is feasible. The Project will be added to the Transportation Improvement Program (TIP) by the end of 2023. The Project team is committed to broad public engagement that reaches the range of stakeholders. The Project partners are ready to continue building upon the public involvement taking place during the application process with local communities and neighborhood associations, elected officials, local and state agencies, major institutions, stakeholder organizations, and the business community.



12 Environmental Readiness

This project includes both a grade crossing elimination study and the final design and construction of short-term crossing improvements. The grade crossing elimination study will include an alternatives screening and feasibility study that will include a pre-NEPA scope of work including an inventory of known environmental features based on GIS and likely impacts to the different resources for different alternatives. It will also determine potential right of way needs for each alternative. The appropriate extent of the environmental review for the subsequent grade separation project will be informed by the alternatives and feasibility study.

MDOT MTA has begun the NEPA process for the short-term crossing improvements by consulting with resource agencies and using readily available information to identify environmental resources that could be affected by the Project. Details of this process are noted below and included in the appendix. Within one month of award announcement, MDOT MTA Environmental Planning staff will submit the request for NEPA for design of the short-term crossing improvements. Guided by the potential impacts illuminated during final design, MDOT MTA Environmental Planning staff will submit the request for NEPA for construction of the short-term crossing improvements prior to the start of construction. Based on conceptual design and preliminary investigations, MDOT MTA expects the short-term improvements to qualify as a C-listed categorical exclusion (CE) under 771.116[c][19] or 771.117[c][8].

Fish and Wildlife Service

On August 9, 2022, the Fish and Wildlife Service determined the Northern Long-Eared Bat could be affected if over 15 acres of forest is cleared. This Project will not clear any forest, therefore there will be no impact to the Northern Long-Eared Bat.

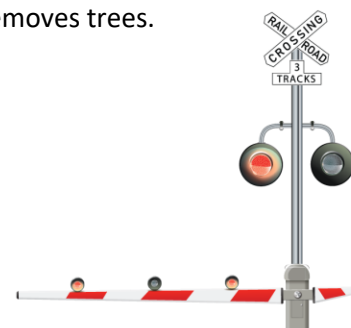
National Register of Historic Properties

MDOT MTA cultural resources staff reviewed listed or eligible historic properties from the National Register of Historic Properties (NRHP), resources over 50 years of age eligible for evaluation, and potentially significant archaeological resources. The review's findings conclude that the Project is not likely to affect historic properties or significant archaeological resources

Maryland Department of Natural Resources

The Maryland Department of Natural Resources (DNR) has found in an early review that no instream work is currently proposed for the Project. Provided the Project will not have instream work and will apply proper sediment and erosion control best management practices (BMPs), Maryland DNR has determined that the Project should not impact anadromous or resident fish species. Maryland DNR has also recommended judicious stormwater treatment designs and other BMPs to protect nearby stream resources.

The Project is within the 1,000' Critical Area, meaning it is within 1,000 feet of the average high line of tidal waters and tidal wetlands, and will require Maryland Department of Natural Resources' Critical Area Commission approval if the Project increases the amount of impervious surface or removes trees.



List of Appendices

1. Letters of Support
2. Statement of Work
 - a. Attachment 2: Statement of Work
 - b. Attachment 3: Deliverables and Approved Project Schedule
 - c. Attachment 4: Approved Project Budget
 - d. Attachment 5: Performance Measurements
3. Environmental Compliance Documents
 - a. US Department of the Interior: Fish and Wildlife Service letter (9/06/2022)
 - b. MDOT MTA Cultural Resources Memo (9/13/2022)
 - c. Maryland Department of Natural Resources letter (9/14/2022)

