

ENVIRONMENTAL ASSESSMENT FORM

GENERAL PROJECT INFORMATION

Date: January 22, 2026
Project: Chesapeake Bay Crossing Study Tier 2 NEPA (Tier 2 Study)
County: Anne Arundel County and Queen Anne's County

Originating Office: Maryland Transportation Authority, Office of Engineering and Construction

This Environmental Assessment Form (EAF) satisfies environmental documentation requirements of the Maryland Environmental Policy Act (MEPA) for state funded projects. Should you have any questions, please contact Heather Lowe, Maryland Transportation Authority (MDTA) at hlowe@mdta.state.md.us.

Scope of Work: The MDTA and Federal Highway Administration (FHWA) are proposing to evaluate additional transportation capacity across the Chesapeake Bay along the U.S. 50/301 corridor in a Tier 2 Environmental Impact Statement (EIS) per the National Environmental Policy Act (NEPA). The Tier 2 Study focuses on the Selected Corridor Alternative (Corridor 7) that was identified at the conclusion of the Tier 1 Study. The MDTA is developing and analyzing multiple alternatives within study limits that extend from the MD 2/MD 450 interchange in Anne Arundel County to the U.S. 50/301 split in Queen Anne's County.

The MDTA has identified the Alternatives Retained for Detailed Study (ARDS), which are the National Environmental Policy Act (NEPA) range of reasonable alternatives for evaluation in the Tier 2 Study EIS. Alternatives include the No Build Alternative and six Build Alternatives. Each build alternative includes removing the existing eastbound and westbound Bay Bridge spans and replacing them with two new bridge spans constructed near the location of the existing Bay Bridge. The ARDS are differentiated by the number of lanes provided across the new bridge and approaches, as well as the bridge location and include:

- **Alternative A - No-Build:** retains the existing Bay Bridge, the U.S. 50/301 alignment, and the existing number of lanes;
- **Alternative B - 6-8-6 North:** 6 lanes along U.S. 50/301 on the Western Shore, 8 lanes across the Chesapeake Bay on a new bridge to the north of the existing bridge, and 6 lanes along U.S. 50/301 on the Eastern Shore;
- **Alternative C - 6-8-6 South:** 6 lanes along U.S. 50/301 on the Western Shore, 8 lanes across the Chesapeake Bay on a new bridge to the south of the existing bridge, and 6 lanes along U.S. 50/301 on the Eastern Shore;
- **Alternative D - 8-8-8 North:** 8 lanes along U.S. 50/301 on the Western Shore, 8 lanes across the Chesapeake Bay on a new bridge to the north of the existing bridge, 8 lanes along U.S. 50/301 on the Eastern Shore;

**Chesapeake Bay Crossing Study: Tier 2 NEPA
ENVIRONMENTAL ASSESSMENT FORM**

- **Alternative E - 8-8-8 South:** 8 lanes along U.S. 50/301 on the Western Shore, 8 lanes across the Chesapeake Bay on a new bridge to the south of the existing bridge, 8 lanes along U.S. 50/301 on the Eastern Shore;
- **Alternative F - 8-10-8 North:** 8 lanes along U.S. 50/301 on the Western Shore, 10 lanes across the Chesapeake Bay on a new bridge to the north of the existing bridge, 8 lanes along U.S. 50/301 on the Eastern Shore; and
- **Alternative G - 8-10-8 South:** 8 lanes along U.S. 50/301 on the Western Shore, 10 lanes across the Chesapeake Bay on a new bridge to the south of the existing bridge, 8 lanes along U.S. 50/301 on the Eastern Shore.

ENVIRONMENTAL ASSESSMENT FORM

The EAF is a requirement of the MEPA Chapter 703 of the Laws of 1973, as codified in §§1-301 -1-305, Natural Resources Article, Annotated Code of Maryland. The checklist identifies specific areas of the natural and social-economic environment which have been considered as part of the Tier 2 Study. The reviewer can refer to the appropriate section of the Tier 2 Study Draft EIS, as indicated in the "Comments" column of the form, for a description of specific characteristics of the natural or social-economic environment within the study area. The form also highlights any potential impacts, beneficial or adverse, that the action may incur. The "No" column indicates that the specific topic has not been identified to within the study area or would not be impacted by the proposed action.

CHECKLIST				
		Yes	No	Comments
A. Land Use Considerations				
1.	Will the action be within the 100-year floodplain?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The study area is located partly within the FEMA 100-year floodplain and tidal portions of the Severn River and the nontidal floodplains associated with several Severn River tributaries. Additional information on floodplains within the Study Area are provided in Draft EIS Chapter 4 .
2.	Will the action require a permit for construction or alteration within the 50-year floodplain?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Additional information on floodplains within the Study Area and permits required for a future project are described in Draft EIS Chapter 4 .
3.	Will the action require a permit for dredging, filling, draining or alteration of a wetland?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Build Alternatives would require a permit for dredging in the study area. Permits required for a future project are described in Draft EIS Chapter 4 .
4.	Will the action require a permit for the construction or operation of facilities for solid waste disposal including dredge and excavation spoil?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Build Alternatives would require a permit for disposal of dredge material. Permits required for a future project are described in Draft EIS Chapter 4 .
5.	Will the action occur on slopes exceeding 15%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Build Alternatives would require construction activities on slopes exceeding 15%. Additional information on the shoreline slopes is provided in the Existing Conditions Shoreline Change Assessment summarized in Draft EIS Chapter 4 .

**Chesapeake Bay Crossing Study: Tier 2 NEPA
ENVIRONMENTAL ASSESSMENT FORM**

CHECKLIST				
		Yes	No	Comments
6.	Will the action require a grading plan or a sediment control permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Grading and ESC plans would be required with the implementation of a Build Alternative. Permits required for a future project are described in Draft EIS Chapter 4 .
7.	Will the action require a mining permit for deep or surface mining?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8.	Will the action require a permit for drilling a gas or oil well?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9.	Will the action require a permit for airport construction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10.	Will the action require a permit for the crossing of the Potomac River by conduits, cables or other like devices?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11.	Will the action affect the use of a public recreation area, park, forest, wildlife management area, scenic river or wildland?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Portions of Sandy Point State Park, Terrapin Nature Park, Piney Creek Nature Area, Eisinger Property, Kent Narrows Landing, Broadneck Trail, and Cross Island Trail are located within the Study Area and could be impacted by the Build Alternatives. There are no wildlife management areas, scenic rivers, or wildlands within the Study Area. Impacts to public recreation areas and parks are described in Draft EIS Chapter 4 .
12.	Will the action affect the use of any natural or manmade features that are unique to the county, state, or nation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The proposed project includes the demolition and replacement of the existing William Preston Lane Jr. Memorial (Chesapeake Bay) Bridge. The bridge is unique to the state of Maryland as it is the only metal suspension bridge in the State of Maryland and is the longest fixed water crossing in the State.
13.	Will the action affect the use of an archeological or historical site or structure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fourteen architectural historic properties were identified within the architectural study area, and a Phase I Archaeology study resulted in the identification of five new archaeological sites within the study area. MDTA and FHWA initiated Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) with the Maryland Historical Trust (MHT). Additional information on cultural resources within the Study Area and Section 106 consultation is provided in Draft EIS Chapter 4 .

Chesapeake Bay Crossing Study: Tier 2 NEPA
 ENVIRONMENTAL ASSESSMENT FORM

CHECKLIST				
		Yes	No	Comments
B. Water Use Considerations				
14.	Will the action require a permit for the change of the course, current, or cross-section of a stream or other body of water?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Tier 2 Study resource review area intersects with the main stem of the Severn River along the western extent of the resource review area. Continuing east, the resource review area intersects with the upper reaches of Mill Creek, Whitehall Creek, and Meredith Creek before spanning the Bay. The proposed action would require permit(s) for the change of course or current of multiple tributaries to the Severn River and Chesapeake Bay. It is anticipated that site-specific hydrologic and hydraulic analyses will be required during later design for the Recommended Preferred Alternative to provide an analysis of water movement. Further information on water resources and required permits is provided in Draft EIS Chapter 4 .
15.	Will the action require the construction, alteration, or removal of a dam, reservoir, or waterway obstruction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
16.	Will the action change the overland flow of stormwater or reduce the absorption capacity of the ground?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Effects associated with stormwater and groundwater and applicable permit(s) required by the proposed action are described in Draft EIS Chapter 4 .
17.	Will the action require a permit for the drilling of a water well?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
18.	Will the action require a permit for water appropriation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
19.	Will the action require a permit for the construction and operation of facilities for treatment or distribution of water?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
20.	Will the project require a permit for the construction and operation of facilities for sewage treatment and/or land disposal of liquid waste derivatives?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
21.	Will the action result in any discharge into surface or sub-surface water?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If a build alternative is selected, use of Best Management Practices (BMPs) and Erosion and Sediment Control (ESC) measures would be implemented during construction of the Selected Alternative; however, there is a potential for release of hazardous materials and discharge of stormwater runoff,

Chesapeake Bay Crossing Study: Tier 2 NEPA
 ENVIRONMENTAL ASSESSMENT FORM

CHECKLIST				
		Yes	No	Comments
				sediment, or pollution into the surrounding environment. Additional information regarding water quality and hazardous materials is provided in Draft EIS Chapter 4 .
22.	If so, will the discharge affect ambient water quality parameters and/or require a discharge permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Development of a Stormwater Pollution Prevention Plan (SWPPP) would help to ensure that rainwater and stormwater runoff does not encounter potentially harmful chemicals, hazardous materials, sanitary and other wastes, wash waters, and any other potential pollutants that may be found at a construction site. A NPDES permit would be required for construction of a build alternative. Additional information on water resources, water quality, and required permits is provided in Draft EIS Chapter 4 .
C. Air Use Considerations				
23.	Will the action result in any discharge into the air?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	An Air Quality Technical Report was completed to present potential air quality impacts associated with the Build Alternatives in compliance with NEPA and the Clean Air Act and Amendments (CAA). Construction activities and resulting daily traffic would all result in discharge of pollutants with established National Ambient Air Quality Standards (NAAQS). Results of the Air Quality Technical Report are provided in Draft EIS Chapter 4 .
24.	If so, will the discharge affect ambient air quality parameters or produce a disagreeable odor?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Build Alternatives are not predicted to increase emission burdens compared to the No Build Alternative, nor cause or contribute to a violation of the NAAQS; no long-term or regional air quality impacts are anticipated, and no mitigation measures are warranted. Results of the Air Quality Technical Report are provided in Draft EIS Chapter 4 .
25.	Will the action generate additional noise which differs in character or level from present conditions?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	A Noise Technical Report was completed to present an assessment of the potential direct impacts of the Build Alternatives to the noise environment. The proposed improvements include substantial horizontal and vertical alterations, as well as additional through traffic lanes; therefore,

**Chesapeake Bay Crossing Study: Tier 2 NEPA
ENVIRONMENTAL ASSESSMENT FORM**

CHECKLIST				
		Yes	No	Comments
				this project is classified as a Type I project as defined in Title 23 of the Code of Federal Regulations (CFR) Part 772 (23 CFR Part 772). Results of the Noise Technical Report, including predicted noise levels and impact analysis, along with noise abatement activities is provided in Draft EIS Chapter 4 .
26.	Will the action preclude future use of related air space?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Build Alternatives could require a taller bridge that would affect the air space. Coordination with the Federal Aviation Administration (FAA) and applicable local aviation jurisdictional agencies will be completed as part of the EIS. Additional information on agency coordination is provided in Draft EIS Chapter 6 .
27.	Will the action generate any radiological, electrical, magnetic, or light influences?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If a build alternative is selected, lighting would be included as part of the design for alternative. No radiological, electrical, or magnetic influences would be generated. Draft EIS
D. Plants and Animals				
28.	Will the action cause the disturbance, reduction or loss of any rare, unique or valuable plant or animal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Build Alternatives would potentially result in disturbance, reduction, or loss of federally and state-listed threatened, endangered, and rare species, as well as aquatic and terrestrial biota. Information on plant and animal species affected by the proposed action is provided in Draft EIS Chapter 4 .
29.	Will the action result in the significant reduction or loss of any fish or wildlife habitats?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Build Alternatives could potentially result in reduction and/or loss of habitat for federally and state-listed threatened, endangered, and rare species, as well as aquatic and terrestrial habitat. However, all impacts to habitat will be mitigated in coordination with Federal and State agencies to ensure impacts are not significant. Information on fish and wildlife habitat impacts are provided in Draft EIS Chapter 4 .
30.	Will the action require a permit for the use of pesticides, herbicides or other biological, chemical or radiological control agents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Chesapeake Bay Crossing Study: Tier 2 NEPA
ENVIRONMENTAL ASSESSMENT FORM**

CHECKLIST				
		Yes	No	Comments
E. Socio-Economic				
31.	Will the action result in a pre-emption or division of properties or impair their economic use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Build Alternatives would require property acquisitions to widen some portions of U.S. 50/301. Additional information of property acquisitions and economic effects are provided in Draft EIS Chapter 4 .
32.	Will the action cause relocation of activities, structures, or result in a change in the population density or distribution?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Build Alternatives would require right-of-way to widen some portions of U.S. 50/301. Additional information of relocation and right-of-way activities are provided in Draft EIS Chapter 4 .
33.	Will the action alter land values?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Build Alternatives could affect land values at properties that are directly adjacent to the improvements along U.S. 50/301. However, the Build Alternatives would not affect land value in the area at large. Additional information of property acquisitions and economic effects are provided in Draft EIS Chapter 4 .
34.	Will the action affect traffic flow and volume?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Build Alternatives would provide additional transportation capacity across the Chesapeake Bay on a new two-span bridge that would fully replace the travel lanes on the existing Bay Bridge spans. The Summer Weekend Average Daily Traffic (ADT) (composite of Eastbound Friday and Westbound Sunday) for 2040 was forecast in the BCS Tier 1 Study to be 135,280 vehicles per day. For the BCS Tier 2 Study, traffic volumes are anticipated to increase in the design year 2045 and the Summer Weekend ADT forecast could approach or exceed the 140,000 AADT. Additional traffic data and analysis is provided in Draft EIS Chapter 2 .
35.	Will the action affect the production, extra-action, harvest or potential use of a scarce or economically important resource?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
36.	Will the action require a license to construct a sawmill or other plant for the manufacture of forest products?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
37.	Is the action in accord with federal, state, regional and local comprehensive or functional plans-including zoning?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Queen Anne’s County Comprehensive Plan, PlanQAC 2022, and Queen Anne’s County transportation priorities letter have

**Chesapeake Bay Crossing Study: Tier 2 NEPA
ENVIRONMENTAL ASSESSMENT FORM**

CHECKLIST				
		Yes	No	Comments
				identified additional capacity for the Bay Bridge as a county priority. The Anne Arundel County Comprehensive Plan, Plan2040, details the findings of the Bay Crossing Study Tier 1 and emphasizes the need to reduce congestion surrounding the corridor. Anne Arundel County’s transportation priorities letter also indicated the importance of continued work to alleviate congestion on the Bay Bridge. The BCS Tier 2 project is not currently in the 2023-2026 Transportation Improvement Program (TIP) or Long-Range Transportation Plan (LRTP) (Maximize2045 or Resilience2050); however, it is included in Maximize 2045 as an “Illustrative Project”. If during the Tier 2 Study a Build Alternative is identified as the Preferred Alternative, MDTA will coordinate with Baltimore Regional Transportation Board for inclusion of the current project design concept and scope into the latest TIP and LRTP and accompanying air quality conformity determination (40 CFR 93.109). Additional relevant local, county, regional, and State plans were reviewed as part of the tiered study. Additional information on these plans and roadway related recommendations and consistencies with the project are summarized within Draft EIS Chapter 4 .
38.	Will the action affect the employment opportunities for persons in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Implementation is anticipated to yield economic benefits for the region, including creation of additional construction and operational jobs. Employment patterns are described within Draft EIS Chapter 4 .
39.	Will the action affect the ability of the area to attract new sources of tax revenue?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
40.	Will the action discourage present sources of tax revenue from remaining in the area, or affirmatively encourage them to relocate elsewhere?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Chesapeake Bay Crossing Study: Tier 2 NEPA
ENVIRONMENTAL ASSESSMENT FORM**

CHECKLIST				
		Yes	No	Comments
41.	Will the action affect the ability of the area to attract tourism?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Improvements proposed with the Build Alternatives would, to varying degrees, continue to make the area desirable for business and residential development and tourism access through the study corridor. Additional information on tourism effects is provided within Draft EIS Chapter 4 .
F. Other Considerations				
42.	Could the action endanger the public health, safety or welfare?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
43.	Could the action be eliminated without deleterious effects to the public health, safety, welfare or the natural environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Eliminating the action would pose a safety risk to users of the bridge as the structure would continue to age and require extensive maintenance work and costs (approximately \$3.8 billion in maintenance costs through 2065) to remain operational. This could cause increases in congestion on the bridge during maintenance, which in turn would reduce the accessibility across the bridge for essential services such as of emergency response.
44.	Will the action be of statewide significance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	As Maryland's only crossing of the Chesapeake Bay, the Bridge is vital in facilitating transportation, commerce, and tourism in the region. Tourism effects, economics, and commuting patterns are discussed within Draft EIS Chapter 4 .
45.	Are there any other plans or actions (federal, state, county or private) that, in conjunction with the subject action could result in a cumulative or synergistic impact on the public health, safety, welfare, or environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
46.	Will the action require additional power generation or transmission capacity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
47.	This agency will develop a complete environmental effects report on the proposed action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A NEPA EIS is being prepared for the Tier 2 Study and will provide a complete analysis of environmental issues.