

Chesapeake BAY CROSSING STUDY
TIER 2 NEPA

FINAL ENVIRONMENTAL IMPACT STATEMENT and RECORD OF DECISION

EXECUTIVE SUMMARY

OCTOBER 2026

MDTA Maryland Transportation Authority

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

FINAL ENVIRONMENTAL IMPACT STATEMENT and RECORD OF DECISION

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ENVIRONMENTAL IMPACT STATEMENT AT-A-GLANCE

- **Study Purpose & Need:** The Maryland Transportation Authority (MDTA) conducted the Chesapeake Bay Crossing Study: Tier 2 National Environmental Policy Act (NEPA), or Tier 2 Study, to address existing and future transportation capacity needs and access along the U.S. 50/301 corridor. The Tier 2 Study considers five key needs, capacity, mobility, roadway deficiencies, maintenance, and navigation, while considering objectives for environmental and financial responsibility.
- **Tiered NEPA Process:** The Tier 1 Study identified Corridor 7, the existing U.S. 50/301 alignment, as the Selected Corridor Alternative. The Tier 2 Study examined specific alternatives and environmental impacts within this corridor.
- **Alternatives:** The MDTA evaluated the no-build alternative and six build alternatives along existing U.S. 50/301. Each build alternative would replace the two existing Bay Bridge spans with two new, higher-clearance spans. The build alternatives vary by the number of lanes on the new bridge and U.S. 50/301 approach roadways, as well as location north or south of the existing Bay Bridge.
- **Preferred/Selected Alternative:** The Preferred Alternative is Alternative C, with additional refinements to avoid and minimize impacts to sensitive resources. The Preferred Alternative consists of two new spans, with one span south of and one span in between the existing spans, and removal of the existing Bay Bridge spans. The Preferred Alternative also consists of eight lanes total (four in each direction), a higher navigational clearance of 230 feet, a one-time investment to local transit agencies for transit-related improvements, and an optional shared-use path (SUP) if financial considerations allow. With the Record of Decision (ROD), the Federal Highway Administration (FHWA) identifies the Preferred Alternative (Refined Alternative C) as the Selected Alternative.
- **Environmental Impacts:** An environmental impact assessment was conducted for the No-Build Alternative and six build alternatives to determine impacts to socioeconomic, natural, and cultural resources. The Selected Alternative has the least impact to historic properties, recreational facilities, and natural resources such as forested areas, wetlands, and non-tidal surface waters. The Selected Alternative would also have the least overall harm to park and historic properties protected under Section 4(f) of the U.S. Department of Transportation Act.
- **Next Steps & Timeline:** Following this combined Final Environmental Impact Statement (EIS)/ROD, anticipated next steps include:
  - **2028:** Begin Final Design
  - **2031:** Obtain Permits
  - **2032:** Begin Construction



INTRODUCTION

The Chesapeake Bay Crossing Study (Bay Crossing Study) was a two-tiered engineering and environmental study advanced by the MDTA in coordination with FHWA. The Bay Crossing Study addressed existing and future transportation issues at the William Preston Lane, Jr. Memorial Bridge (Bay Bridge) and its approaches along U.S. 50/301.

The Chesapeake Bay is one of Maryland's most important natural, economic, and cultural resources and the largest estuary in the United States. The 64,000-square-mile watershed that flows into the Bay spans six states and the District of Columbia and includes 150 major rivers and over 100,000 tributaries. The Bay has historically shaped the region's identity, culture, and traditions. The Bay Bridge is a two-span structure that crosses the Chesapeake Bay from Anne Arundel County on the Western Shore to Queen Anne's County on the Eastern Shore. The Bay Bridge, Maryland's only crossing of the Chesapeake Bay, plays a significant role in the State's regional transportation system and is vital in facilitating transportation, commerce, and tourism in the region.

The Bay Bridge structures have inadequate capacity for current and projected traffic volumes, particularly during summer weekends. Regional and statewide population growth estimates and future travel demand patterns indicate that Bay Bridge traffic volumes will continue to increase through 2045 and beyond. Increases in congestion reduce regional mobility and reliability, which is needed for accessing employment and recreation areas, moving commerce, and providing capacity for emergencies or evacuation events. Further, the bridge does not meet current standards for design or traffic operations. Maintenance activities and incident management often result in closed lanes, creating substantial congestion. These conditions are expected to worsen as the structures age and the risk of congestion-related traffic crashes rises. Lastly, the existing Bay Bridge is a key constraint for the height of ships that can travel the Chesapeake Bay, including the Port of Baltimore.


U.S. 50/301 Oceanic Drive Interchange

The purpose of the Tier 2 Study is to address existing and future transportation capacity needs and access across the Chesapeake Bay and at the Chesapeake Bay Bridge approaches along the U.S. 50/301 corridor. The MDTA identified five needs for the Tier 2 Study:

- Adequate capacity and reliable travel times
- Mobility
- Roadway deficiencies
- Existing and future maintenance
- Navigation

Two objectives were considered throughout the process of developing and evaluating Tier 2 Study alternatives. The Tier 2 Study considered environmental responsibility given the sensitivity of the Chesapeake Bay as an environmental resource, and financial responsibility to evaluate reasonableness of alternatives given the scope of the project.

THE NATIONAL ENVIRONMENTAL POLICY ACT

NEPA requires federal agencies to prepare an EIS for major federal actions (e.g, funding, approvals) significantly affecting the quality of the human environment. Under NEPA, agencies must evaluate a reasonable range of alternatives and the reasonably foreseeable adverse effects of proposed major federal actions. NEPA promotes informed decision-making by federal agencies and provides information to and opportunities for participation by the public in the decision-making process.

Tiered NEPA Process

FHWA and the MDTA followed a tiered NEPA approach for the Bay Crossing Study. A tiered approach to NEPA is a staged process that allows a federal agency to examine a potential action on a broad scale in an initial EIS (Tier 1) and subsequently analyze a more site-specific action in another EIS at a later date (Tier 2).

NEPA regulations issued by FHWA (23 CFR § 771.111(g)) recognize tiering as an appropriate option for complying

with NEPA, particularly for projects like the Bay Crossing Study that must examine information at a broad scale before shifting the focus to a project at a site-specific scale.

Tier 1 Study

The MDTA and FHWA initiated the Tier 1 Study in 2016. The purpose of the Tier 1 Study was to consider corridors for providing additional capacity and access across the Chesapeake Bay in order to improve mobility, travel reliability, and safety at the existing Bay Bridge. The needs identified for the Tier 1 Study included adequate capacity, dependable and reliable travel times, and the flexibility to support maintenance and incident management. As part of the Tier 1 Study, the MDTA also considered financial viability of the proposed corridor alternatives and the presence of environmental resources within the corridor alternatives.

The Tier 1 Study evaluated 14 possible corridor alternative locations across the Chesapeake Bay. After close coordination with regulatory and resource agencies, the public, and other stakeholders to identify critical resources and determine potential impacts, the Tier 1 combined Final EIS and ROD was issued by FHWA on April 14, 2022.

The Tier 1 Study combined Final EIS/ROD identified Corridor 7 as the Selected Corridor Alternative. Corridor 7 was a two-mile-wide and 22-mile-long corridor that followed existing U.S. 50/301 and included the location of the existing Bay Bridge. On the Western Shore, the western limit of the corridor was west of the Severn River near the MD 70 (Rowe Boulevard) interchange, north of Downtown Annapolis. On the Eastern Shore, the eastern limit of the corridor was the U.S. 50/301 split near Queenstown.

Tier 2 Study

The MDTA launched pre-NEPA studies for the Tier 2 Study to focus on project-level (site-specific) analysis within Corridor 7. These studies included preliminary engineering of alternatives for alignment, structure type, and modal and operational alternatives, and the assessment of potential environmental impacts associated with alternatives.

The Tier 2 Study environmental review process was formally initiated with publication of a Notice of Intent (NOI) in the Federal Register on November 15, 2024. The NOI presented the Tier 2 Proposed Action and a reasonable range of alternatives to be analyzed in the EIS. The MDTA proposes to replace the existing Bay Bridge spans with two new bridge spans over the Chesapeake Bay; both existing Bay Bridge spans would be removed.

To evaluate the range of alternatives, FHWA and the MDTA prepared the Tier 2 Draft EIS, released on January 23, 2026. Following the Draft EIS comment period and review of public and agency comments, FHWA and the MDTA prepared the Tier 2 Final EIS, released in October 2026.

Alternatives Screening and Development

As part of the NEPA process, the MDTA, in coordination with FHWA, developed a reasonable range of alternatives for the Tier 2 Study. These alternatives, referred to as the Alternatives Retained for Detailed Study (ARDS), were informed by previous studies and planning documents; input from federal, state, and local regulatory agencies; and public comments. To develop the alternatives, the MDTA analyzed key elements of a new crossing, which included the disposition of existing bridges, structure type, alignments relative to existing U.S. 50/301, number of lanes, structure location, transit/transportation systems management/transportation demand management (TSM/TDM), and an optional SUP. The MDTA then screened the options of each element to determine which would be reasonable for inclusion in the Tier 2 Study alternatives. Seven alternatives, including the No-Build Alternative and six build alternatives, were identified as the proposed ARDS and presented to the public in December 2024. Additional alternatives were evaluated to avoid or minimize impact to Section 4(f) properties pursuant to the requirements of Section 4(f) but were not carried forward.

KEY TAKEAWAY

The project follows the federal NEPA process using a two-tier approach.

Tier 1 Study

Identified Corridor 7, the corridor along existing U.S. 50/301, as the Selected Corridor Alternative.

Tier 2 Study

Focuses on project-level alternatives and environmental impacts within Corridor 7.

ALTERNATIVES RETAINED FOR DETAILED STUDY

The No-Build Alternative served as a baseline for the evaluation of all other build alternatives. The build alternatives varied based on the number of approach lanes on both shores, number of lanes across the bridge, and positioning north or south of the existing spans, as presented in **Table 1**. The six build alternatives include the construction of two new bridge spans that would provide a higher navigational clearance than the existing spans, and removal of the existing bridge spans. The build alternatives also include the following items: tolling, transit-related improvements made through a financial commitment from the MDTA, TSM/TDM, stormwater management (SWM), utilities, truck weigh and inspection stations, and an optional pedestrian/bicycle SUP if financial considerations allow.

Cost Estimates

Preliminary design and construction cost estimates were prepared for each build alternative. Alternatives B and C had the lowest costs because they would be the shortest alternatives. Alternatives F and G had the highest costs because they would have one more lane across the Bay Bridge in each direction than the other build alternatives.

Traffic

Traffic analyses were performed for existing conditions, Alternative A (No-Build), and each of the six build alternatives (Alternatives B through G). The Tier 2 Study included traffic analysis for non-summer weekdays (NSWD) and summer weekend days (SWED) during peak periods, and considered three measures of congestion: queuing, travel time, and throughput (number of vehicles able to travel across the bridge).

Queuing: For NSWD conditions, queuing in both directions for Alternative A (No-Build) would be worse than the build alternatives, both at the Bay Bridge and past the Bay Bridge. For SWED conditions at the Bay Bridge, queuing in both directions for Alternative A (No-Build) would be worse than or the same as the build alternatives. Departing the Bay Bridge in both directions, queuing would be worse for the build alternatives than for Alternative A (No-Build), because the additional lanes across the bridge in the build alternatives would allow more traffic to cross the Bay Bridge.

Travel Time: For NSWD conditions in both directions, the travel times approaching the Bay Bridge and through the full study area would be shorter for the build alternatives than for Alternative A (No-Build). For SWED conditions eastbound, the travel times approaching the Bay Bridge would be shorter for the build alternatives than for Alternative A (No-Build). The travel times through the full study area would be shorter for Alternatives B and C than either Alternative A or Alternatives D through G. For SWED conditions westbound, the travel times approaching the Bay Bridge would vary across the alternatives. However, the travel times through the full study area would be longer for the build alternatives than for Alternative A (No-Build), due to the build alternatives having more lanes across the Bay Bridge and allowing more traffic to reach the Western Shore.

Throughput: On NSWDs and SWEDs in both directions, all build alternatives would allow a larger percentage of traffic to cross the Bay Bridge compared to Alternative A (No-Build) due to the additional lanes across the Bay Bridge.

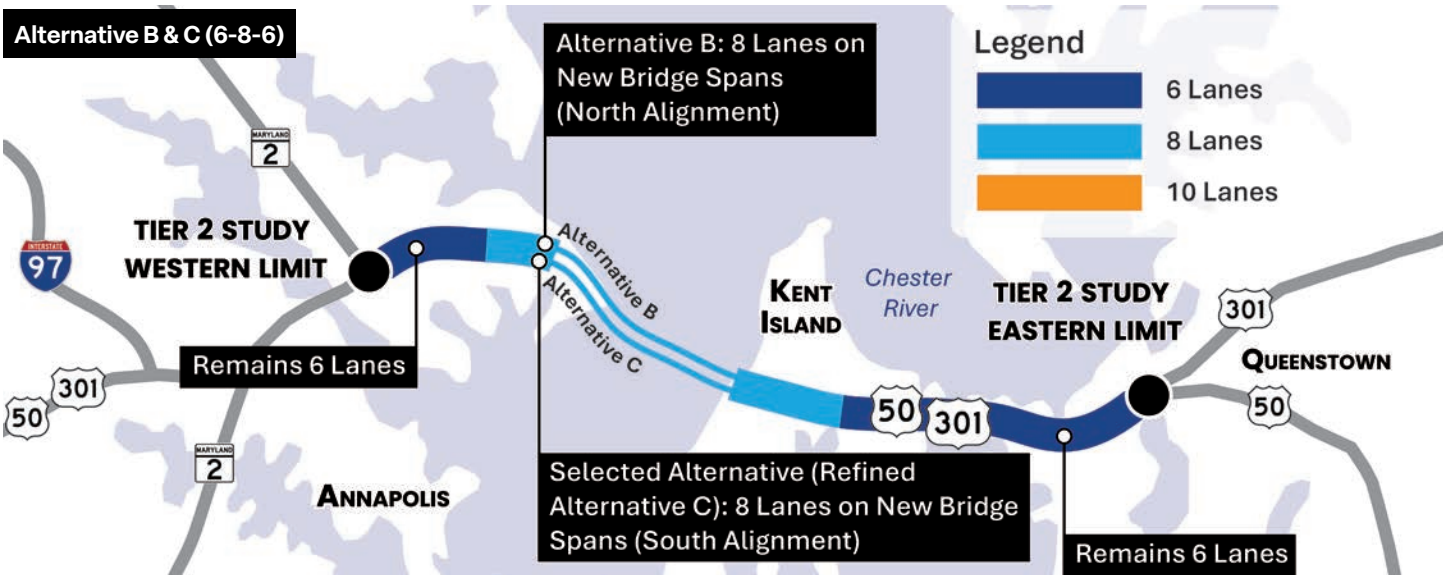
KEY TAKEAWAY

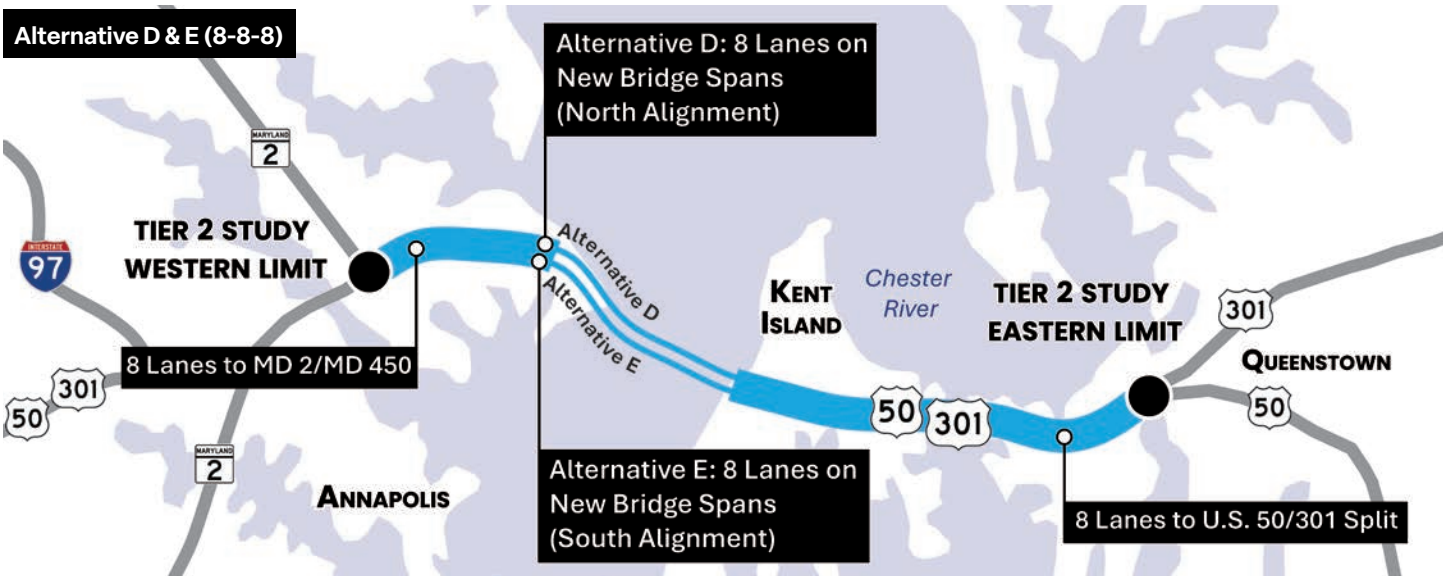
Each of the Build Alternatives would improve conditions at the Bay Bridge on NSWD, but would not alleviate all congestion within the corridor.

Table 1. Range of Alternatives and Costs

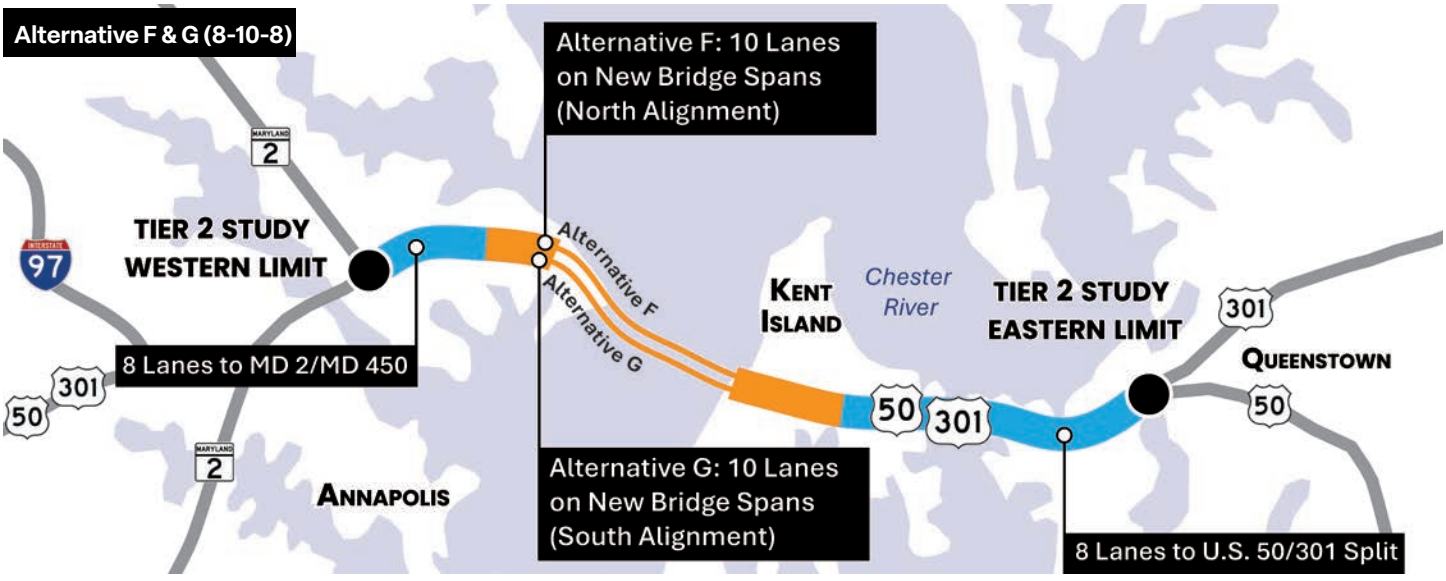
Alternatives	Western Shore Number of Lanes	Bridge Span Number of Lanes and Locations	Eastern Shore Number of Lanes	Total Cost (No SUP) ($B)	Total Cost (With SUP) ($B)
Alternative A: No-Build	6	5	6	$3.8*	N/A
Alternative B	6	8 North	6	$15.1 - 16.6	$16.3 - 17.9
Alternative C	6	8 South	6	$14.8 - 16.4	$16.1 - 17.6
Alternative D	8	8 North	8	$17.5 - 19.0	$18.8 - 20.3
Alternative E	8	8 South	8	$17.3 - 18.8	$18.5 - 20.1
Alternative F	8	10 North	8	$19.5 - 21.1	$20.8 - 22.3
Alternative G	8	10 South	8	$19.2 - 20.8	$20.5 - 22.1
Selected Alternative (Refined Alternative C)	**6**	**8 South**	**6**	**$14.8 - 16.4**	**$16.1 - 17.6**

**The cost for Alternative A: No-Build includes the estimated cost to maintain the existing Bay Bridge through 2065.*





Alternatives F & G (8-10-8)



PREFERRED/SELECTED ALTERNATIVE

Based on the analysis of a wide range of engineering and environmental considerations for each alternative, as described in this Final EIS, and input received from the public and from state and federal agencies, **Alternative C, with refinements, is the Preferred Alternative.**

The Preferred Alternative meets the project purpose and need, addresses the project objectives, and has the least impact to socioeconomic, cultural, and most natural resources compared to the other build alternatives, offering several advantages that contribute to its identification as the Preferred Alternative:

- Least impact to historic properties in consideration of Section 106 of the National Historic Preservation Act.
- Least impact to Section 4(f) properties, including park properties in consideration of the U.S. Department of Transportation Act of 1966.
- Least impact to wetlands and non-tidal surface waters in consideration of Section 404 of the Clean Water Act.
- Least impact to submerged aquatic vegetation (SAV).
- Least impact to Critical Areas and the Critical Area Buffer.
- Lowest cost of the build alternatives at $14.8-16.4 billion (without the optional SUP).

Following identification of Alternative C as the Preferred Alternative, additional engineering refinements were made to further avoid and minimize impacts to environmental resources. The following refinements were made to Alternative C:

- On the Western Shore, the eastbound lane transition from three to four lanes was shifted approximately 600 feet to the east. This change avoided one business displacement (automotive retail center) adjacent to Whitehall Road, avoided one partial commercial property acquisition in Jemal's Bay 50 Shopping Center, reduced Critical Area impacts, and reduced Habitat Connectivity Network (HCN) impacts.
- On the Western Shore, a potential SWM pond in the southwest corner of Sandy Point State Park was removed from the Preferred Alternative. This change avoided the roadway-related impact to Sandy Point State Park, which is a historic site and Section 4(f) and Section 6(f) property, and reduced impacts to Critical Areas, Forest Interior Dwelling Species (FIDS) habitat, and the HCN.
- On the Western Shore, the proposed Skidmore Drive alignment was shifted to the north and a retaining wall was added to avoid impacts to Holly Beach Farm, which is a historic site and Section 4(f) and Section 6(f) property, and to reduce impacts to Critical Areas and FIDS habitat.
- On the Eastern Shore, along westbound U.S. 50/301, the linear SWM facility adjacent to Island Plaza, west of Duke Street, was removed. This reduced impacts to the primary parking lot for this business plaza and mapped Sensitive Species Project Review Areas (SSPRA).

Alternative C (Preferred Alternative) eliminates bridge bottlenecks on non-summer weekdays (NSWD) for both directions of travel and for summer weekends (SWED) in the eastbound direction. A traffic analysis comparison between Alternative C (Preferred Alternative) and Alternative A (No-Build) shows that Alternative C substantially improves conditions during NSWD by eliminating projected queues and improving overall travel time, reliability, and system resiliency. Under NSWD conditions, Alternative C would eliminate the traffic queues forecasted by the traffic analysis modeling for Alternative A.

The MDTA commits to coordinating with the Maryland State Highway Administration (SHA) and local agencies to help them evaluate roadway needs and traffic operations along U.S. 50/301 approaching the Bay Bridge, outside of this study. This includes SHA's U.S. 50 from the Bay Bridge to Ocean City Project and other potential future projects that would address traffic queues during SWED, which impact the U.S. 50/301 corridor-wide network.

KEY TAKEAWAY

The Selected Alternative consists of:

- Two new bridge spans with a total of eight travel lanes (four in each direction) and full shoulders across the Chesapeake Bay.
- Widening U.S. 50/301 to eight lanes from west of Oceanic Drive to east of Cox Creek to allow sufficient room to transition from six lanes to eight lanes on the new bridge crossing.
- Maintaining the existing roadway alignment and the number of lanes west of Oceanic Drive and east of Cox Creek.
- Increasing vertical navigational clearance to 230 feet to meet U.S. Coast Guard requirements.
- An optional SUP, if financial considerations allow, that would provide connectivity for bicyclists and pedestrians across the Bay Bridge.
- Transit-related improvements by providing a one-time investment from the MDTA to local transit agencies.

Table 2. Summary of Environmental Impacts

Resource	Unit	Alternative B 6-8-6 North Roadway/ Optional SUP	Alternative C 6-8-6 South Roadway/ Optional SUP	Alternative D 8-8-8 North Roadway/ Optional SUP	Alternative E 8-8-8 South Roadway/ Optional SUP	Alternative F 8-10-8 North Roadway/ Optional SUP	Alternative G 8-10-8 South Roadway/ Optional SUP	Selected Alternative (Refined Alternative C) Roadway/ Optional SUP
Right-of-Way Required	acres	20.5 / 1.8	20.8 / 1.2	82.0 / 1.8	82.3 / 1.2	86.2 / 1.9	86.4 / 1.2	18.2 / 1.2
	no. of properties	48 / 0	48 / 0	211 / 0	211 / 0	215 / 0	215 / 0	45 / 0
Park and Historic Properties (Section 4(f))	acres	3.1 / 1.9	2.7 / 1.2	4.5 / 1.9	4.1 / 1.2	5.3 / 2.0	4.7 / 1.3	0.9 / 1.8
	no. of properties	9 / 0	9 / 0	13 / 0	13 / 0	13 / 0	13 / 0	6 / 0
Recreational Trails (Section 4(f))	linear feet	3140 / 0	3140 / 0	12100 / 0	12100 / 0	12110 / 0	12110 / 0	3070 / 0
Water Trails (Section 4(f))	linear feet	1030 / 0	920 / 0	1260 / 40	1150 / 0	1260 / 40	1150 / 0	920 / 0
Historic Properties	acres	1.3 / 0.7	0.9 / 0.6	1.4 / 0.7	1.0 / 0.6	1.9 / 0.7	1.3 / 0.6	0.4 / 0.6
	no. of properties	3 / 0	3 / 0	4 / 0	4 / 0	4 / 0	4 / 0	2 / 0
Community Facilities	acres	9.2 / 1.8	9.5 / 1.2	16.4 / 1.8	16.7 / 1.2	18.2 / 1.9	18.4 / 1.2	7.8 / 1.2
	no. of properties	8 / 2	8 / 0	26 / 2	26 / 2	26 / 2	26 / 2	7 / 0
Agricultural Lands	acres	0 / 0	0 / 0	1.5 / 0	1.5 / 0	1.5 / 0	1.5 / 0	0 / 0
Forest Areas	acres	60.3 / 2.3	59.5 / 1.4	147.9 / 2.3	147.2 / 1.4	155.2 / 1.1	153.9 / 0.9	57.7 / 1.4
Critical Areas	acres	166.5/ 3.4	164.1 / 2.5	397.7 / 3.4	395.4 / 2.5	402.0 / 3.3	398.8 / 2.6	162.5 / 2.5
100' Critical Area Buffer	acres	19.0 / 1.2	17.7 / 1.0	28.2 / 1.2	26.9/ 1.0	28.8 / 1.2	27.3 / 1.0	17.7 / 1.0
Wetlands (Field Delineated)	acres	5.9 / 0.7	5.6 / 0.7	11.5 / 0.7	11.2 / 0.7	11.8 / 0.8	11.6 / 0.7	5.6 / 0.7
100-Year Floodplain Area	acres	33.5 / 1.6	35.6 / 1.4	57.0 / 1.8	59.0 / 1.4	59.1 / 1.9	60.7 / 1.4	35.6 / 1.3
Surface Waters - Tidal and Non-tidal	acres	131.9 / 2.0	133.0 / 2.0	136.5 / 2.0	137.5 / 2.0	140.4 / 2.0	141.2 / 2.1	133.0 / 2.0
SAV 2019-2023 (Submerged Aquatic Vegetation)	acres	0.4 / 0.3	0 / 0	0.7 / 0.3	0.4 / 0	0.9 / 0.5	0.4 / 0	0 / 0
Natural Oyster Bars (NOB)	acres	9.4 / 0.8	10.2 / 0.9	12.6 / 0.8	13.3 / 0.9	13.8 / 0.8	14.6 / 0.9	10.2 / 0.6
Oyster Sanctuaries	acres	0.6 / 0	0.6 / 0	1.1 / 0	1.1 / 0	1.6 / 0	1.6 / 0	0.6 / 0

The Preferred Alternative is included in the 2027-2030 Baltimore Regional Transportation Board (BRTB) Transportation Improvement Program (TIP) and accompanying conformity determination. The 2027-2030 TIP was approved on October 8, 2026. The Tier 2 Study is currently included in the amended BRTB Resilience2050 Long Range Transportation Plan (LRTP). FHWA identifies the Preferred Alternative (Refined Alternative C) as the Selected Alternative in the ROD.

Environmental Impacts

Potential environmental consequences were estimated based on the limits of disturbance (LOD) of each build alternative and the Selected Alternative. The LOD for the Tier 2 Study was developed based on preliminary engineering. The LOD will be further refined during final design.

Because the existing six-lane configuration on U.S. 50/301 would remain for Alternatives B, C, and the Selected Alternative, the smaller construction footprint for those options would result in substantially less environmental impacts than Alternatives D through G. A summary of the environmental impacts for each build alternative from roadway improvements and an optional SUP, if financial considerations allow, is provided in **Table 2**. Due to its proposed location, the Selected Alternative was determined to have the least impact to protected resources. Mitigation commitments addressing these environmental impacts are presented in Table 3

As detailed in § 4-101(h) of the Transportation Article, the Bay Bridge is an existing facility, which the Priority Funding Area (PFA) law (codified in Section 5-7B-01 of the State Finance and Procurement Article) exempts from the definition of "growth-related project." Additionally, no Maryland state infrastructure funds will be used to construct the Preferred Alternative, including approaches to the Bay Bridge. Since no Maryland state infrastructure funds will be used to construct the Preferred Alternative, the consistency requirements of the Smart Growth Priority Funding Areas Act of 1997 (the PFA law) would not apply.

AGENCY COORDINATION

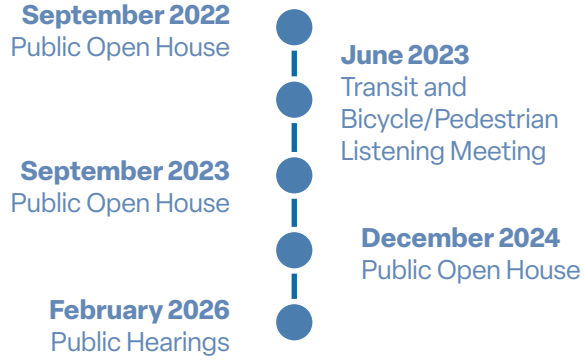
Extensive coordination with state, federal, and local agencies was conducted as part of the NEPA process. Agencies were consulted regarding the project coordination plan and Tier 2 Study schedule, Purpose and Need, methodologies for studying environmental resources, the alternatives development process, the NOI, technical studies for environmental resources, the ARDS presented in the Draft EIS, and the Preferred Alternative and Conceptual Mitigation. There were nine cooperating agencies (six federal and three state) and 16 participating agencies (five federal, eight state, and three local) for the Tier 2 Study. Cooperating agencies are those that have jurisdiction by law or special expertise with respect to an environmental impact from the project and were committed to participating in the scoping process, providing information or analyses in their area of expertise, and making their staff available to support the NEPA process. Participating agencies are those agencies with an interest in the project.

Meetings to facilitate cooperating and participating agency coordination, called Interagency Coordination Meetings (ICM), were initiated during the Tier 1 Study and continued during the Tier 2 Study. Concurrent with the ICMs, consultation with cooperating and participating regulatory and resource agencies was conducted. The purpose of this consultation was to discuss and obtain input on existing resources, potential impacts, and avoidance, minimization, and mitigation strategies. Consultation with regulatory and resource agencies occurred throughout the duration of the Tier 2 Study. The cooperating agencies included:

- U.S. Army Corps of Engineers (USACE)
- U.S. Coast Guard (USCG)
- Environmental Protection Agency (EPA)
- National Marine Fisheries Service (NMFS)
- U.S. Fish and Wildlife Service (USFWS)
- National Park Service (NPS)
- Maryland State Highway Administration (SHA)
- Maryland Department of the Environment (MDE)
- Maryland Department of Natural Resources (DNR)

PUBLIC ENGAGEMENT

Public engagement activities were initiated shortly after the launch of the pre-NEPA studies for the Tier 2 Study in June 2022. Three rounds of public open houses, one listening meeting, and one round of public hearings were held. In total, the MDTA has received over 5,600 public comments on the Tier 2 Study including letters, emails, website comments, public meeting comment cards, and the MDTA customer survey cards. A timeline of public engagement meetings is shown below.




February 2026 Draft EIS Public Hearing

A public comment period was held for the Draft EIS from January 23, 2026, through March 9, 2026. The MDTA and FHWA have considered all comments received during the comment period. The Final EIS includes responses to all public and agency comments received during the comment period.

In addition to these meetings, the Tier 2 Study team attended approximately 60 community events throughout the corridor to date to provide information about the Tier 2 Study and encourage public participation. The Bay Crossing Study website (www.baycrossingstudy.com) has been used to share project information, advertise upcoming engagement opportunities, and gather feedback from the public. All previous meeting materials and comments received can be viewed on the website.

RECORD OF DECISION

The ROD, that is included with the Final EIS, documents FHWA's decision regarding the Tier 2 Study. In making its decision, the FHWA has considered the information and analysis included in the Draft EIS and Final EIS, and all public and agency comments received. FHWA identified Alternative C, with refinements, as the Selected Alternative to advance to design and construction in the ROD.

NEXT STEPS

The anticipated permit and authorization schedule is as follows:

- **Fall 2026 – Spring 2028**: Procurement for Final Design
- **Spring 2028**: Begin Final Design
- **Spring 2030**: Permit Applications/Authorization Requests Submitted
- **Spring 2031**: All Permit Decisions and Authorizations Issued
- **Summer 2032**: Begin Construction

Table 3: Environmental Consequences of the Selected Alternative and Mitigation/Commitments

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Population and Demographics *Final EIS Section 5.1.1*	The Selected Alternative avoids residential displacements. The Selected Alternative accommodates increased traffic from projected regional population growth through 2040.	The optional SUP would not impact the existing population or demographic makeup of the region.	No impact, no mitigation is proposed.	Not applicable	Not applicable
Housing *Final EIS Section 5.1.2*	The Selected Alternative requires right-of-way acquisition of residential areas to accommodate proposed roadway widening. There are no residential displacements or demolitions. The Selected Alternative will not bisect any residential areas or create impediments to travel through residential communities. The Selected Alternative will not affect the overall distribution of age, type, or tenure of housing stock.	The optional SUP would not impact existing housing in the area.	All residential property owners, from whom partial property will be acquired, will be compensated and paid fair market value for the affected property in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA) and state requirements.	MDTA	Final Design
Business, Economics, and Employment *Final EIS Section 5.1.3*	The Selected Alternative avoids business displacements but requires partial right-of-way acquisition of business properties. Construction and operations and maintenance spending represents substantial capital investment in the local economy. The economic capital costs	The optional SUP would generate additional foot traffic to nearby businesses and parks and could attract additional tourism spending to the area.	All business property owners, from whom partial property will be acquired, will be compensated and paid fair market value for the affected property in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and state requirements.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	impact includes $15.6 billion in net capital expenditure, 61,337 in employment, $4.2 billion in earnings, $12.8 billion in value added, and $23 billion in output. The economic O&M costs impact includes $390 million in net capital expenditure, 1,533 in employment, $106 million in earnings, $322 million in value added, and $577 million in output. Construction and demolition of the Bay Bridge would produce localized but economically meaningful impacts on fishing, crabbing, and oystering activities in the immediate area. While these impacts are expected to be localized, their significance would be heightened due to the multi-year construction timeline, resulting in temporary revenue losses or increased uncertainty for seafood businesses reliant on these activities near the Bay Bridge.		Notification protocols will be followed throughout the construction duration to inform recreational and commercial fisheries of restriction periods.	MDTA	Construction
Community Facilities *Final EIS Section 5.1.4*	The Selected Alternative impacts 7 community facilities totaling 7.8 acres: one educational facility partial acquisition, one place of worship partial acquisition, one park/recreational area partial acquisition, one recreational trail partial acquisition and one recreational trail temporary impact, two transportation facility partial acquisitions, and one public utility facility partial acquisition.	The optional SUP would facilitate connections to community facilities, particularly existing and proposed trails and recreational facilities. The optional SUP would impact 1.2 acres of additional	All property owners, from whom partial property will be acquired, will be compensated and paid fair market value for the affected property in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA) and state requirements.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	Generally, the Selected Alternative requires acquisition of undeveloped strips of land from properties along U.S. 50/301. While some driveways and parking may be impacted, these impacts are not expected to restrict access to facilities.	community facility land at two community facilities (Sandy Point State Park and Terrapin Nature Park).	As detailed in the *Final Section 4(f) Evaluation*, mitigation for impacts to recreational sites is not required for the Selected Alternative because the Selected Alternative will not adversely affect the activities, features, or attributes that qualify the properties for Section 4(f) protection.		
Land Use *Final EIS Section 5.2.1*	The Selected Alternative will convert 17.4 acres of land from low-density residential, medium-density residential, high-density residential, commercial, institutional, open urban land, and other land uses to transportation land use. This includes 0.7 acres of protected land that would be converted to transportation right-of-way. The Selected Alternative primarily converts strips of land from undeveloped areas or areas of landscaping and trees, and paved areas associated with commercial and other transportation developments along U.S. 50/301 to transportation land use. Improvements are compatible with planned and future development in Anne Arundel and Queen Anne's counties.	The optional SUP would convert 1.2 acres of land from institutional, urban land, and other land uses. The optional SUP is consistent with Walk & Roll Anne Arundel! (2023), Queen Anne's County Pedestrian and Bicycle Master Plan (2024), and other local plans.	All property owners, from whom partial property will be acquired, will be compensated and paid fair market value for the affected property in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA) and state requirements.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Right-of-Way, Property, and Communities *Final EIS Section 5.2.2, 5.2.3*	The Selected Alternative requires temporary or permanent right-of-way from 45 properties. These properties are located in Cape St. Claire and Broadneck on the Western Shore, and Kent Island on the Eastern Shore. The Selected Alternative will improve transportation capacity, reliability, and mobility at the Bay Bridge and its approaches. The Selected Alternative primarily converts strips of land from undeveloped areas or areas of landscaping and trees, and paved areas associated with commercial and other transportation developments along U.S. 50/301 to transportation land use. While some driveways and parking may be impacted, these impacts are not expected to restrict access to facilities.	Two properties would be impacted by the optional SUP; these properties will already be impacted by the Selected Alternative. The optional SUP would enhance safe pedestrian and bicycle access and would connect the Western and Eastern Shores.	All property owners, from whom partial property will be acquired, will be compensated and paid fair market value for the affected property in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA) and state requirements.	MDTA	Final Design
Visual Resources *Final EIS Section 5.3*	The Selected Alternative has visual impacts due to clearing vegetation which will make the road more visible from surrounding land uses and the increased height and lighting of a new bridge across the Chesapeake Bay, which will have visual or aesthetic impacts.	The optional SUP would have minimal additional visual impact since it would be constructed on the new bridge structure. The optional SUP would provide new views of the Chesapeake	The design of the highway elements and new Bay Bridge could incorporate aesthetic architectural elements that enhance visual appeal. This may include landscaping enhancements on the approach roadways and aesthetic architectural elements on a new bridge, as well as the lighting design.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	Construction will temporarily disrupt the landscape with cranes, scaffolding, and other equipment altering the view. The Severn River is outside the study limits just west of MD 2/MD 450 and is designated as a State Scenic River. While outside the study limits, the increased height of a new bridge may be visible from the Severn River, particularly at the mouth of the river.	Bay and nearby shorelines from the new bridge.	The MDTA will coordinate with MDNR and the Severn River Commission as design progresses regarding potential effects to the scenic river.	MDTA	Final Design
			The MDTA will develop a bridge lighting plan during the design phase. Mitigation measures will focus on minimizing light pollution and ecological impacts, in consideration of DarkSky International guidelines. Warm-toned, low-intensity, and programmable lighting can help protect nocturnal species, migratory birds, and sensitive habitats while maintaining scenic views.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Cultural Resources (Historic Architecture and Archaeology) *Final EIS Section 5.4*	Seventeen architectural historic properties were identified in the APE. The Selected Alternative will adversely affect the Chesapeake Bay Bridge (William Preston Lane, Jr. Memorial Bridge) and Skidmore. The Selected Alternative avoids impacts to identified archaeological historic properties; through the Section 106 consultation process, the MDTA will continue to identify and evaluate archaeological resources.	The optional SUP would not result in additional adverse effects to identified historic properties.	FHWA and the MDTA executed a Section 106 Programmatic Agreement (PA) to resolve adverse effects to historic properties from the Selected Alternative in accordance with Section 106 of the NHPA. The PA identifies mitigation commitments for the Chesapeake Bay Bridge and Skidmore. Mitigation for the Chesapeake Bay Bridge includes photographic and digital documentation, interpretive panels, online interpretive content, and a playground/outdoor interactive interpretive area. Skidmore mitigation includes drafting a Multiple Property Documentation form for Broadneck Peninsula descendant communities, interpretive panels, and a booklet with information about the history of Skidmore and Broadneck Peninsula descendant communities.	MDTA, FHWA, and other PA Signatories as applicable	Final Design through Post-Construction
			As stated in the PA, the MDTA will identify and evaluate archaeological resources with an underwater archaeological survey and additional terrestrial survey if needed.	MDTA, FHWA, and other PA Signatories as applicable	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Section 4(f) and Section 6(f) Resources *Final EIS Section 6 and Final Section 4(f) Evaluation (Final EIS Appendix E)*	The Selected Alternative impacts a portion of five recreational properties and one historic site. The Selected Alternative will not adversely affect the activities, features, or attributes that qualify the recreational properties for protection under Section 4(f). The OWJs over the recreational properties concurred with this determination (see Appendix B of the *Final Section 4(f) Evaluation)*. On June 22, 2026, FHWA subsequently signed the OWJ *de minimis* impact letters for the five recreational properties. The Selected Alternative includes demolition/removal of the historic Chesapeake Bay Bridge, which is considered a 'use', and is documented in an individual Section 4(f) evaluation. Although there would be an adverse effect per Section 106 to the Skidmore Historic District, the Selected Alternative would not require a Section 4(f) use of the District. There would be no physical impact to properties which contribute to the District and no constructive use. The Selected Alternative avoids land acquisition from Section 6(f) properties. The Selected Alternative avoids physical impacts to Sandy Point State Park; however, during in-river construction directly adjacent to the Chesapeake Bay	The optional SUP would impact 0.6 acre of Sandy Point State Park and 0.6 acre of Terrapin Nature Park. A Section 6(f) conversion is not anticipated for Sandy Point State Park because the SUP would be expected to enhance and support public outdoor recreational use.	Mitigation measures for the historic Chesapeake Bay Bridge are noted in the Cultural Resources commitments in this table, and described in the Section 106 PA (Refer to Final EIS **Appendix D**). Minimization and mitigation measures for the historic property were identified in coordination with MHT and other Section 106 consulting parties.	MDTA	Final Design through Post-Construction
			As detailed in the *Final Section 4(f) Evaluation*, mitigation for impacts to recreational sites is not required for the Selected Alternative because the Selected Alternative will not adversely affect the activities, features, or attributes that qualify the properties for Section 4(f) protection.	Not applicable	Not applicable
			The MDTA will coordinate with MDNR, USCG, marina operators, and emergency services to determine timing, duration, and extent of any access restrictions to Mezick Pond. The MDTA will develop and coordinate a Maintenance of Access Plan with MDNR during design that includes: a schedule of anticipated activities that could result in temporary closures of Mezick Pond, procedures for communication of closures, and processes for coordinating modifications to the plan.	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	western shoreline, the Selected Alternative will temporarily restrict navigation at the entrance to Mezick Pond.		If the optional SUP is advanced, potential impacts to Section 4(f) and Section 6(f) properties would be determined and coordinated with MDNR, Queen Anne's County, and NPS.	MDTA	Final Design
Soils and Groundwater *Final EIS Sections 5.5.1 and 5.5.2*	The Selected Alternative will impact 19.6 acres of prime farmland and soils of statewide importance outside the limits of census-designated urban areas and existing transportation right-of-way. Construction of the Selected Alternative will result in soil displacement. Soil may also be compacted in some areas due to heavy equipment operations. The Selected Alternative avoids impacts to private wells and wellhead protection areas. The Selected Alternative would impact five inactive groundwater wells. The Selected Alternative could impact groundwater recharge that enters the Magothy and Aquia aquifers due to an increase in impervious surfaces.	The optional SUP would impact 0.9 acre of additional prime farmland and soils of statewide importance. Construction may result in additional soil displacement. Increases in impervious surface could impact groundwater recharge that enters the Magothy and Aquia aquifers.	The MDTA will implement Best Management Practices (BMPs) and an MDE-approved Erosion and Sediment Control (ESC) plan during construction to minimize impacts to soils.	MDTA	Construction
			The MDTA will evaluate measures to reduce impacts to groundwater resources through SWM measures that mimic natural infiltration to meet (and exceed where feasible) water quality protection requirements during final design.	MDTA	Final Design
			The MDTA will coordinate with USGS and the MDE Water Supply Program during final design and construction to determine potential impacts to active and inactive groundwater wells; determine if any groundwater wells require abandonment and if so, coordinate the abandonment procedures; and determine if mitigation, such as relocation, is required for these impacts.	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	which includes an increase of 98.4 acres of impervious surfaces. Increased impervious surfaces can increase runoff levels, flow levels, and contaminants to surface waters.		The MDTA will obtain a Section 401 Water Quality Certification (WQC) from MDE to ensure discharges comply with Federal and state laws, regulations, and requirements.	MDTA	Final Design
			The MDTA will develop a Stormwater Pollution Prevention Plan.	MDTA	Final Design
Regulated Wetlands and Waterways *Final EIS Section 5.5.5.1*	The Selected Alternative will impact 0.1 acre (670 linear feet) of nontidal waterways and 1 acre (290 linear feet) of tidal waterways. These impacts do not include the Chesapeake Bay (Refer to Chesapeake Bay Tidal Waters). The Selected Alternative will also impact 4.2 acres of nontidal wetlands, 9.8 acres of nontidal wetland buffer, and 1.5 acres of tidal wetlands.	The optional SUP would impact less than 0.1 acre (30 linear feet) of nontidal waterways. It would impact less than 0.1 acre (0.0 linear feet) of tidal waterways. The optional SUP would have no impact to nontidal wetlands and nontidal wetland buffers. There would be a 0.7-acre impact to tidal wetlands.	The MDTA developed conceptual mitigation for unavoidable adverse impacts to all regulated wetlands and waterways in coordination with regulatory agencies and supporting resource agencies (Refer to Final EIS **Section 5.5.5.1** Minimization and Mitigation). The MDTA will coordinate with USACE and MDE during final design to obtain all Federal and state required permits for impacts to regulated wetlands and waterways. The MDTA will develop a final compensatory mitigation plan during final design for approval by MDE and USACE and will adhere to the USACE mitigation hierarchy, as described in the 2008 mitigation rule (33 CFR 332.4(c)), and the *NOAA Mitigation Policy for Trust Resources*. The approved final mitigation plan will meet all Federal and state mitigation requirements.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	which includes an increase of 98.4 acres of impervious surfaces. Increased impervious surfaces can increase runoff levels, flow levels, and contaminants to surface waters.		The MDTA will obtain a Section 401 Water Quality Certification (WQC) from MDE to ensure discharges comply with Federal and state laws, regulations, and requirements.	MDTA	Final Design
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Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			BMPs will be developed based on guidance including MDE's *Best Management Practices for Working in Nontidal Wetlands, Wetland Buffers, Waterways, and 100-Year Floodplains* and the *NOAA Fisheries/FHWA Best Management Practices Manual for Transportation Activities in the Greater Atlantic Region*.	MDTA	Final Design
Chesapeake Bay Tidal Waters *Final EIS Section 5.5.5.2*	Construction of the new bridge structure and removal of existing bridge piers for the Selected Alternative will impact 131.9 acres of Chesapeake Bay tidal open waters. Dredging required for the Selected Alternative will also impact 50.2 acres (308,800 cubic yards) of Chesapeake Bay substrate. Dredging directly impacts benthic organisms. Additionally, new work dredging (i.e., dredging an area that hasn't been previously dredged) in shallow water areas can alter bottom substrate and depth characteristics, potentially displacing	The optional SUP would require slightly larger bridge piers and would impact an additional 1.9 acres of Chesapeake Bay substrate. There would be no additional impacts from dredging.	The MDTA will coordinate with USACE and MDE during final design to obtain all Federal and state required permits for impacts to Chesapeake Bay tidal waters.	MDTA	Final Design
			The MDTA will observe the time-of-year restrictions (TOYRs) listed in **Section 5.5.5.2** of the Final EIS to the greatest extent practicable and work with the resource agencies to develop a construction plan that provides protection for sensitive resources.	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	species that utilize shallow areas, and impact sandy bottom habitat. Dredging also increases turbidity in the water column.		The MDTA will only use mechanical dredging rather than hydraulic dredging. The MDTA will prepare a Dredge Material Management Plan and evaluate dredge material to determine the appropriate disposal method and location. The MDTA will return bottom elevations approximately to existing. During final design, the MDTA will consider the potential for beneficial reuse of appropriate dredge material.	MDTA	Final Design & Construction
			As discussed in **Section 5.5.5.2** of the Final EIS, the MDTA developed a conceptual mitigation plan for unavoidable adverse impacts to tidal waters in coordination with regulatory agencies and supporting resource agencies. The MDTA will develop a final compensatory mitigation plan during final design for approval by MDE and USACE and will adhere to the USACE mitigation hierarchy, as described in the 2008 mitigation rule (33 CFR 332.4(c)), and the *NOAA Mitigation Policy for Trust Resources*. The approved final mitigation plan will meet all Federal and state mitigation requirements.	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			More detailed hydraulic modeling will be conducted in final design when pier locations, pier sizes, and pier protection designs are available to determine flow dynamics and the need for any additional scour protection for the new bridge structures. If future modeling results in substantially different flow dynamics, those effects will be coordinated with regulatory agencies as necessary.	MDTA	Final Design
Maintained Navigational Channels *Final EIS Section 5.5.5.3*	Four navigation channels, including the Chesapeake Bay Bridge Channel, Chesapeake Bay Auxiliary Channel, Bay Bridge Marina, and Mezick Pond access channel will be temporarily impacted during construction. The Chesapeake Bay Bridge Channel is a Federally maintained channel under the USACE Section 408 program. The Chesapeake Bay Auxiliary Channel is not maintained or marked except at the existing bridge. The Bay Bridge Marina and Mezick Pond access channels are state maintained.	No additional maintained navigational channels would be affected by the optional SUP.	The MDTA will coordinate with USCG to obtain a Bridge Permit and USACE to obtain Section 408 approval during final design for construction of a new bridge in or near the Federal navigation channel. Permit conditions will ensure that any temporary impacts and closures of the navigation channel and state-maintained access channels, such as the Bay Bridge Marina channel and Mezick Pond, are minimized and mitigated in coordination with the USCG, MDNR, marina operators, and emergency services.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			For Mezick Pond specifically, the MDTA will develop and coordinate a Maintenance of Access Plan with MDNR during design that includes: a schedule of anticipated activities that could result in temporary closures of Mezick Pond, procedures for communication of closures, and processes for coordinating modifications to the plan.	MDTA	Final Design & Construction
Chesapeake Bay Critical Areas *Final EIS Section 5.5.6*	The Selected Alternative will impact 162.5 acres of Critical Area on the Eastern and Western Shores. The Selected Alternative will also impact 17.7 acres of Critical Area 100-ft Buffer and 29.1 acres of Critical Area Expanded Buffer. The Selected Alternative will impact 9.8 acres of FIDS habitat and 45.8 acres of mapped SSPRA within the Critical Area.	The optional SUP would impact an additional 2.5 acres of Critical Area. It would impact 1.0 acres of Critical Area 100-ft Buffer and 1.5 acres of Critical Area Expanded Buffer. The optional SUP would not impact any FIDS habitat. The optional SUP would impact an additional 2.1 acres of mapped SSPRA.	The MDTA will obtain approval from the Chesapeake Bay Critical Area Commission and adhere to the authorization requirements established under COMAR 27.01.	MDTA	Final Design & Construction
			Where practicable, the MDTA will reduce the roadway footprint in Critical Area habitats and natural shorelines through the use of 2:1 slopes and other ESD measures during final design. Mitigation will be provided for impacts to forest within the Critical Area at a ratio dependent upon the percent of forest acreage cleared, designated land use classification, and whether impacts fall within the identified Critical Area Buffer.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			The MDTA developed conceptual mitigation for unavoidable adverse impacts to the Chesapeake Bay Critical Area in coordination with regulatory agencies and supporting resource agencies. Where practicable, the MDTA will prioritize reforestation within the LOD. Offsite reforestation mitigation within the Critical Area will fulfill any remaining Critical Area reforestation requirements. (Refer to **Section 5.5.6.3** of the Final EIS for details).	MDTA	Final Design & Construction
Aquatic Habitat and Biota *Final EIS Section 5.5.7*	The Selected Alternative will impact aquatic habitat and biota by removing or altering aquatic habitat during construction and could degrade habitat and affect biota long-term. Impacts include increased flow volumes, sedimentation or siltation, water temperature, turbidity, underwater noise, and shading, decreased base flows, changes in substrate composition, and water quality degradation. These impacts can affect animal behavior, such as feeding, migration, nesting, and spawning, or potentially cause injury or mortality. The Selected Alternative impacts 5.6	The optional SUP would include an additional impact to 0.7 acres of nontidal and tidal wetlands, less than 0.1 acres of nontidal and tidal waterways (excluding the Chesapeake Bay), 0.6 acres of NOBs, 0.6 acres of historic oyster bottom, 0.4 acres of public shellfisheries, and 2.4 acres of	The MDTA will observe the time-of-year restrictions (TOYRs) listed in **Section 5.5.7.3** of the Final EIS for aquatic biota to the greatest extent practicable and work with the resource agencies to develop a construction plan that provides protection for sensitive resources.	MDTA	Final Design & Construction
			The MDTA will coordinate with NOAA Permits and Conservation Division in final design to secure an Incidental Harassment Authorization (IHA) for impacts to marine mammals, which would include appropriate BMPs to minimize harassment to the extent practicable.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	acres of nontidal and tidal wetlands, 1.1 acres of nontidal and tidal waterways (excluding the Chesapeake Bay), 10.2 acres of natural oyster bars (NOBs), 24.1 acres of historic oyster bottom, 0.6 acres of oyster sanctuaries, 6.1 acres of public shellfisheries, 136.0 acres of EFH, 290 linear feet of horseshoe crab habitat, and 2.5 acres of waterfowl staging and concentration areas. The Selected Alternative will also impact Mezick Pond and the Bay Bridge Pier Islands, which are used by colonial waterbirds as nesting sites. Impacts to habitat within the Chesapeake Bay from the Selected Alternative will impact local marine mammals that inhabit the Chesapeake Bay.	Essential Fish Habitat (EFH). There would be no additional impact to oyster sanctuaries, horseshoe crab habitat, or waterfowl staging and concentration areas.	The MDTA developed conceptual mitigation for unavoidable adverse impacts to aquatic resources (Refer to **Section 5.5.7.3** of the Final EIS for details) in coordination with regulatory agencies and supporting resource agencies. A final compensatory mitigation plan will be developed during final design.	MDTA	Final Design
			The MDTA has coordinated specific avoidance and minimization measures related to marine mammals, Federally-listed aquatic species, EFH, and HAPCs, as noted in **Section 5.5.7.3** of the Final EIS and below. The MDTA will adhere to the following Conservation Recommendations (CR) provided by NOAA Fisheries through EFH consultation: • **CR-1**: The MDTA will design the bridge to meet structural integrity, engineering efficiency, and up-to-date engineering practices. Once these design criteria have been met, the MDTA will develop an alternatives analysis evaluating measures to minimize underwater noise generated during construction activities where practicable.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• **CR-2**: The MDTA will develop a project schedule that avoids driving piles from January 15 through May 15, unless underwater noise monitoring results demonstrate those piles can be driven while ensuring the Zone of Safe Fish Passage (ZSFP) and all applicable performance standards committed to in coordination with NOAA Fisheries are maintained. The ZSFP is defined as a minimum contiguous 7,000-foot-wide area, including at least one channel edge, while ensuring noise levels do not exceed 150 dB root mean square (RMS).	MDTA	Final Design & Construction
			• **CR-3**: The MDTA will avoid explosive demolition to the maximum extent practicable. When explosive demolition is required, the MDTA will develop a Demolition Plan in coordination with resource agencies and will conduct required blasting during times of lower biological activity (generally October 1 – December 15); specific dates will be determined during the development of the Demolition Plan and will incorporate the	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			best available data including any updated telemetry data. The MDTA will coordinate with resource agencies to define how fish kills will be documented and offset, including any potential adaptive management approaches, during final design.		
			• **CR-4**: The MDTA will Develop an Underwater Noise Monitoring Plan (UNMP) that defines proposed measures to minimize, monitor, and adaptively manage hydroacoustic energy resulting from project pile installation and mechanical demolition activities, including the following elements: o From January 15 through May 15 (the anadromous fish migratory period), ensure a minimum contiguous Zone of Safe Fish Passage (ZSFP) equivalent to approximately one-third the waterway width - approximately 7,000 linear feet. The ZSFP will allow Federally managed fish species, including migratory fish, to safely navigate to	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			their spawning grounds around undesirable noise (i.e., above the 150 dB RMS behavioral threshold) and turbidity levels. The ZSFP will encompass the channel edges. o An adaptive management framework for construction activities and accompanying mitigation measures to minimize fish kills and maintain compliance with the 150 dB RMS threshold across the entire width of the ZSFP. o Monitoring measures to describe the occurrence of fish that are stunned, injured, or killed. The MDTA will coordinate with the regulatory agencies during final design to determine fish kill thresholds that would trigger construction hold points and be described in the UNMP. The		

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			MDTA will coordinate with the regulatory agencies to define an optimization plan prior to resuming the triggering construction activities, which will be included in the UNMP.		
			• **CR-5**: The MDTA will fund additional telemetry deployments prior to production pile driving when information more relevant to construction of the project is available and the project is fully funded for final design. The MDTA will collect at least two years (2 springs & 2 summers) of pre-construction data to monitor migratory behavior and validate ZSFP efficacy. The MDTA will coordinate with the agencies on the details of the initial deployment and two-year data collection and will consider the potential for long-term management of the arrays by resource agencies during final design.	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• **CR-6**: Rubble will be removed to the maximum extent practicable, and to the extent that removal would not result in greater harm to benthic environments compared to leaving the rubble in place. The decision to remove, re-use, or leave rubble in place, or use rubble to fill scour, will be determined prior to the start of demolition, using the best available data at the time and in coordination with NOAA Fisheries.	MDTA	Construction
			• **CR-7**: The MDTA will return bottom elevations approximately to existing and will provide documentation of the post-demolition conditions to the agencies.	MDTA	Construction
			• **CR-8**: The MDTA will develop a pre-construction and post-construction monitoring plan during final design to describe benthic recovery in dredged areas and identify and define measures to restore or otherwise offset documented losses of function, relative to a reference site, after three years in coordination with regulatory and resource agencies.	MDTA	Final Design through Post Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• **CR-9**: The MDTA will only use mechanical dredging and will consider operational BMPs to further reduce impact to the Chesapeake Bay bottom during final design. The MDTA will observe the TOYRs for Natural Oyster Bars to the extent practicable as noted in **Section 5.5.7.3** of the Final EIS. The MDTA will coordinate a working meeting with relevant regulatory agencies to discuss in-water TOYRs as related to construction schedules and costs.	MDTA	Final Design & Construction
			• **CR-10**: The MDTA will observe the TOYRs for aquatic biota to the greatest extent practicable as noted in **Section 5.5.7.3** of the Final EIS. The MDTA will work with resource and regulatory agencies during final design to develop a construction plan and BMPs that provide protection for sensitive resources in compliance with all statutory requirements. The MDTA will coordinate a working meeting with relevant regulatory agencies to discuss in-water TOYRs as related to construction schedules and costs.	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• **CR-11**: The MDTA will continue to evaluate opportunities to treat stormwater from the proposed bridge spans and roadway surfaces to the extent practicable during final design.	MDTA	Final Design
			• **CR-12**: During final design, the MDTA will develop a compensatory mitigation plan (CMP) for regulatory agency approval. The CMP will include the following: (1) replacement of biogenic impacts in-kind to the greatest extent practicable; (2) replacement of permanently impacted open water habitat through out-of-kind mitigation activities to be determined in coordination with regulatory and resource agencies; (3) compensation for the temporal loss of tidal open water habitat function; (4) prioritization of compensatory mitigation projects based on the USACE mitigation hierarchy, as described in the 2008 mitigation rule (33 CFR 332.4(c)), MDE Tidal Mitigation Plan Guide, and the NOAA Mitigation Policy for Trust Resources; (5) implementation of a site protection instrument at mitigation sites for the project as	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			necessary; (6) oyster mitigation will comply with MDE's requirement that oyster mitigation activities will occur at an oyster sanctuary; and (7) final mitigation ratios to be determined in coordination with regulatory agencies during final design.		
			The MDTA will adhere to the following additional commitments: • The MDTA will use noise attenuation and minimization measures during pile driving, including: o Use of a bubble curtain system that achieves 10 dB or greater attenuation for bridge piles and 5 dB or greater attenuation for dolphin pier protection piles. The effectiveness of the bubble curtain attenuation will be demonstrated with a test pile and underwater noise program prior to initiating production pile driving activities. o Use of a "soft start" or "ramping up" pile driving (e.g., driving does not begin at 100% energy). Soft start parameters	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			will be determined and coordinated with NOAA Fisheries in final design. o Where softer sandy soils are at the surface, use a vibratory hammer for initial pile driving through the softer soils prior to using an impact hammer through stiffer material as practicable and as appropriate. o Use of cushion blocks to drive concrete piles with an impact hammer, as practicable and as appropriate.		
			• The MDTA will implement an effective quiet time of no pile driving for 12 consecutive hours per 24-hour period.	MDTA	Construction
			• The MDTA will develop a detailed Demolition Plan in coordination with NOAA Fisheries and submit to NOAA Fisheries for review and approval, in advance of any detonation activity. The Demolition Plan will address the following measures: o Detonation bore hole stemming, capping, or filling;	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			o Firing all charges in a single firing circuit with a delayed detonation between each charge; o Focusing blast energy towards a solid substrate rather than towards the water column; o Evaluating the feasibility of employing noise attenuating devices; o Conducting the blasting during periods of low water or low tide; o Using rubber blasting mats to reduce debris and acoustic signature; o Employing scare charges; o Installing hydrophones to confirm the impact distance to adaptively manage the Demolition Plan; o Using explosive weights that result in injury/mortality thresholds remaining within 100 feet of the blasting source; and		

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			o Using adaptive management actions between blast events to minimize fish mortality.		
			• The MDTA will employ scare charges and fish deterrent boats ahead of blasting activities. Use low weight/energy repellent charges that startle fish from the area prior to blasting, and minimize the time between repellent activities and blasting, such that fish are not allowed a recovery period to re-enter the blasting exclusion zone.	MDTA	Construction
			• The MDTA will employ species spotters and monitoring boats to scan the work area for marine mammals and sea turtles prior to blasting. Blasting will not occur when marine mammals or turtles are present.	MDTA	Construction
			• The MDTA will only use mechanical dredging.	MDTA	Construction
			• To prevent sediment and debris from entering the water, the MDTA will use geo-textile fabric, hay bales, or other methods, and will use nets, tarps, and pans when demolishing bridge superstructures.	MDTA	Construction
			• The MDTA will limit the amount and extent of turbidity and sedimentation by using	MDTA	Final Design through Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			appropriate sedimentation and turbidity controls such as turbidity curtains, silt curtains, settling basins, bridge netting and cofferdams. The MDTA will specify the measures to be used in the construction plans, including: o Install erosion control measures prior to ground disturbance; o Inspect daily and maintain continuously in an effective operating condition all ESC measures until such time as they are removed with prior permission from the MDE inspector; o Upon project completion, remove and stabilize all temporary construction materials with sediment and erosion control measures to prevent reentry into waterways.		

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• The MDTA will minimize the suspension of sediments and disturbance of the substrate when removing piles by implementing the following applicable techniques: o Remove piles with a vibratory hammer, rather than by direct pull, jetting, or clamshell; o Remove piles slowly to reduce sediment sloughing off in the water column; o Strike or vibrate the pile to break the bond between the sediment and pile to minimize the pile breakage, and reduce the amount of sediment sloughing off the pile during removal; o Place piles on a barge equipped with a basin to contain all attached sediment and runoff water after removal.	MDTA	Construction
			• The MDTA will only use clean fill in the water.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• The MDTA will evaluate dredge material to determine the appropriate disposal method and location.	MDTA	Construction
			• The MDTA will remove cofferdams, turbidity curtains, silt curtains, or other diversion structures only after water quality is consistent with ambient levels outside the structure.	MDTA	Construction
			• The MDTA will avoid, to the greatest extent practicable, the use of creosote piles or other in-water structures, and coordinate with NOAA Fisheries if there is an essential use identified by the contractor.	MDTA	Final Design & Construction
			• The MDTA will minimize raw concrete or grout contact with the water to the maximum extent practicable.	MDTA	Construction
			• The MDTA will remove contaminants and sediments from water prior to discharging it to aquatic habitats from construction activities such as excavations, cofferdams, settling basins, and sediment ponds.	MDTA	Construction
			• The MDTA will manage concrete wash water and cooling water effluent from concrete saw operations to ensure they do not enter surface waters untreated.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• The MDTA will employ an Independent Environmental Monitor (IEM) to monitor compliance with environmental and conservation commitments and report to the regulatory agencies and MDTA concurrently.	MDTA	Construction
			• The MDTA will coordinate with NOAA Fisheries and MDNR during Final Design to determine if SAV surveys would be informative of permit conditions. If so, the MDTA will conduct SAV surveys during the growing season, prior to construction, within nearshore areas of the Action Area to determine the presence and extent of SAV beds.	MDTA	Final Design
			• The MDTA will incorporate necessary measures to avoid, minimize, or otherwise offset impacts to SAV, as appropriate. Impacts to SAV will be mitigated at a ratio of at least 3:1, depending upon the nature/scale of the impacts.	MDTA	Final Design & Construction
			• The MDTA will not operate or moor vessels in, or immediately adjacent to, SAV in such a way that could shade or otherwise impact SAV.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			The MDTA will coordinate additional avoidance and minimization measures for aquatic habitat and biota with the agencies during final design.	MDTA	Final Design
Terrestrial Habitat and Biota *Final EIS Section 5.5.8*	The Selected Alternative could cause habitat fragmentation and the introduction and spread of invasive species. The Selected Alternative will impact 57.7 acres of forested areas. The majority of impacts will occur within habitat edges along existing roadways. Wetlands will also be impacted by the Selected Alternative (Refer to Regulated Wetlands and Waterways). Beyond habitat loss, construction can result in increased risk of mortality for less mobile wildlife due to construction disturbance or vehicle strikes. Construction activities also generate noise, vibration, and light pollution, which can disturb wildlife behavior and stress sensitive species.	The optional SUP would impact 1.4 acres of additional forested areas. It would also impact tidal wetlands (Refer to Regulated Wetlands and Waterways).	The MDTA will adhere to Critical Area authorization requirements for impacts to forests and trees within the Critical Area and Maryland Reforestation Law for forest and tree impacts outside the Critical Area.	MDTA	Final Design & Construction
			The MDTA developed conceptual mitigation for offsite reforestation for any remaining mitigation required after onsite reforestation is maximized (Refer to Final EIS **Section 5.5.8.1** for details). Reforestation (mitigation) plans will be developed and coordinated with the Critical Area Commission and MDNR during final design.	MDTA	Final Design
			The MDTA will coordinate with MDNR to ensure compliance with all applicable environmental regulations associated with terrestrial biota, as noted in **Section 5.5.8.2** of the Final EIS.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			Tree clearing will be prohibited during the active season for bat species (April 1 to September 30) to avoid and minimize potential direct effects to NLEB and TCB in the action area, which will also reduce impacts to many migratory and breeding birds and other species. The MDTA will incorporate other TOYRs to the greatest extent practicable to limit work during breeding or migration seasons for sensitive species.	MDTA	Construction
Rare, Threatened, and Endangered (RTE) Species *Final EIS Section 5.5.9*	The Selected Alternative will require demolition, construction, and operational activities that could remove or degrade habitat, cause physical injury to, or alter behavior of RTE species. The Selected Alternative is not likely to adversely affect listed and proposed species under USFWS jurisdiction, including the northern long-eared bat and tricolored bat. The Selected Alternative is likely to adversely affect <u>but is not likely to jeopardize the continued existence of the following</u> listed species under NOAA Fisheries jurisdiction: <u>the New York Bight, Chesapeake Bay, Gulf of Maine,</u>	No additional species would be affected from the optional SUP.	During final design, the MDTA will develop ESC and SWM plans to minimize impacts to species.	MDTA	Final Design
			The MDTA will follow Occupational Safety and Health Administration (OSHA), MDOT, and State Highway Administration (SHA) requirements and will consider DarkSky principles for changes to permanent and temporary lighting where practicable.	MDTA	Final Design & Construction
			The MDTA will replace trees and forests, where practicable, within the LOD according to Chesapeake Bay Critical Area regulations and Maryland Reforestation Law, requiring an impact to replacement ratio ranging from 1:1 to 3:1.	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
	Carolina, and South Atlantic Distinct Population Segment (DPS) of Atlantic sturgeon or shortnose sturgeon. The Selected Alternative is not likely to adversely affect the following listed species under NOAA Fisheries jurisdiction: loggerhead sea turtle, Kemp's ridley sea turtle, green sea turtle, and leatherback sea turtle. The Selected Alternative will impact habitat for several state RTE shorebirds, including Least Tern and Sora Rail. The removal of the existing bridge structure and piers would make the structure and islands unavailable for nesting, which is currently used by Peregrine Falcons and waterbirds, including Great Egret, Snowy Egret, Cattle Egret, and Black-Crowned Night Heron. The Delmarva fox squirrel, a Species in Need of Conservation, may also be affected due to impacts to forested areas in Queen Anne's County.		Tree clearing will be prohibited during the active season for bat species (April 1 to September 30) to avoid and minimize potential direct effects to NLEB and TCB in the action area. The MDTA will adhere to other TOYRs coordinated with USFWS, MDNR, and NOAA Fisheries to the greatest extent practicable.	MDTA	Construction
			Where practicable, the MDTA will use specific construction techniques and equipment to reduce aquatic impacts. These techniques will be coordinated with NOAA Fisheries during final design. The MDTA will employ the measures listed below in addition to those listed in the Aquatic Habitat and Biota section of this table to avoid, minimize, and monitor potential effects of the proposed work on Atlantic and shortnose sturgeon and sea turtles, as noted in **Section 5.5.7** of the Final EIS and below.	MDTA	Final Design & Construction
			• Remove temporary structures and fills including monitoring devices placed for underwater noise monitoring during pile driving and blasting, in their entirety. Return aquatic habitats impacted by temporary activities, fills, or structures to pre-construction or better	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			condition, including contours, elevations, substrate, and vegetation.		
			• Stage construction activities to reduce intensity of disturbance where appropriate and practicable. Staging of construction activities will be coordinated with the agencies during design.	MDTA	Construction
			• Avoid areas where protected species congregate for spawning/foraging or overwintering, if identified prior to or during construction. Currently, no specific spawning, foraging, or overwintering areas are known.	MDTA	Construction
			• Use pile driving underwater noise monitoring results to determine an acceptable pile driving sequence of construction that ensures the ZSFP is achieved from January 15 through May 15.	MDTA	Final Design & Construction
			• Operate construction vessels at reduced speeds (e.g., below 10 knots). Safety exemptions would be in place if needed.	MDTA	Construction
			• Employ species spotters to reduce species/vessel collisions; and keep appropriate distance from protected species if spotted.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• Use construction equipment that reduces potential for impingement and entrainment such as environmental buckets on mechanical dredges.	MDTA	Construction
			• Employ a NOAA Fisheries approved observer during mechanical dredging and removal of demolition debris in case of accidental capture.	MDTA	Construction
			• When explosive demolition is required, employ scare charges and fish deterrent sonar from boats, and monitor for the presence of tagged sturgeon, ahead of blasting activities.	MDTA	Construction
			The MDTA will adhere to the following Reasonable and Prudent Measures (RPMs) included in the Incidental Take Statement (ITS) (Terms & Conditions of each RPM are included in the *Biological Opinion* (**Appendix C**)): • **RPM-1**: All sturgeon captures, injuries, or mortalities in the immediate activity area will be reported to NOAA Fisheries within 24 hours.	MDTA	Construction
			• **RPM-2**: Any dead sturgeon will be held until proper disposal procedures can be discussed with NOAA Fisheries. The fish will be held in cold storage.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
			• **RPM-3**: All sturgeon over 75 centimeters total length that are captured will have a fin clip taken for genetic analysis. This sample will be transferred to a NOAA Fisheries-approved laboratory capable of performing the genetic analysis.	MDTA	Construction
			• **RPM-4**: During blasting, acoustic measurement of the first three detonations will be conducted to confirm the estimated underwater pressure levels. If pressure levels exceed those estimates, the MDTA will contact NOAA Fisheries within 24 hours of the recorded measurement.	MDTA	Construction
			• **RPM-5**: The MDTA will submit a final blasting plan prior to demolition that contains final parameters for blasting, outline the final mitigation measures, details of the deterrent system, the noise and fish monitoring plan and require NOAA Fisheries approval of the plan before it is executed and ensure that any sturgeon killed during blasting are recorded.	MDTA	Final Design & Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Unique and Sensitive Areas *Final EIS Section 5.5.10*	The Selected Alternative will impact 7.2 acres of HCN hubs and corridors and 109.1 acres of mapped SSPRA.	The optional SUP would result in 3.5 acres of additional impact to mapped SSPRA and no additional impacts to HCN hubs and corridors.	The MDTA will consider designs that avoid or minimize impact to HCN hubs and corridors and mapped SSPRA to the maximum extent practicable during final design. Where practicable, the MDTA will follow TOYRs to limit work during breeding or migration seasons for sensitive species and restore habitat by replanting disturbed areas with native vegetation.	MDTA	Final Design & Construction
Hazardous Materials *Final EIS Section 5.6*	The Selected Alternative will potentially impact 46 identified sites of concern, including 25 sites with a high potential for impact (rank 1), eight sites with a medium/high potential for impact (rank 3), three sites with a medium potential for impact (rank 4), and 10 sites with a low potential for impact (rank 5). The majority of impacts occur at greater depth due to releases associated with Underground Storage Tanks (USTs), gasoline stations, and various commercial properties.	No additional sites of concern would be impacted by the optional SUP.	The MDTA will complete a full American Society for Testing Materials (ASTM)-compliant Phase I Environmental Site Assessment prior to any property acquisition. Additional environmental investigations will be required to determine the extent of potential impacts based on ground disturbance activities.	MDTA	Final Design
			A project-specific materials management plan will be developed during the final design phase and implemented during the construction phase to establish procedures for identifying, handling, transporting, and disposing of contaminated materials, soils, or groundwater discovered, or construction materials generated during construction.	MDTA	Final Design & Construction
Air Quality	Mobile Source Air Toxics (MSAT) emissions for the Selected Alternative are expected to remain the same or	The optional SUP could slightly increase temporary	The MDTA will obtain all construction-related permits from MDE prior to construction.	MDTA	Final Design

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Final EIS Section 5.7	increase slightly when compared to 2045 No-Build conditions. Construction-related temporary air quality impacts will be localized to the site and surrounding area.	air quality impacts during construction.	The MDTA will coordinate with the contractor to implement measures to minimize and mitigate temporary construction impacts to air quality, such as those listed in **Section 5.7.3** of the Final EIS.	MDTA	Construction
Noise *Final EIS Section 5.8*	The Selected Alternative will increase traffic noise in 28 Noise Sensitive Areas (NSAs). Per the noise analysis, consideration of noise abatement was completed for 11 of the impacted NSAs. Construction activities could result in temporary noise disturbance.	Construction of the optional SUP would have minimal to no additional noise impact due to the proximity of the existing highway and the construction noise generated from the Selected Alternative.	Three barriers were identified as feasible and reasonable based on the preliminary noise analysis for the Selected Alternative. The barriers provide noise abatement for seven of the 11 impacted NSAs. The MDTA will complete further study to determine the design details of any feasible and reasonable barriers as design of the Selected Alternative progresses.	MDTA	Final Design
			Additional mitigation procedures to minimize public exposure to temporary construction noise will be considered during final design, such as limiting the time of day that pile driving operations can occur, equipment adjustments, construction of noise barriers first where possible, and alteration of construction activity areas and temporary noise barriers.	MDTA	Construction

Environmental Resource	Potential Environmental Consequences of the Selected Alternative	Potential Environmental Consequences of the Optional SUP	Mitigation/Commitments	Responsible Party	Timeframe
Transit	Not Applicable	Not Applicable	The MDTA commits to providing up to approximately $40 million for transit-related improvements for local transit agencies near the Bay Bridge. The MDTA would coordinate with MTA, local governments, and local transit agencies to help them determine the potential improvements that would be most beneficial for them at that time.	MDTA	Final Design & Construction
General	Not Applicable	Not Applicable	The MDTA commits to coordinating with the SHA and local agencies to help them evaluate roadway needs and traffic operations along U.S. 50/301 approaching the Bay Bridge, outside of this study. This includes SHA's U.S. 50 from the Bay Bridge to Ocean City Project and other potential future projects that would address traffic queues during SWED, which impact the U.S. 50/301 corridor-wide network.	MDTA	Following ROD

