CHESAPEAKE BAY CROSSING STUDY

TIER 1 NEPA

WELCOME TO THE PUBLIC HEARINGS

Public Hearing
Virtual Information Room

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

MDTA
Maryland Transportation Authority

Tier 1 DEIS Public Hearings

CHESAPEAKE BAY CROSSING STUDY
TIER 1 NEPA

The Maryland Transportation Authority (MDTA) and the Federal Highway Administration (FHWA) invite all interested parties to join us at our Tier 1 Draft Environmental Impact Statement (DEIS) Bay Crossing Study Public Hearings. Originally scheduled for December, release of the DEIS was delayed due to concerns with rising state COVID-19 rates and associated restrictions. In following public health guidance and to ensure adequate opportunity for the public to comment, MDTA and its federal partners at the FHWA updated the roll-out schedule. The purpose of the Bay Crossing Study is 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 Public Hearings will be made up of two components - a **Public Hearing Virtual Information Room (VIR)** and **Live Testimony Sessions**. The live testimony will consist of four call-in sessions, with two in-person opportunities also available. Each testimony session will include the opportunity to provide public and one-on-one testimony. There will be no formal presentation during the testimony sessions, and no responses to questions will be given. ***Due to the current COVID-19 health crisis and MDTA's commitment to protect the public and agency members, the public is encouraged to provide public testimony through the call-in sessions.***

Those who wish to provide testimony will need to pre-register in advance via baycrossingstudy.com or via telephone at 877-249-8370. Members of the public will have three minutes per person to give testimony. Please sign up only once to provide oral testimony. Each testimony session will follow the same format and will be broadcast on-line at baycrossingstudy.com or via telephone at 855-640-0504. Those who wish to listen live and/or leave your testimony by voicemail during the testimony session, call 855-640-0504.

Public Hearing Virtual Information Room (VIR) Begins February 23, 2021

Beginning February 23, 2021 the DEIS and public hearing materials will be available for review in the VIR at **baycrossingstudy.com**. The public is encouraged to review these materials and provide comment. If you are unable to access the DEIS via the website or if additional assistance is required, please call 877-249-8370 or email the project team at **info@baycrossingstudy.com**.

In the VIR, attendees will have the opportunity to:

- review information on the Tier 1 DEIS and the MDTA-Recommended Preferred Corridor Alternative
- register to give public or one-on-one testimony
- learn how to submit and provide written comments

Live Testimony Sessions Begin April 14, 2021

CALL-IN TESTIMONY SESSIONS
1:00 - 3:00 PM AND 6:00 - 8:00 PM
April 14 and 15

IN-PERSON TESTIMONY SESSIONS
6:00 - 8:00 PM

April 21	**April 22**
DoubleTree by Hilton	Kent Island
Hotel Annapolis	American Legion Hall
210 Holiday Ct	800 Romancoke Rd
Annapolis, MD 21401	Stevensville, MD 21666

To encourage social distancing, display boards will be available online only. Social distancing protocols will be strictly enforced, including required face coverings, hand sanitizing stations, and limiting capacity in the hearing room to only those that are providing testimony.

Comments may be submitted during the comment period through May 10, 2021 via mail, email, project website, public testimony, and one-on-one testimony. *All comments received, whether at the hearing through oral testimony or through other methods (project website, email, and mail), will be given equal consideration.*

Individuals who require special accommodations under the Americans with Disabilities Act or who require translation services (free of charge) should contact the MDTA at 410-537-1000 (711 for MD Relay) no later than ten business days before the live testimony session, if they wish to participate.

Maryland Transportation Authority

National Environmental Policy Act (NEPA)

- NEPA requires federal agencies to assess potential impacts to the environment that would be caused by their actions. This assessment must be complete before an alternative is selected.
- To comply with NEPA, FHWA and the MDTA follow a process that considers a reasonable range of alternatives, analyzes the potential environmental consequences of projects, documents the analysis, and engages the public.
- The Bay Crossing Study is following a tiered NEPA process that allows the MDTA and FHWA to initially identify potential corridors on a broad scale and to examine potential environmental and socioeconomic impacts by applying a high-level, mostly qualitative review of cost, engineering, and environmental inventory data.
- The **Tier 1** Bay Crossing Study will result in the selection of a two-mile-wide Corridor Alternative that addresses congestion at the Chesapeake Bay Bridge. A potential future **Tier 2** study would analyze more site-specific alignments within the selected corridor.

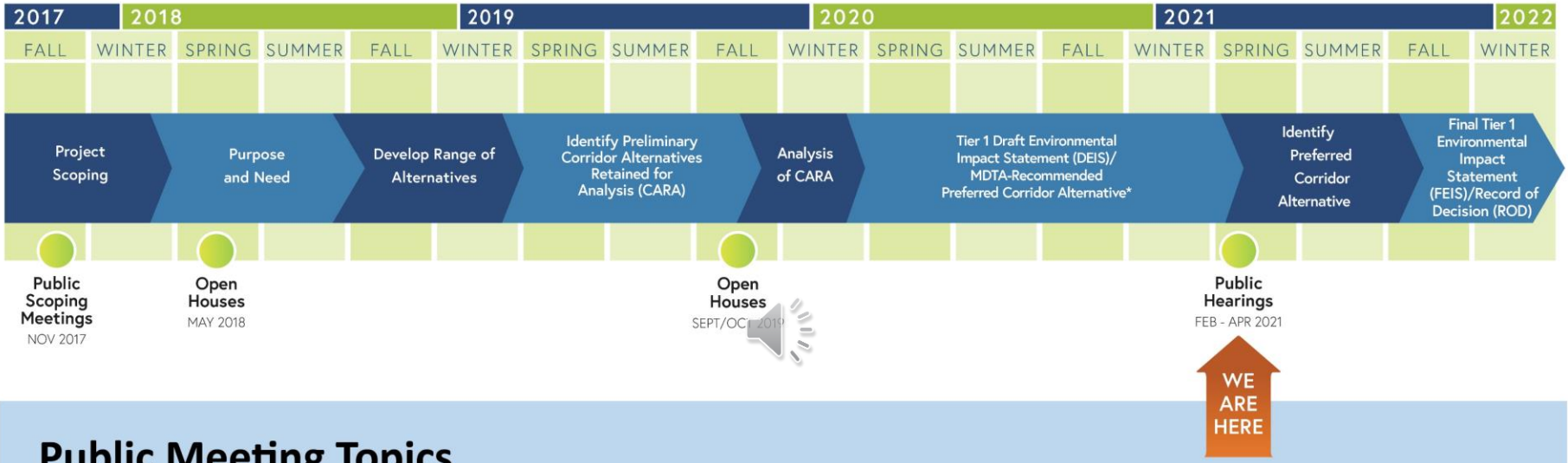
Tier 1 NEPA (current study)

- Establish the project Purpose and Need
- Evaluate a range of alternatives across the Bay using broad-scale engineering and environmental information
- Include public involvement and comment
- Identify a selected Corridor Alternative

Tier 2 NEPA (potential study)

- Refine Purpose and Need
- Identify alignments within the Selected Corridor Alternative identified in Tier 1
- Include more detailed engineering of alternatives and specific assessment of potential environmental impacts
- Include public involvement and comment
- Identify a Selected Alternative within the Tier 1 Selected Corridor
- Identify appropriate mitigation measures

Tier 1 NEPA Study Schedule



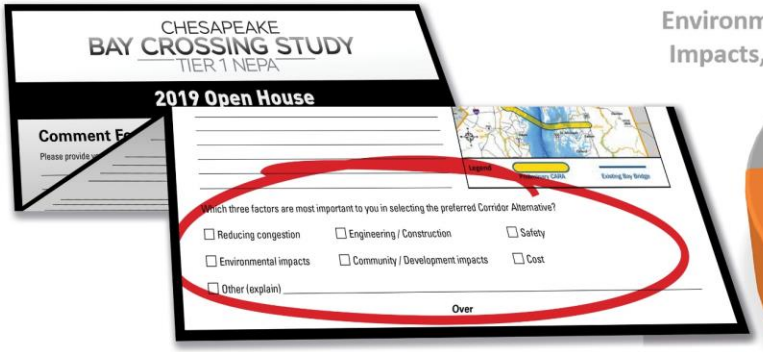
Public Meeting Topics

- November 2017: Scoping Meeting
- May 2018: Purpose and Need, Existing Traffic, and Environmental Conditions
- September/October 2019: Range of Corridor Alternatives and Preliminary CARA
- February - April 2021: Tier 1 DEIS and MDTA-Recommended Preferred Corridor Alternative

*Originally scheduled for December, release of the DEIS was delayed due to concerns with rising state COVID-19 rates and associated restrictions. In following public health guidance and to ensure adequate opportunity for the public to comment, MDTA and its federal partners at the FHWA updated the roll-out schedule.

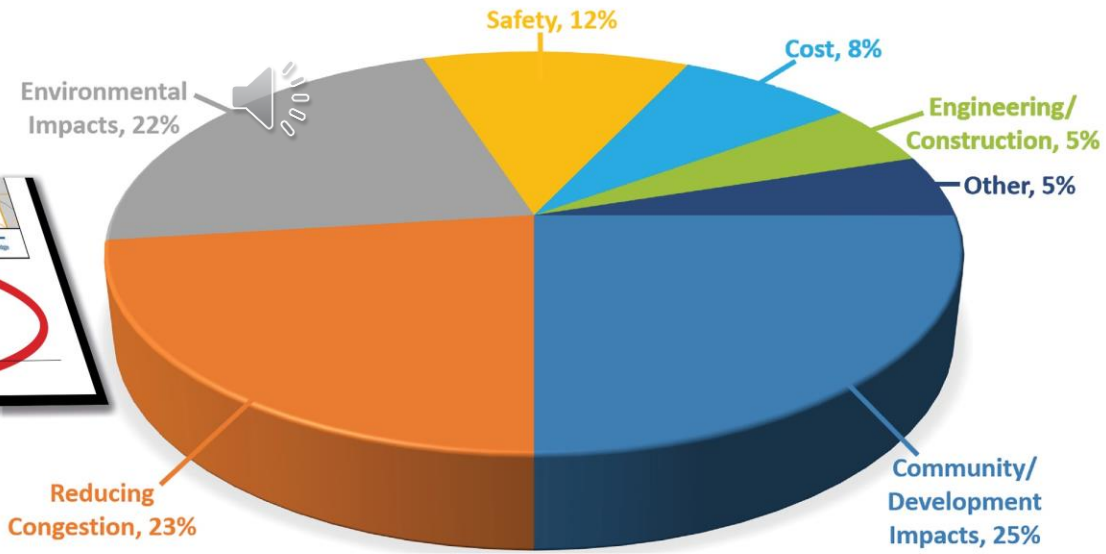
Public Involvement

The MDTA would like to thank you for your continued involvement and feedback! Public involvement and input are important to the study process. The MDTA has presented materials and provided opportunities for the public to comment on the Bay Crossing Study since November 2017. To date the MDTA has received over 1,800 public comments. All public comments are posted to the Bay Crossing Study website for public viewing at baycrossingstudy.com.



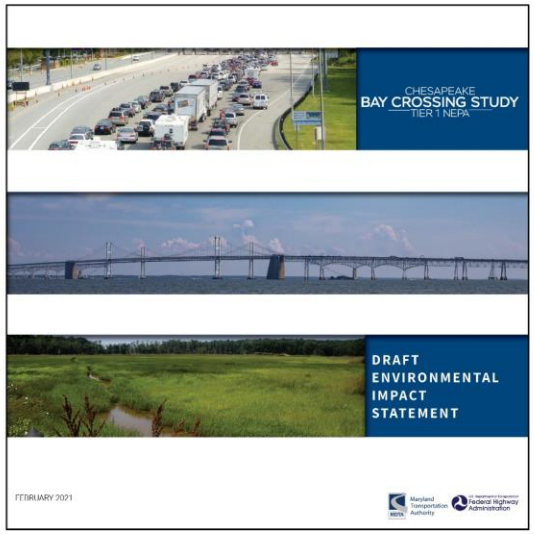
The Fall 2019 Open House comment cards asked "Which three factors are most important to you in selecting the preferred Corridor Alternative?"

This is What We Heard



Draft Environmental Impact Statement (DEIS)

- Comments on the Bay Crossing Tier 1 DEIS will be accepted through May 10, 2021.
- The DEIS can be found on the DEIS page on the project website, in the Public Hearing Virtual Information Room, or by clicking on the document cover on the right.



The DEIS includes the following chapters:

- Introduction
- Purpose and Need
- Alternatives Considered
- Affected Environment and Environmental Consequences
- Coordination
- List of Preparers
- References

The Corridor Alternatives Retained for Analysis (CARA) are evaluated based on:

- Traffic and Transportation
- Natural Resources
- Socioeconomics
- Parks and Recreational Facilities
- Cultural Resources
- Indirect and Cumulative Effects
- Hazardous Materials
- Air Quality
- Noise
- Costs

Purpose and Need

The PURPOSE of the Bay Crossing Study Tier 1 NEPA study is to consider alternatives for providing additional capacity and access across the Chesapeake Bay in order to improve mobility, travel reliability, and safety at the existing Governor William Preston Lane Jr. Memorial (Bay) Bridge.

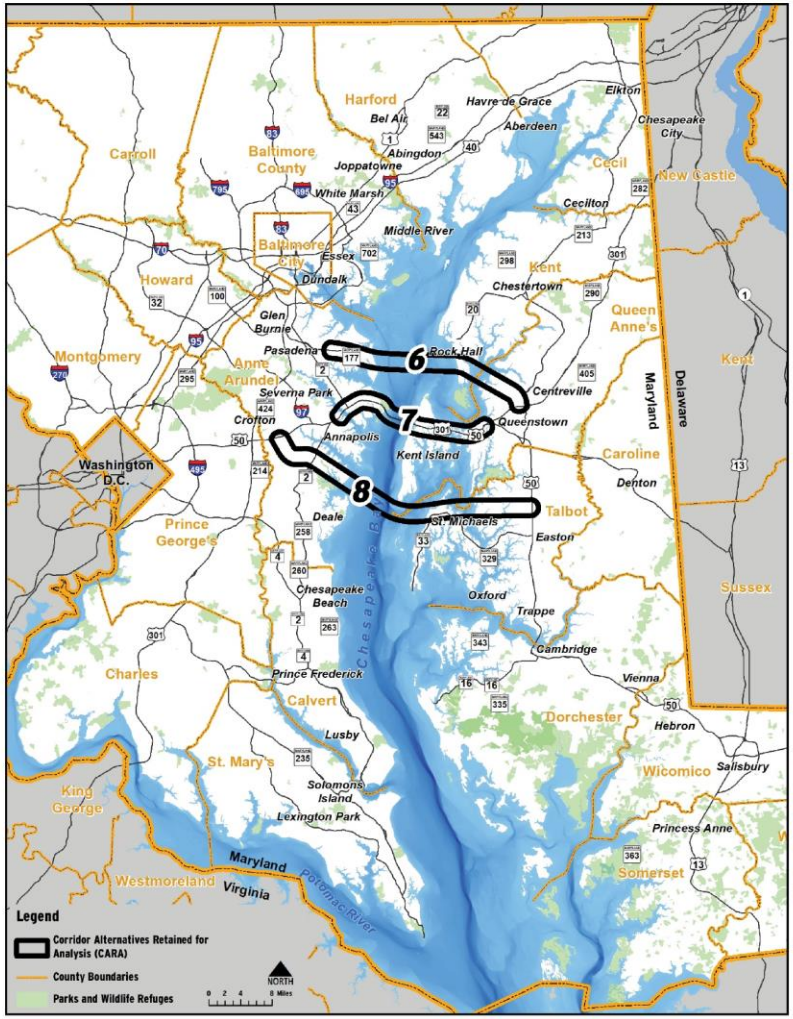
The project NEEDS include:

- adequate capacity
- dependable and reliable travel times
- flexibility to support maintenance and incident management

As part of the study, the MDTA is also considering:

- financial viability
- environmental considerations

Corridor Alternatives Retained for Analysis (CARA)



Corridors 6, 7 and 8 were identified as the CARA because they are the only two-mile-wide corridors to sufficiently meet the Purpose and Need. In accordance with NEPA, the **No-Build Alternative** was also carried forward for further evaluation.

- **Corridor 6**
  Follows MD 177 and ties in with MD 100 on Western Shore; does not follow existing road network on Eastern Shore to tie into US 301
- **Corridor 7**
  Follows existing road network along US 50/301 from west of the Severn River on the Western Shore to US 50/301 split on the Eastern Shore. Includes location of existing Bay Bridge
- **Corridor 8**
  Follows MD 214/424 and ties into existing US 50 interchange on Western Shore. Does not follow existing road network on Eastern Shore to connect to US 50

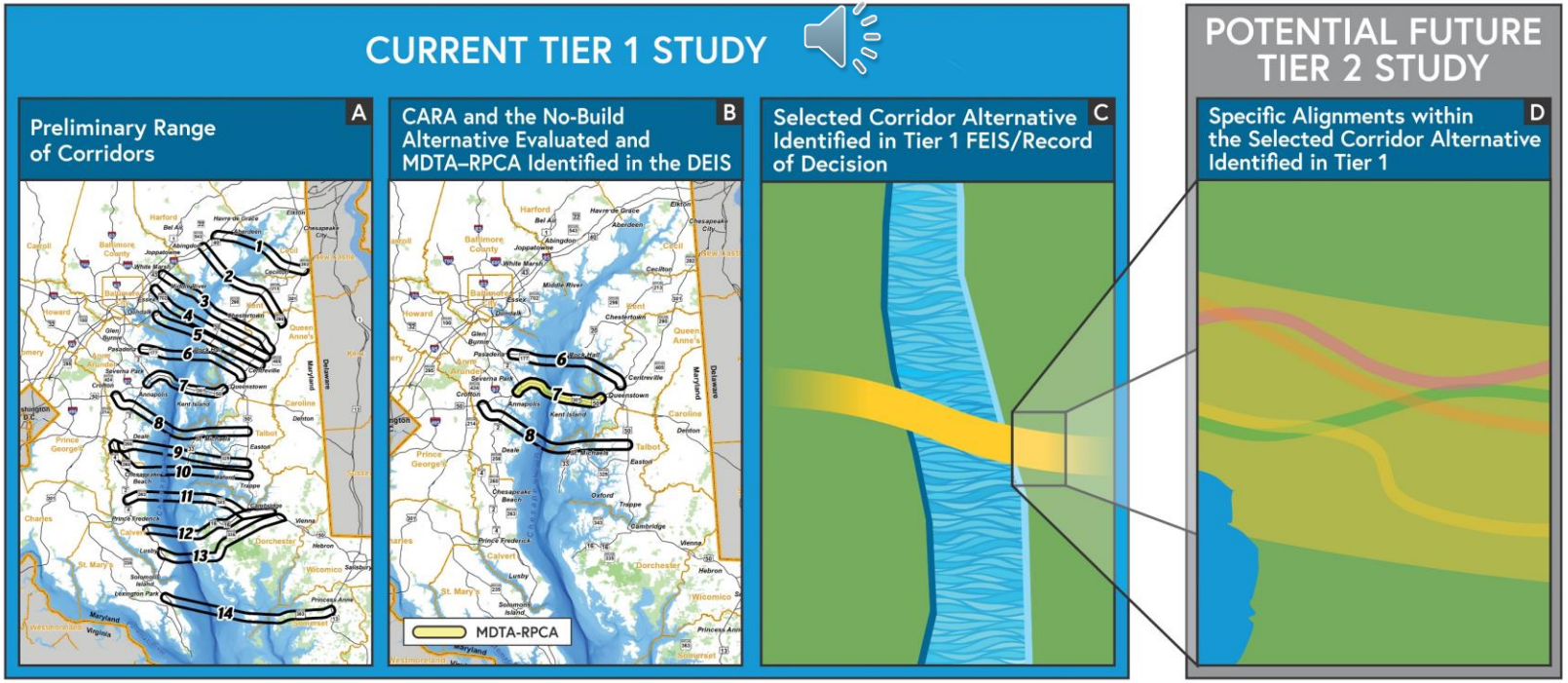
MDTA-Recommended Preferred Corridor Alternative (MDTA-RPCA)

- **Corridor 7**, the existing Bay Bridge corridor, has been identified as the MDTA-RPCA based on the analysis of a wide range of engineering and environmental factors and input received through public comments and coordination with State and federal agencies.
- **Compared with the other CARA, Corridor 7 would:**
  - Provide better congestion relief at the existing Bay Bridge on both summer weekends and non-summer weekdays.
  - Be more effective at reducing backups at the Bay Bridge and reducing the duration of unacceptable traffic level of service.
  - Provide the best diversion route during incidents or maintenance activities, requiring less additional travel than Corridors 6 and 8.
  - Have the shortest crossing of the Chesapeake Bay and shortest overall length, potentially resulting in the lowest overall environmental impact.
  - Likely have the lowest cost due to the ability to utilize existing infrastructure on US 50/301.
  - Have better compatibility with existing land-use patterns likely resulting in fewer indirect effects.
- The analysis used to evaluate the CARA and identify the MDTA-RPCA is presented in the Tier 1 DEIS and summarized on the following boards.

Corridor Alternatives Screening

The Tier 1 corridor development process applied the Study Purpose and Need to narrow 14 Corridor Alternatives to 3 Corridor Alternatives Retained for Analysis (CARA). In accordance with NEPA, the Tier 1 DEIS presents the analysis of the CARA and the No-Build alternative. It also identifies the MDTA-Recommended Preferred Corridor Alternative (RPCA).

As standalone alternatives, Transportation Systems Management/Travel Demand Management (TSM/TDM), Ferry Service, and Bus and Rail Transit do not meet the Study Purpose and Need. It is anticipated that certain transit options would be studied in combination with other alternatives in Tier 2.

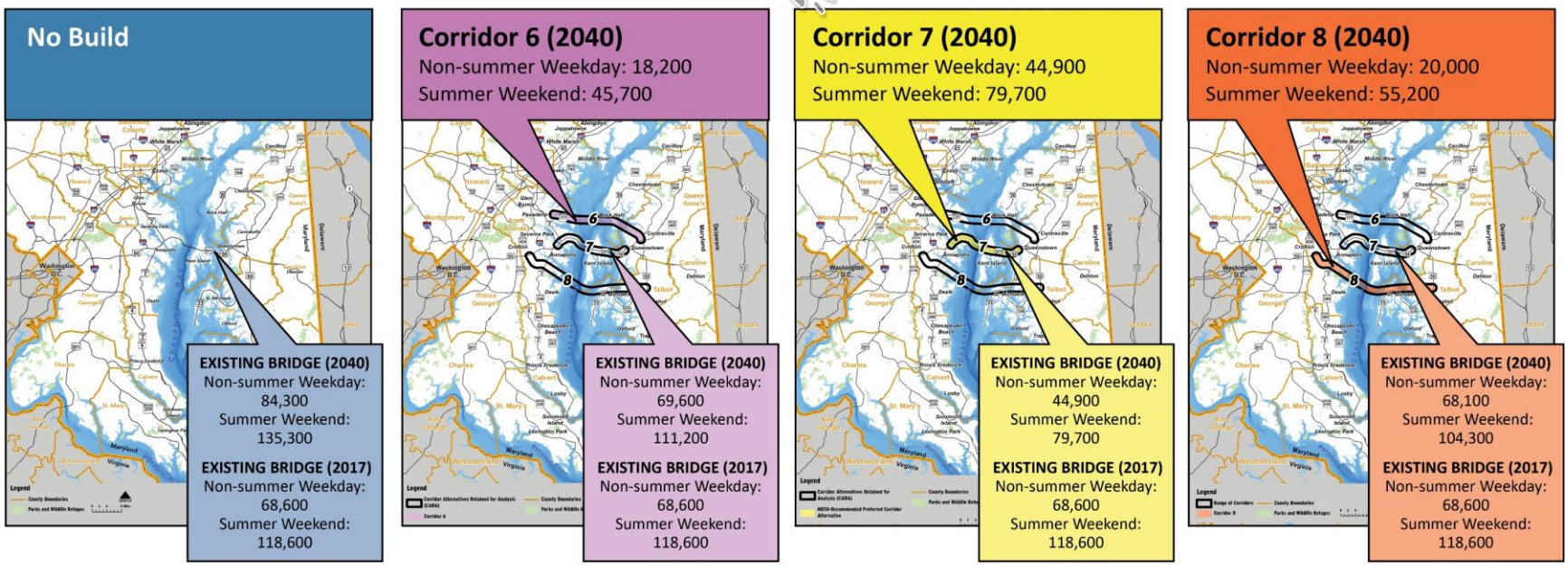


Traffic Analysis

Average Daily Traffic

The traffic analysis considered the 2040 projected average daily traffic (ADT) for both summer weekends and non-summer weekdays for a new crossing in each corridor and for the existing Bay Bridge. Projections are compared to the 2017 ADT at the existing Bay Bridge.

The results further defined the differences among the CARA for providing adequate capacity and addressing congestion on the existing Bay Bridge. A new crossing at Corridor 7 would draw more traffic from the existing Bay Bridge than a new crossing in either Corridor 6 or Corridor 8.



Level of Service

- The projected 2040 Level of Service (LOS) for a new crossing and the existing Bay Bridge was assessed for both summer weekends and non-summer weekdays.
- Although Corridors 6 and 8 would provide LOS A or B on a new crossing, the existing Bay Bridge would still operate at LOS E or F, demonstrating that those corridors would not draw enough traffic away from the Bay Bridge to effectively relieve congestion.

2040 Peak Hour Level of Service

Alternative		Summer Weekend		Non-Summer Weekday	
		EB	WB	EB	WB
No-Build		F	F	F	F
Corridor 6	Existing Bay Bridge	F	E	E	E
	New Crossing	B	A	A	A
Corridor 7	Existing Bay Bridge	D	C	C	C
	New Crossing	D	C	C	C
Corridor 8	Existing Bay Bridge	F	E	E	E
	New Crossing	B	B	A	A

Defining Highway Level of Service

LOS is used to describe traffic flow on a scale of A to F. (A is the best and F is the worst. Generally D is the lowest acceptable LOS, while LOS E and F are considered unacceptable.

Back-Ups and Delays

- To assess which of the CARA would provide the most dependable and reliable travel times, the MDTA evaluated the typical number of hours that backups of over 4 miles on summer weekends, or over 1 mile on non-summer weekdays, would be experienced at the existing Bay Bridge.
- The No-Build Alternative results in 9 hours of these backups for both summer weekends and non-summer weekdays.
- Although all the CARA reduce these backups at the existing Bay Bridge for both summer weekends and non-summer weekdays, Corridor 7 reduces these backups to zero hours.

	Typical Summer Weekend: Number of Hours where Backup is 4 Miles or Greater	Typical Non-Summer Weekday: Number of Hours where Backup is 1 Mile or Greater
Existing Bay Bridge (2017)*	0	0
Existing Bay Bridge (2040) - No-Build Alt.	9	9
6	0	1
7	0	0
8	0	1

* Based on average conditions during both Non-Summer Weekdays and Summer Weekends in 2017. Holiday weekends and atypical conditions such as major crashes, incidents, construction operations, or extreme weather when volumes and queues are known to be greater than average, are not included.

Flexibility During Maintenance and Incident Management

- The MDTA evaluated the feasibility of the CARA to serve as an alternate travel route during maintenance and incident management at the existing Bay Bridge.
- The No-Build Alternative provides no additional flexibility for maintenance and incident management.
- Corridor 7 provides an alternate route with similar travel time as the existing Bay Bridge.
- Corridors 6 and 8 each result in approximately 26-minute diversions.

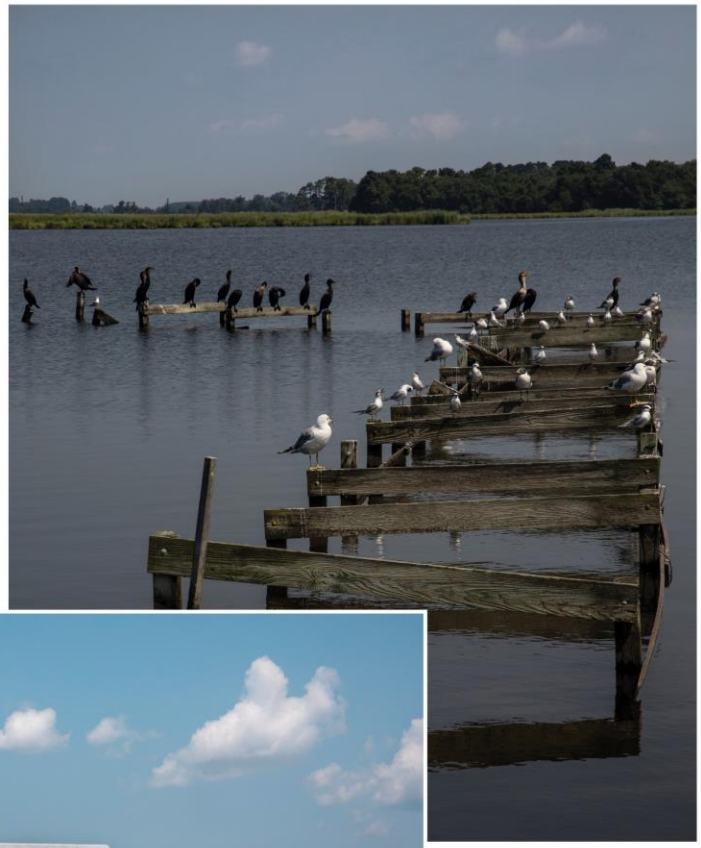
Incident Diversion Summary Origin: US 50/US 301 interchange on the Western Shore Destination: US 50/US 301 interchange on the Eastern Shore			
Corridor #	Total Mileage (mi.)	Total Travel Time (min.)	Additional Travel Time from existing Bay Bridge (min.)
6	56	62	26
7	33	36	0
8	57	62	26

Environmental Analysis

Environmental Analyses

An **environmental inventory** was conducted to quantify the presence of natural, cultural, and socioeconomic resources within the two-mile wide corridors, and was used as a basis for comparing potential impacts among the CARA.

- The quantitative values provided in the DEIS reflect **existing conditions** within the two-mile wide corridors and ***do not reflect actual or expected environmental impacts from construction of a new crossing.***
- The inventory offers a high-level comparison of the distribution of environmental resources among broad corridor alternatives.
- A Tier 2 NEPA Study would analyze potential project-level impacts in greater detail and in context by identifying the relative importance or sensitivity of impacts to key natural, cultural, and/or socioeconomic resources.
- Actual environmental impacts resulting from construction of a new crossing would likely be a smaller subset of the full inventory identified in Tier 1.



Key Environmental Findings: Natural Resources

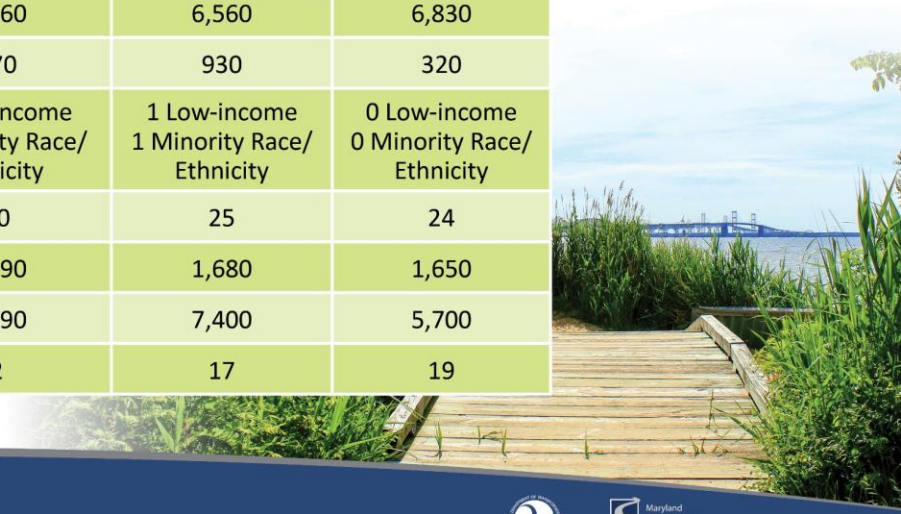
- Corridor 7 would require a much shorter crossing of the Chesapeake Bay, and other major waterways adjacent to the Bay, compared to Corridors 6 and 8, which would result in less impacts to open waters.
- Aquatic resources associated with open water such as Essential Fish Habitat and Oyster Resources are more prevalent in Corridors 6 and 8 compared to Corridor 7.
- Impacts to terrestrial natural resources would likely be greatest under Corridor 8.
- Some resources associated with coastline, such as Chesapeake Bay Critical Areas and 100-Year Floodplains, are more prevalent in Corridor 7 compared to Corridors 6 or 8.

Resource	Unit	Corridor 6	Corridor 7	Corridor 8
Open Water	Acres	18,140	9,660	20,590
Forest Land	Acres	4,500	4,500	8,520
Non-Tidal Wetlands	Acres	1,200	1,500	2,080
Tidal Wetlands	Acres	18,460	10,870	24,940
Surface Waters	Linear Feet	344,380	394,020	471,890
100-Year Floodplain	Acres	3,050	6,640	3,950
Chesapeake Bay Critical Area	Acres	4,910	9,810	8,120
Forest Interior Dwelling Species (FIDS) Habitat	Acres	7,020	6,900	11,410
Sensitive Species Project Review Areas (SSPRAs)	Acres	2,720	2,180	8,630
Green Infrastructure	Acres	4,880	4,480	11,450
Essential Fish Habitat (EFH)	Acres	64,320	36,650	87,680
Submerged Aquatic Vegetation (SAV)	Acres	40	270	460
Oyster Resources	Acres	11,130	3,460	7,960

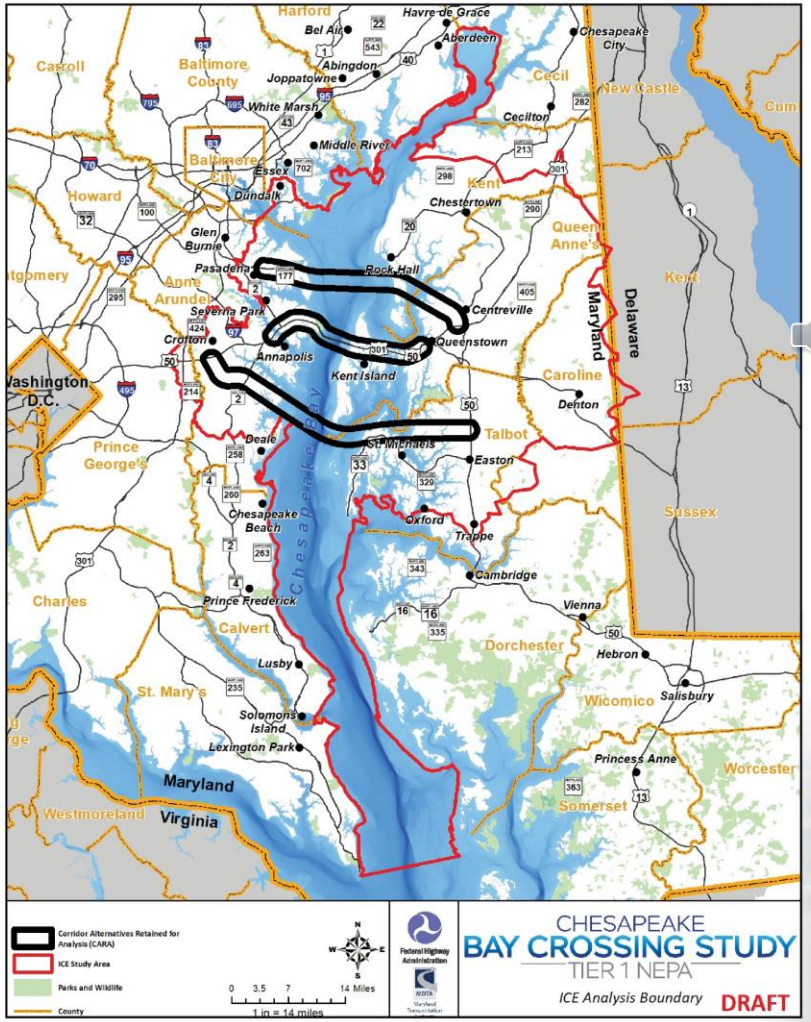
Key Environmental Findings: Land Use, Parks, and Historic Sites

- Parks and historic sites protected by Section 4(f) of the Transportation Act are distributed relatively evenly between Corridors 7 and 8, with the fewest number of properties and smallest acreage present in Corridor 6.
- The CARA contain substantial areas of residential land use. For both Corridors 6 and 8, residential subdivisions are prevalent throughout the full width of the corridors on the Western Shore.
- Corridor 7 is more developed with greater numbers of community facilities and commercial land uses, particularly near US 50/301.
- Corridor 7 contains a greater amount of noise-sensitive land uses.
- Per Section 106 of the National Historic Preservation Act, MDTA and FHWA have initiated consultation with the Maryland Historical Trust, Advisory Council on Historic Preservation, and other parties to identify historic properties within the CARA. We welcome public comments regarding historic properties and the Section 106 process to date.

Resource	Unit	Corridor 6	Corridor 7	Corridor 8
Community Facilities Total	Count	27	70	37
Residential Land Use	Acres	5,660	6,560	6,830
Commercial Land Use	Acres	270	930	320
Environmental Justice (EJ) Census Tracts	Count (Census Tracts)	1 Low-income 0 Minority Race/ Ethnicity	1 Low-income 1 Minority Race/ Ethnicity	0 Low-income 0 Minority Race/ Ethnicity
Total Section 4(f) Resources	Count	10	25	24
Area of Section 4(f) Resources	Acres	1,190	1,680	1,650
Noise-Sensitive Areas	Acres	5,390	7,400	5,700
NHPA Historic Properties	Count	2	17	19



Indirect and Cumulative Effects



- An Indirect and Cumulative Effects analysis was completed to estimate potential indirect and cumulative effects that could result from the CARA.
- ***Indirect Effects:*** Effects that are caused by a project and are later in time or farther removed in distance, such as growth-inducing effects.
- ***Cumulative Effects:*** The impact on the environment that results from the incremental impact of a project when added to other past, present, and reasonably foreseeable future actions.

Key Environmental Findings: Indirect and Cumulative Effects

No-Build Alternative

Increasingly poor traffic conditions at the Bay Bridge and approach roadways by 2040 could cause community and economic effects, impacts to emergency response services, school bus schedules, and commuters.

Corridor 6

Proximity to Baltimore could cause substantial increase in residential growth and development demand on the Eastern Shore, which would not be consistent with land use plans and priority funding areas.

Corridor 7

Would be more compatible with existing and planned land uses due to the presence of the existing crossing and associated infrastructure.

Corridor 8

Proximity to Annapolis and Washington D.C. could cause a substantial increase in residential growth and development demand on the Eastern Shore, which would not be consistent with land use plans and priority funding areas.

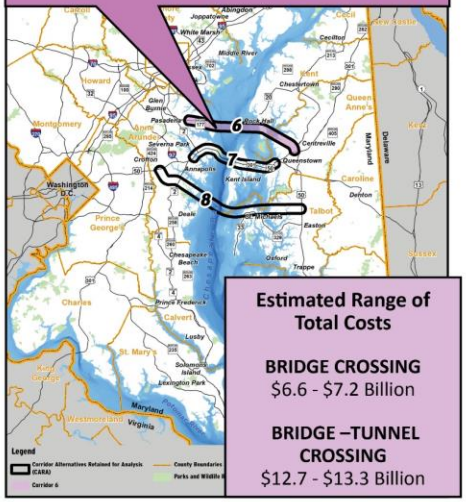
Project Length and Cost

A range of cost estimates was developed for the CARA. The range in cost varies based on a number of factors including whether the crossing would require new infrastructure or could use existing roadways. In all instances, the corridors were assumed to tie into the existing roadway network at logical endpoints.

Since it has not been determined whether a new Chesapeake Bay crossing would be a bridge or a bridge-tunnel, cost estimates were developed for both structure types. These costs include improvements to the adjacent infrastructure as well as the crossing structure. A tunnel-only option was not evaluated due to the anticipated high cost.

Corridor 6

Approximate Length – 28 Miles
- Across the Bay 11 Miles
- On-Land Improvements 14 Miles
- Other Water Crossings 3 Miles



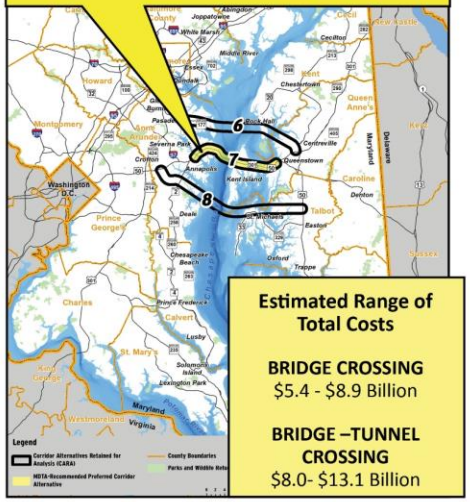
Estimated Range of Total Costs

BRIDGE CROSSING
$6.6 - $7.2 Billion

BRIDGE –TUNNEL CROSSING
$12.7 - $13.3 Billion

Corridor 7

Approximate Length – 22 Miles
- Across the Bay 4 Miles
- On-Land Improvements 17 Miles
- Other Water Crossings 1 Mile



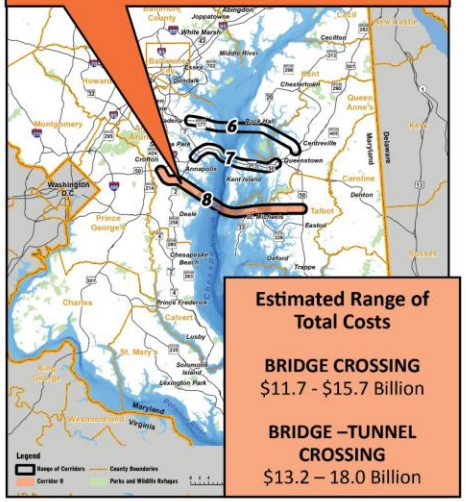
Estimated Range of Total Costs

BRIDGE CROSSING
$5.4 - $8.9 Billion

BRIDGE –TUNNEL CROSSING
$8.0- $13.1 Billion

Corridor 8

Approximate Length – 37 Miles
- Across the Bay 12 Miles
- On-Land Improvements 21 Miles
- Other Water Crossings 4 Miles



Estimated Range of Total Costs

BRIDGE CROSSING
$11.7 - $15.7 Billion

BRIDGE –TUNNEL CROSSING
$13.2 – 18.0 Billion

Next Steps – Tier 1 Study

- The MDTA and FHWA will continue to receive comments on the Tier 1 Draft Environmental Impact Statement (DEIS) and the MDTA-Recommended Preferred Corridor Alternative through May 10, 2021.
- The combined Tier 1 Final Environmental Impact Statement (FEIS)/Record of Decision (ROD) will:
  - Take into consideration all comments received through this Public Hearing comment period
  - Summarize and respond to public and agency comments
  - Identify the Selected Two-Mile-Wide Corridor Alternative
- The Tier 1 FEIS/ROD is the last formal step in the Tier 1 NEPA process and is expected to be completed in Winter 2021/2022.
- Completion of the Tier 1 study does not presume the initiation of a Tier 2 NEPA study, since no funding has been identified.

Next Steps – Potential Future Tier 2 Study

- If funding were to become available, a Tier 2 study would identify specific alignment alternatives within the two-mile-wide Selected Corridor Alternative identified during Tier 1.
- A Tier 2 NEPA Study could take three to five years to:
  - Identify and evaluate a No-Build Alternative and various crossing alignments within the two-mile-wide Tier 1 Selected Corridor Alternative
  - Evaluate how buses, ferries, transportation system management, and demand management could be used in conjunction with these crossing alignments
  - Review potential environmental impacts
  - Determine project delivery methods, such as design-bid-build or design-build, to organize and finance design, construction, operations, and maintenance
  - FHWA ultimately approving one alignment with a Tier 2 ROD
- The process would need a Tier 2 study ROD before proceeding to final design, right-of-way acquisition, and construction if a build alignment alternative is selected.

We Want To Hear From You!

Your comments are vital to the success of the study and will be included with responses in the Tier 1 FEIS.

Comments may be submitted during the comment period from through May 10, 2021 via mail, email, project website, public testimony, and one-on-one testimony.

All comments received, whether during the hearings through oral testimony or through other methods (project website, email, and letter), will be given equal consideration.

baycrossingstudy.com comment form

Live testimony

Email comments to:
info@baycrossingstudy.com

Send comments by mail to:
Bay Crossing Study
2310 Broening Hwy
Baltimore, MD 21224

Title VI Questionnaire

What is Title VI?

- Title VI, 42 U.S.C.,* Section 2000d et seq., was enacted as part of the Civil Rights Act of 1964. Title VI-related statutes and regulations provide that no person shall on the ground of race, color, national origin, sex, English proficiency, or disabilities be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity.

Why is Title VI Important?

- Title VI ensures that public services, including transportation, are provided in an equitable and nondiscriminatory manner.
- Title VI provides opportunities for public participation in decision-making without regard to race, color, or national origin, including populations with Limited English Proficiency (LEP).

Should you need LEP assistance or if you believe the MDTA is not meeting the expectations of Title VI, you may direct questions, concerns, or file a complaint with:

Sherrie Davis, Title VI LEP Coordinator
Division of Civil Rights and Fair Practices
Maryland Transportation Authority

2310 Broening Highway
Baltimore, MD 21224

410-537-6714

sdavis18@mdta.state.md.us

Please Fill Out a Survey by Clicking on the Link Below. The MDTA strives to involve all groups relevant to its Study in its public involvement activities. Please fill out a Demographic Information Survey to assist the MDTA in planning outreach to communities during the course of the Study.

Complete the
MDOT Title VI questionnaire

* United States Code

CHESAPEAKE BAY CROSSING STUDY

TIER 1 NEPA

Thank you for participating!

Thank you for visiting the Public Hearing Virtual Information Room for the Bay Crossing Study Tier 1 Draft Environmental Impact Statement.

U.S. Department of Transportation Federal Highway Administration

MDTA Maryland Transportation Authority