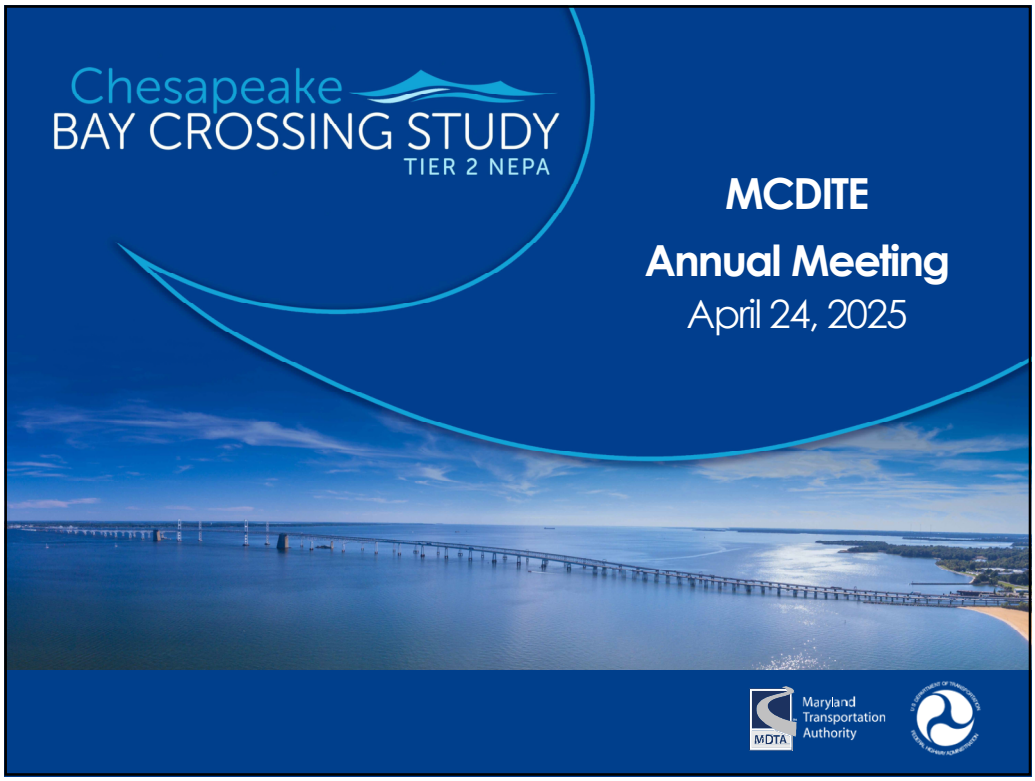

1

Speakers

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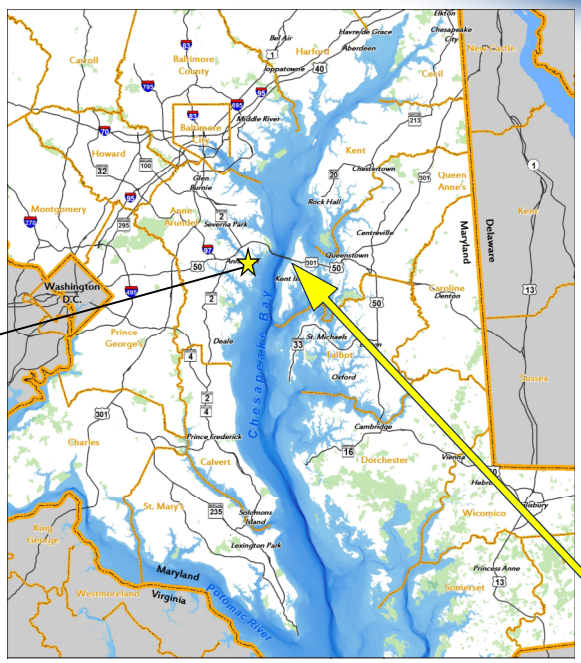
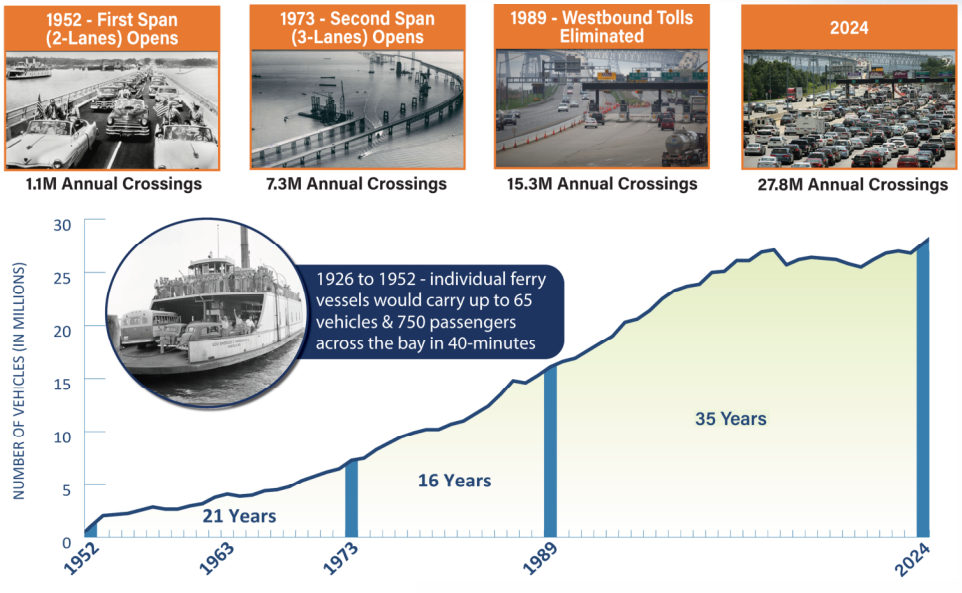
2

Bay Crossing Study Overview



3

Historic Traffic at the Bay Bridge

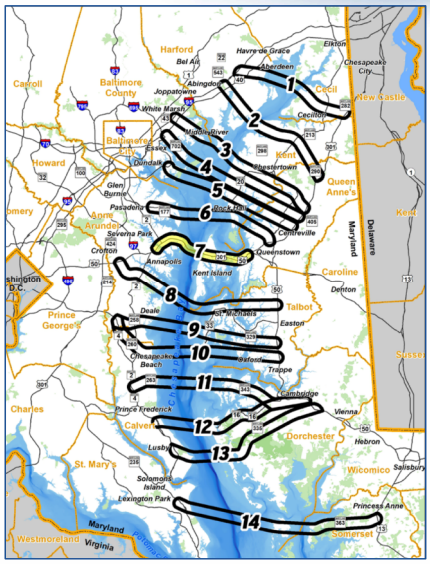


4

Bay Crossing Study Process

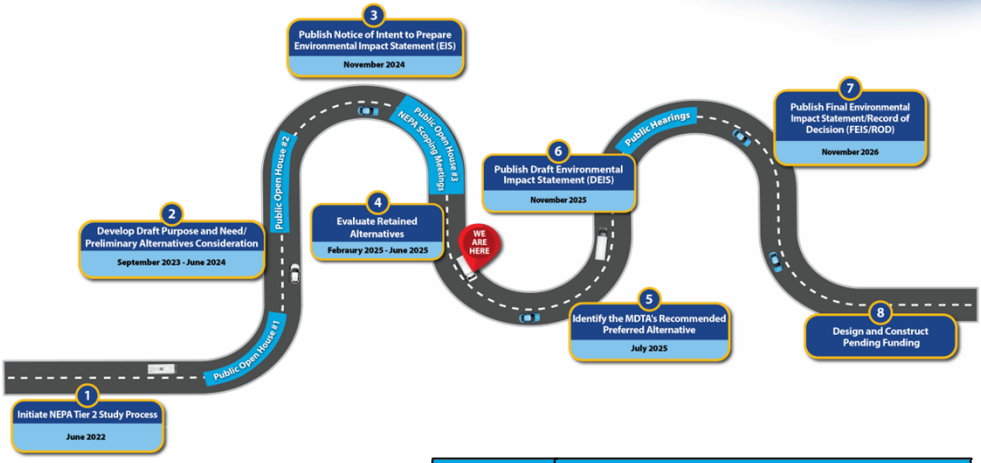
MDTA and FHWA are following a tiered National Environmental Policy Act (NEPA) process:

- The Tier 1 Study evaluated 14 Corridor Alternatives
- In April 2022, the Tier 1 Study was completed with a Final Environmental Impact Statement/Record of Decision
- The Tier 1 ROD identified Corridor 7 as the Selected Corridor Alternative for further evaluation
- In June 2022, MDTA launched the Tier 2 Study to evaluate the environmental impacts of a range of alternatives within Corridor 7



5

Study Schedule



Public Open Houses	Open House Content
Public Open House #1: September 2022	Summary of the Tier 1 Study Results, objectives of the Tier 2 Study, and next steps
Public Open House #2: September 2023	Tier 2 Study proposed Purpose and Need and the alternatives development process
Public Open House #3 December 2024	Proposal for the Bay Bridge, proposed retained alternatives, and analysis of elements
Public Hearings December 2025	Analysis of the proposed retained alternatives and MDTA's Recommended Preferred Alternative

6

Purpose & Need

The purpose of the Chesapeake Bay Crossing Study: Tier 2 NEPA 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 Tier 2 Study is evaluating measures to reduce congestion; improve travel times and reliability, mobility, and roadway deficiencies; and accommodate maintenance activities and navigation, while minimizing impacts to local communities and the environment.

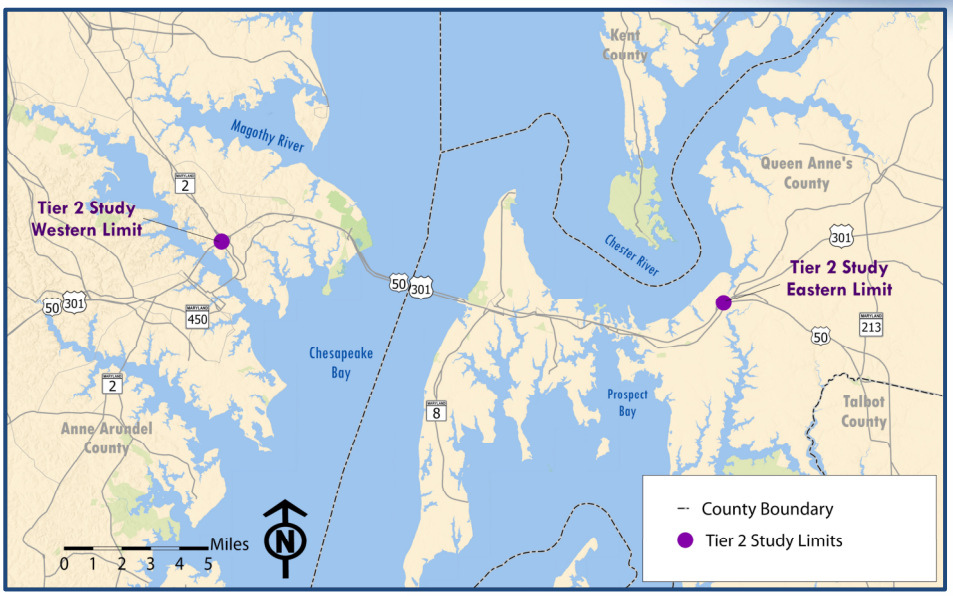
- **Adequate Capacity and Reliable Travel Times**
- **Existing and Future Maintenance Needs at the Existing Spans**
- **Mobility**
- **Navigation**
- **Roadway Deficiencies**

The MDTA also has identified two additional objectives:

- **Environmental Responsibility**
- **Cost and Financial Responsibility**

7

Study Limits



8

Proposed Action

The MDTA proposes to:

- Replace the existing Bay Bridge with two new bridge structures constructed near the location of the existing spans.
- The existing eastbound and westbound bridge structures would be removed.

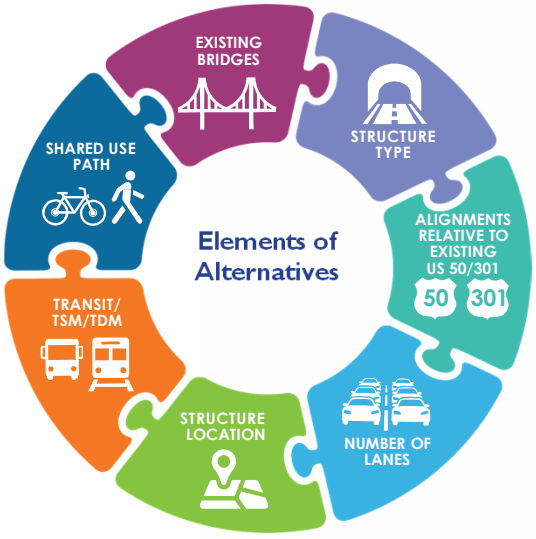
The MDTA has developed six possible alternatives to implement the Proposed Action. The MDTA and FHWA released a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) in November 2024. The NOI describes these alternatives in greater detail.

9

Alternatives Elements

The MDTA considered seven key elements in order to develop alternatives.

Engineering analysis of the elements was conducted using updated traffic counts, land-use data, and preliminary cost and impact assessments.



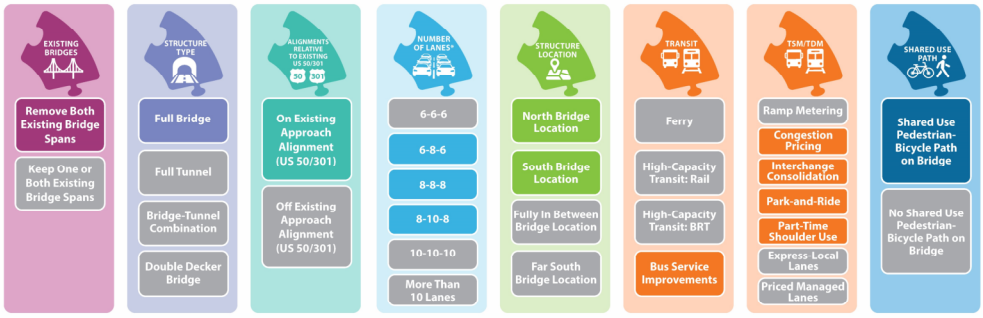
10

Key Elements Overview

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

OPTIONS FOR KEY ELEMENTS:

The MDTA evaluated the following options for each key element. Options shown in color are recommended to be advanced with the retained alternatives.



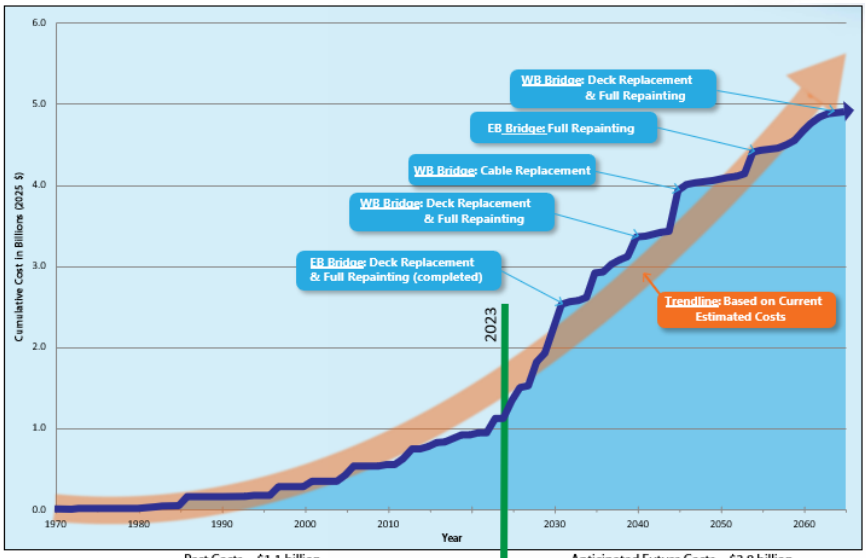
Color = recommended Gray = not recommended

11

Existing Bridges: Remove Existing Bay Bridge Spans

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

✓ RETAINED



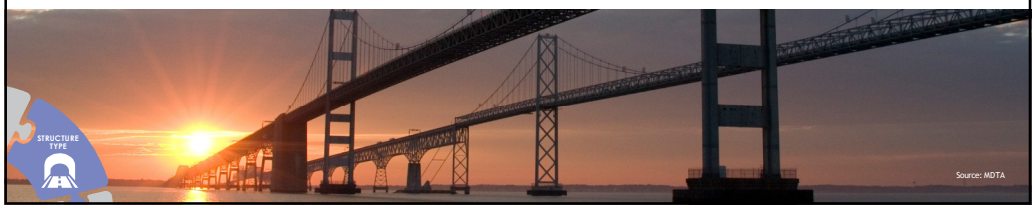
12

Structure Type: Full Bridge

✓ RETAINED

Replace the existing bridge (both spans) with a new bridge (two new spans)

- Advantages of a full bridge compared to the other structure types evaluated include:
  - **Mobility**
    - opportunity for inclusion of a shared use path
    - ability to transport hazardous materials across the Bay
  - **Environmental Responsibility** – smaller footprint
  - **Cost** – lower cost
- Advantages of having two spans instead of one include:
  - redundancy,
  - flexibility in funding,
  - maintenance of traffic during construction, maintenance, and inspections, and
  - ability to use existing right-of-way with staged construction.



13

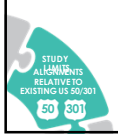
Alignments Relative to Existing US 50/301

✓ MDTA PROPOSES RETAINING US 50/301 ON THE EXISTING ALIGNMENT

To avoid substantial impacts to socioeconomic and natural environmental resources, the MDTA is not considering alignments off the existing US 50/301 roadway.

- The MDTA will consider alternatives that widen along the existing centerline to accommodate the proposed number of lanes.
- Staying on the existing alignment would avoid and minimize impacts to many resources, including:
  - Residential communities
  - Sandy Point State Park
  - Terrapin Nature Park
  - Holly Beach Farm
  - The Bay Bridge Airport
  - Wetlands


Source: Shutterstock



14

Number of Lanes

- The lane combinations studied are shown using three numbers. For example:

- The existing Bay Bridge has less capacity than the approach roadways due to vertical grade, lack of shoulders, and weather impacts to two-way operations, which is why some combinations have a higher number of lanes on the bridge.
- Based on analysis the 6-6-6 and 10-10-10 lane combinations are not being advanced.

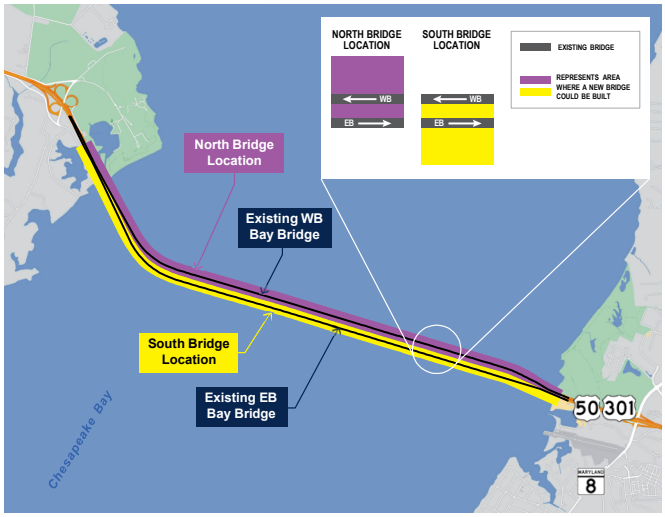
	Non-Summer Weekday (Tuesdays & Wednesdays)				Summer Weekend Day			
	Eastbound		Westbound		Eastbound (Fridays)		Westbound (Sundays)	
Scenario	Maximum Queue (miles)	Duration of Queues > 1 Mile (Hours)	Maximum Queue (miles)	Duration of Queues > 1 Mile (Hours)	Maximum Queue (miles)	Duration of Queues > 1 Mile (Hours)	Maximum Queue (miles)	Duration of Queues > 1 Mile (Hours)
Existing (2022)								
Existing*	0	0	0	0	4.8	8	3.5	8
Projected (2045)								
No-Build*	4.1	4	4.9	11	>10	14	>10	14
6-6-6	4.3	4	1.2	2	>10	14	>10	14
6-8-6	0.0	0	0.0	0	7.3	10	8.0	10
8-8-8	0.1	0	0.0	0	7.5	11	8.4	11
8-10-8	0.0	0	0.0	0	0.0	0	0.0	0
10-10-10	0.0	0	0.0	0	0.0	0	0.0	0

15

Structure Location (Bridge)

✓ **RETAINED**

MDTA is retaining both a north and south bridge location.



16

Bridge Location: Example Bridge Construction Sequencing

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Maryland Transportation Authority MDTA

STRUCTURE LOCATION

17

Transit Options (Bus Service)

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Maryland Transportation Authority MDTA

✓ RETAINED

Bus service improvement options will be evaluated as part of the retained build alternatives.

Enhancements to Bus Service

- Local Bus Service
- Commuter Bus Service
- Intercity Bus Service

Potential Transit Priority Treatments

- 24-hour dedicated transit lane
- Congested-period-only dedicated transit lane
- Bus-on-shoulder operation
- Queue jump lane

Source: wikimedia

Source: MDTA

Source: MDTA

Source: MDTA

TRANSIT/ TSM/TDM

18

TSM/TDM Options

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Maryland Transportation Authority MDTA

Transportation Systems Management (TSM) and Transportation Demand Management (TDM) are operational strategies aimed at optimizing the performance of existing infrastructure and maximizing traveler choices.

These options could be implemented in combination with a build alternative.

✓ **RETAINED FOR CONSIDERATION:**

- Congestion Pricing
- Interchange Consolidation
- Part-Time Shoulder Use
- Park-and-Ride

Congestion Pricing

Park-and-Ride

19

Shared Use Path

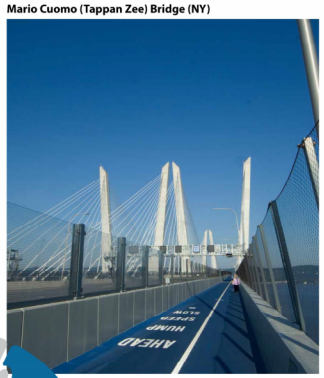
Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Maryland Transportation Authority MDTA

✓ **RETAINED FOR FURTHER CONSIDERATION**

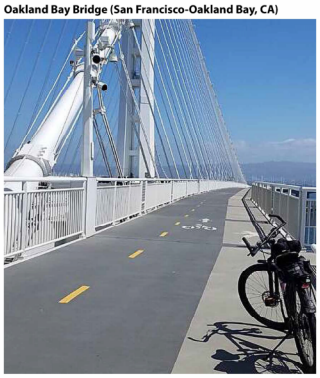
- The MDTA will consider the safe inclusion of a shared use path along a new bridge.
- A shared use path across a new Bay Bridge would be:
  - a two-way ped/bike facility, and
  - separated from travel lanes/shoulders by a physical barrier with a fall protection system.
- A shared use path could span the full length of the bridge or only partial length from one shore.

Mario Cuomo (Tappan Zee) Bridge (NY)



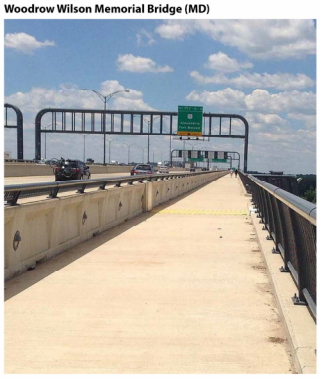
Source: Adobe Stock Photos

Oakland Bay Bridge (San Francisco-Oakland Bay, CA)



Source: Photo by TrailLink user tommyonbike, courtesy of Rails-to-Trails Conservancy

Woodrow Wilson Memorial Bridge (MD)



Source: Photo by TrailLink user mdeplanty, courtesy of Rails-to-Trails Conservancy

20

Proposed Retained Alternatives

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Maryland Transportation Authority MDTA

Alternative A (No-Build Alternative) *No New Transportation Infrastructure*

Build Alternatives *All Build Alternatives Will Include:*

- REMOVE EXISTING BRIDGES
- FULL BRIDGE WITH TWO NEW BRIDGE SPANS
- ON EXISTING APPROACH ALIGNMENT (US 50/301)
- BUS SERVICE IMPROVEMENTS

Each Build Alternative Will Include One of These Lane Combinations and Bridge Locations:

	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G
Number of Lanes	6-8-6	6-8-6	8-8-8	8-8-8	8-10-8	8-10-8
Structure Location	North	South	North	South	North	South

All Build Alternatives Will Also Consider:

- PART-TIME SHOULDER USE
- INTERCHANGE CONSOLIDATION
- PARK-AND-RIDE
- CONGESTION PRICING

- INCLUSION OF SHARED USE PATH ON BRIDGE

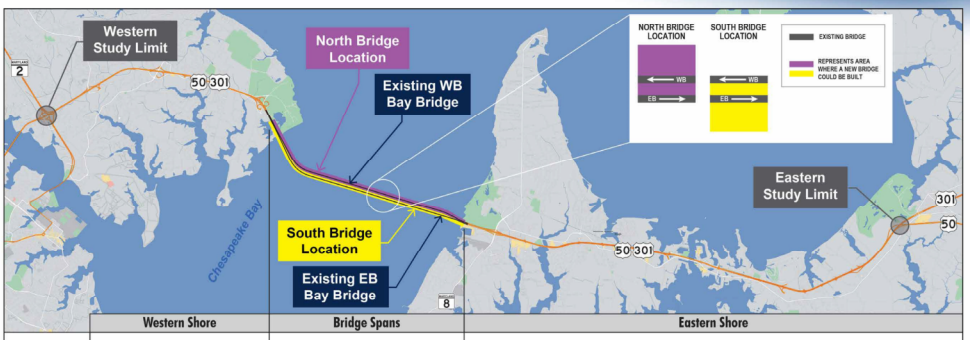
These proposed Alternatives Retained for Detailed Study (ARDS) will be analyzed in the Environmental Impact Statement (EIS).

21

Proposed Retained Alternatives

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Maryland Transportation Authority MDTA



	Western Shore	Bridge Spans	Eastern Shore
Alternative A: No-Build	6 Lanes	5 Lanes	6 Lanes
Alternative B	6 Lanes	8 Lanes NORTH	6 Lanes
Alternative C	6 Lanes	8 Lanes SOUTH	6 Lanes
Alternative D	8 Lanes	8 Lanes NORTH	8 Lanes
Alternative E	8 Lanes	8 Lanes SOUTH	8 Lanes
Alternative F	8 Lanes	10 Lanes NORTH	8 Lanes
Alternative G	8 Lanes	10 Lanes SOUTH	8 Lanes

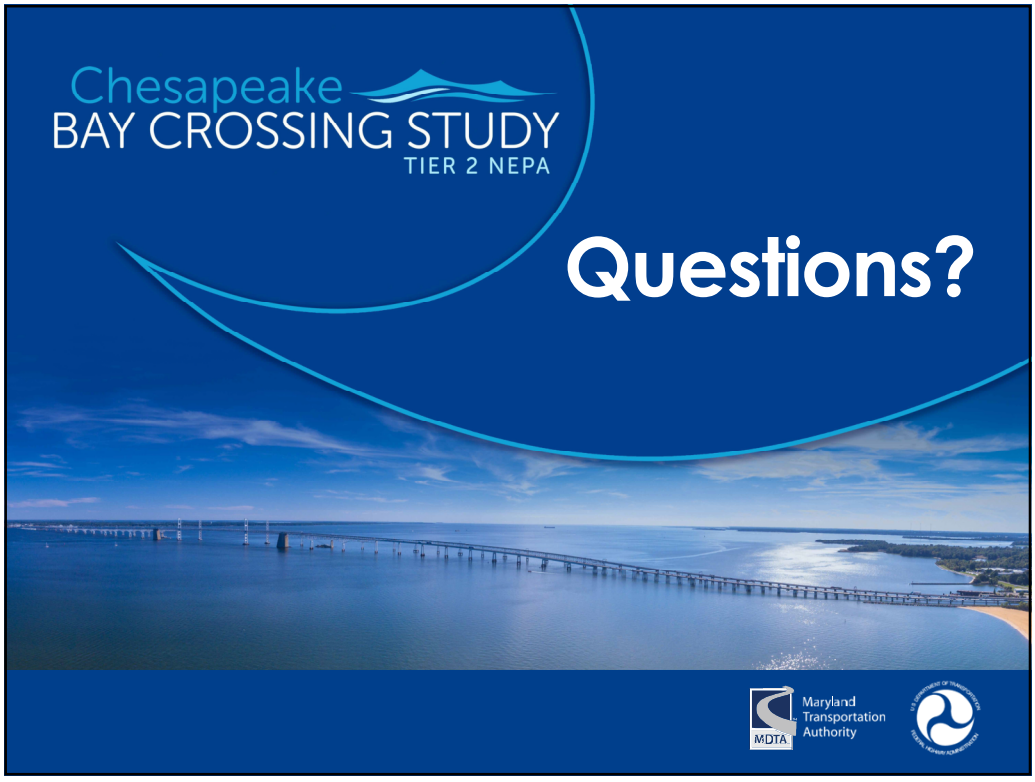
22

December 2024 Public Scoping Meetings

- Virtual – Presentation followed by a live Q&A
  - 435 unique viewers logged in
- Broadneck (Western Shore) In-Person
  - 188 attendees
- Kent Island (Eastern Shore) In-Person
  - 129 attendees
- Over 1,000 comments received

To date, over 5,100 comments & survey responses have been received as part of the study

23



24

Alternative A: No-Build

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

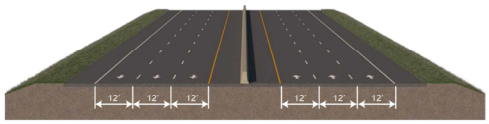
Maryland Transportation Authority MDTA

The No-Build Alternative includes regular maintenance of the Chesapeake Bay Bridge and US 50/301, but no capital improvements other than currently planned and programmed projects.

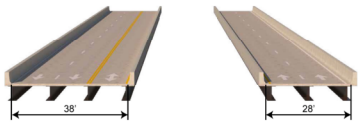
ALTERNATIVE A LANE COMBINATION:

Number of Lanes: 6-5-6 (Existing)

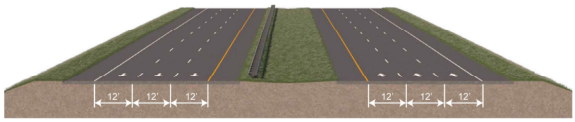
Existing Western Shore - 6 Lanes



Existing Bay Bridge - 5 Lanes



Existing Eastern Shore - 6 Lanes



25

Alternatives B and C: 6-8-6

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Maryland Transportation Authority MDTA

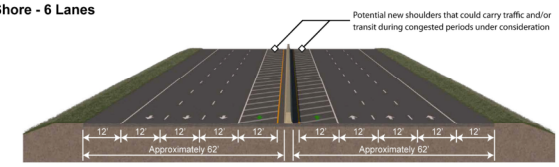
ALTERNATIVES B AND C INCLUDE:

- Remove Existing Bridges
- Full Bridge with Two New Bridge Spans
- On Existing Approach Alignment (US 50/301)
- Bus Service Improvements
- Number of Lanes: 6-8-6
- Alternative B: North Bridge Location
  Alternative C: South Bridge Location

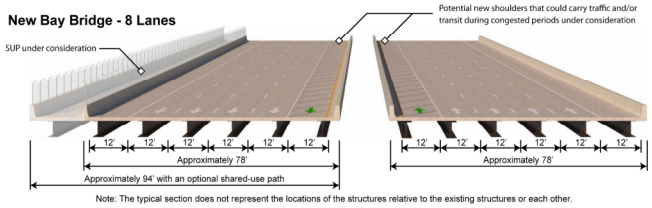
WITH CONSIDERATION OF:

- Part-Time Shoulder Use
  Interchange Consolidation
  Park-and-Ride
  Congestion Pricing
- Inclusion of Shared Use Path on Bridge

Western Shore - 6 Lanes

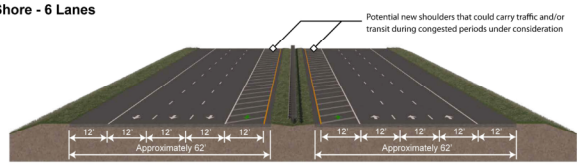


New Bay Bridge - 8 Lanes



Note: The typical section does not represent the locations of the structures relative to the existing structures or each other.

Eastern Shore - 6 Lanes



26

Alternatives D and E: 8-8-8

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Maryland Transportation Authority MDTA

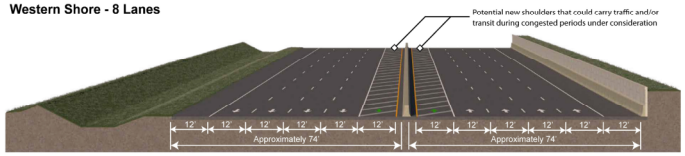
ALTERNATIVES D AND E INCLUDE:

- Remove Existing Bridges
- Full Bridge with Two New Bridge Spans
- On Existing Approach Alignment (US 50/301)
- Bus Service Improvements
- Number of Lanes: 8-8-8
- Alternative D: North Bridge Location
  Alternative E: South Bridge Location

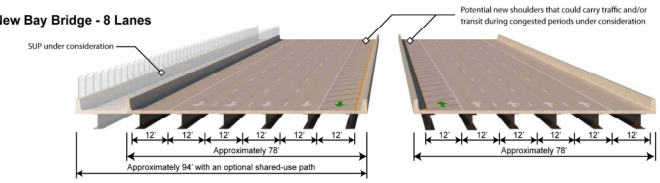
WITH CONSIDERATION OF:

- Part-Time Shoulder Use
  Interchange Consolidation
  Park-and-Ride
  Congestion Pricing
- Inclusion of Shared Use Path on Bridge

Western Shore - 8 Lanes

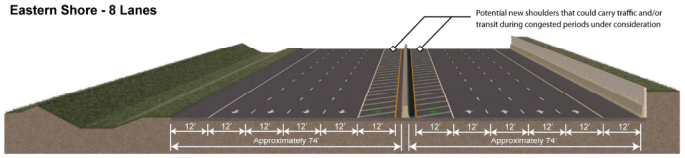


New Bay Bridge - 8 Lanes



Note: The typical section does not represent the locations of the structures relative to the existing structures or each other.

Eastern Shore - 8 Lanes



27

Alternatives F and G: 8-10-8

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Maryland Transportation Authority MDTA

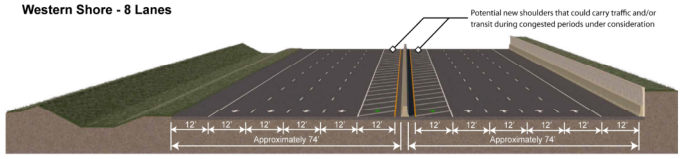
ALTERNATIVES F AND G INCLUDE:

- Remove Existing Bridges
- Full Bridge with Two New Bridge Spans
- On Existing Approach Alignment (US 50/301)
- Bus Service Improvements
- Number of Lanes: 8-10-8
- Alternative F: North Bridge Location
  Alternative G: South Bridge Location

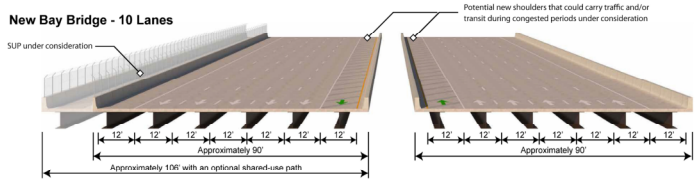
WITH CONSIDERATION OF:

- Part-Time Shoulder Use
  Interchange Consolidation
  Park-and-Ride
  Congestion Pricing
- Inclusion of Shared Use Path on Bridge

Western Shore - 8 Lanes

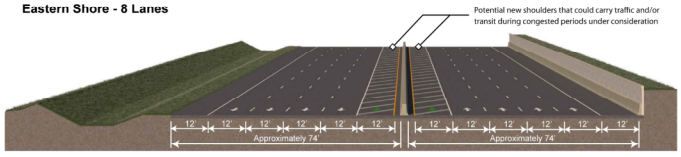


New Bay Bridge - 10 Lanes



Note: The typical section does not represent the locations of the structures relative to the existing structures or each other.

Eastern Shore - 8 Lanes



28

Structure Type: Tunnel

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

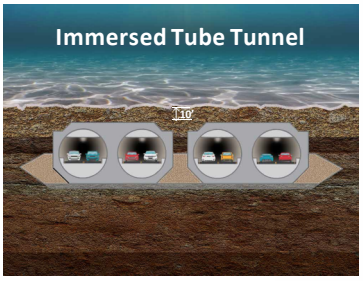
Maryland Transportation Authority MDTA

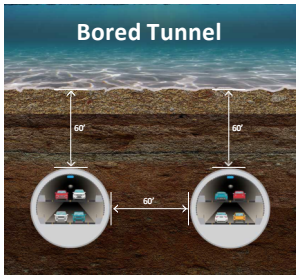
✖ NOT RETAINED

- Substantial environmental impacts to the Bay/resources on shorelines.
- Requires large ventilation islands or larger/ additional bores.
- Mobility challenges:
  - Cannot accommodate a shared use path.
  - Restrictions on hazardous materials.
- Steeper grades resulting in reduced speeds for trucks.
- Less flexibility for maintenance of traffic and incident management.
- Tunnel would be 2 to 3.5 times more expensive

	8 Lanes	10 Lanes
Bridge	$7.3 billion	$8.4 billion
Tunnel	$17.0 billion	$21.0 billion

Tunnel Types Evaulated





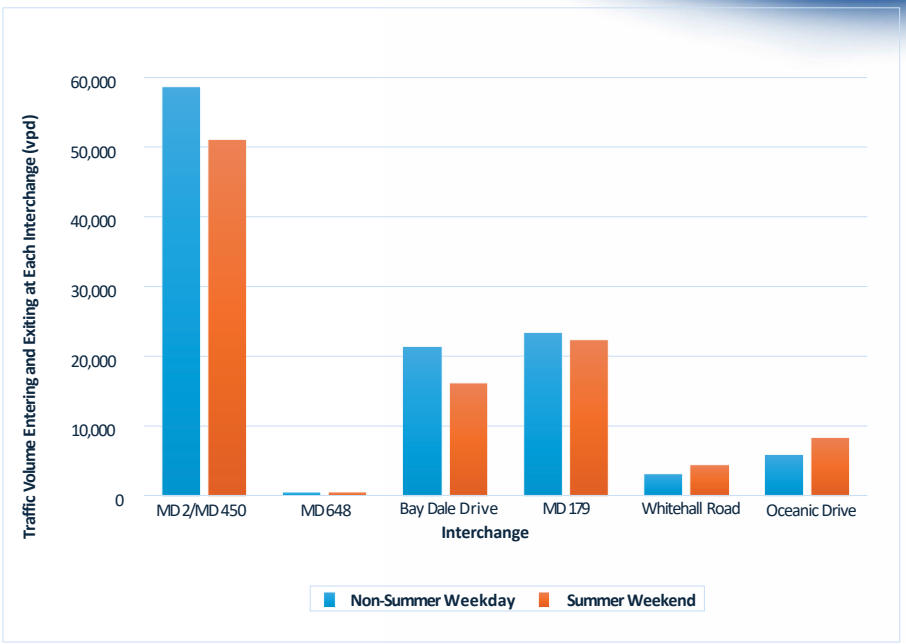
STRUCTURE TYPE

29

Study Limits

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Maryland Transportation Authority MDTA



30

Transit Options (Ferry, Rail, and BRT)

✖ NOT RETAINED

Ferry

Vehicular or passenger ferry.

- Ferry service would reduce Bay Bridge traffic volume by 0.7% to 1.1%
- Ferry alternatives would not make substantial improvements to capacity or travel times in combination with a new bridge.

Source: Shutterstock

Rail

Commuter rail, light rail transit, or heavy rail transit across a new bridge.

- Larger foundations and extensive infrastructure would be needed to connect to existing rail facilities.
- Rail would have extensive environmental impacts and additional cost to provide the new infrastructure.
- Rail would reduce Bay Bridge traffic volume by roughly 0.3% to 0.6%
- Rail would not make substantial improvements to congestion or travel times in combination with a new bridge.

Source: Shutterstock

Bus Rapid Transit (BRT)

BRT in a dedicated transit lane across a new bridge providing reliable, convenient and frequent service.

- Appropriate transit connections for new BRT would be many miles away, requiring new infrastructure with environmental impacts and additional cost.
- BRT would reduce Bay Bridge traffic volume by roughly 0.3% to 0.6%
- BRT would not make substantial improvements to congestion or travel times in combination with a new bridge.

Source: Shutterstock

31

Environmental Resources

The Environmental Impact Statement (EIS) will address impacts to environmental resources, including:

- **Socioeconomic Resources and Land Use:** Approximately 73,000 people live within or adjacent to the study corridor. Many community facilities including public parks, schools, emergency services, and places of worship are located within the area.
- **Natural Resources:** Significant natural resources identified within or adjacent to the corridor include:
  - Surface water resources
  - Coastal Barrier Resource Systems and Chesapeake Bay Critical Areas
  - Aquatic and terrestrial habitat and biota
  - Rare, threatened, and endangered species
  - Unique and sensitive areas
  - Watersheds and their tributary streams, wetlands, and floodplains
- **Section 4(f) and Section 6(f) Properties:** Publicly owned parks, recreation areas, wildlife and/or waterfowl refuges, and historic properties have been identified as potentially subject to Section 4(f) and 6(f) evaluation.

Source: MDTA

32

Engaging the Community

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Maryland Transportation Authority MDTA

MDTA Commitment:

The MDTA is committed to a comprehensive public engagement program that stresses collaboration with our key stakeholders and local community partners. We encourage the public to:

- submit their comments,
- join the mailing list,
- fill out our surveys that help shape the study, and
- spread the word to others about the study.

Source: MDTA

Who We've Engaged:

- Annapolis Pride Festival and Parade
- Grasonville Community Center Small Business Expo
- YMCA Healthy Kids Day
- Annapolis Veteran Center Resource Fair and Community Open House
- Grasonville VFD Spring Vendor Fair
- Annapolis Bike to Work Day
- Annapolis Health Fair and Listening Session
- QA County Annual Senior Summit Day
- Kennard African American Cultural Heritage Center Juneteenth Event
- Celebrate Annapolis Juneteenth
- State of Black Business - Annapolis
- Queen Anne's County Town Hall
- The Great Chesapeake Bay Swim
- Asian American Festival
- Rommel's Ace Home Center
- Kent Island True Value Block Party
- Farmers Markets (Anne Arundel and Queen Anne's counties)
- Fiesta Latina
- Summer Slam Charity Pickleball
- Es Mi Parque - Sandy Point State Park
- Annapolis Family Day Festival
- National Night Out - Annapolis
- Queen Anne's County Fair
- Kunta Kinte Heritage Festival
- Anne Arundel County Fair
- Bay Bridge Run

Hope to see you soon!

If your community/organization has an event you'd like us to attend, please email info@baycrossing.com with details.

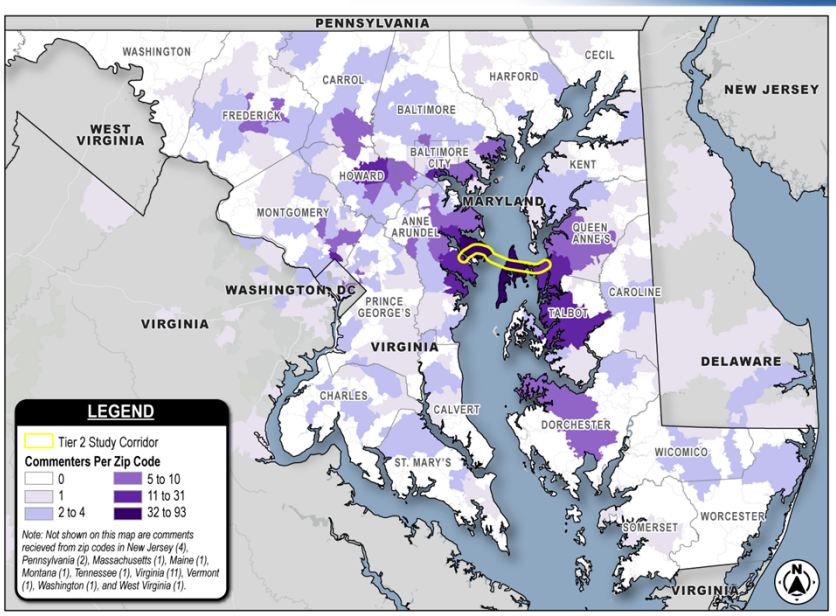
Source: MDTA

33

Survey Responses: Zip Codes

Chesapeake BAY CROSSING STUDY TIER 2 NEPA

Maryland Transportation Authority MDTA



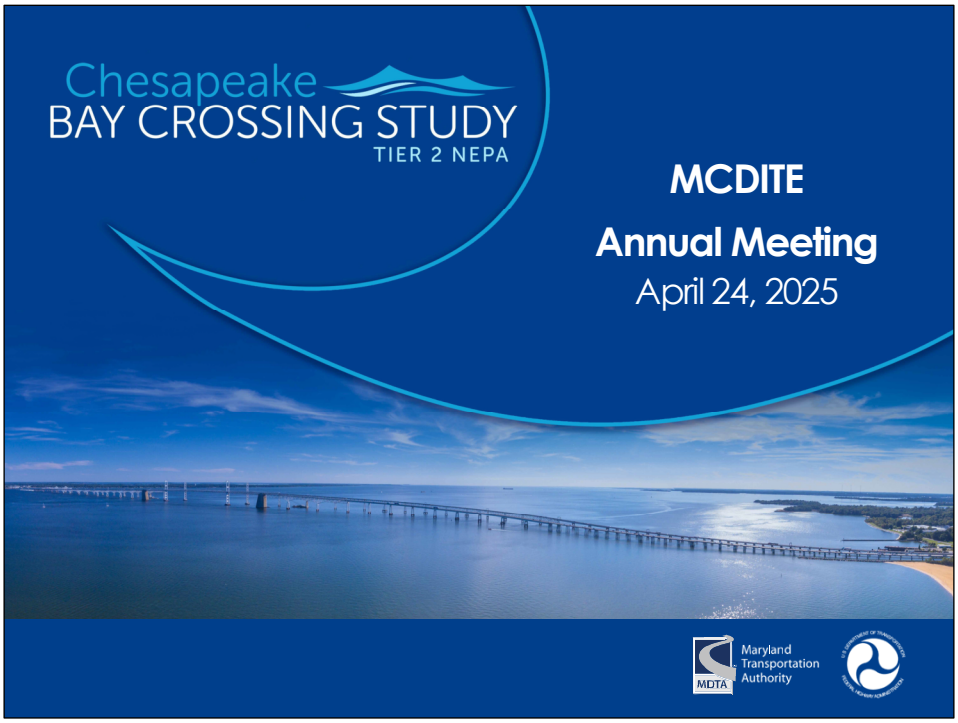
34

Public Open House/ Scoping Comments

Common Themes:

- Something needs to be done in this corridor sooner rather than later.
- Improvements to the bridge and approaches won't solve US 50/301 or local roadway congestion.
- Continue to hear comments for the crossing to be in a different location.
- Concerns for environmental impacts
- Concerns for a wide-array of safety issues
- Concern for costs
- Needs to accommodate shipping and do so safely.
- Interest in keeping old bridges for various reasons/uses

35



Project Website: https://baycrossingstudy.com/public-engagement/previous-meetings/december-2024-open-houses