CHESAPEAKE BAY CROSSING STUDY
TIER 2 NEPA

Baltimore Regional Transportation Board (BRTB) Presentation
November 22, 2022

Maryland Transportation Authority

Tier 2 Study is Underway

- The Maryland Transportation Authority (MDTA) completed the Chesapeake Bay Crossing Study: Tier 1 NEPA (Tier 1 Study) in April 2022, when the Federal Highway Administration (FHWA) issued a Final Environmental Impact Statement/Record of Decision (FEIS/ROD).
- The FEIS/ROD identifies Corridor 7, the corridor containing the existing Bay Bridge, as the Selected Corridor Alternative.
- In June 2022, the MDTA launched the four- to five-year Chesapeake Bay Crossing Study: Tier 2 NEPA (Tier 2 Study). This Tier 2 Study will evaluate the environmental and socioeconomic impacts of a range of alternative alignments and transportation issues from the Severn River Bridge in Anne Arundel County to the U.S. 50/U.S. 301 split in Queen Anne's County.
- The range of alternatives includes a No Build alternative and a range of build alternatives including various alignments, crossing types and modal and operational alternatives.

Presentation Outline

- Summarize the Tier 1 Study Results
- Describe Objectives of the Tier 2 Study
- Review Next Steps

National Environmental Policy Act (NEPA)

- NEPA requires any project receiving federal funding or approval to assess a project's potential impacts to the human environment before taking action.
- The MDTA and the FHWA, in collaboration with the Maryland Department of Transportation State Highway Administration (MDOT SHA), are following a two-tiered NEPA process for the Bay Crossing Study.
- The Tier 1 Study, completed in April 2022, identified Corridor 7 as the best corridor for locating a potential crossing to address congestion at the Bay Bridge. The Tier 1 Study reviewed a range of alternatives based on a variety of factors, such as cost, traffic performance, engineering and an inventory of environmental data.
- The current Tier 2 Study will analyze site-specific alignments within Corridor 7.

TIER 1 NEPA (COMPLETED STUDY)

- Established the project Purpose and Need.
- Evaluated a range of corridor alternatives across the Chesapeake Bay (and a No Build alternative).
- Included Public and Agency involvement and comment.
- Identified a Selected Corridor.

TIER 2 NEPA (CURRENT STUDY)

- Refine the Purpose and Need for a project-level analysis.
- Evaluate a No Build alternative and a range of build alternatives including various alignments, crossing types and modal and operational alternatives.
- Conduct engineering, traffic and environmental analyses.
- Include Public and Agency involvement throughout the Tier 2 Study.
- Identify a Selected Alternative within Corridor 7.
- Identify mitigation measures.

Purpose and Need

The **Purpose** of the Tier 1 Study was to evaluate corridor alternatives for providing additional capacity and access across the Chesapeake Bay to improve mobility, travel reliability and safety at the existing Bay Bridge.

The Tier 1 Study Needs included:

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

The MDTA also considered:

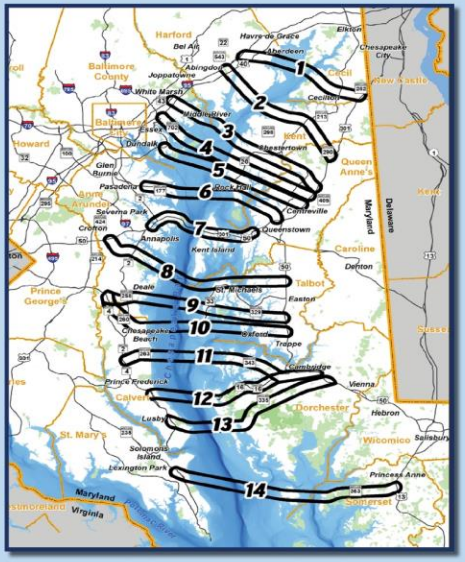
- financial viability and
- environmental considerations.

The Tier 2 Study will refine the PURPOSE AND NEED to focus on Corridor 7.

Tier 1 Study - Corridor Alternative Screening Process

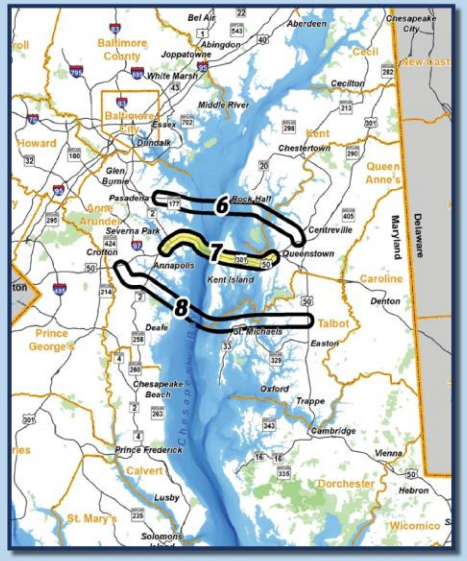
STEP 1

14 two-mile-wide Corridor Alternatives were evaluated for their ability to address the Tier 1 Purpose and Need.



STEP 2

Analysis of traffic, engineering, cost and environmental considerations indicated that Corridors 6, 7 and 8 best met the Tier 1 Purpose and Need.



STEP 3

Corridor 7 was identified as the Selected Corridor Alternative and will be studied in greater detail during the Tier 2 Study.

Historic Traffic at the Bay Bridge

1952 - First Span (Two Lanes) Opens

1.1M Annual Crossings

1973 - Second Span (Three Lanes) Opens

7.3M Annual Crossings

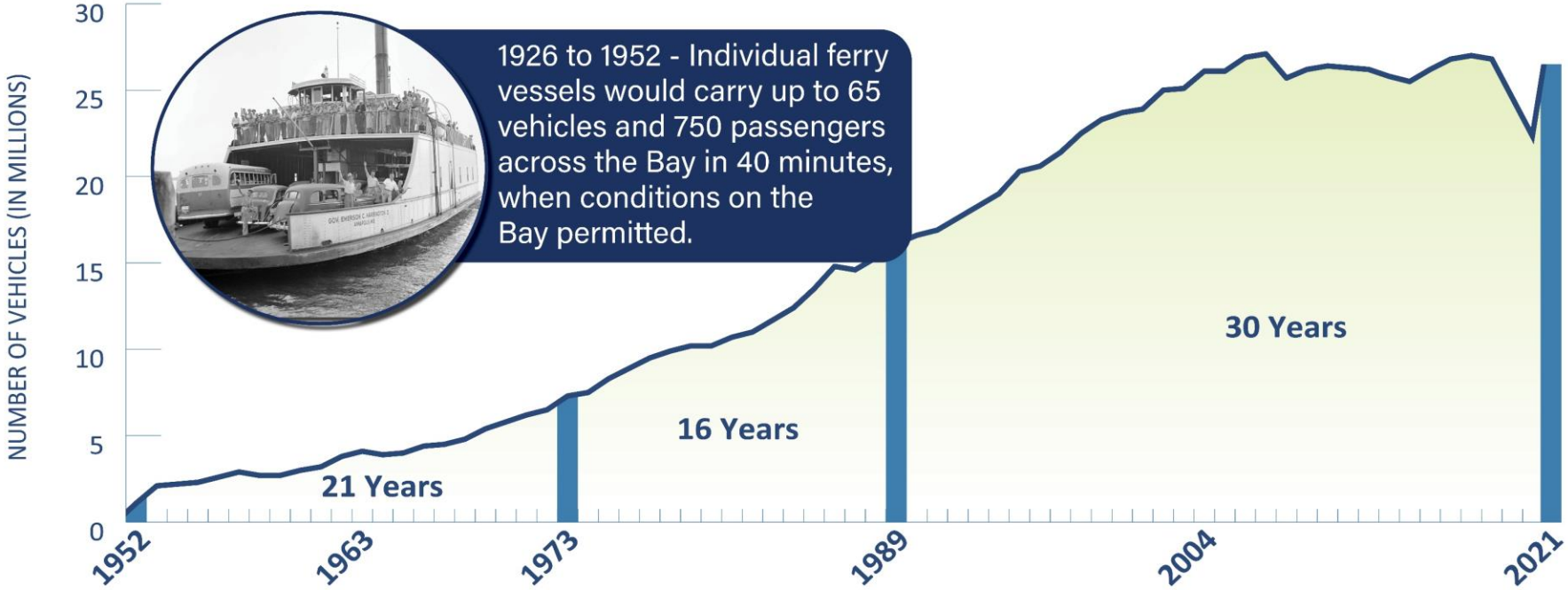
1989 - One-Way Toll Collection Begins

16.1M Annual Crossings

2021

26.6M Annual Crossings

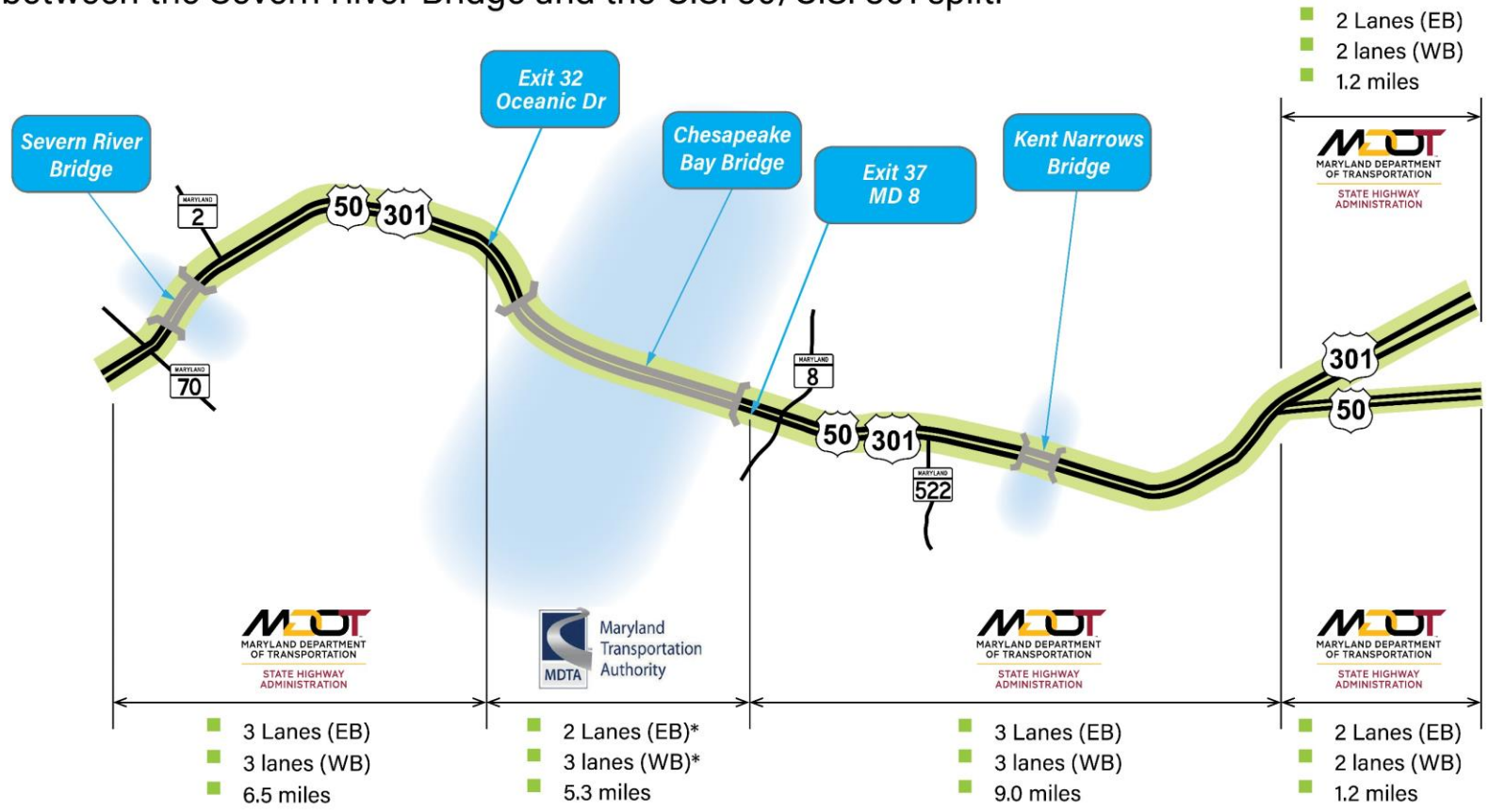
1926 to 1952 - Individual ferry vessels would carry up to 65 vehicles and 750 passengers across the Bay in 40 minutes, when conditions on the Bay permitted.



Maryland Transportation Authority

Corridor Lane Configuration

- Throughout Corridor 7, the existing lane configurations along U.S. 50/U.S. 301 vary as shown below.
- The MDTA and MDOT SHA work in collaboration to study transportation mobility in the corridor between the Severn River Bridge and the U.S. 50/U.S. 301 split.



* During peak periods, contraflow operations adjust the eastbound and westbound traffic flow across the bridge.

Typical and Forecasted Traffic Delays

Traffic Volumes shown on this display were developed for the Tier 1 Study using the Maryland Statewide Transportation Model. Queue lengths were computed using volume and speed data.

2017 Peak Periods

- 68,598 avg. daily non-summer weekday traffic
  1.0 mile EB weekday queue
- 118,579 avg. daily summer weekend traffic
  4.0 mile EB & 2.5 mile WB summer weekend queues

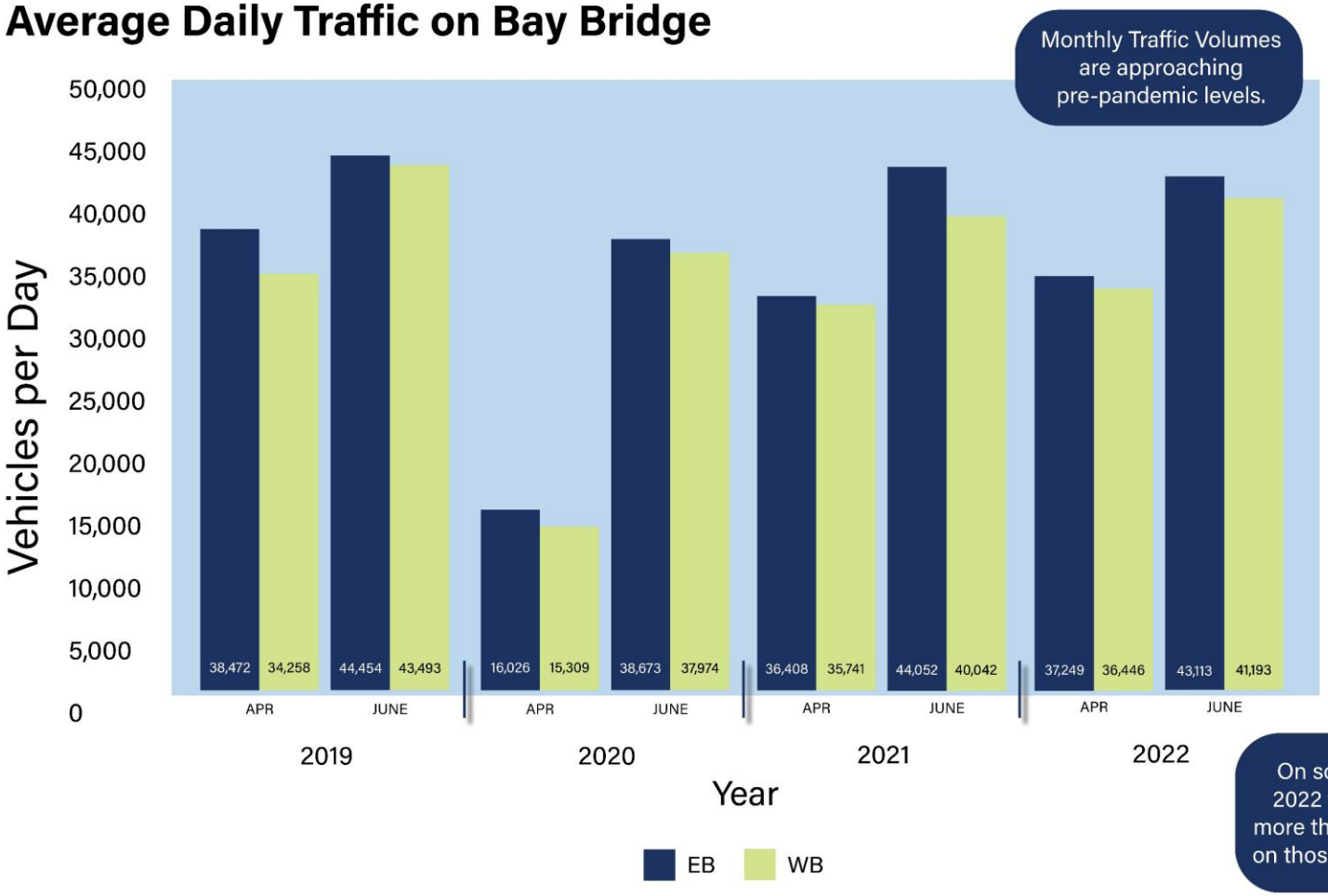
MDTA continuously monitors traffic conditions on both the eastbound and westbound approaches to the Bay Bridge, adjusting the number of eastbound lanes between two and three based on various factors, including volumes in each direction, queue lengths in each direction, weather conditions, and response to incidents.

2040 Peak Periods No Build

- 84,276 avg. daily non-summer weekday traffic
  4.5 mile EB & 2.5 mile WB weekday queues
- 135,280 avg. daily summer weekend traffic
  11.1 mile EB & 13.2 mile WB summer weekend queues

Bay Bridge Traffic and the COVID-19 Pandemic

Average Daily Traffic on Bay Bridge



Environmental Inventory

- These tables identify the community, historic and natural environmental resources within the Corridor, and are not impacts to the resources.
- The Tier 2 Study will evaluate specific transportation alternatives within the Corridor and identify potential environmental impacts. Avoidance and minimization opportunities also will be evaluated.

Environmental baseline data can be viewed on the Open House smart boards or at **baycrossingstudy.com**.

Community and Historic Resources

Community Facilities Total (count)	70
Residential Land Use (acres)	6,560
Commercial Land Use (acres)	930
Total Section 4(f) Properties* (count)	25
Area of Section 4(f) Properties* (acres)	1,680
Noise-Sensitive Areas (acres)	7,400
Historic Properties (count)	17

** Section 4(f) properties include public parks, recreation areas, historic sites and wildlife or waterfowl refuges*

Natural Resources

Open Water (acres)	9,660
Forest Land (acres)	4,500
Forest Interior Dwelling Species (FIDS) Habitat (acres)	6,900
Non-Tidal Wetlands (acres)	1,500
Tidal Wetlands (acres)	10,870
Surface Waters (linear feet)	394,020
100-Year Floodplain (acres)	6,640
Chesapeake Bay Critical Area (acres)	9,810
Sensitive Species Project Review Areas (SSPRAs) (acres)	2,180
Green Infrastructure (acres)	4,480
Essential Fish Habitat (EFH) (acres)	36,650
Submerged Aquatic Vegetation (SAV) (acres)	270
Oyster Resources (acres)	3,460

Detailed Environmental Studies

Environmental Justice

Potential effects to under-served communities, including minority and low-income populations and Limited English Proficiency (LEP) populations.

Natural Resources

Potential effects on natural resources including the Bay, streams, wetlands, water quality, floodplains, threatened and endangered species and wildlife habitat.

Historic Resources

Potential effects on historic properties and archaeological resources; coordinate with consulting parties per Section 106 of the National Historic Preservation Act.

Noise

Potential future noise impacts from transportation improvements; identify possible measures to mitigate noise impacts, when warranted.

Air Quality

Potential air quality impacts on local and regional populations; ensure transportation alternatives are consistent with air quality goals per the Clean Air Act.

Socioeconomic and Land Use

Potential impacts to land use, communities and community facilities, including parks and recreational facilities.

Indirect and Cumulative Effects

Potential foreseeable future impacts to resources such as farm land, residential and business properties, other than from development and local plans.

Hazardous Materials

Potential impacts from known and potential hazardous materials, hazardous waste and contamination.

The MDTA will continue ongoing coordination with previously established consulting parties.

Frequently Heard Concerns

The following concerns were expressed frequently during the Tier 1 Study. The MDTA will consider these and other issues as alternatives in Corridor 7 are evaluated during the Tier 2 Study.


Congestion affects our communities.


Consideration of other modal and operational alternatives (e.g. transit and ferries).


Wait times to cross the existing Bay Bridge caused by congestion, maintenance and incidents.


Emergency service vehicle mobility during backups.

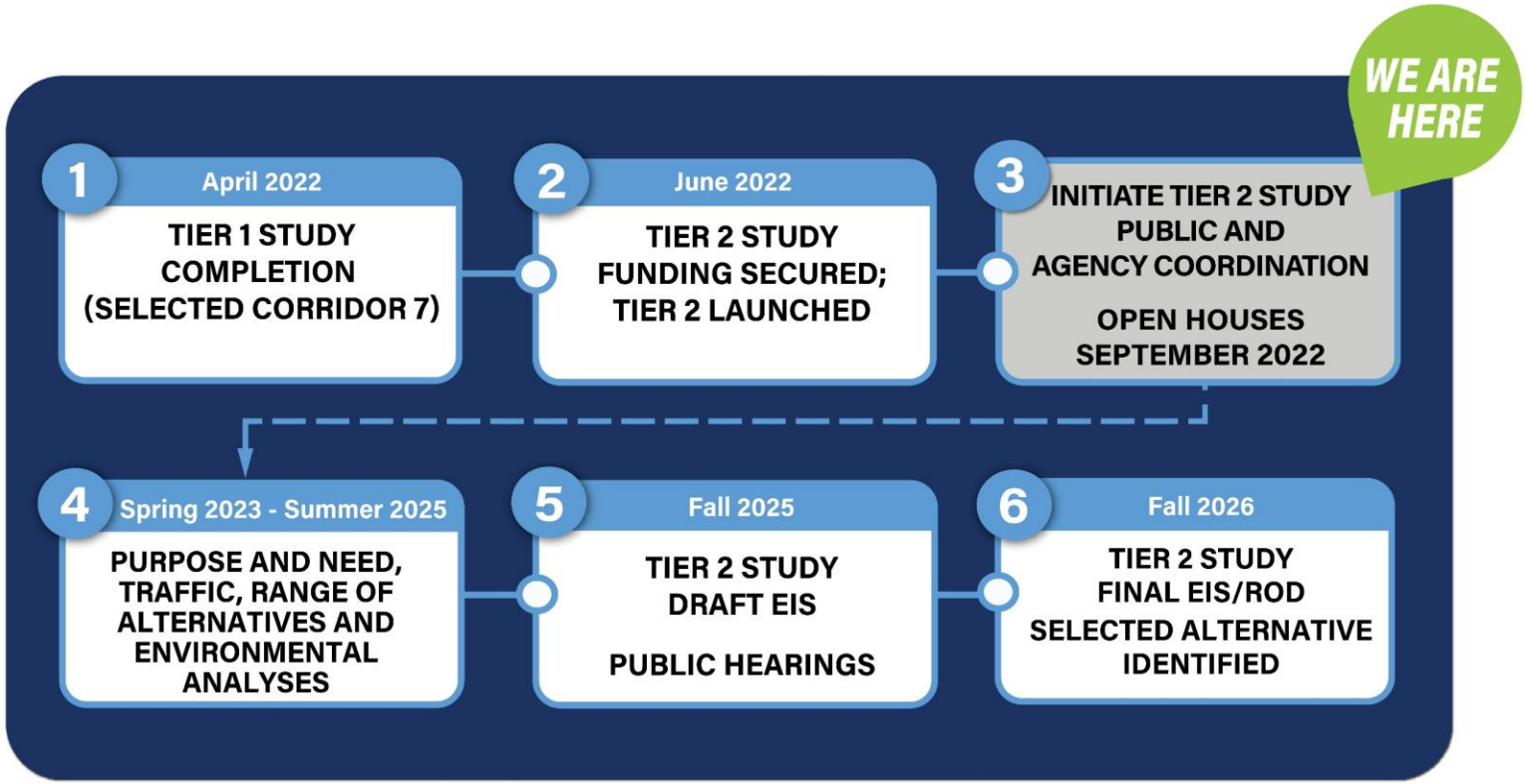

Potential environmental impacts.


Potential induced development on the Eastern Shore.


Potential property acquisitions.


Citizens' desire to be included in the study.

Tier 2 Study Process*



- Should a Build Alternative be selected, subsequent phases will include engineering, right-of-way acquisition and construction.

*Schedule is preliminary and subject to change.

CHESAPEAKE BAY CROSSING STUDY
TIER 2 NEPA

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