

Bay Crossing Study Fall 2019 Open House Presentation

Welcome, and thank you for attending the Maryland Transportation Authority and Federal Highway Administration's 2019 Open House for the Chesapeake Bay Crossing Study.

We're hosting this series of Open Houses to share information and receive input regarding the study's Range of Alternatives and Preliminary Corridor Alternatives Retained for Analysis, or CARA. There will be no formal presentation this evening, so feel free to review the display boards at your own pace.

Public input is encouraged by the National Environmental Policy Act - or NEPA - to help better inform transportation and environmental studies.

We encourage you to ask questions of staff located at the displays and submit comments.

Everything you see tonight is also available online at bay crossing study dot com.

The Bay Crossing Study will:

- Consider potential solutions to address existing and future traffic congestion at the existing Bay Bridge;
- Encompass a broad geographic area, spanning nearly 100 miles of the Chesapeake Bay; and
- Result in a Tier 1 Environmental Impact Statement in accordance with NEPA.

NEPA is Federal legislation that applies to projects receiving Federal funding or approval, requires consideration of a reasonable range of alternatives, and ensures environmental agencies and the public are informed and involved in the consideration of environmental impacts.

The MDTA and Federal Highway Administration are following a two-tiered NEPA process.

Tier 1 includes a broad-scale review of engineering and environmental information to narrow the scope of this complex project.

Prior to this round of Open Houses, the MDTA held a virtual public scoping meeting in November 2017 and six in-person Open Houses in May 2018.

The MDTA has received more than eleven-hundred comments since the study began.

Comments have been categorized into nine general topic areas.

Many comments focus on crossing location preferences and environmental resources.

All comments received on the Bay Crossing Study are available to view at baycrossingstudy.com.

Establishing the Purpose and Need is one of the first steps in a NEPA Study and documents the transportation challenges to be evaluated and addressed.

The purpose of the Chesapeake Bay Crossing Study: Tier 1 NEPA 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 Bay Bridge.

The three primary project needs identified for the study are adequate capacity, dependable and reliable travel times, and flexibility to support maintenance and incident management.

These three needs will be the basis for evaluating the Range of Alternatives.

Additionally, as part of the study, the MDTA will consider financial viability and environmental responsibility for any solutions proposed to address the study needs.

Using an Alternatives Screening Process, the MDTA evaluated a range of Modal and Operational Alternatives, and Corridor Alternatives, including the No-Build Alternative.

“Modal and Operational Alternatives” include other modes of travel such as ferry and transit, as well as improved operations of the existing roadway network.

The Corridor Alternatives are two miles wide and connect the western and eastern shores of the Chesapeake Bay where a new crossing may be located.

The corridors that best meet the Purpose and Need are being carried forward for further analysis.

These corridors are the Preliminary Corridor Alternatives Retained for Analysis, or CARA. The No-Build Alternative is also being carried forward.

From the CARA, one Preferred Corridor Alternative will be identified in this Tier One NEPA study.

In Tier 2 NEPA, various alignment alternatives within the two-mile wide Preferred Corridor Alternative and a no build alternative would be studied should future funding be identified for Tier 2.

This table further describes the Modal and Operational Alternatives that were considered.

The Transportation System Management and Travel Demand Management Alternative includes changes to improve operations of the existing roadway network without adding major new capacity.

The ferry service alternative includes one or more sets of ferry terminals to connect the eastern and western shores.

The transit alternative includes bus service, light rail, and heavy rail connecting major destinations on the eastern and western shores.

The MDTA identified 14 Corridor Alternatives where a new crossing of the Chesapeake Bay might be located.

The Corridor Alternatives connect an existing freeway or major state highway on the western shore to US 301, US 50, or US 13 on the Eastern Shore.

They generally

- are perpendicular to the shorelines, and
- avoid mouths of rivers or other large bodies of water, towns and developed areas where practical.

All Modal & Operational alternatives and Corridor alternatives were evaluated to determine if they met the Purpose and Need adequate capacity criteria.

The MDTA then analyzed the alternatives that met the capacity criteria to see if they achieved dependable and reliable travel times, and provided adequate flexibility to support bridge maintenance and incident management.

Cost, financial and environmental inventory data was also considered during the alternatives evaluation.

The Modal and Operational Alternatives were then evaluated to determine if they met the Purpose and Need adequate capacity criteria.

Details of the analyses conducted are shown on this board.

Results of the screening process show that **as a** standalone option, none of the Modal and Operational Alternatives meet project needs. Therefore, Modal and Operational Alternatives have been eliminated from further analysis in this Tier 1 NEPA study.

Transportation System Management and Travel Demand Management, Ferry Service and Bus Rapid Transit would be studied in combination with alignment alternatives if a Tier 2 NEPA moves forward. The NEPA process could move into the Tier 2 study if a Corridor Alternative were to be approved in the Tier 1 Record of Decision expected in summer 2021.

Three types of traffic analyses were used to screen the Corridor Alternatives and determine how well each would meet the Project Needs at the existing Bay Bridge:

- First, traffic volume forecasts for the year 2040 were developed for each Corridor Alternative using the Maryland Statewide Transportation Model.
- For those corridors that resulted in congestion relief at the existing Bay Bridge in 2040 when compared to 2017 volumes, two additional screening criteria were applied. This additional screening included:
 - an evaluation of the length and duration of traffic backups to understand the effect of a new crossing on travel times at the existing Bay Bridge, and
 - an evaluation of how each corridor alternative might serve as a diversion route during maintenance or incident management at the existing Bay Bridge.

The following maps show the location of each Corridor Alternative and compare the 2040 Average Daily Traffic at each location to the existing 2017 Average Daily Traffic at the existing Bay Bridge.

Information below the maps indicates whether each Corridor Alternative would cause 2040 traffic volumes at the existing Bay Bridge to drop below existing 2017 levels.

Results of the traffic analysis show that Corridor Alternatives 5, 6, 7, 8 and 9 are the **only** corridors that reduce traffic volumes on the existing Bay Bridge below 2017 levels on summer weekends in 2040.

Corridor Alternatives 7 and 8 also reduce traffic volumes on the existing Bay Bridge below 2017 levels on non-summer weekdays in 2040.

As a result, Corridors 5, 6, 7, 8 and 9 were carried forward for additional screening to determine if they met the remaining needs.

To assess which Corridors would provide dependable and reliable travel times, the MDTA evaluated the number of hours that backups of 4 miles or greater on a summer weekend or one mile or greater on a non-summer weekday would be experienced at the existing Bay Bridge.

Under the No-Build scenario, the existing Bay Bridge in 2040 would experience nine hours of backups that are at least four miles long on a summer weekend and at least one mile long on a non-summer weekday.

Corridors 6 and 8 result in backups longer than one mile for one hour on non-summer weekdays at the existing Bay Bridge.

Corridor 7 results in the least amount of backups at the existing Bay Bridge for both summer weekends and non-summer weekdays.

Corridors 5 and 9 result in longer backups at the existing Bay Bridge than Corridors 6, 7 and 8.

The MDTA also evaluated the number of hours during which unacceptable levels of service would exist.

Level of Service is used to describe traffic flow on a scale of "A" to "F," with "A" having no congestion and "F" having severe congestion. Generally, "D" is the lowest acceptable operating condition.

Corridors 6, 7, and 8 were found to have fewer hours of unacceptable levels of service than Corridors 5 and 9. Among these three alternatives, Corridor 7 results in no hours of Level of Service "E" or "F."

The MDTA also evaluated the feasibility of Corridor Alternatives 5, 6, 7, 8 and 9 to serve as an alternate travel route during maintenance and incident management at the existing Bay Bridge.

Should travelers need or want to divert to another crossing, Corridor 7 would provide the shortest travel time, followed by Corridors 6 and 8. Corridors 5 and 9 would provide longer travel times than the other corridors.

Engineering factors such as the length of crossing needed for each corridor alternative allow comparison of the potential magnitude of cost among alternatives.

The MDTA prepared a high-level Environmental Inventory to identify natural, cultural and socioeconomic resources within each Corridor Alternative.

It is important to note that the Environmental Inventory contains resources within the corridors and not potential environmental impacts from the project. The determination of actual environmental impacts would be determined in a Tier 2 NEPA.

Maps and charts have been prepared to show how these resources were quantified within each Corridor.

The MDTA considered the potential for **indirect effects** from each corridor alternative. The screening first considered:

Undeveloped land and Priority Funding Areas, which are designated areas where growth would be consistent with local plans. Providing new access to rural lands could lead to pressure for new development.

Next, the screening considered proximity to employment centers. Corridors that provide new access within a typical commute time (approximately 30 to 45 minutes) of a major employment center could see increased demand for residential development.

Last, the screening considered consistency with County Master Plans. A review of county master plans was conducted to determine whether each county has considered the placement of a new crossing and whether such a crossing would be consistent with the goals and outcomes of the county master plan.

Any new crossing could result in indirect effects to some degree.

The analysis showed that Corridors 3, 4 and 5 would have the greatest potential for indirect effects from new development on the Eastern Shore due to their proximity to the Baltimore Metropolitan area, and prevalence of undeveloped farmland on the Eastern Shore.

More detailed analysis of potential indirect and cumulative effects will be conducted and presented in the Tier 1 Draft Environmental Impact Statement.

The No-build Alt and Three preliminary Corridor Alternatives are being carried forward. In accordance with the federal NEPA process, **Corridors 6, 7 and 8** are being carried forward as the preliminary CARA because they are the only alternatives to sufficiently meet the Tier 1 Purpose and Need.

Corridor 6 would carry traffic from MD 100 to US 301 between Pasadena in Anne Arundel County, to Rock Hall in Kent County, and to Centreville in Queen Anne's County.

It reduces the duration of unacceptable level of service and relieves congestion on summer weekends, but not on non-summer weekdays; and reduces backups on both summer weekends and non-summer weekdays.

Corridor 6 provides a more desirable diversion route than Corridors 5 and 9, but is not as efficient as Corridor 7.

Lastly, Corridor 6 is less compatible with existing land-use patterns, resulting in greater potential for indirect effects.

Corridor 7 is the Existing Corridor. It would carry traffic from US 50/301 to US 50 between Crofton in Anne Arundel County and Queenstown in Queen Anne's County.

It best reduces the duration of unacceptable level of service, relieves congestion, and reduces backups on both summer weekends and non-summer weekdays.

Corridor 7 also provides the best diversion route, and is more compatible with existing land use patterns, resulting in fewer indirect effects.

Corridor 8 would carry traffic on US 50/301 between Crofton in Anne Arundel County and Easton in Talbot County.

It reduces the duration of unacceptable level of service on summer weekends, but not on non-summer weekdays.

It relieves congestion and reduces backups on both summer weekends and non-summer weekdays.

Corridor 8 provides a more desirable diversion route than Corridor 5 and Corridor 9, but is not as efficient as Corridor 7.

Lastly, Corridor 8 is less compatible with existing land-use patterns, resulting in greater potential for indirect effects.

We want to hear from you, because your comments are vital to the success of the study and will be taken into consideration.

There will be more opportunities for you to get involved during the study's Public Hearings, which are anticipated to be held in fall 2020. At these Public Hearings, the MDTA will present the results of analyses that will have been conducted to date as well as MDTA's Recommended Preferred Corridor Alternative.

Before you leave tonight, please fill out a comment card. You may also submit comments online at baycrossingstudy.com, or by email to info@baycrossingstudy.com.

After this round of Open Houses, the MDTA will begin analyzing the Corridor Alternatives Retained for Analysis and developing the Draft Tier 1 Environmental Impact Statement.

The Final Tier 1 Environmental Impact Statement and the Record of Decision are expected to be completed by summer 2021.

If a corridor alternative is approved by the Federal Highway Administration in the Tier 1 Record of Decision, the NEPA process could move into a Tier 2 study. If a Tier 2 study proceeds, the study would take several years to review potential alignments and develop a financial plan that could lead to the Federal Highway Administration ultimately approving one alignment with a Tier 2 Record of Decision.

Thank you again for attending the Chesapeake Bay Crossing Study: Tier 1 NEPA - Open House.