



**Anne Arundel County Bicycle Advisory Commission**

To: Steuart Pittman, Anne Arundel County Executive  
[REDACTED] Transportation Director

CC: Anne Arundel County Bicycle Advisory Commission

From: [REDACTED] Chair

Re: Separated Bicycle/pedestrian Facility on Chesapeake Bay Bridge Crossing

Date: April 16, 2021

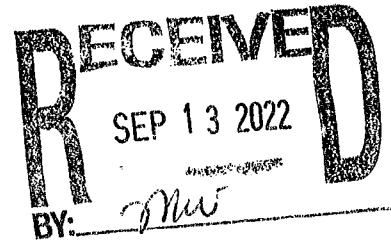
The Anne Arundel County Bicycle Advisory Commission unanimously supports the following position regarding a separated bicycle/pedestrian facilities in the Chesapeake Bay Bridge Crossing Study:



We do not take a position on if or where a new span should be built. However, if a new span is built in any location or one of the existing spans is replaced or renovated then we insist that a separated bicycle/pedestrian lane be included. This has been done on recent bridges of similar length around the U.S. including the replacement Tappan Zee(see photo) and Pensacola Bay bridges. Locally, the Woodrow Wilson Bridge has such a facility which is quite popular and the planned American Legion replacement is expected to have one as well. In spite of the governor's announcement that the Nice Bridge replacement would include a separated bike/ped facility, it was left out of the final bridge design. These are once in a multi-generation opportunities which should not be wasted. These bicycle/pedestrian facilities are in line with Maryland's Complete Streets policy and are a tremendous draw for tourism especially over the iconic Chesapeake Bay. A safe bicycle/pedestrian lane over the Chesapeake Bay would also provide passageway for long distance national trails, including the Delaware-to-California American Discovery Trail and the complementary (alternate) route of the Maine-to-Florida East Coast Greenway between Wilmington, DE and Annapolis via Dover, DE and Chestertown, MD. The lane would provide safe access to and from the scenic and historic byways on the Eastern Shore that are so popular with cyclists as well as non-motorized transportation to and from communities on both sides of the Chesapeake Bay. The bike/ped lane could also provide emergency vehicle access on the bridge when needed.

**Please specify a separated bicycle/pedestrian lane as a mandatory feature of any future Chesapeake Bay crossing as well as any other future bridges in Maryland.**

Maryland Transportation Authority  
Bay Crossing Study  
2310 Broening Highway  
Baltimore, MD 21224



[REDACTED]

To Whom it May Concern:

I follow the MDTA on Facebook and am aware of the upcoming Open Houses in September. Unfortunately, I will not be able to attend in-person. While I live in Indiana, the ongoing traffic issues surrounding the William Preston Lane, Jr. Memorial Bay Bridge are of great concern to me as I have numerous family members who live and work in the area and must use the bridge and the surrounding roadways. Also, I will be moving back to Maryland with my daughter in roughly one year, and plan to settle somewhere in proximity to Annapolis and Kent Island, and may well have to use the bridge quite often.

From this point on I will refer to the bridge crossing in question as the WPL Bridge. That said, for the past few months, I have done much research on possible solutions for the congestion issues at the WPL Bridge and I have included them in this letter (as well as various statistics). I do understand that none of my ideas may come to fruition, they may have been suggested by others, or perhaps even been considered and proven to be unviable, but I wish to share them with your agency, regardless, because it may spark ideas not considered before.

Naturally, I know the congestion issues at the WPL Bridge won't be solved by the time I return to Maryland, but I am certain that those same issues will unfortunately worsen, as more and more young people acquire their operator's licenses and vehicles of their own. That, of course, is not the only factor, but I suspect is likely one of the greatest influences.

As you surely know, the Chesapeake Bay is the largest estuary in the United States and the third largest in the world, yet there are only three ways to get across, or around, it. Compare these facts to the San Francisco Bay, which is approximately 10% the size of the Chesapeake Bay, yet has four bridges for crossing (including the Richmond-San Rafael Bridge, which crosses the San Pablo Bay), and three of those bridges are longer than the WPL Bridge.

While another few years-worth of studies could be done, it should be stated that it is long-past due for a solution. Residents are getting more than impatient – they are getting angry. It took nearly four years to build the original span of the Chesapeake Bay Bridge (completed in 1952), and just over four years to build the second span (completed in 1973). Five decades have passed with no additional crossings and the traffic volume has increased along with the population growth.

It is my understanding that an additional span will be built in proximity to the existing WPL Bridge. But an additional span may likely be meaningless if the infrastructure on each shore doesn't exist to absorb the existing traffic – or the traffic of the future. For example, there are roughly 18.4 million people living

in the Chesapeake Bay watershed; that number is predicted to be over 22 million by the year 2050. With this in mind, building just one new span across the Bay is truly not enough. The State of Maryland has to find a way of not only getting ahead of the game – but *staying* ahead of it! How many lanes should be added to highways on each side of the bay to accommodate the existing (and future) traffic volume? Should US Highway 50 and US Highway 301 be converted into limited access freeways? How agreeable are the residents on either shore to any proposed crossing ideas? Case in point: It took about 33 years for a one-mile section of roadway-extension to be built here in Fort Wayne, because property owners pushed back against the project, many not wanting to sell their property. And, that caused daily traffic back-ups for many years as the area grew in population.

Is having just one additional bridge span really the best idea on the table? The Chesapeake Bay is roughly 200 miles in length, and with about 150 miles of the bay between the WPL Bridge and the bridge-tunnel in Virginia, just how enthused should a resident of Cove Point be about a trip to Ocean City, when they know they will be stuck in the bottle-neck that is the WPL Bridge? How early should a family in Salisbury leave home if they want to tour Washington D.C. for the day? If they leave at 7 o'clock in the morning, will they make it across the bridge without stopping, will they be stuck in the middle of an eight-mile traffic jam on Kent Island, or should they leave at 5 o'clock in the morning to avoid a back-up at the bridge – only to have to wait a couple hours for everything in D.C. to open for business? Clearly, there are some logistics to consider for someone who simply wants to enjoy a day off on the opposite shore, while hoping to avoid a lengthy wait at the WPL Bridge.

We live in a technological age that is constantly improving; feats of bridge and tunnel engineering are appearing around the world: the Channel Tunnel, the Falkirk Wheel, the Oresund Bridge/Tunnel, and the Hong Kong-Zhuhai-Macao bridge-tunnel (to name a few), and yet the WPL Bridge stagnates – and the Bay area, and the State of Maryland, and the tri-state-area with it. The time for *real* solutions is now – they need to be implemented sooner than later!

I propose the following:

A bridge, or tunnel, (or combination of the two) crossing north of the WPL Bridge that links the Lake Shore area (or Swan Point) on the west with the Rock Hall area on the eastern shore.

A bridge, or tunnel, (or combination of the two) crossing south of the WPL Bridge that links the Long Beach/Lusby area on the west with the Taylors Island area on the Eastern Shore.

A car ferry system in proximity to the WPL Bridge to help alleviate congestion. Additional car ferry systems could be located farther north and south of the WPL Bridge. And frankly, car ferries might be the quickest way to help the issue as the only infrastructure needed would be docks for the boats and roadways to those docks. I strongly suggest double-deck ferry boats like those used by Red Funnel in Southampton, England, for trips to the Isle of Wight. Their boats are capable of carrying over 200 cars and nearly 900 passengers per trip. A car ferry system, however, should not be considered as the *only* remedy.

A commuter train that starts from a location between Queenstown and Centreville and runs parallel with US 50/301, and can take passengers as far west as Washington D.C. Is it possible that a commuter rail could run between the existing spans of the WPL Bridge – or even alongside it?

All of the above proposals have some amount of 'build' involved. Frankly, I cannot think of *any* solution that does not involve building some kind of structure(s) to create more ways to allow residents, tourists, and commercial vehicles to cross the Chesapeake Bay and alleviate the congestion at the WPL Bridge. The truth of the matter is that Maryland needs more than just an additional set of lanes for crossing the bay; Maryland needs those additional lanes, yes, but it also needs at least one (or more) additional locations for arteries that allow for getting from shore to shore.

There are roughly 42 million visitors to Maryland each year. How many of them cross the WPL Bridge? How many of them will return home and tell stories about 3-mile, 7-mile, 9-mile, and even 12.5-mile backups at the WPL Bridge, discouraging others from visiting Maryland? The average tourist spends \$144 dollars per day, which means Maryland is raking in over \$6 billion annually. How much of that does the State want to lose?

Of the crossing options I've proposed, how can the State of Maryland keep them 'affordable', not only for the travelers - once the crossing(s) would be completed - but also from the aspect of construction costs, land acquisition, etc.?

Earlier, I mentioned 'staying ahead of the game'. What if – heaven forbid – there is a disaster at the WPL Bridge similar to that in Tampa, Florida, on May 9, 1980, when a cargo vessel crashed into the support columns of the Sunshine Skyway Bridge? A section of that bridge, longer than four football fields, fell into Tampa Bay. Thirty-five people lost their lives in the accident. The wrongful-death settlements averaged \$300,000 each; the owner of the freighter was ordered to pay \$19 million to the State of Florida for damage to the bridge – and that was in U.S. Dollars from forty years ago. If such a disaster would befall the WPL Bridge, any loss of life would be tragic, and such an event would also essentially cripple the central part of the Chesapeake Bay. What might happen to Maryland's economy?

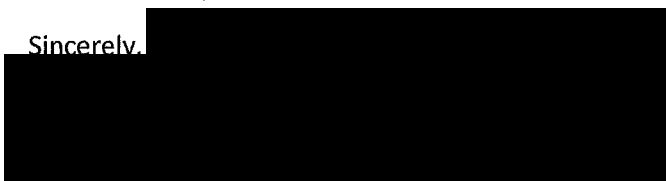
Naturally, the local environment and the Chesapeake Bay ecosystem are of great concern – as they should be. Great care should be taken to ensure that any construction project on (or near) the Chesapeake Bay can coexist with the native lifeforms.

I am a firm believer that the technology exists to not only protect the native flora and fauna of the Chesapeake Bay, but to make it possible for that same body of water to have additional crossing options, and not just an additional set of lanes that already lead into heavily congested streets and roadways.

Lastly, there are over 617,000 bridges in the United States. More than 40% of them are at least 50 years old – including the WPL Bridge. Roughly 7.5% of those bridges are considered structurally deficient, meaning they are in 'poor' condition. This is another reason to have additional crossings over the Chesapeake Bay, because while the WPL Bridge may not be in poor condition now, but that day may arrive one day. And that, is why it is so important to get ahead of the game.

Thank you for your time in this matter.

Sincerely,

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Populations and bridge, tunnel, and ferry information across the United States:

Population of Baltimore City: 609,000±  
Population of Washington D.C.: 692,000±  
Population of Baltimore metropolitan area: 2.84 million  
Population of DC metropolitan area: nearly 6.4 million  
Number of ways to cross or get around the Chesapeake Bay: 3  
Number of visitors to Maryland each year: 42 million  
Number of visitors to Washington D.C. in 2019: 24.5+ million  
Number of people living in the Chesapeake Bay watershed: 18.4 million (predicted to be over 22 million by 2050)  
Chesapeake Bay: 4,479 m<sup>2</sup>; 200 miles long; 21' mean depth  
Chesapeake Bay Bridge (Annapolis): 4.35 miles long; 27 million annual traffic (74,000 daily)

San Francisco Bay Area

San Mateo Bridge: 7 miles long; 3 lanes each way; 93,000 daily traffic  
San Francisco-Oakland Bay Bridge: 4.5 miles long; 250,000+ vehicles per day  
Richmond-San Rafael Bridge: 5.5 miles long; roughly 33,000 vehicles per day  
Dumbarton Bridge: 8,600' long; 70,000+ vehicles daily  
\*There are two additional bridges north of Oakland which cross the Carquinez Strait.

Population of San Francisco: 875,000  
Population of Oakland: 390,000  
Population of Alameda County: 1.5 million  
Population of San Mateo County: 765,000  
Population of Contra Costa County: 1 million  
Population of Marin County: 250,000  
Population of Solano County: 413,000

Total population of the above: roughly 5.2 million  
At least six major bridges for that metropolitan area

Cape May/Lewes Ferry; New Jersey-Delaware

The ferry boats are capable of carrying 100 vehicles and 800 passengers each departure

Lake Pontchartrain; Louisiana

Lake Pontchartrain Causeway: 24 miles long; 2 lanes each way; 12 million annual traffic (32,900 daily)  
Population of the New Orleans metropolitan area: 1.27 million

Lake Champlain; Vermont/New York State

490 m<sup>2</sup>; 125 miles long (north to south); multiple highways and ferries cross the lake; annual ferry traffic to cross the lake is roughly 1 million passengers

### Lake Michigan

307 miles north to south; 22,406 m<sup>2</sup>

Mackinac Bridge and two ferry crossings; Mackinac Bridge annual traffic exceeds 4.2 million vehicles

### Tampa

Sunshine Skyway Bridge: 4+ miles long; 2 lanes each way; 50,000+ vehicles daily

Population of the Tampa metropolitan area: 3.1 million

### New York City

George Washington Bridge: 4,760' long; double-deck bridge; 275,000-300,000 daily traffic

Brooklyn Bridge: 1.1 mile long; 116,000 daily traffic

Manhattan Bridge: 6,855' long; nearly 76,000 daily traffic

Henry Hudson Bridge: 2,208' long; over 62,000 daily traffic

Queensboro Bridge: 3,724' long; 170,000+ daily traffic

Holland Tunnel: 1.6 miles long; nearly 90,000 daily traffic

Lincoln Tunnel: 1.5 miles long; roughly 113,000 daily traffic

Queens-Midtown Tunnel: 6,414' long; 80,000 daily traffic

Number of bridges and tunnels linking Manhattan to the rest of the world: at least 20

Multiple bridges link the surrounding boroughs of New York City to each other

Population of Manhattan: 1.63 million±

Population of the Bronx: 1.43 million±

Population of Brooklyn: 2.58 million±

Population of Queens: 2.27 million±

Population of Staten Island: 475,600±

Number of visitors to New York City annually: 65 million

### International information worth mentioning

Confederation Bridge (Prince Edward Island): 8 miles long; 1.5 million annual traffic

Red Funnel Ferry System, Southampton, England

### Bridge-tunnels

Tokyo Bay Aqua-Line

Oresund bridge/tunnel (Sweden)

Hong Kong/Zhuhai/Macau bridge



**Date:** September 27, 2022  
**To:** Mr. William Pines, Executive Director, Maryland Transportation Authority  
**From:** Maryland Bicycle & Pedestrian Advisory Committee  
**Subject:** Recommendations for the Chesapeake Bay Crossing Study Tier 2 NEPA

In accordance with the requirement stating the Maryland Bicycle and Pedestrian Advisory Committee (MBPAC) advises the Administration on issues directly related to bicycling and pedestrian activity, the Committee offers the following recommendations related to the Tier 2 NEPA Chesapeake Bay Crossing Study.

**Recommendations:**

1. If a new crossing is to be constructed, then it must include a barrier separated pedestrian and bicycle accommodation.
2. If an existing crossing is renovated or otherwise replaced, then the renovation or replacement should include a barrier separated pedestrian and bicycle accommodation.
3. The NEPA Tier 2 Study should include an evaluation that includes accommodation for bicycling and walking in all possible scenarios with a focus on mode shift, safety and economic impact
4. Generally, MBPAC recommends that any bridge or tunnel construction by a State Department or Agency or funded in full or in part by the State require accommodations for pedestrians and bicyclists.

Similar to the existing 4.3-mile bay crossings, the recently constructed Governor Mario M. Cuomo Bridge, a 3.6-mile span over the Hudson, 20 miles north of New York City, carrying I-87, includes barrier separated pedestrian and bicycle accommodations. Here in Maryland, both the Woodrow Wilson and the planned American Legion Bridge accommodate both pedestrians and bicyclists over the Potomac River.

Crossings of natural geographical barriers are built or renovated perhaps once in every other generation. Failure to include bicycle and pedestrian accommodation adversely impacts not only the current citizens of Maryland but those for the next 50 to 100 years.

Such accommodations can be tourism destinations in and of themselves as well as links to facilities on either end and with longer and multi-state trail networks. The separated bike/ped facility would provide safe access to and from scenic and historic byways on the Eastern Shore popular with cyclists as well as facilitate non-motorized transportation to and from communities on both sides of the Chesapeake Bay.

For all of the above reasons, MBPAC strongly recommends this project include at least a twelve-foot-wide barrier separated bicycle and pedestrian path. We would be glad to discuss this matter directly with the Study team or members of the Administration, at your convenience.

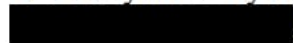


M A R Y L A N D  
Bicycle and Pedestrian Advisory Committee



Sincerely,



The Maryland Bicycle and Pedestrian Advisory Committee  
, Chair

Reference

[Home | Governor Mario M. Cuomo Bridge \(ny.gov\)](#) – Run, Walk, Bike and Explore  
[Explore-The Bridge Path | Governor Mario M. Cuomo Bridge \(ny.gov\)](#)



October 12, 2022

Bay Crossing Study

2310 Broening Highway

Baltimore, MD 21224

Thank you for this opportunity to provide my comments on the Maryland Transportation Authority's (MDTA's) Tier 2 Bay Crossing Study.

My objective in these comments is to advocate for the following actions on the part of MDTA:

- 1) Choose a solution that will ultimately result in the demolition of the two existing bridges;
- 2) Construct one eight-lane or two four-lane bridges as replacements that actively incorporate community, recreation, and tourist-friendly features that will improve quality of life and economic development specifically for Anne Arundel County residents;
- 3) Incorporate objectives such as improvement of aesthetics, local recreational opportunities, and local tourism into the Purpose and Need Statement for the Tier 2 Environmental Impact Statement (EIS);
- 4) Incorporate aesthetics into the analysis in the Tier 2 EIS, with an equal focus on accruing beneficial and avoiding adverse impacts to aesthetics in the local area.
- 5) Ensure that the analysis of visual, recreational, and economic development impacts in the Tier 2 EIS focuses strongly on local impacts, especially in Anne Arundel County, instead of on regional impacts that only benefit residents in the Washington and Baltimore suburbs, Ocean City, or Delaware; and
- 6) Ensure that the impact analysis in the Tier 2 EIS gives as much consideration to beneficial visual, recreational, and economic development impacts as it gives to adverse impacts to those values.

### Introduction

Tourist bridges exist. They range in scale and importance from small, historic, and decorated bridges that attract a few amateur bridge photographers within a local area to iconic, world-renowned structures visited by thousands of people every day. They are located in downtown areas of large cities and hidden in the woods in isolated rural areas, and they dominate the vistas of our most scenic landscapes. These bridges support their local community and economy by encouraging tourists to visit the area, providing recreational opportunities for the local residents, serving as prominent features of our cityscapes, enhancing our parks and outdoor green spaces, and functioning as community gathering places.

I know that these bridges exist because I spent nine years studying and writing two books about them. [REDACTED]

\_\_\_\_\_ was published in March 2022, and \_\_\_\_\_

\_\_\_\_\_ will be published in November 2022.

These books, based on extensive research, interviews with experts, and visits to more than 600 tourist bridges in the US, Canada, and Europe, document the features and characteristics of bridges that support tourism and recreation, and enhance their viewcape and environment.

Tourist and community-centric bridges exist. The Chesapeake Bay Bridge is not one of them.

The most important passage from \_\_\_\_\_

\_\_\_\_\_ begins Chapter 10, which is titled “Bridges Not For Tourists”.

The first paragraph of Chapter 10 reads:

“Once you have walked across hundreds of bridges specifically to study and document the features that make them special, you will inevitably begin to see and document the opposite – bridges that are distinctly not special, do not enhance their surroundings, and do not attract tourists or other visitors. This is not a reference to the thousands of boring, everyday, working bridges that are doing their part to keep traffic moving without bothering anyone. Instead, it refers to locations where a historically important bridge has been allowed to fall into disrepair through rust or rot, or where an obvious opportunity to develop a bridge into an enhancement for the community has been missed.”

This was written in 2019, long before I ever heard of the Bay Crossing Study. To support that statement, I wrote detailed profiles of several of these “non-tourist bridges”. However, for the final version of the book, I chose to focus on a single example of a bridge that was a major disappointment - one that not only failed to enhance its local community, but that actually diminished its surrounding viewscape, and served to repel tourists from its local area – the Chesapeake Bay Bridge. I chose the Chesapeake Bay Bridge as the prime example of a failed bridge for three reasons:

- It is my bridge - as a lifelong Marylander, I grew up crossing the bridge, and was intimately familiar with it.
- It is the Chesapeake Bay – not some small, remote river unknown to all but a few locals, but one of the most important scenic vistas in the eastern US.
- The current bridges are a blot on the landscape – the mismatched, disparate styles of the towers of the two bridges are so discordant that they not only fail to enhance the aesthetic, recreational, and tourist resources that make a vibrant community, but they actively damage those resources.

In this first book, my discussion of the Chesapeake Bay Bridge was limited to pointing out its deficiencies. In \_\_\_\_\_

\_\_\_\_\_, written after I became familiar with the Bay Crossing Study, I wrote that Tier 2:

“ . . . will offer additional opportunities for the public to become involved and demand that the new bridge incorporate aesthetics, recreation, and

other community-centric features into its design. Hopefully, the decision-makers, with local community input, will recognize the enormous damage that was done to the viewscape 50 years ago by constructing the existing mismatched bridges and will work to correct the situation, or at least strive to not make it worse.”

I then went further by speculating on possible solutions to correct the deficiencies. In that analysis, I acknowledged that my proposed solution of demolishing the existing bridges was “. . . admittedly and completely disconnected from the reality of budgets and other constraints.” However, I pointed out that “it is an approach that could be used to develop a world-class, iconic bridge that would not only enhance the aesthetics of this portion of the Chesapeake Bay, but would create a prominent, bridge-centric tourist and recreational attraction.”

### 1 - Demolish the Existing Bridges

When I was publishing my criticism of the current Chesapeake Bay Bridge and advocating for its demolition in early 2022, I assumed that I was alone. It was not that everyone I spoke to disagreed with me – almost everyone agreed that the current bridges are enormously unattractive. Instead, it was that nobody seemed to care. Nobody understood that this unattractive appearance has real detrimental effects on local land values, tourism, and recreation and, most importantly, nobody thought that anything could be done about it. It seemed to be a ridiculous idea that someone would spend billions of dollars to demolish bridges that, flawed as they are, still serve to move most of the traffic, most of the time.

I was surprised, then, to learn that the county councils in both Anne Arundel County and Queen Anne’s County actually passed resolutions advocating for the demolition of the current bridges and replacement by one or more new bridges. Then, during the Open Houses in September, I learned that several other counties, as far away as Garrett County, had passed similar resolutions.

In general, those resolutions advocate for a replacement and demolition solution for functional reasons. Several of them note that the older of the two bridges is likely going to require replacement eventually anyway. Others argue that, even with a new bridge added to the corridor, the limitations in the widths of the existing bridges will continue to hinder traffic flow, as well as ability to perform emergency response and maintenance, into the future. While a third bridge, operating in conjunction with the two existing bridges, could temporarily alleviate these issues, it is not likely to be a long-term solution.

I concur with all of these points raised in the resolutions, and support their proposed solutions. However, as discussed in my two books, I offer additional reasons, related to the aesthetics of the two existing bridges, that support a replacement/demolition solution.

As discussed in the Introduction above, tourist and community bridges do exist, in thousands of locations. However, these are not bridges that somehow, randomly became tourist and community bridges. These are bridges where the developer made

specific design choices to enhance aesthetics, to incorporate recreational features, and to make the bridge an attraction for local residents and tourists. The aesthetics of a man-made structure, especially one in such a prominently scenic setting, is not subjective for the majority of viewers. There are design choices that can be made that will, objectively, complement the scenery and create an aesthetically pleasant experience for most viewers – this is one of the primary goals of an architect.

The image of a bridge is not going to spontaneously spur shoreline development, or begin to be used as a recognizable logo for local businesses and municipalities – its designers must deliberately consider aesthetics in creating symmetry and in selecting the form of the towers, the shape of the supporting cables, the colors of the paint, and the lighting of the bridge at night. Similarly, a bridge is not going to become the focus of a state park, with specific bridge viewing areas, visitor center, and educational plaques describing the bridge along with the local ecology and history, unless these features are deliberately added. A bridge is not going to attract hikers and bicyclists unless it is given a sidewalk. A bridge is not going to be used as an elevated platform for viewing wildlife and scenery in the Chesapeake Bay unless an elevated platform with benches is provided.

Because the most disturbing characteristic of the current bridges is their lack of symmetry or any other element of visual appeal, their continued presence will eliminate any potential for a third bridge to improve the aesthetics of the corridor. No matter how much consideration of aesthetics is put into the design of a third bridge, it will always be seen in the context of the two unattractive bridges, so cannot overcome the problem. The Broadneck Peninsula and Kent Island shoreline will never become a major attraction for development similar to shorelines near hundreds of other major bridges as long as the aesthetics of the corridor continue to be compromised.

With respect to the environmental impacts of demolition, the Tier 2 EIS is going to conclude that demolition of the existing bridges will have greater impacts to water quality and ecological resources than any alternatives that continue to maintain the bridges. This is true, and will be used by some members of the agency, interest groups, and the community to argue against demolition. However, Best Management Practices (BMPs) are available to be used as mitigation measures to minimize the impacts while the demolition is occurring. In addition, bridges in areas with valuable ecological resources are demolished all the time. An analogue to the Chesapeake Bay Bridge would be Ravenel Bridge in Charleston. This is a sculptural, community-focused bridge that replaced two unattractive truss bridges, Grace and Pearman. After the new bridge was completed, the Grace and Pearman bridges were demolished. Interestingly, it appears to be MDTA's current policy to demolish their obsolete bridges. Despite substantial interest in maintaining the old Governor Nice Bridge, the Maryland Transportation Secretary has stated that this would present too many logistical and financial challenges. Instead, the bridge is to be demolished and its remains to be used as an artificial reef.

These observations document that:

- The size, age, configuration, and condition of the existing bridges are not compatible with a long-term solution for the transportation challenges in the corridor.
- The asymmetry and lack of any community-friendly or recreational features on or near the existing bridges precludes any future development of the corridor into a prominent enhancement for the community or attraction for tourists.
- The adverse impacts of demolition are not severe enough to justify continuing to maintain these flawed bridges.

## 2 - Create a Community and Tourist Bridge

One of the most important observations I made in my years of studying tourist bridges was how common they are, especially in the most visible or prominent location of a city.

The Epilogue of [REDACTED]

[REDACTED] discussed how Chapters 1 through 9 of the book offered hundreds of bridges in other locations as concrete examples of places where specific ideas have already been implemented, and which are actively supporting quality of life and driving economic development in their communities. Following are a few examples of the features that could be incorporated into a future Bay crossing if the planners at MDTA are willing to look past the simplistic objective of alleviating traffic jams:

- Sidewalk – almost every other major bridge has a pedestrian sidewalk, including the Golden Gate, Brooklyn, George Washington, Benjamin Franklin, Ravenel, Woodrow Wilson, and Frederick Douglass. It is almost easier to mention the few major bridges that do not have sidewalks, including Mackinac, New River Gorge, and Delaware Memorial.
- Connects to regional bike trails on either end of the bridge – Woodrow Wilson, Walkway over the Hudson, Golden Gate, John Kerry (Omaha), Center Street (Des Moines)
- Dedicated visitor center with gift shop, snack bar, exhibits, and restrooms – Golden Gate, Clifton Suspension, Sydney Harbour, Forth Road, Navajo
- State park directly associated with the bridge through its name, and with displays providing information about the bridge – Mackinac. Note that the Chesapeake Bay Bridge dominates the view from Sandy Point State Park, but when you look at the Sandy Point website, you will not find a single photo of, or mention of, the bridge. The bridge does not attract visitors to the park – it repels visitors.
- Annual Event – Mackinac, New River Gorge. The Chesapeake Bay Bridge is the site of a running event sponsored by a private, for-profit company, in some years, but not in others. Mackinac has held an annual, state-sponsored celebration every year (except pandemic) since the mid-1950s. Also, the Chesapeake event is a running event, whereas Mackinac is strictly a walking event with only a few runners allowed before the walkers begin. A running event is a competition – a walking event, where people can talk to each other, is a community event. The Chesapeake Bay Bridge running event, in a heavily populated area, attracts

10,000 people. The Mackinac Bridge walk, in a much less densely populated area, attracts 40,000. Why is that? I have attended both events – the Chesapeake event is for individuals, while the Mackinac event is a community celebration.

- Annual Festival – Ashtabula, Stone Arch, Kramerbruckenfest
- Fireworks viewing – Jacques-Cartier, Key (Washington), Sydney Harbour, many others
- Benches and observation platforms with exhibits, telescopic viewers, and bike racks – Woodrow Wilson, Benjamin Franklin, Bob Kerrey (Omaha), Center Street (Des Moines), High Trestle Trail, Rip Van Winkle
- Symmetrical twin (or triplet) bridges – Delaware Memorial, Navajo, Three Sisters
- Sculptural bridge serving as work of public art – Golden Gate, Ravenel, Liberty (Greenville), Woodrow Wilson, Route 52 (Ocean City, NJ), Millennium (London), Clark (Alton, IL), Gateshead Millennium, Clyde Arc, Zakim (Boston), Bob Kerrey (Omaha), Center Street (Des Moines), Frederick Douglass, Lowry Avenue (Minneapolis)
- Light shows and colored lighting at night – Lowry Avenue (Minneapolis), Kosciuszko (New York), Indian River, Jacques-Cartier (Montreal), San Francisco Bay Bridge, Gray's Lake Park (Des Moines), High Trestle Trail (Iowa), I-35W (Minneapolis), Gateshead Millennium
- Monuments – Arlington Memorial, Springfield Memorial, Market Street (Wilkes-Barre)
- Interior access/catwalk tours – Sydney Harbour, New River Gorge
- Elevated observation tower – Penobscot Narrows
- Image used as state/local symbol – New River Gorge (used as symbol for West Virginia on their state quarter), Mackinac (used as symbol on city vehicles and Michigan state license plates). In possibly the most ironic case, even though MDTA owns the Chesapeake Bay Bridge, they have chosen the industrial-looking Key Bridge as the landing page for the MDTA website. Note that the Chesapeake Bay Bridge is included on the recent Maryland state license plates. The image only shows one of the two bridges unless you get very close and squint to find the second bridge, very faint in the background.
- Tourist advertisements – High Trestle, Sydney Harbour, Chain (Budapest), Clifton.
- Image on souvenir items – High Trestle, Sydney Harbour, New River Gorge, Golden Gate, Columbia-Wrightsville, Brooklyn, and dozens of others.

Adding these features to a new bridge at the current crossing would range from free to very expensive, and it is likely that any additional cost will be used as an argument against them. This thought process is, unfortunately, exactly how we got into this mess

in the first place. It does not take much observation to see that the designers of the two current bridges gave no thought to any such enhancements.

Of these features, I recognize that one of them, incorporation of a sidewalk that connects into regional bicycle trails on either end, would be problematic on the Chesapeake Bay Bridge. As an active, long-distance bicyclist who regularly rides on the Baltimore & Annapolis Trail, I would love nothing more than a 10 mile extension of this trail up to and over the Bay to Kent Island. However, I recognize that any bike trail is also, by definition, a hiking trail. I have participated in the Chesapeake Bay Bridge running event, and I am aware that a five-mile-long hiking trail climbing this steep grade, especially in summer, would likely result in more than a few health emergencies that would need to be responded to. Of all of the bridges I have studied that have sidewalks and trails, I recognize that none of them are five miles long, and this makes a big difference. I encourage MDTA to consult with bike trail advocates and the owners of other bridges to find an innovative solution, such as providing a partial trail out to an elevated viewing platform, that could satisfy some demand for pedestrian access without requiring 24/7 emergency response teams on the bridge.

### 3 – Correct the Confusion of Project Objectives with Resource Impacts within Purpose and Need Statement

Too often, the Purpose and Need for a project is narrowly focused on the primary mission of the decision-making agency, without considering any secondary objectives. MDTA's Purpose and Need Statement for the Tier 1 EIS is the perfect example – the need for the project was almost entirely based on transportation objectives, including providing adequate capacity, dependable and reliable travel times, and flexibility to support maintenance and incident management. The Purpose and Need Statement also considered the cost of a solution, and the ability of the agency to pay for it. Both of these issues should be carried directly into the Purpose and Need Statement for Tier 2.

In addition to those objectives, Section 2.4, Environmental Responsibility, of the Tier 1 EIS gave a brief mention of the need to avoid adverse environmental impacts, and an even briefer suggestion that beneficial impacts to economic development would be "taken into account". There are several problems with Section 2.4 that should be corrected in a Purpose and Need Statement for Tier 2.

In Section 2.4, MDTA provides a broad, general list of the environmental and socio-economic resources that are usually evaluated in EISs. However, the section fails to clearly distinguish between the beneficial resource impacts that are objectives of the Purpose and Need for the project versus impacts that will result from the project, but which are not part of the reason for doing the project. As a result, this section does not clearly focus on the actual objectives of the project.

The Purpose and Need for doing a project may be based on resource impacts – it can have the objective of accruing beneficial impacts such as improving traffic and transportation flow, or it can have the objective of correcting past adverse impacts, such as in an environmental restoration project. In the case of Tier 1 and Tier 2 of the Bay Crossing Study, the primary objective of the project is to accrue beneficial impacts to



traffic and transportation, and these benefits are analyzed and quantified throughout the Tier 1 EIS.

Section 2.4 of the Purpose and Need Statement also vaguely implies that beneficial impacts to regional recreation, tourism, and economic development are also an objective of the project, similar to beneficial impacts to transportation. However, as discussed in more detail in Item 6 below, no such analysis was done.

The rest of the text in Section 2.4 focuses on the need to avoid adverse impacts to a more general list of resources, including natural resources, cultural resources, air quality, and others. While these more general impacts need to be identified and quantified to distinguish between alternatives, they are not part of the reason to do a project, and therefore have no place in the Purpose and Need Statement. In most EISs I have managed, there is a separate subsection in one of the up-front sections titled something like “Resources to be Analyzed”, where the manner in which these general resource impacts are analyzed is discussed.

Based on these observations, the “Environmental Responsibility” subsection of the Tier 2 Purpose and Need Statement should:

- Remove any discussion or suggestion that an objective of the project (i.e., a reason for doing a project) is to avoid adverse impacts to a general list of resources.
- More strongly affirm a commitment to accruing beneficial impacts to aesthetics, local recreational opportunities, and local economic development through tourism as part of the need for doing a project.

This commitment should then be followed up by actually proposing aesthetic, recreational, and tourist-centric features as part of the Proposed Action and Alternatives, and then developing a rigorous analysis of these benefits that allows MDTA to distinguish between the alternatives based on the benefits they will provide to those values.

#### 4 – Incorporate Aesthetics into the Purpose and Need and Impact Analysis

A major shortcoming of the Tier 1 EIS is that it does not mention visual impacts and aesthetics. It is not listed as an objective of the project in the Purpose and Need Statement, and adverse impacts of a bridge on a viewscape are not considered at all in the Tier 1 EIS. Given the enormous importance of the Chesapeake Bay as a nationally-prominent viewscape, this flaw is very unfortunate.

Similar to an objective to actively seek beneficial impacts on transportation, MDTA could conceivably implement a major project that has a substantial objective to correct previous adverse impacts to aesthetics by demolishing/replacing structures from a previous project. This can, and should, be an objective for this project, and there is ample precedent for doing so. In 1998, the Maryland State Highway Administration led the “*Thinking Beyond the Pavement*” workshop, which was then carried forward by the Federal Highway Administration and multiple other state transportation agencies. The purpose of this workshop, and the subsequent implementation of its ideals, focused on

the incorporation of aesthetics and context-sensitive designs into highways and bridges. Although MDTA was not a participant in that process, its implementation on hundreds of other bridges in the US establishes consideration of aesthetics as a standard practice in bridge design.

At no point in the Tier 1 EIS was aesthetics mentioned, or the impact of an alternative on aesthetics evaluated. Aesthetics is one of the most important factors in attracting tourists to an area, and also in enhancing the residents' embrace of the bridge as a symbol and source of community pride. No matter how functional a bridge, or how many tourist-friendly features are added to it, people will not go out of their way to visit an unattractive bridge. But it seems that almost every important scenic natural area or city in the US and Europe that has constructed a new bridge in the past 20 years has been willing to spend the additional funding, as an investment, to deliberately incorporate these features to attract tourists. These include Washington DC (Woodrow Wilson and Frederick Douglass bridges), New York City (Kosciuszko Bridge), San Francisco (Bay Bridge), London (Millennium Bridge), Glasgow (Clyde Arc), Newcastle (Gateshead Millennium), St. Louis (Stan Musial Bridge), Charleston (Ravenel Bridge), Savannah (Talmadge Bridge), Boston (Zakim Bridge), Omaha (Kerrey Bridge), Des Moines (Center Street Bridge), and Minneapolis (Lowry Bridge), just to name a few.

Based on my experience as a local resident, as well as my research into the bridge for my books, I have drawn the conclusion that no one thinks of this corridor as a prominent visual resource because the viewscape has already been defiled by the asymmetrical bridges. Because replacement of the current unattractive bridges with an attractive bridge would have enormous beneficial impacts to local tourism, recreation, and socio-economics, MDTA should add enhancement of aesthetics as part of the Purpose and Need for Tier 2.

#### 5 – Replace the Regional Focus with a Local Focus

A substantial flaw within Section 2.4 of the Purpose and Need Statement for Tier 1 is the reference to “regional” economic activities associated with recreation and tourism. As discussed above, MDTA may choose to adopt an objective of beneficial impacts to recreation and tourism as part of their rationale for needing a project. However, it is not clear why beneficial impacts to “regional” recreation, tourism, and development is presented as a reason to do the project, while similar beneficial impacts to “local” recreation, tourism, and development are ignored. In the end, the impact analysis in the Tier 1 EIS did not actually address regional economic benefits as implied in the Purpose and Need Statement but, even if it had, the regional focus would have been misplaced.

This suggestion to focus on local beneficial impacts is not just an attempt to support the interests of the local communities. The current focus on regional economic impacts does not allow MDTA to distinguish between alternative crossing or bridge designs. This is because all alternative crossing and bridge designs are likely to have the same impacts to regional economic resources – they will all move the same volume of traffic to the Eastern Shore. By relying only on analysis of regional impacts, it is difficult to develop alternatives that present real choices which each have distinct consequences. For instance, a classical suspension bridge versus a cable-stayed bridge of the same

size, analyzed under the Tier 1 system, would not be distinguishable from comparison of their impacts. They both have about the same construction impacts to water quality and ecological resources in the Bay. They both have the exact same effect on *regional* tourism and recreation. They might even have about the same cost. So how do you use the development of alternatives and impact analysis to distinguish them? The answer is that you have to build in a substantial focus on *local* aesthetics, *local* recreation, and *local* tourism. Only then can you come up with alternatives whose impacts are appreciably different from each other, and only by doing these comparisons can you demonstrate the value of a tourist bridge to the local community.

While it is understood that a primary impetus for the original construction of the bridge was to facilitate recreation, tourism, and development, all of those benefits were realized only on the Eastern Shore and, more recently, in Delaware. Anne Arundel County is simply a place that is to be driven through as quickly as possible without stopping at all, so a bridge that lacks any features that attract recreation or tourism, such as the current bridges, provides no benefit to Anne Arundel County. Meanwhile, the traffic jams, exhaust emissions, ecological impacts, and adverse visual impacts to the Bay occur entirely in Anne Arundel and Queen Anne's counties.

## 6 - Emphasize Beneficial Impacts in the Analysis

In most EISs, impacts to aesthetics, recreation, and economics are considered in terms of their adverse nature – the damage that the project can do to these resources. From among the Proposed Action and several alternatives, the one that does the least damage to aesthetics, recreation, and economics is preferable, and this is as far as the analysis goes. In many cases, especially those involving construction, economic benefits may be recognized in an EIS, but these benefits are usually limited either to temporary jobs during construction or to an increase in the tax base as a result of the project. Rarely are economic benefits from recreation and tourism actually used to discriminate between alternatives. However, if accruing economic benefits from recreation and tourism is actually part of the Purpose and Need Statement, then these benefits not only can be used to compare alternatives, they must be used to compare alternatives.

Although Section 2.4 of the Tier 1 Purpose and Need Statement refers to a purpose of the project to accrue beneficial impacts to regional recreation, tourism, and development, these impacts are not analyzed or quantified in the EIS, and are not actually used to distinguish among alternatives. The “analysis” of the impacts of alternatives on parks and recreation (Section 4.1.2.1) focuses entirely on adverse impacts to existing parks, and there is no further discussion of tourism or aesthetics in the document.

Ensuring that the NEPA analysis actually accomplishes a focus on beneficial impacts to local aesthetics, recreation, and tourism will be a challenge. Do you just assume that the NEPA resource leads will do this organically, without any specific direction? The answer is “no, that won't happen”, and the reason we know it won't happen is because it could have, and should have, happened on Tier 1, and it didn't. Aesthetics was not even mentioned, the only mentions of tourism or recreation were regional instead of local,

and there was no discussion of how any alternative could benefit development related to tourism or recreation.

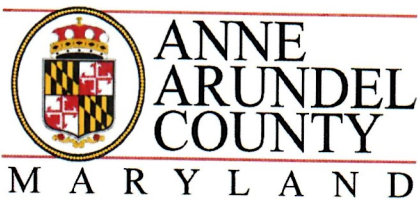
The only way to force this focus in the EIS is to explicitly call it out in the Purpose and Need Statement, put it in writing in a contractor SOW, and then continually remind the contractor's resource leads that they need to focus on these issues.

### Conclusion

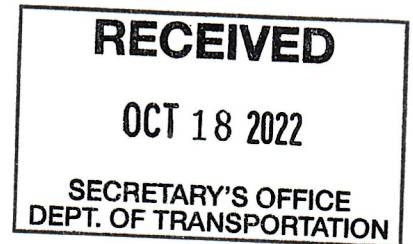
As long as Marylanders and citizens of Anne Arundel County consider the problem to consist only of Friday evening traffic jams, I fear that the current, unattractive bridges will continue to be a blot on the landscape for decades to come. Even more concerning, I believe that the addition of a third bridge which, by definition, cannot be matched with the current mismatched bridges, will damage the viewscape even more. In turn, this lack of visual appeal will continue to discourage any other improvements to local development related to tourism and recreation that may be considered in the future.

MDTA has an opportunity here to correct a major historic wrong and turn the corridor into an attraction for new residential and tourism development, not just in Delaware, but specifically in Anne Arundel County. To achieve this, the agency needs to establish this as one of the primary goals driving the need for this project, and that can only be done by developing a Purpose and Need Statement that specifically cites the promotion of local aesthetics, recreation, and tourism as needs for the project.

[REDACTED]



Office of the County Executive  
STEUART PITTMAN



October 13, 2022

Mr. James Ports  
Secretary, Maryland Department of Transportation  
7201 Corporate Center Drive  
Hanover, MD 21076

Dear Secretary Ports:

Thank you for the opportunity to provide comment on the Tier 2 NEPA Study for the Chesapeake Bay Crossing. The County offers the following comments:

- The Alternatives Analysis performed should be fully multimodal including bicycle, transit (MTA, local and private operators) and ferry modes as well as Travel Demand Management strategies. The County is willing to provide its local plans and studies documenting proposed services as supporting documentation in the modal considerations.
- While the limits of the study area are set, strategies to keep through traffic on US 50 and off local roadways should also be included in the study to potentially include such things as ramp metering during congested times, median separated through lanes, HOV lanes, etc.
- There must be up-to-date data used in the analysis. It should include pre, during and post COVID to more accurately reflect future trips of all modes.
- Consideration of revenue cost sharing for impacts to the surrounding communities or to provide supportive services should be included.
- Alternative selection should also consider operational modifications that would occur during maintenance activities in the decision matrix.
- Connected and Automated Vehicle considerations should also be included in the study.

Sincerely,

Steuart Pittman  
County Executive

***The Best Place - For All***

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*By appointment only*

October 14, 2022

**Submitted via E-mail:**

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**Re: Preliminary Comments on the Chesapeake Bay Bridge Crossing Tier 2 NEPA Study Process from Queen Anne's Conservation Association**

Dear MDTA and FHWA Officials:

Queen Anne's Conservation Association ("QACA") submits this letter in response to Maryland Transportation Authority's ("MDTA") invitation for public comments on the Chesapeake Bay Crossing Tier 2 NEPA Study, which MDTA and the Federal Highway Administration ("FHWA") are soliciting as part of FHWA's compliance with the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321-4347, and other applicable laws. We respectfully request that FHWA include this comment letter in the formal administrative record underlying the agency's Tier 2 NEPA process.

In order to fulfill its NEPA obligations in the upcoming Tier 2 Study, FHWA must: (1) evaluate all feasible Modal and Operational Alternatives ("MOAs") including those that have not yet been adequately analyzed, such as combinations of MOA strategies separate from the construction of a new bridge; (2) utilize updated baseline traffic projections—including all congestion management strategies that are either currently available or are reasonably foreseeable to be available at the conclusion of the Tier 2 NEPA process; and (3) account for the impacts of induced traffic demand arising from any new span—including the likelihood that large stretches of US 50 would need to be widened, resulting in significant cost and disruption to surrounding communities.

**Statement of Interest**

QACA is the oldest conservation organization on the Eastern Shore and is dedicated to promoting smart and sustainable growth in Queen Anne's County. It supports development that

will provide a viable and sustainable economic foundation for the county, while also ensuring the protection of its rural character, including the small towns, farms, waterways, and open spaces that shape the county's landscape.

QACA has been an active participant in MDTA's Bay Crossing Study since its inception. It has consistently advocated for accurate and methodologically sound traffic projections, as well as using all available travel management strategies to mitigate peak traffic congestion before committing to a costly, disruptive, and environmentally damaging new bridge. To this end, QACA previously submitted detailed comments on the Bay Crossing Study Tier 1 Draft Environmental Impact Statement ("DEIS").<sup>1</sup> Included in those comments was a rigorous study by independent traffic engineering firm, AKRF, commissioned by QACA to evaluate the Purpose and Need Assessment ("PNA") first published by MDTA in 2019.<sup>2</sup> AKRF is a nationally recognized traffic engineering firm with impeccable credentials, which FHWA and other federal and state agencies routinely retain to manage and coordinate all aspects (including preparation of Draft and Final EISs) of traffic and highway engineering projects throughout the United States.

## **BACKGROUND**

Relevant background information, including the applicable legal framework and a brief summary of the Bay Bridge Crossing NEPA process, is described below.

### **Statutory and Regulatory Framework**

NEPA was enacted in 1970 to protect human health and the environment by ensuring that "unquantified environmental amenities and values" are given "appropriate consideration in decisionmaking." 42 U.S.C. § 4332(2)(B).

This foundational environmental law has twin aims. It establishes transparent procedures that require federal decisionmakers to consider and account for the environmental impacts of federal projects. NEPA also requires agencies to inform the public about the environmental impact of federal projects, along with reasonable alternatives, so that the public may weigh in on the decisionmaking process and ensure that the ultimate agency decision is careful and well-informed. *See* 40 C.F.R. § 1500.1(a). Under NEPA, agencies have a duty to take a "hard look" at potential environmental impacts and environmentally enhancing alternatives "as part of the agency's process of deciding whether to pursue a particular federal action." *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 100 (1983).

NEPA's substantive goals are effectuated through regulations promulgated by the Council on Environmental Quality ("CEQ"), which are "binding on all Federal agencies." 40

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<sup>1</sup> *See* Letter from QACA, April 22, 2021, to Bay Crossing Study, re: Comments of Queen Anne's Conservation Association on Bay Crossing Study Tier 1 DEIS.

<sup>2</sup> *See* AKRF, *Chesapeake Bay Bridge Crossing Study Transportation Study*, December 15, 2020 (prepared for Queen Anne's Conservation Association).



C.F.R. § 1500.3. Specifically, NEPA requires agencies to prepare a “detailed statement” i.e., an EIS—for any “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. §4332(C). An EIS must describe, among other items, the purpose and need for the proposed action, the alternatives to the action, the affected environment, and the environmental consequences of alternatives. *See* 40 C.F.R. § 1502.10; *see also* 42 U.S.C. § 4332(2)(C). Relevant environmental impacts include “ecological, . . . aesthetic, historic, cultural, economic, social, or health” impacts. 40 C.F.R. § 1508.1(g)(4).

The purpose and need assessment for the proposed action serves to “delimit the universe of the action’s reasonable alternatives.” *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 195 (D.C. Cir. 1991). However, the agency’s purpose must not be too narrow. “[A]n agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency’s power would accomplish the goals of the agency’s action, and the EIS would become a foreordained formality.” *Id.* at 196.

Once the agency has crafted a project’s goals, it must turn to evaluating a reasonable range of alternatives to the proposed action. The alternatives analysis has long been described as the “the heart” of the NEPA process.<sup>3</sup> The agency must: “[e]valuate reasonable alternatives to the proposed action, and, for alternatives that the agency eliminated from detailed study, briefly discuss the reasons for their elimination,” and also “[d]iscuss each alternative considered in detail, including the proposed action, so that reviewers may evaluate their comparative merits.” 40 C.F.R. § 1502.14(a)-(b). The agency is also required to retain a “no action” alternative in its analysis in order to compare the proposed action to baseline conditions. *Id.* § 1502.14(c).

Public input is a critical component of the NEPA process. After publishing a notice of intent to prepare an EIS in the Federal Register, an agency must engage in a “scoping” process designed to determine the scope of the issues to be addressed in the EIS and to identify significant issues related to the proposed action. *Id.* § 1501.9. “During the scoping process, the agency must, among other things, invite participation and input by federal, state, and local agencies, as well as the public.” *Webster v. U.S. Dep’t of Agric.*, 685 F.3d 411, 418 (4th Cir. 2012); *see also* 40 C.F.R. § 1501.9(c) (identifying public outreach and communication options available to agencies during the scoping process). “Utilizing information acquired during the scoping process, the agency is then to prepare an initial draft EIS, which it must make publicly available and circulate to other agencies for feedback”; “[a]fter doing so, the agency must draft a final EIS that addresses any comments.” *Webster*, 685 F.3d at 418 (internal citations omitted); *see also* 40 C.F.R. § 1501.10(d) (detailing order and time limits for each constituent part of the NEPA process).

Finally, the EIS “shall be prepared early enough so that it can serve as an important practical contribution to the decision-making process and will not be used to rationalize or justify decisions already made.” 40 C.F.R. § 1502.5.

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<sup>3</sup> Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations, Council on Environmental Quality, 46 Fed. Reg. 18026 (March 23, 1981, as amended 1986).

## *Factual Summary*

FHWA, working alongside MDTA, recently completed the first step in a two-tier approach under NEPA “to address existing and future congestion at the William Preston Lane Jr. Memorial Bridge (Bay Bridge) and its approaches along US 50/301.” Tier 1 FEIS/ROD at 1-1 (hereinafter Tier 1 FEIS).

The agencies separated the Bay Crossing Study (“BCS”) into two parts. The Tier 1 NEPA Study was intended to identify “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” using a “high-level qualitative review of cost, engineering, and environmental data.” Tier 1 FEIS at 1-2, 1-3.

By contrast, the Tier 2 NEPA Study is intended to “result in project-level (site-specific) decisions made through evaluation of specific alignments within” the selected corridor and “would include detailed engineering design of alternative alignments and the assessment of potential environmental impacts associated with those alignments.” *Id.* at 1-2.

### *Background*

On April 14, 2022, FHWA signed a combined Tier 1 FEIS and Record of Decision (“ROD”). The Tier 1 FEIS/ROD was published in the Federal Register on April 29, 2022. *See* 87 Fed. Reg. 25,563 (Apr. 29, 2022). FHWA clarified that the Tier 1 FEIS/ROD did not constitute a new analysis, but rather merely updated limited aspects of the agency’s Tier 1 DEIS, issued in February 2021. Specifically, the Tier 1 FEIS only responded to public comments and updated the analysis where there were material changes to the evaluation in the DEIS. *See* Tier 1 FEIS at 1-1 (“The content of the DEIS remains valid except where changes are noted in this FEIS.”).

In the Tier 1 FEIS/ROD, FHWA selected Corridor 7 as the Preferred Corridor Alternative; thus, FHWA stated that this would be the only corridor option moving forward to the Tier 2 EIS/ROD process. *See* Tier 1 FEIS at 7-1, 7-4. FHWA determined that Corridor 7 is the “environmentally preferable alternative,” although that determination was limited to a comparison with only Corridors 6 and 8—i.e., FHWA did not compare Corridor 7 to MOAs in reaching this conclusion. *Id.* at 7-5, 7-6. Detailed environmental analysis and mitigation of impacts was also delayed: “[a] potential future Tier 2 NEPA study would consider alternatives within the Tier 1 Selected Corridor at a level of detail that would allow for consideration of all practicable means to avoid or minimize environmental harm from Tier 2 alternatives.” Tier 1 FEIS at 7-6.

According to the BCS website, the Tier 2 Study will “refine the Purpose and Need for a project-level analysis and focus on the two-mile-wide Selected Corridor Alternative (Corridor 7).” MDTA, *Tier 2 Study Process - MDTA Chesapeake Bay Crossing Study*, <https://baycrossingstudy.com/tier-2-study-process> (last visited Sept. 29, 2022). Specifically, it will:

evaluate a No-Build alternative and a range of build alternatives including various alignments, crossing types and modal and operational alternatives. During the Tier

2 Study, the MDTA will evaluate specific transportation alternatives within the Study Corridor, including conducting detailed engineering and environmental impact analyses. The Tier 2 Study also will identify mitigation measures for any unavoidable environmental impacts.

*Id.* MDTA secured funding for the Tier 2 NEPA Study in June 2022, and the agencies recently initiated coordination with the public. *Id.* In addition to offering several open houses in connection with the Tier 2 NEPA Study, the agencies invited the public to submit comments prior to October 14, 2022 to inform the appropriate scope of the Tier 2 NEPA Study.

### Tier 1 Alternatives Analysis

The Tier 1 NEPA Study identified the following three primary needs that the agencies used as the basis for evaluating the feasibility of corridor alternatives: (1) adequate capacity; (2) dependable and reliable travel times; and (3) “flexibility to support maintenance and incident management in a safe manner.” Tier 1 FEIS at 1-2, 1-3.

The initial range of alternatives for the Tier 1 NEPA Study “included the No-Build Alternative, four Modal and Operational Alternatives (MOAs), and 14 corridor alternatives.” DEIS at 3-1, *see also* Tier 1 FEIS at 7-2. The Corridor Alternatives “were developed to include potential Chesapeake Bay crossing locations and the approach roadways that would tie into the existing roadway network.” *Id.* The No-Build Alternative “included existing infrastructure, planned future improvements, and regular maintenance of the Bay Bridge.” Tier 1 EIS at 7-2. The agencies’ consideration of MOAs included the following *stand-alone* options: Transportation Systems Management / Travel Demand Management (“TSM/TDM”), ferry service, bus rapid transit (“BRT”), and rail transit. *Id.* FHWA defined TSM/TDM as “infrastructure and operational changes to improve the function of the existing roadway network without adding major new capacity.” *Id.* FHWA noted that “[i]mprovements evaluated included AET [all-electronic tolling] or variable tolling” and that “AET at the Bay Bridge has since been implemented as of Spring 2020.” *Id.*

### FHWA’s Rejection of all Modal and Operational Alternatives

At the conclusion of the Tier 1 Study, FHWA determined that none of the MOAs—standing alone—would meet the project’s purpose and need and thus they were “eliminated from further consideration as stand-alone alternatives.” Tier 1 FEIS at 7-2. Specifically, the TSM/TDM, as well as BRT and ferry service, alternatives were eliminated from further consideration “because they would not: provide adequate capacity to relieve congestion at the existing Bay Bridge, provide dependable and reliable travel times, or provide flexibility to support maintenance and incident management at the existing bridge.” *Id.*

Although the FEIS did not explain the basis for eliminating the MOAs without considering whether they could, *in combination*, satisfy the purpose and need, the prior DEIS attempted to explain why the MOAs were considered only in isolation from one another:

The MOAs were developed as part of the range of alternatives to determine if a different mode, or operational changes, could meet the Purpose and Need as stand-alone alternatives. In other words, this Tier 1 screening is intended to determine if any of these MOAs could meet the Purpose and Need independent of other corridor alternatives *or MOAs*. The MOAs were evaluated based on the Purpose and Need elements of adequate capacity, dependable and reliable travel times, and flexibility to support maintenance and incident management at the existing Bridge.

DEIS at 3-8 (emphasis added). As such, FWHA concluded that:

Based on the MOA screening analysis results, *all MOAs are recommended to be eliminated from further consideration as stand-alone alternatives*. TSM/TDM, Ferry Service, BRT, and Rail Transit each fail to meet the Purpose and Need of the study because they would not provide adequate capacity to relieve congestion at the existing bridge, provide dependable and reliable travel times, or provide flexibility to support maintenance and incident management at the existing bridge.

DEIS at 3-15, 3-15 Table 3-4 (emphases added).

Further, the DEIS made clear that FHWA included the No-Build alternative only to serve as a baseline and not as an actual alternative that might be selected. There, FHWA explicitly noted that the No-Build alternative “will not relieve traffic congestion and improve travel times on the existing Bay Bridge.” DEIS at 3-26. Instead, the No-Build alternative was “retained throughout the NEPA process to serve as a baseline of comparison.” *Id.*

Thus, with no MOA alternatives remaining—and a No-Build alternative that was by design insufficient to meet the Study’s purpose and need—FHWA only considered the remaining alternatives, *all of which* involved new spans of similar bridge or bridge-tunnel configurations at 14 different Corridor locations.<sup>4</sup> After narrowing its review to Corridor 7, *see* Tier 1 FEIS at 7-4, the Tier 1 ROD made clear that FHWA intends to restrict any Tier 2 EIS/ROD to examining a limited suite of functionally indistinguishable action alternatives within Corridor 7, including

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<sup>4</sup> Incidentally, Governor Hogan declared in 2019—while the Tier 1 Study was underway and years before the DEIS was published—that “[t]here is only one option I will ever accept: adding a third span to our existing Bay Bridge,” and that a third span “is the only serious way forward.” Katherine Shaver, *Gov. Hogan: ‘There is only one option I will ever accept’ to relieve Bay Bridge backups*, WASHINGTON POST (Aug. 28, 2019), <https://www.washingtonpost.com/transportation/2019/08/28/gov-hogan-there-is-only-one-option-i-will-ever-accept-relieve-bay-bridge-backups/> (quoting Governor Hogan’s August 28, 2019 Twitter posts). In doing so, Governor Hogan potentially undermined the NEPA process, which is designed to promote objective and well-informed decisionmaking and shall not be used “to rationalize or justify decisions already made.” 40 C.F.R. § 1502.5. Notably, the DEIS itself also treated a new span as a foregone conclusion: “Thus, this Tier 1 document is intended to identify the general location of a new Bay Crossing so that a site-specific study in Tier 2 can avoid further consideration of the corridor location decision made in Tier 1.” DEIS at 1-6.

different bridge and/or bridge-tunnel alignments within that two-mile-wide corridor, and replacement of the existing Bay Bridge. *Id.* at 7-7.

However, because the Tier 1 Study was designed to defer detailed environmental impacts analysis until the subsequent, site-specific Tier 2 Study, FHWA has avoided taking a “hard look” at the comparative environmental impacts of bridge and *non-bridge* alternatives (e.g., MOAs in combination). Instead, FHWA has deferred this legally required analysis until the only action alternatives under consideration are bridge or bridge/tunnel alignments within a single narrow corridor that will result in comparable environmental effects.<sup>5</sup> In other words, without the benefit of any detailed analysis of comparative environmental impacts among bridge and non-bridge alternatives that can feasibly achieve the stated purpose and need, FHWA committed itself to a new bridge or bridge/tunnel configuration and sidestepped looking at combinations of MOA alternatives or other practicable options that might have avoided exorbitantly costly and environmentally damaging bridge construction in an ecologically sensitive area.

### Responses to Comments in the Tier 1 FEIS

A number of commenters expressed concerns about the elimination of the MOA alternatives, especially in combination with one another and distinct from a bridge construction alternative. As FHWA acknowledged: “[i]n particular, some felt that various MOA, such as TSM/TDM, transit, and ferry service could achieve more in combination, rather than as standalone alternatives as assessed in the DEIS” and “[m]any commenters felt that MDTA’s primary aim should be to reduce the demand for travel across the existing bridge, or redistribute the demand more efficiently, rather than to provide new capacity.” Tier 1 FEIS, App. A at A-17; *see also id.* at A-19 (addressing comments that MOA should be considered in greater detail). In response, however, FHWA simply reiterated that as stand-alone alternatives none of the MOAs met the Study’s Purpose and Need, and once again failed to explain why the DEIS and FEIS only considered the MOAs in isolation, rather than in combination.<sup>6</sup>

QACA submitted a report prepared by AKRF in December 2020, *Chesapeake Bay Bridge Crossing Transportation Study* (“AKRF Study”), to assess “whether there is a current

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<sup>5</sup> FHWA acknowledged that as part of the Tier 1 process, it had not analyzed—let alone adopted—all practicable means to avoid or minimize environmental harm from the selected alternative, because the agency deferred those considerations until a subsequent NEPA process. *See* Tier 1 FEIS at 7-6 (“A potential future Tier 2 NEPA study would consider alternatives within the Tier 1 Selected Corridor at a level of detail that would allow for consideration of all practicable means to avoid or minimize environmental harm from Tier 2 alternatives.”).

<sup>6</sup> FHWA stated only that “[t]he Tier 1 Study has determined that individual MOAs, implemented as standalone alternatives, would not meet the Purpose and Need for the Study. However, combinations of multiple MOA[s], such as TSM/TDM, transit and ferry service, would also be evaluated in a Tier 2 study. The Tier 2 study would be focused on the evaluation of alternatives within Corridor 7, including alternatives for new crossing capacity, upgrades to approach roadways, and combinations of MOA within the corridor.” Tier 1 FEIS, App. A at A-18; *see also id.* at A-16, A-19 (same).

need for replacement of the Chesapeake Bay Bridge Crossing from a traffic operations perspective.” AKRF Study at 2. This report from independent traffic engineering experts raised serious concerns about the agencies’ traffic growth projections and assessment of future congestion in the DEIS; the report ultimately concluded that “there will not likely be a need for a replacement bridge by 2040 for either traffic or structural purpose.” *Id.* at 3. It addressed the impact of different traffic management strategies, including variable tolling and management of the reversible lane, along with several examples where such strategies had been successfully employed by FHWA and others.

Without elaborating, FHWA disregarded the examples of variable tolling on the purported basis that they were not “comparable facilities in the region.” Tier 1 FEIS, App. C at C-6. Further, the agency claimed that while congestion pricing (variable tolling) would “help peak period congestion,” it would not “support the project need to provide ‘flexibility to support maintenance and incident management in a safe manner,’ by increasing volumes during off-peak periods and potentially reducing the number of off-peak hours during which lane closures could be accommodated.” *Id.* at C-6.

With regard to different management practices for the reversible lane, such as running them as High-Occupancy Vehicle (“HOV”) or High-Occupancy Toll (“HOT”) lanes, FHWA reiterated that “[b]oth variable tolling and HOV/HOT lanes are Transportation Systems Management/Transportation Demand Management (TSM/TDM) strategies, which would be further considered in a potential future Tier 2 Study, in the context of Corridor 7”; “[t]his would include the evaluation of all Modal and Operational Alternatives (MOA) during any future Tier 2 alternatives analysis.” *Id.*

### Tier 2 NEPA Study

The recently commenced Tier 2 NEPA Study is intended to: “result in decisions made on a project-level (site-specific) analysis, through evaluation of specific alignments within the Tier 1 SCA.” Tier 1 FEIS at 7-7. Specifically, the Tier 2 NEPA Study will assess both the micro-alignment and type of future crossing, i.e. “a bridge, a bridge-tunnel, or replacement of the existing Bay Bridge.” Tier 1 FEIS at 7-7.

In addition, the Tier 2 Study will, among other things, include:

- Refinement of Purpose and Need to reflect project-level issues;
- Updated traffic analysis to reflect current conditions at the time of a Tier 2 study;
- Consideration of alignments within Corridor 7;
- More detailed engineering of Corridor 7 alternatives, evaluation of crossing types, and specific assessment of potential environmental impacts;
- Consideration of MOAs in combination with a new crossing and/or other MOAs within Corridor 7;
- Public and cooperating agency involvement and response to Tier 2 DEIS comments;
- Continued consideration of the No-Build Alternative that FHWA has stated will not meet the Purpose and Need.

See Tier 1 FEIS at 7-7, 7-8; *see also* Tier 1 FEIS App. A at A-17 (outlining analyses to be included in Tier 2). The Tier 2 study will “also include evaluation of potential traffic impacts to local roadways in the vicinity of new crossing infrastructure.” Tier 1 FEIS App. A at A-13.

With regard to updated traffic projections, FHWA has committed to collecting revised traffic volume data and preparing “updated traffic volume forecasts, using a [current] updated travel demand model.” *Id.* at A-27. Specifically, “[r]evised traffic analysis in a Tier 2 study would provide updated growth forecasting, including any foreseeable changes resulting from COVID-19 or other potential future changes in travel and commuting patterns. A new project-level NEPA analysis would have to demonstrate a continued need for a new crossing in order to advance any build alternative . . . .” *Id.* at A-18. In addition, as FHWA stated in the DEIS, the No-Build Alternative “will be updated as needed during Tier 2 to reflect future [infrastructure] projects that were not planned and programmed as of Project Scoping in 2017, such as implementation of [AET] or eliminating the physical toll plazas and the option to pay cash at those facilities,” as well as TSM/TDM “measures such as improvements to the contraflow operation on the existing bridge [that] may be implemented.” DEIS at 3-1.

## **DISCUSSION**

By excluding consideration in the Tier 1 Study of MOAs (including various TSM/TDM options) working together in combination, FHWA has never before considered a reasonable range of alternatives to the construction of a costly and environmentally damaging new bridge; therefore, FHWA must do so now.

As it currently stands, the only alternatives that FHWA is carrying forward into the Tier 2 Study are minor variations of the alignment and configuration of a new crossing within the narrow, two-mile width of Corridor 7. To the extent MOA strategies will be considered at all in the Tier 2 Study, FHWA says that any such consideration will only be in connection with a major new construction project. Notably, although the No-Build Alternative was retained and carried forward into the Tier 2 Study, FHWA has made clear that it is not a viable alternative that FHWA could select at the conclusion of the NEPA process. *See* DEIS at 3-26 (finding that the No-Build Alternative “will not relieve traffic congestion and improve travel times on the existing Bay Bridge” and was only “retained throughout the NEPA process to serve as a baseline of comparison”).

In other words, despite having at its disposal a suite of well-documented and highly effective TSM/TDM and other MOA strategies that have never been adequately analyzed *in combination* with one another (independent of new construction), FHWA intends to consider only those alternatives that include new construction of a massive bridge or bridge/tunnel in Corridor 7. This is inadequate on its face, but particularly so where independent traffic engineering and management experts have supplied extensive documentation and evidence demonstrating the potential of TSM/TDM and other MOA strategies—working in combination—to satisfy the project’s purpose and need. FHWA cannot justify refusing to evaluate these combined approaches, yet the agency appears poised to do just that.



As explained in more detail below, FHWA must comply with NEPA in its Tier 2 Study by adequately evaluating all of the MOA strategies detailed below—not in isolation, but in combination with one another in a scenario without any bridge or bridge/tunnel construction. Further, to comply with NEPA, FHWA must measure these combined approaches against updated traffic projections that reflect current traffic flows, the addition of AET in 2020, the anticipated introduction of automated lane closures this fall, as well as any other technological advances in traffic management that will foreseeably reduce congestion in the future during the projected lifespan of this agency action. FHWA must also consider the impacts of induced traffic demand from any potential new span, which would itself potentially necessitate a widening of approach and departure roadways with further associated cost and delay.

Only then can FHWA lawfully assess whether combinations of these MOA strategies, in light of updated traffic data and foreseeable advances in vehicular and related technology, are sufficient to mitigate future congestion across the existing bridge without the unnecessary expenditure of taxpayer funds and damage to Maryland’s ecosystem and natural resources.

**1. FHWA Must Consider All Available and Foreseeable MOA Alternatives in Combination Prior to Committing to a New Span**

FHWA and MDTA must undertake a rigorous analysis of the following TSM/TDM alternatives—working together in concert, and also in combination with all other available or foreseeable MOA alternatives, such as enhanced ferry service, BRT, and rail transit, to reduce traffic volume and congestion on the Bay Bridge. These *non-exhaustive* options for addressing the purpose and need, as discussed below, include variable tolling, enhanced management of the reversible lane, and other TSM/TDM strategies such as: HOT/HOV lanes, best practices in traffic incident management, connected and automated vehicles (“CAVs”), wind barriers, and variable speed limit signs. FHWA may well know of additional TSM/TDM options that are currently, or will become during the planning time frame for this action, technically and financially practicable—NEPA requires consideration of those measures, in combination with all others, as well. Importantly, best practices in traffic management must be included in any combination of MOAs under evaluation in order to satisfy the third component of the Study’s purpose and need: flexibility to support maintenance and incident management in a safe manner.

*Variable Tolling During Peak Periods*

Variable tolling is an appropriate countermeasure to reduce congestion on the existing bridge crossing. A portion of the crossings during peak directional traffic flows are discretionary and could be made at times other than peak periods. Under variable tolling regimes, MDTA can increase toll costs during periods of peak demand and reduce toll costs during off-peak times to encourage a deliberate shift in traffic patterns to avoid or significantly reduce congestion. This could be implemented either through time-of-day pricing or dynamic pricing, which responds to real-time congestion and traffic conditions.

Variable tolling is a highly effective means of reducing traffic congestion in situations comparable to the Bay Bridge, and its efficacy is well-documented at similar variable tolling facilities throughout the United States. A representative sample of such facilities include:

- I-95 Express Toll Lanes, Baltimore, Maryland
- Virginia Express Lanes (I-495, I-95)
- Port Authority of New York and New Jersey Crossings
- I-78 Newark Bay Extension, New Jersey
- I-276 Pearl Harbor Memorial Extension, New Jersey
- I-95 New Jersey Turnpike, New Jersey

Myriad technical studies have also documented substantial reductions in travel time achieved by use of variable tolling.<sup>7</sup>

In light of the well-established efficacy of variable tolling in achieving FHWA’s stated goals for this action, FHWA must evaluate, in combination with other TSM/TDM strategies described herein (along with other MOAs, such as enhanced ferry service, BRT, and rail transit), variable toll pricing during peak demand. Given that the Bay Bridge exhibits peak traffic primarily during summer weekends, it is a particularly suitable candidate for variable tolling during those times.

#### Enhanced Management and Optimization of the Reversible Lane

The Chesapeake Bay Bridge currently has a reversible/contra-flow lane on the westbound span to redistribute roadway capacity from the westbound direction to the eastbound direction during peak periods. This is one example of a managed lanes strategy; however, the effectiveness of the current implementation has been hindered due to a number of constraints including, among other things, inability to use the reversible lane during high-wind events, inefficient transitions, and rigid scheduling.

The ability of the reversible lane to reduce congestion could be substantially enhanced by the strategies described below. FHWA must give full consideration to *all* of these options, in combination with the other TSM/TDM strategies contained herein and the traffic congestion reduction efficiencies gained from expanded and more effective ferry, bus, and rail transit, as part of the Tier 2 NEPA Study.

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<sup>7</sup> For example, MDTA opened the I-95 Express Toll Lanes in Baltimore in December 2014, resulting in a *12 percent reduction in delay* in travelers in the general purpose (non-tolled lanes). See State Highway Administration, Maryland Department of Transportation, I-270 & I-495 Managed Lane Study Appendix C – Traffic Analysis Technical Report (May 2020), [https://oplanesmd.com/wp-content/uploads/2020/07/APP-C\\_MLS\\_Traffic-Tech-Report-Appendices.pdf](https://oplanesmd.com/wp-content/uploads/2020/07/APP-C_MLS_Traffic-Tech-Report-Appendices.pdf). Similarly, The I-495 Express Lanes were opened in November 2012 along I-495 from the Springfield Interchange to the Dulles Toll Road. The I-495 northbound free general-purpose lanes experienced a seven percent reduction in travel time and the I-95 southbound free general purpose lanes experienced a *15 percent reduction in travel time* over the last five years, compared to before the construction of the managed lanes. See Op Lanes Maryland, Maryland Department of Transportation, *Have Managed Lanes worked elsewhere?*, <https://oplanesmd.com/updates/faqs/>.

### Truck / bus restrictions in the reversible lane

The existing reversible lane on the Bay Bridge is available to all vehicles, including trucks, buses, and other high-profile vehicles. During high-wind events, these vehicles are more susceptible to the risk of swerving into oncoming traffic and, as such, the reversible lane must be closed out of precaution during these not-infrequent weather events. However, by banning these high-profile vehicles, the reversible lane could continue to be used by ordinary passenger cars during high-wind events and thereby be used more frequently and effectively to substantially reduce congestion on the bridge.

FHWA must consider, in combination with the other MOA strategies described herein, adding truck, bus, and/or higher-profile vehicle restrictions for the reversible lane in order to increase the number of days and hours this lane can be used and avoid weather-related closure.

### Manage the reversible lane on a dynamic schedule

The reversible lane on the Bay Bridge is currently reversed on a fixed schedule and is not responsive to real-time traffic demands. In other words, there are times when a reversible lane could be used to reduce congestion on the bridge that it is not actually being utilized at present.

With the expected introduction of an Automated Lane Closure System (“ALCS”) later this year, discussed further below, QACA hopes that the reversible lane will be managed on a dynamic schedule going forward. If this will, in fact, be part of the new baseline it must be evaluated as such and included within the updated traffic projections as described below. On the other hand, if there are not yet plans in place to actively manage the ALCS based on real-time, dynamic traffic data, FHWA must evaluate this simple strategy in the Tier 2 Study, in combination with other TSM/TDM and MOA strategies identified herein, as means to reduce congestion across the bridge.

### HOV/HOT restrictions in the reversible lane

Implementation of HOV or HOT lane restrictions can provide additional incentives to reduce congestion and keep traffic moving. With regard to improved management of the reversible lane, it either can be restricted to HOV or could be managed as an HOT lane with higher tolls for vehicles that do not meet the occupancy requirement. Both strategies can induce a portion of travelers during peak directional traffic flows to carpool, while the HOT strategy would still allow mobility options for those vehicles with 1 or 2 occupants.

FHWA must consider, in combination with other TSM/TDM strategies described herein, incorporating HOV or HOT lane restrictions for the reversible lane in order to improve traffic flow in that lane.

### *Additional Traffic Management Strategies*

In addition to and in combination with both variable tolling and enhanced management of the reversible lane—analyzed in combination with traffic reduction achieved from increased ferry, BRT, and rail transit—FHWA must consider the following TSM/TDM alternatives:

### HOV/HOT lane restrictions in one lane in the peak traffic direction

As discussed above for use in the reversible lane, MDTA can also designate static lanes as HOV/HOT lanes to encourage carpooling among a subset of travelers during times of peak demand. HOT lanes encourage shared ridership, while offering another option to drivers of vehicles that do not meet standard occupancy requirements, yet wish to quickly bypass any peak demand traffic congestion.

By way of example, there could be a lane on the Bay Bridge that is toll-free late on Friday evenings and very early Saturday mornings in the summer months for vehicles with 3 or more passengers, while charging a higher toll for vehicles in that lane with only 1 or 2 passengers. Based on examples throughout the country involving comparable traffic situations, this proposed lane could result in improved traffic flow during these times. Indeed, HOT lanes are increasingly being utilized to mitigate congestion, including the following examples:<sup>8</sup>

- US 290 Northwest Freeway QuickRide HOT Lanes in Houston, Texas
- I-394 and I-35W MnPass in Minneapolis, Minnesota
- I-25 Express Lanes / US 36 in Denver, Colorado
- I-15 Express Lanes in Salt Lake City, Utah
- SR 167 HOT Lanes Pilot Project in Seattle, Washington
- I-95 Express Lanes in Miami, Florida
- I-15 FasTrak in San Diego, California
- I-680, Alameda County, California
- I-85 in Atlanta, Georgia

FHWA must consider, in combination with the other TSM/TDM strategies contained herein in addition to all other MOA strategies, implementing HOV/HOT lane restrictions during peak times in order to reduce demand and improve traffic flow in the selected lane.

### Best practices in traffic management

The “flexibility to support maintenance and incident management in a safe manner” is identified as one of the three primary needs for the Tier 1 NEPA Study and will presumably be used as the basis for evaluating alternatives during Tier 2. Tier 1 EIS at 1-3. As such, and in order to meet the project’s stated purpose and need, each of the TSM/TSD strategies detailed herein (along with enhanced ferry, BRT, and rail transit) must be considered in combination with available and foreseeable best practices in traffic management, including, at minimum, the following:

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<sup>8</sup> *HOT Lanes Marketing Toolkit - HOT Lanes, Cool Facts* (June 18, 2020), <https://ops.fhwa.dot.gov/publications/fhwahop12031/fhwahop12027/index.htm>.

- Improvements to transportation management centers—e.g., incident detection and verification utilizing closed-circuit television cameras
- Improved traveler information systems—e.g. variable message signs
- Optimized incident response—e.g., tow procedures, patrols, scene management, and automated lane closures

FHWA must consider these traffic management best practices in combination with all of the TSM/TDM strategies contained herein, alongside all other MOA approaches, to ensure that improved maintenance and incident management are adequately supported.

### Connected and Automated Vehicles

Before committing to an extremely expensive and environmentally damaging new bridge, FHWA must also address as part of its alternatives analysis the expected efficiencies in traffic reduction that can be attained by equipping at least one lane of the existing bridge with technology to platoon CAVs during times of peak demand. Although full saturation of CAV technology in the entire vehicle market is not anticipated until later this century, full CAV automation is expected in the next decade to be available and begin to saturate the market, allowing individual travel lanes with CAV-only restrictions to be much more efficient than comparable non-CAV general purpose travel lanes. CAV technology has the potential to greatly expand the capacity of the existing spans by reducing separation between vehicles and significantly smoothing traffic flow.

CAVs offer two important benefits to managing congestion. First, a connected vehicle can platoon itself with others and have an awareness of red lights at traffic signals up ahead. This reduces the distances between vehicles and improves on human perception/reaction times, reducing or eliminating stop-and-go traffic and smoothing out flow much more evenly. Second, automated features, like those already standard on many newer vehicles, can reduce rear-end crashes due to driver inattention, resulting in fewer crashes and incidents to be investigated and cleared. This would directly support the third prong of FHWA’s stated purpose and need for the Tier 2 Study.

This rapidly evolving technology is on the near horizon and is certain to favorably reduce congestion well before the 2040 timeframe adopted and utilized by the FHWA to justify a new bridge. There could be an almost 10 percent increase in traffic capacity with the expected saturation of 20 percent CAVs by 2040. Indeed, other Maryland agencies are already incorporating CAV technology in numerous planning areas. For example, Maryland’s CAV Working Group “led and collaborated on numerous CAV-related research, education, and planning efforts in 2021.”<sup>9</sup> The multi-agency team includes, among others, the Maryland

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<sup>9</sup> Kristen E. Humphrey, *Maryland’s Connected and Automated Vehicle (CAV) Working Group: Celebrating 2021 Accomplishments; Looking Forward to 2022*, MARYLAND PLANNING BLOG (March 31, 2022), <https://mdplanningblog.com/2022/03/31/marylands-connected-and-automated-vehicle-cav-working-group-celebrating-2021-accomplishments-looking-forward-to-2022/>.

Department of Planning (“MDP”), the Maryland Department of Transportation (“MDOT”), and the Maryland Highway State Office.<sup>10</sup> It has “worked to incorporate CAV into several statewide plans including the State Freight Plan, Transit Plan, Consolidated Transportation Program, and the Strategic Highway Safety Plan.”<sup>11</sup>

In April 2022—the same month that FHWA signed the Tier 1 FEIS and ROD—the MDOT State Highway Administration (“MDOT SHA”) released a survey inviting the public to comment about CAV technology in order to “help MDOT SHA develop a strategy for increasing public awareness of CAV-related technologies” and “plan for a future of travel with self-driving vehicles.”<sup>12</sup>

Likewise, the 2021-2025 MDOT SHA’s CAV Implementation Plan, published in June 2021 prior to FHWA’s issuance of its Tier 1 FEIS and ROD, states that:

MDOT SHA has an opportunity to propose innovative solutions that shift from major infrastructure projects to projects blended with TSMO [Transportation System s Management Operations]<sup>13</sup> and CAV solutions.<sup>14</sup> The use of innovative solutions would *reduce the reliance on roadway expansion projects* since technology-based projects in the TSMO and CAV realm offer more economic and potentially safer solutions. One could envision using CAV platooning solutions in congested conditions to significantly reduce rear-end and sideswipe crashes where aggressive or distracted driving causes unnecessary frustration and delays.<sup>15</sup>

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<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

<sup>12</sup> Kristen E. Humphrey, *Connected and Automated Vehicles: Help Shape the Future of Travel in Maryland*, MARYLAND PLANNING BLOG (April 21, 2022), [https://mdplanningblog.com/2022/04/21/connected-and-automated-vehicles-help-shape-the-future-of-travel-in-maryland/?utm\\_medium=email&utm\\_source=govdelivery&utm\\_term=](https://mdplanningblog.com/2022/04/21/connected-and-automated-vehicles-help-shape-the-future-of-travel-in-maryland/?utm_medium=email&utm_source=govdelivery&utm_term=) (publishing survey by the MDOT SHA).

<sup>13</sup> TSMO is “an integrated set of strategies to optimize the performance of existing infrastructure through the implementation of multimodal and intermodal, cross-jurisdictional systems, services, and projects designed to preserve capacity and improve security, safety and reliability of the transportation system.” 23 U.S.C. § 101(a)(30); *see also* <https://ops.fhwa.dot.gov/tsmo/index.htm> (collection of links with answers to common questions about TSMO).

<sup>14</sup> 2021-2025 MDOT SHA Connected and Automated Vehicles Implementation Plan (June 2021) at 15, [https://www.roads.maryland.gov/OTMO/2021-2025\\_MDOTSHA\\_CAVImplementationPlan\\_Final.pdf](https://www.roads.maryland.gov/OTMO/2021-2025_MDOTSHA_CAVImplementationPlan_Final.pdf).

<sup>15</sup> *Id.* (emphasis added).



Given this forward-looking approach by both MDOT and MDP and the substantial consideration being given to CAVs in other comparable planning processes in Maryland, it is clear that CAVs must also be incorporated into Bay Bridge forecasting. This is particularly so in light of their reasonably foreseeable wide-ranging deployment during the time frame in which FHWA purports to address the purpose and need of this action. FHWA must consider equipping at least one lane of the existing bridge with technology to platoon CAVs during times of peak demand, in combination with all TSM/TDM and other MOA strategies, in its Tier 2 NEPA Study.

### Wind barriers

The addition of wind barriers on the existing Bay Bridge spans—permeable screens or baffle barriers that direct winds over the bridge—could help avoid weather-related closure of the reversible lane by eliminating the impact of higher-wind weather events on high-profile vehicles, such as buses and trucks. Such measures have been demonstrated in comparable contexts to significantly reduce traffic congestion during certain inclement weather conditions; yet, FHWA to date has never considered whether such measures have the potential to reduce congestion on the Bay Bridge to acceptable levels when implemented alongside all TSM/TDM and other MOA approaches.<sup>16</sup>

If the reversible lane could remain open to traffic even during high-wind events, the reversible lane would be more consistently available to help improve traffic flow. For these reasons, FHWA must consider in its Tier 2 NEPA Study the efficacy of wind barriers, in combination with all other TSM/TDM and MOA strategies described herein, to address FHWA’s stated purpose and need for this action.

### Variable speed limit signs

The use of variable speed limit signs, including on the approach highways, could also help manage congestion. These signs can be used dynamically to slow traffic during a period of incremental traffic buildup and make the flow more uniform, and therefore less likely to result in stop-and-go driving that exacerbates traffic backups. When used in conjunction with the other strategies identified herein, variable speed limit signs could further enhance a non-bridge alternative approach that would reduce travel times without requiring any major construction activities in this fragile ecosystem.

## **2. FHWA Must Update the No-Build Alternative and Traffic Projections in the Tier 2 NEPA Study**

FHWA committed during Tier 1 to include an updated traffic assessment in the Tier 2 NEPA Study. *See* Tier 1 FEIS at 7-7 (Tier 2 Study will include “[u]pdated traffic analysis to reflect current conditions at the time of a Tier 2 study”). Similarly, FHWA committed to carry

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<sup>16</sup> *See, e.g.,* Steven Brocklehurst, *Queensferry Crossing: The bridge that should never close*, BBC (Feb. 11, 2020), <https://www.bbc.com/news/uk-scotland-38598155> (examining the effective use of a baffle barrier on the Queensferry Crossing over the Forth estuary in Scotland).

forward the No-Build alternative into the Tier 2 Study and by design must encompass all “existing infrastructure, planned future improvements, and regular maintenance.” *Id.* at 7-2. Thus, because the No-Build Alternative serves as the status quo baseline against which the proposed project (and any alternatives to it) are compared, any changes to bridge infrastructure that exist or are reasonably foreseeable as of the conclusion of the Tier 2 FEIS and ROD must be reflected in the No-Build baseline alternative.

In particular, QACA urges FHWA to include as part of its description of the No-Build Alternative the following TSM/TDM approaches that have been implemented since the original Tier 1 analysis, or that will be implemented or are reasonably foreseeable prior to the completion of the Tier 2 Study. Likewise, although FHWA decided long ago that the No-Build Alternative is not feasible due to its alleged failure (at that time) to satisfy the project’s purpose and need, the significantly changed baseline conditions obligate FHWA to reconsider in its Tier 2 EIS and ROD whether the No-Build Alternative, *at the time FHWA issues its Tier 2 ROD*, satisfies the purpose and need.

### Automated Lane Closures (ALCS)

MDTA’s ALCS project is underway and expected to be operational in late 2022, followed by a transitional period with some manual support.<sup>17</sup> The ALCS was “constructed for opening and closing lanes including two-way traffic operations on the bridge” and “will enhance the current manual system for motorists by allowing maintenance crews to remotely implement and discontinue two-way traffic on the Bay Bridge’s Eastern and Western Shores.” *Id.*

Among its benefits, including improved worker safety, ALCS is expected to reduce “congestion associated with manual lane closure operations” on the bridge and provide motorists advance notice of lane closures. *Id.* (identifying customer savings benefits, including reduced congestion). According to MDTA, the latter will help reduce secondary crashes due to driver inattention.<sup>18</sup> This reduction in traffic incidents can be expected to further reduce bridge congestion and the frequency of incident management and response activities. Additionally, ALCS will also facilitate more dynamic implementation of the reversible lane in response to real-time traffic data and will therefore allow dynamic delay conditions to be addressed sooner.

Any congestion-related improvement flowing from the implementation of ALCS on the Bay Bridge must be incorporated into the baseline traffic projections for the Tier 2 NEPA Study (and included as part of the status quo in the No-Build Alternative), which must disclose and examine the efficiencies gained by these automatic lane closures, based on modeling reflecting

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<sup>17</sup> See MDTA, *William Preston Land Jr. Memorial (Bay) Bridge Automated Lane Closure System Project*, [https://mdta.maryland.gov/Capital\\_Projects/BayBridgeALCS](https://mdta.maryland.gov/Capital_Projects/BayBridgeALCS).

<sup>18</sup> John Domen, *Automated lane closure system coming to Maryland’s Bay Bridge*, WTOP News (September 15, 2022), <https://wtop.com/maryland/2022/09/maryland-makes-another-effort-for-a-more-efficient-trip-across-the-bay-2/> (quoting MDTA Acting Executive Director Will Pines).



similar gains from real-world comparable examples that are already in operation (and, if possible, actual concrete traffic reduction data from ALCS on the Bay Bridge that exist at the conclusion of the Tier 2 process).<sup>19</sup>

### All Electronic Tolling (AET)

Similarly, AET was introduced in 2020 and is also expected to substantially reduce eastbound traffic congestion. *See* Tier 1 FEIS App. A at A-20. FHWA stated that “prior to the preparation of the Tier 1 FEIS, additional data collection will be performed to evaluate the effects of AET on eastbound operations.” *Id.* Yet no such analysis was included in the Tier 1 FEIS.

Because this data collection effort and a robust analysis of such data has not yet occurred, FHWA’s Tier 2 NEPA Study must include all such data, as well as an evaluation of the documented benefits on traffic congestion from implementation of AET on the Bay Bridge.

### Rapid Deployment of the Reversible Lane on the North Span

As discussed above under ALCS, MDTA is in the process of implementing automated and rapid deployment of the lane closure on the south side of the north span to allow the lane to be reversed to eastbound traffic flow. It will be in place by the end of this year and will improve lane transition efficiency and enhance use of this reversible lane.

Because this was not accounted for in the Tier 1 DEIS traffic analysis (nor updated in the Tier 1 FEIS or ROD), FHWA is obligated to consider it in the Tier 2 Study and incorporate any reduction in congestion gained from this approach in the baseline conditions of the No-Build Alternative.

### Weekday Telecommuting

Lastly, FHWA must address how the well-documented increase in telecommuting will affect the agencies’ travel demand projections during the planning time frame of this action, including how this important new information impacts FHWA’s purpose and need.

Prevalence of remote work arrangements accelerated exponentially during the COVID-19 pandemic. Even with COVID-19 restrictions receding, many work-from-home and hybrid work arrangements are expected to outlive the COVID-19 pandemic and permanently alter many daily activities, including driving patterns and traffic congestion (especially during rush hour and other peak driving times). AKRF’s 2020 Transportation Report addressed this increase in telecommuting and projected that increases in telecommuting could result in lower future traffic

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<sup>19</sup> The Tier 1 FEIS notes, in its discussion of the MOA it will bring forward to analyze in Tier 2, that “MDTA also has initiated an automated lane closure system project for opening and closing lanes on each span to two-way operations, construction of which is anticipated to be completed in the Fall of 2022.” Tier 1 FEIS App. A at A-20. However, the Tier 1 FEIS deferred any *analysis* of the ALCS until the Tier 2 NEPA Study and thus it remains to be incorporated.



volumes than those forecasted by FHWA. *See* AKRF Study at 13. However, the Tier 1 FEIS did not account for these changes, promising that “[l]onger-term impacts of telecommuting would be addressed in the travel demand forecasting for a Tier 2 Study.” Tier 1 FEIS App. C at C-6.

Because FHWA has not examined the significant effects of telecommuting and reduced workday travel, including during peak weekday travel times—and FHWA could not have done so previously in light of the overlapping timing of the COVID-19 pandemic and the Tier 1 NEPA process—FHWA must take a hard look at this topic and analyze all existing data and reasonable forecasting in the updated traffic projections for the Tier 2 NEPA Study.

### **3. FHWA Must Consider the Impacts of Induced Traffic Demand on Route 50**

In weighing any combination of MOAs—such as those discussed above—against a potential new bridge or bridge/tunnel span across the Chesapeake Bay, FHWA must also account for the impact of induced traffic demand on approach and departure roadways that would necessarily arise from construction of any new span, as well as the growth-inducing effects in the communities surrounding these approach and departure roadways.

The concept of induced traffic demand is well-established and occurs because drivers change their habits to use the newly constructed lanes, thereby absorbing the increase in traffic capacity within a relatively short period of time following construction. Thus, if a new span were added, the widening of the Bay Bridge would temporarily relieve congestion on the bridge itself, but not on the highways leading to it unless they were also widened. The additional traffic attracted to the wider bridge would correspondingly require widening of large stretches of US 50 in the years following the bridge project to avoid new, foreseeable traffic bottlenecks.<sup>20</sup> This, in turn, would lead to staggering costs and many years of additional construction, as well as encroachment into surrounding communities that will both fuel substantial growth and further degrade the natural environment. These are textbook examples of “indirect effects” under NEPA, “which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” 40 C.F.R. § 1508.8. In fact, in supplying an example of an indirect effect, NEPA’s implementing regulations point to “growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.” *Id.*

Because major construction of the Bay Bridge would result in significant indirect effects on and around approach and departure roadways—including induced traffic demand and associated growth inducing effects in those communities—FHWA must rigorously address in the Tier 2 NEPA Study this aspect of any action alternative that would require the construction of a bridge or bridge-tunnel.

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<sup>20</sup> *See* AKRF, *Induced Traffic Demand & US 50 Highway Widening*, March 16, 2022 (prepared for Queen Anne’s Conservation Association), <https://qaca.org/press-release-%26-archives> (select 2022-03-16 QACA Highway Widening Study Final).

## CONCLUSION

As an organization dedicated to both the conservation and sustainable growth of the Eastern Shore, QACA appreciates the opportunity to submit comments and urges FHWA to take seriously the recommendations above to: (1) ensure that the Tier 2 Study traffic data reflects all up-to-date congestion management strategies that are either currently in place on the Bay Bridge or are reasonably foreseeable, prior to the conclusion of the Tier 2 NEPA process, to become available during the action's planning time frame; (2) assess impacts from induced traffic demand on the approach and departure roadways, particularly the likelihood that it will be necessary to widen those roads in the near future and fuel growth in those communities—which would itself entail substantial cost and traffic disruption; and (3) from this baseline, to evaluate every MOA (including TSM/TDM) strategy available—in combination with one another—as components of a strategy to mitigate peak traffic congestion and thereby avoid the costly, disruptive, and environmentally damaging construction of a massive new bridge across the Chesapeake Bay.

In the Tier 1 EIS and ROD, FHWA deferred many of the important issues at stake for this action until the Tier 2 Study. As a result, federal law now requires the FHWA to rigorously evaluate readily available approaches that have proven effective elsewhere and which have strong potential to achieve the stated purpose and need in a far less damaging and expensive manner. To ensure compliance with NEPA and its implementing regulations, FHWA must, in Tier 2, provide decisionmakers and the public with a full, legally supportable analysis of all available alternatives to a costly, disruptive, and environmentally damaging new Bay Bridge.

Thank you for your solicitation of comments on the Tier 2 NEPA process. We hope that FHWA takes seriously the concerns raised by QACA, and we look forward to reviewing a Tier 2 Draft EIS at the appropriate juncture.

Respectfully submitted,

A large black rectangular redaction box covering the signature and name of the individual submitting the comments.

*Counsel for QACA*





October 14, 2022

Bay Crossing Study  
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[Info@baycrossingstudy.com](mailto:Info@baycrossingstudy.com)

## Re: Tier 2 NEPA Study Public Comments

To Whom It May Concern:

Thank you for the opportunity to provide comments on the Tier 2 NEPA Study and Open House of the consideration of a new Chesapeake Bay Bridge crossing. ShoreRivers is a non-profit dedicated to the protection and restoration of Eastern Shore rivers, including the Chester River and Eastern Bay and their tributaries, of which this study impacts. After attending the open house and reviewing the documents provided to the public, ShoreRivers urges the Maryland Transportation Authority to consider the following comments and recommendations.

### 1. Consider public access impacts

Currently, the Tier 2 Study proposes to evaluate environmental, community, and historic impacts. While the environmental inventory includes community facilities, it neglects to include public access points to our natural resources such as community parks and landings. Public access to Queen Anne's and Anne Arundel County's natural resources, including their waterways, is intrinsic to promoting commerce, tourism, and quality of life for residents. It also fosters a deeper respect and concern for protecting these natural resources. Sandy Point Park and Terrapin State Park are essential resources to our communities and are two of few public access points to enjoy our waterways. Impacts to these resources and an assessment of what those impacts might mean to our communities should be considered in the Tier 2 study.

### 2. Include look-backs and economic considerations for aquatic natural resource impact Considerations

The Chesapeake Bay is a dynamic system that experiences annual changes in water quality due to precipitation, restoration, and pollutant loading. It is anticipated that aquatic natural resources, such as oysters and submerged aquatic vegetation, will fluctuate in abundance from year to year. ShoreRivers requests that the Tier 2 study incorporate sufficient look-backs to past populations and acreage numbers when considering impacts to these species. Additionally, bottom surveys should be considered for future potential to support aquatic species. Finally, the impacts to these aquatic natural resources should include economic impacts. For example, submerged aquatic vegetation supports many other species, including juvenile blue crabs. If submerged aquatic vegetation is projected to be impacted, what will the economic impacts to the blue crab fishery be?

### 3. Environmental Justice considerations and impacts should be more emphasized

Historically underserved and BIPOC communities are often the most vulnerable to environmental impacts. While Environmental Justice is identified as a detailed environmental study that will be

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[shorerivers.org](http://shorerivers.org)

completed through this process, the specifics on how that will be achieved were unclear. Additionally, ShoreRivers encourages the MDTA consider factors outside just environmental impacts to underserved communities, such as traffic and economic impacts to these communities.

**4. Include wastewater and stormwater impacts**

There is no current indication that impacts to wastewater will be included in this study. A new Chesapeake Crossing along corridor 7 will result in increased development, increasing stormwater runoff and wastewater. Queen Anne’s County in particular is currently at capacity at its Kent Island WWTP and the county suffers from nutrient pollution from failing and old septic systems. Queen Anne’s County is also currently navigating a new MS4 permit for stormwater runoff and treating impervious surfaces. environmental impacts from projected increase of stormwater and wastewater should be included in the Tier 2 Study.

**5. Include resiliency impacts**

There is no current inclusion of impacts to community resiliency. A new Chesapeake crossing along corridor 7 will increase development and stormwater runoff and likely impact shorelines, existing green infrastructure, and climate-change mitigating wetlands and forests. Resiliency planning is essential for the future of our community resources and general way of life and should therefore be included in this study.

**6. Increase public involvement throughout Tier 2 study**

ShoreRivers encourages the MDTA to incorporate public feedback throughout the upcoming step 4: Purpose and need, traffic, range of alternatives and environmental analyses during the spring of 2023 throughout the summer of 2025. As it currently stands, the next opportunity to update the public and seek specific input is not scheduled until Fall 2025. Transparency and public input strengthen studies such as these and ensures that every voice is heard.

**A new Chesapeake crossing along corridor 7 to Kent Island will threaten water quality trends by increasing pollutants entering the Chester and Miles-Wye Rivers, as well as Eastern Bay.** Pollutant loads from construction of the new bridge and secondary effects from development include SAV habitat and oyster reef destruction, increased stormwater runoff, potential septic and sewage overflows, increased air emissions, and litter. ShoreRivers is eager to remain involved and participate in public comment opportunities as the Bay Crossing study progresses and considers environmental impacts. **Finally, ShoreRivers advocates for strong mitigation tactics for environmental impacts that occur, including land preservation, shoreline restoration, addition of new public access sites, and implementation of green stormwater best practices.**

Thank you for the opportunity to provide comments.

Sincerely,

[Redacted]  
Miles-Wye and Chester Riverkeepers, on behalf of:

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***ShoreRivers***

[Redacted] Executive Director  
[Redacted] Chester Riverkeeper | [Redacted] Choptank Riverkeeper  
[Redacted] Miles-Wye Riverkeeper | [Redacted] Sassafras Riverkeeper

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October 14, 2022

Bay Crossing Study  
Maryland Transportation Authority  
Division of Planning and Program Development  
2310 Broening Highway  
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To Whom It May Concern,

The Eastern Shore Land Conservancy (ESLC) is an accredited land trust operating for the past 30 years on Maryland's Eastern Shore. Our organization has 60,000 acres under easement with 300 individual landowners across our six county operating area, which includes Cecil, Kent, Queen Anne's, Caroline, Talbot, and Dorchester counties. ESLC staff, volunteers, and supporters work every day to implement our vision of a rural Eastern Shore with a thriving agricultural and natural resources-based economy, ample publicly-accessible open space, and a network of vibrant and livable small towns.

In the last half-century, there can be no doubt the building of the Chesapeake Bay Bridge has impacted life on the Eastern Shore more than any other single development. Those impacts have been a mix of positive and negative, expected and unimagined, and a full accounting would be difficult to achieve. Construction of the two current spans led to dramatically increased residential and commercial development across the Eastern Shore and an accordant loss of productive agricultural lands. Traffic from the existing bridges disperses around the region, creating regular volumetric bottlenecks around virtually all of the Eastern Shore's population centers.

ESLC has deep reservations about a new and expanded crossing of the Chesapeake Bay. Our concerns include unsustainable development pressures along the entire breadth of the Route 50 and Route 301 corridors, the need to further expand roadway capacity region-wide to accommodate additional traffic from induced demand, and the substantial loss of agricultural lands, forests, and open spaces at scale that would accompany these impacts. We are also concerned about the direct impact of bridge and approach construction on proximate public lands like Sandy Point State Park and Terrapin Beach, as well as adjacent wetlands within the analysis area, including loss of wildlife habitat, erosion, and reduced water quality.

ESLC continues to be troubled by the potential erosion of local government control of land use decision making given the extraordinary pressure additional Bay Bridge capacity will bring. The Tier I study indicated utilization of the current bridge corridor would limit impacts to "existing land use patterns," but we would argue that existing







land use patterns on the Route 50 corridor are far from ideal and can poorly bear increased stress. With such external pressure, land use decisions tend to get made by extenuating circumstances, irrespective of comprehensive plans and local public desires. A double digit percentage increase in traffic on the highways of the Eastern Shore will place inordinate pressure on local officials and would represent a massive change in the assumptions most local comprehensive plans are based on.

As the Tier II analysis moves forward, the Eastern Shore Land Conservancy would urge officials to take as wide a gaze as possible at not only the direct impacts in the identified analysis area, but also throughout the whole Route 50 and Route 301 corridors. Identify likely impacts to agricultural lands, forests, and open spaces and seek methods to mitigate both their conversion and the associated environmental impacts.

Review the effects of increased traffic beyond the direct bridge and approaches, and model the need for expanded roadways far downstream from the bridge itself: does the expansion of Bay Bridge capacity simply make worse bottlenecks that already exist elsewhere? This should also include the already ongoing evolution of the Route 301/50 corridors from a seasonally variable regional connector to an increasingly pressured link in the highly traveled Northeast Corridor, given the build-out of the Middletown/301 bypass.

Identify the policies and funding streams necessary to ensure the local land-use decision-making framework is able to withstand tremendous pressure for growth and enhances the implementation of comprehensive plans, rather than eroding their functional utility.

Finally, ESLC encourages officials to review the true durability of traffic relief at the Bay Bridge. With an estimated construction date in the Tier I analysis of 2040, is the traffic relief meaningful enough, over a long-enough period of time, to warrant the torrent of impacts that Bay Bridge construction would undoubtedly bring?

As we saw in the 1950s and the 1970s, Bay Bridge construction has real impacts across an enormous region. Any analysis of the environmental impacts of a new bridge should rightly look across the breadth of the entire region in order to be truly comprehensive. We urge planning and analysis officials to take a holistic approach to the Tier II analysis, our iconic and still-rural Eastern Shore region deserve nothing less.

Sincerely,

[Redacted Signature]

President

Eastern Shore Land Conservancy

