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December 15, 2017

Mr. Kevin Reigrut, Executive Director
Maryland Transportation Authority
2310 Broening Highway
Baltimore, MD 21224

SUBMITTED AT WWW.BAYCROSSINGSTUDY.COM
AND VIA EMAIL TO info@baycrossingstudy.com

RE: MDTA Chesapeake Bay Crossing Study
Tier I Environmental Impact Statement

Dear Mr. Reigrut:

The Chesapeake Bay Foundation appreciates this opportunity to comment on a potential purpose, need and scope for the Maryland Transportation Authority's Tier One Environmental Impact Statement ("EIS") for the Chesapeake Bay Crossing Study prepared pursuant to the National Environmental Policy Act ("NEPA"). Per your invitation at the November 15, 2017 webinar, we respectfully request to meet with the project team to discuss our comments and other aspects of the study in further detail.

Established 50 years ago, CBF is the largest non-profit organization dedicated solely to the restoration of the Chesapeake Bay. We maintain offices in three states and the District of Columbia and represent approximately 94,000 members in Maryland. Our education department operates 15 field programs for students and teachers across the watershed. Several of these facilities are located within the study's "sub-area" boundaries. In addition, our land and oyster restoration programs have created and enhanced oyster reefs in the Chesapeake Bay and its tributaries and established riparian buffers, wetlands, and forest stands in the Maryland portion of the watershed. We encourage MDTA to protect these resources and ensure that the study fully accounts for the state's commitments to clean water as described in the Chesapeake Bay TMDL and Watershed Implementation Plans.

CBF respectfully submits the following comments and recommendations on a potential purpose, need and scope for the Tier I EIS. In summary, we believe that the purpose and need should reflect the goals and objectives of state and regional plans. The study should not reject alternatives to a new crossing out of hand. The analysis of direct, indirect and cumulative impacts of proposed alternatives must account for

the full extent of improvements to access corridors, changes in land use, and impacts on state goals for climate change and the health of the Chesapeake Bay.

Specifically, we note that the stated need for a new crossing requires additional justification using updated projections for population growth and travel behavior. It also requires more solid grounding in applicable state, regional and local transportation and land use plans. The scope of the study should include alternative actions that emphasize growth and land use policy changes, enhanced transit, and additional transportation demand management options in lieu of and in combination with “build” alternatives. The scope must be sufficiently broad to account for improvements and impacts along potential access corridors for a new crossing. Finally, the review of direct, indirect and cumulative effects should examine the impact of proposed alternatives on Maryland’s progress towards commitments established to address climate change and water quality under the Greenhouse Gas Emissions Reduction Act and the Chesapeake Bay TMDL.

I. MDTA should revise outdated population and traffic projections and conduct a constrained analysis of demand that accounts for reasonably attainable changes to travel patterns across the region.

Comments by the project team during the November 15, 2017 on-line scoping meeting indicated that the Tier I EIS will consider and, presumably, build upon the 2004 Transportation Needs Assessment and the 2006 Task Force Report. CBF agrees that these past efforts provide important context for the current study in terms of stakeholder views and the various considerations and impacts associated with a new crossing. However, we believe that the population and traffic projections included in these prior studies do not provide a valid basis to restrict the purpose and need of the Tier I EIS to the construction of a new vehicular crossing.

The 2004 and 2006 studies were completed during a time of nearly unprecedented growth, and many of the population and traffic projections included in these studies have since been revised downward. For example, the 2004 Needs Assessment cites a growth rate of almost 20% in Queen Anne’s County, 11% in Upper Eastern Shore counties and 8% in counties on the lower Eastern Shore from 2000 to 2010.¹ Recent estimates from the Maryland State Data Center indicate that the growth rate on the Upper Eastern Shore has fallen to 1% since 2010. The growth rate on the Lower Eastern Shore is approximately 2% over the same time period. Six of the nine Eastern Shore counties have experienced decreases in population since 2010.²

¹ MDTA (2004). *Transportation Needs Report, William Preston Lane Jr. Memorial (Bay) Bridge*. Vol I, p. 3-1.

² MDP (2017). *Table 1A, Total Resident Population for Maryland's Jurisdictions, April 1, 2010 Thru July 1, 2016*. Accessed online December 12, 2017.

The dramatic reduction in growth on the Eastern Shore calls into question the applicability of traffic projections from these early studies. The 2004 Needs Assessment projected traffic counts of approximately 135,000 vehicles per day at the Bay Bridge by the year 2025, which would exceed capacity of the Bay Bridge and approach roadways by 60%.³ In 2015, MDTA revised projected traffic at the Bridge down to 92,800 vehicles per day by 2040 – less than half the original projected increase over nearly twice the time.⁴ The actual average daily traffic at the eastbound toll plaza was 73,100 in 2016, which is less than the number of vehicles that crossed the Bridge in 2007.⁵

The traffic projections in the 2015 Life Cycle Cost Analysis are based on more recent trends; however, these projections alone are insufficient to justify limiting the scope to a new crossing. First, the unconstrained model employed in the analysis is likely to overstate future conditions because it does not fully account for adaptive behaviors by travelers or transit providers. To our knowledge, the six-hour, 12-mile daily queues produced by the analysis would be unprecedented and are not supported by experience on more heavily traveled routes and toll facilities across the state. If congestion increases, more drivers are likely to alter their departure or arrival time. Commuters may opt to share rides, take transit or add telework days. In addition, the 2015 analysis did not include an origin-destination study, which is needed to determine whether (and if so, where) a new crossing would effectively increase accessibility in the region. Furthermore, it is unclear at this point to what extent the significant delays experienced along the westbound approach to the Bridge are related to conditions at the Bridge. Traffic studies conducted as part of the Tier I EIS should examine these dynamics and not prematurely foreclose the possibility that alternatives to a new crossing would be sufficient to address capacity concerns. Without this information, it is premature to restrict the purpose and need of the study to a new crossing.

II. MDTA should identify a purpose that is consistent with state, regional and local plans, including an emphasis on system preservation, environmental stewardship and coordination with land use planning.

Maryland's transportation system includes more than 32,000 miles of roads and 5,000 bridges serving urban and rural communities across the state. As you know, MDOT balances and prioritizes investments in this transportation network with a set of planning and funding tools including the Maryland Transportation Plan (MTP), short-

³ MDTA (2004). p. ES-2.

⁴ Md Transportation Authority (2015). *US 50/301 William Preston Lane Memorial (Bay) Bridge Life Cycle Cost Analysis*. p. 12.

⁵ http://www.marylandroads.com/Traffic_Volume_Maps/Traffic_Volume_Maps.pdf. Accessed online December 13, 2017.

and long-range plans from Maryland's six Metropolitan Planning Organizations, and transportation planning elements in local comprehensive plans. In particular, the MTP is used to "identify the State's most critical transportation needs...serves as MDOT's guiding policy document...incorporates related State goals for sustainable growth, the economy, and the environment...and how and where to direct Maryland's transportation investments."⁶ The plan is informed by an extensive stakeholder process and other important planning tools including the State Development Plan and the Greenhouse Gas Emissions Reduction Act Plan.

Federal transportation statutes state that the objectives of a proposed transportation project may include "achieving a transportation objective identified in an applicable statewide or metropolitan transportation plan," and "supporting land use, economic development, or growth objectives established in applicable Federal, State, local or tribal plans."⁷ CBF could not identify a new crossing in any adopted state or regional transportation plan. The adopted MTP heavily emphasizes system preservation, environmental stewardship, and better coordination of transportation investments and land use planning, both as guiding principles and as specific strategies to manage congested infrastructure.⁸

Given that a new crossing is a novel project in terms of state and regional planning, it is imperative that the purpose, need, and alternatives presented in the Tier I EIS reflect adopted state goals and objectives. As of now, the purpose of the Tier I EIS appears limited to "adequate capacity, dependable and reliable travel times, and flexibility to accommodate future maintenance and rehabilitation."⁹ Failure to expand the purpose and scope could create conflicts between the selected alternative and other state projects and needs, long-range land use planning, and established goals for environmental protection.

Accordingly, we strongly recommend that MDTA expand the purpose of the Tier I EIS to include these core state planning objectives in a manner consistent with applicable federal statutes. This may lead MDTA to target a level of service at Bay crossing facilities that partially accommodates anticipated travel demand, which the Life Cycle Cost Analysis identified as a reasonable and available course of action.¹⁰ In any case, incorporating state and regional planning objectives will provide MDTA

⁶ MD Dept of Transportation (2014/2016). *2035 Maryland Transportation Plan: Moving Maryland Forward*. p. 3.

⁷ 23 U.S.C. § 139(f)(3).

⁸ MDOT (2014/2016). pp. 9, 16, 18.

⁹ MDTA (2017). *Chesapeake Bay Crossing Study Tier 1 NEPA, On-line Scoping Meeting November 15, 2017*. Slide 27.

¹⁰ MDTA (2015) p. 23.

with the flexibility needed to balance perceived capacity needs with established goals for environmental protection and growth management.

III. MDTA should include alternatives that combine enhanced land use management with transit and transportation demand management strategies alone and in combination with expansion or replacement of an existing span.

The on-line scoping meeting materials state that the purpose of the Tier I EIS is to “identify the corridor of a new crossing.”¹¹ A reasonable interpretation of this purpose is that the decision to build a new vehicular crossing has been made and that the study will be limited to identifying a specific location. CBF believes this conclusion is premature and should be evaluated within the study among a wide range of alternatives, not used to define the study’s parameters. Additional alternatives should include, at a minimum, enhanced land use management, increased transit options, and rehabilitation or expansion of existing spans.

The 2006 Task Force report highlights the importance and potential efficacy of enhanced land use management to reduce demand for capacity at the Bridge while satisfying other community and regional goals. Specifically, the report states that:

The Task Force, particularly those representing Eastern Shore counties, expressed concern that new capacity would negatively affect communities and other resources within all four zones...They recommended that state and local jurisdictions focus on creating viable jobs, businesses, and industry on the Eastern Shore for its citizens so more roads are not needed.¹²

Many Task Force members commented on the potential to slow growth and reduce the demand for capacity across the Bay. Some suggested that because growth follows the addition of highways and public utilities, limiting that type of infrastructure would also limit growth and the demand for a new crossing.¹³

Clearly, a wide cross-section of stakeholders believed that enhanced land use management could reduce demand for cross-Bay travel such that an additional crossing might not be needed. Land use management strategies could also influence the effectiveness of “build” options, including the relative suitability of a replacement span compared to a new crossing elsewhere on the Bay.

Increased options for transit may have similar reductive effects on traffic congestion. The Maryland Transportation Authority’s *Analysis of Transit Only Concepts to*

¹¹ MDTA (2017) Slide 14.

¹² MD Transportation Authority (2006) *Task Force on Traffic Capacity Across the Chesapeake Bay*. p. 29.

¹³ *Ibid.*, p. 30.

Address Traffic Capacity across the Chesapeake Bay (2007) found that expanding transit could have positive effects on congestion at the Bridge. While the study did not recommend a *transit only* solution, the study states that “because transit is projected to attract ridership and provide some congestion relief at the existing Bay Bridge, it is clear that transit could be an important component of any future studies on additional capacity across the Chesapeake Bay.”¹⁴ It is possible that better matches between proposed transit service locations and the results of the origin-destination analysis would increase the projected effectiveness of transit. Preferential toll pricing for ride-sharing and other transportation demand management programs should also be explored to reduce cross-Bay travel demand.

These strategies are likely needed under any alternative that MDTA ultimately selects. The 2006 Task Force report found that even with the construction of a southern crossing between Calvert and Dorchester counties, “major capacity issues would remain on the existing bridge. US 50 outside Annapolis would remain severely congested.”¹⁵ Construction of a northern crossing between Baltimore and Kent counties would not relieve congestion on US 50, either.¹⁶ Given these findings, it is difficult to envision a successful alternative that does not include enhanced land use, transit and transportation demand management.

The cumulative effect of enhanced land use management, increased transit options, and additional strategies to reduce or flatten peak travel demand may be sufficient to justify a no-build alternative. These strategies may reduce the size and scope of the investment needed and the impacts associated with an expansion or replacement of the existing spans. These strategies appear to be essential to address congestion at the existing spans even if MDTA were to build a new crossing elsewhere on the Bay. MDTA has a responsibility under NEPA regulations to analyze reasonable alternatives not within the jurisdiction of the lead agency.¹⁷ CBF recommends that these alternatives include, at a minimum, enhanced land use management, increased transit, and transportation demand management strategies in lieu of a new crossing and in combination with alternatives that would expand or replace existing spans.

IV. MDTA should ensure that the study’s scope fully accounts for impacts associated with improvements to access corridors serving a new or expanded span.

¹⁴ Md Transportation Authority (2007). *Analysis of Transit Only Concepts To Address Traffic Capacity Across the Chesapeake Bay*. p. 3.

¹⁵ MDTA (2006). p. 12.

¹⁶ *Ibid.* p. 12

¹⁷ 40 C.F.R. § 1502.14(c).

Federal NEPA regulations require that MDTA evaluate all connected, cumulative and similar actions associated with proposed alternatives.¹⁸ Among other criteria, actions are considered connected when they “cannot or will not proceed unless other actions are taken previously or simultaneously,” or when they “are interdependent parts of a larger action and depend on the larger action for their justification.”¹⁹ The 2015 Life Cycle Cost Analysis clearly identifies the efficacy of expanded capacity across the Bay as dependent upon improvements to access corridors, stating that:

If improvements were only made to the Bay Bridge, they would not address the potential capacity limitations of US 50/301 on both sides of the bridge and would; therefore, not provide the regional transportation improvements needed to accommodate future traffic demand.”²⁰

In these cases, the scope and impact of improvements required to access corridors are likely to be substantial and could extend beyond the approximate “sub-area” boundaries identified for analysis during the on-line scoping meeting. The 2006 Task Force report states that for a southern crossing between Calvert and Dorchester counties:

MD 4 would need to be upgraded with one to two additional lanes in each direction with greater controls of access from I-495 to Prince Frederick (32 miles). An access controlled freeway could be needed around Prince Frederick. In Dorchester County, an upgrade to MD 16 or construction of a new roadway may be necessary. This upgrade or new construction would impact small communities and roughly 20 miles of sensitive environmental areas (along and near MD 16). Because 85 percent of Dorchester County is covered by wetlands, the length of roadway bridges could be greater than the Bay crossing itself.²¹

The Tier I EIS must identify the full geographic extent and material scope of improvements necessary for access corridors to adequately support additional capacity across the Bay. The EIS must also include an analysis of the impacts associated with these improvements. We strongly encourage MDTA to employ a conservative approach in demarcating the study areas for each alternative to ensure that the full extent of necessary corridor improvements and their associated direct, indirect and cumulative impacts are adequately considered.

¹⁸ 40 C.F.R. §1508.25(a).

¹⁹ 40 C.F.R. § 1508.25(a).

²⁰ MDTA (2015). p. 1.

²¹ MDTA (2006). p. 12.

V. MDTA should account for the direct, indirect and cumulative impacts of each proposed alternative on Maryland's commitments for air and water quality.

Federal regulations specifically anticipate that a Tier I EIS should “focus on broad issues such as general location, mode choice, and areawide air quality and land use implications of the major alternatives.”²² These implications can include “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.”²³ CBF concurs with the findings of the 2006 Task Force report that a new crossing is highly likely to focus substantial demand for growth and infrastructure in areas that otherwise would not experience such levels of development pressure. These indirect and cumulative impacts, along with the direct impacts associated with construction, land conversion and increased vehicle miles traveled could have deleterious effects on local and regional air and water quality. These activities may also impact subsurface habitat and system function for oysters, fish, and benthic communities.

As you may know, the Chesapeake Bay and many of its tributary rivers and streams are listed as impaired waterways under Section 303(d) of the Clean Water Act. As result of those impairments, the Chesapeake Bay states including Maryland asked the US Environmental Protection Agency to develop a Total Maximum Daily Load (TMDL) for nitrogen, phosphorous and sediment in the Chesapeake Bay and the tributaries to the Bay. The Chesapeake Bay TMDL establishes specific pollution loading limits for all major source sectors, including agriculture, wastewater, stormwater, septic systems, atmospheric deposition, and forest.²⁴ These limits represent the maximum amount of pollution that the Chesapeake Bay can assimilate while meeting water quality standards. Specific target loads for each sector have been assigned for the Bay watershed, the State of Maryland, major basins within the state, and county jurisdictions. All of these allocations require reductions from current loads. The state, in coordination with its local jurisdictions and the U.S. Environmental Protection Agency, has developed a Watershed Implementation Plan to provide reasonable assurance that these reductions will be achieved.

Construction of a new crossing and associated improvements along access corridors could result in significant short term increases in pollution loads including nutrients, sediment and toxic contaminants. In fact, the Chesapeake Bay Watershed Model

²² 23 C.F.R. § 771.111(g).

²³ 40 C.F.R. § 1508.8(b).

²⁴ United States Environmental Protection Agency (2010). *Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus and Sediment*.

recognizes construction activity among the highest loading non-agricultural sources of nitrogen, phosphorus and sediment on a per-acre basis.²⁵ Systemic, long term increases in pollution loads could result from the conversion, filling or degradation of porous, bio-active resource lands such as forests, wetlands, pastures, hay fields and mixed open areas along the route. Growth and development induced by the project is likely to increase pollution loads through additional wastewater flows, increased stormwater volumes, and new sources of air deposition from associated vehicle trips and energy consumption.

Under the TMDL framework, new or expanding loads to an impaired water body must be accounted for and fully offset so there is no increase in pollution.²⁶ It is highly likely that expanded travel capacity across the Bay will result in new pollution loads from construction activity, land conversion and future growth. These activities may also impede Maryland's ability to achieve goals that support habitat, fisheries and resource lands in the Chesapeake Bay Agreement. The Tier I EIS should examine the relative contribution to changes in pollution loads caused by each alternative's direct, indirect and cumulative impacts and identify any conflicts with the Bay Agreement, the Chesapeake Bay TMDL, local TMDLs, and any limits to assimilative capacity under Maryland's anti-degradation framework. MDTA should identify the feasibility and expense of offsetting these loads in accordance with federal law.

CBF also recommends that MDTA evaluate the impacts of each proposed alternative on Maryland's progress toward statutory greenhouse gas reduction goals. The 2016 Greenhouse Gas Emissions Reduction Act of mandates development of a plan to achieve 40% reduction in emissions by 2030.²⁷ This plan is under development now; strategies in the current plan (written to achieve earlier reduction goals) include support for transportation investments that reduce vehicle miles traveled ("VMT") and increase the availability of transit.²⁸ The Tier I EIS should evaluate the relative effectiveness of each proposed alternative in achieving these goals and identify any alternatives that would increase VMT or limit the provision of transit.

In closing, CBF recognizes that traffic congestion at the Bay Bridge can result in delays during peak travel periods that many Marylanders consider unacceptable. We are also cognizant that a new crossing could have profound impacts on the health of the Chesapeake Bay and the communities that call it home. CBF seeks to be a

²⁵ Chesapeake Bay Program (2017). *Phase 6 Watershed Model – Section 2 – Average Loads - Draft Phase 6*.

²⁶ 40 CFR § 122.4(i)

²⁷ Md. ENVIRONMENT Code Ann. § 2-1205(c).

²⁸ MD Department of the Environment (2015). *Greenhouse Gas Emissions Reduction Plan Update*.

constructive participant to help MDTA arrive at a solution that advances the state's goals for transportation, growth management and environmental protection. In that regard, we would appreciate the opportunity to meet with the project team and discuss the purpose, need and scope of this project in further detail.

Thank you again for the opportunity to comment on the Tier I EIS. Please do not hesitate to contact our office at 410/268-8816 or by email at efisher@cbf.org to discuss these comments or schedule a meeting.

Sincerely,

A handwritten signature in black ink, appearing to read "Erik Fisher". The signature is fluid and cursive, with the first name "Erik" and last name "Fisher" clearly distinguishable.

Erik Fisher, AICP
Maryland Land Use Planner and Assistant Director