QUEEN ANNE'S CONSERVATION ASSOCIATION

QACA

P.O. BOX 157
CENTREVILLE,
MARYLAND 21617
WWW.QACA.ORG

April 22, 2021

VIA EMAIL (info@baycrossingstudy.com)
AND FIRST-CLASS MAIL
Bay Crossing Study
2310 Broening Higway
Baltimore, Maryland 21224

Re: Comments of Queen Anne's Conservation Association on Bay Crossing Study Tier 1 Draft Environmental Impact Statement

To Whom It May Concern:

The Draft Environmental Impact Statement (DEIS) published in February of this year makes clear two inconvenient truths. The first is that the Bay Crossing Study (BCS) that began in 2016 has never demonstrated the need for a new, third span. The second truth revealed by the DEIS is that the Maryland Transportation Authority (MDTA) has never given adequate attention, either in the BCS or in actual practice, to available options for better management of traffic on the Bay Bridge's two existing spans.

Last year Queen Anne's Conservation Association (QACA) commissioned an analysis by independent traffic engineers (AKRF Study) of the Purpose and Need Assessment (PNA) published by MDTA in 2019. The AKRF Study, submitted herewith and incorporated herein by reference, concluded that contrary to the PNA, no new Bay crossing will be needed until sometime after 2065. In the course of reaching this conclusion, AKRF showed in detail that MDTA's forecasts in the PNA of traffic growth on the Bay Bridge are unrealistically high, as its earlier forecasts have consistently been. The MDTA forecasts are unreliable because they use outdated traffic data and are methodologically unsound, and because they ignore the effects of available traffic management improvements.

QUEEN ANNE'S CONSERVATION ASSOCIATION
QACA
P.O. BOX 157
CENTREVILLE,
MARYLAND 21617
WWW.QACA.ORG

The DEIS does not go a single step beyond the defective PNA.[1] All of the shortcomings of the PNA are carried over into the DEIS – and made more glaring by the DEIS's failure to correct them, notwithstanding the passage of time. That the PNA is unreliable, and that available traffic management techniques have not been utilized to ease Bay Bridge congestion, are fully demonstrated by the AKRF Study. In the following discussion of the DEIS, QACA links some of the main AKRF findings about the PNA's defects directly to their reappearance in the DEIS. For the full picture, however, we urge MDTA and other readers of these Comments to consult the AKRF Study itself.

1. The traffic growth projections in the DEIS take account of neither the Bay Bridge's recent traffic history, nor the effects on traffic of the pandemic, increased telecommuting, and future economic recessions.

The DEIS projects Bay Bridge traffic growth by 2040 of 22.9 percent for an average non-summer weekday and 14.1 percent for a summer weekend.[2] On their face, these projections are called into question by the historical fact that there has been effectively *no change* in annual or average daily traffic on the Bridge from 2007 to 2017.[3] This recent decade of no growth is depicted in the two charts below, using the latest available traffic data in the DEIS.

[1] See DEIS 2.1: "This chapter is a summary of the Bay Crossing Study Purpose and Need document."
[2] BCS Traffic Analysis Technical Report, Jan. 2021, p. 22.
[3] DEIS, Figure 2-1, Table 2-1: Annual Chesapeake Bay Bridge Volume, pp. 2-2, 2-3

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QACA
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CENTREVILLE,
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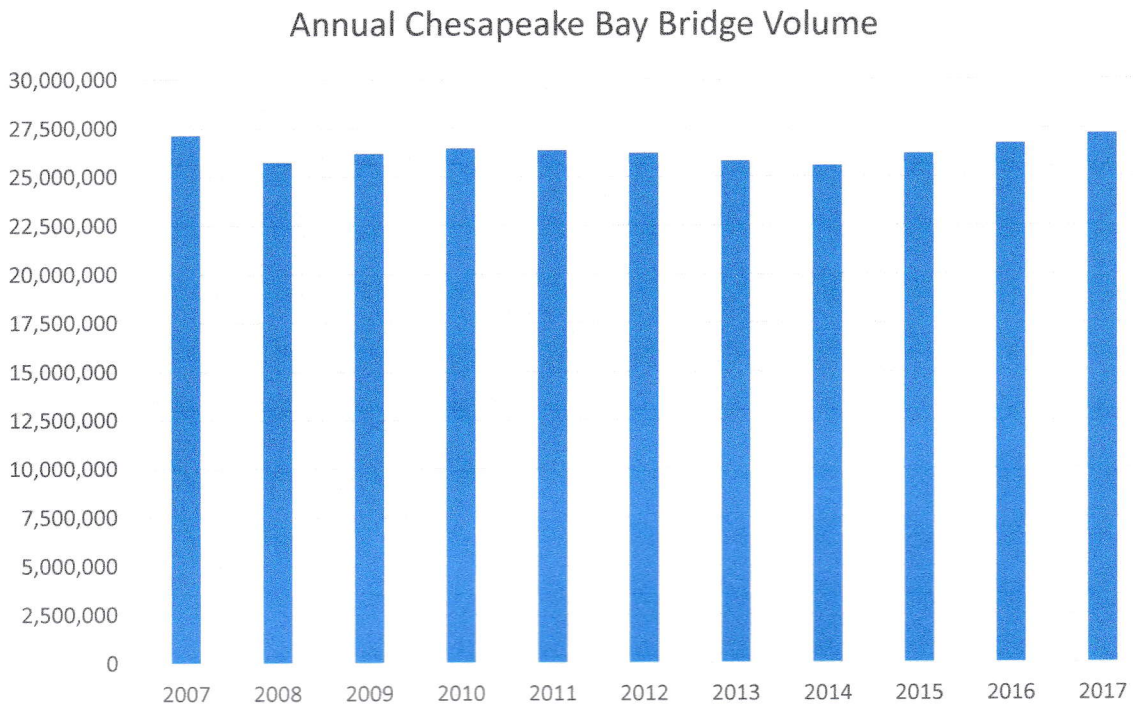
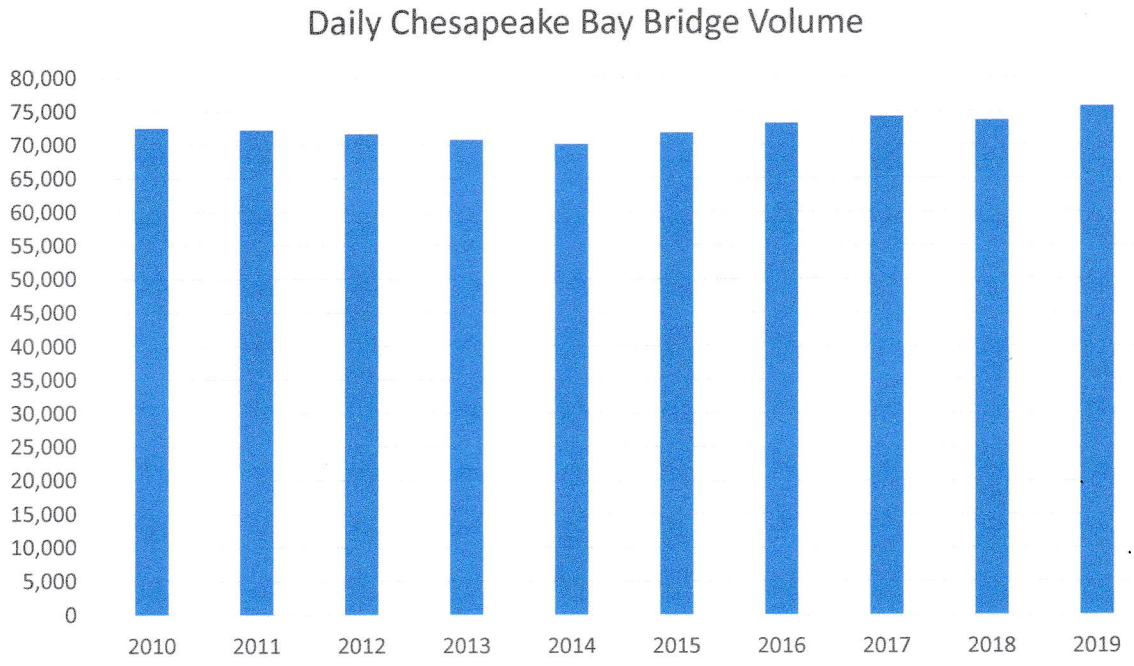


Source: DEIS, Figure 2-1, p. 2-2, modified to show 2007 to 2017 only.



Source: Maryland DOT Annual Average Daily Traffic (AADT) Locator—US-50 from Anne Arundel-Queen Anne's County line to MD Route 8.

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CENTREVILLE,
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Why has traffic on the Bridge been flat for a decade? Obviously the "Great Recession" of 2008-2009 reduced motor vehicle travel for years, and reduced traffic is likely to continue in future years as the result of COVID-19 and the rise of telecommuting. The DEIS, like the PNA, ignores these hugely important real-life events, and in so doing it inevitably overestimates future demand for travel across the Bridge.

Realizing that it has to acknowledge in some fashion the COVID elephant in the room, MDTA tries to escape with a poor excuse: "At this time, there is no definitive traffic model that would predict how the pandemic will affect long-term traffic projections . . . ."[4] One is inclined to simply respond that if that's true, maybe you shouldn't be doing these Bridge traffic forecasts at all. But it must also be said that throughout the pandemic there have been traffic count data collected on the Bay Bridge. These data do exist, in the form of the eastbound daily tolls collected by MDTA – the same toll collections that are relied on for the traffic statistics in Table 2-1 of the DEIS. Moreover, there have been past economic recessions that stalled traffic growth – as the Great Recession did with Bridge traffic, as well as the economic downturn resulting from the pandemic. The traffic effects produced by these other recessions and the continuing increase in telecommuting, along with the omitted traffic counts, could and should have been incorporated into whatever model MDTA is using to generate its predictions of Bay Bridge traffic. Since these data sources and necessary modeling inputs have been ignored, the DEIS projections of future Bay Bridge traffic are entirely unpersuasive.

2. The conclusions in the DEIS about future traffic congestion on the Bridge are founded on outdated speed and traffic count data.

The DEIS, in projecting degrees of future congestion, presents speed data from 2016 and traffic counts collected in 2017 – data that are now five and four years old, respectively.[5] It is, however, normal practice in publishing a transportation-related EIS to present traffic data collected within the last three years, or at least to amend the outdated information to reflect more recent traffic conditions. The DEIS tacitly admits its Bridge traffic data are stale and have been overtaken by events such as the

[4] DEIS, Executive Summary, p. 1.
[5] BCS Traffic Analysis Technical Report, Jan. 2021, p. 9.

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QCA
P.O. BOX 157
CENTREVILLE,
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introduction of cashless tolling, when it promises that they will be updated in the future.[6] That is all well and good – but it doesn't update the DEIS, and it does reveal, once again, the flakiness of the foundations on which the claimed need for a third span currently rests.

3. By arbitrarily picking out a single unrepresentative data point, the DEIS makes future summer weekend traffic congestion look worse than it will be.

The DEIS reports that the summer weekend traffic counts on the bridge were collected during a seven-day period in early August 2017.[7] Since only one weekend can occur within any single seven day period, the DEIS portrayal of summer weekend conditions is based on just one weekend in just one year. But in fact summer weekend traffic counts are available for several years, not just for 2017.[8] These data should obviously have been added in to arrive at an accurate picture of average summer weekend traffic conditions.[9]

As it happens, the singular set of counts on the August 2017 weekend record *much higher* daily traffic volumes than the historical averages recorded for summer weekend traffic. Using that single summer weekend traffic count as the starting point to project the 2040 future summer weekend traffic conditions makes the future traffic conditions appear much worse than if the starting point were based on an average summer weekend. The DEIS, like the PNA before it, stands revealed as a document advocating, rather than objectively assessing, the need for a new Bay crossing.

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[6] The BCS Traffic Analysis Technical Report states: "Following completion of the Draft Tier 1 EIS, and prior to the preparation of the Final Tier 1 EIS, additional data collection will be performed to determine the effects of All Electronic Tolling (AET) on eastbound operations. In addition, if a Tier 2 Study is performed, the capacity analyses performed at that time for then-existing conditions would reflect updated volumes resulting from full use of AET." (p. 7) This assertion is repeated in the context of the traffic methodologies used to establish the capacity analysis for the existing bridge. (p. 12)

[7] BCS Traffic Analysis Technical Report, Jan. 2021, p. 15 and Table 4-1.

[8] See AKRF Study, p. 6.

[9] This is what the AKRF Study did when it demonstrated that summer weekend traffic growth by 2040 would be less than one-third of what MDTA is predicting, even disregarding the effects of increased post-COVID telecommuting and improved traffic management. See p. 6 and Table 1.

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4. The DEIS uses obsolete traffic data, collected before all electronic tolling was introduced in May of 2020, to claim that present and projected eastbound traffic queues support the need for a third span.

The DEIS states that after the implementation of all electronic tolling (AET) in May of 2020 "delays in the eastbound direction are anticipated" during peak periods[10], but it does not quantify these remaining (and presumably reduced) delays. Instead, all consideration of the beneficial effects of AET is postponed, to be addressed only "as needed" in a possible later NEPA document.[11] Nevertheless, the DEIS plunges ahead to make overblown claims about the existing and projected eastbound queues, using traffic counts and speed data pre-dating the current reality of all electronic tolling on the Bridge.[12]

As a purported justification for this irregular procedure, the DEIS claims that "[s]ince the Draft EIS has been in development at the same time that AET has been put in place at the Bay Bridge, it was not feasible to include information regarding its impact on Bridge traffic in the Draft EIS".[13] This clearly won't do. The effect of AET on traffic queue length could readily have been estimated by MDTA from an earlier study of its own which found that AET would produce up to an 80 percent reduction in queue lengths at the Bridge. That quite "feasible" calculation would reduce the 2040 eastbound summer weekend queue projected in the DEIS from 13 miles to 2.6 miles -- *less than* the 4 miles cited as the current condition, and not a happy result for the case the DEIS is trying so hard to make.[14]

5. The DEIS does not adequately consider the alternative of not building an additional Bay Bridge span.

Adequate consideration of the "no build" alternative to constructing another Bay crossing is legally required.[15] The DEIS does not meet this

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[10] BCS Traffic Analysis Technical Report, Jan. 2021, pp. 11-12.
[11] DEIS, p. 3-1.
[12] See, *e.g.*, DEIS, pp. 2-10, 2-11: "The current summer weekend vehicle queues of up to four miles eastbound are projected to increase to nearly 13 miles in 2040. . . . During average weekdays, current evening eastbound queues of up to one mile are expected to increase to five miles in 2040 . . . ."
[13] DEIS, p. 3-1.
[14] For the full discussion, see AKRF Study, pp.14-15, A-23, A-24.
[15] See Federal Highway Administration, NEPA Implementation (1992): "In the draft EIS stage, all reasonable alternatives should be discussed at a comparable level of detail. . . . The 'no-build'

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QACA
P.O. BOX 157
CENTREVILLE,
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WWW.QACA.ORG

requirement. The "no build" alternative is not properly characterized or discussed when, as in the DEIS, available strategies to better manage traffic operations and demand under that alternative are excluded from consideration.[16]

In discussing the no-build alternative, the DEIS states that "transportation system management/travel demand management (TSM/TDM) measures such as improvements to the contraflow operation on the existing bridge may be implemented".[17] It says that specific examples of TSM/TDM improvements "could include" implementing all electronic tolling and variable tolls.[18] But it then cuts off further discussion by saying that if TSM/TDM improvements are implemented, that will be done "separately from the Bay Crossing Study".[19] In telling contrast, the AKRF Study directly addresses TSM/TDM measures and indicates the potential they have for lowering peak period congestion.[20] In excluding TSM/TDM, the DEIS fails to provide the consideration of the "no build" alternative that NEPA requires.

6. QACA, as a conservation organization, deplores the fact that what purports to be an *Environmental Impact* Statement has so little to say about the environmental consequences of building a third Bay Bridge.

We reiterate that the most important point to be made about the DEIS is that it exposes both the flimsiness of the State's case for building another multi-billion dollar bridge and its failure to give attention to better managing traffic on the two bridges that it already has. QACA must also, however, note the failure of the DEIS as an environmental impact

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alternative must always be included."
https://www.environment.fhwa.dot.gov/legislation/nepa/overview_project_dev.aspx, accessed April 6, 2021.

[16] *Ibid.:* "Transportation System Management must be included as an alternative or design option where applicable."

[17] DEIS, p. 3-1.

[18] DEIS, p. 3-2.

[19] Ibid. Similarly, in the Executive Summary, the DEIS puts off any consideration of TSM/TDM until a possible future (Tier 2) NEPA evaluation. DEIS, p. 6. The DEIS's aversion to talking about TSM/TDM goes so far as to require its authors to say that their studied avoidances "do not preclude such improvements from future implementation". DEIS, p. 3-2.

[20] See AKRF Study, pp. 14-15, A-23, A-24 (all electronic tolling); pp. 15-16, A-26, A-27 (variable tolls); pp. 16-18, A-29 to A-32 (actively managed lanes).

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statement -- namely, that, despite its title, it doesn't consider environmental impacts.

The DEIS offers no more than an inventory of potentially affected environmental assets in each of the three corridors under discussion, from which it concludes that a new bridge in its preferred corridor (Corridor 7) will have the least impact because there are fewer environmental assets there than in the other two corridors (6 and 8). But the DEIS is deficient because, as presented, it is an environmental impact statement that does not attempt to state even approximately what the environmental impacts of the proposed project in the preferred corridor will be.

We are not making this up. Here is what the DEIS itself says in its section on "Environmental Considerations":

"The environmental inventory within the two-mile wide corridors, however, *does not provide the level of specificity needed to determine actual environmental impacts*. Specific impacts would be largely determined by the alignment of a new crossing, which would be developed during a future Tier 2 study."[21] (Emphasis supplied.)

In the DEIS's now familiar pattern of kicking the can down the road, "actual environmental impacts" are for some time later, not now (just like realistic traffic counts and improved traffic management). The fact that different alignments will have somewhat different impacts is no excuse for not considering impacts now: one could have posited the most probable alignments, or an environmentally worst-case alignment, and then done the kind of analysis and evaluation for each that good practice in preparing an EIS requires.

As we said above, because of these deferrals and exclusions, the DEIS that is before us, the one upon which the public has been invited to comment, does not give the degree of consideration to the no-build alternative that is legally required. Accordingly, notwithstanding the refusal of the DEIS to discuss the environmental impacts of a third span, QACA wishes to assert that these impacts will be significant and are an important reason why the no-build alternative should have been adequately discussed (and, we submit, preferred).

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[21] DEIS, p. 5-64-77.

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CENTREVILLE,
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We can begin with the DEIS's inventories of what will be potentially impacted[22]:

- Corridor 7 contains 10,870 acres of mapped tidal wetlands (9,600 acres of open water and 1,270 acres of coastal wetlands), constituting 34% of the total corridor.
- 3,460 acres of natural oyster bars and 5,140 acres of Chesapeake Bay Critical Area Resource Conservation Areas are located within the corridor.
- 6,900 acres of forest interior dwelling species (FIDS) habitat and 2,180 acres of Sensitive Species Projects Review Areas (SSPRAs) are in the corridor.
- Federally-listed aquatic species in the corridor include shortnose and Atlantic sturgeon and four species of sea turtles. Federally-listed terrestrial species include Northern long-eared bat and state-listed Delmarva fox squirrel.
- Essential Fish Habitat (EFH) for several species of finfish (9,600 acres) constitutes 34% of the corridor. There are also 270 acres of submerged aquatic vegetation (SAV) in the corridor.
- Anadromous fish species such as striped bass and shad migrate through the corridor to get to and from their spawning areas. Several large marine mammals, including the bottlenose dolphin, are known to spend a portion of their life cycle in the Bay, and in recent years there have been a large number of dolphin sightings in the vicinity of the Bridge.[23]

How will building a third span impact these "environmental assets" of the Bay? Two bridge-related activities that can result in major impacts to water quality and natural resources are dredging and pile-driving. To start with dredging: the dredging associated with bridge construction is an activity that causes sediment resuspension, turbidity, and destruction of

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[22] DEIS, Table 4-20, p. 4-44; p.

[23] The DEIS, as we have said, never gets nearly specific enough to mention the increased number of dolphin recorded in the vicinity of the Bridge in 2018 (University of Maryland Dolphin Watch) or the 193 individual dolphin with 27 mother and calf pairs that have been reported at the mouth of the Potomac River (Potomac-Chesapeake Dolphin Project).

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QACA
P.O. BOX 157
CENTREVILLE,
MARYLAND 21617
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bottom habitat, producing impacts on water quality, fish, mammals, sea turtles, and benthic resources such as oysters.

The DEIS, however, provides no information about what level of dredging will be needed for a new bridge. While the specific alignments under consideration may not be known, it is not plausible to think that no amount of dredging will be needed. A reasonable worst case of dredging volumes could have been estimated, thereby informing an impact assessment. Are we talking thousands of cubic yards, tens of thousands of cubic yards, hundreds of thousands, or perhaps more than a million cubic yards? With that kind of information, surely not too difficult to assemble, the impacts to resources such as oyster habitat, Essential Fish Habitat, and the level and types of mitigation required to offset these impacts, could have been approximated and evaluated.

As to pile-driving, there is a large body of scientific literature finding that the elevated sound levels produced by pile-driving can result in adverse effects on marine mammals and anadromous fish. Since species such as striped bass and shad have been documented to pass through the proposed bridge construction area to and from their spawning grounds, they are at substantial risk of impacts associated with elevated sound exposure. Depending on the levels and duration of the elevated sounds, pile-driving can result in behavioral or physiological impacts or even mortality. It is likely that any bridge alignment will be driving several hundred or possibly thousands of piles over multiple years. How many and how long? The DEIS doesn't even ballpark any of this – so once again we can't evaluate what the impacts will be or how they might be mitigated (or, crucially, how important it would be to avoid them altogether by preferring the no-build scenario).

We offer the foregoing as no more than little indicators of what this DEIS leaves out with respect to the Bay-related impacts of a third span. We don't even touch on the impacts to the land areas on both shores that will result from highway alterations to accommodate eight lanes of bridge traffic. Yet those land impacts, on flora, fauna and human beings, may well be greater even than the Bay impacts.

QUEEN ANNE'S CONSERVATION ASSOCIATION

QACA

P.O. BOX 157
CENTREVILLE,
MARYLAND 21617
WWW.QACA.ORG

Conclusion

For the reasons set forth in these Comments, QACA concludes that the Bay Crossing Study Tier 1 DEIS as presented is inadequate and must be revised to better address the need for a third span, using corrected traffic forecasting methodologies and taking into account post-COVID telecommuting, the institution last year of all electronic tolling, and implementation by MDTA of improved traffic management strategies, all as set forth in the AKRF Study submitted herewith. QACA also recommends that MDTA suspend any future activities towards advancing a Tier 2 study until these deficiencies are addressed.

Respectfully submitted,

QUEEN ANNE'S CONSERVATION ASSOCIATION
Caroline Gabel, Chair
Jay Falstad, Executive Director
P.O Box 157
Centreville, MD 21617