

# Comments on Draft Environmental Impact Statement

## I-495 & I-270 Managed Lanes Study

The Draft Environmental Impact Statement is fatally flawed because it misrepresents the purpose and need of the project. The project is advertised to the public as “traffic relief.” The true purpose is to generate large amounts of toll revenue to create profits for private investors, dealmakers, and construction firms. For this purpose, congestion must be so severe that drivers will pay high tolls to avoid it.

To get around the contradiction between the stated and true purposes, MDOT rigged its analysis to come to a predetermined conclusion – the construction of toll lanes. To do so, it improperly screened out alternatives and arbitrarily limited the scope of analysis.

To ensure that the EIS reached its predetermined conclusion, MDOT refused to analyze alternatives that fail to generate toll revenue, such as rail transit and TSM/TDM. These alternatives were eliminated by such means as:

- In the initial screening, all-transit alternatives were ruled out on the grounds that they would require state financial support and toll lane alternatives would not. Subsequent analysis found that toll lane alternatives require state financial support too, yet those alternatives were not ruled out.
- One element of the purpose and need was stated as “accommodate existing traffic and long-term traffic growth.” Another element is to “provide additional roadway travel choices.” This is circular reasoning; non-roadway travel choices and choices that involve less motor vehicle travel are arbitrarily excluded.
- The geographic scope of the alternatives was arbitrarily limited to the existing alignment of the I-270 and I-495 roadways. This rules out most demand management methods as well as alternate routes for transit (such as a third track on the MARC Brunswick Line).

These are not the only fatal flaws in this NEPA process. The environmental effects of widening I-270 are being studied in two separate EISs. This constitutes illegal “segmentation.” Not only is MDOT currently procuring a single contractor to widen the entirety of I-270, but widening just the southern part, as analyzed in this EIS, would make traffic worse on the northern part. Only if the northern part is widened as well would there be any “traffic relief.”

## Purpose and Need Statement

The Purpose and Need Statement is incoherent nonsense. The purpose of the project is entirely misrepresented. No real need is identified.

This is so because the entire project is built on a lie. Governor Hogan announced that its purpose is “traffic relief.” The real purpose is to generate profits for investors, dealmakers, and construction contractors. These profits are to be derived from high tolls, which motorists will not pay unless traffic remains severely congested.

The Purpose and Need Statement furthers this deceit by describing the purpose as “a travel demand management solution(s) that addresses congestion...” In the light of the governor’s statements, the ordinary reader will interpret “addressing congestion” as lessening congestion. But the project does not lessen congestion; it addresses congestion by maintaining it and exploiting it for private profit.

The Statement then lists five “needs.” Two of these assume the desired answer: new lanes. The other three purported needs are mere verbal decoration; the DEIS in its 19,000 pages fails to analyze whether any alternative will meet them:

- **Accommodate existing traffic and long-term traffic growth** - This is circular reasoning, prejudging the outcome by defining the goal as the movement of increased numbers of motor vehicles. The actual need is access – the ability to reach places people need or want to go.<sup>1</sup> Travel by private automobile on interstate highways is only one means of access, and usually an inefficient means.
- **Enhance trip reliability** - The DEIS makes no attempt to measure the variability of travel speeds on the general-purpose lanes of I-495 and I-270 or on any of the roadways that connect those highways to origins and destinations. It simply asserts that increasing average vehicle travel speeds will also increase reliability. Thus, for trips using the GP lanes (the vast majority of trips) the DEIS provides no information about whether any alternative satisfies this need. Even for trips that use toll lanes for part of the journey (no trip is entirely on an interstate highway), the DEIS cannot determine whether the net effect of an alternative on reliability is positive or negative.

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<sup>1</sup>Measuring What Matters: Access to Destinations. Center for Transportation Studies, University of Minnesota, <http://hdl.handle.net/11299/101339>.

- **Provide additional roadway travel choices** - This again is circular reasoning. The ostensible need is more choice, but the choice is limited to roadways. The only way to add roadways is to add roadways.
- **Accommodate homeland security** - Widening the Beltway and I-270 south of Shady Grove would not assist “population evacuation.” Evacuation routes are perpendicular to the Beltway, and the choke points on I-270 are north of Shady Grove. As for “emergency response access,” the vast majority of emergency response travel is on local roads. Adding more capacity and traffic to the interstates is likely to increase congestion on arterials;<sup>2</sup> the DEIS does not address this beyond some vague conclusory statements.
- **Improve movement of goods and services** - Under the bi-state accord announced in November 2019, northbound toll lanes on the American Legion Bridge will be operated as part of the Virginia toll lane system.<sup>3</sup> Trucks with more than two axles are banned. The DEIS does not even mention this. Moreover, the DEIS traffic model analyzes trips that move goods and services during rush hour using travel times during uncongested off-peak hours. The DEIS does not tell us whether any alternative improves the movement of goods and services, and their traffic model is, *by design*, incapable of finding out.

## Screening of Alternatives<sup>4</sup>

The criteria used to screen out non-highway alternatives were inconsistent, misleading, and biased. As a result, the DEIS analyzes in detail only variants of toll lanes (along with the legally required no-build alternative).

**Financial viability** - The screening criterion for financial viability was positive net cashflow to the state. All-transit alternatives were eliminated early in the process of EIS preparation on this basis. MDOT then estimated construction costs for the remaining alternatives and performed a financial analysis. This analysis, completed in June 2019, found that Alternatives 5, 13B, and 13C had a negative cashflow. However, instead of screening these alternatives out, MDOT redid the financial analysis.

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<sup>2</sup>See comments by Norman Marshall, Smart Mobility Inc., submitted separately by others. We incorporate those comments herein by reference.

<sup>3</sup>See Gov. Northam’s Nov. 12, 2019 [press release](#) and Transurban’s 2020 [annual report](#), pp. 27, 46.

<sup>4</sup>These comments are in addition to the comments previously submitted by the Maryland Transit Opportunities Coalition and other signers on Scoping, Preliminary Range of Alternatives, and Recommended ARDS, which are incorporated herein by reference.

In the re-analysis, the construction cost of the toll lanes was first estimated using the MDOT SHA *Highway Construction Cost Estimating Manual*. Even using the lowest allowable contingency percentage, the result (which MDOT refuses to disclose) was apparently too high to support MDOT's predetermined decision to build toll lanes. So the agency arbitrarily lowered its cost estimate to match Governor Hogan's earlier claims about project cost, citing unexplained "assumed efficiencies." Even after these manipulations, Alternatives 13B and 13C are barely cashflow-positive – the cashflow is negative if the actual construction cost exceeds the estimate by just 5%. Cost growth of 5% is highly likely for any project at this stage of development and nearly certain in the light of the \$2 billion cost of water and sewer infrastructure that was identified after the June 2019 analyses were completed.<sup>5</sup> Yet 13B and 13C remain among the screened alternatives, while transit alternatives go unanalyzed.

The DEIS [Appendix A, p. 40] justifies eliminating alternatives with negative cashflow on the basis of federal policy that "restricts issuance of a NEPA decision document unless the project is fiscally-constrained." This misrepresents the policy and is contrary to both law and policy. Alternatives must be analyzed even if no funding is available for them. As discussed in more detail in our scoping comments, 40 CFR 1502.14 requires the inclusion of reasonable alternatives, such as mass transit, not within the jurisdiction of the lead agency.

**Study area** - The DEIS [p. 1-1] further restricts alternatives by shrinking the study area to a narrow strip along I-270 and I-495, with fingers reaching out along some connecting arterial highways to a maximum distance of 1.5 miles. This is a much smaller area than the corridor the plan is designed to serve; most trip origins and destinations do not adjoin the interstate.

Limiting the location of new infrastructure to a highway corridor biases the analysis against non-highway alternatives. For example, a third track on the MARC Brunswick Line is an obvious alternative to widening I-270, but the narrow study area definition rules it out because the existing tracks aren't right next to the highway. The study area definition also biases the analysis against Transportation Demand Management, which generally requires action at trip origins and destinations rather than along the highway.

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<sup>5</sup>DEIS p. 2-6; Appendix B, Alternatives Technical Report, pp. 110-115, 148; B. DePuyt, [As Hogan's Highway-Widening Plan Changes, \\$9 Billion Price Tag Does Not](#), *Maryland Matters*, Sept. 1, 2020.

**Traffic congestion** - The DEIS purports to screen alternatives by their ability to “relieve” traffic congestion [p. 2-3]. It does not, in fact, measure congestion. And even if accurately measured, congestion reduction would not be an appropriate screening criterion.

The screening criteria involve vehicle movement only within the very narrow study area. The great majority of trips on I-270 and I-495 begin or end outside the study area and use connecting roads to access the interstates. Increased vehicle throughput on the interstates necessarily increases traffic volumes on those connecting roads, creating increased congestion which is not captured in the DEIS’s calculations.

Moreover, the traffic analysis does not measure congestion; it measures “delay” which combines time stopped at intersections with congestion delays. This intrinsically biases the analysis toward expansion of limited-access highways which don’t have traffic lights. For example, consider a trip that takes the same amount of time on straight local roads or on a longer route that uses the Beltway. On the local roads, a car moves for 10 minutes and stops at lights for 5 minutes. The Beltway route has no traffic lights but due to the added distance the car has to keep moving for 15 minutes. Switching this trip from the local roads to the Beltway yields a 5-minute reduction in model-calculated “delay” even though the actual trip time is identical.

Even if they were accurately measured, traffic congestion and vehicle speed would be inherently biased screening criteria. They measure vehicle movement rather than access to destinations. A simple example illustrates the difference. If I walk across the street to a store, I reach my destination in less than a minute, but a vehicle may need to stop for a few seconds while I cross. If I drive to a store ten miles away at 60 mph, there is no vehicle delay. When congestion and speed are screening criteria, infrastructure that forces me to drive 10 miles appears to be better than infrastructure that lets me cross the street, because the few seconds a driver waits count and the nine minutes I save by walking don’t count.

**Transportation systems management** - The explicit justification offered on p. 2-11 for eliminating the TSM/TDM alternative is an unsupported assertion that TSM/TDM cannot meet the stated needs. This is simply false. For example, ramp metering with queue-jumper lanes for trucks and buses could potentially satisfy several of the purported needs:

- It would enhance trip reliability on all lanes on I-270 and I-495. This is better than the alternatives that passed the screening, which only enhance reliability on the toll lanes. (The DEIS did not analyze trip reliability on the arterial roads that lead to the interstate ramps.)
- It would provide an additional roadway travel choice.
- It would improve the movement of goods and services.

Other variants of TSM/TDM require analysis as well.

## Segmentation

Governor Hogan's announcement of this project made clear that the state considers his proposed new lanes on I-270, the Beltway, and Baltimore-Washington Parkway to be a single integrated project whose purpose is to improve "traffic in the region."<sup>6</sup> It must be compared to transit alternatives with a similar regional scope, such as the Maryland Transit Opportunities Coalition's rail transit plan.<sup>7</sup>

More specifically, the scope of the DEIS excludes the portion of I-270 between Frederick and Shady Grove, which the state is preparing to analyze in a separate NEPA document. Phase 1 of the toll lane procurement, which has been under way since last February, combines this road segment with portions of the DEIS build alternative in a single contract.

Widening the southern portion of I-270, now six lanes wide, without widening the northern portion would exacerbate congestion at the northbound merge points where the road would narrow from eight to two lanes. The DEIS admits this, in a figure buried on page 150 of Appendix C, but glosses over it in its alternatives analysis. Moreover, the traffic analysis does not accurately measure the added congestion, and very likely greatly underestimates it. The computer model does not consider traffic backups south of the merge points, a phenomenon that every I-270 driver knows is the main source of congestion.<sup>8</sup>

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<sup>6</sup><http://www.roads.maryland.gov/OC/Traffic-Relief-Plan-Press-Release.pdf>;

<sup>7</sup><https://www.transitformaryland.org/>

<sup>8</sup>Marshall, *op. cit.*

Dividing this contract into two separate NEPA processes also adds to the heavy bias against rail transit. Trains on the MARC Brunswick Line primarily serve trips from north of Shady Grove to areas within or south of the study corridors, such as Silver Spring, the District of Columbia, or (via the Red Line) Bethesda. To increase capacity, track must be added both north and south of Shady Grove. Cutting off the analysis at Shady Grove makes it impossible to fairly evaluate this alternative.

Limiting the geographic scope of this DEIS clearly constitutes segmentation, an evasive action that has been ruled illegal by the courts because it violates the spirit and letter of NEPA.

### **Procurement Method**

In January 2020, the Maryland Board of Public Works made major revisions to the procurement process for the toll lanes, which this NEPA process has been rigged to justify. These revisions significantly alter the environmental impacts of the project. The DEIS mentions these changes on p. 2-47, but it analyzes the project only as it was conceived prior to these alterations.

The procurement is now a two-stage process in which MDOT first selects a “Phase Developer.” An initial contract with the Phase Developer closes after the Record of Decision is issued. The Phase Developer then designs the toll lanes. After the project is designed, MDOT negotiates a build-finance-operate-maintain contract with the Phase Developer on a sole-source basis.

The BPW also altered the scope of the first phase of the project, which now runs from the American Legion Bridge to I-270 in Frederick. Out of Maryland’s 42 miles of I-495, only the short segment from the Bridge to the I-270 west spur is included. This phasing makes it certain that toll lanes on the remainder of the Beltway will not be built until many years in the future, and there is a strong likelihood that they will never be built.

MDOT has not initiated procurement of the Phase Developer contract for the rest of the Beltway and does not plan to do so for many years. The limitations on use of park land under the Capper-Cramton Act, the high costs of utility relocation, and local government opposition create enormous financial and political obstacles to widening the Beltway east of I-270, especially given MDOT’s assertions that it will rely on toll revenues to cover the entire project cost.

The most likely outcome of this NEPA process, if a build alternative is selected, is that only the first segment, running from the American Legion Bridge to the I-270 spur and up I-270 to Shady Grove, will ever be built. The toll lanes would then funnel four additional lanes of traffic, two from the Bridge and two from I-270, into the merge near Wisconsin Avenue. That would exacerbate the already severe congestion at the merge point. Such an outcome would be the opposite of “traffic relief.” It would reduce trip reliability and impede the movement of goods and services.

## **Conclusion**

The entire process leading to this DEIS is fatally flawed. It cannot be the basis for a Record of Decision.

MDOT and FHWA must restart the process with a new, unbiased Purpose and Need Statement. The study must address the entire region through which I-270 and I-495 run, from Frederick and the American Legion Bridge to the Woodrow Wilson Bridge. All-transit alternatives, such as MARC rail expansion, must be among the ARDS. Transit alternatives must be located where they will most productively improve transit service and not be constrained by the locations of highway infrastructure.

This is not the first NEPA study of toll lanes on the Beltway or I-270. A Beltway managed lane study was initiated in 1996. In response to scoping comments from the public and local government, a transit alternative of light rail from Bethesda to New Carrollton was added to the study. That alternative, the Purple Line, was found to outperform added highway capacity and is now under construction.

We believe an unslanted analysis of the so-called Traffic Relief Plan would reach a similar conclusion. Others may not share that belief; the only way to find out who is right is through a completely new study that rejects the biases and preconceived conclusions that pervade this DEIS. Only such a study can satisfy the requirements of NEPA.