

I oppose the Preferred Alternative as explained in my detailed comments below. At this point, I only support the No-Build Option.

Respectfully,

Rodolfo Pérez, P.E.  
6 Manor Spring Court  
Silver Spring, MD 20906

### **Traffic Model Lacks Credibility due to Discrepancies and Inaccuracies in Speed and Traffic Volumes Results**

The SDEIS traffic analysis contains remarkable discrepancies and inaccuracies that challenge MDOT's assertions that the Preferred Alternative will significantly improve travel for *all lanes* along the corridors. These discrepancies and inaccuracies invalidate the traffic model results. MDOT must identify the root cause of the model's failure, and then rectify its traffic analysis to support any purported travel gains.

For example, Table 3-5 presents corridor travel speeds that disagree with the travel speeds in Appendix A Traffic Evaluation Memorandum, which is the source document for the modeling results. Table 3-5 misleadingly reports that, during the AM Peak with the Preferred Alternative, the GP Lanes reach 45 mph and the HOT Lanes reach 51 mph on the I-495 Inner Loop from GW Memorial Parkway to the I-270 West Spur. In contrast, the corresponding speed map in Appendix A shows that the GP Lanes speed at the GW Parkway decays to less than 25 mph (red zone) by 9:00 am, and that before 8:00 am their speed is in the red zone at the I-270 West Spur. The map also shows that the HOT Lanes speed falls into the red zone after 9:00 am from the GW Memorial Parkway towards Maryland. Table 2 in Appendix A, further corroborates what the speed map says, for it reports that in the I-495 Inner Loop from GW Memorial Parkway towards MD 5, the GP Lanes reach 27 mph and the HOT lanes reach 28 mph, not the higher speeds cited in Table 3-5.

Another anomaly in the model is the inexplicable disappearance of the traffic volume projected along the I-495 Outer Loop (when the toll lanes are built) at locations far away from the HOT Lanes termini that will not be physically improved. These are locations in Prince George County which, according to MDOT projections, are expected to experience a steady growth in traffic volume.

For example, the speed map in Appendix A, shows that in the evening rush-hour in 2045, the I-495 Outer Loop GP lanes at US 1 interchange flow at or below 35 mph (orange zone) in the No-Build scenario. This is a logical decrease from the green speeds (equal or greater than 40 mph) of the Existing scenario as traffic grows without capacity improvements. However, in the HOT Lanes scenario, the GP lanes speed jumps back to the green zone as the model inexplicably predicts a 13% drop in the number of vehicles at that intersection which had no improvements in built capacity.

Similarly, at the interchange of US 50 with the Outer Loop, the GP lanes flow at less than 25 mph (red zone) in the No-Build scenario and, in the HOT Lanes scenario, the GP lanes jump back to the green zone speed without additional built capacity. The model inexplicably predicts a 4% drop in the number of vehicles at that intersection for the HOT Lanes scenario.

What compounds even more the model contradictions occurs at the MD 201 interchange. At this location, the speed of the Outer Loop GP lanes remains in the red for *all* the scenarios in spite of a 16% drop in the number of vehicles that the model forecasts for the HOT Lanes scenario.

In a credible traffic model, the demand (number of vehicles) projected for a given year does not disappear, it just flows differently for each scenario modeled. Each scenario resembles a network of pipelines tweaked differently to determine which one may offer the optimal flow for the projected demand.

### **Impact of COVID-19 on Traffic Demand and Forecasts**

The SDEIS concludes that highway travel will resume its projected growth, and only commits MDOT to a pro forma monitoring of trends in telework, eCommerce, etc., while the toll lanes project plows ahead.

This conclusion contradicts several experts who forecast a remarkable increase in telework for the Washington Metropolitan Area, and proportional decreases in traffic congestion. For example, the Ernst & Young report for the Greater Washington Partnership indicates that the number of persons who telework a few days per week could quintuple from pre-pandemic levels. That would mean 18% of the total workforce (over 1 million people) staying off the roads during the morning and evening travel peaks. The report also forecasts more discretionary non-peak hour trips spread throughout the day. These discretionary trips are certainly not the toll harvesting trips that TransUrban is banking on.

The Maryland Transportation Institute separately reported that just a 5% reduction in the morning peak traffic volumes along the I-270 and I-495 corridors, reduced traffic congestion by 32 and 40 percent respectively. A traffic expert from INRIX, confirmed this correlation saying that even a slight traffic reduction (3 to 5 percent) has an outsized impact on heavily congested roads because teleworking removes vehicles from the rush hour when the road capacity is most overtaxed. MDOT must explain why its conclusions about traffic demand and telework trends are so different to those of the aforementioned experts.

### **Preferred Alternative Does Not Meet the Stated Purpose and Need**

The SDEIS does not explain how moving goods and services (one the stated needs for the project) is served for the trailer tractors crossing the American Legion Bridge into VA. These vehicles are prohibited from using the HOT lanes in VA and will be forced to join the GP lanes thus creating bottlenecks. A revised traffic operational analysis must address this problem in tandem with the traffic model anomalies discussed above.

### **Total Project Costs and Financial Viability Remain Unknown**

In a report dated July 9, 2021, the State Treasurer, listed the uncertainties about the costs, financial risks and ultimate benefits of the public-private partnership (P3) agreement to deliver the project. MDOT must address the State Treasurer's concerns.

The SDEIS does not estimate the state subsidies necessary for the Preferred Alternative. Last year's DEIS estimated subsidies for each alternative examined. For example, the DEIS estimated subsidies for Alternatives 9 and 10 at \$482 million and \$604 million respectively. Given the order of magnitude for this item, MDOT must report the subsidies for which taxpayers could be liable with this project.

The SDEIS does not include the utility relocations costs associated with the Preferred Alternative. For the DEIS alternative, MDOT had estimated a cost of \$900 million. Given the order of magnitude of this item, MDOT must disclose all the utility relocation costs for its Preferred Alternative.

The scope of the project in the SDEIS calls for total replacement of the American Legion Bridge. In contrast, MDOT Secretary Slater testified on two occasions this year that only the deck needs replacement because the bridge is structurally sound. MDOT must confirm whether Secretary Slater is correct and if so, revise the cost

estimate accordingly. The cost difference between total bridge replacement versus deck-only replacement would be significant for a bridge of this magnitude.

### **Inadequate Examination of Multimodal Alternatives**

The SDEIS claims that the benefits from five transit projects on the traffic demands for the roadway network, were accounted for in the traffic modeling. First, the discrepancies and inaccuracies in the traffic modeling discussed above raise doubts on how such benefits were accounted for. Second, the transit projects listed do not include the implementation of the MARC Cornerstone Plan and its benefits on reducing traffic along the I-270 corridor.

I already pointed this omission in my critique of the DEIS. The Cornerstone Plan could provide the Brunswick Line with additional rail capacity of 19,400 passengers over its pre-pandemic ridership. That growth in rail capacity represents 53% of the net growth in single-occupancy vehicles that the DEIS estimated for I-270. MDOT's two times exclusion of MARC's potential for reducing traffic congestion is indefensible.

In 2017, the National Capital Region Transportation Planning Board compared the performance of toll lanes to a whole suite of alternatives including rail extensions, travel demand management, and land-use changes. The results of that comparison dismantled the notion that toll lanes are the optimal solution to traffic congestion.

Considering that only 9% of the total traffic projected accounts for trucks and trailers, and the post-pandemic trends in travel and telework, it is imperative to examine all viable alternatives for the 90% of the traffic which, unlike truckers, has other choices. MDOT's resistance to rigorously examine all alternatives does not serve the taxpayers.