

Ineffectiveness of Traffic Relief Plan

Author: Eric Norton, Director of Policy & Programs, Central Maryland Transportation Alliance

Strip away all the ancillary promises made by MDOT and project proponents – that the project wouldn't come at a cost to the state, that it would grow the economy, that it would reduce emissions – and the fundamental promise of this proposal is “traffic relief”. The Pre-Solicitation Report (PSR) notes that “significant congestion along two of the most critical highways in the National Capital Region – I-495 and I-270 (the “Program Corridor”) – negatively affects residents and businesses daily.” Secretary Rahn has promised that this project would “bring transformative relief to the growing congestion” in the D.C. region.

There is no doubt that congestion exists along these corridors. But widening roadways in metropolitan areas fails to reduce traffic congestion for very long. For decades, study after study has found that expanding road capacity encourages more people to drive which, in as little as three to five years, soaks up that added capacity. The most recent study to come to this conclusion was released just this year and found that a 1 percent increase in lane-miles induced a 1 percent increase in vehicle-miles traveled (VMT) - a one for one correlation. Moreover, after just five years the short-term increases in speed are wiped out and congestion returns to pre-project levels¹. The evidence of this “induced demand” is so overwhelming that it is sometimes called the “Fundamental Law of Road Congestion”.²

A policy brief from the National Center for Sustainable Transportation entitled *Increasing Highway Capacity Unlikely to Relieve Traffic Congestion* summarizes findings from over a dozen research papers thusly:

- The quality of evidence linking highway capacity to increased VMT is high;
- Increased capacity induces additional VMT in the short-run and even more in the long-run; and
- Capacity expansion leads to a net increase in VMT, not simply a shifting from one road to another³

¹ Kent Hymel, “If you build it, they will drive: Measuring induced demand for vehicle travel in urban areas,” *Transport Policy* Vol. 76 (April 2019): 57-66

² Gilles Duranton and Matthew Turner, “The Fundamental Law of Road Congestion: Evidence from US cities,” *American Economic Review* Vol. 101 No. 6 (October 2011): 2616-52

³

http://www.dot.ca.gov/newtech/researchreports/reports/2015/10-12-2015-NCST_Brief_InducedTravel_CS6_v3.pdf

In Maryland, we have seen direct evidence of this over the last few decades. For example, in the Baltimore region, between 1982 and 2011 the region nearly doubled the amount of freeway lane miles (from 885 lane miles to 1,561 lane miles). During that same time, the region's population grew from 1.7 million to 2.5 million – a 48% increase. Freeway expansion far outpaced population growth, but it did not relieve traffic congestion. In fact, by every measure congestion got worse: the amount of congested lane miles increased from 31% to 58%; the annual hours of delay per auto commuter quadrupled, from 9 hours a year to 41 hours a year; and the annual cost of congestion increased from \$96 million per year to \$1.5 billion per year.⁴

Increasingly, transportation professionals and departments of transportation around the country are recognizing this and responding accordingly. For example, the Colorado Department of Transportation (CDOT) has admitted that “simply accommodating more cars won't work”. Shoshana Lew, head of CDOT said, “We are not going to be able to build our way out of congestion on a corridor where 85 percent of a growing population lives. The math just doesn't work.”⁵ In the PSR, even MDOT acknowledges the phenomenon of induced demand:

“Adding more general purpose lanes is neither financially feasible nor is it likely to relieve congestion over the long term as the Region's population is expected to grow and drivers, left without a reliable option that manages traffic demand, will be forced to drive in a congested corridor.”⁶

In recognizing this, MDOT has framed these projects as a form of transportation demand management because they involve price managed toll lanes. But the proposed project is not really transportation demand management, which is focused on using *existing* infrastructure in more efficient ways. Tolls, HOV/HOT lanes, and congestion pricing can be transportation demand management solutions when applied to existing infrastructure, but this project would be “adding new, tolled capacity while maintaining existing, free lanes.”⁷ This project would result in more capacity on I-495 and I-270, and there would be induced demand adding congestion not just to the general purpose lanes but to every connecting arterial road and highway as well. As proposed, the Traffic Relief Plan would not actually deliver traffic relief.

⁴ Texas Transportation Institute 2012 Urban Mobility Scorecard

⁵ <https://www.denverpost.com/2019/05/20/colorado-transportation-priorities/>

⁶ Presolicitation Report for the I-495 & I-270 P3 Program. December 2018. Page 8

⁷ Ibid. Page 9