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March 4, 2020

The Honorable Kumar Barve  
Chairman, House Environment and Transportation Committee  
251 House Office Building  
Annapolis MD 21401

The Honorable Dereck Davis  
Chairman, House Economic Matters Committee  
231 House Office Building  
Annapolis MD 21401

***Re: Letter of Information – House Bill 1425– Climate Solutions Act of 2020 – Greenhouse Gas Emissions Reduction Act***

Dear Chairman Barve, Chairman Davis, and Members of the Committees:

The Maryland Department of Transportation (MDOT) offers the following letter of information for the Committee’s consideration on House Bill 1425.

House Bill 1425 requires that all State agencies, including the Maryland Department of Transportation, implement a plan for Maryland to achieve a 60% reduction in greenhouse gas emissions (from 2006 levels) by 2030 and that the state achieve net-zero emissions by 2045.

The MDOT supports the overall objective to reduce greenhouse gas emissions. Climate change is an urgent threat, and all levels of government and nongovernment organizations must take increasingly aggressive and balanced actions to reduce emissions and increase community resiliency. Maryland is a national leader in this area, realizing substantial reductions in emissions since the first Greenhouse Gas Reduction Act (GGRA) was passed in 2009, with the Hogan Administration taking bold new actions to achieve significant progress. While MDOT welcomes efforts to accelerate action to combat climate change, we would like to provide information and express some concerns with the bill as currently drafted.

MDOT has focused our emissions modeling and GHG mitigation strategies development in three key areas: 1) Vehicle Technologies; 2) Vehicle Miles Traveled (VMT) Reduction; and 3) Education and Outreach. Generally speaking, any goals that require deeper GHG emissions reductions or net-zero aspirations must also account for the time that it will take for the development and adoption of new and reliable vehicle technologies.

Vehicle technologies offer the most current and potential promise for emissions reductions. While the average age of the light-duty fleet is 12 years and the average age of the heavy duty fleet is 15 years, there is great opportunity as transportation professionals begin to better understand how automated, connected, electric, and shared (ACES) technologies can be best

implemented to reduce emissions, reduce congestion, and increase safety. However, it will continue to be a challenge to have a meaningful impact on the VMT that travels *through* our State. Based on data collected by MDOT State Highway Administration (MDOT SHA), 75 percent of total VMT originates and ends within Maryland and only 50 percent of heavy-duty VMT occurs completely within Maryland. The rest of the travel is known as through travel, meaning it either begins, ends, or travels completely through our State, but is still captured in our emissions analyses.

Maryland ranks as the 19<sup>th</sup> most populous state and 5<sup>th</sup> in population density. Between 2010 and 2017, the populations in the Washington Metropolitan region and Southern Maryland grew by 7.9 percent and 6.5 percent, respectively. The National Capital Region will, by 2040, see a population increase of an estimated 1.5 million people. As Maryland's population continues to grow, it is essential that we maintain every strategy and tool available to us for ensuring safe, efficient, and environmentally conscious travel throughout our transportation system. The benefits inherent in congestion reduction projects, including the maintenance and enhancement of our transit system, will be vital to achieving our goals.

Of particular concern, House Bill 1425 prohibits the new GGRA Plan from including highway widening or traffic congestion relief as a GHG emissions reduction measure. MDOT, MDE, and nationally recognized institutions such as the Transportation Research Board (TRB) have conducted research and analyses demonstrating that congestion reduction is a critical component of achieving short- and long-term GHG emissions reductions. However, we must recognize that environmental benefits to congestion relief and conversion to Zero Emissions Vehicles (ZEV) are pieces of the overall puzzle. Marylanders will continue to be stuck in hours of traffic each day without important traffic mitigation strategies, which include increases in highway *and* transit capacity. These measures are important to the overall strategy of reducing GHGs, and they also present opportunities to reduce the significant costs of congestion Marylanders face every day. Inaction on this front is not acceptable. The bill's requirements would even prohibit increases in transit capacity from being counted towards these new GHG reduction requirements.

The MDOT SHA Coordinated Highway Action Response team (CHART) program ensures that incidents are managed as quickly as possible to reduce congestion, idling times, and emissions. MDOT also works with local agencies to optimize signal phasing and timing to reduce emissions as well as congestion. MDOT has invested, and will continue to invest, in the maintenance and enhancement of our transportation system. Travel demand management is an important piece of our VMT and congestion reduction strategy. MDOT works with many partners to maintain and build bicycle and pedestrian infrastructure and to promote alternatives to driving, such as carpooling, vanpooling, and transit use.

The second concern, from the MDOT perspective, is related to the requirements to replace the State's vehicle fleet. Due to the limited operating budgets of State agencies, and the limited ZEV model options, it would be difficult to achieve the legislation's stated goal of a 100 percent ZEV light-duty State agency fleet. The average age of light-duty vehicles (LDVs) in the State fleet is 10 years, with a total of 124,400 miles in the final year of use. The State purchases approximately 400 LDVs per year (41 percent are sedans, 59 percent are light-duty trucks). The current, average price differential between a ZEV and conventionally powered vehicle is nearly \$10,000. Per recommendations from the Maryland Commission on Climate Change and the Zero Emission and Electric Vehicle Infrastructure Council, Maryland State agencies, including, MDOT, MDE, DGS, DBM, MEA, and others, are currently working on a plan to responsibly accelerate the turnover of the State LDV fleet to ZEVs.

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Finally, the bill's requirement for the MDOT Maryland Transit Administration (MDOT MTA) to begin converting the existing bus fleet to ZEV starting July 1, 2020 is not practical and conflicts with its current contract. MDOT MTA is currently in year one of a five-year bus procurement. The existing procurement does not have an option to purchase ZEV buses. The requirement in House Bill 1425 to purchase 25 percent of new buses as ZEVs starting July 2020 is not possible. It would take at least two years to complete a new procurement and cancelling the existing contract would adversely affect service for MTA customers. This also does not account for the charging and maintenance infrastructure, or the different skill sets that would be immediately necessary to accommodate ZEV busses. MDOT is completing a study to determine the requirements for ZEV transit busses that meet the high demands of the Baltimore transit system. The next contract to purchase transit buses at MDOT MTA will be entirely ZEV buses. The expectation is that in 2025 we will begin to receive ZEV buses as promised in the current GGRA. As these efforts unfold, MDOT supports House Bill 432, with amendments, as a more realistic approach to incorporating ZEVs into the MDOT MTA fleet.

While Maryland has demonstrated success in reducing total GHG emissions, MDOT acknowledges that more must be done to continue reducing emissions and to prepare for the impacts of climate change. MDOT has been working closely with local, state, regional, national, and international partners on advancing our understanding of transportation-related emissions reductions and conducting research, analyses, and implementation that will ensure our ability to meet our goals without putting Maryland's citizens, businesses, and communities at an economic disadvantage.

For these reasons, the Maryland Department of Transportation respectfully requests the Committee carefully consider this information when deliberating House Bill 1425.

Respectfully submitted,

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