HB 1013

Department of Legislative Services

Maryland General Assembly
2019 Session

FISCAL AND POLICY NOTE
First Reader

House Bill 1013 (Delegate Wilson)
Environment and Transportation

Department of Transportation - Study on Roadway Surface Material

This bill requires the Maryland Department of Transportation (MDOT) to conduct a study on roadway surface material to determine the roadway surface material that is the most efficient in terms of cost, durability, and maintenance. MDOT must submit a report of its findings and recommendations to the Governor and the General Assembly by January 1, 2020. **The bill takes effect July 1, 2019.**

Fiscal Summary

State Effect: Transportation Trust Fund (TTF) expenditures increase significantly in FY 2020 to conduct the required study. The total cost for the study could easily exceed $1.0 million, as discussed below. Revenues are not affected.

Local Effect: The bill does not directly affect local governmental operations or finances.

Small Business Effect: Minimal.

Analysis

Bill Summary: In conducting the study, MDOT must:

- study the potential of using concrete and other roadway surface materials as an alternative to asphalt, as specified;
- analyze alternatives to the use of asphalt as a roadway surface material that are used in other states and countries;

- explore options for replacing existing asphalt roadways in the State with concrete or other alternative roadway surface materials; and
- develop recommendations comparing the cost, durability, and maintenance of concrete and other alternative roadway surface materials with the cost, durability, and maintenance of asphalt.

Current Law/Background: The State Highway Administration (SHA) is responsible for more than 5,200 miles or approximately 16,800 lane miles of road, 2,500 bridges, 3,500 small stream crossing structures, and 80 miles of sound barriers in the State. It also has responsibility for planning, designing, constructing, and maintaining these roads and bridges to safety and performance standards while considering sociological, ecological, and economic concerns.

While asphalt is the most commonly used roadway surface material, other materials used for roadway surfaces include concrete, composite pavement (which combines concrete and asphalt), gravel, pavers, and various coating materials that can be applied on top of other materials.

The Federal Highway Administration (FHWA) has two existing programs designed to develop and study pavement and roadway surface materials and to assist states with the safe and proper use of those materials: the Pavement and Materials Research and Development Program and the Accelerated Implementation and Deployment of Pavement Technologies Program. FHWA advises that the programs improve the safety, durability, sustainability, and cost-effectiveness of highway pavements and the materials from which highway infrastructure is constructed.

State Expenditures: SHA advises that roadway surface materials are a complex issue with numerous technical considerations that must be taken into consideration along with cost, durability, and maintenance for each individual project and, therefore, conducting the study required by the bill is likely to be extensive and complex. Depending on traffic volume and other environmental factors involved with an individual project, the cost, durability, and maintenance necessary for a surface material that could be used for any given project can vary significantly. Therefore, TTF expenditures increase significantly for SHA to complete the required study.

In recent years, the National Cooperative Highway Research Program (NCHRP) has undertaken studies similar to what is required by the bill for individual road surface materials and experienced costs of $300,000 to $500,000 per study. SHA is likely to experience similar costs for each material it studies, and since the bill requires SHA to study multiple materials, the total cost for the study could easily exceed $1.0 million. The total cost may be reduced somewhat to the extent that SHA is able to summarize existing studies produced by FHWA and NCHRP.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Maryland Department of Transportation; Federal Highway Administration; National Cooperative Highway Research Program; Department of Legislative Services

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