

Department of Legislative Services
 Maryland General Assembly
 2012 Session

FISCAL AND POLICY NOTE
Revised

Senate Bill 478

(Senator Ferguson)

Education, Health, and Environmental Affairs

Rules and Executive Nominations

Education - School Buses - Fire Safety Standards for Engine Components - Study

This bill requires the Maryland State Department of Education (MSDE) to research and explore ways to reduce the flammability of the plastic components contained in a school bus engine compartments. The study must include cost estimates for compliance with the Underwriters Laboratories Inc. Standard 94 (UL 94), “Standard for Safety of Flammability of Plastic Materials for Parts in Devices and Appliances Testing” and for equipping school buses with an emergency fire suppression system. MSDE must report the results of the study to the House Ways and Means Committee and the Senate Education, Health, and Environmental Affairs Committee by December 1, 2012.

The bill takes effect July 1, 2012.

Fiscal Summary

State Effect: General fund expenditures increase by \$13,800 in FY 2013, which reflects the cost of hiring one part-time contractual employee to conduct the study. Revenues are not affected.

(in dollars)	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	13,800	0	0	0	0
Net Effect	(\$13,800)	\$0	\$0	\$0	\$0

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect

Local Effect: None.

Small Business Effect: None.

Analysis

Current Law: Any school bus procured for use in the State on or after January 1, 2014, must be constructed with materials that enable it to meet the fire safety criteria established by the National School Transportation Specifications and Procedures adopted at the most recent National Congress on School Transportation. The Motor Vehicle Administration, with the advice and consent of the Maryland State Department of Education (MSDE), must adopt regulations to promote the safety of school buses.

According to the Code of Maryland Regulations, the rear davenport paneling in a school bus is required to be covered with fireblock upholstery or have fireblock material between the engine compartment and the passenger compartment. In addition, seating on rear engine buses, track seating, and crash barriers are required to be covered with fireblock material. In addition, every school vehicle must be equipped with a nontoxic dry chemical fire extinguisher having a rating of at least 5 lb./10 B.C.

In addition, school buses must meet the Federal Motor Vehicle Safety Standard #302 (49 CFR § 571.302). In general, according to this safety standard, a material used in a school bus must not burn, nor transmit a flame front across its surface, at a rate of more than four inches per minute.

Unless it fails to meet applicable safety standards, a conventional school bus may be operated for up to 12 years, except in Caroline, Dorchester, Somerset, Talbot, Wicomico, and Worcester counties where it may be operated for up to 15 years.

Background: Underwriter Laboratories Inc. has been an independent safety science company since 1894. Its UL 94 standard determines a material's tendency to either extinguish or spread a flame once the specimen has been ignited. The three vertical ratings – V-2, V-1, and V-0 – indicate that the material was tested in a vertical position and self extinguished within a specified time after the ignition source was removed. The vertical rating also indicates whether the test specimen dripped flaming particles that ignited a cotton indicator located below the sample.

Brominated flame retardant (BFR) chemicals are typically used to meet the UL 94 V-0 classification. Due to the fear that these chemicals persist in the environment and accumulate in living organisms, as well as toxicological testing that indicates these chemicals may cause liver toxicity, thyroid toxicity, and neurodevelopmental toxicity some of these chemicals have been banned in some states and countries in Europe. The U.S. Environmental Protection Agency is currently working with manufactures of these chemicals to evaluate the risks of some of these chemicals and assess substitutes that meet the same flame retardant standards. However, since their flame retardant

capabilities have yet to be matched, BFRs are still commonly used in many applications, including printed circuit boards, carpets, upholstery, and domestic kitchen appliances.

After meeting with the School Bus Advisory Council, the School Vehicle Division of the Maryland Department of Transportation sets the safety standards and regulations that must be met by all public school buses. The council is overseen by the Motor Vehicle Administration's Vehicle Inspection Services School Vehicle Division and consists of the School Vehicle Division leadership team, the MSDE Director of Transportation, five members of the Maryland Association of Pupil Transportation, three members of the Maryland School Bus Contractors Association, a member of the private school transportation association, representatives from the three major Maryland school bus dealers, and members from other related State agencies.

As of the 2010-2011 school year, there were 3,834 publicly owned school vehicles and 3,312 contract school vehicles being used in the State.

State Expenditures: General fund expenditures increase by \$13,841 in fiscal 2013 for the cost of hiring one part-time contractual employee to conduct the study regarding ways to reduce the flammability of the plastic components contained in a school bus engine compartments. The estimate includes a part-time salary, fringe benefits, one-time start-up costs, ongoing operating expenses and termination of the contractual employee on December 1, 2012, when the study is complete.

	<u>FY 2013</u>
Salary and Fringe Benefits	\$11,482
Operating Expenses	116
Start-up Costs	<u>2,243</u>
Total	\$13,841

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Maryland State Department of Education, Maryland Department of Transportation, Environmental Protection Agency, Underwriters Limited Inc., National Congress on School Transportation, National Association of State Directors of Pupil Transportation Services, Department of Legislative Services

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