



**Committee: Finance**

**Testimony: HB 832 Public Utilities - Electric School Bus Pilot Program**

**Position: FAVORABLE**

**Hearing Date: March 30, 2021**

Dear Chairwoman Kelley and Members of the Committee:

The **39** undersigned groups strongly support HB832 and urge a favorable report. HB832 creates an Electric School Bus Pilot Program implemented and paid for by Maryland’s investor-owned utilities. School systems in each utility service area will be eligible to purchase zero-emission electric buses rather than diesel ones at no additional cost to the system. While the utility will cover the “incremental cost” and provide the charging infrastructure, savings from operating and maintaining the buses may be retained by the school system. Each investor-owned utility that implements the program will purchase a minimum of 25 electric buses and can spend up to \$50 million during the pilot program, which will run 3-5 years. The utility, in consultation with participating school systems, will provide annual reports on the costs and benefits of the program to the General Assembly, the Governor and the Public Service Commission.

Every day over 650,000 children in Maryland ride to school on one of the State's approximately 7,200 diesel school buses. Every year, school buses in Maryland travel more than 128 million miles. [Studies](#) have shown that diesel pollutants concentrate inside a bus cabin, increasing children's exposure. A child riding inside of a diesel school bus may be exposed to as much as four times the level of toxic diesel exhaust as someone riding in a car. Diesel emissions are filled with carcinogens, particulate matter and soot that increases lifetime risk of cancer, incidents of asthma and heart disease. These effects are even more dangerous to children, whose lungs, heart and other organs are still developing.<sup>1</sup>

In Maryland, approximately one in ten children suffer from [asthma](#), and this rate is higher among minority groups.<sup>2</sup> Asthma is a leading chronic illness among children in the United States, and it is also one of the leading causes of school absenteeism. In Maryland, 19.2 percent of parents [reported](#) that their child missed 1-2 days of school because of asthma and 9.7 percent said their child missed over seven days due to asthma.<sup>3</sup> Children riding in zero-emission buses experience reduced exposure to air pollution, less pulmonary inflammation, more rapid lung growth over time and lower absenteeism compared to children riding in diesel buses, particularly those with asthma.

Diesel school buses harm the environment in a number of ways. They are a major source of greenhouse gas emissions, each bus emitting about 27 tons of CO<sub>2</sub> per year—6 times as much as an average car. Nitrogen oxide, a major constituent of diesel exhaust, contributes to acid rain, ozone formation and smog.

In the past, the high upfront cost of purchasing electric buses put them out of reach for many school systems. But costs have come down, and recent innovations, such as vehicle-to-grid (V2G) technology, coupled with the lower costs of operating and maintaining electric buses, have made them financially attractive for schools. One [estimate](#) puts the cost of operating electric school buses at about 19 cents per mile, compared to the 82 cents per mile cost of diesel buses.<sup>4</sup>

V2G technology uses bus batteries to provide electricity to the grid when it is needed to stabilize imbalances and meet peak demands. School buses are ideally suited for this function, as they are equipped with very large batteries and only operate for small parts of the day. In the summer, when electricity demand is at its highest, most school buses do not operate at all. School bus routes are typically less than 40 miles, whereas today's electric school buses can travel 120 miles or more on a single charge, which for some buses can be accomplished in only three hours.

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<sup>1</sup> National Resources Defense Council Coalition for Clean Air, *No breathing in the aisles — diesel exhaust inside school buses*; <https://www.nrdc.org/sites/default/files/schoolbus.pdf>, January 2001

<sup>2</sup> Centers for Disease Control and Prevention, *Asthma in Maryland*; <https://www.govtech.com/workforce/Electric-Buses-Are-Not-Only-Clean-but-Less-Costly-to-Run.html>, 2008

<sup>3</sup> Maryland Department of Health and Mental Hygiene, *Asthma in Maryland 2012*; <https://phpa.health.maryland.gov/mch/Documents/Asthma%20in%20Maryland%202012.pdf>, 2012

<sup>4</sup> Government Technology, *Electric Buses Are Not Only Clean but Less Costly to Run*; <https://www.govtech.com/workforce/Electric-Buses-Are-Not-Only-Clean-but-Less-Costly-to-Run.html>, 2018

Electric school buses are already being deployed in Maryland. Montgomery County, Frederick County, Howard County and Prince George's County already own, or plan to own, electric school buses. In Howard County, BGE utility is furnishing the charging equipment and installation.

HB832 provides the opportunity to expand the benefits of electric school buses to every school system in Maryland within the territory of an investor-owned utility. The program ensures there are no capital, administrative or operational costs to the school system. Rather, in addition to the substantial health benefits of the buses, each participating school system can expect to see estimated cost savings of thousands of dollars per year per bus, dollars that can go to educational programs, teachers' salaries and assistance to needy students.

HB832 is a no-lose proposition that would provide substantial health and educational benefits to Maryland's students and improve the environment for all Marylanders.

The undersigned 39 groups urge a favorable report on HB832.

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