

March 22, 2022



Committee: Senate Finance Committee

Testimony: SB948, Public Utilities - Electric School Bus Pilot Program

Position: FAVORABLE

Hearing Date: March 22, 2022

Dear Chairwoman Kelley and Members of the Committee:

The undersigned 35 groups strongly support SB948 and urge a favorable report.

SB948 creates an Electric School Bus Pilot Program where school districts in each utility service area will be eligible to purchase zero-emission electric buses rather than diesel ones at no additional cost to the school districts. Investor-owned utilities may recover reasonable costs of the pilot program through a ratepayer adjustment. Each investor-owned utility that implements the program will provide rebates to school districts for a minimum of 25 electric buses; the rebates are capped at \$50 million during the pilot program, which will run 3-5 years. The utility, in consultation with participating school districts, will provide annual reports on the environmental, health, and other 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 15 times the level of toxic diesel exhaust as someone riding in a car.¹ Diesel emissions are filled with carcinogens, particulate matter and soot that increases lifetime risk of cancer, incidence of asthma and heart disease. These effects are even more dangerous to children, whose lungs, heart, and other organs are still developing.²

In Maryland, approximately one in ten children suffer from asthma, and this rate is higher among minority groups.³ Asthma is a leading chronic illness among children in the United States, and it is also one of the leading causes of school absenteeism.⁴ 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.⁵ 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.⁶

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 CO₂ per year—6 times as much as an average car.⁷ Nitrogen oxide, a major constituent of diesel exhaust, contributes to acid rain, the formation of ground-level ozone, which is a known respiratory irritant and trigger for asthma, and the formation of smog.

In the past, the high upfront cost of purchasing electric buses put them out of reach for many school districts. 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.⁸

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.

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, and operate electric school buses. School bus routes are typically less than 40 miles, whereas today's electric

¹ <https://www.ehhi.org/reports/diesel/dieselintro.pdf>, <https://www.sciencedirect.com/science/article/abs/pii/S0167629611000701>

² <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>

³

<https://health.maryland.gov/phpa/OEhfp/eh/Pages/asthma.aspx#:~:text=In%20Maryland%2C%207.6%25%20of%20children.was%20119.4%20per%2010%2C000%20residents>

⁴ <https://www.cdc.gov/healthyschools/asthma/index.htm>

⁵ <https://health.maryland.gov/phpa/mch/Documents/Asthma%20in%20Maryland%202012.pdf>

⁶ <https://www.atsjournals.org/doi/pdf/10.1164/rccm.201410-1924OC>

⁷ https://bellwethereducation.org/sites/default/files/Bellwether_WVPM-YellowToGreen_FINAL.pdf

⁸ https://uspirg.org/sites/pirg/files/reports/US_EL%20buses%202021%20scrm.pdf

school buses can travel 120 miles or more on a single charge, which for some buses can be accomplished in only three hours.

SB948 provides the opportunity to expand the benefits of electric school buses to every school district in Maryland within the territory of an investor-owned utility. The program ensures there are no capital, administrative or operational costs to the school district. Rather, in addition to the substantial health benefits of the buses, each participating school district 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.

SB948 is a no-lose proposition that would provide substantial health and educational benefits to Maryland's students and improve the environment for all of Maryland's communities.

The undersigned groups urge a favorable report on SB948.

Alliance of Nurses for Healthy Environments
Katie Huffling

**American Academy of Pediatrics,
Maryland Chapter**
Michael Ichniowski, MD
Chairperson, Environmental Health and Climate
Change Committee

Audubon Naturalist Society
Denisse Guitarra, Maryland Conservation
Advocate

Blue Water Baltimore
Alice Volpitta, Baltimore Harbor Waterkeeper

Chesapeake Bay Foundation
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**Chesapeake Climate Action Network
Action Fund**
Victoria Venable, Maryland Director

**Chesapeake Physicians for Social
Responsibility**
Gwen L. DuBois MD, MPH, President

Children's Environmental Health Network
Kristie Trousdale, Deputy Director

**Chispa Maryland,
Maryland League of Conservation Voters**
Ramon Palenica-Calvo, Program Director

**Climate Justice Wing of Maryland Legislative
Coalition**
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Climate Law & Policy Project
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Climate XChange Maryland
Wandra Ashley-Williams, Regional Director

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Larissa Koehler, Senior Attorney

**Environmental Justice Ministry Cedar Lane
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Howard County Climate Action

Liz Feighner, Steering Committee

Indivisible Howard County

Richard Deutschmann/Facilitator Climate Action Team

Labor Network for Sustainability (LNS)

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Maryland Campaign for Environmental Human Rights

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Maryland Catholics for Our Common Home

Robert M. Simon, Member, Organizing Committee

Maryland League of Conservation Voters

Kim Coble, Executive Director

Maryland Legislative Coalition

Cecilia Plante, Co-Chair

Maryland Public Health Association

Erica Weiss, Co-Chair, Advocacy Committee

Maryland Sierra Club

Lindsey Mendelson, Transportation Representative

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Staci Hartwell, Chair, Environmental and Climate Justice

Northeast Catholic Community Peace/Justice Committee

Nancy Conrad, Chairperson

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Christine D. Berg, M.D., Bethesda, Maryland

St Anthony of Padua, St Dominic & Most Precious Blood Church (Baltimore)

Rev. Ty Hullinger, Pastor

Takoma Park Mobilization Environment Committee

Diana Younts, Co-Chair

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Robin Budish, Director

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Monica O'Connor, Legislative Liaison