

## WORLD Resources Institute

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February 10, 2022

Delegate C.T. Wilson Maryland House Economic Matters Committee Room 231 House Office Building Annapolis, MD 21401

Dear Chairman Wilson and Members of the Committee:

I am writing on behalf of World Resources Institute's (WRI's) <u>Electric School Bus (ESB)</u> <u>Initiative</u> to respectfully encourage this committee to advance HB696 Public Utilities -Electric School Bus Pilot Program, sponsored by Delegate Fraser-Hidalgo. An earlier iteration of this bill passed the House of Delegates last year with broad support, and there continues to be momentum behind this legislation. WRI is working to advance an equitable transition of the entire fleet of U.S. school buses to electric vehicles by 2030. Maryland is poised to play a leadership role regarding both supportive electric school bus policies and deployment.

The Electric School Bus Pilot Program proposed in this bill would serve as a significant down payment towards the full electrification of Maryland's school bus fleet, which is presently comprised of mostly diesel school buses. Approximately 600,000 Maryland students take the bus to and from school<sup>1</sup> and, depending on the age of the bus, are exposed to air pollution levels as much as 12 times higher inside the bus compared to ambient levels.<sup>2</sup> Diesel exhaust from school buses is a known carcinogen that is linked to reduced lung development in children, respiratory diseases,<sup>3</sup> and negative impacts on cognition, affecting students' abilities to succeed in the classroom. Electric school buses are a healthier solution for students and bus drivers as they produce no tailpipe emissions. Moreover, students from historically underserved communities often rely more heavily on school bus transportation while also experiencing the highest levels of air pollution, so taking steps to electrify the state's school bus fleet has the potential to address historic inequities. Moreover, through pairings with renewable energy and storage, electric school buses can also support a transition to a cleaner energy grid while increasing resiliency.

<sup>&</sup>lt;sup>1</sup> "National School Bus Safety Week During a Pandemic." *Maryland Center for School Safety*, 18 Oct. 2020, https://news.maryland.gov/mcss/page/5/.

<sup>&</sup>lt;sup>2</sup> Beatty, Timothy K.M., and Jay P. Shimshack. "School Buses, Diesel Emissions, and Respiratory Health." *Journal of Health Economics*, vol. 30, no. 5, Sept. 2011, pp. 987–999., https://doi.org/10.1016/j.jhealeco.2011.05.017.

<sup>&</sup>lt;sup>3</sup> "The Road to Clean Air: Benefits of a Nationwide Transition to Electric Vehicles." *American Lung Association*. Sept. 2020, https://www.lung.org/clean-air/electric-vehicle-report.

This bill would allow each of Maryland's investor-owned utilities to access up to \$50 million over a three- to five-year period to support the deployment of electric school buses in selected school districts. This funding will help school districts and school bus contractors overcome the current upfront cost barriers associated with the transition to a cleaner, more sustainable transportation solution for their fleets. Additionally, as more schools learn of the benefits of electric school buses, drive up demand, and support manufacturing at greater scale, we expect to see the upfront cost of an electric school bus decline significantly over the next several years.

There is momentum building across the country for school bus electrification as several states have recently enacted a variety of bills to incentivize electric school buses and regulate school bus emissions. A growing number of states are also working to direct current funding or devote additional funding to school bus electrification and to support related efforts by electric utilities. The federal government recently enacted the bipartisan Infrastructure Investment and Jobs Act, which allocates \$5 billion for a Clean School Bus Program. While \$5 billion is the largest federal investment to date in clean school buses, additional resources will be required to accelerate an equitable transition across the country. The EPA may also, when awarding funds under this competitive program, reward districts that are able to leverage other funding sources, such as state-level funds. Furthermore, Maryland school districts are increasingly interested in pursuing ambitious fleet electrification plans. For example, Montgomery County recently committed to achieving a fully electric fleet by 2035 and Prince George's County is taking advantage of Volkswagen Settlement funds to deploy electric school buses. The time is now for the state of Maryland to enact this legislation and support deployment in additional communities.

In addition to their significant environmental and public health benefits, electric school buses equipped with vehicle-to-grid (V2G) technology could bolster grid storage and resilience across the state of Maryland. Unlike plugging in a kitchen appliance, which takes energy directly from the grid, V2G allows electricity to flow in both directions – charging the bus battery when grid demand is low and discharging energy back to the grid later when demand (and cost) is high. Through unique policies and partnerships, school districts can also benefit from the energy and capacity their buses provide through credits for the energy discharged; ratepayers can benefit from potential downward pressure on electricity rates as fixed system costs are spread over more electricity sales; and publicly and privately owned buildings could use the stored energy in the vehicles as back-up emergency power sources to keep the lights on amid prolonged outages that occur in the United States with increasing regularity. While V2G technology is in the early stages of implementation, this bill presents a compelling opportunity for Maryland to become a national leader in V2G development, while enjoying the many benefits of grid-wide economic and environmental advantages it has the potential to offer.

In sum, this bill will help several school districts across the state of Maryland adopt electric school buses, providing cleaner and healthier air for students and drivers while helping decarbonize Maryland's transportation sector. The bill can serve as a significant step toward a statewide shift to electric school buses, ultimately leading to health benefits and increasing the state's competitiveness for other funding sources. Maryland also has the potential to serve as a leader in the vehicle-to-grid space through enaction of this bill, serving as a model for other states to follow. We respectfully urge the committee to advance this bill, followed by the full House of Delegates.

Sincerely,

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Sue Gander Director, Electric School Bus Initiative World Resources Institute

CC: House Economic Matters Committee Chair C. T. Wilson