



Ways and Means Committee
HB1451 - School Bus Purchasing – Zero-Emission Vehicle
Position: Favorable
March 4, 2020

Maryland PIRG is a state based, citizen funded public interest advocacy organization with grassroots members across the state. For forty years we've stood up to powerful interests whenever they threaten our health and safety, our financial security, or our right to fully participate in our democratic society.

Environment Maryland is a citizen-based environmental advocacy organization. We work to protect clean air, clean water, and open space.

Maryland PIRG and Environment Maryland support House Bill 1451 requires that beginning in October 2023, any buses purchased by County School Boards be zero-emission school buses and by October 2026, and buses purchased by contractors for use by County School be zero-emission school buses.

School buses play a key role in Maryland's transportation system. In Maryland, nearly 625,000 public school students are transported on school buses every day.¹ They either ride on one of the 3,700 buses owned by county boards of education or one of the 3,400 buses owned and operated by school bus contractors. Parents across the state rely on these buses to get their kids to and from school safely.

Yet, the vast majority of these buses remain dirty – burning fossil fuels like diesel that put the health of our children and communities at risk and contribute to global warming. Numerous studies have shown that inhaling diesel exhaust can cause respiratory diseases and worsen existing conditions like asthma. Diesel exhaust is internationally recognized as a cancer-causing agent and classified as a likely carcinogen by the U.S. Environmental Protection Agency.² In a study of 61 million people in 2015, researchers found that exposure to diesel soot and ground-level ozone created by diesel exhaust was linked to higher rates of mortality.³

Diesel pollution is especially dangerous for children -- for children there is no established safe level of exposure to diesel exhaust pollutants.⁴ But in Maryland PIRG's report, [*Electric School Buses: Clean Transportation for Healthier Neighborhoods and Cleaner Air*](#), we found that dirty school buses expose

¹ School buses transport over 70 percent of all Maryland public school students and travel over 123,000,000 miles every year. "U.S. State by State Transportation Statistics 2016-17," School Bus Fleet, <http://files.schoolbusfleet.com/stats/SBFFB19-transportation.pdf>.

² International: World Health Organization, International Agency for Research on Cancer, "IARC: Diesel Engine Exhaust Carcinogenic" (press release), 12 June 2012, available at http://www.iarc.fr/en/media-centre/pr/2012/pdfs/pr213_E.pdf; U.S. Environmental Protection Agency, "IRIS Assessments: Diesel Engine Exhaust – CASRN NA," 28 February 2003, archived at https://web.archive.org/web/20180412031944/https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=642.

³ Quian Di et al., "Air Pollution and Mortality in the Medicare Population," *The New England Journal of Medicine*, 376:2513-2522, DOI: 10.1056/NEJMoa1702747, 29 June 2017.

⁴ Children are most vulnerable to the negative health effects caused by air pollution; their respiratory systems are still developing and they inhale more air per pound of body weight than adults. C. Li, Q. Nguyen, P. Ryan, G. LeMasters, H. Spitz, M. Lobaugh, S. Glover and S. Grinshpun, 2009, *Journal of Environmental Monitoring*, "School Bus Pollution And Changes in The Air Quality at Schools: A Case Study."

children to high levels of diesel exhaust pollutants, whether they are on the bus, near an idling bus at school, or even just in neighborhoods where dirty school buses travel.⁵

The good news is that Maryland can clean up its school buses by making them electric. All-electric buses are here, and they're cleaner, healthier and often cheaper for school districts and bus contractors to run in the long-term. With no tailpipe emissions, electric school buses can drastically reduce the pollution Maryland's children are exposed to.

Dramatic declines in battery costs and improvements in performance, including expanded driving range, have made electric buses a viable alternative to diesel-powered and other fossil fuel buses.⁶ So while electric school buses are essential to protect the health of our children, they are also smart investments for school districts and school bus contractors. Still, the upfront purchase price is more expensive than that of a diesel bus, so the grant program set up by the bill will be critical to allowing school boards to make the switch.

Kids in Maryland deserve a safe ride to school. Thanks to pollution, they're not getting safe rides on diesel buses. It's time to switch to all-electric buses.

We respectfully request a favorable report on HB1451.

⁵ "Electric School Buses: Clean Transportation for Healthier Neighborhoods and Cleaner Air," Maryland PIRG, May 2018, <https://marylandpirg.org/sites/pirg/files/reports/MD%20Electric%20Bus%20Report%20Apr18.pdf>.

⁶ Each electric school bus can save districts nearly \$2,000 a year in fuel and \$4,400 a year in reduced maintenance costs, saving tens of thousands of dollars over the lifetime of a bus. Clinton Global Initiative V2G EV School Bus Working Group, ZEV School Buses – They're Here and Possibly Free (presentation), 22 April 2016, available at <https://green-technology.org/gcsummit16/images/35-ZEV-School-Buses.pdf>.