

Re: Support of House Bill 1451 (School Bus Purchasing – Zero-Emission Vehicle – Requirement)

I am writing in support of House Bill 1451 (School Bus Purchasing – Zero-Emission Vehicle – Requirement). My name is Joseph Jakuta and I live in Mount Rainier, MD in District 47A. I am writing as a taxpayer, and a father of two young children. I also have first hand experience with this year having worked at my day job on Volkswagen Settlement Funds in a neighboring jurisdiction.

First and foremost purchasing zero emission school buses is vital to the health of our school children and bus drivers. A study from 2012 found that 16.4% of all Maryland children have been diagnosed with asthma.¹ Studies have shown that even with windows closed the pollution from bus exhaust causes impacts on bus drivers and riders.² Then when they arrive at school the buses idle out front making children walk through a fog of air pollution to enter their learning environment. Given that we now have alternatives that make economic sense this must change.

I realize that school officials in Prince George's County might be concerned about some of the more challenging routes to electrify. In regards to this point it is not as if the entire school bus fleet will be electrified overnight. Routes can be gradually redesigned to make them easier to traverse on a charge and electrification can begin on shorter routes, leaving the longer routes for when batteries have improved even more so.

Another benefit to electrification comes from a concept called “bi-directional electrical flow.” Essentially bus batteries can be hooked to the grid at time and provide power back. School buses are particularly useful here because of when their down time usually occurs. Peak energy use often occurs during the middle of the day and after five o'clock, and during the summers. These are all times when school buses are less likely to be in use and the charge that remains on the batteries can be sent back to the grid to reduce peak demand. This is such a large benefit that power companies such as Dominion in Virginia³ and Con Edison in New York City⁴ are partnering with schools to offset the costs of buses so that they can use the batteries during this down time.

A final benefit from electrification comes from maintenance costs. Quite simply electric buses have fewer moving parts. While the upfront costs for an electric bus might be more, the long term operating and maintenance costs outweigh the upfront costs making electric less expensive to the tax payer in the long term.⁵ Additionally, training Prince George's County residents in how to maintain these buses will allow our residents to learn the job skills of the future.

¹ [https://phpa.health.maryland.gov/mch/Documents/Asthma in Maryland 2012.pdf](https://phpa.health.maryland.gov/mch/Documents/Asthma%20in%20Maryland%202012.pdf)

² <https://ww3.arb.ca.gov/research/schoolbus/schoolbus.htm>

³ http://www.fairfaxtimes.com/articles/fairfax-county-to-get-first-zero-emission-electric-school-buses/article_9a26fb8e-3e30-11ea-8265-53c1be4406a8.html

⁴ <https://news.bloombergenvironment.com/environment-and-energy/new-york-electric-school-buses-to-feed-power-grid>

⁵ <https://www.eesi.org/papers/view/fact-sheet-electric-buses-benefits-outweigh-costs> (Note this article focuses on transit buses, the costs of school buses are lower)

I urge you to support House Bill 1451. We need to convert to zero emission buses for the health of our school children, the financial benefit of the taxpayers, and the good of our planet.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joseph Jakuta". The signature is written in a dark ink and is positioned above the printed name.

Joseph Jakuta
Mount Rainier, MD