



Michigan Energy Innovation Business Council
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Advanced Energy Economy
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Dear Chair VanSingel, Majority Vice Chair Borton, Minority Vice Chair Steckloff, and members of the House Subcommittee on Transportation,

Thank you for the opportunity to comment in support of Clean Fuels Michigan's request to fund a \$45 million program to study and pilot electric bus initiatives in Michigan. As a member-driven organization made up of 140 advanced energy companies doing business in Michigan, including those working in electric vehicles and mobility, **the Michigan Energy Innovation Business Council (Michigan EIBC), in partnership with Advanced Energy Economy (AEE), supports this initiative because it will help facilitate a more comprehensive transition to an advanced mobility future in Michigan, spur new business opportunities, potentially improve electric reliability, and help improve local air quality.** Additionally, considering the dynamic changes occurring within today's transportation sector, Michigan EIBC/AEE also supports funding for more comprehensive electric transportation initiatives that will enable long term and full-fledged fleet electrification across Michigan.

Billions of dollars of private investment for advanced mobility assets such as electric vehicles and charging infrastructure have helped create the current state of advanced transportation in Michigan. While Michigan continues its progress toward a mobility future, it is important that the state of Michigan plays a critical role to help ensure widespread access to charging infrastructure, coordinate among private and public sector funding, and enable the multiple benefits of electrified public fleets, including school buses.

By funding a program to study and pilot electric bus initiatives, the Legislature can help ensure that bus fleets are not neglected in the transition toward electrified transportation. A study focused on pilot electric bus initiatives in Michigan will not only help develop a deeper understanding for the current and future needs of bus transportation in Michigan, but the results of the study will also help spur new business investments and opportunities. For example, electric school buses have the potential to provide energy storage services to the electric grid if leveraged properly. Although transportation is the primary purpose for stored energy in these vehicles, there are opportunities to benefit the grid due to their usage patterns and provide new revenue streams for vehicle owners. Electric school bus fleets are idle in the middle of the day, the evening, and the summer,

and their total trip mileage is generally minimal. According to the World Resources Institute, electrifying the entirety of the U.S. school bus fleet alone can unlock 72 GWh of energy storage for utilities via vehicle-to-grid technologies.¹

A study focused on pilot electric bus initiatives in Michigan will also ultimately help improve local air quality. According to the Health Effects Institute, “air pollution is one of the top-ranking risk factors for death and disability, with vehicle emissions [being] the main contributor to outdoor air pollution.”² Bus transportation has historically been dominated by internal combustion engines, which, according to the EPA, creates exposures to pollutants that can cause neurological, cardiovascular, respiratory, reproductive health impacts, as well as damage to immune systems.³ Additionally, because children, low-income earners, and communities of color are most likely to utilize transportation systems such as buses, a transition toward electrified bus fleets will help reduce health impacts within vulnerable communities.^{4,5}

This is a critical time in the race for advanced mobility. Initiatives such as these will help ensure that Michigan competes on the global stage and keep the state on track to lead the national advanced transportation industry. Michigan EIBC/AEE supports Clean Fuels Michigan’s request to fund a \$45 million program to study and pilot electric bus initiatives in Michigan and believes that an initiative such as this will play an important role in transitioning bus systems to the latest vehicle technologies, signal to advanced mobility companies that Michigan is a business-friendly state for their services, support grid reliability, and help improve local air quality.

Considering the importance and timeliness of these issues, Michigan EIBC/AEE also encourages funding be used beyond the development of studies and pilot programs for electric buses toward the creation of more comprehensive electric bus programs across Michigan. Given how quickly electric transportation is evolving, the need for broad electrified transportation and full-fledged fleet electrification programs and incentives are necessary. Therefore, Michigan EIBC/AEE recommends that any public study on electric transportation include clear recommendations, timelines, and policies that should be used

¹ World Resources Institute. “Electric School Bus Initiative.” Available at <https://www.wri.org/initiatives/electric-school-bus-initiative>.

² GreenBiz. “Electric bus fleets are the latest tool for improving air quality.” Available at <https://www.greenbiz.com/article/electric-bus-fleets-are-latest-tool-improving-air-quality>.

³ US Environmental Protection Agency (EPA). “Research on health effects, exposure, & risk from mobile source pollution.” Available at <https://www.epa.gov/mobile-source-pollution/research-health-effects-exposure-risk-mobile-source-pollution>.

⁴ Adar SD, D'Souza J, Sheppard L, et al. Adopting Clean Fuels and Technologies on School Buses. Pollution and Health Impacts in Children. *Am J Respir Crit Care Med*. 2015;191(12):1413-1421.

doi:10.1164/rccm.201410-1924OC. Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4476560/#:~:text=The%20findings%20from%20this%20natural,buses%20without%20these%20technologies%20and>.

⁵ Monia Anderson. PEW Research. “Who relies on public transit in the U.S.” Available at <https://www.pewresearch.org/fact-tank/2016/04/07/who-relies-on-public-transit-in-the-u-s/>.

to electrify the vehicle fleets across the state. Studies such as this have already been done in places such as Colorado, where the State has now successfully identified policies and funding streams to electrify Colorado's medium- and heavy-duty vehicle fleets.⁶

By considering long-term strategies to electrify Michigan's vehicle fleet, the Legislature can help Michigan solidify its history as the mainstay of America's automotive industry and cement the State's lead in today's transition to electrified mobility.

Sincerely,

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⁶ Colorado Energy Office. "Colorado medium- and heavy-duty (M/HD) Vehicle Study." Available at <https://www.atlasevhub.com/resource/colorado-medium-and-heavy-duty-vehicle-study/>.