Written Statement for the Record

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Putting the Bipartisan Infrastructure Law to Work: The Private Sector Perspective

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Introduction to Highland

Chairman Carper, Ranking Member Capito, and members of the Senate Committee on Environment and Public Works, thank you for the opportunity to testify before you today. My name is Matt Stanberry. I have spent the last twenty years in the advanced transportation and energy industries and am currently the Managing Director of Market Development at Highland Electric Fleets. Highland Electric Fleets ("Highland," "we") is submitting this testimony regarding the private sector's experience with implementation of the Infrastructure and Investment Jobs Act (IIJA).

Highland's work centers around partnerships with municipalities and other governments to enable the electrification of vehicle fleets. We recognized in 2018 that electric vehicle technology was underutilized in government fleets, including the large network of school bus fleets, and that although the existing electric vehicles could meet most school district needs, district adoption lagged behind both the capacity of the vehicles and the motivation of communities to electrify. We set out to bridge the gap between technological capability and community deployment, using our expertise in a public private partnership to eliminate the barriers to better performing vehicles, improved health, and a cleaner environment.

Today, our business is focused on providing electric school buses (ESBs) to school districts and/or their third-party managed fleet contractors through an electrification-as-a-service (EaaS) model. EaaS is a contractual mechanism offered by several companies, including Highland, that provides ESBs, along with some combination of planning, financing, charging equipment, infrastructure, training, and other support and operational services. The EaaS model enables ESB acquisition and operation at a cost that is equivalent to or better than traditional diesel total cost of ownership. The EaaS provider makes that possible by leveraging volume purchasing; asset depreciation; fuel and maintenance savings; grant, rebate, and utility programs; and other values ESBs can provide. As a result, EaaS is the only ESB acquisition model available today that drives project costs down and fundamentally reduces the amount of incentive funding necessary per bus to reach affordability. Furthermore, the model allows the school district to benefit from the expertise of the EaaS company, which takes on all the activities involved in electrifying the fleet and assumes any associated technology risk. While EaaS has only been available to school districts for a couple

years, the market has responded rapidly given its benefits. Over the past two years, roughly a third of all ESBs put under contract in the United States were in EaaS contracts.

Highland is the largest provider of EaaS services, and we are now the largest buyer of ESBs in the country. We are working with districts across the United States and Canada on electrification projects, including the largest project in North America, which is serving Montgomery County Public Schools (MCPS) in Maryland. Through our partnership with MCPS, the school district fleet will deploy 326 ESB over four years, putting the district on a path to 100% fleet electrification. MCPS demonstrates that electrification at scale is feasible today, even in the nation's largest fleets.

In addition to leading on deployment scale, our team is at the cutting-edge when it comes to helping districts leverage the technology's capabilities. For example, our project in Beverly, Massachusetts was the first in the country to place an ESB into a utility's commercial vehicle-to-grid (V2G) program whereby the utility compensates the school for allowing its bus battery to provide power back to the grid during times of need. Today, we are bringing our leadership on ESBs to projects and partnerships from Florida to California and from Texas to Illinois and all points in between. Our project pipeline now stretches across more than 20 states and provinces. These projects include all kinds of fleets, from large fleets in dense communities like MCPS to small fleets in rural locations like Hardin County in rural southern Illinois, where we are working with the fleet of Community Unit School District #1.

Feedback on the Infrastructure Investment and Jobs Act

Several elements of IIJA impact Highland, including SEC. 71101. Clean School Bus Program., and SEC. 40541. Grants for Energy Efficiency Improvements and Renewable Energy Improvements at Public School Facilities. Since its rollout is well underway and it is an area of expertise, this testimony centers on the Clean School Bus Program (CSBP), and its impacts on the ESB market as we have witnessed and experienced them.

The passage of the IIJA was a watershed moment for school bus fleet electrification as the federal government has a critical potential role to play in the market. Specifically, the government has the unique opportunity to build nationwide awareness and knowledge about ESBs, accelerate the development of a resilient market for ESB adoption by encouraging private sector participation,

and ensure that all communities have access to the technology. The CSBP, as written by Congress, can successfully serve this role if U.S. Environmental Protection Agency (U.S. EPA) provides thoughtful and effective implementation.

We have been closely tracking the implementation of the CSBP since its inception. We assisted many districts with the 2022 rebate program application process, were listed as the private fleet partner on over 50 applications, and are now working in various capacities with a number of school districts that will receive funds.

We commend U.S. EPA for doing the hard work of standing up a major program in short order, communicating the details of the program to a wide swath of the school districts nationwide, and providing support through webinars, conference presentations, regional outreach, etc. The CSBP has had a significant impact on our industry and our work, and we have seen a large uptick in awareness and interest in the ESB technology.

In cases of technology transition, it is difficult to overstate the importance of building awareness and education around the new technology. While interest in ESBs has built organically over the past several years, the IIJA and the CSBP has generated broad awareness and knowledge building that has motivated action in places with little prior experience. For example, there are only four ESBs operating in Missouri to date, but districts in the state put in a significant number of rebate applications and the state had the highest number of individual district awardees of any state. The awareness, knowledge, and interest will only build on itself, as there will soon be an ESB in nearly every state and territory in the United States. Our experience shows that exposure to the technology quickly results in additional adoption. Current ESB technology is sufficient to cover almost any school bus route in the county, and the CSBP is showing districts and transportation directors nationwide that this is a reality. Given the importance of building awareness and education, this result alone is a significant victory for the IIJA, and Congress and the Administration should be commended for their efforts in making it possible.

With all of that said, as U.S. EPA itself anticipated, we believe that there were real challenges in the first iteration of the CSBP and that the Agency needs to make some significant refinements in order to realize Congress' objectives. Specifically, we believe that U.S. EPA needs to focus on

market economics and leveraging private sector competition to drive down project costs and accelerate deployment. Success will require 1.) A program structure that focuses on accelerating deployment by encouraging competition and reducing uncertainty; 2.) Incentive levels designed to put downward pressure on project costs; and (3) An emphasis on encouraging cost share and private sector participation.

Establishing a Program Structure that Accelerates Deployment – In IIJA, Congress called on U.S. EPA to design the CSBP to be a competitive program that would maximize the impact of program funding and the number of buses deployed nation-wide. As such, a successful program design would encourage the development of quality project proposals from school districts, incentivize industry to compete on price and quality in supporting those district projects, limit uncertainty that can reduce program participation, and avoid designs that can lead to periodic freezes in market activity. In the first iteration of the CSBP, U.S. EPA, which faced real limitations in staffing and resources at the outset of the program, set up a lottery program as it was a mechanism the Agency had used previously. Unfortunately, lotteries are inherently uncompetitive since projects are chosen at random. Since there is nothing an applicant can do to improve its chances of success and the probability of random selection are low, lotteries both create large amounts of uncertainty for school districts and the businesses supporting them and discourage the development of high-quality applications. Lotteries also create lengthy freezes in market activity because awards happen all at once and school districts are incentivized to hold off on signing new contracts until award announcements take place. We saw a number of these inherent challenges with lottery programs manifest in the initial implementation of the CSBP.

Going forward, U.S. EPA is considering alternative program designs, and we strongly recommend that the Agency does not use a lottery approach again at any point in the future. It is notable that there are several other incentive designs that have been used successfully by states to support cleaner school bus adoption, and to our knowledge, none of them have used a lottery system. Highland recently provided U.S. EPA with detailed recommendations regarding program designs that can address the issues identified in the first iteration of the CSBP.

Designing Incentive Levels to Drive Down Costs – Experience across several economic sectors has shown that incentive levels are a powerful tool in shaping market economics. Incentives that

are too high perversely encourage price setters to drive prices up beyond levels supported by market fundamentals. Lower incentive levels that are still economically significant spur competition and push prices downward. The decline in prices is magnified when the implementing body establishes a clear schedule of declining incentives over time. A declining schedule signals to industry that downward price pressure will continue over time and provides the industry with time to plan accordingly. A schedule also pulls market activity forward, as participants chase the higher value incentives available earlier in the schedule.

In its initial approach under the CSBP, U.S. EPA established incentives that were too high, so moving forward it will be important for the Agency to both lower those incentives and establish a clear schedule of decline over time. Doing so will not only put downward pressure on prices, but also simultaneously help the Agency maximize vehicle deployment per dollar of incentive and encourage cost share from private companies, states, school districts, and utilities - a topic covered more thoroughly below. It is important to note that U.S. EPA can reduce incentive levels overall while still supporting the higher needs of low-income communities by establishing higher incentives and dedicated budgets for those communities.

Encouraging Cost Share – In IIJA, Congress provided U.S. EPA with the ability to prioritize projects that leverage outside financial resources to provide cost share. Program approaches that emphasize cost share make intuitive sense. They would help the Agency pursue its goals of maximizing deployment under the program and accelerating the development of a resilient market for deployment. A resilient market will in turn enable deployment far beyond the reach of the CSBP itself. By emphasizing cost share and making smaller, but still economically significant incentives available (as outlined above), U.S. EPA can draw the investment of private companies (via public private partnership arrangements), states, school districts, utilities, and others as they see the opportunity to leverage federal funds to achieve their objectives. In drawing capital from many sources into school bus electrification, the Agency can accelerate the development of a resilient market that is not dependent on any single source of capital.

The federal government was able to do just this with renewable energy by providing approximately thirty percent of project funding through the tax code, which encouraged all interested parties to come forward with capital to leverage those dollars. Renewable energy projects have flourished as

a result. The same effect is possible here, but it requires U.S. EPA to encourage cost share and reduce incentive values. While the Agency did not reward cost share in its first iteration of the CSBP, it is explicitly considering doing so moving forward, and we strongly believe that this is required for the long-term success of the program.

Closing

Our team at Highland is honored by the invitation to speak today on behalf of all our partners regarding this transformational piece of legislation and the groundbreaking work we are all undertaking together. School bus electrification is one of the rare areas in policy making where there is so much value for everyone involved. These vehicles protect the health of the next generation, provide better performance to school bus drivers, decrease carbon emissions, support the electrical grid, and provide all these values in the context of one of the only truly ubiquitous forms of public transportation in the country. By enabling the deployment of ESBs everywhere, IIJA is making vehicle electrification a reality everywhere from Boone County, WV, to New York City, to the Ojibwe Charter School in Michigan's Upper Peninsula. Furthermore, because ESBs are predominantly manufactured in the United States, IIJA is supporting domestic manufacturing and the American workers who carry it out in Oklahoma, Georgia, North Carolina, Colorado, West Virginia, Ohio, California, and beyond.

While our testimony necessarily focused on the CSBP, it is likely that the big themes have relatively widespread applicability. As the federal government rolls out new programs, especially those dealing with technology transitions, it should use its unique platform to build education and awareness, and it should design the programs to leverage the capacity of the private sector. In this way, it can create momentum so that the private sector can help fund the transition going forward.

Chairman Carper, Ranking Member Capito, and members of the committee, thank you again for the opportunity to testify before you today and provide the private sector perspective on putting IIJA to work. I look forward to engaging with you on any and all questions.