





DRIVING CHANGE ADDENDUM

Respecting Tribal Sovereignty and Self-Determination in the Transition to Electric School Buses

The content below, including policy recommendations, was developed from the 2025 working paper, "Who's Driving This Bus? A Culturally and Legally Informed Approach for Electrifying Student Transportation in Indian Country" by Maranda Compton (Lepwe Inc.) and Alyssa Curran (World Resources Institute). This serves as an addendum to the publication, "Driving Change: A State Playbook for Equitable Electric School Bus Policy.

Summary

School bus electrification initiatives within Native communities must begin with non-Native stakeholders recognizing Tribal Nations as distinct sovereign governments with inherent rights of self-determination. Non-Native stakeholders must also understand the complex, often negative historical relationships between Tribes and federal and state authorities, which have created profound infrastructure gaps that present unique barriers to electrification. Before working with Native communities, policymakers and advocates should invest time and effort in learning how past policies and programs have impacted Native communities, particularly in education, transportation and energy.

American Indian and Alaska Native (AIAN) students rely on school transportation more than any other racial group — 42 percent compared with 31 percent nationally. They also experience longer commutes to school and higher rates of childhood asthma. Greater reliance on school transportation increases Native students' exposure to diesel pollutants, the most common fuel type for school buses, making electric school buses an opportunity to address systemic inequities while advancing environmental justice and improving health.

Most Native students attend one of three types of schools: public schools, Bureau of Indian Education (BIE) schools (Tribally controlled or BIE-operated), and Native language immersion schools. Each has different governance structures and funding sources, and all face additional federal oversight beyond schools serving non-Native populations, which impacts how school buses are administered.

Public schools serving Native students and BIE-funded schools also receive less funding compared to the national average, which is a result of both the U.S. government's failure to meet treaty and trust responsibilities and U.S. ownership of Tribal lands (held in trust). This means Tribes cannot tax their trust lands to generate revenue for essential services like infrastructure and education. In addition, federal and state funding programs sometimes prioritize Tribes, but program designs do not always account for the unique barriers that Tribes face when applying for and implementing award dollars.

There are more than 160,000 miles of roads on trust lands in the United States, and as a relic from allotment policies (1887 General Allotment Act) and the Termination Era, these roads have multiple owners, including Tribal Nations, the Bureau of Indian Affairs states, and counties — presenting significant administrative issues in their repair and reconstruction. A 2017 Government

Accountability Office report found roads on Tribal lands to be the most underbuilt road network within the United States. These poor road conditions are a result of historic and ongoing underinvestment on Tribal lands, with states spending between \$4,000 and \$5,000 per road mile on maintenance, compared to less than \$500 per road mile on Tribal lands.

Like roads, electricity infrastructure in Native communities has long suffered from underinvestment (e.g., 1935 Rural Electrification Act). Significant disparities in electricity access affect both the feasibility and timeline of electrification efforts in Tribal Nations. Many Tribal lands experience inadequate electric service, ranging from complete absence of power infrastructure to limited connectivity. Tribal facilities and schools often sit at the far reaches of utility distribution systems, operating with aging equipment prone to failure. More than three-quarters of homes without electricity in the United States are on Tribal lands, and approximately 14 percent of reservation households lack electric access.

Lastly, systemic data gaps and poor data quality in Native communities in the United States impact the ability of school bus electrification project leads to effectively and accurately design fleets that meet district needs.

Despite these barriers, several Tribal Nations are exploring electric school buses as one way to advance their environmental, energy, and health goals. They also continue to weigh whether the technology fits their long-term needs and priorities. Looking at the successful deployment of electric school buses in Tribal Nations such as the Eastern Band of Cherokee Indians can provide guidance for future deployment plans.



For All Actors:

EDUCATE STAFF PRIOR TO ENGAGEMENT WITH TRIBAL NATIONS AND NATIVE COMMUNITIES

- Understand the history and legacies of U.S. policy, particularly on Native transportation, energy and education systems.
- Research the Tribal Nation or Native community's history (distinct from its history with the United States government) and governance structure. To start, learn the Tribe's population, languages spoken, and how Tribal members refer to themselves and the Tribe. These are just a few initial steps; the needs of each Nation, community, and Tribal organization will differ.

RESPECT TRIBAL SOVEREIGNTY AND SELF-DETERMINATION

Regardless of one's role in government or in the electric school bus transition, respecting Tribal sovereignty and self-determination is essential and central in working with Tribes. This includes recognizing that Tribal Nations are distinct nations and require the same level of government-to-government outreach expected by foreign countries.

For State Agency Staff:

AUTHORIZE FLEXIBLE FUNDING MECHANISMS

- Consult Tribal governments as equal partners when designing state programs to ensure programs align with Tribal policy priorities and respect sovereignty.
- Provide flexible and accessible funding for ESBs and support infrastructure (e.g., chargers, durable roads and utility
 upgrades), targeting support for rural areas facing limited grid infrastructure or poor road conditions. This includes
 funding mechanisms that provide resources upfront and allow stacking of funding sources from multiple agencies
 including federal sources, and state energy, environment and transportation agencies, and utilities to promote equitable
 access to electrification opportunities.
- Incentivize school districts and fleet operators to prioritize transitioning school buses serving Native students through targeted programs.
- Enable flexible financing structures for Tribal governments and the businesses and organizations that serve them, acknowledging limited taxing authority and unique revenue constraints. Look to offer low-cost capital, employ flexible terms, and design financial structures that deliver value in the forms desired by host Tribes (co-ownership models, air quality or workforce benefits, etc.).

 Allocate targeted funding to improve road conditions, enhance grid infrastructure and deploy charging stations in Native communities. Infrastructure planning should prioritize collaboration with Tribal governments and focus on addressing long-standing inequities in underserved areas.

SUPPORT INFRASTRUCTURE FOR SCHOOLS SERVING TRIBES

Integrate Tribal-specific needs into state EV infrastructure plans through meaningful consultation and community
engagement, ensuring accessible charging stations and route optimization for rural and remote Tribal lands.

ENGAGE IN CULTURALLY RESPONSIVE PLANNING

- Partner with Tribal Nations to develop a consultation framework that respects sovereignty and involves Tribal governments in decision-making. Furthermore, collaborate with Tribal governments to create intergovernmental agreements that streamline decision-making and respect Tribal sovereignty.
- Provide technical assistance to Tribal schools and agencies to navigate U.S. federal and state funding programs, ensuring they are accessible and applicable to Tribal contexts.
- Ensure that Tribal representatives are included in all stages of electric school bus planning and implementation.

PROMOTE DATA COLLECTION AND TRANSPARENCY

- Support Tribal-led data collection initiatives to gather insights into transportation needs and infrastructure challenges.
- Provide technical assistance and resources to build Tribal capacity for electrification planning and data analysis.

ACKNOWLEDGE ENVIRONMENTAL JUSTICE CONCERNS

- Engage Tribal Nations in discussions about the environmental impacts of critical minerals and EV battery production.

 The extraction of critical minerals for EV batteries, such as lithium, disproportionately impacts Tribal lands, leading to environmental degradation and harm to cultural resources.
- Consult Tribal Nations on any critical mineral mining or extraction projects taking place on or near their lands, including all ancestral lands.
- Prioritize sustainable practices, such as recycling and reuse of EV components including batteries, to reduce reliance on resource extraction. Repurpose retired bus batteries for microgrids, grid support/peak-shaving, or emergency backup on Tribal lands. See the Battery section of the playbook for additional second-life and end-of-life recommendations.

For Legislators:

ESTABLISH REQUIRED TRIBAL-SPECIFIC ACCESSIBILITY STANDARDS

- Introduce legislation requiring that EV infrastructure serving Tribal Nations incorporate design standards for their specific terrain and rural needs, such as durable roads and robust electric infrastructure.
- Establish funding models tailored to Tribal needs, such as grants for electrification that do not require fleet scrappage or immediate scrappage for schools serving Tribes. Due to resource disparities and terrain, Tribal school districts may be more willing to transition if they have backup vehicles in case of any technical difficulties.

For Utilities and Utility Regulators:

DEVELOP INCLUSIVE UTILITY PROGRAMS

- Institutionalize consent mechanisms to ensure meaningful Tribal engagement throughout all phases of transportation planning and implementation.
- Prioritize grid development on Native lands to improve energy access and reliability with the consent of and partnership with Tribal Nations.
- Prioritize the deployment of charging stations in Tribal communities, ensuring equitable access to infrastructure investments.
- Provide technical assistance for Tribal Nations to support EV infrastructure development.

PROMOTE ENERGY SOVEREIGNTY

- Support renewables and microgrid systems that enable energy independence and reliability, as demonstrated by the Blue Lake Rancheria and the Moapa Band of Paiute Indians.
- Support Tribal utilities, like the Navajo Tribal Utility Authority (NTUA), to enhance grid resiliency and support EV infrastructure build-out.
- Support the creation of Tribal advisory boards to guide electric school bus policies and initiatives, like the state of Minnesota's Tribal Advisory Council on Energy, the first state-funded body giving tribes an official voice on state energy policy

Resources

- Alliance for Tribal Clean Energy Tribal Energy Sovereignty
- Institute for Tribal Environmental Tribal Clean Transportation
- Joint Office of Energy and Transportation Technical Assistance and Resources for Tribal Nations
- National Congress of American Indians Policy Research Center
- Tribal Clean Energy Resource Center Tribal Clean Energy
- WRI's Electric School Bus Initiative Who's Driving This Bus? A Culturally and Legally Informed Approach for Electrifying Student Transportation in Indian Country
- WRI's Electric School Bus Initiative How Tribal Nations Are Charging Ahead with Electric School Buses
- WRI's Electric School Bus Initiative How to Ensure a Sustainable Future for Electric School Bus Batteries
- U.S. Department of Energy Office of Indian Energy Indian Energy Policy and Programs



