

# Electric School Bus Deployment at Salt Lake City School District

This profile reflects the electric school bus deployment experience and perspective of Salt Lake City School District in Utah.

### **Overview**

Since 2021, Salt Lake City Schools has been steadily building its electric school bus (ESB) fleet, under the leadership of their Transportation Director, Ken Martinez. While the transition has encountered a few challenges – common when adopting new technology – Martinez notes the process has been largely successful.

As of April 2025, the district has added 12 electric school buses to its fleet. The rollout began with four Micro Bird Type A buses in 2021, followed by four Blue Bird Type D buses in both August 2022 and November 2023.

Contact	<b>Ken Martinez</b> , Transportation Director
District Size	35 schools
Student Population Transported	6,000 students
Bus Fleet	100 buses

# **Charging Infrastructure**

To support this new electric fleet, Salt Lake City Schools has installed 12 chargers:

- Four single port Nuvve 60kW DC fast chargers
- Eight single port level 2 19.2kW Nuvve chargers

Both the buses and the chargers are owned and operated by **Salt Lake City Schools**, with the charge management software through **Nuvve**. **Rocky Mountain Power** is the electric utility for the district.

## **Clean Energy Infrastructure**

The school district has installed solar panels producing approximately 400kW and plans to initiate vehicle-to-grid (V2G) operations in the near future.

# **Funding Sources**

The initiative has been made possible through a mix of funding sources, including \$500,000 from the **Volkswagen settlement**, \$1.5 million from the **Diesel Emissions Reduction Act** funding, and \$2.3 million from the school district.

## **Motivation**

The decision to adopt electric school buses was driven largely by health considerations. The local Department of Environmental Quality (DEQ) was eager to improve air quality, a goal the district strongly supported. In addition, the district was enthusiastic about exploring and learning from this technology.

## Implementation Challenges

- Infrastructure planning: Understanding the power requirements needed to charge ESBs requires upfront learning. The team had to assess and plan for sufficient capacity.
- Charging equipment: Initially drawn to lower-cost options, the district discovered that not all chargers deliver the same quality or performance. By consulting with other school districts operating similar buses, they were able to identify chargers compatible with their fleet.

Bus manufacturers: While the district originally elected to use a well-known manufacturer for their initial electric school buses, they've now been able to explore and identify alternative manufacturers. This will allow the district to find buses that align more closely with their future operational and budgetary needs.

#### **Community Benefits**

- Improved student behavior: The significantly quieter environment of electric school buses has contributed to a noticeable improvement in student behavior on the buses.
- Driver satisfaction: Drivers have expressed a strong preference for the electric school buses, appreciating the quieter ride without the smells associated with diesel buses.
- Reduced operating costs: The district has seen substantial savings in fuel and maintenance expenses, with many routine maintenance needs reduced or eliminated entirely.

"A successful transition to electric school buses requires a district-wide commitment. While change can be difficult, it is important that all stakeholders contribute. Superintendents and school boards play a vital role by committing to the shift for student health. Route coordinators must learn to optimize routes based on the capabilities of electric buses. Meanwhile, drivers need training to understand and take advantage of the benefits of ESBs.... It's also important to seek advice from those that have already deployed electric buses. Find out what has and has not worked for them. Talk to your local utility and include them in your plans."



- Ken Martinez, Transportation Director, Salt Lake City Schools



