Washington
Green Transportation Program
Moving forward with Washington's public fleets

Here's What You're Not Hearing About
Electric School Buses

Have You Seen the Headlines?

If you've read a headline or heard a story about electric school buses (ESBs) not working in the cold, getting stranded in places where charging isn't available, or being too expensive to maintain—you're not alone. These stories make the rounds in Washington school districts, sparking concern and hesitation about adding ESBs to a school bus fleet. But we've looked closely at the facts, the context behind those stories, and what's actually happening here in Washington. Here's what we found.

Cold weather challenges? Context matters.

Some reports, like those from Alaska or Norway, paint a picture of ESBs failing in freezing temperatures. But often, these stories miss the broader context: route planning, pre-conditioning the battery, and proper charging infrastructure can reduce these challenges. Michigan's own environmental agency studied ESB reliability in winter and found they "make the grade, even in the cold."[1]

In Washington, school districts such as Walla Walla have continued using their ESBs through winter with no shutdowns. "It gets pretty darn cold in Walla Walla, and we've had no problems running our fleet during the wintertime," said Wade Smith, superintendent of public instruction for Walla Walla Public Schools.[2]

What to know: Range reduction in cold weather is real but manageable. Technology and planning solve this challenge.

Problem with charging infrastructure? Often a start-up hiccup.

Some stories focus on situations where buses sit idle because charging stations weren't ready or compatible. These are valid concerns—but they're not due to bus failures. Most of these issues result from coordination issues between utilities, installers, and vendors early in the project planning. With better planning and funding (now widely available in WA), these bumps in the road are avoidable.[3]

What to know: Charging problems aren't inherent to ESBs—they are logistical, and can readily be solved by improving coordination with utilities, and charging equipment installers and vendors.

Battery or tech glitches? Most are fixed fast.

Some reports highlight faulty batteries, unexpected engine shutoffs, or software glitches. Like any emerging technology, early adopters can face bugs. But in most cases, these issues are handled under warranty and bus manufacturers are rapidly improving their systems.

In Beaverton, OR, the school district had some initial hiccups with their ESBs, but they now operate 45 ESBs and plan to have 100 ESBs on the road by April 2026.[4]

What to know: Reliability grows with experience. One glitch doesn't doom the whole technology.

It's different in Washington

Let's talk local. Districts in Aberdeen, Olympia, Highline, and Wenatchee are already operating ESBs. Some received their first buses in 2021 and have logged thousands of miles. While they've faced learning curves, most districts report high driver satisfaction, lower noise levels, and manageable charging routines. Even with the higher upfront cost of ESBs, districts are saving money in the long run on fuel and maintenance.[5]

Additionally, using ESBs will place your district in a network of other districts that have already added ESBs to their fleets, where you will be able to provide guidance to other districts.

What to know: Washington school districts are proving that ESBs work—rain, snow, and all.

Cost concerns? Washington funds the ESB transition.

Yes, ESBs cost more upfront. But Washington has your back. In the previous funding cycle, the Dept. of Ecology offered $31.5 million in grants—including funding for vehicles, charging stations, staff training, and more.[6] Future state funds are on the way. By 2035, state law will require all new buses to run on clean fuels. Getting started now in the inevitable transition to ESBs means you'll learn the ropes before it becomes mandatory.[7]

What to know: The funding is real. The timeline is clear. And the benefits are long-term.

Bottom Line: Don't Let the Headlines Fool You

Yes—ESBs come with a learning curve. But the issues getting headlines are often outdated, exaggerated, or solvable. With proper planning, funding, and support, school districts across Washington are already demonstrating that ESBs are a smart, sustainable step forward.

Contact the Green Transportation Program for free technical assistance about your projects and challenges: greentransportation@energy.wsu.edu.

Learn more on the GTP website:

[1] Survey finds electric school buses make the grade, even in the cold

[2] Learning as they go: Walla Walla commits to a greener future with electric school buses

[3] Zero Emissions: Metro Transit Working to Mitigate Risks to County's Ambitious 2035 Goal

[4] Beaverton School District Environmental Efforts

[5] The Future of Student Transit: Why Districts Are Going Electric

[6] Electric school buses to earn extra credit in 2025

[7] Washington State Passes Law to Support School Buses to Zero-Emission

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Creating Energy Solutions

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