West Fargo Public Schools runs 63 bus routes each day, through snowy winters and spring flooding.

In 2018, the district turned to its local utility company, Cass County Electric Cooperative, to learn about electric buses. In 2019, the district received the state’s first zero-emissions electric bus, a Blue Bird Vision.

West Fargo Public Schools received a total of $150,000 funding toward their bus purchase. North Dakota Department of Commerce approved a $70,000 grant, which the district received after the purchase. The Coalition for Secure Energy Future and Cass, in conjunction with Minnkota Power Cooperative, separately donated $40,000, providing the district with a total of $80,000 in additional capital.

“The initial cost of the bus was three times more than a diesel bus. But the bus’ operational costs are only one-fourth that of our district’s diesel buses,” said Brad Redmond, West Fargo Public Schools’ transportation director. The price of an electric school bus levels over time due to low maintenance costs and the elimination of fuel bills.

The district’s diesel buses average 42 cents per mile for fuel, while the electric bus averages 14 cents per mile in energy costs. The electric bus doesn’t require the typical engine oil and fuel filter changes or transmission services compared to its fossil-fueled counterparts.

The bus has been running 100 miles between charges. “Range is a consideration, but we charge for a few hours after each route. The driver loves how easy it is to recharge, and there’s no chance of spillage like diesel or gasoline.”

The electric bus averages 25-34 miles per gallon equivalency compared with about 7 miles per gallon for diesel.

Redmond said the community has been supportive of the positive impact on air quality. They especially appreciate zero-emissions while students line up for the bus. And the driver has commented on the bus’ quiet operation. “Learning to drive the bus was easy, but one of the biggest benefits has been how much better the students behave due to the reduction in the bus’ noise levels,” he said.

The district’s heated transportation facility helps optimize battery charging and operations. Their local utility installed the charging station in one day, wrapping the costs in with the bus purchase.

“We have saved money in fuel and employee hours since there are no runs to the fuel station. And our transportation department employees value that there is no emission buildup in the bus garage,” said Redmond.

The district used its electric bus to deliver free meals for students during COVID-19.

Redmond offered this advice to other districts considering electric: “Do your homework before making a decision.” He suggested focusing on each electric school bus manufacturer’s pros and cons, predetermining the routes that would work well for electric, and laying out plans for onsite electrical infrastructure.
Franklin Pierce School District runs 51 bus routes each day within its 14-square mile area. The district prides itself on being forward-thinking and put the first, zero-emissions electric school bus on the road in Washington in 2019.

“We chose electric because we think it fits perfectly with our district’s vision for sustainability and clean energy,” said Tim Bridgeman, Franklin Pierce’s director of transportation.

The district received a grant of about $330,000 from the TransAlta Centralia Coal Transition. Additional grant funds were used to install a charging station. The district worked with Tacoma Public Utilities officials to analyze the decision to incorporate electric. The utility company also helped map out feasible routes for the bus.

The district’s Blue Bird All American electric buses replace the older mid-90’s model diesel buses.

Buses in the Franklin Pierce district generally log 12,000 to 15,000 miles per year. After the first full school year in operation, the district talked $8,000 in fuel savings with the electric bus over diesel. Franklin also reports that the electric bus requires far less maintenance than the fleet’s diesel buses, which has contributed to savings in time and money.

The quick acceleration and quiet ride of Blue Bird’s electric bus have made the bus a favorite with operators. “The driver loves it,” Bridgeman says. “The quietness lowers the stress level and the driver can hear students in back. It reduces end-of-day fatigue.” Another distinct advantage of electric buses to students and community residents is the elimination of toxic exhaust and emissions. The bus is charged during mid-route breaks and overnight on the district’s lot. Bridgeman describes the charging process as easy to learn.

ABOUT BLUE BIRD CORPORATION

Blue Bird (Nasdaq: BLBD) is the leading independent designer and manufacturer of school buses with more than 550,000 buses sold since its formation in 1927 and approximately 180,000 buses in operation today. Blue Bird’s longevity and reputation in the school bus industry have made it an iconic American brand. Blue Bird distinguishes itself from its principal competitors by its singular focus on the design, engineering, manufacture and sale of school buses and related parts. As the only manufacturer of chassis and body production specifically designed for school bus applications, Blue Bird is recognized as an industry leader for school bus innovation, safety, product quality/reliability/durability, operating costs and drivability.

In addition, Blue Bird is the market leader in alternative fuel applications with its propane-powered, electric-powered and compressed natural gas-powered school buses. Blue Bird manufactures school buses at two facilities in Fort Valley, Georgia. Its Micro Bird joint venture operates a manufacturing facility in Drummondville, Quebec, Canada.

Service and after-market parts are distributed from Blue Bird’s parts distribution center located in Delaware, Ohio.

For more information on Blue Bird’s complete line of buses, visit www.blue-bird.com.

2020 FINANCIAL IMPACT CASE STUDY

OVERVIEW
Blue Bird first built an electric school bus in 1994. Today, Blue Bird’s electric school bus is 100 percent electric, emitting zero emissions of nitrogen oxides, carbon monoxide, particulate matter, volatile organic compounds or hydrocarbons.

CHALLENGE
Faced with the challenge of operating buses within strict budgets while meeting environmental initiatives, school district transportation departments look to fleet alternatives.

SOLUTION
Zero-emission electric school buses help districts reduce their carbon footprint and operating costs.

INQUIRES
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