BLUE BIRD OVERVIEW

Electric School Buses

BLUE BIRD

A RICH HISTORY

BLUE BIRD

Founding

- Founded by Albert L. Luce and his wife Helen Mathews Luce
- Owner of Ford dealership in Perry, GA
- In 1927, Luce built 1st school bus using Ford Model T chassis and wooden body
- Opened Blue Bird Body Company manufacturing facility in Fort Valley, GA in 1935, where production remains today
- Sons, George, Albert, and Joseph, ran the company until the early 2000s

Your Children's Safety is Our Business.

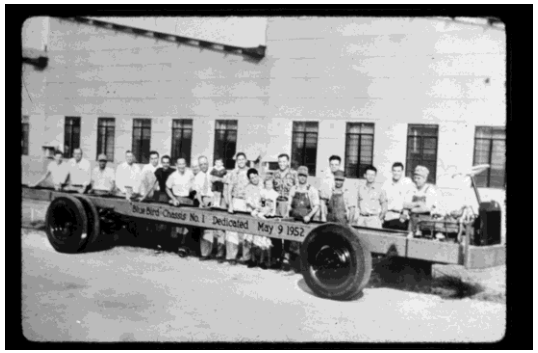
A Legacy of Firsts

1927 Blue Bird No. 1 Built

1937 1st all-steel body bus built

1939 Introduced School Bus Yellow Paint

1948 – Blue Bird's 1st All American



1952 1st school bus OEM to build its own chassis

1973 1st OEM wheel chair lift for special needs students

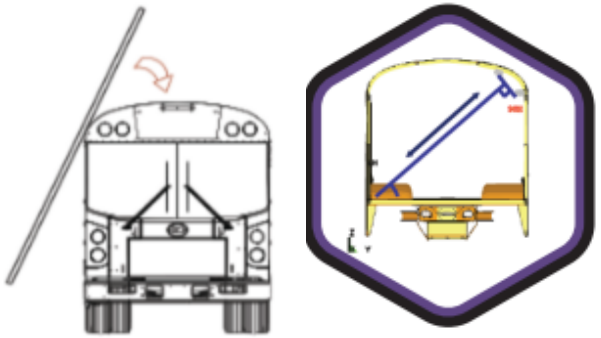
1990 1st clean school bus with Compressed Natural Gas power

1991 1st Type D CNG school bus

A Legacy of Firsts

1994 1st OEM all-electric school bus

2008 1st OEM propane school bus



2013 1st OEM Colorado Rack and Kentucky Pole Compliance standard

2015 publicly-traded company

2016 1st to introduce Electronic Stability System (Vision)

2018 1st electric school bus to market

2024 1st and only OEM lap-shoulder belts as standard safety equipment

2025 1st and only OEM frontal airbag as standard safety equipment

About Micro Bird

Micro Bird offers a complete line of Minibuses that deliver exceptional safety, stability, and durability, making these vehicles the best choice in the market, no matter the conditions.

- Blue Bird acquired Micro Bird in April of 2026
- Previously a Privately Owned Type A Manufacturer for 60 years
- Micro Bird & Ecotuned Technologies
  - Partnership initiated in 2017
  - Acquisition in 2021
- Vertically integrated with proprietary EV technology
- Market Share Leaders for EV Type-A school buses

Micro Bird EV Update – 2026

BLUE BIRD®

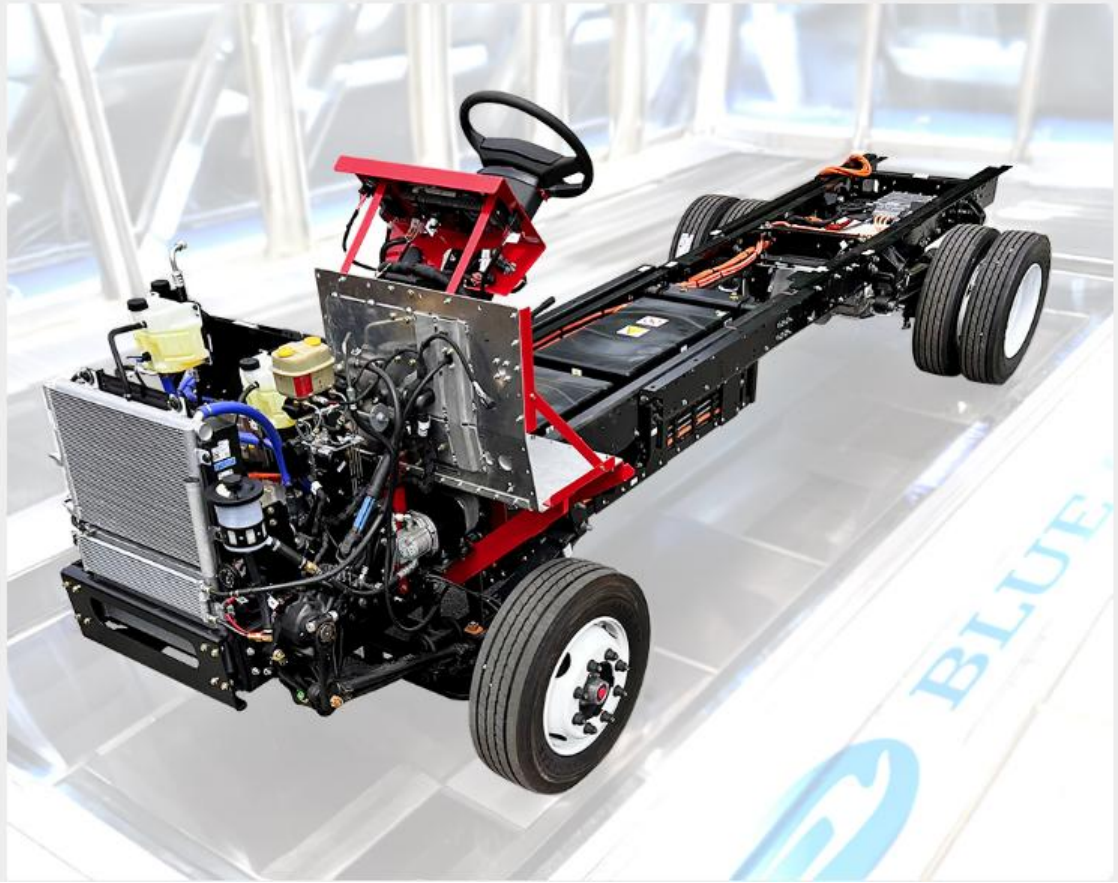
Blue Bird EV Commercial Chassis

Purpose Built Class 6 Chassis

Our chassis is designed to be universally compatible with all existing utility body providers

Industry-best 55 Degree Wheel Cut

Industry-best 55 degree wheel cut for steering on tight streets and loading docks with limited maneuvering area



140kWh Li-ION Battery Pack

Batteries are mounted inside the frame rails providing superior battery protection as compared to systems that mount their batteries underneath and/or to the outside of the chassis rails.

Zero Emissions

Zero emissions means cleaner air for everyone

Blue Bird EV Commercial Chassis

System will perform

Health Checks

based on system parameters and will activate preconditioning prompted by application demand or customer programming.

Up To 130 Mile Range

DC Level 3 Charging Capable up to 124kw

50,000 PSI Standard Steel Fra me

GVWR of up to 23,000 pounds

Over-the-Air System Software Updates

Blue Bird Propane Commercial Chassis

What Makes Alternative Energy Adoption Successful?

- Reduced Emissions
- Positive Total Cost of Ownership
- Performance
- Energy Availability

"Be open-minded. I think today more than at any other time… it's time to look at fleet diversification when it comes to the power train. There's no better time, there's plenty of opportunities out there." Mike Bullman, Director of Transportation

Zero & Near Zero Powertrain Energy Options

Electric

- Zero tailpipe emissions
- Funding available for upfront costs, reduced maintenance costs
- 3,500+ buses operating in 41 U.S. States and 4 Canadian provinces
- Up to 150 mile range
  Infrastructure equipment varies:
  - AC (Level 2) $5-10k
  - DC Fast (Level 3) $35-75k

Propane

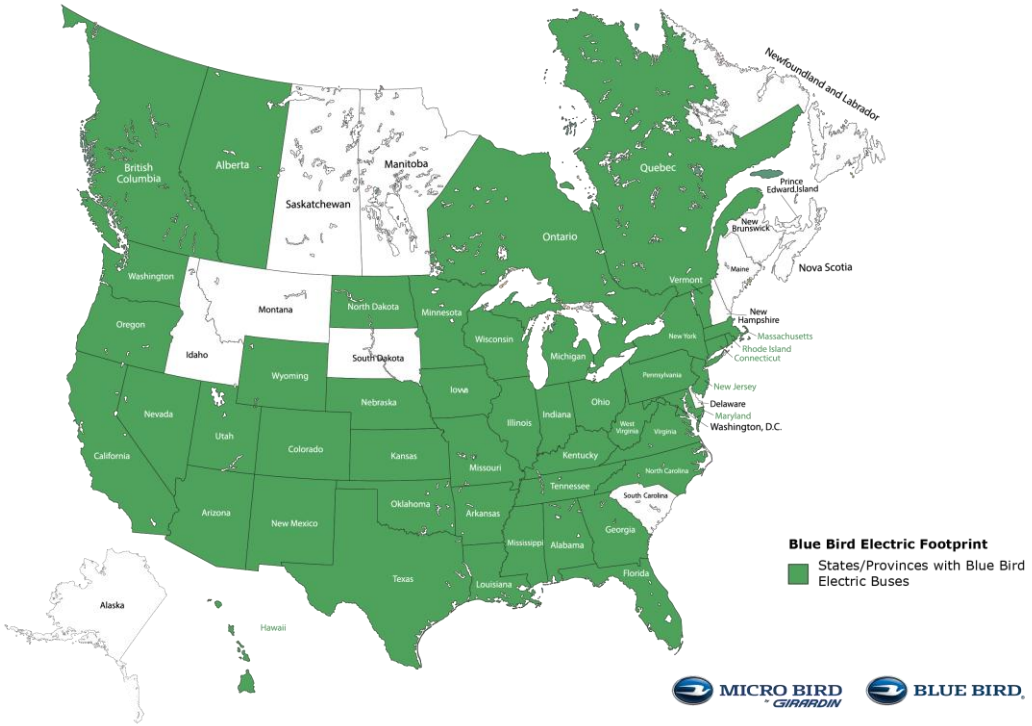
- Ultra-low emissions
- Average fuel and maintenance cost savings over diesel $3,700/year
- 25,000+ buses operating in 49 U.S. States and all 10 Canadian provinces
- Over 400 mile range
  Infrastructure equipment provided by fuel supplier

Electric School Bus Benefits

- Environmental Benefits
- Improved Student Behavior
- Reduced Maintenance
- Cost Savings (Grant Funds Available)
- Outstanding Performance

"At the end of the day, there is a huge benefit to the students, community and districts as a whole to convert fleets and go clean." Christina Celeste-Russo, Director of Transportation

By the Numbers



Blue Bird EV school buses have been sold in 41 U.S. States and 4 Canadian Provinces

Best Fit Today For EV Benefits

Blue Bird Corporation/Westinghouse 1st EV School Bus (1994)

Current EV Platform launched 7 (now into 8) years ago

EPA Clean School Bus Program has provided learning

The buses are deployed in Urban, Suburban and Rural areas

They are running in all geographies and climates

Long routes and trip buses can be managed, but are a challenge

By The Numbers

We continue to deploy and are currently in 41 US States and 4 Canadian Provinces

Most of the traditional features are available on the ESB

Produced ~4000 Blue Bird EV School Buses (3000+ in the US)

Most of these buses are V2G capable providing additional value

Blue Bird holds nearly 40% of the EV School Bus Deployments

There have been many great learnings and we are evolving

Battery Evolution

Accelera

Battery evolution of Accelera's PowerDrive™ 7000

accelera by Cummins

	Gen1	Gen2	Gen3
System Energy- Nominal/Usable	156/124 kWh	196/156 kWh	195/170
Estimated Range	83-96 miles	105-121 miles	111-142 miles
Battery Weight – 2 pack ESS	1452 kg	1194 kg	1100 kg
Fast Charge Capable (60 kW+)	Yes	Yes	Yes
Specific Energy (Wh/kg)	107	164	179
Energy Density (Wh/L)	119	271	283
Vehicle Performance Capability (accel, top speed, startability, drivability)	(+)	(-)	(+) (+)
Accelera developed ESS	Yes	No	Yes

BP97 Battery

NEW Larger Standard Battery Pack

FEATURING THE ACCELERA BP97E

BLUE BIRD

- **Up to 150 Mile Range***
  Additional Range with Enhanced Comfort
- **DC Fast Charging at 120kW**
  *Charge time ~2 hours***
- **194 kWh Battery Capacity**
  88% usable capacity
- **V2G Capable Utilizing 15118-20 Protocol**
  Improved security, charging and communication
- **Standard on Vision & All-American Products**
  Multiple configurations including new 217" wheelbase

Accelera BP97E

DESIGNED & BUILT IN THE USA

*Range performance is an estimation. Many factors contribute to range performance, including vehicle configuration, climate, terrain and driver behavior.
**SOC: State of Charge = 0% (depleted) to 100% (full) and charge time based on charging infrastructure capabilities (up to 120kW is possible).

Get more out of your fleet with Blue Bird's

New Battery Offering

BLUE BIRD

Blue Bird is Ever|Evolving, with the launch of the **Accelera BP97E battery pack**, the All-American and Vision Electric school buses continue to improve. This new standard battery pack features higher energy density, a lighter weight design and an advanced battery management system providing up to 150 mile range on a single charge. Coupled with an increased usable capacity, improved DC fast charging capabilities, and improved thermal management system, these upgrades lead to very significant and tangible real world performance improvements. Providing a power system that can meet the needs of most school bus routes.

Optional front charge port in grill (Vision Models, 252" and 273" wheelbase only)
Standard CCS1 Charge Port (Level 2) AC and DC Fast Charge capable
Available All-American wheelbase configurations: 259", 273"
Available Vision wheelbase configurations: 217", 252", 273"

Blue Bird Vision and All American EV

Both Type A, C and Type D are Available

- The Body Remains the Same
  - Similar Features to Gas/Propane/Diesel (ICE)
  - Allows for easy replacement of existing buses
  - "Plug and Play" for a Route Bus Application
- Driver Orientation
  - Assists in Familiarization
  - Simplicity of the Differences
  - Provides initial Confidence
  - Learning Charging and Range
- Key EV Benefits
  - Improved Air Quality
  - Lower Noise – Calmer and Quieter Passenger Experience
  - Reduced Maintenance Items – Lower Operational Costs
  - Better Driver Experience
  - Funding Readily Available

OVERVIEW | AT A GLANCE | KEY PERFORMANCE

<u>Vision and All American Electric</u>

- Charge Time: 2-8 hours
  - Typical 11.5kW to 30kW Charging
- Range: up to 150 mi
  - 194kW Battery Options
- Capacity Up to:
  - Vision 77 Passengers
  - All American 84 Passengers
- GVWR up to:
  - 33,000 lbs. Vision
  - 36,200 lbs. All American
- Propulsion System: Cummins PowerDrive 7000
- Motor: DANA TM4 SUMO (MN#HV3000-6P)
  - 315 HP & 2400 ft-lb of torque
  - Single Speed direct to axle (no transmission)
  - Same 5.29 axle found in ICE bus

BLUE BIRD

Micro Bird G5e – Major Improvements

	G5 88	G5e 140	G5e 175
Seating Capacity	Up to 30	Up to 27	Up to 25
Battery Capacity	88 kWh NMC	140 kWh LFP	175 kWh LFP
Range	100 mi / 160 km	150 mi / 240 km	200 mi / 320 km
Battery Thermal Mngt	Heating Only	Liquid Cooled / Heat	Liquid Cooled / Heat
Traction System	2 Speed	Single-Speed	Single-Speed
Power	215 HP (150 kW)	335 HP (250 kW)	335 HP (250 kW)
Telematics	Basic	Expanded	Expanded
V2G Operations	Limited	Extensive	Extensive

BLUE BIRD®

IMPROVED BATTERY SYSTEM

140 kWh or 175 kWh Capacity
- Lithium Iron Phosphate (LFP)
- Safest chemistry available
- Up to 200 miles of range

Active Thermal Management
- Liquid Cooled & Active Heating
- Tested at -18°F and 120°F
- Performance in all conditions

600V Architecture
- Level 2: 19.2 kW
- Level 3: Up to 140 kW DCFC

Engineered for longer life cycles & extensive V2G operations!

IMPROVED TELEMATICS

Over The Air (O.T.A) Updates

- Wireless software updates
- Efficient software bug fixes
- Continuous product improvement

Real-time data & Diagnostics

- Active vehicle monitoring
- Real-time service support
- Faster, more accurate diagnostics

Pre-Conditioning

- Set “Ready by” time
- Conserve energy for route
- Maximize mileage

New features and functionalities added over time!

REQUEST ACCESS TODAY!

BLUE BIRD®

ICE v. EV | RANGE IMPACTS

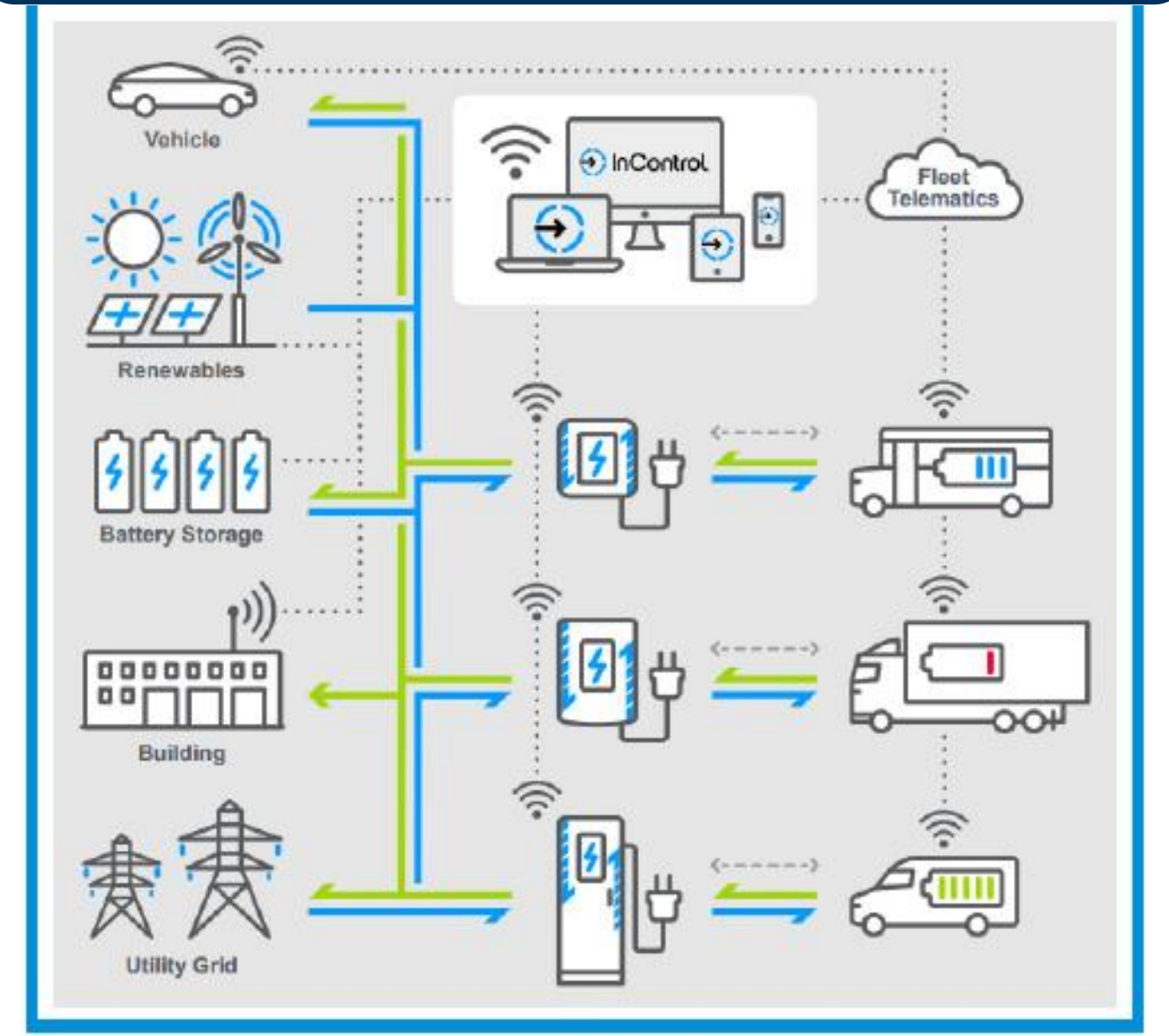
- Component draw – each component contributes to battery draw
  - Battery e-heater: 10kW
  - Cabin e-heaters: 20kW
  - A/C chiller: 2.3kW
  - Air Brake compressor: ~1kW – 3kW
  - Power steering pump: 2kW – 10kW
  - Air conditioning cabin: 5kW – 13kW
- Regenerative braking
- Driver habits from regenerative braking and ease of acceleration
- Understanding range estimator on dash
- Terrain
- Ambient temperature
- City vs. rural driving

EV | CHARGING STRATEGY

- Good – LEVEL 2 - AC
  - Simple Single Phase 240V power needed
  - 10kW to 19.2kW (Typical)
  - Install can often be done with existing power
  - Lower Cost Charging Equipment Available
  - Good for Overnight Charging
  - Starting Point for 1 to 5 buses
- Better – Level 3 - DC Fast Charge
  - Preferred if supplemental funding is available
  - Most require 3 Phase Power
  - 20kW to 60kW is typical
  - Has potential to charge in less than 2 hours
  - Should have at one for every 5 to 6 buses
  - Enhanced Pre-Conditioning when needed
- Best – Yard Planning Project
  - Full Scale Infrastructure Phased Plan
  - Not Commonly Possibly

V2X V2G V2B V2L V2V

V2X V2G V2B V2L V2V



V2X V2G V2B V2L V2V

Represents vehicle exporting energy from the HV battery

Requires the vehicle and charger to work together

Currently executed in many vehicle and charger methods

Utilities embracing ISO 15118-20 w/Transport Layer Security 1.3

Longer term is to use these energy sources to generate revenue

V2V DC, V2B and V2L wave forming, V2G wave following

V2X V2G V2B V2L V2V

We added V2X capabilities 11-2021 on the ISO 15118-2

Nuvve charge management via Rhombus charger

Security was through a cloud exchange via Cummins

Telematics would provide the commands through the SCM

It was used in ~24 buses as a demonstration and was challenged

BorgWarner acquired Rhombus and worked to improve V2G

V2X V2G V2B V2L V2V

In 11-2024 we had a customer to move to ISO 15118-20

1-2025 we had success including the needed security

Accelera bench and field tested 3 V2G charger brands

Tellus, Heliox and InCharge all sent units for Accelera testing

4-2025 Hubject TLS 1.3 added to a Heliox charger with success

Mid month 4-2025 in production on our buses (ahead of the pack)

V2X V2G V2B V2L V2V

V2G using ISO 15118-20 w/TLS 1.3 enters demonstrations

Uses a certificate exchange process bus to charger

Expanded charger and charge management platforms

We are early (if not the first) using the full ISO protocol

It is still in demonstration in, CA, MA, and OR (non-revenue)

1st field success in Gresham, OR (PGE First Student)

Your Support Channels

Proper support channels provide best-in-class resolution

Customer

Charger Vendor

Dealer

OEM

Powertrain Vendor

"Our techs look forward to the overall reduced maintenance. They're excited, much longer brake life and no oil changes and all those things that just go away when you when you move [to the alternative-fueled space]."

Mike Bullman, Director of Transportation

BLUE BIRD

"The savings that we see with the electric buses allow us to reinvest back into the district, whether that's additional zero-emission vehicles or expanded infrastructure. It allows us to provide our students a cleaner and safer environment."

Christina Celeste-Russo, Director of Transportation

BLUE BIRD

"The electric buses respond quickly to acceleration and drive well on flat roadways as well as hills. They are smooth and extremely quiet on the road. The buses also have a good regenerative braking system, which helps recharge the batteries when driven downhill. They're easy to control on steep inclines."

Omar Dena, Transportation Supervisor

BLUE BIRD

“As the primary driver for our electric bus, I am impressed by its power when it climbs the long and steep Gore Pass on my route. This pass is rarely plowed prior to my use in the morning, and the electric bus’s performance has been excellent. Despite poor road conditions, the electric bus has never had any issues.”

Bethany Aurin, Transportation Director

BLUE BIRD®