Highland

Charging Dispenser		
	9	Bi-Directional Va

/2G

Circles Unit # MIC RD 44

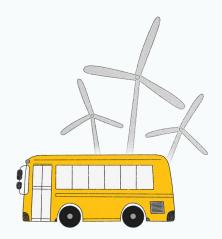
service (percentage)	
Attanta (average) and	



Prepared for Rose Tree Media School District February 13, 2024

Agenda

- 1. Highland Overview
- 2. Proposal & Economic Analysis
- 3. Timeline



Solving electrification complexity

	Legacy Fleet	Going Electric Alone	With Highland
Vehicle Ops			
Fueling	Ę		K
Maintenance	Ę		K
Utility Electricity Cost			K
Training			K
Construction			K
Planning & Permitting			ĸ
Charger Management			K
Financing & Grants			K

Highland makes it simple.

We manage the complexity so you can focus on what you do best.





3MM+ ELECTRIC MILES DRIVEN

800+ CON

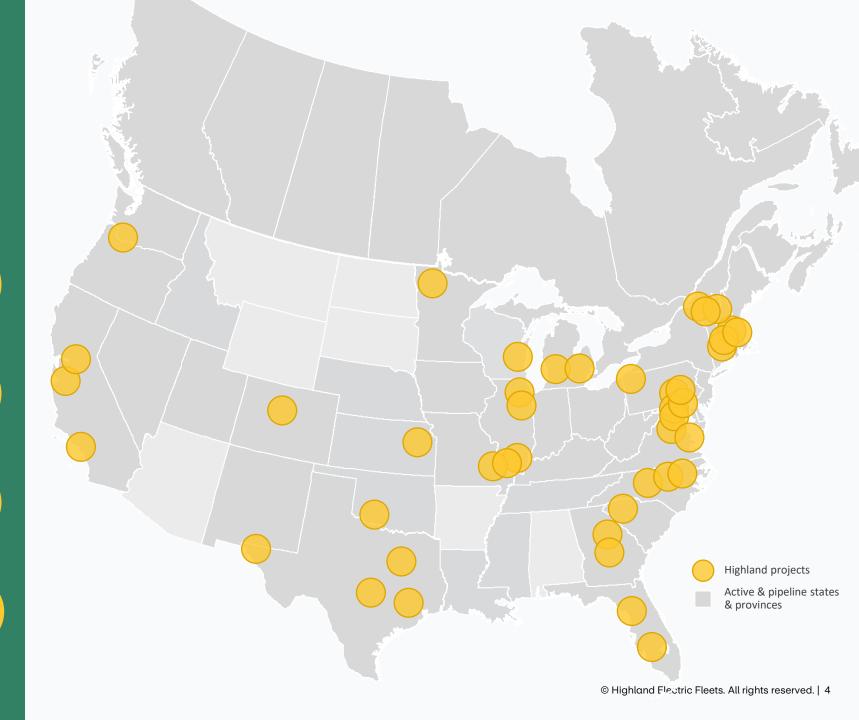
40+

5+

ELECTRIC SCHOOL BUSES UNDER CONTRACT

• SCHOOL DISTRICT PARTNERS

PROJECTS IN RURAL OR UNDERSERVED COMMUNITIES



What's Included in Highland's Contract?

	Reliable School Buses	 EV school uses built to Rose Tree Media's specifications, with right-sized batteries for Rose Tree Media's routes
(3)	Bus Depot Electrification	 Infrastructure – we provide utility interconnection & equipment, site design & permitting, engineering & construction EV supply equipment – chargers, balance of system, maintenance
	Fleet & Charge Management Software	 Advanced charging capabilities – managed charging & Customizable electric fleet data V2G Comprehensive fleet view
5	Electricity (Fuel)	 100% of electricity expenses associated with charging operations Savings from tariff management, managed charging, and V2G Fixed electricity costs, eliminating exposure to volatile energy prices
	Vehicle Maintenance Reimbursement	 Dealer claims & parts management to expedite repairs District's mechanics; parts reimbursed at cost Service promise – 30-minute issue response times & status updates

Additional Benefits of Highland's Contract

Performance-based contract

Performance-based 10-12-year contract with no upfront cost or time investment.

Predictable budgets

One contract for design, implementation, and operation. Everything is included in one simple, annual price.



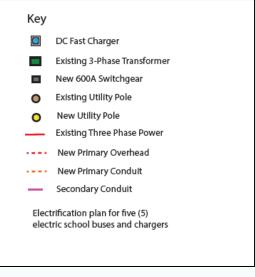
Ongoing support

Bi-Directional V20

Dedicated team to support charging operations, vehicle troubleshooting, and vehicle maintenance.

Site Plan





Site alterations, such as fencing adjustment to be discussed and are not included in pricing.

Pricing Proposal

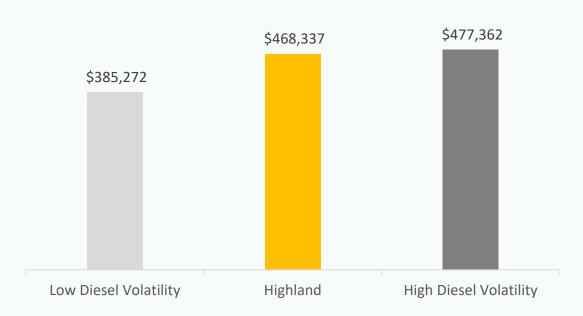
Highland Services Contract			
Annual Service Fee* Year 1, escalated at 3% annually	\$33,000 per bus*		
Deployment Scope	5 EV School Buses, Infrastructure, and Services		
Grant Assumptions	\$1,000,000 from EPA Clean School Bus Rebate – <i>awarded</i> \$250,000 from Alternative Fuels Incentive Grant (AFIG) – <i>application submitted,</i> <i>pending award</i>		
Annual Mileage	8,000 miles (~45 miles per day)		
Contract Term	12 years		

Pricing Proposal

	Payment Breakdown												
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Total
Per Bus	\$33,000	\$33,990	\$35,010	\$36,060	\$37,142	\$38,256	\$39,404	\$40,586	\$41,803	\$43,058	\$44,349	\$45,680	\$468,337
Total (5 Buses)	\$165,000	\$169,950	\$175,049	\$180,300	\$185,709	\$191,280	\$197,019	\$202,929	\$209,017	\$215,288	\$221,746	\$228,399	\$2,341,685

What will it cost to operate a diesel bus?

Internal combustion engine (ICE) costs will continue to increase and fluctuate with market volatility

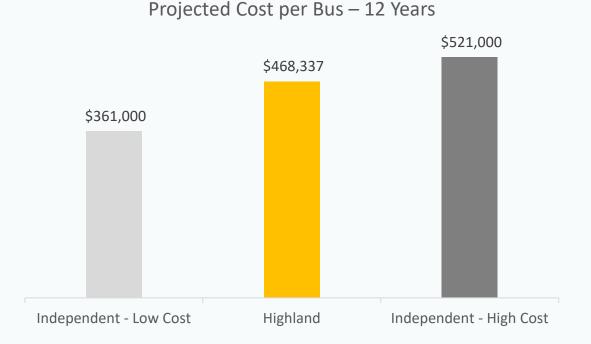


Projected Cost per Bus – 12 Years

Projected Savings Diesel v. Highland		
Lifetime (Per Bus)	Up to ~\$8k	
Lifetime (5 Buses)	Up to ~\$40k	

How does independent electrification compare?

Working with Highland helps mitigate risk of going electric



Projected Savings Independent v. Highland		
Lifetime (Per Bus)	Up to ~\$53k	
Lifetime (5 Buses)	Up to ~\$265k	

Preliminary Project Timeline



Procurement

Sourcewell

Contract 051123-HEF is for Turnkey Fleet Electrification Services provided as an annual fee per bus, based on mileage, term, charger capacity (kW), and Net Vehicle Acquisition Costs (Net VAC).

Highland's Contracted fee per bus includes cost of design, equipment acquisition and installation, project implementation, and ongoing services.

"Cooperative Purchasing Contracts (like Sourcewell) can be used instead of issuing RFPs" for EPA Awarded projects, as Sourcewell contracts meet the competitive requirements and include the required Federal terms and conditions of 2 CFR Part 200 (Quote Ref: EPA CSB RFP - Q&A 5.30)



	Highland 051123-HEF			
EPA Criteria	Sourcewell Award	EPA Compliance		
Project Planning and Design	~	•		
Site Prep & Installation	~	•		
Bus & Charger Acquisition	~	•		
Air Quality Monitoring	~	•		
V2G Equipment & Software	~			
Fleet Management Software	~	~		

Appendix Economic Analysis Inputs

What will it cost to operate an internal combustion engine (ICE) bus?

ICE costs will continue to increase and fluctuate with market volatility

12-year Diesel TCO	Cost Assumptions	Lifetime Costs
Vehicle Operating Timeframe	2026	2026-2037
Bus Purchase Price	\$165k	~\$165k
Fuel (\$/bus) 6 mpg efficiency, 8,000 miles per year, \$4.20 per gallon	\$5.5k, escalates 3-5% annually	~\$83k-\$94k
Maintenance and Repair - Parts (\$/bus)	Starts at \$3k, escalates 3-5% annually, bumps up in year 8	~\$57k-\$93k
Maintenance and Repair – Labor (\$/bus)	Starts at \$3k, escalates 3-5% annually, bumps up in year 8	~\$57k-\$93k
Vehicle Overhead (\$/bus)	~12% of Fuel + M&R costs	~\$24k-\$32k
TOTAL		\$386k-\$477k

EV Deployment Capital Cost Summary

Highland's EaaS Contract Covers All Upfront Costs

Project Capital Inputs	Projected Capital Costs*	Incentive Amount	Projected Actual Cost*
Vehicles	\$1.82M-\$1.95M	\$1.25M	~\$570k-\$700k
Chargers	\$65k-\$90k	\$ 0	~\$65k-\$90k
Interconnection	\$7k-\$15k	\$0	~\$7k-\$15k
Engineering and Construction	\$200k-\$230k	\$0	~\$200k-\$230k
Total Upfront Capital Required	\$842k-\$1.035M		
Total Capital Per Bus	\$168k-\$207k		

*Approximate Project Capital Costs for discussion purposes only

EV Deployment Operating Cost Summary

Highland's EaaS Contract Includes Operating Costs

Operating Cost Inputs	Inclusions	Projected 12-Year Costs Per Bus*
Fueling	Based on annual vehicle mileage of 8,000 miles, average vehicle efficiency and current rate tariffs escalated at 3% per year. Assumes close management to reduce demand charges. Costs can increase substantially above this range.	\$52k-\$80k
Charge Management	Software platform that provides remote montoring of charging stations and functionality to program charging sessions, and connects with vehicle telemetry allowing operator to view location and state of charge of buses.	\$21k-\$24k
Charger Maintenance	Dedicated team of customer success and support specialists, with remote and on-the-ground technician support, 30-minute response time and 97% uptime guarantee on chargers.	\$21k-\$24k
Vehicle Maintenance	Cost of mechanic labor and parts, including for preventative and minor maintenance, and major repairs (tires, brakes, etc.)	\$57k-\$64k
Out-of-Warranty/Unexpected Maintenance	Cost to replace high voltage parts (battery, drivetrain) outside of the manufacturer's 8-year warranty; cost to replace charging equipment due to failure.	\$8k-\$64k
Staff Time, Resources & Training	Staff member(s) to monitor fleet, performing tasks such as training drivers annually, ensuring vehicles are plugged in daily, managing communications and troubleshooting between vehicle dealer, charger manufacturer and any other vendors, perform grant compliance and reporting tasks. Assumes \$15,000 - \$25,000 in staff time annually.	\$34k-\$57k
Total Operating Costs Per Bus		\$181k-\$302k