

METROWEST SCHOOL FLEET ELECTRIFICATION STUDY

May Workshop

May 14, 2024

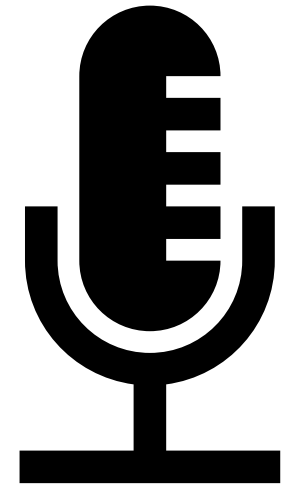


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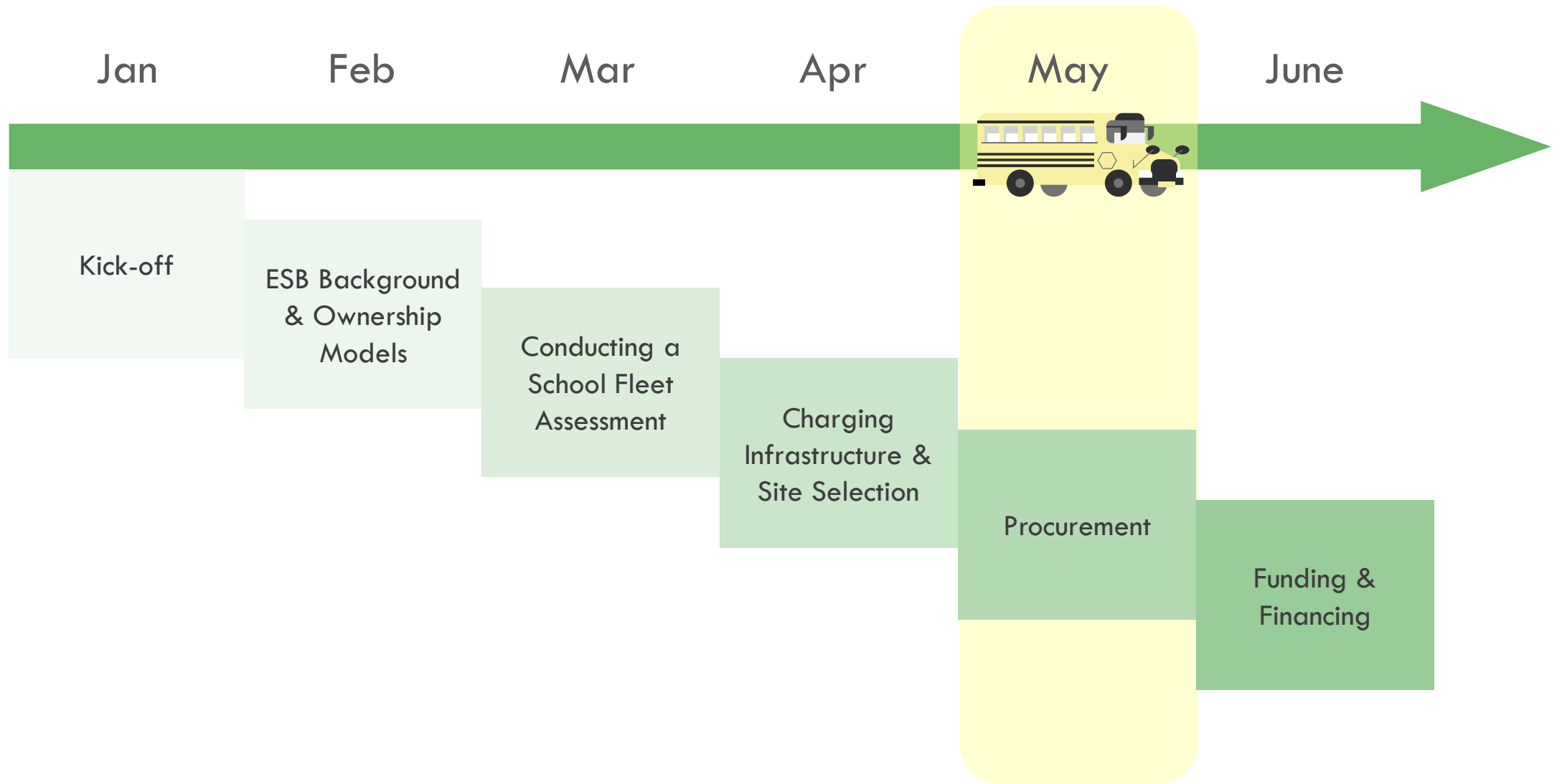
METROWEST SCHOOL FLEET ELECTRIFICATION STUDY

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Workshop Schedule



Today's Agenda

12:00-12:10	Welcome & Procurement Overview
12:10-12:20	Model RFP for Purchasing ESBs & Charging Infrastructure
12:20-12:30	Purchasing School Buses from State Contracts
12:30-12:40	Contracting with Electrification-as-a-Service Providers
12:40-12:55	Discussion and Q&A
12:55-1:00	Wrap-Up



Turnkey Electric School Bus
Procurement Under 30B: Template
RFP and Guidance Document



Turnkey Electric School Bus Procurement Under 30B

- How did the RFP Template come about?
- Why an RFP?
- The RFP Template is intended to be reviewed and adapted in conjunction with the Guidance Document, which identifies issues for consideration when developing a 30B compliant RFP for the purchase of electric school buses.
- Essential things to consider prior to drafting the RFP:
 - Term Length
 - Funding Source Procurement Requirements
 - Purchase or Lease
 - Installation a separate procurement – MGL c. 30, 39M



Turnkey Electric School Bus Procurement Under 30B

What will you include in your procurement?

- Infrastructure – charging equipment
- Maintenance – bus and charging equipment
- Parts on hand
- Training for municipal fleet operators
- Key performance indicators
- Penalties v. liquidated damages
- Municipal support – garaging, working with utilities, siting of equipment, payment of electricity costs, grants, matches, tax credits



Turnkey Electric School Bus Procurement Under 30B

Pricing Considerations

- Price sheet must include all bus options
- Build a bus for price comparison
- Costs for Maintenance
- Repair Services (hourly rates)
- Additional Warranties



Turnkey Electric School Bus Procurement Under 30B

Emerging Issues with Electric School Buses

- Can collective purchasing of electric school buses be considered energy aggregation? MGL c. 164, 137 (no additional installation procurement requirements).
- Can purchasing electric school buses be considered energy conservation for a \$300,000 pilot? MGL c. 25A, s. 14.



Turnkey Electric School Bus Procurement Under 30B

KEY LEARNINGS

Ownership

- This template is only for school districts or municipalities who directly own or lease their school buses, not those who contract school bus services through a third-party vendor.
- This template does not apply for lease to purchase transactions.

EVSE Installation is a Separate Procurement

- M.G.L. c.30B. does not include the ability to procure charging infrastructure. Installation of charging infrastructure may have to be procured separately as a construction procurement under M.G.L. c.30-39M.
- However – Section 15 of the Municipal Empowerment Act of 2024 allows the single procurement of both buses and charging infrastructure in a single 30B supplies contract (MGL c. 30B section 23.)

Contract Length

- To enter into a contract length for a lease agreement longer than three years, approval will need to be given by the governing body that has authority either in advance of the procurement or prior to the award of the contract.



LINKS TO RESOURCES:

[Template RFP for Procurement of a Turnkey Electric School Bus Service](#)

[Guidance Document to Develop a Solicitation for a Turnkey Electric School Bus Service](#)

[Additional Resources when Developing a Solicitation for a Turnkey Electric School Bus Service](#)

[2024 Massachusetts Municipal Empowerment Act: Download \(mass.gov\)](#)

Thank you!

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Purchasing School Buses from State Contracts (OSD)





OPERATIONAL SERVICES DIVISION

Statewide Contracts - VEH110: EV Options for School Buses

MAPC Program - May 14, 2024
Kelly Thompson Clark
kelly.thompsonclark@mass.gov



Eligible Entities



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Organizations eligible to use Statewide Contracts:

Cities, towns, districts, counties, and other political subdivisions	Public institutions of higher education
Executive, Legislative, and Judicial Branches, including all departments and elected offices therein	Public purchasing cooperatives
Independent public authorities, commissions, and quasi-public agencies	Non-profit, UFR-certified organizations that are doing business with the Commonwealth
Local public libraries, public school districts, and charter schools	Other states and territories with no prior approval by the State Purchasing Agent
Public hospitals owned by the Commonwealth of Massachusetts	Other entities when designated in writing by the State Purchasing Agent

Find this list on our [website](#).

VEH110 Contract Overview



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- Light- to Medium-Duty Vehicles
- Thirteen Total Vendors in Twelve Categories
- Two Vendors offer vehicles under the bus category – School Buses & 7D:
 - All vehicles in this Category must reflect "traditional" school buses or 7D vehicles that follow all federal and state regulations related to the transportation of pupils.
 - Anderson Motors, Inc.
 - Bluebird (Microbird)
 - ✓ Full Size & Class 4
 - ✓ Small & Mini
 - DATTCO, Inc. dba DeVivo Bus Sales
 - Collins
 - ✓ Small & Mini
- Cutaway Buses and Vans
- Wheelchair Accessible Vehicles
- More info coming on charging packages!

VEH110: Light and Medium-Duty Vehicles

UPDATED: April 19, 2024	
Contract #:	VEH110
MMARS MA #:	VEH110A*
Initial Contract Term:	December 1, 2021 – November 30, 2024
Maximum End Date:	No remaining extensions
Current Contract Term:	December 1, 2021 – November 30, 2026
Contract Manager:	Kelly Thompson Clark, 617-720-3184, kelly.thompsonclark@mass.gov
This Contract Contains:	Environmentally Preferable Products
UNSPSC Codes:	25-10-00-00: Motor vehicles
Notes:	This update adds 23 models to the EVs in Categories 1 – 3. VEH111 - Heavy-Duty Vehicles, Road Maintenance and Construction Equipment is available as a separate Statewide Contract.
<small>*The asterisk is required when referencing the contract in the Massachusetts Management Accounting Reporting System (MMARS).</small>	

How do I get a quote?

- Contract User Guide
- Reference Vendor Table in back
- Contact Vendors directly (No COMMBUYS)
 - ❖ Provide specs to dealer
 - ❖ What is Mandatory vs Desired
 - How are you getting your charging needs met?
 - ❖ What is the lead time on vehicles?
 - ❖ How long is your quote good for?
 - ❖ Upfitting available for special accessories
 - ❖ Municipal Leases are available!!



Contract User Guide for VEH110

Vendor List and Information*

Vendor	Master Blanket Purchase Order #	Contact Person	Phone #	Email	Prompt Payment Discounts	SDP Commitment Percentage	Maximum % above Cost for Vehicle	Maximum % above Cost for Upfitting
Contract	PO-22-1080-OSD03-SRC3-23886	Kelly Thompson Clark	617-720-3184	kelly.thompsonclark@mass.gov	N/A	N/A	N/A	N/A
Contract Enabled	PO-22-1080-OSD03-SRC3-23885	Kelly Thompson Clark	617-720-3184	kelly.thompsonclark@mass.gov	N/A	N/A	N/A	N/A
Anderson Motors, Inc dba Anderson Motors	PO-22-1080-OSD03-SRC3-23879	Jim Anderson	401-434-5900	jim@andersonmotors.com	2% - 10 Days 1.5% - 15 Days 1% - 20 Days 0.5% - 30 Days	1%	36% Category 11	40%
DeVivo Sales, Inc dba DeVivo Sales	PO-22-1080-OSD03-SRC3-31225	Kevin DeVivo	860-356-0252 x5996	kevin.devivo@devivobus.com	1% for 10, 15, 20 and 30 days	1%	5% above all direct costs. Category 11	5% above all direct costs
Central Dodge Inc dba CENTRAL DODGE WYNNHAM	PO-22-1080-OSD03-SRC3-23920	Deborah Emery	508-828-2134	demery@central-us.com	0.05% - 10 Days 0.025% - 15 Days	1%	Category 2 = 6%; Categories 4 & 5 refer to price file in vendor MBPO; Categories 8, 10, 11 and 12 = 8%	10%
Central Ford, Inc.	PO-22-1080-OSD03-SRC3-23918	John Welch	774-283-6400	twelch@buycmg.com	1% - 10 Days 0.5% - 15 Days	1%	4%	15%
Colonial Imports dba COLONIAL IMPORTS OF DARTMOUTH	PO-22-1080-OSD03-SRC3-23922	John Welch	774-283-6400	twelch@buycmg.com	1% - 10 Days 0.5% - 15 Days	1%	6.5%	14%
Colonial Nissan of Medford, Inc.	PO-22-1080-OSD03-SRC3-23921	John Welch	774-283-6400	twelch@buycmg.com	1% - 10 Days 0.5% - 15 Days	1%	6%	14%



Local Government Enablement Team



OPERATIONAL SERVICES DIVISION



Local Government Enablement

Eric Murphy - Manager

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Jackie Needham – jackie.needham@mass.gov

Trish Burke – patricia.burke@mass.gov

Stay in Touch!



OPERATIONAL SERVICES DIVISION

Interact with OSD on our social media channels:

 Twitter: **@Mass_OSD**

 Instagram: **@Mass_OSD**

 LinkedIn: **<https://www.linkedin.com/company/ma-osd/>**

 Blog: **<https://www.mass.gov/collections/procurement-insights>**

[Sign up](#) to receive OSD communications. Share this link with your staff.

Questions



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Contracting with Electrification-as-a-Service Providers (PowerOptions)





Highland

Charging Dispenser



Bi-Directional V2G

 *PowerOptions*



Highland[®]

MAPC Electric School Bus
Workshop
5/14/2024

Highland

Your partner in fleet electrification



Grants & financing



Project planning



Bus & charger procurement



Permitting & installation



Staff & driver training



Fueling (electricity)



Smart charging



Maintenance reimbursement



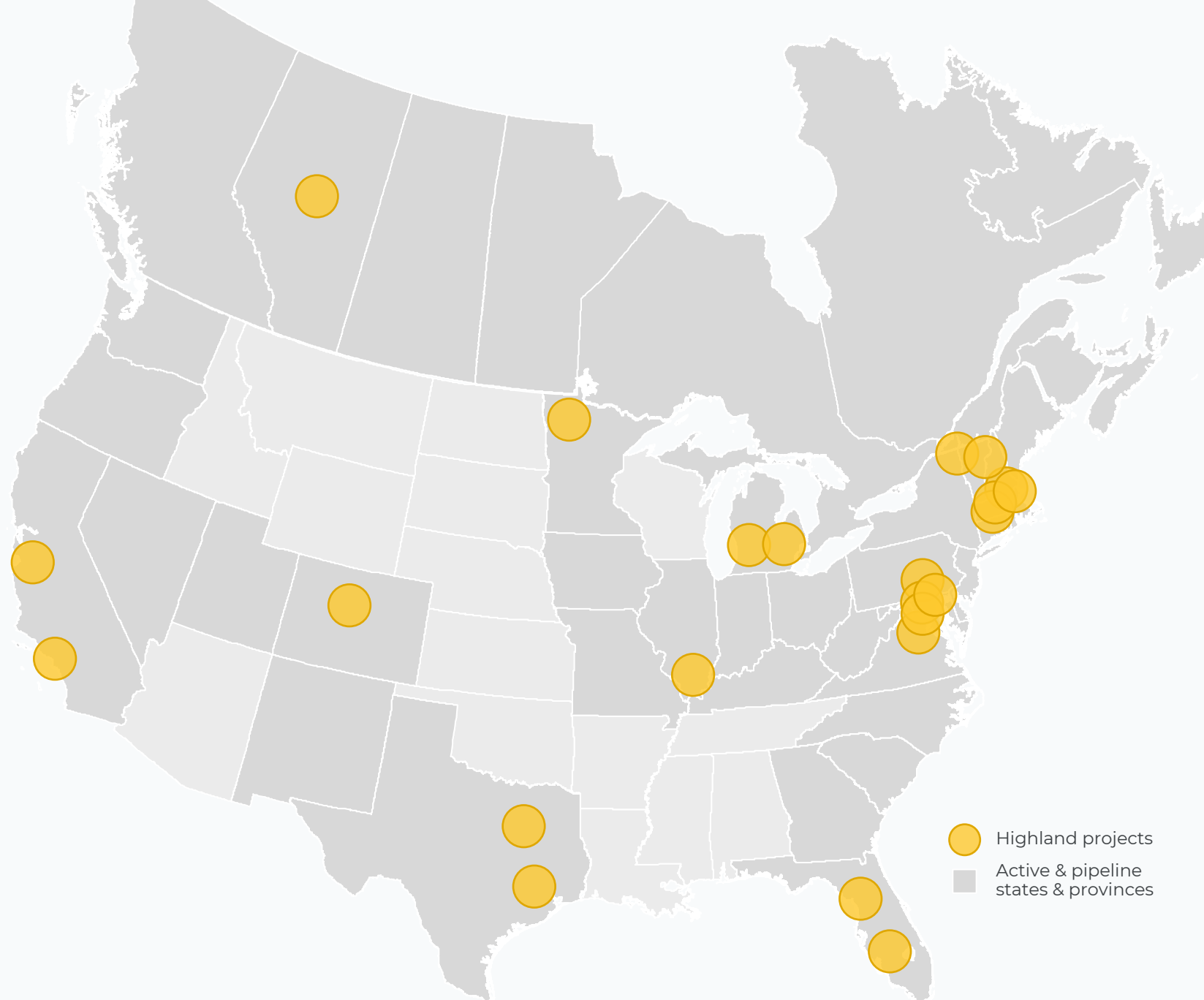
Broad fleet electrification experience

1.6MM+ ELECTRIC MILES DRIVEN

600+ ELECTRIC SCHOOL BUSES UNDER CONTRACT

\$210M+ GRANTS AND INCENTIVES FOR OUR PARTNERS

#1 LARGEST ELECTRIC SCHOOL BUS PROJECT IN NORTH AMERICA





We give our members “peace of mind”

**A Trusted Advisor
Since 1998**

Originally created by the Commonwealth of Massachusetts to serve state agencies, PowerOptions has been serving nonprofits and public entities for 25 years.

**A Mission-Driven
Nonprofit**

PowerOptions’ mission is to empower nonprofits and public entities with solutions to reduce the cost, carbon, and complexity of energy.

**Consortium
Leverage**

PowerOptions members benefit from the collective buying strength of over 490 members including some of the largest nonprofits in Massachusetts, Connecticut, and Rhode Island.

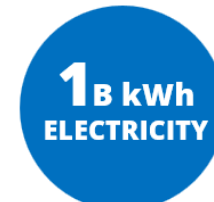
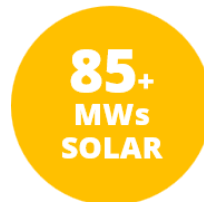
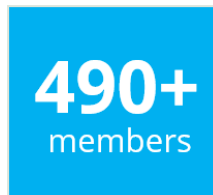
Flexible Programs

PowerOptions’ programs are intentionally and thoughtfully designed to serve members of any size and circumstance

Your Energy Team

PowerOptions’ on-call energy team provides guidance throughout the contracting process, so you feel supported and resourced to make smart and proactive energy decisions.

Electricity & Gas Supply | Solar & Renewables | Vehicle Electrification | Energy Efficiency | Analytics & Sustainability Planning





Charging as a Service (“Depot”)

Fleet Electrification as a Service (“Fleet”)



PowerOptions + Highland

A Robust Competitive Procurement

- PowerOptions RFP conducted on a programmatic basis
- **Fleet Electrification as a Service (“Fleet”)** and **Charging as a Service (“Depot”)**
- MAPC as public sector subject matter experts to RFP evaluation committee
- Highland selected due to experience & qualifications; pricing; pricing transparency; contract terms & conditions

Benefits for MAPC Members

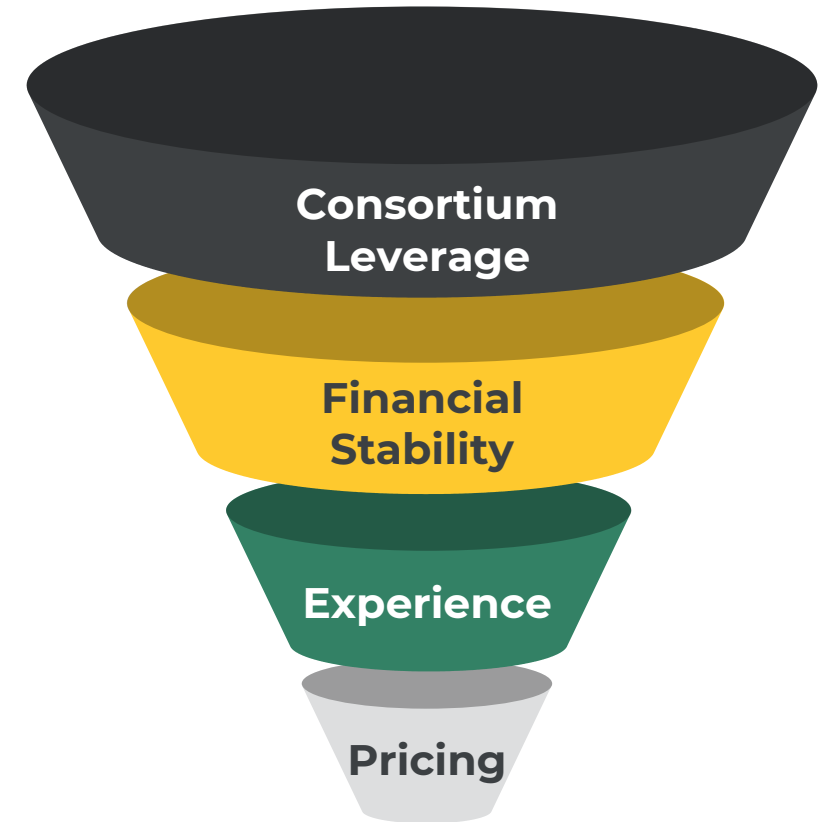
- Standardized pricing & full transparency for PowerOptions
- Ability to incorporate/manage grants, unforeseen circumstances
- Favorable Terms/Conditions: Performance Guarantee, Price Volatility Protection etc.

PO Member School Districts

SAVE TIME: Streamline buying process.

SAVE MONEY: Drive down project pricing.

REDUCE RISK: Improve contract terms and conditions.



Highland

Your partners in fleet electrification



Savings

Avoid peak rates and lower your electric bill by 40-60% with managed charging.



Simplicity

Just plug in your buses and let Highland handle when they charge.



Reliability

Know your buses are charged and ready to go, every day.

Fleet

Our all-inclusive electric bus fleet solution, FEaaS includes all the equipment and finances you need to transition your fleet to electric - planned & implemented together at your pace.

- ✓ School Buses
- ✓ Maintenance Cost
- ✓ Chargers
- ✓ Fleet & Charge Management
- ✓ Training

Depot

For districts with existing electric vehicles, Depot upgrades your infrastructure - providing reliable chargers, affordable fueling, coverage of unexpected repairs, and software to manage your fleet.

- ⊖ School Buses
- ✓ Maintenance Cost
- ✓ Chargers
- ✓ Fleet & Charge Management
- ✓ Training



Electrification with Highland



Experts in EV fleet implementation

Implementation requires coordination of infrastructure, energy, and operations



Interconnection & Infrastructure

- Utility interconnection and new service
- Site preparation
- Engineering, permitting, and grant compliance



Chargers & Energy Management

- Charger selection, connectivity, and maintenance
- Charger & fleet management software
- Utility connection for charging & vehicle-to-grid (V2G) events



Operations & Maintenance

- Procurement, testing, and commissioning of each vehicle
- Driver & mechanic training
- Routine and unexpected maintenance

Real results



~1,000,000
electric miles driven



97%
charger uptime across
all active projects



~15-minute
response time to support
requests


























The smartest way to upgrade to electric

WITH A HIGHLAND PARTNERSHIP:

- 1 Plan** We design & implement the entire project.
- 2 Budget** We apply for grants & create a budget that encompasses all aspects of your electric fleet.
- 3 Build** We procure school buses & infrastructure & manage the installation of depot upgrades.
- 4 Train** We train your drivers & mechanics to operate & maintain your new fleet.
- 5 Charge** We charge the school buses during off-peak hours and ensure you're ready for all routes.
- 6 Maintain** We cover charger repairs & reimburse for school bus repair costs, including parts and labor.

Performance Promise: We guarantee charger uptime and provide ongoing service & support for bus operations

Solving electrification complexity

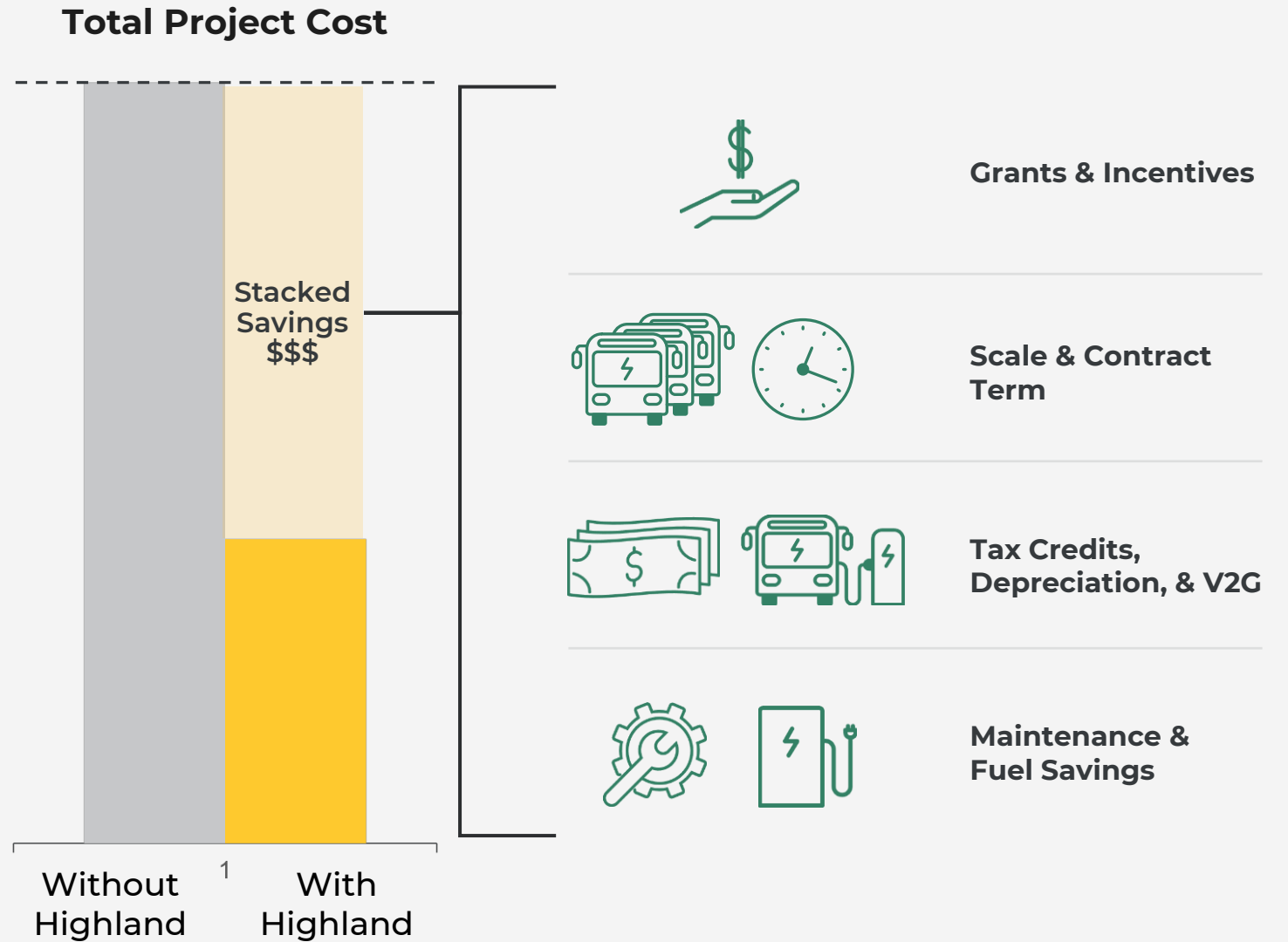
	Legacy Fleet	Going Electric Alone	With Highland
Vehicle Ops			
Fueling			
Maintenance			
Utility Electricity Cost			
Training	—		
Installation	—		
Planning & Permitting	—		
Charger Management			
Financing & Grants			

Highland makes it simple.

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



Highland makes electric fleets affordable



Grant dollars for your transportation budget

Highland has helped districts secure ~\$210 million in grants & incentives



More buses, for less \$

Grants & incentives make your existing transportation budget go further



Federal Programs

EPA Clean School Bus Program, IRA, ZETF, DOE



Local Programs

HVIP, NYTVIP, MassCEC ACTBus



Utility Programs

EVSE Rebates, Demand Response, V2G

Your partner in fleet electrification



Performance-based contract

Performance-based 10-15 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

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

Thank you



Highland
Amy McGuire
amy@highlandfleets.com

 **PowerOptions**
Walter Gray
Wgray@poweroptions.org

Q&A / Discussion



Wrap-Up



Electric School Bus Opportunities

- Clean Heavy-Duty Vehicles Program (EPA)
 - School buses are eligible through School Bus Sub-Program
 - Funding can be used for vehicles, charging infrastructure, and workforce development
 - Up to \$300,000 per vehicle
 - Applications due July 25th
- Join the Joint Office of Energy and Transportation's Electric School Bus Forum
 - Open to school bus operators and stakeholders
- EPA Clean School Bus Webinar Series
 - Next webinar on May 22 @ 1 PM ET – Equipment Overview, Future Proofing, EVSE RFPs, and Best Practices



Reminders & Next Steps



Next Meeting: June 11, 12-1pm

Topic: Funding & Financing



Contact Alison (afelix@mapc.org) and Allie (ashepard@mapc.org) with any questions or to set up a 1:1 meeting