MAPC's Green Mobility Group Purchasing Program

Megan Aki, Clean Energy Analyst, MAPC Wednesday, June 20, 2018





MAPC: CLEAN ENERGY

Regional Energy **Projects**

- ESCO Procurement
- Regional Solar Initiative
- LED Streetlight Purchasing Program
- Community Electricity Aggregation
- Green Mobility Program
- Energy Resiliency

Climate and Energy **Planning**

- Connecting municipalities with incentives + plug-and-play programs
- Community energy and climate baselining, planning, and strategizing
- Outreach programming and education
- Net Zero Planning

Energy Technical Assistance

- Grant Writing
- Green Communities Designation
- Methane Leaks

- Solar Permitting and Zoning
- State and Local Policy
- Net Zero Guidance & Education



FLEETS FOR THE FUTURE









































Accelerate the deployment of alt. fuel vehicles (AFVs) by reducing their incremental costs and building fleet capacity to plan procurements.

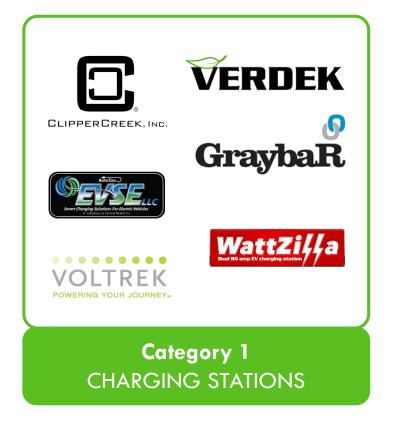
Propane, electric, and natural gas vehicles and infrastructure.



Piloting the Group Purchasing Program 2016-2017



VEH102 Vendors









Identifying the Opportunity

Nearly 50% of municipal vehicles are



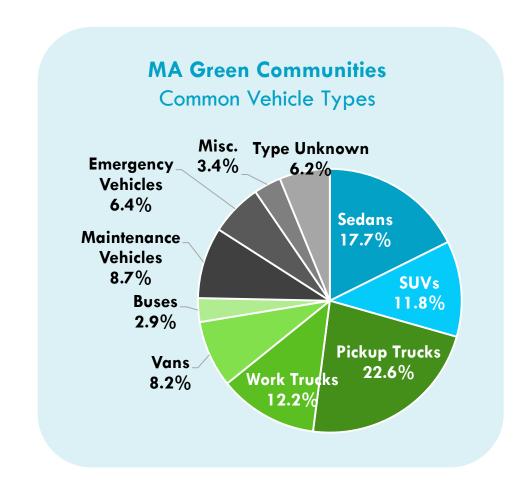
Other popular makes include











Source: MA Dept. of Energy Resources, Green Communities Division (2015)









Accelerated Time-Based Discounts

DAY 1 – DAY 30 3% DAY 31 - DAY 90 1.5% DAY 91 – DAY 180 0%

Volume-Based Discounts

6+ vehicles
20+ vehicles
20+ vehicles
100+ vehicles
100+ vehicles

Volume-Based Discounts



6+ vehicles
20+ vehicles
100+ vehicles

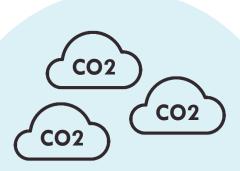
Results from the Pilot Round



28 vehicles4 fleets



11-19% discounts1-2k per vehicle

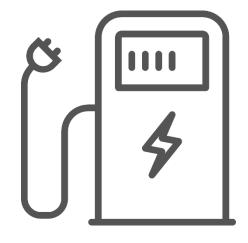


25-30% average fuel economy improvement

Group Purchasing Program Opportunities in 2018



2018 Group Purchasing with MAPC



EV CHARGING STATIONS

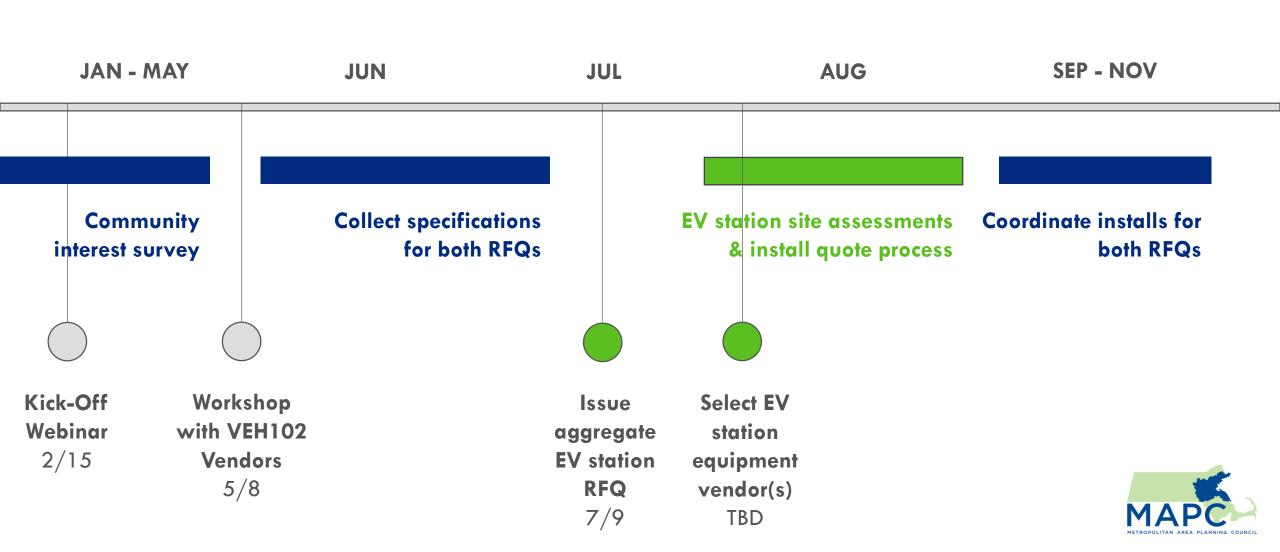


AFTERMARKET CONVERSIONS

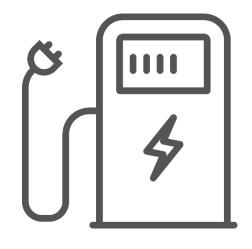


Timeline

Exact timing subject to change, per community purchasing needs



EV CHARGING STATION BID

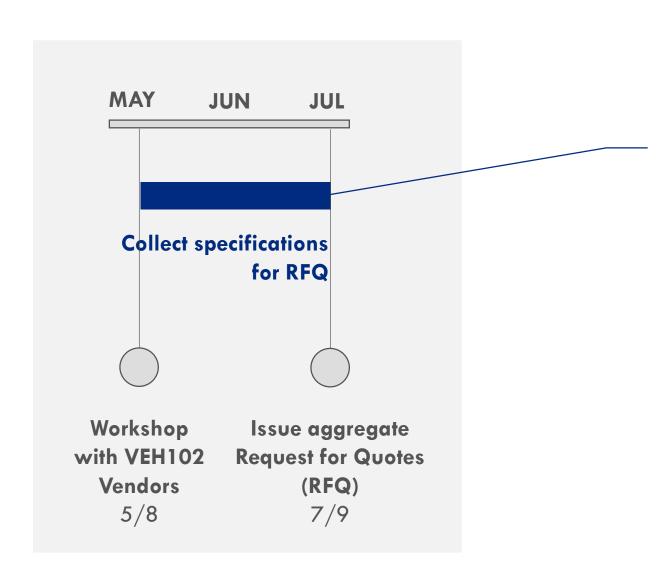


EV CHARGING STATIONS

- 1. Level II and DCFC stations
- 2. Coordinated site assessments
- 3. Installation



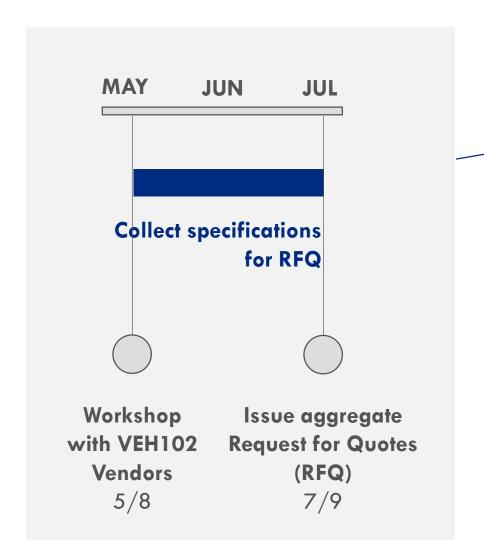
SPECIFICATIONS NEEDED



EQUIPMENT SITE For each station: ☐ Level of Charge □ Voltage ☐ # of Ports ☐ Payment System \square Network Capable (Y/N) ☐ Desired Network Functions ☐ Mounting Type ☐ Cable Management



SPECIFICATIONS NEEDED



EQUIPMENT SITE For each station: ■ Approx. site address ☐ Existing site load capacity ☐ Distance from power source \Box Cell signal availability (Y/N) ☐ Excavation needed (distance /surface type) Physical protections needed



AFTERMARKET CONVERSION BID

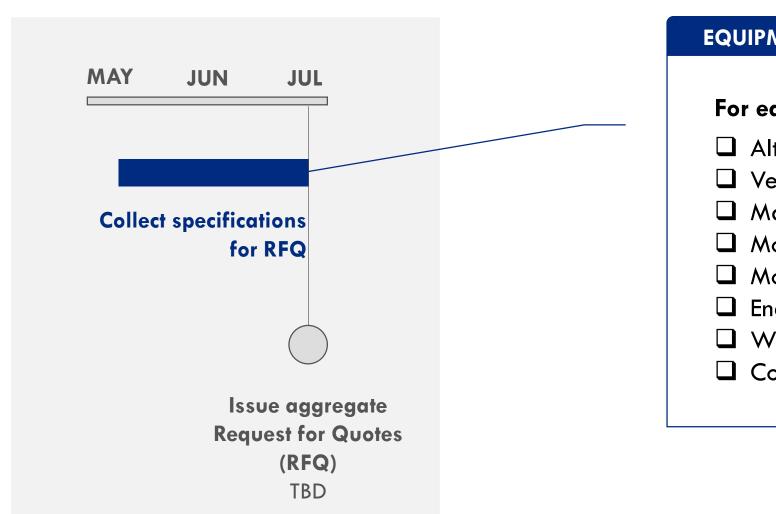


AFTERMARKET CONVERSIONS

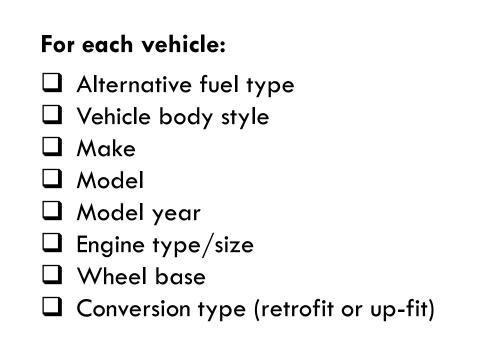
- 1. Hybrid electric conversions
- 2. Plug-in hybrid electric conversions



SPECIFICATIONS NEEDED



EQUIPMENT





Next Steps & Related Opportunities

EV Charging Station Specifications TemplateSend to MAPC no later than **July 2, 2018**

Aftermarket Conversion Vehicle Specifications Template Send to MAPC no later than July 2, 2018

Download the specifications templates at:

https://www.mapc.org/our-work/expertise/clean-energy/clean-vehicle-projects/



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