Kick Off Meeting Agenda

10:00 AM  Welcome & Introduction
10:15 AM  Green Mobility Purchasing Landscape in Massachusetts
10:25 AM  Purchasing/Procurement Models Discussion
11:05 AM  Existing & New Financing Opportunities Discussion
11:25 AM  Wrap Up & Next Steps
MAPC: About Us

- Regional Planning Agency
- 101 cities and towns
- 80+ employees
- Wide range of planning expertise
We provide help — as much or as little as you need — at every step:

- Police Vehicle Cooperative Purchasing
- Fire Apparatus Group Purchasing
- Clean Energy Group Purchasing
  - LED streetlights
  - ESCOs
  - Solar development
  - Aggregation

And ongoing advice and support throughout the process.
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
Advisory Committee

- Mix of state, regional and municipal entities with varying expertise in alt. fuels

- Quarterly meetings w/opportunity for focus groups

- Input on procurement model and engagement strategies

- Feedback on bid development
Project Timeline

Bid Development
December – June 2017

Issue Bid
June 2017

Bid Process
July - August 2017

Implementation/Evaluation
September – March 2018

Ongoing outreach to interested communities

Advisory Committee Meeting
December 2016

Advisory Committee Meeting
March 2017

Advisory Committee Meeting
June 2017

Advisory Committee Meeting
September 2017

Advisory Committee Meeting
December 2017
Green Mobility Purchasing
The Landscape in Massachusetts
Between 2012 – 2014 the number of public electric vehicle charging stations has grown from 87 to 469.

Hybrids more than doubled between 2009 – 2014, from 38,700 to more than 89,000 statewide.

Fully electric vehicles grew from 23 to nearly 1,500 between 2009 – 2014.
Reducing Range Anxiety

Existing 'Corridors'

Future Corridors
Connecting the Landscape

**PLANNING**
- MA ZEV MOU 2025 Target
- U.S. Alt. Fuel Corridor Designation
- Utility Rate Cases for EVSE Build Out

**PURCHASING**
- VEH98 – light duty vehicles
- VEH102 – advanced vehicle technology
- Drive Green – group buy

**FUNDING**
- EVIP – Fleets
- EVIP – Workplace Charging
- Green Communities
- DOER Clean Vehicle Grants
- MOR-EV
- Federal Tax Credits
- VW Settlement

Vehicles only
Infrastructure only
Both
So, what’s missing?
F4F Survey & Advisory Committee Questionnaire Results

12 responses covering 13 municipalities
- Arlington
- Burlington
- Cohasset
- Marlborough
- Marshfield
- Medford
- Medway
- Melrose
- Middleton
- Millis
- Natick
- Newton
- Westfield

13 responses from Advisory Committee Members
- Natick
- Newton
- Boston
- Gloucester
- Winchester
- Wayland
- PVPC
- CMRPC
- MassDOT
- Eversource
- National Grid
- MMWEC
Alternative fuel vehicle types are you likely to purchase in next 2-3 years?

- Majority of F4F Survey respondents indicated they would be purchasing Dedicated Electric and Electric Plug-In Hybrid

Which green mobility technologies do you think municipalities need the most assistance to purchase?

- Light duty hybrid and electric vehicles
- Medium and heavy duty alternative fuel vehicles (i.e. propane, CNG, LNG)
- Electric vehicle charging stations
- Electric school buses
A majority of F4F Survey respondents expressed an interest in best practices for electric vehicle (e.g. suitability analysis and vehicle specs) and fueling infrastructure (e.g. siting and needs assessment) procurement decisions.

69% of Advisory Committee members interested in inclusion of comprehensive fleet assessment.

46% of Advisory Committee members interested in site assessment for infrastructure build out.

F4F Survey respondents expressed a need for education on Alternative Fuel Technologies and Vehicle Types (purchasing, maintenance, infrastructure availability).
Purchasing Patterns

Methods most frequently used by F4F Survey respondents to purchase conventional vehicles:

- Direct Upfront Purchase
- State Bid List
- National Cooperative Procurement Contracts

A majority of F4F Survey respondents expressed a strong interest in bundling vehicle procurement with infrastructure procurement

62% of Advisory Committee members expressed interested in bundling vehicle purchase with infrastructure purchase

Going forward, do you think that municipalities will purchase alternative fuel vehicles for their fleets by buying them outright or leasing them?

- 38% More municipalities will buy vehicles outright
- 31% More municipalities will lease vehicles
- 31% Unsure
- 31% Unsure

More municipalities will buy vehicles outright
More municipalities will lease vehicles
Unsure
Fitting F4F into the Landscape

**PLANNING**
- MA ZEV MOU 2025 Target
- U.S. Alt. Fuel Corridor Designation
- Utility Rate Cases for EVSE Build Out
- MAPC/3rd Party Fleet Assessments

**PURCHASING**
- VEH98 – light duty vehicles
- VEH102 – advanced vehicle technology
- Drive Green – group buy
- Facilitation of Bulk Purchase
- Procurement of Medium/Heavy Duty alt. fuel vehicles

**FUNDING**
- EVIP – Fleets
- Green Communities
- DOER Clean Vehicle Grants
- VW Settlement
- EVIP – Workplace Charging
- MOR-EV
- Federal Tax Credits

- Vehicles only
- Infrastructure only
- Both
Purchasing/Procurement Models

Group Discussion
Municipal Green Mobility Purchasing Consortia – Concept Paper

**Outreach**

- Aggregate vehicle and/or infrastructure commitments (and quantities) from cities/towns for bulk buy
- Focus particularly on cities/towns coming through the EVIP program – bringing them together into purchasing consortia

**Charging Infrastructure Procurement**

- Conduct a charging station RFQ from vendors on VEH 102 to get best group price

**Vehicles Procurement**

- Conduct a vehicle buying RFQ for cities/towns from vendors on VEH 98 to get best group price
- Conduct a leasing IFB for cities/towns from vendors to get best monthly prices

**Assess**

- Provide support to cities and towns in: 1) assessing fleet efficiency and cost/benefit of converting to green vehicles; 2) determining best locations for charging infrastructure – potentially conduct collective procurement(s) for assessment/infrastructure consultant to work alongside consortia

**Pros/cons of buy vs. lease**

**Buy pros:**
- Can benefit from long-term lifecycle efficiencies
- Treat as capital budget expenditure

**Lease pros:**
- Better for pilot program to evaluate gains
- Obtain latest technology
- Reduces capital outlay

This process could be regularly repeated with new groups of cities/towns coming together through the consortia. Bringing state grant recipients together for bulk purchasing would be a great way to stretch resources.
Existing & New Financing Opportunities

Group Discussion
Leveraging All Opportunities

**FUNDING**

- Reauthorization
- Target green communities for participation
- Submit joint application to reduce cost
- Advocate for allocation of funds

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**EVIP – Fleets**

**Green Communities**

**DOER Clean Vehicle Grants**

**VW Settlement**

**MOR-EV**

**Federal Tax Credits**

Incorporate into lease agreement
Wrap Up & Next Steps

1. Action Items identified during Discussions

2. Focus Groups/Research Areas

3. Next Meeting Date:  
   March 13th, 2017  
   10-11:30am

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