# REGIONAL TRANSPORTATION | ADVISORY COUNCIL

















# Regional Transportation Advisory Council

January 11, 2017, Meeting

3:00 PM, State Transportation Building, Conference Room 4, Boston, MA

## **Meeting Summary**

## Introductions

M. Gowing, Vice Chair (Acton) called the meeting to order at 3:00 PM. Members and guests attending the meeting introduced themselves. (For attendance list, see page 6)

## Vice Chair's Report - M. Gowing

M. Gowing announced Commuter Rail rescheduling based on community and customer inputs is underway. The attempt is to address the on-time record of the service and the process is open to public comment.

## Minutes - December 14, 2016

A motion to approve the minutes of the December 14 meeting was made and seconded. The minutes were approved as amended.

# Panel Discussion on Electric Vehicles; Christine Kirby, Massachusetts Department of Environmental **Protection**

C. Kirby gave a brief background on the status of electric vehicles (EVs) in the Commonwealth. Massachusetts has opted for the California Motor Vehicle Emissions Standards (MVES) as part of the Federal Clean Air Act. These standards commit the state to increase sales of EVs including plug-in battery vehicles, hybrids, and diesel vehicles. Gradually the sales of EVs have increased with December 2016, being the record month for the largest number of sales nationwide.

Historically, the designation of nonattainment of the ozone standard in the Clean Air Act was the primary motivating factor in expanding EVs. Now, the impetus is to mitigate

climate change in alignment with goals established by the Massachusetts Global Warming Solutions Act. Mitigation goals include a 25 percent reduction in the target from 1990 – 2020 emissions and an 80% reduction by 2050. So there must be a large market penetration of EVs in all aspects of the transportation system including buses.

In 2012, forty-two percent of the MA GHG emissions came from transportation, making it the largest contributor. Battery EVs emit 60-70 percent less than petroleum power vehicles which make them the major focus for impactful mitigation.

Massachusetts is a partner to a multi-state, regional Zero-Emission Vehicle (ZEV) Memorandum of Understanding, which was adopted to achieve ZEV and 2025 Targets, and for adopting higher standards by promoting infrastructure and incentives for market growth initiatives. Currently, there are 10K EVs in Massachusetts, significantly less than the 300K goal by 2025. Interstate cooperation facilitates the development of EV corridors throughout the country.

Massachusetts has a statewide ZEV Commission supported by the Executive Office of Energy and Environmental Affairs (EOEEA) to focus on EV topics. An upcoming ZEV Commission report will focus on incentives, infrastructure and education and outreach. Education and outreach studies show that consumers do not understand the benefits of EV.

The Massachusetts Department of Energy Resources (DOER) has offered a consumer rebate program since 2014 in which 3400 rebates have been awarded for EVs, including electric motorcycles. DOER is investing \$12M more in rebates for this program.

Other programs through the Massachusetts Department of Environmental Protection (MassDEP) include the Massachusetts Electric Vehicle Incentive Program (MEVIP). The program funds the Fleets Program for infrastructure and vehicles to state and local fleets. The incentive is up to \$7,500 for Battery Electric Vehicles; \$5,000 for Plug-In Hybrid vehicles; and \$7,500-13,500 for level-2 dual-head charging stations. [Level 1 charging is a slow-charging station requiring an 8-hour charge. Level 2 charging allows for faster charging.]

As of the end of 2016, 163 EVs were deployed to municipal and state fleets and 46 charging stations. Using state and municipal fleets helps to showcase EVs in the communities while the charging stations are open to the public which expands the EV recharging network and helps municipalities to lead by example. An added benefit to the community is seen in gas savings.

MassDEP also administers a Workplace Charging Program. The program provides up to 50% of the hardware costs for charging to employers of 15 or more employees located at a non-residential place of business, with charging stations able to charge all types of EVs. Workplace charging is the second most common place for vehicle charging. A study by the

US Department of Energy found that people are 20 times more likely to purchase an EV if they have workplace recharging available. The Workplace Charging Program helps to build "range confidence" and has resulted in the installation of 379 charging stations and 604 ports at 186 street locations.

As a part of Volkswagen settlements, Massachusetts will receive \$75M of which 15 percent can be used for EVs (\$11.25M). VW will pay \$2B throughout the country for developing and advancing EVs over the next 10 years. Northeast states are anticipating a large share of these funds.

## Haidee Janak, City of Boston Environment Department

H. Janak described the Air Pollution Control Commission's parking freeze program which closely monitors parking in the City. The City's Electric Vehicle Policy requires that a minimum of 5 percent of total parking spaces have level 1 or 2 charging capability. The policy applies to developments larger than 50K square feet, and all projects with non-residential off-street parking in the parking freeze zones, covering a total of at least 15 percent of the total spaces in the city. To date, 27 projects covered by the policy have produced 220 level 2 charging stations.

The City of Boston has initiated a signage campaign to show that EV parking is available at a public facility. The sign conforms to the Massachusetts Electric Vehicle Initiative guidelines and will be as large as the "Blue P" parking sign at any location.

In 2015, a study done in conjunction with Boston, Cambridge and Somerville examined urban challenges to EV implementation. The study, called the Garage Orphan Study, recommended that charging station rebates be issued for charging stations, or Electric Vehicle Supply Equipment (EVSE), for non-single family homes including provisions for rebates to be pooled among multiple tenants.

The study also recommends that DC Fast Charge locations in areas of greatest parking shortfall be installed and that EVSE be installed at shopping centers near residential areas. Fast charging charge times can be as quick as 30 minutes which makes them ideal for concession rest stops along freeways.

The concept of neighborhood mobility micro-hubs is rooted in the Go Boston 2030 planning initiative which was conducted over the last year. Mobility hubs tie into EV growth by increasing people's confidence in using multi-modal trips by co-locating multiple travel modes aided by combining wayfinding and real-time information. This concept supports regular transportation users making daily decisions about the best combination of modes for the day. An overall goal of this vision is easier travel through the city with more EVs.

H. Janak discussed the Volkswagen Settlement Funds and the impact on Boston. The City has applied for some of the funding through state and regional grants notably identifying 28 "quick win" sites including 13 Municipal lots with over 80 EV ports. Entities can apply for

the VW funding by visiting the website <a href="www.electrifyamerica.com/">www.electrifyamerica.com/</a>. Volkswagen is investing in ZEV infrastructure by building a network of EV chargers and improving public awareness of EV.

The Massachusetts DOER has launched a new "Drive Green" program offering EV group discounts at select dealerships which cover buying or leasing vehicles. More information on this program is available at <a href="https://www.massenergy.org/drivegreen">www.massenergy.org/drivegreen</a>. (34:15)

#### QUESTIONS, COMMENTS, AND DISCUSSION

In response to a member's question, C. Kirby stated that more EVs are coming to the market with better mileage range, in addition, there are more stations with faster charging equipment. These developments help to ease fueling anxiety on the part of potential EV motorists. Most of the commuter trips are shorter range and will fall within the planning targets, however, even longer-range trip vehicles are being developed which will improve inter-regional travel. (J. McQueen)

- C. Kirby and H. Janak indicated that ridesharing companies have been considered in the planning aspects of increasing the presence of EVs in response to a question.
- C. Kirby stated that regulatory issues are needed to determine how power is distributed for charging stations and how costs for allocating these impacts on the electricity grid. She emphasized the need to try to keep the electricity costs low to avoid canceling out the benefits derived from increased EVs. (D. Montgomery)
- H. Janak indicated that EV planning is ongoing with MAPC to deal with regional issues including signage in response to a member's question. C. Kirby explained that the Commonwealth is working with municipalities to promote uniform understanding of EV issues including website and applications. (R. McGaw)
- H. Janak noted that off-street charging lots are being emphasized but the potential for onstreet sites might be pursued in the future even with the myriad issues that surround onstreet use and availability. (M. Gowing)
- C. Kirby also indicated that interoperability among vehicle types and charging station types is being advanced by the administration. She stated that charging stations should be able to serve all types of EVs. (M. Gowing)
- C. Kirby replied to a member's question on the use of energy by national region. She noted that DOE has table of cost of energy per state broken down by gas and electric consumption. (R. Hoyland)

In response to a question on solar powered charging stations C. Kirby indicated that technology is expanding and that prototypes are being developed. (R. Hoyland)

A. Felix commented that the State's procurement agency has established standards for fleet vehicles. They include anti-idling technology, EV charging equipment, and outfits and

retrofits. A municipal group purchasing consortium tied to fleet vehicles is being considered. She also pointed out that the DOE website map for charging stations reveals a natural pattern of stations emerging along the existing road network.

## 3C Document Development Schedule; Lourenço Dantas, CTPS

L. Dantas explained that there may be an accelerated schedule for the TIP development to align it with the state's CIP process, with a new TIP needed to be ready by June 1. As part of this, next week the MPO will consider a change to the public review period for the MPO documents. The change to the MPO's public participation plan (PPP) would cut the public review of various certification documents to 21 days from the current 30-day period. For this to take effect, the PPP would need to be amended.

This year, the evaluation of TIP projects will happen in February. Once staff receives financial information for MassDOT, staff will develop the Staff Recommendation for TIP projects for presentation to the MPO a late March meeting. Through late March and early April, there will be much interaction with the municipalities during the development of the Draft TIP for presentation at the April MPO meetings.

Advisory Council should see a fairly well-developed Draft TIP by the April 12 meeting. The draft TIP Project Evaluations are scheduled to be available for the March 11 Advisory Council meeting. The 3C Committee could meet once the draft evaluation results are available.

A final proposed TIP development schedule will be presented to the MPO at its upcoming meeting.

UPWP does not require the same schedule as the TIP, so a June public review period is more likely. The Advisory Council will have ample opportunity to discuss and comment on the UPWP as it progresses.

In response to a question from M. Gowing regarding multiple MPO involvement and coordination, L. Dantas explained that large MPOs with overlapping boundaries require coordination for long-range planning and the TIP planning program. This already occurs at the staff level, and will be formalized in an updated MOU with other MPOs.

## Old Business, New Business, and Member Announcements

Scott Zadakis was approved as voting Advisory Council member after a brief introduction. Scott will represent the Cross-Town Connect TMA. Scott is Executive Director of Cross-Town Connect which covers transportation programs in the Acton, Littleton, and Boxborough area.

## Adjournment

A motion to adjourn was made and seconded. The meeting adjourned at 4:20 PM.

## **Attendance**

Municipalities - Voting Attendee

Acton Mike Gowing
Belmont Robert McGaw
Millis Ed Chisholm

Needham Rhain Hoyland; David

Montgomery

Weymouth Owen MacDonald

**Citizen Advocacy Groups** 

American Council of Engineering

Companies Fred Moseley
APA - Massachusetts Chapter John "Tad" Read
Association for Public Transportation Barry M Steinberg

Boston Society of Architects Schuyler Larrabee

MoveMassachusetts Jon Seward National Corridors Initiative John Businger

WalkBoston John McQueen

**Agencies - Voting** 

MassRides Gary St. Fleur

**Municipalities Non-Voting** 

Boston Tom Kadzis

**Agencies Non-Voting** 

MAPC Alison Felix
TRIC Steve Olanoff
US EPA Gary Rennie

Guests

Union of Concerned Scientists Daniel Gatti
Crosstown Connect Scott Zadakis

Boston Resident Jonathan P. Chance

Boston Resident C. Blackler

Staff

Lourenço Dantas David Fargen
Anne McGahan Matt Archer

Jen Rowe