

Q&A from February 2024 Electric Vehicle Regional Working Group Meeting about Curbside Charging

The Q&A summary is a combination of questions and corresponding answers exchanged both within the Zoom chat interface and verbally during the Electric Vehicle Regional Working Group Meeting.

Questions about the City of Boston's Curbside Charging Initiatives

Q: Where will Boston's 8 Level 3 Chargers be sited?

A: They will all be sited in municipal lots: 115 Harvard in Allston; 10 Taft Hill Ter in Roslindale; 37 Winthrop in Hyde Park; 16 Hamlet in Dorchester.

Q: How did Boston factor in using 19kw chargers vs. 6.6kw? Are you anticipating quicker turnover to offset the lack of total units?

A: Since the chargers are curbside, we want to see quicker turnover. It really came about through a conversation with Eversource, the utility, our consultant, and our vendors. It didn't change the project all that much to switch to the 19.2kw from the typical 7.2kw stations.

Q: Is the City of Boston Electrical Vehicle Supply Equipment (EVSE) Project Manager doing the power cycling when needed, or has the city hired additional electricians to service the stations?

A: Better Together Brain Trust will be our installer and will be tasked with commissioning and activating stations and conducting preventative maintenance. We will use the Flo Performance warranty for other maintenance needs.

Q: Why would the City ticket someone who parks at 10 pm at 2 am for violating a 4-hour limit?

A: There are a variety of schedules that produce demands at all hours. We are also focused on top-off charging to provide access to the greatest number of people.

Q: For the stations funded by the state Electric Vehicle Infrastructure Program (EVIP), did you face any pushback from the City about loss of parking? Due to EVIP's important accessibility requirements, we typically lose one space for every EVIP funded station we install, which can be inhibiting from a Town buy-in perspective. But it's also typically the only source of funding for the stations themselves that we can leverage (and a requirement for accessing Eversource funds).

A: For curbside we just needed to locate near an ADA curb ramp, so near intersections. For off-street we were already carving out an access aisle for at least one station, so it didn't change our approach much. It does take additional parking spaces to achieve that, but I think people generally support stations being accessible.

Q: How do you manage data tracking from these different hardware and network providers?

A: We use ChargePoint for our municipal lots. They have a back office that is fairly simple to use. It can produce reports. Flo has a similar product. It does require an annual cost for the data connectivity and software.

Q: Parking availability in city neighborhoods can be difficult. Has there been push back for dedicated EV charging only spaces?

A: This has been a big consideration for our program. We have focused on being adjacent to public assets with the idea that parking is already seen as shared rather than entrenched residential parking. We are going out to neighborhood groups now, one down, 13 to go, so we will see what the response is like. For the pilot, we went where we were invited to go. If a Community Board wasn't interested in participating, we didn't force it on them.

Q: What were the zoning issues that the City of Boston encountered?

A: First, there are restrictions on the number of Level 2 and Level 3 charging stations you can install in private parking lots. If you install above a certain number, it is treated like a fueling station or gas station which has a whole slew of restrictions and requirements. Our planning department is working with our zoning department to make it allowable by right or at least to allow more stations than currently allowed as long as it's not your primary use in that parking lot. For our curbside program, it's not zoning that we've run into as much as historic districts. Historic districts all have their own extra layer of review and restrictions. We even had some districts suggest specialized designs for their neighborhood for charging stations. When it comes down to it, we can't specialize stations to make them fit the image of each district. We didn't go into any of those neighborhoods through this demonstration program so it's yet to be seen if those just become off limits because of that. It'll be a challenge for ItsElectric because I do think that some of their siting locations will be in historic landmark districts so we'll have to face that.

Q: Have you considered Level 1 options for overnight?

A: We considered many options including street light utility poles, antennas – things that we could tap into (e.g. Is there a product out there that makes a parking meter into an electric vehicle charging station?). We wondered if we could just provide enough utility chargers so that everyone can see they are easy to access. In the end we decided to back away from it because we can't use our street lights and we didn't really see another solution that would make it worthwhile. We are focusing on Level 2. Our next focus is obviously Level 3.

Questions about New York City's Curbside Charging Initiatives

Q: Has New York City DOT considered charging money for vehicles plugged in but not charging to avoid long residence times for vehicles not charging but essentially using the EV space as a parking space?

A: In our pilot you pay as long as you're plugged in. Our average session is 4 hours with energy being delivered for about 80% of the session. We'll probably move towards charging by kilowatt and adding charge fees if you've finished receiving energy to encourage folks to move off the charger.

Q: Does the charging expense encourage turnover of spaces? A penalty if charged in for more than 1 hour and not drawing electricity?

A: Yes, since the chargers bill by time plugged in rather than per kWh, it does charge drivers that dwell after their vehicle is done charging. We are also looking into dwell time fees when expanding the program and transitioning to a per kWh model.

Q: Does NYC own and maintain your curbside EVSE, or are they privately owned? If NYC owns, the stations who maintains them?

A: The operator owns and maintains them in the pilot, and we plan to continue that approach. ConEd and Flo own the stations. We gave them permission to site on city right of ways.

Q: What is the Flo model? Are the chargers accessible to ADA standards?

A: It's a modified version of FLO's smart 2 model. Flo models are ADA compliant to possibly a dated standard and are by and large accessible. The new PROWAG & US Access Board rules will be used for the expansion of the program.

Q: In the Flo model, does/can the charger also collect meter fees for parking?

A: This model/pilot program did not include collection of meter fees.

Q: Have you considered Level 1 options for overnight?

A: We haven't considered level one, but we are exploring whether the user could choose the power output that they would like to receive from the vehicle if they're trying to be cost conscious or if they anticipate staying at the location for a longer time period.

Questions about MassCEC Charging Infrastructure Program

Q: Is the MassCEC program only for municipal sites? Only for EJ communities within municipal sites? is the MassCEC funding compatible with EVIP and other funding?

A: Since this funding comes from American Rescue Plan Act (ARPA) funds, it will need to be allocated by the end of this year and spent by 2026. MassCEC is open to feedback on how funding for projects is allocated and what parties could be eligible to receive funding.

Q: Are there restrictions on the utility pole mounted charging infrastructure?

A: There are restrictions on which charging stations models are approved under the State database. However, there is legislation in the works to amend this issue and ensure that streetlight and pole-mounted charging stations are able to be approved. Part of what we want to do with this project is to determine the ideal scenarios for and limitations of pole-mounted and streetlight charging so that municipalities have the necessary information to explore on-street charging models and determine whether they are viable options for residents.