ELECTRIC VEHICLE CHARGING PROGRAM

Manhattan CB7 Briefing
September 10, 2019
Curbside EV Charging Pilot Program
PROJECT BACKGROUND

Project Structure:
• **Partnership**: Con Ed and DOT will install 100 L2 EV charging ports on city streets for a four year demonstration.

• **Purpose**: Encourage EV ownership and test financial and operational feasibility of curbside EV charging.

• **User Cost**: Pay per time, charge cost comparable to gas.

Project Details:
• 50 chargers (100 curbside charging ports) citywide for public use.

• **In Manhattan, we are looking at the following numbers of parking spaces:**
  • 2 chargers (4 parking spaces) in Washington Heights
  • 3 chargers (6 parking spaces) on the Upper West Side
  • 3 chargers (6 parking spaces) on the Upper East Side
CURBSIDE CHARGER: HOW IT WORKS

To start a Charge Event:
Once the user authentication is completed and the status light is flashing white

1. Open the flip-up door
2. Remove the connector from its holster
3. Open the vehicle charge port
4. Insert the connector into the vehicle charge port

RGBW LED Status Lights

Flashing white: The charger is waiting for the user to start a charge event.
Level 2 Charger Rendering and Signage

- 50 chargers (100 Level 2 public charging ports)
- Full charge in 4-8 hours
- Con Ed to install and operate
SITE SELECTION AND SITES

• Near major institutions, educational institutes and medical centers, commercial activity – high visibility, turnover, and utilization
• Data used includes Journey to Work, Census, DCP, elected feedback, and EV registrations

Central Park (West 93rd Street)

Riverside Park (West 86th Street)

PS 199/Julliard/LaGuardia (West End Ave – east side curb)
Background
CHALLENGE: PRIVATE CARS ARE A MAJOR SOURCE OF GHG EMISSIONS

Transportation: constitute 30% of citywide GHG emissions

Passenger Cars: 83% of on-road transportation GHG emissions
INCREASING THE ADOPTION OF EVS IS KEY TO ACHIEVING CITY’S GHG GOALS

- Goals of 80x50 plan and Paris Climate Agreement Executive Order 26: requires electrification of most of the city’s 1.8 M private light-duty vehicles.
- Mayor’s goal for 20% of new NYC vehicle registrations be EV by 2025: requires more on- and off-street EV charging
## EV CHARGING: HOW IT WORKS

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>DC Fast</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="120V" alt="Power Requirements" title="1-3 kW" /></td>
<td>![Charging Speed](5 miles per hour, 12+ hours for a full charge)</td>
<td>![Location](Home garage)</td>
</tr>
<tr>
<td><img src="240V" alt="Power Requirements" title="3-10 kW" /></td>
<td>![Charging Speed](12-25 miles per hour, 4-6 hours for a full charge)</td>
<td>![Location](Home garage, on street or parking field)</td>
</tr>
<tr>
<td>![Power Requirements](480 Volts (25-150 kW))</td>
<td>![Charging Speed](100-600 miles per hour, 30 minutes for a full charge)</td>
<td>![Location](Commercial locations, short stops, near highways)</td>
</tr>
</tbody>
</table>
OUTREACH PROCESS

**Outreach**
- BP Brewer December 2018
- Manhattan DMs February 2019
- CM Rosenthal February 2019

**Public Feedback**
- Launch public feedback portal where public can provide feedback on where DOT should or shouldn’t locate chargers

**Pilot Zones**
- Notify elected officials and community boards where pilot neighborhoods are chosen, offer and conduct briefings on the program and feedback on suggested locations.

**Installation**
- Spring 2020 for Authorized Parking for City Fleet, followed by installation of curbside public chargers.

**Feasibility and Final Site Notification**
- July notification to impacted CBs and electeds.
- December notification to impacted CBs and electeds.

**CB Engagement**
- Outreach to Community Boards and offer presentations and feedback on suggested locations.
THANK YOU!

Visit the NYC DOT Public Portal for FAQs on EV and to add a location for EV:

www.nyc.gov/charge