ELECTRIC VEHICLE CHARGING PROGRAM

Manhattan CB7 Briefing
November 9th, 2021
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**: $2.50/hr peak, $1.00/hr off-peak.

**Project Details:**
- 50 chargers (100 curbside charging ports) citywide for public use – 58/100 in service.
- In Manhattan, we are looking at the following numbers of parking spaces:
  - Upper West Side - 3 chargers (6 parking spaces)
  - Upper East Side - 3 chargers (6 parking spaces)
  - Washington Heights - 2 chargers (4 parking spaces)
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
Curbside Level 2 Charger

- 100 Public Level 2 charging ports
- 2 charging ports per post
- Con Ed to install and operate
SITE SELECTION AND SITES

- Two of the three sites that were planned for CB 7 (86th St. btwn. Riverside & West End; 70th St. btwn. West End & Amsterdam) proved to be infeasible due to site conditions.
- DOT proposing to install chargers at two different locations:
  - 76th St. btwn. Amsterdam & Columbus – 1 charger, 2 parking spaces
  - 84th St. btwn. Amsterdam & Columbus – 1 charger, 2 parking spaces
- Near major institutions, educational institutes and medical centers, commercial activity – high visibility, turnover, and utilization
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="image1" alt="Level 1 plug" /></td>
<td><img src="image2" alt="Level 2 plug" /></td>
<td><img src="image3" alt="DC Fast plug" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power Requirements</th>
<th>120V (1-3 kW)</th>
<th>240V (3-10 kW)</th>
<th>480 Volts (25-150 kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charging Speed</td>
<td>5 miles per hour, 12+ hours for a full charge</td>
<td>12-25 miles per hour, 4-6 hours for a full charge</td>
<td>100-600 miles per hour, 30 minutes for a full charge</td>
</tr>
<tr>
<td>Location</td>
<td>Home garage</td>
<td>Home garage, on street or parking field</td>
<td>Commercial locations, short stops, near highways</td>
</tr>
</tbody>
</table>
THANK YOU!

Visit the PlugNYC website for more information on NYC DOT’s EV charging initiatives:

www.nyc.gov/PlugNYC
QUESTIONS?