



ELECTRIC VEHICLE CHARGING PROGRAM

Community Board 3 TC Briefing
May 14th 2019

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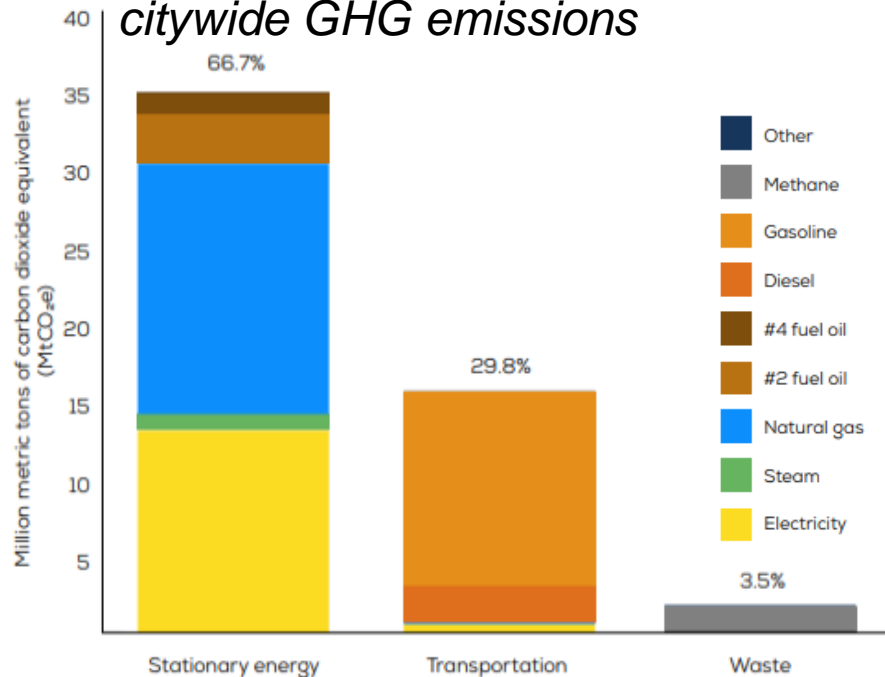


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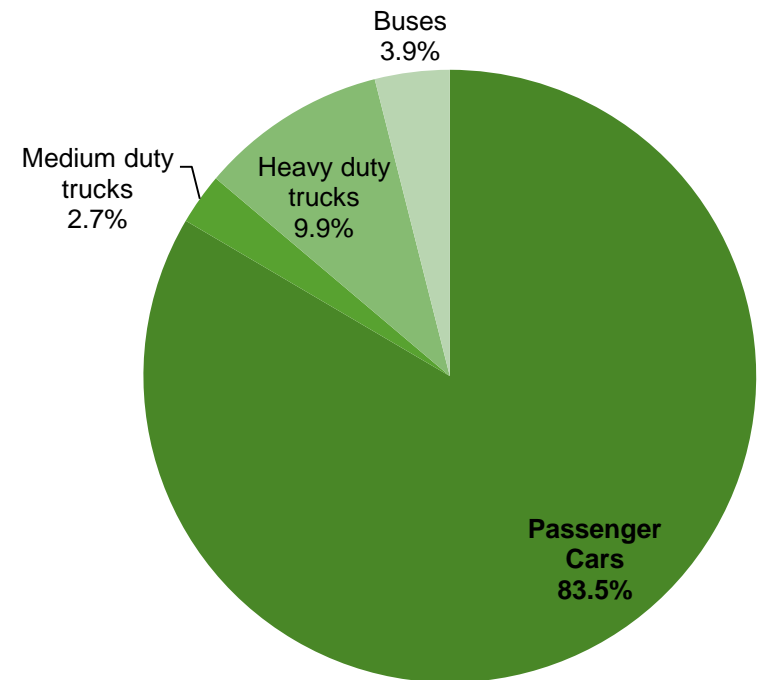
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CHALLENGE: PRIVATE CARS ARE A MAJOR SOURCE OF GHG EMISSIONS

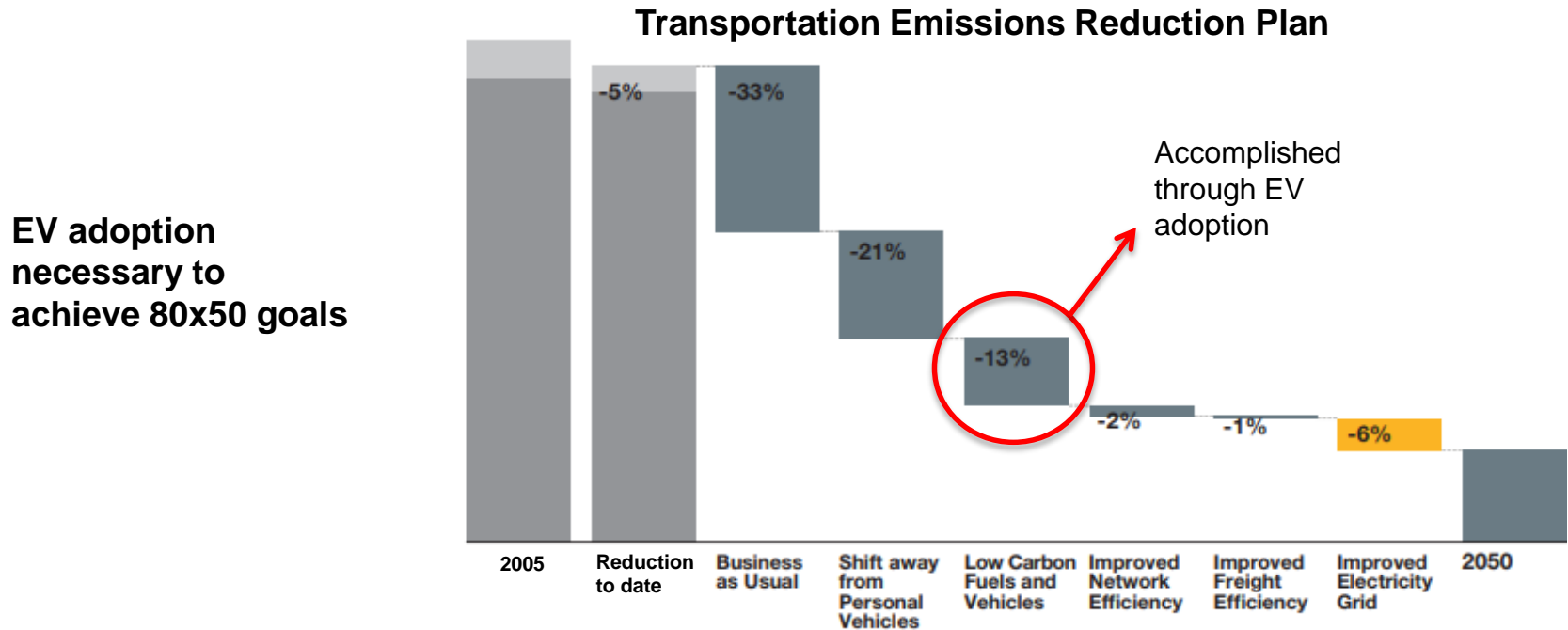
Transportation: constitute 30% of citywide GHG emissions



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

OPPORTUNITY: STARS ARE ALIGNING FOR GROWTH IN EV ADOPTION

- Vehicle cost is falling, driven by cheaper batteries
- Range is increasing, models with 200+ miles per charge
- Model choice is expanding, 32 models on the U.S. market
- EV sales are growing, up 66% in NYC from 2017 to 2018

Public Access to charging remains a barrier, as 50% of New Yorkers store their cars on-street.

To increase EV adoption, NYC must expand its public charging network



Example: Hyundai Kona

Price: \$26,450 in NYS with tax incentives

Range: 258 miles



Example: Tesla Model 3

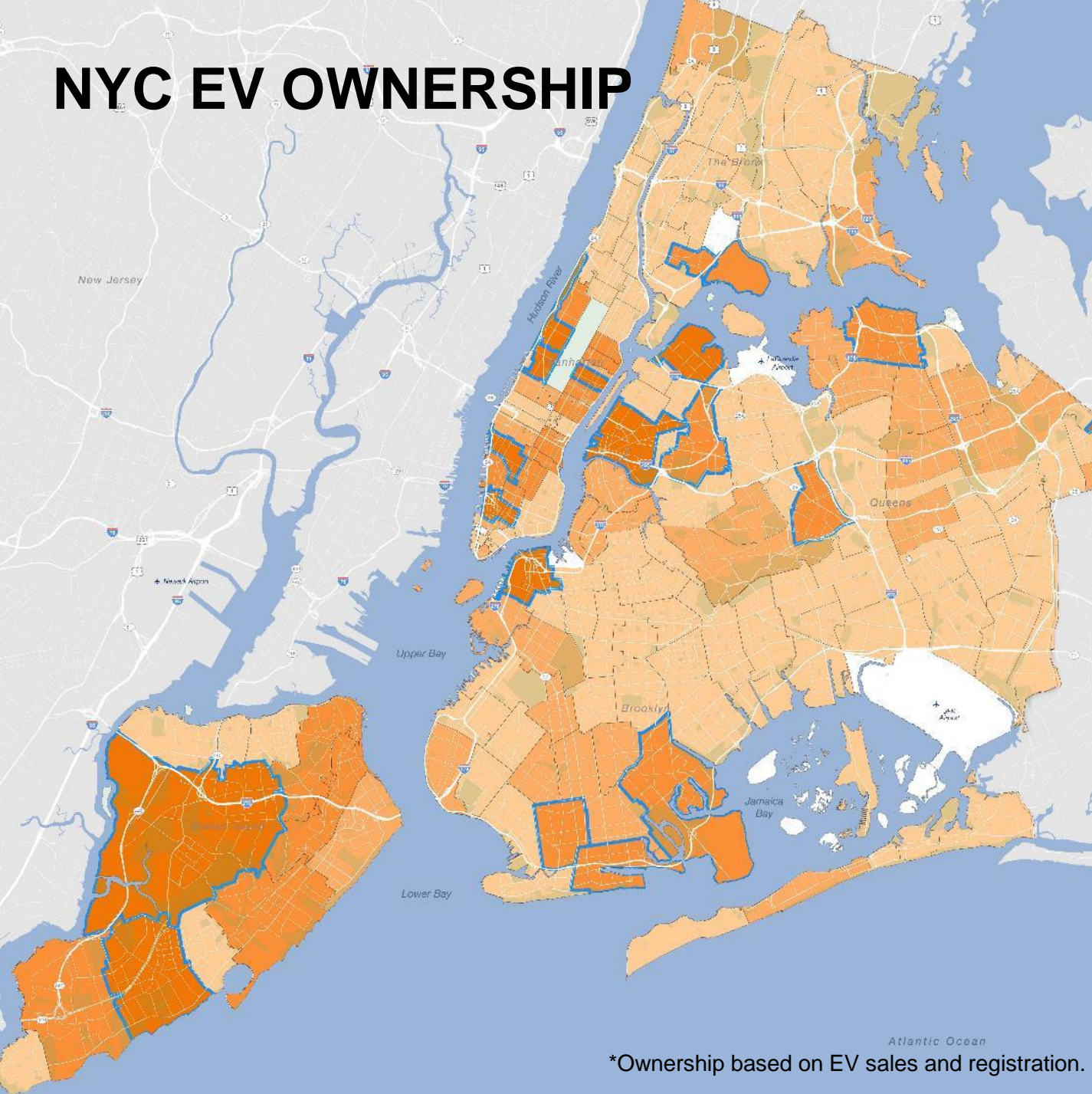
Price: \$28,750 in NYS with tax incentives

Range: 220 miles

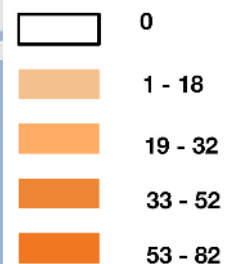
NYC EV OWNERSHIP

EV Registrations, by Boro (2011 – 2018):

- Bronx: 533
- Brooklyn: 1,882
- Manhattan: 2,971
- Queens: 3,219
- Staten Island: 924
- **Citywide:** 9,529






Number of EVs



Top Areas of EV Ownership

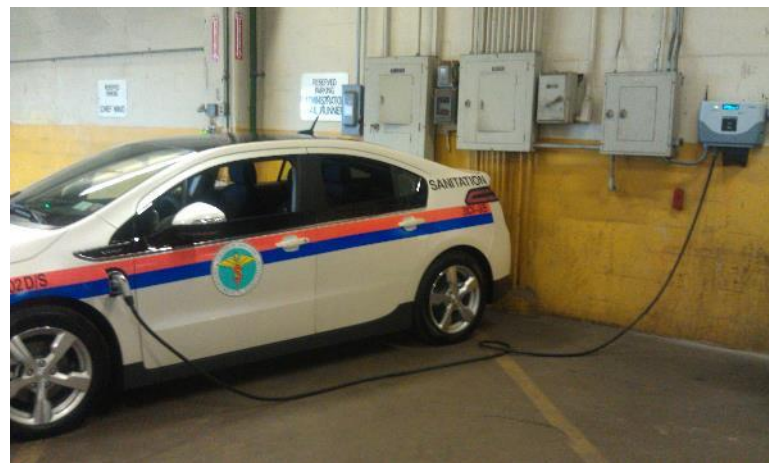
*Ownership based on EV sales and registration.

EV CHARGING: HOW IT WORKS

	Level 1 	Level 2 	DC Fast 
Power Requirements	120V (1-3 kW)	240V (3-10 kW)	480 Volts (25-150 kW)
Charging Speed	5 miles per hour, 12+ hours for a full charge	12-25 miles per hour, 4-6 hours for a full charge.	100-600 miles per hour, 30 minutes for a full charge
Location	Home garage	Home garage, on street or parking field	Commercial locations, short stops, near highways

NYC'S CURRENT EV EFFORTS

- **NYC Clean Fleet:** Mayoral commitment to create largest municipal EV fleet. A total of 1,750 EV purchased to date.
- **Chargers in DOT Lots and Garages:** pursuant to Local Law 160 of 2016, DOT has installed 39 level 2 EV chargers
- **Electric Vehicle Advisory Committee:** pursuant to Local Law 122 of 2013, group meets regularly to discuss EV strategies.
- ***Curbside Level 2 Charging***
- ***Fast Charging Stations***



Fast Charging Station Program

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PROJECT BACKGROUND

Fast Charging Stations

- Gas station model
- Charge in 30 mins or less
- Multiple chargers
- Supplements on-street, at home, and at-work charging



Mayor at EV Charging Announcement

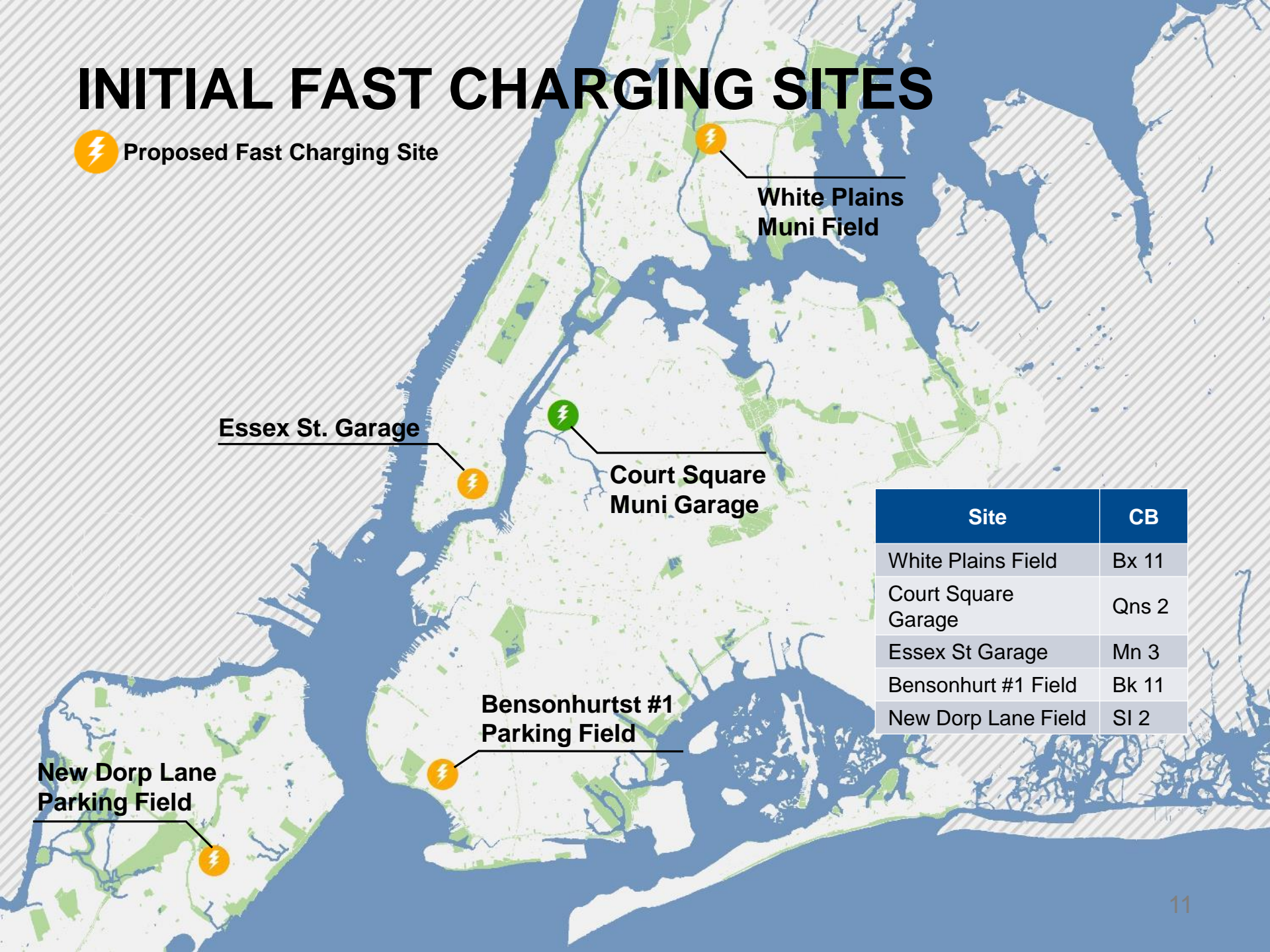
Funding and Deployment

- Mayor committed to 50 fast charging sites by 2020
- City: \$10 million capital funding in FY18-20
- To complete rollout of stations, look to public/private partnerships
- DOT is focused on development of the first five stations

INITIAL FAST CHARGING SITES



Proposed Fast Charging Site



White Plains
Muni Field

Essex St. Garage

Court Square
Muni Garage

Bensonhurst #1
Parking Field

New Dorp Lane
Parking Field

Site	CB
White Plains Field	Bx 11
Court Square Garage	Qns 2
Essex St Garage	Mn 3
Bensonhurst #1 Field	Bk 11
New Dorp Lane Field	SI 2

Curbside EV Charging Pilot Program

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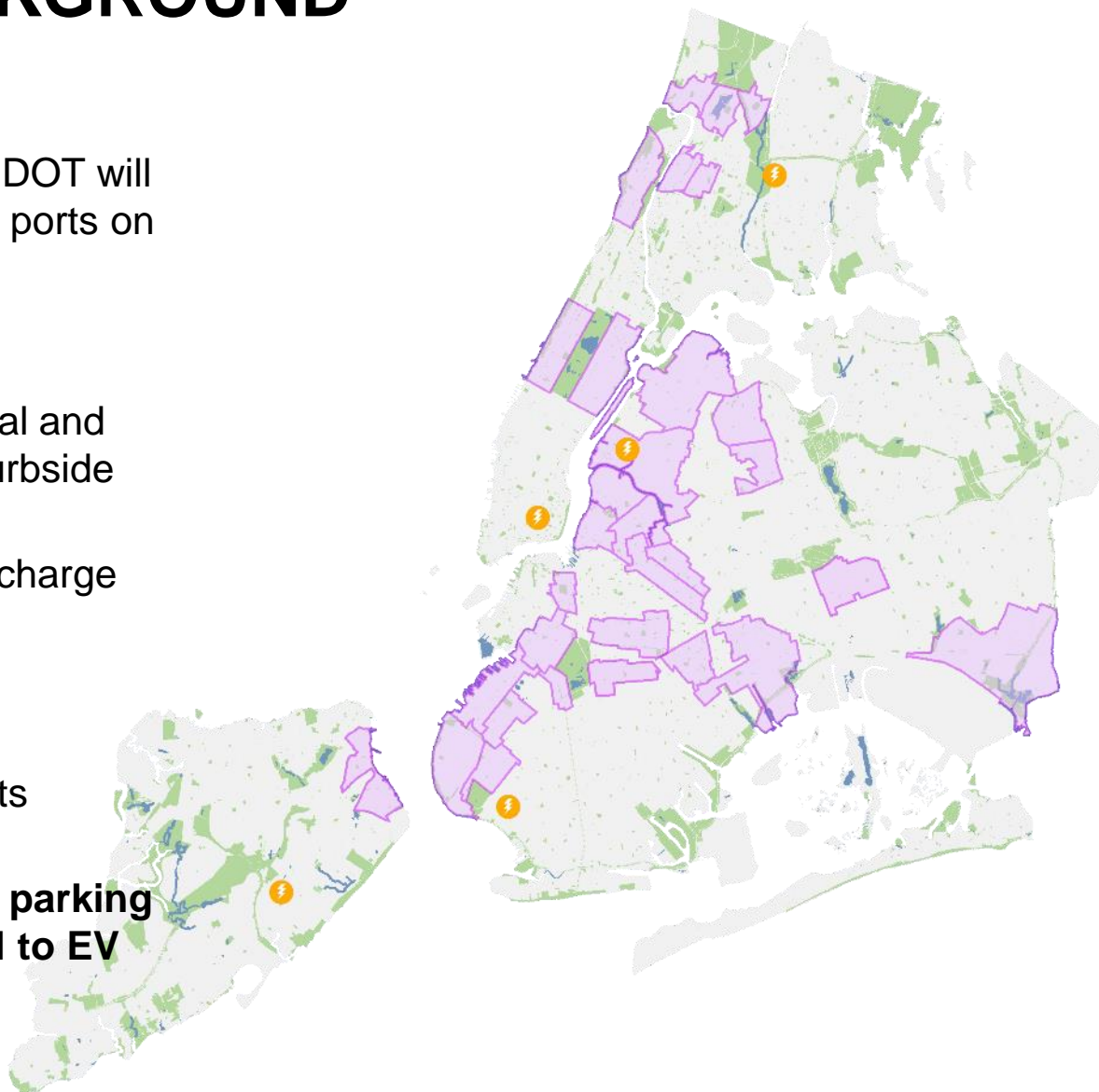
PROJECT BACKGROUND

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 hour, charge cost comparable to gas

Project Details:

- 100 curbside charging ports citywide for public use
- **In CB 3, a maximum of 4 parking spaces will be converted to EV parking**

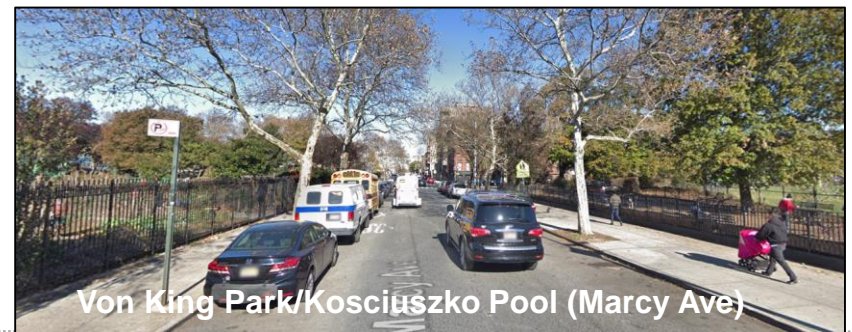
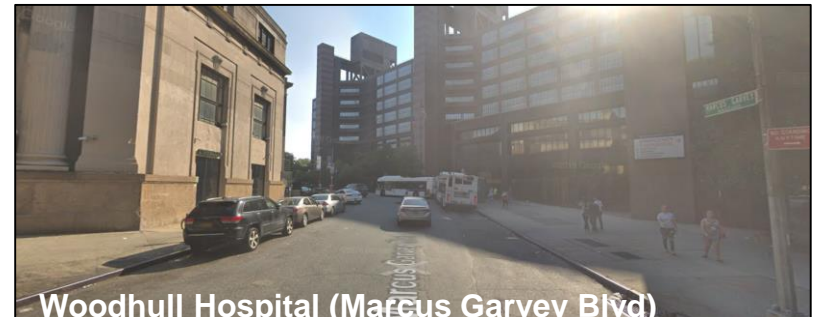
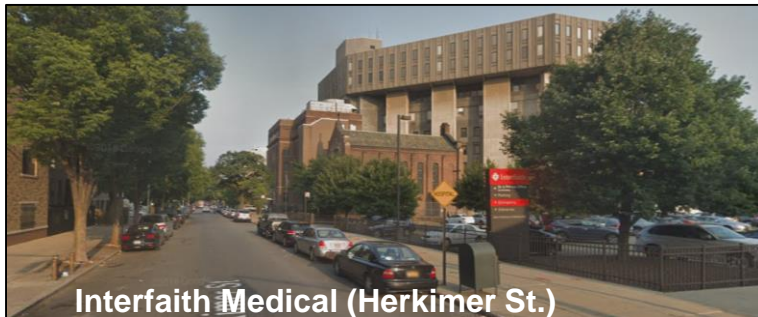


CB 3 SITE SELECTION AND SITES

Site Selection:

- Near major institutions, educational institutes and medical centers, commercial activity – high visibility, turnover, and utilization

Possible Location(s):

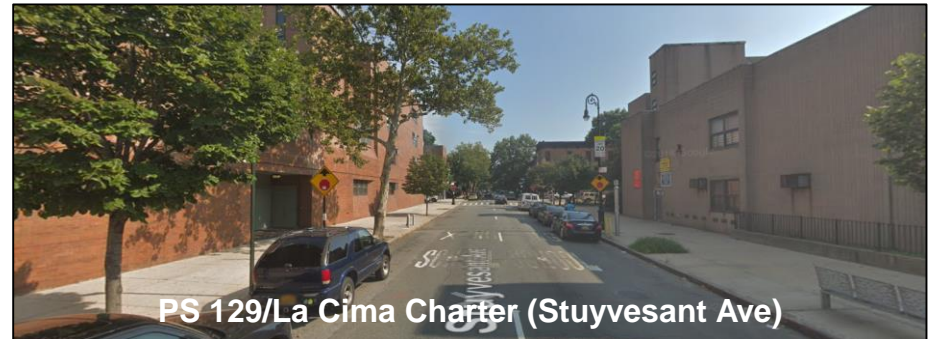


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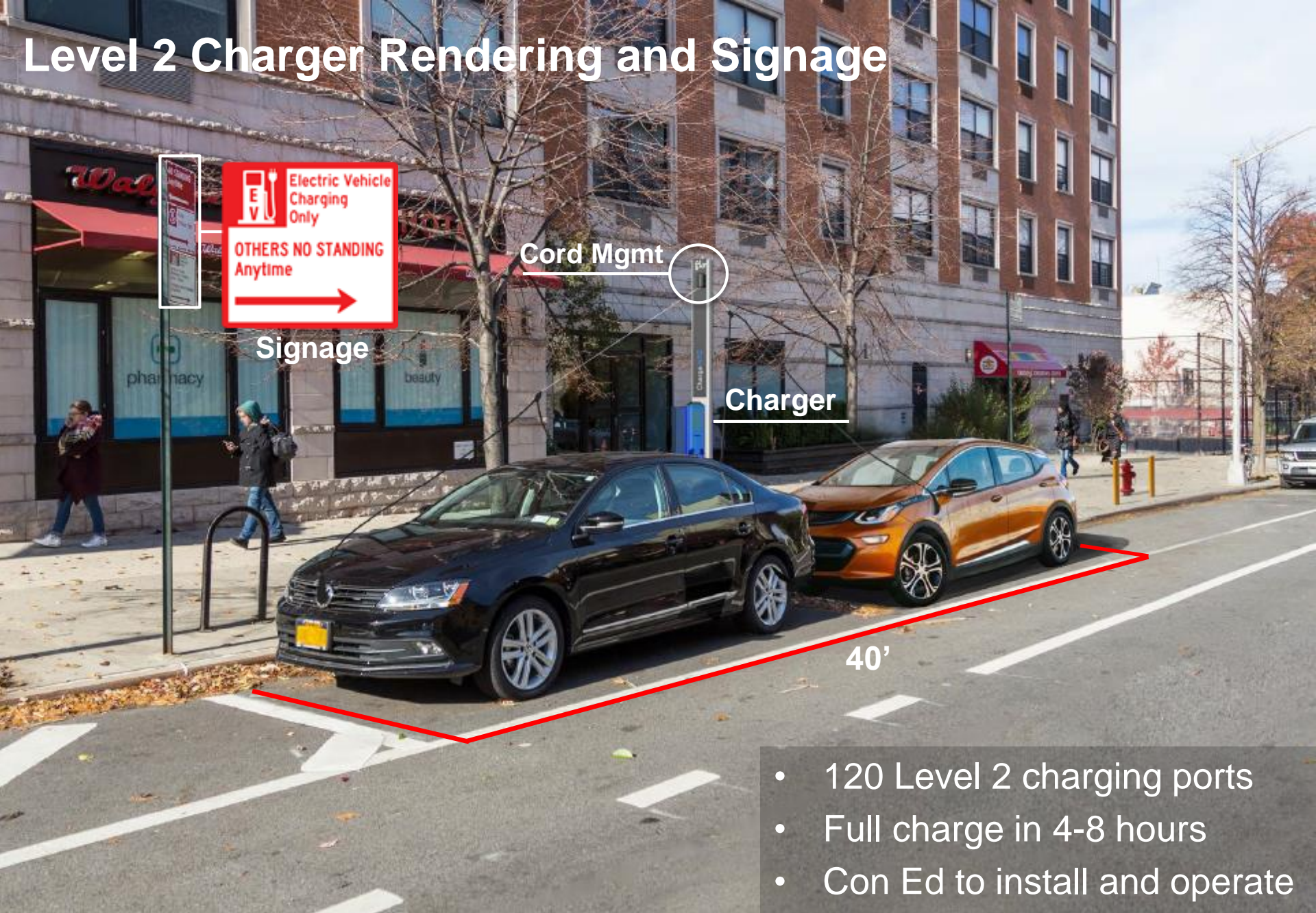
Site Selection:

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Possible Location(s):



Level 2 Charger Rendering and Signage



OUTREACH PROCESS

Outreach

- Brooklyn District Managers briefing in February 2019
- CM Cumbo briefing in February 2019
- CM Ampy-Samuel briefing in February 2019
- CM Cornegy briefing in February 2019
- Sen Myrie briefing on May 16, 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.

CB Engagement

- Outreach to Community Boards and offer presentations and feedback on suggested locations.

Installation

- Fall 2019 for Authorized Parking for City Fleet, followed by installation of curbside public chargers.

THANK YOU!

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

www.nyc.gov/charge

New York City Department of Transportation
Projects & Initiatives

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DOT

Dashboard

Curbside Level 2 Electric Vehicle Charging
NYC DOT project to install 100 curbside level 2 electric vehicle chargers across New York City.

Project Home


Overview

Where Should DOT Install Curbside EV Chargers?

Accessibility

Request an EV Charger Outside Your Business

PLANNING



PROJECT UPDATES

Thursday, August 30, 2018 - 16:53

Where would you like to see curbside EV chargers? Show us!

NYC DOT thanks you for your interest in curbside level 2 electric vehicle charging. Your feedback will help inform planners as they site 100 level 2 EV chargers across New York City.



QUESTIONS?

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CURBSIDE CHARGER: HOW IT WORKS

