



NY Power
Authority

EVolve NY: Fast Charging Deployment

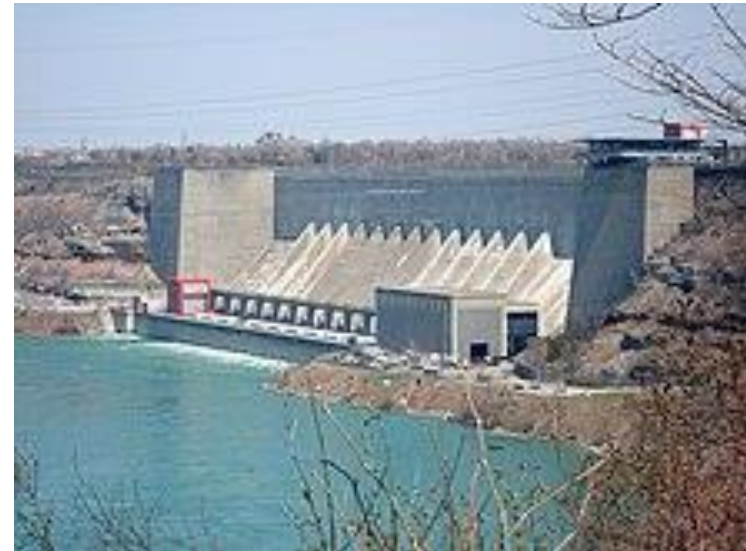


March 25, 2024

John Markowitz
Senior Director of e-Mobility

New York Power Authority

- Largest state-owned electric utility in US
- ~ 25% of NY State's electricity generation
- Mostly hydro-electric
- Transmission – but not distribution
- Government loads – Subways, Airports, NYC
- Energy-efficiency and research programs



e-Mobility Program

- Program is over twenty years old
- Research with NYSERDA, DOE, etc.
- Early hybrid transit bus testing
- Pilot L2 and DCFC projects
- 100 L2 with NYSERDA
- Thruway DCFC Pilot
- Current e-Mobility Team: >20 people



e-Mobility Customer Program

EPC Offering for State and Local Government:

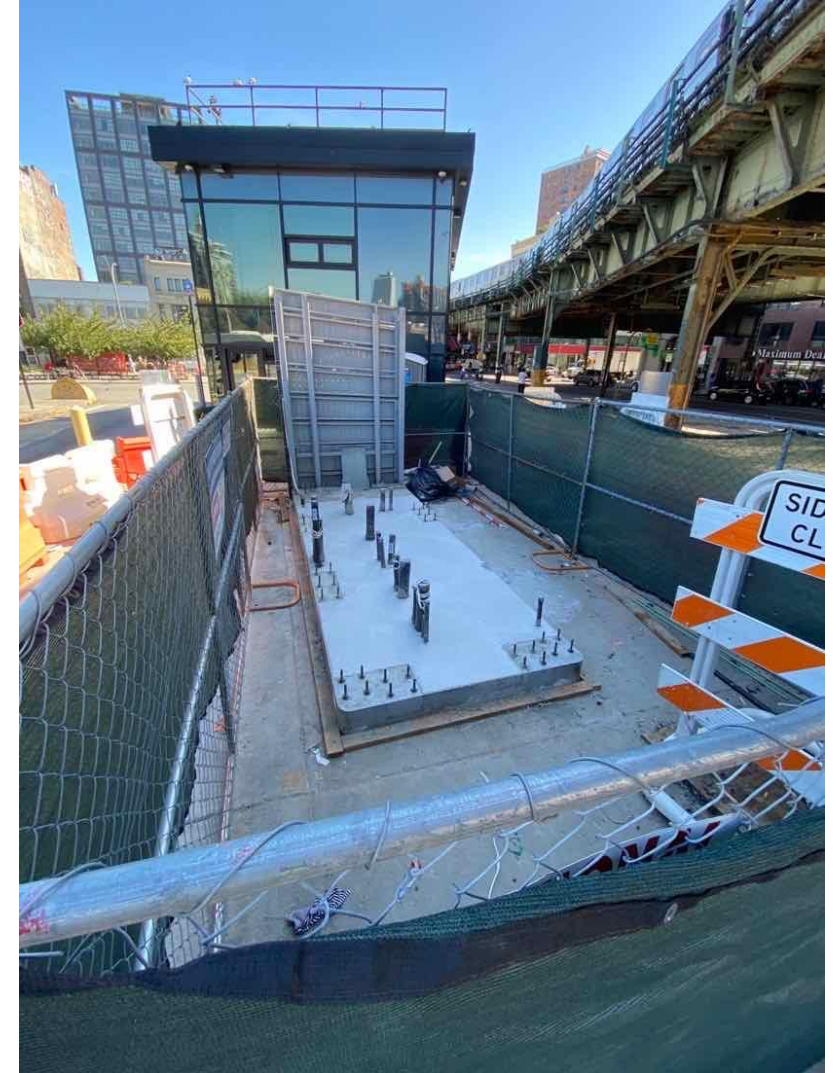
- Customer-Owned L2 and DCFC Deployments
 - Workplace Charging
 - Fleet Charging
 - Public Charging
 - Transit Bus Charging
 - School Bus Charging
- Feasibility studies
 - Long term capital planning



MTA Overhead Charging Phase 1 - WBBP

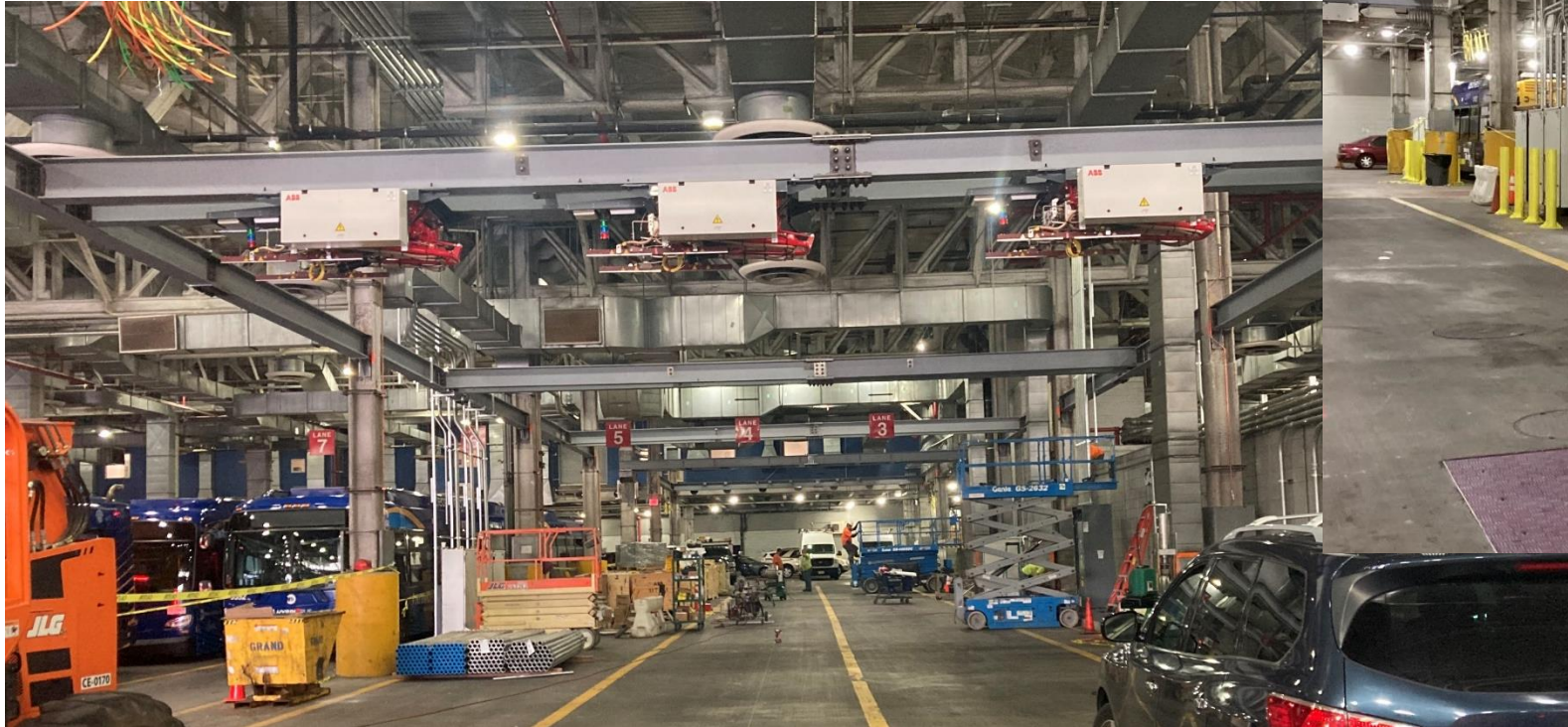


Williamsburg Bridge Plaza – Pantograph Mast



Williamsburg Bridge Plaza – Charger Enclosure

MTA Overhead Charging Phase 1 – Grand Ave Depot



Grand Ave – Gantries & Pantographs



Grand Ave – Power Cabinets

EVolve NY

NYPA-owned highway and urban DC fast charging backbone network

Eliminating “DCFC deserts”

First mover

Meeting the State’s carbon goals

Transportation is 40% of GHG



EVolve NY

First Site Opening – Lagrangeville, New York – September, 2020



Layout of an EVolve NY Site



Utility transformer and pad

Switch Gear

Power Cabinets

Dispensers



Anatomy of a DCFC Dispenser



Liquid
Cooled
Cables

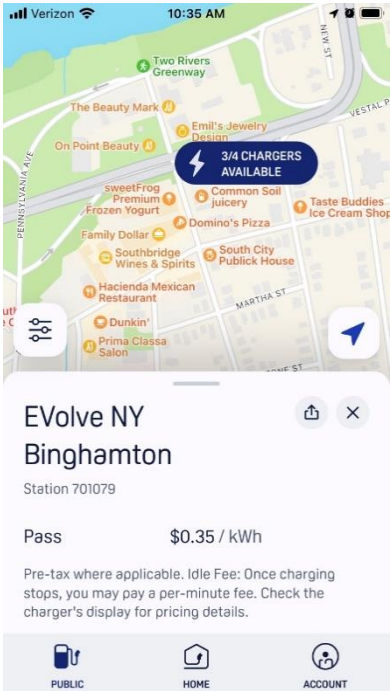
HMI
Touch
Screen

Credit
Card
Reader

QR Code
Charger ID Number
Tech Support Phonenumber

Tap to Pay
Interface

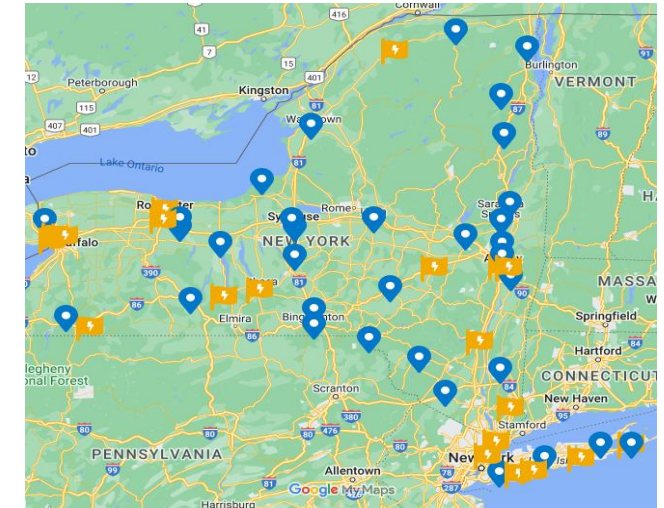
Visibility
Lighting



Phone app
(Swipe to pay)

EVolve NY Status

- Celebrated Evolve NY's 100th charger milestone in September 2022
- Build out continues to 2025
- Currently at 170 chargers
- Goal of 400 DCFC
- 2 to 12 DCFC per site
- 175 kW to 350 kW each



Blue dots are
operational sites

Yellow flags are sites
in development



Federal funding

- NEVI
- IIJA funding administered by NYSDOT
- EVolve NY to fill remaining designated alternate fuel corridor gaps
 - Minimum of one site every 50 miles
 - 4 chargers at 150 kW each
- First site: Kingston
 - One of first in the nation
- Second site: Richmondville
- Third site: North Hudson



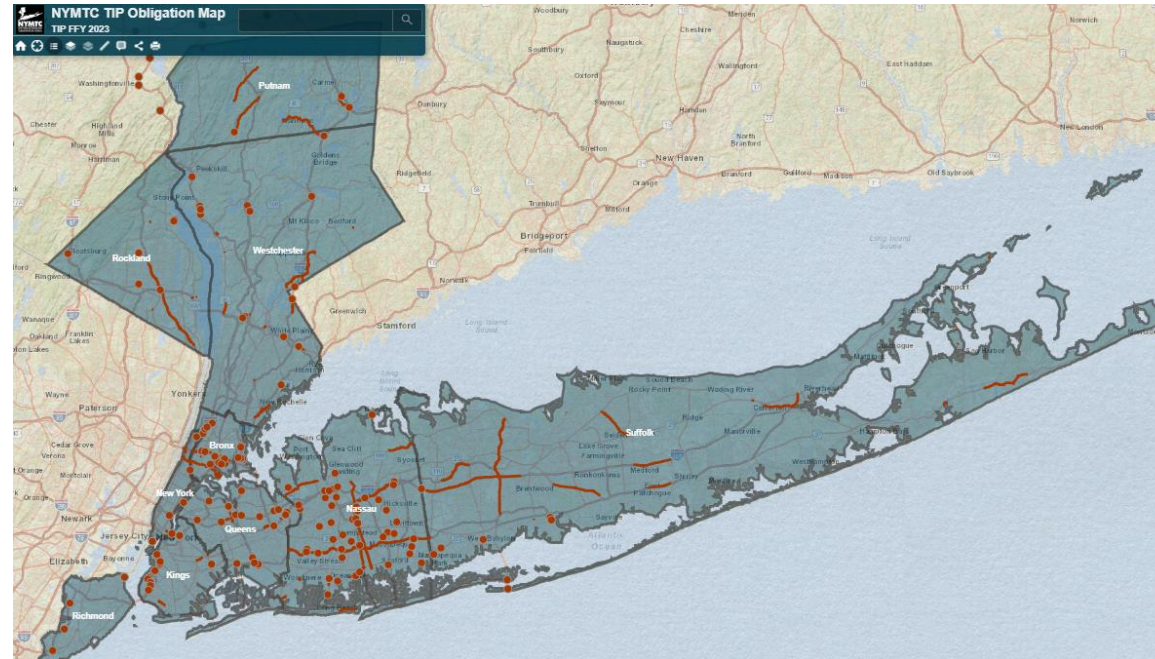
EVoLve NY: Sites in NYMTC region

- Existing sites:
 - JFK
 - Riverhead
 - Commack
 - Bridgehampton
 - Goldens Bridge
 - Copiague



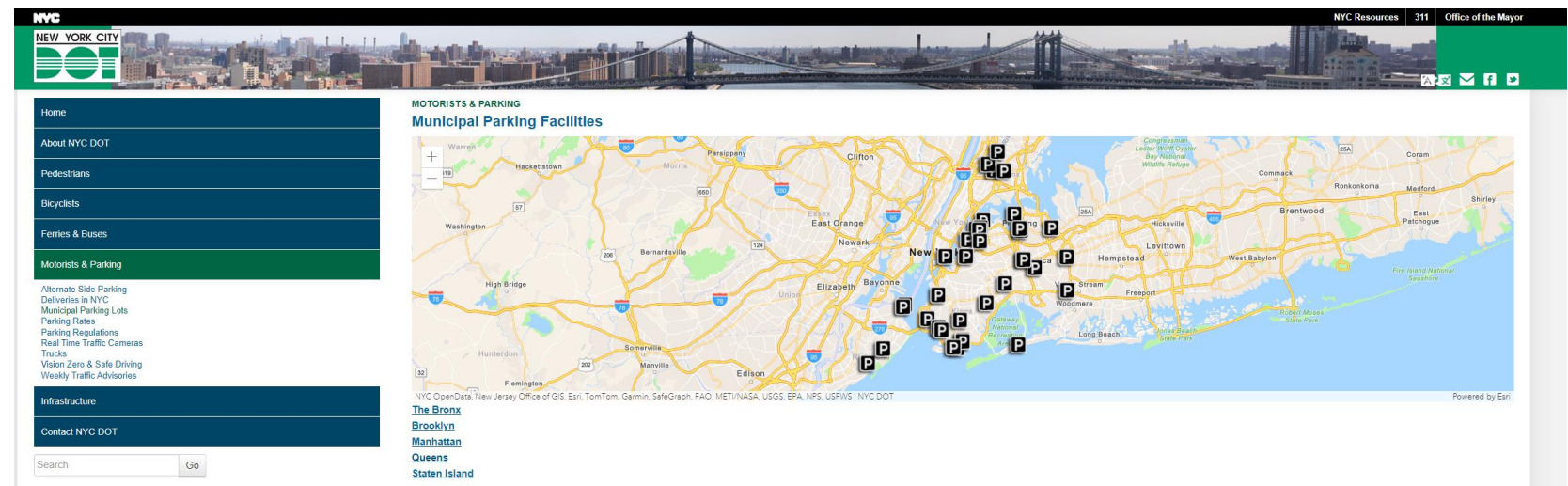
EVolve NY: Sites in NYMTC region

- Sites in development:
 - Stony Point
 - East Hampton
 - LaGuardia Airport
 - Katonah
 - Southold
 - White Plains



EVolve NY: Sites in NYMTC region

- Sites in development (with NYCDOT):
 - Sunnyside
 - Jerome
 - Steinway
 - Ditmars
 - Bayside
 - Rosedale
 - Flushing 2
 - Canarsie
 - Ditmars 1
 - Brighton Beach
 - Flushing 4
 - Rockaway Park
 - Sheepshead Bay



Thank You

