



**conEdison**

# **AEG Transportation Challenge**

**Eric Davis**

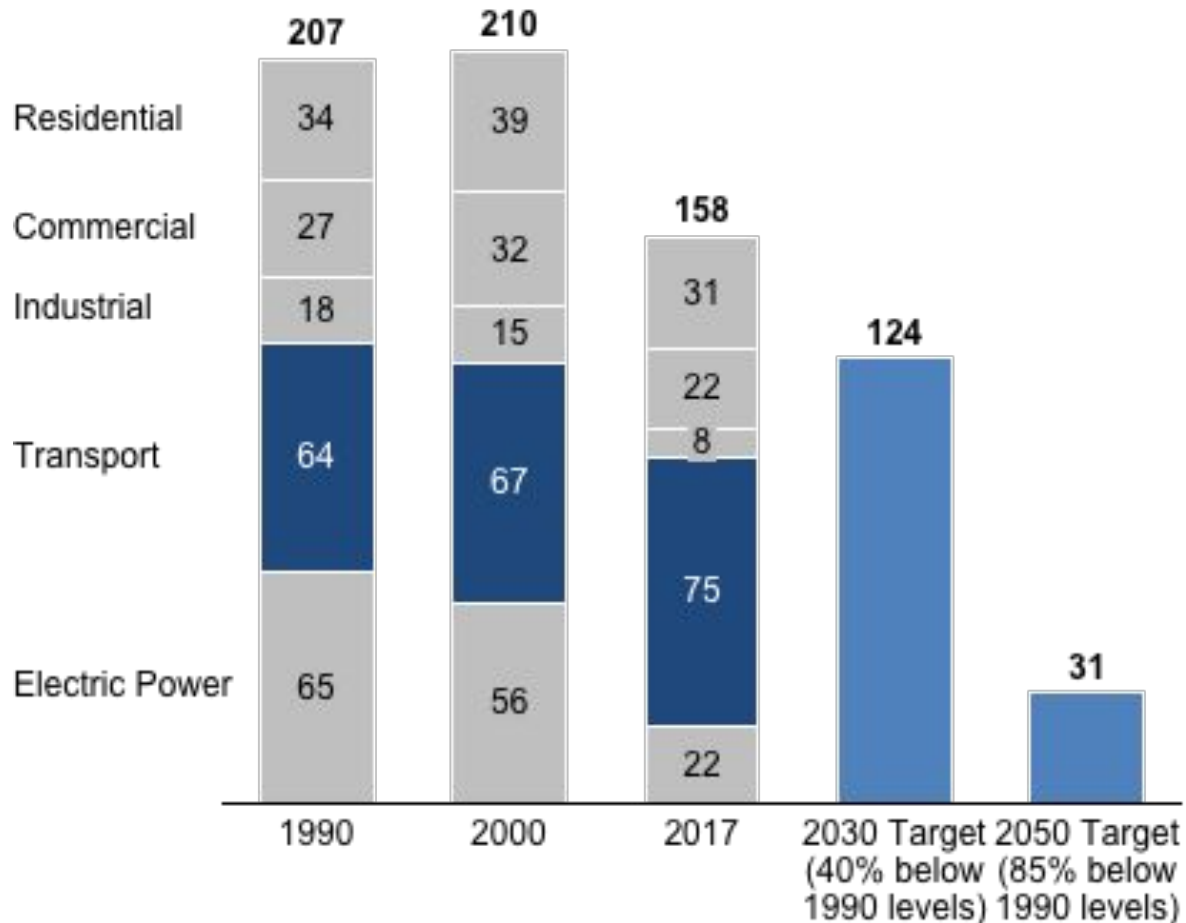
**Section Manager, Utility of the Future – Innovation Hub**

**November 17, 2022**



# Transportation electrification is essential to reaching ambitious New York clean energy goals

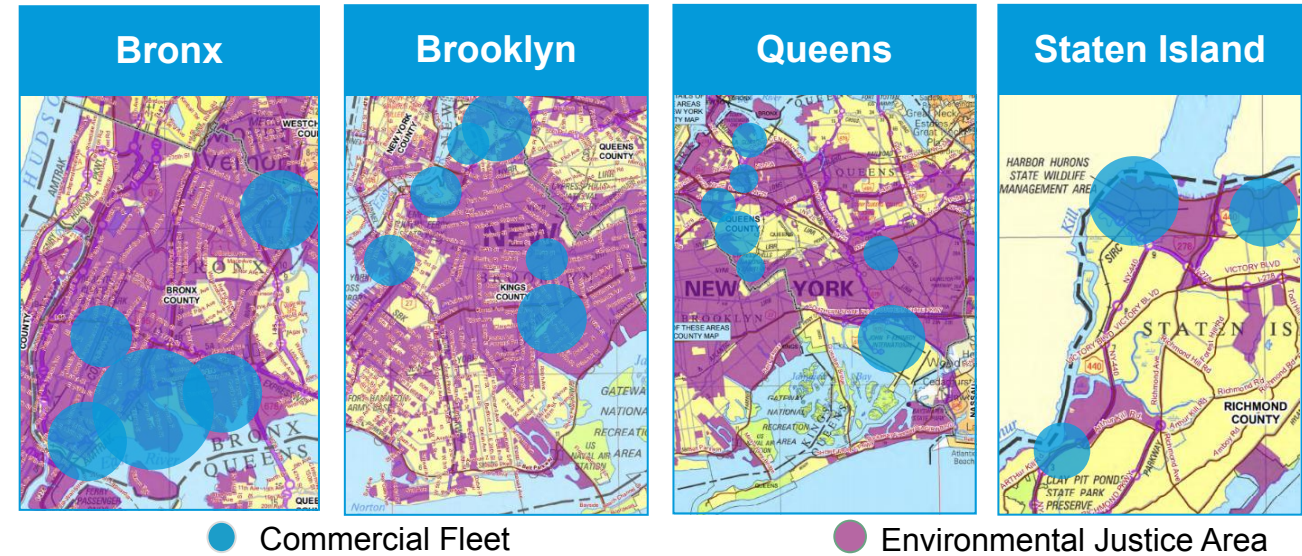
NY State carbon reduction goals [MMT of CO<sub>2</sub>]



- Transportation sector accounted for 28% of all carbon emissions in NYS in 2021
- Transportation sector emissions are the only end use emissions source that is growing

# Medium- and Heavy-Duty (MHD) vehicle electrification reduces local pollution

NYC MHD vehicles, including buses, make up only 7% of miles traveled, but account for more than 16% of vehicle CO<sub>2e</sub> emissions (2020 data<sup>1</sup>).



Drayage



Delivery truck



Walk-in van



Refuse truck



Utility truck



City bus



School bus



The downstate NY region has ~100,000 MHD vehicles, which:

- Have varying duty cycles and therefore also have varying charging needs
- Have charging needs that can trigger substantial utility infrastructure upgrades

<sup>1</sup>[GHG Inventory - NYC Mayor's Office of Sustainability \(nyu.edu\)](https://www.nyu.edu/sustainability/ghg-inventory)

# Con Edison PowerReady Program Overview

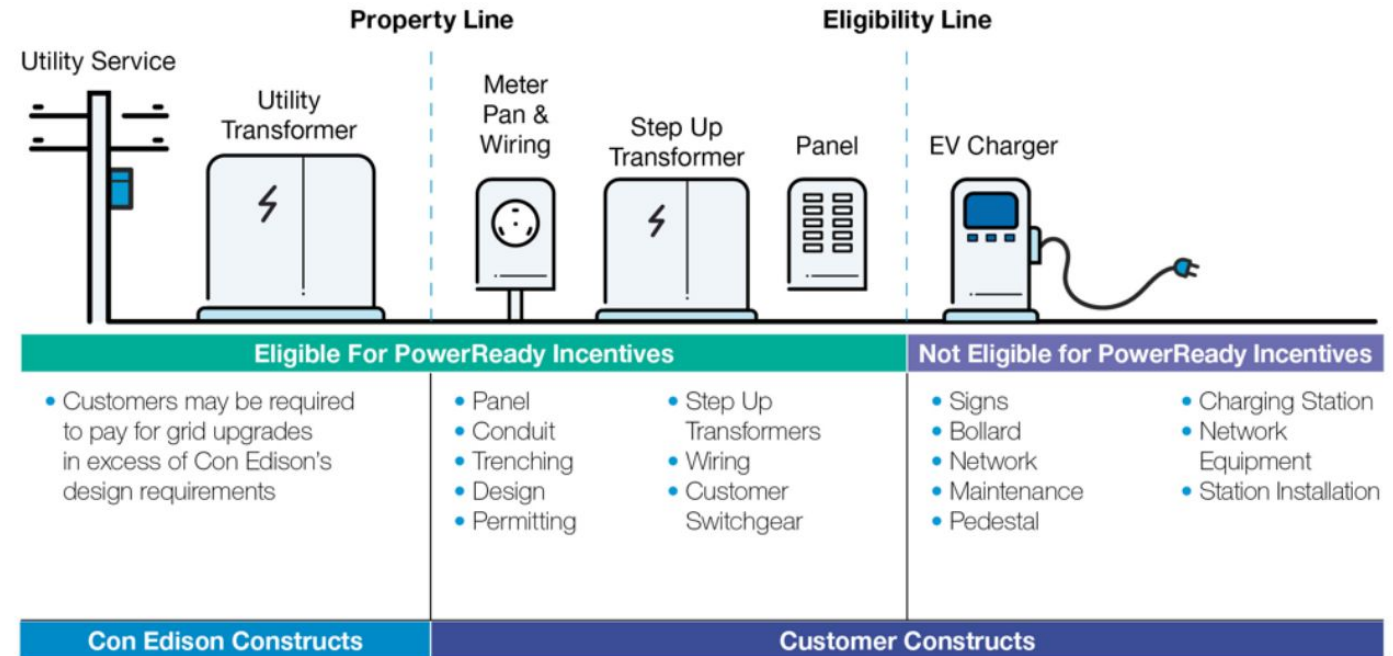
As Authorized in NY PSC July 16, 2020 Order

\$234M in incentive funds for customer and utility side work to provide service to Level-2 and Direct-Current Fast Charging (DCFC) chargers in NYC and Westchester

## Program Plug Goals (2025)

Type	Installed	2025 Target
L2	>1,700	18,539
DCFC	>120	457

### What's Eligible?



### MHD:

We offer incentives for DCFC infrastructure for fleets that cover up to 85% of the utility-side costs, with incentives capped at \$1.2 million per participant.

# Charger Deployments Can Face Grid Constraint Challenges

- Despite rebate programs, charging infrastructure deployments can still face economic challenges
- Grid constraints can also pose challenges, especially during peak usage hours
- MHD managed charging incentives and rate structures are in the works

EV Hosting Capacity Map



# Final Statement:

Regarding Clean Transportation, to achieve New York's Climate, Health and Equity goals, a critical obstacle to collectively overcome in 12 months is **the economic and physical factors of MHD vehicle and charging station deployment.**

