A Sustainable Future: Planning for the Electrification of Transportation

Samantha Bingham
Clean Transportation Program Director, CDOT

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Clean Cities Coalitions

*Connecticut Clean Cities Include:
- New Haven
- Connecticut Southwestern Area
- Capitol Clean Cities (Hartford area)

Map Date: 1/6/20
Clean Cities Strategies

U.S. Department of Energy

Reduce

Eliminate

Replace

- Biodiesel
- Electricity
- Hydrogen
- Natural Gas
- Propane
- Ethanol

Idle Reduction
WHAT IS THE M2M PROJECT?

- Supports an **clean fuels corridor** along I-94 from Port Huron, Michigan to Billings, Montana
- Provides commercial fleets and individual drivers with more **fueling sites** to serve alternative fuel and electric vehicles
- Funded in part by an award from the U.S. Department of Energy
WHAT ARE ALTERNATIVE FUEL CORRIDORS?

- Federally designated routes on major highways that allow for inter-city, regional, and national travel using lower-emission vehicles.

- Alt-fuel corridors cover more than 135,000 miles of the National Highway System.
• Alternative fuel corridors extend throughout Illinois and are **not limited to I-94**

• In 2019, commercial and government fleets that participate in Chicago Area Clean Cities had an energy impact equal to **17.6 million gasoline-gallon equivalents** (GGEs) and reduced greenhouse gas emissions by **95,000 tons**
Chicago is a Prime EV Market

Community Benefits
EVs can be an affordable alternative to traditional vehicles, improve local air quality & reduce greenhouse gas emissions

Large Automobile Market
Third largest automobile market in the US

Ideal Trip Distances
92% of Chicago’s residents commute 40 miles or less each day

Targeted Fleet Adoption
Innovative incentive and education programs for fleets to adopt electric vehicles
Chicago’s Future LDEV Landscape

Current number of registered EVs within City Limits: 3,442

Projected number of EVs within City Limits by 2030: 81,000

Number of EVs Projected in Chicago Limits by 2030

Data analyzed by Northwestern University and compiled from:
- Frontier Group, 2018
Key Insights

403 L2s @ 127 sites
19 DCFC @ 13 sites
- does not include Tesla

Every community area has registered EVs

70% of all public charging is located in just 3 community areas

47 of 77 community areas do not have a single public charger

Data analyzed by Northwestern University & compiled from:
- Illinois Secretary of State EV Registrations, 2020
- CMAP Community Data Snapshot, 2019

Data analyzed by NWU & compiled from:
- AFDC Illinois Fueling Stations Data, 2020
- Plugging In Report, 2017
Chicago EV Charging Barriers Addressed

Easy Home Installation

Easy, online expedited permit process for station installations

Regulatory Clarity

Illinois Commerce Commission determined that EVSE operators are not deemed sellers of electricity and therefore not regulated as such

Multi-Unit Dwelling Support

70% of Chicago residents live in multi-unit dwellings. DriveElectricChicago.org provides a guide to help with infrastructure development

Chicago also has EV owners/advocacy group, Chicago for EVs

New Developments, 2017-2020

EV-Installed or EV-Ready options added to the Chicago Sustainable Development Policy

New Developments, November 2020+

EV-Ready Ordinance passed by City Council: April 24, 2020

https://www.chicago.gov/content/dam/city/progs/env/CACCEVGuide.pdf
Community EV Readiness: New Construction Options

EV-Capable

EV-Ready

EV-Installed
Chicago’s EV Readiness Efforts: EV-Ready Cost Effectiveness

![Chart showing EV Ready Versus Retrofit (Cost Per Parking Spot): EV Ready Cost is $810 and Retrofit Cost is $5,430.](chart)
Chicago’s EV Readiness Efforts: EV Readiness Ordinance

<table>
<thead>
<tr>
<th>Residential Buildings</th>
<th>Non-Residential Buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>• New construction</td>
<td>• New construction</td>
</tr>
<tr>
<td>• 5 or more dwelling units</td>
<td>• 30 or more parking spaces</td>
</tr>
<tr>
<td>• on-site parking</td>
<td>• At least 20%</td>
</tr>
<tr>
<td>• At least 20%, 1 minimum</td>
<td>• EVSE-Ready or -Installed</td>
</tr>
<tr>
<td>• EVSE-Ready or -Installed</td>
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</tbody>
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*If an accessible parking space is required, at least one of the EVSE-Ready spaces must be accessible.*

[Link to Ordinance](#)
CHICAGO COMMERCIAL ELECTRIC VEHICLE READINESS GUIDELINES

www.DriveElectricChicago.org
THANK YOU

Samantha Bingham, Clean Transportation Program Director, CDOT
Email: Samantha.Bingham@cityofchicago.org
Phone: 1-312-744-8096
Websites: www.cityofchicago.org/Transportation
www.DriveCleanChicago.com
www.DriveElectricChicago.org
www.ChicagoCleanCities.org