CTDOT OUTREACH SESSION ON THE BIPARTISAN INFRASTRUCTURE LAW: NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI) FORMULA PROGRAM

April/May 2022
FRIENDLY REMINDERS

- Webinar is being recorded and the chat is public record
- Please stay on mute to avoid disruptions
- If we stop the presentation for any reason, please rejoin using your registration link
- Questions can be entered in the Zoom Q&A field throughout the presentation
- We will answer questions from the Q&A at the end
- If we don't get to your question, we will follow up after the presentation
Agenda to Cover

- Federal Goals for Electric Vehicles
- Background on IIJA NEVI Funding Requirements
- Investing in DC Fast Charging
- Review of Plan (Vision, Goals)
- Phase 1 Focus: Alt. Fuel Corridors
- Prioritization of Zones
- Next Steps & How to Stay Informed
Executive Order 14037 calls for 50% EVs by 2030
$7.7M in the first year of the program
~$52M across all five years of the program
Law Requires:

- Prioritizing **publicly-accessible** direct current (DC) **fast charging** along the Interstate Highway System (designated Alt. Fuel Corridors)
- At least four 150 kW DC Fast Chargers with Combined Charging System (CCS) ports capable of simultaneously DC charging four EVs
- Minimum station power capability at or above 600 kW and supports at least 150 kW per port simultaneously across four ports for charging
- Located one mile off the interstate ramp
- EV Infrastructure Deployment Plans are required
- Priority for equity and environmental justice
- Guidance covered minimum standards for EV charging stations

(FHWA to publish more info May 13, 2022)
NEVI AND STATE TRANSPORTATION PLANNING

• NEVI Program to be administered as a Federal-aid Highway Program under 23 USC Chapter 1

• All projects receiving NEVI funding must be programmed in the “relevant TIP/STIP plans,” and have completed all state and federal environmental reviews

• Funding is not transferable to other highway programs
INVESTING IN DC FAST CHARGING

150 kW Chargers
Drivers on average get
125 miles of charge in ~15 minutes*

350 kW Chargers
Drivers on average get
200 miles of charge in ~10 minutes*

DCFC charging sessions can be billed either by per kWh or per minute.

EVs Can Charge Faster and Faster

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Range (kW)</th>
<th>Average Max Charging</th>
<th>Average Range (No Tesla)</th>
<th>Average Max Charging (No Tesla)</th>
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<tbody>
<tr>
<td>2021</td>
<td>247</td>
<td>175</td>
<td>218</td>
<td>149</td>
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<tr>
<td>2022</td>
<td>261</td>
<td>218</td>
<td>261</td>
<td>218</td>
</tr>
</tbody>
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Source: This data was downloaded directly from fueleconomy.gov on April 12, 2022

*Rate of charge depends on vehicle capability
The Plan should:

▪ Describe state agency coordination
▪ Discuss how the public was involved in plan development
▪ Articulate the plan’s vision and goals on a 5-year horizon using performance management principles
▪ Present the results of existing and future conditions analysis
▪ Present a deployment strategy for meeting the goals, including identifying funding and general locational priorities, as well as post-build out activities
▪ Describe how the plan will account for sociodemographic, geographic, and economic equity considerations
ESTABLISHING CONNECTICUT’S NEVI PLAN
VISION & GOALS

The Connecticut Charging Ahead Plan will create a robust roadmap for how the state intends to catalyze the expansion of a safe, reliable, accessible electric vehicle fast charging network by spurring investments in and ensuring equitable distribution of fast charging infrastructure throughout the state.

Accelerate EV adoption/deployment by:
• Making Fast Charging Convenient
• Providing a Seamless New England EV Traveler Experience
• Working with State and Local Partners to Address Gaps Along Connecticut’s Highway Network
The Connecticut Charging Ahead Plan will create a robust roadmap for how the state intends to catalyze the expansion of a safe, reliable, accessible electric vehicle fast charging network by spurring investments in and ensuring equitable distribution of fast charging infrastructure throughout the state.

- **Provide Equitable Access to the Benefits of Electrification Across the State**
- **Boosting Range Confidence**
- **Engage People: Build in Transparency to the Strategy and Implementation of Plan Development**
- **Comply With Federal Program Requirements**
- **Maximize Investments: Compliment Any NEVI Investments with Other Available Funding Streams**
PHASE 1
FUNDING
ALTERNATIVE FUEL CORRIDORS

1. Manchester - (6) Stations, (4) 150 kW, (2) 350 kW
2. North Haven - (4) Stations, (2) 150kw, (2) 350kW
3. Stratford - (8) Stations, (6) 150kW, (2) 350kW
*4. Waterford - (6) Stations, (4) 150kW, (2) 350kW

*Seeking Discretionary Exception (Distance = 1.12 miles)
FOCUSING ON MEETING 50 MILE NEVI REQUIREMENT
CTDOT COMPLETED A GAP ANALYSIS OF EV FAST CHARGING ALONG CT’S TRANSPORTATION CORRIDORS

January Analysis Results

- 14 locations that are located directly off the interstate
- Focused on 6 chargers a location
- Estimated Cost: ~$7 Million

*Initial Analysis Done Before NEVI Guidance Released*

Full Presentation on CTDOT’s Gap Analysis can be found at:

https://youtu.be/FFcii1uDan0
High-Level Analysis

Focus
50 Miles
Between Stations

~8 Zones Identified
Based on Mileage
Why Prioritize?

❖ Potential application selection process-scoring
❖ Targeted outreach
❖ Ensure benefits provided to all populations (Justice 40)
❖ Support charging in rural areas
DATA NEEDED TO HELP PRIORITIZE LOCATIONS:

- Existing Station Locations
- Utility Hosting Capacity Maps
- Destination/Attractions
- EV Registrations
- Socioeconomic Data
- Exit Locations and Amenities
- Input from Stakeholders

ArcGIS

A Drivable Mile off an Interstate
COMPETITIVE GRANT PROGRAM

- Who will be eligible to apply?
  - Open to All

- How much per applicant?
  - Up to 80% of station cost
  - CTDOT considering a $$ maximum per port/station

- Criteria will include:
  - Cost Effectiveness
  - Reliable Operations
  - Customer Experience
  - Drive Innovation

- When?
  - Fall of 2022
POTENTIAL TO INCENTIVIZE A COHESIVE FAST CHARGING NETWORK FOR CONNECTICUT

It is essential to ensure that publicly-funded, publicly-accessible charging stations are brand agnostic, support charging for all makes and models, and are reliable and convenient for all to access.

~$52 Million

21,300 Registered Electric Vehicles

Over 600 new EVs registered per month

~$52 Million
EMPHASIS ON EQUITY AND ENVIRONMENTAL JUSTICE

Plan Development

Plan Implementation
WHAT’S NEXT & HOW TO STAY INFORMED

- Send plan feedback to CT-DOTEVPlanning@ct.gov by June 3, 2022
- Visit CTDOT’s NEV1 Webpage & sign up for email updates
- Multi-Agency Steering Committee
- Prioritizing Phase 1 Charging Locations
- Continuing Plan Development
- Determining Best Contracting Method(s)
- Submitting Connecticut’s Plan by August 1

Take our brief survey:
forms.office.com/g/1nfaXB111B

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