The team of WXY, Energetics and Barretto Bay Strategies created a series of EV guidance documents for the TCI region:

- An **Assessment of Current EV and EVSE Deployment** in the TCI region;
- An **EVSE Cluster Analysis**;
- **Siting and Design Guidelines for Electric Vehicle Supply Equipment**;
- A report on **EV-Ready Codes for the Built Environment**; and
- A **Guide to Planning and Policy Tools** for creating EV-Ready Towns and Cities.

All available at [NortheastEVs.org](http://NortheastEVs.org)
Siting and Design Guidelines
EV-Ready Codes for the Built Environment

- National Model Electrical Code
- National Model Building Code
- National Model Green Building Code
- State Adopted Construction Code
- State Green Building Code
- Municipal Construction Code
Guide to Planning and Policy Tools

This report provides guidance to practitioners at all levels of state and local governments wishing to take action to implement EVSE deployment in their jurisdictions. The guide:

• Provides discussion and guidance regarding the steps to create, administer, and amend planning processes, rules, and regulations;
• Explores the potential for jurisdictions to encourage EV charging station installation and use; and
• Examines best practices for promoting EV-friendly zoning regulations, parking ordinances, building codes, permitting practices, and partnership and procurement policies.
Current EV Deployment

- EV ownership info was received from each state individually, except Connecticut, DC, and Rhode Island. No standard repository for this info.
- Ownership is at the ZIP Code level.
- There are large discrepancies in EV ownership on a state-by-state basis.
- We see heaviest concentrations in the major metropolitan areas.
Current EVSE Deployment

- Data on EVSE was gathered from the Alternative Fuels Data Center
- A 30-mile driving range was used
- Most public EVSE are clustered around the I-95 corridor
- A significant portion of the region’s EVSE is located at dealerships, which are not the most accessible locations,
EV Ownership Demographic Analysis

Communities with EV ownership tend to be:

• Better-educated
• Wealthier
• Younger
• Suburban and Exurban communities connected to metropolitan areas

• Note: these are trends based on zip-code level data, and not representative of every EV owner
Further analysis assessment highlights that greater incidence of EV ownership correlates with:

- Higher income
- Younger populations
- More bachelor’s and graduate degrees

The report suggests that locations matching these demographics are the locations where greater EV ownership should be pursued.
Analysis of Access to EV Dealership

- EV ownership is found to correlate with greater accessibility to dealerships.
- This was found by measuring the number of EV models at dealerships within each models’ driving distance to each community in the region.
- The shows the impact of EV makers’ decisions to initially release vehicles only to select markets

<table>
<thead>
<tr>
<th>Vehicle</th>
<th>Type</th>
<th>Electric Range (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chevrolet Volt</td>
<td>EREV</td>
<td>35</td>
</tr>
<tr>
<td>Fisker Karma</td>
<td>EREV</td>
<td>33</td>
</tr>
<tr>
<td>Ford Focus Electric</td>
<td>BEV</td>
<td>76</td>
</tr>
<tr>
<td>Mitsubishi i</td>
<td>BEV</td>
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<tr>
<td>Nissan Leaf</td>
<td>BEV</td>
<td>73</td>
</tr>
<tr>
<td>Tesla Model S</td>
<td>BEV</td>
<td>160</td>
</tr>
<tr>
<td>Toyota Prius Plug-In</td>
<td>PHEV</td>
<td>11</td>
</tr>
</tbody>
</table>
Analysis of Environmental Impacts

Solar Energy Generated

- By Zip Code
- Energy generated in kW / 1,000 households
- None
- up to 5
- up to 10
- up to 25
- over 25

Electricity Source in Region

Non Attainment Areas

- None
- Ozone only
- Carbon Monoxide only
- Particulate Matter only
- Carbon Monoxide + Ozone
- Particulate Matter + Ozone
- Particulate Matter + Carbon Monoxide + Ozone

Average PV installation by # of EVs

Non-attainment for ZIP codes with EVs
Further Info

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All reports are available at NortheastEVs.org