



# Municipal EV Readiness Toolkit 12-Week Program

## Module 4: Parking & Enforcement

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## Transportation Electrification Plan Foundational Insights

### Why should you start planning now for a Transportation Electrification Plan?

- Connecticut passed statutes that requires a reduction of greenhouse gas (GHG) emissions 80 percent below 2001 levels by 2050 (Public Act 08-98), with an interim target of 45 percent below 2001 levels by 2030 (Public Act 18-82).
- Transportation makes up 38% of GHG emissions, the largest source of GHG emissions. In order to reach those goals, transportation will need to become zero-emission.
- For 2030 target: The [report](#) from the GC3 recommends reducing transportation emissions 29% from 2014 levels to stay on target.
- December 2015 – CT joined the [International zero emission vehicle \(ZEV\) alliance](#) that says: no later than 2050 – strive to make all new passenger vehicles in their jurisdictions ZEVs
- July 2020 – CT joined the [multi-state Medium and Heavy-duty ZEV memorandum of understanding](#) that commits states will work toward ensuring that: by 2050 – 100 percent of all new medium- and heavy-duty vehicle sales be ZEVs, with an interim target for 2030 having 30 percent ZEV sales

### Parking ordinances may foster PEV readiness by establishing EVSE requirements at the state and local levels.

Parking ordinances will apply to publicly accessible EVSE, whether at municipal lots, privately operated garages, or on-street locations. In order for PEVs to charge, they must be parked, which implicates parking regulation. Parking management for PEVs will spark discussions around incorporating EVSE in the public right of way, safety and accessibility, user rotation time, violations of posted parking rules and enforcement, site design, and monetization and business models.

Areas with the highest PEV uptake tend to have two to six times greater than average public charging infrastructure.[1] Ample publicly available charging infrastructure is critical to the widespread adoption of PEVs. At this point in time, when PEVs have not yet saturated the market, areas with high parking demand and constraints can make installing EVSE complicated. Offering free vehicle charging may entice potential PEV buyers in the beginning, but may slow investment of public infrastructure with no way to recoup costs. However, as PEV adoption increases, PEV stations can become like other traditional refueling stations where a PEV driver pays for the electric fuel they receive from the charger. The price may be determined by the station owner, operator, utility and/or other entities. PEV charging stations potentially can provide a revenue stream for the site owner.



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As PEV adoption grows, charging spots need to be safe and accessible for all people and just as there are parking spots that comply with the American with Disabilities Act (ADA), there need to be PEV charging spots that are ADA compliant. Accessibility should also take into account payment options.

Many potential EV drivers fear not being able to find public charging when they may need it. Local governments can help increase visibility of the availability of EV chargers and also help EV drivers better utilize existing EV chargers by providing wayfinding signs on the street for public charging stations. Additionally, EV charging locations can be made highly visible with signposts and painted parking spots.

Two main concerns arise around dedicated PEV charging stations enforcement:

1. Conventional vehicles — also known as ICE vehicles — can be parked in dedicated PEV-charging spots (sometimes quite purposefully as a form of protest called “ICEing”)

One challenge for public PEV charging is that access to chargers can be blocked by non-EVs or EVs that are not actively charging. Local governments can discourage this from happening by ensuring adequate instructional signage that only actively-charging EVs (determined by whether or not they are plugged in) should be parked in those spots. Connecticut outlaws non-EVs from parking in EV-designated spaces, but local enforcement may not happen. Enforcement should be encouraged.

2. Time limits on parking in PEV charging spots are currently not easily enforced, which causes problems in public parking lots

Another challenge for public PEV charging is that PEVs may be parked in a charging spot after the vehicle is fully charged. Several tools exist to address the challenges around driver charging behavior. These tools utilize both passive and active strategies such as planning and design, regulatory, and economics that can be deployed in tandem to achieve the optimal results.

[1] Slowik, P. and Lutsey, N. Expanding the electric vehicle market in U.S. cities. The International Council on Clean Transportation. July 2017. [https://theicct.org/sites/default/files/publications/US-Cities-EVs\\_ICCT-White-Paper\\_25072017\\_vF.pdf](https://theicct.org/sites/default/files/publications/US-Cities-EVs_ICCT-White-Paper_25072017_vF.pdf).