Charge Up Your Town:

Best Management Practices to Ensure Your Town is EV Ready

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OVERVIEW

As part of its commitment to reduce energy consumption and greenhouse gas (GHG) emissions from the transportation sector (42% of the State's net GHG emissions), New Jersey is implementing a suite of strategies in a concerted effort to increase the number of light-duty electric vehicles (EV) on the road and to ensure sufficient public electric vehicle charging infrastructure. Municipalities are at the core of this activity. A significant percentage of Electric Vehicle Supply/Service Equipment (EVSE), often referred to as EV charging infrastructure or EV charging stations, installed in New Jersey will be overseen by municipal officials and this guide is designed to help facilitate that process.

Three facets to ensure your town is EV Ready:

1. **Implement the statewide ordinance** — designed to help local governments plan and encourage the installation of EVSE and Make-Ready[1] parking spaces to meet the public's charging needs – and determine whether your town would like to deviate from certain provisions of the ordinance;
2. **Install EV charging stations** — install publicly accessible EV charging stations to support public and municipal EV fleet charging needs; and
3. **Understand financial incentives available to install charging stations.**

This Best Management Practices guide is intended to help municipal staff and their communities understand the context for the statewide EV ordinance, and the considerations relevant to municipalities as they take steps to support the state goals of increasing access to electric vehicle charging infrastructure.

I. BACKGROUND

A. Transportation contributes to climate change

On October 15, 2020, the NJDEP released New Jersey's Global Warming Response Act 80x50 Report (GWRA 80x50 Report). The report provided a sector-by-sector analysis of various pathways for meeting the New Jersey Global Warming Response Act's mandate to reduce statewide greenhouse gas emissions to 80% below 2006 levels by 2050. The 80x50 Report integrates and

[1] "Make-Ready" means prewiring of electrical infrastructure at a parking space or a set of parking spaces to facilitate easy and cost-efficient future installation of electric vehicle supply or service equipment, including but not limited to Level 2 EVSE and direct-current fast chargers.

builds on the detailed least-cost scenario modeling underpinning the 2019 New Jersey Energy Master Plan (2019 EMP). The comprehensive Energy Master Plan includes rigorous goals and spans multiple sectors and governmental agencies to achieve Governor Murphy's goal of 100 percent clean energy and an 80% reduction in greenhouse gases by 2050. In addition, Governor Murphy issued an Executive Order in November 2021 setting an interim emissions reduction goal of 50% by 2030.

The transportation sector is New Jersey's largest source of GHG emissions. The 80x50 Report confirms that to meet the State's 80x50 goal, 100% of new passenger car and truck sales need to be electric by 2035. This assessed need is more ambitious than that previously established by New Jersey's EV Law (330,000 EVs by 2025). The accelerated rate of transportation electrification in a shorter timeframe requires coordinated government action to ensure New Jersey towns are prepared to meet the EV charging needs of their citizens, businesses, and visitors.

B. EV Law sets goals for electrification

P.L. 2019, c. 362 (https://www.njleg.state.nj.us/Bills/2018/PL19/362_.PDF) established aggressive goals for a robust publicly accessible charging network by 2025, including 400 Direct Current Fast Chargers (DCFCs) at 200 locations along major highways and throughout New Jersey's communities, and 1,000 publicly accessible Level 2 chargers. Additional goals from the law include increasing deployment of EVSE at multi-family residences and hotels. While most people charge overnight at home or during the day at their place of work, developing a robust public charging network throughout the state will help alleviate "range anxiety" and encourage EV purchases.

C. Law establishes statewide EVSE ordinance

Governor Phil Murphy signed P.L. 2021, c. 171 (https://www.njleg.state.nj.us/Bills/2020/PL21/171_.PDF) into law on July 9, 2021. The law requires that EVSE and Make-Ready parking spaces be designated as a permitted accessory use in all zoning or use districts and establishes associated installation and parking requirements related to EVSE in New Jersey's municipalities. In order to implement this, the bill required that the New Jersey Department of Community Affairs (DCA) publish a statewide EVSE ordinance on its website within 30 days of enactment of the bill. The EVSE ordinance is required to include the installation and parking requirements detailed in the bill, as well as address installation, sightline, and setback requirements and other health- and safety-related specifications ("Reasonable Standards") for EVSE and Make-Ready parking spaces.

The law allows the Commissioner of DCA to periodically update the EVSE and Make-Ready parking space requirements in the EVSE ordinance through the NJ Administrative Procedures Act (APA) rulemaking process to reflect increased electric vehicle adoption levels and technological advances in the State. However, any changes to the Reasonable Standards section of the EVSE ordinance do not need to go through the rulemaking process.

D. Helping municipalities prepare

Municipalities can anticipate being asked to review EVSE applications from homeowners, landlords, developers, and third-party EVSE installers in the near and long term, especially in light of the statewide EVSE ordinance and the numerous incentive programs being rolled out as indicated in Section IV. Understanding and implementing the statewide EVSE ordinance is an important component to meeting the state's goals and to a successful and efficient deployment of EVSE in New Jersey.

E. Definitions

Electric Vehicle Supply/Service Equipment (EVSE)

EVSE delivers electrical energy to charge an electric vehicle's batteries. This equipment communicates with the vehicle to supply an appropriate and safe flow of electricity. All EVSE is not uniform, however.

EVSE charging can vary, including:

- Based on communication capabilities;
- On how quickly the EVSE can charge a vehicle;
- The suitability for installation at homes, workplaces, private fleet facilities, and public venues; and
- The installation — whether the EVSE is directly wall-mounted on the outer wall of buildings, inside garages, or stand alone on a pedestal.

"Electric vehicle supply equipment" or "electric vehicle service equipment" or "EVSE" means the equipment, including the cables, cords, conductors, connectors, couplers, enclosures, attachment plugs, power outlets, power electronics, transformer, switchgear, switches and controls, network interfaces, and point of sale equipment and associated apparatus designed and used for the purpose of transferring energy from the electric supply system to a plug-in electric vehicle. "EVSE" may deliver either alternating current or, consistent with fast charging equipment standards, direct current electricity. "EVSE" is synonymous with "electric vehicle charging station."

EV Charging Station Comparison

	AC Level 1	AC Level 2	DC Fast Charger
Voltage	120V 1-Phase AC	208V or 240V 1-Phase AC	480V 3-Phase AC
Suitable for Installation	Single-family Multi-family	Single-family Multi-family Commercial Municipal/Private Fleet	Municipal/Private Fleet Public Metro Areas
Amps	12-16 Amps	12-90 Amps (typical 32 Amps)	<125 Amps (typical 60 Amps)
Charging loads	1.4 - 1.9 kW	2.5 - 19.2 kW (typical 7 kW)	<90 kW (typical 50 kW)
Charge time for vehicle	3-5 miles of range per hour	10-20 miles of range per hour	80% charge in 20-30 minutes
Best for	6+ hour or overnight charge	2-6 hour dwell times	High turn over
Station hardware cost	$500 - $1,000 per port	$600 - $5,000 per port	$7,000 - $50,000 per port

Adapted from NYSERDA

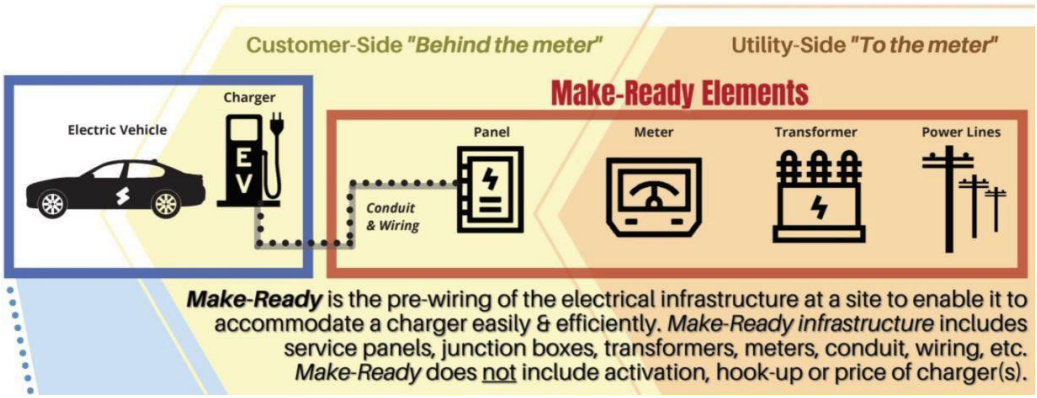
Direct Current Fast Charging (DCFC) requires a 480V/3-Phase Alternating Current (AC) electricity connection (with the DCFC equipment converting AC to DC) and is the fastest charging EVSE type which is especially useful for applications such as highway charging. Note that this high-speed charging comes at a high cost for the equipment and the investment in electrical supply.

Level 2 (L2) charging requires 208V or 240V with 1-Phase AC (outlet equivalent to an electric range or electric dryer). Level 2 charging provides charging at a rate of 12-30 miles of range per hour of charge. Many people find L2 charging provides the best solution for at home or at work charging. Level 2 charging may also be appropriate for other locations where people park vehicles for several hours at a time (e.g., fleet vehicles, retail establishments, destination locations, etc.).

Level 1 (L1) charging requires 120V with 1-Phase AC (equivalent to powering a space heater). While this charging method has a relatively slow charging rate, adding 3 - 5 miles of range per hour of charge, there are still opportunities for L1 use such as workplace or home charging, where vehicles may be parking for

many hours. This is somewhat dependent on how far the vehicle is typically driven. Level 1 may be particularly appropriate for plug-in hybrid electric vehicles (PHEVs) and battery electric vehicles (BEVs) with small batteries, workplace charging for employees, as well as long-term parking at airports, transit lots and shared community parking.

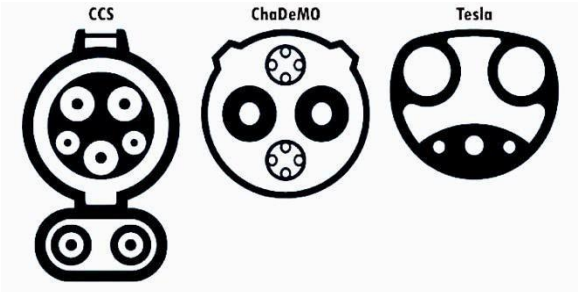
Make-Ready means the pre-wiring of electrical infrastructure at a parking space or set of parking spaces to facilitate easy and cost-efficient future installation of EVSE, including, but not limited to, Level 2 EVSE and DCFCs. Make-Ready includes expenses related to service panels, junction boxes, conduit, wiring, and other components necessary to make a particular location able to accommodate EVSE on a "plug and play" basis. "Make-Ready" is synonymous with the term "charger ready," as used in P.L.2019, c.362 (C.48:25-1 et al.).



Private EVSE means EVSE that has restricted access to specific users (e.g., single and two-family homes, executive parking, fleet parking with no access to the general public).

Publicly-accessible EVSE means EVSE that is publicly available (e.g., park & ride, public parking lots and garages, on-street parking, shopping center parking, non-reserved parking in multi-family parking lots, etc.).

Electrical Connectors for DCFC
Unlike Level 1 and 2 charging, there are currently three different types of DCFC connectors (plugs) in use in the United States: CHAdeMO, SAE Combined Charging System (CCS), and the North American Charging Standard (NACS), which is formerly known as the Tesla charger.



CHAdeMO is used by Japanese automakers Nissan and Mitsubishi. Older Kia, Honda, and Hyundai models also use CHAdeMO. Currently, all other automakers in the U.S market, except Tesla, use the CCS connector. While the NACS connector has historically been available only for use by Tesla vehicles, Tesla recently announced they would open their network to other automakers[2]. With the exception of Volkswagen and Stellantis (Chrysler, Dodge, Fiat, Jeep) most major automakers in the U.S. have announced their intention to include the NACS port on their new vehicles beginning in 2025[3].

Except for Tesla stations, many new DCFC stations currently come equipped with both CCS and CHAdeMO plugs. With the announcement by automakers to adopt the NACS on their vehicles, major charging station companies, including ChargePoint[4] and Electrify America[5], have indicated their intent to begin offering the NACS connector for their stations. While the NACS connector has not yet been certified by the Society of Automotive Engineers (SAE) as an approved standard, it will be important to consider which connector types are most appropriate for each site.

II. IMPLEMENT THE STATEWIDE EVSE ORDINANCE

A. Overview

The statewide EVSE ordinance was designed to ensure that municipalities are requiring installation of EVSE and Make-Ready parking spaces in a manner consistent with the law and also to provide an ordinance that can be easily used by every municipality with no or minimal amendments. The EVSE ordinance is mandatory.

The statewide EVSE ordinance addresses key land use, installation, and parking requirements for EVSE and Make-Ready parking spaces, including:

- **Accessory Uses in Zoning**— Designate EVSE and Make-Ready parking space as permitted accessory uses in all zoning and use districts, whether the EVSE or Make-Ready parking spaces are included with a site plan application for a new development or being added to an already existing building or development[6];

The requirements that all EVSE and make ready spaces be considered a permitted accessory use in all zoning or use districts, and the associated installation and parking requirements, became effective on July 9, 2021. The remaining requirements ("Reasonable Standards") from the statewide model ordinance became effective in all municipalities upon DCA publication on September 1, 2021.

[2] https://www.tesla.com/blog/opening-north-american-charging-standard
[3] https://www.consumerreports.org/cars/hybrids-evs/tesla-superchargers-open-to-other-evs-what-to-know-a9262067544/
[4] https://www.chargepoint.com/about/news/chargepoint-will-soon-offer-nacs-connector-options-its-charging-solutions
[5] https://media.electrifyamerica.com/en-us/releases/223
[6] A permitting application solely for the installation of electric vehicle supply equipment permitted as an accessory use shall not be

- **Minimum Parking Mandates** — Allow EVSE and Make-Ready parking spaces to count toward minimum parking mandates, and giving a two for one credit for the EV parking, up to 10% of the total required parking[7]; and Section E of the ordinance only applies to EVSE and Make-Ready parking spaces being installed pursuant to Section D.

- **EV Parking Spaces Required for New Parking Areas** — Require EVSE and Make-Ready parking space installation (including some EV spaces that are accessible for people with disabilities) in new multiple dwellings with five or more units of dwelling space, and new parking lots or garages as a condition of preliminary site plan approval (requirements are based on how many parking spaces are approved as part of the site plan application).

Municipalities with existing EV ordinances

The statewide EVSE ordinance supersedes existing EV ordinances. Municipalities are encouraged to formally adopt the statewide EVSE ordinance. Without adoption, the EVSE ordinance is still effective in each municipality; however, adoption allows municipalities to address local concerns and to make it a simpler process for residents and developers to determine the appropriate rules for EVSE and Make-Ready parking space installation.

Municipalities that adopt the statewide EVSE ordinance locally will be able to reference an ordinance number so they can fit the EVSE ordinance into their existing ordinances. The municipality can cross-reference the newly adopted ordinance to emphasize that EVSE and Make-Ready parking spaces are permitted accessory uses in all municipal land use zones. Local adoption of the statewide EVSE ordinance will also allow municipalities to cross reference and update as appropriate the multi-unit dwelling land use zones and parking requirements to reflect the new requirements for EVSE and Make-Ready parking spaces. In addition, municipalities may want to establish their own usage fees and penalties for publicly accessible and municipally-owned EVSE parking spaces. Such guidance can identify enforcement procedures and responsibilities, such as who will be responsible for enforcing the new requirements. Local adoption of the statewide EVSE ordinance will also provide an opportunity for municipalities

subject to review based on parking requirements.

[7] Each EVSE or Make-Ready parking space that is accessible for people with disabilities shall comply with the sizing of accessible parking space requirements in the Uniform Construction Code, N.J.A.C. 5:23, and other applicable accessibility standards, but are not required to have handicapped-only signage. Accessible EVSE and Make-Ready parking spaces cannot not be used to address the general accessible parking requirements of the UCC.

to outline requirements such as responsibilities for long-term equipment maintenance.

B. Modifying "Reasonable Standards" (Section F) of the statewide EVSE ordinance

A municipality ***may*** deviate from the reasonable standards section of the statewide EVSE ordinance to address installation, sightline, and setback requirements or other health- and safety-related specifications for EVSE or Make-Ready parking spaces. To do so, municipalities should adopt a supplemental ordinance that modifies the reasonable standards provisions of the statewide EVSE ordinance. Alternatively, they may adopt, with amendments, the statewide EVSE ordinance.

Note that municipalities cannot require more EVSE/Make-Ready parking spaces, or faster installation of EVSE, than what is included in Section E. of the statewide EVSE ordinance.

While the statewide ordinance outlines the critical items that municipalities should consider, there are additional considerations that could be included in a local EV ordinance, such as:

- **Security and Safety** — In addition to being well-lit and highly visible, consider whether additional security features such as motion detectors, cameras, locked electrical enclosures, anti-vandalism hardware and/or graffiti-resistant coatings are applicable. Safety considerations may also include protecting equipment from vehicle damage, including for example, snow removal. Physical boundaries such as bollards and wheel stops can provide protection. Sites should also have specific guidance to manage trip hazards (cord management system).

Signs provided by NJDEP to each recipient of its EVSE funding programs

- **Signage —** Ensure that sufficient wayfinding signage is installed. Publicly accessible EVSE should be clearly identified through paint patterns on the ground and signage that is visible above parked cars. The design of signage can fit within the aesthetics of the town but must be distinctive enough to draw attention. Regulatory signs inform drivers of the parking restrictions ("EV only parking") and applicable violations. In addition, wayfinding or directional signage could help EV owners find these sites more easily. It is recommended that all signage comply with the visibility, legibility, size, shape, color, and reflectivity requirements contained within the Federal Manual on Uniform Traffic Control Devices as published by the Federal Highway Administration. Consistency with the standards helps all drivers understand and recognize charging station signage. Visit US DOT's standard signage designs at: https://afdc.energy.gov/fuels/electricity_charging_station_signage.html

- **Lighting —** Visibility is important for driver and pedestrian safety and helps deter vandalism of the charging station equipment. The public should feel safe and comfortable charging their vehicle regardless of the time of day. As such, EVSE should be well-lit. In addition, consider locating the EVSE in a highly visible area. Most municipal ordinances contain sufficient requirements for proper lighting in parking lots and garages.

  Information that can be posted on the EVSE or on the charging station's app instead of on a sign:
  - Hours of operation and/or time limits or tow-away provisions are to be enforced by the municipality or owner/designee;
  - Usage fees and parking fees, if applicable; and
  - Contact information (telephone number or phone application) for reporting when the equipment is not operating or other problems.

Space — Compared to Level 2 charging, DCFC requires more space and power and the installation of an equipment pad. For Level 2 charging, an EVSE mounting approach will need to be chosen. Wall- or ceiling mounted charging stations can save space, but either wall-mounted or pedestal-mounted charging stations will enable one unit to serve multiple parking spaces. In addition to standard parking space considerations, when siting all EVSE, the charging equipment must not interfere with passenger or freight loading and unloading nor impact adjacent traffic.

Accessibility — Finally, larger parking spaces are needed for each EVSE or Make-Ready parking space that is intended to be accessible for people with disabilities as required by the model ordinance (see sizing of accessible parking space requirements in the Uniform Construction Code, N.J.A.C. 5:23, and/or Americans with Disabilities Act (ADA)).

C. Streamlining the approval process

The following zoning and construction/building permit review and inspection processes can significantly reduce the time and effort for EVSE approval:

1. **Standardize and provide transparency** for the zoning, construction/building, and electrical permit review and inspection process by clearly identifying location of the applications, application materials, application process, fees, timelines, and point(s) of contact. This might be best achieved by **providing a comprehensive list of all required documentation on the municipality's website** so the information is easily accessible.

2. In addition to providing all the needed information on the municipality's website, **adopting an online permitting process** is ideal. Use an online portal that guides **applicants through forms and requirements for permit submission and accepts** electronic signatures and payments for plan check reviews[8].
3. **Develop application checklists** that include the plans, information, and specifications needed to review and approve the installation of the EVSE.

   At the state level, the electrical code requirements for EVSE are the same as other electrical code applications. A checklist should include:

   - List of committee reviews needed, such as planning board, for specific types of EVSE installations (if any);
   - Drawing/diagram requirements (if any) for electrical permits;
   - Site plan requirements (if any);
   - Applicable electrical and construction permit applications, as applicable; and
   - Specifications for signage, striping, and other planning directives.

4. **Provide information on inspection requirements** to lay out clear expectations on what will be inspected, documents needed, and who should be present for inspections on the municipal website. If your municipality currently requires multiple inspection processes prior to approval (e.g., electrical, construction, etc.), consider the need for those inspections for this type of installation, and, if needed, attempt to coordinate those inspections to occur simultaneously.

5. Depending on the location of the EVSE installation, review and **approval by other State departments might also be required**. For example, any installation in the right-of-way, on, or adjacent to a State or County roadway would need approval from the NJ Department of Transportation or the County department of planning or engineering. Similarly, any installation on transit property would need approval from NJ Transit. It is best to identify these additional approval requirements early in the siting and staging process to ensure coordination.

6. **For existing buildings:**
   - Identify if the process for residential installation is different from installation for other uses – e.g., commercial or multifamily.
   - Identify if a zoning permit is required for different types of EVSE and under what conditions.

[8] https://site-assets.evgo.com/f/78437/x/a36897f7b3/connect-the-watts_local-permitting-best-practices.pdf

- If a zoning permit is needed, provide a list of drawings and information requirements that must accompany the permit application. Many municipalities develop specific submission requirements for common applications such as "decks", "fences" and "pools". For example, a survey or aerial photo (to scale) that shows the location of the EVSE and distance to the property line with information on lighting, signs, landscaping, etc.
- Provide information on each step of the process and what is next. For example:
    - All completed zoning permit applications will be reviewed by the Zoning Officer (completeness review must be completed within 20 days pursuant to statewide EV ordinance, Section C.6.). A completed application means that all required documents have been submitted and all application fees have been paid.
    - Once an application is complete, the Zoning Officer will respond with an approval and issuance of a zoning permit or an explanation for denial within ten (10) business days.
- The application must meet the requirements in the statewide EVSE ordinance (Section C.5.) in order to be approved.

7. **For new construction that is required to install EVSE and Make-Ready parking spaces in accordance with the statewide EVSE ordinance:**
    - Identify if applications with EVSE and Make-Ready parking spaces need any additional information.
    - If the municipality uses checklists in the review process, update the checklist - e.g., site plan drawing checklist or development review checklist - to provide information on EVSE requirements and any requirements for setback, parking stall size and markings, lighting, signs, safety issues, and landscaping. The checklist for applications coming in for preliminary site plan approval should also include the number of EVSE and/or Make-Ready parking spaces that are required to be installed per the statewide EVSE ordinance.

III. INSTALL EV CHARGING STATIONS

Municipalities can play a critical role in meeting New Jersey's goals to install EV charging stations throughout the state by installing publicly-accessible EVSE in their town. In fact, P.L. 2019, c.267 (www.njleg/state.nj.us/bills/2018/pl19/267_.pdf) requires municipalities to show *existing* and *proposed* locations of public electric vehicle charging infrastructure in the municipal master plan. In reexamination reports, the law requires planning boards to include recommendations for development of EVSE in commercial districts, transit facilities, transportation corridors, and rest stops, and identify regulations to revise local development regulations to provide EVSE.

TRANSITIONING MUNICIPAL FLEETS TO ELECTRIC

The GWRA 80x50 Report emphasizes the need to transition nearly all of New Jersey's transportation to electric in order to meet the State's climate goal. To reach our goals, New Jersey municipalities must start to integrate EV transition considerations into their fleet management practices now. While fleet management is beyond the scope of this guidance, we encourage municipalities to review the U.S. Department of Energy's Fleet Rightsizing Guidance.

USDOE funded Atlas Policy and the Cadmus group have a Fleet Procurement Analysis Tool that provides decision relevant information on the financial viability and environmental impacts of various fleet procurements. Also, consider if the Climate Mayors Electric Vehicle Purchasing Collaborative is right for your town.

The following sections are intended to guide municipalities through the relevant considerations that should be taken into account when deciding how to deploy charging stations; they are not meant to be prescriptive as each municipality will have unique needs that can only be addressed through site specific analyses.

A. Which charger to install?

In addition to cost considerations, charging installations should strategically align with the characteristics of the drivers visiting the station as well as the goals of the EVSE host. Typical use cases include:

- **Municipal Lot** Visitors who traveled some distance to a downtown retail district may need to park and charge for an extended time period in a municipal lot or garage, and extended parking would benefit local businesses. In these cases, Level 2 charging, which provides substantial charge over several hours, might make the most economic sense.
- **Local Small Business** Areas with a large array of convenience businesses, such as coffee shops and fast-food restaurants, may be better served by a DCFC, but also need to consider whether charging at these sites will ever be needed (e.g., those driving 5-10 miles to run errands likely won't need public charging). Areas with these amenities on a travel corridor are most likely to need public fast charging.
- **Workplace** Workplaces may benefit from a mix of Level 1 and 2 charging for their employees. Workplace fleets may require some Fast Chargers depending on the types of vehicles and the uses. For instance, medium- and heavy-duty vehicles will require several hours at a Fast Charger for a full charge.
- **Residential** Charging installations designed for multi-unit residential parking, where vehicles are parked for 6+ hours, may be best served by a mix of Level 1 or 2 chargers.
- **Curbside** Curbside charging refers to any charging station which is installed on the side of a road or on a sidewalk (note: curbside charging does not include extension cords run across a sidewalk from an outlet to a vehicle). Public charging stations installed along the curbside are

better suited for dense urban areas where access to off-street parking is limited. As with other public charging stations, Level 2 charging is best suited for areas where visitors park for extended periods of time. Areas with high turnover rates or along high-use travel corridors may be better served by a DCFC. In addition to serving the charging needs of visitors, public curbside chargers may be used to meet the needs of nearby residents who lack access to off-street parking.

Local governments considering installing public DCFCs should select "dual standard" equipment, which provides both CCS and CHAdeMO connectors. As the NACS connector becomes more common, local governments are encouraged to consider whether including NACS in new installations is appropriate. Some charging station providers have additionally indicated that NACS connectors can be added to existing charging stations after installation. For details on this process, local governments should consult with their charging station provider.

Level 1 and Level 2 connectors, known as J1772 connectors, are universal. EVs from all automakers except Tesla can be charged using a Level 1 or Level 2 charging station. Tesla offers a J1772-to-Tesla adapter. The development of a universal electric vehicle charging network across New Jersey is encouraged.

NJDEP is developing mapping that will help inform strategic placement of EVSE. P.L. 2019, c. 362 (signed January 17th, 2020), prescribes specific requirements for EV charging infrastructure with regard to number, power, and distribution of charging stations. NJDEP's initial mapping focused on DCFC on major travel corridors in New Jersey Home - Drive Green - Air Quality, Energy and Sustainability (AQES) | Department of Environmental Protection (nj.gov). The second mapping phase identifies strategic community locations, which could be within your municipality, in order to meet the requirements of the law which says that by December 31, 2025, DCFC shall be available at 100 community locations throughout New Jersey.

EVSE Installation Order of Operations

- **Select the type of charging most beneficial for the site.** Level 1, Level 2 Networked, Level 2 Non-Networked, DCFC
- **Select the electrical meter EVSE will be connected to.** Consider the amount of usage and number of available circuits. How will adding EVSE to the meter impact the electrical demand costs? Does it make sense to install a dedicated meter?
- **Select the location for the charging equipment on the site.** As near the electrical service as is convenient, remembering to take accessibility into consideration.
- **Seek out incentives.** There are many incentives offered for EV Charging. See Section IV for a listing of current offerings.

B. Networked EVSE

When purchasing a Level 2 charging station[9], consider whether "networked" charging stations are needed. Networked charging stations have the advantage of allowing the site host to remotely monitor the usage in real-time and access other management tools such as turning the stations on and off, receiving automatic updates with the latest features, controlling access, generating reports on station utilization and energy use, accepting payment, charging variable rates for usage, and collecting usage fees.

Networked charging stations also have the advantage of being "visible" to drivers either from a charging provider's mobile app, third party sites, or GPS navigation apps, such as Google Maps. Networked charging stations let drivers know if/when a station is available. This can be an especially useful feature in multifamily developments. Signal connectivity is a primary consideration when choosing a networked charger.

In New Jersey, most state and utility incentive programs require a networked charger and the sharing of the data collected. This allows the state to better understand charging behavior, which will help in the state's overall adoption goals and assist utilities when setting EV charging rates.

Networked EVSE cost more than non-networked chargers and require a monthly contract with the company providing the networking communication services. In some cases, networked chargers also require access to Ethernet (Cat 5 or Cat 6), Wi-Fi, or a cell network. Consider the projected usage of the planned EVSE to determine how long it would take for the monies collected by a networked charger to offset that higher cost.

However, some station owners choose to provide free and unlimited charging as an enticement or benefit, so they may feel that a networked EVSE is not necessary and operating costs can be lowered by not joining a network.

C. Costs

The cost of charging stations varies widely depending on the type of EVSE, the nature of the site, and size of the installation. Typical costs include:

- Upfront equipment purchase,
- Installation (e.g., garage modifications or pedestal construction needs, Including any needed trenching; protective bollards, etc.),
- Electrical work – including possible expansion of utility infrastructure for connectivity,

[9] Nearly all DCFC chargers are networked and very few Level 1 chargers are networked, so the choice to network an EVSE primarily applies to Level 2 charging.

- Permitting and administrative fees,
- Any supporting features (e.g., Wi-Fi-enabling, credit card support), and
- Operation and maintenance costs (e.g., networked fees).

A 2019 assessment by the International Council on Clean Transportation (Estimating electric vehicle charging infrastructure costs across major U.S. metropolitan areas (theicct.org)) provides the following cost comparisons. However, costs can vary widely based on many factors including supply issues, site conditions, etc. The tables below are just estimates.

Table 2. Per charger public and workplace charger hardware cost.

Level	Type	Chargers per pedestal	Per-charger cost
Level 1	Non-networked	One	$813
Level 1	Non-networked	Two	$596
Level 2	Non-networked	One	$1,182
Level 2	Non-networked	Two	$938
Level 2	Networked	One	$3,127
Level 2	Networked	Two	$2,793
DC fast	Networked 50 kW	One	$28,401
DC fast	Networked 150 kW	One	$75,000
DC fast	Networked 350 kW	One	$140,000

Table 3. Installation costs for Level 2 public and workplace charger, by chargers per site.

		1 charger per site	2 chargers per site	3-5 chargers per site	6+ chargers per site
California	Labor	$2,471	$1,786	$1,491	$1,747
	Materials	$1,235	$958	$1,014	$908
	Permit	$283	$172	$110	$65
	Tax	$156	$121	$128	$115
	Total	**$4,148**	**$3,039**	**$2,745**	**$2,837**
Outside California	Labor	$1,544	$1,827	$1,647	$1,316
	Materials	$1,112	$1,039	$1,272	$874
	Permit	$82	$62	$59	$38
	Tax	$96	$89	$110	$75
	Total	**$2,836**	**$3,020**	**$3,090**	**$2,305**

Table 4. Installation costs per DC fast charger by power level and chargers per site.

	50 kW				150 kW				350 kW			
	1 charger per site	2 chargers per site	3-5 charger per site	6-50 chargers per site	1 charger per site	2 chargers per site	3-5 chargers per site	6-20 chargers per site	1 charger per site	2 chargers per site	3-5 chargers per site	6-10 chargers per site
Labor	$19,200	$15,200	$11,200	$7,200	$20,160	$15,960	$11,760	$7,560	$27,840	$22,040	$16,240	$10,440
Materials	$26,000	$20,800	$15,600	$10,400	$27,300	$21,840	$16,380	$10,920	$37,700	$30,160	$22,620	$15,080
Permit	$200	$150	$100	$50	$210	$158	$105	$53	$290	$218	$145	$73
Taxes	$106	$85	$64	$42	$111	$89	$67	$45	$154	$123	$92	$62
Total	$45,506	$36,235	$26,964	$17,692	$47,781	$38,047	$28,312	$18,577	$65,984	$52,541	$39,097	$25,654

DCFC charging systems are the costliest to purchase, install, and maintain. Although installation costs can vary greatly from site to site, with this large of an investment, it is important that towns and installers carefully consider current and future needs when siting DCFCs to ensure maximum usage and benefits. Networked DCFCs hardware is estimated to cost between $28,400 and $140,000, depending on the power level[10]. Installation costs vary based on power level and number of chargers per site with estimated costs ranging from $17,700 to $66,000 per station. Keeping the charging station up and running is a vital component of charging station operations. General maintenance is estimated to cost approximately $400 per charger per year while repair warranties are estimated to cost an additional $800 per charger per year for DCFCs.

In comparison, Level 2 charging systems are less costly to purchase, install, and maintain. On average, these stations cost between $1,000 and $3,000 depending on power level and networking capabilities. Installation costs are

[10] https://theicct.org/sites/default/files/publications/ICCT_EV_Charging_Cost_20190813.pdf

estimated to vary from $2,000 to $3,000 per charger, while general maintenance and repair warranties are estimated to cost $400-$800 total per charger.

Level 1 comes at the lowest cost, ranging from $300-$1,300 per unit with $0-$300 for installation. While hardwired Level 1 charging equipment does exist, Level 1 charging is more commonly provided by installing 120V outlets. Drivers use the L1 charging cable that comes with their vehicle. Level 1 chargers can also be utilized by electric scooters and bikes.

NOTE: Charging an electric vehicle via an L1 outlet requires nearly the full output of a standard 120V circuit. L1 charging installation designs should have a dedicated circuit for each outlet in the electrical panel.

D. Electrical Power Needs

The ideal public charging location is:

- as close to electric service as possible while also being convenient to other activities at the site. Trenching to accommodate underground wires from the electric supply to the EVSE can add significantly to the construction costs for installation.
- planned with safety in mind (e.g., cords and wires should not cross pedestrian walkways creating tripping hazards, location should consider nearby potential hazard areas, etc.).

Electrical Upgrades and Expansions. Depending on the size of the EVSE project (e.g., DCFC platform for multiple vehicles), the site could require additional circuits and electrical capacity. In addition, given the goal of overall transportation electrification, towns should consider futureproofing by building in enough electrical capacity for EVSE expansion. These additions will be less costly if done during initial construction than during modifications later. Municipalities should work directly with their local electric utility provider to identify electric infrastructure and capacity needs.

Electrical Demand. Planning for EVSE installations should include reviewing the electrical demand of meters being considered for the project. This means looking at what else is connected to the electric meter to which you are considering connecting EVSE. If EVSE is connected to a meter that already draws a lot of electricity during the prime usage times for the EVSE, the demand fee for that meter will go up, and this can be very costly.

Energy Audits. Completing a municipal energy audit can help identify opportunities for energy savings to offset increased electricity load from EVSE installation. Visit NJBPU's Local Government Energy Audit to find out more and how to apply for an energy audit.

E. Charging Time Limits

Data collected from EV drivers indicate that a majority of charging occurs at home. However, an established network of public charging stations that are readily available and visible will reduce range anxiety of current and potential drivers, leading to more EV purchases. For this reason, it is necessary that these stations be available for EVs only. The question becomes whether you put a time limit on how long EVs can be parked in a given space and whether a usage fee should be charged. EVSE owners may generate a return on investment from the charging station, but that may not be the owner's goal. Some station owners choose to provide free and unlimited charging as an enticement or benefit. The owner may wish EV drivers to patronize the business, provide a benefit to employees and customers, lower operating costs by not joining a network, or just do something good for the environment.

However, as demand for EVSE increases, the charging station owner may wish to implement further restrictions, such as requiring that EVs parked in those spaces are connected to the charging station and/or actively charging. Alternately, the station owner can set a time limit for how long an EV can charge/park in the space or can trigger an increase in the parking fees for that space once the car is fully charged or after a certain amount of time has passed. Time limits and/or usage fees can help ensure there is turnover so that the charging station is available to EV drivers that need them.

In order to decide whether to implement time limits and/or usage fees, the EVSE owner should look at the venue or land use. Some venues lend themselves to having longer available charging times, such as a hotel or recreation site. For example, a beach or amusement park should have longer charging time limits. Other venues can have shorter charging time limits, such as a public library or supermarket.

EVSE owners may also want to consider setting time limits to promote a more positive driver experience in addition to facilitating higher utilization of public chargers. One EVSE vendor, Greenlots, provides the following suggestions:

- **Use clear communication to avoid surprises**: Provide highly visible and clear signage as well as clear notification within driver apps to communicate any parking time limits or penalties to drivers in advance. Reduce the chances that a driver receives an unpleasant and unexpected surprise because they are unaware of any time limits or financial penalties.
- **Provide charging flexibility**: Some drivers may arrive with a mostly-charged battery and may need only 30 minutes of additional charging; others may arrive in need of a substantial charging session of 4-6 hours or more. Depending on the intended use of the charging station, it is

recommended that any time limits provide flexibility so that a driver can receive the charge the EV needs.

- **Offer a grace period**: Allow the driver a grace period after a charging session is complete before assessing a penalty. The appropriate length of the grace period may depend on the location and intended usage of the charger, and may often be between 10 minutes and two hours. Most charging apps and EVs have the ability to send a notification to the driver once a charging session completes, so the driver should be able to avoid incurring penalties if the grace period is well communicated in advance.
- **Set time limits**: In addition, a parking lot owner/operator may want to provide time limits on parking in general. Such time limits could apply even after a charging session is complete and the driver unplugs the charging cable from the vehicle.

F. Usage Fees

Many publicly funded EVSE offer free charging as a public service to encourage use by the general public. However, having the general public pay to use EVSE can provide an opportunity for municipalities to offset upfront purchase and installation costs, as well as electricity, operation, and maintenance fees.

Most networked EVSE allow EVSE owners to set their own pricing and can even support custom pricing strategies. The fees should be easily visible to the EV driver either on the EVSE unit display or on the network app. Customer payment typically involves using a Radio-Frequency Identification Card (RFID), obtained through registering with a network, or a credit card.

Various fee assessment methods exist, including subscription-based, pay-per-charge, and pay-for-parking. In most cases, drivers are charged a single fee for parking and charging. However, this has the disadvantage of not incentivizing drivers to move their EVs so that other EVs can utilize the charging station. Advanced EVSE products are typically capable of accepting payment but must be networked to do so. There is a cost to the site host or equipment owners for providing some types of payment systems, and those entities ultimately determine their user fees and share that information publicly on their website or through a parking/mapping application.

Pricing for charging services is typically set to incentivize charging behavior in addition to serving as a means to generate supplemental direct revenue. Prices can be set in a number of ways[11]:

- **Per Hour/Time-Based Fee:** A time-based fee (e.g., hourly) is set for all charging regardless of time of day or vehicle type. If you charge per hour,

[11] Pricing information provided by ChargePoint.

there is a set cost for any vehicle whether it is charging or not. Because different vehicles receive electricity at different rates, the cost of energy may vary widely by charging session. This is similar to how a parking meter fee works.

- **Flat Fee Per Session:** The driver pays a set fee for the entire session. This is usually more appropriate for workplace charging or charging stations that have very short, regular sessions.
- **Per Unit of Energy (usually kilowatt-hour [kWh]):** The driver pays for the energy consumed on a per kilowatt-hour (kWh) basis. This accurately accounts for the true cost of electricity for the charging station owner (similar to a utility bill), since different makes and models charge at varying power levels, but does not give an incentive for a car to leave the space once charging is complete.
- **Time-of-Use ("TOU") Price:** Time of Use (TOU) pricing represents an opportunity to ensure that the increased energy use associated with the growing number of EVs can create value for all ratepayers and the grid, in addition to EV drivers. TOU pricing works by sending price signals to drivers: prices are lower during certain hours of the day and higher during others. EV charging operators can set TOU pricing to drivers regardless of whether they are enrolled in an electric utility's TOU electricity rate, which is tied to the operator's monthly utility bill. If an EV charging operator is enrolled in a utility's TOU electricity rate, they can choose whether and how to pass along a TOU price to drivers.
- **Minimum and/or a Maximum Price Per Session:** A **maximum price per session** would be a limit to the amount it costs each time a car plugs in (per session) or a limit per a certain number of hours, and a **minimum price per session** would be the amount it costs each time a car plugs in, regardless of the time length.
- **Length-of-Stay Price:** One price is charged during the first period of time and another price, which is displayed to drivers, is charged for subsequent periods of time.
- **Combination Approach:** A combination of these approaches, such as charging a flat rate for the first two hours, then an increased time-based per-hour rate for longer sessions. This is a custom pricing strategy to encourage people to move their EV once charging is complete.
- **Driver Group Price**: Fees are set based on different classifications of drivers. For example, employees charging at their workplace or visitors could be offered a unique or reduced rate, which could be any of the options listed above.

G. First Responder Training

Due to the unique chemical, electrical, and thermal hazards associated with high voltage charging systems, and to address the potential consequences such

hazards pose, all municipal staff in the law enforcement, fire, and/or emergency response departments should receive education and training related to electric vehicles and electric vehicle charging stations.

Law enforcement and fire departments should undergo training such as, but not limited to, participating in the National Fire Protection Association's (NFPA's) self- paced online training program, Alternative Fuel Vehicles Training Program for Emergency Responders, and developing effective methods to properly combat and extinguish lithium-ion battery fires.

Volunteer Rescue Squads should receive general education and training regarding the hazards described in this section for purposes of being better able to anticipate and render the basic life support care needed, after the fire department has secured the incident area and deemed it safe.

H. EVSE Ownership Options

Consider whether the town would purchase, install, and operate EVSE themselves, or contract with a third-party in a leasing or sharing agreement. While the latter model reduces upfront costs and maintenance and administrative responsibilities, the town would not benefit from any revenue generated by the EVSE. However, third-party ownership might be appropriate for municipalities that do not want to expose themselves to the challenge of managing a retail operation.

I. Reporting Issues

Individuals should have a convenient way to report issues with EVSE or their locations (e.g., 24-hour hotline or phone application).

J. Special Considerations for Curbside Charging

While the majority of currently installed charging stations are in off-street parking lots and garages, interest in charging station installations at on-street parking locations (known as curbside charging) is growing. New Jersey state law does not prohibit curbside chargers, however, review and approval by other departments may be required depending on the location of the EVSE installation. Publicly available curbside charging is eligible for financial incentives provided by NJ BPU and NJ DEP.

Curbside charging stations may be best suited for a variety of locations including those with high use of rideshare vehicles (e.g., Uber and Lyft), those located near transit stations, areas with a high concentration of multifamily housing complexes, dense urban areas, or other locations with limited access to off-street parking. Stations should be located within walking distance of residential areas and high traffic, walkable areas (e.g., downtown, boardwalk, etc.). Special

consideration should be given to design features to prevent the charging station from interfering with pedestrian accessibility, including charging station size or cables blocking sidewalks. In addition to standard siting requirements, the need for parking space repurposing, parking enforcement, signage, and parking policy evaluation are particularly important for ensuring successful utilization of curbside charging stations. Municipalities should consider whether amendments to the municipal code are needed to prohibit vehicles from parking in charging spaces while not actively charging or to prevent large stations from blocking sidewalks.

Note: There are a variety of curbside charging options, however, pole mounted charging stations on utility owned streetlights may not be feasible as utilities are not currently permitted to own and operate charging stations.

Additional information on curbside charging can be found here.

IV. INCENTIVES AVAILABLE TO INSTALL CHARGING STATIONS

A comprehensive list of statewide financial incentives for electric vehicles and electric vehicle charging stations can be found at: Incentives to Drive Green (nj.gov)

A. Utility funding programs

Regulated utilities in New Jersey are required by the New Jersey Board of Public Utilities (NJBPU) to have programs to help fund the Make-Ready infrastructure for publicly accessible chargers. Make-Ready infrastructure is defined as the work on the utility side of the meter, known as pole to meter (PTM) and on the customer side of the meter, known as behind the meter (BTM). Each utility has proposed its own program to help incentivize the installation of Make-Ready infrastructure for residential, public, workplace, and multi-unit dwelling charging.

- PSE&G launched a program to offset the cost of Make-Ready infrastructure needed to install EVSE. Electric Vehicle Program – PSE&G (pseg.com) The charging station is not covered by this program, but applicants can "stack" this program with DEP's It Pay$ to Plug In program to offset the cost of the charging station. https://dep.nj.gov/drivegreen/it-pays-to-plug-in/
- Atlantic City Electric launched a program in December 2021. The charging station is not covered by the program, but applicants can "stack" this program with DEP's It Pay$ to Plug In program to offset the cost of the charging station. Find information here: Electric Vehicle Program - Coming Soon | Atlantic City Electric - An Exelon Company
- Both JCP&L and RECO have proposed programs that are being reviewed by BPU Staff as of February 2022.

PSE&G Electric Vehicle Sub-Program Incentives

1. Residential Smart Charging		2. Level 2 Mixed Use Charging		3. Public DC Fast Charging	
Single Family Homes		Multi-Family, Government & Publicly Accessible		Travel Corridors & Community Locations	
$80M Investment	40,000 chargers	$35M Investment	875 sites ~3,500 chargers	$45M Investment	300 sites ~1,200 chargers
Incentives include*: • Up to $1,500 toward the behind the meter (BTM) installation of a residential Level 2 charger • Up to $5,000 of pole to meter (PTM) utility service upgrades (if needed) • Credit on charging during off-peak periods to help lower your bill (if not already an RLM customer)		Incentives include*: • Up to $30,000* toward the behind the meter (BTM) installation of commercial Level 2 chargers • Up to $10,000 for pole to meter (PTM) utility service upgrades (if needed) *Note: the incentive is based on the number of chargers installed, offering up to $7,500 per charger installation for up to four chargers per site		Incentives include*: • Up to $100,000** per site for behind (BTM) the meter installation costs for DCFC chargers • Up to $50,000 of pole to meter (PTM) utility service upgrades (if needed) • Demand Charge Rebates to help lower your electricity bill **Note: the incentives is based on the number of chargers installed, offering up to $25,000 per charger installation for up to four chargers per site	

*Some incentives may depend on participants' agreement to allow PSE&G to collect charging data

PSE&G 4

ACE's programs will expand South Jersey's public EV charging network by supporting the installation of 1,100 Smart L2 and fast charging ports in locations that are available to the public 24/7.

- 1,000 Smart L2 charging ports, which can fully charge most EVs in about 3-5 hours, will be installed in communities across South Jersey
- 100 DCFC ports, which can charge most EVs to 80 percent in about 30 minutes or less, will be installed in communities across South Jersey.
- Locations will be determined by third-party providers and incentives will be provided on a first-come-first-serve basis to applicants that meet the program's parameters
- Third-party providers will install, own, and maintain the charging stations
- A new rate option for owners of public EV fast charging stations will help attract private investment in fast chargers and support the continued expansion of charging infrastructure in South Jersey

Here's how our electric vehicle programs will help you skip the gas pump

5 atlantic city electric

B. NJBPU Clean Fleets program for local Government EVs and EVSE

NJBPU offers a Clean Fleets rebate program which allows local and state government entities to receive rebates for the purchase of battery electric vehicles, Level 2 charging stations, fast charging stations and the Make-Ready for charging stations. For more information visit Electric Vehicle Incentive Programs (njcleanenergy.com).

C. NJDEP It Pay$ to Plug In funding for EVSE

NJDEP offers rebates for charging stations through the It Pay$ to Plug In program. For more information visit the AQES Drive Green (drivegreen.nj.gov).

D. NJBPU EV Tourism grant

NJBPU offers an EV Tourism charging incentive for locations ranging from boardwalks, parks, and other unique attractions, as well as overnight lodging. Establishments will have the opportunity to apply for up to six Level 2 chargers and two DC Fast Chargers through the program. For more information on application windows and deadlines visit NJBPU's Electric Vehicle Incentive Programs (njcleanenergy.com/ev).

V. ADDITIONAL RESOURCES

A. Legal

- P.L. 2021, c. 168 (https://www.njleg.state.nj.us/Bills/2020/PL21/168_.PDF) encourages municipalities to identify appropriate locations for the development of publicly-available infrastructure for fueling or charging zero-emission vehicles when adopting redevelopment plans.
- P.L. 2020, c. 108 (https://www.njleg.state.nj.us/Bills/2020/PL20/108_.PDF) concerns the installation of EVSE in common interest communities. Specifically, the law: Prohibits common interest communities from adopting rules that prohibit or unreasonably restrict the installation or use of EVSE in the designated parking space of a unit owner.
- P.L. 2020, c. 80 (https://www.njleg.state.nj.us/Bills/2020/PL20/80_.PDF) requires a developer to offer to install, or to provide for the installation of, an electric vehicle charging station into a dwelling unit when a prospective owner enters into negotiations with the developer to purchase a dwelling unit
- P.L. 2019, c. 267 (https://www.njleg.state.nj.us/Bills/2018/PL19/267_.PDF) encourages local units to plan for EVSE.

B. EVSE installation

- Homeowner Guide to Electric Vehicle Charging Stations (https://www.state.nj.us/dca/divisions/codes/publications/pdf_other/homeowners_gui de_electric_vehicles_charging_stations.pdf). This guide from NJDCA informs residents of the streamlined permitting process for installation of home charging stations.
- Electric Vehicle Charging Stations – Installation and Permit Requirements. (https://www.state.nj.us/dca/divisions/codes/publications/pdf_ccc/ccc_2011_spring.pdf) Guidance on EV charging station installation and permit requirements for local code enforcement officials was published by NJDCA in the Spring 2011 "Construction Code Communicator".
- Construction Permit Application Packet and Related Forms. (https://www.nj.gov/dca/divisions/codes/resources/constructionpermitforms.html) Information from NJDCA on the electrical code forms, Construction Permit Application (UCC F-100) and the Electrical Subcode Technical Section (UCC F-120) to file with the local jurisdiction.

C. EV Planning for Local Governments

- Electric Vehicle Resource Kit for Municipalities (https://www.dvrpc.org/energyclimate/alternativefuelvehicles/evmuniresource) This toolkit from the Delaware Valley Regional Planning Commission is intended to help the user answer "What should my municipality do about electric vehicles?". It is written specifically for municipal managers in Pennsylvania and New Jersey, with a focus on the Greater Philadelphia region. However, the information it provides is likely to be useful to other users, including businesses, fleet managers, and potential electric vehicle owners.
- Alternative Vehicle Readiness: A Guidebook for Municipalities (https://www.njtpa.org/NJTPA/media/Documents/Planning/Regional-Programs/Alternative-Fuel-Vehicles/NJTPA-AFV-Readiness-Guidebook_Dec2017_FINAL(1).pdf) Guidebook from the North Jersey Transportation Planning Authority for all municipalities in New Jersey to design and conduct alternative fuel vehicle readiness planning efforts in their own communities. This guidebook highlights best practices for municipalities implementing AFV infrastructure and supportive policies.
- Electric Vehicle Resources for Local Government (https://www.drivegreen.nj.gov/localresources.pdf) Short flyer from NJDEP that lists and links to incentives, procurement tools, policy and planning support, Sustainable Jersey resources, and more.

- Sustainable Jersey Resources (https://www.sustainablejersey.com/actions/) Sustainable Jersey has developed a suite of actions, grants, and resources to support local governments and schools as they transition to electric transportation. Look for the Transportation Initiatives in the Energy section of the Sustainable Jersey Actions. Learn from your peers and earn points toward Sustainable Jersey certification.
- Cross County Connection's EV Primer (https://documentcloud.adobe.com/link/track?uri=urn%3Aaaid%3Ascds%3AUS%3A2b4979d6-034d-48c8-949d-131523ce7123#pageNum=1) Cross County Connection, the designated Transportation Management Association (TMA) for Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem Counties, developed this resource to provide information on EV costs, technology, infrastructure and planning considerations to help potential EV owners understand the technology and assist local governments and businesses meet the future demand for charging stations.
- Ridewise TMA Let's Go Electric Resources (https://ridewise.org/lets-go-electric/electric-vehicle-resources/) RideWise is Somerset County's partner for information on environmentally-friendly transportation. This page has a compilation of resources gathered during Let's Go Electric Meetings.

D. Miscellaneous

- Compliance and Best Practices Guidelines for EV Chargers and the Americans with Disabilities Act (https://dep.nj.gov/wp-content/uploads/drivegreen/ippi/accessibilityguidelines.pdf) Requirements and guidance for entities that receive funding from It Pay$ to Plug In, NJDEP's grant program for electric vehicle charging infrastructure.
- Program Resources - NYSERDA (https://www.nyserda.ny.gov/All-Programs/ChargeNY/Charge-Electric/Charging-Station-Programs/Charge-Ready-NY/Program-Resources)
- US Department of Energy. Alternative Fuels Data Center handbook for public charging hosts Plug-In Electric Vehicle Handbook for Workplace Charging Hosts (Brochure), Clean Cities, Energy Efficiency & Renewable Energy (EERE) (https://afdc.energy.gov/files/u/publication/pev_workplace_charging_hosts.pdf)