



Inspiring Climate Action: Understanding EVs and Funding Opportunities

Massachusetts Municipal Association

August 7, 2024



OUR MISSION

To relentlessly advocate for, and protect the interests of, cities, towns and villages by influencing federal policy, strengthening local leadership and driving innovative solutions.

NLC

Federal Funding Opportunities, Incentives and Technical Assistance for Electric Vehicles

NILC

Grant Programs for Local Governments

- EPA – [Clean School Bus program](#) – \$5 billion for grants/rebates to replace existing school buses with zero-emission and clean school buses. *Expected Fall 2024.*
- EPA – [Clean Heavy-Duty Vehicles](#) – \$1 billion in one-time funding to replace existing non-zero-emission heavy-duty vehicles (class 6 and 7) with zero-emission vehicles, support zero-emission fueling infrastructure, and train and develop workers. *Just closed.*
- EPA – [Climate Pollution Reduction Grants](#) – \$5 billion in one-time funding for regional planning and project implementation to reduce GHG emissions. *Awarded.*
 - EV deployment top 3 priorities among all Priority Climate Action Plans
- DOE – [Energy Efficiency and Conservation Block Grant](#) – Formula funding or vouchers + state grants to reduce carbon emissions, improve energy efficiency, reduce energy use primarily in the building and transportation sectors. **Due Oct. 31.**
 - Federal formula funds: Awarded to 6 cities to date; missing full application from 15 cities
 - State Grants (less than 35k pop.): Apply to [MA Dept. of Energy Resources](#) by **Aug. 16.**

Grant Programs for Local Governments

- JOET – Communities Taking Charge Accelerator – \$54 million for innovative approaches to expanding EV adoption and charging access, particularly in urbanized areas where land use, density, car ownership rates, grid considerations, and other factors add further complexities to electrifying the transportation network while the demand for transportation access is at its highest density. *Just closed.*
- DOT – Charging and Fueling Infrastructure – \$2.5 billion through two rounds to strategically deploy publicly accessible electric vehicle charging and alternative fueling infrastructure in the places people live and work – urban and rural areas alike – in addition to along designated Alternative Fuel Corridors. **Due Aug. 28.**
- DOT – National Electric Vehicle Infrastructure – \$5 billion for states to strategically deploy EV charging infrastructure and establish an interconnected network.
 - MassDOT NEVI plan

Direct Pay – 5 Steps for Getting Started

1. Pick a tax year
 - a. Calendar year (Jan.-Dec.)
 - b. Fiscal year (July-June)
2. Prefiling registration - ASAP
 - a. Variety of information needed on hand to do this
3. IRS issues registration number
4. File your 990-T
 - a. First time filers granted a 6-month extension
5. Receive the elective payment

- [GREAT webinar on Direct Pay + EVs + slides](#)
- [Final Municipal Tax Credit Regulations Present Opportunities for Clean Energy Projects](#)
- [Resources to Make Deploying Tax Credits for Clean Energy Projects in Small and Rural Communities Easier](#)
- [How IRA Elective Pay is Helping Cities Meet Climate Action Plans](#)

GFOA and NLC will be publishing a brief next week!

Sign up for the [Local Infrastructure Hub Direct Pay Bootcamp](#) starting in September!

EVs + Direct Pay

Key Resources:

- [Lawyers for Good Government](#)
- [Electrification Coalition](#)

- **Investment Tax Credits for EVs**
 - Commercial Clean Vehicle Credit (45W) – EVs
 - Restricted to eligible manufacturers
 - Vehicles < 14,000 lbs: up to \$7,500 credit
 - Vehicles > 14,000 lbs: the lesser cost of 30% of base price or \$40,000 credit
 - Placed in service = receipt of the vehicle
 - Alternative Fuel Vehicle Refueling Property Credit (30C) – EV infrastructure
 - Must be in a [census tract identified as non-urban or low-income](#)
 - Credit pays 6% of the cost of infrastructure installed not to exceed \$100,000 per item/property
 - Credit can increase up to 30% if prevailing wage and apprenticeship requirements are met
 - Placed in service = available for use

Technical Assistance + Other Resources

JOET technical assistance and resource page for school districts

- Clean School Buses – Technical assistance for implementation and maintenance of charging equipment, utility connections, bus performance evaluation, operational considerations
 - Clean Bus Planning Awards – Technical assistance for school and transit bus fleet managers to develop comprehensive and customized fleet electrification transition plans. *Open on a rolling basis through Sept. 30.*
 - Case study from Massachusetts – 2016 pilot project that allowed Concord, Cambridge and Amherst to purchase Type C electric school buses and Level 2 bidirectional vehicle-to-grid charging stations.
 - Alternative Fuels Data Center – recorded webinars on working with utilities, vehicle requirements, charging infrastructure and more
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- Public EV Charging Infrastructure Playbook – interactive resources to help communities plan and build the infrastructure needed to support a zero-emission transportation system.
 - Webinar – Aug. 27 at 12 pm eastern

Technical Assistance + Other Resources

- [Clean Cities and Communities Coalitions](#) – connect with a national network to advance clean transportation in your community.
- [Energy Efficiency and Conservation Block Grant](#) – DOE provides “Blueprints” of model projects and programs designed to help local and tribal governments achieve high impact results with limited grant dollars.
 - Webinar: EV Charging Infrastructure for the Community – Aug. 8, 2 pm eastern
 - Webinar: EVs and Fleet Electrification – Aug. 28, 3:30 pm eastern
 - General [technical assistance](#) from DOE on EECBG application support
- *Stay tuned* – [Charging Smart](#) – technical assistance to help local governments establish policies, procedures and programs for deployment of EV charging infrastructure.

EV Policy Considerations

NILC



ELECTRIC VEHICLE CHARGING:

A Primer for Municipal Leaders

BY JIM BROOKS AND KYLE FUNK*

Electric vehicles (EVs) are a growing share of America's fleet through new federal and state investments, as well as charging infrastructure expansion from utility companies and private sector partners. In the Bipartisan Infrastructure Law (BIL) alone, the federal government commits \$7.5 billion for states and cities to build out an additional 500,000 EV chargers across the U.S. With EVs coming to communities, local leaders in cities, towns and villages of all sizes need to be ready to ask the necessary questions about EVs and the electric charging infrastructure that they require.

* Jim Brooks is the Director of Infrastructure, Transportation and Solutions, National League of Cities and Kyle Funk is Senior Program Specialist, Infrastructure, Transportation and Solutions, National League of Cities.



Bring Electric Vehicle Charging to Your Community:

PUT FEDERAL FUNDING & PRIVATE PARTNERSHIPS TO WORK

BY JAMES BROOKS, KELLY AVES AND KYLE FUNK*

The National League of Cities' [Electric Vehicle \(EV\) Charging Primer](#) explores questions local leaders should ask themselves about EV charging infrastructure. This second EV resource examines how local leaders can plan, partner, site and deploy charging infrastructure equitably in their communities. While each community may take a different approach to EV charging, it is important to view each charging location as a potential economic development catalyst that draws people to a location, which may bring economic benefits to surrounding businesses and communities at-large.

Being Proactive to Set Goals for EV Charging

With federal funding flowing from [the Bipartisan Infrastructure Law](#) (BIL), local leaders can be proactive in EV charging. They may install electric vehicle supply equipment (EVSE) themselves or enact ordinances to facilitate private sector installation. Partnership opportunities to deploy EVSEs is another option. This brief will help local leaders determine their best course of action.

* James Brooks, Director of Infrastructure, National League of Cities
Kelly Aves, Senior Program Specialist, Sustainability, National League of Cities
Kyle Funk, Senior Program Specialist, Infrastructure, National League of Cities

- ⚡ How might my city engage with community residents and businesses to prepare for EVs?
- ⚡ Should my city revise zoning laws to allow and/or promote EVSE?
- ⚡ Should my city use public assets such as municipal buildings, parking spaces or rights-of-way for EV charging?
- ⚡ May my municipality levy a fee for EV charging?
- ⚡ Should my city vehicle fleet include EVs?
- ⚡ Under what rules may businesses be permitted to construct or request EVSE in proximity to their locations?
- ⚡ Under what rules may single and multi-family dwellings upgrade electrical systems for EV charging?
- ⚡ How can our city ensure that EVSE is geographically distributed to provide equitable access to EV charging in all areas?





SETTING THE STAGE: START WITH UTILITY PROVIDERS

Across the country different utility structures exist, including investor-owned utilities, municipal-owned utilities and cooperatives. Current best practice recommends that the electric utility serving a jurisdiction, whether public or private, be included in the planning, deployment and installation of EV charging. They also may be installing EV chargers on their own, in addition to providing power to them.

Why Utilities Should be the First Stop

Regardless of ownership structure or the type of EV charger installed, the local electricity provider needs to be involved. Utilities are responsible for installing "make-ready" infrastructure, or upgrades to electricity distribution lines (labeled as EV Service Connection Upgrades and EV Supply Infrastructure in Figure 1). These service connection upgrades give users the ability to draw more power from the grid. They are usually necessary for DC Fast Chargers (DCFC, also known as Level-3 chargers) but are commonly needed for Level-2 home chargers. The installation of second meters by the utility is required to take advantage of separate electricity rates sometimes offered specifically for EV charging.

Local grid capacity

- ⚡ Does the utility's capacity meet current and future peak demand? Will this impact charging placement?
- ⚡ How is the utility forecasting energy demand and EV charging in a service area?
- ⚡ How is the utility planning to meet future demands through greater efficiency or expansion? Will they need to expand capacity and/or distribution, potentially leading to higher rates for residents and businesses?

Rate structure

- ⚡ Does the utility currently or plan to offer different rates for EV charging? Does this differ between residential and commercial customers?
- ⚡ Does the utility currently or plan to offer different rates for EV charging of public transportation or municipal fleets?

- ⚡ Where will EV charging be allowed, incentivized and required? In which zoning areas? [Chelan, WA](#) allows for Level-1 and 2 EV charging in all zones, while Level-3 is allowed only in industrial, highway service commercial, and public lands and facilities zoning districts and requires a conditional use permit.
- ⚡ Under what circumstances should any new construction be EV-ready, capable or installed? [Broomfield, CO](#), has a matrix for new development around requirements for EV-ready, capable and installed for both commercial and residential properties, including multifamily developments.
- ⚡ Where will EV charging be allowed in parking lots and the right of way? Will improvements to parking lots or streets require upgrades to be EV-ready, capable or installed? [Pinecrest, FL](#), requires one installed EV charger in new or redeveloped lots or garages with 25 spaces or more.
- ⚡ If EV-installed is required in public areas, how many spaces will be allocated? If municipalities adopt this approach, it is better to establish a percentage. [Avondale, AZ](#), has Level-2 EV charging minimums for parking spaces. A fixed percentage must be EV-installed (hardware in place) and/or EV-capable (hardware yet to be installed).

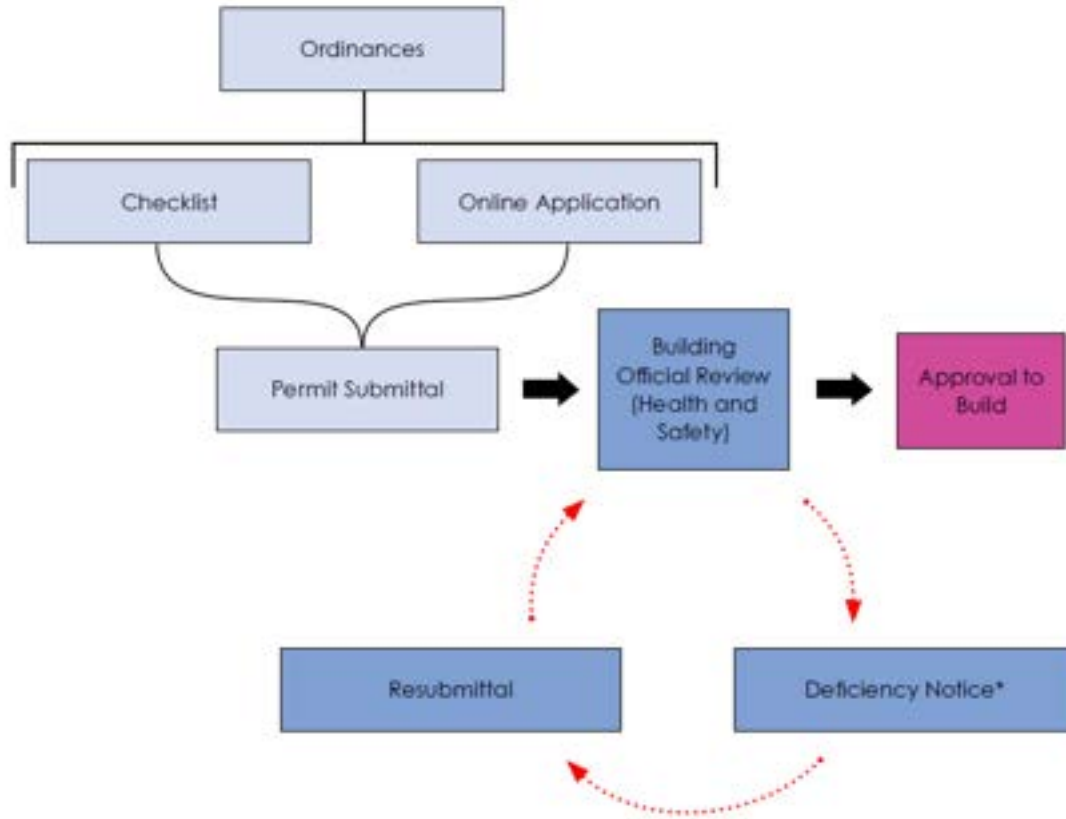


Figure 2: State of California Simple Streamlined Process*



Within stages of the planning process, local governments will want to bring together community voices and use community resources to site charging locations. This outreach should include mixes of the following:

- ◆ Private businesses that are interested in having chargers available for their customers and employees
- ◆ Utility companies
- ◆ Regional and state EV site planners
- ◆ Community groups, especially those supporting renewable energy or environmental justice outcomes



SAFETY ISSUES RELATING TO EVS AND CHARGING

Localities already issue permits for residential and commercial electrical systems and inspect buildings to enforce electricity codes. Mitigating the risk of fire from improper electric hookups is well within the purview of municipal ordinances and setting standards for electric vehicle charging is consistent with existing local oversight.

Enforce Electrical Codes Licensed Installers and Inspections Firefighter Training

- ⚡ What training do municipal firefighters have with respect to the ignition of electric vehicle batteries?
- ⚡ Does the municipality have, or plan to have, a public parking structure in which EV chargers may be installed?
- ⚡ What standards need to be set to ensure that EV chargers are safely installed and maintained?
- ⚡ What level of scrutiny (inspections) will be mandated for EV chargers installed by the private sector?



PARTNERSHIPS WITH THE PRIVATE SECTOR FOR EV CHARGING

Private firms already are active in the business of electric vehicle charging. For many municipalities, partnerships with the electric utility, with regional transportation planning organizations, with adjacent jurisdictions and with private sector vendors will offer the most efficient path to quickly advancing EV charging infrastructure.

1. Does the municipality have its own electrification vision, goals and strategic implementation plan in place? For an example, read the [Baton Rouge, LA, EV Strategic Plan](#) developed with private sector partner Stantec.
2. Will interested private sector partners support EV charging build-out to rural, underserved or disadvantaged neighborhoods or regions?
3. Does the municipality view EV charging as a public service only, or as an economic catalyst incentivizing future development?
4. Planning for strategic electrification and future expansion (energy load analysis of grid-level constraints) reduces the risks of supply chain interruptions for EVSE and inflation-related cost increases. Current demand for EV charging equipment and electrical transformers to provide high-power capacity to the charging station can take more than one year to secure.
5. Because charging stations are essentially energy systems, onsite power generation, such as solar, and energy storage can be integrated to support a city's decarbonization goals, optimize onsite energy and create greater cost efficiencies. Local leaders may want to consider any renewable energy sources as they partner with private companies.
6. What decisions have been made about what a customer pays for electricity - whether charging stations earn revenue, break-even or are subsidized?
7. Will a potential EV charger vendor provide non-proprietary and open-source hardware and software that is not under exclusive management of the vendor?



[All Articles](#)

Finding Funding for EV Charging: A State Comparison



[All Articles](#)

How Cities Can Ensure Equity For Siting Electric Vehicle Infrastructure



[All Articles](#)

Planning EV Charging Stations for Maximum Impact



[All Articles](#)

Building Critical Partnerships with Electric Utilities for Decarbonization

EV Workforce Collaborative

Overview

City and State leaders are presented with a once-in-a-generation opportunity to transform their communities thanks to historic federal investments in infrastructure.

Investments in the electrification of mobility promise to generate well-paying, sustainable, and localized jobs in manufacturing, repair, maintenance, and overhaul of electric vehicle supply equipment.

City and State leaders can leverage the deployment of electric vehicle charging infrastructure as a place-based economic development catalyst.



Tapping into this potential economic engine means addressing several key challenges at once:

Pathways Development

Developing consensus on skill needs as well as pathways towards family-sustaining jobs.

Policy Alignment & Funding

Accessing and leveraging federal funds and programs, and developing shared electrification vision, goals, and strategic plans.

Career Accessibility & Talent Sources

Building better onramps by addressing non-skill barriers workers often face.

Taskforce Membership

- ◆ Stephanie Piko (Co-chair), Mayor, City of Centennial, CO
- ◆ Justine Johnson (Co-chair), Senior Vice President & Chief Mobility Officer, Michigan Economic Development Corporation
- ◆ Kate Kreamer, Executive Director, AdvanceCTE
- ◆ Michael Staley, President, Alabama Clean Fuels Coalition
- ◆ Steve Jurch, AVP, Center for Policy & Practice, American Association of Community Colleges
- ◆ Missy Henriksen, Executive Director, Center for Energy Workforce Development
- ◆ Kianna Scott, SVP of Workforce Development, ChargerHelp!
- ◆ Mahanth Joishy, Fleet Superintendent, City of Madison, WI
- ◆ Jeanette Shaw, Councilor, City of Tiagrd, OR; Director of Policy, Forth Mobility
- ◆ Alexis Sulentic, Senior Manager, Edison Electric Institute
- ◆ Liz Hunt, Principal Project Manager, Electric Transportation, Electric Power Research Institute
- ◆ Jennifer Mefford, EVITP National Co-Chair, Electric Vehicle Infrastructure Training Program (EVITP)
- ◆ Cheryl Sanford, Director of Workforce Programming, MUST Construction Careers
- ◆ Ben Prochazka, Executive Director, Electrification Coalition
- ◆ Matt Stephens-Rich, Director, Electrification Coalition
- ◆ Jim Thornton, Director of Governmental Relations, Georgia Municipal Association
- ◆ Jeremy Ross, International Representative & Government Affairs, International Brotherhood of Electrical Workers
- ◆ Katherine Magruder, Executive Director, Maryland Clean Energy Center
- ◆ Kandee Bahr Worley, Division Chief, Nevada Sustainability & Emerging Transportation
- ◆ Caroline Sullivan, Executive Director, North Carolina Business Committee for Education
- ◆ Naheed Huq, Manager of Economic & Community Vitality, Southeast Michigan Council of Governments
- ◆ Román Partida-López, Senior Legal Counsel for Transportation Equity, The Greenlining Institute
- ◆ Betony Jones, Director, U.S. Department of Energy, Office of Energy Jobs



[All Articles](#)

Charging up The State and Local EV Workforce Collaborative

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