



ELECTRIFY THE SOUTH

A PROGRAM OF THE SOUTHERN ALLIANCE FOR CLEAN ENERGY

ELECTRIC TRANSPORTATION TOOLKIT FOR LOCAL GOVERNMENTS TO ACCELERATE ELECTRIC VEHICLES

Electric vehicles save money by reducing operating costs, while improving public health, and addressing climate change by drastically reducing emissions. Today, there are light, medium and heavy duty electric vehicle (EV) options for fleets and consumers.

The Electrify the South Toolkit makes it easier for decision makers to identify cost-effective, sustainable, and equitable solutions and successful strategies to accelerate electric transportation. The Toolkit curates best-practice local government EV policies and actions from around the country with links to real-world examples. If you need a better understanding of the technology and terminology, we recommend you start [here first](#). *The Toolkit is a living document that is updated biannually to keep pace with the rapidly expanding EV market.*

I. Create Transportation Electrification Plans

Transportation electrification plans provide a framework and roadmap for community-wide EV adoption. Effective plans incorporate different elements from each of the categories below--and more--and support long-term community engagement, fleet procurement, finance, and technology decision making.

Transportation electrification plans articulate priorities, align strategies, and build capacity, all of which can be leveraged to pursue federal and state grants and rebates to support the shift to EVs. State and federal transportation electrification grants are often very competitive and having a strategic plan in place strengthens



your proposal.

The planning process itself can help build your city's electrification capacity. Transitioning city fleet vehicles and supporting the broader community-wide shift to EVs requires coordination across a multitude of departments. It is good to create a team composed of leaders from all the departments that will impact and be impacted by transportation electrification. This team will be positioned to identify opportunities and challenges, and by working together on the planning, will foster internal support. Some departments to consider including from the beginning (no order of importance, not comprehensive):

- **Sustainability**--big picture thinkers, is responsible for advancing sustainability and climate goals, connected to a network of thought and implementation leader
- **Transportation, Motor Pool and Parking**--leads planning for and manages vehicles and vehicle parking, engages across departments and with the community, has access to telematic, transportation flows, and other important data
- **Information Technology**--understands value and use of 'big data', responsible for digital security, well positioned to interact with charging station network providers
- **Development Services**--leads long-term planning for and manages physical spaces, oversees permitting and inspections, understands the interface between vehicles and the built environment
- **Transit**--works to reduce vehicle miles traveled and enhance mobility options for all, coordination will ensure converting to electric buses is explored and broad transportation electrification goals support and address mass transit goals and challenges
- **Budget and Finance**--oversees fiscal integrity and long term financial planning, influence procurement policy, often provide creative ways to evaluate costs and benefits of new technology
- **Economic Development**--works with the community, businesses and institutions to build shared prosperity, opens valuable public-private partnership opportunities, connects to workforce development
- **Communications**--responsible for internal education and external communication and marketing, positioned to increase knowledge and awareness about values of transportation electrification.

Additionally, it is critical to engage your electric utility at the beginning of the planning process to understand and potentially integrate with the local utility's transportation electrification plan. Hopefully, your local utility already has a plan and forming a partnership could inform and support each other's implementation success.

Examples:

- [Raleigh, NC](#)
- [San Antonio, TX](#)
- [Portland, OR](#)
- [Seattle, WA](#)
- [Columbus, OH](#)

II. Deploy Light-Duty Municipal Fleets

Local leaders can establish goals as well as adjust procurement policy to electrify their fleets, saving taxpayer dollars, reducing pollution and providing healthier outcomes for their citizens and the environment. The economic benefits of transitioning to electric fleets is an increasingly compelling reason for many municipal leaders. EVs provide an overall reduction in fuel costs and maintenance requirements so their total cost of ownership is frequently lower than traditional internal combustion vehicles.

A. Electric Vehicle Procurement

Articulate what the municipality or county is trying to accomplish by transitioning to electric vehicles (EV). List out any metrics of success, such as economic, environmental, public health, climate change, or public relations. Modifying procurement processes can result in significantly more EVs being added to a fleet. For example, adding in a requirement to consider the total lifetime ownership costs.

Examples:

- [Charlotte, NC](#) 100% zero-carbon fleet by 2030
- [Broward County, FL](#) purchase of only zero-emissions electric fleet and transit vehicles by 2030
- [Boulder County, CO](#) "electric first" policy

B. Model Green Fleets

Exemplar Green Fleet Guides:

- [Charlotte, NC](#) | Sustainable and Resilient Fleet Policy
- [Atlanta, GA](#) | EV Conversion Plan
- [Ann Arbor, MI | Fleet Policy](#)
- Seattle, WA | Green Fleet [Action Plan](#), [Resolution](#)

C. Tools for Green Fleets

Examples:

- [Atlas Public Policy/Electrification Coalition | DRVE Fleet Procurement Analysis Tool](#): The Fleet Procurement Analysis Tool equips users with decision-relevant information on the financial viability and environmental impact of light-, medium-, and heavy-duty vehicle fleet procurements. The Microsoft Excel-based tool can evaluate a variety of procurement ownership structures, vehicle types, and procurement scenarios. The tool compares procurements side-by-side on a cost-per-mile basis and provides an analysis of cash flows and location-specific lifecycle emissions.
- [Argonne National Laboratory | Alternative Fuel Life-Cycle Environmental and Economic Transportation \(AFLEET\) Tool](#): The tool estimates petroleum use, greenhouse gas emissions, air pollutant emissions, and cost of ownership of light-duty and heavy-duty vehicles using simple spreadsheet inputs.

III. Support Electric Bus and Medium and Heavy-Duty Truck Deployment

Electric buses and medium and heavy-duty trucks have significantly fewer carbon emissions and reduce harmful air pollution in our communities. They provide considerable savings in maintenance and fuel costs, compared to combustion engine buses and trucks. Additionally, the purchase price of electric buses and trucks are falling fast with advancements in battery technology. While electric transit and school buses and medium and heavy-duty trucks have many similarities there are significant enough differences including how they are driven, price points and how they interact with the grid, that we are choosing to separate them and address them individually.

Resources:

Electrify The South Policy Suite // Last Update 4.8.21
ElectrifyTheSouth.org/toolkit



[CALSTART | Drive to Zero's Zero-emission Technology Inventory \(ZETI\) Tool](#)- The Zero-Emission Technology Inventory (ZETI) tool is an interactive online resource to establish a current and shared knowledge base for worldwide commercially available offerings of zero-emission medium- and heavy-duty vehicles (MHDVs). The tool aims to provide fleets and governments with comprehensive information including regions where zero-emission brands are available for purchase, and the timeline over which additional models are expected to become available. Commercial availability is defined as availability for immediate production based on placed orders.

A. Electric Transit Buses

Transit buses are typically driven year round and as such can significantly reduce both fuel costs (up to 75 percent because of their high fuel efficiency) and climate emissions. Every zero emission bus is able to eliminate 1,690 tons of CO₂ over its lifespan. In our region, an electric bus provides CO₂ emissions benefits similar to a diesel bus getting 11-15 MPG. For reference, the typical transit bus achieves 4.8 MPG. Lifetime costs to own are similar to a diesel bus when factoring fuel and maintenance savings over the lifespan of the bus. Federal cost-share funding for transit buses efficiently leverages local funding. Additionally, with proper planning, the fast charging stations used to charge buses can provide needed fast charging hubs to support EV drivers in case of storm evacuation. (See section VI. Incentivize EVs to Accelerate Economic Development). Working with your electrical utility provider is key to addressing charging infrastructure.

Funding:

- See Funding Section

Examples:

- [Greensboro, NC](#)
- [Miami-Dade, FL](#)
 - (Purchase of 33 electric buses)
- [Pinellas Suncoast Transit Authority, FL](#)
- [Raleigh-Durham National Airport, North Carolina](#)

Resources:

- [Accelerating to 100% Clean: Zero Emitting Vehicles Save Lives. Advance Justice. Create Jobs](#)

- [Electric vs. Diesel vs. Natural Gas: Which Bus is Best for the Climate?](#)

B. Electric School Buses

The US school bus fleet is the nation's largest public transportation fleet, moving more than 25 million children on 480,000 buses each school day. One major benefit of electrifying our school buses is a significant reduction of childrens' exposure to harmful pollutants in diesel exhaust from conventional buses. School buses have predictable schedules and large energy storage capacity, opening up opportunities for partnerships with local utilities and making them ideal for electric "Vehicle to Grid" technology. Vehicle to Grid technology enables bus batteries to provide power to the electricity grid while not running, helping to offset demand during peak hours, and increasing resiliency by acting as a stored-energy source during an emergency. Additionally, school districts can electrify their light-duty vehicle fleet and provide charging in their parking lots.

Funding:

- See Funding Section

Example:

- [Virginia Dominion School Bus Pilot](#)

Resource:

- [World Resources Institute | Electric School Bus Initiative](#)

C. Medium and Heavy Duty Trucks

Medium and heavy-duty electric trucks make up only 8% of on-road vehicles, but these trucks are responsible for approximately 32% of on-road greenhouse gas (GHG), or carbon dioxide (CO₂) equivalent, emissions; 63% of on-road nitrogen oxide (NO_x) and 68% of on-road emissions of particulate matter with a diameter of 2.5 microns or smaller (PM_{2.5}). This underscores the impacts of transitioning them to electric and why truck electrification should be a policy priority.

Funding:

- See Funding Section

Example:

- [Ocala, FL Garbage truck pilot](#)

Resource:

- [Calstart | Zeroing in on Zero Emission Trucks](#)- an inventory report on the number of medium and heavy-duty trucks available, market trends and future growth and technology.
- [ZETA | Medium- and HeavyDuty Electrification: Weighing the Opportunities and Barriers to ZeroEmission Fleets](#)

IV. Deploy EV Charging Access & Infrastructure

Fueling EVs require a paradigm shift on how we view transportation, buildings and energy. It is a departure from the traditional combustion vehicle gas station model. Electricity access is ubiquitous and any electric outlet is a potential fueling station. However, modern long-range light, medium and heavy-duty EVs often require specific EV charging stations with hardware and software to meet changing needs. The perceived lack of charging stations is cited as one of the top barriers to purchase of electric vehicles.

Each EV use case (such as public vs fleet, light-duty vs heavy-duty, long-range vs short trips) requires a different charging infrastructure approach. Thus, planning for and implementing EV charging stations requires addressing unique use case needs and removing barriers.

Local governments can install and own EV charging equipment and adopt policies to encourage private investment in fleet, workplace, and public charging infrastructure. The following are key considerations for local governments that are looking to support electric vehicle charging infrastructure deployment.

[GO DEEPER ON INFRASTRUCTURE](#)

Learn more about the different levels of charging infrastructure and the different applications.

Resources:

- Alternative Fuels Data Center | [Electric Vehicle Infrastructure Projection Tool \(EVI-Pro\) Lite](#) Determines the amount of charging needed from the Alternative Fuels Data Center, U.S. Department of Energy.
- County of Santa Clara, CA Office of Sustainability | [Best Practices Guide](#)
- Department of Energy | [Electric Vehicle Charging for Residential and Commercial Energy Codes](#) Technical Brief

A. Applications of City/County Charging Infrastructure

1. Fleet Charging for City/County Vehicles

One option for local governments is to install charging stations to support their fleets' electrification specifically and not designate them for public use. This ensures the stations are always available for their use.

Example:

- [City of Seattle, WA](#)

2. Workplace Charging for City and County Employees

Workplace charging is one way to encourage and support employees who drive electric. It extends their all-electric driving range, enabling those with long commutes or those who lack home charging to drive electric. According to the Department of Energy, an employee with access to workplace charging is six times more likely to drive electric than the average worker. It can attract visitors as well. It can be free or have a subscription fee. Additionally, daytime charging can easily take advantage of low-cost, environmentally friendly solar power.

Examples:

- [City of Seattle, WA](#)
- [City of Atlanta, GA](#)

Resources:

- [U.S. Department of Energy | Sample Workplace Charging Policy](#)
- [U.S. Department of Energy | Plug-In EV Handbook for Workplace](#)

[Charging Hosts](#)

- [Plug-in America | Workplace Charging Resources](#)

3. Community Charging on Public Property

Cities can spur EV adoption in the community by providing public access to EV charging stations. There are examples of both free and pay-to-charge systems.

Examples:

- [Coral Gables, FL](#)
- [Fort Lauderdale, FL](#)
- [Miami Beach, FL](#)

Strategies to deploy City/County Charging Infrastructure

1. Charging as a Service for City/County Vehicles

Charging as a service is another option to consider, where a third party owns, operates and maintains the infrastructure.

Resources:

- [EV Direct | A Duke Energy Non-Regulated Company](#)
- [eIQMobility | A Nextera Non-Regulated Company](#)
- [Electric Vehicle Supply Equipment \(EVSE\) Incentives - Brickell Energy](#)

2. Permit Curbside Charger Installation in Public Right of Way

A challenge for some businesses and residences is the lack of off-street parking at which to install charging stations. Some cities have addressed this issue by permitting installation of curbside EV chargers.

Examples:

- [New Orleans, LA](#)- On-Street Electric Vehicle Charging Resources for the City of New Orleans
- [Los Angeles, CA](#)- The Bureau of Street Lighting has installed Level 2 electric vehicle charging stations on 284 of the streetlights in the City of Los Angeles.
- [Seattle, WA](#)
- [Plug In America/Sierra Club | Template Ordinance](#)

3. Streetlight and Power Pole Charging Access

Cities can use the electricity already wired for LED converted lightposts to easily allow for EV charging. There are devices which can retrofit a light post in a cost-effective manner to allow for charging of the electricity.

Example:

- [Los Angeles, CA](#)

B. Policies to Enable Private Sector Charging Infrastructure Deployment

1. EV-Readiness Policies

EV-readiness policy requires a percentage of parking spaces built to include electrical infrastructure that enables future EV charging. Requiring EV infrastructure to be planned for at the time of new construction is one of the most impactful, cost-effective actions a city can take to facilitate the adoption of EVs. It dramatically reduces the cost to install infrastructure post construction.

Nationwide, cities have passed EV make-ready policies requiring between 20% and 100% of new commercial parking spaces be prepared for the installation of Level II charging. Most cities focus policies on zoning ordinances and land use modifications as opposed to building codes.

There are different tiers of EV-ready policy. EV Capable means installing enough electrical capacity at the panel to support future EV parking spots and raceway to the parking spots. EV Ready includes all the components of EV capable plus adds in a requirement for wiring and a junction box or 240 outlet. EVSE installed means there is a fully functional charging station installed.

Example EV Ready Policies:

- [Orlando, FL](#)
- [Miami-Dade County, FL](#)
- [Coral Gables, FL](#)
- [St. Petersburg, FL](#)
- Atlanta, GA: [Background](#) [Ordinance](#)
- Ann Arbor, MI: [Background](#) [Ordinance](#)

Resources:

- [Southwest Energy Efficiency Project | EV Infrastructure Building Codes Adoption Toolkit](#)
- [Great Plains Institute | Summary of Best Practices in Electric Vehicle](#)

- [Ordinances](#) a guide to EV and EV charger ordinances in the US.
- Santa Clara County | [Plug-in EV Best Practices Compendium](#)

2. Multi-Unit Dwelling Charger Support and Incentives

On average, 80% of charging happens at home or at the workplace. Low or no access to home charging is a well established barrier to EV adoption. For the roughly 26% of Americans that live in multi-unit dwellings (MUDs) like apartment buildings and condos, the majority do not have a power outlet accessible necessary for home charging. As noted in the previous section, it is cost-prohibitive to install the infrastructure post-construction (pricing referenced above), with the result that most MUD residents are denied the benefits of home charging. This underscores the importance of a city or county taking make-ready policies to ensure equity and accessibility for all community members. When new MUD projects are being considered, installation of shared charging equipment at MUD developments should be required or encouraged.

Resources:

- [Florida State Statute](#) protects condo owners from prohibitive rules by Homeowner Associations regarding installing a charging station in their common element parking area.
- [Virginia Statute](#) states no association shall prohibit any lot owner from installing an electric vehicle charging station for the lot owner's personal use on property owned by the lot owner.
- [US Department of Energy | Charging at Home](#)

3. Streamlined Charger Permitting Process

Cities and counties can make the permitting approval process easier for the installation of EV chargers with strategies such as one-day turnaround, online design review services, and expedited inspection for EV charger permits.

Examples:

- [City of Chicago](#), IL Online Permitting Process
- [Many cities in California](#)--from small to large--, pursuant to Assembly Bill 1236

4. Reduce/Waive Permitting Fees for Charging Infrastructure

Cities and counties can reduce the cost of installation of charging by waiving the permitting fees for installation of charging equipment.

Example:

- [Miami Beach, FL](#)
- [Anaheim, CA](#)

5. City/County Charging Station Installation Guidelines and Best Practices

Cities and counties can clear up any confusion around how to go about installing EV charging equipment by providing clear expectations to stakeholders such as step-by-step instructions or installation guidelines. The city/county can maintain hard copies of the resources and digital copies on their website for installation at different types of sites.

Examples:

- [Atlanta, GA EV Readiness Workbook](#)
- [Chicago, IL Multi-Unit Dwelling EV Charger Installation Guide](#)
- [California: Charging Station Permitting Guidebook](#)

6. Enable Workplace Charging for Private Sector Employees

Encouraging workplace charging in your community is another way to build infrastructure. When new projects are being considered for permitting, encourage the property/business owner to consider installing workplace charging. The availability of workplace charging is the third most significant driver of electric vehicle adoption behind vehicle model availability and public direct-current fast charging.

Examples:

- [MetLife](#)
- [TECO](#)

Resources:

- [Plug-in America | Workplace Charging Resources](#)
- [Alternative Fuels Data Center | Workplace Charging for Plug-In Electric Vehicles](#)

C. Best Practices to Support Charging Infrastructure

1. Ensure Interoperability and Open Standards

Primarily, interoperability refers to the ability for EV charging station network companies to use standard communications to allow charging stations to connect to multiple open networks. Open networks use standard communications to allow the owners of compliant charging stations to choose from multiple open networks. This allows owners of charging stations to choose from and switch between different open standards-based networking providers on the same piece of hardware without the need for significant upgrades to existing hardware.

Open Charge Point Protocols (OCPP) are the internationally recognized standards established by the Open Charge Alliance. These standards are intended to ensure interoperability between the main components of EV charging;

- the vehicles,
- charging infrastructure,
- charging software,
- and the electric grid.

Interoperability and open standards provide reliable charging experiences and long term flexibility as vehicles, charging infrastructure and charging software evolve overtime. Thus, OCPP compliance is often a requirement of EV charger grant and rebate programs.

Resources:

- [Open Charge Alliance | International Open Charge Point Protocols](#)
- [Electric Power Research Institute | Interoperability of Public Electric Vehicle Charging Infrastructure](#) paper that details the issue.

2. Pair EV Charging Stations with Renewables

Several companies offer solar canopies to generate the power for charging stations. Solar canopies have the additional benefit of providing an attractive, shady parking place so cars are sheltered from the sun. Battery-backup systems can be added to solar canopies co-located at critical facilities such as water treatment plants or hospitals. EV chargers paired with solar and battery storage can also provide off-grid charging where grid interconnection is an issue.

Example:

- [University of Central Florida, Orlando, FL](#)
- [Stuart, FL](#): 150 car solar canopy parking lot with EV charging stations
- [ARC Solar arrays](#) in North Carolina: solar with battery storage not grid tied

3. Free Up Access to Chargers with Instructional Signage and Code Enforcement

One challenge for public EV 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. Some states, such as Florida, Colorado and outlaw non-EVs from parking in EV-designated spaces, but local enforcement may not happen. Enforcement can be encouraged and in states without such legislation, it can be added to code.

Examples:

- [Miami-Dade County, FL](#) Ordinance
- [Florida State Statute](#)
- [Colorado State Statute](#)

Resources:

- [USDOT FHWA Regulatory Signs for EV Charging and Parking](#)
- [Advanced Energy Parking Enforcement Guide](#)

4. Standardize Wayfinding Signs for Drivers to Locate Chargers

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. Efforts by the Central Florida Clean Cities Coalition are underway to get Florida highways designated as "Alternative Fuel Corridors" by the Federal Highway Administration. Local governments can support these efforts for the

economic benefit of attracting EVs to local businesses or downtown areas offering charging stations.

Resources:

- [Alternative Fuel Data Center | Wayfinding Signage](#)
- [USDOT FHWA | Signing for Designated Alternative Fuels Corridors](#)

5. Incorporate Resilience Planning

It is important to incorporate electric transportation in resilience planning for 3 primary reasons:

1. Adequate charging infrastructure needs to be deployed along evacuation routes to ensure that personal and fleet EVs can evacuate safely;
2. First responder and essential service EVs need access to charging infrastructure backed-up by battery storage to ensure accessibility during power outages (such installations can also serve as emergency charging hubs for communications and other electronic devices);
3. With the proper charging technology and building electrical system integration, stored energy in fleet EVs, especially medium and heavy duty vehicles such as transit and school buses, can be used to power essential services such as shelters.

Example:

- [Florida Energy Office | EV Roadmap](#)

V. Identify Funding for Vehicles and Charging Infrastructure

This section identifies funding mechanisms for light-duty vehicles, buses, medium-and-heavy-duty vehicles and charging infrastructure. There are increasing options for local governments to fund both electric vehicles and charging infrastructure. Financing options, incentives (like rebates and tax credits), public/private programs as well as grants and vouchers have all been used to reduce or cover upfront costs. Of note, funding these projects will require coordination across a multitude of departments that have not traditionally been involved in purchasing decisions. For example, in working out the charging

infrastructure: the public services department may be involved in engaging with the local utility; the public works department may help decide where to site the equipment; the finance department may handle the purchase of the units; and the information technology department may handle the wifi and software.

FUNDING MECHANISMS MATRIX

TYPE	CONSIDERATIONS
Financing	A loan to be paid back over a set time frame, often with interest. Can be a traditional ownership, lease or municipal lease.
Rebate/Tax Credit	Rebates and tax credits are paid back once capital expenditure is made.
Voucher	Vouchers are a credit that is used at time of purchase to lower the overall cost of the vehicle/equipment.
Competitive Grant	For discretionary grant programs, an agency solicits applications and competitively selects projects based on eligibility, evaluation criteria, and departmental or program priorities. May require a percentage match from local funds
Formula Grant	Formula grant programs apportion funding based on formulas in statute. The recipients of these funds can be States, federally recognized Tribal recipients, cities and counties, or transit agencies. Recipients are responsible for determining how the funds are used according to program guidelines. Entities that do not receive formula funding directly (e.g., nonprofits or transportation providers) may be eligible to receive funding from agencies that initially receive the formula grants. May require a percentage match from local funds.
VW Settlement	Funds from a legal settlement that were disbursed based on a state action plan by state agencies to qualified applicants.

CALL OUT BOX FOR BIL

In November 2021, the [Bipartisan Infrastructure Law \(BIL\)](#) was signed codifying the Infrastructure and Investment Jobs Act (IIJA). Consequently, the [Joint Office of Energy and Transportation](#) was created to facilitate collaboration between the U.S. Department of Energy and the U.S. Department of Transportation. The Joint Office will align resources and expertise across the two departments and will help with implementation of programs that seek to deploy a network of electric vehicle chargers and zero-emission transit and school buses. Additionally, the [Bipartisan Infrastructure Law Guidebook](#) was released that contains information about all the programs included in the BIL-including several other electric transportation-related programs.



A. Funding for Vehicles

1. Federal Funding and Financing for Vehicles

The Bipartisan Infrastructure Law includes billions of dollars in both formula and competitive funding available to states, cities, towns, and municipalities across dozens of new and existing programs.

Tools:

- [US Department of Transportation | Funding Matrix](#) This matrix is a list of Federal programs that can fund electric vehicles and infrastructure, sorted alphabetically by agency. The matrix notes the type of EV activities that are eligible for funding under different programs, as well as the eligible entities.
- [US Department of Transportation | Overview of Federal Funding and Financing Programs](#) The following provides a description of each relevant agency and how its mission relates to EV infrastructure.
- [American Climate Cities Challenge | Federal Funding Opportunities for Local Decarbonization \(FFOLD\)](#) This tool helps local governments prioritize and leverage existing federal funding to advance system-wide energy transition goals—from block grants and technical assistance to competitive grants, loans, and revolving loan funds.

Resources:

- [World Resource Institute | How to Help Your Community Fund Electric School Buses in the US](#)
- [PIRG | Report Paying for Electric Buses](#)

2. State Funding For Vehicles

Several Southeast states have used Volkswagen Settlement funds to purchase electric transit and school buses. SACE tracks this data in our Report: Transportation Electrification in the Southeast. Southeast states have awarded \$170 million of the \$427 million allocated to them from the VW Settlement. To date, 55 percent of those awards have gone towards EVs and EV charging.

Examples:

- [VW Settlement North Carolina](#) (settlement)
- [VW Settlement Florida](#) (settlement)

Resource:

- [Alternative Fuels Data Center Incentives](#) allows you to select a state and find state incentives.

[GO DEEPER ON VW SETTLEMENT FUNDING](#)

Some local governments have used VW Settlement funding to fund charging infrastructure.

3. Local and Utility Funding for Vehicles

Your local utility's plan or policies may encourage and provide financial support for certain types of EVs and vehicle classes.

Examples:

- [Orlando-LYNX-OUC-Proterra](#): With Orlando's assistance, LYNX applied funding from a Low or No Emission (Low-No) Grant from the Federal Transit Administration (FTA) to purchase seven battery electric buses, which will be procured through Proterra Inc. Orlando Utilities Commission assisted in the procurement of charging stations and batteries to help LYNX successfully deploy the project.
- [West Palm Beach and FPL](#)
- [Duke NC School Bus Program](#)

4. Financing for Vehicles

a. Fleet Leasing (financing)

Municipalities have realized cost savings from fleet leasing. This works as a traditional lease.

Example:

- New Port Richey, FL- fleet leasing

b. Municipal Leasing (financing)

Municipalities have realized savings with a municipal lease. This allows a third-party leasing company to capture federal tax credit savings and pass it along to the municipality.

Example:

- [Coral Gables, FL](#)
- [Winter Park, FL](#)

c. The Climate Mayors EV Purchasing Collaborative (incentive)

The Collaborative provides a host of resources to assist cities/counties to achieve fleet electrification -- including favorable prices on electric vehicles. Through manufacturer-direct contracts, the Collaborative leverages municipalities' collective purchasing power to lower the cost of EVs and charging stations for public entities. The Collaborative also allows local governments to monetize a portion of the federal tax credit incentive for EVs, via an innovative EV-leasing option. Additionally, the Collaborative can help identify and prioritize which vehicles to transition first.

Link:

- [Climate Mayors Purchasing Collaborative](#)

B. Funding for Charging Infrastructure

1. Federal Incentives for Charging Infrastructure

The Infrastructure Investment and Jobs Act or the Bipartisan Bill has two specific funding priorities for charging infrastructure.

- [The National Electric Vehicle Formula Program](#) will fund \$5 billion for new EV charging along Alternative Fuel Corridors across the country. Learn [more here](#).
- The Charging and Fueling Infrastructure Program is a competitive program that will fund \$2.5 billion in infrastructure along corridors and in communities. EV charging stations are one of the allowed projects.

Tool:

- [US Department of Transportation | Funding Matrix](#) This matrix is a list of Federal programs that can fund electric vehicles and infrastructure, sorted alphabetically by agency. The matrix notes the type of EV activities that are eligible for funding under different programs, as well as the eligible entities.

2. State Incentives for Charging Infrastructure

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Electrification in the Southeast. Southeast states have awarded \$170 million of the \$427 million allocated to them from the VW Settlement. To date, 55 percent of those awards have gone towards EVs and EV charging. In addition to those funds, some states offer tax credits for EVSE.

Examples:

- **Georgia:** [Electric Vehicle Supply Equipment \(EVSE\) Tax Credit](#)
- **Tennessee:** [Vehicle Emissions Reduction and Electric Vehicle Supply Equipment \(EVSE\) Project Funding](#)

Resource:

- [Alternative Fuels Data Center Incentives](#) allows you to select a state and find state incentives.
- [SACE | Transportation Electrification in the Southeast](#)

3. Local Incentives for Charging Infrastructure

Municipalities can offer a rebate for the equipment and labor costs associated with the installation of both public and private EV charging stations.

Municipalities can direct residents toward grant opportunities such as the Charge Up! program, which covers up to 50% of EVSE costs. The funds come from pollution recovery fees.

Examples:

- [Boynton Beach, FL Energy Edge Rebate Program](#)
- [Sarasota County, FL Charge Up! Program](#)

4. Utility Incentives for Charging Infrastructure

Utilities across the region are increasingly investing in charging infrastructure. Utility spending is tracked by SACE in our Electrification in the Southeast report. Some utilities offer rebates on the charging equipment or offer make ready credits.

Resource:

- [Alternative Fuels Data Center Incentives](#) allows you to select a state and find utility incentives.

VI. Establish Education and Outreach Initiatives

Most American drivers are not aware of the cost, public health, and environmental

benefits of driving electric. Educational opportunities can be offered to both staff and citizens to increase understanding of electric vehicles, charging, and the cost savings to taxpayers. Examples include having EV information on your website, providing presentations on EVs and hosting outreach activities such as “ride and drives” at which staff and citizens can ride or drive in electric vehicles.

A. Consumer Education and Informational Materials Website

Cities and counties can partner with non-profit organizations to expand engagement and increase understanding among citizens about the practicality and benefits of electric driving. They can host information on their website about their own EV initiatives as well as links to additional resources, such as the [PlugStar Program](#).

Examples:

- [Savannah, GA](#)-education about EVs
- [Boynton Beach, FL](#)
- [Raleigh, NC](#) -what the local government is doing to promote EVs
- [Largo, FL](#)
- [Chicago, IL](#)

Resources:

Links to trusted partners

- [PlugStar Program](#)
- [Sierra Club EV Guide](#)

Links to incentives

- [Link to Federal tax credits for vehicles](#)
- [Link to Federal incentives](#)
- [Link for State Incentives](#)

[Information link for developers](#)

B. Outreach Events

Partnering with other organizations to host electric vehicle community events are a great way to bring current EV drivers together with community members who want to learn more. Events can take place as showcase events, ride and

drives, or parades. The best way to get people excited about EVs is for them to test drive them. It also offers an opportunity for elected officials to show their support for electric transportation. Driving on Sunshine, a campaign of the Southern Alliance for Clean Energy (SACE) is one way to help educate.

Examples:

- [Capitol Electric Transportation Day Atlanta, GA](#)
- [National Drive Electric Week](#)
- [Drive Electric Earth Day](#)

[GO DEEPER ON DRIVING ON SUNSHINE](#)

C. Presentations

There are several frequently asked questions that should be addressed to provide a high-impact EV presentation. Key pieces of information with links have been compiled here to help facilitate a comprehensive data-based EV presentation.

Resource:

- [Link to Electrify the South EV 101 Presentation](#)

VII. Promote Economic Development by Investing in Electric Transportation

View manufacturing, sales, utility and government investment indicators and electric vehicle (EV) momentum for: [Alabama](#), [Florida](#), [Georgia](#), [North Carolina](#), [South Carolina](#), and [Tennessee](#), and the Southeast region from the "[Transportation Electrification in the Southeast](#)" report released in August 2021 and updated in March 2022 by Atlas Public Policy and the Southern Alliance for Clean Energy.

Regional Indicators through December 2021



MANUFACTURING EMPLOYMENT

Georgia #1 in the Southeast (total)

- Jobs: 23,569
- Increase of 15,784 jobs from July 2021
- 33% of national total



MANUFACTURING INVESTMENT

Tennessee #1 in the Southeast (total)

- Investment: \$23.2 billion
- Increase of \$12.1 billion from July 2021
- 43% of national total



SALES

Florida #1 in the Southeast (per capita)

- Cumulative sales: 253,173
- 49% growth in 2021
- 4.4 EVs sold per 1,000 people
- 2.9% of market share in region in 2021



CHARGING DEPLOYMENT

Georgia #1 in the Southeast (per capita)

- Total: 15,871 ports
- 49% growth in 2021
- 0.27 ports per 1,000 people



UTILITY INVESTMENT

Florida #1 in the Southeast (total)

- Approved: \$335.1 million
- 416% increase in 2021
- 10% of national total



GOVERNMENT FUNDING

Florida #1 in the Southeast (total)

- VW Settlement Awarded for EVs: \$110.5 million
- Federal Low-No Awarded: \$83.9 million
- VW Settlement Remaining: \$316.6 million

All measures include medium- and heavy-duty EVs, except for sales which refers exclusively to passenger EVs. EV manufacturing employment and investment represent commitments made to specific facilities in the state. Utility investment refers to investor-owned utilities only. To understand EV Sales and charging deployment in a national context, please read our report. Source: Atlas EV Hub

There are many economic development benefits of electrifying transportation to the local economy.

1. Tax dollars saved operating electric public fleets can be invested in other areas.
2. Purchasing "local" electricity instead of out-of-state gas keeps transportation dollars circulating in local economies.
3. Increased spending on electricity for transportation puts downward pressure on electricity rates for all ratepayers.
4. Increased spending power of consumers saving \$1,000+/year on reduced fuel and maintenance costs with EVs.
5. Price-stability of electricity vs gasoline/diesel for fleet fuel budgeting.
6. Value of stored energy in EV batteries that can serve the grid to meet peak-demand needs and resilience during an emergency.
7. Ability to pair with solar spurring on another clean energy sector and enabling the cascading economic development benefits.
8. Public health dollars saved by reduced air pollution leading to reduced disease and ER visits and increased productivity.

9. Climate-cost avoidance achieved by reducing transportation carbon emissions and maximized by cleaning the grid in parallel
10. Electric vehicle manufacturing directly creates 7,785 jobs in the southeast. That accounts for 18% of the national total EV manufacturing jobs and a 33% increase over the past 12 months.

Those benefits can be maximized through strategic partnerships that highlight the value the city places on advanced technology solutions.

Resources:

- Atlas Public Policy and SACE: [Transportation Electrification in the Southeast](#)
- MJ Bradley Report: [Plug-in Electric Vehicle Cost-Benefit Analysis: North Carolina](#)

A. Engage Economic Development Offices

1. Public-Private Partnerships

Cities and counties should engage economic development offices to cultivate partnerships that would accelerate EV market development.

Example:

- [Drive Electric Orlando](#) renting an EV from Enterprise allows for VIP parking in theme parks and hotels.

2. Marketing Material

Integrate information into marketing collateral and promote on your website to provide awareness of the city's electric transportation successes both externally and internally.

Example:

- Largo, FL [Charging Station Ribbon Cutting](#)

3. Workforce Development

Engage regional businesses and entrepreneurs to identify demonstration and collaboration opportunities.

Example:

- [Miami-Dade College Tesla START](#) program.

4. DC Fast Charging Hubs

Cities can leverage public-private partnerships to install direct current (DC) fast charging 'hubs' to grow the infrastructure needed to support different types of electric transportation. High powered hubs can also be co-located with transit and school bus infrastructure to maximize efficiency and decrease costs.

i. Electric Taxi, Uber/LYFT TNC Targets

Transportation Network Companies (TNCs) are increasing among cities and their greenhouse gas emissions are also increasing. Cities and Counties should engage directly with TNCs to ensure EV adoption and charging infrastructure is being planned accordingly.

Example:

- [Atlanta, GA](#)

ii. Multi Unit Dwelling and On-Street Parking Targets

Cities and counties are seeing a rise in multi-unit dwellings and many urban neighborhoods lack access to off street parking. In both scenarios, home charging, which accounts for 80+% of an EV driver's charging needs, is lacking. Fast charging neighborhood hubs can serve as an alternative 'home charging' option and make EV ownership accessible to more residents.

iii. Resiliency/Evacuations Targets

When evacuation is necessary, more fast charges will be needed. Hubs or depots designed to serve a specific need most days, such as charging transit buses, school buses, or rideshare, can be utilized for evacuation when needed. Such cross utilization requires careful planning and can make hub installations more economical by spreading the costs over multiple beneficiaries.

iv. Downtown Parking and Congestion Mitigation

Public fast charging and Level II charging hubs can entice EV drivers to the edge of the downtown core to locations such as park and rides from where (electric) shuttles can provide access into the city. This can

reduce the need for additional parking, ease the strain on existing parking, and reduce downtown congestion while providing EV drivers with the benefit of charging.

B. Strategic Charging Incentives for EVs

Locating city-owned chargers in targeted areas within the city can attract EV drivers for a two-fold benefit. It increases spending opportunities for EV drivers in downtown while charging and directs EVs to parking decks/lots that are underutilized. Dedicated EV-designated parking spaces and signage (include training for law enforcement for blocking EV spots [i.e. car must be plugged in in order to qualify]) make charging visible and demonstrate the city's commitment to clean energy. Local governments have taken multiple approaches to parking and charging rates for EVs.

1. Free parking and free charging

Examples:

- [Coral Gables, FL](#) Provides free parking and EV charging
- [Nashville, TN](#) Provides free parking and EC charging

2. Pay for parking but charging is free

This ensures income generation from parking isn't impacted but incentives electric driving in downtown areas. It also allows for non-networked charging infrastructure.

Example:

- [Savannah, GA](#) parking is paid but charging is free

3. Pay for parking and charging

Allows for income generation from both parking and charging. With networked charging infrastructure, it allows adjustable rates depending on the premium of parking.

Example:

- [Miami Beach, FL pay to park and charge](#)

C. EV Group Buy Program

Local governments can partner with local dealerships to coordinate group buy programs for EVs. Group buy programs help raise consumer awareness about opportunities to purchase an EV and help consumers get a good deal.

Example:

- [Green Energy Consumers Alliance](#)

VIII. Center Equitable Electric Transportation

Equity-centered policies reduce barriers and increase opportunity making the benefits of electric transportation more accessible and affordable for all community members. Policies and strategies to advance equitable transportation should center on diversity and equity from the onset, be grounded in engagement with diverse communities and should incorporate community needs and wants. Equitable transportation policy can redress public health burden, like the 66% higher exposure to transportation-related air pollution among Black, Indigenous, and People of Color (BIPOC) communities than white communities. “Equitable transportation electrification ensures that all communities, regardless of race, ethnicity, location, and income level, have increasing opportunities to access and benefit from e-mobility solutions.” EVHybridNoire Public Policy Toolkit.

Resources:

- [EV Hybrid Noire | E-Mobility Public Policy Toolkit](#)
- [Union of Concerned Scientists: Inequitable Exposure to Air Pollution from Vehicles](#)
- [Greenlining Institute: Clean Mobility Equity: A Playbook Lessons From California's Clean Transportation Programs](#)
- [American Lung Association: The Road to Clean Air](#)
- [California's Low Carbon Transportation Equity Programs](#)

A. Meaningful Community Engagement with Diverse Communities

To ensure community wide understanding of electric transportation technology and benefits, local governments should fund and prioritize education and outreach efforts with diverse communities. As transportation electrification decisions and programs are being made, local governments,

school districts and transit authorities should ensure inputs from diverse communities are incorporated during every phase including planning, implementation and evaluation. School districts and transit agencies should support and fund electric buses and communities exposed to the greatest amount of pollution should be prioritized for electrification first.

Example:

- [EVHybridNoire/Duke MLK EV Event](#)
- [Mother Clara Hale Bus Depot, NYC](#)

Resource:

- [Inequity in consumption of goods and services adds to racial-ethnic disparities in air pollution exposure](#)

B. Equitable Charging Infrastructure

When opportunities for citing locations for charging stations occur stakeholders should advocate for equitable access to all communities.

Example:

- [Duke Pilot Florida 10% Requirement for Income-dependent communities](#)
- EV-ready building codes

C. Reducing Barriers and Engaging Diverse Consumers

Provide funding to support the development of community engagement programs for electric transportation including education for car dealers about Electric Vehicles. Local governments can support EV purchases through funding or partnerships to provide vouchers, low-interest financing, and point-of-purchase rebates. These are more effective than traditional rebates for helping lower the initial cost of vehicles, by reducing the amount of financing needed. Also, allowing used EVs to qualify for rebates makes them even more accessible for low-income customers. Additionally, targeting incentives to low-income customers via an income cap directs limited funds to consumers who need the benefit the most.

Examples:

- [OUC Certified Dealer Program](#)
- [San Joaquin, CA Air Pollution Control District](#)

D. Carshare Programs

Partner with a community development organization to develop an EV car share pilot for members of the community with limited transit opportunities.

Example:

- [EV Car Sharing and Mobility Hubs in Affordable Housing Pilot](#)
- [Forth Community Electric Vehicle \(CEV\) Project](#)
- [Blue LA Electric Car Sharing](#)
- [Green Raiteros Car Sharing Program](#)
- [Sacramento Metropolitan Air Quality Management District Our Community CarShare \(OCCS\) Pilot Program](#)

IX. Engage Your Local Utilities

Local utilities are essential partners - after all, they provide the electricity. Because of their role, engaging with your local utilities should be a first step. Local utilities can be partners in increasing EV adoption rates. They can offer EV friendly rates where it is cheaper to charge an EV at low-use times of the day and can install charging infrastructure through pilot programs. Additionally, municipalities can partner with local utilities to create education and outreach events and programs. Cities and counties that have municipal utilities have a unique opportunity to work closely with their electricity provider to develop pilot programs and provide strategic direction.

A. EV Charging Infrastructure

The local utility will be in a good position to help draft EV-ready policies and design incentives. Also, the utility needs to know where you are installing the charging stations so that it can take early action to ensure that its distribution system is ready to deliver the power. The utility may have ideas on where to direct that infrastructure, may be willing to install it for free for certain fleet uses, or may have solar projects in the works that would be easily paired with an EV charger. Finally, the utility may have experience with different EV

chargers or installers that would suggest criteria for offering an expedited permit, and when more cautious scrutiny may be needed.

Examples:

- [Savannah, GA and Georgia Power “Georgia Make Ready”](#)
- [Duke North Carolina “Make Ready Credit Program”](#)

B. Utility Incentives

Some utility companies offer incentives for either purchasing the charging equipment or an electric vehicle.

Examples:

- [Knoxville Utilities Board Charger Rebate](#)
- [Orlando Utilities Commission EV Rebate](#)

Resources:

- [Alternative Fuels Data Center Incentives](#)
- [West Palm Beach-FPL Electric School Buses](#) | Florida Power and Light and West Palm Beach partnered on Florida's first electric school buses. The pilot will explore vehicle to grid technology using the bus batteries and provide data that will inform future applications.

C. Utility EV-Friendly Rates

Many utilities offer rates that encourage EV drivers to charge during the time of day when the utility has surplus energy. This does several things. It helps the utility to keep a consistent outflow of energy without having to turn on additional generation. It benefits all utility users by selling more energy but in a more consistent pattern. It benefits EV drivers because they are charging their EV when rates are lower.

Example:

- [Georgia Power, GA](#)
- [Florida Power & Light](#) tariff pilot DCFC

D. Utility EV Charger Programs

Utilities programs focus on supporting the market through initiatives such as rate design, utility-owned charging infrastructure and rebates to customers for the installation of non-utility-owned chargers.

Example:

- [Duke Energy](#) EV Program
- [Florida Power and Light](#) EVolution Program
- [TVA/TDEC](#) TN Corridor Fast Charging Network
- [OUC](#) ChargeIt OwnIt Program

X. Support State Actions

EV-supportive state policies help drive adoption and are necessary if the Southeast is to catch up to the EV deployment levels of leading regions. There are several actions that states can take to support and enable local government electric transportation goals. Likewise, local governments can lean into advocating for state policies that will support goals.

A. Leading by Example

Master Planning

States can establish targets for share of EV adoption and deployment of EVSE. These targets act as market signals for increased demand to auto manufacturers.

Examples:

- [Alabama EV Infrastructure Plan](#)
- [Florida Energy Office EV Roadmap](#)
- [Florida EV Infrastructure Master Plan](#)
- [North Carolina EO 80](#)
- [North Carolina ZEV Plan](#)
- [Drive Electric Tennessee EV Roadmap](#)

B. State Policies

1. Policies to Electrify State Agency Fleet

States can establish minimum EV targets for state agency fleet purchases. Fleets move the market forward faster because of scale. Incorporating more EV models onto the state purchasing list will help local governments get new models that are needed to meet their fleet needs.

Example:

- [NC DOA Motor Fleet ZEV Plan](#)
- [NC EO 246](#) calls for deep decarbonization targets and boosting electric transportation. The EO calls for a decarbonization pathways analysis across all sectors, the development of a clean transportation plan for light, medium and heavy duty EVs, and the inclusion of the social cost of greenhouse gas emissions in decision making across state agencies. Importantly, the EO is centered on equity and justice including the creation of equity leads in each cabinet agency and a focus on workforce diversity, health equity, and meaningful community participation.

2. Policies to Electrify Bus Fleets (School and Transit)

States can develop transit and school bus EV transition plans. They can help facilitate necessary steps for electric fueling including effective rate design and allowing cost recovery for utility connection. They can also incentivize purchase of buses and charging infrastructure by coordinating federal and state funding.

Example:

- [California](#)

3. Policies for Consumer Adoption/Direct Sales and Service

Some states have enacted laws to do away with the traditional dealership model to support consumer choice, decrease vehicle costs to consumers, and support new manufacturers and the EV market in general. Across the Southeast, laws governing direct-to-consumer sales vary. Florida, Georgia, Tennessee, and North Carolina all allow for direct EV sales and service. North Carolina and Georgia only allow limited direct sales and service only for Tesla, with North Carolina permitting Tesla to operate six sales and service centers and Georgia two.

4. Uniform Signage Requirements

Uniform signage requirements make a consistent design across the state and would make compliance easier for local governments to enforce. Additionally, states could allow private businesses to inform the public of EVSE availability on state-owned signage similar to gas station signage now.

Resource:

- [USDOT FHWA Signing for Designated Alternative Fuels Corridors](#)

5. Encourage Utility Investment

The Southeast is significantly underrepresented in utility funding for transportation electrification per capita, representing 18 percent of the U.S. population but approximately one percent of utility investment to date. States that have higher levels of utility investment tend to have stronger EV markets. These investments include “make-ready” infrastructure (which includes service connection upgrades and new supply infrastructure to bring power to the charging equipment), utility-owned and operated charging infrastructure, charging station rebates, incentives to promote equity and access, workplace charging and fleet electrification including school and transit buses.

Resources:

- Atlas Public Policy and SACE: [Transportation Electrification in Florida](#)
- Atlas Public Policy and SACE: [Transportation Electrification in North Carolina](#)
- National Association of Regulatory Utility Commissioners: [Electric Vehicles: Key Trends, Issues, and Considerations for State Regulators](#)

6. Charging Infrastructure Investment (Funding and Financing)

States can promote additional infrastructure by developing EVSE funding and grant programs. They can leverage federal funds and identify alternative state funding and financing programs.

Example:

- [New Jersey It Pays\\$ to Plug In Program](#)

7. Adopt ZEV Standards

Under section 177 of the Clean Air Act, California was empowered to adopt stronger air quality standards. Now, eleven other states have chosen to adopt these more stringent standards in lieu of federal standards. The ZEV standards component requires that automakers supply a certain percentage of ZEVs to that state or purchase credits from other automakers to meet the state requirements. Thus, California and other “ZEV program states” claim 60 percent of all U.S. passenger EV sales while making up only 31 percent of the population. This action would help local governments gain access to additional models currently available.

Resources:

[More information on ZEV](#)

[Colorado ZEV Website](#)

8. Join the Transportation and Climate Initiative

The Transportation Climate Initiative (TCI) is a bi-partisan regional collaboration that seeks to improve transportation, develop the clean energy economy, and reduce carbon emissions from the transportation sector. The collaboration began in the Northeast and now engages states along the eastern seaboard from North Carolina to Vermont. At the center of TCI is a market-driven, carbon cap-and-invest strategy. The “cap” in cap-and-invest puts a price on carbon and leverages market dynamics to achieve guaranteed emissions reductions at relatively low cost for consumers and businesses. Joining TCI could generate upwards hundreds of millions of dollars to fund transportation climate initiatives.

Resource:

[The Transportation Climate Initiative \(TCI\)](#)

9. Adopt the Advanced Clean Truck Rule

The [Advanced Clean Truck](#) (ACT) regulation will ensure more zero-emission trucks are available for sale by requiring truck manufacturers to produce an increasing percentage of zero-emission

vehicles over time. Medium and heavy-duty trucks makeup only around 10% of the nation's vehicles, however, they [are responsible for](#) 28% of carbon emissions from the transportation sector, 45% of on-road NOx emissions, and 57% of direct fine particulate. These vehicles are a climate problem and negatively impact public health, especially for frontline communities impacted first and worst by air pollution.

Resources:

[Advanced Clean Truck \(ACT\) Rule](#)

[Report: Ready for Work Now Is the Time for Heavy-Duty Electric Vehicles](#)

C. Best Practice Standards

1. Interoperability and Open Standards

States can require public EVSE to be open to all users regardless of membership to a specific charging network and should maintain an open-source data protocol for projects receiving public funding.

2. Consumer Incentives

State-administered tax credits or rebates or utility-administered rebates to reduce the upfront cost of EVs and/or charging have been utilized to incentivize EV purchases. Vehicle rebates have been implemented in 15 states and charging rebates are active in 29. None of the southern states have a state-administered tax credit at this time. Georgia had a \$5,000 tax credit between 2013 and 2015. EV sales in Georgia fell 65% throughout 2015 when the program ended.

Resource:

Atlas Public Policy and SACE: [Transportation Electrification in the Southeast](#)

XI. Explore Case Studies

We have identified case studies from various US cities and linked them here. Some have total cost of ownership data that can be useful for a local government considering fleet transition. They also outline the entire transition process and address pain points.

A. Columbus, OH

Columbus, OH has been a regional leader providing a plethora of resources on their website. This page Smart Columbus website has resources focused on making it simple for Columbus region municipalities to electrify their fleets.

Link:

- [Columbus Website Fleet Page](#)

Resource:

- [Smart Columbus Develops Innovative Procurement Contract, Overcomes Barriers to Fleet Electrification](#)

B. Seattle, WA

The city of Seattle has been working towards electrification for many years. Two important resources on their website are their Electrification Blueprint which lays out a path for Seattle to electrify transportation at scale. Also, the Green Fleet Action Plan included total cost of ownership calculations for transitioning the fleet to electric.

Link:

- [Seattle TE Webpage](#)

Resources:

- [Green Fleet Action Plan](#)
- [Transportation Electrification Blueprint](#)

C. Denver, CO

Denver has many resources on their website including information about their electric fleet plan, charging infrastructure locations, EV-ready code, electric car share program and electrifying ride sharing.

Link:

- [Denver EV Projects Webpage](#)

Resource:

- [Denver EV Action Plan](#)

D. Minneapolis, MN

The city of Minneapolis conducted a green fleet study in 2017. The report provides recommendations and cost analysis.

Resource:

- [City of Minneapolis Electric Vehicle Study \(with cost analysis\)](#)