FLORIDA'S ELECTRIC VEHICLE INFRASTRUCTURE DEPLOYMENT PLAN

August 2022

FDOT

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1 INTRODUCTION

This Electric Vehicle Infrastructure Deployment Plan (Plan) is Florida's framework for implementing the National Electric Vehicle Infrastructure Program (NEVI) to invest funding for EV infrastructure improvements to address charging gaps identified in the market. The framework described in this five-year Plan supports the goals and objectives of not only the State's long-range transportation plan, the Florida Transportation Plan (FTP), but also the State's Electric Vehicle Infrastructure Master Plan (EVMP).

Implementation of the NEVI program in Florida will build on the existing electric vehicle (EV) charging network, which consists of both market-driven charging stations as well as 170 direct current fast chargers (DCFC) along 1,200 miles of the most traveled corridors in the State funded by the VW Settlement. DCFCs provide the fastest charging capability currently on the market. Charging speeds are minutes as opposed to Level 2 chargers that require hours to complete a full charge.

The FTP, the single overarching plan guiding Florida's transportation future, identifies the need to develop transportation systems that increase mobility, provide accessibility, enhance Florida's communities and environment, and are safe and resilient. Updated every five years, the FTP is a collaborative effort of State, regional, and local transportation partners across the public and private sectors.

The Florida Department of Transportation (FDOT) released the EVMP in 2021 meeting the Section 339.287, Florida Statutes (F.S.) requirements for FDOT to coordinate, develop, and recommend a Master Plan for the development of EV charging station infrastructure along the State Highway System (SHS). The EVMP provided an important foundation for the development of this Plan.

EVMP Objectives

SUPPORT	ENCOURAGE	SERVE
both short-range and long-range EV travel	**the expansion of EV use in the State**	**evacuation routes in the State**

The EVMP was developed through extensive public outreach, including seven outreach webinars with over 150 stakeholders, and supports the FTP goals to enhance Florida's environment and strengthen Florida's economy by advancing the use of EVs. It serves as a starting point for public and private entities to identify the challenges and opportunities for EV charging infrastructure investment and also as a guide for future legislation and public engagement. EV infrastructure includes the hardware technology used to charge an electric vehicle as well as site amenities where available.

State Characteristics

Florida's roadways are some of the most traveled in the nation serving nearly 22 million residents[1] and over 122 million annual visitors[2]. Figure 1 displays Florida's projected population and visitor growth.

Florida Population and Visitor Growth
(2019-2030)

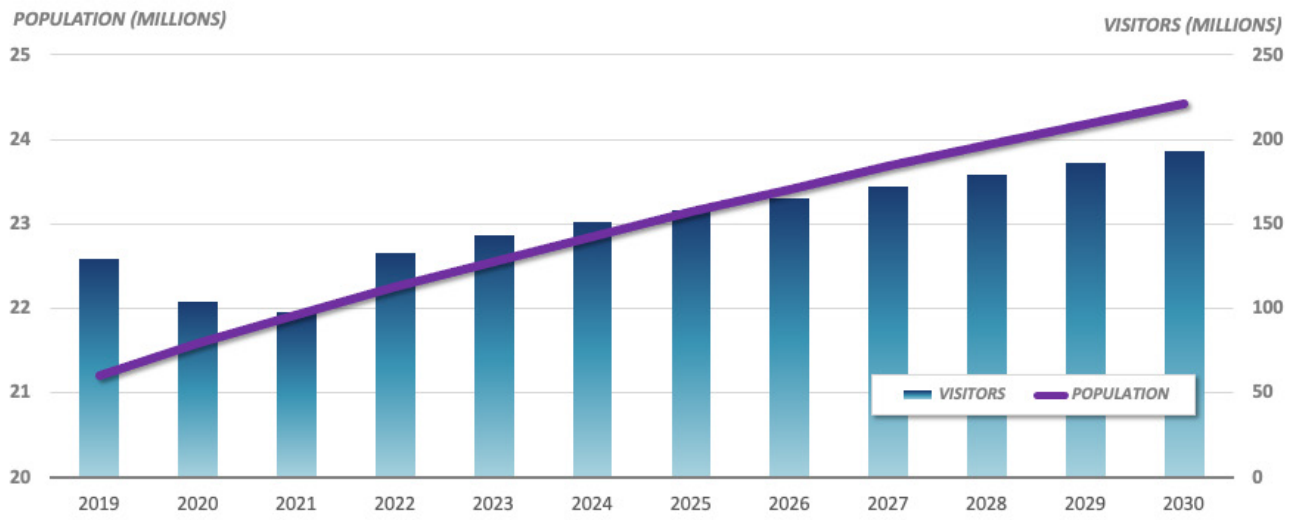
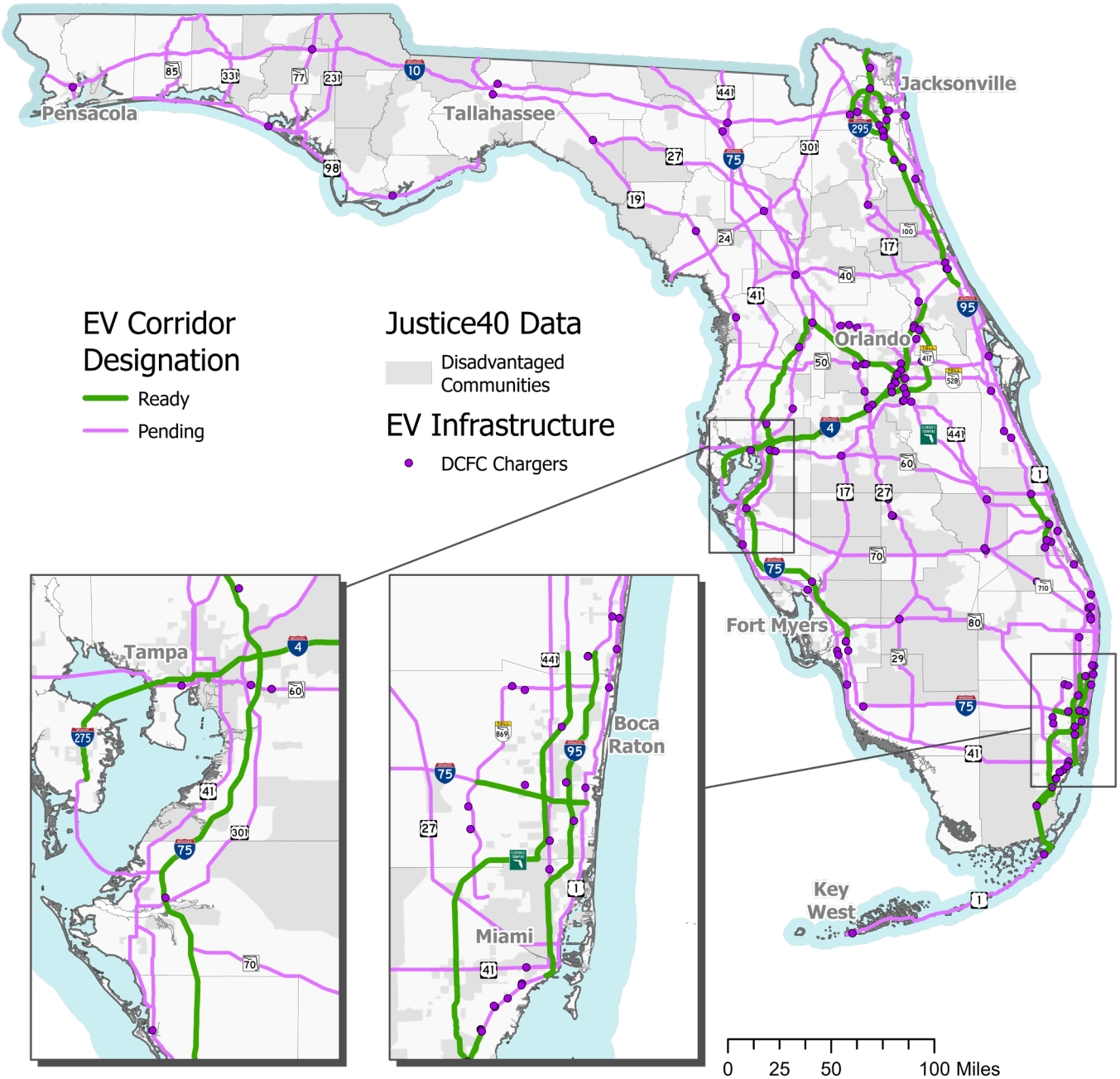


Figure 1: Florida Population and Visitor Growth[3]

Although Florida consumes around eight billion gallons of gasoline annually[4], it also claims the **second-highest number of EV sales in the nation[5]** and offers **more than 1,300 publicly available DCFC ports** and 900 publicly available Level 2 chargers[6]. The State EV market has experienced growth in EV sales and installation of new chargers. Since 2020, the number of available DCFCs increased by 55 percent, which offers a ratio of 49 EVs per DCFC port statewide. Recognizing this trend and keeping Florida's anticipated future EV charging needs in mind, the State added more than 4,000 miles to its EV alternative fuel corridor (AFC) designated network through the recent Round 6 AFC nomination cycle[7]. **This will allow the State to utilize funds from the NEVI program on EV charging gaps identified in the market over the next five years.**

Figure 2 shows the existing DCFCs within one mile of a designated AFC[8]. To meet the NEVI requirements for buildout, EV charging stations must be located within one travel mile of the designated AFC, are no more than 50 miles apart, and have at least four DCFC ports that can provide 150 kilowatt (kW) of power simultaneously. Corridors with EV charging stations that meet all the requirements are labeled "corridor-ready" and the corridors that that do not meet this criteria have been designated "corridor-pending".

In addition to the NEVI requirements for buildout, states must also comply with the Justice40 initiative. The Justice40 initiative in Executive Order 14008 aims to identify communities that are traditionally underserved or disadvantaged. Figure 2 shows the disadvantaged communities in Florida as provided from the Justice40 mapping tool.



(1) Designated segments support hurricane evacuation routes, economic development, tourism, rural needs, and/or freight

Source: https://afdc.energy.gov/stations as of 7/19/2022
Justice40 Data from USDOT as of 5/10/22

Figure 2: Florida's DCFC Locations within one-mile of an AFC

2 PLAN VISION AND GOALS

This Plan serves as a guide for how EV funds will be invested across the State over the five-year timeline of the NEVI program. The Plan's procurement strategies include a transparent, market-based, competitive approach that balances required regulation with customer experience, as described in Section 5, Implementation. The FTP and EVMP are two foundational documents that have informed the development of this Plan and influence how the State of Florida will address NEVI requirements. Both the FTP and EVMP address the need for a network of convenient, reliable, affordable, and equitable charging infrastructure.

The goals of the Plan used the EVMP as a foundation and were updated to focus on implementation. The following goals will guide Florida as it moves forward to buildout an EV network.

- Expand energy sources for transportation fuels.
- Position Florida as a national leader in EV infrastructure implementation.
- Expand EV charging access to all users in Florida.
- Anticipate changes in travel choices and transportation technologies towards EV adoption.
- Enhance Florida's overall transportation system, including roadways within rural and urban disadvantaged communities.
- Support emergency evacuation.

Achieving these goals will help Florida meet its target of 100 percent completion of a built-out network for EV charging infrastructure that is convenient, reliable, equitable, and accessible. Investments made with NEVI funds will aim to close network gaps by spacing DCFC sites no more than 50 miles apart and provide at least four ports at each location along the AFC. Private sector investments in EV charging infrastructure will continue during this deployment. Federal fiscal year 2022 (FFY 22) activities will focus on planning. Once the Plan is approved by the Federal government and FDOT can access NEVI funds in FFY 23, focus will be on procurement and implementation of charging infrastructure to maximize build out. As infrastructure is added to the charging network, planning efforts will shift to conducting performance evaluations. By the end of the five-year period, operations and maintenance will be the dominant activity of the program. A timeline of activities is presented in Figure 3. Opportunities to increase the network will be monitored and explored throughout the NEVI cycle. Status reports of Florida's Plan will be provided as needed over the next five years to monitor the EV infrastructure deployment progress.

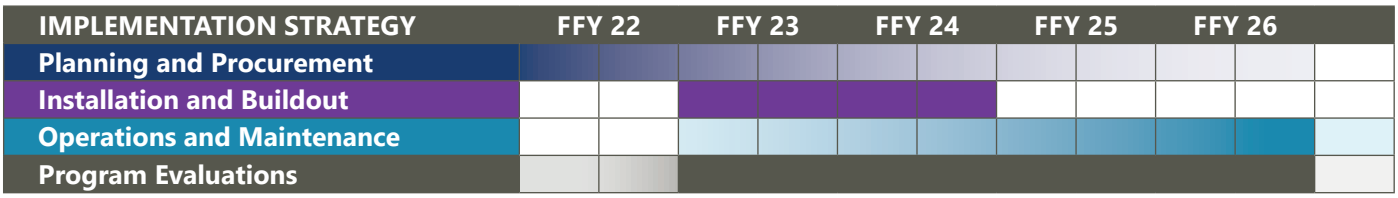


Figure 3: Funds Deployment Timeline

This Plan is supported by three implementation strategies:

IMPLEMENTATION STRATEGY 1:

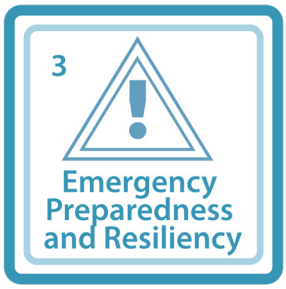
Planning an equitable, reliable, and future-proof network:

Lead the effort to develop and deliver the process for the buildout of Florida's EV infrastructure, which further supports a national network of DCFC sites. **Advancing the initiatives outlined in this implementation strategy requires continuous performance measurement and evaluation as well as coordination and partnerships.**

IMPLEMENTATION STRATEGY 2:

Installation and operations to build out the network:

Procure contracts to install and provide for long-term operations and maintenance to ensure the successful deployment of a national network of convenient, reliable, and accessible DCFC infrastructure. **The success of this implementation strategy is predicated on a competitive procurement process in collaboration with partners delivering innovation and best value through sustainable, market-informed solutions.**



IMPLEMENTATION STRATEGY 3:

Emergency preparedness and resiliency:

Provide accessibility to reliable DCFCs during emergency events. This is paramount to the safety and mobility of Florida's residents and visitors. Resiliency of the charging infrastructure along evacuation corridors will be addressed through inclusion of backup systems. Solutions for the overall system will include solutions for storm hardening. **This implementation strategy supports furthering consumer confidence and enhanced EV adoption.**

These strategies are supported by implementation actions and activities that are described in greater detail within Section 5, Implementation.

3 CONDITIONS ANALYSIS

Existing and Future

Successful Plan implementation requires an assessment of the State's physical features as well as the existing market for EVs and their infrastructure. This section of the Plan outlines the State's geography, terrain, climate, and land use and travel patterns along with an analysis of the current EV infrastructure within the State.

Current State EV Infrastructure Needs

The EVMP provided an overview of EV ownership and market adoption by vehicle type. Florida is second in the nation in terms of both EV adoption rate and availability of DCFCs (1,300). Ownership and adoption rates are the highest in the major urban areas of Jacksonville, Orlando, Tampa, and Miami. Although EV sales are below one percent of all vehicle sales in the State, in a moderate growth scenario their adoption is projected to represent 20 percent of vehicles by 2040 in the State. Even a conservative rate of adoption of EVs will require an intensive build out of charging infrastructure.

State Geography, Terrain, Climate, and Land Use Patterns

Florida is a peninsula that lies primarily between the Atlantic Ocean and the Gulf of Mexico and is bordered along the north by Georgia and Alabama. It is the southernmost state of the 48 contiguous states. Most of the State is located at or near sea level, with portions of Northwest Florida reaching elevations up to 345 feet above sea level.

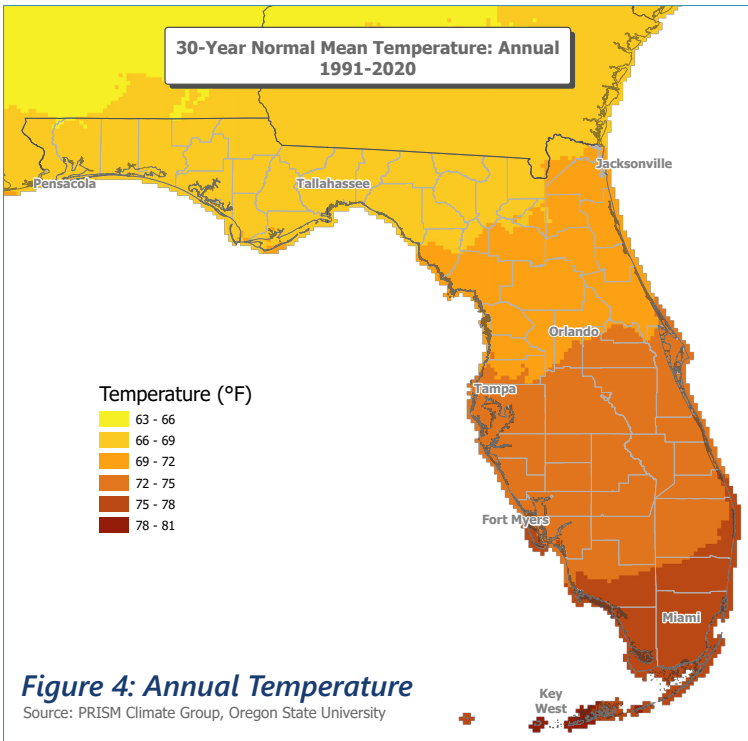


Figure 4: Annual Temperature
Source: PRISM Climate Group, Oregon State University

Florida's climate is considered humid subtropical, which translates to cool winters with hot, humid summers. The average daily temperature (70.7 degrees Fahrenheit (ºF)) is ideal for EV vehicles and infrastructure, with lows reaching into the 20s and highs above 100 ºF. While Florida does not receive measurable snowfall, frost does occur occasionally during the winter months. The average annual precipitation is 53.7 inches, with the most rain occurring between June and August. Figures 4 and 5 summarize the annual temperature and precipitation experienced within the State.

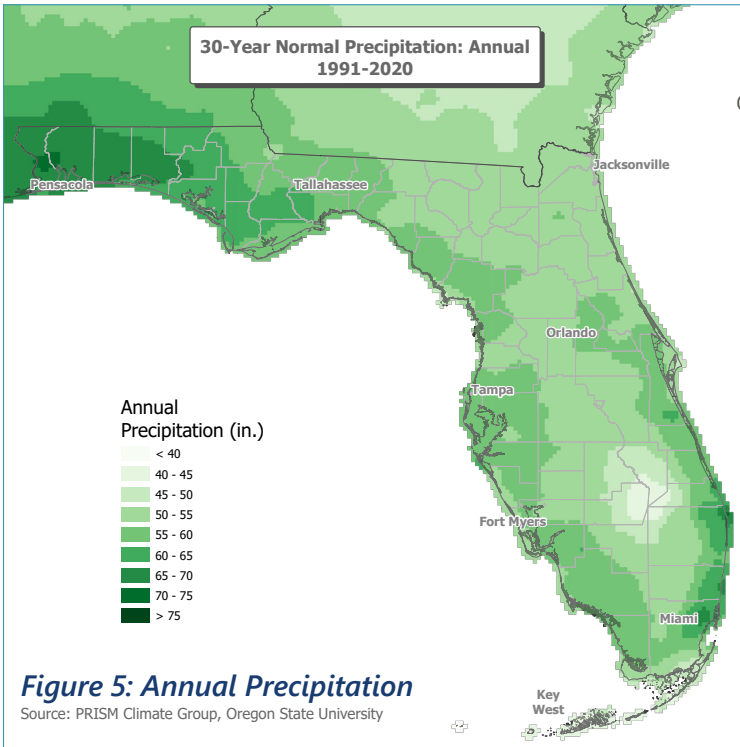


Figure 5: Annual Precipitation
Source: PRISM Climate Group, Oregon State University

The State is also prone to tropical disturbances during the Atlantic hurricane season between June and November. Large volumes of lightning strikes tend to occur during summer storm events with Central Florida receiving more lighting strikes than any other area in the United States. Tornadoes are prevalent in Florida, but typically do not reach very strong intensities.

Since 2000, Florida has been affected by 79 tropical or subtropical cyclones[9]. During Hurricane Irma in 2017, nearly seven million residents were evacuated, illustrating the need for a robust and resilient network to provide alternative fueling for EV owners.

Following the 2017 storm season, FDOT developed *Hurricane Irma's Effect on Florida's Fuel Distribution System and Recommended Improvements*, with several recommendations, such as mobile charging, included in this Plan. Responding to the need for EV charging during evacuation events, significant investments have been made by FDOT along these corridors to support safe and efficient mobility during emergency events. This includes the expansion of EV charging to support alternative fuel choices across the transportation network.

Travel Patterns

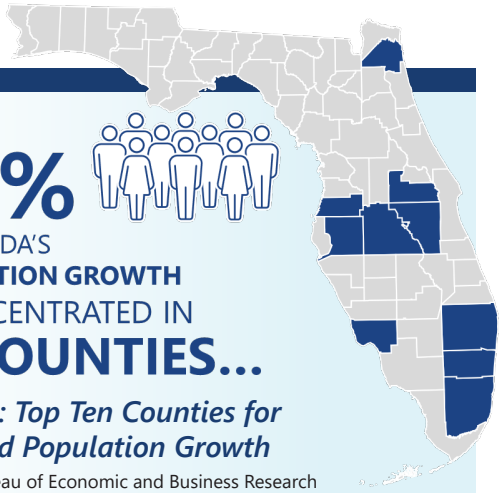


Figure 6: Top Ten Counties for Projected Population Growth

Source: Bureau of Economic and Business Research

Land use across the State includes a mix of density, intensity, and uses. Eighty-eight percent of the State's population resides in urbanized areas. The projected 10 fastest growing counties are shown in Figure 6 and continue to experience increasing density. The State contains several emerging areas including Fort Myers/Naples, Ocala/The Villages, and Tallahassee, which continue to grow. These areas rely heavily on personal vehicles for mobility needs. Remaining areas are classified as rural. Within the rural areas are three designated Rural Areas of Opportunity which are defined as rural communities or regions that have been adversely affected by extraordinary economic events or natural disasters that present a unique economic development opportunity of regional impact.

EV travel patterns are expected to occur similarly to how people and goods move around the State currently. Visitors travel Florida's roadways from out of state to reach destinations such as beaches, public spaces, theme parks, and cruise-, air-, and space-ports. Residents travel along these same roadways between regions for work and leisure. Seasonal travel patterns include temporary residents who reside in Florida over the winter months from out of state as well as holiday visitors. As noted in the Introduction, Florida is anticipated to welcome over 122 million visitors this year (2022). Additionally, nearly 90 percent of the State's commuters travel by car[10]. Figure 7 shows Florida's Annual Average Daily Trips across the Strategic Intermodal System (SIS) overlaid on top of Justice40 areas that are traditionally underserved or disadvantaged. The SIS provides interregional travel and is comprised of corridors and hubs that serve as the backbone for moving Florida's people and goods.

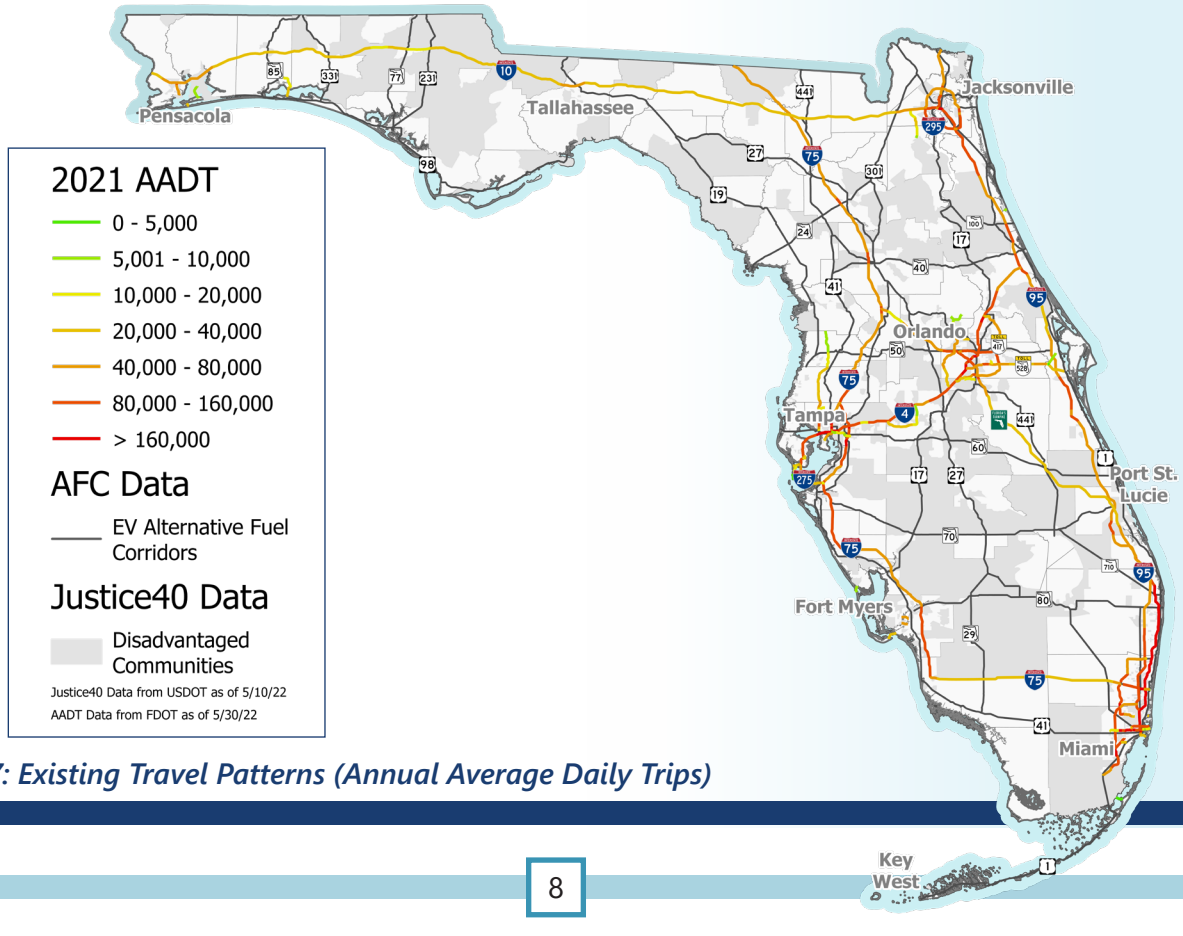


Figure 7: Existing Travel Patterns (Annual Average Daily Trips)

Current Market Conditions

The global market for EVs has been growing with significant increases in EV sales. Automobile manufacturers are increasing production with many expecting that upwards of 50 percent of global sales will be electric by 2030. It is projected that by 2025, there will be 81 models available to consumers. As of July 2020, Florida had a 0.41 percent adoption rate based on analysis of registered vehicles. Figure 8 illustrates the projected adoption of passenger and light duty EV in Florida.

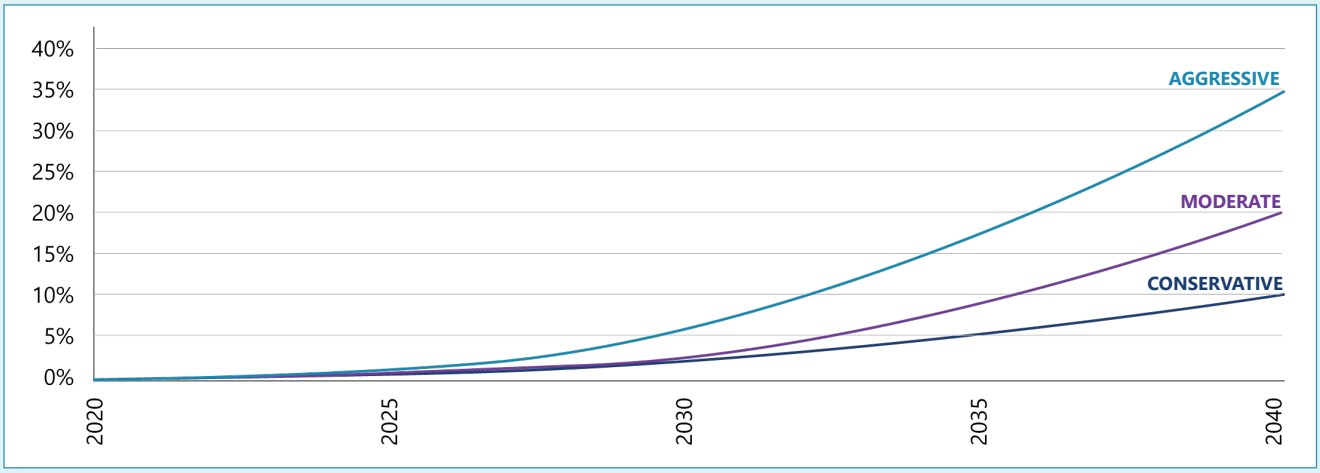


Figure 8: Projected Passenger and Light Duty EV Adoption in Florida

Source: Florida's EVMP

Electric Vehicle Freight and Supply Chain Considerations

Fleet conversion is an ongoing activity in Florida with fleet managers working through where and how to charge their vehicles. Florida's local governments and private industry have invested in EV conversions with many local plans and funding avenues available to expand the charging network, furthering accessibility and adoption of alternative fuel vehicles. The following provides considerations when working through this process and making these decisions. Light-duty fleet owners may benefit from off-peak charging using the DCFC infrastructure.

For private light-duty fleets:

(rental cars and delivery vans)

- **The majority of vehicles will be light-duty, but some may be medium-duty vehicles; the charging infrastructure for each is the same.**
- **Primary charging demands will be met with on-premises (i.e., depot, yard) Level 2 chargers.**
- **Secondary charging demands may be met using off-site publicly accessible DCFCs as needed.**

For private heavy duty fleets:

(commercial trucks)

- **Heavy-duty fleet vehicles currently use heavy-duty EV charging equipment which operate at greater than 150 kW.**
- **Heavy-duty vehicles will have their own dedicated EV charging network and may use Extreme Fast Charging soon (1 megawatt (MW)).**
- **Light-duty and medium-duty chargers will not be compatible with heavy-duty EV charging infrastructure.**
- **The heavy-duty EV charging infrastructure network will be primarily located along the State Highway System (SHS), likely at truck stops, rest areas, intermodal hubs, and distribution centers.**

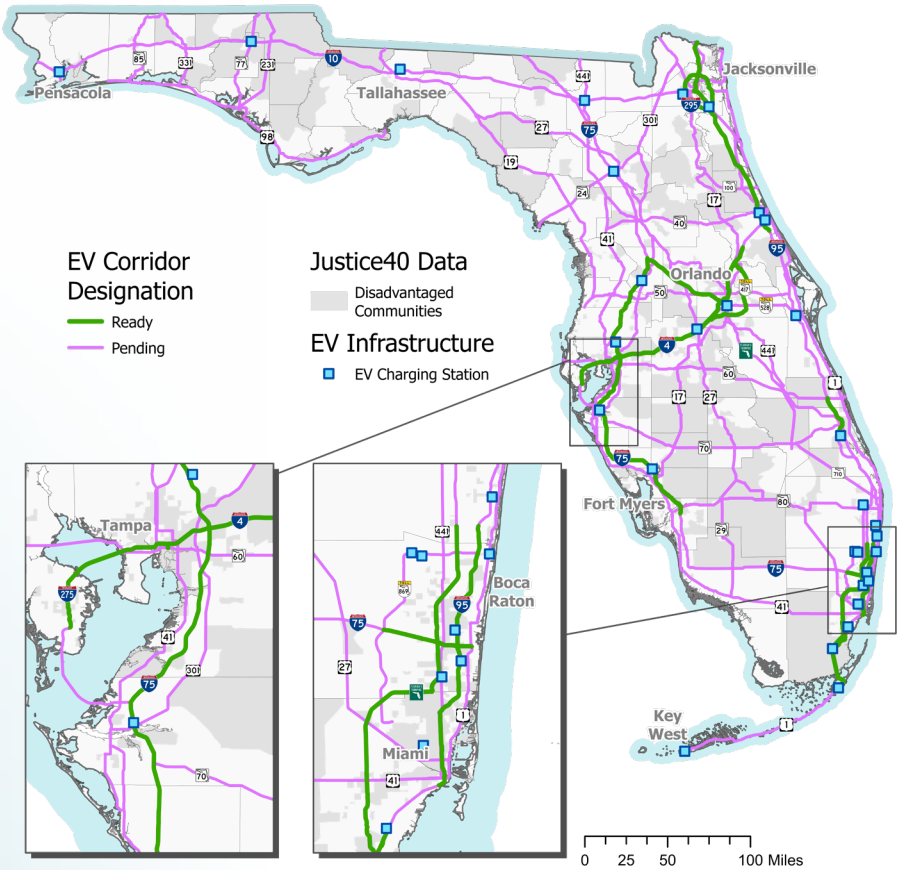
Public Transportation Considerations

Transit agencies throughout Florida have been proactive in executing fleet conversions to EV, including Pinellas Suncoast Transit Authority as well as Leon County Star Metro. Transit vehicles serve transportation disadvantaged during emergency evacuations, which could include the use of the DCFC network. Considerations for EV include:

- Heavy-duty equipment for transit bus charging typically ranges between 150 kW and 350 kW.
- A 100-bus depot requires approximately 5 MW of power to support 30 to 35 150 kW chargers.
- Charging is primarily conducted within the bus depot, but in-route charging is extending operations.
- When in-route charging is not feasible, multiple buses may need to cover longer routes traditionally served by one bus using another fuel source.
- Battery size and charging strategy are critical to ensure maximum in-route time.
- Transit fleet fuel sources have evolved from petroleum (diesel) to natural gas and now electricity, requiring substantial investment to deliver fuel to vehicles.
- School bus electrification, with fixed distance routes, should be included as the larger EV asset strategy.

AFC Networks

In a continued effort to expand the EV infrastructure network, the State submitted new proposed alternative fuel corridors as part of the Round 6 AFC nomination cycle. Figure 9 summarizes the designated AFC network for EV. Status changes from "corridor-pending" to "corridor-ready" are also included and reflect new AFC Round 6 compliant stations added along the National Highway System (NHS).



(1) Designated segments support hurricane evacuation routes, economic development, tourism, rural needs, and/or freight.
(2) EV Charging Sites shown are compliant with station requirements in the Round 6 AFC Nomination guidance

Source: https://afdc.energy.gov/corridors as of 5/17/22
Justice40 Data from USDOT as of 5/10/22

Figure 9: 2022 AFC Designations

Known Risks and Challenges

Large scale deployments of technology infrastructure have a variety of inherent risks. The nationwide expansion of charging infrastructure may impact availability of Buy American materials and skilled labor. Emerging and evolving technology could pose challenges to a consistent consumer experience across the network. Incorporation of long-term operations and maintenance considerations furthers the risk to overall program schedule and cost. These risks will be monitored and managed throughout the five-year Plan.

The following outlines the known risks and challenges associated with the deployment of this Plan.

Technology

- Rapid technological change of EV charging infrastructure and EV technology.
- Availability of components, including microchips, conduit, fiber optic communication cable, and transformers.
- Consolidation of equipment and service providers creating lack of interoperability with ownership change.
- Ever evolving cybersecurity threats and standardization for consumer, grid, and network protection.

Schedule

- EV charging infrastructure availability and supply chain issues and Buy America requirements.
- Utility infrastructure readiness (transformer locations) and alignment with planned upgrades.
- Non-uniform permitting requirements among municipalities.
- End of term funding and ongoing maintenance and operations.
- Contractor resource availability of skilled and trained labor.

Cost

- State financial obligations for long-term operations and maintenance funding.
- Cost escalations due to large scale deployment resulting in material availability shortages.
- Lack of qualified contractors to perform EV charging equipment installation resulting in less competition.

4 EV CHARGING INFRASTRUCTURE DEPLOYMENT

Florida will receive approximately $198 million in NEVI formula funds through the Federal fiscal year 2026. These funds will be used to grow the network of EV chargers by installing, maintaining, and operating DCFC sites for the duration of the five-year program. Working in tandem with our industry partners to fill in the gaps and identify innovative solutions that support charging in rural, disadvantaged, and under served areas, Florida's goal is for the market to continue to self-support after the program ends. Should new or continuing Federal funding become available to support EV charging infrastructure after the five-year period, it would likely be utilized towards operations and maintenance to ensure the success of the network.

Early investment of NEVI funds will focus on the installation of sites with subsequent funding supporting the operations and maintenance over the term of this Plan. Strategies for deployment are addressed in Section 5, Implementation.

Funding considerations include the use of performance-based payments established on site revenue models. This model may include variable payments based on site utilization (charging sessions), with lower utilized sites receiving higher operational funding, to a limiting amount. This will encourage competition and participation by the industry to install and maintain EV charging infrastructure in locations that may not initially warrant investment.

Funding Sources

The required non-Federal match for NEVI formula funds is 20 percent. Florida anticipates using FDOT's toll development credits. The use of private-sector matching funds may be used as a prioritization criterion during the competitive contracting process.

Additional formula funds that may be applied to continue the EV charging network build out include:

National Highway Performance Program

Surface Transportation Block Grant Program

Congestion Mitigation & Air Quality Improvement Program

Carbon Reduction Program

Completing the EV Charging Network

Florida will continue to work towards buildout of the EV network across the State over the life of the program and monitor corridor upgrades annually as private and public investments continue to occur.

Increases of Capacity/Redundancy along the Designated AFC

Several strategies will be implemented under the NEVI program to continue to build out EV infrastructure along the AFC network. While NEVI guidance states to prioritize investments along the Interstates, intersections with State roads are also prime candidates for charging locations. Candidate sites will be determined through the ongoing public and partner engagement to identify innovative solutions that support EV charging in rural, disadvantaged, and under served areas, identify gaps where there is a benefit to the site owner, alignment with State priorities, and the need is not addressed elsewhere. Florida's primary focus for buildout will be along the Interstate system.

As EV adoption continues, sites can be prepared for future expansion beyond the current 150 kW criteria by installing additional conduit, providing adequate space for EV charging equipment, and addressing needs to support future growth. Stations can be upgraded to meet future demand without incurring substantial additional costs. Provisioning the electrical capacity for upgrades during the initial charger construction can help support future demand changes, resulting in drastically lower upgrade time and cost. Future-proofing can also be achieved by installing a high-powered charging station and then metering output power until full capacity is necessary. For example, a host site may install a 350 kW charger but limit its output to 150 kW until fast charging demand increases. When more power is needed, minor component exchange/ additions allow the station to produce more power.

As part of the deployment strategy, FDOT is coordinating the existing and planned distribution and transformer capacity with electric utility providers along the designated AFCs. The Homeland Infrastructure Foundation-Level Data maps provide electric company substation data, and is used as a baseline for evaluation. The substation characteristics that are considered include the distance from the corridor, the voltage provided, and any existing transmission lines in the vicinity of the corridor.

State, Regional, and Local Policy

Pursuant to Chapters 350 and 355, F.S., Florida is classified as a "traditionally regulated" state with public electric utilities serving designated service territories under the jurisdiction of the Florida Public Service Commission (FPSC). The FPSC exercises its regulatory authority through rate setting, oversight of bulk power grid planning, safety inspections, and ensuring the availability of reliable service. To ensure future power demand and new government mandates are planned for and considered, a 10-year site plan for each utility is generated and reviewed annually. This provides an opportunity for the State to collaborate with FPSC to plan for future electricity needs for EV infrastructure demand.

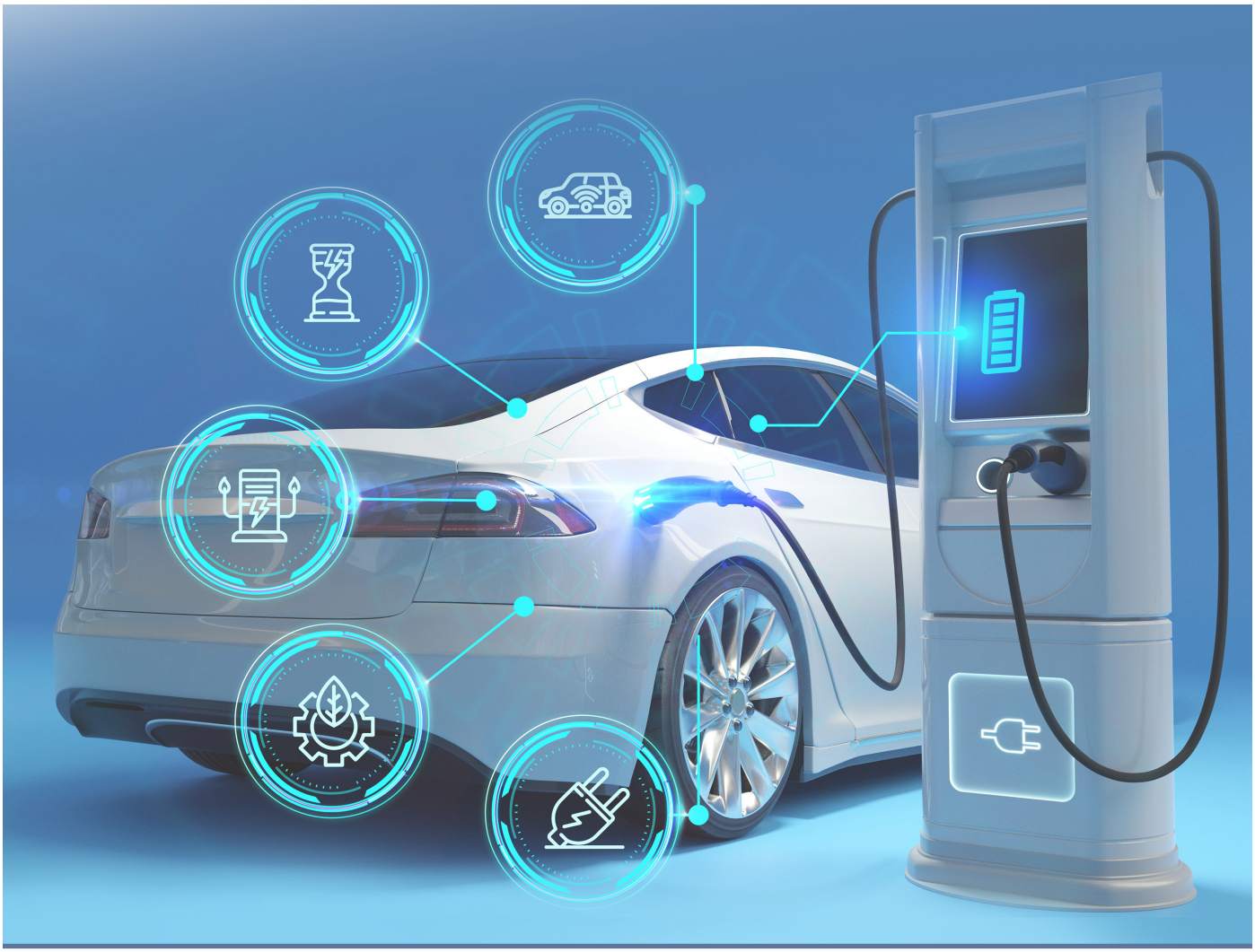
The FPSC regulates the four investor-owned electric utilities in the State: Duke Energy Florida, Florida Power & Light, Florida Public Utilities Company, and Tampa Electric Company as shown in Figure 10. Rates are set based upon the cost of service and providers are permitted to recover the capital investment, operating costs, and a reasonable return on their investment within their rates. Together, these four investor-owned utilities serve approximately 75 percent of the State's population. The FPSC does not regulate the rates and service quality of municipal or rural cooperative electric utilities.

A rural electric cooperative utility is a joint venture organized to supply electric energy to a specified area. Such ventures are generally exempt from the Federal income tax laws. The rates and revenues of rural electric cooperative utilities are regulated by their elected cooperative officers. Most cooperatives have

been financed by the Rural Electrification Association. While 16 electric cooperatives (Figure 11) serve approximately 10 percent of Florida's population, their service territory covers more than 60 percent of Florida's landmass.

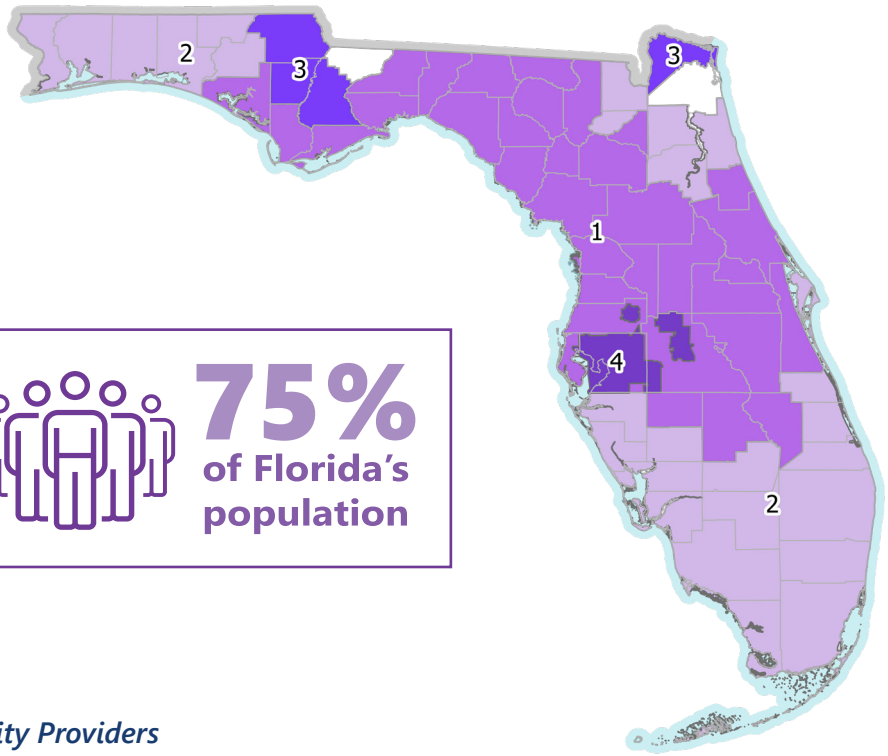
A municipal electric utility is an electric utility system owned or operated by a municipality engaged in serving residential, commercial, or industrial customers, usually within the boundaries of the municipality. Municipally owned utility rates and revenues are regulated by their local governing body. There are 33 municipal electric utilities in the State as shown in Figure 12, that serve about 15 percent of the State's population.

Through coordination and development of multiple efforts leading to this Plan, electric utilities agree that EV ownership is going to continue to rapidly increase in the coming years. In the FPSC's Review of the 2021 Ten-Year Site Plans of Florida's Electric Utilities[11], reporting electric utilities estimate growth could approach nearly 700,000 EVs and 29,000 DCFC within the State by the end of 2030. Despite this relatively rapid growth rate, Florida's electric utilities estimate an impact of less than 1.5 percent on net energy for load by 2030. Florida's electric utilities are well equipped for this increase in energy use. At a minimum, Florida electric utilities must maintain a 15 percent reserve margin, and Florida's three largest electric utilities have a 20 percent reserve margin.



INVESTOR OWNED ELECTRIC UTILITY PROVIDERS

1	Duke Energy Florida, LLC
2	Florida Power & Light Company
3	Florida Public Utilities Company
4	Tampa Electric Company



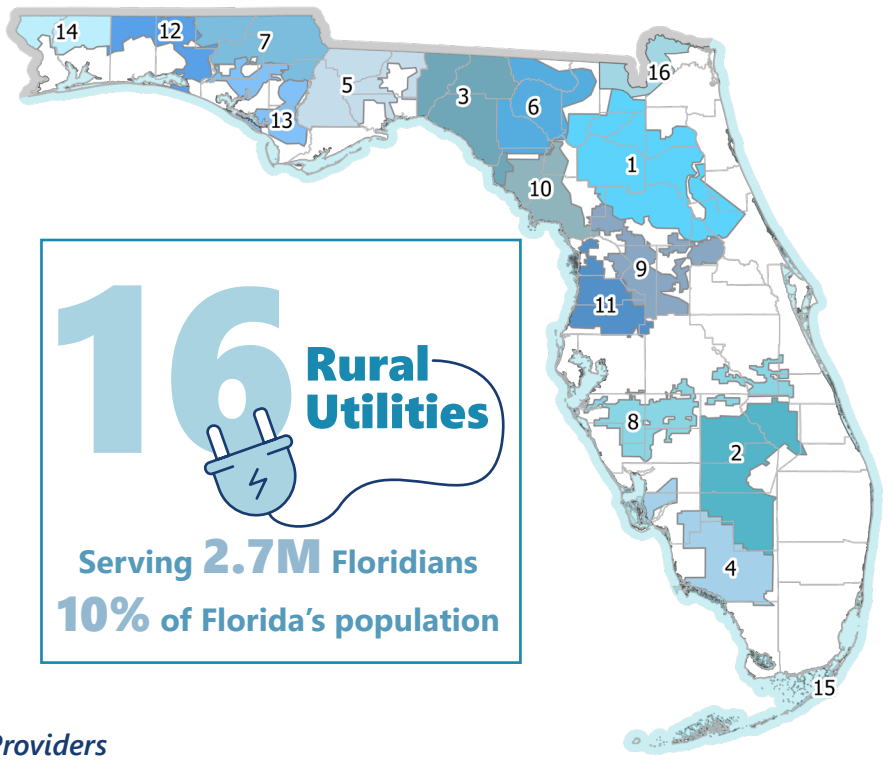
4 Investor Owned Utilities

75% of Florida's population

Figure 10: Investor Owned Electric Utility Providers

COOPERATIVE ELECTRIC UTILITY PROVIDERS

1	Clay Electric Cooperative, Inc
2	Glades Electric Coop, Inc
3	Tri-County Electric Coop, Inc
4	Lee County Electric Coop, Inc
5	Talquin Electric Coop, Inc
6	Suwannee Valley Elec Coop Inc
7	West Florida El Coop Assn, Inc
8	Peace River Electric Coop, Inc
9	Sumter Electric Coop, Inc
10	Central Florida Elec Coop, Inc
11	Withlacoochee River Elec Coop
12	Choctawhatche Elec Coop, Inc
13	Gulf Coast Electric Coop, Inc
14	Escambia River Elec Coop, Inc
15	Florida Keys El Coop Assn, Inc
16	Okefenokee Rural Electric Membership Corporation



16 Rural Utilities

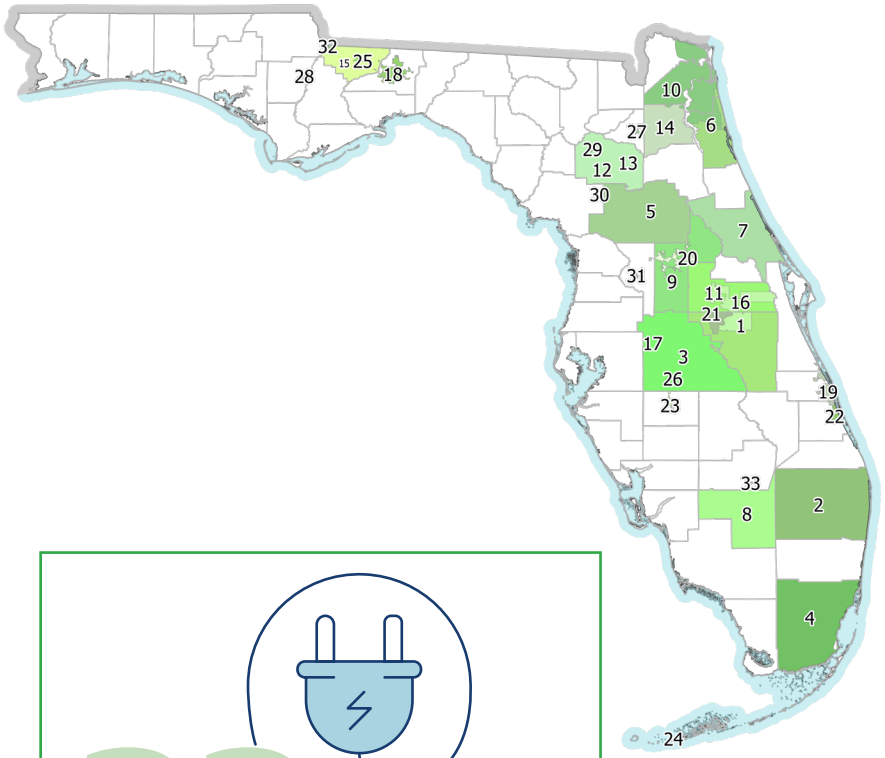
Serving **2.7M** Floridians

10% of Florida's population

Figure 11: Cooperative Electric Utility Providers

MUNICIPAL ELECTRIC UTILITY PROVIDERS

1	Reedy Creek Improvement District
2	City of Lake Worth
3	City of Bartow
4	City of Homestead
5	City of Ocala
6	Beaches Energy Services
7	City of New Smyrna Beach
8	City of Clewiston
9	City of Mount Dora
10	JEA
11	City of Winter Park
12	Gainesville Regional Utilities
13	City of Newberry
14	City of Green Cove Springs
15	Havana Power & Light Company
16	Orlando Utilities Comm
17	City of Lakeland
18	City of Tallahassee
19	City of Vero Beach
20	City of Leesburg
21	Kissimmee Utility Authority
22	Fort Pierce Utilities Authority
23	City of Wauchula
24	Utility Board of the City of Key West
25	City of Quincy
26	City of Fort Meade
27	City of Starke
28	City of Blountstown
29	City of Alachua
30	City of Williston
31	City of Bushnell
32	City of Chattahoochee
33	City of Moore Haven



33 Municipal Utilities

Serving 3M Floridians
15% of Florida's population

Figure 12: Municipal Electric Utility Providers

In 2012, the Florida Legislature created an exemption for EV charging. Section 366.94(4) F.S., states that ***"The provision of electric vehicle charging to the public by a non-utility is not the retail sale of electricity for the purposes of this chapter. The rates, terms, and conditions of electric vehicle charging services by a non-utility are not subject to the regulation under this chapter."*** *As such, the process for the installation and provision of EV charging by a non-utility is not subject to regulation by the FPSC. Additionally, Section 627.6535, F.S., states that insurance companies may not impose surcharges on EVs based on factors such as new technology, passenger payload, or weight-to-horsepower ratio.*

5 IMPLEMENTATION

Effective implementation of this Plan is key to successful attainment of the identified goals. This Plan will carry forward Florida's current momentum of DCFC installation, which set the stage for the network build out. ***In less than a year, publicly available DCFC has grown from 870 ports to over 1,300 ports.*** *This Plan will focus on maximizing U.S. made EV equipment and Buy America requirements. To enhance the efficiency in implementation of the program, evaluation is underway to deploy sites in a manner that drives competition while fostering innovation from the contracting industry.*

The EVMP identified initial investment areas for DCFCs in the State through a gap analysis. Multiple factors were combined to find the areas around the SHS roadway intersections that had high potential to fill the gaps in the DCFC network. This gap analysis was updated with NEVI criteria to inform Plan development and to ultimately meet the NEVI program goals:

- DCFC sites have at least four charging ports with 150 kW per port concurrently;
- DCFC sites are within the one-mile driveshed of an interchange; and
- DCFC sites are no more than 50 miles apart.

Existing DCFC sites with less than four ports or less than 150 kW were identified as potential locations for early upgrades in the program. Figure 13 summarizes the results of the updated gap analysis and potential early site upgrades.

This Plan will fill these gaps through the efficient deployment of DCFCs as outlined in the following by the defined Implementation Strategies, Actions, and Activities to build out the AFC network.

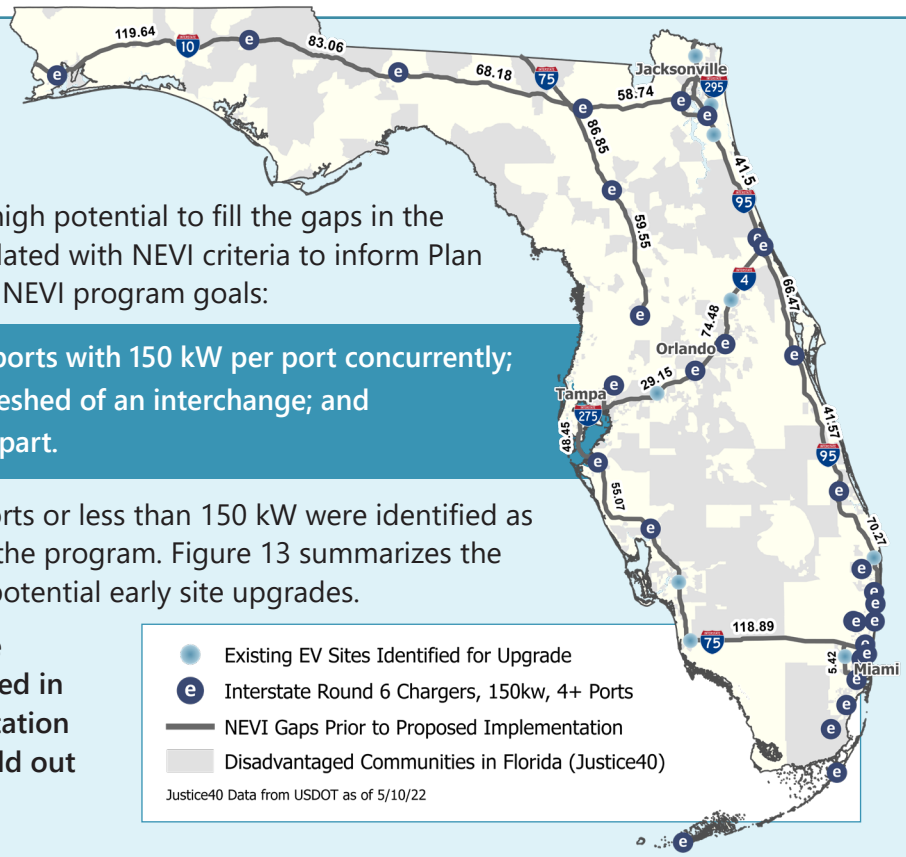


Figure 13: NEVI Corridor Gaps and Justice40

GOAL
Strategy
Action
Activity

This Plan is organized into three main implementation strategies. Each implementation strategy includes supporting actions and defined activities for accomplishing the State's overall goal to build out a robust EV infrastructure network that is designated "corridor-ready" over the next five years. ***Florida is committed to leading the nation in providing a statewide network of convenient, equitable, affordable, reliable, and accessible EV charging infrastructure.*** *Refer to Section 12, Program Evaluation, for associated Plan performance measures.*

Planning

FDOT's role is to facilitate the inclusion of and the ability to incorporate electrified mobility into State transportation infrastructure. The following planning actions and associated activities will develop a future-proof network that is resilient, equitable, accessible, and reliable.

The planning implementation strategy focuses on developing the data-driven, statewide criteria, and evaluation of success with performance analytics as leading indicators informing the need to evolve with market trends. The goal of the planning implementation strategy is to continuously measure, collaborate, and update over the duration of the five-year Plan to provide efficiency and effectiveness in delivery of the EV charging infrastructure.

1 ACTION

Collect, maintain, and leverage information and data, including performance measures, to inform decision-making

- Establish initial conditions and continually measure the performance of factors contributing to the success of this Plan.
- Monitor trends and conditions impacting future deployments, including adoption rates, weather patterns, land use, and roadway improvements.
- Update AFC nominations as necessary and track the progress of this Plan.

2 ACTION

Collaborate with partners to support the development and operations of the EV charging infrastructure network

- Continue stakeholder engagement with electric utilities, EV infrastructure providers, site hosts, trade associations, environmental groups, and other interested parties.
- Partner with skilled resources and talent providing agencies, including universities, technical colleges, CareerSource Florida, and others, to plan for training and workforce development.

3 ACTION

Plan for procurement of EV charging infrastructure

- Develop and advertise a request for information (RFI) to solicit input from the industry.
- Prepare procurement documents, including minimum technical requirements and criteria for installation, operations, and maintenance, that meet all State and Federal requirements.

4 ACTION

Monitor potential risks that can delay efficient and effective deployment

- Monitor nationwide availability of and inflation impacts on EV infrastructure components and consider waivers, such as Buy America, to facilitate material acquisition.
- Utilize existing programs such as FDOT's On-the-Job Training services to strengthen the available workforce programs for EV infrastructure construction.
- Perform analyses to "right size" contracts while still ensuring adequate competition.
- Develop an approach to environmental and other required documents.

Installation and Operations

FDOT's role is to facilitate the procurement of resources to install, operate, and maintain the EV charging infrastructure to build out the Interstate and AFC network. The following contracting actions and associated activities will be used to develop procurement documents that are logically sequenced with respect to deployment readiness, transparent to the industry, and result in equitable participation and training of workers.

The installation and operations implementation strategy focuses on further developing the contractual requirements which clearly define the program goals, objectives, and performance expectations. This implementation strategy builds on the efforts of the planning implementation strategy and furthers collaborative engagement with partners. The goal of the installation and operations implementation strategy is to provide a detailed schedule of activities that maximizes the deployment effectiveness of this Plan while maximizing value to the State. The implementation requirements will follow Federal guidelines for minimum standards.

1 ACTION — Coordinate with stakeholders to identify needs and gaps within the overall EV network

- Develop a defined approach to site deployments that considers the stakeholder needs, infrastructure requirements, open and publicly accessible locations, and site readiness. These considerations include:
  a. Completion of Interstate build out followed by AFC network by build out of the AFC network consistent with Federal guidelines for minimum standards.
  b. Rural, disadvantaged, and underserved areas.
  c. Hurricane evacuation routes and AFC connectors to Interstates.
  d. Interchange/intersections with SHS and NHS that support the overall EV network.
  e. Existing charging locations for upgrades to NEVI requirements.
  f. Utility readiness and alignment with utility expansion plans.
  g. "Smart hub" locations with regional charging nuclei around the State that includes provisions for future expansion of charging infrastructure.
  h. Coordination with neighboring state deployments.
  i. Safety considerations and access to amenities and other services.
- Ensure stations are future-proofed, including providing for access to necessary equipment for maintenance and repairs.
- Identify and develop "smart hubs", which include charging locations with more than four ports as well as additional amenities, to fill the gaps in high-traffic areas.

2 ACTION — Focus operations and maintenance on station uptime and reliability through performance reporting

- Develop operation and maintenance requirements for the five years covered by NEVI funding, to be provided by the contractor/vendor.
- Monitor contract requirements, including performance measures, disadvantaged and small business enterprise utilization, incidents and maintenance inspections, software and hardware updates, and cybersecurity and safety events.
- Develop an asset information and tracking mechanism, which may include Geographic Information System, for program element and product performance evaluation.
- Require a real-time operation data feed for the station and charger operations for use by a third-party application and further information dissemination through appropriate public facing dashboards.

3 ACTION — Deploy a competitive, market-driven procurement process that supports performance-based management and continuous innovation

- Conduct industry forums to garner interest and assess the availability and ability to compete and deliver. Publish advance procurement schedules to align resources.
- Tailor procurements to align with funding availability and site scheduling considerations as described in Implementation Action 2, Strategy 1.
- Ensure timely, transparent, and competitive procurement of electric vehicle infrastructure services. This procurement will comply with Federal and State regulations and is not a grant program. Procurement is not a formula based grant process, but a competitively bid procurement with near term implementation expected.
- Allow flexibility in the procurement process for vendors to propose sites based on market and community needs. This includes proposing less than four DCFCs per site, spacing sites more than 50 miles apart, and providing charging above 150 kW.
- Establish market-based procurement that accommodates diverse implementation strategies from a wide variety of vendors. Use of diverse strategies can facilitate market sensitive charging infrastructure design creating the best value for the State's residents.
- Develop scoring criteria that emphasizes best value to the State, which may include long-term performance, system reliability and operability, warranties, redundancies, adaptability for future needs, and diversity in solutions and vendors.

Emergency Preparedness and Resiliency

Providing access to reliable DCFCs during emergency hurricane events for the safety of Florida's residents and visitors is the paramount goal for the State. Florida's unique circumstances to prepare for natural disasters require innovative solutions, like mobile charging, to ensure Florida's residents and visitors can safely evacuate prior to and return home after a storm. Additionally, assistance for stranded motorists and management of traffic flow during events ensures that FDOT can continue to meet its Federally required safety and travel-time reliability performance targets. FDOT will continue to investigate and assess mobile charging options.

In addition to considering evacuation needs when determining DCFC locations, the following actions may be used to achieve this implementation strategy.

1 ACTION

Deploy a program and contract mechanism to allow for the availability and funding for mobile charging

- Assess the need for mobile charging, considering stranded motorists, major events, emergencies, storms, power outages, and other risks.
- Identify potential opportunities to provide mobile charging, including the use of FDOT Road Ranger Service Patrol vehicles.
- Strategically implement mobile charging solutions to meet anticipated emergency and evacuation needs, which may include procurement.
- Strategically implement mobile charging solutions to meet emergency and evacuation needs, which may include procurement of equipment or vendors, partner agreements, or other mechanisms.

2 ACTION

Build a network with redundancy and resiliency that supports uninterrupted availability and accessibility

- Identify solutions for hardening of stations to withstand storms and ensure operator safety, such as auto station shut-off, waterproofing, elevated foundations, and structures.
- Include energy storage capacity, solar power generation, generator hookup points, and battery storage in station design criteria for select stations in critical evacuation areas.
- Develop standard operating criteria for the maintenance and repair of charging sites before, during, and after major storm events.

6 EQUITY CONSIDERATIONS

This Plan was developed to facilitate the advancement of clean transportation deployment and access to high-demand corridors. This Plan also integrates consideration of EV deployment that achieves at least 40 percent distribution of benefits to disadvantaged communities that include individuals with disabilities, are rural, or are characterized as being underserved as outlined by the Justice40 Initiative in Executive Order 14008 and the NEVI guidance. A Justice40 mapping tool has been made available to support work efforts needing to comply with this initiative and will be integrated into the FDOT Sociocultural Data Report and Area of Interest Tool. ***Approximately 48 percent of Florida's EV AFCs lie within disadvantaged communities.*** *By 2030, it is estimated that Florida's population will be comprised of 23 percent minorities, one in four residents will be 65 years or older, and 90 percent of the population growth will be due to migration. Given Florida's unique stakeholders, FDOT will coordinate with rural and disadvantaged communities to determine specific needs as related to this Plan. Engagement efforts with rural, underserved, and disadvantaged communities are discussed in Section 7, Stakeholder Engagement.*

EV charging station locations, as recommended in this Plan, will address the following attributes consistent with the Justice40 mapping and guidelines:

- Decrease the transportation energy cost burden by enabling reliable access to affordable charging.
- Lessen environmental exposures to transportation emissions by reducing traditional emissions from petroleum-fueled vehicles through increased EV adoption.
- Increase parity in clean energy technology access and adoption.
- Increase access to low-cost capital to increase equitable adoption by allowing suppliers to undertake sites in areas where EV growth is expected, instead of only where EV usage is already abundant.
- Increase the clean energy job pipeline, job training, and enterprise creation in disadvantaged communities – incentivize contractors' selection to hire and train residents and help advance minority-owned, women-owned, veteran-owned, and small businesses in alternative fuel specialization.
- Increase energy resilience by advancing EV as another alternative fuel source that is non-reliant on other countries.
- Increase equitable access to the electric grid by opening EV charging stations to all EV users.
- Integrate consistency with the U.S. Department of Transportation's 2022-26 Strategic Plan[12] "Equity Goal" along with the objectives and strategies of the Equity Action Plan[13].

7 STAKEHOLDER ENGAGEMENT

To support the development of this Plan, a Partner and Public Engagement Plan (PPEP) was drafted to seek input, evaluate feedback, and inform partners and the public on the future installation of EV infrastructure under the NEVI program. The PPEP (Appendix B) describes the framework for requesting and receiving information and ideas from interested parties. The PPEP is committed to the inclusion of equitable engagement of rural, underserved, and disadvantaged communities and will serve as a living document throughout the five-year life of the Plan. Building upon the engagement activities of the EVMP, FDOT gathered input from a broad range of partners and the public through various events.

Activities conducted to date are summarized below.

State Agency Coordination

In a continuation of our long-standing relationships with Federal, State, and local government agencies, FDOT relied heavily on input from other state agencies, including DEP, DACS, and FPSC during the development of this Plan. Collaborating through meetings, phone calls and emails, these advisors shared information regarding EV infrastructure funded by the VW settlement, utility regulations and availability, and other considerations so FDOT could replicate and build upon successful strategies. The Plan also incorporates implementation strategies to maximize opportunities to utilize U.S.-made EV equipment.

Stakeholder Coordination

More than 250 attendees participated in two statewide virtual meetings and one public comment webinar that supported the development of this Plan. The single largest takeaway from this outreach included the "smart hub" concept which has been included as a strategy for deployment. These are locations that may occur in places such as the intersection of two interchanges. These locations would provide more than the required four chargers to service high demand as people move into, out of, and around the state.

Public Comment

Eight regional listening sessions were conducted across the State to share updates on FDOT's effort on the Freight, Rail, Transit, and EV planning efforts. Eighteen surveys were collected for EV deployment with ideas provided for mobile charging, site accessibility, and general inquiries on how to stay engaged with the Plan efforts. The single most question received during these events was the mechanism to engage partners and members of the public to advance of funding under the new NEVI program.

The Plan was posted for a public comment period from July 5, 2022 to July 18, 2022. More than 180 comments were received from a diverse group of stakeholders including state and local government agencies, metropolitan planning organizations, consultants, private industry, and the general public. Major themes included requests to clarify what zone-based procurement would entail, support for new EV infrastructure to be installed as soon as possible during the deployment period, benefits of increasing the power standards to 350 kW, and concern that the Plan is overly focused on rural and disadvantaged areas. As a result, this Plan was updated to reflect the input received during this and the many other outreach events.

One-on-One Partner and Industry Meetings

In addition, FDOT staff met individually, upon request, with stakeholders including utilities, EV vendors/providers, private businesses, consultants, and local government agencies. Each of these meetings provided new information that was considered in the development of implementation strategies. FDOT solicited information via a formal request for information (RFI) that provided insight into the EV industry, workforce requirements, utility needs, and the range of types of organizations interested in providing EV infrastructure services.

It should be noted that the PPEP will continue to be utilized and updated over the course of the five-year deployment timeline of the NEVI program.

8 CONTRACTING

As noted in Section 5 Implementation, the installation, operations, and maintenance will be contracted through competitive solicitation processes. This process will use standard FDOT procedures for qualification and price-based selection in accordance with 23 Code of Federal Regulations (CFR) 635 and/or 23 CFR 636. In June 2022, FDOT posted an RFI to support the development of the contractual documents. The results of the RFI will clarify the roles and responsibilities, especially those unique to Florida, that should be considered for inclusion in the contractual documents. FDOT will continue working with stakeholders to understand business models and applicable procurement methods that best serve achievement of Plan goals.

Performance indicators will include schedule and budget versus estimates

- Site criteria including amenities.
- Accessibility requirements including Section 553.5041, F.S., and American with Disabilities Act (ADA).
- Minimum technical requirements in accordance with NEVI guidance.
- Operation and maintenance, including frequency and minimum reliability measures.
- Disadvantaged and Small Business Enterprise utilization.
- Workforce development and community engagement.
- Minimum performance measures.
- Data and reporting requirements.
- Warranty requirements and handover clause.

The contracts may include provisions for payment to achieve efficient delivery of EV charging infrastructure and reliable operational performance. Contractors are not precluded from using private funding sources to provide alternative charger technology (proprietary chargers, level 2 charging, or 350 kW charging) co-located with NEVI funded DCFCs. Payment for phase completion will be outlined and will include provisions for construction and maintenance timelines as well as minimum performance criteria. Operations and maintenance payments to the contractor/vendor will be structured to encourage increased private competition for EV infrastructure in rural, disadvantaged and underserved areas. Increased competition in lower utilized areas helps to ensure a comprehensive network of EV charging locations across Florida.

9 LABOR AND WORKFORCE

A skilled and trained workforce is vital to successful implementation of the program. FDOT will work with its stakeholders to understand the unique needs the charging station development process to ensure any workforce requirements match the charging installation, maintenance, and operation needs. During procurement, FDOT may use a contract service procurement bid that includes an "adjusted score" (weights may be specified per element below) to address labor and workforce development considerations. Although labor and workforce will be developed by the contractor, the State will consider including language in the contracts to support workforce development and equal opportunities. The elements below may be included as grading criteria for labor services to develop an equitable workforce consideration for the acquisition, installation, operation, and maintenance of the DCFCs.

Performance indicators will include the number of skilled worker positions increased by training and level of responsibility.

Employ a workforce that comprises residents that are geographically approximate to the location of the charging station site(s).

Hire at least one pre-apprentice or apprentice that may include any of the following labor services: installation, operation, or maintenance.

Ensure charging station workers are highly trained with documented certification from an officially recognized program, such as the Electric Vehicle Infrastructure Training Program. This training is targeted at commercial/institutional Level 2 charging, DCFC – light-duty, and medium-duty passenger vehicles (120/208/240VAC).

Specific training, either on the job or otherwise, may be delineated, and cost(s) may be encumbered as part of the bid package, and shall be duly committed to and noted in the bid package.

The contractor shall prepare a monthly metric report on its workforce, including the locally hired employees to meet the elements specified. The report should include locally hired apprentice(s) working on the charging station site(s) and identify the labor service capacity (installation, operation, or maintenance) in its monthly report.

10 CYBERSECURITY

The State of Florida and FDOT are committed to public service, including cybersecurity, cyber resiliency, and privacy protections for all services and systems in the communities in which they serve. For EVs to succeed as a viable transportation choice, charging stations must provide reasonable assurance against cyber-attacks, data breaches, and loss of privacy. The potential sources and types of cybersecurity threats for EV infrastructure are evolving and regularly scheduled risk assessments are prudent and necessary to provide protection. The exploitation of even a single DCFC can potentially cause issues such as relay chatter, various power quality issues, and phase instability which could potentially have cascading effects upstream. The cybersecurity strategy is based on contractual criteria requiring the development and submittal of a cybersecurity plan, including when software updates are to be made.

Given the industry does not yet have a clear picture of the attack surfaces, the cybersecurity plan requirements will include a full scope risk assessment to identify the comprehensive threat surface presented by and against the elements of stakeholder partners and users such as grid operators, vehicles, original equipment manufacturers, vendors, and charging network operators.

The requirements of the cybersecurity plan will:

- Provide EV infrastructure deployed within the Florida transportation system that is:
  - Protected against physical or electronic intrusion by unauthorized persons or entities.
  - Segmented (separated) to protect against unintended damage, unauthorized access, loss of data, service availability, privacy breach, or similar threat from unprotected connections among stakeholder partners and user systems.
- Include compliance with the Payment Card Industry requirements.
- Document that security operations and certification is maintained for System and Organization Controls.

The cybersecurity plan will provide a document to inform risk assessments and structured processes for selecting and implementing cybersecurity controls. FDOT will include positional roles for the governance and oversight of the EV infrastructure cybersecurity plan and implementation. Its submittal, included prior to EV charging equipment installation, will include schedules for ongoing risk assessment and process review.

11 CIVIL RIGHTS

Florida is committed to compliance with State and Federal civil rights laws. The following outlines the approach to delivering this Plan.

Title VI, Civil Rights Current Assurances

FDOT complies with the Statutory and Regulatory Authorities as set forth in U.S. Department of Transportation, Standard Title VI/Non-Discrimination Assurances – DOT Order NO. 105-2A[14].

FDOT will require, as part of each bid proposal, that the selected consultant, contractor, or vendor receiving a project award shall adhere to the Title VI/Nondiscrimination Assurance[15] to be attested to by signature of its Chief Executive Officer with regard to the work performed during the contract.

In addition, FDOT has adopted a Title VI Program and Related Statutes Implementation Review Procedure (275-101-1091-f[16]) that details the process FDOT implements statewide for the Title VI Nondiscrimination program in accordance with U.S. Department of Transportation regulations.

Future EV Charging Station Civil Rights Policy Document Commitment

Consistent with the above referenced compliance documents, a Title VI program and nondiscrimination policy document will be prepared for Florida's EV charging station project, upon the Plan approval. The content of the policy document will include the following elements:

- An overview of general reporting requirements (certifications and assurances).
- General reporting requirements for Florida's Plan charging station(s) including:
  - EV Charging Stations Title VI Compliance Procedures;
  - Records management;
  - EV charging station public participation;
  - EV charging station limited English proficient implementation;
  - Monitoring; and
  - Compliance.
- Program specific requirements for Florida's Plan include:
  - System-wide service standards and policies;
  - Demographic analysis;
  - Service monitoring; and
  - Service and fuel equity.
- Appendices
- Figures

ADA and Section 504 of the Rehabilitation Act Commitments by Reference

Pursuant to ADA (1990, Public Law 101-336) which serves as a broad civil rights statute prohibiting discrimination against individuals with disabilities in all areas of public life, Title II of the ADA prohibits disability discrimination by State and local government entities.

Design Standards

FDOT will ensure that contract services for installation, operations, and maintenance of EV charging infrastructure are compliant with the U.S. Department of Justice Civil Rights Division – Information and Technical Assistance on ADA Standard for Accessible Design[17] and U.S. Department of Transportation under 49 CFR Part 27, §27.75(b), including the National Network, Information, Guidance, and Training on the ADA – Accessible Parking[18].

Public Meeting Guidelines

FDOT will ensure compliance with Title II, Regulation Supplement[19] and as set forth in Subpart B – General Requirements, Section 35.130[20], for meetings and events that may be scheduled regarding EV Charging Station(s). FDOT uses the Florida Relay Services to communicate with residents in the State of Florida who are Deaf, Hard of Hearing, Deaf/Blind, or Speech Disabled. Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status.

Website/Digital Presentations

Website standards and guidelines[21] will be adhered to by FDOT per applicability based on content format.

12 PROGRAM EVALUATIONS

FDOT will evaluate the program to identify progress made in EV infrastructure deployment. The following metrics will be used to measure the success in achievement of this Plan's goals as well as identify opportunities to revise implementation activities to better support the deployment, environment, and long-term operations and maintenance of EV infrastructure while maximizing the use of funding. It is anticipated that these evaluations will be conducted annually, as a minimum.

Performance evaluation will include the measure of goals expressed as the following:

Buildout the AFC Network

- Track the net number of new DCFC ports installed.
- Achieve completion of 100 percent AFC buildout.
- Track the DCFC port per NEVI dollar for the overall program.

Equity

- Cooperatively develop with communities, quantifiable benefits to Justice40 areas as a percentage of the overall Plan deployment.

Reliability

- Quantify the DCFC availability of full 150 kW charging and charging duration by session.

Accessibility

- Confirm and monitor customer satisfaction through surveys.
- Quantify total charging duration, per port.

Resiliency

- Calculate percentage of stations deployed with the redundancy of power supply through solar panels, battery storage, generator backup, and/or other mini-grid concept along Interstates and other evacuation routes.

EV Adoption

- Report the number of new EV registrations over the plan period, reported annually.
- Measure and monitor Greenhouse Gas reduction.

13 DISCRETIONARY EXCEPTIONS

There are no discretionary exceptions for the first year of this Plan. FDOT is evaluating the use of mobile charging options and will coordinate the potential for program eligibility. Scenarios where two DCFC ports will be sufficient or where sites may be installed further than every 50 miles or more than one mile from the designated corridor may be determined as the Plan implementation progresses. FDOT will continue to monitor the performance of the EV AFC and make annual exception requests, as needed, once justification has been determined.

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APPENDIX A

References and Acronyms

References

1 https://www.census.gov/quickfacts/FL

2 https://www.visitflorida.org/resources/research/research-faq/

3 Florida Economic Estimating Conference

4 https://afdc.energy.gov/states/fl

5 https://afdc.energy.gov/data/10962#:~:text=This%20chart%20shows%20the%20vehicle,highest%20count%2C%20followed%20by%20Texas

6 https://afdc.energy.gov/stations/states

7 https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/ready/

8 https://hepgis.fhwa.dot.gov/fhwagis/ViewMap.aspx?map=Highway+Information|Electric+Vehicle+(EV-Round+1,2,3,4,5+and+6)#

9 https://dbpedia.org/page/List_of_Florida_hurricanes_(2000%E2%80%93present)

10 https://www.fdot.gov/docs/default-source/planning/trends/special/acs022818.pdf

11 http://www.psc.state.fl.us/Files/PDF/Utilities/Electricgas/TenYearSitePlans/2020/AppendixA.pdf

12 https://www.transportation.gov/sites/dot.gov/files/2022-04/US_DOT_FY2022-26_Strategic_Plan.pdf

13 https://www.transportation.gov/priorities/equity/equity-action-plan

14 https://www.fdot.gov/equalopportunity/titlevi.shtm

15 https://www.fdot.gov/programmanagement/lp/lap/titlevi.shtm

16 https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/equalopporunity/titlevi/2022_ip_fdot-final-to-eoo-website.pdf?sfvrsn=c4d32cbc_2

17 https://www.ada.gov/2010ADAstandards_index.htm

18 https://www.ecfr.gov/current/title-49/subtitle-A/part-27

19 https://www.ada.gov/regs2010/titleII_2010/title_ii_reg_update.pdf

20 https://www.ada.gov/regs2010/titleII_2010/titleII_2010_regulations.htm#a35130

21 https://www.ada.gov/regs2010/titleII_2010/titleII_2010_regulations.htm#subparte

List of Acronyms

ADA
Americans with Disabilities Act

AFC
Alternative Fuel Corridor

CFR
Code of Federal Regulations

DCFC
Direct Current Fast Charger

EV
Electric Vehicle

EVMP
Electric Vehicle Master Plan

FDEP
Florida Department of Environmental Protection

FDOT
Florida Department of Transportation

FPSC
Florida Public Service Commission

FS
Florida Statute

FTP
Florida Transportation Plan

kW
Kilowatt

MW
Megawatt

NEVI
National Electric Vehicle Infrastructure

NHS
National Highway System

PPEP
Partner and Public Engagement Plan

RFI
Request for Information

SHS
State Highway System

SIS
Strategic Intermodal System

U.S.
United States

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APPENDIX B

Partner and Public Engagement Plan

Florida Department of Transportation
Office of Policy Planning

Partner and Public Engagement Plan

for the

Electric Vehicle Infrastructure Deployment Plan (Plan)

National Electric Vehicle Infrastructure Formula Program (U.S. Department of Transportation, Federal Highway Administration)

May 2022

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Table of Contents

List of Tables

List of Acronyms/References

CFR	Code of Federal Regulations
EO	Executive Order
EV	Electric Vehicle
EVA	Electric Vehicle Association
EVMP	Electric Vehicle Infrastructure Master Plan
FDACS OOE	Florida Department of Agriculture & Consumer Services, Office of Energy
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FHWA	Federal Highway Administration
FLDOE	Florida Department of Education
FPSC	Florida Public Service Commission
FPTA	Florida Parking Transportation Association
F.S.	Florida Statutes
FTP	Florida Transportation Plan
LEP	Limited English Proficiency
MPO	Metropolitan Planning Organization
MPOAC	Metropolitan Planning Organization Advisory Council
NEVI	National Electric Vehicle Infrastructure
PPEP	Partner and Public Engagement Plan

1.0 INTRODUCTION AND PURPOSE

The National Electric Vehicle Infrastructure (NEVI) Formula Program was announced by the United States Department of Transportation and the Federal Highway Administration (FHWA) in February 2022 to support the development of a convenient, reliable, affordable, and equitable nationwide electric vehicle (EV) charging network. It requires the development of a statewide Electric Vehicle Infrastructure Deployment Plan (Plan), which must be approved by the Joint Office of Energy and Transportation.

This Partner and Public Engagement Plan (PPEP) has two purposes. It's first purpose is to document the stakeholder outreach that occurred to support the development of the Plan. Its second purpose is to provide a high-level public outreach strategy for the Plan's five-year implementation period. The PPEP will support the State in sharing information on the Plan implementation progress and allow the receipt of valuable feedback on EV charging needs and opportunities.

The Plan supports the efforts made by the State to date related to EV infrastructure investment. In 2020, Governor Ron DeSantis signed Senate Bill 7018 which required the Florida Department of Transportation (FDOT) to create a master plan for the development of EV charging infrastructure across Florida known as the Electric Vehicle Infrastructure Master Plan (EVMP), adopted in July 2021. This legislation was an important step forward in innovation and economic development within Florida's transportation sector. The legislation points to the high priority the State's leaders place on expanding EV charging stations to support growth in EV adoption. This PPEP builds on the public outreach conducted as part of the EVMP, thus, leveraging existing partnerships and FDOT resources. It will serve as the tool for stakeholder engagement over the life of the Plan to ensure NEVI funds are invested across the State consistent with the implementation actions identified in the Plan.

2.0 GOALS AND EXPECTATIONS

As new information is gathered, engagement approaches, resources, and the stakeholder list may be updated to reflect changes. The PPEP is a living document and will be updated at major project milestones. Public feedback will guide all phases of the Plan implementation process and continue to be an integral resource for the installment of Florida's EV charging infrastructure.

The goals of the PPEP are in alignment with State and local transportation planning initiatives, the objectives of the State's long-range transportation plan, the Florida Transportation Plan (FTP), as well as the FDOT mission. The primary goals of the PPEP are listed below.

Goal 1: Provide transparency on the public and stakeholder engagement process.
Goal 2: Provide a sound understanding of the purpose of the Plan.
Goal 3: Receive valuable stakeholder feedback that helps define the Florida EV network and craft strategies for installation.
Goal 4: Understand EV charging considerations and opportunities (i.e., business models, emerging technology, consumer needs).
Goal 5: Evaluate stakeholder participation strategies, obtain feedback, and report findings.

3.0 FEDERAL AND STATE REQUIREMENTS

Public engagement will be conducted in accordance with Federal and State requirements, including Title VI and all nondiscrimination laws. The PPEP meets the guidance criteria outlined in the FHWA NEVI guidance for public participation. These requirements are detailed in Table 1.

Table 1: Summary of Federal and State Requirements for Partner and Public Involvement Related to Statewide Planning

Federal and State Requirements	
Requirement (Regulation Citation)	**Actions to Accomplish the Requirement**
Title VI of the 1964 Civil Rights Act	Requires nondiscrimination in public participation on the basis of race, color, national origin, sex, age, disability, or family status.
Americans with Disabilities Act of 1990	Requires public accommodations to provide equivalent access to individuals with disabilities.
23 Code of Federal Regulations (CFR), Part 450	Requires a public involvement process that provides public comment and review at key decision points.
23 CFR, Part 771	Establishes the importance of early agency coordination and public involvement in the environmental review process.
Limited English Proficiency (Executive Order (EO)13166)	Improves access to Services for Persons with Limited English Proficiency (LEP) and ensures people with LEP will have meaningful access to programs and activities of agencies receiving Federal financial assistance.
Section 120.525, Florida Statute (F.S.)	Requires a public notification period in advance of a public meeting.
Section 286.0114, F.S.	"Florida Sunshine" requirements for meetings of boards and commissions.
Section 339.155, F.S.	Provides procedures for public participation in transportation planning.
Florida EO 07-01 (1/2/2007), Plain English Initiative	Requires clear language, using the active voice and containing only necessary information presented in a logical sequence.

4.0 STAKEHOLDER DEVELOPMENT

Stakeholder engagement will be designed to encourage participation from as many partners as possible. The process will be inclusive, diverse, and encourage two-way communication through multiple platforms and mediums. The stakeholders identified in this PPEP build upon the work undertaken as part of the EVMP and have expanded through outreach conducted for the Plan. FDOT is coordinating with partners on a regular basis, including the following:

- Federal, State, and local government agencies;
- Federally recognized tribal governments;
- State and local elected and appointed officials;
- Statewide modal organizations;
- General public;
- Electric utilities;
- Landowners (State agencies and private entities);
- Partner agencies;
- Workforce and labor organizations;
- Universities;

- Private sector industry companies and vendors;
- Community and advocacy groups; and
- EV Clubs.

Refer to Appendix B1, Stakeholder List, for a more detailed list of stakeholders.

The stakeholder list represents a multitude of interests to ensure that diverse parties have the opportunity to provide feedback on EV charging needs. The stakeholder list will be updated throughout the Plan implementation period. Continued coordination with local municipalities will help ensure that the installation of charging infrastructure is consistent with local and regional transportation planning initiatives and that statewide infrastructure meets the local and regional community visions.

To support Federal and State initiatives of expanding transportation equity, FDOT will ensure this public engagement process has a diverse and inclusive representation of stakeholders with equal representation across the State. This supports the Justice40 initiative which renews environmental justice legislation and places a stronger emphasis on equitable distribution of transportation benefits, particularly on disadvantaged and vulnerable communities.

4.1 Roles and Responsibilities

This section documents the roles and responsibilities that the FDOT staff and partners play in the implementation of the PPEP. FDOT has lead responsibility for all aspects of the PPEP update.

Public involvement activities for the Plan will be coordinated by the FDOT Office of Policy Planning. Their responsibilities related to partner and public involvement include the items listed in Table 2, which also details the responsibilities of FHWA and partners/stakeholders.

Table 2: Summary of Roles and Responsibilities

FDOT Office of Policy Planning
Coordinate with FDOT staff, partners, and public groups in Alternative Fuel Corridor Nominations which serve as a precursor to the Plan.
Coordinate review and approval of the draft and final Plan documents.
Periodically update the FDOT Executive Board and the Executive Office of the Governor.
Lead coordination activities with regional, local, and statewide partner groups.
Lead planning and preparation for statewide events and regional workshops.
Assist with technical support for stakeholder meetings and coordinate participation of local and regional partners.
Draft and update presentations, other materials, and tools for use in briefings and updates to statewide, regional, and local partners to ensure consistent messaging.
Develop and update email and other partner notification contact lists.
Ensure that stakeholder resources related to the Plan are uploaded to the FDOT website.
Support and encourage stakeholders and the community to work together to advance the Plan.
Identify best practices and approaches for engaging key audiences based on sociocultural profiles.
Develop and implement target strategies to educate stakeholders.
Distribute materials provided by FDOT Central Office to promote awareness among District staff and offices about the Plan.
Provide briefings and updates for regional and local partners using various channels (i.e., Metropolitan/Transportation Planning Organizations (MPO), Regional Planning Councils, and local government meetings).
Document completed public involvement activities and input received during these activities.
Update the PPEP document at major project milestones throughout its five-year implementation.
FHWA Program Grantor
Provide background, funding eligibility criteria, and program guidance for implementation in the EV charging infrastructure program.
Coordinate with Federal, State, private industry, and local officials to facilitate an interstate and major road network of alternative clean fuel stations.
Encourage multistate and regional stakeholder cooperation and collaboration with FDOT on the implementation of the Plan.
Coordinate its Division Offices to support FDOT's implementation of the Plan and the NEVI Program.
Notify FDOT of the final approval and obligation of the Plan and encourage collaborative implementation.
Partners/Stakeholders
Assist FDOT with coordinated targeted outreach to respective Governing Boards and other committees and groups, as applicable.
Promote awareness among organization leadership and staff.
Distribute materials provided by FDOT to promote awareness among elected officials about the Plan updates, engage elected officials in the updates, and encourage implementation of the Plan.
Collect and forward input received from partners/stakeholders related to the Plan updates and share information with FDOT.
Staff-level coordination, participation in statewide and regional workshops, hosting workshops, and or providing time for input as part of the stakeholder's regularly scheduled meetings.
Promote public involvement in the Plan using social media and other resources including stakeholders' outreach to their communities.

5.0 OVERVIEW OF PUBLIC ENGAGEMENT PROCESS

The public outreach and engagement process will be designed to incorporate a wide variety of strategies that allow for in-depth, tailored approaches to reaching each audience group. Strategies will not be a one size fits all approach, but will be determined to best fit community needs. Communication will primarily occur through stakeholder meetings, webinars, listening sessions, presentations to agencies, and outreach at other agency or industry events. When possible, outreach opportunities may be conducted in person; however, based on public health concerns and stakeholder convenience, virtual meetings may also be provided.

Additional strategies that may be considered to increase public engagement include:

- Digital media (i.e., online newsletters, social media campaigns, and digital marketing);
- Educational and informational sessions (i.e., workshops, town halls, meet and greets, and open house events); and
- Interactive tours (i.e., listening tours)

5.1 Statewide Events

Building on the outreach efforts to date, FDOT will continually evaluate new approaches and opportunities to engage the public through industry conferences, workshops, and listening tours. An example would be to partner with other FDOT offices that may host a statewide listening tour to engage communities on various transportation initiatives.

Refer to Appendix B2, The Plan – Meetings/Presentations, for a summary of the activities that occurred to date in support of the Plan development and an anticipated schedule of partner and public meetings to continue engagement over the next five-years.

5.2 Polling, Surveys, and Questionnaires

Targeted outreach in the form of polling, surveys, and questionnaires have been a successful tool in the Plan development and will remain a consideration for future engagement to help understand community needs and industry opportunities. This approach may be scaled for statewide use or selected stakeholder meetings to ensure productive feedback is received. A resource such as the online PollEverywhere application may be used to administer a series of multiple choice and short answer questions, in which participant responses can be displayed and updated in real-time during a meeting. Additionally, physical surveys may be conducted at public outreach events. Refer to Appendix B3, The Plan Sample - Survey Questionnaire, for a survey example.

5.3 Website/Online Public Engagement

An FDOT-hosted website (https://www.fdot.gov/plannng/EVIP) will serve as the central source of NEVI information for partners and the public. The website will ensure full transparency of the Plan implementation and provide EV funding information and Federal and State requirements over the five-year implementation of the Plan. Interested parties will have the opportunity to provide feedback through a built-in comment form and sign up for project updates. A collection of frequently asked questions will be developed from stakeholder and public meetings and displayed online. The website will be updated routinely as new information and resources become available. Additional methods for online public engagement may be evaluated to increase participation and enhance the online user experience.

5.4 Communication Approach

The following outlines FDOT's communication approach for stakeholder engagement during Plan development and implementation.

- Engage the public and obtain feedback on preferred charging locations, charging preferences, and proposed impacts and costs.
- Engage stakeholders and communities to ensure the deployment of EV charging infrastructure supports Federal and State goals of achieving equitable and fair distribution of EV supply equipment.
- Establish early and continuous public participation opportunities that provide timely information about the Plan to all interested parties.
- Provide reasonable public access to educational, technical, and policy information to enhance the public's knowledge and ability to participate in the development and implementation of the Plan.
- Provide adequate public notice of participation opportunities during the development of the Plan, and time for public review and comment on the planning, design, and implementation process.
- Promote adaptive public engagement to ensure that all impacted communities have full and equitable opportunities to be engaged.

5.5 Stakeholder Engagement Evaluation/Metrics

To assess the effectiveness of the PPEP, the public engagement team intends to evaluate the level of participation and public response to help facilitate the implementation process. Progress indicators and performance measures such as, but not exclusive to, the number of attendees at meetings, events and presentations; website visits; number of individuals signing up on the website to request information; and topical comments received, will be used to track engagement, and monitor feedback over the five-year implementation of the Plan. This will help FDOT evaluate the most effective public engagement strategies, allowing for program planning adjustments as needed.

APPENDIX B1. STAKEHOLDER LIST

Federal Government
Joint Office of Energy and Transportation
Federal Highway Administration - Florida Division Office
United States Department of Transportation
United States Department of Energy
Federal Highway Administration
National Renewable Energy Laboratory
Federally Recognized Florida Tribal Governments
The Miccosukee Tribe of Indians of Florida
The Mississippi Band of Choctaw Indians
The Muscogee (Creek) Nation
The Poarch Band of Creek Indians
The Seminole Nation of Oklahoma
The Seminole Tribe of Florida
State Government
FDOT
Florida Department of Agriculture and Consumer Services Office of Energy (FDACS OOE)
Florida Public Service Commission
Florida Department of Environmental Protection
Florida Department of Emergency Management
Florida Department of Economic Opportunity
Florida Department of Highway Safety and Motor Vehicles
Florida Department of Education
FDACS Florida Advisory Council of Climate and Energy
Florida House of Representatives
Florida Senate
Enterprise Florida
Florida Highway Patrol
Visit Florida
Space Florida
CareerSource Florida
Local Governments
Metropolitan Planning Organization Advisory Council
Florida League of Cities
Florida Association of Counties
Small County Coalition
Florida Regional Councils Association
Southeast Florida Regional Climate Change Compact

Statewide Modal Organizations
Florida Airports Council
Florida Ports Council
Florida Public Transportation Association
Utilities
Florida Power and Light
Duke Energy
Sumpter Electric CO-OP
Orlando Utilities Commission
Tampa Electric Company
Florida Electric Power Coordinating Group Inc.
Gulf Power
Florida Public Utilities Company
Florida Municipal Electric Association
Florida Electric Cooperative Association
Clay Electric Cooperative, Inc.
Glades Electric Coop., Inc.
Tri-County Electric Coop., Inc.
Talquin Electric Cooperative
Suwannee Valley Electric Cooperative
West Florida El Cooperative
Peace River Electric Cooperative, Inc.
Central Florida Elec Coop., Inc.
Withlacoochee River Electric Coop., Inc.
Choctawhatchee Elec Coop., Inc.
Gulf Coast Electric Cooperative
Escambia River Electric Cooperative
Florida Keys El coop Assn., Inc.
Private Companies/Vendors
ChargePoint
Florida Automobile Dealers Association
GATE Petroleum Company
Hopping, Green, and Sams (Firm dissolved)
Electrify America
Greenlots
JEJ Associates
Nova Charge
RaceTrac
EVGo
Accenture
Kalibrate
Rivian

Community and Advocacy Groups
Clean Cities Coalition - Central Florida
Tampa Bay Clean Cities Coalition
North Florida Clean Fuels Coalition
Southeast Florida Clean Cities Coalition
The Nature Conservancy
Drive Electric Florida
Southern Alliance for Clean Energy
Association of Energy Services Professionals
Florida American Federation of Labor - Congress of Industrial Organization
Florida League of Women Voters
The Able Trust
Association of Blacks in Energy
EVNoire
Electrification Coalition
Florida Chamber of Commerce
Florida Council of 100
Florida Economic Development Council
Florida Transportation Builders' Association, Inc.
- International Brotherhood of Electrical Workers
Florida For Better Transportation
Florida American Federation of Labor & the Florida Congress of Industrial Organizations
Florida Electric Vehicle Clubs
Central Florida Electric Vehicle Association (EVA)
Florida Tesla Enthusiasts
Gold Coast EVA
Space Coast EV Drivers
Sun Coast EVA
Sustainable Tallahassee for EVs
Tallahassee Area EVA

APPENDIX B2. THE PLAN - MEETINGS/PRESENTATIONS

Meeting Name	Date	Federal, State, Local Agencies	Federally Recognized Tribes	Utilities	Private Companies / Vendors	Advocacy Groups	General Public
Statewide Stakeholder Group Meetings							
Florida NEVI Program Stakeholder Meeting	03/22/22	■	■	■	■	■	
Florida NEVI Program Stakeholder Meeting	05/23/22	■	■	■	■	■	
Federal/State/Local Government Agency Presentations and Meetings							
Hernando-Citrus MPO	03/07/22	■					
FDOT/FHWA/FPTA/MPOAC Coordination	03/08/22	■					
FDACS Office of Energy	03/10/22	■					
FDEP/FDACS/FPSC State Agency Coordination	03/10/22	■					
Florida Electric Power Coordinating Group EV Subcommittee	03/16/22	■					
Clean Fuels Coalition	03/17/22	■				■	
Central Florida Clean Cities Coalition	03/25/22	■					
FTP Implementation Committee Meeting	03/30/22	■					
Joint Office of Energy and Transportation	04/13/22	■					
Lee County MPO	04/14/22	■					
FHWA Florida Division Office	04/18/22	■					
Florida Regional Councils Association	04/22/22	■				■	
South Florida Regional Transportation Authority	04/22/22	■					
FLDOE Division of Blind Services	04/25/22	■					
MPOAC Staff Directors Meeting	04/27/22	■					
MPOAC Meeting	04/28/22	■					
City of Largo	05/11/22	■					
FDEP/FDACS/FPSC State Agency Coordination	05/16/22	■					
FTP Environmental Partners Working Group	05/19/22	■					
Joint Office of Energy and Transportation Regional Office Hours	05/20/22	■					
Statewide Conferences and Expositions							
FDOT Transportation Symposium Webinar Series- Design Model Review Tools	09/22/21	■		■	■	■	■
FDOT TransPLEX Web Series Webinar	10/22/21	■		■	■	■	■
Florida Sustainable Transportation and Technology Expo	03/30/22	■		■	■	■	■
Rail and Transit Listening Sessions							
Statewide Virtual Kickoff	03/21/22	■				■	■
Jacksonville Regional	03/29/22	■				■	■
Lakeland Regional	04/06/22	■				■	■
Longwood Regional	04/07/22	■				■	■
Fort Myers Regional	04/12/22	■				■	■
Aventura Regional	04/13/22	■				■	■
Marianna Regional	04/26/22	■				■	■
Statewide Virtual Closing Session	TBD	■				■	■

Meeting Name	Date	Federal, State, Local Agencies	Federally Recognized Tribes	Utilities	Private Companies / Vendors	Advocacy Groups	General Public
One-One Partner Meeting with Industry and Advocacy Groups							
Florida Petroleum Marketers Association	03/01/22					■	
EVGo	03/03/22				■		
Florida Power and Light	03/11/22			■			
Southern Alliance for Clean Energy	03/11/22					■	
Seminole Electric	03/15/22			■			
International Brotherhood of Electrical Workers	03/18/22					■	
Electrify America	03/24/22				■		
EVGo	03/28/22				■		
Center for Sustainable Energy	03/28/22					■	
Accenture	04/01/22				■		
Association of Energy Services Professionals	04/05/22					■	
Kalibrate	04/05/22				■		
Owen Electric	04/06/22			■			
IFC	04/14/22					■	
ChargePoint	04/14/22				■		
Rivian	04/14/22				■		
Southern Alliance for Clean Energy	04/18/22					■	
The Climate Group	04/21/22					■	
Orlando Utilities Commission	04/22/22			■			
EnviroSpark Energy Solutions, Inc.	05/04/22				■		
Blink Charging	05/10/22				■		
Charge Zero	05/10/22				■		
Southern Alliance for Clean Energy	05/11/22					■	
Advanced Energy Economy	05/26/22					■	
Environmental Defense Fund	05/26/22					■	
AMPLY Power	**05/27/22**				■		
Ongoing Coordination (Email Updates, Comment Forms, etc.)		■	■	■	■	■	■

APPENDIX B3. THE PLAN SAMPLE – SURVEY QUESTIONNAIRE

l Electric Vehicle Infrastructure Sample Survey	
1	Please rank the following considerations for determining electric vehicle (EV) fast-charging infrastructure locations in order of importance from 1 to 4, where 1 is the most important and 4 is the least important. ___ Proximity to amenities ___ Proximity to interstate/highway interchanges ___ Space to support the future buildout
2	Please rank the following planning considerations for EV fast-charging infrastructure in order of importance from 1 to 4, where 1 is the most important and 4 is the least important. ___ Fees - costs to use EV fast charging ___ Equity - targeting rural, disadvantaged, and underserved communities ___ Evacuation Routes ___ Economic Development
3	How can FDOT best consider the impacts of EV fast-charging infrastructure on rural/disadvantaged/underserved communities?
4	What opportunities should FDOT consider related to EV fast-charging infrastructure deployment?
5	What innovative ideas should FDOT consider related to EV fast-charging infrastructure?

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