



FDACS OOE Briefing Sheet on the Florida Electric Vehicle Roadmap

The Florida Department of Agriculture and Consumer Services Office of Energy (FDACS OOE) began working on the Florida Electric Vehicle (EV) Roadmap in May 2019 with its kickoff stakeholder meeting. The goals of the roadmap have remained the same:

- Identify EV charging infrastructure impacts on the electric grid;
- Identify solutions for any negative impacts;
- Locate areas that lack EV charging infrastructure;
- Identify best practices for siting EV charging stations; and
- Identify technical or regulatory barriers to expansion of EV charging infrastructure.

The EV Roadmap will focus on the demands of individual light duty passenger vehicles, trucks, and small shuttle systems that serve communities, paratransit, and systems that perform transport for airports, ports, and multimodal hubs. Infrastructure to support heavy-duty vehicles and fleets is typically specific to their needs and will not be included in the roadmap.

Transportation and land planners need guidance, tools, and information to analyze and plan infrastructure based on a number of scenarios and environments, including urban, suburban, and rural environments. The EV Roadmap will provide that guidance and provide first generation tools to support transportation and land planners.

Some of the considerations include in the EV Roadmap analysis are:

- Increase in battery efficiency, resulting in 400+ mile range;
- Increase in electric vehicle supply equipment (EVSE) output of 600kW+;
- Requirements for thermal management of higher EVSE outputs;
- Increased grid demands at EVSE locations;
- Broad introduction of EV passenger shuttles, taxis, and transportation network companies (TNCs);
- Initial deployment of autonomous vehicles;
- Inductive charging;
- Networking and internetworking of EVSE;
- Siting and upgrade capabilities;
- Uptime, resiliency, and backup power;
- Obsolescence and upgrade of EVSE;

- Social equity and underserved communities;
- Outreach, education, and training;
- Energy consumption;
- Environmental;
- Site Safety;
- Zoning, building codes, and permitting; and
- Signage.

In March of this year, FDACS OOE hired Central Florida Clean Cities Coalition to aid in information gathering, modeling, analysis, and report preparation. To date, we have held five webinars to solicit input from stakeholders and have another two webinars scheduled this later month.

Before releasing the final report, four interim reports will be posted on the [FDACS OOE website](#) for public input and comments. The topics of these interim reports include:

- **Future Network Architecture Considerations and Recommendations (2023-2030)** that address anticipated battery technologies, anticipated infrastructure technologies, connected and autonomous environment, and inductive charging.
- **EV Infrastructure Models** that address common basic network architecture, evacuation, public/government, urban, suburban, rural, workplace, and commercial.
- **Emergency Evacuation Routes** will provide maps U.S., state, and county roads with proposed evacuation routes and considerations unique to EVs.
- **EV Deployment Recommendations** that address policy, planning, financing, EV adoption, forecasting, network growth, infrastructure, reporting, signage, and billing.