



FLORIDA EV ROADMAP STAKEHOLDER MEETING NOTES

THURSDAY, MAY 16, 2019

9 AM UNTIL 11 AM

UF/IFAS EXTENSION SEMINOLE COUNTY AUDITORIUM
250 W. COUNTY HOME ROAD
SANFORD, FL 32773

Florida Electric Vehicle (EV) Roadmap Goals

Several attendees advocated the need for EV adoption goals as a result of the roadmap. It was also suggested that in order to set realistic goals, the state would first need to analyze its current position through benchmarking. Benchmarking would also help the state determine if the goals of the roadmap are achieved.

Authority, Regulation, & Enforcement

It was noted that Florida's EV landscape has evolved without much effort and to move forward to the next level, coordinated effort will be required. Suggestions for this included:

- Creating a formal state authorized conveying authority that would empower various groups (Maryland and Massachusetts are possible examples).
- Creating a blue-ribbon committee with elected officials that has an overall vision and could work to remove barriers for EV implementation.

It was brought to the group's attention that the permitting process for installing chargers across the state is not uniform. It was suggested that all local governments have a standard permitting process with clear guidance and best practices, including compliance with public health, safety, and access rules and regulations.

It was suggested the state review and consider fair and reasonable ways EV users contribute to transportation infrastructure in lieu of a gas tax.

While there is currently a modification before the Florida Building Commission that would require new single-family housing with garages to accommodate future EV charging equipment, it was recommended that more EV friendly modifications could be made.

It was discussed that both state and local governments could benefit from adding electric passenger vehicles and electric busses to state term purchasing contracts.

Non-EV drivers are parking in spaces designated for EV charging without consequence. A recommendation was made to have EV parking enforced.

Infrastructure

Many meeting attendees discussed the importance of infrastructure and that without adequate infrastructure, successful and sustained EV adoption will not be possible. It was noted that as EV adoption continues to increase, more fast chargers will be required. Below is a summary of the suggestions and comments:

- **Key Destinations** - Suggestions were made to examine the top travel destinations in the state and make sure those destinations are accessible by EVs. The alternative fuel corridors are a good starting point for this initiative.
- **Resiliency** - Discussions took place concerning the need to have evacuation routes in place for EV drivers. Issues arose during Hurricanes Irma and Michael for EV drivers trying to evacuate. The Florida Department of Transportation and the Florida Department of Emergency Management will be part of this effort. Utilities, especially co-ops, will also need to be involved as many evacuation routes will need electric infrastructure.

It was suggested to perform a study looking at the evacuation routes, number of EVs, number of chargers, and time to charge. The study would also need to consider alternative return trips as much infrastructure may be damaged after a natural disaster.

- **Desert of EV Chargers** - When looking at both key destinations and evacuation routes, lack of charging will need to be addressed, especially in rural areas. It was noted that the most needed infrastructure may not be the most used infrastructure.

- Senate Bill 7068 (2019) road corridor task forces – FDACS should use its position on the road corridor task forces to ensure that they adequately facilitate “electric vehicle technology.”
- **Equipment & Technology** – The attendees agreed that it is important to be future proofing. Some electric vehicle infrastructure companies are installing equipment that is upgradeable. Equipment, managed charging, and communication all need to be future looking.
- **Fleets** - EV fleets represent an opportunity for substantial growth in the market, but also unintended consequences if the proper infrastructure is not in place. It was suggested that the state and utilities work with fleets of various size vehicles to ensure proper power and fiduciary requirements are met.
- **Low-income Communities** - Several attendees brought up the importance of including low-income communities in the roadmap. It was advised that the Florida Public Service Commission be included in this discussion. It was also advised that low-income communities have access to EV charging, but not be harmed in the process. It was noted that ride sharing may be better for low-income communities than EV charging.
- **Funding** – It was recommended the state review different types of funding mechanisms (Volkswagen Settlement, public-private partnerships, federal funds) and leveraging those funds to maximize and accelerate the implementation rate of charging infrastructure.
- **Autonomous Vehicles (AVs)** - While the state has AV friendly regulation, it does not have the needed EV charging infrastructure to support them. There are also cybersecurity and safety concerns that will need to be addressed before automakers bring AVs to the state.

Education, Awareness, & Promotion

Multiple attendees reinforced the importance of EV education. Suggestions and comments included:

- Education plans need to be consistent and long term.
- Develop a common campaign that can be rebranded locally.
- Provide personal experiences to educate and change views.
- Elected and appointed officials must be educated.
- Need more signage directing EV drivers to charging – add EV charging station signs to the blue signs at freeway exits similar to those for gas stations, fast food, etc..
- Study installing multiple chargers in the same location for redundancy and high visibility.
- Engage EV drivers in smart charging campaigns.
- Promote managed charging and its benefits: lower rates and better air quality.
- Help promote companies that offer workplace charging.
- Help promote communities that provide charging.
- Provide more first responder training. Clean Cities Coalitions are providing training, but key officials also need to be educated on EVs.
- Create a program similar to the U.S. Department of Energy’s Workplace Charging Challenge.

Data

Multiple attendees expressed concerns of the lack of data. Data is either difficult to extract from the Florida Department of Motor Vehicles or expensive. It was suggested that a partnership be created to collect and provide data using a simple, common standard. Suggested data points include:

- Number of EVs registered in the state
- Market trends
- Growth rate
- Regional surveys
- Attitudes towards EV adoption
- Urban vs. rural behavioral adoption rates

- Charging behavior, reliability, and route availability
- Utilization of Time of Use rates

Current resources:

- FleetCarma: they are expensive, but it may be possible to get a bulk discount
- U.S. Department of Energy's Alternative Fuel Data Center
- The National Renewable Energy Laboratory's (NREL) Vehicle Technology Simulation and Analysis Tools

Miscellaneous

Other comments and suggestions from the meeting:

- Examine load forecasting. California peak time moved every day for a year based on charging. Florida can plan for this by expecting new demand spikes at midnight when rates are lowest.
- See how to further reduce emissions by utilizing renewable energy.
- Look at the used car market and the decommissioning process to see what assets can be further utilized.