

Tourism, Infrastructure & Energy Subcommittee

Wednesday, September 22, 2021
10:45 AM – 12:00 PM
Reed Hall (102 HOB)

Meeting Packet

Chris Sprowls
Speaker

Brad Drake
Chair

The Florida House of Representatives

Commerce Committee

Tourism, Infrastructure & Energy Subcommittee

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Meeting Agenda

Wednesday, September 22, 2021
10:45 AM – 12:00 PM
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I. Call to Order

II. Roll Call

III. Welcome and Opening Remarks

IV. Discussion of Electric Vehicle Charging Infrastructure

Brad Thoburn, Assistant Secretary, Strategic Development
Florida Department of Transportation

Cayce Hinton, Director, Office of Industry Development and Market Analysis, Florida Public Service Commission

V. Closing Remarks

VI. Adjournment

Florida Department of Transportation



ELECTRIC VEHICLE INFRASTRUCTURE MASTER PLAN

September 22, 2021

FDOT Strategic development

Statutory Charge

Section 339.287, F.S.

- ✓ Identify EVSE Locations
- ✓ Identify Adoption Barriers
- ✓ Quantify Funding Impacts
- ✓ Provide Implementation Strategies



Key Partners

FDOT

FLORIDA PUBLIC SERVICE COMMISSION
STATE OF FLORIDA

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Key Objectives

Support Short- and Long-Range Travel and Emergency Evacuation

Adapt State Highway Infrastructure

Ensure Availability of Charging Stations



Electric Vehicle Infrastructure

Level 1 Charger	Level 2 Charger	DCFC
Slower charging speed – 8 hours full charge	Slower charging speed – 2 hours full charge	Fast charging speed – 30 minutes full charge

Focus of EVMP is Direct Current Fast Charging (DCFC)

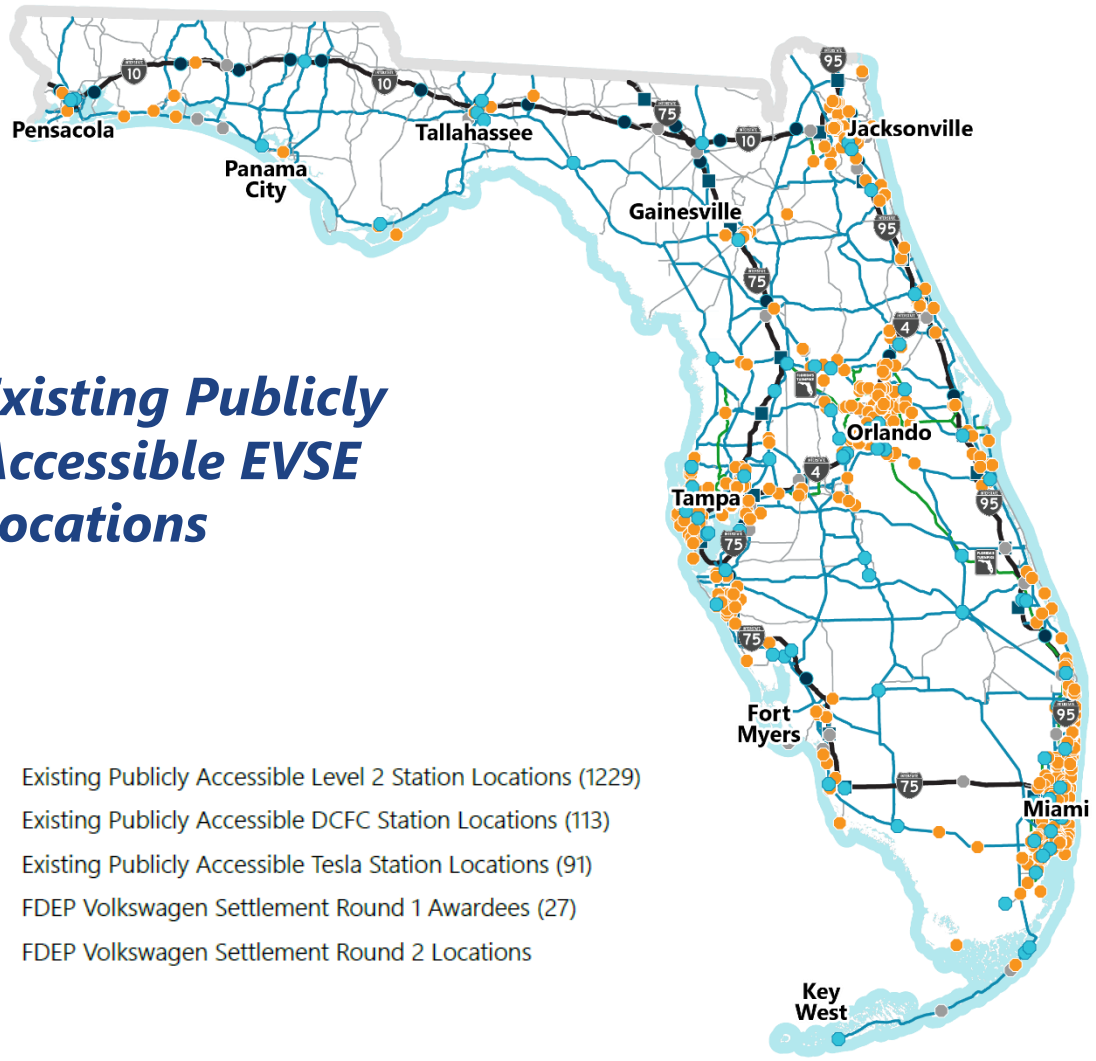
Future Infrastructure: Wireless Power Transfer (WPT)

In road (highway) or in route (transit)	Uses inductive loop technology	Currently in research and development phase

Florida's managed lanes provide an excellent opportunity to pilot in-lane charging



Existing and Future EVSE Locations



Existing Publicly Accessible EVSE Locations

- Existing Publicly Accessible Level 2 Station Locations (1229)
- Existing Publicly Accessible DCFC Station Locations (113)
- Existing Publicly Accessible Tesla Station Locations (91)
- FDEP Volkswagen Settlement Round 1 Awardees (27)
- FDEP Volkswagen Settlement Round 2 Locations

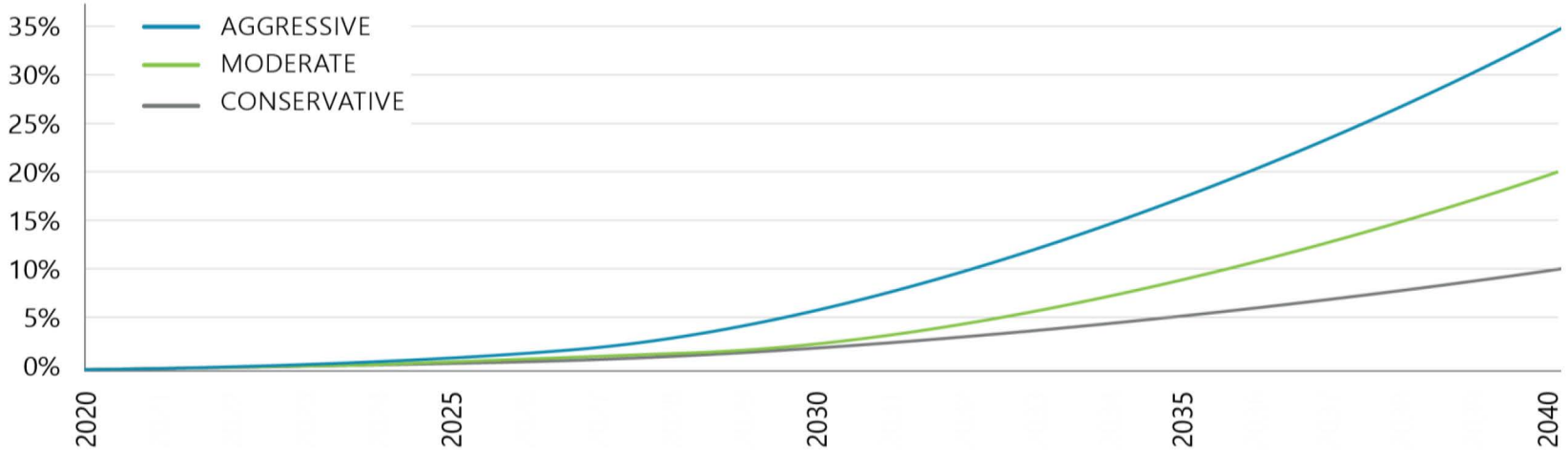


Potential Future DCFC Locations

- 5 (Highest Priority)
- 4
- 3
- 2
- 1 (Lowest Priority)
- Fiscally Constrained Counties*
- Fiscally Constrained Counties with Proposed DCFC

For more information visit: ***https://storymaps.arcgis.com/stories/ee330a41ee4b458e8e17587a17e53387***

EV Market Adoption



VOLVO
50% of its vehicle offerings will be EV.

FORD
40% of global sales will be EV.

GENERAL MOTORS
all light-duty cars and SUVs will be EV.

	All Registered LD Vehicles	Other Fuel Types	HEV	PHEV	BEV
Vehicles	16,529,219	16,218,211	244,323	**22,617**	**44,068**
% Total	100%	98.12%	1.48%	0.14% +	0.27%

.41%
all LD vehicles registered in Florida

Source: FLHSMV VIN Registrations as of July 28, 2020



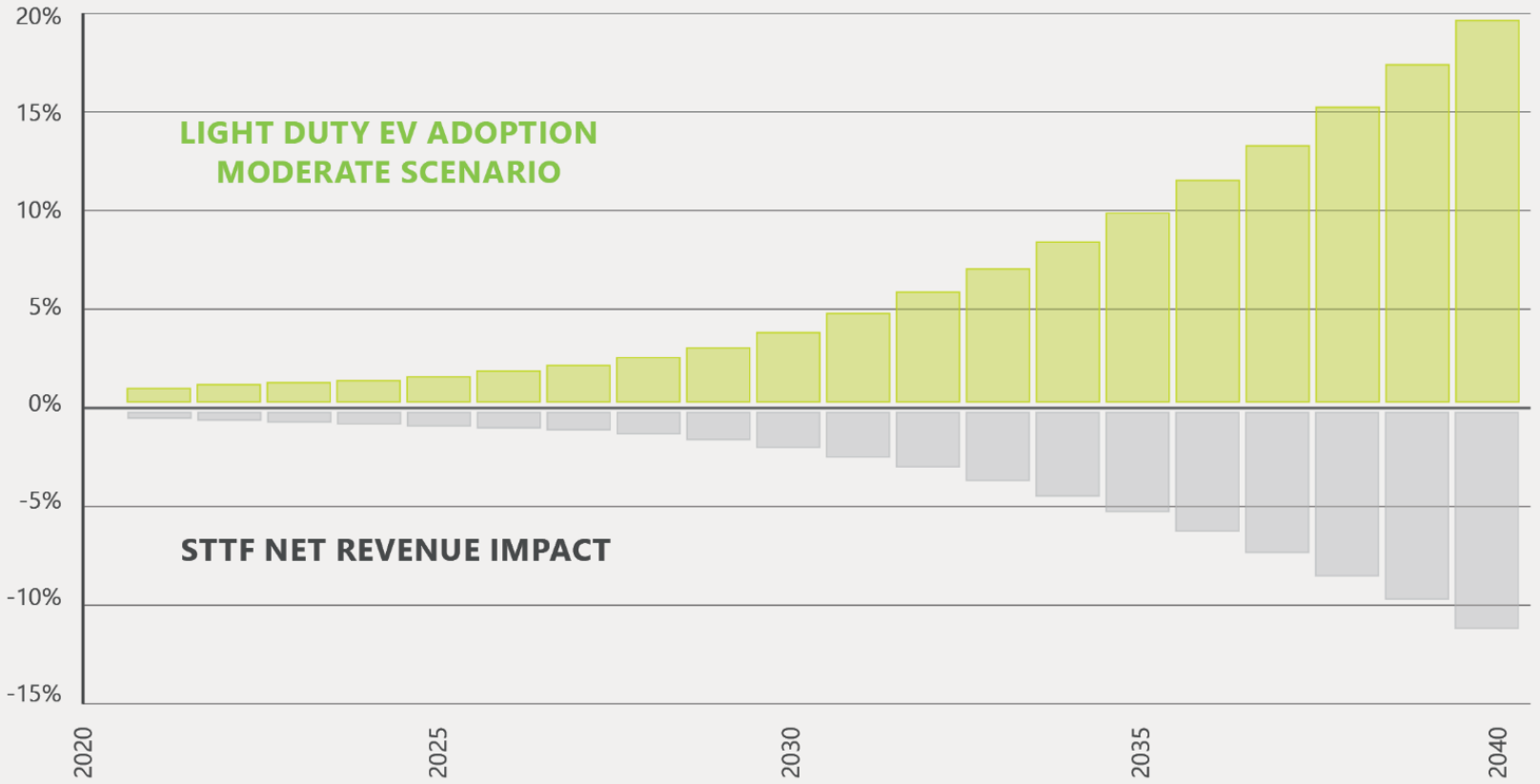
Transportation Funding Impacts

2040 Net Revenue Loss Projections

Conservative Growth Scenario	Moderate Growth Scenario	Aggressive Growth Scenario
-5.6%	-11.1%	-20.0%

20-Year Cumulative Total Projections

Conservative Growth Scenario	Moderate Growth Scenario	Aggressive Growth Scenario
-2.2%	-3.8%	-7.0%



Policy Actions of Other States

- As of early 2021, 28 states have implemented an EV registration fee
- Several road usage fee pilot projects are underway
- Some states adopted Zero Emission Vehicle regulations to promote EV sales

Recommendation

CATEGORIES

- Adapt
- Facilitate
- Educate
- Coordinate



Adapt

Adapt transportation infrastructure to **advance electrified** mobility.



Anticipate Market and Industry Trends

Adapt Transportation Policy Framework

Expand EVSE Network along Transportation Infrastructure

Support Municipal and Local Agencies with Implementation of the EVMP

Support Research and Testing of Next Generation EVSE like WPT and HD EVSE

Facilitate

Facilitate the transition of next generation infrastructure through **strategic investments and partnerships**.



Promote EVSE Infrastructure to Support Long-Range Corridor Travel and Emergency Evacuation

Identify and Pursue a Variety of Funding Options with Partners to Support EVSE Implementation

Promote Installation of Community Charging Infrastructure

Educate

Provide resources to share information and knowledge that **enhance educational and outreach** efforts to support the state's electrification goals.



Support EVSE-Focused Education and Outreach

Support Local Jurisdictions and Agencies

Increase Awareness of Publicly Available EVSE Locations

Coordinate

Engage other states, communities, agencies and stakeholders to **coordinate best practices** on EV infrastructure deployment.

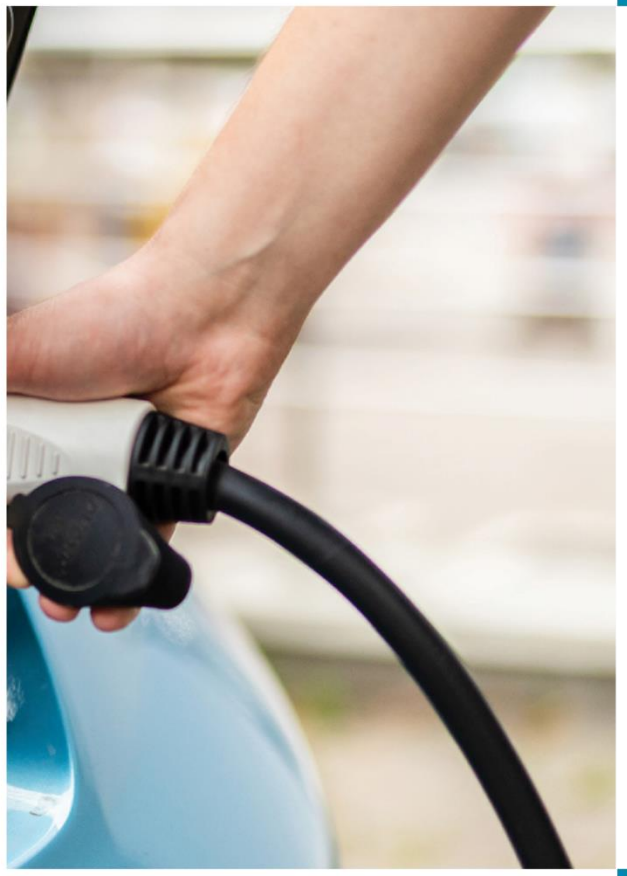


Advance a Regionally and Comprehensive Approach to EVSE

Continuously Coordinate Stakeholders to Support EVSE Planning and Implementation Efforts

Establish State, Regional and Local Agency Roles and Responsibilities

Coordinate Utility Roles and Rates to Support the Goals



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www.fdot.gov/planning/fto/ev

FDOT Strategic development

Florida Public Service Commission

Electric Vehicle Master Plan
Utility Regulatory Considerations

Presentation to the

Florida House of Representatives Tourism, Infrastructure and Energy Committee

Cayce Hinton, Director
Office of Industry Development and Market Analysis
September 22, 2021

Electric Vehicle Master Plan
Florida Public Service Commission (FPSC) Tasks

- 20-year projection of EV use, how to ensure adequate supply of EV charging infrastructure, and evaluation of current and future technology

- Strategies to develop supply of charging stations

- Identify the regulatory structure necessary for delivery of electricity to EV charging station infrastructure, including competitively neutral policies and public utility participation in the marketplace

Florida Public Electric Utilities

- Vertically Integrated
  - Generation, Transmission, Distribution of electricity to retail customers
- Exclusive Service Territories
- Regulatory Oversight by FPSC
  - Chapters 350 and 366, F.S.

FPSC Regulatory Authority

- Rate Base/Economic Regulation
  - Establish revenue requirements and set rates
  - Conduct earnings surveillance to ensure regulated utilities are not exceeding authorized rates of return
  - Municipal and Rural Cooperative utilities are exempt from FPSC rate setting authority
- Consumer Protection and Safety
  - Investigate consumer complaints
  - Conduct safety inspections of electric facilities
- Bulk Power Grid Planning
  - Oversight of the planning, development, and maintenance of the grid to ensure an adequate and reliable supply of energy

Electric Vehicle Charging

- Section 366.02(1), F.S., defines a public utility as any person, corporation, or other entity supplying electricity to or for the public within the state
  - Interpreted to mean that selling electricity to retail customers deems one a public utility subject to the rate setting authority of the FPSC

- 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 and not subject to regulation by the FPSC
  - EV charging stations are regulated by FDACS

EVMP Stakeholder Engagement

- Consensus that Florida's current regulatory structure is appropriate for delivery of electricity to EV charging stations
- Focus on flexibility to adopt different models of utility and third-party ownership
- Avoid prematurely and narrowly defining the role of public utilities

Utility Regulatory Considerations

- Utility interaction with third-party EV charging station owners
- Utility participation directly in the EV charging Marketplace

Utility and Third-Party EV Chargers

- Make-ready Installations
- Rates and Rate Design
  - Demand Charges
  - Time-of-use rates

Utility Participation

- Competitive Neutrality
- Cost of Service
  - Cost-based Rates
  - Subsidization

Public Utility Programs

- EV Charging Pilot programs
- Mix of residential and commercial elements
- Rebates for EV charging station installation
- Rates for utility-owned and non-utility charging stations

Questions?