

**The Florida Senate**  
**BILL ANALYSIS AND FISCAL IMPACT STATEMENT**

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

---

Prepared By: The Professional Staff of the Committee on Transportation

---

BILL: CS/SB 138

INTRODUCER: Senator Brandes

SUBJECT: Electric Vehicles

DATE: March 11, 2021

REVISED: \_\_\_\_\_

|    | ANALYST | STAFF DIRECTOR | REFERENCE | ACTION        |
|----|---------|----------------|-----------|---------------|
| 1. | Price   | Vickers        | TR        | <b>Fav/CS</b> |
| 2. |         |                | ATD       |               |
| 3. |         |                | AP        |               |

---

**Please see Section IX. for Additional Information:**

COMMITTEE SUBSTITUTE - Substantial Changes

---

**I. Summary:**

CS/SB 138 directs the Florida Department of Transportation (FDOT) to establish the Electric Vehicle Infrastructure (EVI) Grant Program to provide financial assistance to encourage the installation of publicly-available electric vehicle charging infrastructure for electric vehicles, electric semi-trucks, and electric aircraft on public or private property.

The bill authorizes state agencies, public universities, public transit agencies, ports, airports, and local governments to apply to the FDOT for grants for technical assistance for the development and adoption of local or regional plans establishing charging infrastructure and for assistance with the purchase of related equipment and costs of installation. The bill sets out required matching funds and sources and authorizes an applicant to partner with a private-sector entity to install charging infrastructure on private property in the jurisdiction of the applicant.

The FDOT is directed to develop and publish criteria for prioritizing applications and maintain a prioritized list of approved grant applications; continually review emerging research, policies and standards relating to electric vehicle charging infrastructure; publish best practices relating to such infrastructure; and adopt rules to administer the new provisions.

The bill also amends current law relating to FDOT development of a required EVI Master Plan for development of electric vehicle charging station infrastructure along the State Highway System, requiring a supplemental master plan by July of 2023 and a second status report by December of 2021, following an already-issued initial status report.

The bill also:

- Allocates certain increased license tax revenues from registration of electric and hybrid vehicles to the State Transportation Trust Fund (STTF) and requires the FDOT to use the revenues to fund the EVI Grant Program for specified years.
- Prohibits rules of the Department of Agriculture and Consumer Services from adopting rules that require specific methods of sale for electric vehicle charging equipment used in, and services provide in, this state.
- Revises the FDOT's prevailing principle relating to mobility to include improvement of travel choices to ensure mobility includes planning and establishment of infrastructure for innovative technologies, including electric vehicle charging infrastructure.

In addition, the bill:

- Revises the definition of "autocycle" to require compliance with a specified Federal Motor Vehicle Safety Standard relating to antilock brakes and to replace the requirement of a steering "wheel" with a requirement for a steering "mechanism."
- Revises the definition of "personal delivery device" (PDD) to provide that a PDD has a weight that does not exceed the maximum weight established by the FDOT and, if the FDOT establishes by rule a maximum speed for a PDD, to provide that a PDD has a speed that does not exceed that maximum.
- Authorizes the FDOT to establish rules to implement statutory provisions relating to a PDD.

Except as otherwise provided, the bill takes effect July 1, 2021.

The bill is expected to present varied but indeterminate fiscal impacts to state and local governments and to the private sector. See the "Fiscal Impact Statement" for details.

## II. Present Situation:

### Electric and Hybrid Vehicles

Electric vehicles (EVs) offer a readily available and cleaner fuel source, with higher fuel efficiency and improved air quality compared to vehicles with internal combustion engines (ICEs). Increasing interest in EV use is driven by higher gas prices and greenhouse gas emission concerns, but their relative high cost compared to conventional fuel-powered vehicles and their relative limited range have restricted the commercial viability of EVs.<sup>1</sup> However, advancements in EV-related technology are continuing, EV manufacturing is rising, and EV prices have been dropping.<sup>2</sup>

---

<sup>1</sup> See the Federal Highway Administration's *FHWA NHTS Brief, Electric Vehicle Feasibility*, July 2016, pp. 1-2, available at: <http://nhts.ornl.gov/briefs/EVFeasibility20160701.pdf> (last visited March 6, 2021).

<sup>2</sup> *Id.* at p. 2.

### ***Types of EVs***

The U.S. Department of Energy’s Alternative Fuels Data Center (AFDC) uses the term, “electric-drive vehicles,” to collectively refer to hybrid electric vehicles (HEVs), plug-in hybrid electric vehicles (PHEVs), and all-electric vehicles (AEVs). According to the AFDC:

- HEVs are primarily powered by an ICE that runs on conventional or alternative fuel and an electric motor that uses energy stored in a battery. The battery is charged through regenerative braking and by the ICE and is not plugged in to charge.
- PHEVs are powered by an ICE that can run on conventional or alternative fuel and an electric motor that uses energy stored in a battery. The vehicle can be plugged in to an electric power source to charge the battery. Some can travel more than 70 miles on electricity alone, and all can operate solely on gasoline (similar to a conventional hybrid).
- AEVs use a battery to store the electric energy that powers the motor. AEV batteries are charged by plugging the vehicle in to an electric power source.<sup>3</sup> AEVs are also referred to as battery electric vehicles, or BEVs.

For purposes of vehicle registration, Florida law<sup>4</sup> currently defines the term “electric vehicle” to mean “a *motor vehicle* that is powered by an electric motor that draws current from rechargeable storage batteries, fuel cells, or other sources of electrical current.”

### ***Electric Semi-trucks***

A number of automakers reportedly have “announced or advanced ambitious plans to electrify heavy-duty big rigs, semi-trucks, box trucks, delivery vans and more.” The report details efforts at various stages of development, such as companies that are ramping up production of medium- and heavy-duty electric trucks; unveiling long-haul electric trucks; and actually delivering battery-electric trucks.<sup>5</sup>

### ***Electric Vertical Takeoff and Landing (eVTOL) Aircraft***

Electric vertical takeoff and landing aircraft, other than the familiar helicopter, are in the development stage, and the Federal Aviation Administration (FAA) is currently working with a number of companies seeking what is called a type certificate, which is the FAA’s approval of the design of the aircraft and all component parts. The certificate “signifies the design is in compliance with applicable airworthiness, noise, fuel venting, and exhaust emissions standards.”<sup>6</sup>

---

<sup>3</sup> See the AFDC’s website available at: <https://www.afdc.energy.gov/vehicles/electric.html> (last visited March 6, 2021).

<sup>4</sup> Section 320.01(36), F.S. Section

<sup>5</sup> See GreenBiz, *Keep your eyes on these 9 electric truck and van companies in 2021*, available at <https://www.greenbiz.com/article/keep-your-eyes-these-9-electric-truck-and-van-companies-2021> (last visited March 20, 2021).

<sup>6</sup> See FAA, *Certification*, available at [Certification \(faa.gov\)](https://www.faa.gov/certification) (last visited March 20, 2021). Once obtained, the next step is production certification, which is the approval to manufacture duplicate products under an FAA-approved type design. Lastly is the airworthiness certification, either in the “Standard” or “Special Class,” which signifies an aircraft meets its approved type design and is in a condition for safe operation.

**III. Effect of Proposed Changes:**

**Florida EVI Master Plan Reports (Section 5)**

*Present Situation*

The 2020 Legislature<sup>7</sup> enacted s. 339.287, F.S., directing the FDOT, in consultation with the Public Service Commission and the Office of Energy within the Department of Agriculture and Consumer Services (DACCS) to develop and recommend a plan for current and future plans for the development of EV charging station infrastructure along the State Highway System. The recommended plan must be developed and submitted by July 1, 2021. As also required, the FDOT submitted a preliminary status report in December of 2020.<sup>8</sup>

Preliminary recommendations in the report contain 12 areas of focus, with potential strategies and action items categorized by potential action type (by executive order, legislative, and/or agency action) and potential lead and coordinating agencies identified.<sup>9</sup>

In accordance with the 2020 law, the report reviews emerging technologies in the electric and alternative vehicle market and sets out the following preliminary findings:

- With respect to EV technologies:
  - PHEVs have a relatively short range on a full battery (~40 miles). Once expired, the ICE automatically starts, so PHEVs are not limited in range by available electricity.
  - BEVs have a 40-300 mile range, depending on the vehicle make and model, which is a primary consideration for long-range travel and evacuations.<sup>10</sup>
- With respect to EV technology trends:
  - The trend is toward increased battery power density, increased battery lifetime (recharge cycle) and higher battery voltages.
  - BEV historical battery cost has decreased from ~\$1,175 per kWh<sup>11</sup> in 2010 to ~\$375 per kWh in 2015 and is forecasted to reduce further to ~\$160 in 2020 and to ~\$100 in 2025.
  - BEV historical range has increased from ~75 miles in 2010 to ~160 miles in 2015 and is forecasted to increase further to 250 miles in 2020 and ~450 miles in 2025.

As directed, the report also evaluates and compares EV charging stations available at present and which may become available, key findings of which are summarized in part in the below table:

| EVSE <sup>12</sup> Type | Supply Voltage           | Power Level                  | Charge Rate (miles/hour) | Use cases                         |
|-------------------------|--------------------------|------------------------------|--------------------------|-----------------------------------|
| Level 1                 | 120V (toaster)           | 1 -18 kW                     | 3 – 7                    | Home/overnight                    |
| Level 2                 | 208-240V (clothes dryer) | 3.3 – 19.2<br>7.7 kW typical | 10-60<br>26              | Home/work<br>Destination charging |

<sup>7</sup> Ch. 2020-21, L.O.F.

<sup>8</sup> *EV Infrastructure Master Plan Status Report*, December 1, 2020 available at [https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/fto/evmp-status.pdf?sfvrsn=ac348cf4\\_8](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/fto/evmp-status.pdf?sfvrsn=ac348cf4_8) (last visited March 6, 2021).

<sup>9</sup> These recommendations are set out in table form for ease of review. *Id.* at p. 15.

<sup>10</sup> *Supra* note 27 at p. 3.

<sup>11</sup> Per kilowatt hour.

<sup>12</sup> The report refers to EV charging equipment using an industry term, electric vehicle supply equipment, or EVSE.

|                 |                             |                          |                     |                                       |
|-----------------|-----------------------------|--------------------------|---------------------|---------------------------------------|
| DC Fast Charger | 480V (commercial HVAC unit) | 50 kW<br>150 Kw<br>350Kw | 175<br>500<br>1,200 | Roadside/travel<br>Emergency charging |
|-----------------|-----------------------------|--------------------------|---------------------|---------------------------------------|

The report indicates that Level 1 chargers are currently obsolete for commercial purposes, Level 2 chargers are currently dominant for commercial purposes, and DC fast chargers are the most applicable for long-range travel and evacuations.<sup>13</sup> Future EVSE technologies for fleet and passenger operations include higher-power charging, up to 350 kW with current standards, extreme fast charging for medium and heavy duty applications, and wireless power transfer.<sup>14</sup>

***Effect of Proposed Changes***

Section 5 amends s. 339.287, F.S., relating to the EVI Master Plan reports. The bill requires the FDOT to issue a supplemental master plan for development of EV charging station infrastructure along the State Highway System; leaves in place the July 1, 2021, due date for delivery of the recommended master plan; and applies to both the recommended master plan and the supplemental master plan the directive to the FDOT to include recommendations for legislation and the authority to include other recommendations as determined by the FDOT.

The bill directs the FDOT to submit the supplemental master plan to the Governor, the President of the Senate, and the Speaker of the House of Representatives by July 1, 2023. The supplemental plan must address innovations in EV charging infrastructure occurring since the submission of the recommended plan and the development of high-powered charging infrastructure for electric aircraft, and must make recommendations related to charging station infrastructure along the State Highway System and at airports, seaports, and other ports in light of the innovations.

The bill also directs the FDOT to file a second status report by December 1, 2021.

**EVI Grant Program (Section 4)**

***Present Situation***

The EV Master Plan Status Report also identified barriers to the use of EVs and EV charging station infrastructure for both short- and long-range EV travel. With respect to barriers to adoption of EVs:

- EV prices are generally still higher than a motor vehicle powered solely by an ICE, but cost parity with ICE vehicle is expected to occur between 2025 and 2030.
- Range anxiety is a significant factor during longer trips, as drivers worry about availability of EVSE.
- A lack of EV models exists on the market, with trucks and SUVs accounting for greater than 50 percent of vehicle registered in Florida.
- Dealerships lack the knowledge or willingness to suggest the purchase of an EV and have few available EVs.<sup>15</sup>

<sup>13</sup> *Supra* note 27 at p. 4.

<sup>14</sup> *Id.* For a map of existing publicly accessible Level 2 station locations (773), DC fast charger stations (59), and locations funded by the Florida Department of Environmental Protection from the VW Settlement (27), *see* p. 9.

<sup>15</sup> *Supra* note 27 at p. 5.

As for barriers to adoption of EVSE:

- The EV customer base is low, and the public lacks awareness of EVSE locations. A perception exists that gasoline is cheap, and the public is generally more familiar with ICE vehicles.
- EV charging speeds are a deterrent, in that charging speed is a function of power delivery of the EVSE and how much power the EV can accept.
- Service providers locate EVSE where EV adoption is highest, resulting in gaps in EVSE particularly in low-utilization, rural, and income qualified communities. In addition, a lack of site-specific utility infrastructure for DC fast charger stations exists, particularly in rural and emergency-critical areas, and additional costs are incurred when back-up power is provided for emergency-critical EVSE locations.
- Utility charges increase during peak demand periods.
- A lack of state-level public funding to deploy EVSE exists, especially in low-use areas.<sup>16</sup>

Current Florida law contains the following EV-related incentives:

- Section 163.08, F.S., authorizes a property owner to apply to a local government for funding of, or to enter into a financing agreement with the local government to finance, installation of electric vehicle charging equipment on the owner's property, subject to local government ordinance or resolution.
- Section 212.055, F.S., authorizes local governments to use proceeds from a local government infrastructure surtax to provide loans, grants, or rebates to residential or commercial property owners who make energy efficiency improvements to their property, including, but not limited to, installation of electric vehicle charging equipment, if the local government ordinance authorizing such use is approved by referendum.
- Certain hybrid vehicles and inherently low-emission vehicles may use a high-occupancy vehicle lane (HOV lane)<sup>17</sup> regardless of occupancy, and such vehicles may use any HOV lane re-designated as HOV toll lanes or express lanes without paying a toll as provided in s. 316.0741, F.S.

### ***Effect of Proposed Changes***

Section 4 of the bill creates s. 339.286, F.S., directing the FDOT to establish the EVI Grant Program to provide financial assistance to encourage the installation of electric vehicle charging infrastructure. Eligible applicants include state agencies, public universities, public transit agencies, ports, airports, and local governments, including housing authorities and libraries, which applicants may apply to the FDOT for grants to install publicly available electric vehicle charging infrastructure on public or private property.

The bill authorizes award of a grant for:

- Technical assistance for the development and adoption of:
  - A local or regional plan that establishes an electric vehicle charging infrastructure;
  - Any action plans necessary to address any infrastructure gaps; and

---

<sup>16</sup> *Id.*

<sup>17</sup> Generally, a high-occupancy vehicle lane is a lane designated for use by vehicles in which there is more than one occupant. Section 316.0741(1)(a), F.S.

- Steps necessary to complete the infrastructure plan. (A plan must address actions to deploy the necessary infrastructure in high-density housing areas and low-income to moderate-income areas.)
- Assistance with the purchase of related equipment and the costs of installation of that equipment to provide electric vehicle charging. (Such equipment must be capable of collecting and reporting data, use standard connectors, and be available to the public.)

Applicants may apply for a grant for both technical assistance and equipment purchase and installation.

For a technical assistance grant, a minimum match of funds from the applicant of 30 percent of the grant award is required, but no match is required for an applicant located in a fiscally constrained county.<sup>18</sup>

For an equipment purchase and installation grant, a minimum match of 60 percent of the total project cost is required for alternating-current, Level 2 charging infrastructure 20 percent for direct-current, fast charging infrastructure; or 20 percent for high-powered charging infrastructure for electric aircraft, including, but not limited to, eVTOL aircraft and electric semi-trucks.

Matching funds must be from non-state sources but may include private funds provided through a partnership with a private entity or in-kind contributions such as donation of equipment, services, or land or use of land for establishment of EV charging infrastructure.

Grant funds may not subsidize the cost for the use of electricity. Twenty percent of the funds available under the grant program must be reserved for applicants or projects in fiscally constrained counties. An applicant is authorized to partner with a private-sector entity to install charging infrastructure on private property in the same county or local jurisdiction as the applicant.

The bill directs the FDOT to continually review emerging research, policies, and standards related to EV infrastructure and innovations in the use of EVs. Using such information, the FDOT must publish best practices for the establishment of EV charging infrastructure, model infrastructure plan development and components, and other significant information for the implementation and use of EV charging infrastructure. The bill authorizes the FDOT to develop a model plan that state agencies, public universities, public universities, public transit agencies, ports, airports, and local governments may use to establish an EV charging infrastructure plan. The bill directs the FDOT to adopt rules to administer the new section of law.

---

<sup>18</sup> As defined by s. 218.67(1), F.S., which provides that “Each county that is entirely within a rural area of opportunity as designated by the Governor pursuant to s. 288.0656 or each county for which the value of a mill will raise no more than \$5 million in revenue, based on the taxable value certified pursuant to s. 1011.62(4)(a)1.a., from the previous July 1, shall be considered a fiscally constrained county.”

### Allocation of Increased License Tax Revenues (Section 3)

#### *Present Situation*

Currently, an electric vehicle pays the same motor vehicle license tax as non-electric vehicles.<sup>19</sup> Generally, registration fees differ based on factors such as the type of vehicle and its weight, with fees ranging, for example, between \$14.50 and \$32.50 annually for light-duty vehicles and from \$60.75 to \$1,322 for heavy trucks and truck tractors.<sup>20</sup>

The EV Master Plan Status Report includes:

- A required projection of the increase in the use of EVs in this state over the next 20 years, which in part provides data<sup>21</sup> on existing EV market adoption in Florida. The report concludes that BEVs (44,068) and PHEVs (22,617) currently total just 0.41 percent of the 16,529,219 total light-duty vehicle registrations in Florida.<sup>22</sup>
- Conservative, moderate, and aggressive growth scenarios for light-duty vehicle sales, projecting a respective 10, 20, and 35 percent growth in sales by 2040.<sup>23</sup>
- Respective of the growth scenarios, projections of *negative* net revenue loss to the STTF of 8.4, 16.6, and 30 percent by the same year.<sup>24</sup>

Among the most common potential strategies for mitigation of revenue loss from increased EV use in other states, the report notes a fee in addition to any existing registration fee, which may or may not be tied to inflation, and concludes that 26 states impose such a fee with a range in cost of \$32.50 to \$213.88 annually.<sup>25</sup>

#### Related Legislation

CS/SB 140, linked to this bill, imposes fees in addition to those above as follows:

- For “electric vehicles” weighing less than 10,000 pounds, a flat fee of \$135 beginning July 1, 2021, increasing to \$150 beginning January 1, 2025.
- For “electric vehicles” weighing 10,000 pounds or more, \$235 beginning July 1, 2021, increasing to \$250 beginning January 1, 2025.
- For “plug-in hybrid electric vehicles,” a \$35 flat fee beginning July 1, 2021, increasing to \$50 beginning January 1, 2025.

CS/SB 140 requires these fees to be deposited into the STTF, to be used to fund the EVI Grant Program beginning in the 2023-2024 fiscal year.<sup>26</sup>

<sup>19</sup> Section 320.08001, F.S.

<sup>20</sup> Section 320.08, F.S.

<sup>21</sup> The source is vehicle registration data as of July 28, 2020, provided to the FDOT by the Florida Department of Highway Safety & Motor Vehicles. *Supra* note 6 at p. 6.

<sup>22</sup> *Supra* note 27 at p. 6. HEVs are not included as part of the 0.41 percent of the total light-duty vehicle registrations. HEVs do not plug in to an electric power source to charge batteries, using regenerative braking instead.

<sup>23</sup> *Id.*

<sup>24</sup> *Supra* note 27 at p. 7.

<sup>25</sup> *Id.*

<sup>26</sup> See the Senate Transportation Committee Staff Analysis for CS/SB 140 for details, available at <https://www.flsenate.gov/Session/Bill/2021/140>, “Analyses” tab (last visited March 11, 2021).



### ***Effect of Proposed Changes***

Section 3 of *this* bill, contingent upon passage of CS/SB 140, creates s. 339.0802, F.S., requiring that funds resulting from increased revenues to the STTF from the additional fees imposed on EVs by CS/SB 140 must be used to fund the EVI Grant Program beginning in the 2023-2024 fiscal year.

The new s. 339.0802, F.S., expires on December 31, 2030, which is the same date that the additional fees imposed on certain EVs by CS/SB 140 expire. The EVI Grant Program would not expire and could continue should future funding resources become available.

### **Regulatory Structure to Deliver Electricity to EVs and EV Infrastructure (Section 6)**

#### ***Present Situation***

The EV Master Plan Status Report notes that in Florida, a traditionally regulated state, public electric utilities serving exclusive service territories are under Public Service Commission (PSC) jurisdiction pursuant to chapters 350 and 366, F.S. As described in the report:

The PSC exercises its regulatory authority through rate setting, oversight of bulk power grid planning, safety inspections, and ensuring the provision of reliable service. The PSC has full regulatory authority over five investor-owned utilities in Florida. Rates are set for public utilities based on the cost of service.

The PSC does not regulate the rates and service quality of municipal or rural cooperative electric utilities, but does have jurisdiction regarding rate structure, safety, territorial boundaries, and bulk power supply planning.

Since the current regulatory structure of electric utilities in Florida includes exclusive service territories, the sale of electricity to retail, or end-use customers by a third party is not permitted. However, in 2012 the Florida Legislature created an exemption for electric vehicle charging.<sup>27</sup>

The report also notes initial observations formulated following a PSC request for comment relating to the types of regulatory structure necessary for the delivery of electricity to EV charging infrastructure and participation of public utilities in the marketplace, including:

- A general consensus exists among stakeholders that Florida’s current regulatory structure is appropriate for the delivery of electricity to charging station infrastructure.
- Participation by public utilities in the EV charging marketplace involves two considerations: electrical infrastructure deployment and rates, and utility-owned/operated EVSE.<sup>28</sup>

The report notes, however, that “A focus on flexibility should be maintained in order to adopt different models of utility and third-party ownership/operation based upon site-specific circumstances. In addition, prematurely and narrowly defining the role of public utilities should

---

<sup>27</sup> Section 366.94(4), F.S., which provides that the “provisions of electric vehicle charging to the public by a nonutility is not the retail sale of electricity...”

<sup>28</sup> *Supra* note 27 at p. 9.

be discouraged given the nascence of the market and the urgent need to address gaps in charging infrastructure.”<sup>29</sup>

### Methods of Sale

Section 366.94, F.S., currently requires DACS to adopt rules relating to electric vehicle charging stations to allow for consistency for consumers and the industry, including but not limited to methods of sale. The DACS Rule 5J-22.003, F.A.C., adopts by reference the 2017 Edition of the National Institute of Standards and Technology Handbook 130, including a section on the “Uniform Regulation for the Method of Sale of Commodities.” Section 2.34.2 provides:

Method of Sale. – All electrical energy kept, offered, or exposed for sale and sold at retail as a vehicle fuel shall be in units in terms of the megajoule (MJ) or kilowatt-hour (kWh). In addition to the fee assessed for the quantity of electrical energy sold, fees may be assessed for other services; such fees may be based on time measurement and/or a fixed fee.

### *Effect of Proposed Changes*

Section 6 amends s. 366.94(2), F.S., prohibiting rules implemented under the DACS rulemaking requirement from requiring specific methods of sale for EV charging equipment used in, and services provided in, this state.

The current DACS rule appears to be in conflict with this provision and, therefore, may require revision.<sup>30</sup>

### **FDOT Mobility Goals (Section 2)**

#### *Present Situation*

Section 334.046, F.S., sets out the FDOT’s mission, goals, and objectives. That section requires the FDOT’s goals to address the prevailing principles of preservation, economic competitiveness, and mobility. With respect to the prevailing principle of mobility to be addressed by the FDOT’s goals, that section specifies ensuring a cost-effective, statewide, interconnected transportation system.

#### *Effect of Proposed Changes*

Section 2 amends s. 334.046(2), F.S., relating to the prevailing principle of mobility. The bill adds to the principle “improvement of travel choices to ensure mobility includes planning and establishment of infrastructure for innovative technologies, including electric vehicle charging infrastructure.”

---

<sup>29</sup> *Id.*

<sup>30</sup> See the DACS analysis of SB 138 dated December 9, 2020 (on file in the Senate Transportation Committee).

## **Autocycles (Section 1)**

### ***Present Situation***

According to the National Conference of State Legislatures, the National Highway Traffic Safety Administration (NHTSA) does not currently have a vehicle classification for autocycles. At the federal level, autocycles fall under the definition of “motorcycle” and must generally comply with applicable motorcycle manufacturing and safety standards. States are making efforts to define “autocycles,” address safety requirements and passenger restrictions, and regulate operator licensing and operation of autocycles on roadways.<sup>31</sup>

Current Florida law defines the term “autocycle” to mean “a three-wheeled motorcycle<sup>32</sup> that has two wheels in the front and one wheel in the back; is equipped with a roll cage or roll hoops, a seat belt for each occupant, antilock brakes, a steering *wheel*, and seating that does not require the operator to straddle or sit astride it; and is manufactured in accordance with the applicable federal motor vehicle safety standards in 49 C.F.R. part 571 by a manufacturer registered with [NHTSA].”

### ***Effect of Proposed Changes***

Section 1 amends s. 316.003(2), F.S., to revise the definition of “autocycle” by clarifying that the required antilock brakes must meet the requirements of Federal Motor Vehicle Safety Standard No. 122 relating to such brakes, and to revise the requirement for a steering “wheel” to a steering “mechanism.”

## **Personal Delivery Devices (Section 1)**

### ***Present Situation***

A personal delivery device (PDD) is an electrically-powered device that:

- Is operated on sidewalks and crosswalks and intended primarily for transporting property;
- Weighs less than 80 pounds, excluding cargo;
- Has a maximum speed of 10 miles per hour; and
- Is equipped with technology to allow for operation of the device with or without the active control or monitoring of a natural person.

A PDD is not considered a vehicle unless expressly defined by law as a vehicle.<sup>33</sup>

---

<sup>31</sup> See National Conference of State Legislatures, *Transportation Review: Autocycles*, Lambert, S. and Shinkle, D., April 2017, available at <https://www.ncsl.org/research/transportation/transportation-review-autocycles.aspx#:~:text=Its%20law%20defines%20an%20autocycle.in%20contact%20with%20the%20roadway>. (last visited March 6, 2021).

<sup>32</sup> “Motorcycle” is defined in s. 316.003(45), F.S., to mean “Any motor vehicle having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground. The term includes an autocycle, but does not include a tractor, a moped, an electric bicycle, or any vehicle in which the operator is enclosed by a cabin unless it meets the requirements set forth by the National Highway Traffic Safety Administration for a motorcycle.

<sup>33</sup> Section 316.003(56), F.S.

A PDD may operate on sidewalks and crosswalks and has all the rights and duties applicable to a pedestrian, except that a PDD may not unreasonably interfere with pedestrians or traffic and must yield the right-of-way to pedestrians on a sidewalk or crosswalk.<sup>34</sup>

A PDD must obey all traffic and pedestrian control signals and devices, include identifying information on the PDD, and be equipped with a braking system that, when activated or engaged, enables the PDD to come to a controlled stop.<sup>35</sup> A PDD may not:

- Operate on a public highway except to the extent necessary to cross a crosswalk.
- Operate on a sidewalk or crosswalk unless the personal delivery device operator is actively controlling or monitoring the navigation and operation of the personal delivery device or a mobile carrier owner remains within 25 feet of the mobile carrier.
- Transport hazardous materials.<sup>36</sup>

A person who owns and operates a PDD in this state must maintain an insurance policy, on behalf of himself or herself and his or her agents, which provides general liability coverage of at least \$100,000 for damages arising from the combined operations of PDDs under the entity's or agent's control.

A PDD may be operated on sidewalks and crosswalks within a county or municipality when such use is permissible under federal law, but a county or a municipality is not prohibited from otherwise adopting regulations for the safe operation of PDDs. A PDD may not be operated on the Florida Shared-Use Nonmotorized Trail Network or components of the Florida Greenways and Trails System.<sup>37</sup>

### *Effect of Proposed Changes*

Section 1 amends s. 316.003(56), F.S., revising the definition of the term “personal delivery device.” The bill:

- Strikes the current part of the definition requiring a PDD to weigh less than 80 pounds, excluding cargo, and revises the definition to require that a PDD has a weight that does not exceed the maximum weight established by FDOT rule.
- Revises the current part of the definition requiring a PDD to have a maximum speed of 10 miles per hour by including an alternative: If the FDOT establishes by rule a maximum speed, a PDD must have a speed that does not exceed the maximum of the rule.

Under the bill, the FDOT is required to establish by rule a maximum weight for a PDD. PDDs will be required to comply with the maximum weight requirement to comply with Florida law and, if the FDOT establishes by rule a maximum speed, will be required to comply with that established maximum speed to comply with Florida law.

---

<sup>34</sup> Section 316.2071(1), F.S.

<sup>35</sup> Section 316.2071(2), F.S.

<sup>36</sup> Section 316.2071(3), F.S.

<sup>37</sup> Section 316.008(7)(b), F.S.

**IV. Constitutional Issues:****A. Municipality/County Mandates Restrictions:**

None.

**B. Public Records/Open Meetings Issues:**

None.

**C. Trust Funds Restrictions:**

None.

**D. State Tax or Fee Increases:**

None. This bill does not impose or increase any tax or fee. It does allocate the new fees imposed on certain EVs in the linked CS/SB 140, which fees are to be used to fund the EVI Grant Program.

**E. Other Constitutional Issues:**

None identified.

**V. Fiscal Impact Statement:****A. Tax/Fee Issues:**

None. This bill does not impose or increase any tax or fee. It does allocate the new fees imposed on certain EVs in the linked CS/SB 140, which fees are to be used to fund the EVI Grant Program.

**B. Private Sector Impact:**

Private entities may experience positive fiscal impacts through receipt of grant funds.

Vendors may experience indeterminate positive fiscal impacts associated with providing the related technology, services, and equipment for EV charging infrastructure.

Citizens may experience generally positive impacts associated with increased availability of publicly available EV charging stations. However, those subjected to the fees imposed by CS/SB 140 may object to use of the fees for electric aircraft purposes, as no fees are imposed by that bill on aircraft of any kind.

**C. Government Sector Impact:**

The FDOT will incur indeterminate expenses associated with:

- Establishing by rule a required maximum weight for a PDD.
- Adopting by rule a maximum speed for a PDD, if the FDOT chooses to do so.

- Establishing and staffing the EVI Grant Program and continually reviewing emerging research, policies, and standards relating to EV charging infrastructure. (The FDOT notes it is unknown how many FTEs will be needed to administer the program, and the FDOT “will need to determine what the implications are to funding based on this requirement.”<sup>38</sup>)
- Developing and publishing criteria for prioritizing EVI grant applications and maintaining the required list of approved grant applications.
- Publishing best practices for establishing charging infrastructure, model infrastructure plan development and components, and other information for implementation and use of charging infrastructure.
- Developing a model plan for use by the specified entities, if the FDOT chooses to do so.
- Adopting rules to implement the EVI Grant Program.

The DACS advises it may need to amend its existing rule relating to methods of sale.<sup>39</sup> The cost is expected to be absorbed within existing resources.

The DHSMV advises the bill will require modification of its existing procedures, website, driver license handbook, and communications to specific stakeholders, including tax collectors, but the bill “has minimal impact to the Division of Motorist Services.”<sup>40</sup>

The bill presents an indeterminate positive fiscal impact to local governments (and other eligible public entities) in the form of grant awards for the establishment of EV charging infrastructure, and an indeterminate negative impact due to the match requirements.

## VI. Technical Deficiencies:

Florida law currently defines the term “electric vehicle” for purposes of vehicle registration under Chapter 320, F.S., to mean “a motor vehicle that is powered by an electric motor that draws current from rechargeable storage batteries, fuel cells, or other sources of electrical current.” This definition appears to be ambiguous. For example, the definition does not require that a motor vehicle be *solely* powered by an electric motor, which would mean that only BEVs would meet the definition. PHEVs and HEVs would be excluded because they both have ICEs. However, if the definition requires that a motor vehicle be *partially* powered by an electric motor, BEVs, PHEVs, and HEVs would meet the definition. Florida law does not currently define “plug-in hybrid electric vehicle.” An amendment to clarify the potential ambiguity consistent with intent may be appropriate.

The FDOT notes the bill provides no date by which it must publish the required prioritization criteria or best practices.

---

<sup>38</sup> See the FDOT bill analysis for SB 138 at p. 8 (on file in the Senate Transportation Committee).

<sup>39</sup> *Supra* note 29.

<sup>40</sup> See the DHSMV bill analysis for SB 138 at p. 3 (on file in the Senate Transportation Committee).

**VII. Related Issues:**

Individuals subjected to the fees imposed by CS/SB 140 may object to use of the fees for electric aircraft purposes, as no fees are imposed by that bill on aircraft of any kind.

**VIII. Statutes Affected:**

This bill amends the following sections of the Florida Statutes: 316.003, 334.046, 339.287, and 366.94.

This bill creates the following sections of the Florida Statutes: 339.0802 and 339.286.

**IX. Additional Information:****A. Committee Substitute – Statement of Substantial Changes:**  
(Summarizing differences between the Committee Substitute and the prior version of the bill.)**CS by Transportation on March 10, 2021:**

- Adds high-powered charging infrastructure for electric aircraft and semi-trucks as eligible for potential grant awards under the EVI Grant Program.
- Revises law relating to development of a currently required EVI Master Plan for development of electric vehicle charging station infrastructure along the State Highway System, requiring a supplemental master plan by July of 2023 and a second status report by December of 2021.
- Requires all of the additional flat fees for vehicle registration imposed on electric and plug-in hybrid electric vehicles by CS/SB 140 to be used to fund the EVI Grant Program beginning in fiscal year 2023-2024.
- Removes the \$5 million appropriation in non-recurring funds from the STTF to the FDOT to implement the EVI Grant Program.

**B. Amendments:**

None.