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 Appropriations	
BILL:	CS/CS/SB 852
INTRODUCER:	Appropriations Committee (Recommended by Subcommittee on Transportation, Tourism, and Economic Development); Transportation Committee; and Senator Brandes and others
SUBJECT:	Transportation Infrastructure
DATE:	March 5, 2018 REVISED:

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Price	Miller	TR	**Fav/CS**
2.	McAuliffe	Hrdlicka	ATD	**Recommend: Fav/CS**
3.	McAuliffe	Hansen	AP	**Fav/CS**

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

CS/CS/SB 852 creates the Florida Smart City Challenge Grant Program; requires the Florida Transportation Commission to project the effect of electric and hybrid vehicles on fuel tax revenues; and, creates the Statewide Mobility Innovation Program within the Department of Transportation.

The Florida Smart City Challenge Grant Program is created to provide opportunities to cities and other regions of the state for developing smart mobility solutions to local transportation challenges. The bill authorizes certain state, county, municipal, regional, or other agencies to submit applications to the Florida Department of Transportation (FDOT) for grants to fund certain innovative transportation projects. The bill provides project selection, matching funds, and reporting requirements. The FDOT is directed to provide administrative support and to conduct expedited proposal reviews to facilitate smart city technology deployment within the state.

The bill also requires the Florida Transportation Commission (FTC) to review all funding sources for transportation infrastructure and maintenance projects when it is determined that electric and hybrid vehicles make up two percent or more of the total number of registered vehicles in this state. The report must assess the effect of projected electric and hybrid vehicle use on future revenues from existing fuel taxes and other fees related to nonelectric vehicles. The report must also make recommendations to: provide continued funding to maintain existing

infrastructure; continue to meet projected infrastructure demand; and improve infrastructure to support emergency evacuations by users of electric vehicles.

The bill also requires the FTC, in consultation with the Florida Division of Emergency Management (FDEM), to assess transportation infrastructure with respect to emergency evacuations and electric vehicles, including the availability of electric vehicle charging stations in this state. The bill requires metropolitan planning organization's long-range transportation plans to include an assessment of the increased use of autonomous technology and electric vehicles.

The bill further creates the Statewide Mobility Innovation Program within the Department of Transportation (FDOT). Through the program, FDOT will solicit, evaluate, and finance proposals for the design and construction of innovative mobility systems.

Currently, the Florida Rail Enterprise receives a $60 million from documentary stamp taxes. Beginning in the 2021-2022 fiscal year, the bill redistributes the $60 million to provide $35 million to the Statewide Mobility Innovation Program and $25 million to the Tampa Bay Area Regional Transit Authority (TBARTA). Of the $35 million distributed to the program, $25 million is allocated to Miami-Dade County, $5 million to the Jacksonville Transportation Authority (JTA), and the remaining $5 million will be available to all other counties competing for funding for innovative mobility system projects.

The bill appropriates $15 million in nonrecurring funds from the State Transportation Trust Fund to the FDOT implement the Florida Smart City Challenge Grant Program.

The FTC will incur indeterminate expenses associated with the reporting requirements of this bill. The DHSMV expects the bill to have no impact on expenditures. The FDEM may incur indeterminate expenses associated with its participation in the emergency evacuation assessment.

Beginning in Fiscal Year 2021-2022, the bill will reduce revenues directed to the FRE and may negatively impact FRE projects planned in the FDOT's work program. The FDOT will also incur indeterminate expenses associated with creation and administration of the Statewide Mobility Innovation Program. Counties that elect to apply for funding for innovative mobility system projects will be required to provide matching funds.

The bill takes effect on July 1, 2018.

II. Present Situation:

Smart City Challenge Grant Program

According to the National League of Cities, 66 percent of cities are investing in smart city technology, and 25 percent of cities with no smart city technology are investigating how to implement it.[1] A single definition of smart city technology is difficult to identify, but in the context of transportation, it relates to "using sensors to collect data about the movement of

[1] National League of Cities, *Cities and Innovation Economy: Perceptions of Local Leaders (October 18, 2017)*, available at: http://www.nlc.org/resource/cities-and-innovation-economy-perceptions-of-local-leaders (Last visited January 14, 2018).

people, all forms of vehicles and bikes. A smart city is one that greatly reduces vehicle traffic and allows people and goods to be moved easily through various means."[2] Examples include intelligent vehicle systems and autonomous vehicle transportation. Outcomes of smart city efforts are reduced vehicle related deaths, reduced pollution, reduced traffic times, and healthier populations.[3]

The Federal Smart City Challenge

The United States Department of Transportation (USDOT) launched a Smart City Challenge in December 2015. The challenge asked mid-sized cities "to develop ideas for an integrated, first-of-its-kind smart transportation system that would use data, applications, and technology to help people and goods move more quickly, cheaply, and efficiently."[4] The USDOT committed up to $40 million to one winning city.[5] The USDOT received 78 applications from cities across America, including the following cities in Florida: Jacksonville, Miami, Orlando, St. Petersburg, Tallahassee, and Tampa.[6] However, no Florida city received any funding.

Ultimately, Columbus, Ohio won the challenge by proposing "a comprehensive, integrated plan addressing challenges in residential, commercial, freight, and downtown districts using a number of new technologies, including connected infrastructure, an integrated data platform, autonomous vehicles, and more."[7] The USDOT then worked with selected finalists to further develop the ideas proposed by the cities and, in October 2016, announced an additional $65 million in grants to support advanced technology transportation projects.[8] Again, no city in Florida was selected for project funding.[9]

The State Smart City Challenge Grant Program

The 2017 Legislature enacted legislation[10] requiring the FDOT, in consultation with the Department of Highway Safety & Motor Vehicles and *subject to appropriation*, to develop the Florida Smart City Challenge Grant Program and establish grant award requirements for municipalities or regions for the purpose of receiving grant awards. The law requires grant applications to demonstrate and document the adoption of emerging technologies and their impact on transportation systems and to address at least the following focus areas: autonomous vehicles, connected vehicles, sensor-based infrastructure, collecting and using data, electric vehicles (including charging stations), and developing strategic models and partnerships. The law also specifies a non-exclusive list of goals of the grant program.

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[2] TechRepublic, *Smart Cities: 6 Essential Technologies*, available at: https://www.techrepublic.com/article/smart-cities-6-essential-technologies/ (Last visited January 13, 2018).
[3] *Id.*
[4] US Department of Transportation, *Smart City Challenge (June 29, 2017)*, available at: https://www.transportation.gov/smartcity (Last visited January 14, 2018).
[5] *Id.*
[6] US Department of Transportation, *Smart City Challenge Vision Statements (September 29, 2016)*, available at: https://www.transportation.gov/smartcity/visionstatements/index (Last visited January 14, 2018).
[7] US Department of Transportation, *The Winner: Columbus Ohio (January 3, 2017)*, available at: https://www.transportation.gov/smartcity/winner (Last visited January 14, 2018).
[8] US Department of Transportation, *What Comes Next (April 28, 2016)*, available at: https://www.transportation.gov/smartcity/what-comes-next (Last visited January 12, 2018).
[9] The USDOT advises that no further funding rounds under the federal program are currently anticipated. Telephone conversation with the USDOT staff and Senate Transportation Committee staff, January 12, 2018.
[10] Chapter 2017-42, Laws of Florida. Section 316.0898, F.S.

The law requires the FDOT to develop eligibility, application, and selection criteria for the program grants and a plan for promotion of the grant program to municipalities or regions of the state as an opportunity to compete for the grant funding. Criteria must include the award of grants to a single recipient and secondary grants to specific projects of merit within other applications. The law authorizes the FDOT to contract with a third party demonstrating knowledge and expertise in the focuses and goals of the program to provide guidance in the development of the program requirements. By January 1, 2018, the FDOT was to submit the grant program guidelines and plans for promotion of the grant program to the Governor, the Senate President, and the House Speaker.

The 2017 General Appropriations Act contained an appropriation for the Smart City Challenge Grant program, authorizing the FDOT to use up to $325,000 from the State Transportation Trust Fund (STTF) to establish the program. However, that appropriation was vetoed.[11] The program, currently codified in s. 316.0898, F.S., expires on July 1, 2018.

Electric and Hybrid Vehicles

Florida law currently defines two types of vehicles powered, in whole or in part, by electricity: an electric vehicle and a hybrid vehicle. An "electric vehicle," defined for purposes of vehicle registration under ch. 320, F.S., is "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."[12] A "hybrid vehicle," defined for purposes of use of high-occupancy-vehicle lanes, is a motor vehicle:

- That draws propulsion energy from onboard sources of stored energy which are both an internal combustion or heat engine using combustible fuel and a rechargeable energy-storage system;
- That, in the case of a passenger automobile or light truck, has received a certificate of conformity under the Clean Air Act…and meets or exceeds the equivalent qualifying California standards for a low-emission vehicle;[13] and
- That, in the case of a tri-vehicle,[14] is an inherently low-emission vehicle.[15]

Florida has enacted a number of EV-related provisions that may incentivize people to purchase EVs. They include:

- Authorizing a local government to enact a program to allow property owners to apply for financing from the local government to install EV charging equipment on his or her property. The local government can collect the loan payments through ad valorem assessments.[16]

[11] Specific Appropriation 1869, proviso, ch. 2017-70, Laws of Florida.
[12] Section 320.01(36), F.S.
[13] For detailed information on California's Low-Emission Vehicle Program, *see* California Air Resources Board, *Low-Emission Vehicle Program (January 25, 2017)*, available at: https://www.arb.ca.gov/msprog/levprog/levprog.htm (Last visited February 21, 2018).
[14] Defined in s. 316.003(93), F.S.
[15] Section 316.0741, F.S.
[16] Section 163.08, F.S.

- Authorizing a local government to use the proceeds of a levied infrastructure surtax (discretionary sales surtax) to provide loans to property owners to install EV charging equipment.[17]
- Allowing hybrid electric vehicles to use high-occupancy-vehicle lanes regardless of occupancy and to use such lanes without paying a toll if one is otherwise required.[18]

In addition, local Florida entities offer EV incentives. The National Conference of State Legislatures reports that, through June 30 of this year or until funds were depleted,[19] Duke Energy and Orlando Utilities Commission customers and employees were eligible for a $10,000 rebate for the purchase of a new, all-electric, 2017 Nissan Leaf at participating dealerships; and the Jacksonville Electric Authority offers rebates for plug-in HEVs with a battery less than 15 kilowatt hours in capacity to receive $500, and plug-in HEVs with larger battery capacity are eligible for $1,000.[20] The federal government also allows an income tax credit of up to $7,500 for certain EVs.[21]

Impact of Electric and Hybrid Vehicles on Transportation Funding/Prior Studies

Taxes on gas and diesel fuel are a primary source of revenue for both the federal highway fund and the State Transportation Trust Fund.[22] Transportation funding has generally experienced a continuing shortfall attributed to static federal gas tax rates, more fuel efficient vehicles, and increasing transportation construction and maintenance costs.[23]

Annual fuel tax revenues at both the state and federal levels are directly based on the number of gallons of gasoline and diesel fuel consumed. Because electric vehicles (EV) are not powered by gasoline or diesel, and because hybrid electric vehicles (HEV) use less gasoline or diesel fuel than a conventional vehicle with only an internal combustion engine, an increase in the number of these vehicles operating in Florida results in less revenue being raised from fuel taxes for comparable vehicle miles traveled.

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[17] Section 212.055, F.S.
[18] Generally, a high-occupancy-vehicle lane is a lane designed for use by vehicles in which there is more than one occupant. Section 316.0741, F.S.
[19] US Department of Energy, Alternative Fuels Data Center reports this rebate expired on July 1 of this year. *See* AFDC, *Expired, Repealed, and Archived Florida Incentives and Laws*, available at: https://www.afdc.energy.gov/laws/laws_expired?jurisdiction=FL (Last visited February 22, 2018).
[20] *See* National Conference of State Legislature's website for additional details on available incentives related to EVs, *State Efforts to Promote Hybrid and Electric Vehicles (September 26, 2017)*, available at: http://www.ncsl.org/research/energy/state-electric-vehicle-incentives-state-chart.aspx#other (Last visited February 22, 2018).
[21] *See* Internal Revenue Service, *Plug-In Electric Drive Vehicle Credit (IRC 30D) (January 24, 2018)*, available at: https://www.irs.gov/credits-deductions/individuals/plug-in-electric-drive-vehicle-credit-section-30d (Last visited February 22, 2018).
[22] *See* Florida Department of Transportation, *Florida's Transportation Tax Sources, A Primer (January 2017)*, at p. 4, for a listing of federal and state transportation tax sources and rates for calendar year 2017, available at: http://www.fdot.gov/comptroller/pdf/GAO/RevManagement/Tax%20Primer.pdf (Last visited February 21, 2018).
[23] *See* US Department of Energy National Renewable Energy Laboratory, *Primer on Motor Fuel Excise Taxes and the Role of Alternative Fuels and Energy Efficient Vehicles (August 2015)*, at p. 7, available at: https://www.afdc.energy.gov/uploads/publication/motor_fuel_tax_primer.pdf (Last visited February 22, 2018).

There are a limited number of studies specifically focused on the impact of EVs[24] on fuel tax revenues. A 2015 study conducted by the University of Central Florida acknowledges the increasing national EV sales trend for the 5-year period prior to the study but concludes:

> Of course, despite the increase, electric and plug-in electric vehicles still represent a small portion of the US auto market. With total vehicles sales for 2014 coming in at around 16.5 million, EVs made up less than 1 percent of total sales.[25]

The study further concludes that EVs, for now and in the near future, will have only a small impact on fuel tax revenues but notes a University of Texas study on EV market share suggesting that by 2050, over 50 percent of fuel tax funds may be lost.[26] The authors highlight the importance of understanding that "the rate at which revenue declines depends on many factors. The relationship among these factors is complex and continued investigation is warranted to better understand vehicle fleet mix, fuel economy, and fuel tax revenue."[27]

According to the study, a number of states are exploring or implementing revenue generating alternatives, both to increase transportation funding in general and also to prepare for revenue reduction due to increased EV sales. These alternatives include a fee based on the number of miles a given vehicle travels,[28] as well as increased direct taxes and surcharges on EV purchases.[29]

For example, in 2015, the Georgia Legislature repealed "one of the nation's most generous state tax credits for electric cars." The Legislature also voted to impose a $200 annual registration fee on owners of some plug-in hybrids and all zero-emissions vehicles to make up for the lost fuel taxes. EV sales then experienced a sharp reduction, a result attributed to the repealed credit and imposed fee.[30]

EV Registration in Florida

The license tax for EVs is the same as that for a vehicle that is not electrically powered.[31] The exact number of EVs registered in Florida is somewhat unclear. Under the Department of Highway Safety and Motor Vehicles' (DHSMV) current vehicle registration system

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[24] Unless otherwise noted, EV includes both EVs and HEVs.
[25] *See* Electric Vehicle Transportation Center, *Implications of Electric Vehicles on Gasoline Tax Revenues*, December 2015, at p. 8 available at: http://www.fsec.ucf.edu/en/publications/pdf/FSEC-CR-2011-15.pdf (Last visited February 22, 2018).
[26] *Id.* at p. 12.
[27] *Id.*
[28] Known as VMT (vehicle miles traveled) and MBUF (mileage-based user fee). Fees are assessed based on the actual amount of road use, not on fuel consumption.
[29] *See* US Department of Energy National Renewable Energy Laboratory, *Primer on Motor Fuel Excise Taxes and the Role of Alternative Fuels and Energy Efficient Vehicles*, August 2015, at p. 29-31, available at: https://www.afdc.energy.gov/uploads/publication/motor_fuel_tax_primer.pdf (Last visited February 22, 2018).
[30] *See* Politifact Georgia, *Electric car sales hit the brakes as tax credit axed and fee added*, (November 2, 2015), available at: http://www.politifact.com/georgia/statements/2015/nov/02/don-francis/electric-car-sales-hit-brakes-tax-credit-axed-and-/ (Last visited February 22, 2018).
[31] Section 320.08001, F.S. Registration fees differ based on factors such as the type of vehicle, its weight, the license plate chosen, and whether the registration period is one or two years.

programming, a "fuel type" classification is an optional field and therefore the precise number of EVs registered is unknown.[32]

The DHSMV analyzed vehicle identification numbers (VINs) in its motor vehicle registration database using available software and estimated that of the 16.2 million vehicles with VINs that could be analyzed, approximately 247,131 EVs and HEVs, are registered in Florida, or about 1.53 percent.[33]

Emergency Evacuation

The Florida Division of Emergency Management (FDEM) is responsible for maintaining a comprehensive statewide program of emergency management. Among the FDEM's duties is a requirement to prepare a state comprehensive emergency management plan containing provisions that will ensure the state is prepared for emergencies and minor, major, and catastrophic disasters.[34] As part of the plan, the FDEM must include an evacuation component including specific regional and interregional planning provisions and promoting intergovernmental coordination of evacuation activities. Among other items, this part of the plan must establish strategies for ensuring sufficient, reasonably priced fueling locations along evacuation routes.[35] A review of available documents and information on the FDEM's website did not identify an assessment of electric vehicle charging stations for the purpose of emergency evacuations.

Section 377.815, F.S., authorizes the Florida Department of Agriculture and Consumer Services to post information on its website relating to alternative fueling stations or EV charging stations that are available for public use in this state. The department's website provides a list of stations, however, the list is not specific to emergency evacuations.[36]

According to the U.S Department of Energy's Alternative Fuels Data Center, 949 electric vehicle charging stations (2,130 outlets) are currently available in the State of Florida, excluding private stations.[37] The DHSMV notes that no EV charging stations within Florida's transportation infrastructure are specifically designated for use during emergency evacuations.[38]

[32] The DHSMV also advises a system change is underway to make "fuel type" a mandatory field. *See* email from DHSMV staff dated September 22, 2017, to staff of the Senate Transportation Committee.
[33] *See* DHSMV, *SB 384 Bill Analysis* (November 9, 2017), at p. 5.
[34] Section 252.35(2)(a), F.S.
[35] *Id.*
[36] *See* Florida Department of Agriculture and Consumer Services, Florida Energy Clearinghouse, Transportation, available at: http://www.freshfromflorida.com/Energy/Florida-Energy-Clearinghouse/Transportation (Last visited February 22, 2018).
[37] *See* US Department of Energy, Alternative Fuels Data Center, Electric Vehicles Charging Station Locations, available at: https://www.afdc.energy.gov/fuels/electricity_locations.html, including a map and a download spreadsheet of locations and related information (Last visited February 22, 2018).
[38] *See* DHSMV, *SB 384 Bill Analysis* (November 9, 2017), at p. 5.

Statewide Mobility Innovation Program

FDOT Organization and the Florida Rail Enterprise

The FDOT is organized into seven geographic districts, each headed by a district secretary, and the Florida Turnpike Enterprise (FTE) and the FRE, each of which are headed by an executive director.[39] The district secretaries and executive directors must be registered professional engineers or hold an advanced degree in an appropriate related discipline.

The FRE operates pursuant to the Florida Rail Enterprise Act[40] and is responsible for:

- Developing and operating the high-speed and passenger rail systems established in ch. 341, F.S.;
- Directing funding for passenger rail systems under s. 341.303, F.S.; and
- Coordinating publicly funded passenger rail operations, including freight rail interoperability issues.

Generally[41] the FRE is exempt from the FDOT's policies, procedures, and standards, subject to the FDOT secretary's authority to apply any such policies, procedures, and standards to the FRE as the secretary deems appropriate.[42]

The FRE is a single budget entity that submits its budget to the Legislature along with the FDOT's budget. All passenger rail funding is included in the FRE's budget.[43] Notwithstanding certain provisions of law relating to undisbursed appropriations balances,[44] on July 1 each year the Governor is required to certify forward (into the next state fiscal year) all unexpended funds appropriated or provided pursuant to s. 341.303, F.S., to the FRE. This includes any expended funds that are unencumbered. The carried-forward funds cannot exceed 5 percent of the original approved FRE operating budget.[45] Funds carried forward may be used for any lawful purpose, including, but not limited to, promotional and market activities, technology, and training. Any certified forward funds that are undisbursed on September 30 of each year are carried forward.[46]

[39] Section 20.23(4)(f), F.S.
[40] Section 20.23(4)(f)1., F.S. The Florida Rail Enterprise Act is located in ss. 341.8201-341.842, F.S.
[41] Except as provided in the Consultants' Competitive Negotiation Act, which relates to agency acquisition of professional architectural, engineering, landscape architectural, or survey and mapping services. s. 287.055, F.S.
[42] Section 20.23(4)(f)2., F.S. Florida's Turnpike Enterprise (FTE) is likewise exempt, subject to the FDOT secretary's same authority, under s. 20.23(4)(e)2., F.S.
[43] Section 341.303(6)(a), F.S.
[44] See s. 216.301, F.S., which generally provides that the balance of any operations appropriation not identified in the state's financial system as an incurred obligation effective June 30th each year ("unencumbered") reverts to the fund from which it was appropriated and is available for re-appropriation by the Legislature. Funds for an identified incurred obligation are "carried forward" in the amount of the identified obligations (unexpended, but encumbered). Generally, fixed capital outlay appropriation balances which are not disbursed but are expended, contracted, or committed to be expended prior to February 1 of the second fiscal year of the appropriation are "certified forward." Similarly, any balance not certified reverts to the fund from which it was appropriated and is available for re-appropriation.
[45] Per s. 216.181, F.S., the General Appropriations Act and any other acts containing appropriations are considered the original approved operating budgets for operational and fixed capital expenditures. The original approved operating budgets may be amended in accordance with provisions contained in that section of law.
[46] Section 341.303(6)(b), F.S. Similar provisions apply to the FTE under s. 338.2216(3), F.S.

Funding for the FRE

The Transportation Regional Incentive Program receives a distribution from documentary stamp taxes, of which the first $60 million of funds are redirected annually to the FRE.[47] Such distribution must be used to fund:

- Up to 50 percent of the nonfederal share of the costs of any eligible[48] passenger rail capital improvement project.
- Up to 100 percent of planning and development costs related to the provision of a passenger rail system.
- The high-speed rail system.
- Projects necessary to identify or address anticipated impact of increased freight rail traffic resulting from the implementation of passenger rail systems.[49]

In addition to documentary stamp tax revenues, the FRE is appropriated additional funds from the State Transportation Trust Fund in the General Appropriations Act. For the 2017-2018 fiscal year, the FRE was authorized one position and a total budget of approximately $237.4 million. Of that amount, $74.4 million was for public transit development grants, $159.6 million for rail development grants, and $2.8 million for intermodal development grants.[50]
Examples of major passenger rail projects that have received funding by the FRE include the Central Florida Commuter Rail System (SunRail)[51] and the South Florida Regional Transportation Authority (TriRail)[52].

Transportation Regional Incentive Program

The Transportation Regional Incentive Program (TRIP) was created in 2005 as part of growth management legislation to "encourage regional planning by providing state matching funds for improvements to regionally significant transportation facilities identified and prioritized by regional partners."[53] It is a "matching program designed to leverage investments in regionally-significant road and public transportation projects."[54] The TRIP funds provide up to 50 percent of the project costs and must be matched by regional, local, or federal dollars or in-kind contributions. Funds are "distributed to the FDOT Districts based on a statutory formula of equal parts population and fuel tax collections."[55] Certain projects receive priority, such as providing connectivity to the strategic intermodal system or supporting economic development and goods movement in rural areas of opportunity.

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[47] Section 201.15(4)(a), F.S.
[48] Any project necessary to carry out the FDOT's duties and responsibilities provided in s. 341.302, F.S., that is consistent with the approved local government comprehensive plan of the unit of government of the areas served by the rail service, and that is contained in the adopted work program, is eligible for funding in accordance with the identified participation rates, per s. 341.303(2), F.S.
[49] Section 341.303(5), F.S.
[50] Specific Appropriations 1883-1891, ch. 2017-70, L.O.F.
[51] For additional information, see the SunRail website available at: http://sunrail.com/ (last visited February 11, 2018).
[52] For additional information, see the TriRail website available at: http://www.tri-rail.com/; and the South Florida Regional Transportaton Authority website available at: http://www.sfrta.fl.gov/ (both sites last visited February 11, 2018).
[53] Section 339.2819, F.S. FDOT, *Transportation Regional Incentive Program Fact Sheet*, available at http://www.fdot.gov/programmanagement/LP/TRIP/TRIPFactsheet.pdf (last visited February 12, 2018).
[54] Id.
[55] Id.

Tampa Bay Area Regional Transit Authority

Part V of ch. 343, F.S., creates the Tampa Bay Area Regional Transit Authority (TBARTA). TBARTA covers Hernando, Hillsborough, Manatee, Pasco, and Pinellas Counties and any other contiguous county that is party to an agreement of participation.[56] TBARTA's express purposes are to:

- Plan, implement, and operate mobility improvements and expansions of multimodal transportation options for passengers and freight throughout the designated region;
- Produce a regional transit development plan, integrating the transit development plans of participant counties, to include a prioritization of regionally significant transit projects and facilities; and
- Serve, with the consent of the Governor or designee, as the recipient of federal funds supporting an intercountry project or an intracounty capital project that represents a phase of an intercountry project that exists in a single county within the designated region.[57]

The TBARTA was required to provide to the Legislature a plan to produce the regional development plan on or before the 2018 Regular Session. Currently, the TBARTA is developing the plan to identify projects "that have the greatest potential to be funded (compete for federal grants) and implemented[,]… are the most forward thinking and make the best use of today's technology[, and]…best serve our region today while supporting tomorrow's growth."[58] An evaluation process will use "clearly defined criteria [to] identify the top transit corridors in the region, and ultimately one "catalyst project" that could be implemented first, followed by other projects to move forward around the region."[59]

South Florida Regional Transportation Authority

Part I of ch. 343, F.S., creates the South Florida Regional Transportation Authority (SFRTA). SFRTA covers Broward, Miami-Dada, and Palm Beach Counties, and may expand its service area into Monroe County by resolution of the SFRTA's governing board and consent of the board of county commissioners and any other county with FDOT's approval.[60]

SFRTA receives funding from the State Transportation Trust Fund for the operation, maintenance, and dispatch of the South Florida Rail Corridor.[61] The law specifically prohibits the provision of these funds from the funds dedicated to the FRE from documentary stamp tax distributions.

[56] Section 343.91(1)(a), F.S.
[57] 343.922(1), F.S.
[58] TBARTA, Regional Transit Feasibility Plan, *About*, available at http://tbregionaltransit.com/about/ (last visited February 11, 2018).
[59] Id.
[60] Section 343.54, F.S.
[61] Section 343.58(4), F.S.

Jacksonville Transportation Authority

Chapter 349, F.S., creates the Jacksonville Transportation Authority (JTA). The JTA covers the Duval County and any jurisdiction outside of Duval County with the consent of that jurisdiction.[62] Some of the JTA's purposes and powers are to:

- Acquire, hold, construct, improve, operate, maintain, and lease in the capacity of lessor a mass transit system employing motor cars or buses; street railway systems; or any other means determined useful to the rapid transfer of large numbers of people among the locations of residence, commerce, industry, and education in Duval County;
- Plan, coordinate, and recommend to methods and facilities for the parking of vehicles, the movement of pedestrians, and vehicular traffic (including bicycles), public and private, in Duval County to accomplish a coordinated transportation system for the greater Jacksonville area.[63]

III. Effect of Proposed Changes:

The bill creates a new Florida Smart City Challenge Grant Program to provide opportunities for grants to fund certain innovative transportation projects. The FDOT must issue a request for proposals by September 1, 2018, and distribute awards by January 1, 2019. The bill establishes goals and eligibility requirements for the program; provides project selection criteria and matching funds requirements; sets out reporting requirements; provides for administrative support for the program; and provides an appropriation from the STTF to implement the program.

Section 1 creates s. 316.0899, F.S., effective July 1, 2018, to create a new Florida Smart City Challenge Grant Program within the FDOT. The bill identifies the goals of the program to include:

- Providing opportunities to municipalities and other regions of the state to develop innovative smart mobility solutions to local transportation challenges.
- Deploying smart city technology that has an immediate impact on the safe and efficient movement of people and goods within municipalities and other regions of the state.
- Advancing autonomous, connected, grid-integrated,[64] and electric vehicle readiness and deployment throughout the state.
- Providing enhanced education and workforce development opportunities by deploying emerging technologies that support the state's future workforce.
- Meeting the mobility needs of residents of this state, particularly transportation disadvantaged persons[65] by increasing access to and convenience of transportation within municipalities and other regions of the state.

[62] Section 349.04(2)(q), F.S.
[63] Section 349.04(1), F.S.
[64] The bill defines this term to mean "a motor vehicle that has the ability for two-way power flow between the vehicle and the electric grid and the communications hardware and software that allow for external control of battery charging and discharging."
[65] Section 427.011(1), F.S., defines a "transportation disadvantaged person" as a person who, because of physical or mental disability, income status, or age is unable to transport himself or herself or to purchase transportation and is, therefore, dependent on others to obtain access to health care, employment, education, shopping, social activities, or other life-sustaining activities, or children who are handicapped or high-risk or at-risk as defined in s. 411.202, F.S.

- Facilitating the efficient movement of freight within the state, especially in and around airports and seaports.
- Supporting the reduction or elimination of fossil fuel consumption by relying on renewable energy sources and electric technologies.
- Creating a smart mobility demonstration community in the state that serves as a model for municipalities and other regions nationwide.

The bill authorizes the various government entities to apply to the FDOT for project funding under the program. These government entities include:

- A state, county, municipal, regional, or other agency that is responsible for the movement of persons, goods, or services within a defined geographical region, including an entity created pursuant to chs. 343,[66] 348,[67] or 349,[68] F.S.
- An independent special district with powers that include or are related to infrastructure development or transportation systems or services.
- A metropolitan planning organization (MPO) or transportation planning organization (TPO), with a requirement that each entity responsible for deploying or operating a project on behalf of an MPO or TPO must submit to the FDOT a letter detailing its commitment to the implementation, operation, and maintenance of the project.
- A state university.

The bill requires an applicant to have in place a plan or framework for the implementation of the proposed project in at least one of the following categories:

- Autonomous vehicle deployment or demonstration.
- Connected vehicle technology deployment.
- Shared mobility services innovation and deployment.
- Acceleration of the use of plug-in electric vehicles and electric charging infrastructure, including the deployment of grid-integrated vehicles.

The FDOT is required to issue a request for proposals for the award of program grants by September 1, 2018. Each submitted proposal must include:

- A statement by the applicant certifying that the project will be implement within 5 years after receipt of the grant.
- A plan for fulfilling documentation requirements under the FDOT's Statewide Systems Engineering Management Plan within such 5-year period.[69]

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[66] Chapter 343, F.S., creates the Northeast Florida Regional Transportation Commission, the South Florida Regional Transportation Authority, the Central Florida Regional Transportation Authority, the Northwest Florida Transportation Corridor Authority, and the Tampa Bay Area Regional Transit Authority.

[67] Chapter 348, F.S., creates the Miami-Dade Expressway Authority, the Tampa-Hillsborough County Expressway Authority, the Santa Rosa Bay Bridge Authority, and the Osceola County Expressway Authority.

[68] Chapter 349, F.S., creates the Jacksonville Transportation Authority.

[69] A Systems Engineering Management Plan (SEMP) enables an engineer "to manage a project using systems engineering principles and methods to maximize the quality of the system being implemented, while minimizing the budget and schedule required for its completion." For extensive details, see the FDOT's systems engineering website available at: http://www.fdot.gov/traffic/its/projects_deploy/semp.shtm (Last visited January 12, 2018). Federal regulations require all Intelligent Transportation System projects funded with federal highway funds to be based on a systems engineering analysis on a scale commensurate with the project scope. See 23 C.F.R. s. 940.11. Required documentation in a SEMP can be extensive. See the list of document templates on the identified FDOT website.

- A description of how operation and maintenance costs for the project will be funded in order to ensure that the FDOT's investment in the project is sustained.
- A plan for evaluation of the project and the methods by which such evaluation will be shared with residents of the area served by the project.
- The procedure for integrating the project's transportation-related data into the FDOT's Data Integration and Video Aggregation System.[70]

The FDOT must award a grant to at least three recipients, with each award limited to no more than $6 million. The FDOT must distribute awards by January 1, 2019. An award may fund up to 50 percent of project costs. A grant recipient must fund at least 10 percent of project costs, and a minimum of 10 percent of project costs must be funded by the private sector. Grant funds must be used exclusively for startup costs, including acquisition of hardware, software, and assets associated with implementing a project. Grant funds may not be used for costs associated with operation, maintenance, or evaluation of the project.

When selecting grant recipients, the FDOT must give priority to proposals that:
- Demonstrate the availability of matching funds;[71]
- Include a plan for documenting the acquisition and expenditure of matching funds; and
- Include a larger amount of matching funds from private sector partner organizations.

Matching funds may be used for costs associated with operation, maintenance, and evaluation of the project.

Each grant recipient must submit a quarterly report to the FDOT regarding the development, implementation, and operation of the project. A grant recipient that receives matching funds must document the contribution of such funds in the quarterly report that details the manner in which the value of such contribution is calculated. The FDOT must submit a quarterly report to the Senate President and House Speaker regarding the overall status of the grant program.

After a project is implemented, each grant recipient must submit a report to the Governor, the Senate President, and the House Speaker detailing: the project's impact on the transportation system within the area served by the project; the extent to which the goals of the grant program have been met; and recommendations for project revisions or improvements to guide future deployment activities. A final report must be submitted 2 years after submission of the initial report.

[70] This system integrates and manages real-time information. It consists of a data integration subsystem, which collects and integrates transportation and related data from numerous sources and integrates that data for internal and external dissemination and consumption; and a video aggregation subsystem, which aggregates "live streaming video from FDOT and external agency cameras for distribution using ubiquitous, modern video streaming technologies, such that video is made available to users regardless of their specific location or device platform. See the FDOT's *TSM&O Disseminator*, July-August 2017, at p. 9, available at: http://www.fdot.gov/traffic/Newsletters/2017/2017-AUG.pdf (Last visited January 12, 2018).

[71] Under the bill, "matching funds" includes in-kind services, goods, equipment, or other noncash contributions calculated at fair market value.

The bill requires the FDOT to provide administrative support to the grant program to facilitate the deployment of smart city technology within the state, including expedited review of submitted proposals.

The FDOT may select an independent nongovernmental entity to assist in project construction, management, and evaluation; to oversee the implementation of the project; and to analyze and document lessons learned during, and benefits derived from, implementation of the project. The nongovernmental entity must have experience with the national (federal) Smart Cities Initiative, advanced transportation deployment experience in this state, extensive engineering experience, or expertise in stakeholder engagement of potential partners to create a demonstration community.

Section 2 appropriates $15 million in nonrecurring funds from the State Transportation Trust Fund for the 2018-2019 fiscal year to the FDOT to implement the program.

Electric and Hybrid Vehicles

Section 3 requires the FTC to review all sources of revenue for transportation infrastructure and maintenance projects and prepare a report to the Governor and the Legislature when the FTC determines that electric vehicles, as defined in s. 320.01(36), F.S., and hybrid vehicles, as defined in s. 316.0741, F.S., make up two percent or more of the total number of vehicles registered in this state.

The FTC, in consultation with the DHSMV, is authorized to use commercially available data that the FTC deems reliable to support its determination and report. In consultation with the FDEM, the FTC is also required to assess transportation infrastructure with respect to emergency evacuations and EVs, including, but not limited to, the availability of EV charging stations in this state.

At a minimum, the report must assess the effect of projected electric and hybrid vehicle use in this state on future revenue from existing taxes, fees, and surcharges related to nonelectric, private-use motorcycles, mopeds, automobiles, tri-vehicles, and trucks. The report must include recommendations to the Legislature to:

- Ensure continued funding for necessary maintenance that provides for adequate levels of service on existing transportation infrastructure;
- Accomplish improvements and capacity projects on transportation infrastructure which meet the demand from projected population and economic growth; and
- Accomplish necessary improvements to transportation infrastructure that would support emergency evacuations by users of electric vehicles.

The bill requires the report to be submitted to the Governor and the Legislature by September 1 of the year immediately after the year in which the FTC determines that electric and hybrid vehicles make up two percent or more of the total number of vehicles registered in this state. The FTC is authorized to complete the review and report before the two-percent threshold is reached if the FTC determines that earlier completion is appropriate to maintain a financially stable long-term transportation work program.

Section 4 amends s. 339.175(7)(c)2., F.S., requiring each metropolitan planning organization to consider the increased use of autonomous technology and electric vehicles, and other developments, when making its capital investment assessment as part of development of its long-range transportation plan.

Statewide Mobility Innovation Program Funding

Section 5 amends s. 201.15(4)(a)4., F.S., relating to the distribution of documentary stamp taxes to the TRIP. For the 2018-2019, 2019-2020, and 2021-2021 fiscal years, the FRE will continue to receive $60 million distributed from the documentary stamp taxes pursuant to this subparagraph.

Beginning in the 2021-2022 fiscal year, the first $60 million allocated to the TRIP will be allocated for innovative mobility systems as follows:

- $25 million on a matching basis to TBARTA for the design and construction of an innovative mobility system.
- $35 million to the Statewide Mobility Innovation Program for the purposes established in s. 341.86, F.S. (which directs that $25 million of those funds be distributed to Miami-Dade County, $5 million to the JTA, and the remaining $5 million available for any other counties).

The funds distributed to the TBARTA require one dollar in local or private matching funds for each dollar distributed, and federal funds may not be substituted for the local or private matching funds. If TBARTA notifies the FDOT that it will not request all of the funds allocated for an innovative mobility system, the FDOT must allocate those funds to projects in the 5-year work program in the jurisdiction of TBARTA.

The existing prohibition against pledging the distributed funds for debt service unless such pledge is approved by referendum of the voters is unchanged.

Statewide Mobility Innovation Program

Section 6 creates s. 339.84, F.S., creating the Statewide Mobility Innovation Program within the FDOT. "Innovative mobility system" is defined as a "system of infrastructure, appurtenances, and technology designed to move the greatest number of people in the least amount of time." An innovative mobility system includes automated people movers, bus rapid transit networks, autonomous vehicles,[72] transportation network companies,[73] ridesharing,[74] and commuter highway vehicles,[75] but not other traditional uses of a roadway system for conveyance.

[72] Section 316.003, F.S., currently defines "autonomous vehicle" as any vehicle equipped with autonomous technology, with certain exclusions. "Autonomous technology" is defined to mean technology installed on a motor vehicle that has the capability to drive the vehicle on which the technology is installed without the active control of monitoring by a human operator.
[73] Section 627.748, F.S., defines "transportation network company" or "TNC" as an entity operating in this state using a digital network to connect a rider to a TNC driver, who provides prearranged rides.
[74] The term "ridesharing" is defined in s. 341.031(9)(a), F.S.
[75] 49 U.S.C. s. 5323(i)(2)(C)(ii) defines "commuter highway vehicle as "any vehicle…the seating capacity of which is at least 6 adults (not including the driver); and…at least 80 percent of the mileage use of which can be reasonably expected to be for the purposes of transporting commuters in connection with travel between their residences and their place of employment."

The goals of the program include, but are not limited to:

- Evaluating, financing, and overseeing proposals for innovative mobility systems in this state;
- Expending funds to publicize and promote innovative mobility systems and to contract with entities to accomplish these purposes; and
- Soliciting proposals in accordance with ch. 287, F.S.,[76] for the design and construction of innovative mobility systems and contracting with entities to expend funds to accomplish this purpose.

The FDOT, through the program, is required to use the $35 million distributed from documentary stamp tax revenues in a county to fund the design and construction of an innovative mobility system for passengers, based on a county proposal that the FDOT approves as being consistent with the requirements of the new law. More specifically, the bill requires the program to use:

- $25 million for an innovative mobility systems in a county as defined in s. 125.011(1), F.S. (Miami-Dade County).[77]
- $5 million for an innovative mobility systems in the Jacksonville Transportation Authority.
- $5 million for an innovative mobility systems in any other county or counties in the state.

If Miami-Dade County notifies the FDOT that it will not request all of the funds allocated for an innovative mobility system, the FDOT must allocate those funds to projects in the 5-year work program in the jurisdiction of the county.

A county proposing use of innovative mobility system funds must submit a request to the FDOT. The request must include a detailed project and financial plan, and must specify the project's duration and the total amount of funding sought by state fiscal year.

One dollar in local or private matching funds is required for each dollar distributed, and federal funds may not be substituted for the local or private matching funds. Additionally, funds distributed may not be used to subsidize projects with existing funding commitments as of July 1, 2018.

Conforming Revision

Section 7 amends s. 341.303, F.S., to provide the FDOT may not program any funds from the documentary stamps after Fiscal Year 2017-2018 to ensure funding will be available for the Statewide Mobility Innovation Program beginning in 2021.

Section 8 repeals subsection (5) of s. 341.303, F.S., effective July 1, 2021, which sets forth how the FRE is required to use the distribution from the documentary stamp taxes.

[76] Chapter 287, F.S., sets forth requirements and procedures to be used by state agencies in managing and procuring commodities and contractual services.

[77] Section 125.011(1), F.S., defines a county as: "[A]any county operating under a home rule charter adopted pursuant to Art. VIII, ss. 10, 11, and 24 of the State Constitution of 1885, as preserved by Art. VIII, s. 6(e) of the State Constitution of 1968, which county, by resolution of its board of county commissioners, elects to exercise the powers herein conferred." Of the local governments authorized to operate under a home rule charter by the State Constitutions of 1885 and 1968, only Miami-Dade County operates under a home-rule charter, which was adopted on May 21, 1957, under the constitutional provision.

Section 9 amends s. 343.58(4), F.S., effective July 1, 2021, to conform to changes made in the bill by prohibiting the SFRTA from receiving documentary stamp tax revenues distributed to the Statewide Mobility Innovation Program, instead of the FRE.

The bill takes effect on July 1, 2018.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

The bill does not implicate the mandates provisions of the State Constitution. Counties and cities are not required to apply to the program, but those that do apply for funding from the Florida Smart City Challenge Grant Program will be required to provide matching funds.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

Private-sector partners who invest in innovative transportation projects may benefit to the extent that the project receives state grant funding.

The traveling public in Miami-Dade County and in the counties covered by the JTA and TBARTA, as well as in any other county in which an innovative mobility system project is constructed, may benefit from increased mobility options.

C. Government Sector Impact:

Florida Smart City Challenge Grant Program

The bill appropriates $15 million in nonrecurring funds from the State Transportation Trust Fund for Fiscal Year 2018-2019 to the FDOT to implement the program. This appropriation may be used to fund the costs incurred by FDOT to implement the Florida Smart City Challenge Grant Program as noted below.

The FDOT will incur administrative expenses associated with:
- Issuing the request for proposals.
- Conducting expedited reviews of proposals and awarding grants.
- Preparing the required quarterly reports.
- Providing administrative support.

FTC EV Report

Related to the report on EVs in Florida, the FTC will incur indeterminate expenses associated with:
- Determining when EVs make up two percent of vehicle registrations;
- Assessing transportation revenue impacts of EV registrations;
- Assessing infrastructure related to emergency evacuations for EVs; and
- Preparing the report required by the bill.

The DHSMV expects the bill to have no impact on its expenditures.

The FDEM may incur indeterminate expenses associated with its participation in the emergency evacuation assessment.

Statewide Mobility Innovation Program

Beginning in Fiscal Year 2021-2022, a distribution of the first $60 million in documentary stamp tax revenues for TRIP will be distributed to the:
- TBARTA in the amount of $25 million.
- Statewide Mobility Innovation Program in the amount of $35 million.

The FRE portion of the FDOT's work program will have a $60 million reduction in funding starting in Fiscal Year 2021-2022. As a result, FRE projects planned for the future may be either delayed or canceled. The FDOT states that it has $342.6 million of plan commitments related to the FRE in the Adopted 5-Year Work Program (FYs 2017-2018 to 2021-2022). The FDOT estimates that "redirecting revenue resources would significantly disrupt the FRE-related projects as well as other projects in the work program."[78]

The FDOT will incur indeterminate expenses associated with creation of the program.[79]

Under the bill, Miami-Dade County and the TBARTA will each receive $25 million per year, and the JTA will receive $5 million per year for innovative mobility systems projects. The remaining $5 million will be available to all other counties competing for funding for innovative mobility system projects.

To the extent that counties, including Miami-Dade County, wish to engage in innovative mobility system projects, the bill requires local or private matching funds to be provided.

[78] FDOT, *2018 Agency Legislative Bill Analysis: SB 1200*, February 7, 2018.
[79] Id.

To the extent that a county provides matching funds, the local resources used as a match would not be available for other purposes in that county. Further, projects with existing funding commitments as of July 1, 2018, will not be eligible for funding.

VI. Technical Deficiencies:

None.

VII. Related Issues:

Under the portion of the bill creating the Statewide Mobility Innovation Program, the bill does not include the same provision for the Jacksonville Transportation Authority as it does for Miami-Dade County, which allows Miami-Dade County to notify the FDOT that it will not request all of the funds allocated for an innovative mobility system and requires the FDOT to allocate those funds to projects in the 5-year work program in the jurisdiction of the county.

VIII. Statutes Affected:

This bill creates section 316.0899 of the Florida Statutes.

This bill creates an undesignated section of Florida Law.

This bill amends section 339.175 of the Florida Statutes.

IX. Additional Information:

A. Committee Substitute – Statement of Substantial Changes:
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

CS/CS by Appropriations on March 2, 2018:
The committee substitute changes the bill to "[a]n act relating to transportation infrastructure" and adds the substance of CS/SB 384 and CS/SB 1200 (2017) to the bill.

The committee substitute requires the FTC to review all revenue sources for transportation infrastructure and maintenance projects and assess the effect of projected electric and hybrid vehicle use on future revenue from existing taxes, fees, and surcharges; make an assessment with the FDEM of transportation infrastructure with respect to emergency evacuations and electric vehicles; and prepare a report containing certain recommendations at the specified time.

The committee substitute revises planning requirements related to autonomous technology and electric vehicles to be considered as part of each metropolitan planning organization's development of the long-range transportation plan.

The committee substitute creates the Statewide Mobility Innovation Program within the Department of Transportation (FDOT). Through the program, FDOT will solicit, evaluate, and finance proposals for the design and construction of innovative mobility systems.

CS by Transportation on January 18, 2018:
The Committee Substitute:

- Creates a "Definitions" subsection, defines "grid-integrated vehicle," and relocates the definition of "matching funds" to this subsection.
- Revises one of the categories for which an applicant must have in place a plan or framework for project implementation to include acceleration of deployment of grid-integrated vehicles.
- Requires the FDOT to award at least three grants, rather than a awarding a maximum of three.
- Requires a grant recipient to fund at least ten percent of project costs and correspondingly removes a reference to partner organizations funding "50 percent of" projects costs in the provisions relating to priority selection of proposals.
- Revises the authorized uses of grant funds to specifically include acquisition of hardware, software, and assets associated with project implementation.
- Requires each recipient's initial report to be submitted to the Governor, in addition to the Senate President and the House Speaker.
- Authorizes the FDOT to select an independent nongovernmental entity to assist in project construction, management, and evaluation; and requires such entity to have certain prior experience.

B. Amendments:

None.