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 Appropriations Subcommittee on Transportation, Tourism, and Economic Development
BILL:	PCS/CS/SB 852 (859872)
INTRODUCER:	Appropriations Subcommittee on Transportation, Tourism, and Economic Development; Transportation Committee; and Senator Brandes and others
SUBJECT:	Florida Smart City Challenge Grant Program
DATE:	February 22, 2018 REVISED:

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

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

PCS/CS/SB 852 creates the Florida Smart City Challenge Grant Program 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 requires the FDOT to issue a request for proposals by September 1, 2018, and sets out information and documentation requirements for inclusion in grant proposals. The FDOT must award at least three grants, and each grant is limited to $6 million. Grant awards may be used to fund up to 50 percent of project implementation costs. A grant recipient must fund at least 10 percent of project costs. The FDOT must distribute awards by January 1, 2019.

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.

Related to electric vehicles, the bill 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 report must 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 Florida. The FTC may complete the review and report before the two-percent threshold if the FTC determines it appropriate.

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. Lastly, 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 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.

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 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 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]

[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).
[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.*

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.

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

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[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.

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]
- 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]

[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.
[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.

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.

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]

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[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).

[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).

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 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]

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[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.
[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.

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]

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.

[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.

- 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,[39] 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[40] by increasing access to and convenience of transportation within municipalities and other regions of the state.
- 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,[41] 348,[42] or 349,[43] F.S.
- 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.

[39] 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."
[40] 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.
[41] 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.
[42] 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.
[43] Chapter 349, F.S., creates the Jacksonville Transportation Authority.

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 2 years after receipt of the grant.
- A plan for fulfilling documentation requirements under the FDOT's Statewide Systems Engineering Management Plan within such 2-year period.[44]
- 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.[45]

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. 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;[46]
- Include a plan for documenting the acquisition and expenditure of matching funds; and
- Include 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

[44] 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.

[45] 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).

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

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.

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.

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.

C. Government Sector Impact:

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.

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.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

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 Subcommittee on Transportation, Tourism, and Economic Development on February 21, 2018:
The committee substitute changes the bill to "[a]n act relating to transportation infrastructure" and adds the substance of CS/SB 384 (2017) to the bill.

The bill 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 bill 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.

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.