

The Florida Senate
BILL ANALYSIS AND FISCAL IMPACT STATEMENT

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

Prepared By: The Professional Staff of the Committee on Transportation

BILL: CS/SB 852

INTRODUCER: Transportation Committee and Senators Brandes and Taddeo

SUBJECT: Florida Smart City Challenge Grant Program

DATE: January 18, 2018 **REVISED:** _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Price	Miller	TR	Fav/CS
2.			ATD	
3.			AP	

I. Summary:

CS/SB 852 revises and re-creates the Florida Smart City Challenge Grant Program with the goal, among others, 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 amount 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 ten 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.

The bill appropriates \$15 million in nonrecurring funds from the State Transportation Trust Fund (STTF) to implement the grant program. The bill may have both positive and negative fiscal impacts. See “Fiscal Impact Statement” below.

The bill takes effect on July 1, 2018.

II. Present Situation:

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. Intelligent traffic systems are an example of this and the achievement of autonomous vehicle transportation would be a prime example of success for a smart city, as this could reduce vehicle related deaths. All these efforts would reduce pollution as well as time stuck in traffic, resulting in a healthier population.”²

The Federal Smart City Challenge

The United States Department of Transportation (USDOT) launched a Smart City Challenge in December of 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.”³ The USDOT committed up to \$40 million to one winning city.⁴ The USDOT received 78 applications from cities across America, including the following cities in Florida: Jacksonville, Miami, Orlando, St. Petersburg, Tallahassee, and Tampa.⁵ 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.”⁶ The USDOT then worked with selected finalists to further develop the ideas proposed by the cities and, in October of 2016, announced an additional \$65 million in grants to support advanced technology transportation projects⁷. Again, no city in Florida was selected for project funding.⁸

The State Smart City Challenge Grant Program

The 2017 Legislature enacted legislation⁹ 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

¹ See *66% of US Cities Are Investing in Smart City Technology*, with a link to the League’s report, available at: <https://www.techrepublic.com/article/66-of-us-cities-are-investing-in-smart-city-technology/>. (Last visited January 13, 2018.)

² See *Smart Cities: 6 Essential Technologies*, available at: <https://www.techrepublic.com/article/smart-cities-6-essential-technologies/>. (Last visited January 13, 2018.)

³ See the USDOT website available at: <https://www.transportation.gov/smartcity>. (Last visited January 12, 2018.)

⁴ *Id.*

⁵ See the USDOT website available at: <https://www.transportation.gov/smartcity/visionstatements/index>. (Last visited January 12, 2018.)

⁶ See the USDOT website available at: <https://www.transportation.gov/smartcity/winner>. (Last visited January 12, 2018.)

⁷ See the USDOT website available at: <https://www.transportation.gov/smartcity/what-comes-next>. (Last visited January 12, 2018.)

⁸ The USDOT advises that no further funding rounds under the federal program are currently anticipated. Telephone conversation with the USDOT staff, January 12, 2018.

⁹ Ch. 2017-42, Laws of Florida.

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, including 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 to establish the program. However, that appropriation was vetoed.¹⁰ The program, currently located in s. 316.0898, F.S, expires by its own terms on July 1, 2018.

III. Effect of Proposed Changes:

SB 852 revises and re-creates the 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 State Transportation Trust Fund to implement the program. More specifically:

The bill creates s. 316.0899, F.S., effective July 1, 2018, re-establishing the Florida Smart City Challenge Grant Program within the FDOT. The bill provides that the goals of the program include, without limitation:

- Providing opportunities to municipalities and other regions of the state to develop innovative smart mobility solutions to local transportation challenges.¹¹
- 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,¹² and electric vehicle readiness and deployment throughout the state.

¹⁰ Ch. 2017-70, Laws of Florida, at p. 272, available at: <http://laws.flrules.org/2017/70>. (Last visited January 13, 2018.)

¹¹ As an example of a Florida community invested in innovative transportation solutions, see *Babcock Ranch Adds Cutting Edge Transportation*, October 17, 2017, available at: <https://fortmyers.floridaweekly.com/articles/babcock-ranch-adds-cutting-edge-transportation/>.

¹² 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.”

- 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 as defined in s. 427.011,¹³ 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 following entities to apply to the FDOT for project funding under the program:

- 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 chapters 343,¹⁴ 348,¹⁵ or 349,¹⁶ 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.

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 implemented within two years after receipt of the grant.

¹³ A "transportation disadvantaged person" is 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. Section 427.011(1), F.S.

¹⁴ 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 are created under Ch. 343, F.S.

¹⁵ The Miami-Dade Expressway Authority, the Tampa-Hillsborough County Expressway Authority, the Santa Rosa Bay Bridge Authority, and the Osceola County Expressway Authority are created under Ch. 348, F.S.

¹⁶ The Jacksonville Transportation Authority is created under Ch. 349, F.S.

- A plan for fulfilling documentation requirements under the FDOT’s Statewide Systems Engineering Management Plan within such two-year period.¹⁷
- 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.¹⁸

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 awarded grants by January 1, 2019. A grant may fund up to 50 percent of project costs. A grant recipient must fund at least ten percent of project costs. Grant funds must be used exclusively for startup costs, including without limitation acquisition of hardware, software, and assets associated with implementing a project; and 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 demonstrating the availability of matching funds from partner organizations to fund project costs and including a plan for documenting the acquisition and expenditure of such matching funds.¹⁹ Further:

- The FDOT must give priority to those proposals that include matching funds from private-sector partner organizations, but local public funds may also be used.
- Matching funds may be used for costs associated with operation, maintenance, and evaluation of the project.
- A grant recipient that receives matching funds must document the contribution of such funds in a quarterly report that details the manner in which the value of such contribution is calculated.

Regarding reporting requirements:

- Each grant recipient must submit a quarterly report to the FDOT regarding the development, implementation, and operation of the project.
- The FDOT must submit a quarterly report to the Senate President and House Speaker regarding the overall status of the grant program.

¹⁷ 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 website available at:

http://www.fdot.gov/traffic/its/projects_deploy/sempt.htm. (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 SEMPT can be extensive. See the list of document templates on the identified FDOT website.

¹⁸ 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& Disseminator*, July-August 2017, at p. 9, available at: <http://www.fdot.gov/traffic/Newsletters/2017/2017-AUG.pdf>. (Last visited January 12, 2018.)

¹⁹ Under the bill, “matching funds” includes in-kind services, goods, equipment, or other noncash contributions calculated at fair market value.

- After implementation of a project is complete, each grant recipient must submit an initial 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 two 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 without limitation 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 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.

Lastly, the bill appropriates \$15 million in nonrecurring funds from the STTF for the 2018-2019 fiscal year to implement the bill's provisions.

The bill takes effect on July 1, 2018, the same date on which the current s. 316.0898, F.S., expires by its own terms.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

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:

Users of a grant-funded project may experience increased mobility, reduced traffic congestion, reduced travel costs, and positive environmental benefits.

Private-sector partners who invest in such 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 STTF for fiscal year 2018-2019 with which to award grants.

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.

Governmental entities with transportation-related responsibilities that choose to submit applications will incur unknown expenses associated with:

- Preparing the required plan or framework for implementation of a proposed project.
- Preparing the items required for inclusion in an application to the FDOT for a grant, and preparing the application.
- Preparing the required documentation of the contribution of matching funds in the quarterly reports, and preparing the quarterly reports, including information regarding the development, implementation, and operation of the project.
- After a project is completed, preparing the required initial and final reports to the Senate President and House Speaker.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill creates the following sections of the Florida Statutes: 316.0899.

IX. Additional Information:

A. Committee Substitute – Statement of Changes:

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

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 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.