

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/SB 852

INTRODUCER: Transportation Committee and Senator Brandes and others

SUBJECT: Florida Smart City Challenge Grant Program

DATE: February 26, 2018 **REVISED:** _____

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

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

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.

The bill appropriates \$15 million in nonrecurring funds from the State Transportation Trust Fund (STTF) to the FDOT implement the grant program.

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.”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

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.*

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.

The State Smart City Challenge Grant Program

The 2017 Legislature enacted legislation¹⁰ 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 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.

III. Effect of Proposed Changes:

This 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.

The bill 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.

¹⁰ Chapter 2017-42, Laws of Florida. Section 316.0898, F.S.

¹¹ Specific Appropriation 1869, proviso, ch. 2017-70, Laws of Florida.

- Advancing autonomous, connected, grid-integrated,¹² 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 persons¹³ 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. 343,¹⁴ 348,¹⁵ 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.

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.”

¹³ 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.

¹⁴ 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.

¹⁵ 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.

¹⁶ 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 implemented 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.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 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;¹⁹
- 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

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 systems engineering website available at: http://www.fdot.gov/traffic/its/projects_deploy/sempt.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.

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&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).

¹⁹ 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.

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

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 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 to the FDOT to implement the program. This appropriation may be used to fund the costs incurred by FDOT to implement the 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.

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 Substantial 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.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.
