

**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.)

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Prepared By: The Professional Staff of the Committee on Appropriations

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BILL: SB 114

INTRODUCER: Senator Trumbull

SUBJECT: Insurance Research

DATE: April 1, 2025

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

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Knudson</u>	<u>Elwell</u>	<u>AHE</u>	<b>Favorable</b>
2.	<u>Knudson</u>	<u>Sadberry</u>	<u>AP</u>	<b>Pre-meeting</b>

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**I. Summary:**

SB 114 creates the Florida Center for Excellence in Insurance and Risk Management (the Center) at the Florida State University College of Business, Department of Risk Management. The Center replaces the Florida Catastrophic Storm Risk Management Center (Storm Risk Center). The Center will conduct research into all lines of insurance offered in Florida and catastrophic risk management generally, with a focus on property insurance issues. The previous Storm Risk Center conducted research focused solely on issues related to catastrophic storm loss.

The Center's purpose is to:

- Develop, conduct, evaluate, promote, and disseminate accurate and timely research on issues related to the state's insurance market and risk management.
- Assist the Legislature in developing and evaluating evidence-based policy options and making recommendations related to insurance and risk management in this state.
- Identify emerging issues in the insurance market.
- Provide insight regarding the accessibility and affordability of insurance products.
- Assist in identifying and developing education and research grant funding opportunities among higher education institutions in this state and the private sector.

The Center is directed to conduct, coordinate, and disseminate research and information that benefits businesses, consumers, and public policymakers or that is expected to have an immediate impact on policy and practices related to the state's insurance markets generally or catastrophic event preparedness.

The bill requires the Center to conduct research responsive to joint or individual inquiries from the President of the Senate and the Speaker of the House of Representatives regarding insurance or risk management. This will allow policymakers to have the benefit of academic research when considering legislation related to insurance and risk management.

The bill also directs the Center to cooperate with the Office of Insurance Regulation (OIR) in conducting research and specifies that the Center may conduct research responsive to requests made by the OIR. Biennially, the Center will produce a report analyzing the Florida property insurance marketplace and making recommendations to improve the availability and affordability of property insurance.

The bill transfers the Public Hurricane Loss Projection Model (Public Model) from Florida International University (FIU) to Florida State University (FSU) through a type two transfer and requires the OIR to contract with the Center to manage the Public Model. The Center is directed to cooperate with other entities and universities, including FIU, to develop and maintain the Public Model, which clarifies that the Legislature intends that the team developing and maintaining the model must continue to include experts from multiple universities and other entities. The Center is directed to constantly evaluate and update the Public Model so that it will have the same functionalities as other models approved by the Florida Commission on Hurricane Loss Projection Methodology.

The bill appropriates \$5 million in recurring funds and \$1.5 million in nonrecurring funds from the General Revenue Fund to FSU for the purpose of establishing and maintaining the Center. **See Section V., Fiscal Impact Statement.**

## **II. Present Situation:**

### **Florida Catastrophic Storm Risk Management Center**

In 2007, the Legislature created<sup>1</sup> the Florida Catastrophic Storm Risk Management Center (Storm Risk Center) within the Department of Risk Management of Florida State University's College of Business. The Storm Risk Center was created to: (1) promote and disseminate research on issues related to catastrophic storm loss; (2) assist in identifying and developing education and research grant funding opportunities among higher education institutions in this state and the private sector; and (3) support the state's ability to prepare for, respond to, and recover from catastrophic storms.

The Legislature directed the Storm Risk Center to:

- Coordinate and disseminate research efforts expected to have an immediate impact on policy and practices related to catastrophic storm preparedness.
- Facilitate Florida's preparedness for and responsiveness to catastrophic storms by coordinating and disseminating information related to catastrophic storm risk management that would benefit businesses, consumers, and public policy makers.
- Areas of interest include storm forecasting, loss modeling, building construction, and risk management strategies.
- Create and promote studies that enhance educational options for risk management and insurance students.
- Publish and disseminate findings.

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<sup>1</sup> Chapter 2007-90, s.24, L.O.F.

- Organize and sponsor conferences, symposia, and workshops to educate consumers and policymakers.<sup>2</sup>

The Legislature annually appropriated funds for the operation of the Storm Risk Center beginning in the 2007-2008 fiscal year through the 2015-2016 fiscal year. A total of \$11.475 million was appropriated, of which \$3.8 million was vetoed by the Governor, resulting in the Storm Risk Center receiving \$7.925 million. The appropriations history is as follows:

Florida Catastrophic Storm Risk Management Center at FSU (43500400 / 100500)					
Appropriation History					
Fiscal Year	GAA SA Line #	Appropriation	BOB	Vetoed	Total
FY 06-07					-
FY 07-08	SA 2662A	1,000,000		(1,000,000)	-
2007-C	SA 544A	750,000			750,000
FY 08-09	SA 2539A	3,000,000			3,000,000
FY 09-10	SA 2463A	975,000			975,000
FY 10-11	SA 2545A	700,000	250,000	(950,000)	-
FY 11-12	SA 2341A	950,000			950,000
FY 12-13	SA 2488A	350,000		(350,000)	-
FY 13-14	SA 2410A	750,000			750,000
FY 14-15	SA 2447	1,500,000			1,500,000
FY 15-16	SA 2434A	1,500,000		(1,500,000)	-

Throughout its history, the Storm Risk Center published various academic studies and papers and performed research in conjunction with state entities. Titles of some such academic studies and papers included:

- *The 30th Anniversary of Hurricane Andrew: Evolution of the Florida Homeowners Insurance Market*<sup>3</sup>
- *Evaluating the Public Financing for Florida's Wind Risk*<sup>4</sup>
- *The Impact of Hurricane Mitigation and Inspection Information on House Prices*<sup>5</sup>
- *Market Implications of Public Policy Interventions: The Case of Florida's Property Insurance Market*<sup>6</sup>

Research carried out by the Storm Risk Center on behalf of state entities<sup>7</sup> included:

<sup>2</sup> Section 1004.647, F.S.

<sup>3</sup> Nyce, C. M., *The 30th Anniversary of Hurricane Andrew: Evolution of the Florida Homeowners Insurance Market*, Risk Management and Insurance Review, 25(3), 239-270, (2022).

<sup>4</sup> Medders, L. Nicholson, J., *Evaluating the Public Financing for Florida's Wind Risk*, Risk Management and Insurance Review, Vol. 21, No. 1, 117-139 (2018).

<sup>5</sup> Gatzlaff, D. H., McCullough, K., Medders, L., & Nyce, C., *The Impact of Hurricane Mitigation and Inspection Information on House Prices*, Journal of Real Estate Finance and Economics (2018).

<sup>6</sup> Medders, L. A., Nyce, C. M., & Karl, J. B., *Market Implications of Public Policy Interventions: The Case of Florida's Property Insurance Market*, Risk Management and Insurance Review, 17(2), 183-214(2014).

<sup>7</sup> Charles Nyce, *The Florida Catastrophic Storm Risk Management Center Partial Publication List* (2025). On file with the Senate Banking and Insurance Committee.

- Florida Division of Emergency Management – Helping Local Governments Design Financing Programs for Residential Wind Mitigation and Home Hardening Projects.
- Florida Division of Emergency Management – Home Hardening Incentives Programs: Innovative Finance Concepts for Wind Mitigation and Home Hardening.
- Department of Financial Services – Hurricane Mitigation Inspection System Study.
- Division of Risk Management – Mitigation Feature Inventory and Analysis of State-owned Buildings.

The Storm Risk Center is no longer operating, as the Legislature ceased appropriations for the center after the 2015-2016 fiscal year, and the center lacked other significant sources of funding.

### **Public Hurricane Loss Projection Model**

The National Association of Insurance Commissioners defines a catastrophe model as:

“[A] computerized process that simulates thousands of plausible catastrophic events scenarios. Simulated event scenarios are based on realistic event parameters drawing data from meteorological history, geology, and geography to probabilistically model what could happen in the future. These scenarios are used by the models to quantify the expected damages for an underlying portfolio of exposures using an engineering approach. Lastly, the insured loss is calculated by incorporating underlying insurance policy coverage. These models provide valuable insights for risk identification, risk quantification and risk management strategies by taking a multi-disciplinary approach of science engineering and mathematics/statistics.”

Prior to Hurricane Andrew, property insurers measured the risk of catastrophic hurricane losses primarily through five to 25 years of historic loss data.<sup>8</sup> The inadequacy of this ratemaking approach was demonstrated in the aftermath of Hurricane Andrew, which made landfall in south Florida on August 24, 1992. The storm caused \$20 billion in insured losses, which was the largest loss event at the time.<sup>9</sup> Eleven property insurers became insolvent as a direct result of Hurricane Andrew. This led the insurance industry to adopt catastrophe modeling to better estimate the risk of hurricane losses.

Catastrophe models are generally composed of four modules that are used in conjunction with one another to project risk:

- **Catastrophe Probability:** A mathematical simulation with many simulated events representing a wide range of plausible scenarios. This calculates the probable location, size, intensity, and probable frequency of catastrophes.
- **Vulnerability:** Quantifies the expected damage from catastrophes of various intensities based on the characteristics of the insured property such as construction techniques and elevation.

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<sup>8</sup> American Academy of Actuaries, *Uses of Catastrophe Model Output*, pg. 4 (2018).

<sup>9</sup> National Association of Insurance Commissioners, *Catastrophe Models (Property)*, (March 20, 2024) <https://content.naic.org/insurance-topics/catastrophe-models-%28property%29> (last visited March 5, 2025).

- Exposure: Location specific information such as the location of the risk and insurance policy terms such as coverage limits, deductibles, and exclusions.
- Financial: A calculation of the financial losses from all the catastrophe event scenarios, which are aggregated to create a loss probability distribution. The loss distribution is used to project expected losses and the likelihood of different levels of loss.<sup>10</sup>

In 1995, the Legislature responded to the increased use of computer modeling in ratemaking to project hurricane risk by creating the Florida Commission of Hurricane Loss Projection Methodology (methodology commission). The methodology commission is an independent panel of experts<sup>11</sup> that provides actuarially sophisticated guidelines and standards for projection of hurricane losses. Any model used in rate filings under s. 627.062, F.S., must be accepted by the methodology commission as conforming to the standards of the commission.<sup>12</sup> In 2014, the Legislature expanded the scope of the methodology commission to include flood projection models for use in ratemaking for personal lines residential flood insurance coverage.<sup>13</sup>

In 2000, the Legislature authorized the Public Hurricane Loss Projection Model (Public Model). The Public Model estimates loss costs and probable maximum loss levels caused by hurricanes for residential property.<sup>14</sup> The Legislature intended that the Public Model would be more transparent than private models because its assumptions and methodologies would be open to public review and inspection.<sup>15</sup>

The Public Model is the property of the Office of Insurance Regulation (OIR) and, in 2001, the OIR contracted with Florida International University (FIU) to develop the Public Model. The Public Model was activated in March 2006, and found acceptable by the methodology commission in August 2007.<sup>16</sup> Florida International University manages the Public Model through FIU's Laboratory for Insurance, Economic and Financial Research at FIU's International Hurricane Research Center. The Public Model has been submitted to, and approved by, the methodology commission at statutorily required intervals<sup>17</sup>, most recently on July 19, 2023.<sup>18</sup> The Public Model will remain approved by the methodology commission until November 1,

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<sup>10</sup> See *id.*

<sup>11</sup> Florida Hurricane Commission on Hurricane Loss Projection Methodology, *Commission Structure*, pgs. 24-26. [https://fchlpm.sbafla.com/media/c2dnlvah/20231101\\_structure.pdf](https://fchlpm.sbafla.com/media/c2dnlvah/20231101_structure.pdf) (last visited March 9, 2025).

<sup>12</sup> Section 627.0628(1)(c), F.S.

<sup>13</sup> Chapter 2014-80, L.O.F.

<sup>14</sup> See Florida Hurricane Loss Projection Model, *Services for You*, at <https://fphlm.cs.fiu.edu/services.html> (last visited March 9, 2025).

<sup>15</sup> Office of Program Policy Analysis & Government Accountability, *Steps Could Be Taken to Reduce the Public Hurricane Loss Projection Model's Reliance on State Funding*, pg. 2 (Report No. 11-25, December 2011).

<sup>16</sup> See *id.*

<sup>17</sup> See annual submissions to the methodology commission at <https://fchlpm.sbafla.com/model-submissions/hurricane-model-submissions/> and the methodology commission letters of acceptability at <https://fchlpm.sbafla.com/documents-and-standards/model-acceptability/letters-of-acceptability/> and a summary of methodology commission approvals of the Public Model at <https://fchlpm.sbafla.com/media/nacnv0fy/fphlm-7-19-23.pdf> (last visited March 9, 2025).

<sup>18</sup> Letter from the methodology commission to Dr. Shahid Hamid (July 19, 2023). <https://fchlpm.sbafla.com/media/cezjszpf/fiu-acceptability-letter-21-standards-7-19-23.pdf> (last visited March 9, 2025).

2025.<sup>19</sup> On October 1, 2024, the OIR renewed and amended its contract with FIU to manage the Public Model through June 30, 2025.<sup>20</sup>

The primary users of the Public Model are public entities, though private entities may contract to use it. The OIR uses the Public Model to evaluate the hurricane components of property insurance rate filings and to conduct “catastrophe stress tests” to evaluate the ability of property insurers operating in this state to remain solvent in the aftermath of a hurricane. In the aftermath of hurricanes, the OIR reviews loss estimates developed by the Public Model and compares those estimates with the actual losses incurred.<sup>21</sup> The State Board of Administration uses the Public Model, along with other private sector models, to develop the reimbursement premiums for the Florida Hurricane Catastrophe Fund.<sup>22</sup> Citizens Property Insurance Corporation uses the Public Model and other private sector models in ratemaking.<sup>23</sup>

The hurricane component of the Public Model is developed by experts in the fields of actuarial science, computer science, finance, engineering, meteorology, and statistics.<sup>24</sup> Experts in storm surge, waves, and inland flood were added to the team to develop the flood component of the Public Model. These experts are employed by various entities: Florida International University, Florida State University, University of Florida, Florida International University, University of Missouri-Kansas City, Notre Dame University, Rutgers University, the University of Oklahoma, the National Oceanic and Atmospheric Administration, AMI Risk Consultants, and Meta.

Ongoing development and maintenance of the Public Model is funded through legislative appropriations. For the 2023-2024 fiscal year, the Legislature appropriated \$1.273 million to OIR to enhance the Public Model. For the 2024-2025 fiscal year, the Legislature appropriated \$2.273 million to enhance the Public Model.

## Type Two Transfers

Section 20.06, F.S., provides for the reorganization of the executive branch of state government by transferring specified agencies, programs and functions to other specified departments, commissions, or offices. The transfers provided by s. 20.06, F.S., are intended to supplement but not supplant the requirements of s. 6, Art. III of the State Constitution. There are two types of transfers created by this statute – “type one” transfers and “type two” transfers.

A type one transfer is the transferring intact of an existing agency or department so that the agency or department becomes a unit of another agency or department.

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<sup>19</sup> See *id.*

<sup>20</sup> See Office of Insurance Regulation and Florida International University, *Renewal No. 1 and Amendment No. 1 to Contract 1980F-23-OIR-FIU Between the Florida Office of Insurance Regulation and the Florida International University Board of Trustees* (October 1, 2024) (on file with the Florida Senate Banking and Insurance Committee).

<sup>21</sup> See *id.* at pg. 2.

<sup>22</sup> Paragon Strategic Solutions, *Florida Hurricane Catastrophe Fund 2024 Ratemaking Formula Report*, pg. 4 (March 21, 2024), <https://fhcf.sbafla.com/media/jtunioka/2024-ratemaking-formula-report-final.pdf> (last visited March 9, 2025).

<sup>23</sup> See Office of Insurance Regulation, *Public Rate Hearing Citizens Property Insurance Corporation*, pgs. 24-26 (August 1, 2024), [https://www.floridair.com/docs-sf/default-source/public-hearings/citizens-hearing-2024/august-2024-citizens-rate-hearing-slides\\_final.pdf?sfvrsn=2b408b5c\\_4](https://www.floridair.com/docs-sf/default-source/public-hearings/citizens-hearing-2024/august-2024-citizens-rate-hearing-slides_final.pdf?sfvrsn=2b408b5c_4) (last visited March 9, 2025).

<sup>24</sup> See Florida Hurricane Loss Projection Model, *People*, at <https://fphlm.cs.fiu.edu/people.html> (last visited March 9, 2025).

A type two transfer is the merging into another agency or department of an existing agency or department or a program, activity, or function thereof. If certain identifiable units or subunits, programs, activities, or functions are removed from the existing agency or department, or are abolished, it is the merging into an agency or department of the existing agency or department with the certain identifiable units or subunits, programs, activities, or functions removed therefrom or abolished. Type two transfers are the means to transfer a particular program or activity from one state entity to another state entity.

In a type two transfer:

- The transferred agency, department, program, activity, or function retains its statutory powers, duties, and functions, and its records, personnel, property, and unexpended balances of appropriations, allocations, or other funds, except those transferred elsewhere or abolished. The foregoing are transferred to the new agency or department. The transfer of segregated funds must retain the relation between program and revenue source as provided by law.
- The head of the agency or department to which an existing agency or department or a program, activity, or function thereof is transferred may establish units or subunits to which the agency or department is assigned, and to assign administrative authority for identifiable programs, activities, or functions, to the extent authorized in ch. 20, F.S.
- The administrative rules of any agency or department involved in the transfer which are in effect immediately before the transfer remain in effect until specifically changed in the manner provided by law.

### **III. Effect of Proposed Changes:**

#### **Florida Center for Excellence in Insurance and Risk Management**

**Section 1** amends s. 1004.647, F.S., establishing the Florida Center for Excellence in Insurance and Risk Management (the Center) at the Florida State University College of Business, Department of Risk Management. The Excellence in Insurance Center essentially recreates and expands the research scope of the Florida Catastrophic Storm Risk Management Center (Storm Risk Center).

#### ***Purpose***

The bill provides that the Center's purpose is to:

- Develop, conduct, evaluate, promote, and disseminate accurate and timely research on issues related to the state's insurance market and risk management. This broadens the Center's purpose beyond catastrophic storm loss.
- Assist the Legislature in developing and evaluating evidence-based policy options and making recommendations related to insurance and risk management in this state.
- Identify emerging issues in the insurance market.
- Provide insight regarding the accessibility and affordability of insurance products.
- Assist in identifying and developing education and research grant funding opportunities among higher education institutions in this state and the private sector.

***Research – Areas of Inquiry***

The bill amends statutory language governing the Center’s activities. The Center is directed to expand its research efforts beyond catastrophic storm risk management and instead conduct, coordinate, and disseminate research and information that benefits businesses, consumers, and public policymakers or that is expected to have an immediate impact on policy and practices related to the state’s insurance markets generally or catastrophic event preparedness.

Current law specifies that the research activities of the Storm Risk Center may include storm forecasting, loss modeling, building construction and mitigation, and risk management strategies. The bill retains those research topics and expands the Center’s areas of research to also include:

- This state’s insurance-related consumer protections;
- Insurer claims-handling and adjudication practices in this state in comparison with insurer practices in other states;
- Cost factors in the reinsurance, catastrophe bond, and insurance-linked securities markets;
- The Florida Hurricane Catastrophe Fund;
- The effectiveness of the My Safe Florida Home Program; and
- Health insurance, life insurance, workers’ compensation, motor vehicle insurance, or any other type of insurance sold within Florida.

***Research - Cooperation and Collaboration with the Office of Insurance Regulation***

The bill directs the Center to cooperate with the Office of Insurance Regulation (OIR) in conducting research and specifies that the Center may conduct research responsive to requests made by OIR. The Center must specifically collaborate with OIR to create a report analyzing the Florida property insurance market, projecting the market’s outlook over one year, five years, 10 years, and 20 years. The report must recommend ways to improve the available and affordability of property insurance in this state and to facilitate the state’s preparedness for and responsiveness to catastrophic events. The OIR must cooperate with the center in providing data necessary to complete the report. The initial report must be published on or before July 1, 2026, and updated at least once every two years.

***Research – Responding to Legislative Requests***

The bill requires the Center to conduct research responsive to joint or individual inquiries from the President of the Senate and the Speaker of the House of Representatives regarding insurance or risk management. This will allow legislative policymakers to have the benefit of academic research that is relevant to public policy proposals related to insurance and risk management being considered by the Legislature.

***Research – Public Hurricane Loss Projection Model***

The bill directs the Center to use the public hurricane loss projection model when needed to meet the center’s statutory obligations.



***Public Sector Actuarial Practice***

The bill requires the Center to collaborate with the OIR and the Actuarial Science Program of the Department of Mathematics at Florida State University to encourage actuarial science students to practice in the public sector in the fields of risk management and insurance.

**Public Hurricane Loss Projection Model**

**Section 2** amends s. 627.06281, F.S., regarding the Public Hurricane Loss Projection Model.

***Management by the Florida Center for Excellence in Insurance and Risk Management***

The bill requires the OIR to contract with the Center to manage the public hurricane loss projection model. This will have the effect of moving the management of the public model from FIU to FSU. The Center is directed to cooperate with other entities and universities, including FIU, to develop and maintain the Public Model, which clarifies that the Legislature intends that the team developing and maintaining the model must continue to include experts from multiple universities and other entities.

***Updates to and Functionality of the Public Model***

The Center is directed to constantly evaluate and update the Public Model so that it will have the same functionalities as other models approved by the Florida Commission on Hurricane Loss Projection Methodology. Doing so should expand the usefulness of the Public Model. The OIR would derive greater usefulness from the Public Model in evaluating rate filings, conducting “stress tests” of property insurers ability to withstand major hurricanes, and conducting research. Similarly, the Center would likely find the Public Model more useful when conducting research. Private market insurers would also be more likely to use the Public Model in rate filings if it contains functionalities comparable to private market models.

***Use by the Florida Center for Excellence in Insurance and Risk Management***

The bill specifies that the Center may use the Public Model, including all assumptions, factors, and detailed loss results to meet the Center’s statutory obligations. The bill specifies that fees for private sector use of the Public Model do not apply to the Center.

**Type Two Transfer of the Public Model to Florida State University**

**Section 3** requires a type two transfer from FIU to FSU of all powers, duties, functions, records, offices, personnel, associated administrative support positions, property, pending issues, existing contracts, administrative authority, administrative rules, and unexpended balances of appropriations, allocations, and any other funds relating to the public hurricane loss projection model.

**Section 4** makes technical conforming changes to s. 627.06292, F.S., regarding a statutorily required annual report summarizing loss data and associated exposure data collected as part of the management of the Public Model. The bill strikes references to FIU and inserts references to FSU.

**Appropriation**

**Section 5** appropriates \$5 million in recurring funds and \$1.5 million in nonrecurring funds from the General Revenue Fund to FSU for the purpose of establishing and maintaining the Center.

**Effective Date**

**Section 6** provides an effective date of July 1, 2025.

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

None.

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

None.

**C. Trust Funds Restrictions:**

None.

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

None.

**E. Other Constitutional Issues:**

None.

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

None.

**B. Private Sector Impact:**

None.

**C. Government Sector Impact:**

The bill appropriates \$5 million in recurring funds and \$1.5 million in nonrecurring funds from the General Revenue Fund to Florida State University for the purpose of establishing and maintaining the Center.

**VI. Technical Deficiencies:**

None.

**VII. Related Issues:**

None.

**VIII. Statutes Affected:**

This bill substantially amends the following sections of the Florida Statutes: 1004.647, 627.06281, and 627.06292.

**IX. Additional Information:****A. Committee Substitute – Statement of Changes:**

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

None.

**B. Amendments:**

None.

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

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