

## HOUSE OF REPRESENTATIVES STAFF ANALYSIS

**BILL #:** CS/HB 1247 The Public Model for Hurricane Loss Projections

**SPONSOR(S):** Nuñez

**TIED BILLS:** **IDEN./SIM. BILLS:** SB 1248

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Insurance & Banking Subcommittee	12 Y, 0 N, As CS	Callaway	Cooper
2) Government Operations Appropriations Subcommittee			
3) Regulatory Affairs Committee			

### SUMMARY ANALYSIS

After Hurricane Andrew in 1992, insurance companies began using privately developed catastrophe loss models to estimate expected losses. Catastrophe models are complex computer simulations that property insurers worldwide use to project potential losses from natural catastrophes, such as hurricanes, earthquakes, and tornados.

The 2000 Legislature authorized the creation of a public hurricane loss projection model (public model) and the Office of Insurance Regulation (OIR) contracted with Florida International University (FIU) to develop the model in 2001. In March 2006 the public model was activated and in August 2007 it was first found acceptable by the Florida Commission on Hurricane Loss Projection Methodology.

The public model was built to assess hurricane risk and predict annual expected insured residential losses in Florida for an insurance company, zip code, county, or for the entire state. The OIR uses the public model as an independent tool to facilitate its review of the reasonableness of property insurance rates proposed by insurers. Without the public model, the OIR's basis for rate determinations would be each insurer's own selected private model and corresponding loss data and the OIR would not have a way to corroborate the accuracy of this data.

The FIU is the lead institution for developing and operating the public model, but it collaborates with several other public and private Florida universities and the U.S. National Oceanic and Atmospheric Administration. The OIR provides annual funding of almost \$600,000 for the public model which is primarily used to maintain and update the model, so that it can maintain its acceptability for use in property insurance rate setting.

The bill requires the OIR to contract with the FIU for enhancements to the public model, subject to an appropriation. The amount of the appropriation is not specified by the bill. The appropriated funds are to be used to enhance the public model so that it can assess risks and predict losses from both wind and flood associated with a hurricane. The model currently does not have the capability of assessing and predicting flood damage.

The bill has no fiscal impact on local government or the private sector. The fiscal impact on state government is unknown as the bill is contingent upon an unspecified appropriation.

The bill is effective July 1, 2013.

## FULL ANALYSIS

### I. SUBSTANTIVE ANALYSIS

#### A. EFFECT OF PROPOSED CHANGES:

After Hurricane Andrew in 1992, insurance companies began using privately developed catastrophe loss models to estimate expected losses. Catastrophe models are complex computer simulations that property insurers worldwide use to project potential losses from natural catastrophes, such as hurricanes, earthquakes, and tornados.<sup>1</sup>

The 2000 Legislature authorized the creation of a public hurricane loss projection model (public model) and the Office of Insurance Regulation (OIR) contracted with Florida International University (FIU) to develop the model in 2001.<sup>2</sup> In March 2006 the public model was activated and in August 2007 it was first found acceptable by the Florida Commission on Hurricane Loss Projection Methodology (Commission).<sup>3</sup> Any hurricane model must be found acceptable by the Commission in order for a property insurer to use the model to develop property insurance rates.<sup>4</sup> The public model was last found acceptable in 2011.<sup>5</sup>

The public model was built to assess hurricane risk and predict annual expected insured residential losses in Florida for an insurance company, zip code, county, or for the entire state. The OIR uses the public model as an independent tool to facilitate its review of the reasonableness of property insurance rates proposed by insurers. Without the public model, the OIR's basis for rate determinations would be each insurer's own selected private model and corresponding loss data and the OIR would not have a way to corroborate the accuracy of this data.

The OIR holds the copyright for the public model, which means that it has exclusive rights to the model but can authorize others to use it. In addition to the OIR, users of the public model include Citizens Property Insurance Corporation, the FHCF, and some private insurers.<sup>6</sup> The OIR does not pay a fee for use of the public model, but private insurers do.<sup>7</sup> The amount of the fee is provided in current law and is the actual reasonable costs of the public model operation and maintenance.

The FIU is the lead institution for developing and operating the public model, but it collaborates with several other public and private Florida universities (including Florida State University, the Florida Institute of Technology, the University of Florida, and the University of Miami) and the U.S. National Oceanic and Atmospheric Administration. The OIR provides annual funding of almost \$600,000 for the public model which is primarily used to maintain and update the model, so that it can maintain its acceptability for use in property insurance rate setting.

The bill requires the OIR to contract with the FIU for enhancements to the public model, subject to an appropriation. The amount of the appropriation is not specified by the bill. The appropriated funds are to be used to enhance the public model so that it can assess risks and predict losses from both wind and flood associated with a hurricane. The model currently does not have the capability of assessing and predicting flood damage.

---

<sup>1</sup> There are 4 private companies in Florida that have been approved to offer hurricane loss projection models. These include: AIR Worldwide, Applied Research Associates, EQECAT, and Risk Management Solutions.

<sup>2</sup> Summary information on the Florida Public Hurricane Loss Projection Model obtained from Office of Program Policy Analysis and Government Accountability. Report No. 11-25: *Steps Could Be Taken to Reduce the Public Hurricane Loss Projection Model's Reliance on State Funding* (December 2011). Available at: <http://www.oppaga.state.fl.us/MonitorDocs/Reports/pdf/1125rpt.pdf>.

<sup>3</sup> The Florida Commission on Hurricane Loss Projection Methodology is an independent body of experts created by the Legislature in 1995 for the purpose of developing standards and reviewing hurricane loss models used in the development of residential property insurance rates and the calculation of probable maximum loss levels.

<sup>4</sup> s. 627.0628(3), F.S.

<sup>5</sup> This acceptance expires on September 1, 2013.

<sup>6</sup> See note 2.

<sup>7</sup> s. 627.06281(3)(b), F.S.

**B. SECTION DIRECTORY:**

**Section 1:** Creates an unnumbered section of law requiring the OIR to contract with the FIU to enhance the public model, subject to an appropriation during the fiscal year 2013-2014.

**Section 2:** Provides an effective date of July 1, 2013.

**II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT**

**A. FISCAL IMPACT ON STATE GOVERNMENT:**

1. Revenues:

None.

2. Expenditures:

The fiscal impact on state government is unknown as the bill is contingent upon an unspecified appropriation.

**B. FISCAL IMPACT ON LOCAL GOVERNMENTS:**

1. Revenues:

None.

2. Expenditures:

None.

**C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:**

None.

**D. FISCAL COMMENTS:**

None.

**III. COMMENTS**

**A. CONSTITUTIONAL ISSUES:**

1. Applicability of Municipality/County Mandates Provision:

Not applicable. This bill does not appear to: require counties or municipalities to spend funds or take an action requiring the expenditure of funds; reduce the authority that counties or municipalities have to raise revenues in the aggregate; or reduce the percentage of a state tax shared with counties or municipalities.

2. Other:

None.

**B. RULE-MAKING AUTHORITY:**

None provided in the bill.

**C. DRAFTING ISSUES OR OTHER COMMENTS:**

None.

#### **IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES**

On March 28, 2013, the Insurance & Banking Subcommittee considered the bill, adopted a strike all amendment, and reported the bill favorably with a committee substitute. The amendment removed all the provisions of the bill and added a new provision. The new provision, which is contingent on an appropriation, requires the OIR to contract with the FIU to enhance the public hurricane model to predict and assess windstorm and flood damage.

The staff analysis was updated to reflect the committee substitute.