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**A REPORT ON THE  
ECONOMIC IMPACT OF A 1-IN-100 YEAR HURRICANE ON  
THE STATE OF FLORIDA**

Prepared for:

**The Florida Department of Financial Services**

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## EXECUTIVE SUMMARY

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The Florida legislature has directed the Chief Financial Officer of the State of Florida to provide an annual report analyzing the economic impact on the State of Florida of a 1-in-100 year hurricane. The statute mandating this report requires that “The report shall include an estimate of the short-term and long-term fiscal impacts of such a storm on Citizens Property Insurance Corporation, the Florida Hurricane Catastrophe Fund, the private insurance and reinsurance markets, the state economy, and the state debt. The report shall also include an analysis of the average premium increase to fund a 1-in-100 year hurricane event and list the average cost impact, in both a percentage and dollar amount, to consumers on a county-level basis.” Milliman, Inc, has been engaged by the Department of Financial Services to produce the report for 2010. This executive summary provides an overview of the principal conclusions of our analysis.

### ***A 1-in-100 Year Hurricane***

A 1-in-100 year hurricane is defined based on the simulation of property damages from all possible future hurricanes; it is the single storm such that 1% of all simulated hurricanes have larger amounts of damage and 99% have smaller amounts of damage. Our estimates of the damage from such an event are based on the simulation models used by the FHCF, adjusted to account for the portion of FHCF covered losses paid by policyholders and the losses that are not covered by FHCF reinsurance at all. The estimates of total and insured damages are shown below:

<b>PROPERTY DAMAGES FROM 1-IN-100 YEAR HURRICANE</b>			
<b>(\$ BILLIONS)</b>			
	<b>Total</b>	<b>Insured</b>	<b>Uninsured</b>
Residential Structures	\$52.9	\$34.4	\$18.5
Mobile Homes	7.6	4.9	2.7
Personal Property	31.1	21.1	10.0
Commercial (Non-residential)	55.4	17.7	37.7
Agriculture	4.0	0.0	4.0
Governments	8.6	1.0	7.6
<b>Total</b>	<b>\$159.5</b>	<b>\$79.1</b>	<b>\$80.4</b>

### ***Impacts on Florida Hurricane Catastrophe Fund (FHCF)***

The Florida Hurricane Catastrophe Fund (FHCF) was created in 1993 by the Florida legislature to provide reinsurance for insurers selling homeowners and other property coverage in Florida. Currently, all property insurers in the state purchase reinsurance through the FHCF. In the event of a catastrophic hurricane, the FHCF is expected to incur covered losses of \$23.0 billion, \$10.1 billion of which will be provided for by available funds (surplus plus pre-event bonds). This leaves \$12.9 billion of reinsured losses that must be funded by the issuance of additional debt, which will result in assessments on policyholders.

### ***Impacts on Citizens Property Insurance Corporation (CPIC)***

Citizens Property Insurance Corporation ("CPIC") was created in 2002 by the Florida legislature to replace the Florida Windstorm Underwriting Association and the Residential Property and Casualty Joint Underwriting Association. CPIC currently serves as the property residual market insurance mechanism in Florida and is now the largest property insurer in the state. In the event of a catastrophic hurricane, we estimate CPIC will incur a total loss of \$23.6 billion, \$8.6 billion of which will be recovered in reinsurance from the FHCF. This results in net losses from the 1-in-100 year hurricane of \$15.1 billion. Of this \$15.1 billion, \$8.3 billion will be covered by available funds (surplus plus pre-event bonds). This leaves total unfunded losses for CPIC equal to \$6.8 billion, which will be funded by the issuance of additional debt. As with the FHCF debt, this will result in additional assessments on policyholders.

### ***Impacts on Private Insurance and Reinsurance Market***

Large catastrophic events can reduce the supply and at the same time, increase the demand for reinsurance, driving up price levels significantly. Since insurers pass the increased cost of reinsurance on to policyholders through rate increases, this can have a substantial impact on policyholders. After a 1-in-100 year hurricane occurring in Florida in 2010, we expect a significant increase in reinsurance prices for 2011 catastrophe reinsurance contracts. For the purposes of other calculations in this report, we have selected the first-year impact on reinsurance prices to be an increase of 40%.

### ***Impacts on State Economy***

The impacts on the state economy will occur in three phases – the crisis, recovery and long-term impact phases. During the immediate crisis phase, the principal impact will be the property losses from the storm, which have been estimated to be \$159.5 billion. However, additional expenditures for recovery and relief could be in the range of \$6 - 10 billion, with much of the cost funded by sources outside the state. In addition, the state itself could incur additional costs of up to \$2 billion from mandated and legislatively enacted programs, and suffer a loss in tax revenue of \$0.4 billion.

In the recovery phase, the state economy will experience an expansion due to the significant repair and rebuilding from the storm. Net new spending will exceed \$112 billion, generating sales tax revenues of \$4.1 billion. As to the long-term impact on the economy, previous research indicates that while near-term disruptions may take place at the local level, there is little impact in the long run at the statewide level. However, given the current state of the economy and housing market in Florida, and the absence of experience with a catastrophe of this magnitude, it is possible that more serious long-term dislocation might occur.

### ***Impacts on State Debt***

As discussed, a 1-in-100 year storm will cause large deficits in both the FHCF and CPIC, resulting in the issuance of bonds in the amount of \$19.7 billion. Currently, the state of Florida has total outstanding debt of \$41.1 billion, comprised of \$26.4 billion of direct debt, and \$14.7 billion of indirect debt (of which \$8.1 billion is already from the FHCF and CPIC). Thus, the additional debt required to fund these deficits represents an increase of 48% in total state debt outstanding. In addition, a single debt issue of \$19.7 billion would probably be the largest tax-exempt bond issue ever floated in United States capital markets; in current capital markets, the ability to place that much debt might be questionable. Also, while current FHCF and CPIC debt carries a yield of around 5%, it is likely that the yield required to sell \$19.7 billion of bonds would be substantially higher. We have used a yield of 8% in our analysis.

### **Impacts on the Florida Insurance Guaranty Association (FIGA)**

The Florida Insurance Guaranty Association (“FIGA”) pays the claims of insolvent insurers by assessing solvent insurers in an amount sufficient to cover the unfunded liabilities of the insolvent company. These assessments are then passed through to policyholders in future insurance rates. To the extent that a 1-in-100 year storm results in one or more insolvencies, there will be consequences for policyholders in the future. We have not conducted an analysis to determine the likelihood that any insurers would become impaired as a result of a 1-in-100 year hurricane. It would take \$414 million in unfunded property claims from insolvent insurers to cause the maximum 2% assessment in the FIGA “All Other Lines Account” (the account where property claims of insolvent insurers are paid).

### **Average Cost Increases to Consumers**

As noted, a 1-in-100 year hurricane will subject Florida consumers to direct costs in the form of additional assessments from the FHCF, additional assessments and surcharges from CPIC, and potential assessments from FIGA. In addition, consumers will face indirect costs in the form of higher premiums for property insurance (because of increases in the cost of reinsurance), and higher prices for goods and services (because the cost of commercial insurance will also increase). We estimate that these direct and indirect costs will have an average impact on consumers across the state of \$1,140 per household.

We have also quantified the impact of these factors on an average household in each county in the State of Florida. These calculations were performed separately by line of insurance, and for households with homeowners insurance purchased through CPIC versus those with homeowners insurance purchased through private carriers. An illustration of the total first-year impact on households in three counties is provided in the chart below:

<b>FIRST-YEAR IMPACT OF ALL INSURANCE-RELATED EXPENDITURES</b>						
	<b>Dade</b>		<b>Hillsborough</b>		<b>Leon</b>	
Current Average Cost	\$7,349		\$6,614		\$4,756	
<b>Total Increase</b>	<b>\$1,447</b>	<b>19.7%</b>	<b>\$1,029</b>	<b>15.6%</b>	<b>\$654</b>	<b>13.8%</b>
New Average Cost	\$8,796		\$7,642		\$5,410	

## **PURPOSE OF THE REPORT**

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The Florida legislature has directed the Chief Financial Officer of the State of Florida to provide an annual report on the Economic impact on the State of Florida of a 1-in-100 year hurricane.

An excerpt from the enabling statute details the report requirements.

Section 215.55952 F.S. - Annual report on economic impact of a 1-in-100-year hurricane:

“The report shall include an estimate of the short-term and long-term fiscal impacts of such a storm on Citizens Property Insurance Corporation, the Florida Hurricane Catastrophe Fund, the private insurance and reinsurance markets, the state economy, and the state debt. The report shall also include an analysis of the average premium increase to fund a 1-in-100 year hurricane event and list the average cost, in both a percentage and dollar amount, impact to consumers on a county-level basis.”

The first report was produced by the Florida Department of Financial Services in March of 2009. For the 2010 report, Milliman, Inc. has been engaged by the Florida Department of Financial Services to produce the report.

We are very appreciative of the assistance we received in collecting the data and information necessary to complete this report from the following: the Office of Insurance Regulation, Citizens Property Insurance Corporation, the Florida Hurricane Catastrophe Fund, the Legislative Office of Economic and Demographic Research, the DFS Divisions of Risk Management and Rehabilitation and Liquidation, and the Department of Financial Services.

## **A 1-IN-100 YEAR HURRICANE**

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A technical definition of a 1-in-100 year hurricane is a storm that causes property damage at the 1% occurrence probability, based on a complete simulation of possible hurricane property damage estimates. It is simply the single storm such that 1% of the hurricanes included in the whole distribution have larger amounts of property damage and 99% have smaller amounts of property damage. In order for a storm to fall in the top 1% of all possible events, the strength of the storm must be significant and it must make landfall in an area densely populated with buildings and other property subject to damage from the storm. For example, a significant category 5 hurricane making landfall in Taylor or Dixie counties will not cause enough damage to be in the top 1% of all possible events because the exposed property in its path is very low relative to other areas of the state. On the other hand, a lower-strength hurricane (low category 4) making landfall in Miami has the potential to cause enough property damage to be one of the top 1% of simulated events.

As explained in the previous section of this report, the Florida legislature requires a report on the impact of a 1-in-100 year hurricane on the Florida economy. In order to analyze the impact on the whole economy, we need to estimate the total amount of property damage caused by the 1-in-100 year event. Hurricane damage estimates are determined through computer-simulated catastrophe models based on an exposure base of properties in a certain geographic area. The determination of the 1-in-100 year event will depend on what exposures are included in the simulation models.

For this report, we are concerned with the State of Florida and the total damage to all property, so the geographic area would include the whole State of Florida and the exposure base should include all structures, improvements and tangible property subject to damage from a hurricane. We are not aware of a model output that includes all exposed property in its exposure base. The best source of the statewide impact from hurricane losses is the Florida Hurricane Catastrophe Fund ("FHCF"). The FHCF does have statewide industry exposures, but they only include personal residential and commercial residential



properties.<sup>1</sup> Non-residential commercial properties, other properties and other structures subject to damage (roads, bridges, etc.) from a hurricane are not included in the FHCF exposure base. Also, uninsured properties are not included in the exposure base.

In order to define the 1-in-100 year event for the 2010 storm season, we are using data from the FHCF. Each year insurers are required to report their exposures to the FHCF. The FHCF runs five different catastrophe models and produces results based on a weighted average of those models. The FHCF is in the process of developing prices for reinsurance coverage for the 2010 storm season. The FHCF has indicated that the 1-in-100 year loss for properties covered by the fund is \$56.5 billion, up slightly from \$55.3<sup>2</sup> billion last year. This amount does not include the deductible paid by the policyholder, does not include any loss adjustment expense,<sup>3</sup> and does not include damage to non-residential commercial buildings, automobiles and other vehicles, boats, recreational vehicles, agricultural land or the tangible property associated with such buildings and land.

Our estimates of the property damage caused by a 1-in-100 year hurricane are as follows:<sup>4</sup>

<b>ESTIMATED COSTS FROM A 1-IN-100 YEAR HURRICANE</b>	
Gross Insured Loss to Personal & Commercial Residential Structures	\$56.5 billion
Gross Insured Loss to Other Lines of Business <sup>5</sup>	22.6 billion
<b>Total Insured Loss</b>	<b>\$79.1 billion</b>
Deductibles paid by Policyholders on Residential Properties	\$14.1 billion
Loss Adjustment Expense Paid by Insurers on Personal & Commercial Residential Structures	\$2.8 billion

<sup>1</sup> Commercial residential structures are those that are insured under commercial insurance policies but are used as residences, such as condo buildings.

<sup>2</sup> From FHCF 2009 Ratemaking Formula Report, Exhibit 5, page 2

<sup>3</sup> The FHCF reimburses insurers an additional 5% of paid loss to cover loss adjustment expense. We are not including the loss adjustment expense in our estimates of total damage caused by the 1-in-100 year hurricane, since these expenses are paid for by the direct insurer and are not damage to a building. The loss adjustment expenses will be included in estimates of the cost of covered claims in the FHCF and CPIC analysis.

<sup>4</sup> See Exhibit 1, page 1, for the derivation of our estimates.

<sup>5</sup> Other lines of business include private passenger autos, commercial autos, the portion of commercial multi-peril excluding commercial residential structures and other lines as reported to the Florida OIR in a special call for data on hurricanes during the 2004 and 2005 storm seasons. See Exhibit 1, page 2 which details our selection of the ratio of losses for these properties to the losses for personal and commercial residential properties.

It should be noted that these estimates do not include buildings that are uninsured and do not include damage to property that is not covered under typical insurance policies.<sup>6</sup> Our estimates of these damages will be covered in the next section of this report.

As mentioned previously, the 1-in-100 year hurricane is a single event based on a complete simulation of possible events.<sup>7</sup> It should be noted, however, that damage estimates by line of business, the impact on agriculture, damage estimates on uninsured structures, and CPIC's share of the insured losses will vary, and in some cases vary significantly, depending on the exact storm track. For example, a storm that makes landfall in Miami and proceeds due west through the everglades would most likely have less agricultural losses than a similar strength storm that makes landfall in Tampa and proceeds east through the middle of the state.

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<sup>6</sup> In addition, these estimates do not include any damage covered under the National Flood Insurance program. Flood and Storm surge damage will also be considered in the next section.

<sup>7</sup> It is possible to estimate the losses using a sample of events above and below the single 1-in-100 year event. For example, if all events were ranked from high to low, losses from twenty events including 9 just above the 1-in-100, the 1-in-100, and 10 just below the 1-in-100 could be averaged to estimate the total losses from the 1-in-100 year hurricane. Using the average of the twenty events would not significantly change the total insured damage estimates for insured losses. However, each of the 20 events could have different impacts on segments of Florida properties. For example, the percentage of Commercial insured losses to total insured losses may be 20% in one of the twenty events and 30% in another.

## **OVERVIEW OF ECONOMIC IMPACTS OF A 1-IN-100 YEAR HURRICANE IN FLORIDA**

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### ***General Background***

In the past several years there has been a growing body of academic literature analyzing the economic impact of catastrophic events, particularly hurricanes. Not surprisingly, much of the empirical analysis underlying this literature is based on events in Florida, since the state has suffered the largest number, and highest total cost, of catastrophes in the United States. In addition to this research, many entities in Florida – agencies of government, research units within the state universities and the like – have developed databases and analytical methodologies designed to address both the insurance impacts as well as the broader economic effects attributable to the occurrence of natural catastrophes. We draw on this literature in the analyses conducted for this report.

To begin, it is useful to consider a general method for classifying the economic effects of hurricanes on a particular state or region. There have been a number of papers that describe such classification systems, all of which have a broadly similar structure based on the timing of events relative to the occurrence of a hurricane. For example, Pielke and Landsea describe “direct impacts” as “those most closely related to the event, such as property losses associated with wind damage”; “secondary impacts” as those “related to the direct impacts such as an increase in medical problems or disease following a hurricane”; and “tertiary impacts” as “those that follow long after the storm has passed.”<sup>8</sup> Similarly, Kliesen describes three periods associated with the occurrence of a natural disaster: “In period 1, losses to buildings, highways, and other infrastructure (direct losses) occur; in period 2, indirect losses such as lost output and reductions in employment, leisure time and taxable receipts occur. Finally, in period three, a recovery ensues.”<sup>9</sup> In addition, in last year’s report to the Legislature entitled “Economic Impact of a 1-in-100 Year Hurricane”, a four phase classification scheme is described: a “preparatory phase” in advance of hurricane occurrence; a “crisis phase” during and immediately after the event; a “recovery phase” where rebuilding and replacement of lost property occurs; and a “displacement phase” where the acceleration of

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<sup>8</sup> See Pielke and Landsea, 1998, page 622.

<sup>9</sup> See Kliese, 1994, page 3

expenditures due to the recovery phase is offset by reductions in spending and potential permanent losses in population, employment and economic activity.<sup>10</sup>

It is evident that these classification structures are broadly similar. At the risk of over-simplification, they each categorize the impact of catastrophes in three phases: (1) the “crisis period” during and immediately following the event, in which there are severe dislocations due to mandatory evacuations, business interruptions and significant property loss<sup>11</sup> ; (2) the “rebuilding and recovery phase” where real and personal property damaged or destroyed during the event is repaired or replaced, and (3) the “long-term impact” which occurs several years after the event and may or may not be of significance in terms of overall economic effects. This seems to be a useful way to think about the economic effects of catastrophic events.

In addition to the temporal characteristics of such events, it is also important (particularly for this report) to distinguish between the impact on state government and the broader economic effects on the state. For state government, both expenditures and revenues may be affected; on the expenditure side the effects include the immediate costs of providing emergency and clean-up services, the cost of mandated programs triggered by the event, and the losses to state and local government owned infrastructure, while on the revenue side the major impact is on tax revenues. The balance between the change in revenues and change in expenditures will determine the ultimate impact of a hurricane on state and local governments.

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<sup>10</sup> See Economic Impact of a 1-in-100 Year Hurricane, Department of Financial Services, 2009

<sup>11</sup> In the *Economic Impact of a 1-in-100 Year Hurricane*, Florida Department of Financial Services, 2009, the crisis period or period of direct losses is broken into two sub-periods – the preparatory and crisis phases.

As opposed to the impact on state government, the effects of hurricanes on the state economy are more wide-ranging. Economic effects include all the losses suffered by individuals and businesses beginning with the announcement of the event and continuing at least until the recovery and rebuilding are complete, and potentially long thereafter (depending on whether long-term economic, social and demographic changes ensue).

Some of these effects are amenable to estimation – for example it is possible to estimate total real and personal property losses in the state, based on the direct use and extrapolation from hurricane loss projection models. But others, particularly the long-term effects, are inherently more difficult to enumerate and measure. This is especially true in the context of this report, which is intended to measure the impact of a 1-in-100 year hurricane on the economy of Florida. Inasmuch as no such event has actually occurred, since Florida has grown to be the fourth largest state in the nation, there is no historical record from which to draw inferences as to the long-term economic and demographic dislocations that might ensue.

#### ***Estimated Impact of a 1-in-100 Year Hurricane***

We attempted to estimate the impact on the economy of a 1-in-100 year hurricane based on projections of hurricane losses from computer simulation models, historical loss data reported by the Office of Insurance Regulation, and estimates as to the proportion of losses that are residential and the proportion that are insured. A brief discussion of the methodology and data is provided below.

Recalling the earlier discussion, the impact of a hurricane on the state economy can be thought of as occurring in three distinct periods – the crisis phase, the rebuilding/recovery phase, and the long-term impact phase. We briefly discuss our consideration of each phase below.

### ***Crisis Phase***

During the “crisis phase” there are significant losses within the state arising from:

- the evacuation of populations in advance of and in the aftermath of the storm;
- the cost of emergency rescue and relief services;
- the disruptions in earning and spending patterns due to the economic dislocations subsequent to a catastrophic storm; and
- the damage to real and personal property.

The costs associated with these events subsequent to a 1-in-100 year storm would be significant.

### ***Population Evacuation and Emergency Services Costs***

A major hurricane striking Miami or Tampa would likely produce evacuations of sizable numbers of people, as nearly one-third of the state's population lives in the Miami/Ft. Lauderdale/Palm Beach metropolitan areas, and almost one-sixth lives in the Tampa/St.Petersburg/Clearwater metropolitan areas (the two areas most likely to be affected in the event of a 1-in-100 year hurricane).<sup>12</sup> As an indication of the degree of potential evacuations, consider the research conducted following the 2004 Florida storm season by the Bureau of Economic and Business Research (BEBR) at the University of Florida. The BEBR undertook an extensive survey of Floridians to determine their evacuation and relocation patterns during the worst hurricane season in Florida history.<sup>13</sup>

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<sup>12</sup> See Office of Economic and Demographic Research, <http://edr.state.fl.us/population.htm>. More than 5.5 million people live in the Miami area, and more than 2.7 million in Tampa.

<sup>13</sup> Four hurricanes struck the state, accounting for more than \$25 billion of insured losses, and some areas were struck as many as three times.

According to these studies, more than 25% of Floridians evacuated at least once in advance of a hurricane during that year, and more than 10% evacuated more than once. Although most evacuations were relatively brief (half lasted only one or two nights) more than 12% extended longer than one week.<sup>14</sup> In addition to evacuations in advance of the storm, large numbers of Floridians had to move from their homes due to structural damage, loss of utilities and the like; 2.6 million homes sustained at least minor damage, and 1.7 million residents were forced to move temporarily. As with evacuations, most of the moves were of relatively brief duration (more than 80% were 2 weeks or less) but more than 10% of the population were gone for more than a month.<sup>15</sup>

Evacuations and emergency relief are costly; temporary food and shelter have to be provided, employment is frequently interrupted and businesses may be forced to close for a time. In addition, there are costs associated with emergency medical services, debris removal and immediate restoration of infrastructure (repairs of roads, bridges, power lines etc.). Although many of these expenditures may be funded by contributions from outside of the state (charities such as the Red Cross, or FEMA and other Federal agencies), there are substantial costs to the state as well.

As an example of outside funding, FEMA reports that \$5.6 billion of disaster assistance was provided subsequent to the 2004 hurricane season in Florida. However a portion of that total paid for costs other than evacuation and emergency relief, and which we are accounting for elsewhere in our estimates.<sup>16</sup> Based on FEMA press releases, it appears that up to \$4 billion was spent for emergency relief during the crisis phase of the storms.<sup>17</sup> In addition, there was \$1.3 billion of Federal disaster assistance for the 2005 storm season in Florida, and \$3.3 billion due to Hurricane Ike in Texas and Louisiana.<sup>18</sup>

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<sup>14</sup> See *Florida Focus*, The Demographic Impact of the 2004 Hurricane Season on Florida, BEBR, July, 2005.

<sup>15</sup> Smith, Stanley K. and Chris McCarty, *Florida's 2004 Hurricane Season: Disaster response and Recovery*, 2006, BEBR, University of Florida.

<sup>16</sup> For example, some of the funds were used for loans to uninsured homeowners for property repairs, and to businesses for losses due to business interruption and the like. As discussed below, these costs are incorporated directly into our estimates of uninsured damages, hence it would be double counting to include them as emergency expenditures as well.

<sup>17</sup> See *Florida 2004 Hurricane Recovery Passes the \$5.6 Billion Mark*, FEMA press release, August 12, 2005.

<sup>18</sup> See the various reports and press releases from FEMA listed in the bibliography. As with the FEMA expenditures in the 2004 season, these amounts also include some costs that are accounted for directly in our estimates of the uninsured portion of total losses.

As far as the costs to state government, in the 2009 report entitled “Economic Impact of a 1-in-100 Year Hurricane”, the direct costs to Florida’s state government attributable to the 2004 and 2005 storm season were estimated. These direct costs include only those programs that were legislatively enacted specifically in response to the hurricanes, additional expenditures made under existing programs but resulting from the hurricanes, and the matching funds paid by the state that are required to obtain FEMA assistance. According to that report, the expenditures for these categories totaled \$791 million in 2004 and \$621 million in 2005.

Projecting the costs of emergency evacuation and relief services and additional state government programs for a 1-in-100 year hurricane in 2010 involves numerous assumptions that are difficult to make with precision. The 2004 and 2005 storm seasons produced estimated insured hurricane losses of only \$28.2 billion (2009 \$) and \$11.8 billion (2009 \$) respectively, but current estimates for the insured losses from a 1-in-100 year storm in 2010 are nearly \$80 billion (or double the combined costs of these 2 seasons).<sup>19</sup> However, it may not be prudent to estimate future costs simply by extrapolating from the previous data based on the higher expected losses for the 2010 storm.

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<sup>19</sup> These insured estimates are based on OIR data adjusted for inflation using the GDP deflator published by the US Department of Commerce.



In 2004, perhaps because of the multiple storms throughout the season, very large segments of the population were affected. For example, the BEBR estimates that close to a third of Florida's housing units suffered damages during the season, and more than a quarter of the residents had to evacuate. These proportions (one quarter to one third) are similar to the share of the population in Miami, and larger than the share of the population in Tampa. Thus, while a 1-in-100 year hurricane might produce twice the damages, it would not necessarily affect twice the population or incur twice the cost of emergency services.

Although it may be incorrect to assume that the costs of emergency services are directly proportional to insured losses, it is reasonable to believe that they are positively correlated with the event losses. As regards the evacuation and emergency relief costs, given the data from the 2004 season and the projections for the 1-in-100 year event, we believe an estimate of \$6 - 10 billion is reasonable.<sup>20</sup> As for costs to the state, using a similar basis for projection, we estimate additional costs of up to \$2 billion.<sup>21</sup>

#### *Disruption in Earning and Spending Patterns*

In addition to the direct costs incurred by state and local government, there are also fiscal effects and ultimately budgetary impacts attributable to the dislocations in economic activity that occur during the crisis phase. Among other things, employment is interrupted, businesses close and tourism (a major source of revenue) declines precipitously.<sup>22</sup> These dislocations have an immediate impact, causing tax revenues to decline in the near term. To determine the impact of these tax effects, we relied on the model developed by the statutorily created Revenue Estimating Conference (REC) to estimate the impact of the 2004 hurricane season on Florida tax revenues.<sup>23</sup> Based on that model, we estimated that the immediate

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<sup>20</sup> Some emergency costs are likely proportional to the population affected while others are proportional to the damage caused by the storm. Of the \$4 billion for the 2004 season mentioned above, we assumed that \$3 billion was proportional to the affected population, and \$2 billion was proportional to the damages from the storm.

<sup>21</sup> In 2004 the state incurred additional direct costs of almost \$0.8 billion; adjusting that upward for inflation and accounting for the larger storm damages results in an estimate of \$1 to \$2 billion.

<sup>22</sup> See, for example, the following: [http://www.frbatlanta.org/pubs/econsouth/econsouth-vol\\_6\\_no\\_4-hurricanes\\_raise\\_questions\\_about\\_floridas\\_outlook.cfm?redirected=true](http://www.frbatlanta.org/pubs/econsouth/econsouth-vol_6_no_4-hurricanes_raise_questions_about_floridas_outlook.cfm?redirected=true).

<sup>23</sup> We are grateful to Amy Baker of the State Legislature Office of Economic and Demographic Research for providing access to the model and assistance with its interpretation.

losses in sales tax revenue due to declines in aggregate economic activity in the immediate aftermath of a storm would be approximately \$400 million.<sup>24</sup>

#### *Damage to Real and Personal Property*

Far more significant than the immediate costs of evacuation and emergency relief will be the damages to real and personal property attributable to a 1-in-100 year hurricane. As noted earlier, we have estimated those damages based on the output of hurricane simulation models and loss data from the 2004 and 2005 hurricane season, as reported by the OIR. The basic methodology used for this estimation is described briefly below.

First, we were provided with the modeled loss estimates run for the FHCF. Since the FHCF exposure base is essentially all the insured residential and commercial-residential properties in the state, this model output represents the best available estimate of the total insured damages to residential structures and contents in the state as a whole. The total amount of insured losses from the models is \$56.5 billion in 2009 dollars. However, this is not a reasonable estimate of the damages incurred in the state as a whole because as noted, the models provide output on the insured losses to FHCF covered property only. To develop an estimate of losses for the state as a whole, one must account for (1) the portion of losses on the FHCF exposure base that are not insured, as well as (2) the exposures that are not covered by the FHCF at all. We developed these estimates using data provided by the OIR on the distribution of hurricane losses across lines of insurance, and estimates as to the proportion of losses across lines that are insured versus uninsured.

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<sup>24</sup> The REC model seems primarily intended to estimate the gains in tax revenue associated with the recovery period after a hurricane. To that end it very carefully enumerates various categories of expenditures and estimates the sales tax revenues that would arise due to the repair and rebuilding of residential and commercial structures and business and personal property. In addition, the model appears to have judgmentally estimated a loss in tax revenues of around \$100 million from the 2004 hurricane season, based on estimated total damages of approximately \$41 billion. Since our estimated damages are approximately 4 times that amount, we estimated the tax losses at 4 times the \$100 million.

To estimate the proportion of losses not covered by the FHCF and therefore not captured in the modeled insured losses, we recognize that the FHCF writes reinsurance on any residential or commercial-residential (i.e., condominium) property in the state of Florida, but does not provide coverage for non-residential property (cars, boats, etc.); commercial or business insurance losses; crop and other agricultural damages; damages to government buildings; and damages from perils not-covered under standard property insurance policy forms (most notably flood losses). These losses would all be in excess of the amounts developed in the hurricane projection models provided by the FHCF.

As mentioned previously, the OIR has published a detailed accounting of insured losses by line of insurance attributable to each of the storms recorded in the 2004 and 2005 seasons.<sup>25</sup> We used these data as a basis for extrapolating from the FHCF hurricane model results to estimate the insured losses for damages to commercial enterprises as well as to government buildings. Generally, the methodology was to divide the 2004/2005 storm season losses reported by the OIR into those covered by the FHCF and those not covered; calculate the average ratio of non-FHCF insured losses to FHCF insured losses; and multiply that ratio by the 2010 modeled FHCF losses, to obtain estimates of the non-residential insured losses in the state.<sup>26</sup> We believe the sum of the modeled FHCF insured losses (\$56.5 billion) and the estimated non-FHCF covered losses (\$22.6 billion) provides a reasonable estimate of the amount of statewide insured losses from a 1-in-100 year event - \$79.1 billion.

As to converting the amount of insured losses to total losses in the state, estimates are required of the proportion of residential and commercial properties that are uninsured, the impact of deductibles on the amount of residential and commercial losses that are paid directly by policyholders (and therefore not insured)<sup>27</sup>, and the losses to agricultural properties that might be partially covered through the federal crop insurance program. In addition, we had to estimate the total amount of losses to government buildings and equipment, and the portion of those losses that might be insured by private insurers

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<sup>25</sup> See Florida OIR, *Hurricane Summary Data*, August 2006

<sup>26</sup> See Exhibit 1, pages 1 & 2 for details of these estimates.

<sup>27</sup> When the term residential is used in this discussion, it refers to both residential and commercial-residential properties.

reporting to the OIR. Finally, our estimates of modeled losses do not include the impact of flood damage, since flood is not covered under the homeowners policy or by the FHCF.<sup>28</sup>

A brief discussion of some of the specific assumptions used to derive the estimate of total losses is contained at the end of this report. Conditional on those assumptions and the FHCF model runs, the estimated total losses to real and tangible property attributable to a 1-in-100 year hurricane are \$159.5 billion. A summary of the insured and total damages appears in the table below:

<b>PROPERTY DAMAGES FROM 1-IN-100 YEAR HURRICANE</b>			
<b>(\$ BILLIONS)</b>			
	<b>Total</b>	<b>Insured</b>	<b>Uninsured</b>
Residential Structures	\$52.9	\$34.4	\$18.5
Mobile Homes	7.6	4.9	2.7
Residential Contents	24.9	16.2	8.7
Autos, Boats, Planes	6.2	4.9	1.2
Total Personal Property	31.1	21.1	10.0
Commercial (Non-residential) <sup>1</sup>	55.4	17.7	37.7
Agriculture	4.0	0.0	4.0
State & Local	7.6	1.0	6.6
Federal	1.0	0.0	1.0
Total Government	8.6	1.0	7.6
<b>Total</b>	<b>\$159.5</b>	<b>\$79.1</b>	<b>\$80.4</b>

<sup>1</sup> Includes utilities

### ***Rebuilding/Recovery Phase***

The rebuilding and recovery phase is likely to take several years after a catastrophic event such as a 1-in-100 year hurricane. The principal effects on the state economy during this phase result from the damages incurred during the crisis – property that was destroyed or damaged during the crisis is repaired or replaced. This produces a substantial boost in economic activity, with the resulting increase in sales tax revenue attendant to the additional activity.

<sup>28</sup> The modeled losses also exclude Loss Adjustment Expense, which is a claim cost but not a loss to property.

If all damaged property were repaired or replaced, then the recovery phase would presumably produce aggregate economic activity roughly equal in magnitude to the losses incurred during the crisis. However for several reasons this is not likely to be the case. For one thing, only about half of all losses are insured, and it is likely that some portion of the uninsured property (buildings and personal property) goes unreplaced after the storm. Second, and particularly after an extreme catastrophic event, it is possible that some portion of residents and businesses leave the affected area entirely and never return.<sup>29</sup> Third, some portion of property replacement and repair undertaken during the recovery will simply be the acceleration of expenditures that would have otherwise been made in future periods. While there will be positive revenue and sales tax impacts more immediately, these effects will be offset by lower expenditures in the future, when the repairs and replacement would have otherwise occurred. Finally, it is possible that some activities relating to the recovery phase will draw on resources that would have been otherwise employed in similar activities in the state, thus “crowding out” other private sector activity. This would also have the effect of reducing the overall impact of the recovery.<sup>30</sup>

The reductions in future expenditures due to these effects are referred to as either “leakages” or “amounts displaced” in the results below. By leakages, we intend to mean differences between total damages and the amounts expended for repair and replacement – essentially amounts of damages that “leak” out of the system and go unrepaired. As to “amounts displaced”, that refers to the amounts of repair and replacement costs that displace expenditures that would otherwise have taken place.<sup>31</sup>

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<sup>29</sup> It is possible that some of those who are permanently displaced relocate to other areas of the state; in such cases there would not be losses at the state level but there would certainly be shifts in economic activity across regions within the state.

<sup>30</sup> This would likely have been far more significant during the 2004/2005 hurricane seasons. During that period, Florida was in the midst of a period of very robust economic growth, particularly in the construction sector. With significant demand for labor and materials attendant to recovery from a major storm, it is unquestionable that a significant amount of private sector activity would have been crowded out. This is considerably less likely today.

<sup>31</sup> For leakages and displacements, we relied on the estimates utilized in the REC model, with one notable exception; for the percentage of repair and replacement costs that crowd out other private sector construction activity, we used an estimate of 10%, as opposed to the 40% estimate used in the 2004 model. This was based on the recognition that in 2004 Florida was in the midst of an historic boom in construction, such that significant rebuilding would have a material impact on other private sector construction. In light of the slowdown in construction in the state, the crowding out effect would likely be minimal.

The total of the amount of damages (estimated at \$159.5 billion), less the amounts displaced and the leakages, provide an estimate of the total new spending during the recovery phase after a catastrophic event. Given that we have estimated leakages equal to \$27.0 billion, and displaced amounts equal to \$19.9 billion, total new spending is estimated at \$112.6 billion, as shown in the table below.

<b>TOTAL NEW SPENDING AFTER 1-IN-100 YEAR HURRICANE (\$ BILLIONS)</b>					
	<b>Total Damages</b>	<b>Total Leakages</b>	<b>Amount Repaired/ Replaced</b>	<b>Amount Displaced</b>	<b>Total New Spending</b>
Residential Structures	\$52.9	\$4.9	\$48.0	\$7.2	\$40.8
Mobile Homes	7.6	1.6	6.0	0.9	5.1
Residential Contents	24.9	3.5	21.4	3.2	18.2
Autos, Boats, Planes	6.2	0.5	5.7	0.9	4.8
Total Personal Property	31.1	4.0	27.1	4.1	23.0
Commercial (Non-residential) <sup>1</sup>	55.4	11.3	44.0	6.6	37.4
Agriculture	4.0	4.0	0.0	0.0	0.0
State & Local	7.6	1.1	6.5	1.0	5.5
Federal	1.0	0.2	0.8	0.1	0.7
Total Government	8.6	1.3	7.3	1.1	6.2
<b>Total</b>	<b>\$159.5</b>	<b>\$27.0</b>	<b>\$132.5</b>	<b>\$19.9</b>	<b>\$112.6</b>

<sup>1</sup> Includes utilities

As far as the fiscal impact of the recovery on the state budget, this additional economic activity gives rise to significant additional sales tax revenue. Based on the same REC model mentioned earlier, we estimated additional sales tax revenue attributable to this additional spending of approximately \$4.1 billion. This offsets the \$0.4 billion loss in revenues during the crisis phase, resulting in an overall revenue gain of \$3.7 billion. However, it is important to note that the revenue gain will take place over a multiple year period, so long as the repair and rebuilding takes place, whereas the revenue losses are immediate. Therefore, there will likely be a short-term adverse budget impact that will be more than offset by a gain later.<sup>32</sup>

<sup>32</sup> Of course any consideration of gains in tax revenues must be balanced by the additional budgetary costs associated with state activities in both the crisis and recovery phases. As shown in the 2009 Report, and discussed earlier, the overall impact of additional direct costs exceeded the revenue gains attributable to the hurricanes during 2004 and 2005.

### ***Long-Term Impact Phase***

The long-term impact of a major catastrophic event on Florida's economy is inherently difficult to predict. As mentioned earlier, there has been no experience in the state with a hurricane of that magnitude since Florida has emerged as the fourth largest (and one of the most rapidly growing) states in the nation. Thus, even though there has been some research in the past few years based on previous historical events, it is hard to know whether that research is indicative of what might happen subsequent to a truly devastating (e.g., a 1-in-100 year) hurricane.

Based on previous research, it appears that the long-term effects of hurricane activity may be meaningful at the local level but the aggregate impact at the state level is negligible. For example, Strobl finds that the economic growth rate in a specific county will initially fall by 0.8% in response to a major hurricane strike, but will then only partially recover, by 0.2 percentage points.<sup>33</sup> However, when the analysis is conducted at the state rather than the county level, the long-term effects appear negligible: "[T]here is an immediate negative effect of a hurricane strike, where the estimated coefficient implies a 4.96 percentage point reduction in state level economic growth rates during the quarter in which the hurricane strikes. The positive recovery effect kicks in both in the quarter immediately after the state is hit by a hurricane as well as within five quarters of a strike." Strobl then explains that the immediate and five quarter effect is to increase growth rates by 5.29%, implying that the net effect is an increase in the state growth rate of 0.33% (the 4.96% reduction offset by the 5.29% increase); however he concludes that the effect is not statistically significant. He ultimately states: "[T]here appears to be no significant longer term effect of hurricanes at the state level."

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<sup>33</sup> See Strobl, Eric, *The Economic Growth Impact of Hurricanes: Evidence from US Coastal Counties*, Institute for the Study of Labor, July, 2008, p. 21

Similar to the effect on economic growth is the impact of hurricane activity on employment and wages - while there appears to be an effect at the local level the impact is offset by changes in neighboring localities, such that the impact in the state as a whole is likely negligible. For example, a recent study by Belasen and Polachek concludes as follows: "We find that earnings of the average worker in a Florida county rise over 4% within the first quarter of being hit by a major category 4 or 5 hurricane relative to counties not hit, and rise by about 1.25% for workers in Florida counties hit by a less major category 1-3 hurricane. Concomitantly, employment falls between 1.5% and 5% depending on hurricane strength. On the other hand, the effects of hurricanes on neighboring counties have the opposite effects, moving earnings down between 3% and 4% in the quarter the hurricane struck."<sup>34</sup> In a companion paper, the same authors report similar findings: earnings increase as much as 4% in the first quarter following a strike but earnings in a neighboring county decline by approximately the same percentage. They also find that over time earning in both counties tend to grow faster than average but this is coupled with employment growth that is slower than average.<sup>35</sup>

Since these effects were estimated based on historical data from past hurricanes in Florida, and there have been no 1-in-100 year storms during the relevant period, it is hard to know whether the same results would prevail after a catastrophic hurricane causing \$80 billion of insured losses. Should there be more permanent dislocations resulting from a mega-catastrophe in the future, it is possible that there will be longer term impacts on Florida's economy that cannot be predicted using historical data. For example, if the result of a large hurricane is to cause permanent relocation of significant portions of the population away from coastal areas and possibly away from the state as a whole, the long-term impacts could be far more significant than are described here.

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<sup>34</sup> Belasen, Ariel R. and Solomon Polachek, *How Hurricanes Affect Employment and Wages in Local Labor Markets*, Institute for Labor, March 2008, abstract.

<sup>35</sup> Belasen, Ariel R. and Solomon Polachek, *How Disasters Affect Local Labor Markets: The Effects of Hurricanes in Florida*, Institute for Labor, August 2007, abstract.



To estimate the impacts of a mega-catastrophe it might be tempting to use the experience of Hurricane Katrina, the only event in the recent historical record creating levels of damage similar to what is predicted from a 1-in-100 year event in Florida. However there are dramatic differences between Florida and the areas struck by Hurricane Katrina (particularly New Orleans) in terms of the local economy, labor markets, housing markets and general economic conditions.<sup>36</sup> These differences suggest that inferences based on the experience of Hurricane Katrina would be inappropriate.

One other consideration that affects the interpretation of these results is the fact that Florida has been in the midst of a severe economic downturn in the past several years, which could significantly impact the patterns of recovery after a major hurricane. During the last period of substantial hurricane activity in the state (the 2004/2005 seasons) Florida had been in the midst of a long period of sustained rapid growth – from the recession of 1991/92 until 2005 there was not a single year where employment declined in the state.<sup>37</sup> However since December, 2005 the picture has been considerably different; total employment in Florida has declined by more than 7% and employment in the construction sector has declined by nearly 40%. This raises the possibility that the recovery from a major storm might be less robust in the long-term, if Florida is no longer perceived as a robust and growing environment.<sup>38</sup>

Another consideration that could affect the degree of recovery in the long-term is the condition of the housing market in Florida today. As has been well documented, Florida has suffered among the deepest declines in property value of any state in the nation; in the most recent data, house prices in Miami (Tampa) were 47% (40%) lower in November, 2009 than they had been in December, 2007.<sup>39</sup> The severity of these declines is exceeded only by the declines in Las Vegas and Phoenix, areas which have been prominently featured as in the midst of a housing crisis of historic proportions.

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<sup>36</sup> The population of New Orleans had been suffering long-term declines for decades prior to Katrina; in 2005 the population was 23% lower than in 1970, 23% of the population lived below the poverty line, and the unemployment rate was 12% - twice the national average. For further discussion, see Sastry, Narayan, *Tracing the Effects of Hurricane Katrina on the Population of New Orleans*, Gulf States Policy Institute, April 2007.

<sup>37</sup> See Bureau of Labor statistics, Florida Employment Data

<sup>38</sup> The permanent relocation of large numbers of people subsequent to Hurricane Katrina is often attributed to the depressed state of the economy in the affected areas.

<sup>39</sup> Based on the Case-Shiller index. Data from the FHFA show similar results at the state level.

It is widely recognized that the precipitous decline in home values has contributed to the financial crisis in this country, as many homeowners in negative equity positions (i.e., where the amount of outstanding indebtedness exceeds the value of the property) have abandoned their properties and left their mortgages in default. Imagine what could happen in the event of a 1-in-100 year hurricane that produces significant damage to potentially millions of properties in Florida. Even if the properties are insured, virtually all hurricane related damages are subject to a significant deductible (generally 2% of insured value), implying that affected homeowners would have substantial out of pocket expenses subsequent to a storm. With large numbers of properties already in negative equity positions, such expenses would only increase the already existing incentives to abandon homes.

## **FLORIDA HURRICANE CATASTROPHE FUND**

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The Florida Hurricane Catastrophe Fund (“FHCF”) was created in November 1993 during a special session of the Florida legislature.<sup>40</sup> The principal motivation behind the formation of the FHCF is stated succinctly in the statute: “As a result of unprecedented levels of catastrophic insured losses in recent years, and especially as a result of Hurricane Andrew, numerous insurers have determined that in order to protect their solvency, it is necessary for them to reduce their exposure to hurricane losses. Also as a result of these events, world reinsurance capacity has significantly contracted, increasing the pressure on insurers to reduce their catastrophic exposures.”<sup>41</sup> As a consequence, the legislature created the FHCF to provide reinsurance for private insurers selling property coverage in Florida.

The fund has operated successfully since its inception, adding substantial reinsurance capacity to the Florida market. There have been several notable changes made by the Florida legislature to the FHCF structure that have an effect on the economic impact of a 1-in-100 year hurricane. A major enhancement was enacted in 1999, when second season capacity was created. This allows the FHCF to continue to operate after a large event that depletes its surplus and uses up the first season capacity.

In 2007, legislation was enacted in response to market conditions caused by the 8 hurricanes causing damage to Florida properties in the 2004 and 2005 storm seasons. In this legislation, Temporary Increase in Coverage Limits Option (“TICL”) and Temporary Emergency Additional Coverage Options (“TEACO”) layers were added as optional reinsurance. This greatly expanded the amount of reinsurance the FHCF made available to direct property insurers, however, in order to provide the expanded capacity, the FHCF relies on the financial markets and its ability to issue debt. The liquidity crisis that began in 2007 has had a large potential impact on the FHCF’s ability to fund to its maximum statutory limits. Since the FHCF is only obligated to the extent of its cash balance and the amount that it can raise through the issuance of revenue bonds, any insurer that found itself relying on the FHCF’s maximum coverage could find itself short of reinsurance coverage. The FHCF publishes its estimated claims paying capacity twice

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<sup>40</sup> §215.555 F.S. created the FHCF.

<sup>41</sup> §215.55 (1), (b)F.S.

a year in May and October. These figures are intended to be used by insurers for all regulatory and reinsurance purposes in determining their FHCF retention and projected payout.<sup>42</sup>

Finally, in May of 2009, HB 1495 was enacted and included three major changes to the FHCF, as follows:

- TICL layers were reduced by \$2 billion per year over the next 6 years (For the 2010 storm season \$8 billion of optional coverage for the industry is available, down from \$10 billion for the 2009 storm season).
- The cost for the optional TICL layer reinsurance was increased over the next five years (the premiums for the 2009 storm season were increased by applying a factor of 2 to the actuarially sound rates and the premiums for the 2010 storm season will be increased by applying a factor of 3 to the actuarially sound rates).
- A cash build-up factor was reintroduced for the 2009 storm season at 5%, increasing 5% each year until it reaches 25% for the 2013 storm season and thereafter.

These changes served to decrease the FHCF's maximum statutory capacity from a large hurricane through decreasing the amount of reinsurance that can be potentially offered and by allowing surplus to grow more rapidly through increased premiums.

The FHCF is structured as a tax-exempt state trust fund with low administrative costs, and is administered by the State Board of Administration. The statute requires the price of FHCF reinsurance to be set at an actuarially indicated level<sup>43</sup> that will cover the expected losses and the operating expenses of the fund. Theoretically, at this pricing level the premiums collected by the FHCF would be enough to pay all covered losses in the long-term.<sup>44</sup> This results in a much lower priced reinsurance than is available in the private markets, where the price reflects higher expenses, commissions, and most importantly, large risk

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<sup>42</sup> §215.555(4)(c) 2.

<sup>43</sup> §215.555 (5),(b)F.S. Here the term "actuarially indicated" is intended to mean that the rates will be based on actuarial estimates of expected losses and expenses. According to standard actuarial practice (see ASOP #30), actuarially indicated rates also contain a risk load or profit provision that incorporates a cost of capital. FHCF rates do not include any such provision.

<sup>44</sup> Assuming the cost of short-term debt in deficit years is offset by investment earning in surplus years.

loads or profit provisions. Participation in the fund is mandatory for direct writers of residential property insurance, who can choose coverage participation levels of 45%, 75% or 90%.<sup>45</sup>

Each year the FHCF collects premiums for the reinsurance coverage it offers to property insurers and pays the expenses of the fund. In years when there are no covered losses the FHCF will increase its surplus. These funds accumulate with interest from investments until they are needed to pay covered losses. This occurred for the first 10 years (1994 through 2003) of the FHCF's existence.<sup>46</sup> At the end of 2004, the surplus of the FHCF had grown to over \$6 billion. If there are covered losses from hurricanes, these losses are reimbursed to private insurers first using the surplus that has accumulated in the fund. If covered losses exceed that surplus, the FHCF is authorized to raise funds through the issuance of tax-exempt revenue bonds. These bond issuances are supported by emergency assessments on policyholder premiums statewide for most lines of business.<sup>47</sup> There is currently a 6% maximum assessment for a single storm season and a 10% maximum assessment from multiple storm seasons.

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<sup>45</sup> The mandatory layer is required to be purchased at one of the three participation levels, while the TICL and TEACO are optional.

<sup>46</sup> \$13 million in covered losses were reimbursed to participating insurers due to Erin and Opal in 1995.

<sup>47</sup> Surchargeable lines are all P&C lines of business, including surplus lines premiums, except for Workers Compensation, Medical Malpractice, Accident and Health and Federal Flood. (§215.555 (6), (b) 1 F.S.). According to the current law Medical Malpractice premiums will become part of the assessment base for the 2010 storm season (§215.555 (6), (b), 10 F.S.).

As referenced earlier, the 2004 and 2005 hurricanes caused significant property damage in Florida. To date the FHCF estimates total payments on reinsured losses from those seasons of \$9.65 billion. These loss payments exhausted the accumulated surplus of the fund and required \$1.35 billion of revenue bonds to be issued in July 2006, with a second tranche for \$625 million issued in July 2008.<sup>48</sup> A third tranche of about \$700 million is contemplated to be issued in March or April of 2010. The interest and principle of the revenue bonds are being paid by a 1% emergency assessment, which began in January of 2007. The FHCF projects the 1% emergency assessment will remain in effect until 2013, at which time the bonds will be retired.<sup>49</sup>

In May and October of each year, the FHCF is required to estimate its claim paying capacity for that year's storm season. The latest report on claims paying capacity from the FHCF was from October, 2009. For the 2009 storm season the FHCF projected an initial season fund balance of \$4.5 billion and a total claims paying capacity of \$23.2 billion.<sup>50</sup>

While the FHCF report references claims paying capacity, the estimate is really the maximum amount of reinsurance coverage that will be offered by the fund for the initial season. In this report we are estimating the impact of a 1-in-100 year hurricane during the 2010 storm season, thus we need to project both the FHCF surplus and the amount of reinsurance coverage that will be offered for the 2010 storm season. We project the available funds to grow to \$6.6 billion and the amount of reinsurance coverage offered by the FHCF to increase slightly to \$23.0 billion.<sup>51</sup>

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<sup>48</sup> The FHCF has cautioned that the \$1.975 billion in revenue bonds issued may not be enough to pay all covered losses from the 2005 hurricanes. It does include a provision for IBNR claims, but might not be enough to cover all claims yet to be reported.

<sup>49</sup> The FHCF anticipates that the 1% emergency assessment will need to be increased to 1.3% to finance its third tranche of debt and will remain in effect until the funds collected will be sufficient to retire the remaining bonds, which are expected to mature in 2016.

<sup>50</sup> Page 4 of the FHCF Report on "Estimated Claims Paying Capacity", October 2009.

<sup>51</sup> Exhibit 3, pages 1-5 show the details of our projections of available funds and FHCF capacity for the 2010 storm season.

With the introduction of the TICL, the total amount of coverage in a given storm season is a function of the proportion of the optional TICL layer coverage elected by participating insurers. The total amount of reinsurance coverage offered by the FHCF for the last three seasons, and our projection for 2010, are shown in the following table:

<b>REINSURANCE COVERAGE PROVIDED BY THE FHCF (\$ BILLIONS)</b>				
<b>Layer of Coverage</b>	<b>2007 Storm Season</b>	<b>2008 Storm Season</b>	<b>2009 Storm Season</b>	<b>2010 Storm Season</b>
Mandatory	\$15.8	\$16.5	\$17.2	\$18.3 <sup>52</sup>
TICL (Optional)	11.4	10.9	5.5	4.5
LAC (Optional)	0.3	0.2	0.2	0.2
<b>Total</b>	<b>\$27.5</b>	<b>\$27.6</b>	<b>\$22.9</b>	<b>\$23.0<sup>53</sup></b>

The total reinsurance offered by the FHCF will continue to decrease as the TICL layer is gradually eliminated. This directly reduces the potential debt of the fund each year. At the same time, the reduction in the TICL layer is offset by increases in the mandatory layer due to indexing.<sup>54</sup>

The rate increases for the TICL coverage and the inclusion of a cash build-up factor in the rates for the mandatory coverage layer act to increase the average premium collected per dollar of coverage while the decrease in TICL coverage being offered results in less premiums being collected. Overall the amount of premium charged by the FHCF is increasing due to the changes implemented during the 2009 legislative session. This increase in premiums flows directly to surplus and also serves to decrease the potential amount of bonding necessary to fund the maximum statutory capacity of the FHCF.

<sup>52</sup> SB 1460 proposed during the 2010 Legislative Session, if passed, would reduce the mandatory coverage to \$17.0 billion for the 2010-2011 FHCF's reimbursement contract year.

<sup>53</sup> The FHCF capacity estimate (\$23.2) includes the automatic reinstatement of LAC coverage for second and subsequent events in a single season, while we are calculating the coverage for the first event (\$23.0).

<sup>54</sup> See Exhibit 3, page 4 for details of available coverage. For the 2010 storm season the increase in the mandatory layer from indexing more than offsets the decrease in the TICL layer coverage.

As described earlier in this report, we expect insured losses from the 1-in-100 year hurricane to cause in excess of \$56 billion for properties covered by the FHCF. For purposes of the calculations in this report we are assuming that all the FHCF reinsurance coverage for the initial season (\$23.0 billion) will be used to reimburse participating insurers for claims from this hurricane (\$56 billion in insured losses from the hurricane). This is an upper bound on the extent of losses to be reimbursed by the FHCF since some companies may not use any or all of the FHCF reinsurance coverage because they do not have significant exposure in the landfall area.<sup>55</sup>

To summarize our conclusions regarding the FHCF, as a result of the 1-in-100 year hurricane, the FCHF will have \$23.0 billion in covered losses. \$6.6 billion will be covered by available funds, which leaves \$16.4 billion of reinsured losses to be funded. We assume revenue bonds of \$16.4 billion<sup>56</sup> will be issued by the FHCF to cover the deficit.

Thus, in the short-term, the FHCF surplus will be depleted and additional debt will be created.

In the long-term, we believe that the FHCF will continue to operate and, assuming no additional major hurricanes in future years, continue to accumulate surplus. The statute, as amended in 1999, contemplates a second season coverage, which would be available for the 2011 storm season, but the amount of coverage is uncertain depending on the FHCF's ability to access the bond markets and other factors. The principal and interest on the FHCF debt will be paid for from funds collected from the emergency assessments.

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<sup>55</sup> It is likely one or more private insurers participating in the FHCF will not exhaust their FHCF coverage layer as a result of the 1-in-100 year hurricane. For example, if the hurricane makes landfall in Miami, an insurer whose business is concentrated in the panhandle may not have losses from this event enough to utilize all of their FHCF reinsurance. The impact of this will vary by event and estimates are not readily available. We believe the impact is minimal, since most personal property insurers have some exposure statewide and will incur significant insured property losses from a significant hurricane making landfall in Miami or Tampa.

<sup>56</sup> The FHCF has pre-event funding of \$3.5 billion, so only \$12.9 billion of new debt would need to be issued. Details on debt are covered later in this report in the section on State Debt



## **CITIZENS PROPERTY INSURANCE CORPORATION**

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Citizens Property Insurance Corporation (“CPIC”) was created in 2002 by the Florida legislature, replacing the Florida Windstorm Underwriting Association and the Residential Property and Casualty Joint Underwriting Association.<sup>57</sup> CPIC serves as the property residual market insurance mechanism in Florida and is now the largest property insurer in the State of Florida.

As of September 30, 2009 CPIC insured 1.06 million policies, down from a high of 1.30 million in 2007.<sup>58</sup> Based on 2008 written premiums, we have estimated that CPIC’s share of the residential property market is 24.6%.<sup>59</sup>

CPIC is required to maintain three separate accounts for segments of its business.<sup>60</sup> These are:

- Personal Lines Account (PLA) - These are policies written on residential properties, where the property is not located in the high risk area.
- Commercial Lines Account (CLA) - Includes both commercial residential and other commercial property policies not located in the high risk area.
- High Risk Account (HRA) - Includes both residential and commercial policies, where the property location is within the high risk area.

The policies in force in each account as of December 31, 2009 are:

<b>ACCOUNT</b>	<b>POLICIES IN FORCE</b>
PLA	609,652
CLA	9,126
HRA	410,436
<b>Total</b>	<b>1,029,214</b>

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<sup>57</sup> §627.351 (6) F.S.

<sup>58</sup> CPIC PowerPoint report to The Florida Department of Financial Services, February 2010

<sup>59</sup> Source: OIR QUASR report as of December 31, 2008; Residential property includes both personal and commercial residential properties.

<sup>60</sup> §627.351 (6) (b) 2. F.S. Separate accounts must be maintained as long as financial obligations enter into by the Florida Windstorm Underwriting Association or the Residential Property and Casualty Joint Underwriting Association remain.

If a deficit occurs in any of the individual accounts, the statute requires a three pronged funding approach.<sup>61</sup> First, all CPIC policyholders are surcharged up to 15% of premium for 1 year. Second, regular assessments are levied, which are assessments on direct written premiums of Florida policyholders (regular assessments do not apply to CPIC policyholders), limited to 6% for 1 year. Finally, emergency assessments are levied (emergency assessments apply to all statewide policyholders including CPIC policies), which are assessments on direct written premium of Florida policyholders, limited to 10% for as many years as necessary to cover the deficit.<sup>62</sup>

In this report we will refer to the surcharge on CPIC policyholders as Tier 1, the regular assessments as Tier 2 and the emergency assessments as Tier 3. It should be noted that the surcharges and assessments apply to each account separately and thus are cumulative over the three CPIC accounts, so the maximum annual assessments are:

<b>CPIC – MAXIMUM ANNUAL ASSESSMENT PERCENTAGES</b>		
<b>Tier</b>	<b>Per Account</b>	<b>All Accounts Combined</b>
Tier 1	15%	45%
Tier 2	6%	18%
Tier 3	10%	30%

CPIC will incur a deficit in an account when covered net losses (after application of reinsurance contracts) exceed its adjusted GAAP surplus. For the 2009 storm season, CPIC only purchased reinsurance from the FHCF and none from the private reinsurance market. At the time this report was written, CPIC had not yet made decisions on their reinsurance coverage for the 2010 storm season, so for purposes of the projections in this report we are assuming their reinsurance purchases will be the same as the 2009 season. These include the FHCF mandatory layer and the maximum optional TICL layer.

<sup>61</sup> §627.351 (6) (b) 3. F.S.

<sup>62</sup> Regular and emergency assessments apply to all lines of business (including surplus lines premiums) except for workers compensation, medical malpractice, accident and health and national flood or crop insurance.

As of September 30, 2009 Citizens had \$4.1 billion in adjusted GAAP surplus.<sup>63</sup> Any shortage in funds available to pay covered losses will be calculated using adjusted GAAP surplus.<sup>64</sup> In order to project the impact of a 1-in-100 year hurricane on CPIC, we need to project funds available to pay claims from hurricanes in the 2010 storm season on an adjusted GAAP basis for each account separately. Our estimates of funds available<sup>65</sup> are displayed in the following table:

<b>ESTIMATED FUNDS AVAILABLE TO PAY HURRICANE LOSSES</b>		
<b>(\$ BILLIONS)</b>		
<b>CPIC Account</b>	<b>Adjusted GAAP Surplus As of 9/30/09</b>	<b>Projected Available Funds as of 12/31/10</b>
PLA	\$1.59	\$1.76
CLA	0.92	1.03
HRA	1.55	1.82
<b>Total</b>	<b>\$4.06</b>	<b>\$4.61</b>

As described earlier in this report, we expect insured losses from the 1-in-100 year hurricane to cause in excess of \$56 billion for properties covered by the FHCF. Of these, we estimate that \$21.9 billion are from buildings insured by CPIC. In addition, CPIC insures commercial risks not covered by the FHCF. We estimate CPIC will incur an additional \$1.7 billion on properties not covered by the CPIC for a total of \$23.6 billion.

We estimate CPIC will recover \$8.6 billion in reinsurance from the FHCF, resulting in net losses from the 1-in-100 year hurricane of \$15.1 billion.<sup>66</sup> The total deficit for CPIC from the 1-in-100 year hurricane will be \$10.5 billion (\$15.1 billion in net covered losses less available cash of \$4.6 billion of surplus).<sup>67</sup>

<sup>63</sup> Citizens GAAP Financials as of 9/30/09

<sup>64</sup> CPIC quarterly financials contain a calculation of adjusted GAAP surplus; essentially GAAP results are adjusted downward to include deferred financing costs.

<sup>65</sup> Details of our projections are contained in Exhibit 4, page 2 of this report

<sup>66</sup> Details of our estimates for CPIC hurricane losses and amount covered by the FHCF are contained in Exhibit 4, page 3 of this report

<sup>67</sup> Details of our estimates and breakdowns by account are contained in Exhibit 4, page 1 of this report.

CPIC performs its own internal analysis of modeled hurricane losses. This internal analysis is done using only the RMS model and produces a 1-in-100 year loss of \$20.3 billion. In order to put the FHCF and CPIC 1-in-100 year losses on a common basis, we believe two adjustments are necessary. The RMS model produces significantly lower loss estimates than the other four models used by the FHCF. Thus, an upward adjustment to the CPIC 1-in-100 year loss is needed. The CPIC 1-in-100 year loss is also based on a blend between the long-term and near-term models while the FHCF is based on long-term models. Thus, a downward adjustment is necessary.<sup>68</sup> In this report, our estimate of CPIC's share of the industry 1-in-100 year loss is \$23.6 billion, which is higher than CPIC's internal estimate of their 1-in-100 year loss (\$20.3 billion).

To summarize the short-term results for CPIC, surplus will be depleted and a \$10.5 billion deficit will be created. This deficit<sup>69</sup> will require surcharges on CPIC policyholders, regular assessments and emergency assessments.<sup>70</sup> The short-term impact of assessments on consumers will be discussed in a later section of this report.

In the long-term, CPIC will continue to operate as the insurer of last resort for property insurance in Florida. Assuming no additional major hurricanes in future years, it will begin to re-build its surplus over time. Alternative assessment rates and the long-term impact on policyholders will be discussed in the section on Assessments on Policyholders.

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<sup>68</sup> Details of our estimates of the adjustments to CPIC losses are contained in Exhibit 4, page 4.

<sup>69</sup> CPIC will have funds available from pre-event financing, so any new debt issuance will depend on funds available from pre-event financing and the timing of surcharges on CPIC policies and collection of regular assessments. Details of the implications of pre-event financing are contained in the report section on State Debt.

<sup>70</sup> Regular and emergency assessments are based on Property & Casualty premiums, including surplus lines premiums for all lines of business except Workers Compensation, Medical Malpractice, Accident & Health, National Flood Insurance and the Federal Crop Insurance. Regular assessments do not apply to CPIC policies, but emergency assessments do.

## **FLORIDA INSURANCE GUARANTEE ASSOCIATION**

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The Florida Insurance Guarantee Association (“FIGA”) is a non-profit entity created by the Florida legislature that provides for the payment of insurance claims in the event that an insurance company becomes insolvent with outstanding unfunded claims from Florida policyholders. All property and casualty insurers authorized to write insurance policies in the state are required to be members of FIGA. FIGA is legally responsible for the ultimate settlement of claims from insolvent member insurance companies as defined by §631.54 and §631.574 F.S.

FIGA’s only funding source is assessments on member insurers, which are applied as a percentage of premium. Member insurers are allowed to pass these assessments on to their policyholders with the maximum assessment limited to 2% of premium per year. Property Insurance losses of insolvent insurers would be paid out of the “All Other Lines” account. We estimate the assessment base for the “All Other Lines” account for 2011 to be \$20.7 billion.<sup>71</sup>

In theory, it might be possible to perform an analysis quantifying the possibility of a Florida property insurer being impaired by the storm, however, it would require estimating potential storm damage for individual insurers, understanding their reinsurance coverages, estimating operating results for the 2009 and 2010 years and finally aggregating these impacts on the company’s surplus. Without this type of detailed analysis it is not possible to draw any firm conclusions on the potential impact of a 1-in-100 year hurricane on FIGA.

As mentioned before, the FIGA assessment base to cover any property losses of an insolvent insurer is \$20.7 billion. A 2% FIGA assessment would produce \$414.3 million. One or more insolvent insurers with unfunded property claims of at least \$414.3 million would cause the maximum FIGA assessment for one year.

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<sup>71</sup> The assessment base for the “all other lines” FIGA account exclude all auto lines, accident and health, workers compensation, title insurance and surplus lines.

## ASSESSMENTS ON POLICYHOLDERS

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### *FHCF*

As determined earlier in this report the FHCF will have a potential unfunded obligation to insurers of \$16.4 billion as a result of a 1-in-100 hurricane in 2010. This is the amount that will be funded through emergency assessments and will require the fund to issue additional revenue bonds in order to meet its maximum obligations.<sup>72</sup> There is discretion in the term of the bonds, but they are not to exceed 30 years.<sup>73</sup> Emergency assessments are limited to 6% for any single contract year. There is also discretion in the emergency assessment percentage, which must be recommended by the FHCF board at a level necessary to meet its obligations. One approach would be to charge an emergency assessment of 6% and retire the bonds as soon as possible. Another approach would be to maximize the term of the bond to 30 years and keep the emergency assessment percentage as low as possible.<sup>74</sup> Other combinations of term and emergency assessment percentage are possible. The advantage of longer debt financing is that subsequent season capacity is maximized.

If an emergency assessment of 6% is charged, we estimate the debt can be paid off in nine years (in 2019).<sup>75</sup> If the 30-year term is chosen, the emergency assessment rate can be set at 2.7%.<sup>76</sup>

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<sup>72</sup> \$3.5 billion has already been bonded as pre-event liquidity; an additional \$12.9 billion of revenue bonds would need to be issued to cover the FHCF reinsurance obligations. There is concern in the FHCF that it might not be possible to bond all of the additional \$12.9 billion, especially given the impact of the recent mortgage crisis on the financial markets. In the October 2009 "estimated Claims Paying Capacity" report, the FHCF published a likely post-event bonding capacity to be \$11 billion. For the purposes of this report we have assumed that all of \$12.9 billion would in fact be bonded at an average yield of 8%.

<sup>73</sup> §215.555 (6) (a) 1. F.S.

<sup>74</sup> This is the approach used by the FHCF its report on Claims Paying Capacity

<sup>75</sup> See Exhibit 5, page 1 for the detail on this calculation

<sup>76</sup> See Exhibit 5, page 2 for the detail on this calculation

## CPIC

As determined earlier in this report, CPIC incurs a deficit of \$10.5 billion as a result of a 1-in-100 hurricane in 2010. This is the amount that will be funded through surcharges on CPIC policyholders and through regular and emergency assessments. CPIC also has some discretion in how to collect funds to retire its deficit. The process of surcharges on CPIC policyholders and regular and emergency assessments on property and casualty policyholders statewide is specified in the statute.<sup>77</sup> As described previously, the deficit must be calculated separately for each account, and surcharges and assessments will apply to each account.

The deficit in each account will require a surcharge on CPIC policyholders. The maximum surcharge for each account is 15%, or a total of 45% across all three accounts.<sup>78</sup> A regular assessment of not more than 6% is required<sup>79</sup> if the CPIC surcharge is not enough to cover the deficit in any account. If the surcharge and regular assessment are not enough to cover the deficit in any account, then an emergency assessment is required, but there is discretion in the percentage up to a maximum of 10% per account.

We have calculated the surcharges and assessments under two different scenarios:

- First, we have assumed that the maximum surcharges and assessments allowed for in the statute would be used, which would result in paying off the deficit as quickly as possible.
- Second, we have assumed the surcharge on CPIC policyholders and the regular assessment would be the same as the first scenario, but the emergency assessment percentage would be set at the level needed to retire debt created by the deficit over 20 years.

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<sup>77</sup> §627.351 (6) (b) 3. F.S.

<sup>78</sup> According to CPIC, the surcharge on CPIC policyholders resulting from each account must be set at 15% or a smaller amount if the deficit is less than 15% of the CPIC assessment base.

<sup>79</sup> “..... the corporation shall levy regular assessments on assessable insurers ... in an amount equal to the greater of 6 percent of the deficit or 6 percent of the aggregate statewide direct written premium for the subject line of business for the prior calendar year.” §627.351 (6) (b) 3. b. F.S.

For illustrative purposes we assume both the CPIC surcharge and the regular assessment to non-CPIC policyholders would be applied to all policies renewing in 2011 and any necessary emergency assessments would commence in 2012. A summary of the CPIC surcharges and assessments under the two scenarios is presented in the following table:

<b>SUMMARY OF CPIC SURCHARGES AND ASSESSMENTS<sup>80</sup></b>						
Year	<b>Maximum Scenario<sup>81</sup></b>			<b>Tempered Scenario<sup>82</sup></b>		
	Tier1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3 <sup>83</sup>
2011	45.0%	11.2%	-	45.0%	11.2%	-
2012			10.0%			1.3%
2013			6.3%			1.3%
2014 - 2030			0.0%			1.3%

The major difference between the two scenarios is the impact and duration of an emergency assessment on Florida property and casualty policyholders statewide. In the tempered scenario, all policyholders in the state end up paying significantly more in total because of the large amount of interest paid when amortizing over a 20-year period as opposed to a 3-year period, yet pay a smaller amount each year. The final decision on the amount of the surcharges and assessments and the duration will be made by CPIC after the 1-in-100 year hurricane occurs. We have attempted to capture a range of the possibilities in our two scenarios.

<sup>80</sup> The amortization of the deficit illustrated in Exhibit 5 assumed \$6.8 billion of new debt is created. This is most likely an upper bound on the duration of an emergency assessment. First-year amounts are not impacted by this assumption.

<sup>81</sup> See Exhibit 5, pages 3 through 6 for details of the CPIC surcharge and assessment levels and duration under the maximum surcharge and assessment scenario.

<sup>82</sup> See Exhibit 5, pages 7 through 10 for details of the CPIC surcharge and assessment levels and duration under the tempered surcharge and assessment scenario.

<sup>83</sup> We have assumed in the Tempered Scenario that the emergency assessment would have a duration of 20 years at an assessment percentage of 1.3%. This is based on the total debt related to the event being amortized over 20 years at 8%.



## FIGA

As discussed in the previous section, we are not able to project the potential of FIGA assessments. For the illustrative purposes of this report we are assuming that FIGA will not have to issue any revenue bonds, so there is no affect on state debt from FIGA, and FIGA will not be assessing policyholders as a result of the 1-in-100 year hurricane. The possibility of insolvencies as result of a 1-in-100 hurricane exists, and if significant unfunded property losses become the responsibility of FIGA, additional assessments of up to 2% annually would have to be added to those included in our analysis.

### Summary of Assessments

As a result of the 1-in-100 year hurricane the following total (combining FHCF, CPIC and FIGA) surcharges and assessments would be applied to homeowners premiums.<sup>84</sup>

<b>MAXIMUM SCENARIO</b>		
<b>Year</b>	<b>CPIC Policyholders</b>	<b>All Other Policyholders</b>
2011	47.7%	13.9%
2012	12.7	12.7
2013	9.0	9.0
2014 - 2040	2.7	2.7

<b>TEMPERED SCENARIO</b>		
<b>Year</b>	<b>CPIC Policyholders</b>	<b>All Other Policyholders</b>
2011	47.7%	13.9%
2012 - 2030	4.0	4.0
2031 - 2040	2.7	2.7

These two scenarios will be used in the section on Impacts on Florida Households.

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<sup>84</sup> We have assumed the FHCF would elect to retire their debt through an annual 2.7% assessment over 30 years in both scenarios.

## PRIVATE REINSURANCE MARKET

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Prices in the catastrophe reinsurance market are significantly influenced by supply and demand. Large catastrophic events reduce the reinsurance industry's surplus by significant amounts, which, in turn, reduce supply, and at the same or increased demand levels, drive the price of reinsurance up dramatically. Swiss Re and Guy Carpenter both produce annual reports on the impacts of catastrophes on reinsurance markets. A perspective of the price changes in the reinsurance market after major events can be developed from the data in these reports.<sup>85</sup>

REINSURANCE PRICE CHANGES AFTER MAJOR CATASTROPHES			
Major Event	Year	Estimated Insured Losses During the Year <sup>86</sup>	Change in Guy Carpenter Reinsurance Price Index During Subsequent Year
Hurricane Katrina	2005	\$118,221	31.8%
Hurricane Andrew	1992	44,151	61.7%
World Trade Center	2001	43,409	22.5%

In this report we are estimating insured losses from a 1-in-100 year hurricane in Florida during the 2010 storm season would be \$79 billion, similar in scale to the total insured losses from Katrina, which have been estimated by Swiss Re to be \$71 billion in 2008 dollars. (These loss estimates are total insured losses and not losses covered by catastrophe reinsurance.) A major factor in the reinsurance prices after the event is the amount of reinsurance capacity used to pay covered losses from the event which will no longer be available for future reinsurance protection. We expect the reinsured losses from a 1-in-100 year event in Florida to be greater than those from Katrina, because direct insurers tend to purchase more reinsurance for their Florida business than they do in other catastrophe prone states.

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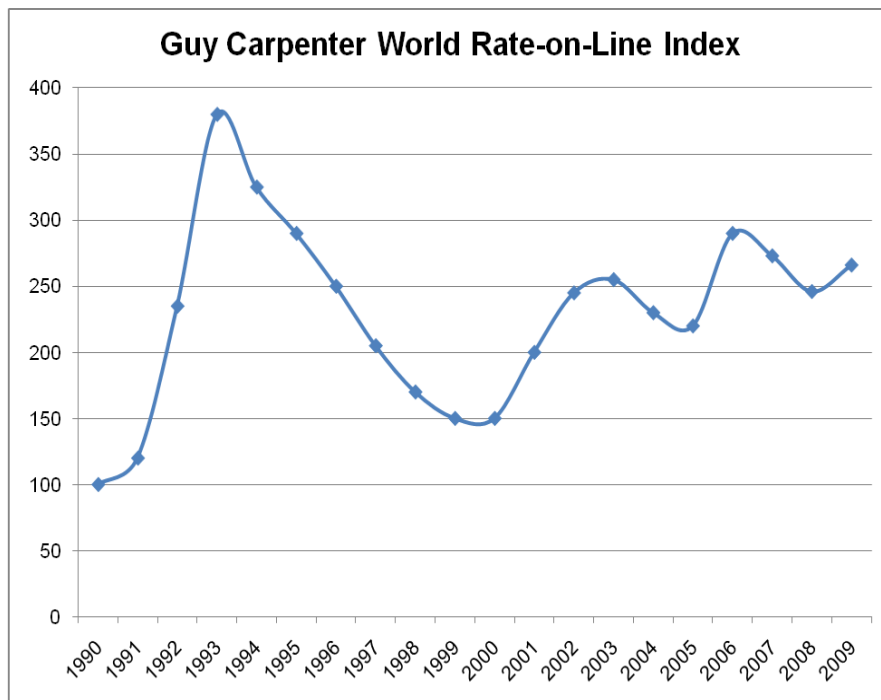
<sup>85</sup> See Exhibit 6, page 1 for more detail on the reinsurance market costs changes.

<sup>86</sup> Insured losses have been indexed to 2008 levels.

The Guy Carpenter reinsurance price index only captures annual points. Their description in the 2007 report of the price changes due to 2005 storms was as follows: “Reflecting the impact of Katrina, Rita and Wilma in 2005, rates practically doubled at January 2006 renewals, and continued to increase through the 2006 renewal cycle, peaking at July 2006. At January 2007 renewals, rates were below the peak and continued to decline in 2007. At July renewals, rates had dropped to approximately the levels of January 2006.”<sup>87</sup>

After a 1-in-100 year hurricane occurring in Florida in 2010, we expect a significant increase in reinsurance prices for 2011 catastrophe reinsurance contracts. For the purposes of other calculations in this report we have selected the first-year impact on reinsurance prices to be an increase of 40%.

The following is a reproduction of a graph of the Guy Carpenter global property/casualty reinsurance index:



<sup>87</sup> “The World Catastrophe Reinsurance Market”, published by Guy Carpenter, 2007, page 18.

There is clearly an increasing trend in the price index and clearly there is a recovery (decrease) in reinsurance prices resulting from subsequent years without major events. In the long-term (3 to 5 years) we expect reinsurance prices to recover somewhat from the 40% increase in the first year, assuming there is not a second major event during this time period.

## PRIVATE INSURANCE MARKET

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Direct writers of property insurance in Florida build the net cost of reinsurance into their rates. If their net cost of reinsurance increases, as it will in 2011 if a 1-in-100 year hurricane occurs in 2010, insurers will submit new rate filings to increase their rates to reflect the higher reinsurance costs. We expect these filings to be submitted beginning as early as April 2011, once reinsurance costs for the 2011 contracts are known.

Based on a sample of actual insurance company filings made with the Florida OIR, we derived 25.7% as the proportion of the overall rate due to reinsurance costs.<sup>88</sup> For purposes of this report we have estimated the first-year impact on property insurance rates resulting from a 1-in-100 year hurricane to be a 10% average statewide increase due to approximately 25% of the rate being due to reinsurance costs and a 40% first-year increase in those costs.<sup>89</sup>

Increases in reinsurance rates will also impact the cost of commercial property insurance rates. We do not have a source to determine the portion of the commercial property rates for reinsurance costs, but expect the portion of the commercial rate related to the costs of reinsurance to be much lower than in residential insurance rates. We have judgmentally estimated the first-year impact on commercial property rates to be 1%.

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<sup>88</sup> Reinsurance costs are readily accessible from the OIR rate calculation workbook required to be included with each property rate filing. See Exhibit 7 for details of our calculations. 36 filings were included in the sample. CPIC was not included in the sample since they have not purchased private reinsurance.

<sup>89</sup> We have not measured the impact of the annual reduction of the TICL coverage, nor the annual rate increase for TICL coverage, which result from 2009 legislation. These impacts are the result of that legislative change and not the result of a 1-in-100 year hurricane and thus, are not included in our analysis. They will, however, have an impact on private insurance rates.

We do not expect the 1-in-100 year hurricane to have any other significant impact on the private insurance market rates. The short-term impact will be an increase in residential property insurance rates of 10% on average statewide and of 1% for commercial property insurance rates on average statewide. There will be no impact on CPIC rates, since they do not purchase private reinsurance.

A 1-in-100 year hurricane will also deplete the surplus of companies writing property business in Florida. Although difficult to predict individual company decisions, it is possible the loss of surplus could lead to individual companies restricting their writing of property insurance and as a result more property exposures would move to CPIC.

The impact of the 1-in-100 year hurricane in the long-term (3 to 5 years) will be a gradual reduction in rates from those filed in 2011 as reinsurance prices stabilize. For purposes of the calculations used later in this report we are assuming that private market residential property rates will initial increase by 10%. In 2012, they will be 7.5% higher than 2010 rates. In 2013, they will be 5% higher than 2010 and in 2014 and beyond they will remain at 2.5% higher than 2010 rates. In a similar way the commercial property insurance rates will gradually move from 1% to 0.25% over the same time period.

## **IMPACT ON FLORIDA HOUSEHOLDS**

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As described in earlier sections of this report, a 1-in-100 year hurricane will subject Florida consumers to additional assessments from the FHCF, additional assessments and surcharges from CPIC, and higher premiums on their property insurance because of increases in the cost of reinsurance. Florida consumers will be impacted directly and indirectly by these additional costs. The FHCF and CPIC assessments will apply directly to all personal insurance coverages purchased by a Florida household. Each Florida household will also see their property insurance premiums increase because of increases in the cost of reinsurance.

These assessments and higher reinsurance costs will also increase the costs of other (non-personal residential and non-personal auto) lines of insurance in Florida. If we assume that the full cost of these other lines of insurance is embedded in the prices of goods and services purchased by consumers, and that all commercial premiums in Florida are paid for by Florida consumers, then the impact of increases in commercial lines premiums will be borne by Florida households in the form of higher costs of goods and services they purchase.

In our analysis, we have quantified the impact of these factors on an average household in each county in the State of Florida. We have done separate calculations for the direct cost of homeowners insurance, the direct cost of automobile insurance and the indirect cost of all other insurance. As a practical matter, households with homeowners insurance purchased through CPIC will have different first-year impacts than those with homeowners insurance purchased through private carriers. The county averages will include the average of households with CPIC homeowners policies and with homeowners policies from private insurers.

The details of the analysis are included in Exhibit 8, where county average impacts are broken down by type of insurance and by the source of the impact (FHCF, CPIC and reinsurance costs). The impact in dollars and percent are included. We have chosen 3 counties to provide an overview of the results of the

analysis. These counties are Dade (Miami), Hillsborough (Tampa) and Leon (Tallahassee). Dade captures the higher end of the range of impacts by county and Leon captures the lower end.<sup>90</sup> Hillsborough is included as another example of a populated area where it is possible a 1-in-100 year hurricane could strike Florida. As discussed in a previous section of this report, the timing of surcharges, assessments and when the increase in reinsurance costs will be included in insurance rates is difficult to project precisely. For this analysis we are assuming that in 2011 all of these factors will impact Florida consumers. This is the combined short-term (first-year) impact on Florida consumers.

First-year Impacts

The total first-year impact on households of the 1-in-100 hurricane (combining the costs of homeowners insurance auto insurance and indirect costs of other lines of business) are:

FIRST-YEAR IMPACT OF ALL INSURANCE-RELATED EXPENDITURES <sup>91</sup>						
	Dade		Hillsborough		Leon	
	\$	%	\$	%	\$	%
Current Average Cost	\$7,349		\$6,614		\$4,756	
<b>Total Increase</b>	<b>\$1,447</b>	<b>19.7</b>	<b>\$1,029</b>	<b>15.6</b>	<b>\$654</b>	<b>13.8</b>
New Average Cost	\$8,796		\$7,642		\$5,410	

While there is some variation by county, the impacts on Florida households is significant in all areas of the state under this scenario.

Next, we will examine some detail of the impacts separately by homeowners, auto and other insurance lines. These summaries will also include a breakdown by cause of the cost increase (i.e. the FHCF assessments, CPIC assessments or increases in reinsurance costs). All of these charts use the CPIC Tempered Scenario and the 2.7% FHCF assessment.

<sup>90</sup> It should be noted that the analysis is done based on the average for the county. While the percentage impact on the household will generally be the same across the county (there will be some variation in the increases due to reinsurance costs), the dollar impact will vary significantly across the county, most notably due to the geographic location, value of the home and the number and classification of the autos.

<sup>91</sup> See Assessment on Policyholders section of this report for detail of the surcharges and assessments used in this analysis. The first-year impacts are the same under CPIC's maximum and tempered scenarios.



The first-year impacts are different for households that purchase their primary homeowners insurance from CPIC vs. those that purchase homeowners insurance from a private company. Details of the first-year household impacts for homeowners insurance are:

<b>HOUSEHOLDS WITH CPIC HOMEOWNERS POLICIES</b>						
	<b>Dade</b>		<b>Hillsborough</b>		<b>Leon</b>	
	<b>\$</b>	<b>%</b>	<b>\$</b>	<b>%</b>	<b>\$</b>	<b>%</b>
<b>Current Average Cost</b>	<b>\$3,517</b>		<b>\$2,174</b>		<b>\$1,140</b>	
Increase due to FHCF	96	2.7	59	2.7	31	2.7
Increase due to CPIC	1,583	45.0	979	45.0	513	45.0
Increase due to Reinsurance Costs	0	0.0	0	0.0	0	0.0
<b>Total Increase</b>	<b>\$1,678</b>	<b>47.7</b>	<b>\$1,038</b>	<b>47.7</b>	<b>\$544</b>	<b>47.7</b>
<b>New Average Cost</b>	<b>\$5,196</b>		<b>\$3,212</b>		<b>\$1,684</b>	

<b>HOUSEHOLDS WITH PRIVATE (NON-CPIC) INSURANCE FOR HOMEOWNERS</b>						
	<b>Dade</b>		<b>Hillsborough</b>		<b>Leon</b>	
	<b>\$</b>	<b>%</b>	<b>\$</b>	<b>%</b>	<b>\$</b>	<b>%</b>
<b>Current Average Cost</b>	<b>\$2,068</b>		<b>\$1,576</b>		<b>\$917</b>	
Increase due to FHCF	56	2.7	43	2.7	25	2.7
Increase due to CPIC	231	11.2	176	11.2	102	11.2
Increase due to Reinsurance Costs	269	13.0	111	7.0	36	4.0
<b>Total Increase</b>	<b>\$557</b>	<b>26.9</b>	<b>\$330</b>	<b>20.9</b>	<b>\$164</b>	<b>17.9</b>
<b>New Average Cost</b>	<b>\$2,625</b>		<b>\$1,906</b>		<b>\$1,080</b>	

Households with homeowners insurance from CPIC are impacted significantly more than other households because of the large first-year CPIC surcharges (45.0% vs. 11.2%) in this scenario. The majority of the cost increases for all households results from the large CPIC surcharges or assessments in the first year.

Details of the first-year household impacts for auto insurance are:

<b>HOUSEHOLD IMPACTS FOR AUTO INSURANCE</b>						
	<b>Dade</b>		<b>Hillsborough</b>		<b>Leon</b>	
	\$	%	\$	%	\$	%
<b>Current Average Cost</b>	<b>\$1,887</b>		<b>\$2,092</b>		<b>\$1,242</b>	
Increase due to FHCF	51	2.7	57	2.7	34	2.7
Increase due to CPIC	211	11.2	234	11.2	139	11.2
Increase due to Reinsurance Costs	0	0.0	0	0.0	0	0.0
<b>Total Increase</b>	<b>\$262</b>	<b>13.9</b>	<b>\$291</b>	<b>13.9</b>	<b>\$173</b>	<b>13.9</b>
<b>New Average Cost</b>	<b>\$2,149</b>		<b>\$2,383</b>		<b>\$1,414</b>	

As with homeowners insurance the majority of the cost increase is due to CPIC assessments.

The household impacts from the indirect costs of other lines of insurance included in goods and services purchased by households are:

<b>COST OF OTHER LINES OF INSURANCE INCLUDED IN THE COSTS OF GOODS AND SERVICES</b>						
	<b>Dade</b>		<b>Hillsborough</b>		<b>Leon</b>	
	\$	%	\$	%	\$	%
<b>Current Average Cost</b>	<b>\$3,085</b>		<b>\$2,896</b>		<b>\$2,592</b>	
Increase due to FHCF	70	2.3	65	2.3	58	2.3
Increase due to CPIC	286	9.3	268	9.3	240	9.3
Increase due to Reinsurance Costs	33	1.1	17	0.6	9	0.3
<b>Total Increase</b>	<b>\$389</b>	<b>12.6</b>	<b>\$351</b>	<b>12.1</b>	<b>\$307</b>	<b>11.9</b>
<b>New Average Cost</b>	<b>\$3,474</b>		<b>\$3,247</b>		<b>\$2,899</b>	

As with the other categories of insurance costs, the majority of the impact is due to CPIC assessments.

It should be noted that the above analysis does not capture all the impacts on consumers from the hurricane. For those homeowners with damage from the hurricane, a large cost is the impact of the deductible. Earlier in the report we estimated \$14.1 billion of the damage to dwellings would be covered by deductibles. 86% of the personal residential units have a 2% wind deductible.<sup>92</sup> The average amount of homeowners insurance in Dade County is about \$215,000, so the potential 2% deductible paid by the household would be \$4,300. In Hillsborough County, the average amount of insurance is approximately \$250,000 and the potential deductible is \$5,000.

As described earlier in the section on the overall economic impacts of a 1-in-100 year hurricane, there are costs associated with pre-storm evacuation. Although, additional living expenses are covered by most property insurance policies there will be additional costs associated with a prolonged displacement while severely damaged homes are rebuilt. Finally, this analysis does not contemplate the impact the existence of the FHCF has on the homeowners premiums households have been paying since the fund was created in 1994.<sup>93</sup>

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<sup>92</sup> See FHCF "2009 Ratemaking Formula Report", March 20, 2009, Exhibit 3, page 8

<sup>93</sup> The FHCF essentially replaces private reinsurance with much less expensive public sector reinsurance. We have estimated the FHCF will provide \$22.8 billion of coverage (for mandatory and TICL layers combined) for the 2010 storm season and collect premiums of \$1.47 billion for this coverage. At a rate on line of 15% (current rates on line in the FHCF layer are generally higher than 15% making this a conservative estimate of savings) the cost of this coverage in the private reinsurance market would be \$3.42 billion. Thus, the estimated savings for 2010 would be \$1.95 billion.

Long-Term Impacts

As discussed previously we are using the 3-5 year time frame for long-term. To illustrate the long-term impacts on Florida households we have replicated the first-year analysis of 2011 for 2015. This captures the impact of the ongoing assessments that will continue under our debt duration assumptions through 2030. For all insurance expenditures combined the results are as follows:

<b>LONG-TERM IMPACT OF ALL INSURANCE-RELATED EXPENDITURES<sup>94</sup></b>						
	<b>Dade</b>		<b>Hillsborough</b>		<b>Leon</b>	
	\$	%	\$	%	\$	%
Current Average Cost	\$7,349		\$6,614		\$4,756	
<b>Total Increase</b>	<b>\$332</b>	<b>4.5</b>	<b>\$273</b>	<b>4.1</b>	<b>\$182</b>	<b>3.8</b>
New Average Cost	\$7,681		\$6,886		\$4,938	

While there is some variation by county, the long-term impacts on Florida households are no more than 4.8% in all areas of the state under this scenario.

In 2015, the vast majority of the impact is due to emergency assessment for the FHCF and CPIC. The long-term impacts are only slightly different for households with their primary homeowners insurance from CPIC vs. those with homeowners insurance from a private company. Details of the long-term household impacts for homeowners insurance are:

<b>HOUSEHOLDS WITH CPIC HOMEOWNERS POLICIES</b>						
	<b>Dade</b>		<b>Hillsborough</b>		<b>Leon</b>	
	\$	%	\$	%	\$	%
<b>Current Average Cost</b>	<b>\$3,517</b>		<b>\$2,174</b>		<b>\$1,140</b>	
Increase due to FHCF	96	2.7	59	2.7	31	2.7
Increase due to CPIC	44	1.3	27	1.3	14	1.3
Increase due to Reinsurance Costs	0	0.0	0	0.0	0	0.0
<b>Total Increase</b>	<b>\$140</b>	<b>4.0</b>	<b>\$86</b>	<b>4.0</b>	<b>\$45</b>	<b>4.0</b>
<b>New Average Cost</b>	<b>\$3,657</b>		<b>\$2,261</b>		<b>\$1,185</b>	

<sup>94</sup> See Assessment on Policyholders section of this report for detail of the surcharges and assessments used in this analysis.

HOUSEHOLDS WITH PRIVATE (NON-CPIC) INSURANCE FOR HOMEOWNERS						
	Dade		Hillsborough		Leon	
	\$	%	\$	%	\$	%
<b>Current Average Cost</b>	<b>\$2,068</b>		<b>\$1,576</b>		<b>\$917</b>	
Increase due to FHCF	56	2.7	43	2.7	25	2.7
Increase due to CPIC	26	1.3	20	1.3	11	1.3
Increase due to Reinsurance Costs	67	3.3	28	1.8	9	1.0
<b>Total Increase</b>	<b>\$149</b>	<b>7.2</b>	<b>\$90</b>	<b>5.7</b>	<b>\$45</b>	<b>5.0</b>
<b>New Average Cost</b>	<b>\$2,218</b>		<b>\$1,667</b>		<b>\$962</b>	

Households with homeowners insurance from CPIC are impacted less than other households because the increase due to reinsurance costs does not affect CPIC policyholders.

Details of the long-term household impacts for auto insurance are:

HOUSEHOLD IMPACTS FOR AUTO INSURANCE						
	Dade		Hillsborough		Leon	
	\$	%	\$	%	\$	%
<b>Current Average Cost</b>	<b>\$1,887</b>		<b>\$2,092</b>		<b>\$1,242</b>	
Increase due to FHCF	51	2.7	57	2.7	34	2.7
Increase due to CPIC	24	1.3	26	1.3	16	1.3
Increase due to Reinsurance Costs	0	0.0	0	0.0	0	0.0
<b>Total Increase</b>	<b>\$75</b>	<b>4.0</b>	<b>\$83</b>	<b>4.0</b>	<b>\$49</b>	<b>4.0</b>
<b>New Average Cost</b>	<b>\$1,962</b>		<b>\$2,175</b>		<b>\$1,291</b>	

Similar to homeowners insurance, the long-term costs increases are less than 5.0% and are attributable to the ongoing FHCF and CPIC assessments.

The household impacts from the indirect costs of other lines of insurance included in goods and services purchased by households are:

<b>COST OF OTHER LINES OF INSURANCE INCLUDED IN THE COSTS OF GOODS AND SERVICES</b>						
	<b>Dade</b>		<b>Hillsborough</b>		<b>Leon</b>	
	\$	%	\$	%	\$	%
<b>Current Average Cost</b>	<b>\$3,085</b>		<b>\$2,896</b>		<b>\$2,592</b>	
Increase due to FHCF	70	2.3	65	2.3	58	2.3
Increase due to CPIC	32	1.0	30	1.0	27	1.0
Increase due to Reinsurance Costs	8	0.3	4	0.1	2	0.1
<b>Total Increase</b>	<b>\$110</b>	<b>3.6</b>	<b>\$100</b>	<b>3.4</b>	<b>\$87</b>	<b>3.4</b>
<b>New Average Cost</b>	<b>\$3,195</b>		<b>\$2,996</b>		<b>\$2,679</b>	

As with the other categories of insurance costs, the impacts are less than 5.0% and are largely driven by the affect of ongoing FHCF and CPIC assessments.

Under the tempered scenario, the impact of a 1-in-100 year hurricane will be felt by Florida for many years after the storm. There is some variation in cost increases by county, but will remain 4-5% higher for the next 20 years.

## **IMPACT ON STATE DEBT**

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Florida's state debt is comprised of "direct" and "indirect" debt. Direct debt is defined as net tax-supported debt (i.e., debt supported by state tax revenues) and self-supporting debt (debt secured by revenues from operating facilities supported by the debt). Indirect debt is that which is not secured by traditional state revenues or is the primary obligation of a legal entity other than the state. The indirect debt includes the outstanding debt on the bond issuances of the FHCF and CPIC.

The total state debt as of June 30, 2009 totaled \$41.1 billion; \$26.4 billion in direct debt and \$14.7 billion in indirect debt.<sup>95</sup> Of the \$14.7 billion in indirect debt, \$8.1 billion is attributed to outstanding debt of the FHCF and CPIC.<sup>96</sup> While the debt amounts mentioned here will change prior to the 2010 hurricane season due to both new bond issues and the retirement of existing debt, it would be difficult to project a debt level as of December 31, 2010. Therefore, for illustrative purposes in this report, we are assuming that the current state of Florida debt level - \$41.1 billion - prevails at the time of the 1-in-100 year hurricane.

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<sup>95</sup> "State of Florida 2009 Debt Affordability Report" prepared by The Division of Bond Finance in December 2009

<sup>96</sup> The \$8.1 billion includes both the pre-event bonds and bonds issued as a result of hurricane losses from the 2005 hurricane season.

We are projecting the 1-in-100 year hurricane will cause the FHCF to issue \$12.9 billion in new revenue bonds and CPIC to issue \$6.8 billion,<sup>97</sup> for a total of \$19.7 billion in insurance-related debt.<sup>98</sup> Based on this estimate, a 1-in-100 year hurricane would result in an increase in total state debt of 47.8% - from \$41.1 billion to \$60.8 billion.<sup>99</sup> More notably, the state's indirect debt would increase by 133.5%, from \$14.7 billion to \$34.4 billion.<sup>100</sup> These data are displayed in the table and charts below:

	CURRENT	POST-EVENT	% CHANGE
Direct State Debt	\$26.4	\$26.4	0.0%
Indirect State Debt	14.7	34.4	133.5%
<b>Total State Debt</b>	<b>\$41.1</b>	<b>\$60.8</b>	<b>47.8%</b>

It is obvious from the data above that a 1-in-100 year hurricane will cause a material increase in the amount of indebtedness for the State of Florida. The cost of amortizing that debt is an important component of the increase in costs to consumers attributable to the 1-in-100 year storm. Therefore several comments regarding our estimates of those costs are in order.

First, we have assumed that the state will be able to issue and place (i.e., sell) all such debt in the market. The ability for the state of Florida to increase its total outstanding debt burden by 50% might be questionable in current capital markets. For example, we believe that a single issue of \$19.7 billion would exceed the largest single tax-exempt debt issue ever placed in United States capital markets.

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<sup>97</sup> \$6.8 billion is the maximum additional debt needed by CPIC from a 1-in-100 year hurricane. Actual amount of new debt will depend on how quickly cash is needed to pay claims and how quickly the surcharge and regular assessment are collected. The amount of new debt needed will likely be reduced by some or all of these surcharges and assessments.

<sup>98</sup> See Exhibit 9 for details of the calculations of new debt.

<sup>99</sup> Although it is possible that additional insurance related debt from FIGA will need to be issued for, this possibility is difficult to estimate and thus, for illustrative purposes in this report we are assuming FIGA will not have any debt issuance as a result of the 1-in-100 hurricane.

<sup>100</sup> We have not considered the impact on state debt of any new expenditures that might arise from the provision of emergency services attendant to the occurrence of a major storm. To the extent that such expenditures produce a deficit that must be financed, additional debt might be issued.



Second, we have assumed that the debt will carry an interest cost of 8%.<sup>101</sup> This assumption is based on several considerations, including the current yields on existing Florida debt; the relative creditworthiness of the FHCF and CPIC compared to the state in general; the term to maturity of the debt issued; and the impact of placing an extremely large single debt issue on the market. As to current yields, Florida state debt is generally rated AAA or AA+, and 20 or 30 year bonds issued in the past several years have been floated at rates in the range of 4.1% to 5.4%.<sup>102</sup> Debt issued by the FHCF and CPIC will carry a lower rating than direct state debt, and hence should have a higher yield, but will have a shorter maturity which should act to reduce the yield. As to how those two factors – lower rating and shorter maturities – combine, consider that the debt issued by these two entities in the past several years has been rated AA-, and has carried yields ranging from 4.5% to 5.25% for bonds with maturities up to six years. Finally, as mentioned, the ability of any tax-exempt entity to float a bond issue of \$19.7 billion is questionable, and undoubtedly such a large issue would have to be accompanied by a substantial yield premium.

Based on all these considerations, we believe an estimate of 8%, for illustrative purposes, is reasonable.

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<sup>101</sup> The 8% is used in our calculations to amortize the total debt related to losses from the 1-in-100 year hurricane. Our assumption is that the average debt cost would be 8%, and new debt would be issued at higher than 8%.

<sup>102</sup> Based on data provided by the Division of Bond Finance. The data refer to bonds of 20 to 30 years maturity. Although there was one issue in 2009 at a yield of 3.76%, that was a full percentage point lower than the yield on any other issue during the year.

## **IMPACT ON STATE-OWNED BUILDINGS**

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“The State of Florida has self-insured its state-owned properties since the early 1900s when the Legislature created the Risk Management program, currently housed within the Department of Financial Services (DFS).”<sup>103</sup> The Florida Risk Management Trust Fund (RMTF) is the self-insured fund created by the Florida Legislature designed to provide property insurance for Florida’s state-owned buildings and contents, and the contents of leased buildings. “More than 21,000 state buildings are included in this coverage – ranging in size from the Capitol to small beach structures with only covered roofs at state parks – and ranging in age from historic university buildings built in the 1850’s to modern correctional facilities.”<sup>104</sup>

These 21,000 state owned buildings have approximately \$19.2 billion in property values (building and contents). In estimating the impact of a 1-in-100 year hurricane on State-owned buildings we are utilizing results of computer model simulations on the State-owned building exposures run by their reinsurance broker.<sup>105</sup> The following are the results of the losses on State-owned building from a 1-in-100 year hurricane:

<b>GROUND-UP LOSSES TO STATE-OWNED BUILDINGS DUE TO 1-IN-100 YEAR STORM</b>	
Actual Cash Value	\$335,086,602
Replacement Cost	\$461,983,898

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<sup>103</sup> “Insurance Coverage for State of Florida Properties – Report on Key Policy Issues”- Produced by the RMTF in April, 2009, page 1.

<sup>104</sup> Ibid, page 3.

<sup>105</sup> The RMTF’s reinsurance broker runs both RMS and AIR models and our results are an average of the two models. These estimates include demand surge, storm surge and rental income, but do not include business interruption costs.

The loss amounts on state-owned buildings produced by the models are likely on the high end of the range of losses that could result from a statewide 1-in-100 year event. This is because the distribution of the State-owned properties is different than the distribution of all properties state-wide (there is significant exposure away from the Miami and Tampa areas). In fact, the largest exposure of State-owned buildings is well inland from the coast in Alachua County (The University of Florida).

In the event of a catastrophe loss, the RMTF is responsible for the first \$40 million plus a \$2 million deductible. In addition, for the 2010 storm season, the RMTF attempted to purchase catastrophe insurance coverage for the \$40 million layer excess of the \$42 million retention. In placing their 2010 reinsurance, budgetary constraints resulted in the RMTF actually retaining a portion of this layer (\$3.3 million)

The RMTF is exploring options to purchase additional catastrophe coverage and may pursue this option prior to the 2010 hurricane season when coverage may be more difficult to obtain. They are currently considering coverage of up to \$70 million (up from the current \$40 million) above the self-insurance layer, but this much additional coverage would require additional funding from the state legislature.<sup>106</sup> The additional layer would cover State-owned building losses for up to a 1-in-20 year storm. The following estimates of the impact of a 1-in-100 year hurricane assume that no additional coverage is purchased.

The RMTF is required by statute to offer coverage only on an actual cash value basis. Therefore, any cost above the actual cash value, (i.e. the difference between the replacement cost and the actual cash value), would not be covered by the RMTF or covered by the catastrophe insurance. Any damages in excess of actual cash value would need to be funded by the State of Florida, outside of the RMTF.<sup>107</sup>

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<sup>106</sup> Based on conversations with the risk management division.

<sup>107</sup> See Exhibit 10, for a chart of the reinsurance coverage purchased by RMTF for State-Owned buildings.

Based on the ground-up loss estimates, and the current structure of the RMTF's excess insurance, the following table shows the amount of loss retained by the RMTF, the amount insured, and the amount not covered:

<b>GROUND-UP LOSS FOR 1-IN-100 YEAR STORM (\$ MILLIONS)</b>	
Retained by RMTF	\$298.4
Reimbursements from Reinsurers	36.7
Not covered by RMTF	126.9
<b>Storm Total</b>	<b>\$462.0</b>

The RMTF would retain the first \$42.0 million, the \$3.3 million coinsurance layer, plus the \$253.1 million excess of the insurance limit, up to the actual cash value of the losses, for a total of \$298.4 million. Reinsurers would cover \$36.7 million. The remaining \$126.9 million (the difference between the replacement costs and the actual cash values) would be a liability of the State agencies experiencing the damage.

The RMTF is funded on a cash-flow basis based on historical average annual losses. The average property loss over the last 10 years is \$13.8 million.<sup>108</sup> The largest event loss since 1973 was \$17.9 million, due to Hurricane Andrew in 1992.<sup>109</sup> Premiums are paid by state agencies, and are funded by the budget of these state agencies. There are no separate reserves established for catastrophe losses. Clearly, the potential damage from a large hurricane exceeds the fund's resources. In the event of a Trust Fund shortfall, the RMTF can:

- Use any surplus from the current fiscal year budget
- Borrow funds from the General Revenue Fund
- Assess state agencies
- Borrow up to \$38 million per fiscal year from the Budget Stabilization Fund
- Borrow from other sources

<sup>108</sup> "Insurance Coverage for State of Florida Properties – Report on Key Policy Issues"- Produced by the RMTF in April, 2009, page 8.

<sup>109</sup> Ibid, page 7.

If we assume the \$2 million deductible is covered by the current year operating budget and \$38 million is borrowed from the Budget Stabilization Fund, then \$40 million of the replacement cost damages are covered. In addition, \$36.7 million is covered by catastrophe reinsurance contracts, for a total of \$76.7 million. In the short-term, the shortfall from a 1-in-100 year hurricane is \$385.3 million. This amount would need to be appropriated through the state legislature in order to repair or replace all the damage to State-owned buildings and contents from the storm.

## **MAJOR ASSUMPTIONS AND MAJOR DIFFERENCES FROM 2009 REPORT**

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- We assume 65% of residential losses are insured, while the 2009 report assumed 45% of building losses and 50% of contents losses for residential structures were insured. This explains a substantial portion of the difference between our estimated total property damages of \$160 billion and the \$191 billion (mid-point of a range) estimate in the 2009 report.
- We estimate FHCF's TICL coverage to be \$4.5 billion as compared to \$12.0 billion in the 2009 report. This is due to 2009 legislative changes made to the TICL coverage options.
- We are relying on the catastrophe model results from the FHCF (a weighted average of 5 models) for our projections of insured losses for residential and commercial residential properties.
- In estimating CPIC's share of the insured losses, we have recognized that their model results are based on only the RMS RiskLink v9.0 model, which produces loss estimates much lower than the average of the 5 models used by the FHCF. Thus we are estimating, CPIC will have a greater share of the industry 1-in-100 year hurricane than would be indicated by relying solely on the RMS model. This fact, plus differences in the estimated impact of deductibles, largely explains the difference between the current estimate of CPIC's post-hurricane deficit, \$10.5 billion, and the estimate in the 2009 report (\$2.5 billion).
- In our Maximum scenario we use CPIC assessments rates of 45.0%, 11.2% and 10.0% in CPIC assessment Tier 1, Tier 2 and Tier 3, respectively. We also provide a Tempered Scenario using assessments rates of 45.0%, 11.2%, and 1.3% in CPIC assessment Tier 1, Tier 2 and Tier 3, respectively. In the 2009 report, the CPIC assessment rates used were 45.0%, 3.0% and 0.0% in Tier 1, Tier 2, and Tier 3, respectively.

- We assume the maximum annual FHCF assessment percentage from a single storm season is 6.0% and that the FHCF has discretion in the annual assessment amount and duration. For the purposes of assessments on policyholders we are assuming the FHCF would assess under emergency assessments for 30 years at 2.7%. In the 2009, a single year assessment rate of 48.1% was used.
- We assume a 40.0% increase in reinsurance costs as a result of a 1-in-100 year hurricane. In the 2009 report a 20.0% increase (mid-point of a range) was assumed.

## **OTHER UNDERLYING ASSUMPTIONS**

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- We assume the 1-in-100 year hurricane to be the only hurricane to impact Florida during the 2010 storm season. It was beyond the scope of our assignment to consider any additional impacts from a second hurricane during the 2010 storm season.
- Loss adjustment expenses (LAE) are assumed to equal 5.0% of gross insured losses (the amount reimbursed by the FHCF). LAE amounts are not included in our estimates of total damage as they do not represent damage to a building or contents. LAE amounts are included, however, in estimates of covered claims in the FHCF and CPIC analysis.
- We assume that the FHCF and CPIC will be able to issue and place (i.e., sell) tax-exempt bonds to satisfy 100% of its unfunded hurricane-related liabilities. The FHCF warns that only \$11 billion of the \$12.9 billion would be bonded. If only \$11 billion of the unfunded reinsurance liabilities are paid by the FHCF via the revenue bonds issued, the additional \$1.9 billion would shift back to the private insurers and be paid out of their surplus. This increases the possibility of insolvency, which would shift that liability to FIGA. The FHCF assessment rates would also decrease from the level used in this report (\$11 billion vs. \$12.9 of debt to be paid by assessments).
- In our estimate of total loss, we assume the ratio of losses not covered by the FHCF to the losses covered by the FHCF equals 40.0% - based on payments made on hurricane claims following the 2004 and 2005 storm seasons.
- In our estimate of total loss, we assume deductibles will cover 20% of the total loss for residential structures and contents, based on a review of deductible relativities in various homeowners insurance rate filings in Florida.



- We assume that flood losses not covered under the homeowners (or other property insurance) policy plus the portion of homes completely uninsured account for an additional loss elimination of 15%, implying that insured losses represent 65% of total residential losses.
- For commercial losses, we assume that approximately 32% of commercial property is subject to insurance coverage, with the remainder uncovered. This reflects the fact that businesses are more likely to self insure, purchase high layer excess coverage or take large deductibles than are homeowners. Specifically, for public utilities, we assume 10% of losses were insured while 35% was insured for remaining businesses. This leads to an average percentage insured of 32%.
- For agricultural losses, we assume that insured losses to farm buildings and other farm property were included in the commercial insurance losses reported by the OIR, but that crop and livestock losses, if insured, would have been covered under federal crop insurance programs (i.e., not under private sector programs where the losses were reported to the OIR). We assume these agricultural losses will equal 5% of insured losses, none of which are subject to private insurance coverage.
- For government buildings and equipment we assume that losses are proportional to employment and that losses to government property will account for 15% of the combined losses to businesses and government.
- In the “Overview of Economic Impacts of a 1-in-100 Year Hurricane” section of this report, there are many assumptions which underlie our discussion of evacuation and emergency services costs, and the quantification of leakages and displacement amount. These assumptions are too numerous to list separately and are included in the text and footnotes in that report section.

- In our estimate of FHCF available funds, we assume that operating expenses and amounts transferred from component units will accrue in future periods as they have for the 5-month period July 1, 2009 to November 30, 2009. The monthly average was also used for our projection during the second half of 2010.
- We assume the FHCF will earn an annual return on investments of 2.0%, based on a review of recent investment results.
- FHCF premium estimates for contract year 2010/2011 assume each company maintains the same mandatory, TICL and LAC coverage options selected in contract year 2009/2010, except those companies electing TICL coverage of \$10 billion were assumed to purchase \$8 billion.
- Estimated FHCF mandatory layer coverage limit for contract year 2010/2011 does not reflect the potential impact of proposed Senate Bill 1460.
- FHCF LAC coverage amount assumes each company maintains the same LAC coverage options for the 2010/2011 contract year.
- FHCF LAC premium includes one prepaid reinstatement; FHCF LAC coverage only includes first-event coverage and not second-event coverage.
- FHCF TICL coverage estimation based on the distribution of all companies assuming each selects the mandatory coverage option (participation percent) of 90%.
- We relied on the CPIC *2010 Operating Budget* to project premiums as of December 31, 2009 and premiums, incurred losses and incurred loss adjustment expenses as of December 31, 2010.

- We assume CPIC will earn an annual return on investments of 2.0%, based on a review of recent investment results.
- Although insolvencies from a 1-in-100 year hurricane are possible, no estimate is made in this report on the possibility of FIGA liabilities from a 1-in-100 year hurricane. For the purpose of this analysis, we assume no impact on FIGA and thus, no FIGA assessments.
- Two assessment scenarios were utilized for FHCF. The first assumes emergency assessments are made at the maximum rate until unfunded reimbursements are satisfied. The second assumes emergency assessments are made at a rate necessary to satisfy unfunded reimbursements over the maximum duration of 30 years.
- Two assessment scenarios were utilized for CPIC. The first assumes emergency assessments are made at the maximum rate until the deficit is satisfied. The second assumes emergency assessments are made at a tempered rate necessary to satisfy the deficit over 20 years.
- We assume an assessment base annual trend rate of 0.0% until 2010 and 3.0% in all subsequent years for use in the calculation of both the FHCF and CPIC surcharges and assessments.
- We assume reinsurance rates in Florida will increase by 40% for the 2011 storm season following a 1-in-100 year hurricane in 2010; this is based on the historical changes in reinsurance costs in the years immediately following the costliest insurance losses of the past 40 years.
- We derived the portion of current property premiums attributable to the cost of reinsurance from a sample of 36 rate filings and selected 25%.

- We assume an average 1.0% increase in commercial premiums statewide as a result of the estimated 40% increase in reinsurance costs following a 1-in-100 year hurricane in 2010.
- We assume the premium impact from reinsurance gradually decreases from a high in 2011 over each of the next three years and stabilizes at 125% of the rates in effect prior to the 1-in-100 year event.
- We assume the only reinsurance CPIC purchases is the mandatory layer and all optional TICL coverage from the FHCF.
- We assume that the full cost of commercial insurance is embedded in the cost of goods and services purchased by consumers, and that all commercial premiums in Florida are paid for by Florida consumers, so that the impact of increases in commercial lines premiums will be borne by Florida households in the form of higher costs of goods and services.
- For simplicity in illustrations, we assume that surcharges, assessments and reinsurance cost increases will begin to impact Florida consumers in 2011.
- We assume that State Farm Mutual Insurance Company personal auto liability rate relativities by county used in the 2009 report *Economic Impact of a 1-in-100 Year Hurricane* are representative of county rate relativities for all auto insurers in Florida.
- We assume that county reinsurance relativities from a sample of company rate filings in Florida are representative of the industry county reinsurance relativities in Florida.
- We derived Citizens' statewide average homeowners premium per policy in Florida from Citizens' 2010 budgeted direct written premium divided by Citizens' 2010 budgeted policies in-force.

- We derived statewide average homeowners premium per policy in Florida for non-CPIC policies from statewide homeowners direct written premium divided by policies in-force as reported in the Florida OIR's *Commercial and Personal Residential Property Supplemental Quarterly Report* as of September 30, 2009.
- In deriving the number of Florida households, we assume that vacant housing units equal 13% of total housing units, that seasonal housing units equal 50% of vacant housing units, and that seasonal housing units in Florida are occupied for six months out of the year.
- In deriving the average auto and other lines costs per household, we projected industry premium by line of business through the end of 2010 for each line. Other lines were summed and the auto and other lines totals were divided by our estimates of Florida households.
- We assume that pre-event liquidity bonds issued by CPIC and FHCF will be retired with surcharges and assessments, essentially converting the pre-event liquidity to post-hurricane debt.
- We assume that CPIC will issue \$2.4 billion dollars in new pre-event liquidity bonds during 2010 as proposed in CPIC's *2010 Operating Budget*.
- For use in amortizing the FHCF and CPIC debt, we assume the average interest rate of 8% on all debt.
- We relied on return period occurrence losses as modeled by Risk Placement Analytics in their report *2010 Hurricane & Tornado Catastrophe Analysis Executive Summary* dated January 6, 2010.

- We assume that the 1-in-100 year losses based on the distribution of State-owned buildings from their reinsurance brokers models are representative of a 1-in-100 year hurricane in the State of Florida.
- We assume that catastrophe coverage currently bound by the RMTF for State-owned buildings will remain in effect for the 2010 storm season and no additional coverage will be purchased.

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## **LIMITATIONS**

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### Data Reliance

In performing this analysis, we relied on data and other information provided to us by the Florida Department of Financial Services and other Florida state agencies, and numerous publicly available sources as identified in the Reference section of our report. We did not audit or independently verify this data and information for accuracy. Such a review is beyond the scope of our assignment. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency. We did not find material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or relationships that are materially inconsistent. Such a detailed review was beyond the scope of our assignment.

### Uncertainty

We based our results on generally accepted actuarial procedures and analytical methodologies, the information available to us, and our professional judgment. Much of our analysis relied on the use of computer-simulated hurricane loss estimates, which are known to have an inherent degree of uncertainty. Due to the uncertainty associated with these modeled hurricane losses, and the effect of other factors such as political, social, and legislative issues, actual results will not develop exactly as projected and may, in fact, significantly vary from the projections. Our conclusions also rely on numerous assumptions based on our analysis and research, which have a material impact on the results. If the assumptions are inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

Sincerely,



Paul D. Anderson, FCAS, MAAA  
Consulting Actuary



David Appel, Ph.D.  
Director, Economics Consulting



David R. Chernick, FCAS, MAAA  
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**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of Costs from a 1-in-100 Year Hurricane  
(\$ in thousands)

Insured Costs:

(1) Gross Insured Loss ( <i>Lines covered by the FHCF</i> )	\$56,508,528
(2) Gross Insured Loss ( <i>Lines not covered by the FHCF</i> )	22,603,411
(3) Gross Insured Loss ( <i>All Lines</i> )	79,111,939

Uninsured Costs:

(4) Deductibles Paid by Policyholders on Residential Properties	\$14,127,132
(5) Loss Adjustment Expense ( <i>Lines covered by the FHCF</i> )	2,825,426

**Notes:**

- (1) The FHCF is in the process of developing prices for reinsurance coverage for the 2010 storm season and indicated that the projected 1-in-100 year loss for properties covered by the FHCF is \$56.5 billion
- (2) = (1) x 40.0%; Assumes ratio of Lines not covered by the FHCF to Lines covered by the FHCF is 40.0% (See Exhibit 1, Page 2)
- (3) = (1) + (2)
- (4) = (1) x [ 20.0% / (1-20.0%) ]; Assumes 20.0% of losses are eliminated by policyholder deductibles  
Commercial deductibles and co-payments are also assumed to be uninsured losses, but are not easily quantified
- (5) = (1) x 5.0%; Assumes loss adjustment expense is 5.0% of loss (amount reimbursed by the FHCF)



**Florida Department of Financial Services**  
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Estimate of Losses for Lines of Business Not Covered by the FHCF  
(\$ in thousands)

Year	Hurricane	(1)	(2)	(3)
		Lines Covered by FHCF	Lines Not Covered by FHCF	Ratio of Not Covered to Covered
		Claim Payments		
2004	Charley	\$6,791,138	\$2,265,566	33.4%
	Frances	6,307,379	1,400,138	22.2%
	Ivan	2,312,045	893,393	38.6%
	Jeanne	2,720,823	793,000	29.1%
2005	Dennis	196,867	72,941	37.1%
	Katrina	483,894	198,145	40.9%
	Rita	9,494	5,671	59.7%
	Wilma	6,489,239	2,359,277	36.4%
			Average	37.2%
			Selected	40.0%

Notes:

(1) & (2) From *Florida Office of Insurance Regulation Hurricane Summary Data* for calendar years 2004 & 2005; Estimated the portion of Commercial Multi-peril and Fire & Allied Lines losses that were covered by the FHCF using data from Industry Aggregate Annual Statements as of December 31, 2008, Citizens' *2009 Operating Budget*, and the Florida OIR's *Commercial and Personal Residential Property Supplemental Quarterly Report* as of December 31, 2008

(3) = (2) / (1)

Note: Selected a slightly higher ratio than the average of historical data to reflect the likelihood that damage to commercial buildings from a much larger storm will be greater relative to residential damage

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Property Damage and Anticipated Spending for Replacement and Repair  
(\$ in billions)

	TOTAL DAMAGE	INSURED DAMAGE				UNINSURED DAMAGE				TOTAL LOSSES		TOTAL NEW SPENDING - NET		
	\$ billion	% Insured	Insured \$ billion	Constr. Activity	TPP	Uninsured \$ billion	Constr. Activity	TPP	Unreplaced Loss	Leakage	Displacem't	TOTAL	Constr. Activity	TPP
<b>Residential Structures</b>	<b>\$52.9</b>	65%	<b>\$34.4</b>			<b>\$18.5</b>				<b>\$4.9</b>	<b>\$7.2</b>	<b>\$40.8</b>	<b>\$38.3</b>	<b>\$2.5</b>
Replacement	21.2		13.7	100%		7.4	85%		15%	1.7	2.9	16.5	16.5	0.0
Repair	31.7		20.6	100%		11.1	50%	35%	15%	3.2	4.3	24.3	21.8	2.5
<b>Mobile Homes</b>	<b>7.6</b>	65%	<b>4.9</b>	25%	75%	<b>2.7</b>	25%	25%	50%	<b>1.6</b>	<b>0.9</b>	<b>5.1</b>	<b>1.6</b>	<b>3.6</b>
<b>Personal Property</b>	<b>31.1</b>	68%	<b>21.1</b>			<b>10.0</b>				<b>4.0</b>	<b>4.1</b>	<b>23.0</b>	<b>0.0</b>	<b>23.0</b>
Residential Contents	24.9	65%	16.2		100%	8.7		80%	20%	3.5	3.2	18.2	0.0	18.2
Autos, Boats, Planes	6.2	80%	4.9		100%	1.2		80%	20%	0.5	0.9	4.8	0.0	4.8
<b>Commercial (Non-Resid.)</b>	<b>48.5</b>	35%	<b>17.0</b>			<b>31.5</b>				<b>10.7</b>	<b>5.7</b>	<b>32.1</b>	<b>16.9</b>	<b>15.2</b>
Structures	24.2	35%	8.5	100%		15.8	80%		20%	4.4	3.0	16.9	16.9	0.0
Contents	24.2	35%	8.5		100%	15.8		80%	20%	6.3	2.7	15.2	0.0	15.2
<b>Utilities</b>	<b>6.9</b>	10%	<b>0.7</b>	100%		<b>6.2</b>	100%		0%	<b>0.6</b>	<b>0.9</b>	<b>5.3</b>	<b>5.3</b>	<b>0.0</b>
<b>Agriculture</b>	<b>4.0</b>	0%	<b>0.0</b>			<b>4.0</b>				<b>4.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Structures	0.0	0%	0.0	100%		0.0	60%		40%	0.0	0.0	0.0	0.0	0.0
Equipment	0.0	0%	0.0		100%	0.0		60%	40%	0.0	0.0	0.0	0.0	0.0
Crops & Inventories	4.0	0%	0.0		100%	4.0			100%	4.0	0.0	0.0	0.0	0.0
<b>Government</b>	<b>8.6</b>	12%	<b>1.0</b>			<b>7.6</b>				<b>1.3</b>	<b>1.1</b>	<b>6.2</b>	<b>3.6</b>	<b>2.6</b>
State & Local	7.6	13%	1.0			6.6				1.1	1.0	5.5	3.1	2.4
Buildings	2.5	13%	0.3	75%	25%	2.2	80%	20%	0%	0.3	0.3	1.9	1.5	0.3
Other public works	2.5	13%	0.3	75%	25%	2.2	80%	20%	0%	0.3	0.3	1.9	1.5	0.3
Equipment	2.5	13%	0.3		100%	2.2		100%	0%	0.5	0.3	1.7	0.0	1.7
Federal	1.0	0%	0.0			1.0				0.2	0.1	0.7	0.5	0.2
Buildings	0.8	0%	0.0	100%		0.8	80%	20%	0%	0.1	0.1	0.6	0.5	0.1
Equipment	0.2	0%	0.0		100%	0.2		100%	0%	0.1	0.0	0.1	0.0	0.1
<b>Other</b>	<b>0.0</b>	0%	<b>0.0</b>	0%	0%	<b>0.0</b>	0%	0%	100%	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>TOTAL</b>	<b>\$159.5</b>		<b>\$79.1</b>			<b>\$80.4</b>				<b>\$27.0</b>	<b>\$19.9</b>	<b>\$112.6</b>	<b>\$65.6</b>	<b>\$46.9</b>

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Impacts on Transactions Subject to Sales Tax (Taxable Sales)  
(\$ in billions)

	<b>Constr. Activity</b>	Construction (50% Taxable)	<b>TPP</b>	<b>CND</b>	<b>CNDT</b>	<b>CDRC</b>	<b>CDRO</b>	<b>INBL</b>	<b>INBU</b>	<b>Taxable Sales</b>	<b>Sales Tax</b>	<b>GR 89.0%</b>
<b>Residential Structures</b>	<b>\$38.3</b>	<b>\$19.1</b>	<b>\$2.5</b>							<b>\$21.6</b>	<b>\$1.3</b>	<b>\$1.2</b>
Replacement	16.5	8.3	0.0					8.3		8.3	0.5	0.4
Repair	21.8	10.9	2.5					13.4		13.4	0.8	0.7
<b>Mobile Homes</b>	<b>1.6</b>	<b>0.8</b>	<b>3.6</b>			3.6		0.8		<b>4.4</b>	<b>0.3</b>	<b>0.2</b>
<b>Personal Property</b>	<b>0.0</b>	<b>0.0</b>	<b>23.0</b>							<b>23.0</b>	<b>1.4</b>	<b>1.2</b>
Residential Contents	0.0	0.0	18.2	7.1	1.8	2.0	7.3	0.0		18.2	1.1	1.0
Autos	0.0	0.0	4.8			4.8		0.0		4.8	0.3	0.3
Boats & Planes	0.0	0.0	0.0				0.0	0.0		0.0	0.0	0.0
<b>Commercial (Non-Resid.)</b>	<b>16.9</b>	<b>8.4</b>	<b>15.2</b>							<b>23.7</b>	<b>1.4</b>	<b>1.3</b>
Structures	16.9	8.4	0.0					8.4		8.4	0.5	0.4
Contents	0.0	0.0	15.2	0.8		0.1	2.3	0.0	12.1	15.2	0.9	0.8
<b>Utilities</b>	<b>5.3</b>	<b>2.7</b>	<b>0.0</b>					<b>2.7</b>		<b>2.7</b>	<b>0.2</b>	<b>0.1</b>
<b>Agriculture</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>							<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Structures	0.0	0.0	0.0					0.0		0.0	0.0	0.0
Equipment	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0
Crops & Inventories	0.0	0.0	0.0					0.0		0.0	0.0	0.0
<b>Government</b>	<b>3.6</b>	<b>1.8</b>	<b>2.6</b>							<b>1.8</b>	<b>0.1</b>	<b>0.1</b>
State & Local	3.1	1.5	2.4							0.0	0.0	0.0
Buildings	1.5	0.8	0.3					0.8		0.8	0.0	0.0
Other public works	1.5	0.8	0.3					0.8		0.8	0.0	0.0
Equipment	0.0	0.0	1.7					0.0		0.0	0.0	0.0
Federal	0.5	0.2	0.2							0.0	0.0	0.0
Buildings	0.5	0.2	0.1					0.2		0.2	0.0	0.0
Equipment	0.0	0.0	0.1					0.0		0.0	0.0	0.0
<b>Nonprofit Institutions</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Gross Direct Impact</b>	<b>\$65.6</b>	<b>\$32.8</b>	<b>\$46.9</b>	<b>\$7.9</b>	<b>\$1.8</b>	<b>\$10.5</b>	<b>\$9.6</b>	<b>\$35.3</b>	<b>\$12.1</b>	<b>\$77.2</b>	<b>\$4.6</b>	<b>\$4.1</b>
<b>Direct Loss - Month 1</b>				<b>(\$1.3)</b>	<b>(\$0.6)</b>	<b>(\$1.0)</b>	<b>(\$0.6)</b>	<b>(\$0.3)</b>	<b>\$0.0</b>	<b>(\$3.8)</b>	<b>(\$0.2)</b>	<b>(\$0.2)</b>
<b>Direct Loss - Month 2</b>				<b>(\$1.3)</b>	<b>(\$0.6)</b>	<b>(\$1.0)</b>	<b>(\$0.6)</b>	<b>(\$0.3)</b>	<b>\$0.0</b>	<b>(\$3.8)</b>	<b>(\$0.2)</b>	<b>(\$0.2)</b>
<b>Net Direct Impact</b>		<b>\$32.8</b>		<b>\$5.3</b>	<b>\$0.5</b>	<b>\$8.6</b>	<b>\$8.3</b>	<b>\$34.7</b>	<b>\$12.1</b>	<b>\$69.5</b>	<b>\$4.2</b>	<b>\$3.7</b>
<b>Net Total Impact</b>										<b>\$69.5</b>	<b>\$4.2</b>	<b>\$3.7</b>

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Florida Hurricane Catastrophe Fund (FHCF)  
Estimate of Reinsurance Obligations Resulting from a 1-in-100 Year Hurricane  
(\$ in thousands)

(1) Estimated Funds Available as of December 31, 2010	\$6,618,102
(2) Estimated Reinsured Losses resulting from 1-in-100 Year Hurricane	22,988,158
<b>(3) Reimbursements owed to Participating Insurers in Excess of Available Funds</b>	<b>(\$16,370,056)</b>

Notes:

- (1) See Exhibit 3, Page 2
- (2) See Exhibit 3, Page 4
- (3) = (1) - (2)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Florida Hurricane Catastrophe Fund (FHCF)  
Estimate of Funds Available to pay Hurricane Losses  
(\$ in thousands)

**Contract Year 2009-2010**

(1) Unrestricted Net Assets as of November 30, 2009	\$3,935,243
(2) Unpaid Hurricane Losses as of November 30, 2009	632,752
(3) Hurricane Losses Payable as of November 30, 2009	4,790
(4) Estimated Operating Expenses <i>(December 1, 2009 to June 30, 2010)</i>	(2,895)
(5) Estimated Transfer from Component Units <i>(December 1, 2009 to June 30, 2010)</i>	201,018
(6) Projected Investment Income from November 30, 2009 to December 31, 2010	102,290
	\$4,873,197
(7) Funds Available as of December 31, 2010	\$4,873,197

**Contract Year 2010-2011**

(8) Estimated Premium for Contract Year 2010-2011	\$1,576,463
(9) Estimated Operating Expenses <i>(July 1, 2010 to December 31, 2010)</i>	(2,482)
(10) Mitigation Expenses <i>(July 1, 2010 to December 31, 2010)</i>	(10,000)
(11) Transfer from Component Units <i>(July 1, 2010 to December 31, 2010)</i>	172,301
(12) Projected Investment Income as of December 31, 2010	8,623
	\$1,744,905
(13) Estimated Funds Available from Underwriting Operations	\$1,744,905
	\$6,618,102
<b>(14) Total Funds Available as of December 31, 2010</b>	<b>\$6,618,102</b>

Notes:

FHCF contract years cover the period 7/1/XX to 6/30/YY; FHCF premium is collected in 3 installments each year - Aug. 1, Oct. 1, & Dec. 1

(1) - (3) From the latest available (unaudited) financial statements for the FHCF, evaluated as of 11/30/09

(2) & (3) Unpaid Hurricane Losses will be paid using bond proceeds from the FHCF Financing Corporation; therefore, are not obligations of the FHCF

(4) & (5) Projected from the FHCF *Combining Statement of Revenues, Expenses, and Changes in Net Assets for the 5 Months Ended November 30, 2009*

(6) & (12) Assumes an investment return of 2.0%, selected based on historical investment returns from the FHCF's 2004-2009 financial statements

(7) = (1) + (2) + (3) + (4) + (5) + (6)

(8) See Exhibit 3, Page 3; Assumes all premium for contract year 2010-11 will be available to reimburse participating insurers for covered losses from 2010 storms

(9) - (11) Projected from the FHCF *Combining Statement of Revenues, Expenses, and Changes in Net Assets for the 5 Months Ended November 30, 2009*

(13) = (8) + (9) + (10) + (11) + (12)

(14) = (7) + (13)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Florida Hurricane Catastrophe Fund (FHCF)  
Estimate of Premium for Contract Year 2010-2011  
(\$ in thousands)

	Layer	Contract Year	
		2009-2010	2010-2011
(1)	Mandatory Coverage	\$1,069,260	\$1,120,177
(2)	Optional TICL Coverage	273,158	345,971
(3)	Optional LAC	110,315	110,315
(4)	<b>Total</b>	<b>\$1,452,733</b>	<b>\$1,576,463</b>

**Notes:**

Contract year 2009-2010 premiums from the FHCF's *2009/2010 Coverage Selections and Premium Calculations*

(1) Contract year 2010-2011 assumes each company maintains the same mandatory coverage option (participation %) selected for contract year 2009-2010; Mandatory Coverage premium reflects the increase in "cash build-up" factor from 1.05 to 1.10

(2) TICL Coverage premiums reflect the decrease in maximum coverage from \$10 billion to \$8 billion and assume no additional companies elect to decrease the amount of TICL purchased; TICL Coverage premium also reflects the increase in premium factor from 2 to 3 for contract year 2010-2011

(3) LAC = Limited Apportionment Company

- those with surplus of \$20 million or less writing 25% or more of its total countrywide property insurance premiums in Florida
- eligible to purchase an additional amount of reimbursement coverage of up to \$10 million
- premium for this additional coverage is 50% of the coverage provided, which includes one prepaid reinstatement

Contract year 2010-2011 assumes each eligible company maintains the same LAC option selected for contract year 2009-2010

(4) = (1) + (2) + (3)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Florida Hurricane Catastrophe Fund (FHCF)  
Estimate of Reinsurance Coverage for Contract Year 2010-2011  
(\$ in thousands)

	Layer	Contract Year	
		2009-2010	2010-2011
(1)	Mandatory Coverage	\$17,175,000	\$18,290,000
(2)	Optional TICL Coverage	5,492,373	4,477,528
(3)	Optional LAC	220,630	220,630
(4)	<b>Total</b>	<b>\$22,888,002</b>	<b>\$22,988,158</b>

**Notes:**

Contract year 2009-2010 TICL & LAC coverage derived from the FHCF's *2009/2010 Coverage Selections and Premium Calculations*

(1) Contract year 2009-2010 from Exhibit V in the FHCF's *2009 Ratemaking Formula Report*;

For contract year 2010-2011, the FHCF is in the process of developing prices for reinsurance coverage for the 2010 storm season and indicated that the projected size of the Mandatory Coverage layer is \$18.29 billion

(2) See Exhibit 3, Page 5

(3) Contract year 2010-2011 assumes each eligible company maintains the same LAC option selected for contract year 2009-2010;

Only coverage for the first event in the year is included in the table above

(4) = (1) + (2) + (3)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Florida Hurricane Catastrophe Fund (FHCF)  
Estimate of TICL Coverage for Contract Year 2010-2011

(1) 2009-2010 TICL Coverage Selection	(2) Number of Companies	(3) Distribution within the FHCF	(4) 2009-2010 TICL Layer Coverage	(5) 2010-2011 TICL Coverage Option	(6) 2010-2011 TICL Layer Coverage
No Coverage	113	39.1%	N/A	No Coverage	N/A
1,000,000,000	5	3.1%	30,797,585	1,000,000,000	30,797,585
2,000,000,000	1	0.5%	9,325,212	2,000,000,000	9,325,212
3,000,000,000	1	0.6%	16,738,156	3,000,000,000	16,738,156
4,000,000,000	2	2.4%	97,246,708	4,000,000,000	97,246,708
5,000,000,000	1	1.0%	48,582,287	5,000,000,000	48,582,287
6,000,000,000	0	0.0%	0	6,000,000,000	0
7,000,000,000	0	0.0%	0	7,000,000,000	0
8,000,000,000	2	2.7%	215,462,022	8,000,000,000	215,462,022
9,000,000,000	0	0.0%	0	8,000,000,000	0
10,000,000,000	59	50.7%	5,074,220,586	8,000,000,000	4,059,376,469
<b>Total</b>	<b>184</b>	<b>100.0%</b>	<b>5,492,372,555</b>	<b>Total</b>	<b>4,477,528,438</b>

**Notes:**

Each \$1 billion layer of TICL Coverage is an option that can be selected by companies

(1) & (2) From the FHCF's *2009/2010 Coverage Selections and Premium Calculations*

(3) Based on the 2009-2010 Mandatory Coverage premiums, adjusted as if all companies selected the Mandatory Coverage Option of 90%;  
Mandatory Coverage premiums from the FHCF's *2009/2010 Coverage Selections and Premium Calculations*

(4) = (1) x (3); Represents the aggregate reinsurance coverage for all companies selecting that TICL Coverage amount

(5) 2010-2011 TICL Coverage options adjusted to account for decrease in maximum coverage option from \$10 billion to \$8 billion

(6) = (3) x (5)



**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Citizens Property Insurance Corporation (CPIC)  
Estimate of Surplus or Deficit by Account Resulting from a 1-in-100 Year Hurricane  
(\$ in thousands)

	<u>Personal Lines Account</u>	<u>Commercial Lines Account</u>	<u>High Risk Account</u>	<u>Total</u>
(1) Estimated Funds Available as of December 31, 2010	\$1,761,154	\$1,032,590	\$1,816,102	\$4,609,846
(2) Estimated Net Hurricane Loss & LAE	3,575,816	1,744,346	9,745,741	15,065,902
<b>(3) Estimated Surplus / (Deficit) After 1-in-100 Year Hurricane</b>	<b>(\$1,814,662)</b>	<b>(\$711,755)</b>	<b>(\$7,929,639)</b>	<b>(\$10,456,056)</b>

Notes:

- (1) See Exhibit 4, Page 2
- (2) See Exhibit 4, Page 3
- (3) = (1) - (2)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Citizens Property Insurance Corporation (CPIC)  
Estimate of Funds Available to pay Hurricane Losses  
(\$ in thousands)

	<u>Personal Lines Account</u>	<u>Commercial Lines Account</u>	<u>High Risk Account</u>	<b>Total: All Accounts</b>
<b><u>Funds Available from U/W Operations as of September 30, 2009</u></b>				
(1) Adjusted GAAP Total Net Assets	\$1,585,525	\$924,122	\$1,551,835	
(2) Projected Investment Income as of December 31, 2010	<u>39,737</u>	<u>23,161</u>	<u>38,892</u>	
(3) Projected Value of Current Assets as of 12/31/10	\$1,625,262	\$947,283	\$1,590,727	<b>\$4,163,272</b>
<b><u>Funds Available from U/W Operations (October 1, 2009 to December 31, 2010)</u></b>				
(4) Estimated Net Premium Earned	\$749,978	\$219,139	\$742,671	
(5) Estimated Loss & LAE Incurred	(408,268)	(64,357)	(82,523)	
(6) Estimated Expenses Incurred	(207,489)	(70,523)	(437,546)	
(7) Projected Investment Income as of December 31, 2010	<u>1,672</u>	<u>1,049</u>	<u>2,772</u>	
(8) Estimated Funds Available from Underwriting Operations	\$135,893	\$85,307	\$225,374	<b>\$446,574</b>
<b>(9) Total Funds Available for Hurricane Losses at 12/31/2010</b>	<b><u>\$1,761,154</u></b>	<b><u>\$1,032,590</u></b>	<b><u>\$1,816,102</u></b>	<b><u>\$4,609,846</u></b>

Notes:

- (1) From CPIC's *Financial Statements for the Year Ended September 30, 2009*
- (2) & (7) Assumes an investment return of 2.0%, selected based on historical investment returns from CPIC's 2004-2009 financial statements
- (3) = (1) + (2)
- (4) - (6) From CPIC's *2010 Operating Budget*; adjustments made to budget amounts when incurred expenses at 9/30/09 were greater than projected expenses at 12/31/09
- (8) = (4) + (5) + (6) + (7)
- (9) = (3) + (8)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Citizens Property Insurance Corporation (CPIC)  
Estimate of Net Loss & LAE by Account from a 1-in-100 Year Hurricane  
(\$ in thousands)

	<u>Personal Lines Account</u>	<u>Commercial Lines Account (Residential)</u>	<u>High Risk Account (Residential)</u>	<b>Sub-Total: Lines Covered by FHCF</b>	<u>Commercial Lines Account (Non-Residential)</u>	<u>High Risk Account (Non-Residential)</u>	<b>Total</b>
(1) Gross Hurricane Loss & LAE	\$5,477,810	\$2,585,434	\$13,881,999	<b>\$21,945,244</b>	\$84,640	\$1,616,688	<b>\$23,646,572</b>
<b>FHCF Recoveries:</b>							
(2) Mandatory Layer <sup>2</sup>	1,323,221	644,031	4,002,335	<b>5,969,588</b>	N/A	N/A	<b>5,969,588</b>
(3) TICL Layer <sup>3</sup>	578,773	281,698	1,750,611	<b>2,611,083</b>	N/A	N/A	<b>2,611,083</b>
(4) Total FHCF Recoveries	1,901,994	925,729	5,752,947	<b>8,580,670</b>	N/A	N/A	<b>8,580,670</b>
(5) Net Hurricane Loss & LAE	\$3,575,816	\$1,659,705	\$8,129,052	<b>\$13,364,574</b>	\$84,640	\$1,616,688	<b>\$15,065,902</b>
<b>(6) Net Hurricane Loss &amp; LAE by Account:</b>	<b>\$3,575,816</b>	<b>\$1,744,346</b>	<b>\$9,745,741</b>				

Notes:

The FHCF only provides reinsurance coverage for Residential property insurance policies. CPIC also writes Non-Residential property insurance policies, which are not covered by the FHCF. The Non-Residential portion of CPIC's Gross Hurricane Loss & LAE is estimated based on CPIC's PML estimates from RMS RiskLink v9.0, which include estimates by Policy Type and by Account

(1) See Exhibit 4, Page 4

(2) The FHCF's Mandatory Coverage layer is \$18.29 billion in excess of industry retention of \$7.385 billion; based on the FHCF's 2009/2010 Coverage Selections and Premium Calculations, CPIC's High Risk Account represents 21.9% of the exposure in the layer and CPIC's Personal Lines and Commercial Lines Accounts represent 10.8% of the exposure in the layer

(3) Assumes that each account in CPIC purchases the maximum amount of TICL coverage available (using same exposure percentages as the Mandatory Coverage layer); The maximum coverage option for the 2010 storm season is \$8 billion

(4) = (2) + (3)

(5) = (1) - (4)

(6) = Sum of Residential and Non-Residential segments in Row (5)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Citizens Property Insurance Corporation (CPIC)  
Estimate of Gross Loss & LAE by Account from a 1-in-100 Year Hurricane  
(\$ in thousands)

	<u>Personal Lines Account</u>	<u>Commercial Lines Account</u>	<u>High Risk Account</u>	<b>Total: All Accounts</b>
(1) Modeled 1-in-100 Year Hurricane Loss				<b>\$17,812,041</b>
(2) Distribution of Modeled Loss by Account	23.2%	11.3%	65.5%	
(3) Pro-rated 1-in-100 Year Hurricane Loss	\$4,126,221	\$2,011,263	\$11,674,557	<b>\$17,812,041</b>
(4) Factor to Adjust CPIC's Hurricane Model to the FHCF's 5-Model Average	1.264	1.264	1.264	
(5) Provision for Loss Adjustment Expense	1.050	1.050	1.050	
(6) Adjusted 1-in-100 Year Hurricane Loss	<u>\$5,477,810</u>	<u>\$2,670,075</u>	<u>\$15,498,688</u>	<b>\$23,646,572</b>
(7) Commercial Non-Residential as % of Total Account	0.0%	3.2%	10.4%	
<b>Gross Hurricane Loss &amp; LAE by Account &amp; by Policy Type:</b>				
	<u>Personal Lines Account</u>	<u>Commercial Lines Account</u>	<u>High Risk Account</u>	<b>Total: All Accounts</b>
(8) Residential	\$5,477,810	\$2,585,434	\$13,881,999	<b>\$21,945,244</b>
(9) Non-Residential	0	84,640	1,616,688	<b>1,701,329</b>
(10) Total	<u>\$5,477,810</u>	<u>\$2,670,075</u>	<u>\$15,498,688</u>	<b>\$23,646,572</b>

Notes:

- (1) From CPIC's table of Occurrence Probability Loss Comparisons, based on RMS RiskLink v9.0
- (2) From CPIC's table of Occurrence Probability Loss Comparisons by Account, based on RMS RiskLink v9.0
- (3) = Total (1) x (2)
- (4) RMS RiskLink v9.0 model provides a lower 1-in-100 year loss estimate than the weighted average of 5 models used by the FHCF; Adjustment factor developed by comparing the PMLs from each of the 5 models shown in the 2008/2009 model submissions to the Florida Commission on Hurricane Loss Projection Methodology to the weighted average PML across all 5 models
- (5) Applies a 5% provision for loss adjustment expense, which is consistent with the FHCF reimbursements
- (6) = (3) x (4) x (5)
- (7) Estimated from CPIC's tables of Occurrence Probability Loss Comparisons by Account and by Policy Type, both based on RMS RiskLink v9.0
- (8) = (6) x [100% - (7)]
- (9) = (6) x (7)
- (10) = (8) + (9)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Florida Hurricane Catastrophe Fund (FHCF)  
Development of Emergency Assessments Assuming Maximum Annual Assessment Rate (6%)  
(\$ in thousands)

Year	(1)	(2)	(3)		(4)	(5)	(6)
	Assessment Base	Beginning Debt	Assessment %	Assessment \$	Debt Interest	Year-End Debt	
2010	\$38,481,254					\$16,370,056	
2011	39,635,692	\$16,370,056	6.0%	\$2,378,142	\$1,309,604	15,301,519	
2012	40,824,763	15,301,519	6.0%	2,449,486	1,224,122	14,076,155	
2013	42,049,506	14,076,155	6.0%	2,522,970	1,126,092	12,679,277	
2014	43,310,991	12,679,277	6.0%	2,598,659	1,014,342	11,094,960	
2015	44,610,320	11,094,960	6.0%	2,676,619	887,597	9,305,937	
2016	45,948,630	9,305,937	6.0%	2,756,918	744,475	7,293,494	
2017	47,327,089	7,293,494	6.0%	2,839,625	583,480	5,037,349	
2018	48,746,902	5,037,349	6.0%	2,924,814	402,988	2,515,522	
2019	50,209,309	2,515,522	5.4%	2,716,764	201,242	0	
<b>Total</b>				<b>\$23,863,998</b>	<b>\$7,493,942</b>		

Notes:

- (1) See Exhibit 5, Page 11 for 2010 Assessment Base; Assessment base is assumed to increase 3.0% annually
- (2) = Column (6) of prior year
- (3) = Assumes maximum FHCF assessment rate of 6.0% until bonded debt is retired
- (4) = (1) x (3)
- (5) = (2) x 8.0%, where 8.0% is the average interest rate that will be paid for Tax-Exempt Revenue Bonds issued as a result of a 1-in-100 year hurricane
- (6) = (2) + (5) - (4)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Florida Hurricane Catastrophe Fund (FHCF)  
Development of Emergency Assessments Assuming Maximum Duration (30 Years)  
(\$ in thousands)

Year	(1)	(2)	(3)		(5)	(6)
	Assessment Base	Beginning Debt	Assessment %	Assessment \$	Bond Interest	Year-End Debt
2010	\$38,481,254					\$16,370,056
2011	39,635,692	\$16,370,056	2.7%	\$1,078,702	\$1,309,604	16,600,959
2012	40,824,763	16,600,959	2.7%	1,111,063	1,328,077	16,817,973
2013	42,049,506	16,817,973	2.7%	1,144,395	1,345,438	17,019,016
2014	43,310,991	17,019,016	2.7%	1,178,726	1,361,521	17,201,811
2015	44,610,320	17,201,811	2.7%	1,214,088	1,376,145	17,363,868
2016	45,948,630	17,363,868	2.7%	1,250,511	1,389,109	17,502,466
2017	47,327,089	17,502,466	2.7%	1,288,026	1,400,197	17,614,637
2018	48,746,902	17,614,637	2.7%	1,326,667	1,409,171	17,697,141
2019	50,209,309	17,697,141	2.7%	1,366,467	1,415,771	17,746,445
2020	51,715,588	17,746,445	2.7%	1,407,461	1,419,716	17,758,700
2021	53,267,056	17,758,700	2.7%	1,449,685	1,420,696	17,729,711
2022	54,865,067	17,729,711	2.7%	1,493,175	1,418,377	17,654,912
2023	56,511,019	17,654,912	2.7%	1,537,971	1,412,393	17,529,335
2024	58,206,350	17,529,335	2.7%	1,584,110	1,402,347	17,347,572
2025	59,952,540	17,347,572	2.7%	1,631,633	1,387,806	17,103,744
2026	61,751,117	17,103,744	2.7%	1,680,582	1,368,300	16,791,462
2027	63,603,650	16,791,462	2.7%	1,731,000	1,343,317	16,403,779
2028	65,511,760	16,403,779	2.7%	1,782,930	1,312,302	15,933,152
2029	67,477,112	15,933,152	2.7%	1,836,417	1,274,652	15,371,387
2030	69,501,426	15,371,387	2.7%	1,891,510	1,229,711	14,709,588
2031	71,586,469	14,709,588	2.7%	1,948,255	1,176,767	13,938,099
2032	73,734,063	13,938,099	2.7%	2,006,703	1,115,048	13,046,444
2033	75,946,084	13,046,444	2.7%	2,066,904	1,043,716	12,023,256
2034	78,224,467	12,023,256	2.7%	2,128,911	961,860	10,856,205
2035	80,571,201	10,856,205	2.7%	2,192,778	868,496	9,531,923
2036	82,988,337	9,531,923	2.7%	2,258,562	762,554	8,035,915
2037	85,477,987	8,035,915	2.7%	2,326,319	642,873	6,352,470
2038	88,042,327	6,352,470	2.7%	2,396,108	508,198	4,464,559
2039	90,683,597	4,464,559	2.7%	2,467,991	357,165	2,353,733
2040	93,404,104	2,353,733	2.7%	2,542,031	188,299	0
<b>Total</b>				<b>\$51,319,682</b>	<b>\$34,949,626</b>	

Notes:

- (1) See Exhibit 5, Page 11 for 2010 Assessment Base; Assessment base is assumed to increase 3.0% annually
- (2) = Column (6) of prior year
- (3) = FHCF assessment rate of 2.7% is derived from the amortization of the debt so that the bonded debt would be retired in 30 years
- (4) = (1) x (3)
- (5) = (2) x 8.0%, where 8.0% is the average interest rate that will be paid for Tax-Exempt Revenue Bonds issued as a result of a 1-in-100 year hurricane
- (6) = (2) + (5) - (4)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Citizens Property Insurance Corporation (CPIC)  
Summary of Policyholder Surcharges & Assessments -- Assuming Maximum Annual Percentages

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	PLA Account			CLA Account			HRA Account			Total - All Accounts		
	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3
2011	15.0%	4.2%		15.0%	0.9%		15.0%	6.0%		45.0%	11.2%	
2012			0.0%			0.0%			10.0%			10.0%
2013									6.3%			6.3%

Notes:

- (1) - (3) See Exhibit 5, Page 4, Column (3)
- (4) - (6) See Exhibit 5, Page 5, Column (3)
- (7) - (9) See Exhibit 5, Page 6, Column (3)
- (10) = (1) + (4) + (7)
- (11) = (2) + (5) + (8)
- (12) = (3) + (6) + (9)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Citizens Property Insurance Corporation (CPIC) - Personal Lines Account (PLA)  
Development of Policyholder Surcharge & Assessments -- Assuming Maximum Annual Percentages  
(\$ in thousands)

Year	Assessment Tier	(1)	(2)	(3) Assessment		(5)	(6)
		Assessment Base	Beginning Debt	%	\$	Debt Interest	Year-End Debt
2010							\$1,814,662
2011	Tier 1	\$2,855,001	\$1,814,662	15.0%	\$428,250		
	<u>Tier 2</u>	<u>36,165,889</u>	1,386,412	4.2%	<u>1,531,585</u>		
	Total	\$39,020,890			\$1,959,835	\$145,173	0
2012	Tier 3	40,191,517	0	0.0%	0	0	0
<u>Total</u>					<u>\$1,959,835</u>	<u>\$145,173</u>	

Notes:

- (1) See Exhibit 5, Page 11 for 2010 Assessment Bases for each Tier; Assessment base is assumed to increase 3.0% annually
- (2) = Column (6) of prior year
- (3) = Assumes maximum assessment rates of 15.0%, 6.0% & 10.0% for Tiers 1, 2 & 3, respectively, until bonded debt is retired
  - Tier 1 assessment allows for a maximum assessment of 15.0% on all CPIC policies during the first year
  - If Tier 1 proceeds are insufficient, a Tier 2 assessment allows for a maximum assessment of 6.0% all non-CPIC policies during the first year
  - If Tier 2 proceeds are insufficient, a Tier 3 assessment allows for a maximum assessment of 10.0% on all policies up to 10 years or until deficit is satisfied
- (4) = (1) x (3)
- (5) = (2) x 8.0%, where 8.0% is the average interest rate that will be paid for Tax-Exempt Revenue Bonds issued as a result of a 1-in-100 year hurricane
- (6) = (2) + (5) - (4)



**Florida Department of Financial Services**  
 Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season  
 Citizens Property Insurance Corporation (CPIC) - Commercial Lines Account (CLA)  
 Development of Policyholder Surcharge & Assessments -- Assuming Maximum Annual Percentages  
 (\$ in thousands)

Year	Assessment Tier	(1)	(2)	(3)		(4)	(5)	(6)
		Assessment Base	Beginning Debt	Assessment %	Assessment \$	Debt Interest	Year-End Debt	
2010								\$711,755
2011	Tier 1	\$2,855,001	\$711,755	15.0%	\$428,250			
	<u>Tier 2</u>	<u>36,165,889</u>	283,505	0.9%	<u>340,445</u>			
	Total	\$39,020,890			\$768,696	\$56,940		0
2012	Tier 3	40,191,517	0	0.0%	0	0		0
<b>Total</b>					<b>\$768,696</b>	<b>\$56,940</b>		

**Notes:**

- (1) See Exhibit 5, Page 11 for 2010 Assessment Bases for each Tier; Assessment base is assumed to increase 3.0% annually
- (2) = Column (6) of prior year
- (3) = Assumes maximum assessment rates of 15.0%, 6.0% & 10.0% for Tiers 1, 2 & 3, respectively, until bonded debt is retired
  - Tier 1 assessment allows for a maximum assessment of 15.0% on all CPIC policies during the first year
  - If Tier 1 proceeds are insufficient, a Tier 2 assessment allows for a maximum assessment of 6.0% all non-CPIC policies during the first year
  - If Tier 2 proceeds are insufficient, a Tier 3 assessment allows for a maximum assessment of 10.0% on all policies up to 10 years or until deficit is satisfied
- (4) = (1) x (3)
- (5) = (2) x 8.0%, where 8.0% is the average interest rate that will be paid for Tax-Exempt Revenue Bonds issued as a result of a 1-in-100 year hurricane
- (6) = (2) + (5) - (4)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Citizens Property Insurance Corporation (CPIC) - High Risk Account (HRA)  
Development of Policyholder Surcharge & Assessments -- Assuming Maximum Annual Percentages  
(\$ in thousands)

Year	Assessment Tier	(1)	(2)	(3)		(4)	(5)	(6)
		Assessment Base	Beginning Debt	Assessment %	Assessment \$	Debt Interest	Year-End Debt	
2010								\$7,929,639
2011	Tier 1	\$2,855,001	\$7,929,639	15.0%	\$428,250			
	Tier 2	<u>36,165,889</u>	7,501,389	6.0%	<u>2,169,953</u>			
	Total	\$39,020,890			\$2,598,204	\$634,371		5,965,806
2012	Tier 3	40,191,517	5,965,806	10.0%	4,019,152	477,265		2,423,919
2013	Tier 3	41,397,262	2,423,919	6.3%	2,617,833	193,914		0
<b>Total</b>					<b>\$9,235,188</b>	<b>\$1,305,549</b>		

Notes:

- (1) See Exhibit 5, Page 11 for 2010 Assessment Bases for each Tier; Assessment base is assumed to increase 3.0% annually
- (2) = Column (6) of prior year
- (3) = Assumes maximum assessment rates of 15.0%, 6.0% & 10.0% for Tiers 1, 2 & 3, respectively, until bonded debt is retired
  - Tier 1 assessment allows for a maximum assessment of 15.0% on all CPIC policies during the first year
  - If Tier 1 proceeds are insufficient, a Tier 2 assessment allows for a maximum assessment of 6.0% all non-CPIC policies during the first year
  - If Tier 2 proceeds are insufficient, a Tier 3 assessment allows for a maximum assessment of 10.0% on all policies up to 10 years or until deficit is satisfied
- (4) = (1) x (3)
- (5) = (2) x 8.0%, where 8.0% is the average interest rate that will be paid for Tax-Exempt Revenue Bonds issued as a result of a 1-in-100 year hurricane
- (6) = (2) + (5) - (4)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Citizens Property Insurance Corporation (CPIC)  
Summary of Policyholder Surcharges & Assessments -- Assuming Tempered Annual Percentages

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	PLA Account			CLA Account			HRA Account			Total - All Accounts		
	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier 3
2011	15.0%	4.2%		15.0%	0.9%		15.0%	6.0%		45.0%	11.2%	
2012			0.0%			0.0%			1.3%			1.3%
2013									1.3%			1.3%
2014									1.3%			1.3%
2015									1.3%			1.3%
2016									1.3%			1.3%
2017									1.3%			1.3%
2018									1.3%			1.3%
2019									1.3%			1.3%
2020									1.3%			1.3%
2021									1.3%			1.3%
2022									1.3%			1.3%
2023									1.3%			1.3%
2024									1.3%			1.3%
2025									1.3%			1.3%
2026									1.3%			1.3%
2027									1.3%			1.3%
2028									1.3%			1.3%
2029									1.3%			1.3%
2030									1.3%			1.3%

Notes:

- (1) - (3) See Exhibit 5, Page 8, Column (3)
- (4) - (6) See Exhibit 5, Page 9, Column (3)
- (7) - (9) See Exhibit 5, Page 10, Column (3)
- (10) = (1) + (4) + (7)
- (11) = (2) + (5) + (8)
- (12) = (3) + (6) + (9)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Citizens Property Insurance Corporation (CPIC) - Personal Lines Account (PLA)  
Development of Policyholder Surcharge & Assessments -- Assuming Tempered Annual Percentages  
(\$ in thousands)

Year	Assessment Tier	(1)	(2)	(3) Assessment		(5)	(6)
		Assessment Base	Beginning Debt	%	\$	Debt Interest	Year-End Debt
2010							\$1,814,662
2011	Tier 1	\$2,855,001	\$1,814,662	15.0%	\$428,250		
	<u>Tier 2</u>	<u>36,165,889</u>	1,386,412	4.2%	<u>1,531,585</u>		
	Total	\$39,020,890			\$1,959,835	\$145,173	0
2012	Tier 3	40,191,517	0	0.0%	0	0	0
<u>Total</u>					<u>\$1,959,835</u>	<u>\$145,173</u>	

Notes:

- (1) See Exhibit 5, Page 11 for 2010 Assessment Bases for each Tier; Assessment base is assumed to increase 3.0% annually
- (2) = Column (6) of prior year
- (3) = Assumes tempered assessment rate of 15.0% for Tier 1, maximum assessment rate of 4.2% for Tier 2, and a 0.0% assessment rate for Tier 3 to retire debt
- (4) = (1) x (3)
- (5) = (2) x 8.0%, where 8.0% is the average interest rate that will be paid for Tax-Exempt Revenue Bonds issued as a result of a 1-in-100 year hurricane
- (6) = (2) + (5) - (4)

**Florida Department of Financial Services**  
 Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season  
 Citizens Property Insurance Corporation (CPIC) - Commercial Lines Account (CLA)  
 Development of Policyholder Surcharge & Assessments -- Assuming Tempered Annual Percentages  
 (\$ in thousands)

Year	Assessment Tier	(1)	(2)	(3) Assessment		(5)	(6)
		Assessment Base	Beginning Debt	%	\$	Debt Interest	Year-End Debt
2010							\$711,755
2011	Tier 1	\$2,855,001	\$711,755	15.0%	\$428,250		
	<u>Tier 2</u>	<u>36,165,889</u>	283,505	0.9%	<u>340,445</u>		
	Total	\$39,020,890			\$768,696	\$56,940	0
2012	Tier 3	40,191,517	0	0.0%	0	0	0
<u>Total</u>					<u>\$768,696</u>	<u>\$56,940</u>	

Notes:

- (1) See Exhibit 5, Page 11 for 2010 Assessment Bases for each Tier; Assessment base is assumed to increase 3.0% annually
- (2) = Column (6) of prior year
- (3) = Assumes tempered assessment rate of 15.0% for Tier 1 and a 0.9% assessment rate for Tier 2 to retire debt
- (4) = (1) x (3)
- (5) = (2) x 8.0%, where 8.0% is the average interest rate that will be paid for Tax-Exempt Revenue Bonds issued as a result of a 1-in-100 year hurricane
- (6) = (2) + (5) - (4)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Citizens Property Insurance Corporation (CPIC) - High Risk Account (HRA)  
Development of Policyholder Surcharge & Assessments -- Assuming Tempered Annual Percentages  
(\$ in thousands)

Year	Assessment Tier	(1)	(2)	(3) Assessment		(5) Debt Interest	(6) Year-End Debt
		Assessment Base	Beginning Debt	%	\$		
2010							\$7,929,639
2011	Tier 1	\$2,855,001	\$7,929,639	15.0%	\$428,250		
	Tier 2	<u>36,165,889</u>	7,501,389	6.0%	<u>2,169,953</u>		
	Total	\$39,020,890			\$2,598,204	\$634,371	5,965,806
2012	Tier 3	40,191,517	5,965,806	1.3%	502,433	477,265	5,940,638
2013	Tier 3	41,397,262	5,940,638	1.3%	517,506	475,251	5,898,382
2014	Tier 3	42,639,180	5,898,382	1.3%	533,031	471,871	5,837,222
2015	Tier 3	43,918,356	5,837,222	1.3%	549,022	466,978	5,755,177
2016	Tier 3	45,235,906	5,755,177	1.3%	565,493	460,414	5,650,098
2017	Tier 3	46,592,983	5,650,098	1.3%	582,458	452,008	5,519,648
2018	Tier 3	47,990,773	5,519,648	1.3%	599,932	441,572	5,361,289
2019	Tier 3	49,430,496	5,361,289	1.3%	617,929	428,903	5,172,262
2020	Tier 3	50,913,411	5,172,262	1.3%	636,467	413,781	4,949,576
2021	Tier 3	52,440,813	4,949,576	1.3%	655,561	395,966	4,689,981
2022	Tier 3	54,014,038	4,689,981	1.3%	675,228	375,198	4,389,951
2023	Tier 3	55,634,459	4,389,951	1.3%	695,485	351,196	4,045,662
2024	Tier 3	57,303,493	4,045,662	1.3%	716,350	323,653	3,652,965
2025	Tier 3	59,022,597	3,652,965	1.3%	737,840	292,237	3,207,362
2026	Tier 3	60,793,275	3,207,362	1.3%	759,975	256,589	2,703,976
2027	Tier 3	62,617,074	2,703,976	1.3%	782,775	216,318	2,137,520
2028	Tier 3	64,495,586	2,137,520	1.3%	806,258	171,002	1,502,263
2029	Tier 3	66,430,453	1,502,263	1.3%	830,446	120,181	791,999
2030	Tier 3	68,423,367	791,999	1.3%	855,359	63,360	0
<b>Total</b>					<b>\$15,217,752</b>	<b>\$7,288,113</b>	

Notes:

- (1) See Exhibit 5, Page 11 for 2010 Assessment Bases for each Tier; Assessment base is assumed to increase 3.0% annually
- (2) = Column (6) of prior year
- (3) = Assumes tempered assessment rate of 15.0% for Tier 1, maximum assessment rate of 6.0% for Tier 2, and a 1.3% assessment rate for Tier 3 to retire debt in 20 years
- (4) = (1) x (3)
- (5) = (2) x 8.0%, where 8.0% is the average interest rate that will be paid for Tax-Exempt Revenue Bonds issued as a result of a 1-in-100 year hurricane
- (6) = (2) + (5) - (4)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of Assessment Bases as of December 31, 2010  
(\$ in thousands)

ASL	Assessable Line of Business	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
		2004	2005	2006	2007	2008	2009 (Projected)	2010 (Projected)	
		<b>Direct Written Premium in Florida</b>							
1	Fire (Non-Citizens)	\$647,882	\$774,891	\$1,132,363	\$1,223,199	\$1,355,962	\$1,355,962	\$1,355,962	
1a	Fire (Citizens)	41,777	51,049	220,758	230,692	\$177,681	177,681	177,681	
2.1	Allied (Non-Citizens)	809,738	1,036,856	1,296,918	1,435,812	\$1,479,714	1,479,714	1,479,714	
2.1a	Allied (Citizens)	841,407	1,046,543	1,881,253	1,985,025	\$1,558,659	1,558,659	1,558,659	
3	Farmowners Multiple Peril	20,880	23,277	26,727	27,307	26,458	26,458	26,458	
4	Homeowners Multiple Peril (Non-Citizens)	4,520,974	5,592,782	6,751,149	7,083,011	6,210,393	6,210,393	6,210,393	
4a	Homeowners Multiple Peril (Citizens)	517,903	511,493	1,298,388	1,502,254	1,035,506	1,035,506	1,035,506	
5.1	Commercial Multiple-Peril (Non-Liability)	1,072,390	1,208,996	1,439,068	1,444,651	1,391,531	1,391,531	1,391,531	
5.2	Commercial Multiple-Peril (Liability)	783,158	855,289	855,995	760,319	617,969	617,969	617,969	
6	Mortgage Guaranty	417,641	446,405	472,654	523,633	548,762	548,762	548,762	
8	Ocean Marine	246,327	271,033	301,392	313,146	296,335	296,335	296,335	
9	Inland Marine	722,161	867,612	1,086,630	1,126,330	952,662	952,662	952,662	
10	Financial Guaranty	97,901	115,050	152,019	116,102	76,374	76,374	76,374	
11	Medical Malpractice	858,534	848,543	847,260	662,559	596,895	596,895	596,895	
12	Earthquake	20,022	24,452	33,929	35,432	31,857	31,857	31,857	
17	Other Liability	2,554,157	2,949,991	3,302,057	3,170,709	2,778,781	2,778,781	2,778,781	
18	Products Liability	214,081	256,313	293,480	254,166	181,053	181,053	181,053	
19.1	Private Passenger Auto No-Fault (PIP)	2,450,607	2,551,920	2,523,181	2,150,041	2,491,302	2,491,302	2,491,302	
19.2	Other Private Passenger Auto Liability	6,018,864	6,181,014	6,387,369	6,365,311	6,098,233	6,098,233	6,098,233	
19.3	Commercial Auto No-Fault (PIP)	65,232	70,932	79,335	72,384	67,759	67,759	67,759	
19.4	Other Commercial Auto Liability	1,514,343	1,598,314	1,686,573	1,539,898	1,337,834	1,337,834	1,337,834	
21.1	Private Passenger Auto Physical Damage	3,412,180	3,523,465	3,758,343	3,831,828	3,725,189	3,725,189	3,725,189	
21.2	Commercial Auto Physical Damage	423,305	454,893	475,126	435,801	356,431	356,431	356,431	
22	Aircraft (all perils)	138,213	158,873	167,301	150,246	142,394	142,394	142,394	
23	Fidelity	55,244	55,144	54,012	56,886	53,471	53,471	53,471	
24	Surety	274,459	346,940	385,209	432,505	377,976	377,976	377,976	
26	Burglary & Theft	6,749	6,333	12,346	9,491	9,701	9,701	9,701	
27	Boiler & Machinery	51,051	49,257	52,211	54,875	61,472	61,472	61,472	
28	Credit	51,488	54,564	67,017	67,181	52,256	52,256	52,256	
34	Aggregate Write-Ins	527,614	527,549	504,472	572,697	96,154	96,154	96,154	
	Surplus Lines <sup>1</sup>	2,906,419	3,598,987	4,573,592	4,715,137	4,294,489	4,294,489	4,294,489	
	<b>Total - Assessable Lines</b>	<b>\$32,282,701</b>	<b>\$36,058,758</b>	<b>\$42,118,126</b>	<b>\$42,348,628</b>	<b>\$38,481,254</b>	<b>\$38,481,254</b>	<b>\$38,481,254</b>	
				(8)	<b>FHCF Assessment Base:</b>			<b>\$38,481,254</b>	
				(9)	<b>CPIC Tier 1 Assessment Base:</b>			<b>2,771,846</b>	
				(10)	<b>CPIC Tier 2 Assessment Base:</b>			<b>35,112,513</b>	
				(11)	<b>CPIC Tier 3 Assessment Base:</b>			<b>37,884,359</b>	

**Indicated Premium Trend - Total Assessment Base:**

					<u>Selected</u>
Current Year / Prior Year	11.7%	16.8%	0.5%	-9.1%	
Exponential Trend	5.3%	2.0%	-4.4%	-9.1%	3.0%

**Notes:**

- (1) - (5) From Industry Aggregate Annual Statements, Florida state pages; Surplus Lines premium from FLSO Annual Statements ([www.FLSO.com](http://www.FLSO.com))
- (6) & (7) = Column (5); Assumes overall 0% premium trend from 2008 to 2010; Selected premium trend of 3.0% applies after 2010
- (8) = Column (7) Total; FHCF assessment base equals the total of all assessable lines
- (9) CPIC Tier 1 assessment base includes only Citizens premium (Annual Statement Lines 1a, 2.1a & 4a)
- (10) CPIC Tier 2 assessment base includes all assessable lines except Citizens and Medical Malpractice (excludes Annual Statement Lines 1a, 2.1a, 4a & 11)
- (11) = (9) + (10); CPIC Tier 3 assessment base = Tier 1 + Tier 2

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Change in Reinsurance Costs after 1-in-100 Year Hurricane in Florida  
(\$ in millions)

**Historical Catastrophe Losses (Indexed to 2008 Dollars) & Reinsurance Prices:**

Year	Weather-Related Natural Disasters	Earthquake / Tsunami	Man-Made Disasters	Total Insured Losses	Reinsurance Price Index	Reinsurance Price Change
1989	\$13,942	\$2,878	\$7,746	\$24,566		
1990	22,841	321	5,820	28,983	100	
1991	19,757	5	5,599	25,361	120	20.0%
1992	36,809	135	7,207	44,151	235	95.8%
1993	13,656	112	5,319	19,087	380	61.7%
1994	8,416	20,372	6,896	35,684	325	-14.5%
1995	19,152	3,493	3,879	26,524	290	-10.8%
1996	12,169	-	6,506	18,676	250	-13.8%
1997	6,871	147	4,589	11,608	205	-18.0%
1998	20,623	66	5,137	25,826	170	-17.1%
1999	34,170	2,799	7,740	44,708	150	-11.8%
2000	10,365	25	5,230	15,620	150	0.0%
2001	12,711	784	29,914	43,409	200	33.3%
2002	14,610	-	2,743	17,353	245	22.5%
2003	18,878	471	3,057	22,406	255	4.1%
2004	47,937	3,029	3,881	54,846	230	-9.8%
2005	110,934	258	7,029	118,221	220	-4.3%
2006	12,734	87	4,689	17,510	290	31.8%
2007	23,700	454	4,458	28,611	273	-5.9%
2008	44,270	422	7,812	52,504	246	-9.9%
2009					266	8.1%

**3 Most Costly Insurance Losses (1970-2008):**

Major Event	Insured Losses for Event	Insured Losses for Year	Reinsurance Price Index		
			Before Event	After Event	Price Change
Hurricane Katrina (2005)	\$71,300	\$118,221	220	290	31.8%
Hurricane Andrew (1992)	24,552	44,151	235	380	61.7%
World Trade Center (2001)	22,835	43,409	200	245	22.5%

Estimated Insured Losses from a 1-in-100 Year Hurricane in Florida: \$79,449

**Selected Change in Reinsurance Costs (for 2011 storm season) after 1-in-100 Year Hurricane in Florida: 40.0%**

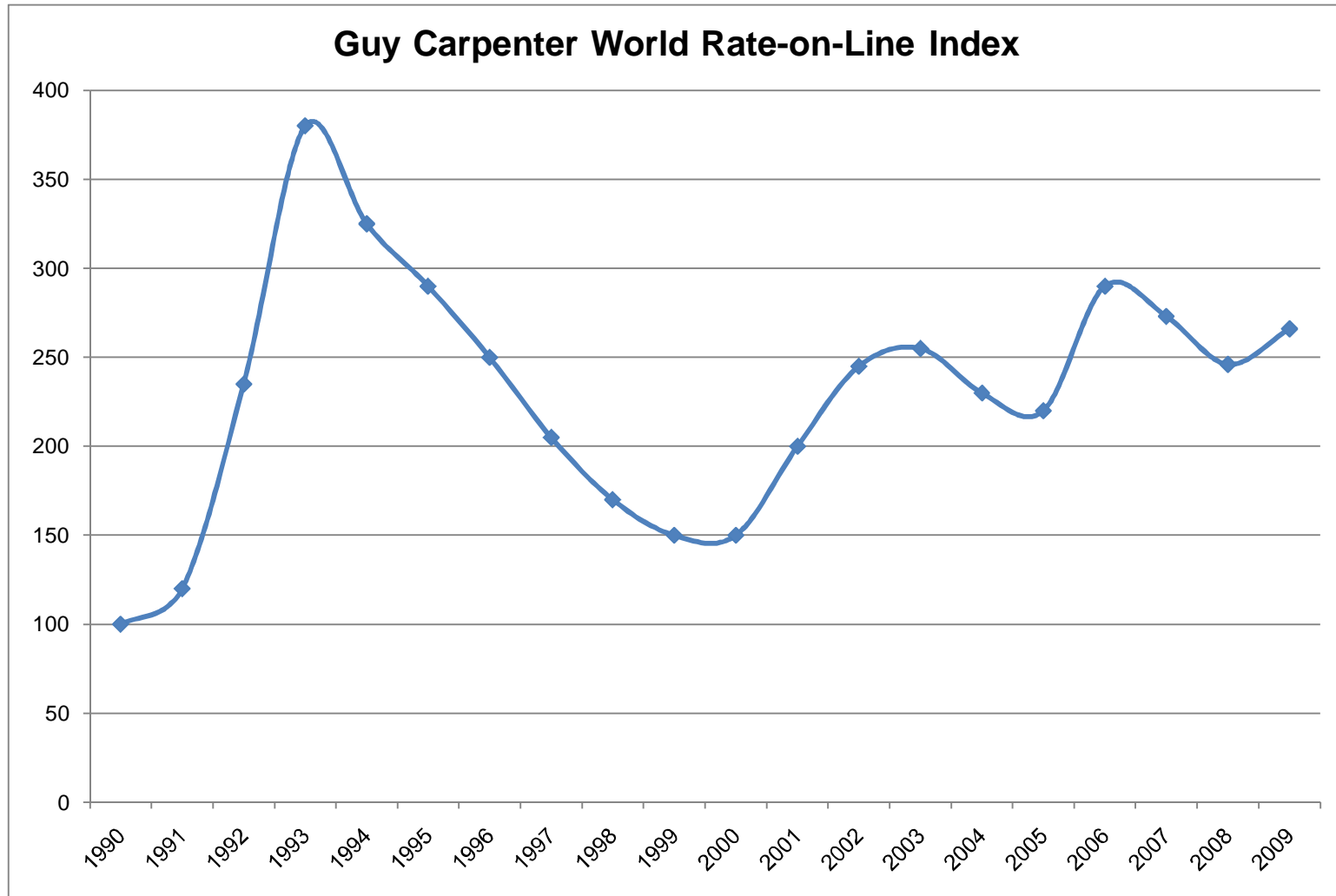
Notes:

2007 & 2008 losses from 2008 & 2009 Swiss Re reports on *Natural catastrophes and man-made disasters*  
2006 & prior losses from 2009 report on Economic Impact of a 1-in-100 Year Hurricane in Florida  
Reinsurance price index from Guy Carpenter report on *World Catastrophe Reinsurance Market 2009*



**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Graph of Historical Reinsurance Price Index



Source: Guy Carpenter & Company, LLC; *World Catastrophe Reinsurance Market 2009*

**Florida Department of Financial Services**  
 Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Determination of Impact of Change in Reinsurance Costs on Residential Insurance Premiums

Sample Rate Filing	(1)	(2)		(3)	(4)	(5)
	Distribution within Sample	Reinsurance Costs		Variable Ratio	Overall Rate Level	Reinsurance Costs as % of Overall Rate
		Fixed Rate				
Filing 1	39.4%	32.1		10.6%	148.4	32.2%
Filing 2	9.3%	23.5		3.1%	108.0	24.9%
Filing 3	6.6%	0.0		9.8%	104.9	9.8%
Filing 4	5.8%	30.4		0.0%	114.0	26.7%
Filing 5	5.8%	0.0		25.8%	90.5	25.8%
Filing 6	5.1%	17.8		0.0%	109.8	16.2%
Filing 7	3.5%	20.9		0.0%	99.9	20.9%
Filing 8	3.2%	23.5		3.1%	114.7	23.6%
Filing 9	2.9%	19.3		7.1%	99.8	26.4%
Filing 10	2.8%	4.0		0.0%	100.0	4.0%
Filing 11	2.8%	22.3		0.0%	114.5	19.5%
Filing 12	2.5%	20.9		0.0%	113.8	18.4%
Filing 13	2.0%	32.1		10.6%	130.7	35.2%
Filing 14	1.4%	35.9		0.0%	106.2	33.8%
Filing 15	1.3%	26.6		0.0%	109.1	24.4%
Filing 16	1.0%	46.8		0.0%	130.3	35.9%
Filing 17	0.9%	46.8		0.0%	130.3	35.9%
Filing 18	0.6%	2.2		0.0%	100.0	2.2%
Filing 19	0.5%	19.5		0.0%	113.1	17.2%
Filing 20	0.5%	16.0		0.0%	104.9	15.3%
Filing 21	0.4%	13.3		0.0%	108.0	12.3%
Filing 22	0.4%	32.1		10.6%	108.6	40.2%
Filing 23	0.2%	0.0		4.6%	104.9	4.6%
Filing 24	0.2%	19.2		0.0%	126.8	15.1%
Filing 25	0.2%	22.3		0.0%	119.9	18.6%
Filing 26	0.2%	20.4		0.0%	100.0	20.4%
Filing 27	0.2%	5.0		22.5%	109.0	27.1%
Filing 28	0.1%	24.5		0.0%	104.9	23.4%
Filing 29	0.1%	23.5		3.1%	102.2	26.1%
Filing 30	0.1%	19.3		7.1%	109.6	24.7%
Filing 31	0.0%	13.4		0.0%	100.0	13.4%
Filing 32	0.0%	18.9		0.0%	108.1	17.5%
Filing 33	0.0%	0.0		4.9%	95.3	4.9%
Filing 34	0.0%	30.3		0.0%	99.7	30.4%
Filing 35	0.0%	19.3		7.1%	100.0	26.4%
Filing 36	0.0%	22.3		0.0%	104.2	21.4%
<b>Total Sample</b>	<b>100.0%</b>					<b>25.7%</b>
(6) Selected Ratio of Reinsurance Costs as % of Total Residential Premium:						25.0%
(7) Selected Change in Reinsurance Costs after 1-in-100 Year Hurricane in Florida:						40.0%
<b>(8) Estimated Change in Residential Premiums due to Change in Reinsurance Costs:</b>						<b>10.0%</b>

Notes:

- (1) Distribution of earned premium at current rate level from sample rate filings for various policy forms of 15 private insurance companies
- (2), (3), & (4) From Standardized Rate Indications Workbooks included in sample rate filings
- (2) = Fixed Expense Load for Non-FHCF Reinsurance Cost
- (3) = Variable Expense Load (as %) for Non-FHCF Reinsurance Cost
- (4) = 1 + Company Selected Rate Change
- (5) = [ (2) + ((3) x (4)) ] / (4)
- (6) Selection based on sample rate filings
- (7) See Exhibit 6, Page 1
- (8) = (6) x (7); For simplicity in our calculations, the 10% increase will be applied as a variable expense

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Summary of Household Impacts for Insurance-Related Expenditures -- Assuming CPIC Maximum Scenario

**2011 Household Impacts:**

Line of Insurance / Company	(1)	(2)	(3)	(4)
	1st Year Assessment / Surcharge Percentages		Premium Impact from Change in Reinsurance Costs	Total Impact
	FHCF	CPIC		
Homeowners: Citizens	2.7%	45.0%	0.0%	<b>47.7%</b>
Homeowners: Non-Citizens	2.7%	11.2%	10.0%	<b>23.9%</b>
Personal Auto	2.7%	11.2%	N/A	<b>13.9%</b>
All Other Assessable Lines	2.7%	11.2%	1.0%	<b>14.9%</b>

**Household Impacts (2012 - 2015):**

Line of Insurance / Company	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	FHCF	2012			2013		
		CPIC	Reinsurance	Total	CPIC	Reinsurance	Total
Homeowners: Citizens	2.7%	10.0%	0.0%	<b>12.7%</b>	6.3%	0.0%	<b>9.0%</b>
Homeowners: Non-Citizens	2.7%	10.0%	7.5%	<b>20.2%</b>	6.3%	5.0%	<b>14.0%</b>
Personal Auto	2.7%	10.0%	N/A	<b>12.7%</b>	6.3%	N/A	<b>9.0%</b>
All Other Assessable Lines	2.7%	10.0%	0.8%	<b>13.5%</b>	6.3%	0.5%	<b>9.5%</b>
	(12)	(13)	(14)	(15)	(16)	(17)	(18)
	FHCF	2014			2015		
		CPIC	Reinsurance	Total	CPIC	Reinsurance	Total
Homeowners: Citizens	2.7%	0.0%	0.0%	<b>2.7%</b>	0.0%	0.0%	<b>2.7%</b>
Homeowners: Non-Citizens	2.7%	0.0%	2.5%	<b>5.2%</b>	0.0%	2.5%	<b>5.2%</b>
Personal Auto	2.7%	0.0%	N/A	<b>2.7%</b>	0.0%	N/A	<b>2.7%</b>
All Other Assessable Lines	2.7%	0.0%	0.3%	<b>3.0%</b>	0.0%	0.3%	<b>3.0%</b>

**Notes:**

FHCF uses assessments from Maximum Duration Scenario

(1), (5), & (12) See Exhibit 5, Page 2, Column (3)

(2), (6), (9), (13), & (16) See Exhibit 5, Page 3, Columns (10) - (12)

(3) See Exhibit 7 for Non-Citizens Homeowners; Impact on All Other Assessable Lines expected to be minimal and judgmentally selected as 1.0%

(4) = (1) + (2) + (3)

(7), (10), (14), & (17) Assumes that the premium impact from reinsurance costs decreases proportionally by 25% of first year over 3 years

(8) = (5) + (6) + (7)

(11) = (5) + (9) + (10)

(15) = (12) + (13) + (14)

(18) = (12) + (16) + (17)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2011 on Households by County -- Assuming CPIC Maximum Scenario  
Summary of Overall Impacts Across ALL LINES of Insurance

County	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Current Average Cost Per Household				Projected Average Cost Per Household				Total Cost Increase	
	Homeowners	Auto	All Other	TOTAL	Homeowners	Auto	All Other	TOTAL	Increase (%)	Increase (\$)
Alachua	\$999	\$1,318	\$2,537	\$4,855	\$1,191	\$1,502	\$2,839	\$5,531	13.9%	\$677
Baker	964	1,228	2,591	4,783	1,157	1,399	2,896	5,451	14.0%	668
Bay	1,357	1,273	1,928	4,558	1,712	1,450	2,166	5,328	16.9%	770
Bradford	964	1,520	2,372	4,856	1,153	1,731	2,652	5,536	14.0%	681
Brevard	1,392	1,437	2,477	5,305	1,771	1,636	2,782	6,189	16.7%	884
Broward	1,749	2,016	3,125	6,890	2,280	2,296	3,515	8,091	17.4%	1,201
Calhoun	1,015	1,172	1,783	3,971	1,227	1,335	1,996	4,558	14.8%	587
Charlotte	1,527	1,501	1,857	4,885	1,981	1,710	2,089	5,780	18.3%	894
Citrus	1,141	1,304	1,867	4,313	1,399	1,486	2,092	4,976	15.4%	664
Clay	900	1,619	2,857	5,376	1,074	1,844	3,197	6,115	13.7%	739
Collier	1,686	1,461	3,602	6,750	2,140	1,664	4,052	7,856	16.4%	1,106
Columbia	971	1,228	2,185	4,384	1,154	1,399	2,442	4,995	13.9%	612
Dade	2,377	1,887	3,085	7,349	3,173	2,149	3,474	8,796	19.7%	1,447
Desoto	1,176	1,304	1,741	4,222	1,447	1,486	1,951	4,883	15.7%	661
Dixie	1,191	1,228	1,327	3,747	1,516	1,399	1,487	4,402	17.5%	655
Duval	921	1,724	2,921	5,566	1,098	1,963	3,269	6,330	13.7%	764
Escambia	1,255	1,464	2,406	5,126	1,555	1,668	2,700	5,923	15.6%	797
Flagler	994	1,247	1,965	4,206	1,213	1,420	2,203	4,836	15.0%	630
Franklin	1,692	1,172	1,235	4,100	2,148	1,335	1,389	4,872	18.8%	772
Gadsden	1,101	1,172	2,240	4,514	1,328	1,335	2,505	5,169	14.5%	655
Gilchrist	1,027	1,228	2,389	4,644	1,274	1,399	2,673	5,346	15.1%	702
Glades	1,157	1,289	1,372	3,818	1,430	1,468	1,538	4,436	16.2%	618
Gulf	1,477	1,172	1,460	4,109	1,885	1,335	1,641	4,861	18.3%	752
Hamilton	933	1,228	1,640	3,801	1,113	1,399	1,832	4,344	14.3%	543
Hardee	1,113	1,534	1,941	4,588	1,352	1,747	2,174	5,274	14.9%	685
Hendry	1,280	1,289	2,500	5,069	1,592	1,468	2,804	5,864	15.7%	794
Hernando	1,462	1,990	2,057	5,508	1,928	2,266	2,305	6,499	18.0%	991
Highlands	1,010	1,534	1,630	4,174	1,225	1,747	1,826	4,798	15.0%	624
Hillsborough	1,625	2,092	2,896	6,614	2,013	2,383	3,247	7,642	15.6%	1,029
Holmes	1,081	1,172	1,904	4,158	1,303	1,335	2,130	4,768	14.7%	610
Indian River	1,614	1,633	3,531	6,779	2,049	1,860	3,970	7,879	16.2%	1,100
Jackson	1,012	1,172	1,915	4,099	1,215	1,335	2,141	4,691	14.5%	592
Jefferson	1,136	1,228	2,330	4,695	1,356	1,399	2,604	5,359	14.2%	664
Lafayette	1,047	1,228	1,693	3,968	1,279	1,399	1,895	4,573	15.2%	604
Lake	946	1,304	2,284	4,534	1,137	1,486	2,557	5,180	14.2%	646
Lee	1,404	1,501	2,389	5,294	1,789	1,710	2,685	6,184	16.8%	890
Leon	923	1,242	2,592	4,756	1,097	1,414	2,899	5,410	13.8%	654
Levy	1,139	1,172	1,846	4,158	1,429	1,335	2,068	4,833	16.2%	675
Liberty	1,030	1,228	1,913	4,171	1,255	1,399	2,141	4,794	14.9%	623
Madison	1,015	1,228	1,707	3,950	1,209	1,399	1,908	4,516	14.3%	565

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2011 on Households by County -- Assuming CPIC Maximum Scenario  
Summary of Overall Impacts Across ALL LINES of Insurance

County	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Current Average Cost Per Household				Projected Average Cost Per Household				Total Cost Increase	
	Homeowners	Auto	All Other	TOTAL	Homeowners	Auto	All Other	TOTAL	Increase (%)	Increase (\$)
Manatee	1,454	1,576	2,562	5,592	1,867	1,795	2,880	6,542	17.0%	950
Marion	911	1,416	2,151	4,477	1,094	1,612	2,407	5,114	14.2%	637
Martin	1,767	1,289	3,954	7,010	2,304	1,468	4,457	8,229	17.4%	1,219
Monroe	1,361	1,440	2,897	5,698	1,812	1,640	3,268	6,720	17.9%	1,022
Nassau	1,277	1,228	3,152	5,657	1,564	1,399	3,531	6,493	14.8%	836
Okaloosa	1,468	1,172	2,662	5,302	1,845	1,335	2,992	6,172	16.4%	870
Okeechobee	1,196	1,607	2,013	4,816	1,487	1,830	2,258	5,575	15.8%	759
Orange	1,067	1,704	2,888	5,660	1,277	1,941	3,234	6,452	14.0%	792
Osceola	993	1,607	1,804	4,404	1,192	1,830	2,020	5,042	14.5%	638
Palm Beach	1,785	2,459	4,069	8,313	2,287	2,801	4,576	9,664	16.2%	1,351
Pasco	1,421	2,186	2,038	5,646	1,866	2,490	2,286	6,642	17.7%	997
Pinellas	1,746	2,009	2,715	6,470	2,301	2,288	3,051	7,640	18.1%	1,170
Polk	1,102	1,604	2,254	4,959	1,322	1,826	2,523	5,671	14.4%	712
Putnam	989	1,520	1,732	4,242	1,210	1,731	1,937	4,879	15.0%	637
Santa Rosa	1,476	1,365	3,685	6,527	1,855	1,555	4,139	7,550	15.7%	1,023
Sarasota	1,319	1,433	1,948	4,700	1,692	1,632	2,190	5,514	17.3%	814
Seminole	1,184	1,461	2,727	5,372	1,412	1,664	3,053	6,129	14.1%	756
St. Johns	1,284	1,200	3,257	5,741	1,575	1,367	3,652	6,594	14.8%	852
St. Lucie	1,301	1,633	3,487	6,421	1,665	1,860	3,920	7,445	15.9%	1,024
Sumter	854	1,304	1,513	3,671	1,024	1,486	1,693	4,203	14.5%	533
Suwannee	1,055	1,228	2,041	4,324	1,263	1,399	2,282	4,943	14.3%	619
Taylor	1,160	1,172	1,757	4,089	1,455	1,335	1,967	4,758	16.4%	669
Union	1,075	1,228	2,265	4,568	1,293	1,399	2,532	5,223	14.3%	655
Volusia	1,106	1,351	2,145	4,602	1,390	1,539	2,409	5,339	16.0%	737
Wakulla	1,164	1,172	2,057	4,393	1,457	1,335	2,306	5,098	16.0%	705
Walton	1,575	1,172	1,261	4,008	1,987	1,335	1,416	4,739	18.2%	731
Washington	1,037	1,228	1,813	4,077	1,268	1,399	2,030	4,697	15.2%	619
<b>Total State</b>	<b>\$1,451</b>	<b>\$1,739</b>	<b>\$2,796</b>	<b>\$5,986</b>	<b>\$1,854</b>	<b>\$1,981</b>	<b>\$3,141</b>	<b>\$6,976</b>	<b>16.5%</b>	<b>\$990</b>

Notes:

- (1) & (5) Weighted average of Exhibit 8, Pages 3 & 4 based on the number of policies by county from the Florida OIR's *Commercial and Personal Residential Property Supplemental Quarterly Report* as of September 30, 2009
- (2) & (6) See Exhibit 8, Page 5
- (3) & (7) See Exhibit 8, Page 6
- (4) = (1) + (2) + (3)
- (8) = (5) + (6) + (7)
- (9) = [(8) / (4)] - 1
- (10) = (8) - (4)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2011 on Households by County -- Assuming CPIC Maximum Scenario  
Change in HOMEOWNERS Insurance Costs per Household (CPIC Policyholders)

(1) <b>County</b>	(2) <b>Current Average Cost Per Policy</b>	(3) <b>Increase in Cost Due to:</b>			(4) <b>Reinsurance Costs (0.0%)</b>	(5) <b>Total Cost Increase</b>		(6) <b>Projected Average Cost Per Policy</b>
		(2) <b>FHCF Assessment (2.7%)</b>	(3) <b>CPIC Surcharge (45.0%)</b>	<b>Increase (\$)</b>		<b>Increase (%)</b>		
Alachua	\$1,165	\$32	\$524	\$0	\$556	47.7%	\$1,721	
Baker	1,170	32	526	0	558	47.7%	1,728	
Bay	1,625	44	731	0	776	47.7%	2,401	
Bradford	1,120	30	504	0	535	47.7%	1,655	
Brevard	2,162	59	973	0	1,032	47.7%	3,194	
Broward	2,546	69	1,146	0	1,215	47.7%	3,761	
Calhoun	1,136	31	511	0	542	47.7%	1,678	
Charlotte	2,138	58	962	0	1,020	47.7%	3,158	
Citrus	1,443	39	649	0	689	47.7%	2,132	
Clay	1,286	35	579	0	614	47.7%	1,900	
Collier	2,138	58	962	0	1,020	47.7%	3,159	
Columbia	1,111	30	500	0	530	47.7%	1,642	
Dade	3,517	96	1,583	0	1,678	47.7%	5,196	
Desoto	1,624	44	731	0	775	47.7%	2,400	
Dixie	1,488	41	670	0	710	47.7%	2,198	
Duval	1,430	39	643	0	682	47.7%	2,112	
Escambia	1,758	48	791	0	839	47.7%	2,598	
Flagler	1,554	42	699	0	742	47.7%	2,296	
Franklin	1,860	51	837	0	888	47.7%	2,748	
Gadsden	1,241	34	559	0	592	47.7%	1,834	
Gilchrist	1,179	32	531	0	563	47.7%	1,742	
Glades	1,342	37	604	0	640	47.7%	1,982	
Gulf	1,638	45	737	0	781	47.7%	2,419	
Hamilton	1,056	29	475	0	504	47.7%	1,559	
Hardee	1,376	37	619	0	657	47.7%	2,033	
Hendry	1,608	44	723	0	767	47.7%	2,375	
Hernando	1,609	44	724	0	768	47.7%	2,376	
Highlands	1,248	34	561	0	595	47.7%	1,843	
Hillsborough	2,174	59	979	0	1,038	47.7%	3,212	
Holmes	1,208	33	544	0	576	47.7%	1,785	
Indian River	2,109	57	949	0	1,006	47.7%	3,115	
Jackson	1,163	32	523	0	555	47.7%	1,718	
Jefferson	1,222	33	550	0	583	47.7%	1,804	
Lafayette	1,133	31	510	0	541	47.7%	1,674	
Lake	1,078	29	485	0	515	47.7%	1,593	
Lee	1,733	47	780	0	827	47.7%	2,560	
Leon	1,140	31	513	0	544	47.7%	1,684	
Levy	1,462	40	658	0	698	47.7%	2,160	
Liberty	930	25	419	0	444	47.7%	1,374	
Madison	1,177	32	530	0	562	47.7%	1,738	

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2011 on Households by County -- Assuming CPIC Maximum Scenario  
Change in HOMEOWNERS Insurance Costs per Household (CPIC Policyholders)

County	(1) Current Average Cost Per Policy	(3) Increase in Cost Due to:			(5) Total Cost Increase		(7) Projected Average Cost Per Policy
		(2) FHCF Assessment (2.7%)	(3) CPIC Surcharge (45.0%)	(4) Reinsurance Costs (0.0%)	Increase (\$)	Increase (%)	
Manatee	1,686	46	759	0	805	47.7%	2,491
Marion	1,184	32	533	0	565	47.7%	1,749
Martin	2,122	58	955	0	1,012	47.7%	3,134
Monroe	2,103	57	946	0	1,004	47.7%	3,107
Nassau	1,459	40	657	0	696	47.7%	2,156
Okaloosa	2,147	58	966	0	1,025	47.7%	3,172
Okeechobee	1,528	42	688	0	729	47.7%	2,257
Orange	1,211	33	545	0	578	47.7%	1,789
Osceola	1,272	35	572	0	607	47.7%	1,879
Palm Beach	2,593	71	1,167	0	1,237	47.7%	3,831
Pasco	1,680	46	756	0	802	47.7%	2,481
Pinellas	2,450	67	1,103	0	1,169	47.7%	3,619
Polk	1,064	29	479	0	508	47.7%	1,571
Putnam	1,319	36	593	0	629	47.7%	1,948
Santa Rosa	1,943	53	874	0	927	47.7%	2,871
Sarasota	1,772	48	798	0	846	47.7%	2,618
Seminole	1,315	36	592	0	628	47.7%	1,943
St. Johns	1,815	49	817	0	866	47.7%	2,681
St. Lucie	1,987	54	894	0	948	47.7%	2,936
Sumter	1,078	29	485	0	514	47.7%	1,592
Suwannee	1,088	30	490	0	519	47.7%	1,607
Taylor	1,746	48	786	0	833	47.7%	2,579
Union	1,185	32	533	0	566	47.7%	1,751
Volusia	1,622	44	730	0	774	47.7%	2,397
Wakulla	1,543	42	694	0	736	47.7%	2,279
Walton	1,920	52	864	0	916	47.7%	2,836
Washington	1,159	32	522	0	553	47.7%	1,712
<b>Total State</b>	<b>\$2,249</b>	<b>\$61</b>	<b>\$1,012</b>	<b>\$0</b>	<b>\$1,073</b>	<b>47.7%</b>	<b>\$3,322</b>

Notes:

- (1) Statewide average premium from CPIC's 2010 Operating Budget;  
Cost relativities by county based on the Florida OIR's Commercial and Personal Residential Property Supplemental Quarterly Report as of September 30, 2009
- (2) = (1) x Exhibit 8, Page 1, Column (1) for Citizens Homeowners
- (3) = (1) x Exhibit 8, Page 1, Column (2) for Citizens Homeowners
- (4) No impact; Assumes Citizens does not purchase private reinsurance in addition to reinsurance from the FHCF
- (5) = (2) + (3) + (4)
- (6) = (5) / (1)
- (7) = (1) + (5)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2011 on Households by County -- Assuming CPIC Maximum Scenario  
Change in HOMEOWNERS Insurance Costs per Household (Non-CPIC Policyholders)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	
County	Current Average Cost Per Policy	Increase in Cost Due to:			Total Cost Increase		Projected Average Cost Per Policy
		FHCF Assessment (2.7%)	CPIC Assessment (11.2%)	Reinsurance Costs (Avg = 10.0%)	Increase (\$)	Increase (%)	
		Alachua	\$995	\$27	\$111	\$43	
Baker	947	26	106	30	162	17.1%	1,109
Bay	1,335	36	149	134	320	24.0%	1,655
Bradford	952	26	106	31	164	17.2%	1,116
Brevard	1,306	36	146	125	306	23.5%	1,612
Broward	1,605	44	179	184	407	25.3%	2,012
Calhoun	1,006	27	112	48	188	18.7%	1,194
Charlotte	1,426	39	159	163	361	25.3%	1,787
Citrus	1,116	30	125	67	222	19.9%	1,338
Clay	888	24	99	38	161	18.2%	1,049
Collier	1,659	45	185	189	420	25.3%	2,079
Columbia	962	26	108	29	162	16.9%	1,124
Dade	2,068	56	231	269	557	26.9%	2,625
Desoto	1,136	31	127	67	225	19.8%	1,361
Dixie	1,115	30	125	71	226	20.2%	1,340
Duval	912	25	102	41	167	18.3%	1,079
Escambia	1,230	33	137	102	273	22.2%	1,503
Flagler	980	27	110	70	206	21.0%	1,186
Franklin	1,674	46	187	177	410	24.5%	2,084
Gadsden	1,088	30	122	40	191	17.5%	1,278
Gilchrist	997	27	111	46	184	18.5%	1,182
Glades	1,140	31	127	80	239	21.0%	1,379
Gulf	1,454	40	162	152	354	24.3%	1,808
Hamilton	924	25	103	27	155	16.8%	1,079
Hardee	1,101	30	123	66	219	19.9%	1,321
Hendry	1,246	34	139	91	264	21.2%	1,510
Hernando	1,372	37	153	90	281	20.5%	1,652
Highlands	1,000	27	112	60	199	19.9%	1,199
Hillsborough	1,576	43	176	111	330	20.9%	1,906
Holmes	1,069	29	120	40	189	17.6%	1,258
Indian River	1,578	43	176	173	392	24.8%	1,970
Jackson	999	27	112	34	173	17.3%	1,172
Jefferson	1,129	31	126	31	188	16.7%	1,317
Lafayette	1,036	28	116	47	191	18.4%	1,227
Lake	941	26	105	48	179	19.0%	1,120
Lee	1,362	37	152	141	330	24.2%	1,692
Leon	917	25	102	36	164	17.9%	1,080
Levy	1,078	29	120	63	213	19.8%	1,291
Liberty	1,045	28	117	48	193	18.5%	1,238
Madison	1,004	27	112	30	170	16.9%	1,174



**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2011 on Households by County -- Assuming CPIC Maximum Scenario  
Change in HOMEOWNERS Insurance Costs per Household (Non-CPIC Policyholders)

(1) <b>County</b>	(2) <b>Current Average Cost Per Policy</b>	(3) <b>Increase in Cost Due to:</b>			(5) <b>Total Cost Increase</b>		(7) <b>Projected Average Cost Per Policy</b>
		(2) FHCFC Assessment (2.7%)	(3) CPIC Assessment (11.2%)	(4) Reinsurance Costs (Avg = 10.0%)	(5) Increase (\$)	(6) Increase (%)	
Manatee	1,415	39	158	151	348	24.6%	1,763
Marion	901	25	101	44	169	18.8%	1,070
Martin	1,736	47	194	253	494	28.5%	2,229
Monroe	1,245	34	139	192	365	29.3%	1,610
Nassau	1,261	34	141	74	249	19.8%	1,510
Okaloosa	1,441	39	161	151	351	24.4%	1,792
Okeechobee	1,165	32	130	89	251	21.5%	1,416
Orange	1,065	29	119	57	205	19.2%	1,270
Osceola	987	27	110	52	189	19.1%	1,175
Palm Beach	1,706	46	191	193	430	25.2%	2,136
Pasco	1,302	35	146	100	281	21.6%	1,583
Pinellas	1,536	42	172	157	371	24.1%	1,907
Polk	1,103	30	123	53	206	18.7%	1,309
Putnam	947	26	106	37	168	17.8%	1,116
Santa Rosa	1,446	39	162	142	343	23.7%	1,789
Sarasota	1,255	34	140	133	308	24.5%	1,563
Seminole	1,183	32	132	59	224	18.9%	1,406
St. Johns	1,261	34	141	90	265	21.0%	1,526
St. Lucie	1,234	34	138	134	306	24.8%	1,539
Sumter	847	23	95	43	161	19.0%	1,008
Suwannee	1,052	29	118	36	182	17.3%	1,235
Taylor	1,060	29	118	57	204	19.3%	1,264
Union	1,065	29	119	36	184	17.3%	1,249
Volusia	1,068	29	119	101	249	23.3%	1,317
Wakulla	1,110	30	124	77	231	20.8%	1,342
Walton	1,545	42	173	154	368	23.8%	1,914
Washington	1,023	28	114	55	197	19.2%	1,220
<b>Total State</b>	<b>\$1,357</b>	<b>\$37</b>	<b>\$152</b>	<b>\$136</b>	<b>\$324</b>	<b>23.9%</b>	<b>\$1,682</b>

Notes:

- (1) Average premiums by county based on the Florida OIR's *Commercial and Personal Residential Property Supplemental Quarterly Report* as of September 30, 2009
- (2) = (1) x Exhibit 8, Page 1, Column (1) for Non-Citizens Homeowners
- (3) = (1) x Exhibit 8, Page 1, Column (2) for Non-Citizens Homeowners
- (4) = (1) x (Exhibit 8, Page 1, Column (3) for Non-Citizens Homeowners) x (Reinsurance relativity by county, estimated from sample rate filings)
- (5) = (2) + (3) + (4)
- (6) = (5) / (1)
- (7) = (1) + (5)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2011 on Households by County -- Assuming CPIC Maximum Scenario  
Change in PERSONAL AUTO Insurance Costs per Household

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
County	Current Average Cost Per Household	Increase in Cost Due to:			Total Cost Increase		Projected Average Cost Per Household
		FHCF Assessment (2.7%)	CPIC Assessment (11.2%)	Reinsurance Costs (N/A)	Increase (\$)	Increase (%)	
		Alachua	\$1,318	\$36	\$147	\$0	
Baker	1,228	33	137	0	171	13.9%	1,399
Bay	1,273	35	142	0	177	13.9%	1,450
Bradford	1,520	41	170	0	211	13.9%	1,731
Brevard	1,437	39	161	0	200	13.9%	1,636
Broward	2,016	55	225	0	280	13.9%	2,296
Calhoun	1,172	32	131	0	163	13.9%	1,335
Charlotte	1,501	41	168	0	209	13.9%	1,710
Citrus	1,304	35	146	0	181	13.9%	1,486
Clay	1,619	44	181	0	225	13.9%	1,844
Collier	1,461	40	163	0	203	13.9%	1,664
Columbia	1,228	33	137	0	171	13.9%	1,399
Dade	1,887	51	211	0	262	13.9%	2,149
Desoto	1,304	35	146	0	181	13.9%	1,486
Dixie	1,228	33	137	0	171	13.9%	1,399
Duval	1,724	47	193	0	240	13.9%	1,963
Escambia	1,464	40	164	0	204	13.9%	1,668
Flagler	1,247	34	139	0	173	13.9%	1,420
Franklin	1,172	32	131	0	163	13.9%	1,335
Gadsden	1,172	32	131	0	163	13.9%	1,335
Gilchrist	1,228	33	137	0	171	13.9%	1,399
Glades	1,289	35	144	0	179	13.9%	1,468
Gulf	1,172	32	131	0	163	13.9%	1,335
Hamilton	1,228	33	137	0	171	13.9%	1,399
Hardee	1,534	42	171	0	213	13.9%	1,747
Hendry	1,289	35	144	0	179	13.9%	1,468
Hernando	1,990	54	222	0	277	13.9%	2,266
Highlands	1,534	42	171	0	213	13.9%	1,747
Hillsborough	2,092	57	234	0	291	13.9%	2,383
Holmes	1,172	32	131	0	163	13.9%	1,335
Indian River	1,633	44	183	0	227	13.9%	1,860
Jackson	1,172	32	131	0	163	13.9%	1,335
Jefferson	1,228	33	137	0	171	13.9%	1,399
Lafayette	1,228	33	137	0	171	13.9%	1,399
Lake	1,304	35	146	0	181	13.9%	1,486
Lee	1,501	41	168	0	209	13.9%	1,710
Leon	1,242	34	139	0	173	13.9%	1,414
Levy	1,172	32	131	0	163	13.9%	1,335
Liberty	1,228	33	137	0	171	13.9%	1,399
Madison	1,228	33	137	0	171	13.9%	1,399

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2011 on Households by County -- Assuming CPIC Maximum Scenario  
Change in PERSONAL AUTO Insurance Costs per Household

County	(1) Current Average Cost Per Household	Increase in Cost Due to:			(5) Total Cost Increase		(7) Projected Average Cost Per Household
		(2) FHCFC Assessment (2.7%)	(3) CPIC Assessment (11.2%)	(4) Reinsurance Costs (N/A)	Increase (\$)	Increase (%)	
Manatee	1,576	43	176	0	219	13.9%	1,795
Marion	1,416	39	158	0	197	13.9%	1,612
Martin	1,289	35	144	0	179	13.9%	1,468
Monroe	1,440	39	161	0	200	13.9%	1,640
Nassau	1,228	33	137	0	171	13.9%	1,399
Okaloosa	1,172	32	131	0	163	13.9%	1,335
Okeechobee	1,607	44	180	0	223	13.9%	1,830
Orange	1,704	46	190	0	237	13.9%	1,941
Osceola	1,607	44	180	0	223	13.9%	1,830
Palm Beach	2,459	67	275	0	342	13.9%	2,801
Pasco	2,186	59	244	0	304	13.9%	2,490
Pinellas	2,009	55	225	0	279	13.9%	2,288
Polk	1,604	44	179	0	223	13.9%	1,826
Putnam	1,520	41	170	0	211	13.9%	1,731
Santa Rosa	1,365	37	153	0	190	13.9%	1,555
Sarasota	1,433	39	160	0	199	13.9%	1,632
Seminole	1,461	40	163	0	203	13.9%	1,664
St. Johns	1,200	33	134	0	167	13.9%	1,367
St. Lucie	1,633	44	183	0	227	13.9%	1,860
Sumter	1,304	35	146	0	181	13.9%	1,486
Suwannee	1,228	33	137	0	171	13.9%	1,399
Taylor	1,172	32	131	0	163	13.9%	1,335
Union	1,228	33	137	0	171	13.9%	1,399
Volusia	1,351	37	151	0	188	13.9%	1,539
Wakulla	1,172	32	131	0	163	13.9%	1,335
Walton	1,172	32	131	0	163	13.9%	1,335
Washington	1,228	33	137	0	171	13.9%	1,399
<b>Total State</b>	<b>\$1,739</b>	<b>\$47</b>	<b>\$194</b>	<b>\$0</b>	<b>\$242</b>	<b>13.9%</b>	<b>\$1,981</b>

Notes:

- (1) Statewide average cost = \$12.31 billion / 7,080,705 = (Total Assessable Private Passenger Auto Premium from Exhibit 5, Page 11) / (# of Occupied Florida Housing Units from 2008 Census data);  
Cost relativities by county from 2009 report on *Economic Impact of a 1-in-100 Year Hurricane*
- (2) = (1) x Exhibit 8, Page 1, Column (1) for Personal Auto
- (3) = (1) x Exhibit 8, Page 1, Column (2) for Personal Auto
- (4) No impact; Assumes change in reinsurance costs does not affect Personal Auto
- (5) = (2) + (3) + (4)
- (6) = (5) / (1)
- (7) = (1) + (5)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2011 on Households by County -- Assuming Maximum CPIC Surcharges  
Impact on the Cost of Goods and Services Due to the Change in ALL OTHER Insurance Costs

County	(1)	(2) (3) (4)			(5)	(6)	(7) (8)		(9)
	Assessable Commercial Lines Average Cost Per Household	Increase in Allocated Cost Due to:			Non-Assessable Commercial Lines Average Cost Per Household	Total Commercial Lines Average Cost Per Household	Total Cost Increase		Projected Average Cost Per Household
		FHCF Assessment (2.7%)	CPIC Assessment (11.2%)	Reinsurance Costs (Avg = 1.0%)			Increase (\$)	Increase (%)	
Alachua	\$2,104	\$57	\$235	\$9	\$433	\$2,537	\$302	11.9%	\$2,839
Baker	2,148	58	240	7	443	2,591	305	11.8%	2,896
Bay	1,599	44	179	16	329	1,928	238	12.4%	2,166
Bradford	1,967	54	220	6	405	2,372	280	11.8%	2,652
Brevard	2,054	56	230	20	423	2,477	305	12.3%	2,782
Broward	2,591	71	290	30	534	3,125	390	12.5%	3,515
Calhoun	1,479	40	165	7	305	1,783	213	11.9%	1,996
Charlotte	1,540	42	172	18	317	1,857	232	12.5%	2,089
Citrus	1,548	42	173	9	319	1,867	224	12.0%	2,092
Clay	2,369	64	265	10	488	2,857	339	11.9%	3,197
Collier	2,987	81	334	34	615	3,602	449	12.5%	4,052
Columbia	1,812	49	203	5	373	2,185	257	11.8%	2,442
Dade	2,558	70	286	33	527	3,085	389	12.6%	3,474
Desoto	1,444	39	161	9	297	1,741	209	12.0%	1,951
Dixie	1,101	30	123	7	227	1,327	160	12.0%	1,487
Duval	2,422	66	271	11	499	2,921	347	11.9%	3,269
Escambia	1,995	54	223	17	411	2,406	294	12.2%	2,700
Flagler	1,629	44	182	12	336	1,965	238	12.1%	2,203
Franklin	1,024	28	114	11	211	1,235	153	12.4%	1,389
Gadsden	1,858	51	208	7	383	2,240	265	11.8%	2,505
Gilchrist	1,981	54	221	9	408	2,389	284	11.9%	2,673
Glades	1,137	31	127	8	234	1,372	166	12.1%	1,538
Gulf	1,210	33	135	13	249	1,460	181	12.4%	1,641
Hamilton	1,360	37	152	4	280	1,640	193	11.8%	1,832
Hardee	1,609	44	180	10	332	1,941	233	12.0%	2,174
Hendry	2,073	56	232	15	427	2,500	303	12.1%	2,804
Hernando	1,705	46	191	11	351	2,057	248	12.1%	2,305
Highlands	1,351	37	151	8	278	1,630	196	12.0%	1,826
Hillsborough	2,401	65	268	17	495	2,896	351	12.1%	3,247
Holmes	1,579	43	176	6	325	1,904	225	11.8%	2,130
Indian River	2,928	80	327	32	603	3,531	439	12.4%	3,970
Jackson	1,588	43	177	5	327	1,915	226	11.8%	2,141
Jefferson	1,932	53	216	5	398	2,330	274	11.8%	2,604
Lafayette	1,404	38	157	6	289	1,693	201	11.9%	1,895
Lake	1,894	52	212	10	390	2,284	273	12.0%	2,557
Lee	1,981	54	221	20	408	2,389	296	12.4%	2,685
Leon	2,149	58	240	9	443	2,592	307	11.9%	2,899
Levy	1,531	42	171	9	315	1,846	222	12.0%	2,068
Liberty	1,586	43	177	7	327	1,913	228	11.9%	2,141
Madison	1,416	39	158	4	292	1,707	201	11.8%	1,908

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2011 on Households by County -- Assuming Maximum CPIC Surcharges  
Impact on the Cost of Goods and Services Due to the Change in ALL OTHER Insurance Costs

County	(1)	(2) (3) (4)			(5)	(6)	(7) (8)		(9)
	Assessable Commercial Lines Average Cost Per Household	Increase in Allocated Cost Due to:			Non-Assessable Commercial Lines Average Cost Per Household	Total Commercial Lines Average Cost Per Household	Total Cost Increase		Projected Average Cost Per Household
		FHCF Assessment (2.7%)	CPIC Assessment (11.2%)	Reinsurance Costs (Avg = 1.0%)			Increase (\$)	Increase (%)	
Manatee	2,124	58	237	23	438	2,562	318	12.4%	2,880
Marion	1,783	49	199	9	367	2,151	257	11.9%	2,407
Martin	3,278	89	366	48	675	3,954	503	12.7%	4,457
Monroe	2,402	65	268	37	495	2,897	371	12.8%	3,268
Nassau	2,614	71	292	15	538	3,152	379	12.0%	3,531
Okaloosa	2,208	60	247	23	455	2,662	330	12.4%	2,992
Okeechobee	1,669	45	187	13	344	2,013	245	12.2%	2,258
Orange	2,395	65	268	13	493	2,888	346	12.0%	3,234
Osceola	1,496	41	167	8	308	1,804	216	12.0%	2,020
Palm Beach	3,374	92	377	38	695	4,069	507	12.5%	4,576
Pasco	1,690	46	189	13	348	2,038	248	12.2%	2,286
Pinellas	2,251	61	252	23	464	2,715	336	12.4%	3,051
Polk	1,869	51	209	9	385	2,254	269	11.9%	2,523
Putnam	1,436	39	161	6	296	1,732	205	11.8%	1,937
Santa Rosa	3,055	83	341	30	629	3,685	455	12.3%	4,139
Sarasota	1,615	44	181	17	333	1,948	242	12.4%	2,190
Seminole	2,261	62	253	11	466	2,727	326	11.9%	3,053
St. Johns	2,701	73	302	19	556	3,257	395	12.1%	3,652
St. Lucie	2,891	79	323	31	596	3,487	433	12.4%	3,920
Sumter	1,254	34	140	6	258	1,513	181	11.9%	1,693
Suwannee	1,692	46	189	6	349	2,041	241	11.8%	2,282
Taylor	1,457	40	163	8	300	1,757	210	12.0%	1,967
Union	1,878	51	210	6	387	2,265	267	11.8%	2,532
Volusia	1,779	48	199	17	366	2,145	264	12.3%	2,409
Wakulla	1,706	46	191	12	351	2,057	249	12.1%	2,306
Walton	1,045	28	117	10	215	1,261	156	12.3%	1,416
Washington	1,503	41	168	8	310	1,813	217	12.0%	2,030
<b>Total State</b>	<b>\$2,318</b>	<b>\$63</b>	<b>\$259</b>	<b>\$23</b>	<b>\$478</b>	<b>\$2,796</b>	<b>\$345</b>	<b>12.4%</b>	<b>\$3,141</b>

Notes:

- (1) Statewide average cost = \$17.41 billion / 7,510,602 = (Total Assessable Commercial Premium from Exhibit 5, Page 11) / (# of Occupied Housing Units + 1/2 of Estimated # of Seasonal Housing Units, from 2008 Census data); Cost relativities by county based on 2007 average income per household from *Florida Per Capita and Total Personal Income, 2005-2007*, prepared by the Bureau of Economic and Business Research, University of Florida
- (2) = (1) x Exhibit 8, Page 1, Column (1) for All Other Assessable Lines
- (3) = (1) x Exhibit 8, Page 1, Column (2) for All Other Assessable Lines
- (4) = (1) x (Exhibit 8, Page 1, Column (3) for All Other Assessable Lines) x (Reinsurance relativity by county, estimated from sample rate filings)
- (5) Statewide average cost = \$3.59 billion / 7,510,602 = (Total Non-Assessable Commercial Premium from Exhibit 5, Page 11) / (# of Occupied Housing Units + 1/2 of Estimated # of Seasonal Housing Units, from 2008 Census data);
- (6) = (1) + (5)
- (7) = (2) + (3) + (4)
- (8) = (7) / (6)
- (9) = (6) + (7)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Summary of Household Impacts for Insurance-Related Expenditures -- Assuming CPIC Tempered Scenario

**2011 Household Impacts:**

Line of Insurance / Company	(1)	(2)	(3)	(4)
	1st Year Assessment / Surcharge Percentages		Premium Impact from Change in Reinsurance Costs	Total Impact
	FHCF	CPIC		
Homeowners: Citizens	2.7%	45.0%	0.0%	<b>47.7%</b>
Homeowners: Non-Citizens	2.7%	11.2%	10.0%	<b>23.9%</b>
Personal Auto	2.7%	11.2%	N/A	<b>13.9%</b>
All Other Assessable Lines	2.7%	11.2%	1.0%	<b>14.9%</b>

**Household Impacts (2012 - 2015):**

Line of Insurance / Company	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	FHCF	2012			2013		
		CPIC	Reinsurance	Total	CPIC	Reinsurance	Total
Homeowners: Citizens	2.7%	1.3%	0.0%	<b>4.0%</b>	1.3%	0.0%	<b>4.0%</b>
Homeowners: Non-Citizens	2.7%	1.3%	7.5%	<b>11.5%</b>	1.3%	5.0%	<b>9.0%</b>
Personal Auto	2.7%	1.3%	N/A	<b>4.0%</b>	1.3%	N/A	<b>4.0%</b>
All Other Assessable Lines	2.7%	1.3%	0.8%	<b>4.7%</b>	1.3%	0.5%	<b>4.5%</b>
	(12)	(13)	(14)	(15)	(16)	(17)	(18)
	FHCF	2014			2015		
		CPIC	Reinsurance	Total	CPIC	Reinsurance	Total
Homeowners: Citizens	2.7%	1.3%	0.0%	<b>4.0%</b>	1.3%	0.0%	<b>4.0%</b>
Homeowners: Non-Citizens	2.7%	1.3%	2.5%	<b>6.5%</b>	1.3%	2.5%	<b>6.5%</b>
Personal Auto	2.7%	1.3%	N/A	<b>4.0%</b>	1.3%	N/A	<b>4.0%</b>
All Other Assessable Lines	2.7%	1.3%	0.3%	<b>4.2%</b>	1.3%	0.3%	<b>4.2%</b>

**Notes:**

FHCF uses assessments from Maximum Duration Scenario

(1), (5), & (12) See Exhibit 5, Page 2, Column (3)

(2), (6), (9), (13), & (16) See Exhibit 5, Page 7, Columns (10) - (12)

(3) See Exhibit 7 for Non-Citizens Homeowners; Impact on All Other Assessable Lines expected to be minimal and judgmentally selected as 1.0%

(4) = (1) + (2) + (3)

(7), (10), (14), & (17) Assumes that the premium impact from reinsurance costs decreases proportionally by 25% of first year over 3 years

(8) = (5) + (6) + (7)

(11) = (5) + (9) + (10)

(15) = (12) + (13) + (14)

(18) = (12) + (16) + (17)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2015 on Households by County -- Assuming CPIC Tempered Scenario  
Summary of Overall Impacts Across ALL LINES of Insurance

County	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Current Average Cost Per Household				Projected Average Cost Per Household				Total Cost Increase	
	Homeowners	Auto	All Other	TOTAL	Homeowners	Auto	All Other	TOTAL	Increase (%)	Increase (\$)
Alachua	\$999	\$1,318	\$2,537	\$4,855	\$1,050	\$1,371	\$2,623	\$5,043	3.9%	\$188
Baker	964	1,228	2,591	4,783	1,010	1,277	2,678	4,964	3.8%	181
Bay	1,357	1,273	1,928	4,558	1,442	1,324	1,995	4,761	4.5%	203
Bradford	964	1,520	2,372	4,856	1,010	1,580	2,452	5,042	3.8%	186
Brevard	1,392	1,437	2,477	5,305	1,475	1,494	2,563	5,532	4.3%	227
Broward	1,749	2,016	3,125	6,890	1,858	2,096	3,235	7,189	4.3%	299
Calhoun	1,015	1,172	1,783	3,971	1,066	1,219	1,844	4,129	4.0%	159
Charlotte	1,527	1,501	1,857	4,885	1,623	1,561	1,923	5,106	4.5%	221
Citrus	1,141	1,304	1,867	4,313	1,202	1,356	1,931	4,489	4.1%	176
Clay	900	1,619	2,857	5,376	944	1,683	2,954	5,582	3.8%	206
Collier	1,686	1,461	3,602	6,750	1,798	1,519	3,730	7,046	4.4%	297
Columbia	971	1,228	2,185	4,384	1,016	1,277	2,258	4,551	3.8%	167
Dade	2,377	1,887	3,085	7,349	2,525	1,962	3,195	7,681	4.5%	332
Desoto	1,176	1,304	1,741	4,222	1,238	1,356	1,801	4,395	4.1%	173
Dixie	1,191	1,228	1,327	3,747	1,253	1,277	1,373	3,902	4.2%	156
Duval	921	1,724	2,921	5,566	968	1,792	3,020	5,780	3.8%	214
Escambia	1,255	1,464	2,406	5,126	1,329	1,523	2,490	5,341	4.2%	216
Flagler	994	1,247	1,965	4,206	1,051	1,297	2,032	4,380	4.1%	174
Franklin	1,692	1,172	1,235	4,100	1,800	1,219	1,279	4,297	4.8%	197
Gadsden	1,101	1,172	2,240	4,514	1,154	1,219	2,316	4,689	3.9%	175
Gilchrist	1,027	1,228	2,389	4,644	1,078	1,277	2,470	4,824	3.9%	180
Glades	1,157	1,289	1,372	3,818	1,222	1,340	1,419	3,980	4.3%	163
Gulf	1,477	1,172	1,460	4,109	1,569	1,219	1,511	4,299	4.6%	190
Hamilton	933	1,228	1,640	3,801	977	1,277	1,695	3,948	3.9%	147
Hardee	1,113	1,534	1,941	4,588	1,174	1,595	2,007	4,776	4.1%	187
Hendry	1,280	1,289	2,500	5,069	1,352	1,340	2,586	5,278	4.1%	209
Hernando	1,462	1,990	2,057	5,508	1,534	2,069	2,127	5,730	4.0%	222
Highlands	1,010	1,534	1,630	4,174	1,065	1,595	1,685	4,345	4.1%	171
Hillsborough	1,625	2,092	2,896	6,614	1,715	2,175	2,996	6,886	4.1%	273
Holmes	1,081	1,172	1,904	4,158	1,133	1,219	1,969	4,321	3.9%	163
Indian River	1,614	1,633	3,531	6,779	1,719	1,698	3,656	7,072	4.3%	294
Jackson	1,012	1,172	1,915	4,099	1,060	1,219	1,979	4,258	3.9%	159
Jefferson	1,136	1,228	2,330	4,695	1,189	1,277	2,409	4,874	3.8%	179
Lafayette	1,047	1,228	1,693	3,968	1,099	1,277	1,751	4,127	4.0%	158
Lake	946	1,304	2,284	4,534	995	1,356	2,361	4,713	3.9%	179
Lee	1,404	1,501	2,389	5,294	1,491	1,561	2,473	5,524	4.4%	230
Leon	923	1,242	2,592	4,756	968	1,291	2,679	4,938	3.8%	182
Levy	1,139	1,172	1,846	4,158	1,198	1,219	1,909	4,326	4.0%	168
Liberty	1,030	1,228	1,913	4,171	1,082	1,277	1,978	4,336	4.0%	165
Madison	1,015	1,228	1,707	3,950	1,062	1,277	1,765	4,104	3.9%	153

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2015 on Households by County -- Assuming CPIC Tempered Scenario  
Summary of Overall Impacts Across ALL LINES of Insurance

County	(1) Current Average Cost Per Household				(2) Projected Average Cost Per Household				(3) Total Cost Increase	
	Homeowners	Auto	All Other	TOTAL	Homeowners	Auto	All Other	TOTAL	Increase (%)	Increase (\$)
Manatee	1,454	1,576	2,562	5,592	1,544	1,638	2,652	5,835	4.3%	243
Marion	911	1,416	2,151	4,477	958	1,472	2,224	4,653	3.9%	176
Martin	1,767	1,289	3,954	7,010	1,896	1,340	4,096	7,331	4.6%	321
Monroe	1,361	1,440	2,897	5,698	1,456	1,497	3,001	5,955	4.5%	257
Nassau	1,277	1,228	3,152	5,657	1,345	1,277	3,260	5,882	4.0%	224
Okaloosa	1,468	1,172	2,662	5,302	1,562	1,219	2,756	5,537	4.4%	235
Okeechobee	1,196	1,607	2,013	4,816	1,264	1,671	2,083	5,017	4.2%	201
Orange	1,067	1,704	2,888	5,660	1,124	1,772	2,987	5,882	3.9%	222
Osceola	993	1,607	1,804	4,404	1,045	1,671	1,865	4,582	4.0%	177
Palm Beach	1,785	2,459	4,069	8,313	1,900	2,557	4,213	8,669	4.3%	356
Pasco	1,421	2,186	2,038	5,646	1,495	2,273	2,109	5,876	4.1%	231
Pinellas	1,746	2,009	2,715	6,470	1,846	2,089	2,810	6,745	4.2%	275
Polk	1,102	1,604	2,254	4,959	1,158	1,667	2,330	5,156	4.0%	196
Putnam	989	1,520	1,732	4,242	1,037	1,580	1,791	4,408	3.9%	166
Santa Rosa	1,476	1,365	3,685	6,527	1,568	1,419	3,814	6,802	4.2%	275
Sarasota	1,319	1,433	1,948	4,700	1,400	1,490	2,016	4,907	4.4%	207
Seminole	1,184	1,461	2,727	5,372	1,246	1,519	2,820	5,585	4.0%	212
St. Johns	1,284	1,200	3,257	5,741	1,357	1,248	3,369	5,974	4.0%	232
St. Lucie	1,301	1,633	3,487	6,421	1,384	1,698	3,609	6,691	4.2%	270
Sumter	854	1,304	1,513	3,671	898	1,356	1,564	3,818	4.0%	148
Suwannee	1,055	1,228	2,041	4,324	1,105	1,277	2,110	4,492	3.9%	168
Taylor	1,160	1,172	1,757	4,089	1,218	1,219	1,817	4,253	4.0%	165
Union	1,075	1,228	2,265	4,568	1,126	1,277	2,341	4,744	3.9%	176
Volusia	1,106	1,351	2,145	4,602	1,173	1,405	2,220	4,798	4.3%	196
Wakulla	1,164	1,172	2,057	4,393	1,227	1,219	2,128	4,573	4.1%	180
Walton	1,575	1,172	1,261	4,008	1,673	1,219	1,305	4,197	4.7%	189
Washington	1,037	1,228	1,813	4,077	1,090	1,277	1,875	4,241	4.0%	164
<b>Total State</b>	<b>\$1,451</b>	<b>\$1,739</b>	<b>\$2,796</b>	<b>\$5,986</b>	<b>\$1,539</b>	<b>\$1,808</b>	<b>\$2,893</b>	<b>\$6,241</b>	<b>4.3%</b>	<b>\$255</b>

Notes:

- (1) & (5) Weighted average of Exhibit 8, Pages 9 & 10 based on the number of policies by county from the Florida OIR's *Commercial and Personal Residential Property Supplemental Quarterly Report* as of September 30, 2009
- (2) & (6) See Exhibit 8, Page 11
- (3) & (7) See Exhibit 8, Page 12
- (4) = (1) + (2) + (3)
- (8) = (5) + (6) + (7)
- (9) = [(8) / (4)] - 1
- (10) = (8) - (4)



**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2015 on Households by County -- Assuming CPIC Tempered Scenario  
Change in HOMEOWNERS Insurance Costs per Household (CPIC Policyholders)

County	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Current Average Cost Per Policy	Increase in Cost Due to:			Total Cost Increase		Projected Average Cost Per Policy
		FHCF Assessment (2.7%)	CPIC Surcharge (1.3%)	Reinsurance Costs (0.0%)	Increase (\$)	Increase (%)	
Alachua	\$1,165	\$32	\$15	\$0	\$46	4.0%	\$1,211
Baker	1,170	32	15	0	46	4.0%	1,216
Bay	1,625	44	20	0	65	4.0%	1,690
Bradford	1,120	30	14	0	44	4.0%	1,165
Brevard	2,162	59	27	0	86	4.0%	2,248
Broward	2,546	69	32	0	101	4.0%	2,647
Calhoun	1,136	31	14	0	45	4.0%	1,181
Charlotte	2,138	58	27	0	85	4.0%	2,223
Citrus	1,443	39	18	0	57	4.0%	1,501
Clay	1,286	35	16	0	51	4.0%	1,337
Collier	2,138	58	27	0	85	4.0%	2,223
Columbia	1,111	30	14	0	44	4.0%	1,156
Dade	3,517	96	44	0	140	4.0%	3,657
Desoto	1,624	44	20	0	65	4.0%	1,689
Dixie	1,488	41	19	0	59	4.0%	1,547
Duval	1,430	39	18	0	57	4.0%	1,487
Escambia	1,758	48	22	0	70	4.0%	1,828
Flagler	1,554	42	19	0	62	4.0%	1,616
Franklin	1,860	51	23	0	74	4.0%	1,934
Gadsden	1,241	34	16	0	49	4.0%	1,291
Gilchrist	1,179	32	15	0	47	4.0%	1,226
Glades	1,342	37	17	0	53	4.0%	1,395
Gulf	1,638	45	20	0	65	4.0%	1,703
Hamilton	1,056	29	13	0	42	4.0%	1,098
Hardee	1,376	37	17	0	55	4.0%	1,431
Hendry	1,608	44	20	0	64	4.0%	1,672
Hernando	1,609	44	20	0	64	4.0%	1,673
Highlands	1,248	34	16	0	50	4.0%	1,297
Hillsborough	2,174	59	27	0	86	4.0%	2,261
Holmes	1,208	33	15	0	48	4.0%	1,256
Indian River	2,109	57	26	0	84	4.0%	2,193
Jackson	1,163	32	15	0	46	4.0%	1,209
Jefferson	1,222	33	15	0	49	4.0%	1,270
Lafayette	1,133	31	14	0	45	4.0%	1,178
Lake	1,078	29	13	0	43	4.0%	1,121
Lee	1,733	47	22	0	69	4.0%	1,802
Leon	1,140	31	14	0	45	4.0%	1,185
Levy	1,462	40	18	0	58	4.0%	1,520
Liberty	930	25	12	0	37	4.0%	967
Madison	1,177	32	15	0	47	4.0%	1,223

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2015 on Households by County -- Assuming CPIC Tempered Scenario  
Change in HOMEOWNERS Insurance Costs per Household (CPIC Policyholders)

County	Current Average Cost Per Policy	Increase in Cost Due to:			Total Cost Increase		Projected Average Cost Per Policy
		FHCF Assessment (2.7%)	CPIC Surcharge (1.3%)	Reinsurance Costs (0.0%)	Increase (\$)	Increase (%)	
		(1)	(2)	(3)	(4)	(5)	
Manatee	1,686	46	21	0	67	4.0%	1,753
Marion	1,184	32	15	0	47	4.0%	1,231
Martin	2,122	58	27	0	84	4.0%	2,206
Monroe	2,103	57	26	0	84	4.0%	2,187
Nassau	1,459	40	18	0	58	4.0%	1,517
Okaloosa	2,147	58	27	0	85	4.0%	2,232
Okeechobee	1,528	42	19	0	61	4.0%	1,588
Orange	1,211	33	15	0	48	4.0%	1,259
Osceola	1,272	35	16	0	51	4.0%	1,322
Palm Beach	2,593	71	32	0	103	4.0%	2,696
Pasco	1,680	46	21	0	67	4.0%	1,746
Pinellas	2,450	67	31	0	97	4.0%	2,547
Polk	1,064	29	13	0	42	4.0%	1,106
Putnam	1,319	36	16	0	52	4.0%	1,371
Santa Rosa	1,943	53	24	0	77	4.0%	2,020
Sarasota	1,772	48	22	0	70	4.0%	1,843
Seminole	1,315	36	16	0	52	4.0%	1,367
St. Johns	1,815	49	23	0	72	4.0%	1,887
St. Lucie	1,987	54	25	0	79	4.0%	2,066
Sumter	1,078	29	13	0	43	4.0%	1,121
Suwannee	1,088	30	14	0	43	4.0%	1,131
Taylor	1,746	48	22	0	69	4.0%	1,815
Union	1,185	32	15	0	47	4.0%	1,232
Volusia	1,622	44	20	0	64	4.0%	1,687
Wakulla	1,543	42	19	0	61	4.0%	1,604
Walton	1,920	52	24	0	76	4.0%	1,996
Washington	1,159	32	14	0	46	4.0%	1,205
<b>Total State</b>	<b>\$2,249</b>	<b>\$61</b>	<b>\$28</b>	<b>\$0</b>	<b>\$89</b>	<b>4.0%</b>	<b>\$2,338</b>

Notes:

- (1) See Exhibit 8, Page 3, Column (1)
- (2) = (1) x Exhibit 8, Page 7, Column (12) for Citizens Homeowners
- (3) = (1) x Exhibit 8, Page 7, Column (16) for Citizens Homeowners
- (4) No impact; Assumes Citizens does not purchase private reinsurance in addition to reinsurance from the FHCF
- (5) = (2) + (3) + (4)
- (6) = (5) / (1)
- (7) = (1) + (5)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2015 on Households by County -- Assuming CPIC Tempered Scenario  
Change in HOMEOWNERS Insurance Costs per Household (Non-CPIC Policyholders)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	
County	Current Average Cost Per Policy	Increase in Cost Due to:			Total Cost Increase		Projected Average Cost Per Policy
		FHCF Assessment (2.7%)	CPIC Assessment (1.3%)	Reinsurance Costs (Avg = 2.5%)	Increase (\$)	Increase (%)	
Alachua	\$995	\$27	\$12	\$11	\$50	5.1%	\$1,045
Baker	947	26	12	8	45	4.8%	993
Bay	1,335	36	17	34	87	6.5%	1,422
Bradford	952	26	12	8	46	4.8%	998
Brevard	1,306	36	16	31	83	6.4%	1,389
Broward	1,605	44	20	46	110	6.8%	1,715
Calhoun	1,006	27	13	12	52	5.2%	1,058
Charlotte	1,426	39	18	41	97	6.8%	1,523
Citrus	1,116	30	14	17	61	5.5%	1,177
Clay	888	24	11	9	45	5.0%	933
Collier	1,659	45	21	47	113	6.8%	1,772
Columbia	962	26	12	7	45	4.7%	1,007
Dade	2,068	56	26	67	149	7.2%	2,218
Desoto	1,136	31	14	17	62	5.5%	1,198
Dixie	1,115	30	14	18	62	5.6%	1,177
Duval	912	25	11	10	46	5.1%	958
Escambia	1,230	33	15	26	74	6.0%	1,304
Flagler	980	27	12	17	56	5.7%	1,036
Franklin	1,674	46	21	44	111	6.6%	1,785
Gadsden	1,088	30	14	10	53	4.9%	1,141
Gilchrist	997	27	12	11	51	5.1%	1,048
Glades	1,140	31	14	20	65	5.7%	1,206
Gulf	1,454	40	18	38	96	6.6%	1,550
Hamilton	924	25	12	7	43	4.7%	968
Hardee	1,101	30	14	17	60	5.5%	1,162
Hendry	1,246	34	16	23	72	5.8%	1,318
Hernando	1,372	37	17	22	77	5.6%	1,449
Highlands	1,000	27	13	15	55	5.5%	1,055
Hillsborough	1,576	43	20	28	90	5.7%	1,667
Holmes	1,069	29	13	10	52	4.9%	1,122
Indian River	1,578	43	20	43	106	6.7%	1,684
Jackson	999	27	12	9	48	4.8%	1,047
Jefferson	1,129	31	14	8	53	4.7%	1,181
Lafayette	1,036	28	13	12	53	5.1%	1,089
Lake	941	26	12	12	49	5.3%	990
Lee	1,362	37	17	35	89	6.6%	1,452
Leon	917	25	11	9	45	5.0%	962
Levy	1,078	29	13	16	59	5.4%	1,136
Liberty	1,045	28	13	12	53	5.1%	1,098
Madison	1,004	27	13	8	47	4.7%	1,052

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2015 on Households by County -- Assuming CPIC Tempered Scenario  
Change in HOMEOWNERS Insurance Costs per Household (Non-CPIC Policyholders)

County	(1) Current Average Cost Per Policy	(3) Increase in Cost Due to:			(5) Total Cost Increase		(7) Projected Average Cost Per Policy
		(2) FHCF Assessment (2.7%)	(3) CPIC Assessment (1.3%)	(4) Reinsurance Costs (Avg = 2.5%)	(5) Increase (\$)	(6) Increase (%)	
Manatee	1,415	39	18	38	94	6.6%	1,509
Marion	901	25	11	11	47	5.2%	948
Martin	1,736	47	22	63	132	7.6%	1,868
Monroe	1,245	34	16	48	98	7.8%	1,343
Nassau	1,261	34	16	18	69	5.4%	1,329
Okaloosa	1,441	39	18	38	95	6.6%	1,536
Okeechobee	1,165	32	15	22	69	5.9%	1,234
Orange	1,065	29	13	14	57	5.3%	1,122
Osceola	987	27	12	13	52	5.3%	1,039
Palm Beach	1,706	46	21	48	116	6.8%	1,822
Pasco	1,302	35	16	25	77	5.9%	1,379
Pinellas	1,536	42	19	39	100	6.5%	1,637
Polk	1,103	30	14	13	57	5.2%	1,160
Putnam	947	26	12	9	47	4.9%	994
Santa Rosa	1,446	39	18	35	93	6.4%	1,539
Sarasota	1,255	34	16	33	83	6.6%	1,339
Seminole	1,183	32	15	15	62	5.2%	1,245
St. Johns	1,261	34	16	23	73	5.8%	1,333
St. Lucie	1,234	34	15	34	83	6.7%	1,316
Sumter	847	23	11	11	44	5.2%	891
Suwannee	1,052	29	13	9	51	4.8%	1,103
Taylor	1,060	29	13	14	56	5.3%	1,116
Union	1,065	29	13	9	51	4.8%	1,116
Volusia	1,068	29	13	25	68	6.3%	1,136
Wakulla	1,110	30	14	19	63	5.7%	1,174
Walton	1,545	42	19	38	100	6.5%	1,645
Washington	1,023	28	13	14	54	5.3%	1,078
<b>Total State</b>	<b>\$1,357</b>	<b>\$37</b>	<b>\$17</b>	<b>\$34</b>	<b>\$88</b>	<b>6.5%</b>	<b>\$1,445</b>

Notes:

- (1) See Exhibit 8, Page 4, Column (1)
- (2) = (1) x Exhibit 8, Page 7, Column (12) for Non-Citizens Homeowners
- (3) = (1) x Exhibit 8, Page 7, Column (16) for Non-Citizens Homeowners
- (4) = (1) x (Exhibit 8, Page 7, Column (17) for Non-Citizens Homeowners) x (Reinsurance relativity by county, estimated from sample rate filings)
- (5) = (2) + (3) + (4)
- (6) = (5) / (1)
- (7) = (1) + (5)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2015 on Households by County -- Assuming CPIC Tempered Scenario  
Change in PERSONAL AUTO Insurance Costs per Household

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
County	Current Average Cost Per Household	Increase in Cost Due to:			Total Cost Increase		Projected Average Cost Per Household
		FHCF Assessment (2.7%)	CPIC Assessment (1.3%)	Reinsurance Costs (N/A)	Increase (\$)	Increase (%)	
		Alachua	\$1,318	\$36	\$16	\$0	
Baker	1,228	33	15	0	49	4.0%	1,277
Bay	1,273	35	16	0	51	4.0%	1,324
Bradford	1,520	41	19	0	60	4.0%	1,580
Brevard	1,437	39	18	0	57	4.0%	1,494
Broward	2,016	55	25	0	80	4.0%	2,096
Calhoun	1,172	32	15	0	47	4.0%	1,219
Charlotte	1,501	41	19	0	60	4.0%	1,561
Citrus	1,304	35	16	0	52	4.0%	1,356
Clay	1,619	44	20	0	64	4.0%	1,683
Collier	1,461	40	18	0	58	4.0%	1,519
Columbia	1,228	33	15	0	49	4.0%	1,277
Dade	1,887	51	24	0	75	4.0%	1,962
Desoto	1,304	35	16	0	52	4.0%	1,356
Dixie	1,228	33	15	0	49	4.0%	1,277
Duval	1,724	47	22	0	68	4.0%	1,792
Escambia	1,464	40	18	0	58	4.0%	1,523
Flagler	1,247	34	16	0	50	4.0%	1,297
Franklin	1,172	32	15	0	47	4.0%	1,219
Gadsden	1,172	32	15	0	47	4.0%	1,219
Gilchrist	1,228	33	15	0	49	4.0%	1,277
Glades	1,289	35	16	0	51	4.0%	1,340
Gulf	1,172	32	15	0	47	4.0%	1,219
Hamilton	1,228	33	15	0	49	4.0%	1,277
Hardee	1,534	42	19	0	61	4.0%	1,595
Hendry	1,289	35	16	0	51	4.0%	1,340
Hernando	1,990	54	25	0	79	4.0%	2,069
Highlands	1,534	42	19	0	61	4.0%	1,595
Hillsborough	2,092	57	26	0	83	4.0%	2,175
Holmes	1,172	32	15	0	47	4.0%	1,219
Indian River	1,633	44	20	0	65	4.0%	1,698
Jackson	1,172	32	15	0	47	4.0%	1,219
Jefferson	1,228	33	15	0	49	4.0%	1,277
Lafayette	1,228	33	15	0	49	4.0%	1,277
Lake	1,304	35	16	0	52	4.0%	1,356
Lee	1,501	41	19	0	60	4.0%	1,561
Leon	1,242	34	16	0	49	4.0%	1,291
Levy	1,172	32	15	0	47	4.0%	1,219
Liberty	1,228	33	15	0	49	4.0%	1,277
Madison	1,228	33	15	0	49	4.0%	1,277

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2015 on Households by County -- Assuming CPIC Tempered Scenario  
Change in PERSONAL AUTO Insurance Costs per Household

County	Current Average Cost Per Household	Increase in Cost Due to:					Total Cost Increase		Projected Average Cost Per Household
		FHCF Assessment	CPIC Assessment	Reinsurance Costs	Increase (\$)	Increase (%)			
		(2.7%)	(1.3%)	(N/A)					
Manatee	1,576	43	20	0	63	4.0%	1,638		
Marion	1,416	39	18	0	56	4.0%	1,472		
Martin	1,289	35	16	0	51	4.0%	1,340		
Monroe	1,440	39	18	0	57	4.0%	1,497		
Nassau	1,228	33	15	0	49	4.0%	1,277		
Okaloosa	1,172	32	15	0	47	4.0%	1,219		
Okeechobee	1,607	44	20	0	64	4.0%	1,671		
Orange	1,704	46	21	0	68	4.0%	1,772		
Osceola	1,607	44	20	0	64	4.0%	1,671		
Palm Beach	2,459	67	31	0	98	4.0%	2,557		
Pasco	2,186	59	27	0	87	4.0%	2,273		
Pinellas	2,009	55	25	0	80	4.0%	2,089		
Polk	1,604	44	20	0	64	4.0%	1,667		
Putnam	1,520	41	19	0	60	4.0%	1,580		
Santa Rosa	1,365	37	17	0	54	4.0%	1,419		
Sarasota	1,433	39	18	0	57	4.0%	1,490		
Seminole	1,461	40	18	0	58	4.0%	1,519		
St. Johns	1,200	33	15	0	48	4.0%	1,248		
St. Lucie	1,633	44	20	0	65	4.0%	1,698		
Sumter	1,304	35	16	0	52	4.0%	1,356		
Suwannee	1,228	33	15	0	49	4.0%	1,277		
Taylor	1,172	32	15	0	47	4.0%	1,219		
Union	1,228	33	15	0	49	4.0%	1,277		
Volusia	1,351	37	17	0	54	4.0%	1,405		
Wakulla	1,172	32	15	0	47	4.0%	1,219		
Walton	1,172	32	15	0	47	4.0%	1,219		
Washington	1,228	33	15	0	49	4.0%	1,277		
<b>Total State</b>	<b>\$1,739</b>	<b>\$47</b>	<b>\$22</b>	<b>\$0</b>	<b>\$69</b>	<b>4.0%</b>	<b>\$1,808</b>		

Notes:

- (1) See Exhibit 8, Page 5, Column (1)
- (2) = (1) x Exhibit 8, Page 7, Column (12) for Personal Auto
- (3) = (1) x Exhibit 8, Page 7, Column (16) for Personal Auto
- (4) No impact; Assumes change in reinsurance costs does not affect Personal Auto
- (5) = (2) + (3) + (4)
- (6) = (5) / (1)
- (7) = (1) + (5)

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2015 on Households by County -- Assuming CPIC Tempered Scenario  
Impact on the Cost of Goods and Services Due to the Change in ALL OTHER Insurance Costs

County	(1)	(2) (3) (4)			(5)	(6)	(7) (8)		(9)
	Assessable Commercial Lines Average Cost Per Household	Increase in Allocated Cost Due to:			Non-Assessable Commercial Lines Average Cost Per Household	Total Commercial Lines Average Cost Per Household	Total Cost Increase		Projected Average Cost Per Household
		FHCF Assessment (2.7%)	CPIC Assessment (1.3%)	Reinsurance Costs (Avg = 0.3%)			Increase (\$)	Increase (%)	
Alachua	\$2,104	\$57	\$26	\$2	\$433	\$2,537	\$86	3.4%	\$2,623
Baker	2,148	58	27	2	443	2,591	87	3.4%	2,678
Bay	1,599	44	20	4	329	1,928	68	3.5%	1,995
Bradford	1,967	54	25	2	405	2,372	80	3.4%	2,452
Brevard	2,054	56	26	5	423	2,477	86	3.5%	2,563
Broward	2,591	71	32	7	534	3,125	110	3.5%	3,235
Calhoun	1,479	40	18	2	305	1,783	60	3.4%	1,844
Charlotte	1,540	42	19	4	317	1,857	66	3.5%	1,923
Citrus	1,548	42	19	2	319	1,867	64	3.4%	1,931
Clay	2,369	64	30	3	488	2,857	97	3.4%	2,954
Collier	2,987	81	37	9	615	3,602	127	3.5%	3,730
Columbia	1,812	49	23	1	373	2,185	73	3.4%	2,258
Dade	2,558	70	32	8	527	3,085	110	3.6%	3,195
Desoto	1,444	39	18	2	297	1,741	59	3.4%	1,801
Dixie	1,101	30	14	2	227	1,327	45	3.4%	1,373
Duval	2,422	66	30	3	499	2,921	99	3.4%	3,020
Escambia	1,995	54	25	4	411	2,406	83	3.5%	2,490
Flagler	1,629	44	20	3	336	1,965	68	3.4%	2,032
Franklin	1,024	28	13	3	211	1,235	43	3.5%	1,279
Gadsden	1,858	51	23	2	383	2,240	75	3.4%	2,316
Gilchrist	1,981	54	25	2	408	2,389	81	3.4%	2,470
Glades	1,137	31	14	2	234	1,372	47	3.4%	1,419
Gulf	1,210	33	15	3	249	1,460	51	3.5%	1,511
Hamilton	1,360	37	17	1	280	1,640	55	3.4%	1,695
Hardee	1,609	44	20	2	332	1,941	66	3.4%	2,007
Hendry	2,073	56	26	4	427	2,500	86	3.4%	2,586
Hernando	1,705	46	21	3	351	2,057	71	3.4%	2,127
Highlands	1,351	37	17	2	278	1,630	56	3.4%	1,685
Hillsborough	2,401	65	30	4	495	2,896	100	3.4%	2,996
Holmes	1,579	43	20	1	325	1,904	64	3.4%	1,969
Indian River	2,928	80	37	8	603	3,531	124	3.5%	3,656
Jackson	1,588	43	20	1	327	1,915	64	3.4%	1,979
Jefferson	1,932	53	24	1	398	2,330	78	3.4%	2,409
Lafayette	1,404	38	18	2	289	1,693	57	3.4%	1,751
Lake	1,894	52	24	2	390	2,284	78	3.4%	2,361
Lee	1,981	54	25	5	408	2,389	84	3.5%	2,473
Leon	2,149	58	27	2	443	2,592	87	3.4%	2,679
Levy	1,531	42	19	2	315	1,846	63	3.4%	1,909
Liberty	1,586	43	20	2	327	1,913	65	3.4%	1,978
Madison	1,416	39	18	1	292	1,707	57	3.4%	1,765

**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Estimate of the Average Cost Impact in 2015 on Households by County -- Assuming CPIC Tempered Scenario  
Impact on the Cost of Goods and Services Due to the Change in ALL OTHER Insurance Costs

County	(1)	(2) Increase in Allocated Cost Due to:			(5)	(6)	(7) Total Cost Increase		(8)	(9)
	Assessable Commercial Lines Average Cost Per Household	FHCF Assessment (2.7%)	CPIC Assessment (1.3%)	Reinsurance Costs (Avg = 0.3%)	Non-Assessable Commercial Lines Average Cost Per Household	Total Commercial Lines Average Cost Per Household	Increase (\$)	Increase (%)	Projected Average Cost Per Household	
	Manatee	2,124	58	27	6	438	2,562	90	3.5%	2,652
Marion	1,783	49	22	2	367	2,151	73	3.4%	2,224	
Martin	3,278	89	41	12	675	3,954	142	3.6%	4,096	
Monroe	2,402	65	30	9	495	2,897	105	3.6%	3,001	
Nassau	2,614	71	33	4	538	3,152	108	3.4%	3,260	
Okaloosa	2,208	60	28	6	455	2,662	93	3.5%	2,756	
Okeechobee	1,669	45	21	3	344	2,013	69	3.5%	2,083	
Orange	2,395	65	30	3	493	2,888	98	3.4%	2,987	
Osceola	1,496	41	19	2	308	1,804	61	3.4%	1,865	
Palm Beach	3,374	92	42	10	695	4,069	144	3.5%	4,213	
Pasco	1,690	46	21	3	348	2,038	70	3.5%	2,109	
Pinellas	2,251	61	28	6	464	2,715	95	3.5%	2,810	
Polk	1,869	51	23	2	385	2,254	76	3.4%	2,330	
Putnam	1,436	39	18	1	296	1,732	58	3.4%	1,791	
Santa Rosa	3,055	83	38	7	629	3,685	129	3.5%	3,814	
Sarasota	1,615	44	20	4	333	1,948	68	3.5%	2,016	
Seminole	2,261	62	28	3	466	2,727	93	3.4%	2,820	
St. Johns	2,701	73	34	5	556	3,257	112	3.4%	3,369	
St. Lucie	2,891	79	36	8	596	3,487	123	3.5%	3,609	
Sumter	1,254	34	16	2	258	1,513	51	3.4%	1,564	
Suwannee	1,692	46	21	1	349	2,041	69	3.4%	2,110	
Taylor	1,457	40	18	2	300	1,757	60	3.4%	1,817	
Union	1,878	51	23	2	387	2,265	76	3.4%	2,341	
Volusia	1,779	48	22	4	366	2,145	75	3.5%	2,220	
Wakulla	1,706	46	21	3	351	2,057	71	3.4%	2,128	
Walton	1,045	28	13	3	215	1,261	44	3.5%	1,305	
Washington	1,503	41	19	2	310	1,813	62	3.4%	1,875	
<b>Total State</b>	<b>\$2,318</b>	<b>\$63</b>	<b>\$29</b>	<b>\$6</b>	<b>\$478</b>	<b>\$2,796</b>	<b>\$98</b>	<b>3.5%</b>	<b>\$2,893</b>	

Notes:

- (1) See Exhibit 8, Page 6, Column (1)
- (2) = (1) x Exhibit 8, Page 7, Column (12) for All Other Assessable Lines
- (3) = (1) x Exhibit 8, Page 7, Column (16) for All Other Assessable Lines
- (4) = (1) x (Exhibit 8, Page 7, Column (17) for All Other Assessable Lines) x (Reinsurance relativity by county, estimated from sample rate filings)
- (5) See Exhibit 8, Page 6, Column (5)
- (6) = (1) + (5)
- (7) = (2) + (3) + (4)
- (8) = (7) / (6)
- (9) = (6) + (7)



**Florida Department of Financial Services**  
Economic Impact of a 1-in-100 Year Hurricane in Florida During the 2010 Storm Season

Determination of Additional Post-Hurricane Debt  
(\$ in thousands)

**Florida Hurricane Catastrophe Fund**

(1) Reimbursements owed to Participating Insurers in Excess of Available Funds	\$16,370,056
(2) External Pre-Event Liquidity	3,500,000
	\$12,870,056
(3) FHCF Additional Post-Hurricane Debt	\$12,870,056

**Citizens Property Insurance Corporation**

(4) Estimated Post-Hurricane Deficit (all accounts combined)	\$10,456,056
(5) External Pre-Event Liquidity	3,671,000
	\$6,785,056
	\$19,655,112
<b>(7) Total Additional Post-Hurricane Debt</b>	<b>\$19,655,112</b>

Notes:

(1) See Exhibit 3, Page 1

(2) From the FHCF's *Fiscal Year 2007-08 Annual Report*, Page 42

(3) = (1) - (2)

(4) See Exhibit 4, Page 1

(5) Includes \$1.271 billion in current pre-event bonds and \$2.4 billion in new pre-event bonds planned to be issued during 2010;

(5) \$1.271 billion from the February 2010 report from the Florida OIR to the Financial Services Commission *Annual report of*

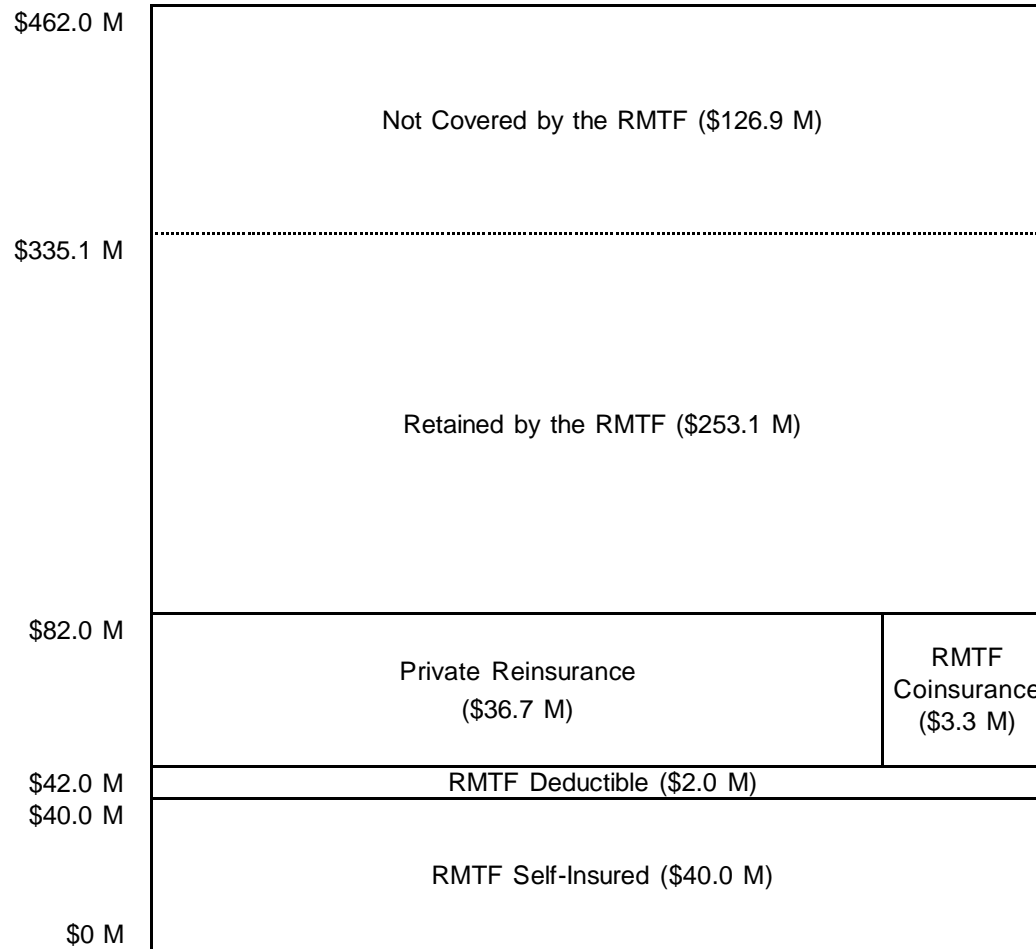
(5) *aggregate net PMLs, financing options and potential assessments*; \$2.4 billion from CPIC's 2010 Operating Budget

(6) = (4) - (5)

(7) = (3) + (6)

**Florida Department of Financial Services**  
 Economic Impact of a 1-in-100 Year Hurricane in Florida  
 2010 Storm Season

Overview of Insurance Coverage on State-Owned Buildings  
 Purchased by the Florida Risk Management Trust Fund (RMTF)



Source: Modeled losses from Risk Placement Services' January, 2010 report for the State of Florida, *2010 Hurricane & Tornado Catastrophe Analysis Executive Summary*; Insurance limits provided by the Florida Division of Risk Management