



**The Florida Hurricane Catastrophe Fund:**  
*Alternative Methods for Managing the Size*

*Submitted to:*

**The President of the Senate, Speaker of the House of Representatives,  
the Governor and Cabinet Officers of the State of Florida**

*by:*

**The Florida Catastrophic Storm Risk Management Center**

December 1, 2013

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The Florida Catastrophic Storm Risk Management Center prepared this report in consultation with the State Board of Administration. Additionally, the Center engaged in discussions with numerous professionals representing the insurance, reinsurance and capital markets in order to gain insights to Florida's residential insurance market.

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# EXECUTIVE SUMMARY

## Statement of the Problem

Line Item 2410A of the 2013 General Appropriations Act included proviso language requiring the Florida Catastrophic Storm Risk Management Center to “produce a report on alternative methods for managing the size of the Florida Hurricane Catastrophe Fund. The center shall coordinate its research efforts with the State Board of Administration. The report shall be submitted to the President of the Senate, Speaker of the House of Representatives, the Governor and Cabinet Officers by December 1, 2013.”

The “size” of the Florida Hurricane Catastrophe Fund (FHCF) can be defined as its *capacity*, or maximum potential obligation, currently set by statute at up to \$17 billion. The size can also be defined as its *resources*, or maximum potential for monies with which to provide capacity. FHCF resources (the maximum of which can only be estimated) consist of reimbursement premiums paid in by participating insurers plus proceeds of revenue bonds, reinsurance cover and/or alternative risk transfers. The FHCF’s charge is to provide additional capacity for the residential property insurance market – an increased ability for the private market to accept and spread risk – and help stabilize the market to protect Florida consumers and the Florida economy. It is incumbent upon all responsible parties to manage size to a level where FHCF capacity meaningfully improves market capacity without impairing market stability. The challenge is to find the proper balance of capacity and stability.

The FHCF needs to be of an appropriate size and structure to act as a stabilizing force to offset or mitigate private reinsurance market volatility, but not be so large, or structured in such a way, as to jeopardize its funding capabilities and risk insurer solvency. Until the FHCF’s year-end cash balance (or bona fide risk transfer commitments) for paying claims in a given year reaches the statutory cap or limit of \$17 billion, there will be some risk associated with the FHCF’s ability to issue revenue bonds. Even at such a level, the FHCF could be unfunded or underfunded for subsequent events, as experienced in Florida in 2004 and 2005, or following seasons. These risks are borne by insurers who rely on the FCHF for their catastrophic loss financing, by the insurance regulator who is responsible for protecting the public from insurer insolvencies, and primarily by Florida residential policyholders who ultimately could suffer the most if the FHCF cannot perform as intended.

The idea behind the FHCF is also to provide for a stable and ongoing source of reimbursement for insurers. Therefore, the FHCF should be structured such that the year following an event which exhausts the FHCF’s initial season’s capacity or exhausts its statutory limit, it will be capable of “recharging” its capacity and stabilizing the market for a subsequent season. The

ability of the FHCF to perform over the long term is vital for the health of the residential property insurance market and the Florida economy. Without the full FHCF protection in the following year, insurers may be forced to replace FHCF coverage with private reinsurance at a higher cost in order to renew their policies. Such costs cannot be immediately recouped in rates, and will shock the balance sheets of insurers, potentially leading to nonrenewal of large numbers of policies. This dynamic played out after both Andrew and the spike in reinsurance rates after the 2004-2005 seasons. The Florida Legislature can limit or allocate the claims-paying capacity of the FHCF, but the financial markets determine how much in revenue bonding can be issued timely to reimburse insurers. Event-free hurricane years allow for the buildup of the FHCF's cash balance. How best to provide for capacity for both an initial season and subsequent seasons as well as how best to define FHCF capacity and management to that level of capacity is, in essence, the problem.

### What Led to the Problem?

The main measure driving the recent evolution of Florida's property insurance market is the level of exposure to risk from catastrophic weather events, namely hurricanes. An abrupt increase in risk assessments, coupled with a new technology and intellectual approach in the form of catastrophe simulation models, followed Hurricane Andrew in 1992. Prior to Andrew, Florida's property insurance market was similar to that of many other states in that the market was dominated by a few large multistate, multiline insurers. Following unexpected billions of dollars in claim losses due to Andrew, these insurers re-evaluated their books of business using the new cat models and reduced their exposure to catastrophes. Meanwhile, Florida continued to see substantial population growth that increased Florida's exposure to catastrophic damage. The reduction in supply and increase in demand for property insurance have spurred a series of legislative, regulatory, and insurer actions that have significantly altered the property insurance landscape in Florida.

The Florida Hurricane Catastrophe Fund (FHCF) was created by the Florida Legislature in 1993. The FHCF provides reimbursement for a selected percentage (90%, 75%, or 45%) of a property insurer's hurricane losses above an annual amount of loss retained by the insurer ("retention"), not to exceed the insurer's share of the total actual claims-paying capacity of the fund. Insurers are required to enter into contracts with the FHCF and pay a premium, called a "reimbursement premium", that appears as a ceded premium to a reinsurer in statutory financial statements. The FHCF's annual maximum limit of coverage is set by statute. Currently, the FHCF's maximum potential obligation for the mandatory coverage is up to \$17 billion. This obligation is not fully funded by reimbursement premiums and the FHCF has never itself reinsured the remainder of its obligations. Therefore, it also depends on the issuance of post-event bonds which are funded through post-event emergency assessments levied on a broad base of insurance companies.

The FHCF is required to charge an actuarially indicated premium for its coverage. Such premiums are lower than what is charged by private reinsurance companies because the FHCF was created as a tax-exempt state trust fund and thus pays no federal income taxes, has lower operating costs than private reinsurers, does not have to load in risk charges or pay profits to investors, and only covers direct claims from hurricanes. In the event that the FHCF's obligations exceed its resources, the FHCF is authorized to collect assessments on policyholders in almost all lines of property and casualty insurance. The practical reality is that amount of coverage available from the FHCF, the cost of the coverage to participating insurers (that pass this cost on to insurance consumers in rate filings), and the potential assessments (paid directly by consumers) are significant factors in the Florida insurance market. (Section I covers the FHCF's operational structure in greater detail.)

Since 2007, financial markets have changed, and this has had a direct impact on the FHCF's capabilities to potentially finance large amounts of debt. Investors today are reluctant to purchase large amounts of debt from unfamiliar issuers, and they scrutinize municipal debt more closely today. Fewer issuances occur today and the market depth for the acceptance of any debt issuance is governed by greater scrutiny of its potential investment risk. Having been "burned" with subprime mortgage based assets and not being able to liquidate other "toxic" assets, investment analysts now approach all investment decisions with extreme caution.

The debt issued to fund FHCF losses has most recently been rated Aa3, AA-, and AA by the rating agencies Moody's, Standard and Poor's, and Fitch, respectively. However, due to financial market conditions, the FHCF could have fallen short of its estimated claims-paying capacity during three of the last five years. Since the FHCF statute requires insurers to rely on the FHCF's estimated claims-paying capacity for justifying their overall catastrophic financing needs in rate filings, insurers could have experienced a financial shortfall and may not have been able to fully pay their policyholder claims on a timely basis had a large hurricane occurred in those years. In extreme cases, this could have led to many insurer insolvencies. Fortunately, there has not been a land falling hurricane in Florida since 2005.

The FHCF's published May 2013 Claims-Paying Capacity Estimate indicated that the FHCF had sufficient estimated claims-paying capacity to meet its statutory maximum limit of \$17 billion. However, for the two prior years, the estimates for the FHCF claims-paying capacity indicated the FHCF would not have been able to provide the full statutory limit of coverage. In October 2011, the estimates (\$15.17 billion) were \$3.2 billion short of the May 2011 estimates for claims-paying capacity (\$18.551 billion). The May 2011 estimates initially indicated that the mandatory coverage and the optional coverage selected by insurers would be capable of being fully funded. No hurricanes occurred, but had a large event occurred, it is highly likely that there would have been financial difficulties for insurers caused by the volatility in the financial

markets; it is this volatility in financial markets that makes precise estimation of the FHCF's claims-paying ability so difficult.

### Why Study the Problem Now?

Given no land falling hurricanes in the last eight years, the FHCF has substantially improved its claims paying position as it enters the 2014-2015 reimbursement contract year. The Fund's cash balance for paying claims has grown to an estimated \$9.8 billion by year-end 2013. The FHCF also was able to obtain \$2 billion of pre-event financing in April 2013 to add to its liquidity position. It is anticipated that for the next contract year it will rely on a maximum debt issuance of around \$5.9 billion for a first event.

Despite the FHCF's relatively improved current financial position, it cannot be forgotten that little more than five years ago, neither the FHCF nor any other bond issuer would have been able to obtain sufficient investment for multi-billion-dollar bond issues. This was the consequence of infrequent but historically recurring financial market conditions, as well as potentially persistent changes in the municipal bond market. The FHCF was originally designed to provide stable additional capacity for the residential property insurance market so as to counteract the adverse effects of private reinsurance underwriting cycles on policyholders and insurance companies. Heavy reliance by the FHCF on debt financing can have disastrous consequences in a liquidity crisis and serve to destabilize the market—the consequences that the FHCF was created to prevent. (Section II covers the importance and challenges of managing the FHCF's size in greater detail.)

During this current hurricane-quiet and financially-improved time period the state has a good opportunity to reassess how best to balance the FHCF capacity-stability mission. Due to the risk of future financial difficulty, it is important to consider alternative ways in which the FHCF's funding obligations and structure may be managed more consistently going forward. Alternative approaches for managing the size of the FHCF follow.

## Managing FHCF Size

Managing the size of the FHCF is a matter of financial capability and is driven by economic and market conditions. In addition to the FHCF overall coverage limits, the per-storm retention, options for co-participation percentages, contract provisions, and the FHCF ratemaking process are specified by statute. Capacity and coverage limits are the primary subjects of this report. Adjustment of the other parameters is a topic in its own right, having implications that are and should be completely within the control of the Legislature from a public policy perspective.

The status quo – wherein capacity is set by legislation – may continue to work in a sense, especially in the continued absence of a major hurricane. But, the status quo may not be satisfactory for dealing with insurer risk. At least four approaches for managing the FHCF size are available to the state – an independent panel of experts, the SBA Trustees, a formulaic approach, and a method to conserve subsequent season capacity.

#### **Grant Statutory Responsibility for Managing FHCF Size to an Independent Panel of Experts**

This approach would create a separate, politically “independent” body to determine the size of the FHCF’s capacity by an appointed, nonpartisan commission (similar to the Public Service Commission). Given the likely perception of political influence, the statute could spell out a methodology to be used by the panel of experts, and their approach could be to spread capacity over time to accomplish the FHCF’s purpose of maintaining capacity in the marketplace.

#### **Grant Statutory Responsibility for Managing FHCF Size to the SBA Trustees**

Since the SBA Trustees already are responsible for administering the FHCF, the members are familiar with the FHCF’s purpose, operations, and financing challenges. This approach places control in the executive branch where there is more administrative and technical expertise rather than the legislative branch whose function is to decide questions of public policy. The SBA Trustees are familiar with the administration of the FHCF and managing the FHCF’s size is consistent with other administrative matters under their control, such as ratemaking, pre-event and post-event financing, investing, and the claims-paying estimation process. Additionally, each individual SBA Trustee serves the interests of the entire state rather than any particular regional or local constituency.

#### **Formulaic Determination of the FHCF Size**

A formulaic approach could systematically take into account private reinsurance capacity and the FHCF’s estimated claims-paying capacity. Such an approach might, for example, set the overall coverage limit within a limited band of elasticity based on the average level of price quotations from the private reinsurance market for a reasonable time frame in advance of a FHCF coverage determination deadline. The formula could clearly specify how the FHCF estimated claims-paying capacity would be used in conjunction with the determination of the limit for both the initial and subsequent seasons. This approach attempts to address the very market issues that the FHCF exists to counteract and mitigate. The formula inputs (presumably some measures of reinsurance, debt market, and/or other financial market capacity) become critical and inherently require estimation. The FHCF size also needs to be set far enough in advance to allow insurers time to negotiate private reinsurance purchases structured around a

known and reliable level of FHCF coverage. Such an approach needs to be stress tested with historical data, and may be worthwhile if execution and financial risks can be proven reduced.

### **Methodology to Conserve Subsequent Season Capacity**

One method to conserve subsequent season capacity and balance it more appropriately with initial season capacity is to adjust the two year estimated capacity to provide for maintaining claims-paying capacity for a subsequent season. Currently, there is \$24.845 billion of two year capacity with the initial season capacity at \$17 billion or 68.4% of the two year capacity estimate. An option is a redefinition of initial season capacity as no more than a lower percentage of two year FHCF capacity, with a transition to this lower ceiling over time as needed. This approach provides for subsequent season capacity when the estimated capacity in the initial season is less than the statutory cap. The estimated claims-paying capacity is more likely to be aligned with actual claims-paying capacity when there is less reliance on bonding.

### Combinations of Approaches

Below are three examples of approaches that combine elements of these individual approaches. The attempt here is to describe and illustrate specific combinations that recognize the importance of balance among various, and sometimes, conflicting desired outcomes that are responsive to capacity in the private marketplace, and relieve the Legislature of its current burden to determine FHCF size each year.

### **Combination Solution 1: Legislative & Independent Expert Panel Shared Authority for Determination of Overall Payout Limit with an SBA Emergency Release Valve**

The Legislature could set the default capacity (payout limit) within a band of coverage on a periodic basis such as every five years. An independent panel of experts could be utilized annually to determine the “right” payout limit for a given year within the band of coverage. The decision of the expert panel might take into account the estimated claims-paying capacity as well as create a cushion around the estimate (given its inherent uncertainty). In any year, the SBA Trustees would have a time frame within which to vote to reject the payout limit as determined by the independent expert panel.

### **Combination Solution 2: Independent Expert Panel Authority for Determination of Payout Limit Subject to a SBA Trustees Defined Minimum for Subsequent Season**

An independent expert panel could be appointed to set mandatory capacity (payout limit) two years out, and the SBA Trustees may define a minimum capacity level for subsequent season. The independent expert panel could also make available floating optional coverage above the mandatory limit that allows for responsiveness of insurers to changes in the private reinsurance environment. An important consideration to this hybrid approach is that the floating optional

coverage would almost certainly be selected by the weakest companies. Actuarially fair rates for this coverage would minimize the negative consequences of adverse selection, which include the potential of a financial shortfall.

### **Combination Solution 3: Payout Limit Based on Method to Conserve Subsequent Season with Independent Expert Panel to Determine Shortfall Financing**

The annual payout limit could take into account the estimated claims-paying capacity, possibility of a subsequent year storm, and the current reinsurance capacity. The FHCF's initial season would be capped at a maximum, but in any year would not exceed a specified percentage. The percentage allowed would decrease each year as a phase in over successive years until a target percentage is reached. This way increasing recognition is given to building up subsequent season capacity, and an affordability and availability problem in a subsequent season can be avoided. As the FHCF's two year capacity estimates grow, the actual change in the FHCF initial season capacity may represent marginal growth or reduction. To respond to reinsurance market capacity, elastic (+/-) coverage amount could be triggered by quoted reinsurance pricing crossing an upper or lower limit. An independent expert panel could be utilized to recommend or determine how to finance any shortfall. As stated earlier, the options include bonds, reinsurance and alternative risk transfer products. It is important to note the estimated bonding capacity report becomes a critical element in the decision process if such an approach is used going forward.

### The Potential Use of Reinsurance and/ or Alternative Risk Transfer

The potential for the FHCF to purchase natural catastrophe reinsurance or other alternative risk transfer is authorized by the Legislature, and theoretically could be used in concert with any of the above approaches to managing FHCF size. One use of reinsurance or other risk transfer is to augment (not replace) resources available for subsequent season capacity. For instance, reinsurance policies can be used as an advance measure to reinstate an insurer's limits after losses deplete coverage. The price of reinsurance for coverage of first-year losses is likely to be too high and volatile for the FHCF to afford; it could spend most or all of its cash resources to buy the reinsurance. The price of reinsurance for a subsequent season after a loss (e.g., coverage triggered only in the event of a catastrophic hurricane that depletes FHCF resources by a predetermined amount) may be substantially lower, making subsequent season coverage worth exploring.

### Structural or Public Policy Options

The study of other structural changes to the FHCF is beyond the technical scope of this report. Parameters such as the FHCF's retention, its copayments, its breadth of coverage, its ratemaking process, its cash buildup factor, and similar matters impact FHCF coverage "shape" (as opposed

to size), and can be changed by the Legislature to implement public policy with regard to how FHCF benefits are provided or funded, who pays for those benefits, which insurers derive the benefits, and similar policy (as distinguished from managerial) considerations.

Section III provides a discussion of public policy parameters as well as a context for evaluating the options. The fundamental difficulty with these public policy options is that an attempt to change one aspect of the FHCF structure or operation inherently impacts other aspects of the FHCF, and therefore has (possibly unintended) ripple effects on the property insurance market and on the industries that depend on a healthy property insurance market, including construction, real estate, and finance. Changes to these public policy options could impact property insurance rates paid by consumers, the amount and frequency of future emergency assessments, and the impact on outside capital.

Section III does also briefly address the competitive impact that selection of the attachment point can have on the market, the potential for the FHCF to explore reinsurance and alternative risk transfer markets, and the usefulness of the cash buildup factor.

## Final Observations

The “size” of the FHCF is its maximum potential obligation, currently set by statute at up to \$17 billion. Other parameters impact the “shape” of FHCF coverage at a given size, but size itself is essentially determined by a cap for initial and subsequent season coverage. To the extent that the FHCF’s estimated claims-paying capacity is at a level above a determined cap, some of the capacity generated for the initial season coverage can be utilized for creating subsequent season capacity. At the heart of the size issue is this charge: Be large enough to act as a stabilizing force to offset or mitigate private reinsurance volatility, but not so large as to jeopardize funding capabilities and risk insurer solvency.

As a final note, the question of whether the FHCF’s actual claims-paying capacity would be sufficient to cover the full extent of hurricane reimbursements that participating insurance companies expect (and plan) to receive from the FHCF is important. Most people, even those familiar with the insurance industry, underappreciate the fact that the estimated gross loss to insurers in a severe scenario, such as a “one in 100 year storm”, varies based on the hurricane loss model used, the books of business and the projected storm path. An event that is a one in 100 year event for Citizens Property Insurance Corporation might not be a one in 100 year event for a company with a different spread of risk. Additionally, a 100 year (or 1% annual probability) meteorological event will have disparate impact on a company based on where the event makes landfall. Furthermore, the probability of a severe impact grows with the time

horizon – the 1% annual probability implies a one-in-four probability over the 30 years of a typical home mortgage or long-term debt instrument. It is prudent to stress test the overall FHCF capacity against not only a one in 100 year storm, but also against several hypothetical storms that make landfall in different localities and have differing severities, and against multi-season erosion of its capacity. Since so many small Florida insurers rely on FHCF coverage, such an analysis seems a good use of FHCF data and resources.

## I. The FHCF's Operational Structure

Soon after Hurricane Andrew, the Florida residential insurance market faced an availability crisis. The creation of the Residential Property and Casualty Joint Underwriting Association (RPCJUA) in December 1992 allowed people who could not get residential property insurance to get coverage, but it did little to address the circumstances of private insurance companies.<sup>1</sup> Even though many of the larger property insurance companies received additional capital from their parent companies to replace the capital consumed by Hurricane Andrew losses, these companies still felt compelled to reconsider their capacity and exposure to hurricane losses in Florida and, in general, seemed to decide that less exposure to hurricane losses was better than more. Likewise, reinsurance companies, which are critical to the writing of residential property insurance in Florida, reassessed their understanding of potential catastrophic hurricane losses in Florida, which in many cases increased its cost. As a result, the private residential property insurance market contracted.<sup>2</sup>

The Florida Legislature met in special session during November 1993 and enacted Section 215.555, Florida Statutes, which created the Florida Hurricane Catastrophe Fund (FHCF) as a trust fund under the State Board of Administration. The Legislature's stated reason for establishing the FHCF was as follows:

A state program to provide a stable and ongoing source of reimbursement to insurers for a portion of their catastrophic hurricane losses will create additional insurance capacity sufficient to ameliorate the current danger to the public health, safety, and welfare.<sup>3</sup>

The FHCF statute was amended in 1995<sup>4</sup> to address various implementation issues, to restrict FHCF coverage to residential risks, and to position the FHCF to achieve federal tax-exempt status. Although the FHCF had begun operations in 1994, the 1995 legislation established the operational framework for the FHCF that has continued in large part to the present.

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<sup>1</sup> See Final Bill Analysis & Economic Statement on CS/HB 31-C (which became Chapter 93-409, Laws of Florida), November 24, 1993, pp. 10–11 for an overview of the condition of the residential property insurance market in 1993 leading up to the formation of the FHCF.

<sup>2</sup> Newman, *Winds of Change*, p. 41

<sup>3</sup> Chapter 93-409, Laws of Florida

<sup>4</sup> Chapter 95-1 Laws of Florida; Chapter 95- 276, Laws of Florida

## A. Structure of FHCF Coverage

The FHCF provides reimbursement coverage<sup>5</sup>, as described below, to insurance companies writing a “covered policy” which includes residential structure or its contents, including private-sector “voluntary market” companies and Citizens Property Insurance Corporation (Citizens), Florida’s residual market entity.<sup>6</sup> These insurance companies<sup>7</sup> are required by Florida law to purchase coverage from the FHCF as a condition of doing residential property insurance business in the state.<sup>8</sup> The coverage provided by the FHCF to each insurance company is based on parameters set forth in the FHCF statute.

The statutorily-specified parameters for FHCF coverage include (1) the insurance industry aggregate retention used to determine the loss level at which FHCF coverage begins for each participating insurer, (2) the maximum coverage limit,<sup>9</sup> and (3) the percentage of the coverage that insurance companies may elect for losses above their retention, i.e., 90 percent, 75 percent or 45 percent.

The FHCF statute specifies how these parameters and the total estimated premium that insurance companies will pay for a particular year’s coverage are used to calculate the specific coverage retention and limit applicable to that company.<sup>10</sup> While the three coverage percentages have remained in place since 1995, the Legislature has on several occasions

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<sup>5</sup> The coverage provided by the FHCF is specified by statute; see s. 215.555(4), F.S. Although this coverage shares some purposes with traditional private reinsurance, there are also many significant differences. The “reimbursement” provided by the FHCF has a broader purpose than traditional reinsurance. The ultimate purpose of the FHCF is to benefit the Florida public by addressing dangers to the state’s economy and the public health, safety, and welfare. In furtherance of its public purpose, the FHCF is a mandatory program with limited liability and less flexible coverage than private reinsurance.

<sup>6</sup> See s. 215.555(2)(c), F.S., for the full definition of “covered policy.” The general portion of the definition states that the term “means any insurance policy covering residential property in this state, including, but not limited to, any homeowner’s, mobile home owner’s, farm owner’s, condominium association, condominium unit owner’s, tenant’s, or apartment building policy, or any other policy covering a residential structure or its contents issued by any authorized insurer, including a commercial self-insurance fund holding a certificate of authority issued by the Office of Insurance Regulation under s. 624.462, the Citizens Property Insurance Corporation, and any joint underwriting association or similar entity created under law.”

<sup>7</sup> Unless the context indicates otherwise, the term “insurance company” will include Citizens.

<sup>8</sup> Section 215.555(4)(a), Florida Statutes

<sup>9</sup> Under s. 215.555(4)(c), F.S., the maximum aggregate coverage limit is \$17 billion, and s. 215.555(4)(d), F.S., provides that the actual coverage limit, i.e., the maximum obligation of the FHCF, is limited to the fund’s “actual claims-paying capacity.” See s. 215.555(2)(m), F.S., for the definition of “actual claims-paying capacity.”

<sup>10</sup> See s. 215.555(5), F.S., for a description of the calculation of FHCF premium. See s. 215.555(2)(e), F.S., for a description of how an insurer’s retention is calculated. See s. 215.555(4)(d), F.S., for a description of how FHCF premium is used in the calculation of an insurer’s maximum recovery from the FHCF.

amended the maximum coverage limit and the insurance industry aggregate retention used to determine each participating insurer's individual retention.<sup>11</sup>

#### Aggregate Retention Dollar Amount for Calculation Purposes

The insurance industry aggregate retention dollar amount was set at \$3.0 billion in 1995<sup>12</sup>, with the requirement that in subsequent years this dollar amount be adjusted to reflect the percentage growth in premium for covered policies.<sup>13</sup> In 1999 the dollar amount was adjusted by resetting it to \$3.0 billion, and the year from which future adjustments were to be based was moved from 1995 to 1998.<sup>14</sup>

After four hurricanes struck Florida in 2004, the Florida Legislature made further changes to the insurance industry aggregate retention level in 2005. First, the industry aggregate retention dollar amount was reset at \$4.5 billion, with the dollar amount in future years to be based on growth in reported exposure since 2004 rather than 2003.<sup>15</sup> This change was motivated by the residential property insurance companies' desire to avoid repeated large retentions in years where multiple hurricanes trigger the FHCF similar to what occurred in 2004. The determination of the dollar amount for basing the calculation of insurer's retentions has remained in place since 2005 except for a minor change in 2010 to address a timing issue regarding the way the year-to-year change in insured residential property exposure is calculated.<sup>16</sup> For the 2013-2014 year, the dollar amount for calculating each insurer's retention has grown to \$7.2 billion.<sup>17</sup>

The other important statutory change affecting insurance company retentions in 2005 was a revision addressing insurers' retention in multiple-hurricane years. Under the 2005 revision, insurance companies absorb their full retention on each of the two hurricanes with the largest losses in a year. For other hurricanes in the same year, the insurer's retention would be

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<sup>11</sup> Although the term "insurance industry aggregate retention" is often used, the statute specifically defines the calculation of an insurer's retention as its reimbursement premium times a retention multiple determined by dividing a statutorily adjusted number based on insurer reported exposure growth by the FHCF's reimbursement premium for the contract year assuming that each insurer selects the 90% coverage option. Thus, hurricane losses are required to trigger each participating insurer according to its defined "retention" rather than hurricane losses triggering some "aggregate" loss level for the insurance industry as a whole.

<sup>12</sup> Chapter 95-276, Laws of Florida

<sup>13</sup> The Retention Multiple for any year is the insurance industry aggregate retention divided by the total estimated FHCF premium for that year and is used to calculate a separate per occurrence retention for each participating insurance company.

<sup>14</sup> Chapter 99-237, Laws of Florida

<sup>15</sup> Chapter 2004-27, Laws of Florida

<sup>16</sup> Chapter 2010-10, Laws of Florida

<sup>17</sup> Retention multiples have increased and decreased over time and may be impacted by reported exposure increasing or declining as well as premium fluctuations or legislative changes to the FHCF. The adjusted dollar amount for determining individual insurer's retention has both increased and decreased over time. The FHCF anticipates that this number will be decreasing for the 2014-2015 contract year.

reduced to one third of the full retention.<sup>18</sup> This change was intended to help insurance companies “when dealing with multiple hurricanes during a contract year and lessen the impact of incurring multiple retentions prior to becoming eligible for reimbursement (from the FHCF).”<sup>19</sup>

### Statutory Maximum Limit

A major distinction between the coverage provided by the FHCF and private reinsurance companies is that the FHCF statute and the FHCF’s reimbursement contract with insurance companies state that the FHCF’s total obligations with respect to all its contracts for a given contract year “... shall not exceed the actual claims-paying capacity of the fund up to a limit of \$17 billion ...” The actual claims-paying capacity is defined as “the sum of the balance of the fund as of December 31 of a contract year, plus any reinsurance purchased by the fund, plus the amount the board is able to raise through the issuance of revenue bonds ....”<sup>20</sup> From 1994 through 1998, the FHCF coverage on this basis increased from \$2.3 billion in 1994 to \$11.0 billion in 1998.

In 1999 the Legislature addressed a major flaw in the original structure of the FHCF. Under the original version of the FHCF statute, there was no upper limit on FHCF obligations and therefore a single storm could wipe out all of the fund’s cash and borrowing capacity, leaving no capacity for subsequent hurricane seasons. The remedy for this situation was characterized by some as the need to ensure that the FHCF would not be a “one and done” operation. At that time, because the FHCF’s maximum obligation included all of its cash and everything it could borrow, all of the FHCF’s financial resources could have been exhausted by one large hurricane or one active hurricane season; if this were the result, the FHCF would not be likely to fulfill its statutory mission in subsequent hurricane seasons because the reimbursement coverage that it would provide in the following hurricane season would be substantially reduced. This would have a detrimental effect on the capacity of private insurance companies in particular to provide residential property insurance coverage to their policyholders. Depending on how the private reinsurance market was affected by the hurricane or hurricane season, insurance companies may have to buy much larger amounts of private reinsurance at higher rates, the cost of which they would need to pass along to their policyholders. The worst case short term is that insurance companies would be unable to purchase adequate private reinsurance to replace the missing FHCF coverage from their remaining surplus or based on their permitted future premium revenues, and they would have to reduce the number of policies they wrote. The Legislature revised the FHCF statute by capping the FHCF’s coverage limit at the 1998 level of \$11.0 billion, which allowed continued growth in cash on hand and borrowing capacity to

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<sup>18</sup> Chapter 2005-111, Laws of Florida

<sup>19</sup> 2004-2005 FHCF Annual Report, p. 9

<sup>20</sup> Section 215.555(2)(m), Florida Statutes (2013)

create “subsequent season” capacity. By 2003, the FHCF’s “subsequent season” capacity had grown to \$11 billion for a total coverage capacity of \$22 billion.<sup>21</sup>

In 2004, the Florida Legislature expanded the FHCF’s emergency assessment authority (which will be discussed in more detail in the next section), which was deemed to be sufficient to create \$15 billion of coverage limit for the “initial season” and \$15 billion for a “subsequent season.” The Legislature, however, removed the wording in the statute that allowed initial season capacity to grow based on the growth of “subsequent season” capacity.<sup>22</sup> In 2010 the Legislature reverted back to the 2004 language when it increased the \$15 billion “initial season” coverage limit to \$17 billion and provided that “subsequent season” capacity would need to exceed \$17 billion in capacity (a total of \$34 billion in capacity) before the initial season statutory capacity of \$17 billion could be increased.<sup>23</sup>

Because of the stresses in the financial markets during and following the “Great Recession” from late 2007 to early 2009, however, the FHCF’s year-end cash balance for paying claims and borrowing capacity was estimated below the maximum statutory limit for the “initial season.” The FHCF is obligated only “up to” its statutory maximum limit, and therefore its obligation to participating insurers cannot exceed its actual claims-paying capacity. However, concern has been expressed in recent years about whether the FHCF had the ability to fully fund the “initial season” obligations.

This concern implies an expectation that the FHCF should be able to fund to its maximum statutory limit of liability. This is clearly contrary to the stated intent and requirements of the statute. The FHCF statute limits the FHCF’s actual claims-paying capacity by specifying a maximum emergency assessment percentage that can be levied on premiums for various lines or property and casualty business. In fact, the FHCF statute specifically provides that the full faith and credit of the state will not be pledged to payment of FHCF obligations, as follows, “The funds, credit, property, or taxing power of the state or political subdivisions of the state shall not be pledged for the payment of such [FHCF] bonds.”<sup>24</sup>

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<sup>21</sup> In order to provide capacity for both initial and subsequent hurricane seasons, the 1999 amendments capped the initial season coverage limit at \$11 billion until the subsequent season coverage capacity also reached \$11 billion. At that point, one half of the increase in total FHCF capacity above \$22 billion could be used to increase the initial season capacity above \$11 billion. Similar language was reenacted in 2010 and referenced a total capacity of \$34 billion that would need to be determined by the SBA prior to an increase in initial season capacity above \$17 billion. Provisions were also made for increasing assessment authority to create additional funding for debt issuance for a subsequent season where a hurricane event in the previous year depletes the cash balance and exhausts the initial season emergency assessment authority.

<sup>22</sup> Chapter 2004-27, Laws of Florida

<sup>23</sup> This allowed the initial season capacity of \$17 billion to be increased by one half of the total FHCF capacity above \$34 billion.

<sup>24</sup> See s. 215.555(6)(a), F.S.

Since its inception, the FHCF's obligation has been limited to its accumulated year-end cash balance and its borrowing capacity. When the statutory limit or cap of \$11 billion was created in 1999, it served to limit obligations in an initial season rather to guarantee or define greater obligations than could be funded by the FHCF's actual claims-paying capacity. However, even after the creation of this initial season maximum limit, the FHCF's obligations remain limited to "actual claims-paying capacity."<sup>25</sup> Any reliance by insurers or other interested parties on the FHCF statutory limit as a measure of its obligation is a misinterpretation of the statute.

Insurers are specifically authorized by law to rely on the estimate of FHCF claims-paying capacity as published in the Florida Administrative Register for "...all regulatory and reinsurance purposes...." Reliance on these estimates can have serious consequences for an insurer if, after a hurricane, it turns out that the FHCF cannot raise enough funds, on a timely basis, to match the estimate (i.e., the estimate was too high). In such a situation, it is possible that the insurer would have obtained less private reinsurance than it needed, resulting in impairment or insolvency. These funds must be raised by the FHCF and provided to the participating carriers in time to fund underlying claims payments. The liquidity needs of the carriers vary, sometimes widely, both compared to each other and at points in time. The FHCF management team has estimated in the past that many primary carriers need to be funded within six months of an event. The consequences of an underestimate are not as harmful to the public as the consequences of an overestimate, but could still be a matter of concern.

The consequences of an overestimate of the FHCF's claims-paying capacity go to the heart of the problem of maintaining stability while maximizing capacity. Prior to October 2008, the FHCF estimated its claims-paying capacity by a purely mathematical and mechanical process. Consideration was given to interest rates, the SBA's credit rating, and the size of the emergency assessment base. Although there was always some recognized risk inherent in each of these factors, it was not anticipated that the estimates would be dramatically different from the FHCF's actual claims-paying capacity. Sensitivity analysis associated with various levels of interest rates were used to illustrate the nature of the risk and volatility of the estimate.

The FHCF's estimates in October 2008 were different. Due to the liquidity crisis and existing financial market conditions, it was recognized that "market access" brought about by investor risk attitudes and preferences would be a major limiting factor. The analysis became a highly subjective one based on the opinions of the FHCF's four bond underwriters and its financial advisor. Financial market volatility cannot be ignored and now is recognized as the major risk factor involved in the FHCF's claims-paying capacity estimates. There is strong evidence that had a large hurricane triggered the FHCF since 2005, that the actual claims-paying capacity could have been billions of dollars below the estimated claims-paying capacity which insurers

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<sup>25</sup> See s. 215.555(2)(m) for the definition of "actual claims-paying capacity."

were legally allowed to rely upon for all reinsurance and regulatory purposes. This is the definition of the situation that would produce a true FHCF shortfall. As long as insurers rely on estimated claims-paying capacity and do not rely on the FHCF always funding to its statutory maximum limit, and are permitted to take appropriate compensating actions (such as bolstering their surplus or investing in additional risk transfer) insurers will be able to maintain their solvency in situations where the FHCF's estimated claims-paying capacity does not exceed its actual claims-paying capacity at the time of loss. A thorough examination of the uncertainty associated with the FHCF's claims-paying ability will be discussed later in this report.

In addition to the legislative changes to the FHCF's coverage limit described above, the Florida Legislature has enacted other statutory provisions that required the FHCF to offer temporary optional extensions of coverage both below and above the traditional mandatory coverage. The existence of these temporary coverage extensions<sup>26</sup> has led to the use of the term "mandatory" to describe and differentiate the traditional, statutorily-required FHCF coverage that all admitted residential property insurers must obtain from the "optional" coverages that were in the past available to, but not required of, insurers. The details of these coverage extensions and the processes by which they have been phased out or eliminated are not relevant at this time. Their significance lies in the historical context in which they were created, the reasons why they were created, and the significant risk they presented to the State of Florida as economic conditions evolved in the next few years after their creation.<sup>27</sup> The subprime mortgage crisis that occurred eight months later in August 2007 was the instigating event that led to changes in the financial markets and quickly changed the FHCF from a mechanism that could effectively manage the state's hurricane risk to a mechanism that became highly leveraged on debt reliance and created potentially unacceptable levels of risk.

The size of the FHCF that will "work" for Florida is not a political decision, but is a practical decision based on financial market realities. These questions require informed judgment and an understanding of the role of the FHCF. The FHCF's size is used to manage to a level of acceptable risk and make adjustments when and if necessary to avoid the adverse consequences that a catastrophic hurricane can have on the state's economy and the citizens of the state. One lesson learned from the legislation of the 2007 special legislative session is that trying to lower residential property insurance rates by leveraging with potential debt issuance can be highly risky. Financial markets may contract at inopportune and unpredictable times.

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<sup>26</sup> The temporary, optional coverages were (a) the Temporary Emergency Option for Additional Coverage (TEACO) which acted to drop the FHCF's retention, (b) the Temporary Increase in Coverage Limit (TICL) Options which acted to increase the FHCF payout to insurers, and (c) the up to \$10 million of optional coverage offered to a limited number of companies due to their status as Limited Apportionment Companies or their status as participating in the Insurance Capital Build Up Incentive Program. Both TEACO and TICL which were enacted in the January 2007 Special Session as part of Chapter 2007-1, Laws of Florida. The up to \$10 million optional coverage was enacted in law the prior year.

<sup>27</sup> These topics have been discussed elsewhere. See Newman (2010), pp. 27-28

Fortunately, this lesson was learned over the last few years without incurring a catastrophic hurricane. This report focuses on managing the size of the FHCF in order to address this concern.

## B. FHCF Capacity and Financial Resources

As described above, the aggregate amount of reimbursement coverage that could be provided by the FHCF to participating insurance companies is the lesser of the statutory limit of \$17 billion or the actual claims-paying capacity of the FHCF.<sup>28</sup> The components of the FHCF's actual claims-paying capacity are: (1) the balance of the funds expected to be on hand at December 31 of the contract year,<sup>29</sup> (2) recoverables from any reinsurance purchased by the FHCF for the contract year, and (3) the proceeds of revenue bonds issued by the FHCF applicable to hurricane losses occurring during the contract year. Each of these components can vary significantly from year to year as the result of past hurricane losses in Florida, the premiums the FHCF receives from insurance companies, the FHCF's decision to purchase or not purchase reinsurance for its own account, and the variable supply and cost of long-term financing in the debt markets as the result of changing national and international economic conditions. While the variability of these components and the consequences thereof will be discussed in more detail below, it is useful at this time to address the largest of these components, i.e., the need for and the ability of the FHCF to issue long-term debt to pay current year hurricane losses.

An important source of funds enabling the FHCF to provide reimbursement for insurers' covered hurricane losses has been the authority to issue revenue bonds. The bonds are backed primarily by emergency assessments on property and casualty insurance premiums (other than premiums for workers' compensation, federal flood, or medical malpractice policies).<sup>30</sup> Notable events impacting the FHCF's bond financing processes and capabilities include the following:

- The emergency assessment rate was established in 1993 at an amount not to exceed 2 percent of property and casualty insurance premiums in Florida, excluding workers compensation insurance. Only one emergency assessment

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<sup>28</sup> Section 215.555(4)(c)1., Florida Statutes

<sup>29</sup> The FHCF in its reimbursement contract with participating insurance companies has taken into account that it may pay out substantial sums resulting from covered losses to these companies prior to December 31 of the contract year.

<sup>30</sup> The assessments are levied on policyholders and collected by insurers. See s. 215.555(6)(b), F.S., for a full description of the emergency assessment process.

could be in effect at any one time. The maximum maturity of any bonds issued by the FHCF was set at 15 years.<sup>31</sup>

- In 1995, the 2 percent emergency assessment could be increased to an amount not to exceed 4 percent if the Governor declared an emergency based on hurricane damage.<sup>32</sup>
- The Florida Hurricane Catastrophe Fund Finance Corporation was created in 1996 to “provide a mechanism necessary for the cost-effective and efficient issuance of bonds.” The maximum maturity of debt issued by the FHCF was increased from 15 years to 30 years, and the FHCF was required to publish in May and October of each year its anticipated borrowing capacity and projected year-end balance.<sup>33</sup>
- In 1999, the emergency assessment was set at an amount not to exceed 4 percent for storms occurring in one contract year and at an amount not to exceed 6 percent for storms occurring over multiple years if the Governor declares an emergency.<sup>34</sup>
- In 2004, the emergency assessment limits were increased to 6 percent for one contract year and capped at 10 percent for funding losses from hurricanes occurring in multiple contract years. The collection of emergency assessments was changed so that insurers would collect the emergency assessments from their policyholders and then forward these collections to the FHCF. The third important change was to expand the FHCF’s assessment base to include surplus lines insurance policies.<sup>35</sup>
- The name of the Florida Hurricane Catastrophe Fund Finance Corporation was changed to the State Board of Administration Finance Corporation in 2013.<sup>36</sup>

The component of the FHCF’s actual claim-paying capacity related to the purchase of reinsurance was amended by the Florida Legislature in 2007 to expand the range of options available to the Fund to allow it to maximize its capacity and take advantage of a wider range of financial products. Even though the FHCF has not purchased any reinsurance in the private market, these new options authorized by statute, “including but not limited to, industry loss warranties, catastrophe bonds, side-car arrangements, or other financial contracts ...”<sup>37</sup> gave it a broader range of risk transfer options to consider, consistent with prudent management of

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<sup>31</sup> Chapter 93-409, Laws of Florida

<sup>32</sup> Chapter 95-1, Laws of Florida

<sup>33</sup> Chapter 96-194, Laws of Florida

<sup>34</sup> Chapter 99-217, Laws of Florida

<sup>35</sup> Chapter 2004-27, Laws of Florida

<sup>36</sup> Chapter 2013-60, Laws of Florida

<sup>37</sup> Chapter 2007-1, Laws of Florida

the Fund. Additionally, the board may borrow from or enter into other financing arrangements with any market sources at prevailing interest rates. Thus, the FHCF has the capability to use tools designated in the statute to maximize its capacity which can help reduce or eliminate the risk of insurer insolvency.

### C. FHCF Premium Formula

FHCF ratemaking is governed by statute. Under s. 215.555(5), F.S., the FHCF must use “actuarially indicated” rates developed by an independent consultant and based on models found acceptable by the Florida Commission on Hurricane Loss Projection Methodology. The premium formula so developed must be approved by unanimous vote of the Trustees of the SBA (i.e., the Governor, the Chief Financial Officer, and the Attorney General). For purposes of FHCF ratemaking, the term “actuarially indicated” is defined as “an amount determined according to principles of actuarial science to be adequate, but not excessive, in the aggregate, to pay current and future obligations and expenses of the fund, including additional amounts if needed to pay debt service on revenue bonds issued under this section and to provide required debt service coverage in excess of the amounts required to pay actual debt service on revenue bonds issued under subsection (6), and determined according to principles of actuarial science to reflect each insurer’s relative exposure to hurricane losses.”<sup>38</sup>

The standards that govern FHCF ratemaking are substantially different from the standards that govern the rate approval process for property and casualty insurers. Under s. 627.062, F.S., rates are reviewed by the Office of Insurance Regulation and may not be used if the rates are excessive, inadequate, or unfairly discriminatory. In addition, under s. 627.351(6)(n), Citizens is subject to the requirement that its rates be “actuarially sound” but that, notwithstanding the requirement of actuarial soundness, rate increases are generally limited to a maximum of 10% per year for any policyholder (the “glide path”).

Section 215.555(5), F.S., establishes the process for determining FHCF premiums for insurers. Insurers that participate in the FHCF are required to report their exposure data (insured values under covered policies) to the FHCF by ZIP Code as of June 30 of the contract year. The FHCF then calculates the premium due for each insurer based on these reports. The calculation of the premium is based on a “formula” for determining an actuarially indicated premium which is developed by an independent consultant selected by the SBA. The premium formula is required to specify by ZIP Code or other limited geographical area the premium to be paid by each

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<sup>38</sup> Section 215.555(2)(a), F.S.

insurer for each \$1,000 in insured value under covered policies. The SBA is required to consider the coverage that insurers select (90%, 75%, or 45%) and other factors that enhance the actuarial sophistication of ratemaking for the FHCF. These other factors are to include deductibles, type of construction, type of coverage provided, relative concentration of risks, and other factors deemed appropriate by the SBA. The formula must also include a cash buildup factor (currently 25 percent of the premium). Premiums for insurers that begin writing new business during the contract year can also be considered as part of the premium formula. The premium formula is required to be unanimously approved by a vote of the SBA Trustees. In addition, the SBA Trustees may, at any time, revise the formula pursuant to the same procedure as specified above.

The concept of the premium formula is to ensure that the FHCF premiums charged individual insurers are “risk based.” This is an important concept for the operations of the FHCF, since the FHCF coverage structure is designed to allocate coverage to insurers based on their relative risk of hurricane losses to residential structures and their contents. The premium formula is adopted annually by rule in a transparent rulemaking process that includes all of the hearings and notices required by the Administrative Procedure Act. In addition to these required hearings and notices, the proposed rule is also presented and discussed in a public meeting of the FHCF Advisory Council. The proposed rule then comes before a public meeting of the SBA Trustees (the Governor, the Chief Financial Officer, and the Attorney General), where a unanimous vote is required. Another hearing is held after the Trustees vote if requested by the public within 3 weeks, and further changes could be proposed, subject to hearing, Advisory Council review, and another Trustees vote.

The process is a transparent one such that premium formula is published in its entirety on the FHCF’s website. Participating insurers and their reinsurance brokers can review the process and have various opportunities to provide input and comment. The FHCF also holds an annual participating insurer workshop around the start of the hurricane season each year and a discussion by the FHCF’s independent consultant of the premium formula is included in order to inform participating insurers of the process and results of the formula.

The statute requires the independent consultant to use hurricane loss projection models found acceptable by the Florida Commission on Hurricane Loss Projection Methodology “... to the extent feasible.”<sup>39</sup> As a matter of practice, the independent consultant uses all models that have been found acceptable by the Commission.<sup>40</sup>

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<sup>39</sup> See s. 627.0628(1)(e),(3)(d),F.S.

<sup>40</sup> See the Premium Formula for any particular year under the “Advisory Council” tab for the March meeting at [www.sbafla.com/fhcf/AdvisoryCouncil/tabid/294/Default.aspx](http://www.sbafla.com/fhcf/AdvisoryCouncil/tabid/294/Default.aspx).

The nature of the FHCF premiums are such that they are unique to the coverage structure of the FHCF and the coverage provided under the law as well as administrative rules that adopt the FHCF's reimbursement contract each year.<sup>41</sup>

Generally, the FHCF premiums that insurers pay are less than what participating insurers would pay for private reinsurance. Private reinsurance costs fluctuate from year to year, but over time the FHCF's premiums have been noted to be anywhere from one-fourth to one-third the level of private reinsurance (in general). Although the FHCF is required to charge an "actuarially indicated premium," questions often arise as to the difference in costs from the private reinsurance industry. Actuarially indicated premiums require that all anticipated losses, expenses, and profits be recognized in the development of the premium. The FHCF is unique in its structure and thus has different expenses and is not a profit generating entity. The FHCF is a tax-exempt state trust fund – it is not a private reinsurer. The FHCF is also mandatory and has no underwriting costs and pays no commissions. Its expenses are a small fraction of the FHCF's annual reimbursement premium which has averaged .55% over the past 18 years (ranging from a high of .93% in 2000-2001 to a low of .35% in 2011-2012). Private reinsurers' expense ratios range around 25%. But, the largest factor deals with the fact that private reinsurers have to incorporate a cost of capital in their profit loads whereas the FHCF does not address this cost. The FHCF is funded with premiums as well as funds received through the issuance of revenue bonds. In this sense, the FHCF does not recognize a cost of capital to recognize and no profit is intended to be generated from its operations. The cost of issuing post-event revenue bonds and the funding of such bonds with emergency assessments is not a charge to premium. Rather, it is a post-event funding cost. The cost of issuing revenue bonds on a pre-event basis, on the other hand, is an expense that is added to premiums. Post-event debt issuance is of the nature of a capital contribution – not an expense. It has no direct cost to the FHCF like capital necessary to fund private reinsurance operations. At a certain level of losses when the FHCF's accumulated cash resources are exhausted, it is required to fund its remaining obligations with post-event debt issuance. The emergency assessments that fund the debt are required to be paid as a part of future premiums for most property and casualty lines of business. As such, the FHCF statute contemplates a continuing capital contribution for a period of time (up to 30 years) to fund FHCF losses on a post-event basis.

The FHCF has historically performed its role of helping to stabilize the insurance marketplace and protect the Florida economy, but there is concern going forward over financial market volatility and how access to the bond markets cannot be assumed to be a given. For the FHCF to accomplish its intended purpose, it needs to be reliable, predictable, and capable of performing to high standards expected of a catastrophic fund when a hurricane catastrophe occurs.

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<sup>41</sup> See Rule 19-8.010, F.A.C., for the text of the current Reimbursement Contract. This rule, along with the other FHCF rules, is also available on the FHCF website, [www.sbafla.com/fhcf](http://www.sbafla.com/fhcf).

As the size of the FHCF has grown and as its capacity has become less predictable with its growth, attempts have been made to scale back or “right size” the FHCF. Although the term “right size” is not and perhaps cannot be accurately and fully defined, the term does imply that the size of the FHCF’s capacity should be managed such that risk to the state is recognized and is dealt with properly to mitigate adverse consequences and this risk does not adversely jeopardize the solvency of insurers. The greater that financial markets are relied upon, the greater the risk to the state. Managing the size of the FHCF is necessary to minimize risks associated with bonding. The discussion of managing the FHCF’s size is not complete without focusing on the factor of risk and the FHCF’s capability to perform as expected under catastrophic loss scenarios.

#### D. Tactical Operational Issues

The FHCF has been fully operational for more than 18 years, and during this time, as indicated above, numerous provisions of the FHCF statute have been added or amended by the Florida Legislature to address new or evolving issues and concerns. Nevertheless, it is useful to address here a few topics that may relate to the strategic issues to be explored in more detail later in this report.

The three components of the FHCF’s actual claims-paying capacity were discussed in the previous section. The first of these is the “the sum of the balance of the fund as of December 31 of a contract year,” the primary component of which is the accumulated revenue from premiums collected from participating insurance companies. Through most of its history, the FHCF rates have been as low as one-third to one-fourth of the rates charged by private reinsurance companies for similar coverage. FHCF rates have risen to about one third of private reinsurance over the years where the current version of the cash buildup factor has been in effect. The cash buildup factor may be one of the causes of this shrinking gap between FHCF pricing and traditional reinsurance pricing, but the lower reinsurance rates resulting from recent increases in worldwide reinsurance and reinsurance-equivalent capital are also relevant. The current FHCF statute requires the cash buildup factor to be maintained at 25 percent.

The Legislature intended the FHCF to be a cost efficient operation since it structured the FHCF to be a tax-exempt entity. The FHCF was also structured to not have to underwrite or pay commissions to brokers, or incur other charges and costs of a traditional reinsurer. The FHCF is not reinsurance in the purest sense. Its operations and financing authorization result in premiums charged insurers that are lower than that of private reinsurance, but this was not the overriding concern of the Legislature in 1993. Rather, the concern was creating a mechanism

that would provide additional capacity to the residential property insurance market. The problem was one of how to keep insurers in the state and how to insure policyholders – not to lower rates. A byproduct of the structure and operations of the FHCF is lower rates. The FHCF being a state tax-exempt trust fund is a different mechanism for the reimbursement of insurers’ losses due to catastrophic hurricanes. Private reinsurance was priced quite low (especially compared to today’s pricing) prior to Hurricane Andrew. Indeed, as it turned out, it was priced too low. Availability of residential property insurance, not affordability, was the initial concern. But shortly afterwards, affordability became an issue. Other measures such as the Florida Commission on Hurricane Loss Projection Methodology and the enactment of mitigation discounts were specifically designed to deal with the affordability problem. But the fact is that residential property insurance rates in Florida are lower than they would be if not for the existence of the FHCF. One of the relevant statutory requirements is that the FHCF establish its rates “according to principles of actuarial science to reflect each insurer’s relative exposure to hurricane losses.” This is a complex task in that FHCF rates are designed to reflect the relative risk of each FHCF participating insurer. This is important since the FHCF’s claims-paying capacity is allocated to insurers based on the relative exposure that each insurer’s exposure (written policies by type, location, construction, deductible, and mitigation features) represents to the state.

## II. The Importance and Challenge of Managing the FHCF's Size and Structure

The Florida Legislature has presented a comprehensive statement of findings and declarations in the initial subsection of the FHCF Statute,<sup>42</sup> which describes the troubled residential property insurance market in Florida following Hurricane Andrew, the broad role the FHCF plays in addressing these market circumstances, and why creating the FHCF was in the public interest. (The entirety of the Legislature's findings and declarations is set forth in the Appendix.) The operative portions of the FHCF statute go on to specify how hurricane losses are to be covered (i.e., the insurer's choice of 90%, 75%, or 45% of covered losses above their retention; the claims-paying capacity; the retention; and the means for determining each insurer's specific coverage).

The Florida Legislature has, over the FHCF's 20-year existence, defined the FHCF coverage as the actual claims-paying capacity of the FHCF. This capacity is subject to financial market access, the level of interest rates as well as the FHCF's credit rating, its emergency assessment authority, and the size of its emergency assessment base. Although an upper limit on how much coverage the FHCF is limited to providing in any one contract year is determined by law, the upper limit or statutory maximum limit was designed for the purpose of preserving capacity for a subsequent season event.

One of the key issues regarding the FHCF size is how to use the financial markets to assure that the FHCF functions as a stable and ongoing source of insurance capacity. A related issue is the need to ensure that its actual claims-paying capacity is consistent with insurers' expectations of FHCF coverage as reflected in the FHCF's estimated claims-paying capacity. This section describes the practical and financial considerations that affect the ability of the state to manage the size of the FHCF to achieve its statutory purposes.

### A. Debt Markets

The actual claims-paying capacity of the FHCF has always been highly dependent on the FHCF's ability to borrow money in the debt markets. In its early years from 1995 to 1998, the FHCF's projected borrowing capacity averaged about 78 percent of its claims-paying capacity. From

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<sup>42</sup> Section 215.555(1), Florida Statutes

1999, when the Florida Legislature created the concept of subsequent season coverage, until 2007, which was the last year that the FHCF had any subsequent season capacity, the FHCF's projected borrowing capacity averaged about 80 percent of combined initial season and subsequent season coverage. In more recent years (2009 to 2011) when subsequent season capacity vanished even as the absence of hurricanes striking Florida allowed the FHCF's cash balance to grow, the FHCF's projected borrowing capacity plus pre-event debt averaged about 66 percent of its claims-paying capacity.

The FHCF has not had to go to the debt markets very often or for large amounts to pay hurricane claims. Following the 2004 and 2005 hurricanes striking Florida, the FHCF issued post-event revenue bonds in 2006, 2008 and 2010 totaling just under \$2.7 billion. These bonds are expected to be repaid by 2016 with an emergency assessment of 1.3 percent per year. The potential for significant hurricane losses in Florida over the past several years, however, has remained high, which could have involved very large issues of FHCF debt with correspondingly higher emergency assessments if a large hurricane had struck the state.

Separate from the post-event debt issues described above, the FHCF has issued pre-event debt of \$2.8 billion in 2006, \$3.5 billion in 2007, and \$2.0 billion in 2013. As discussed in Section E of the Appendix, these pre-event notes were issued primarily to provide additional liquidity for the FHCF in meeting its claims-paying obligations in a timely manner.<sup>43</sup> This pre-event debt is part of the FHCF's claims-paying capacity and will have to be repaid through emergency assessments if it is used to pay covered hurricane claims of participating insurance companies.

The FHCF is required by statute to publish in May and October "... in the Florida Administrative Register a statement of the fund's estimated borrowing capacity, the fund's estimated claims-paying capacity, and the projected balance of the fund as of December 31."<sup>44</sup> These data are intended to be useful to insurance companies in estimating their FHCF retentions and projected loss payouts. The FHCF and its financial advisor have for several years gone through a careful process to develop reasonable estimates of the FHCF's bonding capacity. The results have been "... estimates suitable for the FHCF's requirements — conservative estimates, not guaranteed to be accurate, but responsibly determined using the best available sources."<sup>45</sup> Nevertheless, the financial advisor has also stated that "Estimating the FHCF's post-event bonding capacity is an inexact science.... financial markets can be highly volatile and uncertain.... Such uncertainty

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<sup>43</sup> The 2006 and 2007 pre-event notes expired or were not renewed. The 2013 pre-event notes were issued in three tranches with maturity dates of 2016, 2018 and 2020.

<sup>44</sup> Section 215.555(4)(c)2., Florida Statutes

<sup>45</sup> *Claims-Paying Capacity Estimates*, Raymond James Public Finance Department, October 15, 2013, p. 9, [www.sbafla.com/fhcf/LinkClick.aspx?fileticket=367vVkpmd10%3d&tabid=318&mid=1005](http://www.sbafla.com/fhcf/LinkClick.aspx?fileticket=367vVkpmd10%3d&tabid=318&mid=1005).

creates significant risk for participating insurers who rely on the FHCF for reimbursements.”<sup>46</sup> The history of projected FHCF bonding capacity since 2007 readily illustrates this volatility and uncertainty. The FHCF’s initial season bonding capacity peaked at \$26 billion in the spring of 2007. By the fall of 2008 during the depths of the “Great Recession,” the FHCF’s bonding capacity dropped to \$3 billion. For most of the years since then, the October estimates of FHCF bonding capacity have remained below \$10 billion.

The process used by the FHCF and its Financial Advisor includes asking key debt market participants to estimate the “... post event market capacity over the next 0-12 months and 12-24 months at rates that are above the current “market” scale as needed.”<sup>47</sup> As a result, the FHCF gets an estimate of its total borrowing capacity over two one-year increments. This is important because the FHCF can issue more debt over two years than it can over one. The particular hurricane circumstances actually occurring will determine whether the FHCF will be able to meet its obligations to participating insurance companies as they are paying claims to their policyholders. For example, “... the timing of reimbursements to participating insurers is highly dependent on both the size of the event and the nature of the loss.”<sup>48</sup> The FHCF bases its practice of using the 0-12 months estimated borrowing capacity rather than the two-year capacity because “... the FHCF’s financing of losses needs to account for the rapid reimbursement of claims since some insurers may not be able to survive for over a year waiting for FHCF recoveries.”<sup>49</sup>

The FHCF faces uncertainty regarding the financial markets and may or may not be able to issue enough debt to fund its estimated capacity. Stable financial markets may not exist at the time of a loss or the time that bonds need to be issued to finance FHCF losses. Financial markets can change quickly. Although the markets may be healthy and relatively stable today, this does not imply that they will be viable one month, six months, a year, or two years later. Historically, the FHCF’s estimates have varied significantly among underwriters who have been asked to estimate bonding capacity based on the current financial market conditions. Such estimates are in concept really being made to a large extent to predict the future. It is not appropriate to attribute the estimates of the FHCF’s four bonding underwriters and financial advisor as the ultimate authority on what will happen in the financial markets far into the future. At best, they only offer static opinions based on current market conditions -- not facts regarding future bonding possibilities. This reality, when viewed in light of the financial market volatility since 2007, should serve as a notice that financial markets entail risk. Such risk should not be

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<sup>46</sup> *Claims-Paying Capacity Estimates*, p. 9

<sup>47</sup> *Claims-Paying Capacity Estimates*, p. 10

<sup>48</sup> *Claims-Paying Capacity Estimates*, p. 10

<sup>49</sup> *Claims-Paying Capacity Estimates*, p. 10

considered transient but rather a basic characteristic of all financial markets. Thus, participating insurers who are relying on the FHCF are well advised to interpret this risk as a potential danger to their solvency and plan accordingly.

In situations where hurricane losses are paid over a number of years, there is a reasonable level of confidence that billions of dollars of debt could be issued over such long time periods given that policyholder claims do not develop quickly and are paid by insurers over long time periods. In situations where claims are paid quickly such as with a \$50 billion or a one-in-one-hundred year type loss scenario caused by a Category 5 hurricane involving many total losses, the FHCF could be called upon to reimburse its entire limit of coverage in three months (90 days). In some economic and financial scenarios, this may not be sufficient time to issue \$5.2 billion of debt. A delay in the issuance of debt could result in insurer insolvencies. Some insurers may not be able to wait an extra two or three months to be reimbursed from the FHCF and some might not be able to survive six to nine months without receiving their full anticipated recoveries. The risk of not being able to fully and timely fund the FHCF reimbursements to participating insurers declines as the cash balance grows each year that there are no events that trigger the fund and also declines when the FHCF puts in place pre-event financing that can provide liquidity for long time periods thus making it possible to “wait out” a financial market crisis.

At times, financial market volatility may result in a liquidity crisis which is something that can be impossible to foresee or predict. The financial markets are a key factor in the Florida solvency equation.

Managing financial market risk is an important issue. Due to the magnitude of potential hurricane losses and the funds needed to finance such losses, it may not be possible to completely solve the financing problem over all potential scenarios. Financial prudence, however, requires that steps be taken to at least mitigate problems.

## B. Insurance Company Stability

The FHCF operates most directly to create additional insurance capacity in Florida’s residential property insurance market through its statutory and contractual relations with private insurance companies. It is currently designed to provide a known, and not trivial, amount of coverage for a portion of each insurance company’s residential property hurricane losses independently of the reinsurance coverage available from private reinsurance companies. The FHCF rates for this coverage fluctuate relatively little from year to year. An ideal result of

creating the FHCF is that insurance companies would be able to rely on a long-term, predictable, stable source of reimbursement for a portion of their hurricane losses when deciding to commit capital to Florida. Therefore, the residential property insurance market in Florida should be more stable and rates lower than they would otherwise be. Although this is the premise of the FHCF, financial market volatility can interfere with the FHCF's overall mission.

In reality, the interrelationships between the FHCF and Florida's residential property insurance market are complex. An essential element of the purchase of catastrophe reinsurance by insurance companies in Florida is the size and shape of the coverage provided by the FHCF. "For all regulatory and reinsurance purposes, an insurer may calculate its projected payout from the fund ..." <sup>50</sup> using factors and information provided annually by the FHCF. The projected FHCF payout then is a major factor in determining how much private reinsurance an insurance company may need to buy below, alongside, and above its projected FHCF coverage. For an individual insurance company, depending on its particular book of residential property insurance business and the cyclical movement of private reinsurance rates and changes in the supply of coverage, changes in the FHCF attachment point and coverage limit may produce either favorable or adverse effects relative to other insurance companies in the market. Movements in these parameters can in themselves cause market disruptions and are public policy decisions largely beyond the scope of this report.

Payout patterns for individual hurricanes may differ substantially. It may not be true, for example, that the average claim payout time following a very severe hurricane will be longer than the average claim payout time following a hurricane of moderate intensity. The reverse may be the case. Independent of the timing of loss payments is the issue of whether conditions in worldwide debt markets will allow the FHCF to find buyers for the amount of debt it would need to issue to meet the expectations of participating insurance companies. In those situations where the FHCF's estimated claims-paying capacity is less than the statutory limit (currently \$17 billion); the "estimate" is what insurers rely on to determine their financing and reinsurance needs. If at the time of loss, the "actual claims-paying capacity" is less than the "estimated claims-paying capacity," insurers will be placed in a situation of relying on capacity that in reality did not materialize. This would happen if the capital markets tightened due to a severe liquidity crisis similar to what occurred in the 2007-2009 time period. In other words, insurers may not be fully reimbursed or timely recover from the FHCF for the reimbursement coverage they thought they had purchased based on the FHCF's earlier estimate. This situation creates risk for insurers and the lack of accuracy related to claims-paying capacity estimates

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<sup>50</sup> Section 215.555(4)(c)2., Florida Statutes

could result in insolvencies given a large enough hurricane event. By statute, the FHCF is not required to pay out money it does not have and cannot raise. The risk of insurer insolvency and policyholder uncompensated losses would need to be handled by FIGA. The question would be whether FIGA might also be adversely impacted by financial market access when it attempts to issue debt.

To address these uncertainties, some insurance companies have considered specific private reinsurance to cover potential gaps between the FHCF estimated claims-paying capacity and the statutory maximum limit; however, it is unclear that the Office of Insurance Regulation will allow insurance companies to include the cost of this type of reinsurance coverage in their rates.

In the years immediately following a major land falling hurricane in Florida, the portion of insurance companies' catastrophic hurricane losses the FHCF will be able to provide may be reduced considerably because of either (or both) the FHCF using up all of its available cash or the FHCF's potentially diminished ability to issue substantial amounts of additional debt to pay for hurricane losses in these years. This means that private insurance companies would have to (1) meet their customers' continuing demand for residential property insurance coverage by purchasing enough private reinsurance at higher rates to replace the absent FHCF coverage, which would lead to higher rates for their customers, (2) reduce the number of their customers as the result of not replacing the absent FHCF coverage, which would lead to greater numbers of policies in Citizens, or (3) meet their customers' needs without buying a full program of reinsurance coverage, which would increase their risk of insolvency when the next major hurricane struck Florida. All of these possibilities represent added market stress and uncertainty for insurance companies and their policyholders.

While the coverage provided by the FHCF should not be considered "reinsurance"<sup>51</sup>, the FHCF coverage displaces a substantial amount of the private reinsurance that insurance companies would otherwise purchase. The amount of displacement depends on a range of factors including the surplus and capital options of the participating insurer, the nature of the reinsurance underwriting cycle and whether there is a world-wide reinsurance surplus of capacity or a shortage of capacity. In addition, hurricane losses that insurance companies are

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<sup>51</sup> There are many substantial differences between FHCF coverage and traditional reinsurance, including: FHCF coverage is limited to losses that can be modeled objectively, while reinsurance coverage is the subject of underwriting considerations and negotiations; premiums for FHCF coverage are based entirely on actual property exposures such that two companies with identical exposures would pay identical premiums for identical coverage; and all insurers must obtain coverage from the FHCF and the FHCF must provide the coverage to all insurers, as distinguished from reinsurance, which is based on long-term voluntary business relationships.

obligated to pay to their policyholders will be supported by the coverage provided by both the FHCF and private reinsurance companies. Therefore, from the point of view of some residential property insurance companies in Florida, it would be preferable for the coverage provided by the FHCF to be as similar as possible to private reinsurance coverage.

The Legislature's justification for a narrower scope of coverage than available in the private reinsurance market likely falls into three areas. First, these exclusions allow the FHCF to have more resources for traditional residential property claims. Second, the FHCF, in contrast to private reinsurance companies, does not have the ability to select the insurance companies with which it does business. By statute, it must provide coverage to any insurance company writing residential property insurance in Florida. Finally, these currently-excluded coverages could raise underwriting and auditing issues if they were provided. In particular, if rates continue to be based entirely on modeled property exposures, rather than adjusted to reflect each insurer's relative likelihood of generating these losses, the expansions of coverage would create subsidies from some insurance companies to other insurance companies. But more importantly, the FHCF is an integral part of the State of Florida. It is a mandatory, statute driven program designed and structured with a purpose. Private reinsurance is flexible and in most cases does accommodate coverage concerns of private insurers. The FHCF is structured to only to be a partial solution to the managing catastrophic hurricane losses.

Complicating the issue, some insurers rely on the FHCF for a large portion of their catastrophic financing needs. Florida's "domestic" insurers (e.g. domiciled in Florida and largely writing only Florida property insurance) are largely not as well capitalized as "foreign" insurers (domiciled in other states). In recent years, many Florida domestic insurers have built business models around Citizens "takeout" programs, removing large blocks of policies mid-term – usually near the end of hurricane seasons – from the alternative state-run insurer. Over time, the bulk of Florida residential property insurance market share has shifted from large, well-capitalized national insurers to Florida domestics and Citizens<sup>52</sup>. A key effect is that the primary insurance market is more reliant on reinsurance than in the past.

The goal of this report is to report on alternative methods for managing the size of the FHCF. A discussion of ways to change FHCF coverage is beyond the scope of this report. History has also proven that the FHCF has worked as intended by the Legislature. The FHCF paid about one-third

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<sup>52</sup> This shift is obvious when studying the time series of market share reports known as QUASR, the Quarterly Supplemental Reports published by the Florida Office of Insurance Regulation. See Florida Catastrophic Storm Risk Management Center's "State of the Property Insurance Market" reports for analysis of this shift.

of all insured hurricane losses occurring in 2004 and 2005 with no significant disputes over coverage.<sup>53</sup>

### C. Private Reinsurance Market

Catastrophe reinsurance in general and private catastrophe reinsurance in particular are crucial to the existence and scope of Florida's residential property insurance market and Florida's economy. The majority of insured residential property exposure to loss from a one-in-one-hundred year hurricane in Florida is covered by private reinsurance. Indeed, Florida's coastal development in recent decades would not have been possible without private reinsurance.

The private reinsurance market has a number of characteristics that are relevant for consideration in managing the size of the FHCF. The private reinsurance industry is capitalized and operates on a worldwide basis. After a loss event, money flows into the loss region (e.g., Florida) from global reinsurance companies, stimulating the economy at a critical time.<sup>54</sup> Because private reinsurance companies need to diversify their exposure to loss, these companies typically provide reinsurance for a variety of loss perils<sup>55</sup> on a worldwide basis. To achieve optimal diversification, they, for example, balance carefully their exposure to hurricane losses in Florida, earthquake damage in California and Japan, windstorm losses in Europe, and flood damage in Southeast Asia along with exposures to similar perils in other regions of the world. Unfortunately, Florida hurricane risk causes Florida to be a peak risk zone.<sup>56</sup> While global

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<sup>53</sup> The only issue that raised concern was that the reimbursement of direct incurred losses was interpreted by the FHCF very strictly but the insurance industry differed in many insurers and their trade associations it claimed that direct incurred losses included the payment of policyholder attorney fees. The following year, the FHCF proposed language that was passed by the Legislature that clarified coverage and added the reimbursement of policyholder attorney fees.

<sup>54</sup> The analogue to this reinsurance benefit is that worldwide losses are reflected in private reinsurance rates in Florida, thus resulting in capital being transferred out of the state to replenish the capital base of private reinsurers. But diversification makes all the ceded risks more efficiently financed, making the analogue not necessarily true. Risk transfer to a third party offsets the negative impact of natural disasters on a country's Gross Domestic Product (GDP), and may even have a positive effect. (See the Bank for International Settlements (2012)).

<sup>55</sup> The principal property catastrophe loss perils include hurricane/typhoon, earthquake, flood and wildfire. Many global private reinsurers are also diversified into other lines of business, such as casualty and liability in markets worldwide. The FHCF is concentrated in windstorm peril in a single jurisdiction.

<sup>56</sup> Florida is the number one global peak zone in the world for insurance and reinsurance catastrophe protection, according to most reinsurers, because of the relatively high value of Florida's real estate and Florida's propensity for hurricanes.

diversification increases the efficiency of financing Florida risks, it cannot eliminate the costs of hurricanes or reduce financing cost below what market participants refer to as true risk rate or an actuarially sound rate.

Pricing of reinsurance for Florida property risks is likely to be relatively expensive even in times of no land falling hurricanes in Florida for multiple reasons.<sup>57</sup> Private reinsurers cover more, larger, and different types of losses than does the FHCF; plus reinsurers are evaluated by companies, regulators, and rating agencies on their ability to provide continuing, timely, collectible reinsurance both before and after a catastrophe. Reinsurers' premium and surplus have to be sufficient to pay for all types of covered catastrophic events which may happen the first year, multiple times in a given year, or several years in a row. Additionally, even with worldwide diversification, the capacity of private reinsurance companies to provide coverage for loss perils in one region can be adversely affected by a run of high-severity losses in other regions.<sup>58</sup> Also, reinsurers are not obligated to use a single prescribed catastrophe model when setting rates, but tend to use multiple models, including long- and short-term models so as to build in pricing for loss volatility and loss estimation variability. Short-term models may reflect loss costs 15 percent or more above that of the long-term models approved for use by Florida insurers. Last, private reinsurers price Florida property risk below, beside and above the FHCF coverage. If they lack confidence in the FHCF's capability to pay claims for a hurricane either in the season at hand or in a subsequent season, they will, all else the same, charge higher prices to reinsure the risks of insurers they perceive to be highly dependent on FHCF reimbursement for solvency.

In recent years (since the sharp reinsurance rate increases of 2006), additional capital has moved into the private reinsurance market, the Asia-Pacific market and other emerging markets have developed further, and private reinsurance rates have moved somewhat lower as competition and diversification in this market have increased. This is not to imply that private reinsurance for property risks in Florida can be bought "cheaply," but rather to say rates on line have fallen to levels more consistent with those available prior to the 2004-2005 hurricane seasons. Since capacity and pricing in the private market have eased, the additional capacity that can be provided via the FHCF may be lower today than would be needed in a tighter private reinsurance environment. Many market participants believe these private market

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<sup>57</sup> "Relative" means as compared with the price of reinsurance for either: 1) other-than-natural-catastrophe risk; or other natural-catastrophe-exposed regions. Florida's geography, with nearly the entire state exposed to wind, results in generally higher prices for property reinsurance than is seen in other locations.

<sup>58</sup> Despite this, notably, Florida reinsurance costs decreased after the big Asia Pacific catastrophes in 2011 and again after Sandy in 2012.

innovations and trends will be permanent, or at a minimum, evidence strongly persists, potentially diminishing the cycle peaks that at times characterized the industry in past decades.

#### D. Economic Disruption to Florida

Since its creation 20 years ago, the FHCF has been largely successful in achieving its goal of creating “additional insurance capacity sufficient to ameliorate the current dangers to the state's economy and to the public health, safety, and welfare.”<sup>59</sup> The FHCF has been an integral part of multi-year efforts by the Florida Legislature to address a variety of residential property insurance market-related issues. It is important to recognize, however, that the low frequency and severity of hurricanes striking Florida during this lengthy period has not tested the FHCF under extreme conditions, and it remains to be seen how successful the FHCF will be at accomplishing its mission in the future.

This report has described concerns and limitations on the FHCF’s ability to achieve its intended benefits in the Florida residential property insurance market over a broad range of hurricane scenarios under variable and uncertain international private reinsurance and debt market conditions. In addition to the direct damage done to Florida by a catastrophic hurricane, a negative outcome with respect to the FHCF no matter what the cause would have significant adverse effects on the Florida economy and the public welfare over several years. Section III of this report will present and evaluate a number of options for managing the size of the FHCF.

Another important matter, however, is the longer-term effect on Florida’s economy even if the FHCF functions as intended following an extreme hurricane loss and successfully and timely pays billions of dollars of reimbursement that will enable insurance companies to pay their policyholder claims and remain solvent, while being able to issue all of the post-event debt necessary to supplement its cash resources. A necessary consequence of the FHCF being successful in an extreme hurricane scenario, however, will be emergency assessments levied by the FHCF for up to 30 years on policyholders in almost all lines of property and casualty insurance in Florida. (This will be in addition to the substantial emergency assessments that Citizens and possibly FIGA will be levying on the same policyholders.)

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<sup>59</sup> Section 215.555(1)(e), Florida Statutes

Repayment of debt by the FHCF depends primarily on two factors: (1) the emergency assessment rate and (2) the assessment base<sup>60</sup> on which the emergency assessments are levied. The Florida legislature increased the maximum emergency assessment rate on several occasions from its initial two percent rate in 1993 to six percent for one contract year with an aggregate annual assessment of 10 percent for multiple years in 2004. The Legislature also expanded the FHCF's assessment base to include surplus lines policies in 2004. These actions were necessary for the FHCF to increase its initial season capacity and to create subsequent season capacity.

Under s. 215.555(6)(b), F.S., "A premium is not subject to an annual assessment under this paragraph in excess of 6 percent of premium with respect to obligations arising out of losses attributable to any one contract year, and a premium is not subject to an aggregate annual assessment under this paragraph in excess of 10 percent of premium." While an emergency assessment of 10 percent is not trivial, it may be perceived by many people as being tolerable. There are, however, concerns with this view that may lead to adverse political consequences. First, an emergency assessment of 10 percent may be tolerable for a year or two, but public attitudes about this may change if the 10 percent emergency assessment has to be paid for 20 years or more.<sup>61</sup> Second, public concerns about the emergency assessments may not take that long to develop as people realize how many of their policies are subject to the 10 percent emergency assessment. Individuals and families will pay these assessments on their home and auto insurance policies, umbrella liability insurance policies, multiple business-related policies if they are involved in a business activity, and property and liability insurance policies needed by religious and charitable organizations to which they contribute. In fact, the only types of property and casualty insurance policies not subject to FHCF emergency assessments are workers compensation insurance policies, medical malpractice insurance policies, and federal flood insurance policies. A reduction of FHCF emergency assessment percentages is one way to lower the FHCF capacity and manage its capacity or size. The current level of assessments is a price the Legislature has decided to pay to fund the benefits that the FHCF provides to the State of Florida. Managing risk has its costs.

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<sup>60</sup> The assessment base is the aggregate dollar value of the premiums charged for the broad range of insurance policies subject to assessment by the FHCF if it incurs a deficit in any contract year. See Section 215.555(6)(b)1., Florida Statutes.

<sup>61</sup> It should be noted that the rates and length of emergency assessments levied thus far have not come close to these statutory maximums. The current assessment level is 1.3%, and these assessments will expire in 2016 when the FHCF's 2008A and 2010A bond issues mature.

A probable third area of concern is that people will be paying both the FHCF emergency assessments and potentially even larger emergency assessments levied on the same broad spectrum of insurance policies by Citizens.

The purpose of the FHCF is to create additional insurance capacity and to maintain a viable and orderly market for residential property insurance in the State of Florida. It was the Legislature's intent to create a tax-exempt state trust fund to respond to catastrophic hurricane events. These events are rare and their consequences can be great. Potential constraints on the ability of the FHCF to provide benefits which are relied on by participating insurers is a serious concern that presents risks to insurers and can also be a threat to the state's economy. The level of capacity that is relied on by insurers needs to be managed so as to minimize the risk that an insurer will receive inadequate or unexpectedly low amounts of reimbursement.

Although the FHCF's actual claims-paying capacity may be higher or lower than the estimated claims-paying capacity, this represents risk. The danger to the health of the Florida insurance market arises when actual capacity is lower than estimated capacity. In those circumstances, an insurer could find itself with less reinsurance than it needs because of its reliance on the FHCF's capacity estimate when planning its reinsurance program. Therefore, the gap between estimated claims-paying capacity and actual claims-paying capacity at the time of loss defines the risk that needs to be managed. At times, it may be possible and feasible to fully eliminate this risk, but at other times, it may only be possible to mitigate or reduce this risk. Since 2005, there have been no land falling hurricanes to trigger the FHCF. As a consequence, the FHCF's cash balance has grown substantially. The accumulation of \$9.8 billion has come about due to unusual weather circumstances. Eventually, the long run averages will prevail and hurricanes will make landfall and cause catastrophic losses. Notwithstanding its recent cash growth, one or two severe hurricane seasons could place the FHCF in a position of relying on the financial markets to borrow as much as \$13-\$14 billion to finance a future large hurricane event. This may or may not be possible.

Due to the nature of insurer risk associated with the FHCF's performance, the lower the FHCF statutory limit, the more manageable it is for the FHCF to handle and mitigate this risk. The size of the FHCF retention is also relevant; the higher the retention, the lower the expected frequency with which the FHCF will be required to test the bond markets. The uncertainty and risk comes about from two factors. One is the financial markets and the other involves the nature of the hurricane event. A large hurricane event that coincides with a major financial crisis can have disastrous consequences for Florida's economy and citizens of the state if certain risks are not appropriately addressed prior to such an event occurring. Although this may be considered a rare scenario, a major financial crisis did happen in 2007-2009 and continues to impact the state. No large hurricane event has occurred during the last eight years. Had things

been different, the economic impact could have been much greater and full economic recovery could have been extended for many years.

### III. Alternatives for Managing FHCF Size

The “size” of the FHCF is its maximum potential obligation, currently set by statute at up to \$17 billion. The statutory cap for coverage has been in place since 1999 to limit capacity for the initial season and preserve or spread capacity to a subsequent season. To the extent that the FHCF’s estimated claims-paying capacity is at a level above the statutory cap, some of the capacity generated for the initial season coverage can be utilized for creating subsequent season capacity. This was the theory and rationale for legislative changes that occurred in 1999. Given the melt down of the financial markets in 2007 and their continued impact on the FHCF’s bonding capabilities, the estimated claims-paying capacity has been below the statutory cap for many of the years since 2007. Not only has that been a concern, but the SBA’s ability to estimate the FHCF’s claims-paying capacity has been impaired by the volatility and fundamental changes in the financial markets. This volatility can have severe adverse consequences for insurers who are allowed by law to use the FHCF’s estimates for “... all regulatory and reinsurance purposes...”<sup>62</sup> If the FHCF actual claims-paying capacity at the time of loss is short of the FHCF’s estimated claims-paying capacity, insurers may experience a situation where they may not have obtained adequate resources to pay losses. In extreme cases, insurer insolvency could result. This is a risk that the state needs to manage, and managing the size of the FHCF is one way of dealing with this type of risk.

The issue of managing the FHCF’s size is essentially the question of how to manage and mitigate financial risk. For the 2013-2014 FHCF reimbursement contract year, the FHCF had a statutory limit of up to \$17 billion. Of this amount, \$9.8 billion represented cash from reimbursement premiums and investment income that has been building up since 2006 (the hurricanes occurring in 2005 exhausted the cash balance of the fund and required the FHCF to issue revenue bonds to fund the shortfall – \$2.65 billion of post-event debt was issued). Today, in addition to its accumulated cash balance, the FHCF has another \$2 billion of liquidity from the proceeds of an April 2013 pre-event bond issue. This put the FHCF’s liquidity position at \$11.8 billion for the 2013-2014 contract year, and it means that another \$5.2 billion of debt would have been needed in the event that reimbursements of hurricane losses reached the FHCF’s maximum obligation of \$17 billion. This is the most relatively favorable financial position the

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<sup>62</sup> See s. 215.555(4)(c)2., F.S. It is recognized that there may be some confusion regarding this provision and its meaning for insurers in making rate filings and for financial solvency considerations. The language appears to be clear, but other provisions of the law regarding ratemaking may be interpreted to conflict with the intent of this provision. Regardless of the interpretation, insufficient actual claims-paying capacity is the nature of the problem. And, if insurers are not relying on the FHCF’s estimates, but rather the statutory limit of coverage, the problem is much larger than is being described here.

FHCF has been in since its inception in 1993, and the \$5.2 billion of bonding is the least amount of bonding that the FHCF would have had to issue since the FHCF's capacity was capped in 1999. The expectations are that the FHCF could have financed its maximum limit for the 2013-2014 contract year. However, the estimates indicated it would only have been able to timely finance losses for a maximum of \$15.5 billion in 2012-2013, and \$15.2 billion in 2011-2012.

Despite the Fund's current financial position, in 2008 neither the FHCF nor many other municipal bond issuers would have been able to obtain a sufficient number of investors to make a multi-billion-dollar bond issue feasible.<sup>63</sup> As a consequence of these infrequent, but historically recurring financial scenarios,<sup>64</sup> the SBA took several measures to manage its liquidity risk. These measures included the purchase of \$3.5 billion in pre-event notes and entering into a contract with Berkshire Hathaway, Inc. for \$224 million in exchange for Berkshire Hathaway's pledge to purchase \$4 billion in FHCF bonds at a 6.5% interest rate in the event hurricane losses exceeded \$16 billion. Because the world's financial markets have changed and there is a heightened sensitivity to investment risk, there is a need to recognize the consequences that financial volatility can have on the state's economy. Heavy reliance by the FHCF on debt financing can have disastrous consequences in a liquidity crisis and serve to destabilize the market—the consequences that the FHCF was created to prevent.

Since the FHCF's financing structure is made up of its accumulated cash resources and its ability to issue revenue bonds, there is a need to manage the size of the FHCF such that it is of an appropriate size to stabilize the residential property insurance market in both the short and long run, but not so large as to jeopardize insurer solvency by relying on a large debt issuance which may not be possible in the time frames needed to support the insurance marketplace. This section discusses various options for managing the size of the FHCF.

## A. Managing FHCF Size

Managing the size of the FHCF is a matter of financial capability, and is driven by economic and market conditions. The Legislature can only control the "input variables" to the process that determines the size of the FHCF. These input variables include the emergency assessment

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<sup>63</sup> Indeed, this has arguably been true for several of the years the FHCF has been operating, but during the recent international financial crisis the truth of the statement is undeniable.

<sup>64</sup> See *This Time is Different: Eight Centuries of Financial Folly* by Carmen M. Reinhart and Kenneth Rogoff, Princeton University Press, 2009.

percentage and the emergency assessment base as well as the FHCF's "structural and operational characteristics" that impact both its credit rating and its tax-exempt status. However, the Legislature cannot control other variables, such as interest rates, investor appetite for FHCF debt, carrier liquidity needs, or changing financial market conditions. The FHCF overall coverage limits, as well as, per-storm retention, options for co-participation percentages, contract provisions, and the FHCF ratemaking process are all specified by statute. All of these decision parameters and their adjustments are discussed in the next section, but FHCF capacity and overall coverage limits are the primary subjects of this report. Adjustment of other parameters is a topic in its own right and has implications that are and should be completely within the control of the Legislature from a public policy perspective.

### Approaches for Managing FHCF Size

One alternative for managing the FHCF size and how such decisions are made is to stay with the status quo, in which the critical elements of creating capacity are all set by statute, but the results are what they are, given the current market conditions at the time. But, the status quo may not be satisfactory for dealing with insurer risk. In addition to maintaining current law, four alternative options for managing the FHCF size are discussed here – an independent panel of experts, the SBA Trustees, a formulaic approach, and a method to conserve subsequent season capacity.

A description of each and a discussion of their potential implications are provided.

#### **Independent Panel of Experts**

One possible alternative for managing the size of the FHCF is to create a separate, politically "independent" body. The independent panel option is in response to the recognition that there are financial limitations associated with the marketplace that are beyond the control of the Legislature. The concern over the possibility of increasing rates has tended to dominate the concern over the risk of the FHCF being over exposed for an initial season loss and undercapitalized for a subsequent season event. Under this proposal, the size of the FHCF's capacity would be determined by an appointed, nonpartisan commission (similar to the Public Service Commission). Upon first glance, such a panel might appear to depoliticize the debate regarding the FHCF size. The question arises, however, as to whether such a commission would be perceived as nonpolitical. Almost any method of appointment could raise questions of political involvement, and there is also the question of whether even a politically independent body can avoid the pressures of political sentiment. Perhaps the statute should spell out a methodology to be used by the panel of experts, and their approach would need to be one of

spreading capacity over time so as to accomplish the FHCF's purpose of maintaining capacity in the marketplace.

### **SBA Trustees**

Another option for managing the size of the FHCF is to statutorily grant the responsibility for managing the FHCF's size to the SBA Trustees (the Governor, Chief Financial Officer, and Attorney General), who are already responsible for the administration of the FHCF. Since the SBA Trustees already are responsible for administering the FHCF, the members are familiar with the FHCF's purpose, operations, and financing challenges. This poses at least two readily observable benefits. First, it places the control in the executive branch of government where there is more administrative and technical expertise rather than the legislative branch whose function is to decide questions of public policy. The SBA Trustees are familiar with the administration of the FHCF and managing the FHCF's size is consistent with other administrative matters such as ratemaking, pre-event and post-event financing, investing, and the claims-paying estimation process. Second, each individual SBA Trustee serves the interests of the entire state rather than any particular regional or local constituency.

### **Formulaic Determination of the FHCF Size**

A third option for managing the FHCF size is to develop a formulaic approach that takes into account private reinsurance capacity and the FHCF's estimated claims-paying capacity. Such an approach might, for example, set the overall coverage limit within a limited band of elasticity (e.g., +/- \$250 million) based on the average level of price quotations from the private reinsurance market for a reasonable time frame in advance of a FHCF coverage determination deadline. The formula could clearly specify how the FHCF estimated claims-paying capacity would be used in conjunction with the determination of the limit for both the initial and subsequent seasons. Having the size determined by formula offers the benefit of de-politicizing the process from year-to-year. The FHCF's creation was based in efforts to stabilize the market for property insurance in response to dramatic shifts in the reinsurance market. This approach attempts to address the very market issues that the FHCF exists to counteract and mitigate. This option is not without risks, however. The formula inputs (presumably some measure of reinsurance, debt market, and/or other financial market capacity) become critical and will by their very nature involve estimates and guesswork. The formulaic approach can provide for flexibility, but private reinsurance capacity and pricing can change quickly as a result of a major catastrophe occurring anywhere in the world or from a series of global catastrophic events. The financial markets can unexpectedly freeze due to unforeseen events or circumstances. The FHCF size also needs to be set far enough in advance to allow insurers time to negotiate private reinsurance purchases structured around a known and reliable level of FHCF coverage. Such an approach needs to be stress tested with historical data, and if it can be used to reduce risk over

the current way of managing the size of the FHCF, something worthwhile might be accomplished.

If the formula cannot be reduced to clear and consistently implementable statutory language, is not overseen by the authorized body or entity accurately or consistently, or is not absorbed into the expectations of the market, this approach could increase rather than decrease instability, volatility or financing costs. For instance, what happens if the markets indicate plenty of capacity to influence a smaller FHCF, but then do not provide that capacity at contract time? This could happen for several reasons, such as intervening catastrophe events, financial market or monetary policy changes.

### **Methodology to Conserve Subsequent Season Capacity**

The primary purpose of the FHCF is to provide "... a stable ongoing source of reimbursement to insurers..." The ability to fund the FHCF after a hurricane event or series of events which wipes out the capacity in an initial season was recognized by the Legislature to some degree from 1999 until 2007. Because of the turmoil in the financial markets, the FHCF's estimated claims-paying capacity since then has fallen short of its annual statutory cap or maximum limit of liability. Instead of capping capacity and allowing subsequent season to grow, the circumstances were and are such that most, if not all, of the FHCF's capacity generated by its assessments has been required to fund an initial season loss. The growth in the FHCF's cash balance, although significant, has not been effective in transferring unused bonding capacity to a subsequent season.

One method to conserve subsequent season capacity and balance it more appropriately with initial season capacity is to adjust the "two year" estimated capacity, available in the current semi-annual reports, to provide for maintaining claims-paying capacity for a subsequent season. Currently, there is \$24.845 billion of two year capacity.<sup>65</sup> The initial season capacity is currently \$17 billion or 68.4% of the two year capacity estimate. An option is a redefinition of initial season capacity as no more than a lower percentage of two year FHCF capacity, with a transition to this lower ceiling over time as needed.

The advantage of this methodology for initial and subsequent season capacity is that an attempt is made to provide for subsequent season capacity in those situations where the estimated capacity in the initial season is less than the statutory cap. The statutory cap or

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<sup>65</sup> See the FHCF's October 15, 2013 Claims-Paying Capacity Estimates at the following link, [www.sbafla.com/fhcf/LinkClick.aspx?fileticket=gFTzX4IQxpA%3d&tabid=1412&mid=4266](http://www.sbafla.com/fhcf/LinkClick.aspx?fileticket=gFTzX4IQxpA%3d&tabid=1412&mid=4266).

statutory limit only works to create additional subsequent season capacity when estimated capacity is above the statutory limit. In all situations, the FHCF is dealing with “good faith” estimates, but any “error” or “mismatch” associated with the estimation process is reduced when less debt is involved. The estimated claims-paying capacity is more likely to be aligned with actual claims-paying capacity when there is more cash available and less reliance on bonding. A complexity of this approach is that only after experiencing actual hurricane losses will the optimal percentages for each season become clear.

### Combinations of Approaches

This section describes three examples of approaches that combine elements of the individual approaches described above. No attempt is made to specifically consider every combination and permutation of the options discussed. This section attempts instead to describe and illustrate three specific combinations that recognize the importance of balance among various, and sometimes, conflicting desired outcomes, are responsive to capacity in the private marketplace, and relieve the Legislature of its current burden to determine FHCF size each year.

#### Combination Solution 1: Legislative & Independent Expert Panel Shared Authority for Determination of Overall Payout Limit with a SBA Emergency Release Valve

The Legislature could set the default capacity (payout limit) within a band of coverage, say \$15-17 billion on a periodic basis, such as every five years. An independent panel of experts could be utilized annually to determine the “right” payout limit for a given year within a band of coverage, such as +/- \$2 billion. (In this example, the lower bound and upper bound limits would become \$13 billion and \$19 billion, respectively.) The decision of the expert panel might well take into account the estimated claims-paying capacity as well as create a cushion around the estimate (given its inherent uncertainty). In any year, the SBA Trustees would have a time frame within which to vote to refuse or to accept the payout limit as determined by the independent expert panel.

Potential impacts of this hybrid approach are it 1) can be somewhat responsive to changes in the estimated claims-paying capacity and the private reinsurance environment; 2) does not “jar” the financial position of small insurers and does not require them to rethink a business model that relies on the current attachment point and co-participation percentages; 3) serves as a formal invitation to experts into the problem of how best to set the payout limit; and 4) has the potential to reduce the risk to investment (e.g., capital from insurance and financial

markets) from outside Florida. Property insurance rates to consumers may be slightly impacted by the decisions made in any one year.

#### Combination Solution 2: Independent Expert Panel Authority for Determination of Payout Limit Subject to a SBA Trustees Defined Minimum for Subsequent Season

An independent expert panel could be appointed to set mandatory capacity (payout limit) two years out (e.g., \$12 Billion in 2014 for the 2016 coverage year), and the SBA Trustees may define a minimum capacity level target for the subsequent season (e.g., \$8-10 billion for 2017). The independent expert panel could also define a level of floating optional coverage (e.g., \$3 billion optional additional coverage) above the mandatory limit that allows for responsiveness of insurers to changes in the private reinsurance environment. The problem becomes one of pricing such that adverse selection is avoided, FHCF expense charges are allocated properly, and insurers base their choices not only on price but the compatibility of coverage.

Potential impacts of this hybrid approach are it 1) takes into account the risk of a subsequent storm(s), reducing the likelihood and/or severity of a shortfall; 2) creates more certainty for Florida insurers, allowing them to plan ahead for private reinsurance decisions; 3) allows primary insurers some leeway to respond to changes in the private reinsurance environment; 4) does not “jar” the financial position of small insurers and does not require them to rethink a business model that relies on the current attachment point and co-participation percentages; 5) serves as a formal invitation to experts into the problem of how best to set the payout limit; and 6) reduces the risk to investment (e.g., capital from insurance and financial markets) from outside Florida. Property insurance rates to consumers may be slightly impacted by the decisions made in any one year. An important consideration to this hybrid approach is that the floating optional coverage would almost certainly be selected by the weakest companies. Actuarially fair rates for this coverage would minimize the negative consequences of adverse selection, which include the potential of a financial shortfall.

#### Combination Solution 3: Payout Limit Based on Method to Conserve Subsequent Season with Independent Expert Panel to Determine Shortfall Financing

The annual payout limit could take into account the estimated claims-paying capacity, possibility of a subsequent year storm and the current reinsurance capacity. For example, the FHCF’s initial season would still be capped at up to \$17 billion, but in any year (in addition) would not exceed a specified percentage of the multi-season capacity. The percentage allowed would phase in over successive years starting at 65% in year 1, 62.5% in year 2, 60% in year 3, 57.5% in year 4, 55% in year 5, 52.5% in year 6, and 50% in year 7. This way increasing

recognition is given over time to the goal of building up subsequent season capacity, and an affordability and availability problem in a subsequent season can be minimized. As the FHCF's two year capacity estimates grow, the actual change in the FHCF initial season capacity may represent marginal growth or reduction. To respond to reinsurance market capacity, \$250 million elastic (+/-) coverage amounts could be triggered by quoted reinsurance pricing crossing an upper limit (indicating +\$250 million in payout capacity is warranted) or a lower limit (indicating -\$250 million payout capacity is warranted).

An independent expert panel could be utilized to recommend or determine how to finance any shortfall. As stated earlier, the options include bonds, reinsurance and alternative risk transfer products.

Potential impacts of this hybrid approach are it 1) takes into account the risk of a subsequent storm(s), reducing the likelihood or severity of a shortfall; 2) may be responsive to changes in the private reinsurance environment; 3) does not "jar" the financial position of small insurers and does not require them to rethink a business model that relies on the currently low attachment point and co-participation percentages; 4) serves as a formal invitation to experts into the problem of how best to finance a shortfall; and 5) reduces the risk to investment (e.g., capital from insurance and financial markets) from outside Florida. The primary downside element is that property insurance rates to consumers may be slightly higher than they are now as a result. It is important to note that the semi-annual estimated bonding capacity report becomes a critical element in the decision process of such an approach.

#### A Special Note on Reinsurance to the Fund and/ or the Use of Alternative Risk Transfers

The FHCF could employ reinsurance or other forms of risk transfer in concert with any one of the aforementioned approaches. The FHCF is authorized to transfer its risk to the private sector via reinsurance and/ or alternative risk transfer, such as catastrophe bonds. Such transfer of risk could be perceived to reduce the risk of the FHCF, and in many respects could have similar results to reducing the size of the FHCF if can be bought at favorable prices on a consistent basis. The current market environment for natural catastrophe reinsurance and alternative risk transfer offers the potential to explore such alternatives because of the excess capital currently looking for investment opportunities in Florida.<sup>66</sup> As a practical matter, however, there are

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<sup>66</sup> In short, the fixed-income markets are currently flat. Investors looking to lay off (diversify) some of their equities market risk can expect higher rates of return from catastrophe-related securities than from regular fixed-income securities. There has been a recent growth in the issuance of catastrophe bonds, for instance.

significant challenges to reinsuring the FHCF coverage at present. First, the rates charged by the FHCF are so thin, at 2-3 percent rate on line, as to render excess-of-loss reinsurance likely unaffordable, at an estimated minimum 6-11 percent rate on line<sup>67</sup>, by the FHCF without an increase in the premiums the FHCF charges to its participating insurers. Alternative risk transfer methods, such as catastrophe bonds, have tended to be more expensive than reinsurance unless priced for events with extremely low probabilities (less likely than a 1-in-100-year event).

Even if natural catastrophe reinsurance is affordable, generally speaking, at least two additional complications present:

1. The FHCF does not hold sufficient capital to pay claims from a large hurricane event (which in effect is similar to an insurer with inadequate surplus), nor does it underwrite (screen and/ or differentiate between insureds) in a traditional sense; and
2. Insurers in the Florida property market seeking reinsurance and/ or alternative risk transfers could find themselves competing with the FHCF for reinsurance/ alternative risk transfer capacity.

Either or both of these factors can drive reinsurance and alternative risk transfer prices upward. Nevertheless, these options can be explored for whether their commercial terms and conditions are favorable.

One potential use for the purchase of natural catastrophe reinsurance by the FHCF that could be explored immediately is as an augment to subsequent season capacity. In other words, it could augment FHCF resources for the fund to operate in a subsequent year after most or all of its funds are depleted resulting from a hurricane. A “reinstatement of limits” or similar type of reinsurance protection is worth exploring, but does not negate the need for the FHCF to have other resources for subsequent season capacity, for the reasons discussed above.

## B. Structural or Public Policy Options

This section of the report addresses the impact of various structural changes to the FHCF and other changes that reflect public policy, as opposed to managerial, decisions. The study of most structural changes to the FHCF is beyond the scope of this report, therefore this discussion is intended to be limited and is incomplete. However, with regard to structural matters such as

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<sup>67</sup> Based on interviews with numerous broker representatives, this is a reasonable range for the rate-on-line if buying at levels of reinsurance coverage at the top of, or above, what the FHCF provides.

the FHCF's retention, its copayments, its breadth of coverage (e.g. exclusions and treatment of loss adjustment expenses), its ratemaking process, its cash buildup factor, and similar matters, the Legislature can change these various parameters to implement public policy with regard to how FHCF benefits are provided or funded, who pays for those benefits, which insurers derive the benefits, and similar policy (as distinguished from managerial) considerations. In other words, these parameters can be changed to adjust the "shape" as opposed to the "size" of the FHCF. It is virtually impossible to make changes in FHCF size without effect on important parameters, such as Fund premiums, consumer's property insurance rates and assessments to be paid. Therefore, changes in size (reduction or increase in the FHCF payout obligation) may influence policy decisions regarding shape, but size must take some precedence since capacity and stability of capacity are of paramount importance to the FHCF mission.

### A Context for Evaluating Structural or Policy Options

Structural or public policy options cover a range of issues that include setting coverage parameters (e.g., retention and co-participation) as well as secondary parameters that ultimately affect how the FHCF's capacity is deployed (e.g., exclusions that impact breadth of coverage). The fundamental difficulty with these public policy options is that an attempt to change one aspect of the FHCF structure or operation inherently impacts other aspects of the FHCF, and therefore has (possibly unintended) ripple effects on the property insurance market and on the industries that depend on a healthy property insurance market, including construction, real estate and finance. A full review of potential options (not the intent of this section) must consider the range of potential short-term and long-term effects that can result from the implementation of changes.

#### **Property Insurance Rate Context**

Before discussing specific options, it is important to review the cost context in which they would operate. Any of these changes could potentially impact property insurance rates paid by consumers, the amount and frequency of future emergency assessments, and the impact on outside capital.

Insurers are generally allowed to include their cost of FHCF coverage in their rates as part of the rate regulation process. Insurers' rate filings may also include the net cost of private reinsurance that does not duplicate FHCF coverage. If FHCF limits are lowered, insurers replacing reductions in Fund coverage with private reinsurance at higher rates will realize an increase in their cost structure, which will be reflected in the rates they file with the regulator (except for Citizens, which remains subject to the 10% annual "glide path" rate increase limit).

On the other hand, private insurers are not directly required to pass on cost “savings” to consumers. Thus, any expectation of consumer rate decreases in residential property insurance resulting from increases in Fund coverage or from lower private reinsurance costs is speculative.<sup>68</sup>

### **The Impact on Assessments**

The FHCF statute provides that after a hurricane, if the FHCF’s cash resources (from premium revenues, investment income, and reinsurance recoverables) are insufficient to cover its anticipated hurricane losses, the SBA may issue revenue bonds backed by assessments on most Florida property and casualty insurance policies to raise the needed funds. The assessments may not exceed 6% with respect to the losses caused by any one storm season and may not exceed 10% in the aggregate for all years. The maximum term of the bonds is 30 years, but all of the FHCF bonds issued thus far have had much shorter maturities. The expected amount and duration of emergency assessments the FHCF would levy following a major hurricane striking Florida can be reduced if the amount of coverage provided by the FHCF is decreased. This would, however, lead private insurance companies to purchase additional amounts of more expensive private reinsurance, which could create upward pressure on their rates.

### **The Impact on Outside Capital**

Two issues of outside capital costs exist and warrant discussion.

*Attraction of Insurance Capital.* It has been argued that lower FHCF limits, bringing with them the greater assurance that the FHCF would be able to fully fund its obligations, would make Florida a more attractive destination for insurance capital from large, well-capitalized insurers. It has also been argued that such a change could weaken the financial position of Florida’s less well-capitalized startup and small domestic insurers. Another potential impediment to the commitment of capital to Florida relates to the rate regulation provisions of the Insurance Code rather than the FHCF statute. Insurers of various sizes have pointed to the provision of the rating law, s. 627.062, F.S., limiting an insurer’s ability to recoup reinsurance costs that “duplicate” FHCF coverage—and disagreements about the meaning of the word “duplicate” in context—as a major reason why any gap between the FHCF’s statutory limit and its actual claims-paying capacity is a disincentive to committing capital to Florida.

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<sup>68</sup> Speculative models of property insurance rate impacts have been conducted, however, by actuaries highly regarded for their knowledge of, and work in, Florida’s property insurance market. These models and resulting illustrations are available to study a variety of public policy “levers,” taken alone or in combination with each other.

*Timing issues.* It is possible that after a major event, several Florida insurance entities—the FHCF, Citizens, and FIGA—will all be in the bond market at the same time. It is not clear what effect, if any, the presence of these entities, or of other Florida governmental entities, in the bond market at the same time will have on each other’s financing. It should be noted that the stronger an entity’s liquidity position, the more control that entity has over the timing of its bonding transactions.

The discussion of structural or public policy options that follows attempts to recognize all of these potential impacts. Some cases are more readily quantified than others, and in all cases the impact on property insurance rates charged to consumers is more readily estimated than the impact of Fund size changes on either future assessments or attracting outside capital. It is important to note that a readily quantified option or a readily estimable impact of an option does not necessarily imply a superior option or impact is being considered.

### Description of Structural or Public Policy Options

The description of the structural or public policy options in this section is not an exhaustive list of possibilities. The listing does, however, represent options that have been considered outside of this report, each of which has received an indication of support from some element of the insurance marketplace.

#### **Options that Expand FHCF Coverage**

Expansion of FHCF coverage increases the Fund’s potential reliance on debt and/ or reinsurance. Proponents of a larger FHCF argue that the benefit of expanding the Fund is to provide inexpensive reinsurance to insurers relative to what they would otherwise purchase in the private market, and to the extent insurers choose to pass the savings through to consumers, less expensive homeowners insurance. However, such a change could create competitive advantages for some insurers and competitive disadvantages for others. Because large, well-capitalized insurers tend to have lower private reinsurance costs than small, less well-capitalized insurers, displacing private reinsurance with more FHCF coverage will have a disproportionately favorable impact on the cost structure of the small, less well-capitalized insurers.

The following are several public policy options that could be used to expand FHCF coverage:

*Lower the Retention.* FHCF could attach at a lower level of loss than it now does, meaning that payouts would start at a lower level of overall loss than they now do. The effect of this change would be to increase the number of hurricanes that trigger FHCF coverage, reduce the FHCF's ability to accumulate cash resources for major hurricane events, and therefore increase the Fund's reliance on debt (and thus on potential future assessments). It would, however, also be likely to improve the financial position of the small insurers that are the most heavily dependent on private reinsurance since FHCF coverage is less expensive (notwithstanding the increased reimbursement premium that would need to be charged) than private reinsurance. The consumer's property insurance rates may reflect some of this net insurer cost reduction. Such a change is not likely to attract much new insurance capital to the state's property market, all else the same, since large national and international insurers have ample resources to pay claims at the FHCF's current retention (attachment point) and generally prefer not to reinsure at these levels.<sup>69</sup>

*Decrease Co-participation along the Side of the FHCF.* The current minimum required co-participation is 10%. A smaller co-participation rate is difficult to imagine as it leaves the primary insurer little to no "skin in the game" after an event, during the claims process. In addition, it would decrease the Fund exhaustion point for the same amount of coverage. Generally, the effects on Fund premiums, assessments, outside capital and property insurance rates can be expect to move similarly to how they move with a lowered retention, all else the same.

*Align LAE Coverage with that Offered in the Private Market.* The FHCF statute provides coverage limitations and exclusions that are not the same as the coverage provided under typical private sector reinsurance contracts. For example, rather than pay a portion of the insurer's loss adjustment expenses (LAE), which will vary from insurer to insurer, the FHCF statute provides for a flat 5% amount to be added to an insurer's reimbursement in lieu of LAE. Similarly, the FHCF excludes coverage for such things as extra-contractual obligations, excess-of-policy-limits payments, and bad faith or punitive damages awards, among other things.

According to some insurers, there is a "mismatch" between actual allocated LAE incurred by companies and the statutory 5% LAE amount provided by the Fund and therefore losses that would otherwise be below the FHCF attachment point either increase the participating insurer's net losses or begin to erode the reinsurance coverage along the side FHCF. Similarly, these insurers argue that the losses within the FHCF begin to erode coverage provided above the Fund coverage, and the likelihood of an increased pace of exhaustion is considered by

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<sup>69</sup> Based on numerous discussions with representatives of national insurers

reinsurers in their underwriting. Another “mismatch” they cite is the fact that private reinsurance frequently offers coverage for bad faith exposure and similar exposures under the ECO/XPL clauses (extra-contractual obligations and excess of policy limits coverage). On the other hand, what some parties perceive as “eroding” their coverage may be perceived by other parties as preserving their coverage by conserving finite resources so that they can be used to reconstruct damaged properties.

If the actual amount of an insurer’s loss adjustment expenses (either allocated LAE or both allocated and unallocated LAE) is to be reimbursed, there would be a need to revise the FHCF ratemaking standards to allow the calculation of an actuarial premium for this additional coverage; however, if the allowance remains a uniform percentage, then no revision to the statutory ratemaking standards would be needed. In addition to possibly requiring the addition of underwriting staff to enable the FHCF to implement such a change, additional resources would also be required to audit an insurer’s reported LAE. Similarly, if other kinds of losses that do not directly arise out of hurricane damage to residential property are to be reimbursed, these ratemaking and auditing issues would need to be addressed.

The likely price effects of this change, all else the same, would be FHCF reimbursement premium increases and a questionable effect on overall insurer costs (thus a questionable impact on property insurance rates charged to consumers) and assessments, based on whether the premium for the increased breadth of coverage would cover the increased reimbursements from hurricane events.

### **Options that Contract FHCF Coverage**

Contraction of FHCF coverage decreases the Fund’s potential reliance on debt and/ or reinsurance. Proponents of contracted FHCF coverage argue that the benefit of contracting the coverage is to increase the amount of capital available within the Fund to reimburse for direct insurer losses at catastrophic levels. Doing so, however, could increase costs for insurers that are reliant on FHCF coverage for reimbursement of lower (non-catastrophic) levels of loss.

The following are several public policy options that could be used to contract FHCF coverage:

*Payout Sublimit Based on the 12 month Estimated Claims-Paying Ability.* In response to concerns regarding the potential delay in timing of Fund payouts after a loss, bonding could be limited to a per-year maximum based on its estimated ability to pay claims within 12 (or, at most, 24) months. Using this approach, the FHCF would have two maximum thresholds. First, its maximum coverage offered would be the existing \$17 billion. Second, a lesser coverage maximum would be the amount that it reasonably believes that it can pay timely, if needed.

The 12 month estimated borrowing figure is an appropriate figure because insurers will need payments rapidly in the event of a large event. This approach could cause instability or confusion in the marketplace if insurers do not have reasonably accurate and timely knowledge of their FHCF coverage limits.

*Raise the Retention.* An increase in the amount of losses an insurer must retain before triggering FHCF coverage is another structural or public policy change with far-reaching impacts. As the mirror image of the proposal to decrease retention, the effect of this change would be to reduce the number of times the FHCF is triggered, increasing the FHCF's ability to accumulate cash resources for major hurricane events, and therefore decrease the Fund's reliance on debt. It would, however, also be likely to increase the costs of the small insurers and attract more outside insurance capital, all else the same, for the same reasons that it would have the opposite effect if the retention were lowered.

*Increase Co-participation along the Side of the FHCF.* The current minimum required co-participation is 10%. An increase in the insurer participation would increase insurer motivation to ensure appropriate claims-handling to the benefit of the insured, the insurer and the Fund. In addition, it would increase the Fund exhaustion point for the same amount of coverage and would provide insurers and reinsurers with additional "vertical" diversification. As with several of the proposals discussed in this section, the effect would be to increase the FHCF's ability to accumulate cash resources for major hurricane events and decrease the Fund's reliance on debt. Also, as with several other concepts, it would be likely to increase the cost structure of the small insurers that are the most reliant on private reinsurance.

*Limit Exposure on a Per-risk Basis.* Currently, the Fund reimburses insurers for losses on residences without regard to the property's total insured value. It can be argued that homeowners with extremely high value real properties and/ or contents do not need "protection" from private market volatility. In principle, legislation to exclude policies covering properties above a specified insured value from FHCF participation would appear to make good economic and social sense by marshalling public resources in a way that meets the greatest needs. Before putting such an idea in practice, however, at least two limitations must be noted. First, the definition of "extremely high value" is difficult at best and could result in unintended, adverse consequences for coverage of properties and contents not in an "outlier" range of value. (One example is a homeowner who lacks extraordinary financial means having inherited personal property, such as antiques, which hold an appraised value that gives the appearance of extraordinary financial means.) Second, the number of homes that such exclusion would be likely to impact is relatively minimal, and so any practical economic or social benefit might not be realized. There are about 246 risks that represent homes of value in excess

of \$10 million, with an exposure of about \$4 billion, or 0.2% of the FHCF's total risk exposure value. There are about 1,245 risks which represent homes of value in excess of \$5 million, with an exposure of about \$10.5 billion, or 0.5% of the FHCF's total risk exposure value.

### **Special Note on the Attachment Point and Cash Buildup Factor**

It is important to point out concerns about two elements in particular of a Florida insurer's cost structure – the attachment point and the Cash Buildup Factor – although a deep discussion of either element is beyond the scope of this report. The topics arose repeatedly during the research phase of this study, and are notable here as a result.

The attachment point can be a controversial element of FHCF coverage because it determines the level of loss at which reimbursement begins in the event of a hurricane. Because reinsurance is relatively more expensive at lower levels (and higher probabilities) of loss, the impact of the choice of attachment point on the cost structure for some insurers can be significant. Also, the Cash Buildup Factor, at least at its current level of 25% of reimbursement premium, adds substantially to the cost of FHCF participation.

*The Attachment Point.* Some argue that even though the FHCF has succeeded in stabilizing the market, it continues to provide coverage at what is considered a low attachment point where the private reinsurance market can provide legitimate risk transfer products at actuarially sound pricing that is reasonably affordable for most companies. An opposing argument is that the FHCF could further stabilize the market by reducing the retention (i.e., attachment point) via increased reinsurer competition (and presumably reduced reinsurer prices). The financial position of the smallest insurers – those most heavily dependent on reinsurance – is highly sensitive to private market pricing. But, the same insurers run the greatest risk of insolvency if the FHCF cannot reimburse their losses timely and sufficiently.

One consequence of changing the FHCF retention or attachment point for insurers is that it shifts the way FHCF coverage benefits some insurers in favor of other insurers. Not all insurers value a low retention since they have adequate capital to absorb low loss levels. It must be noted that about 50% of all insurers write around 99% of the business in the State and the other 50% writes about 1% or so of the remaining business. The FHCF is a “one size fits all” in terms of how coverage is based on exposure. Any changes to the FHCF's retention can be disruptive to competition. Much of the argument for changing the FHCF's retention with respect to insurers is to address another problem – competition with Citizens whose rates are on a glide path to actuarial soundness. Until Citizens rates are actuarially sound, there will be situations where an insurer cannot afford to write business in certain areas of the state since it

will not be able to afford to compete. Changing the FHCF is considered a solution by some insurers that are affected, but such a change is not without a cost to other insurers.

*The Cash Buildup Factor (CBF).* Some hold the perspective that since the FHCF is in the best financial condition it has ever enjoyed, the CBF is no longer needed. Others argue the expected amount and duration of emergency assessments the FHCF would levy following a major hurricane land falling can be reduced by maintaining the CBF at the current 25% rate, which would allow the FHCF to continue to grow its cash balance at its current rate. Some have argued for an increase in the factor, which while it would help grow the cash balance at a faster rate, would also lead to insurance companies passing through to their customers the higher rates charged by the FHCF.

One proposed idea to address multiple, potentially conflicting concerns is to reduce, or eliminate entirely, the CBF for private insurers while maintaining it for Citizens. In so doing, policy makers could reduce FHCF size, contract FHCF coverage or both without hurting the competitive position of private insurers vis-à-vis Citizens. For instance, it could make possible an increase in the attachment point without resulting in increased costs to private insurers. Such a proposal merits further discussion. The primary downside to such a change is the negative impact on the growth rate of the FHCF cash balance. Currently, the FHCF is collecting about five premiums every four years given the CBF portion of the premium. This is significant in reducing bonding and assessments. If the net effect is an increase in overall market stability, however, an economic case is made for creating such a cost differential between private writers and Citizens.

### C. Final Observations

The “size” of the FHCF is its maximum potential obligation, currently set by statute at up to \$17 billion. Other parameters impact the “shape” of FHCF coverage at a given size, but size itself is essentially determined by a cap for initial and subsequent season coverage. To the extent that the FHCF’s estimated claims-paying capacity is at a level above a determined cap, some of the capacity generated for the initial season coverage can be utilized for creating subsequent season capacity. Also, because the world’s financial markets now have a heightened sensitivity to investment risk, there is a need to recognize the consequences that financial volatility can have on the state’s economy. Thus the implied charge at the heart of the size issue is to be large enough to act as a stabilizing force to offset or mitigate private reinsurance volatility, but not so large as to jeopardize funding capabilities and risk insurer solvency.

In an earlier section, the question of whether the FHCF's actual claims-paying capacity would be sufficient to cover the full extent of hurricane reimbursements that participating insurance companies expect (and plan) to receive from the FHCF was discussed. A commonly used term is the "one in 100 year storm," yet that definition is frequently misunderstood. Even if one uses the 1% critical probability associated with a "one in 100 year storm," misunderstandings abound as to how to interpret the figure, particularly as it pertains to the FHCF. Most people, even those familiar with the insurance industry, seem unaware of the fact that a one in 100 year storm varies based on the model used, the book of business and the projected storm path. An event that is a one in 100 year event for Citizens might not be a one in 100 year event for a company with a different spread of risk. Additionally, a 100-year (or 1% probability) meteorological event will have disparate impact on a company based on where the event makes landfall.<sup>70</sup> It may be wise going forward to stress test, not just the overall Fund capacity against a one in 100 year storm, but rather stress test it against several different hypothetical storms that make landfall in different localities and have differing severities. Such an approach would stress test insurers within the Fund as well since a one in 100 year event for the Fund overall may produce losses for an individual small company equivalent to a one in 40 year (or even one in 20 year) event. Since so many small Florida insurers rely on FHCF coverage, such an analysis seems a good use of Fund data and resources.

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<sup>70</sup> RiskInsight<sup>®</sup>, a Karen Clark company platform, evaluates characteristic storms in different geographic areas to provide an additional tool for evaluating modeled loss results.

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# Appendix

## Governmentally-Created Insurance Entities and Public Policy

The federal government and state governments have created various types of insurance entities to address insurance availability problems. Availability problems arise when, because of lack of capacity, market conditions, or the potentially uninsurable nature of certain risks, private insurance companies lack either the willingness or the capacity to provide the insurance coverage needed by individuals or businesses. Residual market entities, which provide insurance directly to the consumer, exist in every state and for many lines of insurance. In Florida, for example, separate residual market entities provide property, automobile, medical malpractice, and workers' compensation coverage.

The Florida Hurricane Catastrophe Fund (FHCF) was created to address availability and capacity issues. The FHCF is distinguishable from residual market entities in several ways.<sup>1</sup> Public policy considerations that affect residual markets differ from those that address the considerations associated with the creation of the FHCF. The FHCF was created "exclusively for the purpose of protecting and advancing the state's interest in maintaining insurance capacity in this state."<sup>2</sup>

While the nature and extent of governmental involvement may vary from one kind of residual market entity to another, entities such as automobile insurance assigned risk plans, property insurance joint underwriting associations, the FHCF, and the California Earthquake Authority operate in an environment that is more public and involves more legislative and executive branch involvement than is typically experienced by private insurance companies. The public policy issues associated with residual market entities, therefore, are particularly broad and complex.

With respect to residual market entities, issues related to the size and makeup of the governing board or whether day-to-day operations are outsourced or performed by staff are sometimes

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<sup>1</sup> The main distinctions are that the FHCF provides coverage to insurance companies rather than consumers, the coverage provided is similar to other reinsurance alternatives, and all residential property insurers are required by law to participate, while residual market entities generally deal directly with consumers, provide coverage similar to the coverage provided under standard private-sector policies, and provide coverage solely or primarily to consumers who are unable to obtain coverage in the private-sector or "voluntary" market. The FHCF also shares some important characteristics with Florida's residual market for property insurance, Citizens Property Insurance Corporation; it was created by state government to address a distressed insurance market condition, it is intended to serve an important public purpose, and it is controlled by the State of Florida.

<sup>2</sup> See s. 215.555(1)(f), F.S.

the subject of extensive attention from public officials. But for both residual market entities and entities such as the FHCF, the more important issues are whether the entity’s purpose is clearly stated and widely understood, whether it can be financially self-sustaining, the public policies underlying its ratemaking processes, whether rate-related or assessment-related subsidies are permitted or encouraged, and whether valid, realistic financial mechanisms are in place so that the entity can meet its obligations to policyholders and other claimants. These important issues are strongly interrelated, in that attempts to rigorously address and resolve concerns about one of these issues will not succeed if flaws and shortcomings continue to exist in the way other issues are treated or if “solutions” to one problem exacerbate another problem.

While residual market entities and other governmentally-created insurance entities differ from one another in both small and significant ways and may change over time, what has not changed is the fundamental framework for evaluating their performance and identifying needed operational and structural changes. This framework is set forth below:

- The purpose and nature of the insurance entity,
- The extent to which the insurance entity is achieving its purpose, and
- The kind and degree of effects the insurance entity has on (a) providers and consumers of insurance products in the state and (b) the broader state economy.<sup>3</sup>

### A. Availability and Affordability of Insurance<sup>4</sup>

Historically, residual market entities and other governmentally-created insurance entities have been created primarily to address insufficient availability of needed or required insurance coverage from private insurance companies. For example, in creating the Residential Property and Casualty Joint Underwriting Association (RPCJUA) in 1992 following Hurricane Andrew, the Florida Legislature stated that the RPCJUA was to provide insurance “...covering residential property, for applicants who are in good faith entitled, but are unable, to procure insurance through the voluntary market.”<sup>5</sup> The 2002 legislation that created Citizens Property Insurance Corporation (Citizens) included the following statement of purpose:

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<sup>3</sup> See Newman (2010), pp. 5, 6, and 29

<sup>4</sup> See Newman (2010), pp. 30 - 34

<sup>5</sup> See Section 627.351(6)(a), Florida Statutes (1997)

It is in the public interest and a public purpose to assist in assuring that property in the state is insured so as to facilitate the remediation, reconstruction, and replacement of damaged or destroyed property in order to reduce or avoid the negative effects otherwise resulting to the public health, safety, and welfare. It is necessary, therefore, to provide property insurance to applicants who are in good faith entitled to procure insurance through the voluntary market but are unable to do so.<sup>6</sup>

The 1993 law that created the FHCF included the following statement of purpose, which remains part of the FHCF statute today:

A state program to provide a stable and ongoing source of reimbursement to insurers for a portion of their catastrophic losses will create additional insurance capacity sufficient to ameliorate the current dangers to the state's economy and to the public health, safety, and welfare.<sup>7</sup>

In 1995, the Legislature elaborated on its intent to balance public considerations by adding the following language in the FHCF statute:

"... (I)t is the intent of the Legislature to balance equitably its concerns about mitigation of hurricane impact, insurance affordability and availability, and the risk of insurer and joint underwriting association insolvency, as well as assessment and bonding limitations.<sup>8</sup>

The purpose of the FHCF is to provide a stable and ongoing source of insurance capacity, and is not intended to conflict with the purpose and public policy considerations of the residential property insurance residual market (Citizens).

## B. Rates of Governmentally Created Insurance Entities<sup>9</sup>

An understanding of issues related to rates charged by governmentally created insurance entities must begin with a discussion of how rates are developed and regulated for private insurance companies.<sup>10</sup> A private insurance company's primary concerns are that its rates are

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<sup>6</sup> Chapter 2002-240, Laws of Florida

<sup>7</sup> Chapter 1993-409, Laws of Florida

<sup>8</sup> Section 215.555(1)(g), Florida Statutes

<sup>9</sup> Newman (2010) pp. 39-47 and Newman (2009) pp. 25-27

<sup>10</sup> The ratemaking process for residual market entities is substantially different from the FHCF ratemaking process. See s. 215.555(5), F.S., for a complete description of the FHCF's ratemaking process. The major features of FHCF ratemaking that distinguish it from voluntary market or residual market ratemaking are that: the FHCF is required by statute to use "actuarially indicated" rates; the rates are required to be developed by an independent actuarial

adequate to cover losses and expenses, provide for a reasonable profit, and are competitive in the market. The task of insurance regulators is to assure that rates charged by private insurance companies meet statutory standards, which usually means rates that are not excessive, inadequate or unfairly discriminatory. Both private insurance companies and insurance regulators rely on actuarial principles and methods to achieve “actuarially sound rates.” These principles and methods include principles stating that rates are an estimate of the expected value of all future costs associated with the transfer of risk to the insurance company. The Casualty Actuarial Society has said: “It is important that proper actuarial procedures be employed to derive rates that protect the insurance system’s financial soundness and promote equity and availability for insurance consumers.”<sup>11</sup>

Two important aspects of actuarially sound rates for private insurance companies deserve special mention. First, the concept of affordability is not applicable to the development and regulation of actuarially sound rates. Affordability, which is not a statutorily prescribed and defined rating criterion, should not be confused with the consideration by insurance regulators of whether insurance rates are excessive. For example, the excessiveness standard in Florida relates to whether rates “... are likely to produce a profit from Florida business that is unreasonably high in relation to the risk involved in the class of business or if expenses are unreasonably high in relation to services rendered.”<sup>12</sup> Further, the difficulty of actually setting rates based on whether they would be affordable to policyholders is insurmountable. Insurance companies would have to have access to extensive financial information on individual applicants and insureds in addition to the information they have now about a property’s location, replacement value, construction type, distance to the nearest fire hydrant, etc.

The second aspect is that actuarially sound rates are structured to prevent subsidies from one class of policyholders to another.<sup>13</sup> Subsidies in residual market rates are discussed in Part D, below.

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consultant; the rates must be based on actual property exposures and losses as modeled by models meeting the standards of the Florida Commission on Hurricane Loss Projection Methodology; and the premium formula is approved only when it receives the unanimous vote of the elected officials constituting the Trustees of the State Board of Administration.

<sup>11</sup> Statement of Principles Regarding Property and Casualty Insurance Ratemaking adopted by the Board of Directors of the Casualty Actuarial Society, May 1988

<sup>12</sup> Section 627.062, Florida Statutes. The “excessiveness” standard is defined differently in so-called competitive rating laws where excessive rates are expected to be prevented by competitive forces in the insurance market.

<sup>13</sup> The possibility of subsidies between classes of policyholders is related to the regulatory consideration of whether rates are unfairly discriminatory.

Arguably, ratemaking for residual market entities is more difficult than for private insurance companies in that, while both have the same technical ratemaking issues to contend with, ratemaking for residual market entities will sometimes entail public policy considerations in addition to insurance and financial considerations. In some cases, residual market entities have not been permitted to be financially self-sustaining and have incurred substantial deficits followed by troublesome levels of assessments and/or surcharges. In contrast to private insurance companies, which have options available to them,<sup>14</sup> when suppression of residual market rates occurs, residual market entities must continue to provide insurance coverage and to pass along financial deficits through assessments.

The Florida experience with establishing rates for the RPCJUA and its successor, Citizens, is marked by extensive legislative changes over the years. Following the RPCJUA's creation in the December 1992 Special Session, the Florida Legislature modified the rate making approach to be used by these residual market entities in 1993, 1995, 1996, 1997, 2002, 2003, and 2006. It is important to note, however, that during this 14 year period the public policy of Florida was that the rates of the RPCJUA and Citizens were not to be competitive with rates charged by private insurance companies. The Florida Legislature moved away from this policy dramatically when in the 2007 Special Session it rolled back Citizens' rates and froze them for three years. The Legislature's later adoption of a "glide path" to limit Citizens' rate increases so that no policyholder's rates would increase by more than 10 percent annually does not seem to represent a meaningful move away from a policy of rate suppression. This and other aspects of rate making for the RPCJUA and Citizens are discussed more thoroughly elsewhere.<sup>15</sup>

Throughout its history, the FHCF's rates have been lower than the rates charged for comparable coverage by private reinsurance companies. The difference between the FHCF's rates and private reinsurance rates may be attributable to annual fluctuations in reinsurance capacity, the FHCF's nonprofit status, the FHCF's federal income tax exemption, or other factors. This difference between the FHCF's rates and private sector reinsurance rates has helped hold Florida residential property insurance rates lower than they would have been otherwise. While the Florida Legislature's principal purposes in establishing the FHCF were to provide additional capacity and help stabilize Florida's property insurance market, some commentators point to the "below-market" FHCF rate structure as an additional benefit.<sup>16</sup>

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<sup>14</sup> A private insurance company whose rates have been suppressed by the insurance regulator can (a) continue to operate with an increased chance of becoming insolvent, (b) decrease the amount of business it writes to reduce its financial losses, or (c) withdraw from the line of business or from the state entirely.

<sup>15</sup> See Newman (2009), Part III and the Appendix and Newman (2010).

<sup>16</sup> Senate Committee on Banking and Insurance, "Options for Transferring Risk from the Florida Hurricane Catastrophe Fund. Interim Report 2008-104," November 2007, p. 56

The FHCF is required by statute<sup>17</sup> to charge an “actuarially indicated” premium to insurance companies purchasing FHCF coverage. The concept of an “actuarially indicated” premium is to ensure that the FHCF’s coverage is allocated using a risk based approach. The FHCF’s coverage is based on actuarial differences in reported exposures which result in higher premiums, higher retentions, and higher coverage limits for those insurers who have higher risk exposure. The FHCF’s approach to developing rates is to add an administrative charge to the average annual hurricane loss estimates developed from a weighted average of the hurricane loss models that have been found acceptable by the Florida Commission on Hurricane Loss Projection Methodology.<sup>18</sup> The FHCF’s rates are distributed in various rating categories which are intended to reflect the true risk differences in reported exposures. The FHCF’s premiums comply with the statutory requirement and, as a result, have been as low as one-third to one-fourth<sup>19</sup> of the rates that are charged by private reinsurance companies and may be explained by:

- The FHCF’s exemption from federal income taxation.
- The FHCF’s very low administrative expenses. In particular, because the FHCF is a mandatory insurance program that provides the same coverage to all participants and uses a single rate structure based on modeled property risk, it has no underwriting or marketing expenses.
- The fact that the FHCF’s capacity is not subject to the supply-and-demand fluctuations of traditional reinsurance capacity, which means that, unlike traditional reinsurance, FHCF rates tend to remain stable from year to year.
- The lack of a profit load or contingency factor in FHCF rates.

Some critics have argued that one flaw in the FHCF ratemaking process is that the rates do not recognize the FHCF’s reliance on future debt issues, which will be repaid by emergency assessments. These critics suggest that, with respect to both Citizens and the FHCF, rate determinations should recognize the capital that may be provided in the future by Florida’s residents and businesses. Perhaps a more accurate characterization is that the emergency assessments are not an operating expense, but represents an approach to raising capital. Emergency assessments fund post-event revenue bonds. The emergency assessments will be required to pay off the debt over a period of time not to exceed 30 years. There is no cost of capital charge that the FHCF has to recognize in its premium formula. This explains much of the difference between FHCF ratemaking and private reinsurance ratemaking results. One of the requirements for the FHCF’s private letter ruling was that its issuance of post-event debt not be

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<sup>17</sup> Section 215.555(2)(a), Florida Statutes

<sup>18</sup> Senate Committee on Banking and Insurance, pp. 56-57

<sup>19</sup> Note: Even though the FHCF rates are substantially below market, they reflect accurately the differences in exposure to hurricane losses across the state.

structured such that they would be considered “private activity bonds.” To otherwise include the cost of post-event debt financing in the FHCF premium would circumvent this requirement. On the other hand, pre-event debt issued by the FHCF is taxable and this cost is included in the FHCF’s premium formula for ratemaking purposes as an expense element.

The Florida Legislature in 2002 attempted to reduce the FHCF’s reliance on future debt by authorizing the SBA to add a 25 percent “rapid cash buildup factor” to FHCF rates so that it could build up its financial resources more quickly than if it relied solely on the actuarially indicated premium. The purpose of the rapid cash buildup factor, according to its legislative sponsors, was to reduce the likelihood that the FHCF would need to rely on debt and assessments to cover future hurricane losses. This authority, however, was not used by the SBA. In 2006 the Legislature required implementation of the buildup factor, but less than a year later the Legislature repealed it. As noted below, the Legislature in 2009 reinstated a phase-in of the cash buildup factor, which reached its permanent level of 25% in the 2013-2014 FHCF contract year.

During the January 2007 Special Session, the Florida Legislature expanded significantly the coverage provided by the FHCF.<sup>20</sup> The apparent purpose of this additional coverage was to displace a portion of the coverage previously provided by private reinsurance companies to residential property insurance companies in Florida. The Legislature required that savings in reinsurance costs that property insurance companies would realize from substituting less expensive FHCF coverage for more expensive private reinsurance be passed through to residential property insurance policyholders in the form of lower rates. The Office of Insurance Regulation (OIR) retained outside actuarial personnel to assist it in developing the FHCF rates for the expanded coverage and estimates of the reductions in private insurance company property insurance rates that would occur. The actuarial analysis and recommendations were set forth in an extensive report, titled “House Bill 1A Presumed Rating Factors” and dated March 1, 2007 (the “OIR Report”).

The lower the rates charged by the FHCF for the additional coverage in relation to the rates charged by private reinsurance companies, the greater would be the reduction in residential property insurance rates paid by Florida policyholders, everything else being equal. In this regard, the OIR Report noted that, “Although actuarially priced, the additional reinsurance coverage offered through the (FHCF) will be sharply lower in price relative to coverage being sold by private reinsurance companies.”<sup>21</sup> The OIR report also stated that “a reasonable estimate of the rate on line for the private reinsurance being replaced by the new (FHCF) layer

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<sup>20</sup> Newman (2009), Part IV, Section D

<sup>21</sup> OIR Report, p. 16

is 20 percent.”<sup>22</sup> The rate on line<sup>23</sup> actually charged by the FHCF for the 2007-2008 policy year for the additional \$12 billion of coverage was 2.20 percent,<sup>24</sup> which, as the OIR Report accurately characterized, was “sharply lower” than the OIR’s estimated private reinsurance market cost of 20 percent. The rate on line for this coverage for the 2008-2009 contract year was 2.155 percent.

During the 2009 Regular Session, the Legislature began to undo some of the changes it made regarding the FHCF’s rates and coverage in 2007 and 2008.<sup>25</sup> First, the Legislature began a six-year phase out of the additional \$12 billion coverage it required in 2007. Next, the Legislature mandated that the rates charged by the FHCF for this additional coverage be increased by a factor of two in 2009, a factor of three in 2010, a factor of four in 2011, a factor of five in 2012, and a factor of six in 2013. Finally, the Legislature reinstated the cash buildup factor it passed in 2002 and removed in 2007. The new cash buildup factor was phased in at 5 percent in 2009, 10 percent in 2010, 15 percent in 2011, 20 percent in 2012, and reached its permanent level of 25 percent in 2013.

### C. The Subsidization of Governmentally Created Insurance Entities<sup>26</sup>

While the term “subsidy” has acquired a negative connotation in both political discourse and general conversation, governments at all levels continue to develop and use subsidy programs for a wide variety of public purposes. This is true of discussions of subsidies in governmentally created insurance entities whether in Florida or elsewhere. Subsidies have been defined in

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<sup>22</sup> OIR Report, p. 19

<sup>23</sup> “Rate on Line” is the standard way of expressing the cost of catastrophe reinsurance. It is defined as the cost of coverage divided by the amount of coverage. For example, if \$1 million of reinsurance costs \$150,000, the rate on line is 15 percent. Because the FHCF was structured to pay for its obligations from premiums plus taxpayer-backed bonds, the FHCF’s premium would be expected to be much lower than private reinsurers’ premium. Focusing on premium alone misses the costs imposed on policyholders who may have little or no hurricane risk. While the FHCF may technically view its taxpayer resources as not having a cost of capital, the direct and opportunity cost to Floridians taxed to pay for the subsidies provided to those at greatest risk is real.

<sup>24</sup> FHCF 2007 Ratemaking Formula Report to the SBA, March 20, 2007, Exhibit XVII. For the optional coverage offered by the FHCF, no expenses were allocated to the premium since it was uncertain over time how much of the coverage would be purchased, thus the FHCF needed to load all of its expenses in the mandatory coverage. The FHCF’s optional premiums basically represented a pure premium for estimated losses only.

<sup>25</sup> Chapter 2009-87, Laws of Florida

<sup>26</sup> Newman (2009) and Newman (2010), pp. 48-52

various ways,<sup>27</sup> but “the basic characteristic of all subsidies is to reduce the market price of an item below its cost of production.”<sup>28</sup>

Direct subsidies involve payments directly to producers or consumers and include tax expenditures. In most cases of direct subsidies, the subsidy is apparent and more widely understood and accepted. Indirect or implicit subsidies<sup>29</sup> include all other kinds of subsidies and are more likely to have the types of subsidy-related problems listed below:

- Subsidy leakage – Subsidy programs aimed at a particular population may end up either providing subsidies to some persons outside the intended population or may not reach all members of the intended population.
- Unintended consequences – Because of the complexity of the socio-economic system in which subsidy programs operate and the possibility of faulty reasoning or inadequate understanding by governmental officials, subsidy programs sometimes have unexpected negative and even perverse effects.
- Negative externalities – All of the economic consequences of a course of action may not be fully internalized in its cost, which can lead to a subsidy being realized by one person or group from another person or group where the unaccounted economic consequences fall.<sup>30</sup>

The rollback and freezing of Citizens’ rates by the Florida Legislature in January 2007 can be used to illustrate the subsidy-related problems listed above.<sup>31</sup> The Legislature’s across-the-board rate reductions to achieve affordable rates for Citizens’ policyholders without defining “affordable” led to substantial subsidy leakage. While some Citizens’ policyholders may not have been able to “afford” the Citizens’ rates, the Legislature made no effort to define, identify and target subsidies to these policyholders. Instead, it reduced rates for all Citizens’ policyholders, most of whom could afford the Citizens’ rates. As a result, the financial impact of the Citizens’ rate subsidy program had far larger adverse consequences than necessary to address legitimate affordability concerns. This illustrates the futility of using across-the-board rate reductions to address isolated affordability problems.

Consequences of the Citizens’ rate rollback and freeze included reducing the revenues that Citizens would have received, decreasing the growth of Citizens’ capital base, increasing the size of future Citizens’ deficits, and increasing the size of future deficit assessments. Ironically, a

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<sup>27</sup> Newman (2009), p. 10

<sup>28</sup> <http://www.businessdictionary.com/definition/subsidy.html>

<sup>29</sup> Sometimes these are referred to as hidden subsidies.

<sup>30</sup> Newman (2009), pp. 6-8 and pp. 10-12

<sup>31</sup> This discussion is taken from Newman (2009), pp. 6-8 and pp. 10-12

proportional share of the financial burden of larger deficits and assessments in the future will fall on the policyholders who the Legislature thought could not afford Citizens' rates. Also, private insurance company policyholders in Florida, who received no benefit from the rate rollback and freeze of Citizens' rates and are far more numerous than Citizens' policyholders, will be compelled to pay higher deficit assessments and the greater portion of any large Citizens' deficit. It is not clear that sound public policy justifies increasing the size of deficit assessments imposed on these policyholders to provide short-term rate reductions to Citizens' policyholders who could afford to pay higher rates.

Finally, the Legislature's rollback and freeze of Citizens' rates interfered with legitimate price signals in the market by understating the real cost of residential property insurance, particularly in coastal counties highly exposed to hurricanes. Some people may have moved to or chosen to remain in these counties when they may have made different decisions with accurate information about the true, long-run cost of residential property insurance.

In addition to the rate-related subsidies that exist in Florida's residential property insurance residual market, some have noted that subsidies are inherent in the processes used by Citizens and the FHCF to levy deficit assessments. These assessment-related subsidies, which can also be referred to as post-event subsidies, have received little attention from the Florida Legislature, the media and the general public, primarily because the deficits from the 2004 and 2005 hurricanes produced modest financial deficits and because Florida has been fortunate in having several recent years with no hurricanes striking the state. Nevertheless, according to some observers, these subsidies are real, are being paid currently, and, following a large deficit in Citizens or the FHCF, will be substantial. The view that the deficit assessments imposed by Citizens and the FHCF on policies other than residential property policies represent subsidies, according to these critics, is supported by the observation that these policyholders do not benefit directly from the Citizens and FHCF rates that are too low.<sup>32</sup> A counter viewpoint would be that emergency assessments represent a way of raising capital to fund post-event debt and/or losses and, as such, do benefit all Floridians and businesses operating in Florida by stabilizing the insurance marketplace and ultimately the state's economy. Both Citizens and the FHCF are state programs with a broader state purpose than operating merely as types of insurance providers. The need to levy emergency assessments has been rare. Only one storm year in the last 20 years has resulted in the FHCF's need to depend on emergency assessments to finance losses. The Legislature designed the FHCF to finance debt with emergency assessments in order to create the additional capacity need to maintain a viable and orderly insurance marketplace.

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<sup>32</sup> Arguably, deficit assessments on these policies as well as certain other assessments by Citizens meet the definition used by the Internal Revenue Service for a tax. See Newman (2010), pp. 53-61.

The method by which the amount of the deficit assessments levied on individual Citizens' policyholders and policyholders of private insurance companies is calculated has received little attention. The traditional residual market approach is to determine a percentage factor so that multiplying the full policy premium of each policy being assessed by this factor will generate the amount needed to cover the deficit.<sup>33</sup> This has the appearance of fairness because a person with an expensive home in a coastal county will have a much higher homeowners' insurance premium and pay a proportionately larger assessment than would a person with a modest home in an inland county.<sup>34</sup>

If one assumes that any levy on non-hurricane risks constitutes a subsidy, then the important public policy issue is whether multiplying full policy premiums by the identical percentage factor produces assessment-related subsidies among groups of policyholders and whether the subsidies are significant. Citizens is unlikely to have a financial deficit that is not caused by hurricane losses, although other perils, such as sinkholes, could also impact the potential likelihood or size of a Citizens deficit. Any loss the FHCF incurs will be produced by hurricane losses.<sup>35</sup> For this reason, to those who view any assessments of policies that do not cover hurricane risk as subsidies, the essence of the assessment-related subsidy issue is how accurately full policy premiums measure variations in hurricane loss exposure from one geographic area to another. The initial analysis has shown that the traditional method of calculating deficit assessments for Citizens and the FHCF does not accurately reflect the variation in exposure to hurricane losses across Florida.<sup>36</sup> The result of using the traditional method is that policyholders in some parts of Florida pay deficit assessments that are too high while policyholders in other parts of Florida pay deficit assessments that are too low. This finding takes into account the substantial variation in residential property insurance premiums that currently exists.<sup>37</sup>

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<sup>33</sup> Newman (2009), p. 8 and pp. 21-22

<sup>34</sup> For example, if the percentage factor is three percent, a policyholder whose homeowners' insurance premium is \$5,000 would be assessed \$150, while a policyholder whose homeowners' insurance premium is \$1,200 would be assessed \$36.

<sup>35</sup> The FHCF cannot incur a "deficit." Under s. 215.555(4)(d), F.S., the FHCF's obligation is limited to its "actual claims-paying capacity," which is defined by s. 215.555(2)(l), F.S., to mean "the sum of the balance of the fund as of December 31 of a contract year, plus any reinsurance purchased by the fund, plus the amount the board is able to raise through the issuance of revenue bonds under subsection (6)." The term "shortfall" or "deficit" is sometimes used to describe the gap between the total resources available to the FHCF (cash and bond proceeds) and the statutory maximum limit of \$17 billion, but these terms are also used at times to describe the gap between the FHCF's cash resources and the statutory limit, even in circumstances where there is little or no doubt of the FHCF's ability to obtain the needed financing.

<sup>36</sup> Florida Catastrophic Storm Risk Management Center (2009), pp.39-40

<sup>37</sup> An alternative view would suggest that broad-based assessments, which are sometimes characterized as "subsidies," are essential to maintaining the entities' exemptions from federal taxation. The tax exemption saves the Florida public hundreds of millions of dollars each year,

## D. The Financing of Governmentally Created Insurance Entities

A residual market entity, such as an auto insurance plan with limited exposure to catastrophic losses, can operate with a very simple financial structure. With reasonably adequate rates, the auto plan may need little more than a small cash reserve and modest annual assessments on the member insurance companies to meet its financial obligations. A property insurance residual market entity and other state created government entities that operate in a state subject to catastrophic losses needs a considerably more sophisticated financial structure to meet its obligations over a multi-year period.<sup>38</sup>

Property insurance residual market entities along the Gulf Coast and the Atlantic Seaboard have significant exposure to catastrophic losses from hurricanes, and their normal deficit assessment processes may not produce a sufficient flow of funds to allow the residual market entities to meet their claim payment obligations in an acceptable timeframe. One solution to this timing problem is the issuance of debt following the catastrophic event (i.e., post-event debt) and then repayment of the debt over a period of years as deficit assessments are levied and received.<sup>39</sup> Another financial strategy is to issue debt securities before a catastrophic event occurs (i.e., pre-event debt). The entity's ability to issue and repay debt depends on the assessment authority that allows for deficit assessments to be levied for as many years as necessary to repay the debt.<sup>40</sup>

The Florida Legislature recognized the state's outsized exposure to catastrophic hurricane losses in the mid-1990s and began addressing the likely need of the Florida Hurricane Catastrophe Fund (FHCF), the Residential Property and Casualty Joint Underwriting Association (RPCJUA), and the Florida Windstorm Underwriting Association (FWUA) to issue large quantities of debt. Most significantly, the Florida Legislature specifically authorized the RPCJUA and the FWUA to issue pre-event debt, i.e., debt issued prior to Florida being struck by a hurricane causing catastrophic losses. In 1995 and 1997, the RPCJUA and the FWUA separately obtained significant pre-event lines of credit from worldwide consortiums of very large commercial banks and, in 1997, issued sizeable pre-event notes and bonds. At that point, the RPCJUA had

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<sup>38</sup> The extreme examples include Citizens, the FHCF, and the California Earthquake Authority. Others that come close are property residual market entities in Texas and Louisiana.

<sup>39</sup> A useful example is the \$450 million bonds issued following Hurricane Andrew repaid by a special, multi-year assessment by the Florida Insurance Guaranty Fund that was authorized by the Florida Legislature during a special session in December, 1992. See Chapter 1992-345, Laws of Florida.

<sup>40</sup> Newman (2009), Chapter IV

combined pre-event debt resources of \$1.5 billion, and the FWUA had combined pre-event resources of \$2 billion.<sup>41</sup>

The Florida Legislature in 1996<sup>42</sup> created the Florida Hurricane Catastrophe Fund Finance Corporation and enacted new provisions that related to the issuance of revenue bonds to be repaid by emergency assessments levied for this purpose. The name of the finance corporation was changed by the Legislature in 2013<sup>43</sup> to the State Board of Administration Finance Corporation.

The FHCF issued post-event, tax-exempt debt on three occasions,<sup>44</sup> all related to the hurricanes striking Florida in 2005. These bonds are being paid for by emergency assessments of 1.0 percent starting in 2007 which was increased in 2010 to 1.3 percent. This level of emergency assessments is expected to retire the bonds in 2016. The FHCF has also issued pre-event debt on three occasions. The first was \$2.8 billion of Extendable Floating Rate Notes in 2006.<sup>45</sup> These notes were supplemented with \$3.5 billion of Floating Rate Notes in October 2007.<sup>46</sup> Finally, the FHCF issued three maturities of revenue bonds in 2013 totaling \$2.0 billion.<sup>47</sup>

Timely payment of losses from natural disasters, whether payments from Citizens to their policyholders or payments from the FHCF to its participating insurers, are essential to both physical and economic recovery from the disaster. Pre-event financing can provide the liquidity needed for timely payment to Citizens' policyholders and to the FHCF participating insurers.

Without pre-event financing, the entity would have to issue post-event debt as soon as possible after the hurricane when "headline" risk would be the greatest, which would put upward pressure on interest rates. Issuing pre-event debt would allow the entity to delay the issuance of additional post-event debt (if any were necessary) until the headline risk subsided. Pre-event financing also enables the public entity to maintain some control over the timing of any post-event bond issues, which in turn allows the public entity to maximize capacity and minimize cost. Additionally, pre-event financing can help when claims development is rapid such as what might occur if a category 5 hurricane struck a heavily populated area of Florida. The stronger the hurricane and the more widespread the damage, the lower the likelihood of total losses

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<sup>41</sup> See Newman, *Winds of Change*, pp. 71-78.

<sup>42</sup> Chapter 96-276, Laws of Florida

<sup>43</sup> Chapter 2013-60, Laws of Florida

<sup>44</sup> 2006 for \$1,350,250,000, 2008 for \$625,000,000, and 2010 for \$675,920,000

<sup>45</sup> 2006-2007 FHCF Annual Report, p. 14

<sup>46</sup> 2007-2008 FHCF Annual Report, p. 14

<sup>47</sup> Official Statement for 2013A Revenue Bonds

being paid quickly. Pre-event financing can provide the needed liquidity in such a situation to help insurers avoid insolvency.

Florida's experience with funding hurricane claims in Citizens and the FHCF following the eight hurricanes that hit Florida in 2004 and 2005 proved the benefits of having pre-event financing in place. Although the FHCF had not issued pre-event debt, it had previously obtained investment-grade ratings from the principal rating agencies, had obtained approval from the Internal Revenue Service of its ability to issue post-event debt on a tax-exempt basis, and through a series of presentations had become known to potential buyers of its debt. Likewise, Citizens has been able to take advantage of the earlier financing efforts of the RPCJUA and the FWUA with respect to its own pre-event and post-event financing activities.

Citizens is encouraged<sup>48</sup> and the FHCF is authorized<sup>49</sup> by statute to purchase private reinsurance and to engage in other financial transactions of a similar nature, such as issuing types of securities generally referred to as "catastrophe bonds." In the case of the FHCF, s. 215.555(7)(a), F.S., provides that the SBA may procure reinsurance "for the purpose of maximizing the capacity" of the FHCF and may enter into capital market transactions "consistent with prudent management of the fund." The RPCJUA in the late 1990s and early 2000s, and Citizens more recently, have pursued these options to a limited degree, but the FHCF has not yet done so. The FHCF's role is to add insurance capacity to the market. This role is more apparent when there is a shortage of reinsurance capacity (known as a hard market) and residential property insurance prices are rising as a result of the market forces of supply and demand. In times of an excess of reinsurance capacity (known as a soft market) the issue of the FHCF purchasing private reinsurance is whether it would be a prudent management practice and whether it is the best approach among its prescribed statutory tools. For the 2012-2013 FHCF reimbursement contract year, the FHCF purchased \$2 billion of pre-event notes in an attempt to maximize its capacity by addressing liquidity issues due to the potentially uncertain and volatile financial market conditions that may arise over the next three to seven years.

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<sup>48</sup> Section 627.351(6)(c)9., Florida Statutes

<sup>49</sup> Section 215.555(7)(a) and (b), Florida Statutes

## E. Public Policy from a Broad Perspective

The discussion in this appendix thus far has been presented from the perspective of various interested parties and is somewhat myopic in its failure to fully consider and focus on the broader, statewide public interest. Due to this limitation, the discussion thus far only nips at the heels of the real public policy issue. A narrow focus on the views of some interested parties may tend to create more of a distraction than an enlightenment; and it is, therefore, important to view the FHCF in the context of its broad, statewide public purpose and its ultimate beneficiaries: the people of Florida.

The FHCF is and was created as an integral part of the state. In actuality it is an enterprise risk management tool that serves a much broader function that protects the state's economy and provides stability so that all citizens of the state benefit. This was at the heart of the reason that the FHCF was granted tax-exempt status as an entity by the U.S. Internal Revenue Service.

The broader function that the FHCF serves is also the reason that the FHCF has two favorable IRS private letter rulings. One private letter ruling addresses the FHCF as an entity that is not required to pay federal income taxes and the other addresses the FHCF's ability to issue post-event tax-exempt bonds. The FHCF was designed this way from its inception. The requirements that needed to be met to have tax-exempt status were vital for its creation and defines its structure. This separates the FHCF from insurers and reinsurers and puts it in a unique class by itself. No other state has anything that comes near the FHCF as a risk management tool for dealing with catastrophes. It may have flaws and imperfections in the eyes of some, but the fact remains that it has worked and has served its function for creating additional insurance capacity in the state as well as stabilizing an otherwise very fragile and volatile residential property insurance system. The purpose being served by the FHCF is substantial in both years when hurricanes have struck the state, and also in times when there have been no land falling hurricanes. In both situations, the FHCF has derived significant benefits for every citizen of the state.

The real focus regarding public policy and the FHCF should be on the aggregate benefits for the state as a whole. The FHCF's purpose is not limited to benefit a subset of special interests. Although insurers are the FHCF's direct beneficiaries, some insurers may have a very limited focus and see the FHCF solely as a type of reinsurer, and therefore desire certain subsidies or economic advantages that it is perceived to provide. Even nonresidential property policyholders may resent having to "subsidize" residential property policyholders since they do not see any direct benefits. They often question, "Why should I be assessed to pay for someone else's

loss?” To understand the FHCF and its role, it is necessary to focus on the broader public policy issue and the role the FHCF plays in the context of Florida’s economy.

The FHCF is an efficient organization managed by three of Florida’s four statewide elected officials—the Governor, the Attorney General, and the Chief Financial Officer. It has been estimated that the FHCF has saved Floridians over \$30 billion in residential property premiums over the last 20 years.<sup>50</sup> Each year, the income tax benefit alone is worth over \$450 million. Residential property insurance premiums are about 20-25% lower than they would otherwise be. As such, around \$2 billion in premiums represents money that is put to work in Florida creating jobs and boosting the economy. This does not come without a cost. The cost should not be characterized as the cost for “subsidizing” residential premiums; rather it is a cost that is necessary to manage hurricane catastrophe risk which is a major threat to the wellbeing of all people who reside and work in Florida and all businesses with operations in Florida. It is unfortunate that this important and vital role of the FHCF is so often misunderstood or mischaracterized.

The various public policy perspectives discussed above can be compared to the parable of the blind men and the elephant. Each special interest sees the FHCF differently. Each fails to see the broader perspective and is blinded due to its own perspective. Over time, the true picture of the FHCF has blurred as the FHCF has been viewed as a solution to many insurance market problems that it was never intended to address. The common reaction is that “If we could just change the FHCF this way or that way, we would solve this very important problem.”

The moneys in the FHCF are held in trust for the people of Florida. The placement of the FHCF under the State Board of Administration as a state trust fund was and is highly significant for public policy reasons. This is clearly stated in s. 215.555(1)(f) which reads as follows:

It is essential to the functioning of a state program to increase insurance capacity that revenues received be exempt from federal taxation. It is therefore the intend of the Legislature that this program be structured as a state trust fund under the direction and control of the State Board of Administration and operate exclusively for the purpose of protecting and advancing the state’s interest in maintaining insurance capacity in this state.

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<sup>50</sup> It is important to note this estimate does not account for assessments levied over those years, nor does it consider the adverse impact of assessments on the prices of other lines of insurance which are also subject to assessment (e.g., auto, commercial property).

The statute places the SBA in a fiduciary role and focuses it on only one objective which is to operate the FHCF exclusively for protecting and advancing the state's interest in maintaining capacity. The word "exclusively" is used. There is no mention of other objectives that are intended to be accomplished. The legislature did intend to "balance equitably other concerns" but not to accomplish those other concerns in lieu of or in a way to compromise this exclusive purpose of protecting and advancing the state's interest in maintaining capacity. Section 215.55(1)(g) in relevant part reads as follows:

...it is the intent of the Legislature to balance equitably its concerns about mitigation of hurricane impact, insurance affordability and availability, and the risk of insurer and joint underwriting association insolvency, as well as assessment and bonding limitations.

Although the Legislature's intent is to balance the various concerns listed above, that balance is not in lieu of maintaining insurance capacity in the state. Any interpretation of the statute that reinterprets the public policy of the state to require some other priority of purpose is contrary to the overriding purpose of the FHCF's statute. Let's briefly look at history.

The concept of the FHCF was born late into the night on August 24, 1992, by a 43 year old Miami resident as he and his family hunkered down in their home as Hurricane Andrew was making landfall. The late Democratic Representative John Cosgrove, whose South Dade legislative district bore the brunt of Hurricane Andrew, saw the entire "elephant." He knew that had the storm occurred just 30 miles to the north that the damage would have easily exceed \$50 billion (perhaps as much as \$200 billion in today's dollars) and that Florida's economy would have been devastated for years to come and that people would have suffered the harsh realities from losing not only their home but perhaps their job and family members. The state had no plan at the time.

The realization was that Hurricane Andrew was a wakeup call, not "the big one." The FHCF was put in place to add insurance capacity and to stabilize the state's economy. It was and is a tool for accomplishing a broad public policy. The FHCF is an enterprise risk management approach that was needed not only following Hurricane Andrew but as a tool for the future. It is not something that can be used to solve every residential property insurance problem just because it works to do one thing well. It was not originally designed to address insurer profitability or to lower consumer rates. It works only within a feasible range or scope. The FHCF needs to be large enough to stabilize the market but not so large as to jeopardize insurer solvency by relying on debt financing that can be swept away at an inopportune time following an adverse financial event or circumstance. The world is becoming more and more complex every day and this

complexity calls for sound “anti-fragile”<sup>51</sup> public and private systems. Managing the size of the FHCF is a way of ensuring that the FHCF is in the proper “range” of viability so that it serves its mission. Elsewhere in the body of this report, the consequences of extending the FHCF beyond its capabilities are discussed.

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<sup>51</sup> The term “anti-fragile” is attributed to Nassim Taleb the author of *Antifragile: Things That Gain from Disorder* (Random House 2012). Nassim Taleb is better known for his book, *The Black Swan*, (Random House 2007).

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