

ECONOMIC ANALYSIS OF THE PROPOSED FLORIDA STATEWIDE HURRICANE INSURANCE POOL

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**Prepared for
Shield Our State, Inc.**

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Executive Summary

- Shield our State, Inc. retained Fishkind & Associates, Inc. to provide an independent economic analysis of its proposed Florida Statewide Hurricane Insurance Pool (“HIP”).
- HIP is a proposed public entity that would provide hurricane insurance coverage to all residential property in Florida. All insurers would be required to participate in HIP. HIP would replace the Florida Hurricane Catastrophe Fund (“FHCF”) and the High Risk Accounts (HRA) of Citizens Property Insurance Company (“Citizens”). HIP would also provide hurricane insurance in place of the private market.
- Implementation of HIP produces very substantial cost savings to rate payers and significant economic benefits for the State of Florida. Unlike FHCF and Citizens which insure against loss after the fact, HIP assumes there will be a future loss and insures against it preemptively. HIP internalizes reinsurance thereby producing substantial cost savings compared to FHCF and Citizens.
- HIP generates the necessary capital through an innovative new investment vehicle, the catastrophe contingent capital contract (“CCCC”). CCCC provides investors with an attractive yield of 3% over the current 10-year U.S. Treasury Bond. Until needed HIP invests the funds in those same 10-year U.S. Treasury Bonds. If there is need to draw on the funds because of storm claims, HIP will sell the bonds to generate the necessary cash. The investors continue to earn their full interest which is paid through HIP.
- The cost of capitalizing reinsurance through CCCC is significantly less than the cost in the private reinsurance marketplace.
- Under almost every reasonable storm scenario over the upcoming 20-years there will be one or more major storms. Such storms have a probable maximum loss (“PML”) ranging from \$17.46 Billion for a once in 20-year event to \$50.43 for a once in 100-year storm (like Andrew). Storms of this magnitude will exhaust reserves of any system.
- Under HIP the losses are internalized and CCCC contracts drawn upon. Under the current system of FHCF and Citizens new bonds would be sold, if possible. These bonds would obligate rate payers and maybe tax payers for debt service over 10-to-30 years. In addition, since reserves would be exhausted and debt incurred, there is no ability in the current system to absorb additional future losses. Therefore, expensive private reinsurance would be required by bond investors further burdening rate payers.

- As a result, HIP can provide substantial savings to rate payers compared to the current system or the private system.
- To quantify the potential effects of HIP four storm scenarios were identified and used to project the impacts on the current system and on the HIP alternative. The scenarios are:
 - Average annual storm damage over a 20-year period
 - Repeat of the historical storm pattern from 1992-2009 starting with a Hurricane Andrew magnitude storm in 2010
 - Once in 20-year storm event every five years
 - A once in 100-year storm event in 2010
- Table E1 compares the HIP to the current system of CIT-CAT and the active voluntary market which includes and summarizes the total cost to rate payers from each scenario as it impacts the residential insurance marketplace. Based on the four scenarios modeled, the analysis indicates that HIP will provide very substantial savings to rate payers in all scenarios except for the average annual storm scenario. Granted, hurricanes in Florida hardly occur at an “average” rate. Rather their impacts are random and episodic. Savings range from \$39 Billion to as much as \$119 Billion over the 20-year horizon examined here.

**Table E1. Summary of Impacts on Rate Payers (HIP vs CIT-CAT)
(\$Billions of 2008 Dollars)**

Comparison of HIP v. CIT-CAT Total Cost to Rate Payer	Average Annual Storms 1992-2009	1992-2008 Scenario With Andrew in 2010	20-Yr Storms Every 5 Years	100 Year Storm in 2010
CIT-CAT	\$105	\$214	\$281	\$201
HIP	\$105	\$169	\$162	\$162
	=====	=====	=====	=====
Net Savings with HIP	\$0	\$45	\$119	\$39

- Savings to rate payers translate into substantial economic benefits to Florida’s economy (Table E2). The savings to rate payers outlined in Table E1 occur over a 20-year period. Taken to present value at a 10% discount rate provides a present day perspective. On this basis savings range from \$0-to-\$33 Billion which translates into as many as 248,000 additional jobs over a 20-year horizon or 8,000 jobs per year.

**Table E2. Summary of Economic Impacts
(\$Billions of 2008 Dollars)**

Economic Impacts of HIP v. CIT-CAT	Average Annual Storms 1992-2009	1992-2008 Scenario With Andrew in 2010	20-Yr Storms Every 5 Years	100 Year Storm in 2010
Total 20-Year Savings to Rate Payers	\$0	\$45	\$119	\$39
Present Value of Savings to Payers	\$0	\$12	\$31	\$15
Impact on Economic Output	\$0	\$24	\$63	\$29
Impact on Employment	-	95,896	248,405	116,305

- Table E3 compares the HIP and the pure private market and summarizes the total cost to rate payers from each scenario as it impacts the residential insurance marketplace. As the data shows, in any scenario, the HIP outperforms the private market and provides substantial savings to rate payers. As the report will show, the private market premiums are subject to large spikes after storm events as a result of reinsurance, which ultimately result in more costs to rate payers when compared to HIP. Savings range from \$50 Billion to as much as \$102 Billion over the 20-year horizon examined here.

**Table E3. Summary of Impacts on Rate Payers (HIP vs Private)
(\$Billions of 2008 Dollars)**

Comparison of HIP v. Private Total Cost to Rate Payer	Average Annual Storms 1992-2009	1992-2008 Scenario With Andrew in 2010	20-Yr Storms Every 5 Years	100 Year Storm in 2010
Private Market	\$207	\$242	\$212	\$218
HIP	\$105	\$169	\$162	\$162
Net Savings with HIP	===== \$102	===== \$73	===== \$50	===== \$56

- Savings to rate payers translate into substantial economic benefits to Florida’s economy (Table E4). The savings to rate payers outlined in Table E2 occur over a 20-year period. Taken to present value at a 10% discount rate provides a present day perspective. On this basis savings range from \$23-to-\$37 Billion which translates into as many as 300,000 additional jobs over a 20-year horizon or 10,000 jobs per year.

**Table E4. Summary of Economic Impacts
(\$Billions of 2008 Dollars)**

Economic Impacts of HIP v. Private	Average Annual Storms 1992-2009	1992-2008 Scenario With Andrew in 2010	20-Yr Storms Every 5 Years	100 Year Storm in 2010
Total 20-Year Savings to Rate Payers	\$102	\$73	\$50	\$56
Present Value of Savings to Payers	\$37	\$34	\$23	\$31
Impact on Economic Output	\$206	\$68	\$46	\$62
Impact on Employment	298,695	268,643	183,670	246,799

- Finally, it is important to note that HIP insures against loss in a preemptive and actuarially sound manner. By contrast, the current Citizens CAT Fund system insures against loss in an admittedly non-actuarially sound manner. Currently, the private market is in flux and is not operating properly as a result of the current pricing and practices of Citizens and the CAT Fund. As a result, there are important economic costs imposed on Florida’s residential real estate that are not reflected in the current rate structure, but are reflected in the market prices for Florida’s residential real estate. Moving to a reliable and actuarially sound system will not only provide direct cost savings to rate payers, but it will also produce market benefits for Florida’s residential real estate.
- The detailed calculations supporting the results described above are provided in Appendices 1-3.

1.0 Introduction

1.1 Assignment

Shield Our State, Inc. (“Client”) to analyze the economic impacts of the implementation of its proposed Florida Statewide Hurricane Insurance Pool (“HIP”). As described in more detail below, HIP is envisioned as a public entity that would provide hurricane insurance coverage for all residential properties in Florida. All insurers in the State would be required to participate.

1.2 Use of this Report

This report is provided to the Client for its exclusive use. It is our understanding that the Client intends to use the report in its efforts to implement HIP through the Florida Legislature. The report is not designed for any other purpose. As is the case in any such complex assignment, our analysis and conclusions depend importantly upon a number of critical assumptions which are discussed herein. The report is designed to be used in its totality and summaries or excerpts maybe misleading.

1.3 Limitations

The report relies on information from the Florida Office of Insurance along with published reports from the Florida Hurricane Catastrophe Fund (“FHCF”) and Citizens Property Insurance Company (“Citizens”). Furthermore, the analysis presents a long term view of the issues, and therefore is subject to all of the frailties of long term analyses. Finally, as noted above, the assumptions used here materially impact the analysis.

1.4 Acknowledgments

Mr. Dan Montgomery, principal of the Client, was particularly helpful in the conduct of this research. He provided source documents and reviewed the HIP proposal. However, all of the analysis and conclusions here are ours alone. All faults of commission or omission are our sole responsibility.

1.5 Overview of the Report

The report begins with a description of HIP and discussion of how it is intended to work. We identify and analyze its critical components. Section 2 also provides a summary of the current marketplace for residential property insurance in Florida.

Section 3 presents a baseline set of storm scenarios. These scenarios are used to quantify the costs to rate payers under each scenario. Thus, for each storm scenario estimates are developed for the total cost to rate payers under the current system and with HIP.

Section 4 quantifies the costs to rate payer for the current system and for the proposed HIP alternative for each of the storm scenarios.

Our economic analysis and conclusions are presented in Section 5. Section 5 also discusses the limitations and the reliability of the analysis.

2.0 The Florida Statewide Hurricane Pool -- HIP

2.1 Overview

HIP is envisioned as a replacement for FHCF and the HRA of Citizens. HIP would be established by the State of Florida as an independent entity providing hurricane coverage for all residential properties in Florida. All licensed insurers in Florida would be required to utilize HIP.

2.2 HIP Program

The Client proposes to have the Florida Legislature implement HIP in its current session. HIP would operate as an independent governmental authority to provide exclusive hurricane insurance coverage for all residential properties in the State. Participation would be mandatory for all insurers.

The State of Florida would set the premium rate for hurricane coverage through HIP. The program is designed to operate initially at approximately the same rates being charged today by Citizens. The premiums will be based on the type, location, and construction of the insured properties.

HIP would operate as a true public-private partnership. As noted above, HIP provides protection only for hurricane or so-called wind damage. Flood protection is not provided by HIP, but instead remains the province of the federal government and private providers. Private companies continue to be responsible for covering all the other risks associated with our homeowners' policies - such as fire, theft, and personal liability protection.

In this public-private partnership HIP will rely upon the private providers to do what they do best. The private insurers' role in this partnership will be to: (a) write the homeowners' policies, (b) collect the entire premium, and (c) pass through the hurricane portion of the premium to the state fund, HIP. In addition, the private insurers will also handle all of policy administration and claims processing. HIP will pay the private insurers fees to cover their expenses for these activities.

HIP premiums will build up in a new state fund that is exempt from paying federal taxes, leaving more of the money to pay for Floridians' hurricane damage. The new fund will be protected by State law and several layers of State oversight to ensure that the HIP fund is not used for any other purposes than to cover hurricane losses.

HIP's initial capital will come from two primary sources: (1) the transfer of surplus balances from FHCF and Citizens (which HIP replaces) and (2) the sale of a new security called a catastrophe contingent capital contract ("CCCC"). The CCCC is a new investment vehicle designed by the Client to provide major catastrophe loss financing. Essentially, CCCC is a ten-year bond sold by HIP. The rate on CCCC is projected at 300 basis points ("bp" or 3%) over the comparable 10-year U.S. Treasury Bond. HIP plans to sell \$20 Billion in CCCC.

HIP would invest the CCCC proceeds into 10-year Treasury Bonds. The additional 300bp is paid from HIP premium and investment revenue. In the event a major storm creating a capital need, HIP would sell the Treasuries. The investors will still be paid their original Treasury rate plus 300bp from HIP premiums until the obligations are extinguished.

Payments for losses will be made from HIP's accumulated premium retention and from investment earnings. If these are insufficient, HIP would draw upon its CCCC.

3.0 Storm Scenarios

3.1 Introduction to the Scenarios

Florida is vulnerable to hurricanes. As Figure 1 below shows, thirty-five hurricanes hit Florida since 1950. The strikes have been widespread.

Figure 1. Hurricane Activity in Florida Since 1950



Table 1 summarizes the damage done by hurricanes since 1992. Over this more recent period fourteen storms have hit the State. These storms have caused average annual damage of \$2.5 Billion. However, storm damage is highly episodic. This is reflected in the standard deviation of storm damage since 1992 which equals \$5.3 Billion. Thus, assuming that average damage will occur in any year may prove to be highly misleading.

Given this reality, testing the insurance system options with realistic storm scenarios requires significant care. The tests must reflect the potential for a category 5 storm, such as Andrew, to occur in any year. Furthermore, the tests must also realistically mirror storm frequency and storm magnitude.

Section 3.2 describes the scenarios used in this analysis.

Table 1. Summary of Hurricane Activity in Florida

Year	Loss in \$B	Storm	Category
1992	\$16.00	Andrew	5
1993	\$0.10		
1994	\$0.00		
1995	\$1.65	Opal/Erin	2 2
1996	\$0.00		
1997	\$0.00		
1998	\$0.35	George/Earl	2 1
1999	\$0.15	Irene	1
2000	\$0.00		
2001	\$0.00		
2002	\$0.00		
2003	\$0.00		
2004	\$13.61	Charley/Frances/ Ivan/Jeanne	4 2 3 3
2005	\$10.66	Wilma/Dennis/Rita	3 3 1
2006	\$0.00		
2007	\$0.00		
2008	\$0.11	Ike	
Average	\$2.51		

Sources: Florida Office of Insurance Regulation Hurricane Summary Data August 2006

3.2 Four Storm Scenarios

Four storm scenarios were used to test the impacts on the proposed HIP and on the current system of Citizens/FHCF. By subjecting each option to the same storm scenarios realistic comparative analysis is possible. The scenarios used here are as follows.

(1) Average Annual Storms based on 1992-2008 Experience

In this scenario the losses are set at \$3.9 Billion per year as per Table 2.

(2) Repeat of 1992-2008 with Andrew in 2010

This scenario repeats the pattern from 1992-2009 as shown in Table 1. An Andrew magnitude storm is scheduled for the first year of HIP in 2010. To make this scenario realistic the scale of impacts were adjusted to reflect the percentage of property value affected.

**Table 2. Hurricane Storm Scenario
Repeat of 1992-2008 with Andrew in 2010**

Year	Loss in \$B	Property Value \$B	% Impact	Impact on 2008 Value \$B
1992	\$16	\$456	3.5%	\$58.0
1993	\$0	\$484	0.0%	\$0.3
1994	\$0	\$519	0.0%	\$0.0
1995	\$2	\$792	0.2%	\$5.1
1996	\$0	\$810	0.0%	\$0.0
1997	\$0	\$806	0.0%	\$0.0
1998	\$0	\$817	0.0%	\$1.1
1999	\$0	\$843	0.0%	\$0.4
2000	\$0	\$934	0.0%	\$0.0
2001	\$0	\$922	0.0%	\$0.0
2002	\$0	\$1,100	0.0%	\$0.0
2003	\$0	\$1,193	0.0%	\$0.0
2004	\$14	\$1,321	1.0%	\$25.4
2005	\$11	\$1,527	0.7%	\$17.2
2006	\$0	\$1,789	0.0%	\$0.0
2007	\$0	\$2,013	0.0%	\$0.0
2008	\$0	\$2,241	0.0%	\$0.1
			AVG	\$3.9*

Source: *\$3.9 Billion from FHCF Ratemaking Formula Model

For example, when Andrew struck in 1992 it caused \$16 Billion in property damage which was equal to 3.5% of the total residential property value in the State of Florida in 1992. As of 2008, the latest data available, Florida's residential property has a total value of \$2.24 Trillion. If an Andrew scale storm hit and destroyed 3.5% of all residential value today, the losses would be far larger. However, insured losses are estimated at 67% of the total impact. One final adjustment is the cost associated adjusting the losses, which is estimated at 10%.¹ The total estimated insured cost is \$58 Billion. These same calculations are repeated for each year.

(3) A Once in 20-Year Storm Every Five Years

The estimated cost of a once in 20-Year storm was estimated by FHCF at \$17.46 Billion². When the costs of loss adjustment are added at 10%, the total estimated loss increases to \$19.2 Billion. Losses of this magnitude are imposed every five years beginning in 2010.

¹ Independent Actuarial Analysis provided by Client

² Florida Insurance Council

(4) A Once in 100-Year Storm in 2010

The cost of a once in 100-Year storm event is projected at \$50.43 by the Florida Office of Insurance.³ Adding the costs for adjustment increases the total cost to \$55.47 for a once in 100-Year storm event.

4.0 Costs of the Current System and HIP for Each Storm Scenario

4.1 Introduction

This section reports on the costs estimated for each of the four storm scenarios for each of the two programs: (a) HIP and (b) Citizens-FHCF. The analytical work strives to provide a true “apples-to-apples” comparison. Important assumptions governing the analysis are discussed next followed by the cost estimates for each of the two programs.

4.2 Assumptions

Key assumptions common to all the analyses are outlined below in Table 3. The total value of all insured losses at \$2.24 Trillion is the value as of 2008 as noted above. The probable maximum loss estimates (“PML”) were developed from reports by the Florida Office of Insurance Regulation.

Table 3. Common Assumptions

Financial Assumptions	Amount	Notes
Total Insured Value	\$2.24	Trillion
PML of 1-in-100 Year Loss 2010**	\$50.43	Billion
PML of 1-in-20 Year Loss 2010**	\$17.46	Billion
Average Annual Storm 92-2008	\$1.90	Billion
Gross Premium Revenue	\$6.34	Billion
Gross Premium Revenue (Privatized)***	\$8.84	Billion
PML Escalation Cost of Construction - 5-Yr	12.50%	
Capital Balances Transferred	\$7.10	Billion
Operating Expenses	22.00%	
Loss Adjustment Expense LAE	10.00%	
Contingent Capital Fee	3.00%	
Contingent Capital Interest	7.00%	
Federal Loan Interest	4.00%	
State Capital Interest	6.00%	
Investment Income Interest	4.00%	
Pre-event Revenue Bond Interest	7.00%	
Contingent Capital Line	\$20.00	Billion
Federal Loan Line	\$20.00	Billion
Average Annual Storm*	\$3.90	Billion

³ Florida Office of Insurance Regulation (February 2009), page 6.

The estimate for gross premium revenue was developed in Table 4. An independent actuarial analysis provided the estimate for all residential premiums as of 2010. The current rate is based on current rates in place. The indicated rate is the rate that would apply if the company filings for rate increases were approved. In this analysis the current rates are used.

The operating expense ratio and the loss adjustment expense were estimated per an independent actuarial analysis.

The various interest rates were estimated by us and are projected for 2010 based on current data.

Table 4. Estimate for Residential Premium Revenue For Wind Coverage

Premium Revenue Wind Coverage	2010	2010**
	\$ M	\$ M
Voluntary Market	\$4,565	\$6,641
Citizens HRA	\$946	\$1,177
Citizens PLA	\$826	\$1,026
	=====	=====
Total	\$6,337	\$8,844

Source: Actuarial Analysis

There are five other critical assumptions used in the analyses that follows; first, the success of HIP depends in part upon its ability to sell \$20 Billion CCCC at a total interest cost of 7%. It is anticipated that these sales would occur over a six-to-twelve month period. We believe that this is a reasonable assumption, if HIP is provided assessment authority similar to that accorded FHCF.

Second, while an April 2009 Tampa Tribune article has reported that the US Treasury has indicated it will not offer a line of credit to the Florida Hurricane Catastrophe Fund, we have assumed that in a time of crisis the federal government would ultimately be willing to provide a standby lending agreement of up to \$20 Billion at 4% repayable over a ten year term to back stop either HIP or Citizens-FHCF. In the event of a loss retained premiums would be drawn on first. In the case of HIP the CCCC facility would be drawn on next and if necessary there would be call on the federal backup. In the case of Citizens-FHCF retained premiums are called on first. If these are exhausted, Citizens-FHCF would issue up to \$20 Billion in state-backed bonds. Then if losses exceed these resources, the federal backup would be tapped for up to \$20 Billion. Thus, the federal backup facility is assumed for both systems on an identical basis.

It is reasonable to assume that the federal government would be willing to provide such a facility as envisioned under HIP. To keep the analytical comparison unbiased, it is important to also assume a similar facility would be available to the Citizens-FHCF now in place.

Third, we have assumed Citizens-FHCF will need to obtain reinsurance to mitigate future losses if Citizens-FHCF is forced to sell \$20 Billion in bonds following a major storm. Unlike HIP which would float \$20 Billion in CCCC obligations, Citizens-FHCF is structured to finance losses after a major event. In these circumstances we believe bond buyers would require Citizens-FHCF to purchase bond insurance to cover future losses. In this way the assessments that Citizens-FHCF would use to pay the debt service on the bonds would be available to pay the debt service without being compromised by a future storm event that would need to tap those same assessment revenues. Stated differently, if Citizens-FHCF would attempt to issue \$20 Billion in debt following a major storm event without also covenanting to purchase reinsurance to cover future losses, investors would demand interest rates much higher than the 6% rate assumed here.

The cost of reinsurance was recently estimated by the actuarial analysis, and the results are displayed below in Table 5. The annual cost for reinsurance is a function of the rate, which is 17% according to an independent actuarial analysis, and the amount of coverage. For example, to reinsure for a loss over the 1-in-20 Year storm event in 2010 would cost \$5.6 Billion per year (17% X Reinsurance Amount). If reinsurance were sought for all losses above \$5 Billion, the cost would rise to \$7.72 Billion per year.

Table 5. Estimated Costs for Reinsurance

Category	Amount
PML of 1-in-100 Year Loss 2010	\$50.43
PML of 1-in-20 Year Loss 2010	\$17.46
Reinsurance over 1-in-20 Year Loss	
Amount of Reinsurance	\$32.97
Estimated Rate on Line	17%
Cost of Reinsurance	\$5.60
Reinsurance for Loss over \$5 B	
Amount of Reinsurance	\$45.43
Estimated Rate on Line	17%
Cost of Reinsurance	\$7.72

Source: Actuarial Analysis

For this analysis we have assumed that Citizens-FHCF would be required to purchase reinsurance for losses over the 1-in-20 Year even for \$4.3 Billion per year. This coverage would be required until either the bonds are repaid or accumulated surpluses exceed \$20 Billion.

Fourth, the analyses are conducted in real \$2008. No inflation or other costs increases are included in the analysis. Since the analysis horizon is 20-years, assumptions concerning inflation can come to dominate the results. Therefore, the analysis is conducted in real, non-inflated, dollars for all scenarios.

Fifth, the analyses conducted here focus on the total cost to residential property insurance rate payers. As noted above, currently gross premium revenue is \$6.34 Billion from these rate payers.

4.3 HIP Cost Estimates

Table 6 summarizes the results for the four storm scenarios under the HIP program. The summaries are based on detailed modeling of each scenario. Appendix 1 contains the more detailed modeling results on an annual basis. The summary data presented in Table 6 are the totals over the 20-year horizon beginning in 2010.

**Table 6. Summary of Costs to Rate Payers Under HIP
(\$ Billions 2008)**

Florida HIP	Average Annual Storms 1992-2009	1992-2008 Scenario With Andrew in 2010	20-Yr Storms Every 5 Years	100 Year Storm in 2010
Total Incurred Losses + LAE	(\$78)	(\$111)	(\$91)	(\$55)
Base Premiums	\$105	\$169	\$162	\$162
Operating Expenses	(\$23)	(\$37)	(\$36)	(\$36)
Investment Gains	\$10	\$0	\$8	\$8
	=====	=====	=====	=====
Cash Available for Debt Service	\$93	\$132	\$135	\$135
Total Financing Costs	\$0	(\$96)	(\$15)	(\$59)
	=====	=====	=====	=====
Net in 2029	\$93	\$36	\$120	\$75
Cumulative Balance in 2029	\$10	(\$0)	\$43	\$66
Needed Rate Escalation	-2%	2.9%	2.5%	2.5%

If Florida experienced annual storm losses at their 1992-2008 average of \$3.9 Billion plus a 10% cost for adjustment, premium revenues would be more than sufficient to pay for losses. In this best of cases premiums could be reduced by 2% per year. Investment gains and accumulated surpluses are more than sufficient to pay all claims.

By contrast, a replication of Florida's 1992-2008 experience with an Andrew magnitude storm in 2010 would require rates to rise by 2.9% per year. The total cost to rate payers under HIP would be \$169 Billion over the 20-years.

If instead Florida experienced a 1-in-20 Year storm every five years beginning in 2010, rates would have to increase by 2.5% per year. Under this scenario the total cost to rate payers would be \$162 Billion over 20 years.

Finally, if a 1-in-100 Year storm hit in the first year that HIP was implemented in 2010 without any other storms, the total cost to rate payers would be \$162 Billion. This includes escalation rates of 2.5% per year.

4.4 Current System Cost Estimates

Table 7 summarizes the results for the four storm scenarios under the current programs offered by Citizens-FHCF. The summaries are based on detailed modeling of each scenario, and Appendix 2 contains the detailed modeling results on an annual basis. The summary data presented in Table 7 are once again the totals over the 20-year horizon beginning in 2010.

The best case scenario is again an average storm each year at a full cost including expenses of \$3.9 Billion. At this cost level base premiums of \$105 billion would be collected. As result, premiums would be reduced by 2% per year.

However, if Florida were struck by storms similar to those in 1992-2008 again starting with an Andrew sized storm in 2010, rates would have to increase by 5.2% per year. The total 20-year cost to rate payers is projected at \$214 Billion under this scenario.

A series of 20-year storms striking every five years would require rates to increase at 7.7% per year. The total 20-year cost to rate payers is estimated at \$281 Billion.

Finally, if the 1-in-100 year storm strikes in 2010 with no other storms through 2029, the costs to rate payers would be \$162 Billion.

**Table 7. Summary of Costs to Rate Payers Under Citizens-FHCF
(\$ Billions 2008)**

Citizens Property Insurance Corporation and Florida Hurricane Catastrophe Fund	Average Annual Storms 1992-2009	1992-2008 Scenario With Andrew in 2010	20-Yr Storms Every 5 Years	100 Year Storm in 2010
Total Incurred Losses + LAE	(\$78)	(\$111)	(\$91)	(\$55)
Base Premiums	\$105	\$214	\$281	\$162
Emergency Premium Surcharge	\$0	\$0	\$0	\$39
Reinsurance Costs	(\$62)	(\$95)	(\$106)	(\$106)
Operating Expenses	(\$23)	(\$47)	(\$62)	(\$36)
Investment Gains	\$16	\$5	\$0	\$0
	=====	=====	=====	=====
Cash Available for Debt Service	\$37	\$76	\$113	\$59
Total Financing Costs	\$0	(\$76)	(\$71)	(\$54)
	=====	=====	=====	=====
Net in 2029	\$37	(\$0)	\$42	\$5
Cumulative Balance in 2029	\$27	\$52	\$17	(\$33)
Needed Rate Escalation	-2%	5.2%	7.7%	2.5%

4.5 Pure Private System Cost Estimates

Table 8 summarizes the results for the four storm scenarios under a scenario if Florida was a purely private market. The summaries are based on detailed modeling of each scenario, and Appendix 3 contains the detailed modeling results on an annual basis. The summary data presented in Table 8 are once again the totals over the 20-year horizon beginning in 2010. In all these cases, the assumption is the base premium will increase at 2.5% annually.

With an average storm each year at a full cost including expenses of \$3.9 Billion, the total premiums collected are estimated at \$207 billion. This example highlights the historical impacts of reinsurance and how it drives up the cost of hurricane insurance. Due to recurring average storms, reinsurance rates continue to increase due to the increased risk of loss.

If Florida were struck by storms similar to those in 1992-2008 again starting with an Andrew sized storm in 2010, total premium collections are estimated at \$242 billion.

A series of 20-year storms striking every five years results in continued spikes resulting in a total collection of \$212 billion in premiums over the 20-year horizon evaluated.

Finally, if the 1-in-100 year storm strikes in 2010 with no other storms through 2029, the costs to rate payers would be \$218 Billion.

**Table 8. Summary of Costs to Rate Payers Under Pure Private
(\$ Billions 2008)**

Private Insurance	Average Annual Storms 1992-2009	1992-2008 Scenario With Andrew in 2010	20-Yr Storms Every 5 Years	100 Year Storm in 2010
Total Incurred Losses + LAE	(\$78)	(\$111)	(\$91)	(\$55)
Total Premium (Base & Reinsurance)	\$207	\$242	\$212	\$218
Base Premiums	\$95	\$95	\$95	\$95
Emergency Premium Surcharge	\$0	\$0	\$0	\$0
Reinsurance Costs	\$112	\$147	\$117	\$123
Operating Expenses	(\$21)	(\$21)	(\$21)	(\$21)
Investment Gains	\$6	\$0	\$46	\$47
	=====	=====	=====	=====
Cash Available for Debt Service	\$192	\$221	\$238	\$244
Total Financing Costs	\$0	(\$71)	(\$5)	(\$45)
	=====	=====	=====	=====
Net in 2029	\$192	\$150	\$233	\$200
Cumulative Balance in 2029	\$9	(\$53)	\$149	\$189
Rate Escalation	2.5%	2.5%	2.5%	2.5%

As part of the private insurance analysis, we graphed the estimates of base premiums and reinsurance over the 20-year time period of each storm scenario. As the graphs show, the reinsurance component of the purely private market is the overall driver of market rates. Figures 1 through 4 provide a summary of the private market premiums.

Figure 1.

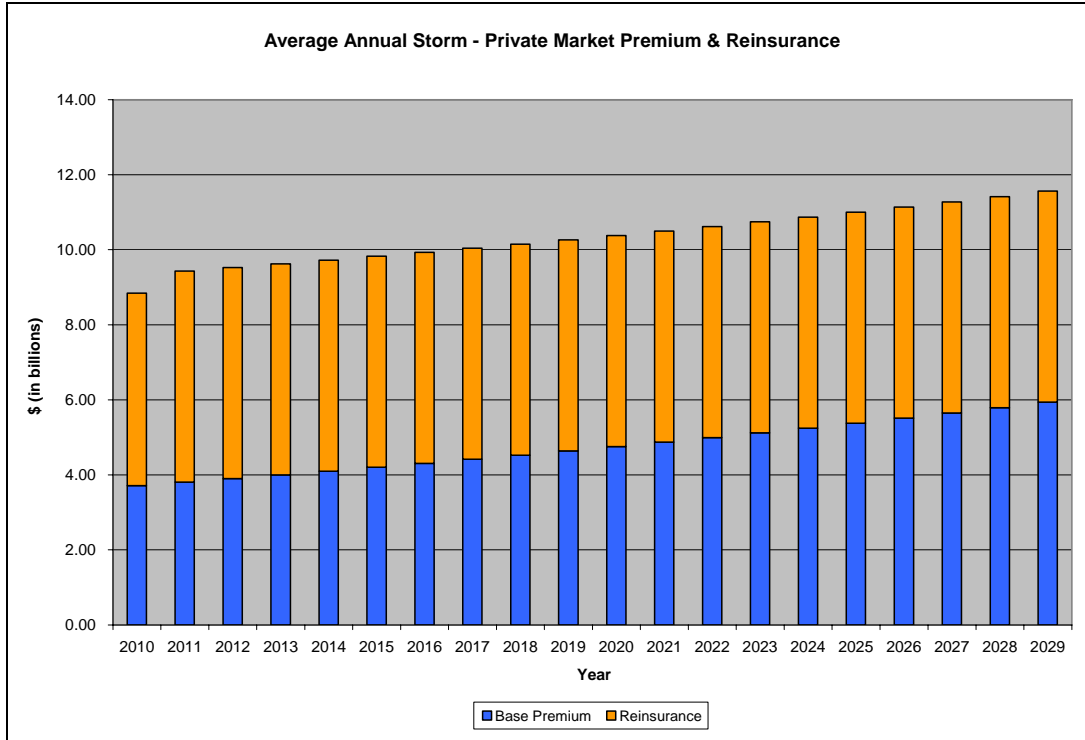


Figure 2.

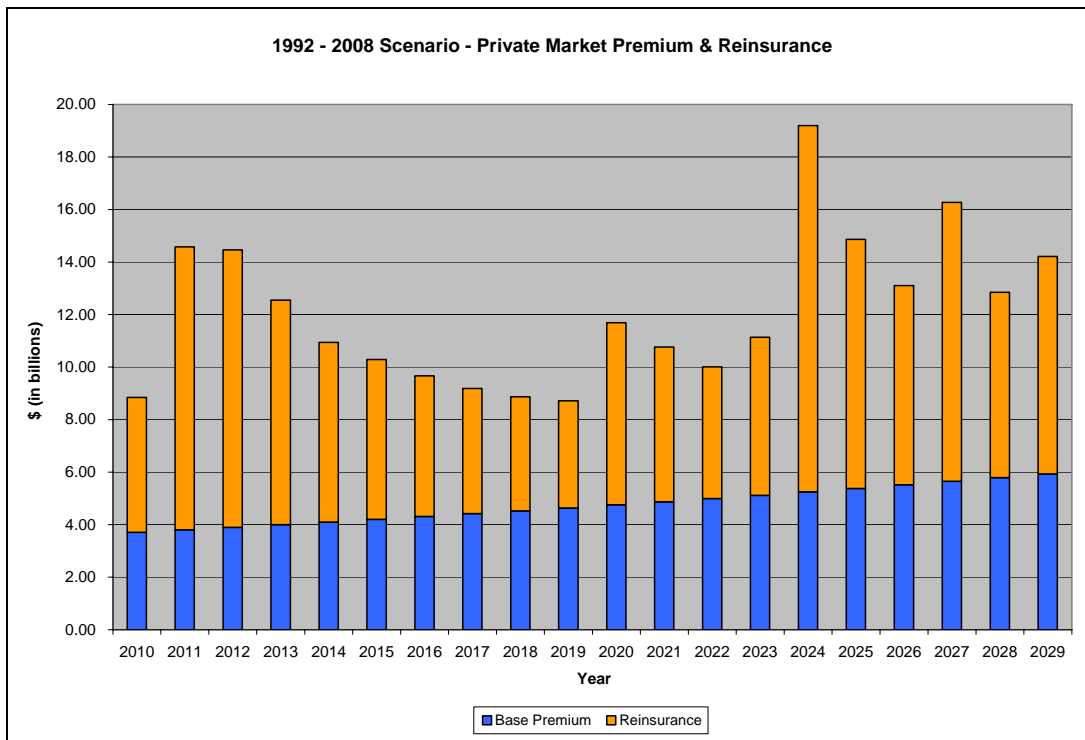


Figure 3.

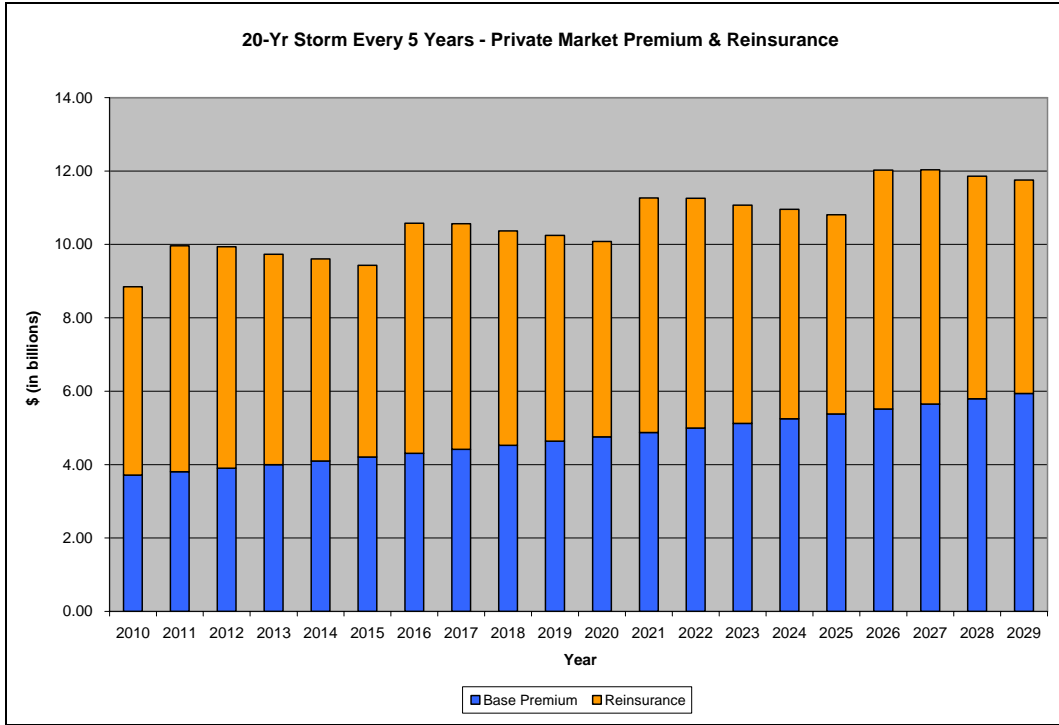
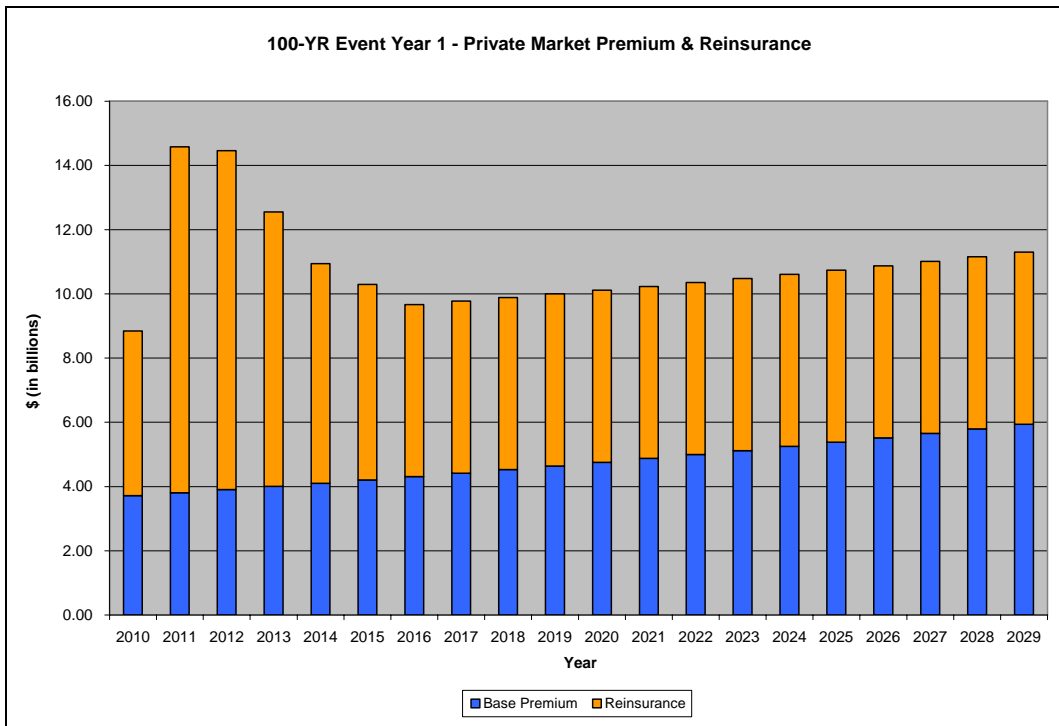


Figure 4.



4.6 Final Observations

The storm scenarios produce significantly different results under both systems. The scenarios put both systems under considerable stress for any scenario except the base case of average annual storms. By subjecting each system to a 1-in-100 year storm event in year 1, their capacities to fund a huge storm loss in excess of \$58 Billion is tested. The most costly scenario is one where major storms, such as the 1-in-20 year storm, strikes regularly every five years. Table 9 summarizes the total premiums collected using the three different programs over the four different storm scenarios.

Table 9. Summary of Hurricane Insurance Premium Scenarios

	HIP	CIT-CAT	Private
Acv Annual Storms	\$105.32	105.32	\$206.90
1992 - 2008 Scenario with Andrew 2010	\$168.84	\$213.58	\$242.18
20-Yr Storm Every 5 Years	\$161.88	\$280.53	\$212.36
100-Yr Storm Yr 1	\$161.88	\$200.76	\$217.83

5.0 Economic Analysis and Conclusions

5.1 Overview

This section of the report compares the resulting costs to residential property insurance rate payers under the two alternatives. Any estimated differences in costs will have consequential economic impacts that are also described.

5.2 Comparisons of HIP to Current System and HIP to Private Market

Tables 10 & 11 compare HIP to the current Citizens CAT Fund and the pure private insurance market in Florida. All costs are over the 20-year analytical horizon. HIP offers the promise of substantial cost savings under all scenarios except the base case of average storms. The potential savings vary depending upon the storm scenarios. However, the savings are potentially quite large ranging from \$39 Billion to as much as \$119 Billion over 20-years when comparing HIP to the current CIT-CAT model and \$29 Billion to \$176 Billion when comparing HIP to a pure private market in Florida.

Table 10. Comparison of HIP to Citizens-FHCF Under All Storm Scenarios (\$ Billions 2008)

Comparison of HIP v. CIT-CAT Total Cost to Rate Payer	Average Annual Storms 1992-2009	1992-2008 Scenario With Andrew in 2010	20-Yr Storms Every 5 Years	100 Year Storm in 2010
CIT-CAT	\$105	\$214	\$281	\$201
HIP	\$105	\$169	\$162	\$162
	=====	=====	=====	=====
Net Savings with HIP	\$0	\$45	\$119	\$39

Table 11. Comparison of HIP to Private Under All Storm Scenarios (\$ Billions 2008)

Comparison of HIP v. Private Total Cost to Rate Payer	Average Annual Storms 1992-2009	1992-2008 Scenario With Andrew in 2010	20-Yr Storms Every 5 Years	100 Year Storm in 2010
Private Market	\$207	\$242	\$212	\$218
HIP	\$105	\$169	\$162	\$162
	=====	=====	=====	=====
Net Savings with HIP	\$102	\$73	\$50	\$56

To better illustrate the premium collections, we graphed annual premium collections necessary to manage the two funds based on the four scenarios provided. Figures 5 through 8 summarizes the findings. Please note in Figure 5, the premiums collected by the current system and the HIP are similar.

Figure 5.

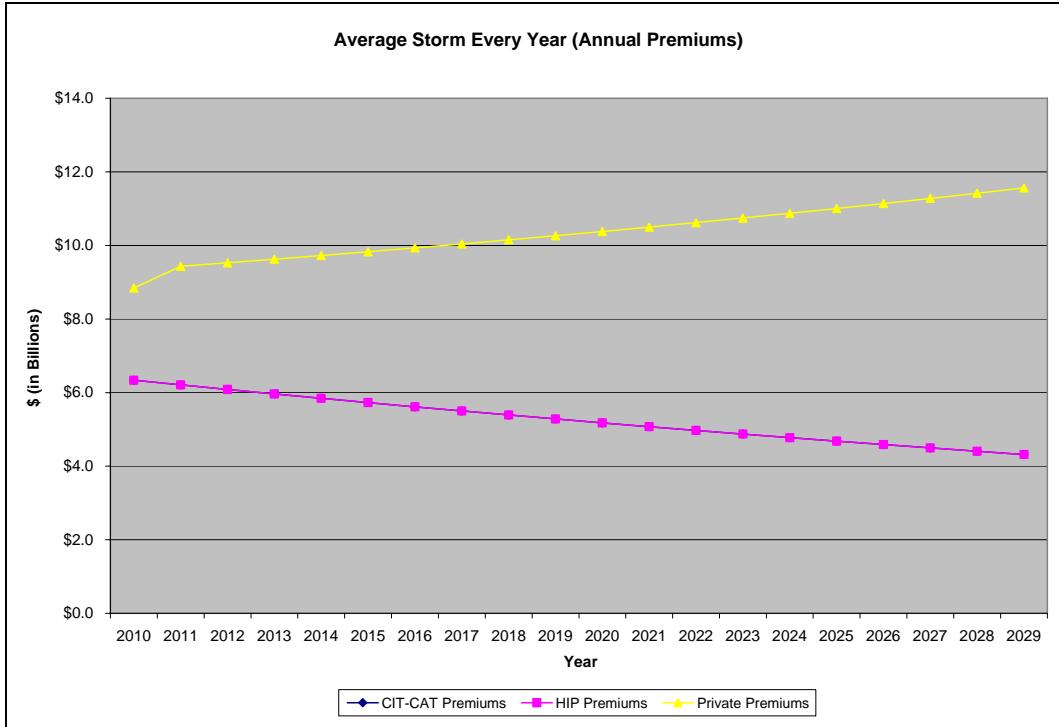


Figure 6.

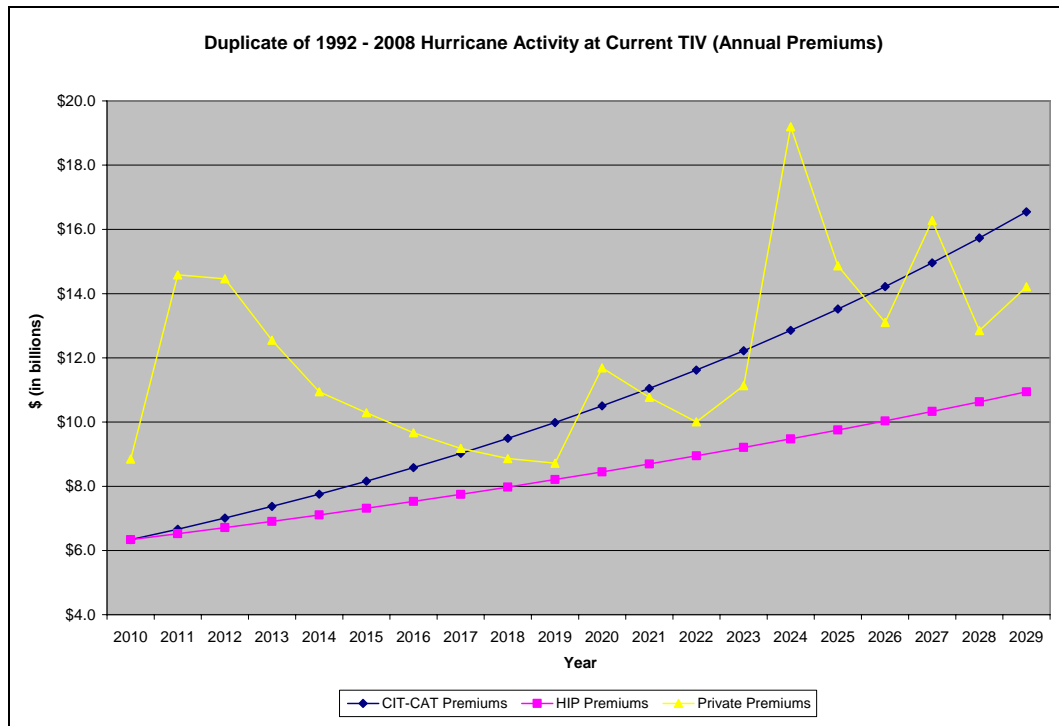


Figure 7.

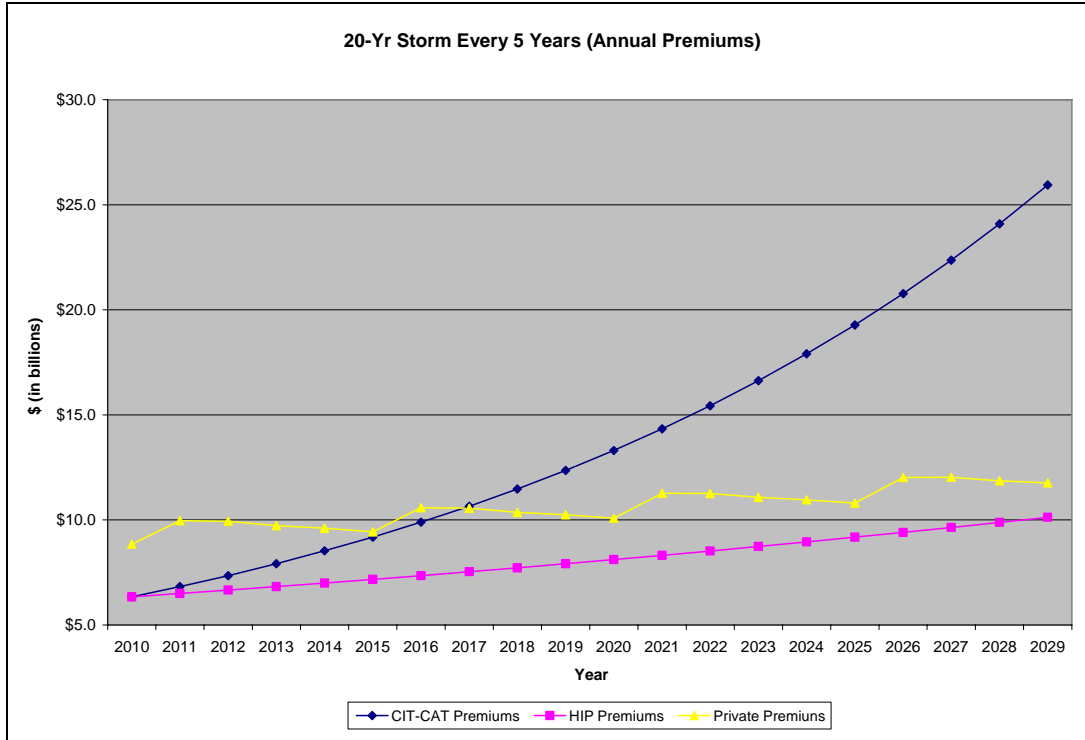
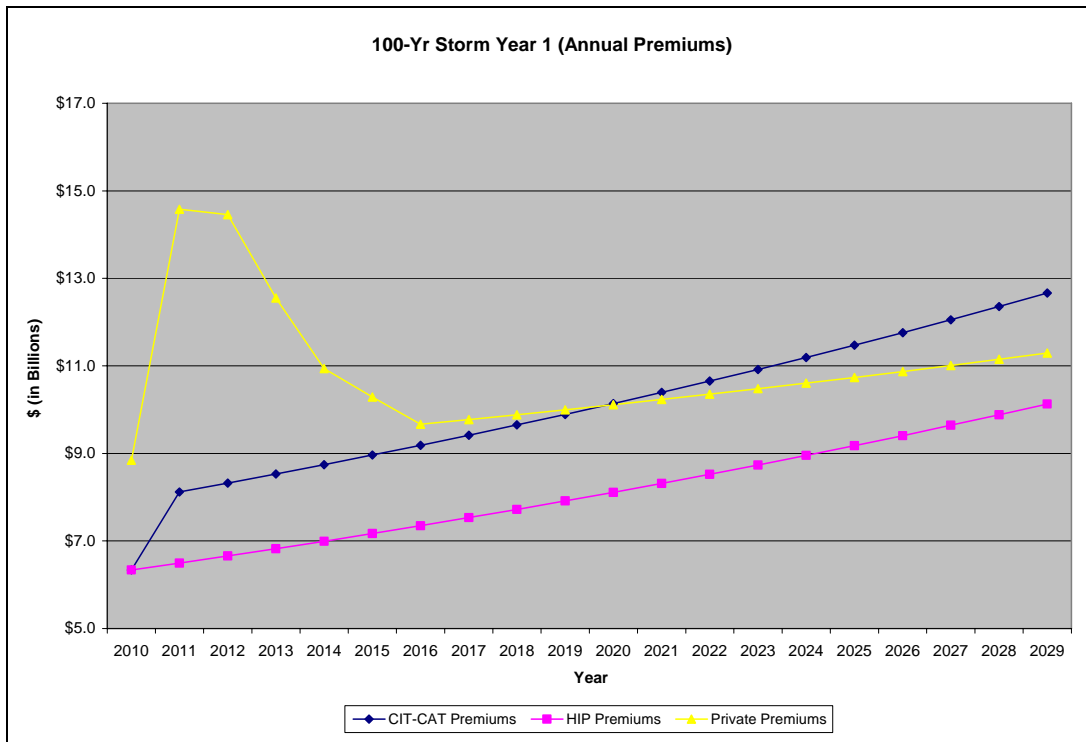


Figure 8.



5.3 Economic Consequences (HIP to Current CIT-CAT/Voluntary System)

There are considerable economic consequences from cost savings ranging from \$39 Billion to as much as \$119 Billion when comparing HIP to the current CIT-CAT scenario. If residential property owners could save on their insurance at these levels, these funds would be available to support other activities. To keep the analysis simple, if we assume that 100% of these savings are spent on other goods and services in Florida, then the consequences for economic output and job creation are substantial. Table 12 summarizes the results.

The potential savings to rate payers occur over a 20-year horizon. The decision to implement HIP is being made today. Therefore, it is important to discount the stream of future savings over the upcoming 20-years to their present value. A 10% discount rate was used to calculate the present value of the estimated savings streams available by implementing HIP. At their present value the savings range from \$0 to as much as \$31 Billion.

To estimate the consequences of savings at these levels, the Regional Economic Input-Output Model or RIMS II maintained by the U.S. Bureau of Economic Analysis ("BEA") was used. RIMS II was developed by BEA for use in estimating the economic impacts of federal programs on states and localities. The latest RIMS II coefficients for Florida were employed.

The effects on additional economic output from the HIP plan range as high as \$60 Billion in additional gross state product. This translates into over 248,000 jobs supported over the 20-year horizon or 8,000 additional jobs supported each year for 20-years.

Table 12. Summary of Economic Impacts from HIP

Economic Impacts of HIP v. CIT-CAT	Average Annual Storms 1992-2009	1992-2008 Scenario With Andrew in 2010	20-Yr Storms Every 5 Years	100 Year Storm in 2010
Total 20-Year Savings to Rate Payers	\$0	\$45	\$119	\$39
Present Value of Savings to Payers	\$0	\$12	\$31	\$15
Impact on Economic Output	\$0	\$24	\$63	\$29
Impact on Employment	-	95,896	248,405	116,305
Average Annual PV Jobs	-	3,197	8,280	3,877

5.4 Economic Consequences (HIP to Pure Private)

There are considerable economic consequences from cost savings ranging from \$50 Billion to as much as \$102 Billion when comparing HIP to a pure private insurance market in Florida. If residential property owners could save on their insurance at these levels, these funds would be available to support other activities. To keep the analysis simple, if we assume that 100% of these savings are spent on other goods and services in Florida, then the consequences for economic output and job creation are substantial. Table 13 summarizes the results.

The potential savings to rate payers occur over a 20-year horizon. The decision to implement HIP is being made today. Therefore, it is important to discount the stream of future savings over the upcoming 20-years to their present value. A 10% discount rate was used to calculate the present value of the estimated savings streams available by implementing HIP. At their present value the savings range from \$23 to as much as \$37 Billion.

To estimate the consequences of savings at these levels, the Regional Economic Input-Output Model or RIMS II maintained by the U.S. Bureau of Economic Analysis (“BEA”) was used. RIMS II was developed by BEA for use in estimating the economic impacts of federal programs on states and localities. The latest RIMS II coefficients for Florida were employed.

The effects on additional economic output from the HIP plan range as high as \$206 Billion in additional gross state product. This translates into nearly 300,000 jobs supported over the 20-year horizon or 10,000 additional jobs supported each year for 20-years.

Table 13. Summary of Economic Impacts from HIP

Economic Impacts of HIP v. Private	Average Annual Storms 1992-2009	1992-2008 Scenario With Andrew in 2010	20-Yr Storms Every 5 Years	100 Year Storm in 2010
Total 20-Year Savings to Rate Payers	\$102	\$73	\$50	\$56
Present Value of Savings to Payers	\$37	\$34	\$23	\$31
Impact on Economic Output	\$206	\$68	\$46	\$62
Impact on Employment	298,695	268,643	183,670	246,799
Average Annual PV Jobs	9,956	8,955	6,122	8,227

5.5 Reliability Analysis

How reliable are these results? The focus here is on the relative performance of HIP compared to Citizens-FHCF and the pure private Florida insurance market. Clearly, the biggest uncertainty is the frequency and magnitude of future storms. However, the choice of insurance programs has no impact on storm frequency or magnitude. The scenarios used here appear to capture most of the reasonable variation in storms. They are sufficient to demonstrate that HIP is equal to or will outperform the Citizens-FHCF system and the pure private insurance market system.

5.6 Conclusions and Recommendations

The analysis conducted here demonstrates the superiority of HIP to the current program for insuring residential properties against wind damage in Florida. Finally, the results here are purely financial results. It is useful to note that HIP insures against loss in preemptive manner. Over time HIP provides an actuarially sound system to provide insurance protection. The current system is recognized as not being actuarially sound. A private market system, while actuarially sound, is cost inefficient as funds are not accumulated, but rather expended on a continuing year-to-year risk basis.

APPENDIX 1

Appendix #1

1992-2008 Andrew 2010	Duplicating 1992-2008 at Current TIV																			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Amounts in Billions																				
Initial Capitalization	7.10																			
Annual Premiums	6.34	6.52	6.71	6.91	7.11	7.32	7.53	7.75	7.98	8.21	8.45	8.69	8.95	9.21	9.48	9.75	10.04	10.33	10.63	10.94
Operating Expenses	1.39	1.43	1.48	1.52	1.56	1.61	1.66	1.70	1.75	1.81	1.86	1.91	1.97	2.03	2.08	2.15	2.21	2.27	2.34	2.41
Annual Surplus	4.94	5.09	5.24	5.39	5.55	5.71	5.87	6.04	6.22	6.40	6.59	6.78	6.98	7.18	7.39	7.61	7.83	8.06	8.29	8.53
Carryover Surplus	0.00	(46.52)	(44.06)	(41.18)	(43.16)	(39.72)	(35.98)	(32.99)	(29.04)	(24.30)	(19.19)	(13.69)	(7.78)	(26.84)	(38.23)	(32.36)	(26.05)	(19.39)	(15.63)	(7.94)
Contingent Capital Fee	(0.60)	0.00	(0.04)	(0.09)	(0.13)	(0.18)	(0.24)	(0.30)	(0.37)	(0.44)	(0.51)	(0.60)	(0.60)	(0.60)	(0.47)	(0.56)	(0.60)	(0.60)	(0.60)	(0.60)
Investment Gain @4%	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Adjusted Surplus	11.44	(41.26)	(38.87)	(35.87)	(37.75)	(34.20)	(30.35)	(27.24)	(23.18)	(18.34)	(13.12)	(7.51)	(1.40)	(19.68)	(31.31)	(25.32)	(18.82)	(11.93)	(7.94)	(0.00)
Incurring Losses + LAE	(57.97)	(0.34)	0.00	(5.14)	0.00	0.00	(1.06)	(0.44)	0.00	0.00	0.00	(25.41)	(17.21)	0.00	0.00	(0.12)	(3.53)	0.00	0.00	0.00
Available Surplus	11.44	5.26	5.19	5.30	5.41	5.52	5.63	5.74	5.85	5.96	6.07	6.18	6.38	7.15	6.92	7.05	7.23	7.46	7.69	7.93
Net Surplus/Deficit	(46.52)	4.92	5.19	0.17	5.41	5.52	4.58	5.31	5.85	5.96	6.07	6.18	(19.03)	(10.06)	6.92	7.05	7.11	3.93	7.69	7.93
Contingent Capital Draw	(20.00)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(19.03)	8.97	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Draw	(26.52)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(19.03)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Surplus/Deficit	(46.52)	(41.60)	(38.87)	(41.01)	(37.75)	(34.20)	(31.41)	(27.68)	(23.18)	(18.34)	(13.12)	(7.51)	(26.81)	(36.89)	(31.31)	(25.32)	(18.94)	(15.46)	(7.94)	(0.00)
Reserve Capital Draw	(46.52)	(41.60)	(38.87)	(41.01)	(37.75)	(34.20)	(31.41)	(27.68)	(23.18)	(18.34)	(13.12)	(7.51)	(26.81)	(36.89)	(31.31)	(25.32)	(18.94)	(15.46)	(7.94)	(0.00)
Contingent Capital Interest	0.00	(1.40)	(1.30)	(1.20)	(1.09)	(0.97)	(0.84)	(0.70)	(0.54)	(0.38)	(0.20)	(0.01)	0.00	(1.33)	(0.30)	(0.09)	0.00	0.00	0.00	0.00
Federal Credit Line Interest	0.00	(1.06)	(1.00)	(0.95)	(0.88)	(0.82)	(0.74)	(0.66)	(0.57)	(0.48)	(0.37)	(0.26)	(0.03)	0.00	(0.76)	(0.64)	(0.44)	(0.17)	0.00	0.00
Total Financing Cost	0.00	(2.46)	(2.31)	(2.15)	(1.97)	(1.79)	(1.58)	(1.36)	(1.12)	(0.86)	(0.57)	(0.27)	(0.03)	(1.33)	(1.06)	(0.74)	(0.44)	(0.17)	0.00	0.00
Contingent Capital Principal Payment	0.00	(1.40)	(1.44)	(1.58)	(1.72)	(1.87)	(2.03)	(2.19)	(2.37)	(2.55)	(2.75)	(3.01)	0.00	(5.82)	(2.93)	(1.30)	0.00	0.00	0.00	0.00
Federal Credit Line Principal Payment	0.00	(1.40)	(1.44)	(1.58)	(1.72)	(1.87)	(2.03)	(2.19)	(2.37)	(2.55)	(2.75)	(3.01)	(5.81)	0.00	(2.93)	(5.01)	(6.79)	(4.30)	0.00	0.00
Remaining Contingent Capital Principal	(20.00)	(18.60)	(17.16)	(15.58)	(13.86)	(11.99)	(9.97)	(7.77)	(5.40)	(2.85)	(0.10)	0.00	(19.03)	(4.23)	(1.30)	0.00	0.00	0.00	0.00	0.00
Remining Federal Credit Line Principal	(26.52)	(25.12)	(23.68)	(22.10)	(20.38)	(18.51)	(16.49)	(14.29)	(11.93)	(9.37)	(6.62)	(0.81)	0.00	(19.03)	(16.10)	(11.09)	(4.30)	0.00	0.00	0.00
Total Remaining Principal	(46.52)	(43.72)	(40.84)	(37.68)	(34.24)	(30.51)	(26.45)	(22.07)	(17.33)	(12.22)	(6.72)	(0.81)	(19.03)	(23.26)	(17.40)	(11.09)	(4.30)	0.00	0.00	0.00
Cumulative Surplus/Deficit	(46.52)	(44.06)	(41.18)	(43.16)	(39.72)	(35.98)	(32.99)	(29.04)	(24.30)	(19.19)	(13.69)	(7.78)	(26.84)	(38.23)	(32.36)	(26.05)	(19.39)	(15.63)	(7.94)	(0.00)

100-Year Event in 2010	100-Year event Year 1																			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Initial Capitalization	7.10																			
Annual Premiums	6.34	6.50	6.66	6.82	6.99	7.17	7.35	7.53	7.72	7.91	8.11	8.31	8.52	8.74	8.95	9.18	9.41	9.64	9.88	10.13
Operating Expenses	1.39	1.43	1.46	1.50	1.54	1.58	1.62	1.66	1.70	1.74	1.78	1.83	1.87	1.92	1.97	2.02	2.07	2.12	2.17	2.23
Annual Surplus	4.94	5.07	5.19	5.32	5.46	5.59	5.73	5.88	6.02	6.17	6.33	6.49	6.65	6.81	6.98	7.16	7.34	7.52	7.71	7.90
Carryover Surplus	0.00	(44.02)	(41.15)	(38.20)	(35.00)	(31.55)	(27.82)	(23.80)	(19.47)	(14.83)	(9.85)	(4.52)	1.19	7.28	13.77	20.69	28.64	37.07	46.01	55.49
Contingent Capital Fee	(0.60)	0.00	(0.04)	(0.09)	(0.14)	(0.19)	(0.24)	(0.30)	(0.37)	(0.44)	(0.51)	(0.59)	(0.59)	(0.59)	0.00	0.00	0.00	0.00	0.00	0.00
Investment Gain @4%	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.29	0.54	0.81	1.11	1.44	1.78	2.15
Net Adjusted Surplus	11.44	(38.78)	(36.00)	(32.96)	(29.68)	(26.14)	(22.33)	(18.23)	(13.82)	(9.10)	(4.04)	1.38	7.30	13.79	20.71	28.65	37.09	46.03	55.51	65.54
Incurring Losses + LAE	(55.47)																			
Available Surplus	11.44	5.24	5.15	5.24	5.32	5.41	5.49	5.57	5.65	5.74	5.81	5.89	7.30	13.79	20.71	28.65	37.09	46.03	55.51	65.54
Net Surplus/Deficit	(44.02)	5.24	5.15	5.24	5.32	5.41	5.49	5.57	5.65	5.74	5.81	5.89	7.30	13.79	20.71	28.65	37.09	46.03	55.51	65.54
Contingent Capital Draw	(20.00)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Draw	(24.02)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Surplus/Deficit	(44.02)	(38.78)	(36.00)	(32.96)	(29.68)	(26.14)	(22.33)	(18.23)	(13.82)	(9.10)	(4.04)	1.38	7.30	13.79	20.71	28.65	37.09	46.03	55.51	65.54
Reserve Capital Draw	(44.02)	(38.78)	(36.00)	(32.96)	(29.68)	(26.14)	(22.33)	(18.23)	(13.82)	(9.10)	(4.04)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contingent Capital Interest	0.00	(1.40)	(1.30)	(1.20)	(1.08)	(0.96)	(0.83)	(0.69)	(0.54)	(0.38)	(0.20)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Federal Credit Line Interest	0.00	(0.96)	(0.90)	(0.84)	(0.78)	(0.71)	(0.64)	(0.56)	(0.47)	(0.38)	(0.28)	(0.17)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Financing Cost	0.00	(2.36)	(2.20)	(2.04)	(1.86)	(1.67)	(1.47)	(1.25)	(1.01)	(0.76)	(0.48)	(0.19)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Contingent Capital Principal Payment	0.00	(1.44)	(1.47)	(1.60)	(1.73)	(1.87)	(2.01)	(2.16)	(2.32)	(2.49)	(2.67)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Principal Payment	0.00	(1.44)	(1.47)	(1.60)	(1.73)	(1.87)	(2.01)	(2.16)	(2.32)	(2.49)	(2.67)	(4.27)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remaining Contingent Capital Principal	(20.00)	(18.56)	(17.09)	(15.49)	(13.76)	(11.90)	(9.89)	(7.72)	(5.40)	(2.91)	(0.25)	(0.25)	(0.25)	(0.25)	(0.25)	(0.25)	(0.25)	(0.25)	(0.25)	(0.25)
Remining Federal Credit Line Principal	(24.02)	(22.59)	(21.11)	(19.51)	(17.79)	(15.92)	(13.91)	(11.75)	(9.43)	(6.94)	(4.27)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Remaining Principal	(44.02)	(41.15)	(38.20)	(35.00)	(31.55)	(27.82)	(23.80)	(19.47)	(14.83)	(9.85)	(4.52)	(0.25)	(0.25)	(0.25)	(0.25)	(0.25)	(0.25)	(0.25)	(0.25)	(0.25)
Cumulative Surplus/Deficit	(44.02)	(41.15)	(38.20)	(35.00)	(31.55)	(27.82)	(23.80)	(19.47)	(14.83)	(9.85)	(4.52)	1.19	7.28	13.77	20.69	28.64	37.07	46.01	55.49	65.52

Appendix #1

Average Storm Every Year																				
Average Storm Each Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Amounts in Billions																				
Initial Capitalization	7.10																			
Annual Premiums	6.34	6.21	6.09	5.96	5.85	5.73	5.61	5.50	5.39	5.28	5.18	5.07	4.97	4.87	4.78	4.68	4.59	4.49	4.41	4.32
Operating Expenses	1.39	1.37	1.34	1.31	1.29	1.26	1.23	1.21	1.19	1.16	1.14	1.12	1.09	1.07	1.05	1.03	1.01	0.99	0.97	0.95
Annual Surplus	4.94	4.84	4.75	4.65	4.56	4.47	4.38	4.29	4.21	4.12	4.04	3.96	3.88	3.80	3.73	3.65	3.58	3.51	3.44	3.37
Carryover Surplus	0.00	7.54	8.06	8.78	9.42	9.99	10.50	10.93	11.29	11.58	11.80	11.94	12.01	12.00	11.91	11.74	11.50	11.16	10.75	10.25
Contingent Capital Fee	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)	(0.60)
Investment Gain @4%	0.00	0.17	0.47	0.49	0.51	0.54	0.55	0.57	0.58	0.60	0.60	0.61	0.61	0.61	0.61	0.60	0.59	0.58	0.56	0.54
Net Adjusted Surplus	11.44	11.96	12.68	13.32	13.89	14.40	14.83	15.19	15.48	15.70	15.84	15.91	15.90	15.81	15.64	15.40	15.06	14.65	14.15	13.56
Incurred Losses + LAE	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)
Available Surplus	11.44	11.96	12.68	13.32	13.89	14.40	14.83	15.19	15.48	15.70	15.84	15.91	15.90	15.81	15.64	15.40	15.06	14.65	14.15	13.56
Net Surplus/Deficit	7.54	8.06	8.78	9.42	9.99	10.50	10.93	11.29	11.58	11.80	11.94	12.01	12.00	11.91	11.74	11.50	11.16	10.75	10.25	9.66
Contingent Capital Draw	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Draw	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Surplus/Deficit	7.54	8.06	8.78	9.42	9.99	10.50	10.93	11.29	11.58	11.80	11.94	12.01	12.00	11.91	11.74	11.50	11.16	10.75	10.25	9.66
Reserve Capital Draw	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contingent Capital Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Financing Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contingent Capital Principal Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Principal Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remaining Contingent Capital Principal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remining Federal Credit Line Principal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Remaining Principal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cumulative Surplus/Deficit	7.54	8.06	8.78	9.42	9.99	10.50	10.93	11.29	11.58	11.80	11.94	12.01	12.00	11.91	11.74	11.50	11.16	10.75	10.25	9.66

20-Yr Storm Every 5 Years																				
20-Year Storm Every 5-Years	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Amounts in Billions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Capitalization	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual Premiums	6.34	6.50	6.66	6.82	6.99	7.17	7.35	7.53	7.72	7.91	8.11	8.31	8.52	8.74	8.95	9.18	9.41	9.64	9.88	10.13
Operating Expenses	1.39	1.43	1.46	1.50	1.54	1.58	1.62	1.66	1.70	1.74	1.78	1.83	1.87	1.92	1.97	2.02	2.07	2.12	2.17	2.23
Net Annual Surplus	4.94	5.07	5.19	5.32	5.46	5.59	5.73	5.88	6.02	6.17	6.33	6.49	6.65	6.81	6.98	7.16	7.34	7.52	7.71	7.90
Carryover Surplus	0.00	(7.76)	(3.06)	1.64	6.43	11.54	(4.60)	0.67	5.97	11.63	17.67	0.70	6.62	12.93	20.26	28.05	9.94	17.07	25.27	33.99
Investment Gain @4%	0.00	0.00	0.00	0.07	0.26	0.46	0.00	0.03	0.24	0.47	0.71	0.03	0.26	0.52	0.81	1.12	0.40	0.68	1.01	1.36
Net Adjusted Surplus	4.94	(2.69)	2.13	7.03	12.14	17.60	1.13	6.57	12.23	18.27	24.70	7.22	13.53	20.26	28.05	36.34	17.67	25.27	33.99	43.26
Contingent Capital Fee	(0.60)	(0.37)	(0.49)	(0.60)	(0.60)	(0.60)	(0.46)	(0.60)	(0.60)	(0.60)	0.00	(0.60)	(0.60)	0.00	0.00	(0.60)	0.00	0.00	0.00	0.00
Incurred Losses + LAE	(19.20)	0.00	0.00	0.00	0.00	(21.60)	0.00	0.00	0.00	0.00	(24.00)	0.00	0.00	0.00	0.00	(26.40)	0.00	0.00	0.00	0.00
Available Surplus	11.44	4.70	4.70	6.43	11.54	17.00	5.27	5.97	11.63	17.67	24.70	6.62	12.93	20.26	28.05	36.34	17.07	25.27	33.99	43.26
Net Surplus/Deficit	11.44	(3.06)	1.64	6.43	11.54	17.00	0.67	5.97	11.63	17.67	24.70	6.62	12.93	20.26	28.05	36.34	17.07	25.27	33.99	43.26
Contingent Capital Draw	(7.76)	0.00	0.00	0.00	0.00	(4.60)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Draw	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Surplus/Deficit	(7.76)	(3.06)	1.64	6.43	11.54	(4.60)	0.67	5.97	11.63	17.67	24.70	6.62	12.93	20.26	28.05	36.34	17.07	25.27	33.99	43.26
Reserve Capital Draw	(7.76)	(3.06)	0.00	0.00	0.00	(4.60)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contingent Capital Interest	0.00	(0.54)	(0.25)	0.00	0.00	0.00	(0.32)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Financing Cost	0.00	(0.54)	(0.25)	0.00	0.00	0.00	(0.32)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contingent Capital Principal Payment	0.00	(4.16)	(4.45)	0.00	0.00	0.00	(4.95)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Principal Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remaining Contingent Capital Principal	(7.76)	(3.60)	0.00	0.00	0.00	(4.60)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remining Federal Credit Line Principal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Remaining Principal	(7.76)	(3.60)	0.00	0.00	0.00	(4.60)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cumulative Surplus/Deficit	(7.76)	(3.06)	1.64	6.43	11.54	(4.60)	0.67	5.97	11.63	17.67	24.70	6.62	12.93	20.26	28.05	36.34	17.07	25.27	33.99	43.26

APPENDIX 2

Appendix #2

1992-2008 with Andrew in 2010	Duplicating 1992-2008 at Current TIV																			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Amounts in Billions																				
Initial Capitalization	7.10																			
Annual Premiums	6.34	6.67	7.01	7.37	7.76	8.16	8.58	9.02	9.49	9.98	10.50	11.05	11.62	12.22	12.85	13.52	14.22	14.96	15.73	16.54
Operating Expenses	1.39	1.47	1.54	1.62	1.71	1.79	1.89	1.99	2.09	2.20	2.31	2.43	2.56	2.69	2.83	2.97	3.13	3.29	3.46	3.64
Reinsurance Expenses	0.00	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	0.00
Annual Surplus	4.94	5.20	5.47	5.75	6.05	6.36	6.69	7.04	7.40	7.79	8.19	8.62	9.06	9.53	10.02	10.54	11.09	11.67	12.27	12.91
Carryover Surplus	0.00	(45.92)	(43.18)	(39.88)	(41.26)	(37.02)	(32.25)	(27.98)	(22.47)	(15.86)	(8.54)	(0.45)	8.05	(8.07)	(15.64)	(6.05)	4.43	15.57	24.33	37.69
Contingent Capital Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Investment Gain @4%	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.68	0.06	0.00	0.18	0.62	1.09	1.46
Net Adjusted Surplus	12.04	(40.53)	(37.72)	(34.13)	(35.21)	(30.66)	(25.56)	(20.94)	(15.06)	(8.07)	(0.35)	8.16	17.44	2.14	(5.56)	4.50	15.70	27.86	37.69	52.06
Incurring Losses + LAE	(57.97)	(0.34)	0.00	(5.14)	0.00	0.00	(1.06)	(0.44)	0.00	0.00	0.00	0.00	(25.41)	(17.21)	0.00	0.00	(0.12)	(3.53)	0.00	0.00
Available Surplus	12.04	5.40	5.47	5.75	6.05	6.36	6.69	7.04	7.40	7.79	8.19	8.62	17.44	10.22	10.08	10.54	15.70	27.86	37.69	52.06
Net Surplus/Deficit	(45.92)	5.06	5.47	0.62	6.05	6.36	5.64	6.60	7.40	7.79	8.19	8.62	(7.96)	(6.99)	10.08	10.54	15.57	24.33	37.69	52.06
State Capital Draw	(23.98)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(7.39)	2.64	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Draw	(21.94)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(0.57)	(9.63)	0.00	0.00	0.00	0.00	0.00	0.00
Net Surplus/Deficit	(45.92)	(40.87)	(37.72)	(39.26)	(35.21)	(30.66)	(26.62)	(21.38)	(15.06)	(8.07)	(0.35)	8.16	(7.96)	(15.07)	(5.56)	4.50	15.57	24.33	37.69	52.06
Reserve Capital Draw	(45.92)	(40.87)	(37.72)	(39.26)	(35.21)	(30.66)	(26.62)	(21.38)	(15.06)	(8.07)	(0.35)	0.00	(7.96)	(15.07)	(5.56)	0.00	0.00	0.00	0.00	0.00
State Capital Interest	0.00	(1.44)	(1.35)	(1.25)	(1.13)	(1.01)	(0.86)	(0.70)	(0.53)	(0.33)	(0.11)	(0.11)	(0.11)	(0.55)	(0.10)	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Interest	0.00	(0.88)	(0.82)	(0.75)	(0.67)	(0.59)	(0.49)	(0.39)	(0.27)	(0.14)	0.00	0.00	0.00	(0.02)	(0.39)	(0.07)	0.00	0.00	0.00	0.00
Total Financing Cost	0.00	(2.32)	(2.16)	(2.00)	(1.81)	(1.60)	(1.36)	(1.09)	(0.80)	(0.46)	(0.11)	(0.11)	(0.11)	(0.57)	(0.49)	(0.07)	0.00	0.00	0.00	0.00
State Capital Principal Payment	0.00	(1.54)	(1.65)	(1.88)	(2.12)	(2.38)	(2.67)	(2.97)	(3.30)	(3.66)	0.00	0.00	0.00	(4.82)	(1.74)	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Principal Payment	0.00	(1.54)	(1.65)	(1.88)	(2.12)	(2.38)	(2.67)	(2.97)	(3.30)	(3.66)	0.00	0.00	0.00	(4.82)	(1.74)	0.00	0.00	0.00	0.00	0.00
Remaining State Capital Principal	(23.98)	(22.44)	(20.79)	(18.91)	(16.79)	(14.41)	(11.74)	(8.77)	(5.46)	(1.80)	(1.80)	(1.80)	(9.19)	(1.74)	0.00	0.00	0.00	0.00	0.00	0.00
Remining Federal Credit Line Principal	(21.94)	(20.40)	(18.75)	(16.87)	(14.75)	(12.37)	(9.70)	(6.73)	(3.43)	0.00	0.00	0.00	(0.57)	(9.63)	(1.77)	0.00	0.00	0.00	0.00	0.00
Total Remaining Principal	(45.92)	(42.84)	(39.54)	(35.78)	(31.54)	(26.78)	(21.44)	(15.50)	(8.89)	(1.80)	(1.80)	(1.80)	(9.77)	(11.36)	(1.77)	0.00	0.00	0.00	0.00	0.00
Cumulative Surplus/Deficit	(45.92)	(43.18)	(39.88)	(41.26)	(37.02)	(32.25)	(27.98)	(22.47)	(15.86)	(8.54)	(0.45)	8.05	(8.07)	(15.64)	(6.05)	4.43	15.57	24.33	37.69	52.06

100-Year Event in 2010	100-Year event Year 1																			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Initial Capitalization	7.10																			
Annual Premiums	6.34	6.50	6.66	6.82	6.99	7.17	7.35	7.53	7.72	7.91	8.11	8.31	8.52	8.74	8.95	9.18	9.41	9.64	9.88	10.13
Emergency Surcharge	0.00	1.62	1.66	1.71	1.75	1.79	1.84	1.88	1.93	1.98	2.03	2.08	2.13	2.18	2.24	2.29	2.35	2.41	2.47	2.53
Operating Expenses	1.39	1.43	1.46	1.50	1.54	1.58	1.62	1.66	1.70	1.74	1.78	1.83	1.87	1.92	1.97	2.02	2.07	2.12	2.17	2.23
Reinsurance Expenses	0.00	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)
Annual Surplus	4.94	1.09	1.25	1.42	1.60	1.78	1.96	2.15	2.35	2.55	2.75	2.96	3.17	3.39	3.62	3.85	4.08	4.33	4.58	4.83
Carryover Surplus	0.00	(43.42)	(44.36)	(45.37)	(46.26)	(47.02)	(47.63)	(48.10)	(48.39)	(48.51)	(48.43)	(47.64)	(46.90)	(45.90)	(44.62)	(43.05)	(41.16)	(38.94)	(36.35)	(33.39)
Contingent Capital Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Investment Gain @4%	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Adjusted Surplus	12.04	(42.14)	(43.11)	(43.94)	(44.66)	(45.24)	(45.67)	(45.94)	(46.04)	(45.96)	(45.68)	(45.19)	(44.47)	(43.51)	(42.28)	(40.77)	(38.96)	(36.83)	(34.36)	(31.52)
Incurring Losses + LAE	(55.47)																			
Available Surplus	12.04	1.28	1.25	1.42	1.60	1.78	1.96	2.15	2.35	2.55	2.75	2.96	3.17	3.39	3.62	3.85	4.08	4.33	4.58	4.83
Net Surplus/Deficit	(43.42)	1.28	1.25	1.42	1.60	1.78	1.96	2.15	2.35	2.55	2.75	2.96	3.17	3.39	3.62	3.85	4.08	4.33	4.58	4.83
State Capital Draw	(23.98)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Draw	(19.44)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Surplus/Deficit	(43.42)	(42.14)	(43.11)	(43.94)	(44.66)	(45.24)	(45.67)	(45.94)	(46.04)	(45.96)	(45.68)	(45.19)	(44.47)	(43.51)	(42.28)	(40.77)	(38.96)	(36.83)	(34.36)	(31.52)
Reserve Capital Draw	(43.42)	(42.14)	(43.11)	(43.94)	(44.66)	(45.24)	(45.67)	(45.94)	(46.04)	(45.96)	(45.68)	(45.19)	(44.47)	(43.51)	(42.28)	(40.77)	(38.96)	(36.83)	(34.36)	(31.52)
State Capital Interest	0.00	(1.44)	(1.47)	(1.50)	(1.52)	(1.55)	(1.57)	(1.58)	(1.59)	(1.59)	(1.59)	(1.58)	(1.57)	(1.54)	(1.51)	(1.47)	(1.43)	(1.37)	(1.30)	(1.23)
Federal Credit Line Interest	0.00	(0.78)	(0.80)	(0.82)	(0.83)	(0.85)	(0.86)	(0.87)	(0.88)	(0.88)	(0.88)	(0.87)	(0.86)	(0.85)	(0.83)	(0.80)	(0.77)	(0.73)	(0.69)	(0.64)
Total Financing Cost	0.00	(2.22)	(2.26)	(2.31)	(2.36)	(2.40)	(2.43)	(2.45)	(2.46)	(2.47)	(2.47)	(2.45)	(2.43)	(2.39)	(2.34)	(2.28)	(2.20)	(2.10)	(1.99)	(1.86)
State Capital Principal Payment	0.00	0.47	0.51	0.44	0.38	0.31	0.23	0.15	0.06	(0.04)	(0.14)	(0.25)	(0.37)	(0.50)	(0.64)	(0.79)	(0.94)	(1.11)	(1.29)	(1.48)
Federal Credit Line Principal Payment	0.00	0.47	0.51	0.44	0.38	0.31	0.23	0.15	0.06	(0.04)	(0.14)	(0.25)	(0.37)	(0.50)	(0.64)	(0.79)	(0.94)	(1.11)	(1.29)	(1.48)
Remaining State Capital Principal	(23.98)	(24.45)	(24.95)	(25.40)	(25.78)	(26.08)	(26.32)	(26.46)	(26.52)	(26.48)	(26.34)	(26.09)	(25.72)	(25.22)	(24.58)	(23.79)	(22.85)	(21.74)	(20.44)	(18.96)
Remining Federal Credit Line Principal	(19.44)	(19.91)	(20.42)	(20.86)	(21.24)	(21.55)	(21.78)	(21.93)	(21.99)	(21.95)	(21.81)	(21.55)	(21.18)	(20.68)	(20.04)	(19.26)	(18.31)	(17.20)	(15.91)	(14.43)
Total Remaining Principal	(43.42)	(44.36)	(45.37)	(46.26)	(47.02)	(47.63)	(48.10)	(48.39)	(48.51)	(48.43)	(48.15)	(47.64)	(46.90)	(45.90)	(44.62)	(43.05)	(41.16)	(38.94)	(36.35)	(33.39)
Cumulative Surplus/Deficit	(43.42)	(44.36)	(45.37)	(46.26)	(47.02)	(47.63)	(48.10)	(48.39)	(48.51)	(48.43)	(48.15)	(47.64)	(46.90)	(45.90)	(44.62)	(43.05)	(41.16)	(38.94)	(36.35)	(33.39)

Appendix #2

Average Annual Storm	Average Annual Storm Every Year																			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Amounts in Billions																				
Initial Capitalization	7.10																			
Annual Premiums	6.34	6.21	6.09	5.96	5.85	5.73	5.61	5.50	5.39	5.28	5.18	5.07	4.97	4.87	4.78	4.68	4.59	4.49	4.41	4.32
Operating Expenses	1.39	1.37	1.34	1.31	1.29	1.26	1.23	1.21	1.19	1.16	1.14	1.12	1.09	1.07	1.05	1.03	1.01	0.99	0.97	0.95
Reinsurance Expenses	0.00	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual Surplus	4.94	4.84	4.75	4.65	4.56	4.47	4.38	4.29	4.21	4.12	4.04	3.96	3.88	3.80	3.73	3.65	3.58	3.51	3.44	3.37
Carryover Surplus	0.00	8.14	9.28	10.65	11.96	13.24	14.46	15.65	16.80	17.90	18.96	19.98	20.96	21.89	22.79	23.64	24.45	25.22	25.95	26.63
State Capital Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Investment Gain @4%	0.00	0.20	0.52	0.56	0.61	0.66	0.71	0.75	0.80	0.84	0.88	0.92	0.96	0.99	1.03	1.06	1.09	1.12	1.15	1.18
Net Adjusted Surplus	12.04	13.18	14.55	15.86	17.14	18.36	19.55	20.70	21.80	22.86	23.88	24.86	25.79	26.69	27.54	28.35	29.12	29.85	30.53	31.18
Incurring Losses + LAE	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)
Available Surplus	12.04	13.18	14.55	15.86	17.14	18.36	19.55	20.70	21.80	22.86	23.88	24.86	25.79	26.69	27.54	28.35	29.12	29.85	30.53	31.18
Net Surplus/Deficit	8.14	9.28	10.65	11.96	13.24	14.46	15.65	16.80	17.90	18.96	19.98	20.96	21.89	22.79	23.64	24.45	25.22	25.95	26.63	27.28
State Capital Draw	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Draw	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Surplus/Deficit	8.14	9.28	10.65	11.96	13.24	14.46	15.65	16.80	17.90	18.96	19.98	20.96	21.89	22.79	23.64	24.45	25.22	25.95	26.63	27.28
Reserve Capital Draw	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
State Capital Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Financing Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
State Capital Principal Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Principal Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remaining State Capital Principal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remining Federal Credit Line Principal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Remaining Principal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cumulative Surplus/Deficit	8.14	9.28	10.65	11.96	13.24	14.46	15.65	16.80	17.90	18.96	19.98	20.96	21.89	22.79	23.64	24.45	25.22	25.95	26.63	27.28

20-Year Storm Every 5 Years	20-Year Storm Every 5 Years																			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Amounts in Billions																				
Initial Capitalization	7.10																			
Annual Premiums	6.34	6.82	7.35	7.92	8.53	9.18	9.89	10.65	11.47	12.35	13.31	14.33	15.43	16.62	17.90	19.28	20.77	22.36	24.09	25.94
Operating Expenses	1.39	1.50	1.62	1.74	1.88	2.02	2.18	2.34	2.52	2.72	2.93	3.15	3.40	3.66	3.94	4.24	4.57	4.92	5.30	5.71
Reinsurance Expenses	0.00	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)	(5.60)
Annual Surplus	4.94	(0.28)	0.13	0.57	1.05	1.56	2.11	2.70	3.34	4.03	4.77	5.57	6.43	7.36	8.36	9.43	10.59	11.84	13.18	14.63
Carryover Surplus	0.00	(7.16)	(7.67)	(7.58)	(7.04)	(5.99)	(26.04)	(25.13)	(23.60)	(21.34)	(18.25)	(38.24)	(34.08)	(28.86)	(22.45)	(14.73)	(31.94)	(22.29)	(10.97)	2.21
State Capital Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Investment Gain @4%	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
Net Adjusted Surplus	12.04	(7.24)	(7.54)	(7.01)	(5.99)	(4.44)	(23.93)	(22.43)	(20.26)	(17.31)	(13.48)	(32.67)	(27.65)	(21.50)	(14.09)	(5.29)	(21.34)	(10.45)	2.21	16.92
Incurring Losses + LAE	(19.20)					(21.60)					(24.00)				(26.40)					
Available Surplus	12.04	(0.08)	0.13	0.57	1.05	1.56	2.11	2.70	3.34	4.03	4.77	5.57	6.43	7.36	8.36	9.43	10.59	11.84	13.18	16.92
Net Surplus/Deficit	(7.16)	(0.08)	0.13	0.57	1.05	(20.04)	2.11	2.70	3.34	4.03	(19.23)	5.57	6.43	7.36	8.36	(16.97)	10.59	11.84	13.18	16.92
State Capital Draw	(7.16)	7.07	0.00	0.00	0.00	(20.00)	0.00	0.00	0.00	0.00	(6.56)	0.00	0.00	0.00	0.00	(13.51)	0.00	0.00	0.00	0.00
Federal Credit Line Draw	0.00	0.00	0.00	0.00	0.00	(0.04)	0.00	0.00	0.00	0.00	(12.67)	0.00	0.00	0.00	0.00	(3.46)	0.00	0.00	0.00	0.00
Net Surplus/Deficit	(7.16)	(7.24)	(7.54)	(7.01)	(5.99)	(26.04)	(23.93)	(22.43)	(20.26)	(17.31)	(37.48)	(32.67)	(27.65)	(21.50)	(14.09)	(31.69)	(21.34)	(10.45)	2.21	16.92
Reserve Capital Draw	(7.16)	(7.24)	(7.54)	(7.01)	(5.99)	(26.04)	(23.93)	(22.43)	(20.26)	(17.31)	(37.48)	(32.67)	(27.65)	(21.50)	(14.09)	(31.69)	(21.34)	(10.45)	0.00	0.00
State Capital Interest	0.00	(0.43)	(0.04)	(0.03)	0.00	0.00	(1.20)	(1.17)	(1.08)	(0.95)	(0.76)	(0.91)	(0.79)	(0.63)	(0.44)	(0.21)	(0.81)	(0.52)	0.00	0.00
Federal Credit Line Interest	0.00	0.00	0.00	0.00	0.00	0.00	(0.00)	0.00	0.00	0.00	(0.51)	(0.42)	(0.32)	(0.19)	(0.04)	(0.14)	0.00	0.00	0.00	0.00
Total Financing Cost	0.00	(0.43)	(0.04)	(0.03)	0.00	0.00	(1.20)	(1.17)	(1.08)	(0.95)	(0.76)	(1.42)	(1.21)	(0.95)	(0.63)	(0.24)	(0.95)	(0.52)	0.00	0.00
State Capital Principal Payment	0.00	0.51	(0.09)	(0.54)	0.00	0.00	(0.45)	(1.53)	(2.26)	(3.09)	(4.01)	(2.08)	(2.61)	(3.20)	(3.86)	(3.46)	(4.82)	(11.32)	0.00	0.00
Federal Credit Line Principal Payment	0.00	0.00	0.00	0.00	0.00	0.00	(0.04)	0.00	0.00	0.00	(2.08)	(2.61)	(3.20)	(3.86)	(3.46)	(0.91)	(3.46)	0.00	0.00	0.00
Remaining State Capital Principal	(7.16)	(0.60)	(0.50)	0.00	0.00	(20.00)	(19.55)	(18.02)	(15.75)	(12.67)	(15.21)	(13.14)	(10.53)	(7.32)	(3.46)	(13.51)	(8.69)	0.00	0.00	0.00
Remining Federal Credit Line Principal	0.00	0.00	0.00	0.00	0.00	(0.04)	0.00	0.00	0.00	0.00	(12.67)	(10.59)	(7.98)	(4.78)	(0.91)	(3.46)	0.00	0.00	0.00	0.00
Total Remaining Principal	(7.16)	(0.60)	(0.50)	0.00	0.00	(20.04)	(19.55)	(18.02)	(15.75)	(12.67)	(27.88)	(23.73)	(18.51)	(12.10)	(4.37)	(16.97)	(8.69)	0.00	0.00	0.00
Cumulative Surplus/Deficit	(7.16)	(7.67)	(7.58)	(7.04)	(5.99)	(26.04)	(25.13)	(23.60)	(21.34)	(18.25)	(38.24)	(34.08)	(28.86)	(22.45)	(14.73)	(31.94)	(22.29)	(10.97)	2.21	16.92

APPENDIX 3

1992-2008 with Andrew in 2010	Duplicating 1992-2008 at Current TIV																			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Amounts in Billions																				
Initial Capitalization	7.10																			
Annual Premiums	3.71	3.81	3.90	4.00	4.10	4.20	4.31	4.42	4.53	4.64	4.75	4.87	5.00	5.12	5.25	5.38	5.51	5.65	5.79	5.94
Operating Expenses	0.82	0.84	0.86	0.88	0.90	0.92	0.95	0.97	1.00	1.02	1.05	1.07	1.10	1.13	1.15	1.18	1.21	1.24	1.27	1.31
Reinsurance Expenses	5.13	10.77	10.56	8.55	6.84	6.09	5.36	4.77	4.34	4.08	6.93	5.89	5.01	6.01	13.95	9.48	7.59	10.62	7.05	8.27
Annual Surplus	2.90	2.97	3.04	3.12	3.20	3.28	3.36	3.44	3.53	3.62	3.71	3.80	3.90	3.99	4.09	4.20	4.30	4.41	4.52	4.63
Carryover Surplus	0.00	(47.97)	(47.54)	(46.78)	(51.04)	(49.00)	(46.79)	(45.45)	(43.31)	(40.55)	(37.58)	(34.41)	(31.02)	(52.80)	(67.40)	(64.96)	(62.29)	(59.51)	(59.88)	(56.45)
Contingent Capital Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Investment Gain @4%	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Adjusted Surplus	10.00	(44.88)	(44.50)	(43.66)	(47.84)	(45.73)	(43.43)	(42.01)	(39.78)	(36.93)	(33.87)	(30.61)	(27.12)	(48.81)	(63.31)	(60.76)	(57.99)	(55.10)	(55.36)	(51.82)
Incurred Losses + LAE	(57.97)	(0.34)	0.00	(5.14)	0.00	0.00	(1.06)	(0.44)	0.00	0.00	0.00	0.00	0.00	(25.41)	(17.21)	0.00	0.00	(0.12)	(3.53)	0.00
Available Surplus	10.00	3.09	3.04	3.12	3.20	3.28	3.36	3.44	3.53	3.62	3.71	3.80	3.90	3.99	4.09	4.20	4.30	4.41	4.52	4.63
Net Surplus/Deficit	(47.97)	2.74	3.04	(2.02)	3.20	3.28	2.30	3.01	3.53	3.62	3.71	3.80	(21.51)	(13.22)	4.09	4.20	4.18	0.88	4.52	4.63
State Capital Draw	(20.00)	0.00	0.00	17.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(20.00)	6.78	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Draw	(27.97)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(1.51)	(20.00)	0.00	0.00	0.00	0.00	0.00	0.00
Net Surplus/Deficit	(47.97)	(45.22)	(44.50)	(48.80)	(47.84)	(45.73)	(44.49)	(42.44)	(39.78)	(36.93)	(33.87)	(30.61)	(52.53)	(66.01)	(63.31)	(60.76)	(58.11)	(58.63)	(55.36)	(51.82)
Reserve Capital Draw	(47.97)	(45.22)	(44.50)	(48.80)	(47.84)	(45.73)	(44.49)	(42.44)	(39.78)	(36.93)	(33.87)	(30.61)	(52.53)	(66.01)	(63.31)	(60.76)	(58.11)	(58.63)	(55.36)	(51.82)
State Capital Interest	0.00	(1.20)	(1.18)	(1.15)	(0.09)	(0.03)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(1.20)	(0.71)	(0.64)	(0.56)	(0.47)	(0.38)	(0.28)
Federal Credit Line Interest	0.00	(1.12)	(1.10)	(1.09)	(1.07)	(1.03)	(0.96)	(0.87)	(0.76)	(0.65)	(0.54)	(0.41)	(0.27)	(0.19)	(0.94)	(0.89)	(0.83)	(0.78)	(0.71)	(0.64)
Total Financing Cost	0.00	(2.32)	(2.28)	(2.24)	(1.17)	(1.06)	(0.96)	(0.87)	(0.76)	(0.65)	(0.54)	(0.41)	(0.27)	(1.39)	(1.65)	(1.53)	(1.40)	(1.25)	(1.09)	(0.92)
State Capital Principal Payment	0.00	(0.38)	(0.38)	(0.44)	(1.02)	(0.66)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(1.30)	(1.22)	(1.33)	(1.45)	(1.58)	(1.71)	(1.86)
Federal Credit Line Principal Payment	0.00	(0.38)	(0.38)	(0.44)	(1.02)	(1.65)	(2.40)	(2.58)	(2.77)	(2.96)	(3.17)	(3.39)	(3.62)	(1.30)	(1.22)	(1.33)	(1.45)	(1.58)	(1.71)	(1.86)
Remaining State Capital Principal	(20.00)	(19.62)	(19.23)	(1.58)	(0.56)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(20.00)	(11.91)	(10.69)	(9.36)	(7.90)	(6.33)	(4.61)	(2.76)
Remining Federal Credit Line Principal	(27.97)	(27.58)	(27.20)	(26.76)	(25.75)	(24.09)	(21.70)	(19.12)	(16.36)	(13.39)	(10.22)	(6.83)	(4.71)	(23.41)	(22.19)	(20.85)	(19.40)	(17.82)	(16.11)	(14.25)
Total Remaining Principal	(47.97)	(47.20)	(46.44)	(28.34)	(26.31)	(24.09)	(21.70)	(19.12)	(16.36)	(13.39)	(10.22)	(6.83)	(24.71)	(35.32)	(32.88)	(30.21)	(27.31)	(24.15)	(20.72)	(17.01)
Cumulative Surplus/Deficit	(47.97)	(47.54)	(46.78)	(51.04)	(49.00)	(46.79)	(45.45)	(43.31)	(40.55)	(37.58)	(34.41)	(31.02)	(52.80)	(67.40)	(64.96)	(62.29)	(59.51)	(59.88)	(56.45)	(52.74)

100-Year Event in 2010	100-Year event Year 1																			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Initial Capitalization	7.10																			
Annual Premiums	3.71	3.81	3.90	4.00	4.10	4.20	4.31	4.42	4.53	4.64	4.75	4.87	5.00	5.12	5.25	5.38	5.51	5.65	5.79	5.94
Emergency Surcharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Operating Expenses	0.82	0.84	0.86	0.88	0.90	0.92	0.95	0.97	1.00	1.02	1.05	1.07	1.10	1.13	1.15	1.18	1.21	1.24	1.27	1.31
Reinsurance Expenses	5.13	10.77	10.56	8.55	6.84	6.09	5.36	4.77	4.34	4.08	6.93	5.89	5.01	6.01	13.95	9.48	7.59	10.62	7.05	8.27
Annual Surplus	8.03	13.74	13.60	11.67	10.04	9.37	8.72	8.80	8.89	8.98	9.07	9.16	9.25	9.35	9.45	9.55	9.66	9.77	9.88	9.99
Carryover Surplus	0.00	(40.34)	(28.29)	(16.10)	(5.23)	4.55	13.96	23.09	32.65	42.66	53.16	64.14	75.64	87.68	100.28	113.47	127.26	141.70	156.79	172.58
Contingent Capital Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Investment Gain @4%	0.00	0.32	0.00	0.00	0.00	0.19	0.56	0.91	1.28	1.66	2.07	2.49	2.93	3.40	3.88	4.39	4.92	5.48	6.06	6.67
Net Adjusted Surplus	15.13	(26.28)	(14.69)	(4.43)	4.81	14.11	23.23	32.80	42.81	53.30	64.29	75.79	87.83	100.43	113.61	127.41	141.84	156.94	172.73	189.24
Incurred Losses + LAE	(55.47)																			
Available Surplus	15.13	14.06	13.60	11.67	10.04	14.11	23.23	32.80	42.81	53.30	64.29	75.79	87.83	100.43	113.61	127.41	141.84	156.94	172.73	189.24
Net Surplus/Deficit	(40.34)	14.06	13.60	11.67	10.04	14.11	23.23	32.80	42.81	53.30	64.29	75.79	87.83	100.43	113.61	127.41	141.84	156.94	172.73	189.24
State Capital Draw	(20.00)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Draw	(20.34)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Surplus/Deficit	(40.34)	(26.28)	(14.69)	(4.43)	4.81	14.11	23.23	32.80	42.81	53.30	64.29	75.79	87.83	100.43	113.61	127.41	141.84	156.94	172.73	189.24
Reserve Capital Draw	(40.34)	(26.28)	(14.69)	(4.43)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
State Capital Interest	0.00	(1.20)	(0.84)	(0.47)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)
Federal Credit Line Interest	0.00	(0.81)	(0.57)	(0.33)	(0.11)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Financing Cost	0.00	(2.01)	(1.41)	(0.80)	(0.26)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)
State Capital Principal Payment	0.00	(6.02)	(6.09)	(5.43)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Principal Payment	0.00	(6.02)	(6.09)	(5.43)	(2.79)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remaining State Capital Principal	(20.00)	(13.98)	(7.88)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)
Remining Federal Credit Line Principal	(20.34)	(14.32)	(8.22)	(2.79)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Remaining Principal	(40.34)	(28.29)	(16.10)	(5.23)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)	(2.45)
Cumulative Surplus/Deficit	(40.34)	(28.29)	(16.10)	(5.23)	4.55	13.96	23.09	32.65	42.66	53.16	64.14	75.64	87.68	100.28	113.47	127.26	141.70	156.79	172.58	189.09

Appendix #3

Average Annual Storm	Average Annual Storm Every Year																			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Amounts in Billions																				
Initial Capitalization	7.10																			
Annual Premiums	3.71	3.81	3.90	4.00	4.10	4.20	4.31	4.42	4.53	4.64	4.75	4.87	5.00	5.12	5.25	5.38	5.51	5.65	5.79	5.94
Operating Expenses	0.82	0.84	0.86	0.88	0.90	0.92	0.95	0.97	1.00	1.02	1.05	1.07	1.10	1.13	1.15	1.18	1.21	1.24	1.27	1.31
Reinsurance Expenses	5.13	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63
Annual Surplus	2.90	2.97	3.04	3.12	3.20	3.28	3.36	3.44	3.53	3.62	3.71	3.80	3.90	3.99	4.09	4.20	4.30	4.41	4.52	4.63
Carryover Surplus	0.00	6.10	5.28	4.79	4.34	3.96	3.64	3.39	3.21	3.11	3.10	3.18	3.35	3.63	4.01	4.51	5.13	5.88	6.77	7.80
State Capital Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Investment Gain @4%	0.00	0.12	0.36	0.33	0.32	0.30	0.29	0.28	0.27	0.27	0.27	0.27	0.28	0.29	0.30	0.32	0.35	0.38	0.41	0.45
Net Adjusted Surplus	10.00	9.18	8.69	8.24	7.86	7.54	7.29	7.11	7.01	7.00	7.08	7.25	7.53	7.91	8.41	9.03	9.78	10.67	11.70	12.88
Incurring Losses + LAE	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)	(3.90)
Available Surplus	10.00	9.18	8.69	8.24	7.86	7.54	7.29	7.11	7.01	7.00	7.08	7.25	7.53	7.91	8.41	9.03	9.78	10.67	11.70	12.88
Net Surplus/Deficit	6.10	5.28	4.79	4.34	3.96	3.64	3.39	3.21	3.11	3.10	3.18	3.35	3.63	4.01	4.51	5.13	5.88	6.77	7.80	8.98
State Capital Draw	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Draw	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Surplus/Deficit	6.10	5.28	4.79	4.34	3.96	3.64	3.39	3.21	3.11	3.10	3.18	3.35	3.63	4.01	4.51	5.13	5.88	6.77	7.80	8.98
Reserve Capital Draw	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
State Capital Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Financing Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
State Capital Principal Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Principal Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remaining State Capital Principal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remining Federal Credit Line Principal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Remaining Principal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cumulative Surplus/Deficit	6.10	5.28	4.79	4.34	3.96	3.64	3.39	3.21	3.11	3.10	3.18	3.35	3.63	4.01	4.51	5.13	5.88	6.77	7.80	8.98

20-Year Storm Every 5 Years	20-Year Storm Every 5 Years																			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Amounts in Billions																				
Initial Capitalization	7.10																			
Annual Premiums	3.71	3.81	3.90	4.00	4.10	4.20	4.31	4.42	4.53	4.64	4.75	4.87	5.00	5.12	5.25	5.38	5.51	5.65	5.79	5.94
Operating Expenses	0.82	0.84	0.86	0.88	0.90	0.92	0.95	0.97	1.00	1.02	1.05	1.07	1.10	1.13	1.15	1.18	1.21	1.24	1.27	1.31
Reinsurance Expenses	5.13	6.16	6.03	5.73	5.50	5.23	6.27	6.15	5.84	5.61	5.33	6.39	6.26	5.95	5.71	5.43	6.51	6.38	6.06	5.82
Annual Surplus	8.03	9.13	9.08	8.85	8.70	8.50	9.63	9.59	9.37	9.22	9.03	10.19	10.16	9.94	9.81	9.62	10.81	10.79	10.58	10.45
Carryover Surplus	0.00	(4.07)	5.13	14.16	23.34	32.71	20.65	31.69	42.25	53.02	64.07	51.34	64.22	76.59	89.27	102.29	89.23	104.27	118.82	133.76
State Capital Fee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Investment Gain @4%	0.00	0.32	0.20	0.57	0.92	1.28	1.65	1.21	1.65	2.06	2.49	2.92	2.46	2.97	3.46	3.96	4.48	4.00	4.60	5.18
Net Adjusted Surplus	15.13	5.37	14.41	23.58	32.96	42.50	31.93	42.49	53.27	64.31	75.59	64.46	76.84	89.51	102.53	115.87	104.52	119.06	134.00	149.38
Incurring Losses + LAE	(19.20)					(21.60)					(24.00)					(26.40)				
Available Surplus	15.13	9.45	14.41	23.58	32.96	42.50	31.93	42.49	53.27	64.31	75.59	64.46	76.84	89.51	102.53	115.87	104.52	119.06	134.00	149.38
Net Surplus/Deficit	(4.07)	9.45	14.41	23.58	32.96	20.90	31.93	42.49	53.27	64.31	51.59	64.46	76.84	89.51	102.53	89.47	104.52	119.06	134.00	149.38
State Capital Draw	(4.07)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Draw	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Surplus/Deficit	(4.07)	5.37	14.41	23.58	32.96	20.90	31.93	42.49	53.27	64.31	51.59	64.46	76.84	89.51	102.53	89.47	104.52	119.06	134.00	149.38
Reserve Capital Draw	(4.07)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
State Capital Interest	0.00	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)
Federal Credit Line Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Financing Cost	0.00	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)
State Capital Principal Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Federal Credit Line Principal Payment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remaining State Capital Principal	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)
Remining Federal Credit Line Principal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Remaining Principal	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)	(4.07)
Cumulative Surplus/Deficit	(4.07)	5.13	14.16	23.34	32.71	20.65	31.69	42.25	53.02	64.07	51.34	64.22	76.59	89.27	102.29	89.23	104.27	118.82	133.76	149.14

References

Lane, Morton and Mahul, Olivier, "Catastrophe Risk Pricing: An Empirical Analysis"

Bradley, Cormac and Pickup, Charles, "Insurance Securitization: The Storm's Silver Lining",
Emphasis 2007/1

Letson, David, "Florida's Storm Profile: The Economics of Self Insurance", Insurance Summit:
Solvency Matters to Consumers, Feb. 2009

State of Florida Department of Financial Services, "Economic Impact of 1-in-100-Year Hurricane",
March 13, 2009

Independent Actuarial Analysis Provided by Shield our State, Inc., March 2009

Paragon Strategic Solutions, Inc., "Florida Hurricane Catastrophe Fund Ratemaking Formula
Report to the State Board of Administration of Florida", March 2008

Montgomery, Daniel, "Solving Florida's Insurance Crisis", Executive Summary, March 2009