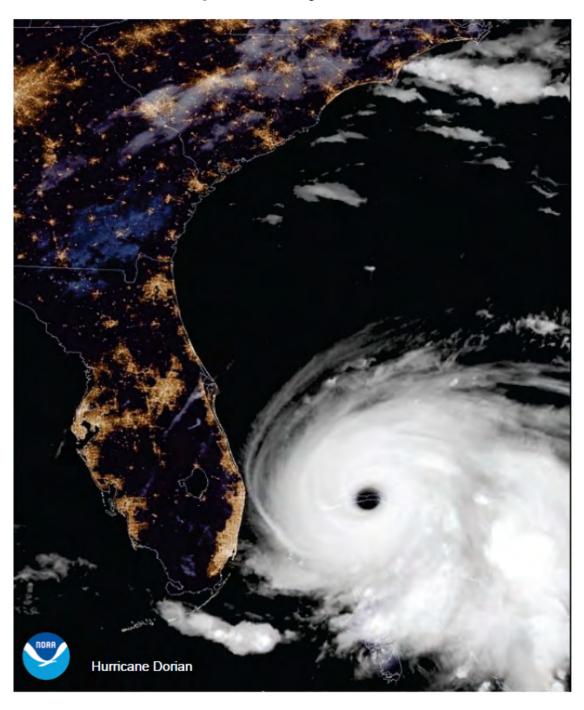
## Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report

# Presented to the State Board of Administration of Florida March 17, 2020 Updated July 6, 2020



#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Supplemental Information

July 6, 2020

The Florida Hurricane Catastrophe Fund (FHCF) 2020 Ratemaking Formula, presented to the FHCF Advisory Council on March 17, 2020, and approved by the State Board of Administration of Florida (SBA) Trustees on May 28, 2020, includes provisions for the anticipated cost of risk transfer and additional purchase of pre-event notes.

For the 2020-2021 FHCF Contract Year, the SBA has decided not to purchase reinsurance but to continue to explore the purchase of additional pre-event notes. The 2020 Ratemaking Formula includes a provision of \$25,577,523 for risk transfer based on the net actual 2019 risk transfer costs. This provision was based on 2019 reinsurance premium less 2019 ceded losses and cash build-up.

The ratemaking formula includes options for adjusting costs for Pre-Event Note options (Exhibit XI) and Risk Transfer Options (Exhibit XVII). Because of the uncertainty regarding the final cost and timing of the purchase of additional pre-event notes, and for rate stability, the 2020 Ratemaking Formula will set the pre-event note estimated cost including cash build up at the same amount as the risk transfer estimate of \$25,577,523. There are no changes to the rates, retention, or retention and payout multiples from the Ratemaking Formula presented on March 17, 2020.

The FHCF's Financial Advisor, Raymond James, provides estimates of carrying costs which are the projected difference between the interest payments to note holders and the investment income on the note proceeds during the 2020 Contract Year. The 2020A Pre-Event Notes first year carrying costs are anticipated to be a combination of transfers of FHCF premium and funds remaining after the final redemption of the 2013A Pre-Event Notes.

The 2020 Ratemaking Formula was approved to incorporate the appropriate cost adjustment factors. As the changes do not impact the rates, a revised 2020 Ratemaking Formula Report will not be created. However, Exhibits II, X, XI, and XVII of the have been updated to provide further details on the reallocation of costs in the ratemaking formula. The remaining exhibits have not been updated.

#### **Distribution and Use**

The attached report was prepared for the use of the State Board of Administration of Florida for the sole purpose of developing a formula for determining the actuarially indicated premium to be paid by individual companies for the FHCF for the 2020 contract year as specified by Section 215.555, Florida Statutes. The report has been prepared to meet actuarial standards of practice of the Actuarial Standards Board. The data, assumptions, methodology and results in this report may not be appropriate for other than the intended use. We recommend that any party using this report have its own actuary review this report to ensure that the party understands the assumptions and uncertainties inherent in our estimates.

Discussion of report limitations, including scope, data sources and variability of projections, can be found in Exhibit 1, Part III of the report. Loss simulation data provided by catastrophe modelers are considered confidential by the modeling organizations.

Sincerely,

Andrew J. Rapoport, FCAS, FSA, MAAA

Managing Director and Actuary Paragon Strategic Solutions Inc.

Andrew J. Kapopat

Florida H	urricane Catastrophe Fund					
2020 Rate	emaking Formula Report					
Effect of	Adjustments for No Risk Transfer Cost, Es	stimated Pre-Event	Note Costs			
	1 Limit		17,000,000,000			
	2 Retention		7,740,000,000			
	3 Coverage %		86.193%			
Part 1:	Premium Adjustment					
	1 Total FHCF proposed premium from		1,192,720,460			
	Ratemaking Formula Report 3/17/2020 with estimated risk transfer		1,102,120,100			
	2 Removal of Estimated Risk Transfer Cost		-25,577,523			
;	3 Total FHCF proposed premium from Ratemaking Formula Report 3/17/2020 with no risk transfer		1,167,142,937			
•	4 Estimated Premium adjustment for 2020A Pre-Event Notes		25,577,523			
	Total FHCF proposed premium with no risk transfer and 2020A Pre-Event Notes		1,192,720,460			
(	6 Factor Adjustment (5)/(1)		1.0000			
	7 % Adjustment		0.00%			
Part 2:	Projected Payout and Retention Multiple Adjustments		3/17/2020 Ratemaking Report (with estimated risk transfer)	3/17/2020 Ratemaking Report (excluding risk transfer)	7/6/2020 Ratemaking Report (with est. pre-event costs)	
	1 Projected Payout Multiple		14.2531	14.5655	14.2531	
	2 Retention Multiples	100%	5.5934	5.7160	5.5934	
;	3	90%	6.2149	6.3511	6.2149	
	4	75%	7.4578	7.6213	7.4578	
	5	45%	12.4297	12.7021	12.4297	
Part 3:	Premium and Rate Changes from 2019 by Type of Business					
		7/6/2020 Supple	mental Ratemaking Repo	rt (with est. pre-event	note costs)	
				, 223 pro 676110	Company Selected	Avg. Rate Change Unadjusted For
		Premium	Exposure	Overall Avg. Rate	Coverage	Coverage Change
	1 Residential	-0.81%	4.00%	-4.63%	6.51%	-10.46%
:	2 Tenants	-1.23%	4.00%	-5.03%	3.35%	-8.11%
;	3 Condominiums	-0.45%	4.00%	-4.28%	3.43%	-7.46%
	4 Mobile Homes	-8.87%	2.50%	-11.09%	0.41%	-11.45%
	5 Commercial	11.66%	1.00%	10.56%	-1.66%	12.42%
	6 Total	-0.01%	3.78%	-3.65%	5.36%	-8.55%



March 12, 2020

Enclosed is the Florida Hurricane Catastrophe Fund (FHCF) 2020 Ratemaking Formula Report which will be presented to the FHCF Advisory Council on March 17, 2020. The rates developed in this report assume an FHCF per event insurance industry aggregate retention of \$7.740 billion (which applies to a participating insurer's two largest events and drops to 1/3 for all other events) and an FHCF limit level of \$17.000 billion.

Also included in this report are windstorm mitigation construction rating factor relativities, as well as formulas to adjust the presented rates for any additional pre-event financing or changes to the reinsurance structure should they become applicable subsequent to the presentation of this report.

#### **Distribution and Use**

The attached report was prepared for the use of the State Board of Administration of Florida for the sole purpose of developing a formula for determining the actuarially indicated premium to be paid by individual companies for the FHCF for the 2020 contract year as specified by Section 215.555, Florida Statutes. The report has been prepared to meet actuarial standards of practice of the Actuarial Standards Board. The data, assumptions, methodology and results in this report may not be appropriate for other than the intended use. We recommend that any party using this report have its own actuary review this report to ensure that the party understands the assumptions and uncertainties inherent in our estimates.

Discussion of report limitations, including scope, data sources and variability of projections, can be found in Exhibit 1, Part III of the report. Loss simulation data provided by catastrophe modelers are considered confidential by the modeling organizations.

A copy of the report will be available on the web site of the FHCF.

Sincerely,

Andrew J. Rapoport, FCAS, FSA, MAAA

Managing Director and Actuary Paragon Strategic Solutions Inc.

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#### Florida Hurricane Catastrophe Fund

#### 2020 Ratemaking Formula Report

#### **Executive Summary**

- 1. **Rates:** The Florida Hurricane Catastrophe Fund (FHCF) overall average rate change for the 2020-2021 (2020) Contract Year, after adjusting for company coverage selection changes, is projected to be a 3.65% decrease. Paragon recommends an average 8.55% decrease in FHCF rates, based on coverage under Section 215.555, Florida Statutes.
- 2. Coverage, Layer, and Retention Changes:
  - a. The average coverage for 2020, based on 2019 market shares and 2020 coverage selections, is projected to be 86.193%, compared to 81.808% for 2019 (a 5.4% increase).
  - b. The increase in the average FHCF coverage selection generates the 2020 FHCF layer of \$19.723 billion, compared to the 2019 layer of \$20.780 billion.
  - c. The projected loss retention for 2020 is \$7.740 billion compared to \$7.363 billion for 2019.
- 3. **Premium Change**: FHCF premium will remain level at \$1.193 billion with exposure growth and coverage selection changes offset by rate decreases.

	2020 Contract Year Modeled	2019 Contract Year Actual	2019 Contract Year Modeled Per HB301 and
FHCF Coverage			Finalized Risk Transfer
Industry Retention	\$7.740 billion	\$7.363 billion	\$7.422 billion
Limit	\$17 billion	\$17 billion	\$17 billion
Average Coverage	86.193%	81.808%	81.629%
FHCF Layer	\$19.723 billion	\$20.780 billion	\$20.826 billion
FHCF Premium	\$1.193 billion	\$1.193 billion	\$1.200 billion
Rate Change	-8.55%	-6.54%	-5.58%
Coverage Selection Change	5.36%	11.33%	11.08%
Exposure Change	3.78%	3.95%	3.72%
Premium Change	-0.01%	8.15%	8.79%
Overall Average Rate Change	-3.65%	4.05%	4.88%
Projected Payout Multiple	14.2531	14.3205	14.1687
90% Retention Multiple	6.2149	5.6105	5.6105
Exposure Base Overall FHCF Rate/\$1,000 Exp.	\$2.450 trillion 0.4867	\$2.361 Trillion 0.5052	\$2.360 trillion 0.5084

#### Part I: The Ratemaking Process

#### Overview

The Florida Hurricane Catastrophe Fund (FHCF) premium formula, which forms the basis of the premiums paid to the FHCF by insurers writing covered policies, as defined in Section 215.555, Florida Statutes, is developed according to statutory requirements, including the requirements of Florida's Administrative Procedure Act and the Florida Public Records Law, which provide a high degree of oversight, accountability, and transparency. This Ratemaking Formula Report presents details of the ratemaking process.

The rates in this report are developed for the limits and retentions, as specified by Section 215.555, Florida Statutes, for the FHCF 2020 Contract Year. Paragon recommends an average 8.55% decrease in FHCF rates for the 2020 Contract Year based on a \$17.000 billion coverage limit and a \$7.740 billion per event retention, which drops to \$2.580 billion for the third largest and subsequent events (1/3 of \$7.740 billion). Companies that did not change their coverage selections will generally have rate decreases. After adjusting for changes in company coverage selections, the overall average FHCF rate change is projected to be a decrease of 3.65%.

This rating formula will produce an estimated \$1.193 billion in total FHCF premium, the same amount of premium for the 2019 Contract Year. This level premium is based on a rate decrease of 8.55%, an increase in coverage level of 5.36% and projected growth in exposure of 3.78%. There is no change in the statutory mandated cash build up factor of 25% from 2019 to 2020.

This premium estimate assumes the same reinsurance structure of 92% of \$1 billion excess of \$10.5 billion as 2019 with no change in ceded premium or losses. Exhibit XVII provides the methodology for adjusting 2020 rates for alternative reinsurance structures and contracted reinsurance premiums should the actual FHCF reinsurance structure differ from the assumed structure used in this ratemaking formula.

For 2020, FHCF coverage is a limit of \$17.000 billion excess of \$7.740 billion. There are two major factors affecting the FHCF layer of coverage for the 2020 Contract Year:

- 1. Pursuant to Section 215.555, Florida Statutes, the industry retention is equal to \$4.5 billion adjusted for the increase in reported exposure from 2004 through 2018. As exposures have grown 72.0% over this period, the modeled retention for 2020 is \$7.740 billion.
- Pursuant to Section 215.555, Florida Statutes, the FHCF limit is equal to \$17.000 billion until there
  is sufficient estimated claims-paying capacity to fund \$17.000 billion of loss in subsequent
  Contract Years. As the State Board of Administration of Florida (SBA) has not made this
  determination, the FHCF limit for 2020 is \$17.000 billion.

The above changes will vary by deductible, construction, and territory. In 2017, we modified the methodology used in the previous ten years to develop territory relativities. To improve stability in ZIP Code rating groups, the current methodology will shift a ZIP Code to a different rating territory only if the indication is for a shift of two or more rating territories or if the indicated shift of one rating territory is consistent for three years. 2020 is the fourth year of this new methodology.

#### Type of Business Allocation

The following table shows the components of the indicated premium changes by type of business.

	Α	В	С	D	E
Exh. 2 Sources	Line 48	Line 51	Line 55	Line 1.1	Line 58
Calculations			((1+A)/(1+B))-1		((1+C)/(1+D))-1
Type of Business	Premium Change	Exposure Change	Overall Avg. Rate Change	Company Selected Coverage Change	Avg. Rate Change Unadjusted For Coverage Change
Residential	-0.81%	4.00%	-4.63%	6.51%	-10.46%
Tenants	-1.23%	4.00%	-5.03%	3.35%	-8.11%
Condos	-0.45%	4.00%	-4.28%	3.43%	-7.46%
Mobile Home	-8.87%	2.50%	-11.09%	0.41%	-11.45%
Commercial	11.66%	1.00%	10.56%	-1.66%	12.42%
Total	-0.01%	3.78%	-3.65%	5.36%	-8.55%

#### **Territory Changes**

The 2020 recommended territories, like the 2019 FHCF territories, are based on analysis of losses in the FHCF coverage as modeled by AIR Worldwide Corporation (AIR), Corelogic-EQECAT (Corelogic), and Risk Management Solutions (RMS). The relationship between lowest rate and highest rate is approximately 1:39, similar to 2019. As was done last year, this ratio was adjusted to accurately reflect the indicated loss costs for territory 1. Indicated territory changes were tempered so that ZIP Codes would only shift one territory up or down if the indication was for a shift of two or more territories or if there has been an indicated one territory shift consistently for three years. In 2020, 137 ZIP Codes shifted down one territory, most due to the 3-year indications of one territory shift.

#### **Premium Summary**

We project premium, exposure, and retention changes as follows:

Exposure Growth (2019 to 2020)	3.78%
Retention	\$7.740 billion
Premium – 2019 (as of 10/16/19)	\$1.193 billion
Premium – 2020 (Projected) 3/17/2020	\$1.193 billion

## Use of Five Models Found Acceptable by the Florida Commission on Hurricane Loss Projection Methodology

For 2020, a weighting of five models found acceptable by the Florida Commission on Hurricane Loss Projection Methodology as of December 1, 2019 was used for aggregate results. The five models were AIR, Corelogic, RMS, Applied Research Associates (ARA), and the Florida Public Model (FPM). Model results were compared in detail to construct an industry distribution of losses by size. (The Karen Clark & Company model declined to participate in FHCF 2020 ratemaking). For the industry aggregate basis, consistent with the weighting methodology used in all years when the FHCF had five models, 5%, 20%, 50%, 20%, and 5% weights were applied to the models ranked from lowest to highest based on annual expected aggregate FHCF losses.

In 2020, all five models meet the 2017 standards. Three out of the five models produced lower loss cost indications than in 2019 ratemaking, two produced higher indications and the five-model weighted indication was lower.

For analysis of detailed allocation to type of business, territory, construction, and deductible, and for special coverage questions, three models (AIR, Corelogic, and RMS) were used for all types of business. Model results were compared in detail and 1/3 weight was given to each model for all types of business.

#### Summary of Changes to the 2020 Ratemaking Formula

In 2020, there are five factors that impact premium and rate changes. Three of these factors have a major impact and two of the factors have a minor impact.

The major impact factors are:

- 1. Change in company coverage selections;
- 2. Projected growth in FHCF exposure; and
- 3. Reduction in Pre-Event Note Expense due mainly to the maturation of the 2013A notes on July 1, 2020.

The minor impact factor is:

- Retention Limit Adjustment Modeling and
- Mobile Home Relativity Change.

#### Major Impact Factors

- 1. The 2019 average coverage selection was 81.808%. The projected 2020 average coverage is 86.193% based on March 2, 2020 selections and adjustments for rating mitigation factor changes. This change reduces the size of the 100% FHCF layer. While FHCF rates by coverage decrease by 8.55% compared to 2019 rates, the overall average FHCF rate decreased by 3.65% due to the shift in coverage selections towards 90%. The impact of the coverage selection change is a 5.36% increase.
- 2. The projected exposure trend increased slightly from 3.72% in 2019 to 3.78% in 2020. The current methodology for allocating trend recognizes that most of the increase in exposure will be due to new construction. The change in distribution of exposure by age of home moderates the growth in modeled loss due to the projected increase in exposure. Exposure growth affects overall premium by type of business but not rates.
- 3. Expenses for 2013A and 2016A pre-event notes decreased from \$26.1 million in 2019 to \$8.2 million in 2020 due mainly to the maturation of \$1 billion of 2013A notes.

#### Minor Impact Factors

- 4. The modeling for the 2020 per company retention limit adjustment is based on the average of the AIR and RMS models. The change in this adjustment factor this year produced a decrease in projected losses of \$1.4 million.
- 5. Mobile Home relativities between Pre and Post 7/31/1994 manufactured dates have been updated based on a member survey of year of manufacture data. This change will provide lower rates for newer manufactured mobile homes. This change has no impact on overall FHCF rates.

Details of the overall changes can be found in Exhibit II, which contains the following exhibits:

- 1. Summary of 2020 Rate Calculation;
- 2. Adjustment to Exposure Base and Summary of Rate Change;
- 3. Summary of Results; and
- 4. Historical Comparison of Exposures, Premiums, and Rates.

#### **Details of the Ratemaking Process**

This ratemaking formula for the FHCF is based on Section 215.555, Florida Statutes. We have followed the same basic process used since 1995. Legislation enacted in 2005 (Chapter 2005-111, Laws of Florida, CS/SBN 1486) addressed retention in multiple-event seasons by creating a per event retention that applies to a participating insurer's two largest events and drops to 1/3 for all other events. This drop-down coverage has again been incorporated into the 2020 rates.

#### A. Trend

For 2020 ratemaking, we reviewed construction data indices from Marshall & Swift and the actual exposures by coverage reported to the FHCF from 1995 to 2019. The Marshall & Swift construction indices for the Southeast were at 0.0% in 2019 (as of October) compared to a 5.0% increase in 2018. Countrywide indices were up 0.7% compared to up 4.5% the prior year.

Our selection of exposure and risk count trends for 2020 was based predominantly on the last three years of historical FHCF data. The table below displays the last five years of annual growth in exposure and risks. In making selections, the FHCF trend data was benchmarked against the indications generated from the Marshall & Swift construction indices. In 2020, positive trends for mobile homes and commercial business are used for modeling due to exposure growth in recent years.

The large 2019 decrease in exposure and counts for the tenants type of business was due to a change in reporting requirements excluding stand-alone inland marine which had previously been reported as contents only tenants policies. The selected trend of 4% assumes this decrease is a one-time reporting adjustment.

Historical FHCF exposure and risk counts can be found in Exhibit III. Note that the trended exposure data in Exhibit III is based on exposure reported to the FHCF as of 10/16/2019. This data was used in the catastrophe modeling process.

Beginning in 2020, the exposure trending process has been refined to focus on new construction. For residential, tenants, and condominium unit owners, trends in unit counts were mainly applied to newer construction (year built 2012 and subsequent) and older year built counts were assumed to have minimal to negative trends. Exposure trends were also mainly allocated to newer construction (year built 2012 and subsequent), with trend levels closer to inflation changes for older construction. Using this approach, the overall trended FHCF exposures better reflect the improvement in damageability levels due to new construction.

## Annual Growth in Exposure and Risk Counts Reported by FHCF Participating Insurers as of 10/16/2019

	Residential		Tenants		Condominiums		Mobile	Homes	Commercial	
	Exposure	Risk Count	Exposure	Risk Count	Exposure	Risk Count	Exposure	Risk Count	Exposure	Risk Count
2014-2015	2.1%	0.0%	1.3%	12.2%	2.0%	0.8%	-5.8%	-7.9%	-9.8%	-7.2%
2015-2016	3.9%	1.3%	12.0%	10.3%	5.1%	3.2%	0.6%	-1.8%	-6.6%	-6.5%
2016-2017	2.8%	0.8%	9.1%	12.0%	4.0%	1.4%	1.4%	-1.1%	-4.2%	36.3%
2017-2018	4.4%	1.5%	2.7%	-4.1%	5.7%	2.3%	2.8%	-0.5%	2.7%	-30.4%
2018-2019	4.4%	0.8%	-20.3%	-18.8%	4.1%	0.4%	3.0%	-1.2%	3.3%	11.6%
Selected	4.0%	1.0%	4.0%	4.0%	4.0%	1.5%	2.5%	0.0%	1.0%	0.0%

#### B. Insurance Industry Aggregate Retention for Ratemaking Purposes (Exhibit IV)

For development of this premium formula, it is necessary to assume a projected aggregate insurance industry retention to estimate losses in the aggregate layer of coverage.

Section 215.555, Florida Statutes, specifies the calculation of the retention multiple for each participating insurer. The numerator of the retention multiple is \$4.5 billion adjusted by the percentage

Paragon Strategic Solutions Inc.

growth in FHCF covered exposure from 2004 to the Contract Year two years prior to the current year. The historical exposure for 2018 was \$2,271.5 billion (as of 10/16/2019) as compared to \$1,320.6 billion in 2004. The percent adjustment is 72.0%, so the numerator of the retention multiple is \$7.740 billion (rounded to the nearest million).

The denominator of the retention multiple is the projected total FHCF reimbursement premium assuming all participating insurers have selected the specified coverage option. Retention multiples by coverage % are displayed below.

Coverage %	90%	75%	45%
Retention Multiple	6.2149	7.4578	12.4297

Each participating insurer's provisional retention is the retention multiple (adjusted for coverage selection) times its provisional premium. An insurer's actual retention is the retention multiple times its actual premium.

Based on the above calculation, the retention multiple numerator of \$7.740 billion is used as the insurance industry aggregate retention for simulating losses in the aggregate layer of coverage. This value is equivalent to the sum of retentions for all insurers.

Since 2003, 100% of all FHCF premiums are calculated based on the premium formula rates applied to individual company exposures. This is called Section I premium. Section II premium refers to a premium calculated from exposure under covered polices that would require individual ratemaking, with each policy risk modeled and rated individually by company. There is currently no Section II exposure and therefore no Section II premium. The Section I insurance industry aggregate retention is \$7.740 billion (based on 100% of projected premium) and the Section II aggregate retention is \$0 (based on 0% of projected premium.)

#### C. Industry Excess Layer (Exhibit IV)

Under Section 215.555(4)(c)1, Florida Statutes, "The contract shall also provide that the obligation of the board with respect to all contracts covering a particular contract year shall not exceed the actual claims-paying capacity of the fund up to a limit of \$17 billion for that contract year, unless the board determines that there is sufficient estimated claims-paying capacity to provide \$17 billion of capacity for the current contract year and an additional \$17 billion of capacity for subsequent contract years."

As the board has made no such determination regarding capacity in excess of \$17 billion, the limit for the 2020 Contract Year is \$17 billion. This \$17 billion represents the total capacity at selected coverage levels for loss and loss adjustment expense allowance. Loss adjustment expense allowance is statutorily set at 10% of losses recoverable from the FHCF. Participating insurers report only losses and do not report actual loss adjustment expenses.

The limit of \$17 billion is first divided by 1.10 to produce a loss only limit of \$15,454,545,455. This limit is then split between Sections I and II based on trended actual premium at current selected coverage levels. We view this as the best indicator of expected losses in the layer. Based on this split, 100% of the \$15,454,545,455 limit is in Section I. This value is the Section I loss only limit.

The next step is to gross up the loss only limit for coverage level. The 2019 average coverage level was 81.808%. Final 2020 company coverage selections as of March 1, 2020 produced an average coverage level of 86.193% based on 2019 company market shares and rating group definitions. Grossing up the loss only layer of \$15,454,545,455 for coverage selections produces a 100% loss layer of \$17,930,243,684. The top end of the loss only layer is then an estimated projected aggregate retention of \$7,740,000,000 for ratemaking purposes plus this limit, which equals \$25,670,243,684. The loss and loss adjustment expense combined layer is \$19,723,268,053.

In summary, for Section I and II loss only modeling purposes we use the following layer: 86.193% of \$17,930,243,684 xs \$7,740,000,000

For publication purposes, the Sections I and II loss and loss adjustment expense layer is: 86.193% of \$19,723,268,053 xs \$7,740,000,000

The simulations produced by the modelers are for producing manual rates per \$1,000 of exposure under covered policies. The rates resulting from such simulations are referred to as Section I rates.

#### D. Industry Detail Exposure Data

Actual 2019 industry FHCF exposures for buildings, contents, and appurtenant structures were summarized by:

- 1. Type of Business (residential, tenants, condominium unit owners, mobile home, commercial habitational);
- 2. ZIP Code:
- 3. Construction/Tie-Down Type; and
- 4. Deductible.

For modeling, we used data as of 6/30/2019 as reported through 10/16/2019 by 163 of 163 companies reporting FHCF Section I exposure for the 2019 year. This data was trended one year as described in Section A. Exhibit III contains trended control totals of the FHCF exposures used in the modeling process.

### E. Modeling Assumption and Data Changes: Combining Five Models - AIR, Corelogic, RMS, ARA & FPM

Model	2006-2007	2008-2020
AIR	Х	X
ARA	Х	Х
Corelogic	Х	Х
RMS	Х	Х
FPM		Х

**Table of Models Used to Calculate Overall Industry Losses** 

The table above lists the models that were used to calculate the overall FHCF losses by year. Models used in ratemaking have been found acceptable by the Florida Commission on Hurricane Loss Projection Methodology as of December 1 of the prior year and have met the 2017 standards. Note that individual results provided to the FHCF by the modelers are considered confidential by the modeling organizations.

Three out of the five models produced lower loss cost indications than in 2019 ratemaking, two produced higher indications and the 5-model weighted indication was lower.

All five of the modelers produce a distribution of industry-wide losses based on trended reported exposures by type of business, deductible, construction, and ZIP Code. The AIR model produces a listing of losses for 50,000 simulated years while the FPM model losses are based on 59,000 simulated years. The ARA model produced a listing of losses for 250,000 simulated years. The other models produce a listing of losses by size with assigned annual frequencies. Since 2008, demand surge has been modeled directly by each of the accepted modelers. Adjustments to these loss distributions are described in the next section.

Exposure data for invalid ZIP Codes was provided to the modelers who then modeled such exposure at the county level. Less than 0.01% of total reported exposure comes from invalid ZIP Codes, which are either ZIP Codes that are located outside of the state of Florida or are ZIP Codes that the U.S.

Postal Service does not recognize or has decommissioned. In the latter case, the FHCF continues to produce rates for such codes for several years in order to give companies time to update their data.

Paragon used the results from each modeler to produce industry-wide gross (that is, net of policy deductibles and after application of policy limits) annual expected losses by type of business and to produce industry-wide FHCF excess losses for all coverages combined. Data from the modelers was combined by giving weights of 5%, 20%, 50%, 20%, and 5% to the model results from lowest to highest. A weighted loss distribution is included in Exhibit V.

The FHCF weighted loss curve in Exhibit V is developed solely for estimating excess hurricane losses within the FHCF layer. Estimates of losses above the FHCF layer were not taken into consideration in developing the curve. Shifts in modeler weights within the FHCF loss layer may have an amplified impact on loss estimates above the FHCF layer.

Although it is not used for ratemaking purposes, we have included an additional loss distribution based on uniform modeler weights (20% / 20% / 20% / 20% / 20%) in Exhibit V. Over time this curve may show greater stability for losses above the FHCF layer. As stated in our disclaimer in Part III herein, we recommend that any party using this report have its own actuary review this report to ensure that the party understands the assumptions and uncertainties inherent in our estimates.

Model	2006-2008	2009-2012	2013-2020
AIR	V		
AIK	^	^	^
Corelogic	X	X	X
RMS	X	X	Х
FPM		Х	

**Table of Models Used for Classifications** 

Three of the modelers ran our 2019 Contract Year trended exposures through their models and provided more detailed outputs (i.e., losses by ZIP Code, construction, and deductible codes for each type of business) that were used to update the class plan relativities. We used a straight average of the indicated loss costs for each rating cell as a basis in order to populate our class plan with rates. Details of the allocation of rates to type of business, deductible, construction, and territory are described in Part III.

Exhibit V contains tables and graphs of modeled loss severity distributions:

- 1. Gross Loss per Event;
- 2. Excess Retention Aggregate;
- 3. Single Event FHCF Liabilities; and
- 4. FHCF Layer Aggregate.

#### F. Losses in the Layer at Coverage Percent

The limit for the 2020 Contract Year is \$17 billion. Because the size of the excess layer is dependent on the average coverage selections of all the FHCF participating insurers, losses must be modeled after coverage selection. Coverage percentage varies by type of business, so modeled losses need to also reflect this variation. As a result, we start with the allocation to type of business and apply the coverage percentages to the layered loss (a method used consistently since 2001). We calculate the overall rates and premiums at the different coverage percentages at the end of the calculations.

Excess losses are allocated to type of business based on their adjusted gross losses. The allocations are adjusted so that no type of business has an overall rate change exceeding 15% in any one year, prior to legislated rate changes. This allocation appears in line 9 of the summary in Exhibit II. See Exhibit VI for additional details.

#### G. Adjustments to Modeled Losses

- Law and Ordinance Coverage
- Aggregate Wind Deductible Adjustment

These adjustments are similar to the adjustments made in the 2019 ratemaking formula.

The projected industry retention was applied to the adjusted modeled losses to estimate the FHCF excess losses. Details on the Law and Ordinance adjustments discussed here are presented in Exhibit VII. The overall increase in modeled gross losses due to these adjustments is 4.26%, compared to an increase of 4.29% in 2019.

#### **Law and Ordinance Coverage**

Law and ordinance coverage provides extra limit for Coverage A (building) in the case where additional rebuilding costs are incurred in order to comply with local laws and ordinances.

We again recommend the FHCF continue to use the factor of 4.86% of residential modeled losses. We assume most companies charge approximately 3% of premium for law and ordinance coverage. We assume approximately 45% of the losses that would generate law and ordinance losses would be FHCF hurricane losses and 25% of the base premium is FHCF premium, so  $3\% \times (45\%/25\%) = 5.4\%$ . We also assume that only 90% of all residential policies will have this coverage in place at the time of a hurricane loss. Then the loading to FHCF residential modeled losses would be  $5.4\% \times 90\% = 4.86\%$ . See Exhibit VII for additional details.

#### **Aggregate Wind Deductible Adjustment**

Under Section 627.701, Florida Statutes, residential property insurance policies issued on or after May 1, 2005 must have hurricane deductibles that apply on an annual, rather than a per-event, basis. Insurers may apply the "other perils" deductible or any amount remaining from the hurricane deductible, whichever is greater, to a loss for a second hurricane and each subsequent hurricane that year.

The loss events were adjusted to account for this change in loss exposure. Adjustment factors by type of business were developed. Exhibit VII details the derivation of these factors. The take-up ratio only impacts the commercial type of business as only these policyholders have the option of having an annual hurricane deductible. The adjusted load was then weighted with the adjusted load from 2019 giving 33% weight and 67% weight to 2020. The selected adjustment factor is the rounded value of the weighted load after the "take-up" modification.

#### H. Adjustments for Per Company Limits and Retentions

In this year's ratemaking report Paragon has updated the adjustment to expected losses for individual company limits, retentions and coverage based on information from an analysis based on detailed loss projections run by Paragon from the RMS and AIR model runs used for 2020 ratemaking. The average of the results from the two separate analyses is -0.4315%. Weighting this result against the prior adjustment factor of -0.2068% (2/3 current indication, 1/3 prior selection), we recommend a factor of -0.3566%. To summarize the approach, using the same exposure inputs and assumptions used by AIR and RMS, Paragon generated files of simulated Florida statewide gross hurricane losses. Average gross losses were first adjusted by type of business for AIR and RMS to match the average gross loss generated by the five models used in FHCF ratemaking. Each simulated gross loss was then allocated to ZIP Code and type of business. Next, FHCF market shares were applied by ZIP Code and company (based on 2019 FHCF premium) to allocate each simulated gross loss to all the FHCF companies. Simulated gross losses for each individual company were then summed and applied the companies' projected retention, limit, and coverage percentage (based on 2019 FHCF premium market shares and 2020 selected coverages) to generate company FHCF losses. These were summed by simulated event to get FHCF total loss by event. Paragon summed losses by simulated year applying aggregate limits and impact of retention drop downs. Separately for the AIR and RMS runs, the average annual FHCF loss based on individual company losses was compared to the average annual FHCF loss based on industry total losses, retention, limit and coverage

percentage. The average of the resulting adjustment factors was -0.4390% indicating, on an average basis, the two approaches generate almost identical results.

Using this more detailed approach, we also observe that there is significant variability between industry gross losses and FHCF layer losses. This variability cannot be determined when using industry gross losses, limits, and retentions to calculate FHCF layered losses. One observation is that the return time for the FHCF to exhaust its total capacity is longer than the value based on industry gross losses. Another observation is that due to increased market share of a single FHCF participating insurer in specific parts of the state, losses in areas where that insurer has very limited market share cannot generate full capacity FHCF layer losses. On the other hand, in parts of the state where one member company has significant market share, that company's retention becomes the effective retention for the industry on storm tracks in that area.

The current and prior special analyses indications can be found in Exhibit VIII.

The shape of the exceedance curves presented in Exhibits V and VIII are different, but the overall expected values of the FHCF loss layers are very similar. The Exhibit VIII curve is the more appropriate curve to use for analysis of interval FHCF losses within the FHCF layer because it more realistically recognizes the impact of company exposure distributions, retentions, and limits. Therefore, Exhibit VIII is used for analysis of expected FHCF losses offset by potential risk transfer options in section P below.

#### I. Other Post-Model Adjustments: (5%)

There are a few coverages that may appear on some FHCF covered policies that are not explicitly modeled in the FHCF's requested simulation. These coverages include guaranteed replacement cost, inflation guard, and reimbursable amounts paid as fees on behalf of or inuring to the benefit of a policyholder. We do not believe there is sufficient FHCF exposure from these coverages to justify additional administrative reporting and modeling at this time, but we do believe it is appropriate to load for these coverages in the post model adjustment.

Consistent with prior years, we recommend judgmentally increasing the modeled excess loss costs by 5% for all types of business to account for these coverages and other factors that are not directly included in the modeled loss results.

#### J. Investment Income Credit– Eliminated in 2012

Since 2012, the FHCF has not used investment income in the rates. There are three reasons that the use of an investment income credit in FHCF ratemaking is not appropriate and has been discontinued.

First, the FHCF investment credit is based on anticipated future long term retained investment income. The amount of anticipated future investment income assumes the FHCF would maintain a stable structure in perpetuity. Since the FHCF's inception, Florida statutes have been and FHCF coverage layers have changed resulting in lower return times and less investment income than originally projected in prior contract year ratemaking.

Second, during periods of sharp interest rate drops such as after 2000 and 2008 the FHCF will need rate increases due to reductions in the investment credit. These rate increases reduce FHCF long term rate stability.

Third, when investment income is used for providing a credit to current year rates, the same investment income cannot be used for mitigation funds appropriated by the legislature. During the years when an investment income credit was used, the premium formula required a matrix to adjust final rates to cover the potential FHCF for FHCF mitigation appropriations which were usually not finalized until the end of the legislative session after the premium formula had been approved. This approach also causes potential instability in FHCF rates. During years when no investment credit is included in the premium formula, the investment income can be used for mitigation appropriation without impacting FHCF rates.

For the three reasons above, investment income is not used in the FHCF ratemaking formula.

#### K. Operating Expenses and Mitigation Funding

Operating expenses of \$8,778,138 are based on an estimate of 2020 fiscal year operating expenses provided by the SBA. This value is a decrease of \$18,387 from the 2019 Contract Year projected expense of \$8,796,525.

The estimated mitigation funding target underlying the rates is set at zero since no investment income will be used to reduce 2020 rates. Pursuant to Section 215.555, Florida Statutes, the minimum appropriation is \$10 million, and the maximum appropriation is 35% of the prior fiscal year's investment income. In 2019, the Florida legislature appropriated \$13.5 million for mitigation. For the 2020-2021 FHCF contract year, the calculated maximum amount subject to mitigation appropriation will be 35% of \$492,770,000 which equals \$172,470,200. Appropriation of mitigation funding will not affect the FHCF rates in 2020. (See Exhibit IX.)

#### L. Pre-Event Notes Expense

This year's estimate of \$8.2 million is the sum of the projected cost estimates for 2013A and 2016A pre-event notes. This is a decrease of \$17.9 million from the 2019 cost of \$26.1 million. This estimate includes the net carrying cost and a judgmental loading for potential asset loss during the Contract Year. The 2020 carrying cost estimates are provided by the FHCF's Financial Advisor, Raymond James & Associates. Raymond James' cost estimate is the projected difference between the interest payments to note holders and the investment income on the note proceeds during the 2020 Contract Year (see Exhibit X).

A 0.3% judgmental loading (based on historical FHCF information) is added to the carrying cost for potential asset loss during the Contract Year. The sum of this loading is \$2.2 million. The loading for the 2013A notes is \$0.2 million (0.3% of \$82 million). \$1 billion of the 2013A notes will come due on 7/1/2020 so the value of the 2013A notes will be \$1 billion for only 1 month of the 2020 contract year. The 2016A notes will be \$650 million for the entire 12 months of the 2020 contract year. The loading for the 2016A notes is \$2.0 million (0.3% of \$0.650 billion).

Should the SBA authorize additional expenditure for pre-event notes during the 2020 Contract Year, the rates, retention multiples, and payout multiple should be modified using the factors provided in Exhibit XI.

#### M. Premium Credits (Windstorm Mitigation Construction Credits)

We are using the same approach to windstorm mitigation construction factors as we used in the 2019 Ratemaking Formula Report, including the incorporation of factors for the following mitigation features recognized since 2012:

Type of Business	Year Built	Structure Opening Protection	Roof Shape
Commercial Residential	X	X	X
Residential	X	X	X
Mobile Home			
Tenants	X	X	X
Condominium Owners	X	X	Х

The proposed rate factors associated with each variable are shown in Exhibit XIV. We propose that these be applied to calculate the final rate for any covered policy subject to the following:

- Year built, structure opening protection, and roof shape factors be applied multiplicatively;
- The combined factor for any risk will not be capped;
- Every risk will be evaluated for its rating factor; and

 A final factor will be applied by type of business so that the indicated premium levels for each type of business are achieved.

#### Exhibit XII includes:

- 1. Calculation of actual 2019 premium credits/surcharges;
- 2. 2019 distribution of credits/surcharges; and
- 3. 2019 distribution of exposure and counts by rating region and type of business.

#### N. Section II (Excess) Adjustment

We included \$0 of Section II premium, based on the fact that there was no Section II exposure reported in 2019. Section II premium covers policies that require individual rating procedures. These exposures would be modeled and rated individually by company.

#### O. Adjustment for Updated Exposures

In the past, we have included an adjustment for change in premiums and exposures between November of the prior year and February of the current year. This change does not affect rate changes but should improve the accuracy of projected premium. For this year, there was no material change to FHCF exposure, so an adjustment was not included.

#### P. Risk Transfer Options

The rates presented in this report include a loading for the cost of risk transfer for a ceded layer of 92% of \$1 billion excess of \$10.5 billion, the same as the reinsurance structure used in the 2019 FHCF premium formula. The ceded premium is set equal to the 2019 initial premium of \$63.5 million and projected ceded losses of \$30.3 million.

The final FHCF 2020 risk transfer structure and cost has not been determined at the time of this report presentation. Should the FHCF enter into a risk transfer arrangement, the cost shall be determined based on the actual ceded layer selected and contracted initial reinsurance premium. The 2020 FHCF premium rates and factors would be adjusted accordingly, by the formula specified in Exhibit XVII.

The estimates for FHCF loss credits are based on the average of 2020 AIR and RMS data distributions in Exhibit VIII. Exhibit XVII is based on the same loss severity distribution and displays probability of exceedance for specific FHCF layers with the adjustments to the FHCF loss layer level prior to fixed expenses. These values are used to illustrate a range of potential risk transfer structures and costs in Exhibit XVII. The details of the formula calculation, along with potential revised factors, are provided in Exhibit XVII.

The Net Risk Transfer Cost Premium in Exhibit XVII and the Estimated Additional Annual Cost of Pre-Event Notes in Exhibit XI are additive in their impact on FHCF premium and rates. Retention and Projected Payout Multiples can be adjusted with interpolation based on the sum of the combined impact on FHCF premiums.

#### Part II: Allocation of Premium

Within a type of business, premium is allocated to territory, construction, and deductible based on a set of relativities. This is the same process that has been used since the creation of the 2001 rates. In all cases, the relativities recommended for 2020 have been adjusted so that none of them has changed by more than 15%. While there is a significant change in the relativities within mobile home constructions, there were no other significant changes in the allocation process for 2020. Following is an overview of the FHCF rating classifications and the entire allocation process.

#### **Overview of the Rating Classifications**

#### 1. Type of Business

The actuarially indicated FHCF premium is allocated first among the five types of business: commercial, residential, mobile home, tenants, and condominium unit owners. This allocation is based on the hurricane catastrophe modeling. For each modeled event, the proportion of FHCF layer losses allocated to each type of business is identical to the allocation of gross losses from that event. This process incorporates the varying weighted average coverage selection of each type of business. This approach produces indicated allocations, which are then adjusted so that no type of business has an indicated rate change of more than 15%. Actual allocations can be found in Exhibit VI.

#### 2. Territorial Definitions

Since 2001, the FHCF revises rating territories using information from three hurricane models: AIR, Corelogic, and RMS. Territory definitions are based on excess layer loss costs, as they are indicative of what insurers might recover from the FHCF. Actual changes to territories are tempered each year to minimize the magnitude of rate changes. For 2020, indicated territories have been recalculated for each ZIP Code using the latest data from these models.

In order to increase rating stability, the FHCF territory tempering method was changed in 2017. Review of past FHCF rating history shows that there have been many years when there were large numbers of ZIP Codes shifting one territory in a year and then shifting back one territory the following year (see Exhibit XVIII). Starting in 2017, a ZIP Code is shifted by one territory to a new territory only if the indication is for a shift of two or more territories or a shift of one territory has been consistent for three years. 2020 being the fourth year of the new methodology, 137 ZIP Codes shifted down one territory, most due to three-year indications of one territory shift.

#### 3. Construction

In 2019, FHCF data was collected for four residential, seven commercial, and three mobile home construction types. Tenants and condominium unit owners exposures have the same construction classes as commercial. The mobile home codes relate to the extent of their tie downs and their compliance with Federal Housing and Urban Development building codes that went into effect in July 1994.

In 2020 the FHCF will collect residential data for the same construction types as the commercial type of business. The new construction types will be Masonry with Reinforced Concrete Roof Deck, Superior, and Superior with Reinforced Concrete Roof Deck. For 2020, these construction types will use the same residential rates as the residential Masonry construction type.

In 2019 the FHCF surveyed its largest writers of mobile home business regarding average year of construction for mobile homes with tie downs manufactured before and after 7/13/1994. An aggregate summary of this survey's results was presented to the FHCF modelers. As a result, one of the modelers changed its assumptions for mobile home losses for the FHCF construction categories. This resulted in a change in relativities of post to pre 7/13/1994 FHCF mobile home rates from 2.2% to 16.9% after tempering.

The FHCF anticipates it will be requesting more detail on year of manufacture for mobile homes in the future and additional refinements on mobile home rating.

#### 4. Deductibles

The rates proposed are for the same sets of deductibles as for 2019. Relativities for each deductible vary by type of business. As with construction relativities, changes in deductible relativities were limited to changing no more than 15%.

#### **General Overview of the Rate Allocation Process**

#### **Construction Classes**

Relativities between the most common construction within a type of business and the other construction types were calculated using AIR, Corelogic, and RMS generated ZIP Code level loss costs. The indicated relativities were selected, except that they were limited to changing from the 2019 relativities by no more than 15%.

Rates for unknown construction are calculated using the same method as other construction types, not to exceed the highest rate for all known constructions in the same type of business.

#### Rating Region (Territory) Definition

To begin the process this year, we identified the 1,456 ZIP Codes for which rates would be produced. These are the currently valid U.S. Postal Service ZIP Codes in Florida, plus some recently deactivated ZIP Codes for which we continue to produce rates. We identified 927 of the ZIP Codes that had at least \$30 million of total exposure. The remaining 529 ZIP Codes were mapped to these 927 ZIP Codes by location. Most of these 529 ZIP Codes were exclusively post office boxes. They inherited their territory from the territory of the ZIP Code to which they were mapped. The purpose of this step was to avoid trying to assign ZIP Codes to territories if they had very little exposure. When a ZIP Code has no frame exposure, for example, the models produce a 0.00 loss cost. To avoid these problems and to increase the reliability of the modeled losses, this mapping technique was employed.

In order to define territories, residential base deductible ZIP Code level loss costs to the FHCF layer were used. The excess loss costs from three models (AIR, Corelogic, and RMS) were averaged and then weighted by the amount of construction in the three classes: frame, masonry, and masonry veneer. Together, these constructions account for over 99% of residential exposure. The result was a weighted average loss cost for each ZIP Code.

The ZIP Codes were ranked by weighted average loss cost and partitioned into 25 territories, or rating regions. We set the relativities between rating regions ahead of time, and then fit the ZIP Codes to these values. This enabled a more consistent spread of values between the highest and lowest rates. In keeping with past rates, the ratio of the rates in the highest and lowest regions was set at 35:1. Subject to these guidelines, statistical methods were used to maximize the differences between regions and minimize the variation within a region. This same procedure was performed for this year's rates. Subsequently, we judgmentally adjusted the territory 1 loss cost down to better reflect actual indications for territory 1. This adjustment had the effect of changing the ratio to approximately 39:1.

We tempered the change in territory from 2019 to 2020 by limiting the territory movement to no more than one from its 2019 territory assignment and only if there is an indication of a movement of two or more territories. This change has been made in 2020 to increase stability of territory definitions.

The proposed (tempered) territories, or rating groups, are presented in Exhibit XIII. Exhibit XV shows exposure and counts by territory. Exhibit XIX displays the proposed territories as maps.

#### **Production of Rates**

The total FHCF losses have been allocated to five types of business (Exhibit VI). Within each, construction and deductible relativities have been calculated. In this process, ZIP Code level modeled loss costs were combined using a straight average. Relativities between territories were determined in the territorial definition process.

An overall premium adjustment factor was calculated for each type of business, so that the modeled exposure, when rated using 90% coverage rates, produced the desired total premium for each type of business. In this last step, the premium required was adjusted to the 90% coverage level.

Rates for 75% and 45% coverage level were calculated as 75/90ths and 45/90ths, respectively, of the 90% coverage rates.

The proposed rates produced for the base set of deductibles are found in Exhibit XIV.

Exhibit XV shows exposure and counts by territory.

Exhibit XVI compares rate changes for Residential Masonry (2% Deductible) by rating region across the state before application of windstorm mitigation credits.

The rates that are published in these exhibits are base rates. To calculate the final rate for an insured risk, one must take into consideration the relativities applicable for the three construction characteristics:

Preliminary factor = (year-built factor) x (roof shape factor) x (opening protection factor).

2020 mitigation factors do not have a cap. Prior to 2014, the preliminary factor was tempered by minimum and maximum caps. In 2014, we removed the cap of plus or minus 30% to unlimited due to increased credibility in reported company data.

Actual factor = Preliminary Factor.

A small on balance factor is applied so that the final rates will produce the indicated FHCF reimbursement premium levels by type of business.

Final rate = (Base rate) x (actual factor) x (on balance factor).

All rate factors for the windstorm mitigation construction rating classifications and the on balance factor are shown in Exhibit XIV.

#### Part III: Limitations

#### Scope

This report was prepared for the use of the SBA for the sole purpose of developing a formula for determining the actuarially indicated premium to be paid by individual companies for the FHCF for the 2020 Contract Year as specified by Section 215.555, Florida Statutes. The formula must be approved by unanimous vote of the SBA Trustees and they may, at any time, revise the formula pursuant to the procedure provided in Section 215.555(5)(b), Florida Statutes.

The rates in this report are developed for the limits and retentions specified by Section 215.555, Florida Statutes, for the 2020 Contract Year. No adjustments have been made to reflect availability of FHCF financial capacity during and subsequent to the 2020 Contract Year.

Actual coverage provided by the FHCF for the 2020 Contract Year is subject to modification due to legislative, judicial, or regulatory actions. Except where explicitly noted, such modifications are not considered in this report.

#### **Data Sources**

In developing the 2020 FHCF ratemaking formula, we have relied on the following data from various sources:

- 1. FHCF 2019 Contract Year exposure data as of 10/16/2019 as reported by 163 FHCF companies and compiled by Paragon. This data has not been fully audited yet and could be subject to variability in terms of amounts and classifications of exposure data.
- 2. Historical FHCF exposure data from prior years, subject to audit by FHCF auditors and compiled by Paragon.
- 3. Projections of 2020 season hurricane losses prepared by AIR, ARA, Corelogic, FPM, and RMS for use in determining overall expected industry losses. All loss projections are based on catastrophe models that have been accepted by the Florida Commission on Hurricane Loss Projection Methodology as of December 1, 2019.
- 4. Allocations of projected 2020 season hurricane losses prepared by AIR, Corelogic, and RMS for use in developing various rating classifications.
- 5. Special analyses of mitigation rating factors prepared by AIR, ARA, Corelogic and RMS.
- 6. Special analyses of projected hurricane losses by county by ARA, Corelogic and RMS.
- Special analyses of projected hurricane losses by ZIP Code by Paragon using AIR and RMS models.
- 8. Historical FHCF investment returns as reported by the SBA.
- Industry residential construction cost trends for Florida and the United States as developed by Marshall & Swift.
- 10. Estimates of projected FHCF operating expenses by FHCF staff.
- 11. Estimates of projected net expenses for 2013A and 2016A Pre-Event Notes by Raymond James and Associates.

We have not audited or verified the sources of the data and information. If the underlying data or information is inaccurate or incomplete, the results of our formula report may be impacted.

#### Variability of Results

Ratemaking is the projection of future losses and expenses and their relationship to future exposures. The projected rates contained in the attached report represent our best professional judgment. In property catastrophe reinsurance, actual losses are likely to vary from expected losses. The degree of variation could be substantial and could be in either direction from estimates. There is also significant potential for future variability in projections of expenses and exposures.

#### **Distribution and Use**

This report was prepared for the use of the SBA for the sole purpose of developing a formula for determining the actuarially indicated premium to be paid by individual companies for the FHCF for the 2020 Contract Year as specified by Section 215.555, Florida Statutes. The data, assumptions, methodology, and results in this report may not be appropriate for other than the intended use. We recommend that any party using this report have its own actuary review this report to ensure that the party understands the assumptions and uncertainties inherent in our estimates.

A copy of this report will be available on the web site of the FHCF.

# **EXHIBIT**

II

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Updated July 6, 2020 Summary of Rate Calculation

Section I: Retention, Attachment and Coverage Coverage Avg. % as of 10/16/2019 Coverage Avg. % as of 03/02/2020 Coverage Change		Residential 80.930% 86.202% 6.514%	Tenants 81.090% 83.808% 3.352%	Condos 83.275% 86.134% 3.433%	Mobile Home 89.619% 89.984% 0.407%	Commercial 86.119% 84.692% -1.656%	Total 81.808% 86.193% 5.360%	(0.9) (1) (1.1)	
Retention Loss Only Limit Retention + Limit Loss and LAE at Coverage Limit	7,740,000,000 17,930,243,684 25,670,243,684 17,000,000,000							(2) (3) (4) (5)	(2)+(3) (3)*total(1)*1.10
LOSS and LAE at Coverage Limit	17,000,000,000							(5)	(3) total(1) 1.10
Section I		Residential	Tenants	Condos	Mobile Home	Commercial	Total		
Gross Losses at 100% Unadjusted Gross Losses at 100% Adjusted* % Adjustment * Adjustment includes factors for law and ordinance coverage	ge and annual aggre	2,455,628,749 2,586,513,761 5.330% egate deductibles.	13,248,615 13,256,565 0.060%	202,754,202 203,017,782 0.130%	104,094,824 104,563,250 0.450%	326,746,360 327,399,853 0.200%	3,102,472,750 3,234,751,211 4.264%	(6) (7) (8)	(7)/(6) - 1
Allocation of Excess Loss to Type of Business at Coverage Excess Losses and LAE at Coverage	Level	80.004% 700,998,375	0.482% 4,224,236	6.332% 55,477,828	3.464% 30,353,905	9.719% 85,155,200	100.000% 876,209,544	(9) (10)	[Alloc of Excess Losses] (7) (9)*total(10)
Per Company Analysis Factors Retention Adjustment Limit Adjustment adj value Combined Retention and Limit Adjustment	-0.357%	-2,499,451	-15,062	-197,809	-108,229	-303,626	-3,124,177	(11) (14) (15)	(11 Factor)*(10) (14 Factor)*(10) (15 Factor)*(10)
Total Loss After Per Company Analysis Factors		698,498,923	4,209,174	55,280,019	30,245,676	84,851,574	873,085,367	(16)	(10)+(15)
Post Model Adjustment Factors		5.00% 34,924,946	5.00% 210,459	5.00% 2,764,001	5.00% 1,512,284	5.00% 4,242,579	5.00% 43,654,268	(17) (18)	(17)*(16)
Total Gross Excess Loss and LAE		733,423,870	4,419,633	58,044,020	31,757,960	89,094,153	916,739,636	(19)	(18)+(16)
Special Adjustments Investment Income Ceded Loss & LAE Total Special Adjustment	0.000% 0.000% 0.000%	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	(20) (21) (22)	(20 Factor)*(19) No Risk Transfer in Contract Year 2020 (20)+(21)
Net Loss & LAE Prior to Expense Loadings and Credits (Ba	se Prem)	733,423,870	4,419,633	58,044,020	31,757,960	89,094,153	916,739,636	(23)	(19)+(22)
Fixed Expense Loadings Operating Expense 2016A Note Expense 2013A Note Expense 2020A Note Expense (Estimated) Mitigation Funding Offset for Premium Credits and Adjustments Total Fixed Expense Loadings	0.958% 0.867% 0.027% 2.232% 0.000%	7,022,819 6,360,279 197,269 16,370,333 0 0 29,950,699	42,320 38,327 1,189 98,648 0 0	555,794 503,360 15,612 1,295,567 0 0 2,370,333	304,095 275,406 8,542 708,851 0 0 1,296,894	853,111 772,628 23,964 1,988,619 0 0 3,638,322	8,778,138 7,950,000 246,575 20,462,018 0 0 37,436,732	(24a) (24b) (24c) (24d) (25) (26) (27)	SBA Operating Expenses Debt Service Payment & Held Asset Risk Charge Debt Service Payment & Held Asset Risk Charge Debt Service Payment & Held Asset Risk Charge (Estimated) Paid from Investment Income (not from premium) -((1+(33))*(1+(37))-1)*((24a+24b+24c+24d)+(25))/((1+(33))*(1+(37)) (24a)+(24b)+(24c)+(24d)+(25)+(26)
2020 Section I Base Premium at Coverage Level prior to Ca	ash Build Up	763,374,569	4,600,117	60,414,353	33,054,854	92,732,475	954,176,368	(34)	

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Updated July 6, 2020

Section I: Adjustment to 10/16/2019 Exposure Base And Summary of Rate Change

				Residential	Tenants	Condos	Mobile Home	Commercial	Total		
Adjustment for Change in Re	eportings 10/	/16/2019 to 10/16/2019									
2019 Section I Base Premium (N	let of Credits)	as of 10/16/2019 as of 10/16/2019 Change		962,013,054 962,013,054 0.00%	5,822,041 5,822,041 0.00%	75,858,661 75,858,661 0.00%	45,338,284 45,338,284 0.00%	103,810,482 103,810,482 0.00%	1,192,842,523 1,192,842,523 0.00%	(35) (36) (37)	(36)/(35) - 1
2019 Section I Exposure (Al	II ZIP Codes)	as of 10/16/2019 as of 10/16/2019 Change		2,042,760,289,098 2,042,760,289,098 0.00%	22,504,088,002 22,504,088,002 0.00%	106,269,237,920 106,269,237,920 0.00%	27,970,851,774 27,970,851,774 0.00%	161,714,438,195 161,714,438,195 0.00%	2,361,218,904,989 2,361,218,904,989 0.00%	(38) (39) (40)	(39)/(38) - 1
Exposure Trend (2019 to 2020	0)			4.00%	4.00%	4.00%	2.50%	1.00%	3.78%	(41)	
2020 Section I Exposure				2,124,470,718,900	23,404,265,783	110,519,996,401	28,670,122,864	163,331,582,349	2,450,396,686,297	(42)	(1+(41))*(39)
2020 Section I Actuarially Indic 2020 Section I Actuarially Indic		remium at Coverage Level remium at Cov. Level Adj. For Reporting Cl	hange	763,374,569 763,374,569	4,600,117 4,600,117	60,414,353 60,414,353	33,054,854 33,054,854	92,732,475 92,732,475	954,176,368 954,176,368		(34) (1+(37))*(43)
Cash Build-up Factor 2020 Adjusted Sect. I Base Pr	remium at Cov	verage at 2020 Cash Build-up Level	25%	954,218,211	5,750,146	75,517,941	41,318,568	115,915,594	1,192,720,460	(45)	(43.01)*1.25
Variable Expense Loading Reinsurance Fa	actor		0.000%	0	0	0	0	0	0	(45a)	No Risk Transfer in Contract Year 2020
2020 Section I Base Premium	at Coverage	with Cash Build-up & Variable Expenses	0.0000%	954,218,211	5,750,146	75,517,941	41,318,568	115,915,594	1,192,720,460	(45b)	(45)+(45a)
Summary of Section I , Premium, Exposure and Rate Change											
Summary of Section I , Prem	nium, Exposu	ıre and Rate Change		Residential	Tenants	Condos	Mobile Home	Commercial	Total		
•		•								(46)	(36)
Summary of Section I , Prem Base Premium (25% CB)	2019 2020	are and Rate Change as of 10/16/2019	_	962,013,054 954,218,211	5,822,041 5,750,146	75,858,661 75,517,941	45,338,284 41,318,568	103,810,482 115,915,594	1,192,842,523 1,192,720,460	(46) (47)	(36)
•	2019	•	[	962,013,054	5,822,041	75,858,661	45,338,284	103,810,482	1,192,842,523		(36) ((47)/(46))-1
•	2019 2020	•	ſ	962,013,054 954,218,211	5,822,041 5,750,146	75,858,661 75,517,941	45,338,284 41,318,568	103,810,482 115,915,594	1,192,842,523 1,192,720,460	(47)	•
Base Premium (25% CB)	2019 2020 Change 2019 2020	as of 10/16/2019	[	962,013,054 954,218,211 -0.81% 2,042,760,289,098 2,124,470,718,900	5,822,041 5,750,146 -1.23% 22,504,088,002 23,404,265,783	75,858,661 75,517,941 -0.45% 106,269,237,920 110,519,996,401	45,338,284 41,318,568 -8.87% 27,970,851,774 28,670,122,864	103,810,482 115,915,594 11.66% 161,714,438,195 163,331,582,349	1,192,842,523 1,192,720,460 -0.01% 2,361,218,904,989 2,450,396,686,297	(47) (48) (49) (50)	((47)/(46))-1 (39) (42)
Base Premium (25% CB)  Exposure	2019 2020 Change 2019 2020 Change 2019 2020	as of 10/16/2019 as of 10/16/2019	[	962,013,054 954,218,211 -0.81% 2,042,760,289,098 2,124,470,718,900 4.00% 0.4709 0.4492	5,822,041 5,750,146 -1.23% 22,504,088,002 23,404,265,783 4.00% 0.2587 0.2457	75,858,661 75,517,941 -0.45% 106,269,237,920 110,519,996,401 4.00% 0.7138 0.6833	45,338,284 41,318,568 -8.87% 27,970,851,774 28,670,122,864 2.50% 1.6209 1.4412	103,810,482 115,915,594 11.66% 161,714,438,195 163,331,582,349 1.00% 0.6419 0.7097	1,192,842,523 1,192,720,460 -0.011% 2,361,218,904,989 2,450,396,686,297 3.78% 0.5052 0.4867	(47) (48) (49) (50) (51) (52) (53)	((47)/(46))-1 (39) (42) ((50)/(49))-1 1000*(46)/(49) 1000*(47)/(50)
Base Premium (25% CB)  Exposure	2019 2020 Change 2019 2020 Change	as of 10/16/2019 as of 10/16/2019	[	962,013,054 954,218,211 -0.81% 2,042,760,289,098 2,124,470,718,900 4.00% 0.4709	5,822,041 5,750,146 -1.23% 22,504,088,002 23,404,265,783 4.00% 0.2587	75,858,661 75,517,941 7-0,45% 106,269,237,920 110,519,996,401 4.00% 0.7138	45,338,284 41,318,568 -8.87% 27,970,851,774 28,670,122,864 2.50% 1.6209	103,810,482 115,915,594 11.66% 161,714,438,195 163,331,582,349 1.00% 0.6419	1,192,842,523 1,192,720,460 -0.01% 2,361,218,904,989 2,450,396,686,297 3,78% 0.5052 0.4867 -3,65%	(47) (48) (49) (50) (51) (52)	((47)/(46))-1 (39) (42) ((50)/(49))-1 1000*(46)/(49) 1000*(47)/(50) ((53)/(52))-1
Base Premium (25% CB)  Exposure  Rate (at 25% CB)	2019 2020 Change 2019 2020 Change 2019 2020 Change	as of 10/16/2019 as of 10/16/2019	[	962,013,054 954,218,211 -0.81% 2,042,760,289,098 2,124,470,718,900 4.00% 0,4709 0,4492 -4.63%	5,822,041 5,750,146 -1.23% 22,504,088,002 23,404,265,783 4.00% 0.2587 0.2457 -5.03%	75,858,661 75,517,941 -0.45% 106,269,237,920 110,519,996,401 4.00% 0.7138 0.6833 -4.28%	45,338,284 41,318,568 -8.87% 27,970,851,774 28,670,122,864 2.50% 1.6209 1.4412 -11.09%	103,810,482 115,915,594 11.66% 161,714,438,195 163,331,582,349 1.00% 0.6419 0.7097 10.56%	1,192,842,523 1,192,720,460 -0.01% 2,361,218,904,989 2,450,396,686,297 3,78% 0.5052 0.4867 -3,65%	(47) (48) (49) (50) (51) (52) (53) (54)	((47)/(46))-1 (39) (42) ((50)/(49))-1 1000*(46)/(49) 1000*(47)/(50) ((53)/(52))-1
Base Premium (25% CB)  Exposure  Rate (at 25% CB)  Rate at 25% CB  Overall Rate Change	2019 2020 Change 2019 2020 Change 2019 2020 Change 2020	as of 10/16/2019 as of 10/16/2019 as of 10/16/2019		962,013,054 954,218,211 -0.81% 2,042,760,289,098 2,124,470,718,900 4.00% 0.4709 0.4492 -4.63% 0.4492	5,822,041 5,750,146 -1.23% 22,504,088,002 23,404,265,783 4.00% 0.2587 0.2457 -5.03% 0.2457	75,858,661 75,517,941 -0.45% 106,269,237,920 110,519,996,401 4.00% 0.7138 0.6833 -4.28% 0.6833	45,338,284 41,318,568 -8.87% 27,970,851,774 28,670,122,864 2.50% 1.6209 1.4412 -11.09%	103,810,482 115,915,594 11.66% 161,714,438,195 163,331,582,349 1.00% 0.6419 0.7097 10.56% 0.7097	1,192,842,523 1,192,720,460 -0.011% 2,361,218,904,989 2,450,396,686,297 3.78% 0.5052 0.4867 -3.65%	(47) (48) (49) (50) (51) (52) (53) (54) (54.01)	((47)/(46))-1 (39) (42) ((50)/(49))-1 1000*(46)/(49) 1000*(47)/(50) ((53)/(52))-1
Base Premium (25% CB)  Exposure  Rate (at 25% CB)	2019 2020 Change 2019 2020 Change 2019 2020 Change 2020	as of 10/16/2019 as of 10/16/2019 as of 10/16/2019		962,013,054 954,218,211 -0.81% 2,042,760,289,098 2,124,470,718,900 4.00% 0.4709 0.4492 -4.63% 0.4492	5,822,041 5,750,146 -1.23% 22,504,088,002 23,404,265,783 4.00% 0.2587 0.2457 -5.03% 0.2457	75,858,661 75,517,941 -0.45% 106,269,237,920 110,519,996,401 4.00% 0.7138 0.6833 -4.28% 0.6833	45,338,284 41,318,568 -8.87% 27,970,851,774 28,670,122,864 2.50% 1.6209 1.4412 -11.09%	103,810,482 115,915,594 11.66% 161,714,438,195 163,331,582,349 1.00% 0.6419 0.7097 10.56% 0.7097	1,192,842,523 1,192,720,460 -0.011% 2,361,218,904,989 2,450,396,686,297 3.78% 0.5052 0.4867 -3.65%	(47) (48) (49) (50) (51) (52) (53) (54) (54.01)	((47)/(46))-1 (39) (42) ((50)/(49))-1 1000*(46)/(49) 1000*(47)/(50) ((53)/(52))-1
Base Premium (25% CB)  Exposure  Rate (at 25% CB)  Rate at 25% CB  Overall Rate Change	2019 2020 Change 2019 2020 Change 2019 2020 Change 2020 Coverage Lev 2019 2020	as of 10/16/2019  as of 10/16/2019  as of 10/16/2019		962,013,054 954,218,211 -0.81% 2,042,760,289,098 2,124,470,718,900 4.00% 0.4709 0.4492 -4.63% 0.4492 -4.63%	5,822,041 5,750,146 -1.23% 22,504,088,002 23,404,265,783 4.00% 0.2587 0.2457 -5.03% 0.2457	75,858,661 75,517,941 -0.45% 106,269,237,920 110,519,996,401 4.00% 0.7138 0.6833 -4.28% 0.6833	45,338,284 41,318,568 -8.87% 27,970,851,774 28,670,122,864 2.50% 1.6209 1.4412 -11.09% 1.4412 -11.09%	103,810,482 115,915,594 11.66% 161,714,438,195 163,331,582,349 1.00% 0.6419 0.7097 10.56% 0.7097	1,192,842,523 1,192,720,460 -0.01% 2,361,218,904,989 2,450,396,686,297 3.78% 0.5052 0.4867 -3.65% 0.4867	(47) (48) (49) (50) (51) (52) (53) (54) (54.01) (55)	((47)/(46))-1 (39) (42) ((50)/(49))-1 1000*(46)/(49) 1000*(47)/(50) ((53)/(52))-1 ) (('1000*(45b)/(50))/(52))-1

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Updated July 6, 2020 Summary of Results

Bernelium	Retention	Limit	Residential	Tenants	Condos	Mobile Home	Commercial	Total	
Premium Section I: Basic Cov. Section I: Extended Cov.			954,218,211	5,750,146	75,517,941	41,318,568	115,915,594	1,192,720,460	(69) (45b) (70) There is no Extended Coverage Charge for Citizens
Section I: Subtotal	7,740,000,000	17,000,000,000	954,218,211	5,750,146	75,517,941	41,318,568	115,915,594	1,192,720,460	(71) (70)+(69)
Section II	0	0	0	0	0	0	0		(72) There is no Section II exposure
Total	7,740,000,000	17,000,000,000	954,218,211	5,750,146	75,517,941	41,318,568	115,915,594	1,192,720,460	(73) (71)+(72)
Coverage %			86.202%	83.808%	86.134%	89.984%	84.692%	86.193%	(74) (1)
Projected Payout Multiple		14.2531							(73Limit)/(73total prem)
Retention Multiples	100%	5.5934	1,106,956,000	6,861,094	87,674,950	45,917,683	136,867,229	1,383,778,798	(75) (73ret)/(73 tot prem)*(74tot)/100%)
	90%	6.2149	996,260,400	6,174,985	78,907,455	41,325,915	123,180,506	1,245,400,919	(76) (73ret)/(73 tot prem)*(74tot)/90%)
	75%	7.4578	830,217,000	5,145,821	65,756,212	34,438,262	102,650,422	1,037,834,099	(77) (73ret)/(73 tot prem)*(74tot)/75%)
	45%	12.4297	498,130,200	3,087,492	39,453,727	20,662,957	61,590,253	622,700,459	(78) (73ret)/(73 tot prem)*(74tot)/45%)
Sect. I Projected Exposure		2020	2,124,470,718,900	23,404,265,783	110,519,996,401	28,670,122,864	163,331,582,349	2,450,396,686,297	(79) (49)
Sect. I Avg. Basic Rates	100%		0.5211	0.2932	0.7933	1.6016	0.8380	0.5647	(80) 1000*(69)/(79)*((100%/(74))
	90%		0.4689	0.2638	0.7140	1.4414	0.7542	0.5082	(81) 1000*(69)/(79)*((90%/(74))
	75%		0.3908	0.2199	0.5950	1.2012	0.6285		(82) 1000*(69)/(79)*((75%/(74))
	45%		0.2345	0.1319	0.3570	0.7207	0.3771		(83) 1000*(69)/(79)*((45%/(74))
	Average Coverage		0.4492	0.2457	0.6833	1.4412	0.7097	0.4867	(84) 1000*(69)/(79) or (52)
Overall Section I Rate Change									
	Total Premium	2019	962,013,054	5,822,041	75,858,661	45,338,284	103,810,482	1,192,842,523	` , ` ,
		2020	954,218,211	5,750,146	75,517,941	41,318,568	115,915,594	1,192,720,460	
	Total Exposure	2019	2,042,760,289,098	22,504,088,002	106,269,237,920	27,970,851,774	161,714,438,195	2,361,218,904,989	
		2020	2,124,470,718,900	23,404,265,783	110,519,996,401	28,670,122,864	163,331,582,349	2,450,396,686,297	
	Average Rate (000s)	2019	0.4709	0.2587	0.7138	1.6209	0.6419		(89) 1000*(85)/(87)
	Overell Data Change	2020	0.4492	0.2457	0.6833	1.4412	0.7097		(90) 1000*(86)/(88)
'	Overall Rate Change		-4.63%	-5.03%	-4.28%	-11.09%	10.56%	-3.05%	(91) (90)/(89) - 1
Rates at 90% (Unadjusted	for Coverage Level)	2019	0.5237	0.2871	0.7715	1.6278	0.6709	0.5558	(92) (56)
• •	,	2020	0.4689	0.2638	0.7140	1.4414	0.7542		(93) (57)
Rate Change Unadjuste	d for Coverage Level		-10.46%	-8.11%	-7.46%	-11.45%	12.42%	-8.55%	(94) (57)/(56)-1

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Updated July 6, 2020 Section I: Historical Exposures and Premiums

	Residential	Tenants*	Condo-Owners	Mobile Home	Commercial	Total
Section I Expo	osures (as of 10/29/2018)					
2009	\$1,815,472,177,828	\$17,345,852,866	\$84,198,948,574	\$36,761,961,986	\$212,460,681,802	\$2,166,239,623,056
2010	\$1,817,662,481,519	\$17,569,203,805	\$83,886,023,190	\$35,542,039,480	\$209,853,976,263	\$2,164,513,724,257
2011 2012	\$1,777,677,567,002 \$1,742,101,137,356	\$18,329,345,968 \$19,311,739,294	\$84,448,798,032 \$84,152,063,133	\$33,837,366,975 \$31,569,203,791	\$203,072,396,562 \$199,076,994,510	\$2,117,365,474,539 \$2,076,211,138,084
2012	\$1,742,101,137,356	\$19,311,739,294	\$84,939,169,492	\$28.539.351.997	\$199,076,994,510	\$2,076,211,138,084
2013	\$1,719,567,803,513	\$20,716,140,015	\$86.702.102.354	\$27,474,291,575	\$188,824,739,041	\$2,024,143,403,633
2014	\$1,719,567,603,513	\$22,229,245,146	\$88 453 721 949	\$27,474,291,373	\$100,024,739,041	\$2,044,796,161,629
2015	\$1,822,895,641,425	\$25,213,767,240	\$92,927,887,318	\$26,037,614,203	\$159,080,068,043	\$2,126,154,978,229
2017	\$1,874,627,619,186	\$27,516,337,109	\$96,650,691,337	\$26,401,323,673	\$152,340,409,087	\$2,177,536,380,392
2018	\$1 957 498 680 128	\$28 247 752 174	\$102 124 442 927	\$27 152 009 690	\$156 511 354 540	\$2 271 534 239 459
2019	\$2,042,760,289,098	\$22,504,088,002	\$106,269,237,920	\$27,970,851,774	\$161,714,438,195	\$2,361,218,904,989
2020	(Proj.) \$2,124,470,718,900	\$23,404,265,783	\$110,519,996,401	\$28,670,122,864	\$163,331,582,349	\$2,450,396,686,297
	niums (as of 10/29/2018)					
2009	\$821.700.186	\$6.499.295	\$52.307.156	\$39.714.714	\$155.523.244	\$1.075.744.595
2009	\$821,700,186 \$859.864.344	\$6,499,295	\$52,307,156 \$51.872.015	\$39,714,714	\$155,523,244 \$153,444,469	\$1,075,744,595
2011	\$880,754,111	\$6,505,495	\$53,683,414	\$45,968,427	\$150.384.875	\$1,137,296,322
2012	\$981,901,520	\$8,032,833	\$60,505,008	\$43,863,584	\$167,063,181	\$1,261,366,127
2013	\$977,906,580	\$9,143,951	\$64,528,991	\$37,315,378	\$175,438,169	\$1,264,333,070
2014	\$981,990,781	\$10,188,137	\$66,375,860	\$35,208,908	\$173,880,302	\$1,267,643,988
2015 2016	\$975,194,503 \$909.067.322	\$9,276,293 \$8,944,937	\$67,838,597 \$68,539,686	\$34,674,641 \$39,405,140	\$128,846,280 \$110,550,511	\$1,215,830,315 \$1,136,507,596
2016	\$909,067,322 \$912.346.334	\$8,944,937	\$68,539,686	\$39,405,140	\$110,550,511	\$1,136,507,596
2018	\$888.739.645	\$8.508.465	\$73,115,114	\$44.576.276	\$87.981.236	\$1,102,920,735
2019	\$962,013,054	\$5,822,041	\$75,858,661	\$45,338,284	\$103,810,482	\$1,192,842,523
2020	(Proj.) \$954,218,211	\$5,750,146	\$75,517,941	\$41,318,568	\$115,915,594	\$1,192,720,460
2021						
Section I Aver	rage Rates (per \$1000)					
2009	0.4526	0.3747	0.6212	1.0803	0.7320	0.4966
2010	0.4731	0.3701	0.6184	1.2250	0.7312	0.5152
2011	0.4955	0.3549	0.6357	1.3585	0.7405	0.5371
2012	0.5636	0.4160	0.7190	1.3894	0.8392	0.6075
2013 2014	0.5778 0.5711	0.4414 0.4583	0.7597 0.7656	1.3075 1.2815	0.8889 0.9209	0.6246 0.6199
2014	0.5557	0.4121	0.7669	1.3400	0.7568	0.5896
2016	0.4987	0.3548	0.7376	1.5134	0.6949	0.5345
2017	0.4867	0.3352	0.7300	1.6499	0.6163	0.5187
2018	0.4540	0.3012	0.7159	1.6417	0.5621	0.4855
2019	0.4709	0.2587	0.7138	1.6209	0.6419	0.5052
2020	(Proj.) 0.4492	0.2457	0.6833	1.4412	0.7097	0.4867
Percent Chang	ge in Rates					
2009-10	4.52%	-1.22%	-0.46%	13.39%	-0.11%	3.75%
2010-11	4.73%	-4.10%	2.80%	10.90%	1.28%	4.25%
2011-12	13.76%	17.20%	13.10%	2.28%	13.32%	13.11%
2012-13	2.51%	6.12%	5.66%	-5.90%	5.93%	2.81%
2013-14	-1.16%	3.84%	0.77%	-1.99%	3.59%	-0.75%
2014-15 2015-16	-2.70% -10.25%	-10.08% -13.92%	0.18% -3.83%	4.56% 12.94%	-17.81% -8.18%	-4.89% -9.34%
2015-16	-10.25% -2.41%	-13.92% -5.52%	-3.83%	9.02%	-8.18% -11.32%	-9.34% -2.96%
2017-18	-6.71%	-10.13%	-1.02%	-0.49%	-8 79%	-6.40%
2018-19	3.73%	-14.11%	-0.29%	-1.27%	14.20%	4.05%
2019-20	-4.63%	-5.03%	-4.28%	-11.09%	10.56%	-3.65%
Historical Rate	es as Percent of 2020 Rates					
2009	101%	153%	91%	75%	103%	102%
2010	105%	151%	90%	85%	103%	106%
2011	110%	144%	93%	94%	104%	110%
2012	125%	169%	105%	96%	118%	125%
2013 2014	129% 127%	180% 187%	111% 112%	91% 89%	125% 130%	128% 127%
2014	127% 124%	187% 168%	112% 112%	93%	130% 107%	121%
2015	111%	144%	108%	105%	98%	110%
2017	108%	136%	107%	114%	87%	107%
2018	101%	123%	105%	114%	79%	100%
2019 2020	105% 100%	105% 100%	104% 100%	112% 100%	90% 100%	104% 100%
		100%	100%	100%	100%	100%
	e on Line (Mandatory Coverage only) Limit(\$B)					
2009	17.175					6.3%
2010 2011	17.000					
2011	17.000 17.000					6.7% 7.4%
2012	17.000					7.4%
2013	17.000					7.5%
2015	17.000					7.2%
2016	17.000					6.7%
2017	17.000					6.6%
2018	17.000					6.5%
2019 2020	17.000 17.000					7.0% 7.0%
2020	17.000					7.076

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\*Includes Inland Marine/Stand Alone & Other Contents Type Policies

# **EXHIBIT**

III

#### Trended Control Totals By Type

Туре	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
Commercial	163,626	2.4%	\$163,331,582,349	\$998,201	6.7%
Residential	4,572,643	67.1%	\$2,124,470,718,900	\$464,605	86.7%
Mobile Home	328,724	4.8%	\$28,670,122,864	\$87,216	1.2%
Tenants	869,128	12.7%	\$23,404,265,783	\$26,928	1.0%
Condominium Unit Owners	882,994	13.0%	\$110,519,996,401	\$125,165	4.5%
Total	6,817,115	100.0%	\$2,450,396,686,297	\$359,448	100.0%

#### Trended Commercial Control Totals By Construction

Construction	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
Frame	32,070	19.6%	\$21,705,564,584	\$676,818	13.3%
Masonry	98,638	60.3%	\$78,685,319,981	\$797,718	48.2%
Masonry with Reinforced Concrete Roof	28,850	17.6%	\$19,581,112,943	\$678,721	12.0%
Superior	517	0.3%	\$6,032,938,573	\$11,669,127	3.7%
Superior with Reinforced Concrete Roof	1,643	1.0%	\$36,637,720,456	\$22,299,282	22.4%
Masonry Veneer	0	0.0%	\$0	\$0	0.0%
Unknown/Non Mobile Home Default	1,908	1.2%	\$688,925,812	\$361,072	0.4%
Total	163,626	100.0%	\$163,331,582,349	\$998,201	100.0%

#### Trended Residential Control Totals By Construction

Construction	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
Frame	1,013,768	22.2%	\$438,298,280,054	\$432,346	20.6%
Masonry	3,239,828	70.9%	\$1,521,745,490,146	\$469,699	71.6%
Masonry Veneer	293,029	6.4%	\$157,679,873,440	\$538,103	7.4%
Unknown/Non Mobile Home Default	26,018	0.6%	\$6,747,075,260	\$259,323	0.3%
Total	4,572,643	100.0%	\$2,124,470,718,900	\$464,605	100.0%

#### Trended Mobile Home Control Totals By Construction

Construction	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
Mobile Home - Fully Tied Down, Mfg before 7/13/94	166,949	50.8%	\$10,660,631,461	\$63,856	37.2%
Mobile Home - Fully Tied Down, Mfg on or after 7/13/94	154,236	46.9%	\$17,293,372,301	\$112,123	60.3%
Mobile Home - Other Than Fully Tied Down or Unknown	7,539	2.3%	\$716,119,102	\$94,989	2.5%
Total	328,724	100.0%	\$28,670,122,864	\$87,216	100.0%

#### Trended Tenants Control Totals By Construction

Construction	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
Frame	176,402	20.3%	\$4,033,552,925	\$22,866	17.2%
Masonry	193,566	22.3%	\$5,941,223,831	\$30,694	25.4%
Masonry with Reinforced Concrete Roof	679	0.1%	\$66,985,929	\$98,654	0.3%
Superior	6,694	0.8%	\$280,849,707	\$41,955	1.2%
Superior with Reinforced Concrete Roof	662	0.1%	\$108,217,855	\$163,471	0.5%
Masonry Veneer	17,002	2.0%	\$539,310,393	\$31,720	2.3%
Unknown/Non Mobile Home Default	474,123	54.6%	\$12,434,125,143	\$26,226	53.1%
Total	869,128	100.0%	\$23,404,265,783	\$26,928	100.0%

#### Trended Condominium Unit Owners Control Totals By Construction

Construction	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
Frame	92,773	10.5%	\$9,948,409,785	\$107,234	9.0%
Masonry	491,374	55.6%	\$51,308,747,271	\$104,419	46.4%
Masonry with Reinforced Concrete Roof	80,009	9.1%	\$10,243,889,687	\$128,034	9.3%
Superior	69,668	7.9%	\$11,265,082,838	\$161,697	10.2%
Superior with Reinforced Concrete Roof	116,464	13.2%	\$24,235,115,677	\$208,091	21.9%
Masonry Veneer	7,888	0.9%	\$916,193,987	\$116,150	0.8%
Unknown/Non Mobile Home Default	24,818	2.8%	\$2,602,557,156	\$104,866	2.4%
Total	882,994	100.0%	\$110,519,996,401	\$125,165	100.0%

### Trended Commercial Control Totals By Deductible Code

Deductible Code	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
CA (\$0 to \$2,500)	191	0.1%	\$296,734,258	\$1,553,583	0.2%
CB (\$2,501 to \$7,500)	156	0.1%	\$30,236,504	\$193,824	0.0%
CC (\$7,501 to \$15,000)	110	0.1%	\$59,444,308	\$540,403	0.0%
CD (\$15,001 to \$50,000)	193	0.1%	\$189,995,863	\$984,435	0.1%
C1 (1%)	10,719	6.6%	\$11,060,642,209	\$1,031,873	6.8%
C2 (2%)	55,836	34.1%	\$69,686,213,765	\$1,248,052	42.7%
C3 (3%)	49,605	30.3%	\$56,703,942,461	\$1,143,109	34.7%
C4 (4%)	22	0.0%	\$284,346,160	\$12,924,825	0.2%
C5 (5%)	46,613	28.5%	\$24,722,057,444	\$530,368	15.1%
C6 (6%)	6	0.0%	\$62,196,028	\$10,366,005	0.0%
C7 (7%)	0	0.0%	\$0	\$0	0.0%
C8 (8%)	0	0.0%	\$0	\$0	0.0%
C9 (9%)	0	0.0%	\$0	\$0	0.0%
C0 (10%)	175	0.1%	\$235,773,349	\$1,347,276	0.1%
Total	163,626	100.0%	\$163,331,582,349	\$998,201	100.0%

### Trended Residential Control Totals By Deductible Code

	Deductible Code	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
RM	(\$0)	14,549	0.3%	\$530,288,017	\$36,448	0.0%
RA	(\$1 to \$500)	190,276	4.2%	\$70,843,636,373	\$372,320	3.3%
RB	(\$501 to \$1,500)	67,109	1.5%	\$38,136,721,642	\$568,280	1.8%
RC	(\$1,501 to \$2,500)	5,723	0.1%	\$3,700,395,887	\$646,583	0.2%
RD	(Greater Than \$2,500)	4,064	0.1%	\$3,622,660,199	\$891,403	0.2%
R1	(1%)	34,358	0.8%	\$20,683,944,662	\$602,012	1.0%
R2	(2%)	3,886,735	85.0%	\$1,798,742,048,632	\$462,790	84.7%
R3	(3%)	33,042	0.7%	\$12,793,451,226	\$387,188	0.6%
R4	(4%)	3,137	0.1%	\$2,160,732,470	\$688,789	0.1%
R5	(5%)	297,509	6.5%	\$146,788,940,455	\$493,393	6.9%
R6	(6%)	2	0.0%	\$6,399,773	\$3,199,887	0.0%
R7	(7%)	5	0.0%	\$14,305,932	\$2,861,186	0.0%
R8	(8%)	49	0.0%	\$39,285,785	\$801,751	0.0%
R9	(9%)	0	0.0%	\$0	\$0	0.0%
R0	(10% to 14%)	34,860	0.8%	\$23,630,423,137	\$677,866	1.1%
RZ	(15% or Greater)	1,225	0.0%	\$2,777,484,710	\$2,267,334	0.1%
Tota	al	4,572,643	100.0%	\$2,124,470,718,900	\$464,605	100.0%

### Trended Mobile Home Control Totals By Deductible Code

	Deductible Code	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
				•	•	•
MM	(\$0)	171	0.1%	\$1,319,260	\$7,715	0.0%
MA	(\$1 to \$250)	1,223	0.4%	\$14,808,075	\$12,108	0.1%
MB	(\$251 to \$500)	121,350	36.9%	\$8,620,873,703	\$71,041	30.1%
МС	(Greater Than \$500)	8,065	2.5%	\$843,952,224	\$104,644	2.9%
M1	(1%)	139	0.0%	\$17,518,910	\$126,035	0.1%
M2	(2%)	115,963	35.3%	\$13,292,729,415	\$114,629	46.4%
М3	(3%)	210	0.1%	\$17,280,612	\$82,289	0.1%
M4	(4%)	15	0.0%	\$840,958	\$56,064	0.0%
M5	(5%)	70,819	21.5%	\$5,245,937,567	\$74,075	18.3%
M6	(6%)	21	0.0%	\$1,348,948	\$64,236	0.0%
M7	(7%)	0	0.0%	\$0	\$0	0.0%
M8	(8%)	0	0.0%	\$0	\$0	0.0%
M9	(9%)	3	0.0%	\$413,895	\$137,965	0.0%
MO	(10% or Greater)	10,745	3.3%	\$613,099,297	\$57,059	2.1%
Tota	al	328,724	100.0%	\$28,670,122,864	\$87,216	100.0%

### Trended Tenants Control Totals By Deductible Code

	Deductible Code	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
RM	(\$0)	3,445	0.4%	\$46,846,833	\$13,599	0.2%
RA	(\$1 to \$500)	462,770	53.2%	\$12,726,382,443	\$27,500	54.4%
RB	(\$501 to \$1,500)	306,688	35.3%	\$7,000,523,693	\$22,826	29.9%
RC	(\$1,501 to \$2,500)	1,315	0.2%	\$57,110,836	\$43,430	0.2%
RD	(Greater Than \$2,500)	2,150	0.2%	\$90,979,674	\$42,316	0.4%
R1	(1%)	50	0.0%	\$4,203,880	\$84,078	0.0%
R2	(2%)	81,795	9.4%	\$3,109,925,014	\$38,021	13.3%
R3	(3%)	4	0.0%	\$852,860	\$213,215	0.0%
R4	(4%)	0	0.0%	\$0	\$0	0.0%
R5	(5%)	6,627	0.8%	\$259,610,078	\$39,175	1.1%
R6	(6%)	0	0.0%	\$0	\$0	0.0%
R7	(7%)	0	0.0%	\$0	\$0	0.0%
R8	(8%)	0	0.0%	\$0	\$0	0.0%
R9	(9%)	0	0.0%	\$0	\$0	0.0%
R0	(10% to 14%)	4,112	0.5%	\$89,240,104	\$21,702	0.4%
RZ	(15% or Greater)	172	0.0%	\$18,590,368	\$108,084	0.1%
Tota	al	869,128	100.0%	\$23,404,265,783	\$26,928	100.0%

Trended Condominium Unit Owners Control Totals By Deductible Code

Deductible Code	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
RM (\$0)	2,485	0.3%	\$79,486,316	\$31,986	0.1%
RA (\$1 to \$500)	232,449	26.3%	\$18,250,926,873	\$78,516	16.5%
RB (\$501 to \$1,500)	109,806	12.4%	\$13,667,196,653	\$124,467	12.4%
RC (\$1,501 to \$2,500)	18,120	2.1%	\$2,778,202,538	\$153,322	2.5%
RD (Greater Than \$2,500)	3,499	0.4%	\$939,249,486	\$268,434	0.8%
R1 (1%)	859	0.1%	\$172,787,818	\$201,150	0.2%
R2 (2%)	444,728	50.4%	\$62,794,166,044	\$141,197	56.8%
R3 (3%)	599	0.1%	\$128,086,837	\$213,834	0.1%
R4 (4%)	180	0.0%	\$31,849,280	\$176,940	0.0%
R5 (5%)	56,137	6.4%	\$9,352,110,171	\$166,594	8.5%
R6 (6%)	0	0.0%	\$0	\$0	0.0%
R7 (7%)	0	0.0%	\$0	\$0	0.0%
R8 (8%)	25	0.0%	\$6,792,845	\$271,714	0.0%
R9 (9%)	0	0.0%	\$0	\$0	0.0%
R0 (10% to 14%)	13,220	1.5%	\$1,766,891,976	\$133,653	1.6%
RZ (15% or Greater)	887	0.1%	\$552,249,564	\$622,604	0.5%
Total	882,994	100.0%	\$110,519,996,401	\$125,165	100.0%

#### Trended Exposures and Risks from Invalid ZIP Codes

		nvalid ZIP Code Data			a	
Туре	Units	Exposure	Average	Units	Exposure	Average
Commercial	2	\$9,799,566	\$4,899,783	163,624	163,321,782,783	\$998,153
Residential	33	\$14,525,206	\$440,158	4,572,610	2,124,456,193,694	\$464,605
Mobile Home	68	\$3,579,959	\$52,646	328,656	28,666,542,905	\$87,224
Tenants	27	\$534,534	\$19,798	869,101	23,403,731,249	\$26,929
Condo Owners	11	\$1,150,683	\$104,608	882,983	110,518,845,718	\$125,165
Total	141	\$29,589,948	\$209,858	6,816,974	\$2,450,367,096,349	\$359,451

		All Data	% from Invalid ZIP Codes		
Туре	Units	Exposure	Average	Units	Exposure
Commercial	163,626	\$163,331,582,349	\$998,201	0.00%	0.01%
Residential	4,572,643	\$2,124,470,718,900	\$464,605	0.00%	0.00%
Mobile Home	328,724	\$28,670,122,864	\$87,216	0.02%	0.01%
Tenants/Other	869,128	\$23,404,265,783	\$26,928	0.00%	0.00%
Condo Owners	882,994	\$110,519,996,401	\$125,165	0.00%	0.00%
Total	6,817,115	\$2,450,396,686,297	\$359,448	0.00%	0.00%

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Exposures, Unit Counts and Averages As of 10/16/19

Annual Change (%)\*\* Exposures (\$) Mobile Home Exposures Mobile Home Commercial Residential Stand Alone I.M. Total Commercia Residentia Stand Alone I.M Total 27,708,002,887 27,471,321,323 852,101,732,589 747,342,350,948 (0.9) (3.0) 1994 250 798 066 574 573 595 663 128 N/A 1994-1995 NA 12.9 N/A N/A 72,259,223,184 1995-1996 (0.3) 0.9 1996 72.045.415.920 655.747.424.327 26.641.265.399 N/A 754.434.105.646 1996-1997 (6.9) 1.5 3.6 N/A 0.8 (6.9) (0.2) 1997 67.060.941.081 665,706,907,693 27.603.802.377 N/A 760.371.651.151 1997-1998 2.1 N/A 62,406,306,25 770,488,483,765 1999 62.310.422.803 707.168.630.617 29.321.225.365 N/A 798.800.278.785 1999-2000 28.9 9.0 1.7 1.8 N/A 10.3 19.4 17.9 3.2 19.2 4.6 19.3 2000 80 327 371 492 771 151 251 493 29 805 027 583 N/A 881 283 650 568 2000-2001 N/A 2001 95,903,685,545 795,830,648,826 30,336,699,432 N/A 922,071,033,803 2001-2002 12.6 N/A 2002 113,055,152,173 948,240,567,004 34,158,045,008 4,649,506,167 1,100,103,270,352 2002-2003 8.5 8.3 (0.1)78.7 8.4 (1.7) 4.1 12.5 17.2 2003 122.711.546.221 027.400.432.961 34.109.501.584 8.307.577.221 192.529.057.987 2003-2004 10.7 1,155,969,925,095 1,354,455,492,240 1,320,642,494,807 1,526,885,819,687 2004-2005 2005-2006 120,567,809,498 35,014,550,966 125.518.806.067 36.309.216.467 10.602.304.913 19.4 2005 8.6 4.8 N/A 17.3 2006 136 340 614 829 1 617 264 717 950 38 069 099 793 N/A 791 674 432 572 2006-2007 37.0 11 2 (1.5) N/A 12 9 2,022,761,003,371 2,115,512,664,393 2007 186,827,864,101 .798.433.070.223 37.500.069.047 N/A 2007-2008 5.9 4.5 (0.4)N/A 4.6 197,900,227,178 1,880,244,332,666 37,368,104,549 2008-2009 N/A 2008 N/A 7.4 2.0 (1.6)2.4 (1.2) (3.3) 2009 212,460,681,802 1.917.016.979.268 36.761.961.986 N/A 2 166 239 623 056 2009-2010 0.1 N/A (0.1)209,853,976,263 203,072,396,562 1,919,117,708,514 1,880,455,711,002 35,542,039,480 33,837,366,975 N/A N/A 2,164,513,724,257 2,117,365,474,539 2010-2011 2011-2012 N/A N/A (2.0) (2.2) (6.7)2011 (2.0)(1.9)(1.9)2012 199.076.994.510 1.845.564.939.783 31.569.203.791 N/A 2.076.211.138.084 2012-2013 (0.9)(2.6)(9.6)N/A (2.5)2013 197 362 838 239 1.798.241.215.417 28.539.351.997 N/A 2.024.143.405.653 2013-2014 (4.3) 1.7 (3.7) N/A 1.0 N/A 1,828,499,151,013 27,474,291,575 N/A 2,044,798,181,629 2014-2015 2014 188,824,739,041 (9.8) 2.0 (5.8)0.8 2015 170.243.010.515 1.865.931.881.566 25.877.523.024 N/A 2 062 052 415 105 2015-2016 (6.6)4.0 0.6 N/A 3.1 2.4 2016 1,941,037,295,983 1,998,794,647,632 26,037,614,203 26,401,323,673 N/A N/A 2,126,154,978,229 2,177,536,380,392 2016-2017 2017-2018 (4.2) 3.0 4.5 N/A N/A 159 080 068 043 1.4 2.8 152,340,409,087 4.3 2018 156.511.354.540 2.087.870.875.229 27.152.009.690 N/A 2.271.534.239.459 2018-2019 3.3 4.0 3.0 N/A 3.9 Avg. 95-19 2019 161,714,438,195 2,171,533,615,020 27.970.851.774 N/A 2.361,218,904,989 4 0 5.3 0.2 N/A 5.1 Unit Counts Unit Counts Residentia Alone I.M. Total Tota 1994 667,009 4,523,478 630,092 5,820,579 1994-1995 NA (0.1) 1995 217.433 4.662.527 629.593 N/A 5.509.553 1995-1996 7.1 (1.6)(6.1)N/A (1.8)1996 232 810 4 589 144 590 981 N/A 5 412 935 1996-1997 (14.4) 29 N/A 20 1997 199,267 4,722,716 601,167 N/A 5,523,150 1997-1998 (13.8) (0.6) (0.5) N/A (1.0) 4,695,966 5,466,278 (23.1)1998 171,866 598,446 N/A 1998-1999 (1.4)1.5 N/A (1.8)(8.9) 39.5 (0.2) 1999 132,195 4.627.958 607.162 N/A 5.367.315 1999-2000 N/A 4,820,714 4,877,216 606,046 593,148 N/A N/A 5,547,182 5,638,325 2000 120,422 2000-2001 N/A 2001 167,961 2001-2002 13.2 0.3 (0.3)N/A 3.7 2002 190,197 4.889.766 591.094 174,492 5.845.549 2002-2003 (5.4) (15.1) (0.1)(2.3)99.5 2.5 2003 179.954 4 885 715 577.547 348,037 5.991.253 2003-2004 (2.5) (5.9) 0.8 6,041,795 4,998,614 (4.6) (2.7) 36.7 4.6 562,979 327,482 2004-2005 2004 152,720 (3.3) 2.9 3.6 2.4 9.8 0.5 (0.6) 2005 145,657 5.229.215 544.433 336.976 6.256.281 2005-2006 N/A 2006 141,782 193,852 5,742,372 5,768,968 522,009 490,926 N/A N/A 6,406,163 6,453,746 2006-2007 2007-2008 N/A N/A (6.0) (8.0)(3.6)(1.9)2008 186.851 5.736.170 481.647 N/A 6.404.668 2008-2009 4.8 0.4 (2.7)N/A 0.3 6,422,109 6,415,149 2009 195 884 5 757 481 468,744 N/A 2009-2010 (0.8) 0.2 (3.4) N/A (0.1)5,767,950 N/A 2010-2011 N/A 2010 194,310 452,889 (0.6) 0.3 (4.1) (7.3) (0.0)2011 193,114 5,784,513 434,355 N/A 6,411,982 2011-2012 (1.5) (0.1)N/A (0.7) 0.3 1.8 1.7 (6.2) (1.0) (7.9) 2012 190.172 5,776,731 5,794,914 402,738 377,877 N/A 6.369.641 2012-2013 (1.4) (5.1) N/A (0.1) 2013 N/A 6,360,295 2013-2014 N/A 2014 178.004 5.896.356 374.055 N/A 6.448.415 2014-2015 (7.2)N/A 0.9 (6.5) 36.3 (1.8) (1.1) 2015 165 116 5 998 865 344 350 N/A 6 508 331 2015-2016 29 N/A 24 2016 154,410 6,170,343 338,035 N/A 6,662,788 2016-2017 N/A 3.2 210,477 2017 6,331,983 334,411 N/A 6,876,871 2017-2018 (30.4)0.7 (0.5)N/A (0.3)(2.4) 2018 146.571 6.374.793 332,699 N/A 6.854.063 2018-2019 11.6 (1.2) N/A (2.0) Avg. 95-19 6,222,193 6,714,543 Averages (\$) Residential \* M Lanol A Total sidenti Alone I M Total Commercia 1994-1995 1994 376,004 126,804 43,975 146,395 N/A N/A NA 9.5 (0.8)N/A 1995 332.329 138.897 43,633 N/A 135,645 1995-1996 (6.9)2.9 3.3 N/A 2.8 1996 1997 45,080 45,917 N/A N/A 1996-1997 1997-1998 N/A N/A 309,460 142,891 139,376 (1.4) (1.2) 336,538 140,958 137,670 7.9 3.7 1998 363.110 144,716 47.624 N/A 140.953 1998-1999 29.8 5.6 1.4 1.8 N/A 5.6 41.5 (14.4) N/A N/A 1999 471.352 152 804 48,292 N/A 148 827 1999-2000 4.7 6.7 667,049 159,966 49,179 N/A 158,871 2000-2001 4.0 2000 2.0 2.9 15.1 4.1 14.7 15.8 2001 570.988 163,173 51.145 N/A 163.536 2001-2002 18.8 13.0 N/A 2002 594,411 681,905 57,788 59,059 26,646 23,870 188,195 199,045 2002-2003 2003-2004 8.4 10.0 5.8 9.8 193,924 2.2 (10.4) 210,287 16.3 2004 789,470 231.258 62.195 27.758 218.584 2004-2005 9.2 12.0 7.2 13.3 11.7 2005 861.742 259.017 66 692 31 463 244 056 2005-2006 11.6 8.7 94 N/A 14 6 N/A 2006 961,621 281,637 72,928 N/A 279,680 2006-2007 10.7 12.1 0.2 9.9 2007 963,765 311,743 76,386 N/A 313,424 2007-2008 5.1 1.6 1.6 N/A 5.4 2008 1.059.134 327,787 77.584 N/A 330,308 2008-2009 2.4 N/A 2.1 N/A N/A 78,427 (0.4) (0.1) 0.0 2010 1.079.996 332,721 78,478 337.407 2010-2011 (2.6)(2.3)(0.7)N/A (2.1)2011 1 051 567 325 085 77 903 N/A 330 220 2011-2012 (0.5) (17 0.6 N/A (1.3) 2012 1.046.826 319,483 78,386 N/A 325,954 2012-2013 0.5 (3.6) N/A 310,314 75,526 2013-2014 2013 1,052,579 N/A 318,247 0.8 (0.1)(2.7)N/A (0.4)2014 1.060.789 310.107 73,450 N/A 317.101 2014-2015 (2.8) (0.1) 0.3 N/A (0.1) 311,047 314,575 N/A N/A 1,031,051 75,149 2015-2016 N/A 2016 1,030,245 77,026 319,109 2016-2017 (29.7)0.3 2.5 N/A (0.8)2017 723.786 315,666 78,949 N/A 316,646 2017-2018 47.5 3.8 3.4 N/A 4.7 2018 1.067.819 327.520 81,611 N/A 331,414 2018-2019 (7.4)6.6 43 N/A 6.1

351,657

N/A

Avg. 95-19

4.0

2.9

348,998

85,089

2019

988,317

N/A

4.2

<sup>\*</sup> Includes Residential, Tenants, and Condominium Unit Owner policies.

<sup>\*\*2002</sup> was the first year Stand Alone Inland Marine data was reported. Stand Alone Inland Marine was defined as inland marine policies not associated with the policy that covers the main building/structure In 2003, it was referred to as "Stand Alone/Contents Type Policies" and also included scheduled personal property written under attachments, endorsements, and riders.

In 2004, it was referred to as "Other Contents Type Policies" and a In 2004, it was referred to as "Other Contents Policies or Endorsements."

In 2004, it was removed.

#### Commercial Totals By Mitigation Features

		Percent of	Primary	Average	Percent of
Mitigation Feature	Units	Units	Exposure	Exposure	Exposure
YEAR BUILT					
Unknown	1,239	0.8%	\$226,749,564	\$183,010	0.1%
1994 or Earlier	118,066	72.2%	\$91,952,543,603	\$778,823	56.3%
1995-2001	13,753	8.4%	\$17,261,955,442	\$1,255,141	10.6%
2002-2011	24,233	14.8%	\$40,408,845,223	\$1,667,513	24.7%
2012 or Later	6,335	3.9%	\$13,481,488,517	\$2,128,096	8.3%
TOTAL	163,626	100.0%	\$163,331,582,349	\$998,201	100.0%
STRUCTURE OPENING PROTECTION					
No Credit is Given to Policyholder	150,097	91.7%	\$126,214,179,568	\$840,884	77.3%
Credit is Given to Policyholder	13,529	8.3%	\$37,117,402,781	\$2,743,544	22.7%
TOTAL	163,626	100.0%	\$163,331,582,349	\$998,201	100.0%
ROOF SHAPE					
Hip, Mansard, or Pyramid	50,606	30.9%	\$49,381,207,897	\$975,797	30.2%
Gable, Other, or Unknown	113,020	69.1%	\$113,950,374,452	\$1,008,232	69.8%
TOTAL	163,626	100.0%	\$163,331,582,349	\$998,201	100.0%

#### Residential Totals By Mitigation Features

Mitigation Feature	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
YEAR BUILT					
Unknown	7,301	0.2%	\$1,885,001,624	\$258,184	0.1%
1994 or Earlier	2,476,465	54.2%	\$951,566,140,777	\$384,244	44.8%
1995-2001	610,198	13.3%	\$324,078,970,202	\$531,105	15.3%
2002-2011	932,961	20.4%	\$517,985,870,122	\$555,206	24.4%
2012 or Later	545,718	11.9%	\$328,954,736,175	\$602,793	15.5%
TOTAL	4,572,643	100.0%	\$2,124,470,718,900	\$464,605	100.0%
STRUCTURE OPENING PROTECTION					
No Credit is Given to Policyholder	3,695,145	80.8%	\$1,572,738,936,919	\$425,623	74.0%
Credit is Given to Policyholder	877,498	19.2%	\$551,731,781,981	\$628,756	26.0%
TOTAL	4,572,643	100.0%	\$2,124,470,718,900	\$464,605	100.0%
ROOF SHAPE					
Hip, Mansard, or Pyramid	1,509,630	33.0%	\$867,374,685,708	\$574,561	40.8%
Gable, Other, or Unknown	3,063,013	67.0%	\$1,257,096,033,192	\$410,412	59.2%
TOTAL	4,572,643	100.0%	\$2,124,470,718,900	\$464,605	100.0%

#### Mobile Home Totals By Mitigation Features

		Percent of	Primary	Average	Percent of
Mitigation Feature	Units	Units	Exposure	Exposure	Exposure
YEAR BUILT					
Unknown or Mobile Home	328,724	100.0%	\$28,670,122,864	\$87,216	100.0%
1994 or Earlier	0	0.0%	\$0	\$0	0.0%
1995-2001	0	0.0%	\$0	\$0	0.0%
2002 or Later	0	0.0%	\$0	\$0	0.0%
TOTAL	328,724	100.0%	\$28,670,122,864	\$87,216	100.0%
STRUCTURE OPENING PROTECTION					
No Credit is Given to Policyholder	328,695	100.0%	\$28,668,692,950	\$87,220	100.0%
Credit is Given to Policyholder	29	0.0%	\$1,429,914	\$0	0.0%
TOTAL	328,724	100.0%	\$28,670,122,864	\$87,216	100.0%
ROOF SHAPE					
Hip, Mansard, or Pyramid	24	0.0%	\$344,578	\$14,357	0.0%
Gable, Other, or Unknown	328,700	100.0%	\$28,669,778,286	\$87,222	100.0%
TOTAL	328,724	100.0%	\$28,670,122,864	\$87,216	100.0%

#### Tenants Totals By Mitigation Features

		Percent of	Primary	Average	Percent of
Mitigation Feature	Units	Units	Exposure	Exposure	Exposure
YEAR BUILT					
Unknown	265,115	30.5%	\$5,609,876,176	\$21,160	24.0%
1994 or Earlier	263,308	30.3%	\$7,482,139,143	\$28,416	32.0%
1995-2001	88,267	10.2%	\$2,664,777,048	\$30,190	11.4%
2002-2011	133,926	15.4%	\$4,531,385,509	\$33,835	19.4%
2012 or Later	118,512	13.6%	\$3,116,087,907	\$26,293	13.3%
TOTAL	869,128	100.0%	\$23,404,265,783	\$26,928	100.0%
STRUCTURE OPENING PROTECTION					
No Credit is Given to Policyholder	860,201	99.0%	\$22,742,409,274	\$26,438	97.2%
Credit is Given to Policyholder	8,927	1.0%	\$661,856,509	\$74,141	2.8%
TOTAL	869,128	100.0%	\$23,404,265,783	\$26,928	100.0%
ROOF SHAPE					
Hip, Mansard, or Pyramid	64,218	7.4%	\$1,760,521,421	\$27,415	7.5%
Gable, Other, or Unknown	804,910	92.6%	\$21,643,744,362	\$26,890	92.5%
TOTAL	869,128	100.0%	\$23,404,265,783	\$26,928	100.0%

#### Condominium Unit Owners Totals By Mitigation Features

Mitigation Feature	Units	Percent of Units	Primary Exposure	Average Exposure	Percent of Exposure
witigation i eature	Office	Offics	Lxposure	Lxposure	Lxposure
YEAR BUILT					
Unknown	2,869	0.3%	\$315,718,186	\$110,045	0.3%
1994 or Earlier	575,611	65.2%	\$56,471,994,779	\$98,108	51.1%
1995-2001	92,091	10.4%	\$14,642,561,898	\$159,001	13.2%
2002-2011	176,583	20.0%	\$29,845,445,122	\$169,017	27.0%
2012 or Later	35,840	4.1%	\$9,244,276,416	\$257,932	8.4%
TOTAL	882,994	100.0%	\$110,519,996,401	\$125,165	100.0%
STRUCTURE OPENING PROTECTION					
No Credit is Given to Policyholder	745,003	84.4%	\$76,373,222,000	\$102,514	69.1%
Credit is Given to Policyholder	137,991	15.6%	\$34,146,774,401	\$247,457	30.9%
TOTAL	882,994	100.0%	\$110,519,996,401	\$125,165	100.0%
ROOF SHAPE					
Hip, Mansard, or Pyramid	123,739	14.0%	\$17,855,491,927	\$144,300	16.2%
Gable, Other, or Unknown	759,255	86.0%	\$92,664,504,474	\$122,047	83.8%
TOTAL	882,994	100.0%	\$110,519,996,401	\$125,165	100.0%

IV

#### Florida Hurricane Catastrophe Fund 2020 Calculation of Layer of Coverage Using 2019 FHCF Premium and Exposure Data as of 10/16/2019

Type of Business	Coverage Option	Total Insured Risks	Total Exposure	Gross FHCF Premium	Net FHCF Premium	Net FHCF Prem at 100%
Section I						
1	45%	3,032	18,187,972,494	7,874,473	4,337,557	9,639,015
1	75%	2,043	1,756,917,378	1,597,669	1,706,715	2,275,620
1	90%	158,551	141,769,548,323	96,176,874	97,766,211	108,629,123
2	45%	500,963	325,812,066,112	103,598,149	92,231,084	204,957,965
2	75%	398,027	190,513,393,224	85,411,154	77,894,849	103,859,798
2	90%	3,617,356	1,526,434,829,762	783,774,781	791,887,121	879,874,579
3	45%	1,980	257,282,246	192,536	192,536	427,857
3	75%	0	0	0	0	0
3	90%	326,744	27,713,569,528	45,145,748	45,145,748	50,161,942
4	45%	179,768	5,793,404,753	659,957	625,426	1,389,836
4	75%	9,048	298,031,059	74,496	71,340	95,121
4	90%	646,853	16,412,652,190	5,092,089	5,125,274	5,694,749
6	45%	68,209	14,898,309,207	5,896,113	4,567,753	10,150,563
6	75%					
6	90%	92,365 709,604	9,299,284,115	6,970,419	7,792,092 63,498,816	10,389,456
0	90%	709,604	82,071,644,598	63,314,854	03,490,010	70,554,240
Section II						
1	45%		0	0	0	0
1	75%		0	0	0	0
1	90%		0	0	0	0
Section I To	otals					
1	xx	163,626	161,714,438,195	105,649,016	103,810,482	120,543,758
2	xx	4,516,346	2,042,760,289,098	972,784,085	962,013,054	1,188,692,343
3	xx	328,724	27,970,851,774	45,338,284	45,338,284	50,589,799
4	xx	835,669	22,504,088,002	5,826,542	5,822,041	7,179,706
6	XX	870,178	106,269,237,920	76,181,385	75,858,661	91,094,259
XX	45%	753,952	364,949,034,812	118,221,228	101,954,356	226,565,236
XX	75%	501,483	201,867,625,776	94,053,738	87,464,996	116,619,994
xx	90%	5,459,108	1,794,402,244,401	993,504,346	1,003,423,171	1,114,914,634
Section I To	otal	6,714,543	2,361,218,904,989	1,205,779,311	1,192,842,523	1,458,099,865
Section II T	otal*	0	0	0	0	0
Grand Tota		6,714,543	2,361,218,904,989	1,205,779,311	1,192,842,523	1,458,099,865
* We last had a	very small amount of	f Section II exposure in 200	02.			
Weighted A	verage Cover	rage Multiples - Se			For	Exh II Ratemaking
4	Commi-'	Risks	Exposure			Premium
1	Commercial	0.88979	0.84776			0.86119
2	Residential	0.83687	0.81424			0.80930
3	Mobile Home	0.89729	0.89586			0.89619
4	Tenants	0.80157	0.78217			0.81090
6	Condos	0.84880	0.82379			0.83275
	Total	0.83827	0.81762			0.81808
Weighted A	Average Cover	rage Multiple - Sec	tions I and II			
	Total	0.83827	0.81762			0.81808

#### Florida Hurricane Catastrophe Fund 2020 Calculation of Layer of Coverage Using 2019 FHCF Premium and Exposure Data as of 10/16/2019

#### 1. Calculate Section I and II Retention

Historical Exposure						
2004	Total		as of 10/16/2019 1,320,642,494,807	Estimate of Missing Data -	Total 1,320,642,494,807	
2018	Total	:	2,271,534,239,459	-	2,271,534,239,459	
Growth in exposure, 2004 to 2018 Base FHCF Retention 2019 Retention (Actual, based on premiums paid) 2020 Target Retention 2020 Selected Retention				72.002% 4,500,000,000 7,362,642,120 7,740,099,321 7,740,000,000	Change 2019 to 2020 5.13%	[1a] [1b] [1c]=(1+[1a])x[1b] [1d]=[1c], md'd to \$M
2. Allocate Retention to Sections I and II						
2019 Net Full Coverage FHCF Premium (ie at 100%)  Note: Allocate Retention based on full coverage pr 2020 Selected Retention (using full coverage FHCF p	Section I Section II Total emium, which is the		rator of expected gro	1,458,099,865 - 1,458,099,865 ound-up losses 7,740,000,000	100.000% 0.000% 100.000%	[2a] [2b] [2c]=[2a]+[2b]
	Section II Total			7,740,000,000	0.000% 100.000%	[2e] [2f]=[2d]+[2e]
3. Calculate FHCF Limit						
Estimated Claims Paying Capacity Average Source: Raymond James: FHCF Estimated Claims	s Paying Capacity,	Oct. 17, 2	2019 Page 13	\$21,300,000,000		[3a]
Dollar growth in cash balance over prior calendar year Cash Balance @12/31/2018 Est Cash Balance @ 12/31/2019		\$ \$	11,000,000,000			[3b] [3c}
Change in Cash Balance	e	\$	(700,000,000)			[3d]=[3c]-[3b]
2019 Statutory Maximum Coverage Limit 2020 Statutory Coverage Limit Prior to Change in Ca 2020 Statutory Coverage Limit	sh Balance Limit			17,000,000,000 17,000,000,000 \$ 17,000,000,000	0.00%	[3e]=[3g prior year] [3f]=17Billion + .5*(max(3a-\$34 billior [3g]=[3e]+min([3f]-[3e],max([3d],0))

#### Florida Hurricane Catastrophe Fund 2020 Calculation of Layer of Coverage Using 2019 FHCF Premium and Exposure Data as of 10/16/2019

Total FHCF Capacity 17,000,000,000 [4a] [4b] = [4a]/1.10 Pure Loss 15,454,545,455 1,545,454,545 Loss Adjustment Expenses [4c] = [4a] - [4b]Actual Coverage FHCF Premium Section I 1,192,842,523 100.000% [4d] Section II 0.000% [4e] Total 1,192,842,523 100.000% [4f]=[4d]+[4e]

Note: Allocate Limit based on actual premium, which is the best indicator of expected FHCF losses.

Sections I and II Limit Allocations

	Pure loss	LAE	Total
Section I	15,454,545,455	1,545,454,545	17,000,000,000
Section II	-	-	-
Total	15,454,545,455	1,545,454,545	17,000,000,000

#### 5. FHCF Layer Structure for Sections I and II

Based on Based on Section I 2019 Selections 2020 Selections Retention 7,740,000,000 7,740,000,000 [5a] = [2d]

Pure Loss Limit Available 15.454.545.455 15,454,545,455 [5b] from Part 3 Total Limit Available 17,000,000,000 17,000,000,000 [5c] from Part 3 Wtd Average Coverage 81.808% 86.193% [5d] Top of Loss Layer 26,631,236,862 25,670,243,684 [5e]=[5a]+[5b]/[5d]

Layer used for modeled losses: 86.193% of \$17,930,243,684 xs \$7,740,000,000 (Modeled losses are Section I losses only, no LAE)

Sections I and II

	2019 Selections	2020 Selections	
Retention	7,740,000,000	7,740,000,000	[5f] = [2f]
Pure Loss Limit Available	15,454,545,455	15,454,545,455	[5g] from Part 3
Total Limit Available	17,000,000,000	17,000,000,000	[5h] from Part 3
Wtd Average Coverage	81.808%	86.193%	[5i]
Top of Loss Layer	26,631,236,862	25,670,243,684	[5j]=[5f]+[5g]/[5i]

Layer used for FHCF publications: Loss only: 86.193% of \$17,930,243,684 xs \$7,740,000,000 Loss + LAE: 86.193% of \$19,723,268,053 xs \$7,740,000,000

V

### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Modeled Adjusted Loss Severity Distributions

### Summary

	Size of Event(s)	Probability	Return Time (Years)	5 Year Probability	10 Year Probability
Single Event					
Attach industry retention	\$7,740,000,000	9.90%	10.1	40.61%	64.73%
Exhaust FHCF Projected Cash Balance Exhaust FHCF Projected Cash Balance and Pre-Event Notes Exhaust Estimated Claims Paying Capacity Exhaust FHCF limit	\$11,710,770,698 \$12,360,770,698 \$17,000,000,000 \$17,000,000,000	3.65% 3.47% 2.55% 2.55%	27.4 28.9 39.2 39.2	16.96% 16.17% 12.13% 12.13%	31.04% 29.73% 22.79% 22.79%
Annual Aggregate					
Exhaust FHCF Projected Cash Balance Exhaust FHCF Projected Cash Balance and Pre-Event Notes Exhaust Estimated Claims Paying Capacity Exhaust FHCF limit	\$11,710,770,698 \$12,360,770,698 \$17,000,000,000 \$17,000,000,000	3.70% 3.53% 2.65% 2.65%	27.0 28.3 37.8 37.8	17.19% 16.44% 12.55% 12.55%	31.43% 30.18% 23.52% 23.52%
Expected Annual Losses					
Adjusted Gross losses at 100% coverage	\$3,234,751,211				
Loss to Mandatory FHCF layer, at actual coverage					
Loss only Loss + LAE	\$796,554,131 \$876,209,544				

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Modeled Adjusted Loss Severity Distributions

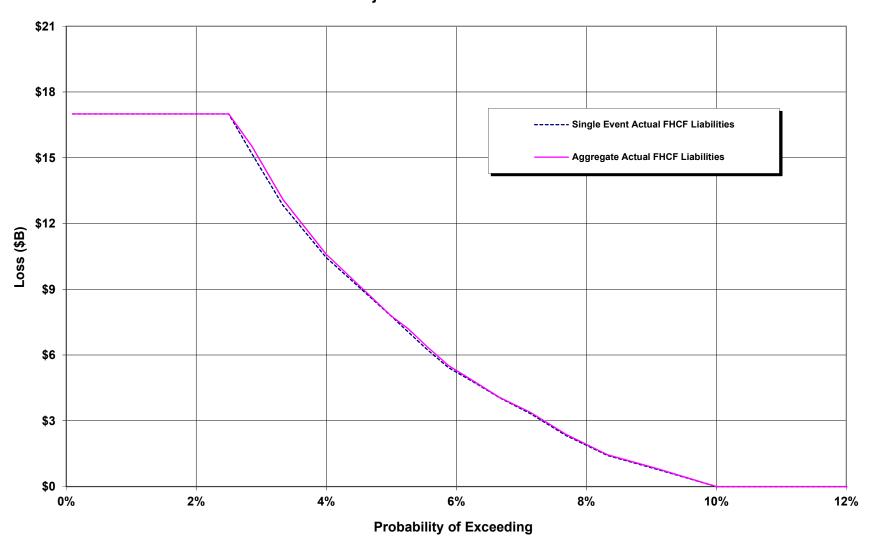
Traditional	FHCF	Only Lay	er
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		Uniform Weighted	FHCF Layer Weighted	Section I Excess		
D - 4	Deck of the conf	Section I Gross	Section I Gross	Retention Aggregate	Oir ele Frank FUOF	A
Return	Probability of	Per Event (100%	Per Event (100%	(100% Coverage, no	Single Event FHCF	Aggregate FHCF
Time	Exceedance	Coverage, no LAE)	Coverage, no LAE)	LAE)	Layer Liabilities	Layer Liabilities
1000	0.0010	£444 4E4 000 04E	£446 707 044 446	£444 707 460 070	¢47,000,000,000	\$17,000,000,000
1000 900	0.0010	\$111,151,922,245	\$116,707,214,116	\$111,707,469,979	\$17,000,000,000	\$17,000,000,000
800	0.0011	\$106,964,750,437 \$102,322,435,696	\$113,729,021,554 \$109,314,549,885	\$107,406,851,508 \$103,709,805,962	\$17,000,000,000 \$17,000,000,000	\$17,000,000,000
700	0.0013	\$97,601,238,312	\$104,091,093,092	\$98,048,075,085	\$17,000,000,000	\$17,000,000,000
600	0.0017	\$93,298,255,428	\$97,211,328,935	\$91,837,778,412	\$17,000,000,000	\$17,000,000,000
500	0.0020	\$87,114,895,098	\$91,043,946,477	\$85,234,104,677	\$17,000,000,000	\$17,000,000,000
400	0.0025	\$79,900,884,785	\$81,958,105,881	\$76,608,071,478	\$17,000,000,000	\$17,000,000,000
300	0.0033	\$72,267,258,179	\$72,748,388,209	\$66,865,259,985	\$17,000,000,000	\$17,000,000,000
250	0.0040	\$67,677,540,272	\$68,142,745,319	\$61,850,934,797	\$17,000,000,000	\$17,000,000,000
200	0.0050	\$62,358,781,882	\$62,449,918,933	\$55,641,194,333	\$17,000,000,000	\$17,000,000,000
150	0.0067	\$54,960,409,411	\$54,473,506,729	\$48,335,829,587	\$17,000,000,000	\$17,000,000,000
100	0.0100	\$45,355,665,295	\$44,671,103,324	\$37,888,713,869	\$17,000,000,000	\$17,000,000,000
90	0.0111	\$43,033,848,983	\$42,382,603,450	\$35,502,791,265	\$17,000,000,000	\$17,000,000,000
80	0.0125	\$40,547,075,573	\$40,012,339,685	\$32,994,815,697	\$17,000,000,000	\$17,000,000,000
70	0.0143	\$37,777,932,206	\$37,169,297,388	\$30,037,932,206	\$17,000,000,000	\$17,000,000,000
65	0.0154	\$36,454,096,047	\$35,604,858,720	\$28,607,742,137	\$17,000,000,000	\$17,000,000,000
60	0.0167	\$34,729,628,382	\$33,754,018,287	\$26,858,366,515	\$17,000,000,000	\$17,000,000,000
55	0.0182	\$33,034,340,615	\$32,046,944,730	\$24,933,956,898	\$17,000,000,000	\$17,000,000,000
50	0.0200	\$31,136,273,739	\$30,143,270,397	\$22,936,141,028	\$17,000,000,000	\$17,000,000,000
45	0.0222	\$29,114,947,087	\$28,320,721,057	\$21,053,874,276	\$17,000,000,000	\$17,000,000,000
40	0.0250	\$27,181,777,713	\$26,006,023,816	\$19,000,984,880	\$17,000,000,000	\$17,000,000,000
35	0.0286	\$24,654,375,962	\$23,758,768,025	\$16,381,078,336	\$15,187,694,112	\$15,531,207,306
30	0.0333	\$22,176,454,181	\$21,278,283,155	\$13,813,768,770	\$12,835,899,929	\$13,097,093,003
25	0.0400	\$19,457,650,749	\$18,762,691,884	\$11,171,834,353	\$10,450,820,710	\$10,592,225,479
20	0.0500	\$16,370,664,056	\$15,943,035,869	\$8,208,349,577	\$7,777,452,009	\$7,782,490,035
19	0.0526	\$15,747,860,590	\$15,173,331,786	\$7,583,877,692	\$7,047,681,146	\$7,190,416,541
18	0.0556	\$14,971,109,088	\$14,323,587,319	\$6,717,690,898	\$6,242,022,495	\$6,369,168,611
17	0.0588	\$14,156,150,833	\$13,458,137,508	\$5,817,710,240	\$5,421,473,313	\$5,515,880,086
16	0.0625	\$13,350,967,181	\$12,799,757,213	\$5,109,272,705	\$4,797,250,619	\$4,844,197,185
15	0.0667	\$12,534,466,105	\$12,016,219,843	\$4,293,653,102	\$4,054,364,158	\$4,070,892,957
14	0.0714	\$11,704,961,581	\$11,241,722,148	\$3,566,227,985	\$3,320,048,381	\$3,381,207,574
13	0.0769	\$10,891,989,697	\$10,190,223,475	\$2,505,727,152	\$2,323,102,787	\$2,375,726,863
12	0.0833	\$9,939,129,124	\$9,231,313,979	\$1,520,495,886	\$1,413,942,727	\$1,441,610,640
11 10	0.0909	\$8,937,579,862	\$8,564,920,994	\$853,437,653	\$782,123,051	\$809,160,230 \$0
9	0.1000	\$8,047,814,573	\$7,634,524,992	\$0 \$0	\$0 \$0	\$0 \$0
8	0.1111 0.1250	\$7,003,416,796 \$6,050,785,325	\$6,759,218,555 \$6,007,344,957	\$0 \$0	\$0	\$0 \$0
7	0.1230	\$4,995,403,928	\$5,008,199,182	\$0 \$0	\$0	\$0 \$0
6	0.1429	\$3,783,317,660	\$3,816,311,380	\$0 \$0	\$0	\$0 \$0
5	0.1007	\$2,582,063,788	\$2,587,469,488	\$0 \$0	\$0	\$0 \$0
4	0.2500	\$1,470,954,843	\$1,529,415,268	\$0 \$0	\$0	\$0 \$0
3	0.2300	\$528,971,079	\$553,725,952	\$0 \$0	\$0	\$0
J	0.0000	Ψ320,311,019	Ψυσυ, ε 20,902	φυ	Ψ0	Ψ0

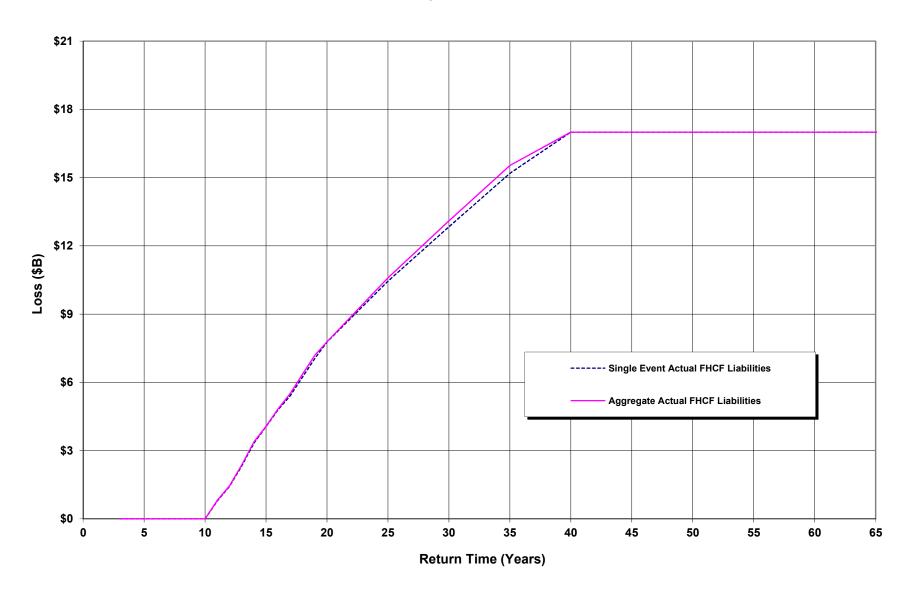
#### Notes

Aggregate FHCF Liabilities include Sections I, II and LAE, and are at weighted average coverage. 2020 severity distributions based on AIR, EQE, RMS, ARA and FPM models.

2020 Projected FHCF Liabilities



# 2020 Projected FHCF Liabilities



VI

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Allocation of Excess Losses to Type of Business at Coverage Level

(1)	Coverage Selection by Type of Business	Evaluated 10/16/2019	Residential 80.930%	Tenants 81.090%	Condos 83.275%	Mobile Home 89.619%	Commercial 86.119%	Total 81.808%
(2)	Coverage Selection by Type of Business	03/02/2020	86.202%	83.808%	86.134%	89.984%	84.692%	86.193%
(3)	Allocation of XS Loss Using 100% Adjusted Gross Losses		79.96%	0.41%	6.28%	3.23%	10.12%	100.00%
(4)	Allocation of XS Loss at Coverage Level (2) x (3)		68.93%	0.34%	5.41%	2.91%	8.57%	86.19%
(5)	Allocation of XS Loss at Cov. Level to Type of Business (4)/Total(4)		79.97%	0.40%	6.27%	3.37%	9.95%	99.96%
(6)	Balance Adjustment to Allocation (5)/Total (5)		80.00%	0.40%	6.27%	3.38%	9.95%	100.00%
(7)	Selected Allocation of XS Loss at Coverage Level for Ratemaking		80.00%	0.48%	6.33%	3.46%	9.72%	100.00%
(8)	Rate Change by Type of Business		-4.63%	-5.03%	-4.28%	-11.09%	10.56%	-3.65%

VII

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Law and Ordinance Adjustment Factors

#### FHCF Premium as a Percentage of Base Premium

Distribution of Premium	Expenses	Liability	Non-hurr. Property	Hurricane Outside FHCF Layer	Hurricane Within FHCF Layer [*]	Total
Commercial Habitational	30%	10%	10%	33%	17%	100%
Residential	30%	10%	10%	33%	17%	100%
Mobile Home	30%	10%	10%	33%	17%	100%
Tenants	30%	10%	10%	33%	17%	100%
Condo-Owners	30%	10%	10%	33%	17%	100%

#### % of Law and Ordinance Premium Applicable to FHCF Layer

					Hurricane	
			Non-hurr.	Hurricane Outside	Within FHCF	
	Expenses	Liability	Property	FHCF Layer	Layer [**]	Total
Commercial Habitational	0%	0%	10%	60%	30%	100%
Residential	0%	0%	10%	60%	30%	100%
Mobile Home	0%	0%	10%	60%	30%	100%
Tenants	0%	0%	10%	60%	30%	100%
Condo-Owners	0%	0%	10%	60%	30%	100%

#### Selections for 2020 Ratemaking

Type of Business	% of Base Premium for Law and Ordinance Coverage [1] Insurer Survey	% of Law and Ordinance Premium Applicable to FHCF Layer [2] = [**]	FHCF Premium as a Percentage of Base Premium [3] = [*]	Law and Ordinance Premium as a Percentage of Base Premium [4] = [1] x [2]/[3]	Percent of Policies with Coverage [5] Insurer Survey	Implied Law and Ordinance Adjustment Factors [6] = [4] x [5]	Selected Law and Ordinance Adjustment Factors [7]
Commercial Habitational	6.50%	30.00%	16.67%	11.70%	5%	0.59%	0.00%
Residential	3.00%	30.00%	16.67%	5.40%	95%	5.13%	4.86%
Mobile Home	0.00%	30.00%	16.67%	0.00%	0%	0.00%	0.00%
Tenants	0.00%	30.00%	16.67%	0.00%	50%	0.00%	0.00%
Condo-Owners	0.00%	30.00%	16.67%	0.00%	65%	0.00%	0.00%

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Wind Deductible Adjustment Factor

#### Calculation of Loading Factor to Adjust Modeled Losses for the Impact of Aggregate Wind Deductibles

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Annual Wind				2020	2019	2019/2020	2020
	Per Event	Deductible + AOP		Implied	Take-up	Adjusted	Adjusted	Weighted	Selected
Type of Business	Deductibles	Deductible	Ratio	Load	Rate	Load	Load	Load	Load
Commercial Residential	357,317,263	358,665,242	1.00377	0.377%	50%	0.189%	0.220%	0.199%	0.200%
Residential	2,790,420,069	2,802,888,095	1.00447	0.447%	100%	0.447%	0.462%	0.452%	0.450%
Mobile Home	145,665,360	146,303,182	1.00438	0.438%	100%	0.438%	0.462%	0.446%	0.450%
Tenants	20,820,775	20,835,522	1.00071	0.071%	100%	0.071%	0.050%	0.064%	0.060%
Condo	231,222,400	231,510,331	1.00125	0.125%	100%	0.125%	0.128%	0.126%	0.130%
Total	3,545,445,866	3,560,202,373	1.00416					·	

#### Notes:

AIR Deliverable 2 is per event, AIR Deliverable 5 is aggregate

- (1) Based on AIR study (Deliverable 2) completed in 2020
- (2) Based on AIR study (Deliverable 5) completed in 2020
- (3) = (2) / (1)
- (4) = (3) 1
- (5) Judgmentally Selected
- (6) = (4) \* (5)
- (7) Indication in 2019
- (8) = (6)\*2/3+(7)\*1/3

VIII

# Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report AIR and RMS 2020 Retention Limit Analyses: Adjustment to Expected FHCF Layer Losses Coverage Selections as of 03/02/2020

			RMS Adjusted Aggregate Run	AIR Adjusted Aggregate Run	Average RMS AIR Adjusted Aggregate Runs	RMS/WTD	AIR/WTD	AVE/WTD	
		2020 (WTD)							
	1 Wtd Ave. Expected Gross Loss Adjusted	3,234,751,211	3,220,689,838	3,234,727,345	3,227,708,591	99.565%	99.999%	99.782%	2020 Ex. 2 (7)
:	2 Expected FHCF Wtd Ave.Aggregate Layer Loss and LAE at Coverage Level	876,209,544	833,604,042	827,129,040	830,366,541	95.138%	94.399%	94.768%	2020 Ex. 2 (10)
2	a Expected FHCF RMS Aggregate Layer Loss and LAE at Coverage Level Using Company Limits, Retentions		845,642,504	807,925,212	826,783,858				
;	3 Model Adjustment Factor		1.014441464	0.976782549	0.995685420				(2a)/(2)
4	4 Indicated Adjustment Factor		1.444%	-2.322%	-0.4315%	(3)-1.00			Weights 67%
,	5 Prior Selected Factor (2019)				-0.2068%				33%
(	6 Current Year Selected Factor Weighted (2/3 Indicated , 1/3 Prior)				-0.3566%				2020 Ex. 2 (15)

# Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Retention and Limit Adjustment Factor Calculation History

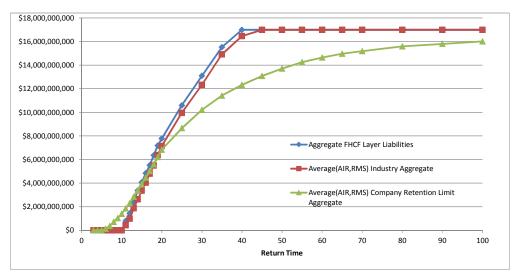
Year	Indicated	Selected	Modeler Data	
2013	-1.9000%	-0.7347%	ARA	
2014	0.3103%	-0.0371%	RMS	
2015	0.3103%	-0.0371%	RMS (prior year , no update)	
2016	0.0298%	0.0075%	AIR,RMS run by Paragon	
2017	0.8549%	0.5724%	AIR,RMS run by Paragon	0.5724%
2018	0.1618%	0.2987%	AIR,RMS run by Paragon	0.2987%
2019	-0.3910%	-0.1611%	AIR,RMS run by Paragon	-0.1611%
2019 HB301	-0.4595%	-0.2068%	AIR,RMS run by Paragon	-0.2068%
2020	-0.4315%	-0.3566%	AIR.RMS run by Paragon	-0.3566%

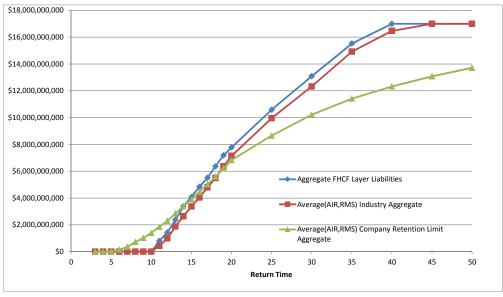
#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Average (AIR,RMS) Modeled Adjusted Loss Severity Distributions Coverage Selections Data as of 03/02/2020

					Traditional FHCF Only Layer				
			FHCF Layer						
		Uniform Weighted Section I Gross	Weighted Section I Gross	Section I Excess Retention Aggregate			FHCF Layer adj Average (AIR,RMS) Section I Gross		Average(AIR,RMS)
	Probability of	Per Event (100%	Per Event (100%	(100% Coverage, no	Single Event FHCF	Aggregate FHCF	Annual (100% Coverage,	Average(AIR,RMS)	Company Retention
Return Time	Exceedance	Coverage, no LAE)	Coverage, no LAE)	LAE)	Layer Liabilities	Layer Liabilities	no LAE)	Industry Aggregate	Limit Aggregate
1000	0.0010	\$111,151,922,245	\$116,707,214,116	\$111,707,469,979	\$17,000,000,000	\$17,000,000,000	125,277,368,299	17,000,000,000	16,997,670,280
900	0.0011	\$106,964,750,437	\$113,729,021,554	\$107,406,851,508	\$17,000,000,000	\$17,000,000,000	123,967,867,979	17,000,000,000	16,997,065,412
800	0.0013	\$102,322,435,696	\$109,314,549,885	\$103,709,805,962	\$17,000,000,000	\$17,000,000,000	119,501,053,790	17,000,000,000	16,996,750,788
700	0.0014	\$97,601,238,312	\$104,091,093,092	\$98,048,075,085	\$17,000,000,000	\$17,000,000,000	113,484,965,194	17,000,000,000	16,994,853,730
600	0.0017	\$93,298,255,428	\$97,211,328,935	\$91,837,778,412	\$17,000,000,000	\$17,000,000,000	109,572,123,949	17,000,000,000	16,990,446,528
500	0.0020	\$87,114,895,098	\$91,043,946,477	\$85,234,104,677	\$17,000,000,000	\$17,000,000,000	99,304,877,354	17,000,000,000 17,000,000,000	16,980,476,075
400	0.0025	\$79,900,884,785	\$81,958,105,881	\$76,608,071,478	\$17,000,000,000	\$17,000,000,000	92,136,790,319 81,206,384,857	17,000,000,000	16,950,235,775 16,913,425,424
300 250	0.0033 0.0040	\$72,267,258,179 \$67,677,540,272	\$72,748,388,209 \$68,142,745,319	\$66,865,259,985 \$61,850,934,797	\$17,000,000,000 \$17,000,000,000	\$17,000,000,000 \$17,000,000,000	74,900,632,113	17,000,000,000	16,871,206,145
200	0.0040	\$62,358,781,882	\$62,449,918,933	\$55,641,194,333	\$17,000,000,000	\$17,000,000,000	68,100,386,591	17,000,000,000	16,757,415,218
150	0.0050	\$54,960,409,411	\$54,473,506,729	\$48,335,829,587	\$17,000,000,000	\$17,000,000,000	59,230,764,762	17,000,000,000	16,511,250,035
100	0.0007	\$45,355,665,295	\$44,671,103,324	\$37,888,713,869	\$17,000,000,000	\$17,000,000,000	49,324,171,230	17,000,000,000	16,014,016,157
90	0.0100	\$43,033,848,983	\$42,382,603,450	\$35,502,791,265	\$17,000,000,000	\$17,000,000,000	46,629,499,479	17,000,000,000	15,809,308,378
80	0.0125	\$40,547,075,573	\$40,012,339,685	\$32,994,815,697	\$17,000,000,000	\$17,000,000,000	43,800,724,220	17,000,000,000	15,597,738,074
70	0.0143	\$37,777,932,206	\$37,169,297,388	\$30,037,932,206	\$17,000,000,000	\$17,000,000,000	40,451,216,056	17,000,000,000	15,190,069,200
65	0.0154	\$36,454,096,047	\$35,604,858,720	\$28,607,742,137	\$17,000,000,000	\$17,000,000,000	38,392,567,204	17,000,000,000	14,977,990,438
60	0.0167	\$34,729,628,382	\$33,754,018,287	\$26,858,366,515	\$17,000,000,000	\$17,000,000,000	36,786,984,335	17,000,000,000	14,651,619,532
55	0.0182	\$33,034,340,615	\$32,046,944,730	\$24,933,956,898	\$17,000,000,000	\$17,000,000,000	34,610,328,871	17,000,000,000	14,255,793,547
50	0.0200	\$31,136,273,739	\$30,143,270,397	\$22,936,141,028	\$17,000,000,000	\$17,000,000,000	32,455,100,274	17,000,000,000	13,715,365,171
45	0.0222	\$29,114,947,087	\$28,320,721,057	\$21,053,874,276	\$17,000,000,000	\$17,000,000,000	30,292,760,441	17,000,000,000	13,085,088,283
40	0.0250	\$27,181,777,713	\$26,006,023,816	\$19,000,984,880	\$17,000,000,000	\$17,000,000,000	27,701,003,519	16,470,976,335	12,329,207,485
35	0.0286	\$24,654,375,962	\$23,758,768,025	\$16,381,078,336	\$15,187,694,112	\$15,531,207,306	25,234,744,499	14,922,767,011	11,422,258,287
30	0.0333	\$22,176,454,181	\$21,278,283,155	\$13,813,768,770	\$12,835,899,929	\$13,097,093,003	22,436,987,374	12,326,342,391	10,213,308,770
25	0.0400	\$19,457,650,749	\$18,762,691,884	\$11,171,834,353	\$10,450,820,710	\$10,592,225,479	19,613,670,853	9,962,164,429	8,663,659,538
20	0.0500	\$16,370,664,056	\$15,943,035,869	\$8,208,349,577	\$7,777,452,009	\$7,782,490,035	16,435,604,809	7,152,615,594	6,835,386,326
19	0.0526	\$15,747,860,590	\$15,173,331,786	\$7,583,877,692	\$7,047,681,146	\$7,190,416,541	15,670,317,471	6,371,905,052	6,210,055,722
18	0.0556	\$14,971,109,088	\$14,323,587,319	\$6,717,690,898	\$6,242,022,495	\$6,369,168,611	15,026,575,299	5,500,771,758	5,607,307,319
17	0.0588	\$14,156,150,833	\$13,458,137,508	\$5,817,710,240	\$5,421,473,313	\$5,515,880,086	14,090,086,616	4,808,477,769	5,029,009,422
16	0.0625	\$13,350,967,181	\$12,799,757,213	\$5,109,272,705	\$4,797,250,619	\$4,844,197,185	13,222,403,631	4,039,015,265	4,461,658,436
15	0.0667	\$12,534,466,105	\$12,016,219,843	\$4,293,653,102	\$4,054,364,158	\$4,070,892,957	12,421,527,675	3,370,149,311	3,907,131,014
14	0.0714	\$11,704,961,581	\$11,241,722,148	\$3,566,227,985	\$3,320,048,381	\$3,381,207,574	11,655,164,468	2,638,530,541	3,389,376,420
13 12	0.0769 0.0833	\$10,891,989,697 \$9,939,129,124	\$10,190,223,475 \$9,231,313,979	\$2,505,727,152	\$2,323,102,787 \$1,413,942,727	\$2,375,726,863 \$1,441,610,640	10,780,558,362 9,875,217,000	1,872,594,890 994,169,885	2,852,458,208 2,304,153,948
11	0.0833	\$8,937,579,862	\$8,564,920,994	\$1,520,495,886 \$853,437,653	\$782,123,051	\$809,160,230	8,949,817,446	434,883,567	1,858,959,506
10	0.1000	\$8,047,814,573	\$7,634,524,992	\$055,457,055	\$782,123,031	\$809,100,230	8,174,702,979	-	1,401,511,790
9	0.1111	\$7,003,416,796	\$6,759,218,555	\$0	\$0	\$0	7,175,987,255	_	1,029,869,098
8	0.1111	\$6,050,785,325	\$6,007,344,957	\$0	\$0	\$0 \$0	6,248,167,048	-	727,327,297
7	0.1429	\$4,995,403,928	\$5,008,199,182	\$0	\$0	\$0	5,332,028,452	_	365,269,454
6	0.1423	\$3,783,317,660	\$3,816,311,380	\$0	\$0	\$0	4,265,420,908	-	144,670,533
5	0.2000	\$2,582,063,788	\$2,587,469,488	\$0	\$0	\$0	2,955,369,610	_	22,156,303
4	0.2500	\$1,470,954,843	\$1,529,415,268	\$0	\$0	\$0	1,782,816,761	_	263,300
3	0.3333	\$528,971,079	\$553,725,952	\$0	\$0	\$0	664,639,274	-	-
			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	**		77.	,,		

Aggregate FHCF Liabilities include Sections I, II and LAE, and are at weighted average coverage. 2019 Severity distributions based on AIR, EQE, RMS, ARA and FPM models.

#### Based on Average (AIR, RMS) 2020 Analysis





IX

#### **FHCF INVESTMENT INCOME\***

(Excludes Finance Corporation)

		Investment	35% of Investment
	Year	Income	Income
	<u> </u>	<u></u>	
1	June 30, 1995	20,183,000	7,064,050
2	June 30, 1996	46,379,000	16,232,650
3	June 30, 1997	74,425,000	26,048,750
4	June 30, 1998	109,979,000	38,492,650
5	June 30, 1999	132,516,000	46,380,600
6	June 30, 2000	173,839,000	60,843,650
7	June 30, 2001	220,915,000	77,320,250
8	June 30, 2002	122,535,000	42,887,250
9	June 30, 2003	104,939,000	36,728,650
10	June 30, 2004	58,127,000	20,344,450
11	June 30, 2005	108,672,000	38,035,200
12	June 30, 2006	103,175,000	36,111,250
13	June 30, 2007	36,065,000	12,622,750
14	June 30, 2008	46,816,000	16,385,600
15	June 30, 2009	7,803,000	2,731,050
16	June 30, 2010	54,298,000	19,004,300
17	June 30, 2011	29,983,000	10,494,050
18	June 30, 2012	26,634,000	9,321,900
19	June 30, 2013	34,636,000	12,122,600
20	June 30, 2014	19,086,000	6,680,100
20	June 30, 2015	29,009,000	10,153,150
21	June 30, 2016	56,143,000	19,650,050
22	June 30, 2017	109,450,000	38,307,500
23	June 30, 2018	201,443,000	70,505,050
24	June 30, 2019	492,772,000	172,470,200
		\$2,419,822,000	\$846,937,700

\*Source: FHCF Audited Financial Statements

Note: 1997 was the first year of mitigation funding.

F.S. 215.555(7)(c) Each fiscal year, the Legislature shall appropriate from the investment income of the Florida Hurricane Catastrophe Fund an amount no less than \$10 million and no more than 35 percent of the investment income based upon the most recent fiscal year-end audited financial statements for the purpose of providing funding for local governments, state agencies, public and private educational institutions, and nonprofit organizations to support programs intended to improve hurricane preparedness, reduce potential losses in the event of a hurricane, provide research into means to reduce such losses, educate or inform the public as to means to reduce hurricane losses, assist the public in determining the appropriateness of particular upgrades to structures or in the financing of such upgrades, or protect local infrastructure from potential damage from a hurricane. Moneys shall first be available for appropriation under this paragraph in fiscal year 1997-1998. Moneys in excess of the \$10 million specified in this paragraph shall not be available for appropriation under this paragraph if the State Board of Administration finds that an appropriation of investment income from the fund would jeopardize the actuarial soundness of the fund.

X

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Pre-Event Note Expense Loading Contract Term: 6/01/2020 to 5/31/2021

		2013A Projected Debt Service	2016A Projected Debt Service	03/17/2020 Total Debt Service Net Cost	2020A Projected Debt Service Placeholder*	Revised Total  Debt Service Net  Cost
	Reimbursement Deposit		•			
1	Premium	0	6,000,000	6,000,000		
2	? Average Market Value	82,191,781	650,000,000	732,191,781		
3	Exp. Default Loading %	0.3%	0.3%			
4	Exp. Default Cost (2)*(3)	246,575	1,950,000	2,196,575		
5	Total Projected Liquidity Facility Cost (1)+(4)	246,575	7,950,000	8,196,575	20,462,018	28,658,593

#### Notes

- This method uses values projected by the FHCF's Financial Advisor, Raymond James (01/18/2019 for 2013A); (1/19/2020 for 2016A); plus a judgmental loading for potential asset loss.
- \$1 billion of \$1 billion 2013A Bonds come due on 7/1/2020

<sup>\*2020</sup>A Placeholder Projection does not have a precise premium, market value or inception date. Default costs cannot therefore be estimated.

XI

### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Additional Pre-Event Note Options

1a 2	Est. FHCF Premium (with o 2020A Note Expense (Plac Cash Build-up Factor	• •	1,192,720,460 20,462,018 25%		Exhibit 2, Line 73 Exhibit 2, Line 24d				
3 Limit 4 Retention 5 Coverage %			\$17,000,000,000 \$7,740,000,000 86.193%		Projected Payout Multiple Retention Multiple 100% Retention Multiple 90% Retention Multiple 75% Retention Multiple 45%	14.2531 5.5934 6.2149 7.4578 12.4297	5.5934 6.2149 7.4578		
					Projected	Retention	Retention	Retention	
	Est. New 2020 Pre Note	Est. Additional Cost -	Change in Cost + Cash	Impact	Payout	Multiple	Multiple	Multiple	
	Cost	Placeholder	Build-up	on Rate	Multiple	90%	75%	45%	
1	0	-20,462,018	-25,577,523	-2.14%	14.2531	6.2149	7.4578	12.4297	
2	5,000,000	-15,462,018	-19,327,523	-1.62%	14.4879	6.3172	7.5807	12.6345	
3	10,000,000	-10,462,018	-13,077,523	-1.10%	14.4111	6.2838	7.5405	12.5675	
4	15,000,000	-5,462,018	-6,827,523	-0.57%	14.3352	6.2506	7.5008	12.5013	
5	20,000,000	-462,018	-577,523	-0.05%	14.2600	6.2179	7.4615	12.4358	
6	25,000,000	4,537,982	5,672,477	0.48%	14.1857	6.1854	7.4225	12.3709	
7	30,000,000	9,537,982	11,922,477	1.00%	14.1121	6.1534	7.3840	12.3067	
8	35,000,000	14,537,982	18,172,477	1.52%	14.0392	6.1216	7.3459	12.2432	
9	40,000,000	19,537,982	24,422,477	2.05%	13.9671	6.0902	7.3082	12.1803	
10	45,000,000	24,537,982	30,672,477	2.57%	13.8958	6.0590	7.2709	12.1181	
11	50,000,000	29,537,982	36,922,477	3.10%	13.8252	6.0283	7.2339	12.0565	
12	55,000,000	34,537,982	43,172,477	3.62%	13.7552	5.9978	7.1973	11.9955	
13	60,000,000	39,537,982	49,422,477	4.14%	13.6860	5.9676	7.1611	11.9352	
14	65,000,000	44,537,982	55,672,477	4.67%	13.6175	5.9377	7.1253	11.8754	
15	70,000,000	49,537,982	61,922,477	5.19%	13.5497	5.9081	7.0898	11.8163	

# **EXHIBIT**

XII

2019 FHCF Premium (Base Premium)

	Commercial	Residential	Mobile Home	Tenants	Condo-Owners	Total
Total Gross FHCF Premium	\$105,649,016	\$972,784,085	\$45,338,284	\$5,826,542	\$76,181,385	\$1,205,779,311
FHCF Premium Credits/Debits	-\$1,838,534	-\$10,771,030	\$0	-\$4,500	-\$322,724	-\$12,936,789
Net FHCF Premium	\$103,810,482	\$962,013,054	\$45,338,284	\$5,822,041	\$75,858,661	\$1,192,842,523

#### **Percent of Gross Premium**

_						
	Commercial	Residential	Mobile Home	Tenants	Condo-Owners	Total
Total Gross FHCF Premium	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FHCF Premium Credits/Debits	-1.74%	-1.11%	0.00%	-0.08%	-0.42%	-1.07%
Net FHCF Premium	98.26%	98.89%	100.00%	99.92%	99.58%	98.93%

2019 FHCF Exposure

	Z013 1 Hot Exposure					
	Commercial	Residential	Mobile Home	Tenants	Condo-Owners	Total
Total Exposure	\$161,714,438,195	\$2,042,760,289,098	\$27,970,851,774	\$22,504,088,002	\$106,269,237,920	\$2,361,218,904,989
Debit = 30% or greater	\$68,011,633,319	\$722,701,380,205	\$0	\$6,478,306,236	\$39,165,982,210	\$836,357,301,970
20% <debit<30%< td=""><td>\$0</td><td>\$167,980,462,158</td><td>\$0</td><td>\$0</td><td>\$4,383,242,036</td><td>\$172,363,704,194</td></debit<30%<>	\$0	\$167,980,462,158	\$0	\$0	\$4,383,242,036	\$172,363,704,194
15% <debit<20%< td=""><td>\$0</td><td>\$0</td><td>\$0</td><td>\$759,248,884</td><td>\$225,670,154</td><td>\$984,919,038</td></debit<20%<>	\$0	\$0	\$0	\$759,248,884	\$225,670,154	\$984,919,038
10% <debit<15%< td=""><td>\$15,349,895,857</td><td>\$0</td><td>\$0</td><td>\$5,557,431,990</td><td>\$10,162,723,168</td><td>\$31,070,051,015</td></debit<15%<>	\$15,349,895,857	\$0	\$0	\$5,557,431,990	\$10,162,723,168	\$31,070,051,015
5% <debit <10%<="" td=""><td>\$6,905,254,780</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$6,905,254,780</td></debit>	\$6,905,254,780	\$0	\$0	\$0	\$0	\$6,905,254,780
0% <debit<=5%< td=""><td>\$0</td><td>\$51,889,073,125</td><td>\$194,927,889</td><td>\$0</td><td>\$0</td><td>\$52,084,001,014</td></debit<=5%<>	\$0	\$51,889,073,125	\$194,927,889	\$0	\$0	\$52,084,001,014
No Credit/Debit	\$0	\$0	\$27,775,923,885	\$0	\$0	\$27,775,923,885
0% <credit<=5%< td=""><td>\$0</td><td>\$56,002,507</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$56,002,507</td></credit<=5%<>	\$0	\$56,002,507	\$0	\$0	\$0	\$56,002,507
5% <credit<10%< td=""><td>\$226,746</td><td>\$24,923,005</td><td>\$0</td><td>\$0</td><td>\$27,323,215</td><td>\$52,472,966</td></credit<10%<>	\$226,746	\$24,923,005	\$0	\$0	\$27,323,215	\$52,472,966
10% <credit<15%< td=""><td>\$1,871,574,458</td><td>\$121,189,340,272</td><td>\$0</td><td>\$50,959,244</td><td>\$1,453,461,490</td><td>\$124,565,335,464</td></credit<15%<>	\$1,871,574,458	\$121,189,340,272	\$0	\$50,959,244	\$1,453,461,490	\$124,565,335,464
15% <credit<20%< td=""><td>\$0</td><td>\$2</td><td>\$0</td><td>\$317,741</td><td>\$7,153,745,954</td><td>\$7,154,063,697</td></credit<20%<>	\$0	\$2	\$0	\$317,741	\$7,153,745,954	\$7,154,063,697
20% <credit<30%< td=""><td>\$0</td><td>\$73,497,695</td><td>\$0</td><td>\$2,340,157,136</td><td>\$0</td><td>\$2,413,654,831</td></credit<30%<>	\$0	\$73,497,695	\$0	\$2,340,157,136	\$0	\$2,413,654,831
Credit =30% or greater	\$69,575,853,035	\$978,845,610,129	\$0	\$7,317,666,771	\$43,697,089,693	\$1,099,436,219,628

**Percent of Total Exposure** 

	Fercent of Total Exposure					
	Commercial	Residential	Mobile Home	Tenants	Condo-Owners	Total
Total Exposure	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Debit = 30% or greater	42.06%	35.38%	0.00%	28.79%	36.86%	35.42%
20% <debit<30%< td=""><td>0.00%</td><td>8.22%</td><td>0.00%</td><td>0.00%</td><td>4.12%</td><td>7.30%</td></debit<30%<>	0.00%	8.22%	0.00%	0.00%	4.12%	7.30%
15% <debit<20%< td=""><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>3.37%</td><td>0.21%</td><td>0.04%</td></debit<20%<>	0.00%	0.00%	0.00%	3.37%	0.21%	0.04%
10% <debit<15%< td=""><td>9.49%</td><td>0.00%</td><td>0.00%</td><td>24.70%</td><td>9.56%</td><td>1.32%</td></debit<15%<>	9.49%	0.00%	0.00%	24.70%	9.56%	1.32%
5% <debit <10%<="" td=""><td>4.27%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.29%</td></debit>	4.27%	0.00%	0.00%	0.00%	0.00%	0.29%
0% <debit<=5%< td=""><td>0.00%</td><td>2.54%</td><td>0.70%</td><td>0.00%</td><td>0.00%</td><td>2.21%</td></debit<=5%<>	0.00%	2.54%	0.70%	0.00%	0.00%	2.21%
No Credit/Debit	0.00%	0.00%	99.30%	0.00%	0.00%	1.18%
0% <credit<=5%< td=""><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td></credit<=5%<>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
5% <credit<10%< td=""><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.03%</td><td>0.00%</td></credit<10%<>	0.00%	0.00%	0.00%	0.00%	0.03%	0.00%
10% <credit<15%< td=""><td>1.16%</td><td>5.93%</td><td>0.00%</td><td>0.23%</td><td>1.37%</td><td>5.28%</td></credit<15%<>	1.16%	5.93%	0.00%	0.23%	1.37%	5.28%
15% <credit<20%< td=""><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>6.73%</td><td>0.30%</td></credit<20%<>	0.00%	0.00%	0.00%	0.00%	6.73%	0.30%
20% <credit<30%< td=""><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>10.40%</td><td>0.00%</td><td>0.10%</td></credit<30%<>	0.00%	0.00%	0.00%	10.40%	0.00%	0.10%
Credit =30% or greater	43.02%	47.92%	0.00%	32.52%	41.12%	46.56%

#### 2019 FHCF Risk Counts

2013 File Risk Coulits					
Commercial	Residential	Mobile Home	Tenants	Condo-Owners	Total
163,626	4,516,346	328,724	835,669	870,178	6,714,543
92,283	2,032,973	0	228,348	455,859	2,809,463
0	399,892	0	0	45,630	445,522
0	0	0	33,766	2,402	36,168
23,417	0	0	260,145	61,590	345,152
2,541	0	0	0	0	2,541
0	73,854	2,318	0	0	76,172
0	0	326,406	0	0	326,406
0	30	0	0	0	30
1	22	0	0	262	285
1,063	268,625	0	993	7,544	278,225
0	1	0	2	59,610	59,613
0	40	0	79,354	0	79,394
44,321	1,740,909	0	233,061	237,281	2,255,572
	163,626 92,283 0 0 23,417 2,541 0 0 0 1 1,063	163,626       4,516,346         92,283       2,032,973         0       399,892         0       0         23,417       0         2,541       0         0       73,854         0       0         0       30         1       22         1,063       268,625         0       1         0       40	Commercial         Residential         Mobile Home           163,626         4,516,346         328,724           92,283         2,032,973         0           0         399,892         0           0         0         0           23,417         0         0           2,541         0         0           0         73,854         2,318           0         30         0           1         22         0           1,063         268,625         0           0         1         0           0         40         0	163,626       4,516,346       328,724       835,669         92,283       2,032,973       0       228,348         0       399,892       0       0         0       0       0       33,766         23,417       0       0       260,145         2,541       0       0       0         0       73,854       2,318       0         0       0       326,406       0         0       30       0       0         1       22       0       0         1,063       268,625       0       993         0       1       0       2         0       40       0       79,354	Commercial         Residential         Mobile Home         Tenants         Condo-Owners           163,626         4,516,346         328,724         835,669         870,178           92,283         2,032,973         0         228,348         455,859           0         399,892         0         0         45,630           0         0         0         33,766         2,402           23,417         0         0         260,145         61,590           2,541         0         0         0         0           0         73,854         2,318         0         0           0         30         0         0         0           0         30         0         0         0           1         22         0         0         262           1,063         268,625         0         993         7,544           0         1         0         2         59,610           0         40         0         79,354         0

#### Percent of All Risks

	Felcent of All Maks					
	Commercial	Residential	Mobile Home	Tenants	Condo-Owners	Total
Total Risk Counts	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Debit = 30% or greater	56.40%	45.01%	0.00%	27.33%	52.39%	41.84%
20% <debit<30%< td=""><td>0.00%</td><td>8.85%</td><td>0.00%</td><td>0.00%</td><td>5.24%</td><td>6.64%</td></debit<30%<>	0.00%	8.85%	0.00%	0.00%	5.24%	6.64%
15% <debit<20%< td=""><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>4.04%</td><td>0.28%</td><td>0.54%</td></debit<20%<>	0.00%	0.00%	0.00%	4.04%	0.28%	0.54%
10% <debit<15%< td=""><td>14.31%</td><td>0.00%</td><td>0.00%</td><td>31.13%</td><td>7.08%</td><td>5.14%</td></debit<15%<>	14.31%	0.00%	0.00%	31.13%	7.08%	5.14%
5% <debit <10%<="" td=""><td>1.55%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.04%</td></debit>	1.55%	0.00%	0.00%	0.00%	0.00%	0.04%
0% <debit<=5%< td=""><td>0.00%</td><td>1.64%</td><td>0.71%</td><td>0.00%</td><td>0.00%</td><td>1.13%</td></debit<=5%<>	0.00%	1.64%	0.71%	0.00%	0.00%	1.13%
No Credit/Debit	0.00%	0.00%	99.29%	0.00%	0.00%	4.86%
0% <credit<=5%< td=""><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td></credit<=5%<>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
5% <credit<10%< td=""><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.03%</td><td>0.00%</td></credit<10%<>	0.00%	0.00%	0.00%	0.00%	0.03%	0.00%
10% <credit<15%< td=""><td>0.65%</td><td>5.95%</td><td>0.00%</td><td>0.12%</td><td>0.87%</td><td>4.14%</td></credit<15%<>	0.65%	5.95%	0.00%	0.12%	0.87%	4.14%
15% <credit<20%< td=""><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>6.85%</td><td>0.89%</td></credit<20%<>	0.00%	0.00%	0.00%	0.00%	6.85%	0.89%
20% <credit<30%< td=""><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>9.50%</td><td>0.00%</td><td>1.18%</td></credit<30%<>	0.00%	0.00%	0.00%	9.50%	0.00%	1.18%
Credit =30% or greater	27.09%	38.55%	0.00%	27.89%	27.27%	33.59%

# **EXHIBIT**

XIII

## Florida Hurricane Catastrophe Fund

## 2020 Ratemaking Formula Report County Rating Regions

County Number	County Name	2020 Region		County Number	County Name	2020 Region
1	ALACHUA	1	•	71	LEE	8
3	BAKER	1		73	LEON	1
5	BAY	5		75	LEVY	2
7	BRADFORD	1		77	LIBERTY	1
9	BREVARD	7		79	MADISON	1
11	BROWARD	13		81	MANATEE	6
13	CALHOUN	1		83	MARION	2
15	CHARLOTTE	7		85	MARTIN	13
17	CITRUS	2		86	MIAMI-DADE	16
19	CLAY	1		87	MONROE	22
21	COLLIER	11		89	NASSAU	1
23	COLUMBIA	1		91	OKALOOSA	6
27	DE SOTO	5		93	OKEECHOBEE	9
29	DIXIE	1		95	ORANGE	3
31	DUVAL	1		97	OSCEOLA	4
33	ESCAMBIA	6		99	PALM BEACH	13
35	FLAGLER	3		101	PASCO	4
37	FRANKLIN	6		103	PINELLAS	7
39	GADSDEN	1		105	POLK	4
41	GILCHRIST	1		107	PUTNAM	1
43	GLADES	7		109	SAINT JOHNS	2
45	GULF	6		111	SAINT LUCIE	9
47	HAMILTON	1		113	SANTA ROSA	7
49	HARDEE	4		115	SARASOTA	8
51	HENDRY	8		117	SEMINOLE	2
53	HERNANDO	3		119	SUMTER	2
55	HIGHLANDS	5		121	SUWANNEE	1
57	HILLSBOROUGH	5		123	TAYLOR	1
59	HOLMES	1		125	UNION	1
61	INDIAN RIVER	11		127	VOLUSIA	3
63	JACKSON	1		129	WAKULLA	1
65 	JEFFERSON	1		131	WALTON	7
67	LAFAYETTE	1		133	WASHINGTON	1
69	LAKE	3				

ZIP Code	2020 Group						
22002		22402		20404	•	20250	
32003 32004	1 3	32102 32105	1 2	32181 32182	2 1	32258 32259	1 1
32004	3 1	32103	1	32183	2	32260	1
32007	2	32110	2	32185	1	32266	3
32007	1	32112	2	32187	1	32277	1
32009	1	32112	1	32189	1	32301	1
32011	1	32114	4	32190	2	32302	1
32013	1	32115	6	32192	1	32303	1
32024	1	32116	5	32193	1	32304	1
32025	1	32117	4	32195	2	32305	1
32026	1	32118	7	32198	4	32306	1
32030	1	32119	4	32201	1	32307	1
32033	1	32120	4	32202	1	32308	1
32034	2	32121	4	32203	2	32309	1
32035	2	32122	4	32204	1	32310	1
32038	1	32123	4	32205	1	32311	1
32040	1	32124	2	32206	1	32312	1
32041	1	32125	4	32207	1	32313	1
32042	1	32126	7	32208	1	32314	1
32043	1	32127	4	32209	1	32315	1
32044	1	32128	2	32210	1	32316	1
32046	1	32129	3	32211	1	32317	1
32050	1	32130	2	32212	1	32318	1
32052	1	32131	2	32214	1	32320	7
32053	1	32132	4	32216	1	32321	1
32054	1	32133	2	32217	1	32322	4
32055	1	32134	1	32218	1	32323	4
32056	1	32135	5	32219	1	32324	1
32058	1	32136	5	32220	1	32326	1
32059	1	32137	3	32221	1	32327	1
32060	1	32138	1	32222	1	32328	6
32061	1	32139	2	32223	1	32329	7
32062	1	32140	1	32224	1	32330	1
32063	1	32141	4	32225	1	32331	1
32064	1	32142	4	32226	1	32332	1
32065	1	32143	4	32227	3	32333	1
32066	1	32145	1	32228	3	32334	1
32067	1	32147	1	32229	1	32336	1
32068	1	32148	1	32231	1	32337	1
32071	1	32157	2	32232	1	32340	1
32073	1	32158	2	32233	3	32341	1
32079	1	32159	2	32234	1	32343	1
32080	4	32160	1	32235	1	32344	1
32081	1	32162	2	32236	1	32345	1
32082	3	32163	2	32238	1	32346	3
32083	1	32164	2	32239	1	32347	1
32084	3 3	32168	3 7	32240	3	32348	1
32085	2	32169	6	32241	1 1	32350	1 1
32086		32170	4	32244		32351	
32087 32091	1 1	32173 32174	3	32245 32246	1 1	32352 32353	1 1
32091	1	32174 32175	ა 5	32246 32247	1	32355 32355	1
32092	1	32176	6	32250	3	32356	1
32094	2	32177	1	32254	1	32357	1
32095	1	32177	1	32255	1	32358	1
32090	1	32178	2	32256	1	32359	1
32097	1	32179	2	32257	1	32360	1
02000	•	52100	-	32201	•	32000	•

ZIP Code	2020 Group	ZIP Code	2020 Group	ZIP C	2020 ode Group	ZIP Code	2020 Group
32361	1	32502	11	3260	01 1	32704	3
32362	1	32503	8	3260	03 1	32706	2
32395	1	32504	7	3260	04 1	32707	2
32399	1	32505	6	3260	05 1	32708	2
32401	6	32506	6	3260	06 1	32709	3
32402	6	32507	8	3260	07 1	32710	3
32403	3	32508	8	3260	08 1	32712	3
32404	3	32509	4	3260	09 1	32713	2
32405	4	32511	6	326 <sup>-</sup>	10 1	32714	2
32406	5	32512	6	326 <sup>-</sup>	11 1	32715	2
32407	7	32513	8	326	12 1	32716	2
32408	9	32514	5	326	14 1	32718	2
32409	3	32516	6	326	15 1	32719	2
32410	6	32520	9	326 <sup>-</sup>	16 1	32720	2
32411	9	32521	10	326	17 1	32721	2
32412	6	32522	10	326	18 1	32722	2
32413	8	32523	8	326	19 1	32723	2
32417	7	32524	8	3262	21 2	32724	2
32420	1	32526	4	3262	22 1	32725	2
32421	1	32530	3	3262	25 5	32726	3
32422	1	32531	2	3262		32727	3
32423	1	32533	3	3262		32728	2
32424	1	32534	4	3262		32730	2
32425	1	32535	1	3263		32732	3
32426	1	32536	2	3263		32733	2
32427	1	32537	2	3263		32735	3
32428	1	32538	1	3263		32736	2
32430	1	32539	2	3263		32738	2
32431	1	32540	10	3264		32739	2
32432	1	32541	10	3264		32744	2
32433	2	32542	6	3264		32745	2
32434	2	32544	10	3264		32746	2
32435	2	32547	6	3264		32747	3
32437	8	32548	9	326		32750	2
32438	1	32549	9	326		32751	3
32439	3	32550	10	326		32752	2
32440	1	32559	5	326		32753	2
32442	1	32560	3	326		32754	4
32443	1	32561	12	3266		32756	3
32444	3	32562	11	3266		32757	3
32445	1	32563	10	3266		32759	5
32446	1	32564	2	3266		32762	2
32447	1	32565	2	3266		32763	2
32448	1	32566	8	3266		32764	2
32449 32455	1	32567	1	3266 3268		32765	2
	1	32568	2			32766	3
32456	6 6	32569	10 2	3268 3268		32767	2 3
32457	7	32570				32768	3
32459 32460	1	32571 32572	3 3	3268 3269		32771 32772	ა 3
32460 32461							
32461	10 2	32577 32578	3 5	3269 3269		32773 32774	3 2
32462 32463	1	32576 32579	5 7	3269		32774 32775	4
32463 32464	1	32579 32580	<i>7</i> 5			32775 32776	2
32464 32465	1	32580 32583	3	3269 3270		32776 32777	3
32465 32466	2	32588	5 5	3270		32778	3 4
32501	8	32591	8	3270		32779	2
J200 I	U	32381	O	327	00 0	32119	_

ZIP Code	2020 Group	ZIP Code	2020 Group	ZIF	<sup>o</sup> Code	2020 Group	Z	IP Code	2020 Group
32780	4	32861	3	3	2964	12		33062	21
32781	4	32862	3		2965	11		33063	10
32783	4	32867	2		2966	8		33064	16
32784	2	32868	3	3	2967	9		33065	11
32789	3	32869	3	3.	2968	9		33066	11
32790	3	32872	3	3	2969	10		33067	11
32791	2	32877	3	3.	2970	9		33068	11
32792	2	32878	3	3	2971	14		33069	13
32793	2	32885	3	3	2976	12		33070	25
32794	3	32886	3	3	2978	11		33071	11
32795	2	32891	3	3	3001	23		33072	14
32796	4	32896	3	3	3002	12		33073	11
32798	3	32899	6	3	3004	19		33074	16
32799	2	32901	9	3	3008	20		33075	11
32801	3	32902	9	3	3009	20		33076	8
32802	3	32903	12	3	3010	12		33077	11
32803	3	32904	6	3	3011	12		33081	13
32804	3	32905	8	3	3012	12		33082	10
32805	3	32906	8	3	3013	12		33083	12
32806	3	32907	5	3	3014	13		33084	12
32807	3	32908	6	3	3015	12		33090	15
32808	3	32909	6	3	3016	11		33092	15
32809	3	32910	5	3	3017	12		33093	10
32810	3	32911	8	3	3018	13		33097	12
32811	3	32912	9	3	3019	23		33101	20
32812	3	32919	9		3020	19		33102	12
32814	3	32920	12		3021	13		33106	19
32815	5	32922	6		3022	19		33109	25
32816	2	32923	7		3023	13		33112	12
32817	2	32924	7		3024	12		33114	15
32818	3	32925	11		3025	11		33116	15
32819	3	32926	4		3026	12		33119	24
32820	3	32927	4		3027	12		33122	12
32821	3	32931	13		3028	9		33124	19
32822	3	32932	13		3029	9		33125	16
32824	3	32934	6		3030	15		33126	14
32825	3	32935	8		3031	16		33127	17
32826	3	32936	8		3032	16		33128	20
32827	4	32937	11		3033	15		33129	22
32828	2	32940	6		3034	15		33130	21
32829	3	32941	9		3035	15		33131	21
32830	3	32948	6		3036	24		33132	20
32831	3	32949	11		3037	23		33133	19
32832	3	32950	9		3039	15		33134	15
32833	3	32951	14		3040	20		33135	17
32835	3	32952	9		3041	20		33136	18
32836	3	32953	6		3042	18		33137	19
32837	3	32954	6		3043	18		33138	19
32839	3	32955	6		3045	20		33139	24
32853	3	32956	6		3050	20		33140	24
32854	3	32957	11		3051	20		33141	24 15
32855	3	32958	11		3052	20		33142	15 17
32856	3	32959	5		3054	13		33143	17
32857	3	32960 32061	12		3055	11 12		33144	14 19
32858 32859	3 3	32961 32962	12 11		3056 3060	12 17		33145 33146	18 18
32860	3 3	32962 32963	15		3060	18		33147	13
J2000	3	32903	10	3	500 I	10		JJ 147	13

71D C - 4 -	2020	71D C- 4-	2020	710.0-4-	2020	710.0-4-	2020
ZIP Code	Group						
33149	25	33245	18	33388	11	33465	17
33150	16	33247	12	33394	19	33466	14
33152	12	33255	15	33401	18	33467	10
33153	19	33256	19	33402	21	33468	18
33154	23	33257	17	33403	17	33469	18
33155	15	33261	17	33404	17	33470	10
33156	18	33265	13	33405	20	33471	7
33157	17	33266	12	33406	14	33472	11
33158	19	33269	13	33407	16	33473	11
33160	23	33280	19	33408	19	33474	16
33161	17	33283	13	33409	13	33475	16
33162	17	33296	19	33410	14	33476	15
33163	22	33299	14	33411	10	33477	18
33164	17	33301	19	33412	9	33478	9
33165	13 12	33302	20	33413	10	33480	21
33166		33303	19	33414	10	33481	18
33167 33168	14 15	33304 33305	20 19	33415	11 14	33482 33483	13 21
33169	13	33306	21	33416 33417	11	33484	12
33170	16	33307	17	33418	10	33486	16
33170	12	33308	21	33419	17	33487	19
33172	14	33309	13	33420	14	33488	13
33173	13	33310	15	33421	10	33493	11
33175	12	33311	14	33422	15	33496	11
33176	15	33312	14	33424	18	33497	12
33177	14	33313	11	33425	16	33498	11
33178	13	33314	12	33426	16	33499	19
33179	16	33315	17	33427	18	33503	4
33180	22	33316	21	33428	11	33508	4
33181	20	33317	11	33429	21	33509	4
33182	14	33318	10	33430	11	33510	4
33183	12	33319	11	33431	18	33511	4
33184	12	33320	11	33432	21	33513	3
33185	14	33321	11	33433	12	33514	3
33186	13	33322	10	33434	12	33521	2
33187	15	33323	12	33435	20	33523	3
33188	13	33324	11	33436	13	33524	4
33189	18	33325	12	33437	11	33525	4
33190	18	33326	13	33438	15	33526	4
33191	18	33327	9	33440	10	33527	4
33192	12	33328	11	33441	18	33530	4
33193	13	33329	11	33442	12	33534	6
33194	15	33330	12	33443	18	33537	3
33195	20	33331	12	33444	19	33538	2
33196	14	33332	13	33445	15	33539	4
33197	17	33334	17	33446	11	33540	4
33198	11	33335	17	33448	11	33541	4
33199	13	33336	14	33449	11	33542	4
33206	19	33338	11	33454	12	33543	4
33222	12	33339	21	33455	16	33544	3
33231	21	33340	14	33458	13	33545	4
33233	19	33345	10	33459	11	33547	4
33234	15	33346	21	33460	21	33548	4
33238	17	33348	20	33461	14	33549	3
33239	24	33351	10	33462	17	33550	4
33242	15	33355	12	33463	11	33556	4
33243	17	33359	12	33464	21	33558	4

ZIP Code	2020 Group						
33559	3	33631	6	33747	9	33840	4
33563	4	33633	5	33755	8	33841	4
33564	4	33634	6	33756	8	33843	5
33565	3	33635	5	33757	8	33844	4
33566	4	33637	4	33758	6	33845	4
33567	4	33646	6	33759	6	33846	4
33568	5	33647	3	33760	6	33847	4
33569	4	33650	6	33761	5	33848	3
33570	6	33655	6	33762	7	33849	3
33571	5	33660	5	33763	6	33850	4
33572	6	33661	5	33764	6	33851	4
33573	5	33662	5	33765	6	33852	6
33574	4	33663	7	33766	6	33853	5
33575	6	33672	6	33767	10	33854	4
33576	4	33673	5	33769	6	33855	4
33578	5	33674	4	33770	8	33856	4
33579	4	33675	6	33771	6	33857	6
33583	4	33677	6	33772	9	33858	3
33584	4	33679	8	33773	6	33859	4
33585	3	33680	4	33774	9	33860	4
33586	6	33681	9	33775	9	33862	6
33587	4	33682	4	33776	10	33863	4
33592	3	33684	6	33777	7	33865	5
33593	3	33685	6	33778	7	33867	4
33594	3	33687	3	33779	8	33868	3
33595	3	33688	3	33780	6	33870	5
33596	3	33689	5	33781	6	33871	5
33597	3	33694	4	33782	5	33872	5
33598	5	33701	10	33784	7	33873	4
33601	6	33702	7	33785	11	33875	5
33602	6	33703	9	33786	11	33876	6
33603	5	33704	9	33801	4	33877	4
33604	4	33705	11	33802	4	33880	4
33605	6	33706	12	33803	4	33881	4
33606	8	33707	11	33804	4	33882	4
33607	6	33708	12	33805	4	33883	4
33608	9	33709	7	33806	4	33884	4
33609	7	33710	8	33807	4	33885	4
33610	4	33711	10	33809	4	33888	4
33611	9	33712	11	33810	3	33890	4
33612	4	33713	7	33811	4	33896	3
33613	3	33714	6	33812	4	33897	3
33614	5	33715	12	33813	4	33898	4
33615	6	33716	6	33815	4	33901	7
33616	9	33729	7	33820	4	33902	7
33617	3	33730	7	33823	4	33903	7
33618	3	33731	10	33825	5	33904	8
33619	6	33732	7	33826	5	33905	7
33620	3	33733	7	33827	5	33906	6
33621	9	33734	9	33830	4	33907	7
33622	6	33736	12	33831	4	33908	9
33623	6	33738	12	33834	5	33909	7
33624	4	33740	10	33835	4	33910	7
33625	4	33741	12	33836	3	33911	7
33626	4	33742	6	33837	3	33912	7
33629	8	33743	8	33838	4	33913	7
33630	6	33744	12	33839	4	33914	8

ZIP Code	2020 Group						
33915	7	34107	15	34239	9	34460	2
33916	6	34108	14	34240	5	34461	2
33917	6	34109	9	34241	6	34464	2
33918	6	34110	10	34242	11	34465	2
33919	7	34112	11	34243	6	34470	2
33920	6	34113	10	34249	7	34471	2
33921	15	34114	9	34250	7	34472	2
33922	12	34116	8	34251	5	34473	2
33924	16	34117	7	34260	7	34474	2
33927	6	34119	7	34264	8	34475	2
33928	8	34120	7	34265	5	34476	2
33929	8	34133	9	34266	5	34477	2
33930	6	34134	11	34267	5	34478	2
33931	13	34135	8	34268	5	34479	2
33932	13	34136	10	34269	5	34480	2
33935	6	34137	10	34270	6	34481	2
33936	8	34138	10	34272	9	34482	2
33938	5	34139	10	34274	9	34483	2
33944	7	34140	15	34275	9	34484	2
33945	12	34141	10	34276	10	34487	2
33946	12	34142	8	34277	9	34488	1
33947	9	34143	7	34280	9	34489	2
33948	7	34145	17	34281	8	34491	2
33949	7	34146	17	34282	7	34492	2
33950	7	34201	5	34284	10	34498	3
33951	7	34202	5	34285	10	34601	2
33952	6	34203	5	34286	5	34602	3
33953	6	34204	6	34287	6	34603	3
33954	5	34205	7	34288	5	34604	3
33955	7	34206	7	34289	5	34605	3
33956	13	34207	8	34290	6	34606	4
33957	15	34208	6	34291	5	34607	5
33960	6	34209	9	34292	6	34608	3
33965	7	34210	9	34293	8	34609	3
33966	6	34211	5	34295	11	34610	3
33967	8	34212	5	34420	2	34611	4
33970	8	34215	13	34421	2	34613	3
33971	7	34216	13	34423	2	34614	3
33972	7	34217	14	34428	2	34636	2
33973	8	34218	13	34429	2	34637	3
33974	8	34219	5	34430	2	34638	4
33975	6	34220	7	34431	2	34639	3
33976	7	34221	7	34432	2	34652	6
33980	6	34222	6	34433	2	34653	5
33981	8	34223	11	34434	2	34654	3
33982	6	34224	9	34436	2	34655	4
33983	6	34228	13	34441	2	34656	5
33990	7	34229	10	34442	2	34660	8
33991	7	34230	10	34445	2	34661	2
33993	8	34231	10	34446	2	34667	6
33994	6	34232	5	34447	2	34668	6
34101	16	34233	6	34448	2	34669	4
34102	16	34234	7	34449	2	34673	6
34103	15	34235	5	34450	2	34674	6
34104	9	34236	10	34451	2	34677	4
34105	11	34237	7	34452	2	34679	6
34106	16	34238	7	34453	2	34680	5

	2020		2020
ZIP Code	Group	ZIP Code	Group
34681	8	34946	12
34682	6	34947	11
34683	6	34948	14
34684	5	34949	17
34685	4	34950	14
34688	4	34951	10
34689	7	34952	12
34690	5	34953	9
34691	7	34954	11
34692	5	34956	10
34695	6	34957	16
34697	7	34958	16
34698	7	34972	7
34705	3	34973	8
34711	4	34974	10
34712	4	34979	14
34713	3	34981	10
34714	3 4	34982	13
34715 34729	4	34983 34984	9 9
34729	3	34985	9 11
34734	3	34986	8
34736	3	34987	8
34737	3	34988	8
34739	5	34990	10
34740	5	34991	13
34741	3	34992	17
34742	3	34994	13
34743	4	34995	13
34744	4	34996	17
34745	3	34997	12
34746	4		
34747	3		
34748	3		
34749	3		
34753	3		
34755	4		
34756	4		
34758	3		
34759	3		
34760	5		
34761 34762	3 3		
34762 34769	ა 5		
34769 34770	5 5		
34771	4		
34772	4		
34773	4		
34777	4		
34778	4		
34785	2		
34786	3		
34787	4		
34788	3		
34789	3		
34797	3		
34945	8		

## **EXHIBIT**

XIV

#### PROPOSED FHCF 2020 Commercial Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 90%

Deductible: 3%

ZIP Code				Masonry with Reinforced Concrete		Superior with Reinforced Concrete	Non-MH Default
<u>Group</u>	<u>Frame</u>	Masonry Veneer	<u>Masonry</u>	Roof Deck	<u>Superior</u>	Roof Deck	and Unknown
1	0.1063	0.0994	0.0789	0.0626	0.0450	0.0371	0.0734
2	0.1925	0.1801	0.1428	0.1134	0.0816	0.0671	0.1330
3	0.2726	0.2550	0.2022	0.1606	0.1155	0.0951	0.1883
4	0.3578	0.3347	0.2655	0.2109	0.1516	0.1248	0.2471
5	0.4485	0.4195	0.3327	0.2643	0.1900	0.1564	0.3098
6	0.5448	0.5096	0.4041	0.3210	0.2308	0.1900	0.3763
7	0.6469	0.6052	0.4800	0.3813	0.2741	0.2256	0.4469
8	0.7554	0.7066	0.5604	0.4451	0.3201	0.2634	0.5217
9	0.8703	0.8142	0.6457	0.5129	0.3688	0.3035	0.6012
10	0.9922	0.9282	0.7361	0.5847	0.4204	0.3461	0.6854
11	1.1215	1.0491	0.8320	0.6609	0.4752	0.3911	0.7746
12	1.2586	1.1774	0.9338	0.7417	0.5333	0.4390	0.8694
13	1.4041	1.3135	1.0417	0.8275	0.5950	0.4897	0.9699
14	1.5586	1.4581	1.1563	0.9185	0.6604	0.5436	1.0766
15	1.7228	1.6116	1.2781	1.0153	0.7300	0.6009	1.1900
16	1.8974	1.7750	1.4077	1.1182	0.8040	0.6617	1.3106
17	2.0833	1.9488	1.5455	1.2277	0.8827	0.7266	1.4390
18	2.2813	2.1341	1.6925	1.3444	0.9666	0.7956	1.5757
19	2.4925	2.3317	1.8492	1.4689	1.0561	0.8693	1.7216
20	2.7181	2.5427	2.0165	1.6018	1.1517	0.9480	1.8775
21	2.9593	2.7683	2.1955	1.7439	1.2539	1.0321	2.0441
22	3.2175	3.0099	2.3870	1.8961	1.3633	1.1221	2.2224
23	3.4941	3.2687	2.5923	2.0591	1.4805	1.2186	2.4135
24	3.7910	3.5463	2.8125	2.2341	1.6063	1.3221	2.6185
25	4.1098	3.8446	3.0490	2.4219	1.7414	1.4333	2.8387

#### PROPOSED FHCF 2020 Commercial Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 75%

Deductible: 3%

ZIP Code <u>Group</u>	<u>Frame</u>	Masonry Veneer	<u>Masonry</u>	Masonry with Reinforced Concrete <u>Roof Deck</u>	Superior	Superior with Reinforced Concrete <u>Roof Deck</u>	Non-MH Default and Unknown
1	0.0886	0.0829	0.0657	0.0522	0.0375	0.0309	0.0612
2	0.1604	0.1501	0.1190	0.0945	0.0680	0.0559	0.1108
3	0.2271	0.2125	0.1685	0.1339	0.0962	0.0792	0.1569
4	0.2982	0.2789	0.2212	0.1757	0.1263	0.1040	0.2060
5	0.3737	0.3496	0.2773	0.2202	0.1584	0.1303	0.2581
6	0.4540	0.4247	0.3368	0.2675	0.1924	0.1583	0.3136
7	0.5391	0.5043	0.4000	0.3177	0.2284	0.1880	0.3724
8	0.6295	0.5888	0.4670	0.3710	0.2667	0.2195	0.4348
9	0.7253	0.6785	0.5381	0.4274	0.3073	0.2529	0.5010
10	0.8269	0.7735	0.6134	0.4873	0.3504	0.2884	0.5711
11	0.9346	0.8743	0.6934	0.5508	0.3960	0.3259	0.6455
12	1.0489	0.9812	0.7781	0.6181	0.4444	0.3658	0.7245
13	1.1701	1.0946	0.8681	0.6896	0.4958	0.4081	0.8082
14	1.2989	1.2151	0.9636	0.7654	0.5504	0.4530	0.8972
15	1.4357	1.3430	1.0651	0.8461	0.6083	0.5007	0.9917
16	1.5812	1.4791	1.1731	0.9318	0.6700	0.5515	1.0922
17	1.7360	1.6240	1.2880	1.0231	0.7356	0.6055	1.1991
18	1.9011	1.7784	1.4104	1.1203	0.8055	0.6630	1.3131
19	2.0771	1.9431	1.5410	1.2241	0.8801	0.7244	1.4347
20	2.2651	2.1189	1.6804	1.3348	0.9598	0.7900	1.5646
21	2.4661	2.3069	1.8296	1.4533	1.0449	0.8601	1.7034
22	2.6812	2.5082	1.9892	1.5801	1.1361	0.9351	1.8520
23	2.9118	2.7239	2.1602	1.7159	1.2338	1.0155	2.0112
24	3.1591	2.9553	2.3437	1.8617	1.3386	1.1018	2.1821
25	3.4248	3.2038	2.5408	2.0183	1.4512	1.1944	2.3656

#### PROPOSED FHCF 2020 Commercial Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 45%

Deductible: 3%

ZIP Code				Masonry with Reinforced Concrete		Superior with Reinforced Concrete	Non-MH Default
<u>Group</u>	<u>Frame</u>	Masonry Veneer	<u>Masonry</u>	Roof Deck	<u>Superior</u>	Roof Deck	and Unknown
1	0.0531	0.0497	0.0394	0.0313	0.0225	0.0185	0.0367
2	0.0962	0.0900	0.0714	0.0567	0.0408	0.0336	0.0665
3	0.1363	0.1275	0.1011	0.0803	0.0577	0.0475	0.0941
4	0.1789	0.1674	0.1327	0.1054	0.0758	0.0624	0.1236
5	0.2242	0.2098	0.1664	0.1321	0.0950	0.0782	0.1549
6	0.2724	0.2548	0.2021	0.1605	0.1154	0.0950	0.1881
7	0.3235	0.3026	0.2400	0.1906	0.1371	0.1128	0.2234
8	0.3777	0.3533	0.2802	0.2226	0.1600	0.1317	0.2609
9	0.4352	0.4071	0.3228	0.2564	0.1844	0.1518	0.3006
10	0.4961	0.4641	0.3681	0.2924	0.2102	0.1730	0.3427
11	0.5607	0.5246	0.4160	0.3305	0.2376	0.1956	0.3873
12	0.6293	0.5887	0.4669	0.3709	0.2667	0.2195	0.4347
13	0.7021	0.6568	0.5209	0.4137	0.2975	0.2449	0.4849
14	0.7793	0.7290	0.5782	0.4593	0.3302	0.2718	0.5383
15	0.8614	0.8058	0.6391	0.5076	0.3650	0.3004	0.5950
16	0.9487	0.8875	0.7038	0.5591	0.4020	0.3309	0.6553
17	1.0416	0.9744	0.7728	0.6138	0.4414	0.3633	0.7195
18	1.1406	1.0670	0.8462	0.6722	0.4833	0.3978	0.7879
19	1.2463	1.1658	0.9246	0.7344	0.5281	0.4346	0.8608
20	1.3591	1.2714	1.0083	0.8009	0.5759	0.4740	0.9387
21	1.4796	1.3842	1.0977	0.8720	0.6270	0.5160	1.0220
22	1.6087	1.5049	1.1935	0.9480	0.6817	0.5611	1.1112
23	1.7471	1.6343	1.2961	1.0296	0.7403	0.6093	1.2067
24	1.8955	1.7732	1.4062	1.1170	0.8032	0.6611	1.3093
25	2.0549	1.9223	1.5245	1.2110	0.8707	0.7167	1.4194

#### PROPOSED FHCF 2020 Residential Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 90%

Deductible: 2%

(a) Masonry (b) Masonry with Reinforced Concrete Roof Deck (c) Superior

<b>-</b> . • .			(c) Superior	
Zip Code	_		(d) Superior with Reinforced	Non-MH Default
<u>Group</u>	<u>Frame</u>	<u> Masonry Veneer</u>	Concrete Roof Deck	Unknown
1	0.0935	0.0856	0.0715	0.0931
2	0.1693	0.1551	0.1294	0.1686
3	0.2397	0.2196	0.1833	0.2388
4	0.3147	0.2882	0.2406	0.3135
5	0.3945	0.3613	0.3015	0.3929
6	0.4792	0.4388	0.3663	0.4773
7	0.5691	0.5211	0.4350	0.5668
8	0.6644	0.6085	0.5079	0.6618
9	0.7655	0.7011	0.5852	0.7625
10	0.8728	0.7993	0.6671	0.8693
11	0.9865	0.9034	0.7540	0.9826
12	1.1071	1.0139	0.8462	1.1027
13	1.2351	1.1311	0.9441	1.2302
14	1.3710	1.2555	1.0480	1.3656
15	1.5154	1.3878	1.1583	1.5094
16	1.6690	1.5284	1.2757	1.6624
17	1.8324	1.6781	1.4007	1.8252
18	2.0066	1.8377	1.5338	1.9987
19	2.1924	2.0078	1.6758	2.1837
20	2.3909	2.1895	1.8275	2.3814
21	2.6030	2.3838	1.9897	2.5927
22	2.8301	2.5918	2.1633	2.8189
23	3.0735	2.8147	2.3493	3.0613
24	3.3346	3.0538	2.5489	3.3213
25	3.6150	3.3106	2.7632	3.6006

#### PROPOSED FHCF 2020 Residential Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 75%

Deductible: 2%

#### (a) Masonry

#### (b) Masonry with Reinforced Concrete Roof Deck (c) Superior

Zip Code <u>Group</u>	<u>Frame</u>	Masonry Veneer	(d) Superior with Reinforced Concrete Roof Deck	Non-MH Default Unknown
1	0.0779	0.0714	0.0596	0.0776
2	0.1411	0.1292	0.1079	0.1405
3	0.1998	0.1830	0.1527	0.1990
4	0.2623	0.2402	0.2005	0.2612
5	0.3287	0.3010	0.2513	0.3274
6	0.3993	0.3657	0.3052	0.3977
7	0.4742	0.4343	0.3625	0.4723
8	0.5537	0.5071	0.4232	0.5515
9	0.6380	0.5842	0.4876	0.6354
10	0.7273	0.6661	0.5559	0.7244
11	0.8221	0.7528	0.6284	0.8188
12	0.9226	0.8449	0.7052	0.9189
13	1.0292	0.9426	0.7867	1.0252
14	1.1425	1.0463	0.8733	1.1380
15	1.2628	1.1565	0.9653	1.2578
16	1.3908	1.2737	1.0631	1.3853
17	1.5270	1.3985	1.1672	1.5210
18	1.6722	1.5314	1.2782	1.6656
19	1.8270	1.6732	1.3965	1.8198
20	1.9924	1.8246	1.5229	1.9845
21	2.1692	1.9865	1.6581	2.1606
22	2.3584	2.1598	1.8027	2.3491
23	2.5612	2.3456	1.9577	2.5511
24	2.7788	2.5448	2.1240	2.7678
25	3.0125	2.7588	2.3027	3.0005

## PROPOSED FHCF 2020 Residential Rates (Not Yet Approved by FHCF Trustees for Use) Rates are Dollars per \$1000 of Exposure

Coverage Level: 45%

Deductible: 2%

(a) Masonry (b) Masonry with Reinforced Concrete Roof Deck (c) Superior

Zip Code			(c) Superior (d) Superior with Reinforced	Non-MH Default
Group	<u>Frame</u>	Masonry Veneer	Concrete Roof Deck	Unknown
1	0.0467	0.0428	0.0357	0.0466
2	0.0847	0.0775	0.0647	0.0843
3	0.1199	0.1098	0.0916	0.1194
4	0.1574	0.1441	0.1203	0.1567
5	0.1972	0.1806	0.1508	0.1965
6	0.2396	0.2194	0.1831	0.2386
7	0.2845	0.2606	0.2175	0.2834
8	0.3322	0.3042	0.2539	0.3309
9	0.3828	0.3505	0.2926	0.3813
10	0.4364	0.3996	0.3336	0.4347
11	0.4932	0.4517	0.3770	0.4913
12	0.5535	0.5069	0.4231	0.5514
13	0.6175	0.5655	0.4720	0.6151
14	0.6855	0.6278	0.5240	0.6828
15	0.7577	0.6939	0.5792	0.7547
16	0.8345	0.7642	0.6379	0.8312
17	0.9162	0.8391	0.7003	0.9126
18	1.0033	0.9188	0.7669	0.9993
19	1.0962	1.0039	0.8379	1.0919
20	1.1954	1.0948	0.9138	1.1907
21	1.3015	1.1919	0.9948	1.2963
22	1.4151	1.2959	1.0816	1.4094
23	1.5367	1.4073	1.1746	1.5306
24	1.6673	1.5269	1.2744	1.6607
25	1.8075	1.6553	1.3816	1.8003

#### PROPOSED FHCF 2020 Mobile Home Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 90%

ZIP Code	Fully Tied Down	Fully Tied Down Manufactured	
<u>Group</u>	Prior to 7/13/94	On or After 7/13/94	<u>Unknown</u>
1	0.4439	0.3691	0.5425
2	0.8038	0.6685	0.9825
3	1.1382	0.9465	1.3911
4	1.4942	1.2426	1.8263
5	1.8727	1.5574	2.2889
6	2.2748	1.8918	2.7804
7	2.7016	2.2467	3.3020
8	3.1543	2.6232	3.8554
9	3.6344	3.0224	4.4421
10	4.1435	3.4457	5.0643
11	4.6833	3.8947	5.7241
12	5.2559	4.3709	6.4240
13	5.8636	4.8762	7.1667
14	6.5088	5.4127	7.9553
15	7.1944	5.9829	8.7933
16	7.9234	6.5892	9.6844
17	8.6995	7.2346	10.6329
18	9.5265	7.9223	11.6437
19	10.4086	8.6559	12.7218
20	11.3506	9.4393	13.8732
21	12.3578	10.2768	15.1043
22	13.4359	11.1734	16.4220
23	14.5913	12.1342	17.8341
24	15.8308	13.1650	19.3491
25	17.1621	14.2721	20.9762

#### PROPOSED FHCF 2020 Mobile Home Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 75%

ZIP Code <u>Group</u>	Fully Tied Do Prior to 7/13/94	own Manufactured On or After 7/13/94	Other than Fully Tied <u>Unknown</u>
1	0.3699	0.3076	0.4521
2	0.6699	0.5571	0.8187
3	0.9485	0.7888	1.1593
4	1.2452	1.0355	1.5219
5	1.5606	1.2978	1.9075
6	1.8957	1.5765	2.3170
7	2.2513	1.8722	2.7517
8	2.6286	2.1860	3.2128
9	3.0287	2.5187	3.7018
10	3.4529	2.8714	4.2203
11	3.9027	3.2456	4.7701
12	4.3799	3.6424	5.3533
13	4.8863	4.0635	5.9723
14	5.4240	4.5106	6.6294
15	5.9953	4.9857	7.3277
16	6.6029	5.4910	8.0703
17	7.2496	6.0288	8.8608
18	7.9387	6.6019	9.7031
19	8.6738	7.2132	10.6015
20	9.4589	7.8661	11.5610
21	10.2982	8.5640	12.5869
22	11.1966	9.3112	13.6850
23	12.1594	10.1118	14.8617
24	13.1923	10.9708	16.1242
25	14.3017	11.8934	17.4802

#### PROPOSED FHCF 2020 Mobile Home Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 45%

ZIP Code	Fully Tied Dow	Fully Tied Down Manufactured	
<u>Group</u>	Prior to 7/13/94	On or After 7/13/94	<u>Unknown</u>
1	0.2219	0.1846	0.2713
2	0.4019	0.3342	0.4912
3	0.5691	0.4733	0.6956
4	0.7471	0.6213	0.9131
5	0.9364	0.7787	1.1445
6	1.1374	0.9459	1.3902
7	1.3508	1.1233	1.6510
8	1.5772	1.3116	1.9277
9	1.8172	1.5112	2.2211
10	2.0717	1.7229	2.5322
11	2.3416	1.9473	2.8621
12	2.6280	2.1854	3.2120
13	2.9318	2.4381	3.5834
14	3.2544	2.7064	3.9777
15	3.5972	2.9914	4.3966
16	3.9617	3.2946	4.8422
17	4.3498	3.6173	5.3165
18	4.7632	3.9611	5.8218
19	5.2043	4.3279	6.3609
20	5.6753	4.7196	6.9366
21	6.1789	5.1384	7.5521
22	6.7180	5.5867	8.2110
23	7.2956	6.0671	8.9170
24	7.9154	6.5825	9.6745
25	8.5810	7.1360	10.4881

#### PROPOSED FHCF 2020 Tenants Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 90%

ZIP Code				Masonry with Reinforced Concrete		Superior with Reinforced Concrete	Non-MH Default
<u>Group</u>	<u>Frame</u>	Masonry Veneer	<u>Masonry</u>	Roof Deck	<u>Superior</u>	Roof Deck	and Unknown
1	0.0542	0.0521	0.0422	0.0366	0.0285	0.0260	0.0383
2	0.0982	0.0944	0.0764	0.0664	0.0516	0.0471	0.0694
3	0.1391	0.1336	0.1082	0.0940	0.0730	0.0667	0.0982
4	0.1826	0.1754	0.1421	0.1234	0.0958	0.0876	0.1289
5	0.2288	0.2198	0.1781	0.1546	0.1201	0.1098	0.1616
6	0.2779	0.2670	0.2163	0.1878	0.1459	0.1334	0.1963
7	0.3301	0.3171	0.2569	0.2231	0.1733	0.1584	0.2331
8	0.3854	0.3703	0.3000	0.2604	0.2023	0.1849	0.2722
9	0.4440	0.4266	0.3456	0.3001	0.2331	0.2131	0.3136
10	0.5062	0.4864	0.3940	0.3421	0.2658	0.2429	0.3575
11	0.5722	0.5497	0.4454	0.3867	0.3004	0.2746	0.4041
12	0.6421	0.6170	0.4998	0.4339	0.3371	0.3081	0.4535
13	0.7164	0.6883	0.5576	0.4841	0.3761	0.3438	0.5060
14	0.7952	0.7640	0.6190	0.5374	0.4175	0.3816	0.5616
15	0.8790	0.8445	0.6842	0.5940	0.4614	0.4218	0.6208
16	0.9680	0.9301	0.7535	0.6542	0.5082	0.4645	0.6837
17	1.0629	1.0212	0.8273	0.7183	0.5580	0.5100	0.7507
18	1.1639	1.1182	0.9060	0.7865	0.6110	0.5585	0.8220
19	1.2717	1.2218	0.9899	0.8594	0.6676	0.6102	0.8981
20	1.3868	1.3324	1.0795	0.9371	0.7280	0.6655	0.9794
21	1.5098	1.4506	1.1752	1.0203	0.7926	0.7245	1.0663
22	1.6415	1.5771	1.2778	1.1093	0.8618	0.7877	1.1594
23	1.7827	1.7128	1.3876	1.2047	0.9359	0.8554	1.2590
24	1.9341	1.8583	1.5055	1.3070	1.0154	0.9281	1.3660
25	2.0968	2.0145	1.6321	1.4170	1.1008	1.0062	1.4809

#### PROPOSED FHCF 2020 Tenants Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 75%

ZIP Code <u>Group</u>	<u>Frame</u>	Masonry Veneer	<u>Masonry</u>	Masonry with Reinforced Concrete <u>Roof Deck</u>	Superior	Superior with Reinforced Concrete <u>Roof Deck</u>	Non-MH Default and Unknown
1	0.0452	0.0434	0.0352	0.0305	0.0237	0.0217	0.0319
2	0.0818	0.0786	0.0637	0.0553	0.0430	0.0393	0.0578
3	0.1159	0.1113	0.0902	0.0783	0.0608	0.0556	0.0818
4	0.1521	0.1462	0.1184	0.1028	0.0799	0.0730	0.1074
5	0.1907	0.1832	0.1484	0.1288	0.1001	0.0915	0.1347
6	0.2316	0.2225	0.1803	0.1565	0.1216	0.1111	0.1636
7	0.2751	0.2643	0.2141	0.1859	0.1444	0.1320	0.1943
8	0.3211	0.3086	0.2500	0.2170	0.1686	0.1541	0.2268
9	0.3700	0.3555	0.2880	0.2501	0.1943	0.1776	0.2613
10	0.4219	0.4053	0.3284	0.2851	0.2215	0.2024	0.2979
11	0.4768	0.4581	0.3712	0.3222	0.2503	0.2288	0.3368
12	0.5351	0.5141	0.4165	0.3616	0.2809	0.2568	0.3779
13	0.5970	0.5736	0.4647	0.4034	0.3134	0.2865	0.4216
14	0.6627	0.6367	0.5158	0.4478	0.3479	0.3180	0.4680
15	0.7325	0.7037	0.5702	0.4950	0.3845	0.3515	0.5173
16	0.8067	0.7751	0.6279	0.5452	0.4235	0.3871	0.5697
17	0.8857	0.8510	0.6894	0.5986	0.4650	0.4250	0.6256
18	0.9699	0.9319	0.7550	0.6555	0.5092	0.4654	0.6850
19	1.0597	1.0182	0.8249	0.7161	0.5563	0.5085	0.7484
20	1.1556	1.1103	0.8995	0.7810	0.6067	0.5545	0.8162
21	1.2582	1.2088	0.9794	0.8503	0.6605	0.6038	0.8886
22	1.3679	1.3143	1.0648	0.9244	0.7181	0.6564	0.9661
23	1.4856	1.4273	1.1564	1.0039	0.7799	0.7129	1.0492
24	1.6118	1.5485	1.2546	1.0892	0.8461	0.7734	1.1383
25	1.7473	1.6788	1.3601	1.1808	0.9173	0.8385	1.2341

#### PROPOSED FHCF 2020 Tenants Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 45%

				Masonry with		Superior with	
ZIP Code				Reinforced Concrete		Reinforced Concrete	Non-MH Default
<u>Group</u>	<u>Frame</u>	<u>Masonry Veneer</u>	<u>Masonry</u>	Roof Deck	<u>Superior</u>	Roof Deck	and Unknown
1	0.0271	0.0261	0.0211	0.0183	0.0142	0.0130	0.0192
2	0.0491	0.0472	0.0382	0.0332	0.0258	0.0236	0.0347
3	0.0695	0.0668	0.0541	0.0470	0.0365	0.0334	0.0491
4	0.0913	0.0877	0.0710	0.0617	0.0479	0.0438	0.0645
5	0.1144	0.1099	0.0890	0.0773	0.0601	0.0549	0.0808
6	0.1390	0.1335	0.1082	0.0939	0.0730	0.0667	0.0981
7	0.1650	0.1586	0.1285	0.1115	0.0866	0.0792	0.1166
8	0.1927	0.1851	0.1500	0.1302	0.1012	0.0925	0.1361
9	0.2220	0.2133	0.1728	0.1500	0.1166	0.1065	0.1568
10	0.2531	0.2432	0.1970	0.1710	0.1329	0.1215	0.1788
11	0.2861	0.2749	0.2227	0.1933	0.1502	0.1373	0.2021
12	0.3211	0.3085	0.2499	0.2170	0.1686	0.1541	0.2268
13	0.3582	0.3441	0.2788	0.2421	0.1880	0.1719	0.2530
14	0.3976	0.3820	0.3095	0.2687	0.2087	0.1908	0.2808
15	0.4395	0.4222	0.3421	0.2970	0.2307	0.2109	0.3104
16	0.4840	0.4650	0.3768	0.3271	0.2541	0.2323	0.3418
17	0.5314	0.5106	0.4137	0.3591	0.2790	0.2550	0.3753
18	0.5819	0.5591	0.4530	0.3933	0.3055	0.2793	0.4110
19	0.6358	0.6109	0.4949	0.4297	0.3338	0.3051	0.4491
20	0.6934	0.6662	0.5397	0.4686	0.3640	0.3327	0.4897
21	0.7549	0.7253	0.5876	0.5102	0.3963	0.3623	0.5332
22	0.8208	0.7886	0.6389	0.5547	0.4309	0.3939	0.5797
23	0.8913	0.8564	0.6938	0.6024	0.4679	0.4277	0.6295
24	0.9671	0.9291	0.7528	0.6535	0.5077	0.4641	0.6830
25	1.0484	1.0073	0.8161	0.7085	0.5504	0.5031	0.7404

#### PROPOSED FHCF 2020 Condominium Unit Owners Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 90%

ZIP Code Group	<u>Frame</u>	Masonry Veneer	<u>Masonry</u>	Masonry with Reinforced Concrete <u>Roof Deck</u>	<u>Superior</u>	Superior with Reinforced Concrete <u>Roof Deck</u>	Non-MH Default <u>and Unknown</u>
1	0.1048	0.0940	0.0791	0.0602	0.0493	0.0360	0.0766
2	0.1897	0.1702	0.1433	0.1090	0.0893	0.0652	0.1387
3	0.2686	0.2410	0.2029	0.1544	0.1264	0.0923	0.1964
4	0.3526	0.3164	0.2664	0.2027	0.1659	0.1212	0.2578
5	0.4420	0.3966	0.3338	0.2540	0.2080	0.1519	0.3231
6	0.5369	0.4817	0.4055	0.3086	0.2526	0.1845	0.3925
7	0.6376	0.5721	0.4816	0.3665	0.3000	0.2191	0.4662
8	0.7445	0.6680	0.5623	0.4279	0.3503	0.2558	0.5443
9	0.8578	0.7697	0.6479	0.4930	0.4036	0.2948	0.6271
10	0.9779	0.8775	0.7386	0.5621	0.4602	0.3361	0.7150
11	1.1053	0.9918	0.8348	0.6353	0.5201	0.3799	0.8081
12	1.2405	1.1131	0.9369	0.7130	0.5837	0.4263	0.9069
13	1.3839	1.2417	1.0452	0.7954	0.6512	0.4756	1.0118
14	1.5362	1.3784	1.1602	0.8829	0.7228	0.5279	1.1231
15	1.6980	1.5236	1.2825	0.9759	0.7990	0.5835	1.2414
16	1.8700	1.6780	1.4124	1.0749	0.8799	0.6427	1.3672
17	2.0532	1.8423	1.5508	1.1801	0.9661	0.7056	1.5011
18	2.2484	2.0174	1.6982	1.2923	1.0580	0.7727	1.6438
19	2.4566	2.2042	1.8554	1.4120	1.1559	0.8442	1.7960
20	2.6789	2.4037	2.0233	1.5398	1.2605	0.9206	1.9586
21	2.9166	2.6170	2.2029	1.6764	1.3724	1.0023	2.1324
22	3.1711	2.8453	2.3951	1.8226	1.4921	1.0898	2.3184
23	3.4437	3.0900	2.6010	1.9794	1.6204	1.1835	2.5178
24	3.7363	3.3525	2.8220	2.1475	1.7581	1.2840	2.7317
25	4.0505	3.6344	3.0593	2.3281	1.9059	1.3920	2.9614

#### PROPOSED FHCF 2020 Condominium Unit Owners Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 75%

**Deductible: \$1 - \$500** 

ZIP Code				Reinforced Concrete		Reinforced Concrete	Non-MH Default
Group	<u>Frame</u>	Masonry Veneer	<u>Masonry</u>	Roof Deck	<u>Superior</u>	Roof Deck	and Unknown
1	0.0873	0.0783	0.0659	0.0502	0.0411	0.0300	0.0638
2	0.1581	0.1419	0.1194	0.0909	0.0744	0.0543	0.1156
3	0.2239	0.2009	0.1691	0.1287	0.1053	0.0769	0.1637
4	0.2939	0.2637	0.2220	0.1689	0.1383	0.1010	0.2149
5	0.3683	0.3305	0.2782	0.2117	0.1733	0.1266	0.2693
6	0.4474	0.4015	0.3379	0.2572	0.2105	0.1538	0.3271
7	0.5313	0.4768	0.4013	0.3054	0.2500	0.1826	0.3885
8	0.6204	0.5567	0.4686	0.3566	0.2919	0.2132	0.4536
9	0.7148	0.6414	0.5399	0.4109	0.3363	0.2456	0.5226
10	0.8149	0.7312	0.6155	0.4684	0.3835	0.2801	0.5958
11	0.9211	0.8265	0.6957	0.5294	0.4334	0.3165	0.6734
12	1.0337	0.9275	0.7808	0.5942	0.4864	0.3552	0.7558
13	1.1532	1.0348	0.8710	0.6629	0.5426	0.3963	0.8432
14	1.2801	1.1486	0.9669	0.7358	0.6024	0.4399	0.9359
15	1.4150	1.2696	1.0687	0.8133	0.6658	0.4863	1.0345
16	1.5584	1.3983	1.1770	0.8957	0.7333	0.5355	1.1394
17	1.7110	1.5353	1.2923	0.9834	0.8051	0.5880	1.2510
18	1.8737	1.6812	1.4151	1.0769	0.8816	0.6439	1.3699
19	2.0471	1.8369	1.5462	1.1766	0.9633	0.7035	1.4967
20	2.2324	2.0031	1.6861	1.2831	1.0505	0.7672	1.6322
21	2.4305	2.1809	1.8357	1.3970	1.1437	0.8353	1.7770
22	2.6426	2.3711	1.9959	1.5189	1.2434	0.9081	1.9320
23	2.8698	2.5750	2.1675	1.6495	1.3504	0.9862	2.0982
24	3.1136	2.7938	2.3516	1.7896	1.4651	1.0700	2.2764
25	3.3754	3.0287	2.5494	1.9401	1.5883	1.1600	2.4678

Masonry with

Superior with

#### PROPOSED FHCF 2020 Condominium Unit Owners Rates (Not Yet Approved by FHCF Trustees for Use)

Rates are Dollars per \$1000 of Exposure

Coverage Level: 45%

**Deductible: \$1 - \$500** 

ZIP Code <u>Group</u>	Frame	Masonry Veneer	<u>Masonry</u>	Reinforced Concrete  Roof Deck	<u>Superior</u>	Reinforced Concrete Roof Deck	Non-MH Default and Unknown
<u>Oroup</u>			·	<u></u>			
1	0.0524	0.0470	0.0396	0.0301	0.0246	0.0180	0.0383
2	0.0949	0.0851	0.0716	0.0545	0.0446	0.0326	0.0694
3	0.1343	0.1205	0.1014	0.0772	0.0632	0.0462	0.0982
4	0.1763	0.1582	0.1332	0.1013	0.0830	0.0606	0.1289
5	0.2210	0.1983	0.1669	0.1270	0.1040	0.0759	0.1616
6	0.2684	0.2409	0.2028	0.1543	0.1263	0.0923	0.1963
7	0.3188	0.2861	0.2408	0.1832	0.1500	0.1096	0.2331
8	0.3722	0.3340	0.2811	0.2139	0.1752	0.1279	0.2721
9	0.4289	0.3848	0.3239	0.2465	0.2018	0.1474	0.3136
10	0.4890	0.4387	0.3693	0.2810	0.2301	0.1680	0.3575
11	0.5527	0.4959	0.4174	0.3177	0.2601	0.1899	0.4041
12	0.6202	0.5565	0.4685	0.3565	0.2918	0.2131	0.4535
13	0.6919	0.6209	0.5226	0.3977	0.3256	0.2378	0.5059
14	0.7681	0.6892	0.5801	0.4415	0.3614	0.2640	0.5616
15	0.8490	0.7618	0.6412	0.4880	0.3995	0.2918	0.6207
16	0.9350	0.8390	0.7062	0.5374	0.4400	0.3213	0.6836
17	1.0266	0.9212	0.7754	0.5901	0.4831	0.3528	0.7506
18	1.1242	1.0087	0.8491	0.6462	0.5290	0.3863	0.8219
19	1.2283	1.1021	0.9277	0.7060	0.5780	0.4221	0.8980
20	1.3395	1.2019	1.0117	0.7699	0.6303	0.4603	0.9793
21	1.4583	1.3085	1.1014	0.8382	0.6862	0.5012	1.0662
22	1.5855	1.4227	1.1975	0.9113	0.7461	0.5449	1.1592
23	1.7219	1.5450	1.3005	0.9897	0.8102	0.5917	1.2589
24	1.8681	1.6763	1.4110	1.0738	0.8790	0.6420	1.3658
25	2.0252	1.8172	1.5296	1.1641	0.9530	0.6960	1.4807

Masonry with

Superior with

## Florida Hurricane Catastrophe Fund

2020 Ratemaking Formula Report

Windstorm Mitigation Construction Rating Classification Factors

#### To Calculate the Final FHCF Rate for a risk:

Preliminary factor = (year built factor) x (roof shape factor) x (opening protection factor)

Capped factor\* = Preliminary Factor

Final rate = (Base rate) x (Capped factor) x (On balance factor)

\*Capped factor = 100% of Preliminary Factor (i.e. no cap in current factors)

Type of Business						
				Mobile		
Rating Factor	Description	Commercial	Residential	Home	Tenants	Condos
	2012 or later	0.3935	0.4469	1.0000	0.4695	0.4460
	2002 - 2011	0.4173	0.4798	1.0000	0.4999	0.4717
Year Built	1995-2001	0.6405	0.7572	1.0000	0.7761	0.7406
rear built	1994 or Earlier	1.2947	1.4660	1.0000	1.4674	1.3808
	Unknown or Mobile Home	1.0688	1.0660	1.0000	1.0944	1.0501
Roof Shape	Hip, Mansard, or Pyramid	0.8702	0.8473	1.0000	0.7887	0.8043
Rooi Silape	Gable, Other or Unknown	1.0536	1.1242	1.0000	1.0182	1.0388
	Structure Opening Protection**	0.8119	0.8578	1.0000	0.7519	0.8031
Opening Protection	No Structure Opening Protection	1.0587	1.1075	1.0000	1.0168	1.1216
On Balance Factor		0.9719	0.9633	1.0000	0.9947	0.9787

<sup>\*\*</sup>Structure Opening Protection Credit requires that primary policy has structure opening protection credit.

## **EXHIBIT**

XV

## Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report 2019 FHCF Exposure and Risks as of 10/16/19 (Trended to 6/30/20)

Total	Exposure	(\$)
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	Total Exposure (\$)							
2019 FHCF Rating Region	Commercial	Residential	Mobile Home	Tenants	Condominium- Owners	Total		
. tog.o	Commercial	Residential	mobile Home	Tonunto	<b>G</b> 1111.01.0	Total		
1	5,300,229,720	236,955,296,347	5,618,739,139	3,262,127,272	3,047,655,123	254,184,047,601		
2	3,358,382,216	218,021,710,545	3,888,147,921	2,026,098,397	3,002,743,386	230,297,082,465		
3	10,856,136,986	315,659,237,064	4,345,144,215	3,978,323,843	6,434,295,920	341,273,138,028		
4	4,983,181,584	234,024,341,519	5,131,671,098	2,189,762,342	3,291,259,378	249,620,215,921		
5	4,838,352,719	99,988,877,413	1,921,699,786	1,108,283,261	3,169,814,129	111,027,027,308		
6	7,238,164,351	127,315,551,382	2,345,382,569	1,786,729,865	4,892,256,953	143,578,085,120		
7	11,449,030,885	114,611,609,554	1,522,453,578	974,033,897	8,230,168,211	136,787,296,125		
8	6,499,694,249	113,731,142,906	582,390,540	992,905,307	5,260,086,473	127,066,219,475		
9	8,425,184,541	99,560,622,204	572,480,040	910,033,263	5,983,734,619	115,452,054,667		
10	11,135,384,290	100,637,472,148	854,760,310	975,216,531	8,851,151,786	122,453,985,065		
11	18,136,122,956	118,857,505,763	338,283,834	1,259,724,462	9,862,481,563	148,454,118,578		
12	13,724,037,558	66,869,141,041	764,409,822	684,137,317	5,926,577,937	87,968,303,675		
13	9,591,958,220	60,574,513,821	398,149,983	578,170,213	5,040,732,159	76,183,524,396		
14	4,252,524,670	35,610,005,435	84,320,886	266,090,973	3,106,555,918	43,319,497,882		
15	3,220,155,865	33,839,315,004	47,052,147	236,548,034	3,432,883,169	40,775,954,219		
16	3,055,163,818	32,181,751,023	105,729,843	248,150,564	1,815,465,980	37,406,261,228		
17	4,162,601,171	27,947,787,558	42,289,750	270,245,648	3,354,838,573	35,777,762,700		
18	2,937,709,766	24,371,497,583	10,934,198	286,804,056	2,342,690,648	29,949,636,251		
19	4,793,558,761	17,682,210,518	7,789,185	389,222,118	4,052,617,830	26,925,398,412		
20	4,546,823,144	8,934,674,234	56,668,684	244,703,327	1,985,814,678	15,768,684,067		
21	8,142,200,511	21,527,192,557	-	422,155,171	7,182,662,798	37,274,211,037		
22	1,711,002,972	1,215,766,561	-	69,738,849	1,595,990,218	4,592,498,600		
23	5,107,575,096	6,560,170,456	24,417,134	105,380,414	4,260,071,394	16,057,614,494		
24	4,027,703,807	5,471,090,424	397,464	111,489,934	2,943,198,712	12,553,880,341		
25	1,838,702,493	2,322,235,840	6,810,738	28,190,725	1,454,248,846	5,650,188,642		
Total	\$163,331,582,349	\$2,124,470,718,900	\$28,670,122,864	\$23,404,265,783	\$110,519,996,401	\$2,450,396,686,297		
1-5	\$29,336,283,225	\$1,104,649,462,888	\$20,905,402,159	\$12,564,595,115	\$18,945,767,936	\$1,186,401,511,323		
6-10	\$44,747,458,316	\$555,856,398,194	\$5,877,467,037	\$5,638,918,863	\$33,217,398,042	\$645,337,640,452		
11-15	\$48,924,799,269	\$315,750,481,064	\$1,632,216,672	\$3,024,670,999	\$27,369,230,746	\$396,701,398,750		
16-20	\$19,495,856,660	\$111,117,920,916	\$223,411,660	\$1,439,125,713	\$13,551,427,709	\$145,827,742,658		
21-25	\$20,827,184,879	\$37,096,455,838	\$31,625,336	\$736,955,093	\$17,436,171,968	\$76,128,393,114		
	% of Total within Type	e of Business						
1-5	18.0%	52.0%	72.9%	53.7%	17.1%	48.4%		
6-10	27.4%	26.2%	20.5%	24.1%	30.1%	26.3%		
11-15	30.0%	14.9%	5.7%	12.9%	24.8%	16.2%		
16-20	11.9%	5.2%	0.8%	6.1%	12.3%	6.0%		
21-25	12.8%	1.7%	0.1%	3.1%	15.8%	3.1%		
	% of Total within Terri							
Total	6.7%	86.7%	1.2%	1.0%	4.5%	100.0%		
1-5	2.5%	93.1%	1.8%	1.1%	1.6%	100.0%		
6-10	6.9%	86.1%	0.9%	0.9%	5.1%	100.0%		
11-15	12.3%	79.6%	0.4%	0.8%	6.9%	100.0%		
16-20	13.4%	76.2%	0.2%	1.0%	9.3%	100.0%		
21-25	27.4%	48.7%	0.0%	1.0%	22.9%	100.0%		

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report 2019 FHCF Exposure and Risks as of 10/16/19 (Trended to 6/30/20)

	Total Risks											
2019 FHCF Rating				(	Condominium-							
Region	Commercial	Residential	Mobile Home	Tenants	Owners	Total						
1	4,926	538,827	63,082	124,939	26,612	758,386						
2	3,854	494,807	42,996	70,975	25,369	638,001						
3	10,486	665,445	48,278	157,740	54,819	936,768						
4	6,070	543,258	58,517	78,724	30,699	717,268						
5	8,522	228,995	22,233	39,833	29,041	328,624						
6	9,175	314,510	28,947	69,861	48,579	471,072						
7	12,218	246,791	17,661	34,442	71,834	382,946						
8	8,001	246,262	8,103	34,162	44,643	341,171						
9	9,829	205,225	7,550	29,436	49,787	301,827						
10	31,170	177,789	8,989	32,379	67,391	317,718						
11	16,230	232,072	4,144	48,521	102,061	403,028						
12	11,494	152,819	7,538	26,976	67,464	266,291						
13	8,978	147,647	4,747	25,675	49,020	236,067						
14 15	3,421	84,400	1,242	10,532	19,269	118,864						
15 16	2,748	65,865	786	7,801 9,410	18,570	95,770						
17	2,970	56,996 57,634	1,471		15,818	86,665						
18	3,058 2,261	57,624	534 192	10,394	25,286 17,621	96,896 66,214						
19	2,201	35,236 27,702	154	10,904 13,795	22,421	66,188						
20	1,503	19,486	891	9,245	18,253	49,378						
21	2,165	16.178	-	13,995	37,658	69,996						
22	262	2,043	_	2,277	9,394	13,976						
23	925	6,972	530	3,342	15,796	27,565						
24	990	3,525	6	3,372	13,161	21,054						
25	254	2,169	133	398	2,428	5,382						
Total	163,626	4,572,643	328,724	869,128	882,994	6,817,115						
1-5	33,858	2,471,332	235,106	472,211	166,540	3,379,047						
6-10	70,393	1,190,577	71,250	200,280	282,234	1,814,734						
11-15	42,871	682,803	18,457	119,505	256,384	1,120,020						
16-20	11,908	197,044	3,242	53,748	99,399	365,341						
21-25	4,596	30,887	669	23,384	78,437	137,973						
	% of Total within	n Type of Busir	ness									
1-5	20.7%	54.0%		54.3%	18.9%	49.6%						
6-10	43.0%	26.0%		23.0%	32.0%	26.6%						
11-15	26.2%	14.9%	5.6%	13.7%	29.0%	16.4%						
16-20	7.3%	4.3%		6.2%	11.3%	5.4%						
21-25	2.8%	0.7%	0.2%	2.7%	8.9%	2.0%						
	% of Total within	n Territory										
Total	2.4%	67.1%	4.8%	12.7%	13.0%	100.0%						
1-5	1.0%	73.1%		14.0%	4.9%	100.0%						
6-10	3.9%	65.6%		11.0%	15.6%	100.0%						
11-15	3.8%	61.0%		10.7%	22.9%	100.0%						
16-20	3.3%	53.9%	0.9%	14.7%	27.2%	100.0%						
21-25	3.3%	22.4%	0.5%	16.9%	56.8%	100.0%						

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report 2019 FHCF Exposure and Risks as of 10/16/19 (Trended to 6/30/20)

			Averages		
2019 FHCF Rating Region	Commercial	Residential	Mobile Home	Tenants	Condominium- Owners
1	1,075,970	439,761	89,070	26,110	114,522
2	871,402	440,620	90,430	28,547	118,363
3	1,035,298	474,358	90,003	25,221	117,373
4	820,952	430,779	87,695	27,816	107,211
5	567,749	436,642	86,435	27,823	109,150
6	788,901	404,806	81,023	25,575	100,707
7	937,063	464,408	86,204	28,280	114,572
8	812,360	461,830	71,873	29,065	117,826
9	857,176	485,129	75,825	30,916	120,187
10	357,247	566,050	95,090	30,119	131,340
11	1,117,444	512,158	81,632	25,962	96,633
12	1,194,018	437,571	101,408	25,361	87,848
13	1,068,385	410,266	83,874	22,519	102,830
14	1,243,065	421,919	67,891	25,265	161,220
15	1,171,818	513,768	59,863	30,323	184,862
16	1,028,675	564,632	71,876	26,371	114,772
17	1,361,217	485,003	79,194	26,000	132,676
18	1,299,297	691,665	56,949	26,303	132,949
19	2,265,387	638,301	50,579	28,215	180,751
20	3,025,165	458,518	63,601	26,469	108,794
21	3,760,832	1,330,646	-	30,165	190,734
22	6,530,546	595,089	-	30,628	169,895
23	5,521,703	940,931	46,070	31,532	269,693
24	4,068,388	1,552,082	66,244	33,063	223,630
25	7,238,986	1,070,648	51,209	70,831	598,949
Total	\$998,201	\$464,605	\$87,216	\$26,928	\$125,165
1-5	\$866,451	\$446,985	\$88,919	\$26,608	\$113,761
6-10	\$635,681	\$466,880		\$28,155	\$117,695
11-15	\$1,141,210	\$462,433		\$25,310	\$106,751
16-20	\$1,637,207	\$563,924		\$26,775	\$136,334
21-25	\$4,531,589	\$1,201,038		\$31,515	\$222,295
	ψ.,σσ.,σσο	Ţ., <b>_</b> 5.,000	Ψ,=	40.,010	<b>+===,200</b>

## **EXHIBIT**

XVI

# Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Valid Zip Codes With Residential Exposure 2020 Residential Masonry Base Premium (2% Deductible) Comparison Prior to Application of Premium Credits/Surcharges

#### % Change in Rates

Maximum Decrease -39.81% Minimum Decrease -3.36%

			Percentage of	Residential	Percentage of	Residential Exposure	Percentage of
Thresho	old	Count of ZIP	Zip Codes in	Exposure	Res Exposure in	Risk Counts	Risk Counts in
From	To	Codes	Group	(in 000's)	Group	(Houses)	Group
Less Than	-15%	29	3.13%	78,748,857	4.38%	152,604	3.93%
-15%	-10%	532	57.45%	1,151,974,656	64.04%	2,545,613	65.50%
-10%	-5%	299	32.29%	482,687,886	26.83%	1,047,624	26.95%
-5%	0%	66	7.13%	85,319,290	4.74%	140,869	3.62%
0%	5%	0	0.00%	-	0.00%	-	0.00%
5%	10%	0	0.00%	-	0.00%	-	0.00%
10%	15%	0	0.00%	-	0.00%	-	0.00%
Greater Than	15%	0	0.00%	-	0.00%	-	0.00%
		926	100.00%	1,798,730,690	100.00%	3,886,710	100.00%
New ZIP Code	es in 2020	0	0.00%	-	0.00%	-	0.00%
		926	100.00%	1,798,730,690	100.00%	3,886,710	100.00%

#### \$ Change in Rates

Maximum Decrease (\$159.51) Minimum Decrease (\$3.53)

			Percentage of	Decidential	Percentage of	Residential	Percentage of
Dua maissana T	Premium Threshold* Count of ZIP		•	Residential	•	Exposure	Risk Counts in
Premium i			Zip Codes in	Exposure	Res Exposure in	Risk Counts	
From	From To Codes		Group	(in 000's)	Group	(Houses)	Group
-\$175	-\$80	35	3.78%	42,969,125	2.39%	79,282	2.04%
-\$80	-\$40	47	5.08%	92,907,076	5.17%	176,985	4.55%
-\$40	-\$10	596	64.36%	1,285,730,364	71.48%	2,778,639	71.49%
-\$10	\$0	248	26.78%	377,124,125	20.97%	851,804	21.92%
\$0	\$10	0	0.00%	-	0.00%	-	0.00%
\$10	\$20	0	0.00%	-	0.00%	-	0.00%
\$20	\$30	0	0.00%	-	0.00%	-	0.00%
\$30	\$65	0	0.00%	-	0.00%	-	0.00%
		926	100.00%	1,798,730,690	100.00%	3,886,710	100.00%
New ZIP Co	odes in 2020	0	0.00%	-	0.00%	-	0.00%
		926	100.00%	1,798,730,690	100.00%	3,886,710	100.00%

#### \*Exposure Assumptions

Coverages: \$ 272 Building Value

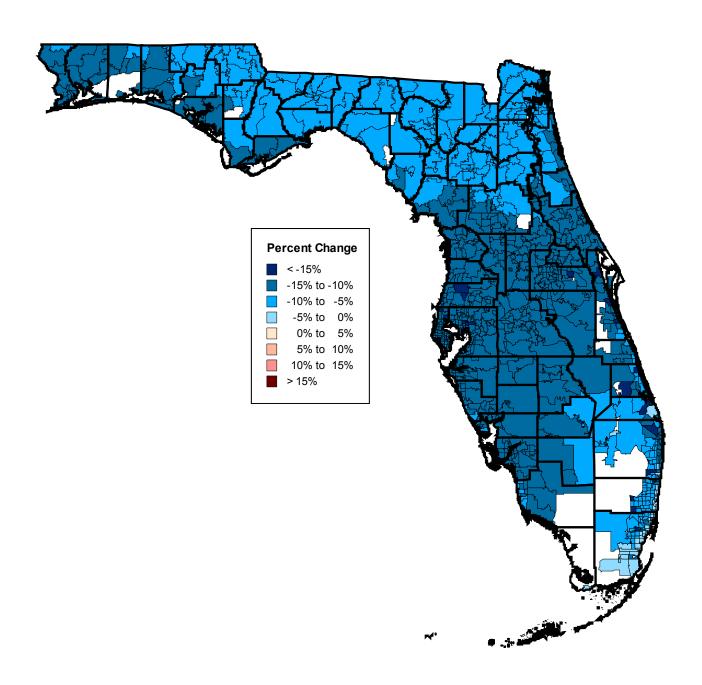
(in thousands) \$ 27 Appurtenant Structures

\$ 136 Contents

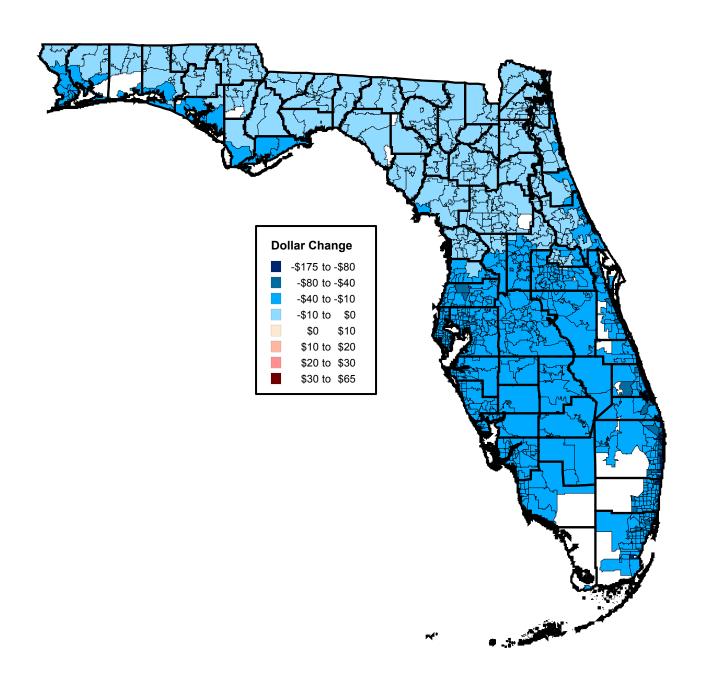
\$ 27 Additional Living Expense

\$ 463 FHCF Exposure

# Florida Hurricane Catastrophe Fund Proposed 2020 Percentage Rate Change by 5-Digit ZIP Code Entire State



# Florida Hurricane Catastrophe Fund Proposed 2020 Dollar Rate Change by 5-Digit ZIP Code Entire State



## **EXHIBIT**

XVII

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Premium Formula Report Exhibit XVII - Risk Transfer Options Formula

The FHCF determined in May of 2020 that it would not purchase reinsurance for the 2020-2021 Contract Year.

The original rates presented in this report included a loading for the cost of risk transfer for 92% of the \$1 billion excess of \$10.5 billion layer, assuming reinsurance premium equal to the 2019 initial premium of \$63.48 million and did not contain an estimated expense loading for additional pre-event notes. A modified version of Exhibit XVII is included for illustration purposes only based on the revised FHCF premium. If the FHCF had entered into a risk transfer arrangement in Contract Year 2020, the impact of the cost would have been determined, and the 2020-2021 FHCF premium rates and factors would have been accordingly adjusted, by using the formula specified in this Exhibit.

The estimates for FHCF loss credits are based on the average of the AIR and RMS data distributions in Exhibit VIII. Exhibit XVII is based on the same loss severity distribution and displays probability of exceedance for specific FHCF layers with the adjustments to the FHCF loss layer level prior to fixed expenses. These values are used to illustrate a range of potential risk transfer structures, costs and factors in the tables of this exhibit.

To adjust the FHCF premium/rates to account for the impact of a future risk transfer arrangement, if any, the rates presented in this 2020 Ratemaking Formula Report would be adjusted by a Risk Transfer Adjustment Factor (RTAF):

Amended FHCF Rate = Original FHCF Rate x RTAF

The details of the formula calculation are provided below.

#### **Definitions**

- 1. Amended FHCF Rate: Original FHCF Rate x RTAF
- 2. Amended FHCF Rate Change: FHCF Current Rate Change x RTAF
- 3. Amended FHCF Projected Payout Multiple: FHCF Current Projected Payout Multiple/RTAF
- 4. Amended FHCF Retention Multiple: FHCF Current Retention Multiple/RTAF
- 5. AP = Amended FHCF Premium: OP x RTAF
- 6. CBF: Cash Build-up Factor [25% for the 2020 Contract Year]
- 7. ELC: Expected Loss Credit
- 8. NRCP: Net Risk Transfer Cost Premium = (RTC (ELC x (1+CBF))
- 9. OP = Original FHCF Premium: \$1,192,720,460 for the 2020 Contract Year [Exh. II, line 73]
- 10. ONRCP: = Original Net Risk Transfer Cost Premium = Reinsurance [Exh. II, line 45a] (ceded loss and lae [Exh. II, line 21] x (1+CBF)) = \$0 (\$0 x 1.25) = \$0
- 11. RTAF = (OP ONRCP + NRCP) / OP
- 12. RTC: Risk Transfer Costs

#### Calculation of the Expected Loss Credit (ELC)

The ELC is calculated, based on the Modeled Adjusted Loss Severity Distributions in Exhibit XVII, as  $ELC = ((P(LA) + P(LE)/2)) \times (LE - LA)) \times TUP$ , whereas:

- 1. LA: Layer Attachment
- 2. LE: Layer Exhaustion
- 3. P(LA): probability of exceedance for Layer Attachment
- 4. P(LE): probability of exceedance for Layer Exhaustion
- 5. TUP: True Up Factor = FHCF Losses Prior to special adjustments and expenses (Exh. II, Line 19) / Exh. XVII total expected losses (no LAE, Adj.) = \$916,739,636/ \$830,318,206 =1.1040823017

#### **Example of RTAF Calculation**

Risk Transfer of \$500 million excess of \$10.5 billion purchased for 5% Rate on Line (\$25 million)

- RTC = 25,000,000
- Layer Attachment: \$10,500,000,000, P(LA) = 3.21000 %
- Layer Exhaustion: \$11,000,000,000, P(LE) = 3.00675%
- ELC = ((.0300675 +0.0321000)/2) x (\$11,000,000,000 -\$10,500,000,000)) x 1.1040823017 = \$17,159,509
- NRCP = \$25,000,000 (\$17,159,509 x 1.25) = \$3,550,614

RTAF = (\$1,192,720,460 - \$0 + \$3,550,614) / \$1,192,720,460 = 1.002976904

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Expected Loss and Premium by Layer

Based on Avg. (AIR, RMS) 2019 Trended Zip Code Loss Data and 2020 Per Company Estimated Limits and Retentions

Aggregate FHCF Loss Level	Return Time	Prob(Exceed)	Expected Loss Company	Adjust to Total Gross Loss and LAE
			Ret, Lim	(Expected Loss Credits)
0	3.4	29.40375%	2,514,637	2,776,367
10,000,000	4.8	20.88900%	17,209,350	19,000,539
100,000,000	5.8	17.35400%	24,453,000	26,998,125
250,000,000	6.6	15.25000%	35,812,813	39,540,292
500,000,000	7.5	13.40025%	61,726,250	68,150,860
1,000,000,000	8.9	11.29025%	100,608,750	111,080,340
2,000,000,000	11.3	8.83150%	81,696,250	90,199,384
3,000,000,000	13.3	7.50775%	70,685,000	78,042,057
4,000,000,000	15.1	6.62925%	62,748,750	69,279,784
5,000,000,000	16.9	5.92050%	56,432,500	62,306,124
6,000,000,000	18.6	5.36600%	51,366,250	56,712,567
7,000,000,000	20.4	4.90725%	46,463,750	51,299,804
8,000,000,000	22.8	4.38550%	41,227,500	45,518,553
9,000,000,000	25.9	3.86000%	36,392,500	40,180,315
10,000,000,000	29.3	3.41850%	16,571,250	18,296,024
10,500,000,000	31.2	3.21000%	15,541,875	17,159,509
11,000,000,000	33.3	3.00675%	14,518,750	16,029,895
11,500,000,000	35.7	2.80075%	13,540,625	14,949,964
12,000,000,000	38.2	2.61550%	12,666,875	13,985,272
12,500,000,000	40.8	2.45125%	11,751,250	12,974,347
13,000,000,000	44.5	2.24925%	10,845,000	11,973,773
13,500,000,000	47.9	2.08875%	9,971,875	11,009,771
14,000,000,000	52.6	1.90000%	9,065,625	10,009,196
14,500,000,000	57.9	1.72625%	8,132,500	8,978,949
15,000,000,000	65.5	1.52675%	7,045,000	7,778,260
15,500,000,000	77.4	1.29125%	3,045,313	3,362,276
15,750,000,000	87.3	1.14500%	2,686,250	2,965,841
16,000,000,000	99.6	1.00400%	2,281,250	2,518,688
16,250,000,000	121.8	0.82100%	3,317,134	3,662,389
16,999,000,000	1,544.4	0.06475%	335	370
17,000,000,000	44,444.4	0.00225%		
Total			830,318,206	916,739,636
True Up Factor				1.1040823017
Average AIR,RMS detai	I modeled expected	losses	826,783,858	

Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Risk Transfer Estimated Cost and Rate Impact Based on Avg. (AIR, RMS) 2019 Trended Zip Code Loss Data and 2020 Per Company Estimated Limits and Retentions

#### Aggregate

Reinsurance Attachment FHCF Premium with Cash Build Up Cash Build Up Factor	\$10,500,000,000 \$1,192,720,460 25%		it ention verage %	\$17,000,000,000 \$7,740,000,000 86.193%		Projected Payou Retention Multip Retention Multip Retention Multip	le 100% le 90%	14.2531 5.5934 6.2149 7.4578		
Rate Change	-3.65%	201	9 Model Net Rein	\$0		Retention Multip	le 45%	12.4297		
Risk Transfer Premiums Gross		Risk Transfer Rate on I								
Limit \$500,000,000	Expected Loss Credit \$17,159,509	4.00% \$20,000,000	4.50% \$22,500,000	5.00% \$25,000,000	5.50% \$27,500,000	6.00% \$30,000,000	6.50% \$32,500,000	7.00% \$35,000,000	7.50% \$37,500,000	8.00% \$40,000,000
\$1,000,000,000		\$40,000,000	\$45,000,000	\$50,000,000	\$55,000,000	\$60,000,000	\$65,000,000	\$70,000,000	\$75,000,000	\$80,000,000
\$1,500,000,000		\$60,000,000	\$67,500,000	\$75,000,000	\$82,500,000	\$90,000,000	\$97,500,000			\$120,000,000
\$2,000,000,000	\$62,124,641	\$80,000,000	\$90,000,000	\$100,000,000	\$110,000,000	\$120,000,000	\$130,000,000	\$140,000,000	\$150,000,000	\$160,000,000
Risk Transfer Dollar Impact on Premiums										
Limit	Expected Loss Credit	Net Risk Transfer Cost 4.00%	Premium 4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
\$500,000,000		(\$1,449,386)	\$1,050,614	\$3,550,614	\$6,050,614	\$8,550,614	\$11,050,614	\$13,550,614	\$16,050,614	\$18,550,614
\$1,000,000,000		(\$1,486,755)	\$3,513,245	\$8,513,245	\$13,513,245	\$18,513,245	\$23,513,245	\$28,513,245	\$33,513,245	\$38,513,245
\$1,500,000,000		(\$174,211)	\$7,325,789	\$14,825,789	\$22,325,789	\$29,825,789	\$37,325,789	\$44,825,789	\$52,325,789	\$59,825,789
\$2,000,000,000	\$62,124,641	\$2,344,199	\$12,344,199	\$22,344,199	\$32,344,199	\$42,344,199	\$52,344,199	\$62,344,199	\$72,344,199	\$82,344,199
Risk Transfer % Impact on Rates		51105 5								
Limit	Expected Loss Credit	FHCF Rate Impact 4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
\$500,000,000		-0.1%	0.1%	0.3%	0.5%	0.7%	0.9%	1.1%	1.3%	1.6%
\$1,000,000,000		-0.1%	0.3%	0.7%	1.1%	1.6%	2.0%	2.4%	2.8%	3.2%
\$1,500,000,000		0.0%	0.6%	1.2%	1.9%	2.5%	3.1%	3.8%	4.4%	5.0%
\$2,000,000,000	\$62,124,641	0.2%	1.0%	1.9%	2.7%	3.6%	4.4%	5.2%	6.1%	6.9%
Risk Transfer: Revised Rate Change										
Limit	Expected Loss Credit	FHCF Revised Rate Cl 4.00%	nange 4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
\$500,000,000		-3.77%	-3.56%	-3.36%	-3.16%	-2.96%	-2.76%	-2.55%	-2.35%	-2.15%
\$1,000,000,000		-3.77%	-3.37%	-2.96%	-2.56%	-2.95%	-1.75%	-1.35%	-0.94%	-0.54%
\$1,500,000,000		-3.66%	-3.06%	-2.45%	-1.85%	-1.24%	-0.63%	-0.03%	0.58%	1.18%
\$2,000,000,000		-3.46%	-2.65%	-1.84%	-1.04%	-0.23%	0.58%	1.39%	2.19%	3.00%
Projected Payout Multiple		Revised Payout Mutiple	es							
Limit		4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
\$500,000,000		14.2705	14.2406	14.2108	14.1812	14.1517	14.1223	14.0930	14.0639	14.0348
\$1,000,000,000		14.2709	14.2113	14.1521	14.0935	14.0353	13.9776	13.9203	13.8636	13.8073
\$1,500,000,000 \$2,000,000,000		14.2552 14.2252	14.1661 14.1071	14.0781 13.9910	13.9912 13.8768	13.9054 13.7645	13.8206 13.6539	13.7369 13.5451	13.6541 13.4380	13.5724 13.3327
\$2,000,000,000				13.9910	13.0700	13.7645	13.0539	13.5451	13.4360	13.3327
Retention Multiple 90%		Revised Retention Mul								
Limit		4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
\$500,000,000 \$1,000,000,000		6.2224 6.2226	6.2094 6.1966	6.1964 6.1708	6.1835 6.1452	6.1706 6.1199	6.1578 6.0947	6.1451 6.0698	6.1323 6.0450	6.1197 6.0205
\$1,500,000,000		6.2158	6.1769	6.1386	6.1007	6.0632	6.0263	5.9898	5.9537	5.9180
\$2,000,000,000		6.2027	6.1512	6.1006	6.0508	6.0018	5.9536	5.9061	5.8595	5.8135
Retention Multiple 75%		Revised Retention Mul-	tiple 75%							
Limit		4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
\$500,000,000		7.4669	7.4513	7.4357	7.4202	7.4048	7.3894	7.3741	7.3588	7.3436
\$1,000,000,000		7.4671	7.4359	7.4050	7.3743	7.3438	7.3137	7.2837	7.2540	7.2246
\$1,500,000,000		7.4589	7.4123	7.3663	7.3208 7.2609	7.2759	7.2315 7.1443	7.1877 7.0874	7.1444	7.1016 6.9762
\$2,000,000,000		7.4432	7.3814	7.3207	7.2009	7.2021	7.1443	7.0674	7.0314	0.9702
Retention Multiple 45% Limit		Revised Retention Mult 4.00%	tiple 45% 4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
\$500,000,000		12.4449	12.4188	12.3928	12.3670	12.3413	12.3156	12.2901	12.2647	12.2394
\$1,000,000,000		12.4452	12.3932	12.3416	12.2905	12.2397	12.1894	12.1395	12.0900	12.0409
\$1,500,000,000		12.4315	12.3539	12.2771	12.2013	12.1265	12.0526	11.9795	11.9073	11.8360
\$2,000,000,000		12.4054	12.3024	12.2012	12.1016	12.0036	11.9072	11.8123	11.7189	11.6270

Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Risk Transfer Estimated Cost and Rate Impact Based on Avg. (AIR, RMS) 2019 Trended Zip Code Loss Data and 2020 Per Company Estimated Limits and Retentions

#### Aggregate

Reinsurance Attachment FHCF Premium with Cash Build Up Cash Build Up Factor Rate Change	\$11,000,000,000 \$1,192,720,460 25%	, F	imit Retention Coverage %	\$17,000,000,000 \$7,740,000,000 86.193%		Projected Payou Retention Multip Retention Multip Retention Multip Retention Multip	le 100% le 90% le 75%	14.2531 5.5934 6.2149 7.4578 12.4297		
Risk Transfer Premiums Gross Limit \$500,000, \$1,000,000, \$1,500,000,0 \$2,000,000,0	00 \$30,979,859 00 \$44,965,132	Risk Transfer Rate of 4.00% \$20,000,000 \$40,000,000 \$60,000,000 \$80,000,000	4.50% \$22,500,000 \$45,000,000 \$67,500,000 \$90,000,000	5.00% \$25,000,000 \$50,000,000 \$75,000,000 \$100,000,000	5.50% \$27,500,000 \$55,000,000 \$82,500,000 \$110,000,000	6.00% \$30,000,000 \$60,000,000 \$90,000,000 \$120,000,000				8.00% \$40,000,000 \$80,000,000 \$120,000,000 \$160,000,000
Risk Transfer Dollar Impact on Premium Limit \$500,000, \$1,000,000, \$1,500,000,0 \$2,000,000,0	Expected Loss Credit 00 \$16,029,895 00 \$30,979,859 00 \$44,965,132	Net Risk Transfer Co 4.00% (\$37,369) \$1,275,176 \$3,793,585 \$7,575,651	4.50% \$2,462,631 \$6,275,176 \$11,293,585 \$17,575,651	5.00% \$4,962,631 \$11,275,176 \$18,793,585 \$27,575,651	5.50% \$7,462,631 \$16,275,176 \$26,293,585 \$37,575,651	6.00% \$9,962,631 \$21,275,176 \$33,793,585 \$47,575,651	6.50% \$12,462,631 \$26,275,176 \$41,293,585 \$57,575,651	7.00% \$14,962,631 \$31,275,176 \$48,793,585 \$67,575,651	7.50% \$17,462,631 \$36,275,176 \$56,293,585 \$77,575,651	8.00% \$19,962,631 \$41,275,176 \$63,793,585 \$87,575,651
Risk Transfer % Impact on Rates Limit \$500,000. \$1,000,000. \$1,500,000. \$2,000,000.	00 \$30,979,859 00 \$44,965,132	FHCF Rate Impact 4.00% 0.0% 0.1% 0.3% 0.6%	4.50% 0.2% 0.5% 0.9% 1.5%	0.9% 1.6%	5.50% 0.6% 1.4% 2.2% 3.2%	2.8%	6.50% 1.0% 2.2% 3.5% 4.8%	7.00% 1.3% 2.6% 4.1% 5.7%	7.50% 1.5% 3.041% 4.7% 6.5%	8.00% 1.7% 3.5% 5.3% 7.3%
Risk Transfer: Revised Rate Change Limit \$500,000, \$1,000,000, \$1,500,000, \$2,000,000,	00 \$30,979,859 00 \$44,965,132	FHCF Revised Rate 4.00% -3.65% -3.55% -3.34% -3.04%	Change 4.50% -3.45% -3.14% -2.74% -2.23%	5.00% -3.25% -2.74% -2.13% -1.42%	5.50% -3.05% -2.33% -1.53% -0.61%	6.00% -2.84% -1.93% -0.92% 0.19%	6.50% -2.64% -1.53% -0.31% 1.00%	7.00% -2.44% -1.12% 0.29% 1.81%	7.50% -2.24% -0.72% 0.90% 2.62%	8.00% -2.04% -0.31% 1.50% 3.43%
Projected Payout Multiple Limit \$500,000, \$1,000,000, \$1,500,000, \$2,000,000,0	00 00	Revised Payout Mut 4.00% 14.2536 14.2379 14.2079 14.1632	4.50% 14.2238 14.1785 14.1194 14.0461	5.00% 14.1941 14.1197 14.0320 13.9310	5.50% 14.1645 14.0613 13.9457 13.8178	6.00% 14.1351 14.0033 13.8604 13.7064	6.50% 14.1057 13.9459 13.7762 13.5968	7.00% 14.0765 13.8889 13.6930 13.4889	7.50% 14.0475 13.8324 13.6107 13.3827	8.00% 14.0185 13.7764 13.5295 13.2782
Retention Multiple 90% Limit \$500,000,0 \$1,000,000,0 \$2,000,000,0	00	Revised Retention N 4.00% 6.2151 6.2082 6.1952 6.1756	4.50% 4.50% 6.2021 6.1823 6.1566 6.1246	5.00% 6.1891 6.1567 6.1185 6.0744	5.50% 6.1762 6.1312 6.0808 6.0251	6.00% 6.1634 6.1060 6.0436 5.9765	6.50% 6.1506 6.0809 6.0069 5.9287	7.00% 6.1379 6.0561 5.9706 5.8816	7.50% 6.1252 6.0314 5.9348 5.8353	8.00% 6.1126 6.0070 5.8993 5.7898
Retention Multiple 75% Limit \$500,000, \$1,000,000, \$1,500,000, \$2,000,000,0	00	Revised Retention N 4.00% 7.4581 7.4499 7.4342 7.4108	4.50% 4.50% 7.4425 7.4188 7.3879 7.3495	5.00% 7.4269 7.3880 7.3421 7.2893	5.50% 7.4115 7.3574 7.2970 7.2301	6.00% 7.3961 7.3271 7.2524 7.1718	6.50% 7.3807 7.2971 7.2083 7.1144	7.00% 7.3654 7.2673 7.1647 7.0580	7.50% 7.3502 7.2377 7.1217 7.0024	8.00% 7.3351 7.2084 7.0792 6.9477
Retention Multiple 45% Limit \$500,000, \$1,000,000, \$1,500,000, \$2,000,000,0	00	Revised Retention N 4.00% 12.4301 12.4165 12.3903 12.3513	4.50% 12.4041 12.3647 12.3131 12.2492	5.00% 12.3782 12.3133 12.2369 12.1489	5.50% 12.3524 12.2624 12.1616 12.0501	6.00% 12.3268 12.2119 12.0873 11.9529	6.50% 12.3012 12.1618 12.0138 11.8573	7.00% 12.2757 12.1121 11.9412 11.7633	7.50% 12.2504 12.0629 11.8695 11.6707	8.00% 12.2251 12.0140 11.7987 11.5795

Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Risk Transfer Estimated Cost and Rate Impact Based on Avg. (AIR, RMS) 2019 Trended Zip Code Loss Data and 2020 Per Company Estimated Limits and Retentions

#### Aggregate

Reinsurance Attachment FHCF Premium with Cash Build Up Cash Build Up Factor Rate Change	\$11,500,000,000 \$1,192,720,460 25%	F (	imit Retention Coverage %	\$17,000,000,000 \$7,740,000,000 86.193%		Projected Payou Retention Multip Retention Multip Retention Multip Retention Multip	le 100% le 90% le 75%	14.2531 5.5934 6.2149 7.4578 12.4297		
Risk Transfer Premiums Gross Limit \$500,000,0 \$1,000,000,0 \$1,500,000,0 \$2,000,000,0	00 \$28,935,237 00 \$41,909,584	Risk Transfer Rate of 4.00% \$20,000,000 \$40,000,000 \$60,000,000 \$80,000,000	4.50% \$22,500,000 \$45,000,000 \$67,500,000 \$90,000,000	5.00% \$25,000,000 \$50,000,000 \$75,000,000 \$100,000,000	5.50% \$27,500,000 \$55,000,000 \$82,500,000 \$110,000,000	6.00% \$30,000,000 \$60,000,000 \$90,000,000 \$120,000,000				8.00% \$40,000,000 \$80,000,000 \$120,000,000 \$160,000,000
Risk Transfer Dollar Impact on Premium Limit \$500,000, \$1,000,000, \$2,000,000,	Expected Loss Credit 00 \$14,949,964 00 \$28,935,237 00 \$41,909,584	Net Risk Transfer Co 4.00% \$1,312,544 \$3,830,954 \$7,613,020 \$12,645,804	4.50% \$3,812,544 \$8,830,954 \$15,113,020 \$22,645,804	5.00% \$6,312,544 \$13,830,954 \$22,613,020 \$32,645,804	5.50% \$8,812,544 \$18,830,954 \$30,113,020 \$42,645,804	6.00% \$11,312,544 \$23,830,954 \$37,613,020 \$52,645,804	6.50% \$13,812,544 \$28,830,954 \$45,113,020 \$62,645,804	7.00% \$16,312,544 \$33,830,954 \$52,613,020 \$72,645,804	7.50% \$18,812,544 \$38,830,954 \$60,113,020 \$82,645,804	8.00% \$21,312,544 \$43,830,954 \$67,613,020 \$92,645,804
Risk Transfer % Impact on Rates Limit \$500,000,0 \$1,000,000,0 \$2,000,000,0	00 \$28,935,237 00 \$41,909,584	FHCF Rate Impact 4.00% 0.1% 0.3% 0.6% 1.1%	4.50% 0.3% 0.7% 1.3% 1.9%	1.2%	5.50% 0.7% 1.6% 2.5% 3.6%		6.50% 1.2% 2.4% 3.8% 5.3%	7.00% 1.4% 2.8% 4.4% 6.1%	7.50% 1.6% 3.256% 5.0% 6.9%	8.00% 1.8% 3.7% 5.7% 7.8%
Risk Transfer: Revised Rate Change Limit \$500,000,0 \$1,000,000,0 \$1,500,000,0 \$2,000,000,0	00 \$28,935,237 00 \$41,909,584	FHCF Revised Rate 4.00% -3.54% -3.34% -3.03% -2.63%	Change 4.50% -3.34% -2.94% -2.43% -1.82%	5.00% -3.14% -2.53% -1.82% -1.01%	5.50% -2.94% -2.13% -1.22% -0.20%	6.00% -2.74% -1.72% -0.61% 0.60%	6.50% -2.53% -1.32% 0.00% 1.41%	7.00% -2.33% -0.92% 0.60% 2.22%	7.50% -2.13% -0.51% 1.21% 3.03%	8.00% -1.93% -0.11% 1.81% 3.83%
Projected Payout Multiple Limit \$500,000,0 \$1,000,000,0 \$1,500,000,0 \$2,000,000,0	00 00	Revised Payout Mut 4.00% 14.2375 14.2075 14.1627 14.1036	4.50% 14.2077 14.1484 14.0748 13.9876	5.00% 14.1781 14.0897 13.9879 13.8734	5.50% 14.1486 14.0316 13.9021 13.7611	6.00% 14.1192 13.9739 13.8174 13.6506	6.50% 14.0900 13.9167 13.7337 13.5419	7.00% 14.0608 13.8600 13.6510 13.4348	7.50% 14.0318 13.8037 13.5692 13.3295	8.00% 14.0029 13.7479 13.4885 13.2258
Retention Multiple 90% Limit \$500,000,0 \$1,000,000,0 \$1,500,000,0 \$2,000,000,0	00 00	Revised Retention N 4.00% 6.2080 6.1950 6.1754 6.1497	4.50% 4.50% 6.1951 6.1692 6.1371 6.0991	5.00% 6.1821 6.1436 6.0992 6.0493	5.50% 6.1693 6.1183 6.0618 6.0003	6.00% 6.1565 6.0931 6.0249 5.9521	6.50% 6.1437 6.0682 5.9884 5.9047	7.00% 6.1310 6.0434 5.9523 5.8581	7.50% 6.1184 6.0189 5.9167 5.8121	8.00% 6.1058 5.9946 5.8815 5.7669
Retention Multiple 75% Limit \$500,000, \$1,000,000, \$1,500,000, \$2,000,000,0	00 00	Revised Retention N 4.00% 7.4496 7.4340 7.4105 7.3796	4.50% 4.50% 7.4341 7.4030 7.3645 7.3189	5.00% 7.4186 7.3723 7.3191 7.2592	5.50% 7.4031 7.3419 7.2742 7.2004	6.00% 7.3878 7.3117 7.2298 7.1426	6.50% 7.3725 7.2818 7.1860 7.0857	7.00% 7.3572 7.2521 7.1428 7.0297	7.50% 7.3420 7.2227 7.1000 6.9746	8.00% 7.3269 7.1935 7.0577 6.9203
Retention Multiple 45% Limit \$500,000, \$1,000,000, \$1,500,000, \$2,000,000,	00 00	Revised Retention N 4.00% 12.4161 12.3899 12.3509 12.2993	4.50% 4.50% 12.3901 12.3384 12.2742 12.1981	5.00% 12.3643 12.2872 12.1985 12.0986	5.50% 12.3386 12.2365 12.1236 12.0006	6.00% 12.3129 12.1862 12.0497 11.9043	6.50% 12.2874 12.1364 11.9767 11.8095	7.00% 12.2620 12.0869 11.9046 11.7161	7.50% 12.2367 12.0378 11.8333 11.6243	8.00% 12.2115 11.9891 11.7629 11.5338

## **EXHIBIT**

**XVIII** 

#### Florida Hurricane Catastrophe Fund 2020 Ratemaking Formula Report Summary of Changes in Zip Codes 2007 to 2020

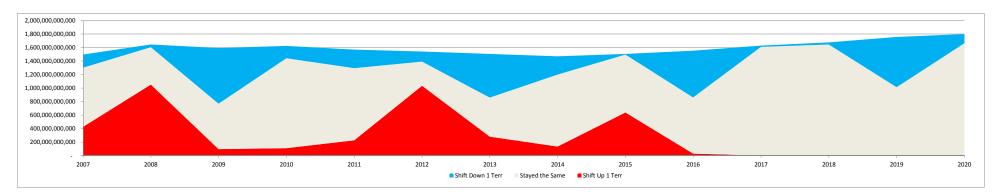
The table below outlines how the Zip Codes, after tempering, have moved relative to the prior year's territory allocations. Columns in yellow highlight years when large numbers of zip code changes were reversed in the following year. 2017 and 2018 indicated shifts were not implemented, except if the indication was for a change of two or more territories.

2019 and 2020 indicated shifts were implemented if the one year indication was for a change of two or more territories or the 3 year average indication was one or more territories.

	Zip Count													
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Shift Up 1Terr	415	848	117	136	244	884	286	153	615	58	5	0	8	31
Stayed the Same	913	579	641	1182	935	394	610	1042	796	660	1429	1438	866	1288
Shift Down 1 Terr	143	47	707	146	286	187	569	271	54	743	29	23	583	137
Grand Total	1471	1474	1465	1464	1465	1465	1465	1466	1465	1461	1463	1461	1457	1456

The table below outlined how the Modeled Residential exposure, after tempering, has moved relative to last year's territory allocations. 2017 and 2018 indicated shifts were not implemented, except if the indication was for a change of two or more territories.

	Residential													
	Exposure	Residential Exposure	Residential Exposure											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Shift Up 1 Terr	424,239,189,098	1,052,071,843,315	95,153,867,703	110,793,850,670	225,354,576,503	1,034,102,124,911	279,982,310,693	133,372,324,850	638,038,689,041	30,355,393,045	120,301,968	-	3,863,182,393	-
Stayed the Same	876,709,520,929	552,189,825,165	675,246,787,074	1,329,194,622,054	1,068,072,705,322	357,624,555,304	578,054,403,377	1,064,750,757,567	857,963,061,092	830,059,146,159	1,609,421,358,880	1,643,489,426,318	1,007,348,125,861	1,663,840,269,688
Shift Down 1 Terr	194,377,582,850	39,769,466,565	821,485,686,346	183,788,837,645	275,251,133,171	149,042,393,925	646,657,288,762	271,116,842,049	9,470,255,881	691,630,004,707	18,497,846,898	30,552,736,945	744,805,357,599	134,890,419,933
Grand Total	1,495,326,292,877	1,644,031,135,044	1,591,886,341,123	1,623,777,310,369	1,568,678,414,996	1,540,769,074,140	1,504,694,002,832	1,469,239,924,466	1,505,472,006,014	1,552,044,543,911	1,628,039,507,746	1,674,042,163,263	1,756,016,665,853	1,798,730,689,621

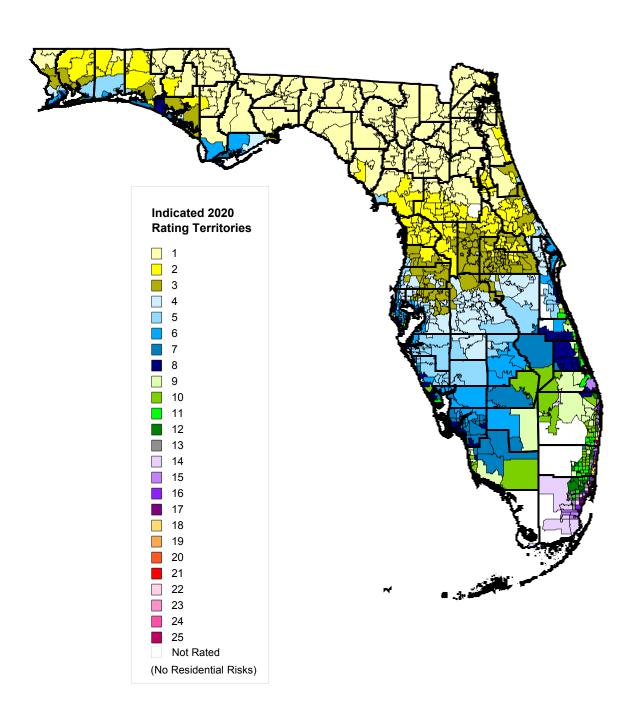


1 of 1 Paragon Strategic Solutions, Inc.

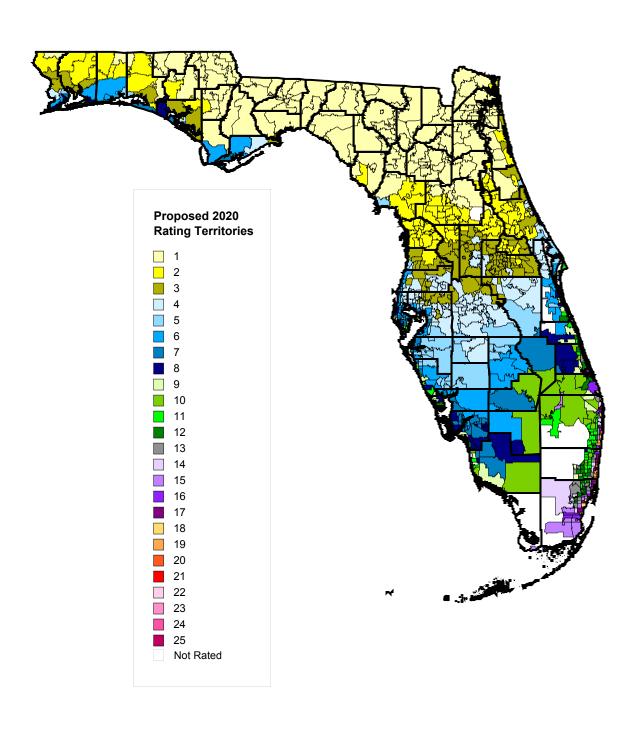
## **EXHIBIT**

XIX

#### Florida Hurricane Catastrophe Fund Indicated 2020 Rating Territories by 5-Digit ZIP Code Entire State

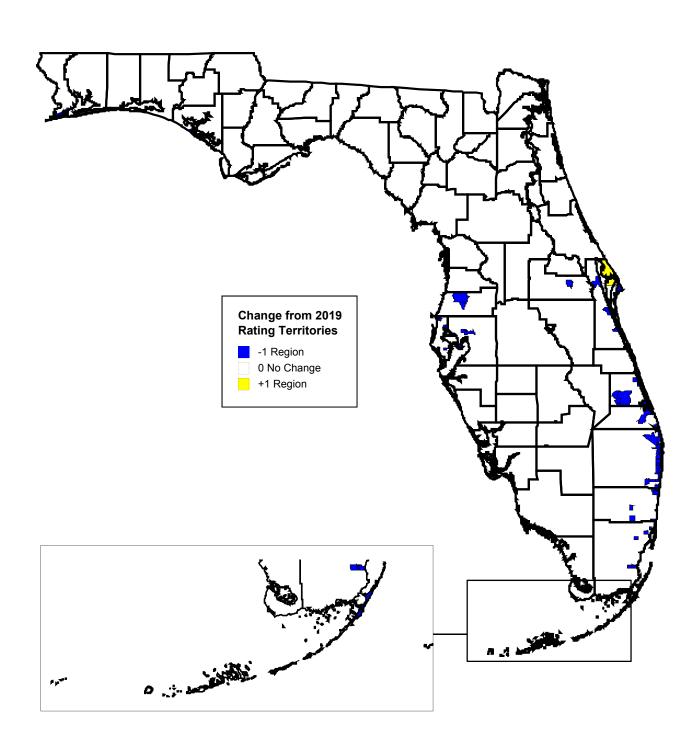


# Florida Hurricane Catastrophe Fund Proposed 2020 Rating Territories by 5-Digit ZIP Code Entire State

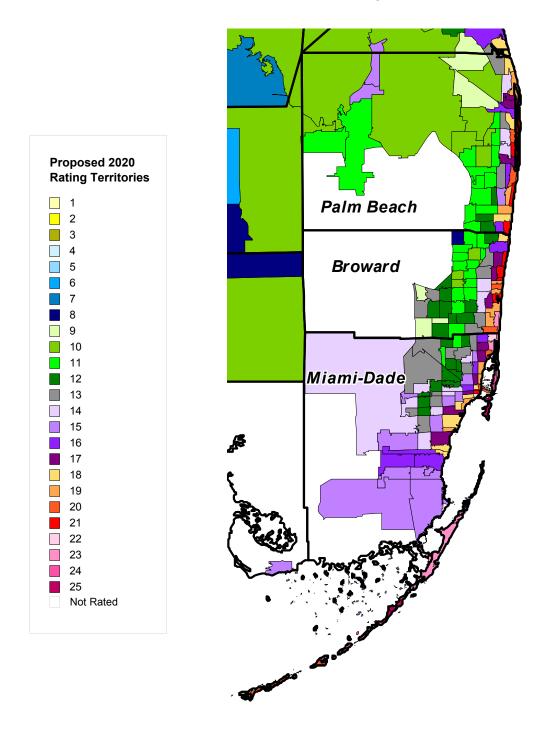


### Florida Hurricane Catastrophe Fund

### Proposed 2020 Rating Territories by 5-Digit ZIP Code Entire State - Change From 2018 Territories

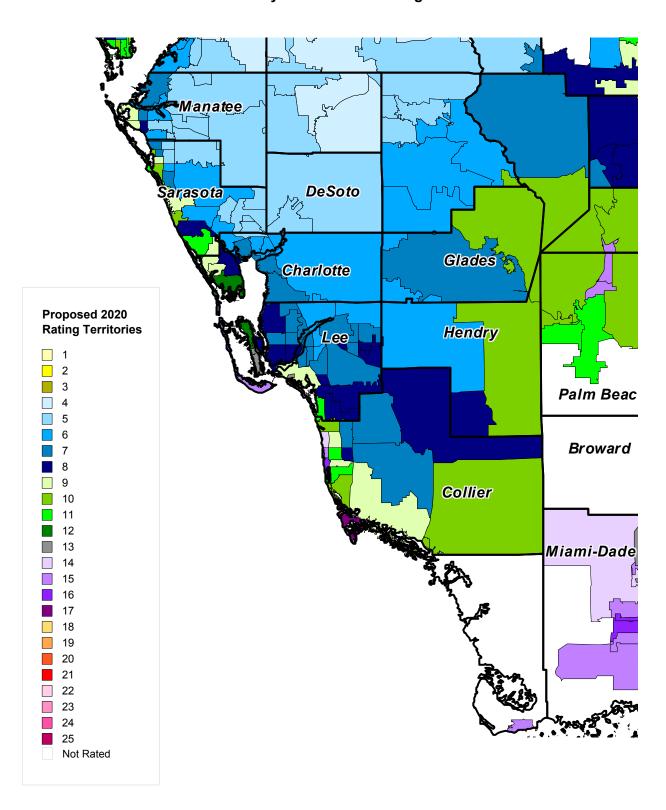


# Florida Hurricane Catastrophe Fund Proposed 2020 Rating Territories by 5-Digit ZIP Code Miami and Surrounding Areas



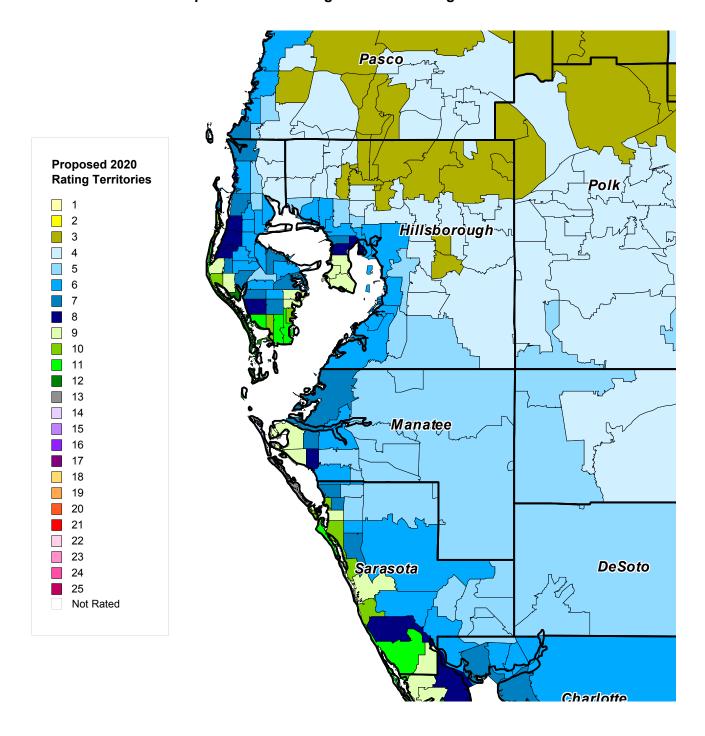
### Florida Hurricane Catastrophe Fund

### Proposed 2020 Rating Territories by 5-Digit ZIP Code Fort Myers and Surrounding Areas



### Florida Hurricane Catastrophe Fund

### Proposed 2020 Rating Territories by 5-Digit ZIP Code Tampa/Saint Petersburg and Surrounding Areas



# Florida Hurricane Catastrophe Fund Proposed 2020 Rating Territories by 5-Digit ZIP Code Florida Keys

