State Board of Administration

Florida Hurricane Catastrophe Fund

Casualty Actuarial Society

November 15, 2016

Orlando, Florida

Three Roles

1. Administer the FHCF
2. Staff the Florida Commission on Hurricane Loss Projection Methodology (FCHLPM)
3. Administer the SBA's Insurance Capital Build-Up Incentive Program

Florida Hurricane Catastrophe Fund Basics

What is the FHCF?

- State Tax-Exempt Trust Fund created by the Florida Legislature in 1993 for the purpose of providing a stable and ongoing source of reimbursement to insurers for a portion of their catastrophic hurricane losses in order to provide additional insurance capacity for the state.

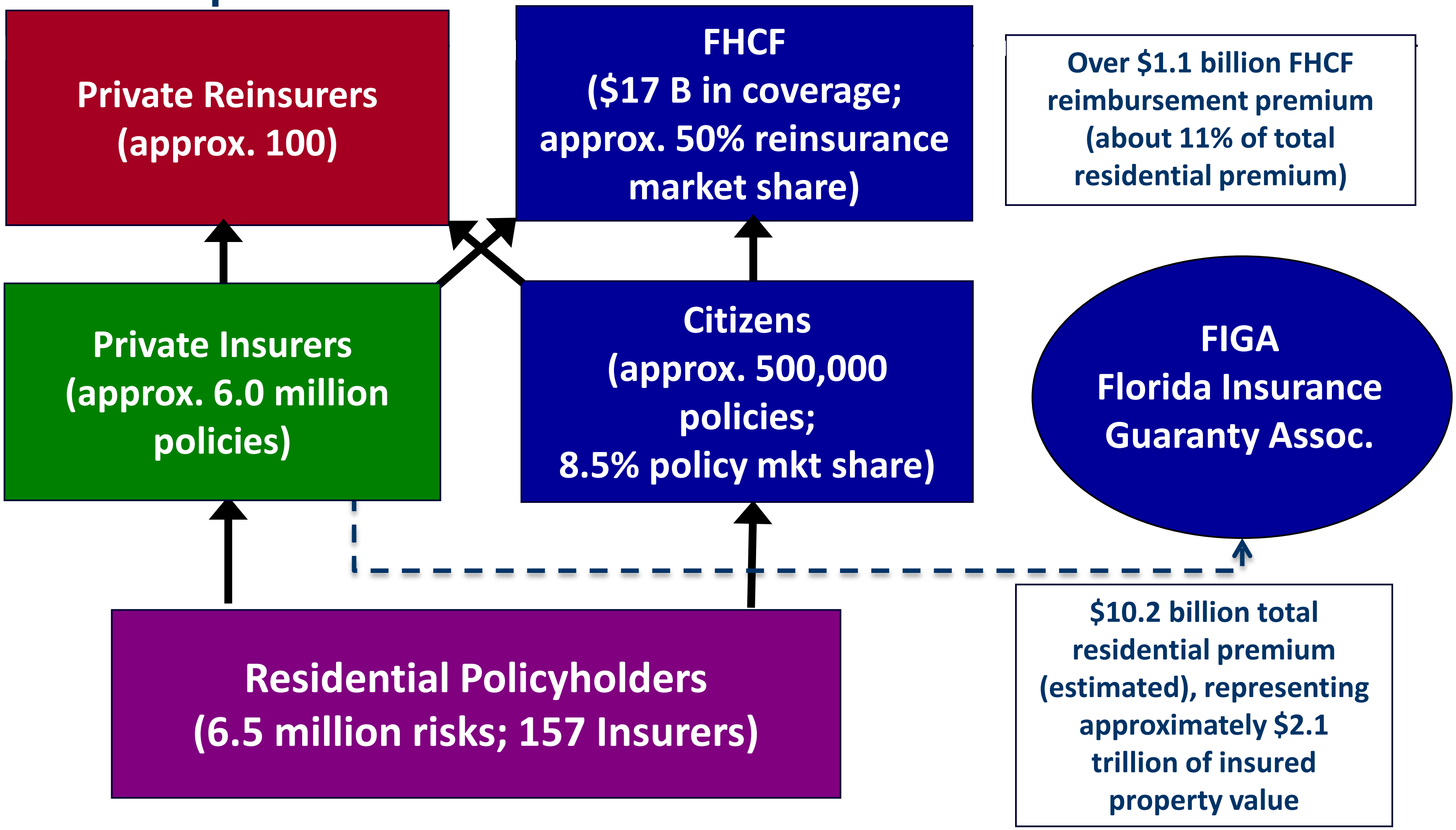
- A state run reimbursement program for insurers for catastrophic hurricane losses administered by the State Board of Administration (SBA). Similar in function to private reinsurance, but a government program governed by statute and administrative rules.

- A violation of the FHCF statute is considered a violation of the insurance code.

Reasons for the Creation of the FHCF

- Following Hurricane Andrew, reinsurance capacity contracted.
- Insurers attempted (or threatened) to withdraw from the state and/or cancel or non-renew policyholders in large numbers.
- State action was needed to stabilize the marketplace.
- A state program was created to add insurance capacity.

Florida Residential Property Insurance Marketplace



Sources: Office of Insurance Regulation, Florida Hurricane Catastrophe Fund, Citizens Property Insurance Corporation, and Aon Benfield

Oversight of the FHCF

- State Board of Administration (Trustees)
  - Governor (Rick Scott)
  - Attorney General (Pam Bondi)
  - Chief Financial Officer (Jeff Atwater)

- Executive Director (Ash Williams)

- FHCF Chief Operating Officer (Anne Bert)

- Nine (9) member Advisory Council – to provide the SBA with advice and information

How the FHCF Operates

- Mandatory participation: All admitted residential property insurers must participate in the FHCF as a condition of doing business in Florida
  - Prevents adverse selection
  - Promotes stability and predictability in the fund
  - Contributes to financial markets' evaluation of the FHCF as a highly creditworthy borrower

- No underwriting: The FHCF must provide coverage to each eligible insurer on identical terms
  - No variation in rates
  - No variation in coverages (except to reflect the insurer's selected options)
  - Assures that each participant has its fair share of the finite resources (capacity) available for reimbursement

How the FHCF Operates

- Reimbursement Contract
  - Coverage for residential policies
  - Participating insurers select coverage 45%, 75%, or 90% and absorb co-payment as well as a deductible (retention)
- Insurer Reporting Forms
  - Data Call (Exposure Data Reports)
  - Proof of Loss Reports
    - interim, year-end mandatory, and quarterly (ongoing)
- Premium Formula
  - Required by law to charge “Actuarially Indicated Premiums”
  - Determined by an independent consultant
  - Calculated using models found acceptable by the FCHLPM
  - Unanimously approved by the SBA Trustees

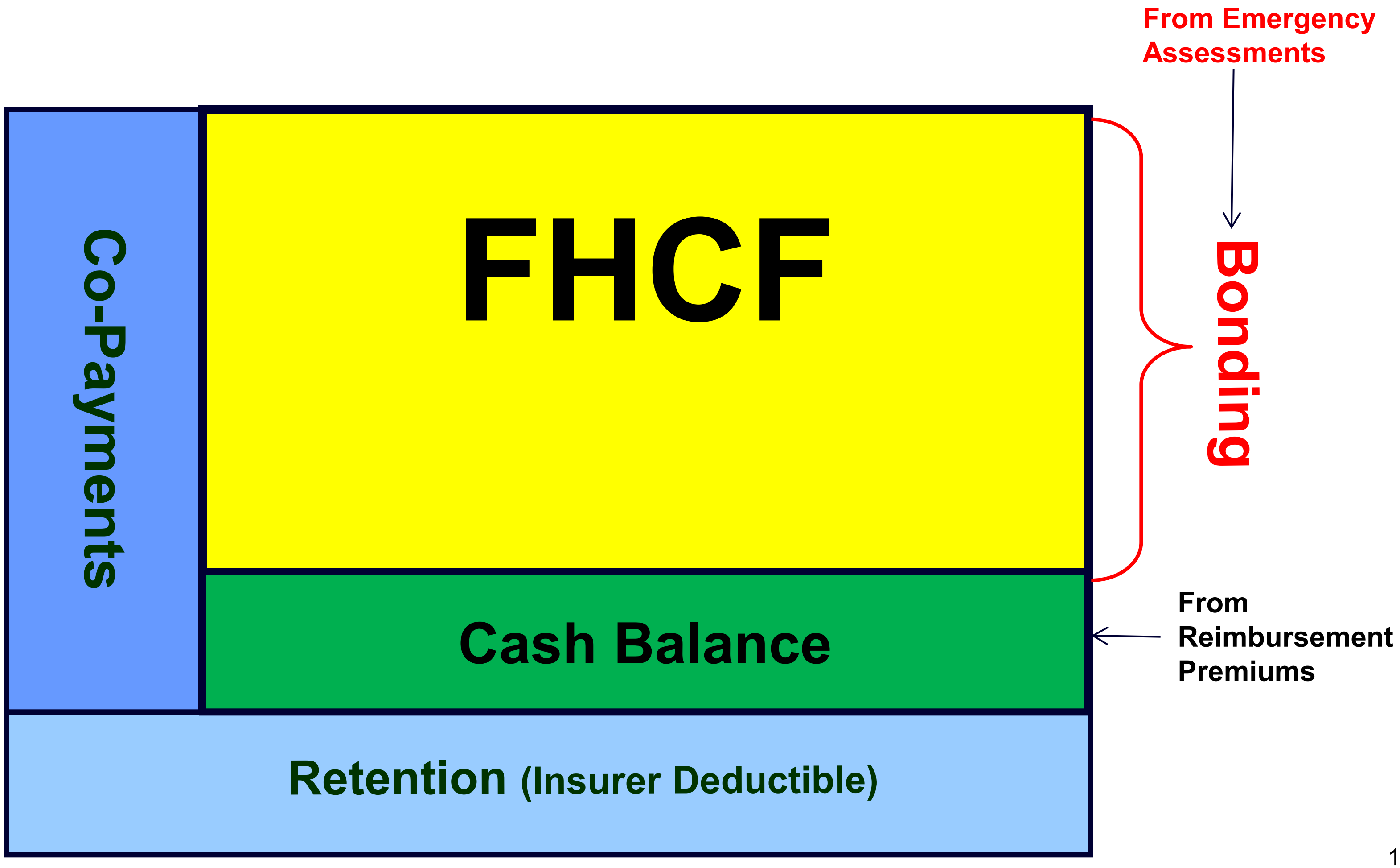
How the FHCF Operates

- Payment of Premiums
  - Three installments
- Payment of Claims
  - as soon as practical, 2-5 days
- Obligations limited to the FHCF’s actual claims-paying capacity
  - Estimate claims-paying capacity twice a year (May and October)
  - Insurers may rely on the FHCF’s claims-paying estimates for all regulatory and reinsurance purposes
- Commutation
  - No earlier than 36 months or later than 60 months, final Proof of Loss Report (actuarial outstanding and IBNR), differences settled by panel of 3 actuaries

Coverage and Retention

- Insurers are required to report exposures
- FHCF premiums are based on an insurer's exposure
  - Rating Factors: Type of business, location, construction, deductibles, & mitigation factors
- FHCF coverage is determined by FHCF premiums
  - Insurer retention (deductible) is a multiple of FHCF premiums and is established in the ratemaking formula report each March; multiple based on industry retention/industry premium ratio adjusted for insurer coverage selection
  - Limit of coverage (payout) is a multiple of FHCF premiums and is estimated in the ratemaking formula report each March; multiple based on industry limit/industry premium ratio
- Retention – adjusted each year to reflect exposure growth or decline

Basic Structure of the FHCF



Not Drawn to Scale.

2016/2017 Contract Year

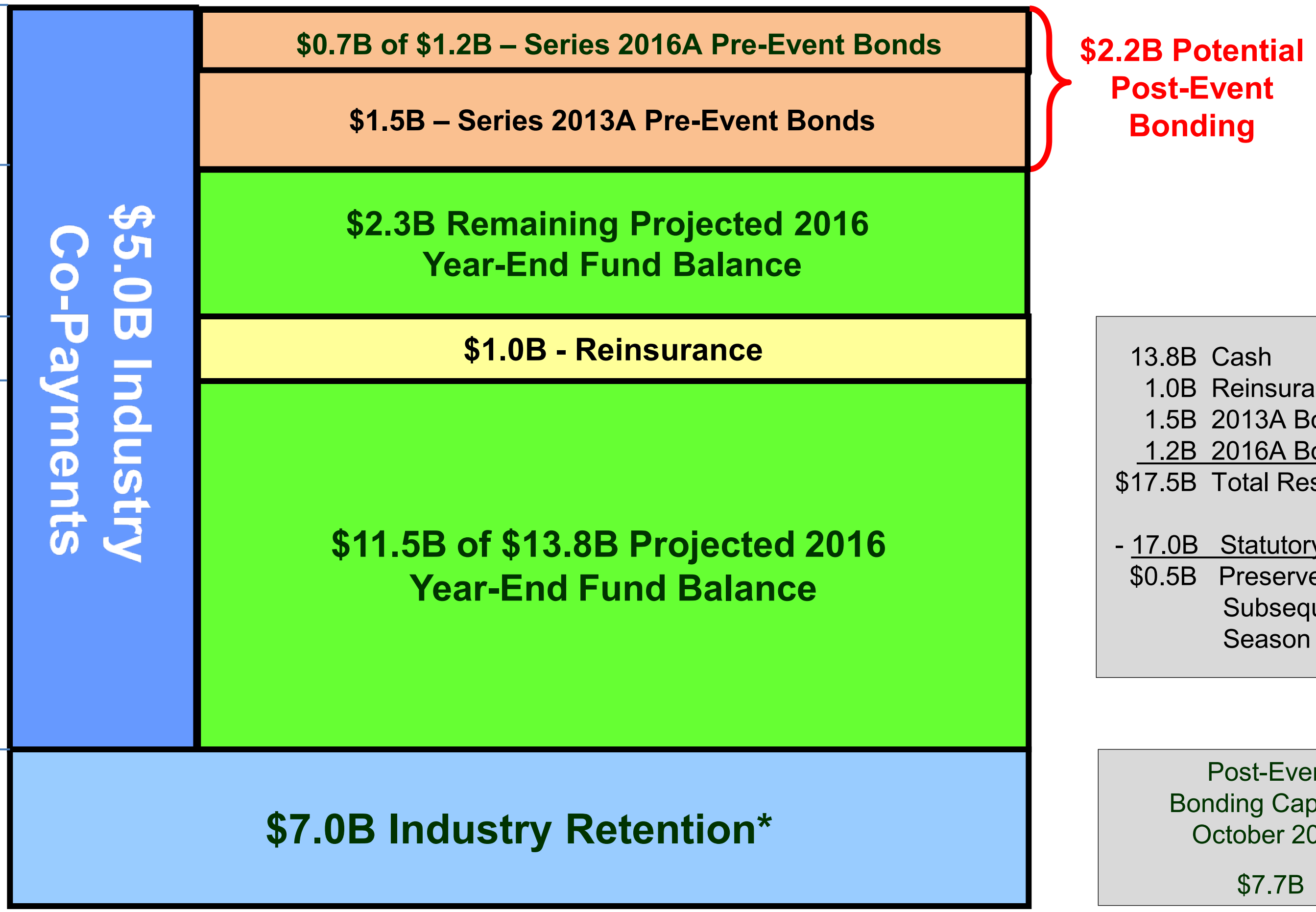
Not Official (For Illustrative Purposes Only)

$17B FHCF Capacity

(Loss Adjustment Expense is included in the capacity)

As of October 7, 2016

Ground Up Losses ($B)	Return Time (Years)	Probability (%)
$28.2	51	1.96%
$25.4	43	2.36%
$22.6	36	2.79%
$21.3	33	3.05%
$7.0	9	10.75%



13.8B	Cash
1.0B	Reinsurance
1.5B	2013A Bonds
1.2B	2016A Bonds
$17.5B	Total Resources
- 17.0B	Statutory Limit
$0.5B	Preserved for Subsequent Season

Post-Event Bonding Capacity October 2016

$7.7B

Represents industry losses. FHCF probabilities are lower at the top loss levels and higher at the lower loss levels. All insurers would need to reach their maximum coverage limit in order to exhaust the last billion of FHCF Coverage. Insurers can trigger coverage below the industry retention.

***Individual company retentions are their share of the industry retention.**

2017/2018 Subsequent Season

Preliminary Estimates

Not Official (For Illustrative Purposes Only)

Industry Losses:

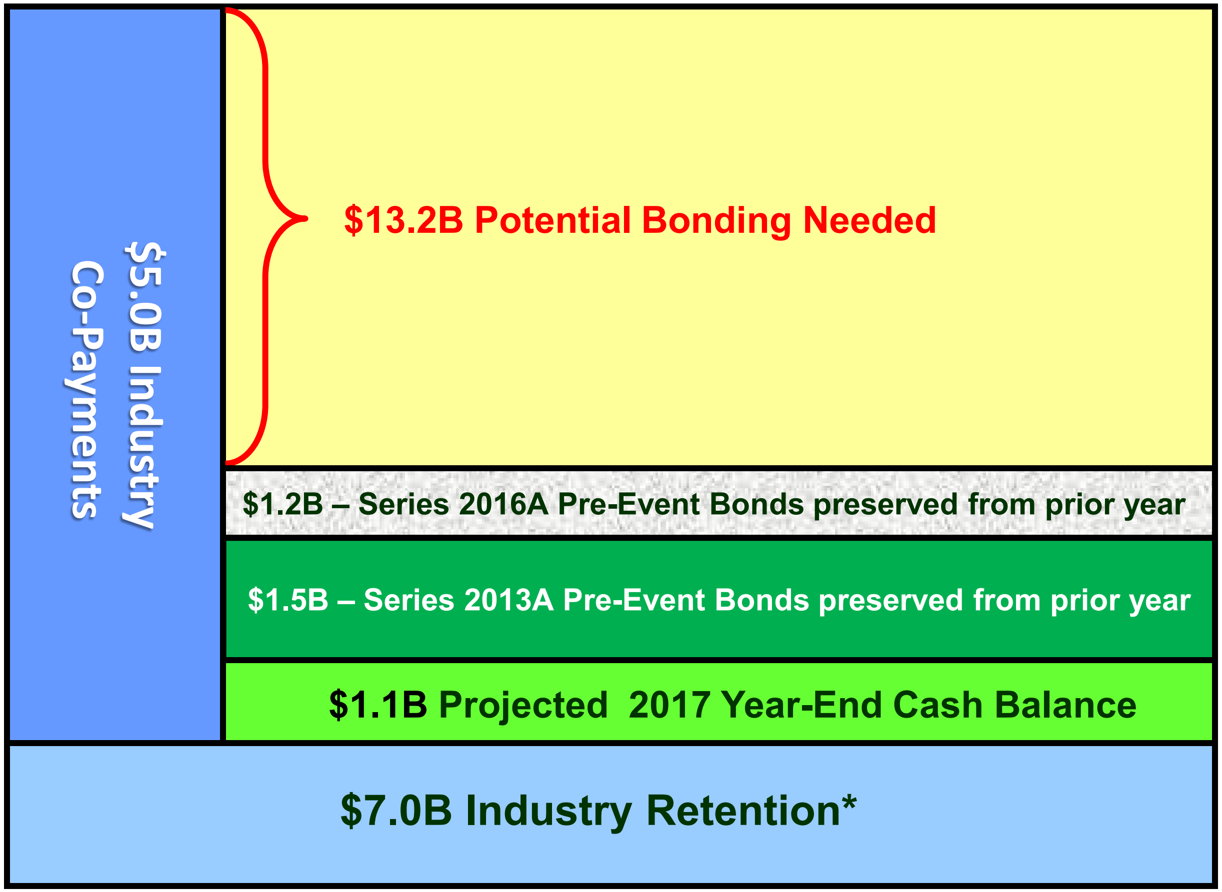
*FHCF Probabilities are lower at the top loss levels and higher at the lower loss levels***

As of October 7, 2016

$17B FHCF Potential Capacity

(Loss Adjustment Expense is included in the capacity)

Assumption: *Preserved all Pre-Event bonds after a $17B loss in prior year*



1.5B 2013A Bonds
1.2B 2016A Bonds
1.1B Cash
$3.8B Total Resources

-17.0B Statutory Limit
$13.2B Potential Bonding Needed

Post-Event Bonding Capacity October 2016

$ 7.7B

*Individual company retentions are their share of the industry retention.
**All insurers would need to reach their maximum coverage limit in order to exhaust the last billion of FHCF Coverage.

2017/2018 Subsequent Season

Not Drawn to Scale.

Preliminary Estimates

Not Official (For Illustrative Purposes Only)

As of October 7, 2016

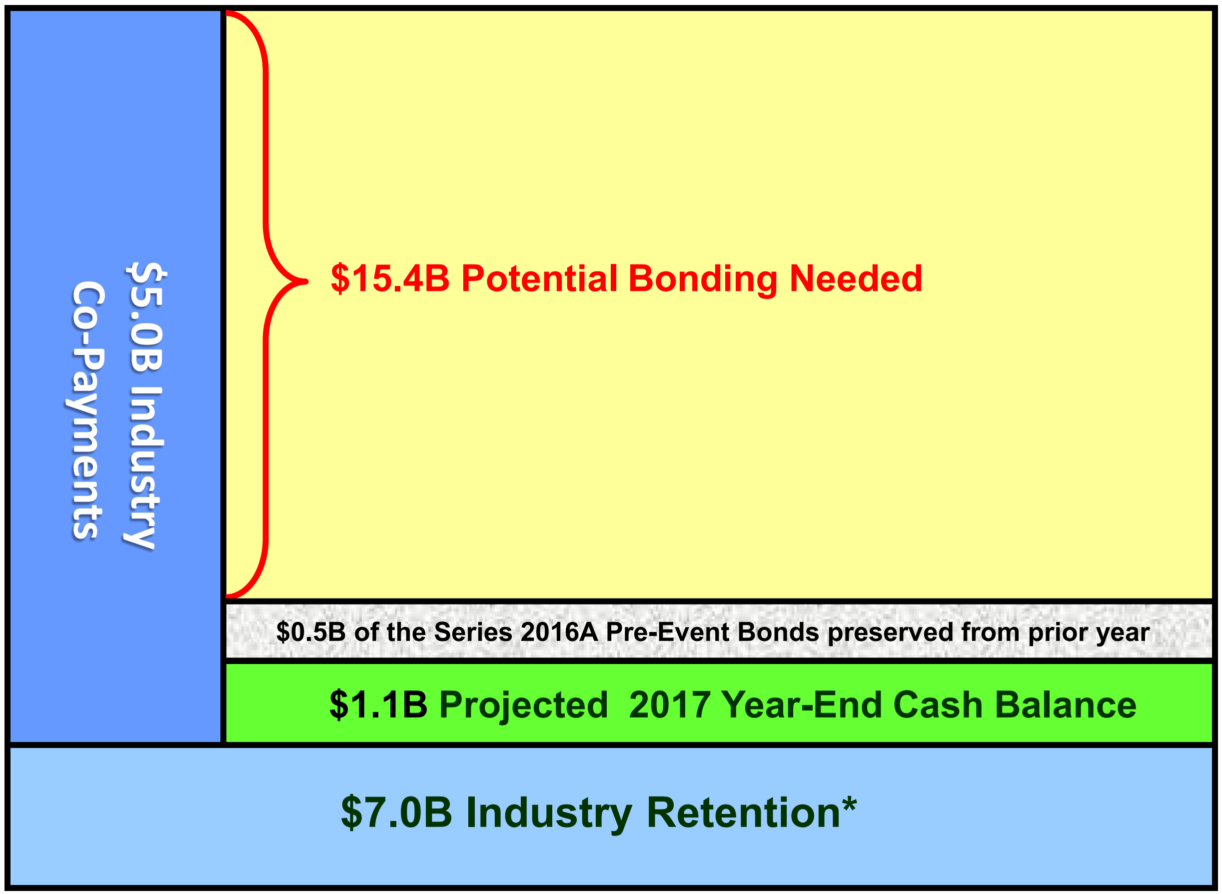
Industry Losses:

FHCF Probabilities are lower at the top loss levels and higher at the lower loss levels**

$17B FHCF Potential Capacity

(Loss Adjustment Expense is included in the capacity)

Assumption: ***Used Pre-Event bonds after a $17B loss in prior year***



0.5B 2016A Bonds
1.1B Cash
$1.6B Total Resources

\- 17.0B Statutory Limit
$15.4B Potential Bonding Needed

Post-Event Bonding Capacity October 2016

$ 7.7B

*Individual company retentions are their share of the industry retention.
**All insurers would need to reach their maximum coverage limit in order to exhaust the last billion of FHCF Coverage.

FHCF’s Financial Strength

- $13.8B Projected Year-End Fund Balance
- No post-event bonds outstanding
- Emergency assessments ended – 0% on all policies new or renewed on or after 1/1/15
- Continue to address long-term stability and resilience for subsequent season:
  - $1.2B 2016A pre-event bonds issued in February 2016
    - $550M matures 2019
    - $650M matures 2021
  - Reinsurance placement of $1B attaching at $11.5B in May 2016

Two Types of Debt Issued

- Post-Event Debt
  - Issued following a hurricane event that exhausts the cash balance
  - Used to reimbursement insurers for paid losses
  - $2.651 billion issued to date

- Pre-Event Debt
  - Issued in the absence of a hurricane event
  - Primarily a source of liquidity
  - $9.5 billion issued to date

Outstanding Debt

Florida Hurricane Catastrophe Fund ($ in Millions)			
Maturity	Series 2013A Pre-Event Bonds Principal	Series 2016A Pre-Event Bonds Principal	Total Pre-Event Bonds Principal
7/1/2017			
7/1/2018	$500		$500
7/1/2019		$550	$550
7/1/2020	$1,000		$1,000
7/1/2021		$650	$650
Total	$1,500	$1,200	$2,700

Laddered maturities:

- Reduce market access risk
- Smooth cost
- Manage rollover risk and interest rate risk

Depending on the financial markets after an event, we have the flexibility to issue post-event bonds or use these existing pre-event bonds

Bond Repayment Mechanisms

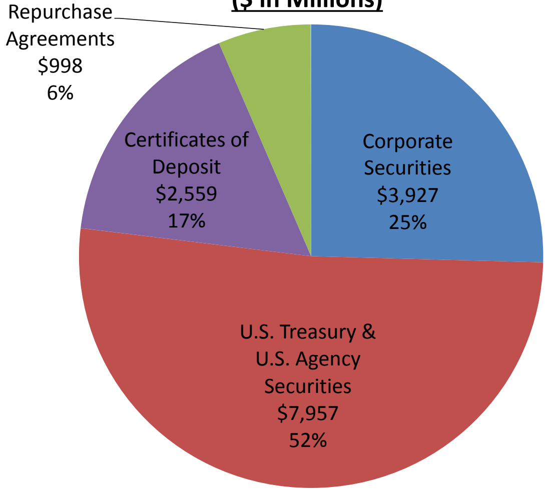
FHCF bondholders have multiple pledged revenues:

- Emergency assessments – levied on a broad $41.5B base of direct written premium for the admitted market and surplus lines policyholders
- Reimbursement premiums – mandatory participation creates a substantial and stable premium base and are collected annually - $1.1B for 2016
- Investment earnings - $15.5B portfolio invested according to conservative guidelines
- Pre-event bonds are also secured by unspent proceeds

Investment Portfolio

- Investment policy provides for (1) liquidity, (2) safety of principal, and (3) competitive returns
- Assets have a high level of liquidity and can be converted to cash on a timely basis to quickly provide loss reimbursements
  - Total portfolio is $15.7B including the pre-event proceeds
  - Approximately 55% of the portfolio is invested in "AAA" securities
  - Over 50% of the portfolio matures within 180 days

FHCF Total Portfolio by Market Value ($15.447B)
($ in Millions)

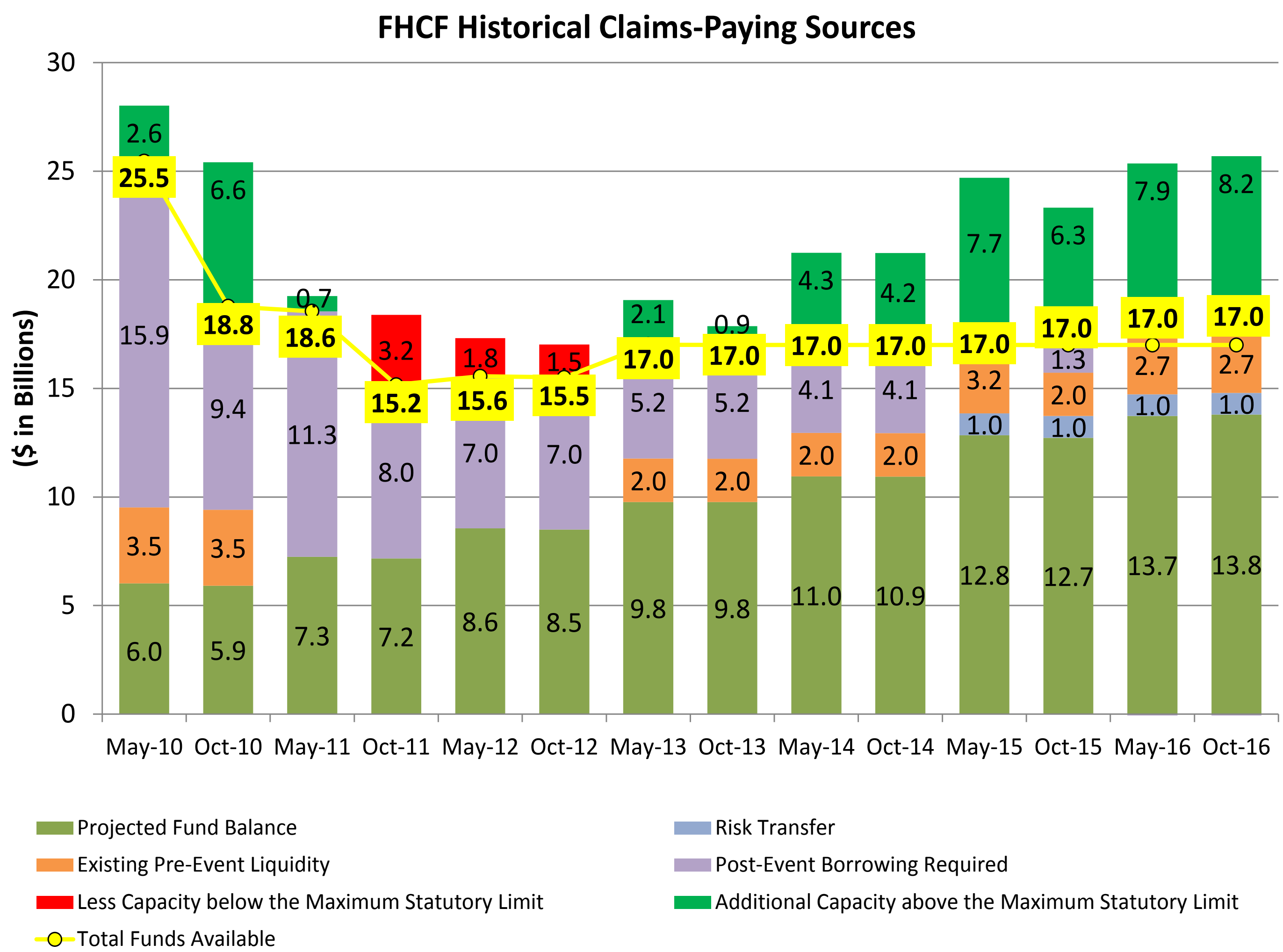


Current Structure of the FHCF

Coverage Selections		
%	**2016-2017**	**2015-2016**
90%	108	114
75%	3	6
45%	47	37

- Citizens is required to select 90%
- 76.309% Weighted Average Coverage in 2016 vs. 81.565% in 2015
- October Bonding Capacity $7.7B, 0-12 months

Historical Claims-Paying Sources

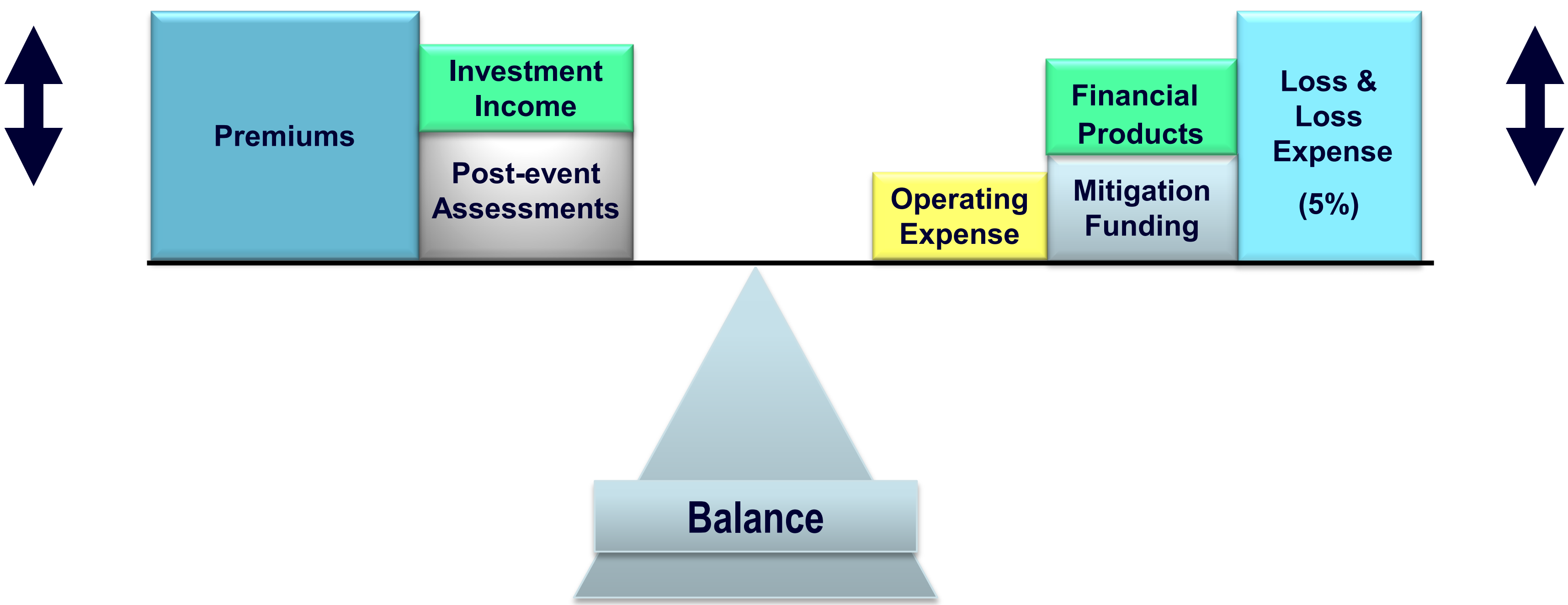


FHCF Examinations

- Statutory Authority (Section 215.555(4)(f), F.S.)
- Types of Exams
  - Exposure Exams
  - Loss Reimbursement Exams
- Purpose
  - Exposure exams: to verify accuracy and completeness of insured values and other rating factors reported
  - Loss Reimbursement exams: to verify accuracy of losses reported

FHCF Ratemaking

Balance: Where Does the FHCF Get Its Funds? Where Do They Go?



Premiums are derived from the Ratemaking Formula

Ratemaking Process: Overview of Steps

Step 1

Determine FHCF Coverage

Step 2

Trend Exposure Data

Step 3

Simulate FHCF Hurricane Losses

Step 4

Load Losses for Loss Expenses, Operating Expenses

Step 5

FHCF Premium

Ratemaking Process: Overview of Steps

Step 5

FHCF Premium

↓

Step 6

Allocate Premium to: Type of Business, Deductible, Territory, Construction

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Divide by Exposure

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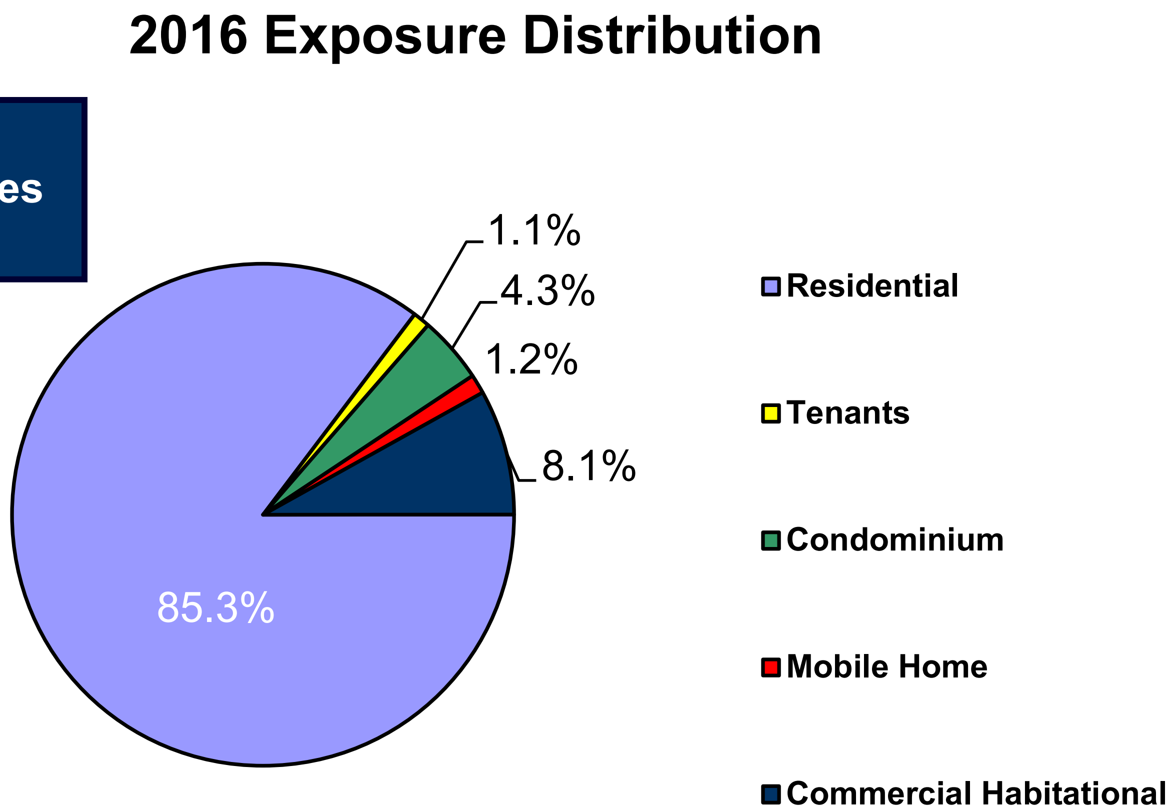
Recommended Rates

Ratemaking Process:
Step 1 – Industry FHCF Coverage

Residential Exposure Drives FHCF Totals



Ratemaking Process:
Step 1 – Company FHCF Coverage

FHCF Premium
Payout Multiple
Retention Multiple

Used to Calculate Individual Company's FHCF Coverage

Ratemaking Process: Step 2 – Trend Exposure Data

- 5 Accepted Hurricane Models
  - AIR Worldwide Corporation (AIR)
  - Applied Research Associates (ARA)
  - EQECAT (EQE)
  - Florida Public Hurricane Loss Model (FPM)
  - Risk Management Solutions (RMS)

Rating Factors

- Type of business: residential, commercial residential, mobile home, tenants, condo unit owners
- Location: reported at the ZIP code level
- Construction
- Deductible
- Mitigation factors: opening protection, roof shape & year built

Cash Build-Up Factor

- 2009 legislation phased in a Cash Build-Up Factor on the mandatory premium

Year	Cash Build-Up Factor	Amount
2009	5%	$51.3M
2010	10%	$101.0M
2011	15%	$154.1M
2012	20%	$219.0M
2013	25%	$265.7M
2014	25%	$255.2M
2015	25%	$279.3M
2016	25%	$218.8M

Historical Hurricane Losses

2004 & 2005 FHCF Losses

$28.726 Billion

Total Residential Losses
(Reported to the FHCF)

- 2004: $16.670 Billion
- 2005: $12.056 Billion

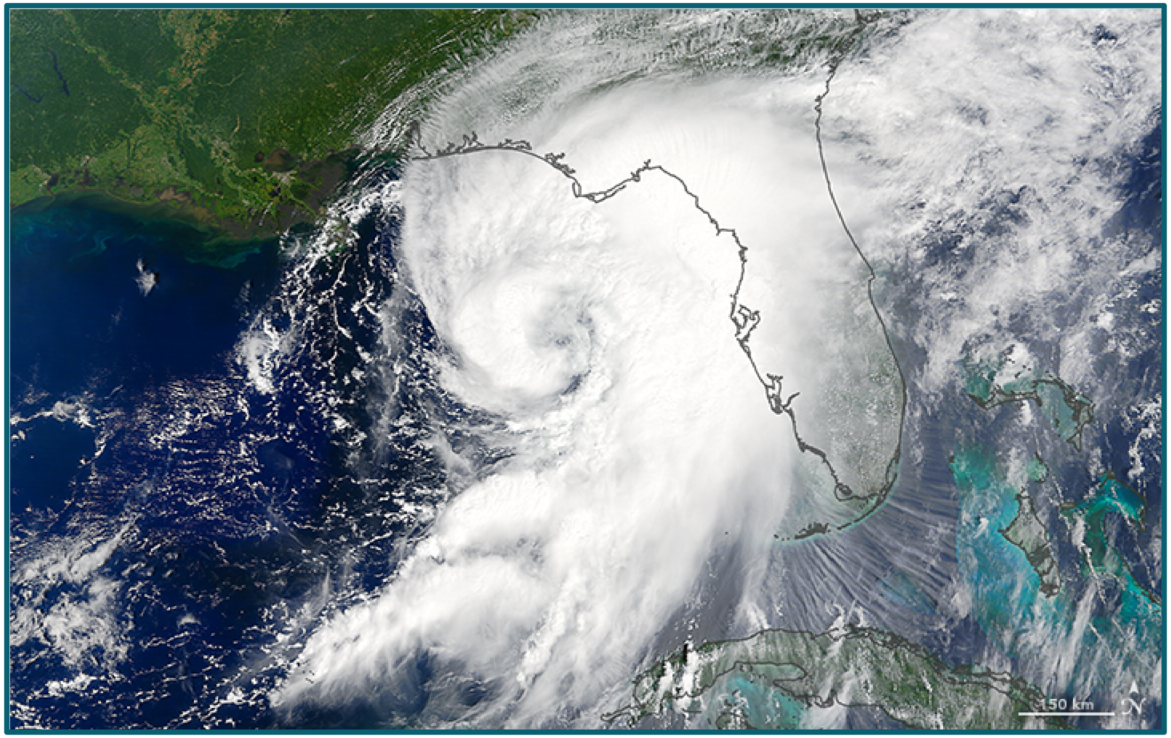
$9.4 Billion

Total FHCF Paid Losses

- 2004: $3.860 Billion
- 2005: $5.536 Billion

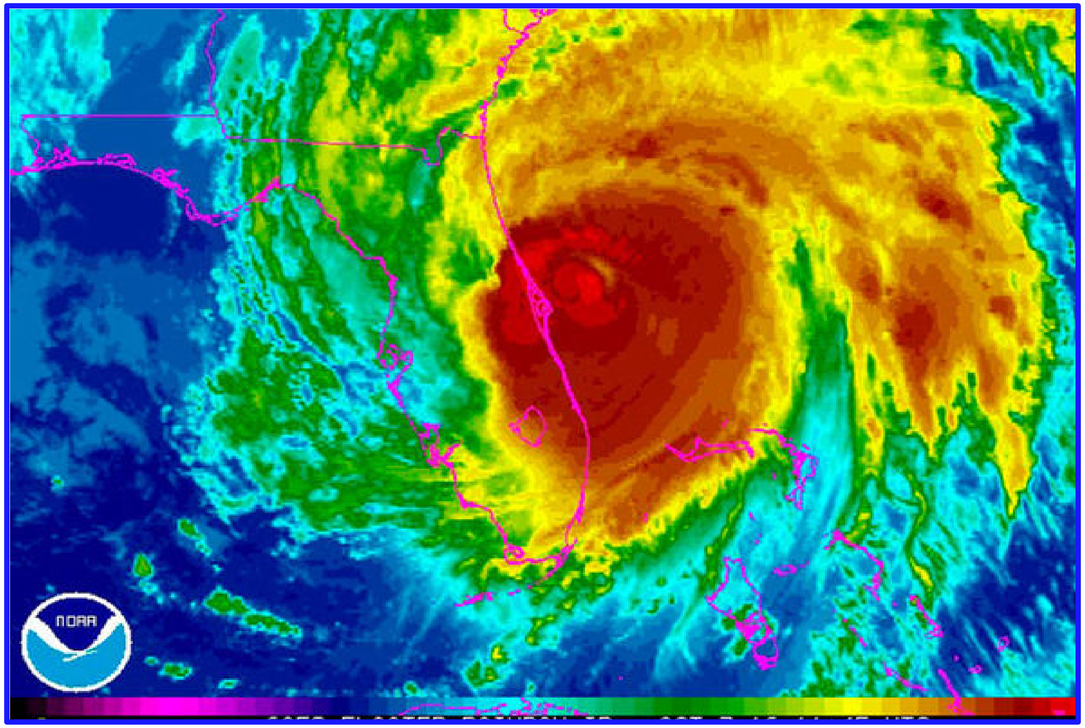
Hurricane Hermine

- Landfall on September 1, 2016
- No Hurricane Hermine loss reimbursement requests received to date



Hurricane Matthew

- Eye by-passed Florida on October 7
- No Hurricane Matthew loss reimbursement requests received to date

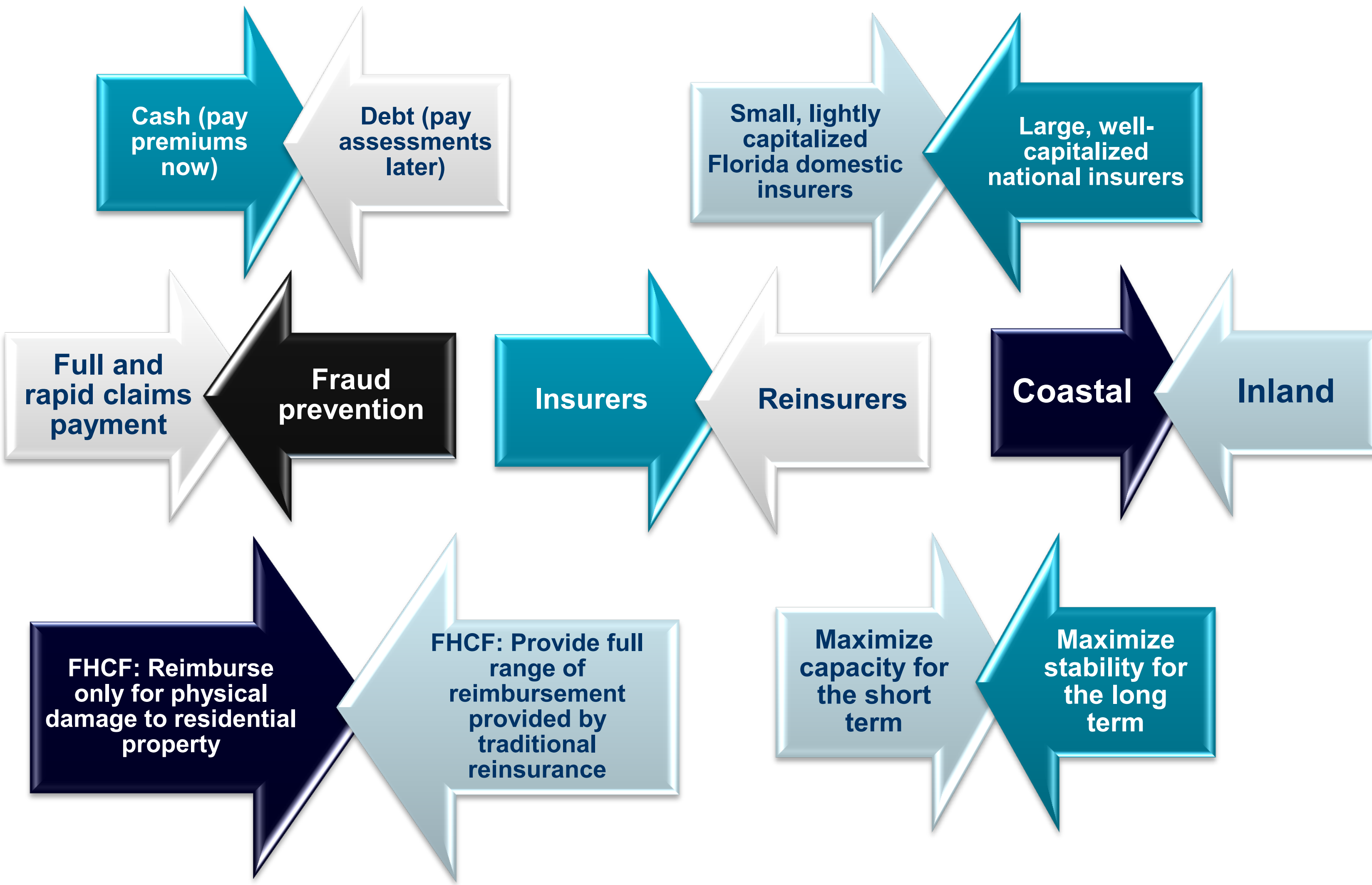


Insurance Capital Buildup Incentive Program

Insurance Capital Buildup Incentive (Surplus Note) Program

- Created for the purpose of providing an incentive for investors to commit additional capital to Florida's residential insurance market and write a minimum level of premiums for residential hurricane coverage.
  - $247.5 million loaned to 13 companies in 2006-2007. Combined with matching company funds of $296 million, created $543.5 million of new unencumbered capital.
  - Surplus Notes are repayable with a term of 20 years.
  - 2 companies have paid off their entire Surplus Note.
  - Currently, 11 companies have notes with a combined outstanding principal balance of $101.8 million.
  - All available funds are transferred quarterly to Florida's General Revenue Fund.
  - SBA monitors compliance with minimum writing ratios, minimum required surplus and 1-in-100 year PML requirements in the Surplus Note.

Tradeoffs and Competing Interests



Contact Information

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