

Prepared for:  
**Florida Hurricane Catastrophe Fund**



# Wind Mitigation Factors in the FHCF Ratemaking Formula Report

January 8, 2013

# Mitigation Factors in the FHCF Ratemaking Formula

- **FHCF member companies are required to adjust primary rates for mitigation**
- **Hurricane models show significant differentiation in risk for exposures with these features**
- **Classifications first used with FHCF rates in 2009**
  - Capped at +/-10% in 2009
  - Capped at +/-20% in 2010 through 2012
- **Current mitigation factors in FHCF Data Call**
  - Year built
  - Roof shape
  - Opening protection

# 2012 Ratemaking Formula Report Factors

**To Calculate the Final FHC Rate for a risk:**

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

*Capped factor = 1.2 if the preliminary factor exceeds 1.2; or  
0.8 if the preliminary factor is less than 0.8; or  
the preliminary factor in all other cases.*

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

Rating Factor	Description	Type of Business				
		Commercial	Residential	Mobile Home	Tenants	Condos
<b>Year Built</b>	<b>2002 or later</b>	0.6546	0.7083	1.0000	0.6003	0.6396
	<b>1995-2001</b>	0.7024	0.7984	1.0000	0.7195	0.7450
	<b>1994 or Earlier</b>	1.1304	1.1652	1.0000	1.2210	1.1665
	<b>Unknown or Mobile Home</b>	1.0165	1.0603	1.0000	1.0739	1.0434
<b>Roof Shape</b>	<b>Hip, Masard, or Pyramid</b>	0.8421	0.8553	1.0000	0.7432	0.7717
	<b>Gable, Other or Unknown</b>	1.0274	1.0939	1.0000	1.0293	1.0355
<b>Opening Protection</b>	<b>Structure Opening Protection</b>	0.8591	0.8452	1.0000	0.6919	0.7834
	<b>No Structure Opening Protection</b>	1.0507	1.0972	1.0000	1.0484	1.1038
<b>On Balance Factor</b>		0.9508	0.9960	1.0000	0.9529	0.9913

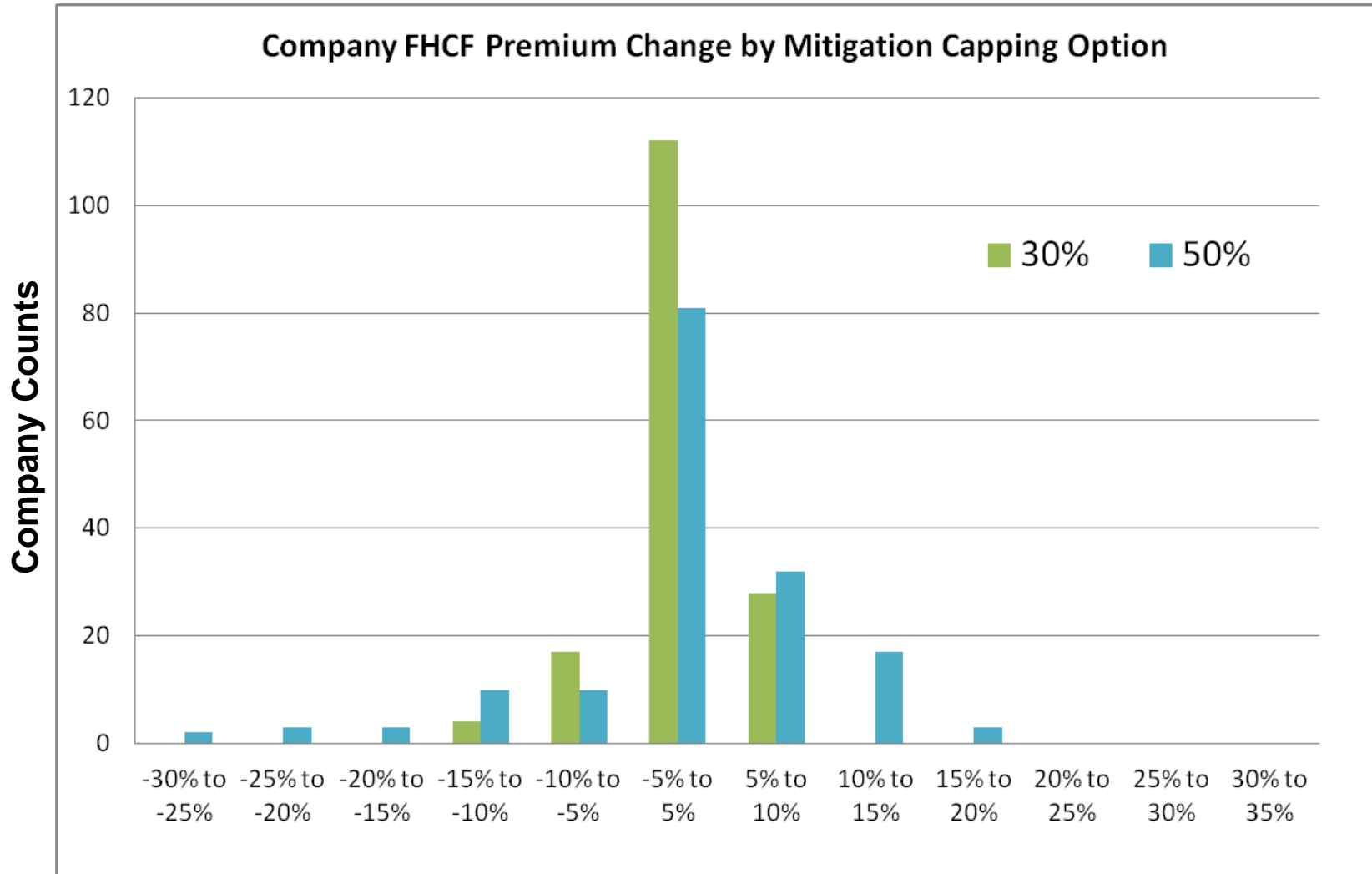
# 2012 FHCF Premiums Under Different Capping Levels

- With no capping, below are the maximum credits and surcharges under the current mitigation framework

	Commercial	Residential	Mobile Home	Tenants	Condos
Maximum Credit	53%	49%	0%	69%	61%
Maximum Surcharge	22%	40%	0%	32%	33%

- Given there is always some uncertainty in the models, and the complex interactions between different rating factors within different territories, we recommend moving towards a 50% cap
  - Captures almost all the credit for commercial and residential
- We propose a resumption of the 10% annual increase in the cap
  - 30% for 2013, 40% for 2014, 50% for 2015 and beyond

# Impact of Capping at 30% or 50% on FHCF Premiums



# Impact of Capping at 30% or 50% by Amount of Change

## Change in FHCF Premium with 50% Mitigation Cap

Premium Change	Number of Companies	2012 Premium	% of 2012 Premium	Average Premium	Change in Average Premium with		Change as % of 2012 Premium	
					30% Cap	50% Cap	30% Cap	50% Cap
>\$1,000,000	8	699,148,779	55%	87,393,597	2,007,283	3,513,970	2.3%	4.0%
\$100,001 to \$1,000,000	17	129,739,265	10%	7,631,721	181,413	378,899	2.4%	5.0%
\$-100,000 to \$100,000	106	88,416,247	7%	834,116	(1,328)	2,223	-0.2%	0.3%
-\$1,000,000 to -\$99,000	20	209,433,198	17%	10,471,660	(218,953)	(408,446)	-2.1%	-3.9%
<-\$1,000,000	10	135,847,967	11%	13,584,797	(922,704)	(2,076,825)	-6.8%	-15.3%
Totals	161	1,262,585,456	100%	7,842,146	0	0	0.0%	0.0%