



Residual Market Property Plans:

FROM MARKETS OF LAST RESORT TO MARKETS OF FIRST CHOICE

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INTRODUCTION

With the official start to the 2016 Atlantic hurricane season approaching, it is important to recognize that it only takes one storm for insurers' loss experience to change, as proven by 2012's superstorm Sandy or by Hurricane Andrew in 1992—the event that caused the first explosion in residual market growth beginning 20 years ago. Though 2015 marked another below-normal hurricane season, the latest forecasts suggest 2016 may be the most active season in years.

Hurricane Joaquin, the last Atlantic storm of 2015 and the strongest since Hurricane Igor in 2010, could easily have caused significant damage along the U.S. East Coast if it had taken a more westerly track. South Carolina residents will remember Hurricane Joaquin for the moisture it sent their way, inflicting catastrophic flooding on many parts of the state.

This year's report by the Insurance Information Institute (I.I.I.) shows that the exposure value of the residual property market in hurricane-exposed states continues its decline from the peak levels seen in 2011. Between 2011 and 2014, total exposure to loss in the plans fell by 30 percent.

At \$620.4 billion, the 2014 exposure to loss of the residual market property insurers is also 20 percent down from \$772 billion at year-end 2007, two years after Hurricane Katrina.

Meanwhile policy counts in 2014—at around 2.8 million—are also down from their 2011 highs.

Even though this market of last resort remains the market of first choice for many vulnerable, high-risk coastal properties, attempts by certain states to reduce the market by the use of depopulation appear to be paying off.

As reinsurance pricing has come down in the United States, a number of the larger residual market plans have also expanded their use of private sector reinsurance, including catastrophe bonds, to manage their hurricane exposure.¹

Florida Citizens Property Insurance Corp.'s record-setting \$1.5 billion catastrophe bond issued in 2014—the largest single catastrophe bond issuance in history—is one example of how access to the capital markets has expanded, helping residual market plans to manage their loss exposures.² In 2015, Citizens accessed the capital markets for the fourth time, increasing its reinsurance protection further.

Still, the fact that many of the plans charge rates that are not actuarially sound and do not accurately reflect the risk of loss means that a major hurricane could expose residents in certain states to billions of dollars in post-storm assessments.





I.I.I.'s latest analysis adds to what is now a well-documented body of research among industry experts and government agencies demonstrating that many state-run residual property insurers have morphed from markets of last resort to become major insurance providers in their states.³

Annual growth in U.S. residual market exposures averaged close to 18 percent between 1990 and 2007, according to the Insurance Research Council (IRC).⁴ It is important to recognize that because most of these plans do not charge rates that reflect the true cost of risk, demand for the subsidized coverage they provide remains high.

As long as the plans continue to be major insurance providers of the properties most exposed to hurricane risk in the United States and their coverage remains underpriced, state finances will remain under threat. And policyholders, and ultimately taxpayers, many of whom live nowhere near the coast, will continue to face the prospect of increased assessments in the years ahead.

OVERVIEW

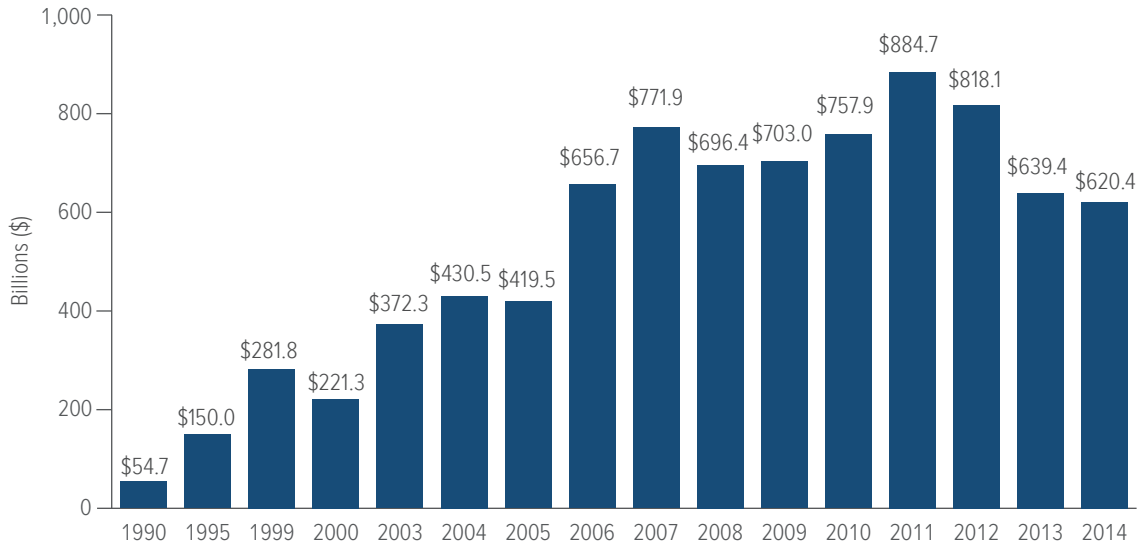
A myriad of different programs in place across the United States provide insurance to high-risk policyholders who may have difficulty obtaining coverage from the standard market. So-called residual, shared or involuntary market programs make basic insurance coverage more readily available.

Today, property insurance from the residual market is provided by Fair Access to Insurance Requirements (FAIR) Plans, Beach and Windstorm Plans and two state-run insurance companies: Florida Citizens Property Insurance Corp. (Florida Citizens) and Louisiana Citizens Property Insurance Corp. (Louisiana Citizens). Established in the late 1960s to ensure the continued provision of insurance in urban areas, FAIR Plans often provide property insurance in both urban and coastal areas, while Beach and Windstorm Plans cover predominantly wind-only risks in designated coastal areas. Hybrid plans like those in Florida and Louisiana provide property insurance throughout a state. It is important to note that in addition to windstorm risk, these plans routinely cover a range of other exposures, such as vandalism and fire. In addition to these residual property plans, a number of federal legislative proposals regarding the financing of natural catastrophes are under consideration. A detailed analysis is beyond the scope of this paper, but a summary of the various proposals is available in Appendix III.

In the course of the last four decades these FAIR and Beach Plans have experienced explosive growth both in terms of policy count and exposure value. However, latest data shows that between 2011 and 2014, total exposure to loss in the plans fell by 30 percent. The most recent decline belies a period of more than 20 years between 1990 and 2011—a period characterized by major catastrophes such as Hurricane Andrew and Hurricane Katrina—when total exposure to loss in the plans surged by 1,517 percent from \$54.7 billion in 1990 to a peak of \$884.7 billion in 2011. Total policies in force (both habitational and commercial) in FAIR and Beach and Windstorm Plans combined more than tripled from 931,550 in 1990 to 3.31 million in 2011. In 2014, total policy counts for the residual property plans were below those record levels at 2.78 million (**Fig. 1 and 2**).

Fig. 1

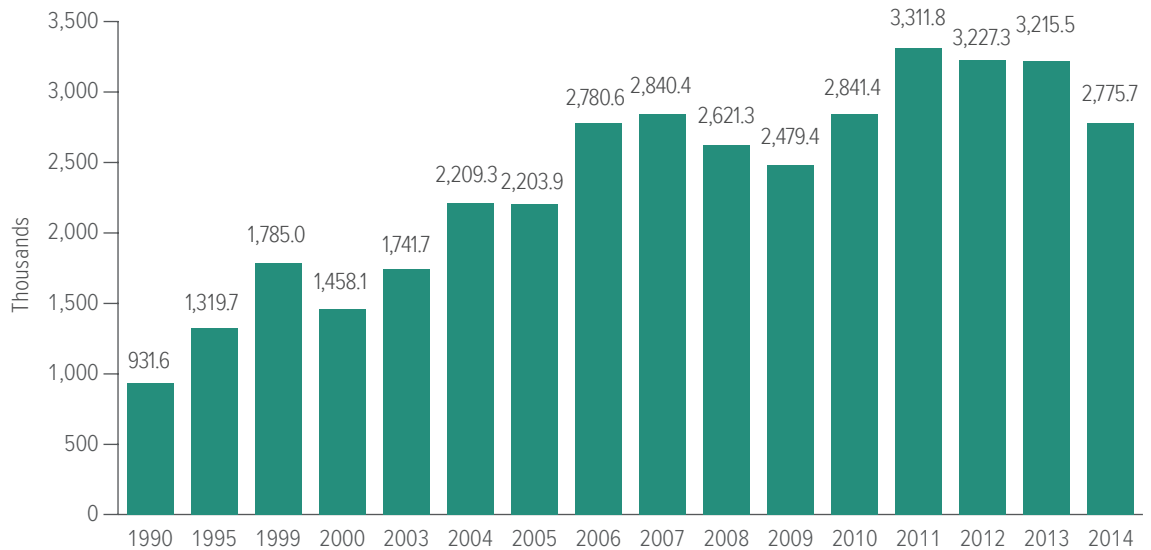
U.S. Residual Market Exposure to Loss (1990–2014)



Sources: PIPSO; Insurance Information Institute.

Fig. 2

U.S. Residual Market: Total Policies In-Force (1990–2014)

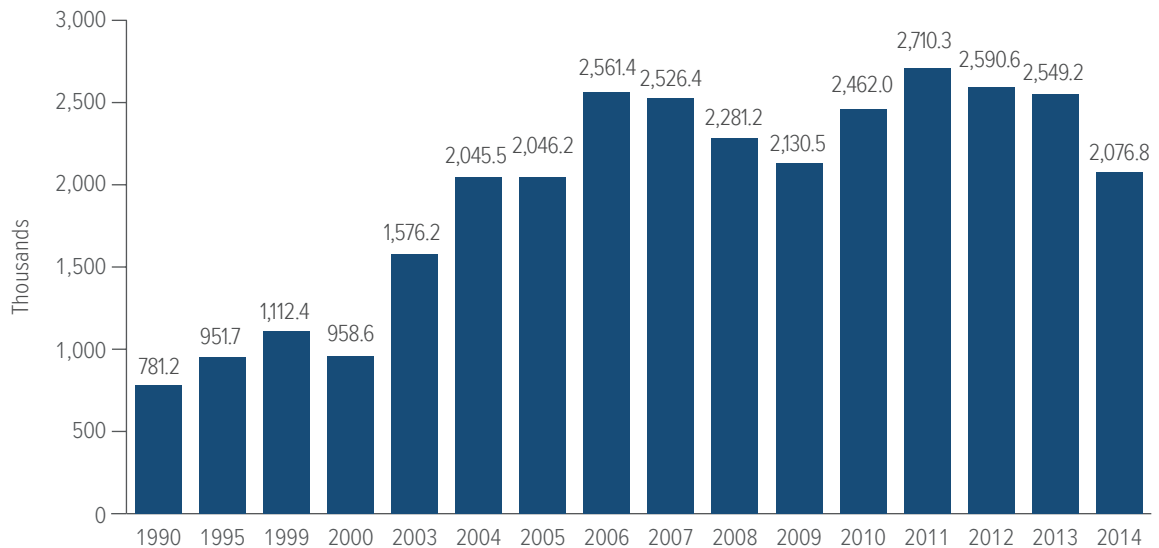


Sources: PIPSO; Insurance Information Institute.



Fig. 3

U.S. FAIR Plans: Total Policies In-Force (1990–2014)



Source: PIPSO; Insurance Information Institute.

FAIR Plans account for the vast majority of policies and exposure in the overall residual property market. Total FAIR Plan policies in force (both habitational and commercial) more than tripled from 781,188 in 1990 to 2.7 million in 2011, but fell to 2.1 million in 2014 (**Fig. 3**).

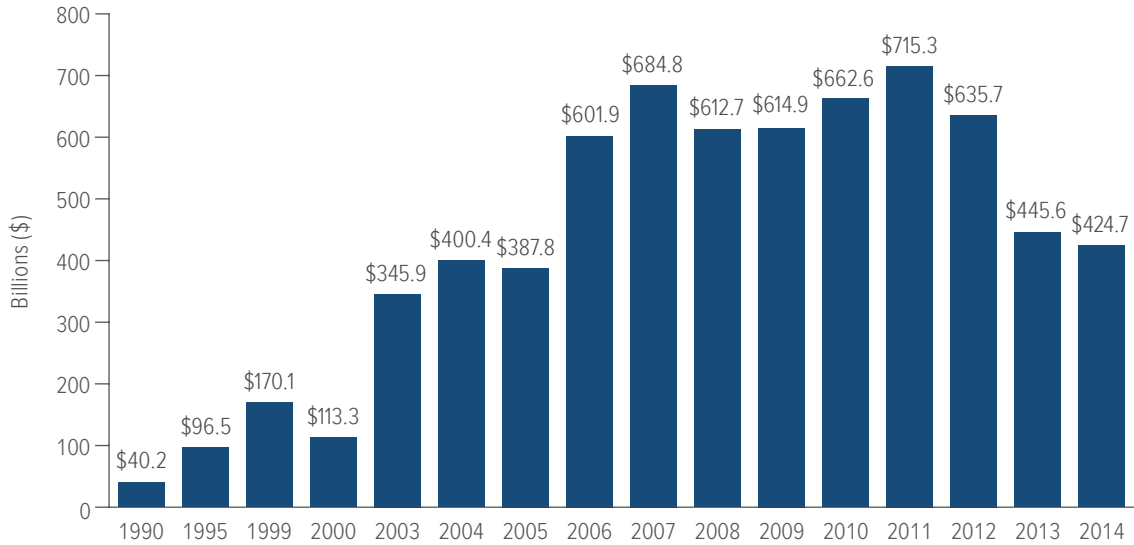
While total exposure to loss in the FAIR Plans declined by 41 percent from \$715.3 billion in 2011 to \$424.7 billion in 2014, total exposure to loss in the Beach and Windstorm Plans continued to grow, increasing by 15 percent during that period (**Fig. 4 and 5**). Since 2010, the Beach and Windstorm Plans have seen their exposure more than double from \$95.2 billion to \$195.7 billion in 2014.

Despite recent fluctuations in the exposure levels of the residual property market, over the course of several decades it is clear that in some states these plans shifted away from their original purpose as predominantly urban property insurers. As a result, many evolved from their traditional role as markets of last resort into much larger insurance providers, in some cases even becoming the largest property insurer in a state.

After the record hurricane seasons of 2004 and 2005, and amid predictions of increased storm activity over the next 15 to 20 years, this shift of high-risk exposure away from the private insurance market placed an enormous burden on these plans. Arguably, many of the plans became home for the most highly exposed, wind-only risks—in other words the least attractive types of business. In some cases, this left plans with huge concentrations of risk.

Fig. 4

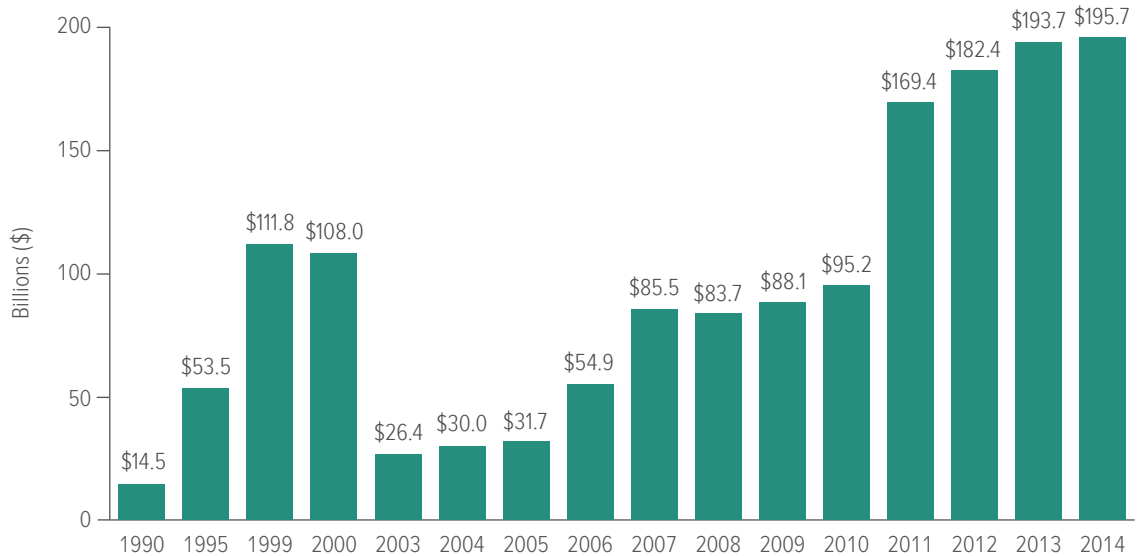
U.S. FAIR Plans Exposure to Loss



Source: PIPSO; Insurance Information Institute.

Fig. 5

U.S. Beach and Windstorm Plans Exposure to Loss



Source: PIPSO; Insurance Information Institute.





Consequently, it is not surprising that many of the plans have experienced severe financial difficulties in certain years (see section on financial results). Of the 31 FAIR Plans for which data are available, 28 have incurred at least one operating deficit since 1999. Of the six Beach and Windstorm Plans for which data are available, all have sustained at least one underwriting loss since 1999.

Growth in Size and Population

The FAIR and Beach and Windstorm Plans have experienced explosive growth in the course of the last two decades. However, the number of policies in force and exposure to loss in each plan can rise or fall from one year to the next due to legislative and regulatory developments—in addition to actual catastrophic loss activity.

A July 2010 study by the Government Accountability Office (GAO) found that between 2005 and 2009 the plans in Mississippi, Texas and Florida showed the largest percentage growth in terms of exposure and number of policyholders.

According to Property Insurance Plans Service Office (PIPSO), total exposure to loss in the residual market (FAIR and Beach/Windstorm Plans) rose from \$419.5 billion in 2005 to a record \$884.7 billion in 2011—an increase of 1,109 percent—and between 1990 and 2011, exposure to loss in the plans surged by 1,517 percent.

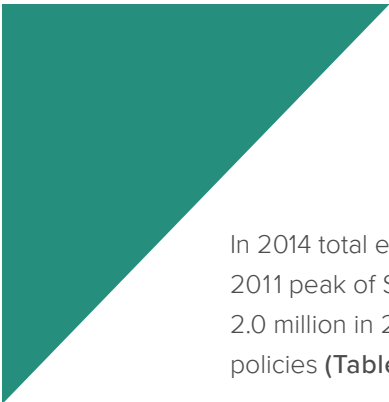
Table 1

Insurance Provided by Fair Plans, Fiscal Years 2005–2014 (1)

Year	Number of			
	Habitational policies	Commercial policies	Exposure (2) (\$000)	Direct written premiums (\$000)
2005	1,928,292	117,942	\$387,780,124	\$2,234,493
2006	2,389,299	172,070	601,859,916	4,063,324
2007	2,412,252	114,053	684,829,667	4,431,381
2008	2,190,189	90,876	612,749,753	3,727,311
2009	2,043,969	86,575	614,905,551	3,038,712
2010	2,378,736	83,243	662,633,180	3,448,576
2011	2,658,662	51,657	715,289,876	3,942,021
2012	2,518,808	71,776	635,705,150	4,059,446
2013	2,484,816	64,359	445,635,335	3,685,283
2014	2,015,536	61,285	424,732,706	3,029,772

Source: Property Insurance Plans Service Office (PIPSO).

(1) Includes the Texas FAIR Plan; Florida Citizens Property Insurance Corporation, which includes FAIR and Beach Plans; the Louisiana Citizens Property Insurance Corporation, which includes FAIR and Beach Plans for 2004, 2005 and premiums written after 2007; and North Carolina after 2010. (2) Exposure is the estimate of the aggregate value of all insurance in-force in all FAIR Plans in all lines (except liability, where applicable, and crime) for 12 months ending September through December.



In 2014 total exposure to loss in FAIR Plans was \$424.7 billion, a 41 percent decline from the 2011 peak of \$715.3 billion in exposure. Meanwhile FAIR Plans had a total policy count of 2.0 million in 2014, comprising some 2.02 million habitational policies and 61,285 commercial policies (**Table 1**).

Florida Citizens, a plan that accounts for around half (48 percent) of the total FAIR Plans' exposure to loss, saw its exposure to loss shrink from \$429.4 billion in 2012 to \$202 billion in 2014, as Citizens took much-needed steps to reduce its size. This accounted for the overall reduction in total exposure under the FAIR Plans.

The drop in exposure came after Citizens' exposure to loss had hit a new peak of \$510.7 billion in 2011, surpassing its prior peak of \$485.1 billion in 2007. Florida Citizens' exposure to loss had already risen to \$460.7 billion in 2010, after two Florida insurers were declared insolvent and as a number of national companies reduced their exposure to Florida windstorm risk, leaving some high-risk policyholders looking for coverage (**See Appendix II**).

Florida Citizens also accounts for 47 percent of the total FAIR Plans policy count. Of the 2.1 million total policies (habitational and commercial) insured by the FAIR Plans in 2014, some 981,799 were in Florida Citizens. In 2014, its total policy count dropped below 1 million for the first time since 2006. The insurer attributes this success to eight storm-free years, which has enabled Florida's private insurance market to begin to rebound as new investors and companies look to increase their market share in the state.

Premiums written by Florida Citizens in 2014 also declined. Direct premiums written totaled \$2.1 billion in 2014, down from \$3.2 billion in 2012. Between 2007 and 2008, direct premiums written by Florida Citizens had declined by nearly \$1 billion (from \$3.7 billion in 2007 to \$2.8 billion in 2008). The collapse in home and condominium construction throughout the state due to the subprime mortgage and credit crisis and ensuing recession was a significant factor in the decline in new business.

Tables 2 and 3 show insurance provided in each state by FAIR Plans and Beach and Windstorm Plans, respectively. After Florida, Massachusetts has the next largest number of policies, with 215,478, or 10 percent of total FAIR Plan policies (**Table 2**). The Texas Beach and Windstorm Plan (Texas Windstorm Insurance Association) insured 293,805 total policies in 2014, making it the largest Beach and Windstorm Plan.

In the Beach and Windstorm Plans, as in the FAIR Plans, the policy count varies significantly from year to year due to the shifting size and nature of the plans, described below. In 2002 Florida combined its Windstorm and Joint Underwriting Association to create Florida Citizens, so these policies were counted under the FAIR Plans from that date.

PIPSO data show that between 2005 and 2014, the number of policies in the Beach and Windstorm Plans more than tripled, from 157,708 in 2005 to 698,934 in 2014. It is important to note that PIPSO's figures include the North Carolina Beach Plan, one of the largest Beach and Windstorm Plans, and a PIPSO member as of June 2012 (**See Appendix II**).



Table 2

Insurance Provided by Fair Plans by State, Fiscal Year, 2014 (1)

State	Number of			
	Habitational policies	Commercial policies	Exposure (2) (\$000)	Direct written premiums (\$000)
California	123,729	5,045	\$ 43,958,244	\$ 73,384
Connecticut	2,779	103	532,514	3,842
Delaware	1,800	71	285,049	623
D.C.	303	79	107,000	349
Florida (3)	943,284	38,515	201,957,396	2,083,870
Georgia	28,768	1,638	4,066,259	26,869
Illinois	6,386	94	711,340	7,344
Indiana	2,284	54	175,625	2,458
Iowa	1,274	44	94,488	971
Kansas	16,095	183	968,312	8,678
Kentucky	11,748	534	604,164	7,881
Louisiana (3)	113,624	4,335	17,059,256	168,069
Maryland	2,004	66	391,000	1,337
Massachusetts	215,087	391	78,739,414	278,865
Michigan	22,230	387	2,887,324	24,137
Minnesota	5,711	42	956,310	4,146
Mississippi	11,393	0	711,411	8,669
Missouri	3,912	173	246,539	2,317
New Jersey	16,977	458	2,436,351	10,697
New Mexico	10,991	288	93,491	4,484
New York	50,935	3,348	14,169,172	35,488
North Carolina	151,822	2,613	13,571,310	61,679
Ohio	28,454	514	6,820,948	24,804
Oregon	2,594	51	272,000	889
Pennsylvania	19,057	1,415	1,646,337	8,052
Rhode Island	17,135	122	4,209,288	22,233
Texas	164,954	0	21,944,279	133,206
Virginia	33,975	531	4,671,246	21,028
Washington	64	21	25,406	171
West Virginia	534	65	34,719	360
Wisconsin	5,633	85	386,514	2,872
Total	2,015,536	61,285	\$424,732,706	\$3,029,772

Source: Property Insurance Plans Service Office (PIPSO).

(1) Does not include the FAIR Plans of Arkansas and Hawaii. (2) Exposure is the estimate of the aggregate value of all insurance in-force in all FAIR Plans in all lines (except liability, where applicable, and crime) for 12 months ending September through December. (3) Citizens Property Insurance Corporation, which combined the FAIR and Beach Plans. (4) The Mississippi and Texas FAIR Plans do not offer a commercial policy. NA=Data not available.

Total exposure to loss under the Beach and Windstorm Plans has ballooned by 1,250 percent from \$14.5 billion in 1990 to \$195.7 billion in 2014, demonstrating the values at stake (**Fig. 6**) (**Table 3**).

Between 2005 and 2014 some of the Beach and Windstorm Plans reporting results to PIPSO have seen accelerating exposure growth rates. During this period, for example, total exposure to loss in the Texas Beach Plan increased by 238 percent. While certain coastal states have shown particularly rapid growth in terms of policy count over the years, more recently policy counts have declined in states such as Florida and Louisiana, as depopulation plans have taken effect. Under these plans state-run insurers can transfer policies back to private insurers, subject to regulatory approval.

For example, in 2007 Louisiana Citizens set out to reduce its policy count to below its pre-Hurricane Katrina policy total of 125,000. At first, the policy count continued to rise, spiking at 174,000 in September 2008 in the wake of hurricanes Katrina and Rita. Since then, the depopulation process has reduced the Louisiana Citizens policy count by about 50 percent to 86,645 as of May 2015. According to the Louisiana Department of Insurance, Citizens' homeowners market share had dropped to an all-time low of 1.8 percent in 2014, after spiking at 9.8 percent in 2008.⁵

The depopulation of Louisiana Citizens is the result of an incentive program created by the Legislature in 2007 to increase the availability of property insurance and to decrease the business written through Louisiana Citizens.

Table 3

Insurance Provided by Beach and Windstorm Plans, Fiscal Year 2014 (1)

State	Number of			
	Habitational policies	Commercial policies	Exposure (2) (\$000)	Direct written premiums (\$000)
Alabama	31,893	103	\$ 5,558,923	\$ 43,973
Mississippi	71,367	3,693	6,711,829	75,123
North Carolina	247,227	12,393	91,107,419	407,092
South Carolina	37,672	781	13,568,982	84,428
Texas	278,038	15,767	78,763,326	494,036
Total	666,197	32,737	\$195,710,479	\$1,104,652

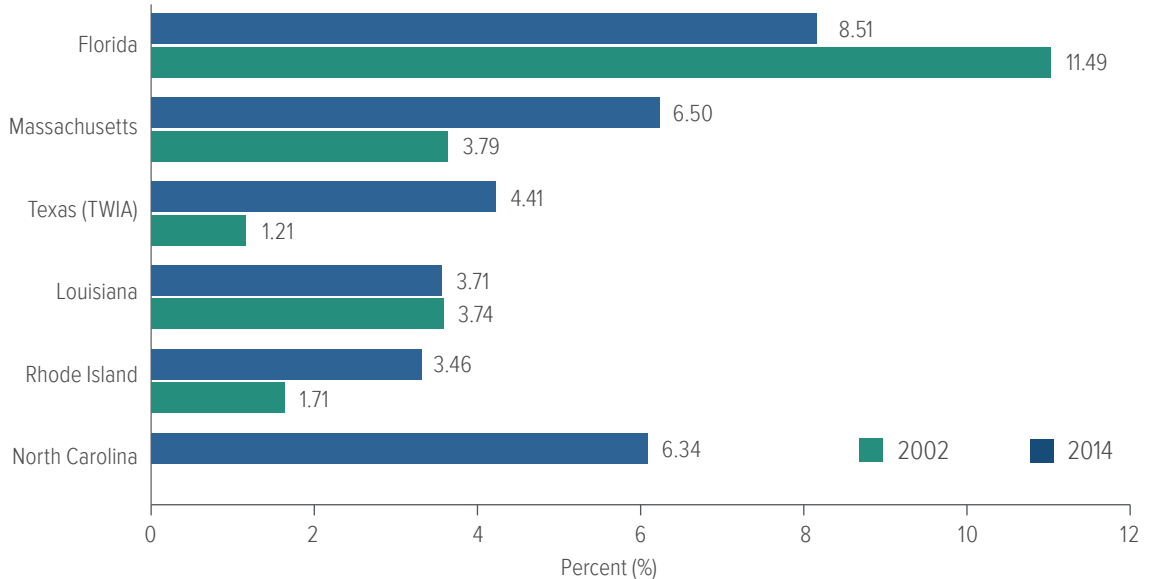
Source: Property Insurance Plans Service Office (PIPISO).

(1) The Florida and Louisiana Beach Plans merged with their FAIR Plans. (2) Exposure is the estimate of the aggregate value of all insurance in-force in each state's Beach and Windstorm Plan in all lines (except liability, where applicable, and crime) for 12 months ending September through December.



Fig. 6

FAIR/Beach Plan Earned Premium as Percent of Overall Property Market (Top 5 States) 2002 vs. 2014



Source: PIPSO; Insurance Information Institute. No data available for North Carolina in 2002.

In terms of the percentage of premium in the residual market, there are few states where the involuntary market represents more than 1 percent of total property premium. However, for several states, a significant percentage of the property insurance market is in the involuntary market (Fig. 6).

Florida and Massachusetts are two examples, though the percentage of premium in the residual market in both these states has declined in recent years after a period of rapid growth. In Florida around 8.5 percent of property premium was in the involuntary market in 2014, while in Massachusetts 6.5 percent of the market was in the involuntary market in 2014, compared to 6.9 percent in 2012. Texas has also experienced rapid growth in its residual market, with 4.4 percent of property premium in the involuntary market in 2014, compared with just 1.2 percent in 2002. Rhode Island's residual market accounts for 3.5 percent of its property market.

Reasons Behind Explosive Growth

A number of factors have contributed to such rapid growth in the plans. One is the changing shape and size of the various residual market mechanisms in a number of states. While in the past there was a clear delineation between coastal and urban plans with coastal properties insured under Beach and Windstorm Plans, and urban properties under FAIR Plans, increasingly these distinctions have become blurred. FAIR Plans are acting as an insurer of last resort for residents who live in shoreline communities in states that do not have a Beach and Windstorm Plan, such as New York state. Beach and Windstorm Plans in some states are being merged

with FAIR Plans or joint underwriting associations as in Florida and Louisiana. Texas is administering a new FAIR Plan. As a result, it is difficult to make a direct comparison of the number of properties insured under any plan with numbers from earlier years. What is clear, however, is that the rapid growth in the FAIR Plans is due in part to these mergers.

Another factor fueling the increase is the rise in coastal properties. According to the U.S. Census Bureau, the population in coastline counties has grown steadily in recent decades (**Table 4**). The Atlantic Coast, the Gulf of Mexico and the Hawaiian Islands are home to the U.S. counties most vulnerable to hurricanes. These counties account for nearly two-thirds of the nation's coastal population.

Table 4

Top 10 States, by Population Change in Coastal Counties, 1960–2010

Total change			Percent change		
Rank	State	By change in number	Rank	State	By percent change
1	California	13,130,000	1	Florida	270.1%
2	Florida	10,360,000	2	Alaska	239.8
3	Texas	3,732,000	3	New Hampshire	198.0
4	Washington	2,578,000	4	Texas	161.9
5	Virginia	1,903,000	5	Virginia	150.8
6	New York	1,400,000	6	Washington	144.4
7	New Jersey	1,275,000	7	South Carolina	125.1
8	Maryland	938,000	8	Hawaii	115.2
9	Massachusetts	826,000	9	North Carolina	114.4
10	Hawaii	728,000	10	California	107.2

Source: U.S. Department of Commerce, Census Bureau: www.census.gov/dataviz/visualizations/039/508.php.

According to the National Oceanic and Atmospheric Administration's (NOAA) *State of the Coast* report, in 2010, 52 percent of the nation's total population—some 163.8 million people—were living in coastal counties (including those that abut the Great Lakes).⁶ In 2010 coastal population density was 319 persons per square mile, compared to just 61 persons per square mile in inland areas. Between 1970 and 2010, the population of U.S. coastal counties grew by 50.9 million people, or 45 percent.

Of the 11 most hurricane-prone counties, five are in Louisiana, three are in Florida and three are in North Carolina, according to the U.S. Bureau of the Census. Some 75.7 percent of the Florida population resides in coastal counties, compared with 32.3 percent in Louisiana, 9.9 percent in North Carolina and 47.7 percent for the total United States (**Table 5**).



Table 5

Top Coastal Counties Most Frequently Hit by Hurricanes: 1960 to 2008

County	State	Coastline region	Number of hurricanes	Percent change in population, 1960 to 2008
Monroe County	Florida	Gulf of Mexico	15	50.8%
Lafourche Parish	Louisiana	Gulf of Mexico	14	67.2
Carteret County	North Carolina	Atlantic	14	104.3
Dare County	North Carolina	Atlantic	13	465.9
Hyde County	North Carolina	Atlantic	13	-10.1
Jefferson Parish	Louisiana	Gulf of Mexico	12	108.9
Palm Beach County	Florida	Atlantic	12	454.7
Miami-Dade County	Florida	Atlantic	11	156.5
St. Bernard Parish	Louisiana	Gulf of Mexico	11	17.2
Cameron Parish	Louisiana	Gulf of Mexico	11	4.8
Terrebonne Parish	Louisiana	Gulf of Mexico	11	78.7

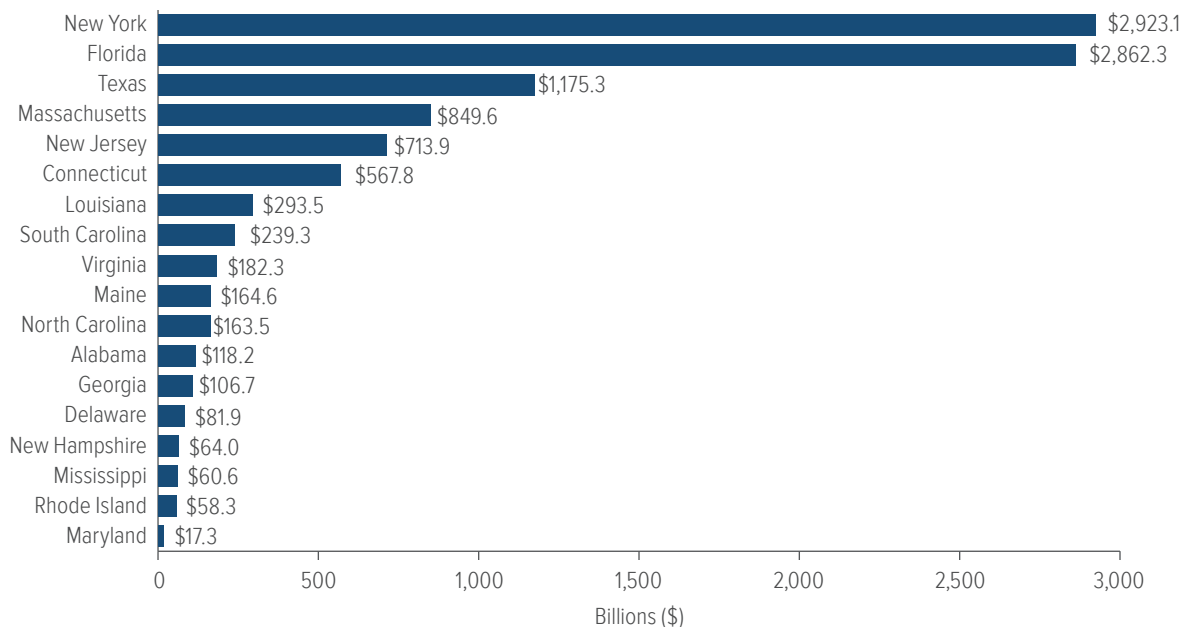
Source: U.S. Census Bureau, Decennial Census of Population and Housing: 1960 to 2000; Population Estimates Program 2008

Exposure to windstorms and high property values combine to make Florida the state with the highest potential for losses and New York City and Long Island the second highest. A study by AIR Worldwide put the value of insured coastal property in hurricane prone states—states bordering on the Atlantic Ocean and Gulf of Mexico—at \$10.6 trillion in 2012, up 19 percent from \$8.9 trillion in 2007 and up 47 percent from \$7.2 trillion in 2004.⁷ In Florida alone the value of residential and commercial coastal property is \$2.86 trillion (**Fig. 7**). This represents 79 percent of the state’s total insured property values (**Fig. 8**). In New York it is even higher, at \$2.92 trillion, but New York has a smaller proportion of its value in coastal counties, at 62 percent. In terms of insured residential coastal exposures, Florida, New York and Texas are the top three states on the list (**Fig. 9**). However, the value of New York’s commercial coastal property, at \$2.1 trillion, is higher than that of any other state on the list (**Fig. 10**). Other states where insured coastal property values exceed 50 percent of the state’s total are Connecticut, Maine and Massachusetts.

North Carolina ranks 11th on AIR’s list, with \$163.5 billion in insured coastal exposure, representing just 9 percent of the state’s total insured values. Yet as of year-end 2012, North Carolina’s Beach and Windstorm Plan, the North Carolina Insurance Underwriting Association, reported a total of 233,403 policies, up from 119,810 policies reported at the end of 2005. Total exposure to loss under the plan also increased, from \$43.3 billion in 2005 to \$81.0 billion at year-end 2012—an increase of 87 percent.

Fig. 7

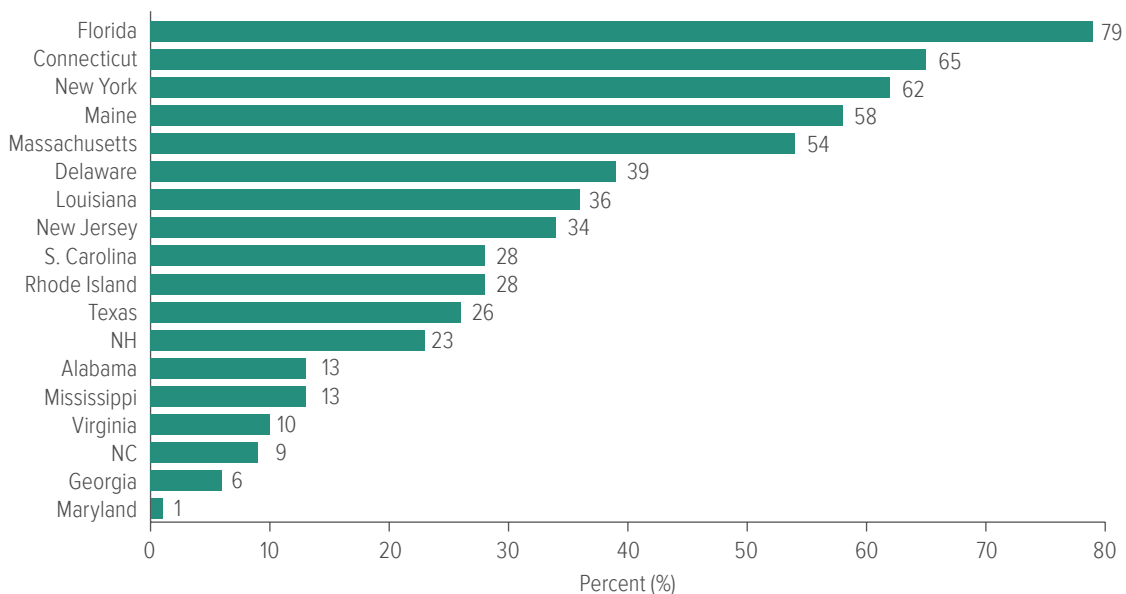
Total Value of Insured Coastal Exposure In 2012



Source: AIR Worldwide.

Fig. 8

Insured Coastal Exposure as a Percent of Statewide Insured Exposure in 2012

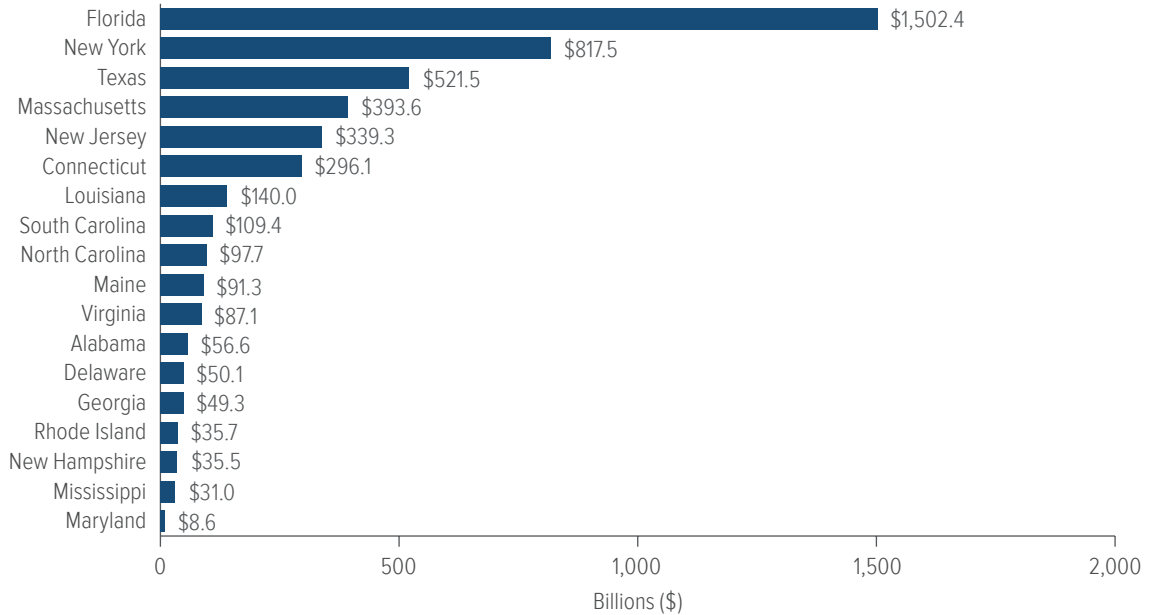


Source: AIR Worldwide.



Fig. 9

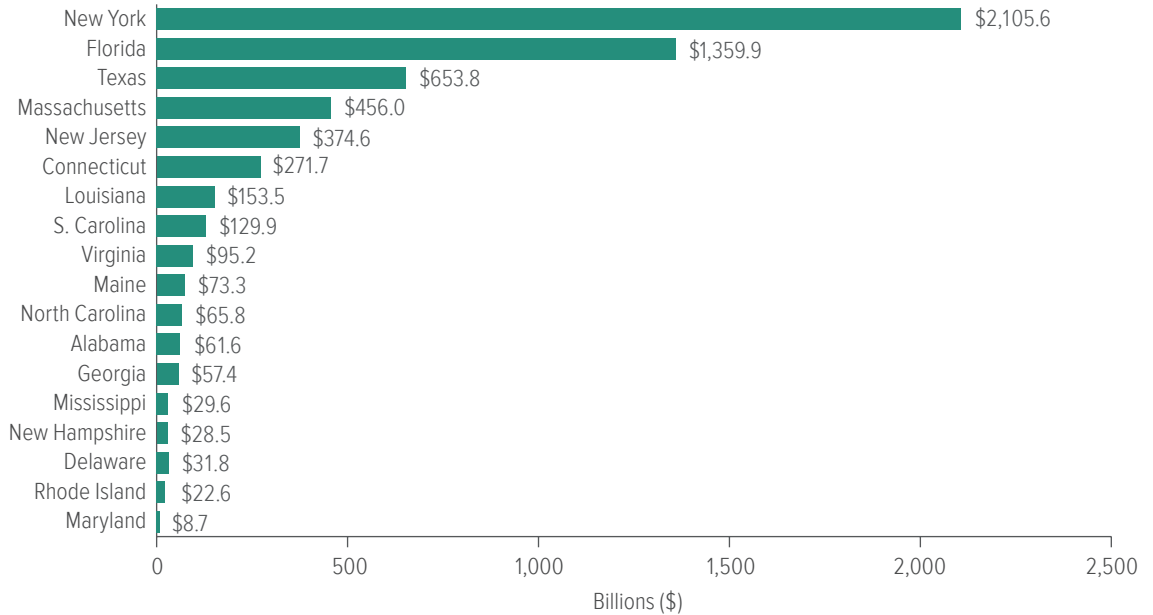
Value of Insured Residential Coastal Exposure In 2012



Source: AIR Worldwide.

Fig. 10

Value Of Insured Commercial Coastal Exposure 2012



Source: AIR Worldwide.

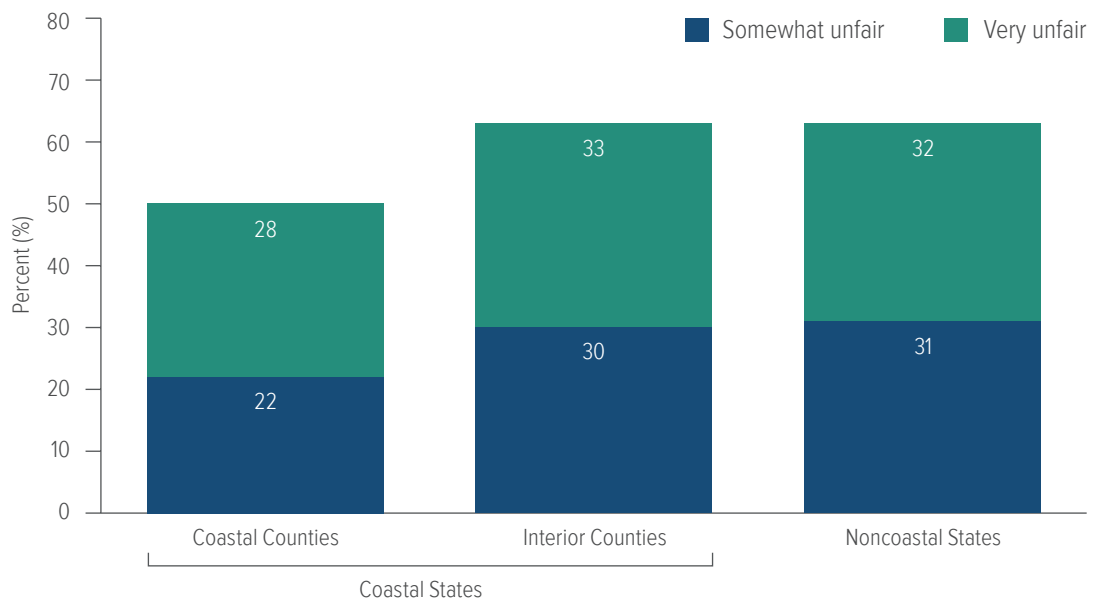
Public Attitudes Toward Subsidized Insurance for Coastal Dwellers

Evidence shows that the growth in residual market mechanisms may be due in part to the implicit support of residents of coastal communities. According to the Insurance Research Council (IRC), geographic proximity to the coast plays a major role in influencing opinions about the fairness of policyholder and taxpayer property insurance subsidies for natural disasters.⁸ The IRC found that those living in non-coastal areas are more likely to disapprove of taxpayer and policyholder subsidies of insurance costs for those living in high-risk areas. Some 63 percent of those from interior counties and non-coastal states believe policyholder subsidies for wind damage coverage in coastal areas are unfair, compared with half of those from coastal counties (Fig. 11). Similarly, when asked about taxpayer-subsidized insurance for natural disasters such as the National Flood Insurance Program, 59 percent of those from interior counties and 61 percent from non-coastal states found these to be unfair, compared with just 51 percent of those in coastal counties (Fig. 12).

Availability and affordability of property insurance in the voluntary market also has an impact on the rate of growth of the FAIR and Beach and Windstorm Plans. Applicants rejected by the voluntary market may apply to the residual market, where acceptance is usually contingent upon proof of inability to obtain coverage in the voluntary market, with some pools requiring evidence of rejection from two or three companies. Therefore, the inability of insurers to charge a rate commensurate with the risk to be assumed (due to regulatory suppression of rates) is a major factor in their decision to reject an applicant in the voluntary market. In addition, the concentration of property risks in coastal areas means insurers are unable to

Fig. 11

Public Attitude Monitor 2006: Unfairness of Policyholder Subsidies



Source: Insurance Research Council.

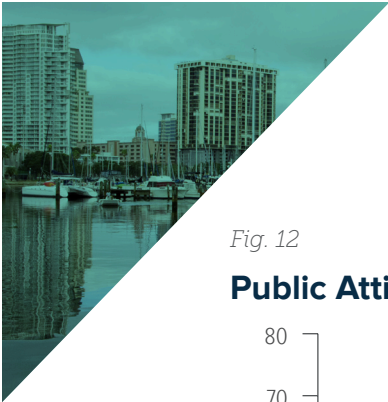
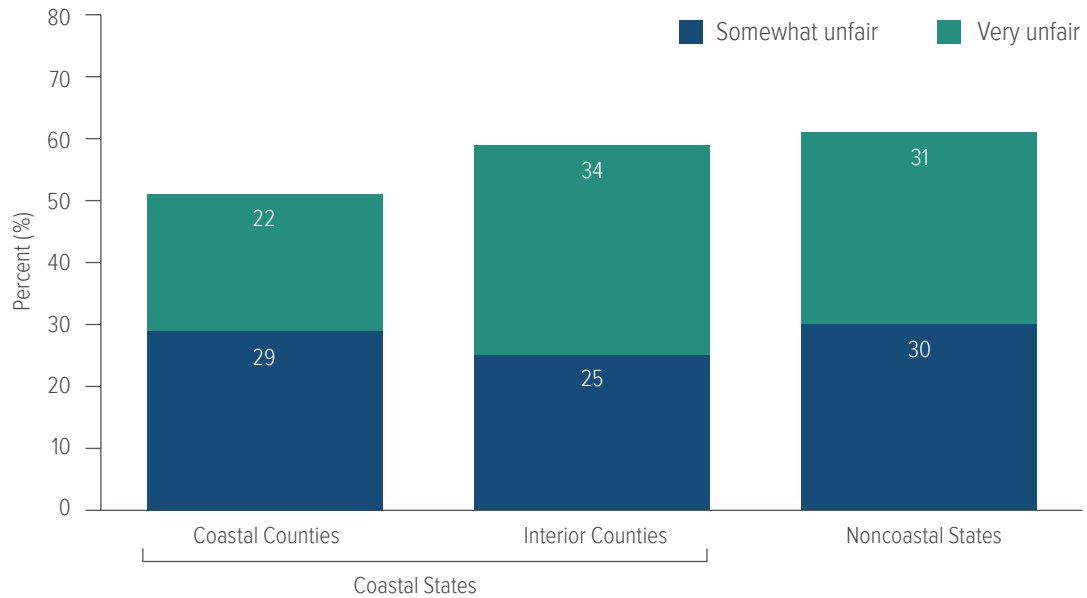


Fig. 12

Public Attitude Monitor 2006: Unfairness of Taxpayer Subsidies



Source: Insurance Research Council.

diversify and spread their portfolio, and that can lead to a reduction or even withdrawal of voluntary capacity in certain markets. For example, in early 2009 a leading Florida property insurer announced plans to withdraw from that state. Such a situation inevitably will increase the volume of property policies being written by the residual market mechanisms.

FINANCIAL RESULTS

Today, many residual property market plans have shifted away from their original mission as insurers of urban properties into major providers of insurance in high-risk coastal areas. Some operate at deficits, or from slim positions of surplus, even in years with little or no catastrophe losses. A variety of factors are at play here, including the fact that state plans may be prohibited from charging a rate that is commensurate with the risk being assumed.

Such frequent volatility in the financial results of the plans raises key questions not just about heightened risk in coastal areas and coastal development, but about rate adequacy. The funding that underpins the plans is in many cases not adequate to offset the rising coastal exposures. Benign hurricane seasons, while welcome reprieves, do not provide a solution for this situation as experts predict that hurricane losses will only continue to grow in the long term. The large volume of insurance being provided under the plans also has serious implications for the private property insurance market and state fiscal policy.

Rates charged by state plans are controlled by state regulators and legislators and are therefore vulnerable to political manipulation. The tendency of regulators and/or legislatures to suppress rates in the private sector is a major contributing factor to a pull-back by private insurers in many coastal areas, which leads directly to more property owners seeking coverage through the state's residual market facility, often at rates that are inadequate.

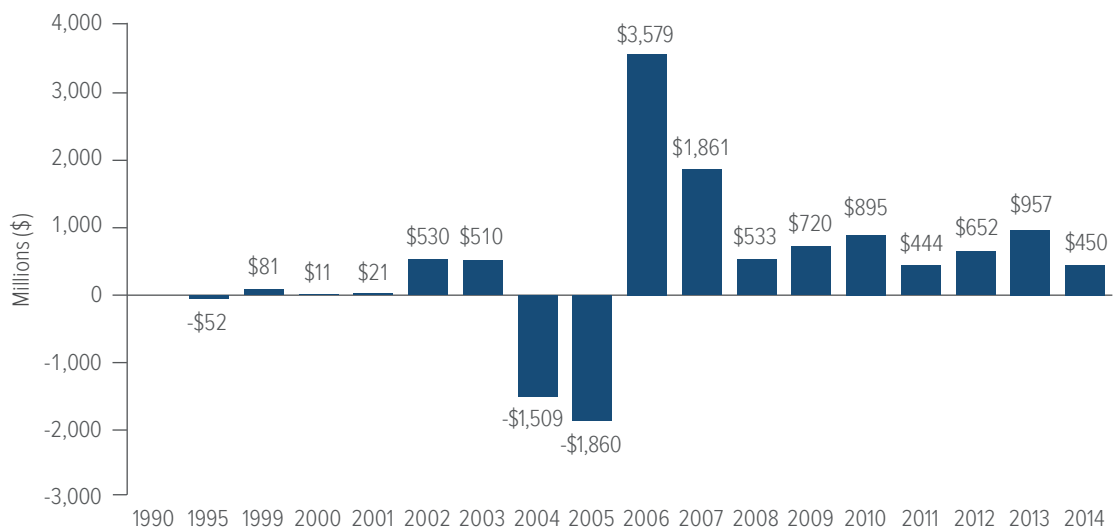
In 2014, the latest year for which complete data is available, the FAIR Plans reported an aggregate operating gain of \$449.6 million, a 54 percent decline from the \$967.2 million reported in 2013. Nine consecutive years of gains between 2006 and 2014 followed successive operating losses of \$1.9 billion in 2005 and \$1.5 billion in 2004 (**Fig. 13**). The turnaround in fortunes in recent years can be attributed to the less active hurricane seasons that followed the record hurricane losses experienced in 2005 and 2004.

It is important to note that the figures for 2005–2007 exclude the results of Louisiana Citizens Property Insurance Corp., a plan severely impacted by losses arising from Hurricane Katrina in 2005 and the third largest of all the FAIR/Beach plans by number of policies in 2004. In 2014 Louisiana Citizens reported an operating loss of \$30.3 million, compared with an operating *gain* of \$22.9 million in 2013. This followed two consecutive years of operating losses in 2012 and 2011.

In the decade from 1995 to 2005, the FAIR Plans saw a more than 30-fold ballooning of their aggregate operating loss. If Louisiana Citizens' reported 2005 operating deficit of \$954 million is included, the FAIR Plans' 2005 deficit rises to a staggering \$2.8 billion—a more than 50-fold increase in the aggregate deficit over the course of the decade.

Fig. 13

FAIR Plan Operating Gains/Losses 1990–2014



Source: PIPSO; Insurance Information Institute.





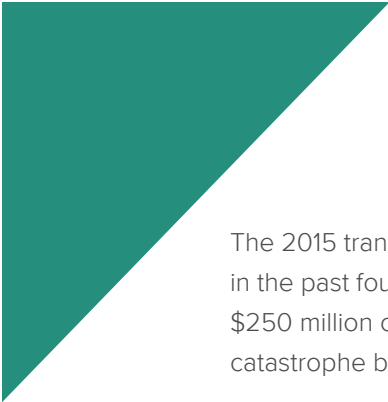
In 2005, by far the largest deficit—\$1.77 billion—was reported by Florida’s FAIR Plan, Citizens Property Insurance Corp. Both Florida and Louisiana’s 2005 deficits resulted in the levying of assessments on virtually all residential property owners in their states.⁹ Insufficient rates, inadequate cash reserves and insufficient or nonexistent reinsurance have contributed to the problems in Florida, Louisiana and other states.

The financial results of the Beach and Windstorm Plans show a similar trend. The results of these plans are illustrative of the fact that in years of low hurricane activity operating margins are slim, and in years of high hurricane activity, losses mount. The IRC reports that as rate inadequacy has continued to increase, the demand for coverage from Beach and Windstorm Plans has grown relative to the total statewide property insurance market. As a result, some plans face increasing risk of insolvency and the potential for large assessments on insurance in non-coastal areas is increased.¹⁰

If their claims-paying capacity is exhausted in a particular year, FAIR and Beach and Windstorm Plans have a number of capital-raising options available to them:

- **Levy of assessments:** When losses exceed claims-paying capacity in a given year, FAIR and Beach and Windstorm plans are required by state law to assess participating insurers. Assessments typically are based on an individual insurer’s market share in the state. In many states insurers are allowed to recoup these assessments by imposing a rate surcharge on policyholders. In some states like Florida, the assessment is a percentage of premium and is passed through directly to consumers.
- **Issuance of bonds:** Plans also have the ability to finance losses and raise additional capacity via the issuance of bonds. In the wake of the 2004 and 2005 hurricane seasons, a number of plans went ahead with post-event bond issues. Pre-event bond issues may also be completed by some plans for funding future hurricane seasons. The cost of issuing bonds may be passed onto policyholders via assessments and surcharges. In recent years, plans have become increasingly dependent on the issuance of debt.
- **Reinsurance and capital markets:** Many plans also buy reinsurance or access the capital markets, providing them with additional layers of catastrophic coverage and ability to fund losses. While costs can be high, reinsurance is playing an increasingly important role in the financing of mega-catastrophes. For example, private reinsurers paid an estimated 45 percent of 2005 hurricane losses.

As reinsurance pricing has come down in the United States, a number of the larger residual market plans have expanded their use of private sector reinsurance, including catastrophe bonds, to help manage their hurricane exposure. In May 2015 Florida Citizens accessed the capital markets for the fourth time, increasing its reinsurance protection for Florida named storm risks (covering tropical storms and hurricanes) via the issuance of a \$300 million catastrophe bond.



The 2015 transaction is the fourth capital market risk transfer secured by Florida Citizens in the past four years. (A \$750 million catastrophe bond was issued in 2012, a second \$250 million catastrophe bond was issued in March 2013, and in April 2014 a third \$1.5 billion catastrophe bond was issued—the largest single catastrophe bond issuance in history.)

The Texas Windstorm Insurance Association also accessed the capital markets for the first time in 2014 via the issuance of a \$400 million catastrophe bond. Meanwhile, in 2015 Louisiana Citizens accessed the capital markets for the third time, joining a growing list that in previous years has included North Carolina's Beach and Windstorm Plan and the Massachusetts' FAIR Plan.

Diversion of Tax Revenues

In addition to assessments and debt, some plans have been bailed out by a diversion of tax revenues from state coffers. Certain plan funding mechanisms may also expose state funds to excess hurricane losses. For example, losses from Hurricanes Dolly and Ike in 2008 left the Texas general revenue fund exposed after the Texas Windstorm Insurance Association's funds were depleted. (See Appendix II.) In an effort to offset the 2005 deficit of Florida Citizens Property Insurance Corp., state legislators provided for a \$715 million appropriation of state general revenue dollars to the fund. Similarly, in December 2006 the Louisiana Legislature passed a law creating a state income tax credit for policyholders facing assessments from Louisiana Citizens. Diversion of state and federal funds to the Mississippi Windstorm Underwriting Association also followed the passage of reforms by the state Legislature in 2009 and 2007 (see later section on Mississippi).

These subsidies effectively shift the cost of assessments from the plan's policyholders to policyholders and taxpayers across the state or country.¹¹ Such temporary political salves for policyholders in coastal areas are hardly a long-term solution to the financial distress in which some of the residual market plans find themselves. At the same time, they dilute the message of risk that actuarially sound premiums send to coastal dwellers. The effect is to encourage and enable even more vulnerable coastal development, further increasing residual market exposure and increasing the burden on taxpayers.

PRICING TO RISK

All insurers must file rates and forms with the state insurance regulator, and residual market plans are not exempt. However, each state has different rate-setting rules and individual plans write different types of risks, so the exact parameters vary from state to state. In general, residual market mechanisms have been designed to work as a complement to, rather than in competition with, the private market. Therefore, historically the rates charged by the residual plans have been higher than those in the voluntary market. The idea has been to charge a risk-based premium that is commensurate with the specific type of business being written.



Today, a number of state legislatures have eliminated the requirement for the rates charged by residual market plans to be noncompetitive with the private market. This means that private insurers face an uphill battle when trying to compete on price. A July 2010 report by the Government Accountability Office (GAO) found that most state-run natural catastrophe plans charge rates that are not actuarially sound and do not accurately reflect the risk of loss.¹² State natural catastrophe programs in Alabama, California, Florida, Louisiana, Mississippi, North Carolina, New Jersey, South Carolina and Texas were reviewed for the report. According to GAO, six of the 10 plans studied charged rates that did not fully reflect the risk of loss, potentially discouraging private market involvement and mitigation efforts by property owners.

As noted earlier, the availability and affordability of property insurance in the voluntary market has a direct impact on the rate of growth of the FAIR and Beach and Windstorm Plans. Post-2004 and 2005, property insurance market conditions changed rapidly, and a number of private insurers and residual market plans in hurricane zones came under considerable financial strain. Record catastrophe years may have amplified the problems, but even before 2004 and 2005, it was clear that many of the residual market plans had not lived up to their original objectives.

Today, overall exposures in the residual property market appear to have stabilized somewhat and many of the plans are underwriting profitably. Legislative reform passed in some of the most at-risk markets, for example the state of Florida, has also contributed to an improvement in the overall financial position of the plans. Diminished hurricane activity in recent years in areas like Florida has been another positive factor. But, while hurricane activity in the most exposed states may have been lower in recent years, there is no question that over the long term major hurricanes will cause extensive damage—making it all the more important for the rates charged by these plans to be actuarially sound.

IMPACT ON THE VOLUNTARY INSURANCE MARKET

When the losses of FAIR Plans and Beach and Windstorm Plans exceed their claims-paying capacity in a given year, the plans impose an assessment on every participating insurer, typically based on their homeowners or property insurance market share in a state. In many states, insurers may then recoup this amount from policyholders when their homeowners policies come up for renewal. The plans may also buy reinsurance. This means that people far away from the coast and property owners who may have never filed a claim are called upon to subsidize coastal insurance rates.

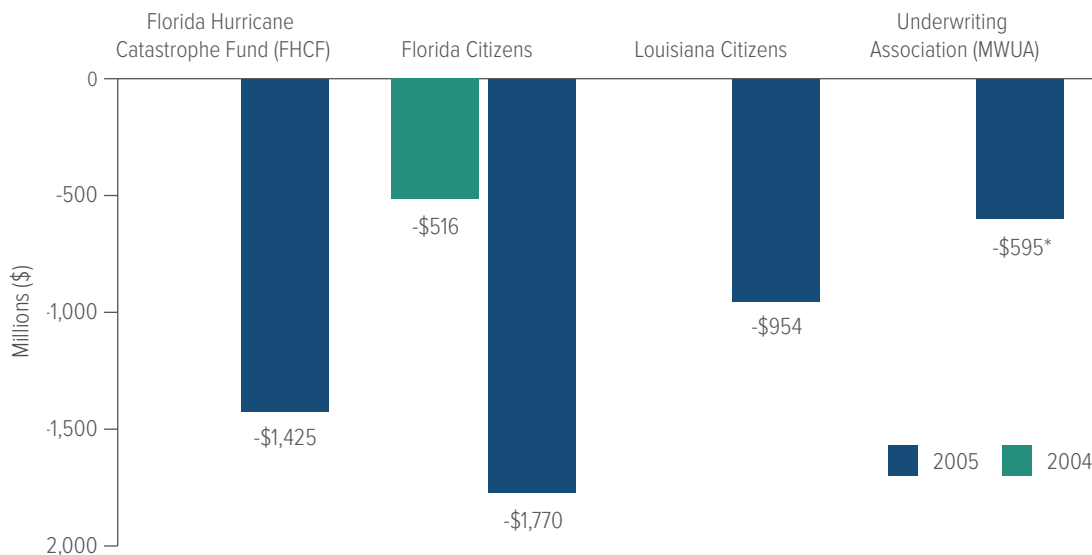
In 2005 the extent of losses from Hurricane Katrina pushed all the residual market plans in the affected states into deficit (Fig. 14). This followed the record hurricane losses of 2004, when Florida Citizens also reported a deficit. As a result, the plans were required to assess participating insurers in order to remain solvent. While the assessment formulas vary from state to state, the record losses created substantial financial strains on private insurance companies in some Gulf Coast states. This led a number of companies to file a class action against the Mississippi Windstorm Underwriting Association board of directors, claiming that the pool did not buy adequate and reasonable reinsurance, which led to the excessive assessments.¹³ Over time it is likely that private insurers operating in high-risk states will have to make additional adjustments to account for their increasing exposure to the residual market. Going forward, it will be critical for private insurers to better understand their risks to the residual market.

Another important consideration is that as private insurers pull back from writing business in coastal areas, a significant share of premium is being ceded to the residual market. This means that private insurers, while reducing their exposure to catastrophic loss, are missing out on significant growth opportunities in certain states.

The leakage of premium to residual market mechanisms has the ultimate effect of reducing options in the private marketplace, another negative for insurance buyers.

Fig. 14

Residual Market Plan Estimated Deficits 2004/2005



Source: Insurance Information Institute.

*MWUA est. deficit for 2005 comprises \$545m in assessments plus \$50m in Federal Aid.



CONCLUSION

While residual market property plans fulfill a key role by ensuring that policyholders can obtain insurance coverage, their exponential growth in the course of the last two decades has key implications for insurers and insurance buyers going forward.

In particular, there are a number of public policy considerations that will need to be addressed as insurers, regulators and legislators seek a long-term solution to managing and funding catastrophic risks in future. Some of those public policy impacts are as follows:

- As residual market plans migrated from markets of last resort to markets of first, or only, choice in certain states, a significant amount of property insurance premium has exited the private marketplace (both the admitted and non-admitted insurance market). This reduced growth opportunities for carriers and choice for policyholders.
- When premiums charged are not commensurate with the risks assumed in highly vulnerable coastal and other areas, this can lead to increased development, unwise land-use policies and buildings that are not sufficiently well-constructed to withstand the exposures.
- When, due to political and/or regulatory constraints, insurers are unable to charge a premium commensurate with the risk they assume in coastal areas, it distorts the true cost of insurance coverage. This has two key public policy implications:
 1. First, rate and underwriting restrictions on property insurers can result in a situation in which high-risk property owners actually pay lower premiums, while low-risk property owners pay artificially higher premiums. This leads to unfair cross-subsidization among risk classes and discourages mitigation.
 2. Ultimately policyholders in both coastal and non-coastal areas pay the price of inadequate premiums in the form of additional payments, such as assessments and taxes following federal/state bailouts. Even policyholders of unrelated risks, such as auto and liability, have to pay assessments.
- In contrast to the private market, state-run insurers concentrate risks on the state itself—on its property owners, business owners and even its drivers—and, ultimately, the state’s taxpayers. While private insurance transfers and spreads risk, ensuring that sufficient funds will be available in the event of a loss, state-run schemes act rather as a conduit to pass along their cost to other insurance buyers, even those who have never filed a claim, live nowhere near the coast and in some cases have no property exposure at all.



Appendix I

How FAIR and Beach and Windstorm Plans Operate

FAIR Plans and Beach and Windstorm Plans are run by state insurance regulators in conjunction with private insurers and basically operate as pools (an association of organizations or individuals that combine resources to economically finance recovery from accidental losses). The pool acts as a single insuring entity and premiums, losses and expenses are shared among pool members (i.e. insurers) in agreed-upon amounts.

Each state has enacted its own legislation in response to local market needs, so there is considerable variation in the types of coverage provided and the methods of operation among the 35 jurisdictions with FAIR Plans. The state government does not typically provide financial support for these plans, though exceptions do occur. Plans may also float debt and benefit from the state's credit rating, which is ultimately linked to its authority to tax. In addition, each state has a guaranty fund in place to pay the claims of failed insurers. Guaranty funds are supported by assessments on solvent insurers doing business in the state. Some FAIR Plans employ their own staff to handle underwriting, processing and even claim adjustment, while others contract with specific insurers to act as servicing carriers. These insurers, for a percentage of premium, perform underwriting, policyholder service and claim settlement functions.

A property owner unable to obtain property insurance in the voluntary insurance market may apply to the state's FAIR Plan through a licensed agent or broker. To be eligible for FAIR Plan coverage, the insured must have the property inspected.

Only property that meets the FAIR Plan's inspection criteria will be insured in the program. Owners of properties failing to meet basic levels of safety, typically older houses and commercial establishments, may be required to make improvements as a condition for obtaining insurance.

Such improvements may include upgrading the electrical wiring, heating and plumbing, and ensuring that the roof is sound, for example. Where deficiencies are not remedied, FAIR Plan administrators may deny insurance as long as hazards are unrelated to the neighborhood location or to hazardous environmental conditions beyond the applicant's control, such as being located adjacent to a fireworks factory.

Under most FAIR Plans, the following types of exposures are considered uninsurable:

- Vacant property
- Property poorly maintained
- Property subject to unacceptable physical hazards, such as storage of flammable materials
- Property in violation of law or public policy, such as a "condemned building" (one that is considered unfit for human habitation)
- In some states, property not built in accordance with building and safety codes



Appendix II: Eight Individual State Plans

1. Florida Citizens Property Insurance Corp.

Overview

Since its establishment in 2002, after the state passed legislation combining two separate high-risk insurance pools—the Florida Windstorm Underwriting Association and the Florida Residential Property & Casualty Joint Underwriting Association—Citizens Property Insurance Corp. (Florida Citizens) has experienced exponential growth. As a result, Florida Citizens has evolved from a market of last resort, becoming the state’s largest property insurer in 2006.

Citizens is a state-regulated association and historically has provided property insurance where it is not available from the regular market. It has tax-exempt status and provides coverage to homeowners, commercial residential properties and a limited number of commercial businesses in coastal high-risk areas and others who are unable to obtain insurance in the private insurance market.

According to PIPSO data, of the 2.0 million total policies (habitational and commercial) insured by the FAIR Plans across the United States in 2014, 981,799, or 48 percent, were in Florida Citizens. This compares with the 658,085 policies, or 44 percent.

Florida Citizens entered 2015 with 661,084 policies and a total exposure of \$200.5 billion. Latest data show that as of December 2015, Citizens’ policy count has been reduced to 506,901, with a total exposure of \$153 billion. Citizens attributes this success to the decade-long lull in storms that has enabled Florida’s private insurance market to begin to rebound as new investors and companies have increased their market share in the state.

Depopulation efforts in recent years have allowed Citizens to shrink policy count by 66 percent since January 2012, when Citizens insured nearly 1.5 million policyholders with a total exposure of \$514 billion. The reduced exposure, coupled with affordable reinsurance, has allowed Citizens to eliminate the assessment risk for Florida policyholders following a 1-in-100 year storm.

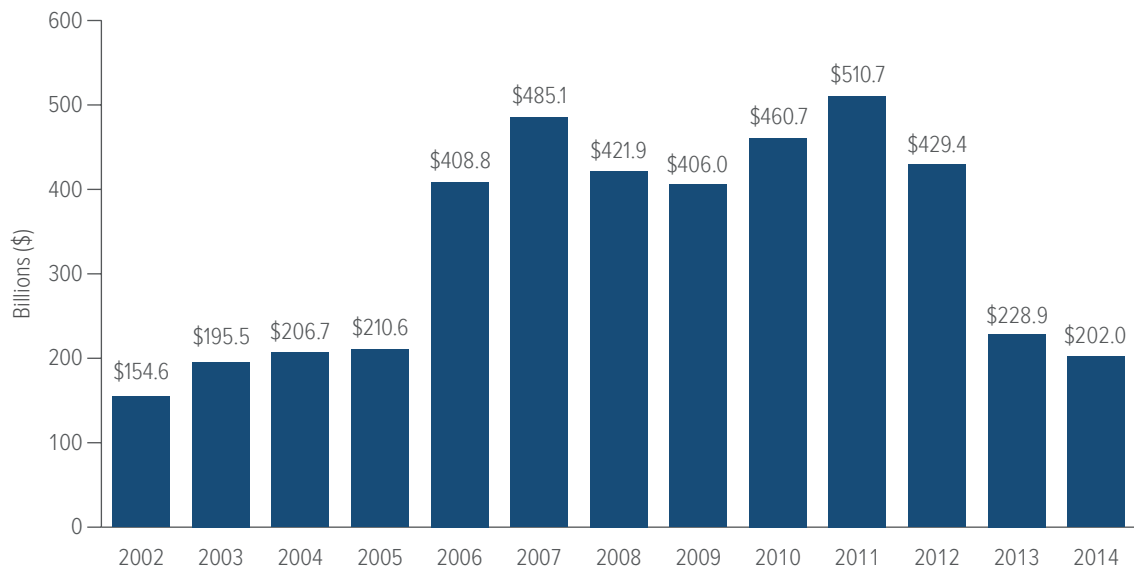
As of December 31, 2014, Florida Citizens had 185,978 coastal (high-risk) account policies in-force (those that were in the old windstorm pool). The insurer also had 373,617 personal/residential policies in-force and 3,219 commercial/residential policies. Total policies in-force in Citizens had dropped to 661,161 at December 31, 2014.

Meanwhile, Florida Citizens also accounted for about half (48 percent) of the total FAIR Plans’ exposure to loss. Citizens’ exposure to loss dropped by 53 percent from \$429.4 billion in 2012 to \$201.9 billion in 2014 after the plan took much-needed steps to reduce its size (**Fig. 15**).

The success is due in part to Citizens charging more competitive rates and offering more restrictive coverage; efforts to recruit small local insurers to take over some Citizens’ policies; and the creation of a computerized clearinghouse that allows Citizens policyholders to find alternatives to purchasing insurance through the pool. The clearinghouse also allows private insurers to decide whether they want to take on pool policies that are up for renewal and new applications before they are accepted by Citizens.

Fig. 15

Florida Citizens Exposure to Loss



Source: PIPSO; Insurance Information Institute.

The drop in exposure in recent years came after Citizens' exposure to loss hit a new peak of \$510.7 billion in 2011, surpassing its prior peak of \$485.1 billion in 2007. Florida Citizens' exposure to loss had also risen to \$460.7 billion in 2010, after two Florida insurers were declared insolvent and as a number of national companies reduced their exposure to Florida windstorm risk, leaving some high-risk policyholders looking for coverage.

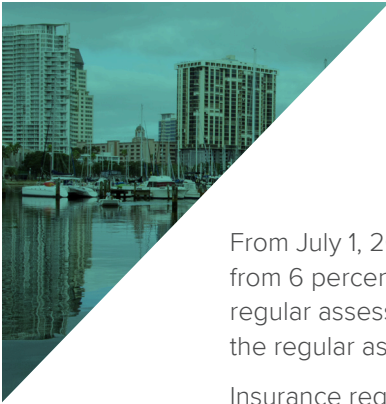
Legislative Developments

Legislation (SB 1770), signed into law at the end of May 2013, was designed to return Florida Citizens to its original purpose as the state's insurer of last resort. The law created a clearing-house that would allow private insurers to decide whether they want to take on pool policies that are up for renewal and new applications before they are accepted by Citizens.

Other provisions of the legislation barred Citizens from insuring new construction in high-risk coastal areas after July 1, 2014, and would cap policy limits at \$700,000 by 2017, down from \$1 million. The legislation also required the appointment of an inspector general to restore public confidence in the entity after the discovery of some questionable expenditures.

Earlier in April 2012 legislation (HB 1127) was signed into law. The law changed how Citizens imposes post-disaster assessments (taxes) on policyholders, effectively reducing the tax burden on non-Citizens policyholders after a catastrophic storm.

Under previous law, if Citizens exhausted its claims-paying capacity in any of its three accounts (personal lines, commercial and high-risk coastal) and ran a deficit, its policyholders were assessed 15 percent of their premium for each account, up to 45 percent. After exhausting that amount, Citizens could levy a 6 percent regular assessment on virtually all property/casualty lines policies in the state. (See section on claims-paying capacity below.)



From July 1, 2012, the new law reduced the regular assessment on non-Citizens policyholders from 6 percent to 2 percent for the coastal account and eliminated the existing 6 percent regular assessments on the other accounts. Emergency assessments that would kick in after the regular assessments are exhausted remain in place, however.

Insurance regulators granted Citizens a higher rate increase than requested for 2011, due to a huge increase in sinkhole claims. A comprehensive property insurance reform measure (SB 408), enacted in May 2011, was designed to reduce the cost of sinkhole claims and did the following:

- Increased the minimum surplus requirements for residential property insurers to \$15 million
- Required windstorm and hurricane claims to be brought within three years and sinkhole loss claims to be brought within two years
- Revised what constitutes a sinkhole loss

Major legislative reforms enacted in 2009 (HB 1495) were widely regarded as a step in the right direction for the state's property insurance market after legislation passed in 2007 and 2008 had significantly expanded the overall role of the state as an insurer and reinsurer of Florida homes.

Among other things, the 2009 reforms allowed Citizens to increase rates by up to 10 percent per year until rates are actuarially sound.

Claims-paying Capacity


When Florida Citizens losses exceed its claims-paying capacity, it is required to impose assessments on insurers doing business in the state that are then passed on to their policyholders in the form of a surcharge. Following the legislative reforms enacted in 2007 the base for assessments to pay for Citizens deficits expanded from property insurance to auto, liability and other lines of insurance, with the exception of medical malpractice and workers compensation, thus placing the burden of paying for the next big storm on all Floridians, even those with no exposure at all to hurricane losses.

Citizens also has the ability to finance loss payments by issuing tax-exempt bonds that carry low interest rates, piggy-backing on the state of Florida's strong credit rating. The credit crisis that began in mid-2007 raised serious concerns about Citizens' ability to raise significant sums in the bond markets should a major hurricane strike. However, since then there has been a gradual improvement in credit markets and bonding capacity.

In May 2015 Citizens accessed the capital markets for the fourth time, increasing its reinsurance protection for Florida named-storm risks (covering tropical storms and hurricanes) via the issuance of a \$300 million catastrophe bond.

The 2015 transaction is the fourth capital market risk transfer secured by Citizens in the past four years. (A \$750 million catastrophe bond was issued in 2012 and a second \$250 million catastrophe bond was issued in March 2013, and in April 2014 a third \$1.5 billion catastrophe bond was issued—the largest single catastrophe bond issuance in history.)

Citizens also continued to benefit from favorable global reinsurance pricing, bolstering its participation in the traditional reinsurance market with the purchase of \$1.9 billion in coverage for the 2015 hurricane season.



As a result, Citizens' 2015 risk transfer program provided more than \$3.9 billion in overall protection—comprising \$1.9 billion in traditional reinsurance and \$2.05 billion in capital markets transfer. This would allow Citizens to pay claims in a 1-in-100 year storm without having to levy assessments.

Florida Citizens' ability to pay claims is partly dependent on the state-run reinsurance fund—the Florida Hurricane Catastrophe Fund (the Cat Fund)—which reimburses Citizens a stated percentage of hurricane losses once a retention level is reached. However, in the event of a major storm, the Cat Fund's ability to pay claims may also be impacted.

Citizens was hit hard by the hurricane seasons of 2004 and 2005, suffering record hurricane damage claims and incurring a deficit in both years. As a result of losses related to Hurricanes Dennis, Katrina and Wilma, Citizens reported an operating deficit of just over \$2 billion in 2005. This followed an operating deficit of \$1.6 billion in 2004, when Citizens incurred around \$2.4 billion in losses from nearly 120,000 hurricane damage claims, of which \$1.8 billion came from its high-risk windstorm account.

To offset Citizens' 2005 deficit, legislation (SB 1980), passed in May 2006, provided for a \$715 million appropriation of state general revenue dollars to the fund. This reduced the regular assessment on policyholders from 11 percent to 2 percent. A further 10 percent emergency assessment to pay off the remainder of the deficit was spread over a 10-year period (1.4 percent annually until 2017).

2. Louisiana Citizens Property Insurance Corp.

Overview

Louisiana Citizens Property Insurance Corp. was created by the Legislature in 2003 to oversee the state's Coastal and FAIR Plans. This state-run entity acts as a market of last resort for residential and commercial property insurance in Louisiana. For coverage purposes, the Louisiana Citizens FAIR Plan and the Louisiana Citizens Coastal Plan operate as separate programs under Louisiana Citizens.

Louisiana ranks seventh highest on the AIR Worldwide coastal exposure list, with \$293.5 billion in insured coastal exposure in 2012, representing 36 percent of the state's total insured values (Fig. 16).

Due to a lack of available data in the years post-Hurricane Katrina, Louisiana Citizens' exposure growth is difficult to establish. However, based on PIPSO data, Citizens' exposure went from \$22.7 billion in 2004 to \$28.4 billion in 2009—an increase of 25 percent. However, from 2009 to 2014, Citizens' exposure to loss declined by 40 percent to \$17.1 billion.

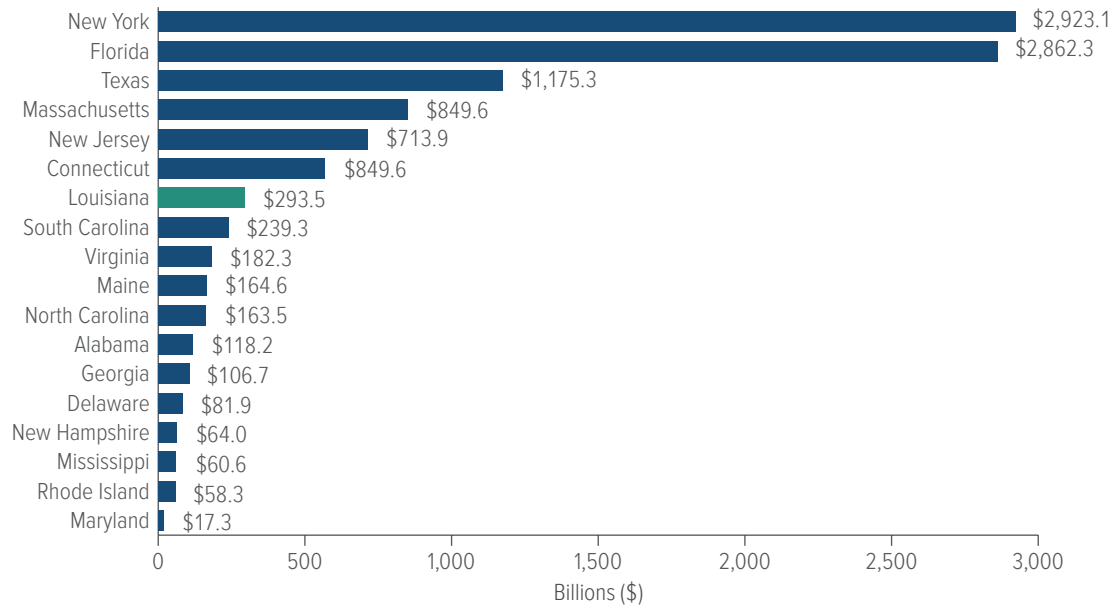
By law, Citizens rates are non-competitive with private insurers and must be at least 10 percent above the private market. A new law (SB 130), which took effect August 2009, revised Louisiana Citizens' rate structure and ensured that the plan remains the insurer of last resort by requiring the 10 percent surcharge be added to the highest rates charged by private insurers.¹⁴

In 2007 Louisiana Citizens set out to reduce its policy count to below its pre-Hurricane Katrina policy total of 125,000. Louisiana Citizens' policy count had spiked at 174,000 in September 2008 in the wake of hurricanes Katrina and Rita. Since then, the depopulation process has



Fig. 16

Total Value of Insured Coastal Exposure In 2012



Source: AIR Worldwide.

reduced Louisiana Citizens’ policy count by about 50 percent to 86,645 as of May 2015. According to the Louisiana Department of Insurance, Citizens’ homeowners market share had dropped to an all-time low of 1.8 percent in 2014, after spiking at 9.8 percent in 2008.

The depopulation of Louisiana Citizens is the result of an incentive program created by the legislature in 2007 to increase the availability of property insurance and to decrease the business written through the plan (see below).

Despite the success of its depopulation program, Louisiana Citizens had to pay out nearly \$106 million in a judgment that stemmed from the question of whether it began adjusting claims from 2005 Hurricanes Katrina and Rita within the 30-day time limit. The class action involved some 18,500 policyholders. Citizens was also called upon to pay many property claims resulting from Hurricane Isaac, which hit the state on August 28, 2012.

Hurricane Katrina produced severe losses for Louisiana Citizens, when the Category 3 storm struck the state in late August 2005. The FAIR Plan was left with a \$954 million deficit for 2005, after incurring estimated hurricane losses of up to \$850 million. Citizens issued \$978 million in revenue bonds to help fund the shortfall. Emergency assessments to pay off those bonds began in 2007 and will continue into 2025.

The Coastal Plan offers coverage in Zone 5, south of the Intracoastal Waterway, the most hurricane-vulnerable area. The Fair Plan offers coverage in the rest of the state. Louisiana Citizens provides coverage statewide. It offers coverage up to \$750,000 for residential properties.



Legislative Developments

New legislation (HB 952) passed in June 2010 relaxed take-out policy rules under which an insurer assumes policies from Louisiana Citizens. Under HB 952, insurers participating in the depopulation program can remove fewer policies than in the original program and select the ones they want. The original takeout program had required insurers to assume bundles of 500 policies to eliminate cherry-picking.

In addition, the program requires companies to prove that they have the capacity to take on new policies. The state insurance department is required to create at least one round of take-out offers each year.

Major legislation passed in 2009 revised Citizens' rate structure and limits the exposure of policyholders to one named storm deductible per hurricane season:

- SB 130 revised Citizens' rate structure and ensures that the plan remains non-competitive with the private market by requiring its rates to be 10 percent higher than either: the actuarially sound rate; or the highest rates charged by private insurers with at least a 2 percent market share in a parish; or the rates of companies that have sold at least 25 homeowners policies in the previous year. The bill also required Citizens to charge rates by ZIP code, rather than by parish.
- HB 333 applied a single named storm deductible per hurricane season. If multiple named storms occur in one year, the full amount of the named storm, hurricane, wind and hail deductible can be applied only once.

Legislation passed in 2007 was designed to make the state of Louisiana more attractive to insurers and to help property owners deal with increased insurance cost by allowing Louisiana Citizens to solicit bids from private insurers to take over its policies. The state also provided financial incentives to new insurers entering the homeowners market on the condition that 25 percent or more of their new business consists of policies taken over from Citizens.

In a special session in December 2006, state legislators passed a law taking \$56 million from a state emergency fund to reimburse policyholders who had been assessed to pay for Citizens' losses. At the same time, a law was approved that created a state income tax credit for policyholders facing assessments from Louisiana Citizens.

Claims-paying Capacity

In the normal course of business, Louisiana Citizens utilizes its cash to pay claims, liquidating investments as necessary to meet demands. The plan also buys reinsurance to supplement its claims-paying capacity in the event of a catastrophe. The amount of reinsurance purchased and the structure of the program may vary year to year.

Louisiana Citizens has a reinsurance structure that is a combination of traditional reinsurance and two catastrophe bonds, making it one of a growing number of state-run residual market plans to have accessed the capital markets to extend its catastrophe protection.

Louisiana Citizens' 2012 \$125 million catastrophe bond issuance, Pelican I, matured in April 2015, while its second \$140 million catastrophe bond issuance, Pelican II, expires in May 2017.

In 2015, Louisiana Citizens accessed the capital markets for the third time to protect the plan from hurricane losses via a \$100 million catastrophe bond issuance. A new bond, Pelican III, replaced the maturing Pelican I, and covers a \$144 million layer of the plan's reinsurance program.



In the event of a deficit in either the FAIR or Coastal Plan, Louisiana Citizens has the ability to assess its member insurers to an amount up to 10 percent of industry premium for the assessable lines of business. Insurers may then choose to recoup that amount from their policyholders over the course of the next year. Policyholders may, in turn, claim that amount as a credit against their Louisiana state income taxes.

If the plan year deficit exceeds the amount that can be recovered via regular assessments, Louisiana Citizens may fund the remainder by issuing revenue assessment bonds in the capital markets. It then declares emergency assessments each year to provide debt service on the bonds until they are retired. Insurers writing assessable lines must surcharge their policyholders within the percentage established annually by Louisiana Citizens. As in the case of regular assessments, policyholders may claim amounts paid as a credit against state income taxes.

3. Mississippi FAIR Plans

Overview

Mississippi has two residual market plans that act as a market of last resort for residential and commercial property insurance. The Mississippi Windstorm Underwriting Association (MWUA) was established by the Legislature in 1987 to provide an adequate market for windstorm and hail insurance in the coastal areas of Mississippi. The Mississippi Residential Property Insurance Underwriting Association (MRPIUA) was established by the Legislature in 2003 to provide an adequate market for residential property insurance in both rural and other areas of the state. It was formed by expanding the state's former Mississippi Rural Risk Underwriting Association to offer coverage across the entire state. All insurers writing property insurance on a direct basis in Mississippi are required to be members of the associations.

MWUA and MRPIUA are funded by the premiums from the insurance issued by the plans and assessments made against the member companies to cover any shortfall between revenues and exposure. The member companies are assessed based on a percentage of their total written property premiums. Insurers doing business in Mississippi are now able to recoup the assessment amount by surcharging their policyholders, following legislative reform approved by the state Legislature in March 2007.

The plans may also buy reinsurance. MWUA purchased \$985 million of reinsurance protection for the 2015 hurricane season.

MWUA provides windstorm and hail coverage only in the coastal counties of George, Hancock, Harrison, Jackson, Pearl River and Stone. Coverage is available up to \$1,000,000 for one- to four-family dwellings and \$250,000 for contents. MWUA policies contain a hurricane deductible of 2 percent of the insured value of the home. The hurricane deductible is triggered by windstorm losses resulting from a named storm as declared by the National Hurricane Center of the National Weather Service and remains in effect until a tropical storm warning is over.

Mississippi ranks 16th on AIR Worldwide's coastal exposure list, with \$60.6 billion in insured coastal exposure, about 50 percent of which is residential and 50 percent commercial. Mississippi's insured coastal exposure represents just 13 percent of the state's total insured values.

At year-end 2014 MWUA had a total of 75,060 policies in-force for a total exposure value of \$6.7 billion. Total exposure to loss has surged by 1,802 percent from \$352.9 million in 1990 to \$6.7 billion as of December 31, 2014 (Fig. 17).

MRPIUA provides fire and extended coverage throughout the state. However, properties located in the three lower coastal counties of Mississippi (Hancock, Harrison and Jackson counties) cannot obtain wind and hail coverage through MRPIUA. Coverage for these perils is available through MWUA. Coverage limits under MRPIUA are up to \$200,000 for buildings and \$75,000 for contents. MRPIUA policies contain a standard deductible of \$500 for all perils. At the end of 2014 MRPIUA had 11,393 policies in force and a total exposure of \$711.4 million.

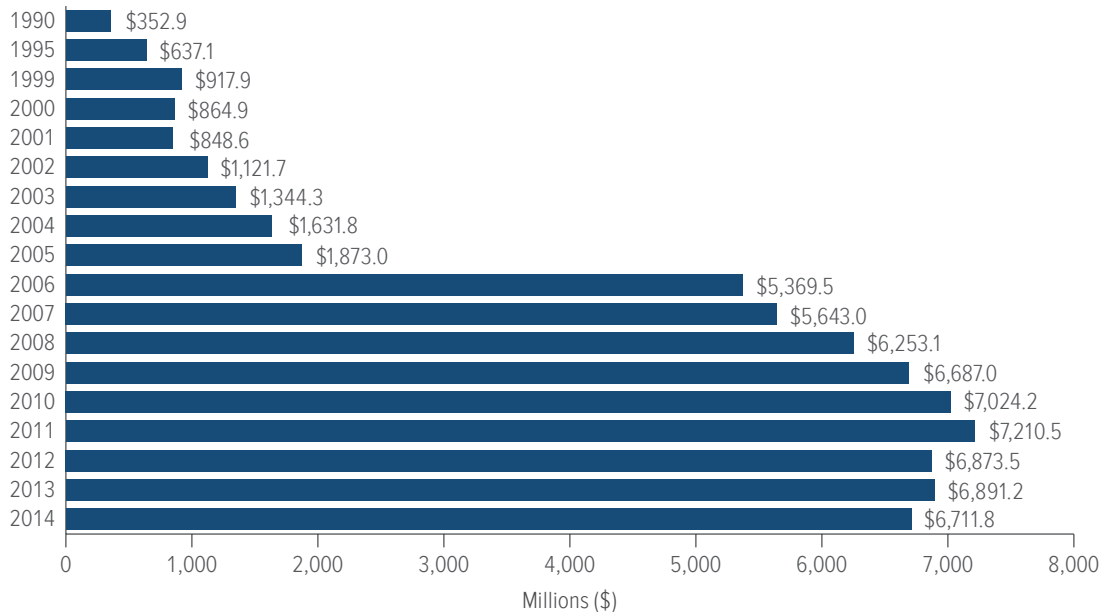
Insurers that write new wind and hail insurance policies in coastal areas in Mississippi may now be granted credits against the payment of state insurance premium taxes following passage of the 2007 legislative package.

In addition, policyholders statewide can be surcharged directly if MWUA has to issue bonds or repay loans or assess insurers for pool deficits. MWUA assessed its member companies around \$545 million for Hurricane Katrina claims, after reinsurance.

Since July 2009 MWUA has been offering discounts of up to 25 percent to policyholders who improve the hurricane resistance of their homes. This is another step toward the state’s goal of encouraging development along the coast.

Fig. 17

Mississippi Windstorm Plan: Exposure to Loss



Sources: PIPSO; Insurance Information Institute.



Legislative Developments

In May 2010 Mississippi Governor Haley Barbour vetoed a portion of HB 1642 that would have allocated an additional \$20 million from the state's hurricane disaster contingency fund to MWUA to subsidize the purchase of reinsurance for another year. The contingency fund exists to repay the federal government for spending \$400 million in hazard mitigation expenses in southern Mississippi.

Legislation in 2007 (HB 1500) created the Mississippi Windstorm Underwriting Association Reinsurance Assistance Fund, whereby the state provides a portion of the revenue received from state insurance premium taxes (up to \$20 million a year) over a four-year period to help MWUA pay its reinsurance premiums. It also allowed a one-time \$80 million diversion of federal and state funds to MWUA to boost the pool's reserves for windstorm damage claims. The infusion of funds is designed to protect policyholders against rate increases.

4. Texas Windstorm Insurance Association

Overview

Hurricane Celia, which struck the Texas coast on August 3, 1970, was one of the most damaging hurricanes in the state's history, causing an estimated \$310 million in insured losses in 1970 dollars (\$1.905 billion in 2015 dollars). Following the extensive damage caused by the hurricane, many insurers decided to stop writing business in the state's exposed coastal communities. As a result, the state stepped in and created the Texas Catastrophe Property Insurance Association (now called the Texas Windstorm Insurance Association) in 1971.

The Texas Windstorm Insurance Association (TWIA) provides wind and hail coverage for Texas Gulf Coast property owners in the event of catastrophic loss. It is the state's insurer of last resort for wind and hail coverage in 14 coastal counties and parts of Harris County, as follows: Aransas, Brazoria, Calhoun, Cameron, Chambers, Galveston, Harris County (partial), Jefferson, Kennedy, Kleberg, Matagorda, Nueces, Refugio, San Patricio and Willacy.¹⁵

How It Operates

All companies licensed to write property insurance in Texas are required to be members of TWIA. Their percentage participation is based on their company's statewide sales versus sales within TWIA's territory.

Coverage for both residential and commercial property owners is available under TWIA. In addition, the association provides coverage for miscellaneous items such as signs, fences, swimming pools and flagpoles.

Effective January 1, 2015, residential and commercial policyholders can purchase TWIA coverage up to the following statutory limits:

- Residential—Dwelling Building and Contents: \$1.77 million
- Apartment, Condo, Townhouse—Contents Only: \$374,000
- Commercial—Commercial Building and Contents: \$4.42 million

TWIA Growth in Policies and Exposure

Increasing development together with a reduction by some insurers of the number of coastal policies they will issue has led to dramatic growth in TWIA's exposure to loss and policy count in the course of the last decade, even as the number of structures insured by TWIA decreased significantly after Hurricane Ike.

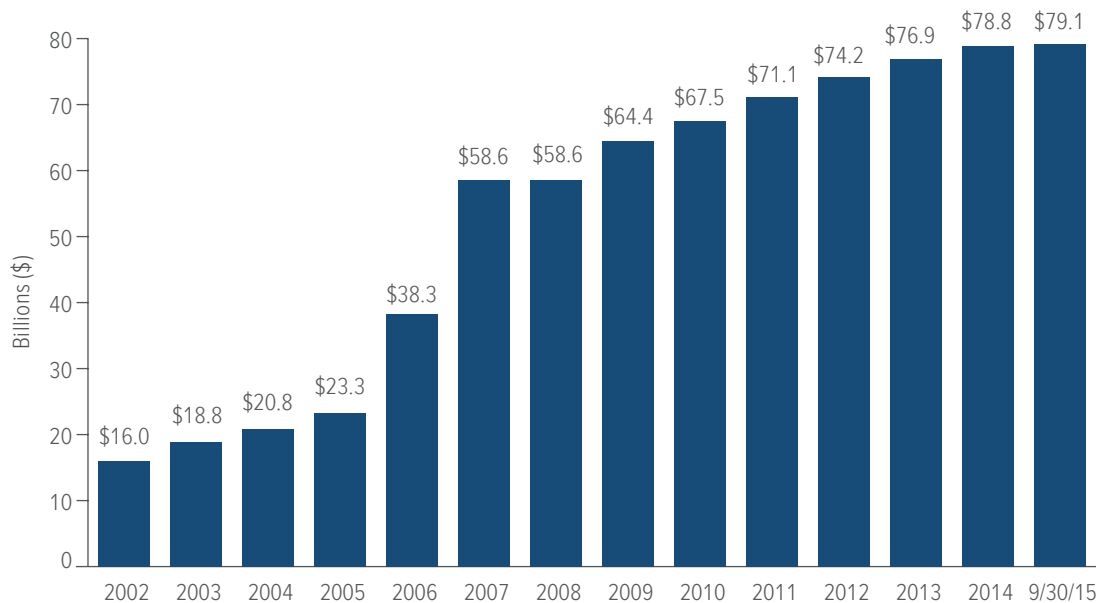
Between 2005 and 2012, TWIA's loss exposures increased by approximately 219 percent, from \$23.26 billion to \$74.17 billion, while its total policies in force grew by 143 percent, from 109,693 to 266,726, according to the Texas Windstorm Insurance Association *Clearinghouse Feasibility Study* released in May 2014.¹⁶

More recently, TWIA's exposure and policy growth have flattened. According to TWIA figures, as of September 30, 2015, the association insured 273,118 residential and commercial policyholders, up 0.3 percent from 272,367 policies in force at September 30, 2014.

TWIA's exposure to loss for buildings and contents was up just 1.5 percent at \$79.1 billion by September 30, 2015, from \$78.0 billion at September 30, 2014 (**Fig. 18**). TWIA total exposure had reached \$85.0 billion (including additional living expense and business interruption) by September 30, 2015 (**Fig. 19**).

Fig. 18

Texas Windstorm Insurance Association (TWIA): Exposure to Loss (Building & Contents Only)

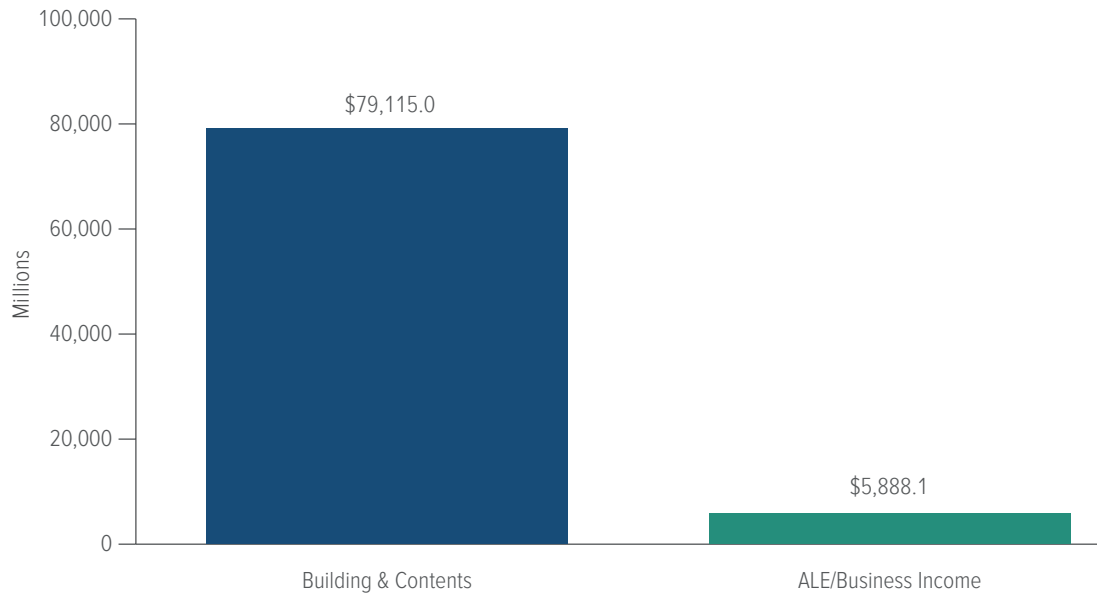


Sources: TWIA at September 30, 2015, Texas Department of Insurance, Southwestern Insurance Information Services (SIIS).



Fig. 19

Texas Windstorm Insurance Association (TWIA) Total Exposure to Loss



Sources: TWIA at September 30, 2015, Texas Department of Insurance.

Claims-paying Capacity

TWIA's ability to cover future claim-related costs as well as its long-term financial viability have been topics of ongoing concern. Different proposals have been considered for restructuring TWIA and its funding mechanism to avoid compromising the state's general revenue fund in the event of another major hurricane making landfall in Texas.

In 2015, new legislation (SB 900), otherwise known as the windstorm reform bill, changed TWIA's funding structure (see below). SB 900, which took effect September 1, 2015, also affects the composition of the board of directors and grants TWIA and the Texas Department of Insurance the authority to develop a formal depopulation program.

TWIA's traditional reinsurance program is complemented with catastrophe bond protection. In 2015 TWIA had \$1.18 billion in traditional reinsurance plus \$1.1 billion in catastrophe bond protection. TWIA accessed the capital markets for the second time in 2015 via the issuance of a \$700 million catastrophe bond. This added to its \$400 million catastrophe bond issued in 2014. Insurers can also purchase reinsurance to cover their individual exposures.

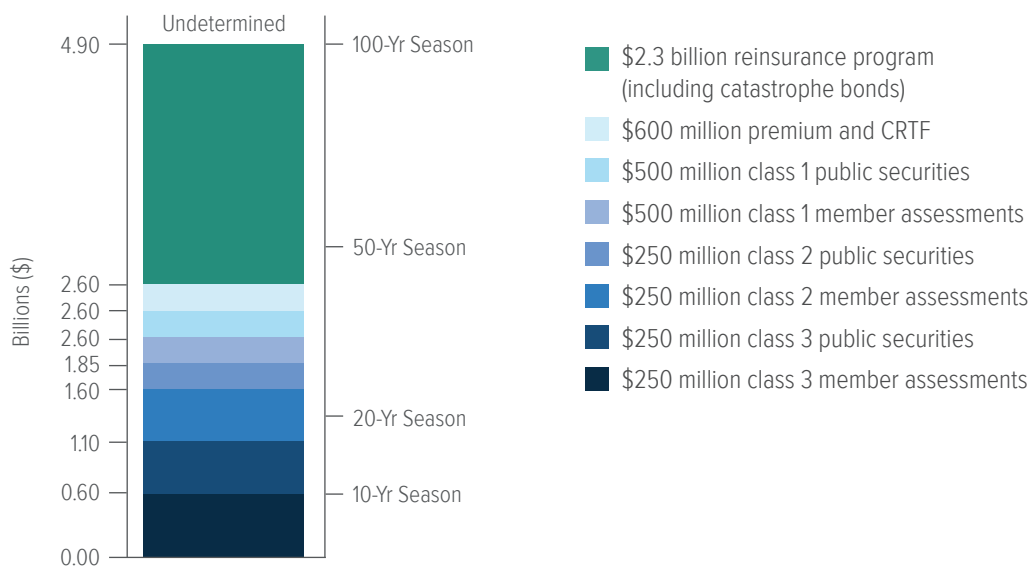
SB 900 changed TWIA's funding structure, requiring the plan, at a minimum, to fund a 100-year storm season—a level of funding it had already achieved for the 2015 season. The law requires TWIA to maintain this level of funding in future years, using the following sources: TWIA premiums and the Catastrophe Reserve Trust Fund; a combination of \$1 billion in company assessments and \$1 billion in bonds repaid first by TWIA policyholders and, if necessary, by all coastal policyholders; and sufficient reinsurance or other risk financing to achieve the 100-year storm season.

Under the new structure, total statutory funding is reduced by \$500 million, and the individual components have changed, relying less on bonds repaid by company assessments and coastal policyholder surcharges and more on direct assessments of insurance companies and bonds repaid primarily by TWIA policyholders.

TWIA's funding for the 2015 hurricane season under SB 900 is illustrated below (Fig. 20):

Fig. 20

Texas Windstorm Insurance Association (TWIA): Funding for 2015 Hurricane Season Under SB 900



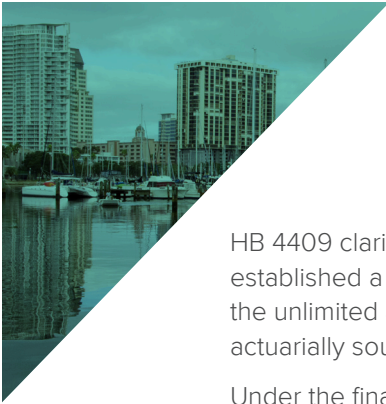
Sources: TWIA Annual Report Card, 6/1/15.
Storm frequencies based on modeled losses using TWIA exposures as of 12/15/14.

In 2008, TWIA funds were depleted after paying an estimated \$3 billion in losses resulting from Hurricanes Ike and Dolly. Concerns over claims handling led to TWIA being placed under administrative oversight by the state Department of Insurance in 2011, and its management was replaced. The state's insurance commissioner determined that TWIA's structure was unsustainable.

Reform legislation (HB 3) was passed in a special legislative session in 2011. HB 3 allowed TWIA to issue pre-event bonds only once a year, improved its administrative operations and claims-paying processes and placed limits on lawsuits against TWIA.

Under HB 3, if TWIA does not purchase reinsurance it has to submit an actuarial plan to the state Insurance Department detailing how it will pay losses in the event of a catastrophe with estimated damages of \$2.5 billion or more.

Earlier in 2009 new legislation (HB 4409), made major reforms to TWIA funding and claims-paying structure, making up to \$2.5 billion available to fund hurricane losses.



HB 4409 clarified that TWIA is intended to serve as a residual market insurer of last resort. It established a more rational plan for the growth of TWIA reserves and premiums and eliminated the unlimited assessments on insurers. The legislation also moved TWIA toward a more actuarially sound rating system.

Under the financial structure established in 2009, TWIA losses in excess of premiums and other revenue were funded by available reserves and amounts in the Catastrophe Reserve Trust Fund (\$486.1 million as of October 31, 2015), up to \$1.5 billion, via the issuance of post-event bonds, and the possible issuance of pre-event bonds.

TWIA Assessment History (Prior to Enactment of HB 4409)

Prior to the 2009 legislative reforms, a substantial component of TWIA funding was its ability to assess its member insurers for losses. Assessments for losses were based on an individual insurer's share of the overall Texas market. In the event of a major storm, an unlimited assessment of member insurers would be utilized after initial TWIA assessment layers, reserves, surplus and reinsurance were exhausted. These unlimited assessments were recoverable through premium tax credits, potentially compromising the state's general revenue fund.

A \$100 million assessment of member insurers was made after Hurricane Dolly hit in July 2008, causing major damage in Cameron and Willacy counties. Member insurers were then assessed another \$430 million to pay for excess losses resulting from Hurricane Ike, which struck the Texas coast in September 2008 and caused major damage in Brazoria, Chambers, Galveston, Harris, Jefferson and Matagorda counties. Some \$230 million of this assessment was subject to premium tax credits based on the previous statutory funding structure.

A \$100 million assessment of member insurers was also made in 2005, after Hurricane Rita struck the upper Texas coast causing major damage in Jefferson, Chambers and Galveston counties. Hurricane Alicia, which struck Galveston Island in 1983, also led to a \$157 million assessment, of which some \$57 million was subject to premium tax credits based on the funding structure at the time.

5. Massachusetts Property Insurance Underwriting Association (MPIUA)

The Massachusetts Property Insurance Underwriting Association (MPIUA) was formed by the Massachusetts Legislature after passage by Congress of the Housing and Urban Development Act of 1968. This legislation made federal riot reinsurance available to those states that instituted such property insurance pools.

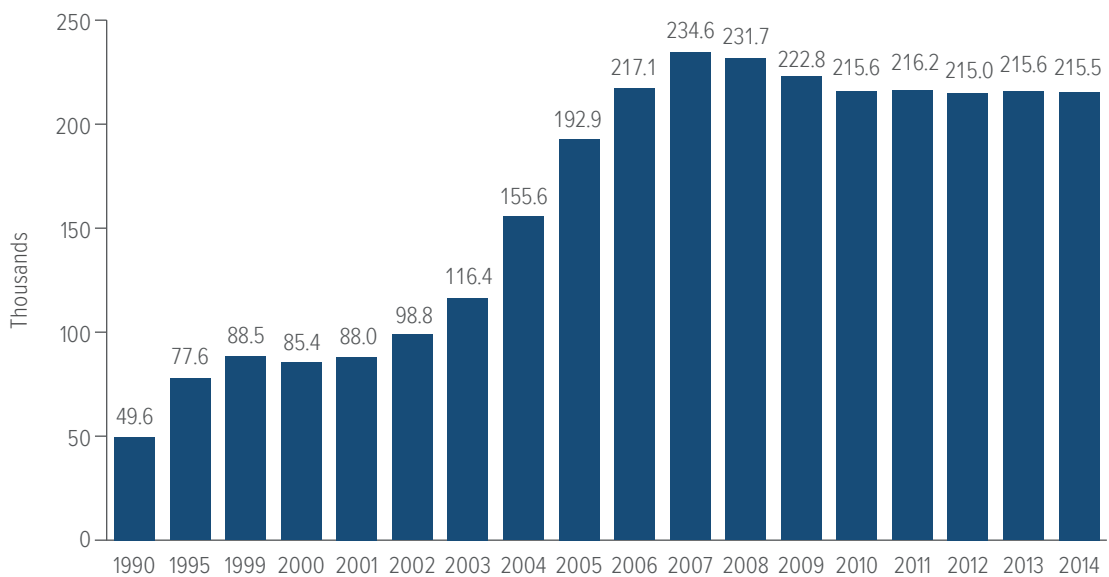
All companies writing basic property insurance in Massachusetts are required to participate in the plan, with losses shared among member companies on a premium volume basis. The plan uses a windstorm/hail deductible for any type of wind damage. Coverage for both residential and commercial property owners is available under MPIUA. The plan offers policies under the homeowners, dwelling fire and commercial property forms. The maximum limits of liability under each program are \$1 million for a single building at any one location and \$1.5 million for multiple interests/building and contents coverage.

Like other Eastern Seaboard states, Massachusetts is experiencing rapid coastal growth. The combination of its exposure to windstorms and high property values makes it a state with significant potential for losses. An updated 2013 study by AIR Worldwide puts the value of insured coastal property (residential and commercial) in Massachusetts at \$849.6 billion, ranking it fourth behind New York, Florida and Texas. This represents 54 percent of the state's total insured property values. AIR estimates that Massachusetts faces a 15 percent chance of a catastrophic storm within the next decade that would cost insurers \$5 billion or more.

The FAIR Plan grew rapidly in the course of the last decade, mirroring rapid growth on Cape Cod, Martha's Vineyard, Nantucket and other coastal areas. MPIUA's policy count surged by 334 percent from 49,628 total policies (habitational and commercial) in 1990 to 215,478 policies in 2014, although the number of policies has declined by 8.1 percent since 2007 (**Fig. 21**).

Fig. 21

Massachusetts FAIR Plan Policy Count (1990–2014)



Sources: PIPSO; Insurance Information Institute.

The FAIR Plan continues to dominate the homeowners market on Cape Cod and the islands of Martha's Vineyard and Nantucket, where it accounts for about 46 percent of all homeowners insurance policies. Exposure to loss under the plan has also skyrocketed, from \$4.1 billion in 1990 to \$78.7 billion in 2014 (**Fig. 22**).

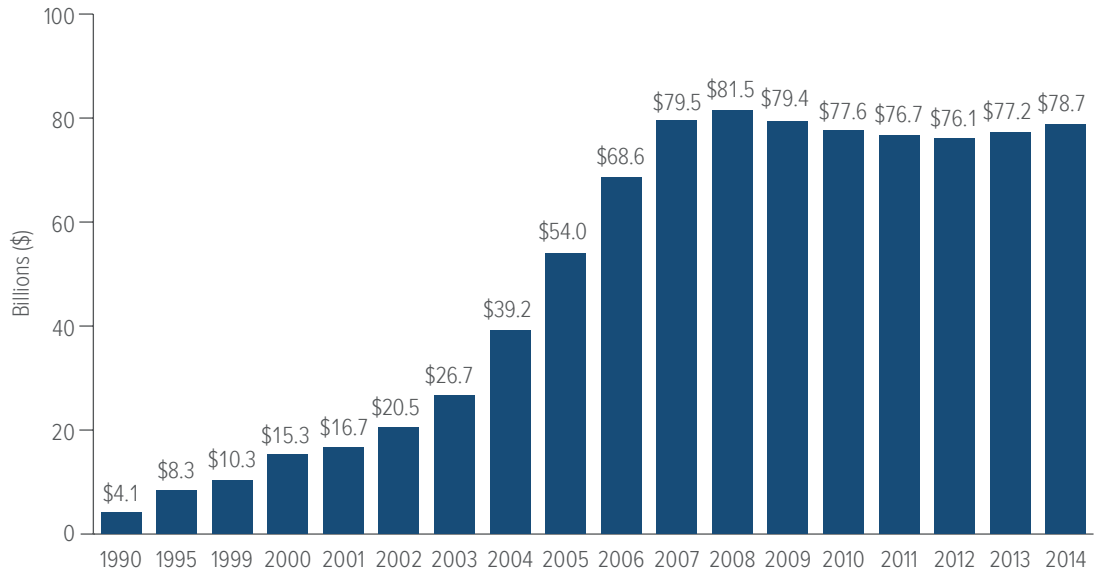
MPIUA has been operating profitably for the last 11 years. In the 15-year period from 2000 to 2014, it reported an operating gain in 12 years (2000 and 2004-2014) and an operating deficit in three years (2001, 2002 and 2003) (**Fig. 23**).

Prior to 2004 homeowners' rate changes under MPIUA were restricted by statute. In territories where its market share was extensive, the plan was permitted to increase pricing only by the statewide average of the top 10 companies. As a result, in the eight years from 1997 to 2004, the annual average price increase was capped at 1 percent. However, a bill passed in



Fig. 22

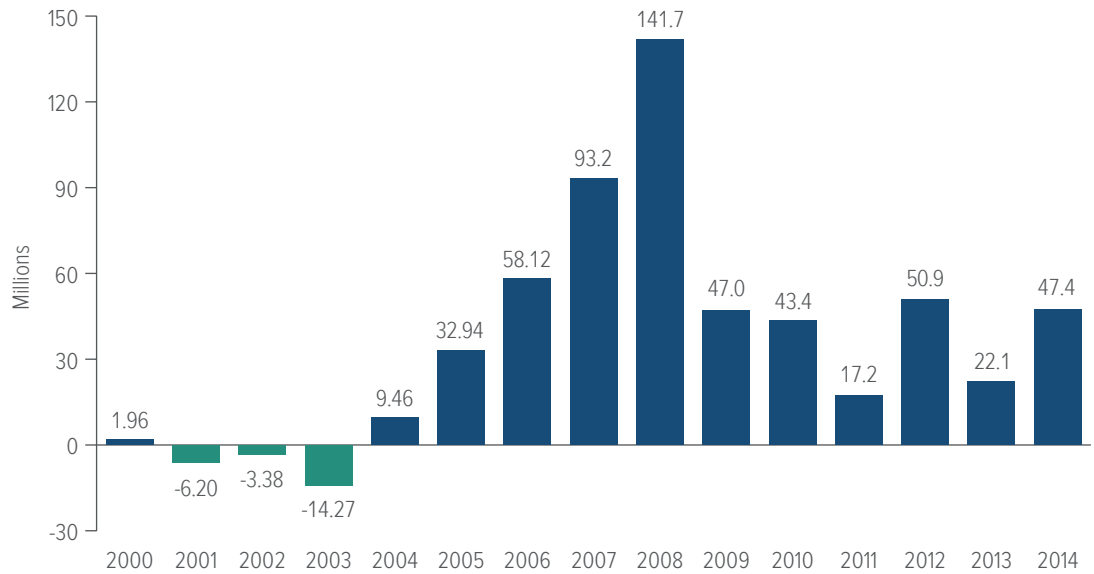
Massachusetts FAIR Plan Exposure to Loss




Sources: PIPSO; Insurance Information Institute.

Fig. 23

Massachusetts FAIR Plan Operating Gain or Loss 2000–2014



Sources: PIPSO; Insurance Information Institute.



December 2004 allowed the insurance commissioner to consider predicted hurricane losses and cost of reinsurance when reviewing the pricing of the plan. As a result, starting in 2006, the rates could be adjusted upward, thereby giving the FAIR Plan an actuarially sound pricing basis.

MPIUA is one of the few plans that offer coverage almost comparable to a private homeowners policy. The plan also offers a form of guaranteed replacement cost coverage, which pays up to \$1 million to rebuild a home. Legislation that would have revised the coverage and allowed the plan to stop offering unlimited replacement cost coverage failed to pass the Massachusetts Legislature in 2008.

The MPIUA's current reinsurance program is a combination of traditional reinsurance and capital markets. MPIUA accessed the capital markets for the second time in 2015, completing a \$300 million catastrophe bond issuance to manage multiple natural catastrophe risks. The bond, which sits alongside its traditional reinsurance program, provides the MPIUA with annual aggregate reinsurance protection against losses from multiple events, including tropical cyclones, tropical storms, hurricanes, severe thunderstorms and winter storms through June 30, 2018.

6. North Carolina and South Carolina Property Markets of Last Resort

The North Carolina Joint Underwriters Association (NCJUA) and North Carolina Insurance Underwriting Association (NCIUA)

North Carolina has two residual market plans that act as a market of last resort for residential and commercial property insurance. The North Carolina Joint Underwriters Association (NCJUA) was created in 1969 to make basic and broad property insurance available to those unable to buy coverage through the standard insurance market. The FAIR Plan covers the entire state except those barrier islands adjacent to the Atlantic Ocean. The North Carolina Insurance Underwriting Association (Beach Plan), also created in 1969, provides windstorm and hail coverage as well as homeowners policies for properties located in the state's beach and coastal area (18 coastal counties).

North Carolina ranks 11th on AIR Worldwide's coastal exposure list with \$163.5 billion in insured coastal exposure, of which about 60 percent is residential and 40 percent is commercial. North Carolina's insured coastal exposure represents just 9 percent of the state's total insured values.

Yet as of year-end 2014, North Carolina's Beach and Windstorm Plan, the North Carolina Insurance Underwriting Association, reported a total of 259,620 policies, up from 119,810 policies reported at the end of 2005. Total exposure to loss under the plan more than doubled from \$43.3 billion in 2005 to \$91.1 billion at year-end 2014. As of September 30, 2015, NCIUA reported \$89.6 billion in exposure and 232,496 total policies.

The North Carolina JUA/IUA plans have optimized the use of both traditional reinsurance and capital markets in an effort to achieve a robust risk financing program. The plans have accessed the capital markets four times (2009–2011 and 2013) to provide them with additional reinsurance protection in the event of a hurricane. As a result, the plans were covered by \$500 million in catastrophe bond protection as well as \$1.7 billion in traditional reinsurance to manage hurricane risk for the 2014 season.¹⁷



Legislative Developments

In August 2009 legislation (HB 1305) aimed at reforming the Beach Plan was passed by the state Senate and subsequently signed into law by North Carolina Governor Bev Perdue. The legislation caps insurers' assessments for losses incurred in one year at \$1 billion; allows insurers to assess a 10 percent surcharge on every property insurance policy statewide after a major storm if the plan hits the \$1 billion deficit threshold; and reduces coverage limits for residential property to \$750,000 from \$1.5 million.

The bill was based on recommendations made in January 2009 by a Joint Select Study Committee to restore the beach plan to its intended role as a market of last resort.

In addition to these legislative recommendations, in December 2008 changes were made by the Beach Plan and the Department of Insurance without the need for legislation. These changes, which included increasing homeowners policy deductibles, raising rates and allowing the plan to retain more capital, were intended to increase the plan's surplus and decrease its exposure to loss.

An October 2008 study by Milliman, an actuarial consulting firm, for the Property Casualty Insurers Association of America warned that the North Carolina Beach Plan was financially unprepared to weather a severe storm. It noted that the Beach Plan's exposure to liability is increasing but its ability to pay claims from a storm and the timing of those payments is dependent upon assessments from member companies. In a season with a large storm (1-in-250 year scenario), the plan would likely face a \$6.2 billion deficit. This could result in assessments that may significantly impact the financial conditions of some insurers, according to Milliman. Even a small storm (1-in-50 year scenario) would leave the plan some \$1.4 billion in the red.

The South Carolina Wind and Hail Underwriting Association

The South Carolina Wind and Hail Underwriting Association (SCWHUA), known as the Beach Plan or Wind Pool, provides wind and hail coverage for residential and commercial properties in the coastal area of the state.

As of December 31, 2014, the South Carolina Beach Plan had 38,453 policies in force, down 11 percent from 43,478 policies in-force at the end of 2013, but up 97 percent from 22,068 total policies in-force at the end of 2005. The South Carolina Beach Plan's total in-force liability increased by 106 percent from \$6.6 billion in 2005 to \$13.6 billion at the end of 2014.

South Carolina ranks eighth on AIR Worldwide's coastal exposure list with \$239.3 billion in insured coastal exposure, representing 28 percent of the state's total insured values. The state is also experiencing accelerating coastal population growth. Between 1980 and 2003, its coastal population grew by 33 percent, ranking it 10th among leading states in terms of coastal population growth.

Starting January 1, 2008, the state Insurance Department has required Wind Pool policyholders choosing replacement cost coverage to purchase flood insurance. Around 70 percent of Wind Pool policyholders already had flood coverage, and several thousand additional policyholders are now covered for flood damage.

Legislation expanding the Beach Plan's coverage territory was approved in June 2007. Residents who make their homes more resistant to wind damage would also be given tax breaks. In addition, insurers would receive tax credits for writing coastal policies that did not exclude windstorm losses.



7. Alabama Insurance Underwriting Association (AIUA)

The Alabama Insurance Underwriting Association (AIUA) was voluntarily formed in the early 1970s by insurance industry leaders in co-operation with the Alabama Department of Insurance. In 2008 the Alabama Legislature codified the AIUA along with its articles of agreement, plan of operation, and rules and procedures.¹⁸

The purpose of the AIUA is to provide a market where owners of eligible property located in coastal areas of Baldwin and Mobile counties may obtain essential insurance when they are unable to obtain coverage in the private insurance market.

The Alabama Beach Plan provides two types of policies: a fire and extended coverage policy (provides no liability coverage); and a wind and hail only policy. Only home and businesses located in the Gulf front, beach and seacoast territories of Baldwin and Mobile counties are eligible for coverage under the Beach Plan.

Residential and commercial policyholders can purchase AIUA coverage up to the following limits:

- Residential—Dwelling Building and Contents: \$500,000
- Commercial—Commercial Building and Contents: \$1 million

Since July 1, 2008, the plan has offered discounts on policies covering residential dwellings built or retrofitted to fortified wind resistive standards, as certified by the Insurance Institute for Business and Home Safety (IBHS).

The Alabama Beach Plan has grown rapidly in the course of the past two decades. PIPSO data show a total of 31,996 habitational and commercial policies in-force at year-end 2014, an increase of 910 percent from 3,169 policies in 2004. Exposure to loss in the plan reached \$5.6 billion in 2014, up 1,650 percent from \$317.6 million in 2004. (PIPSO exposure data for the AIUA in 2005 and 2006 are unavailable.)

Latest data from the AIUA website show the plan had 31,622 total policies in-force and total exposure to loss was \$5.5 billion as of October 2015.

Alabama ranks 12th on AIR Worldwide's coastal exposure list, with \$118.2 billion in insured coastal exposure, about 50 percent of which is residential and 50 percent commercial. Alabama's insured coastal exposure represents 13 percent of the state's total insured values.

The Alabama Beach Plan had a \$600 million reinsurance program in place for the 2015 hurricane season. The attachment point was \$70 million, with an optional buy down for individual members of \$30 million excess of \$40 million. Individual members could also purchase a further \$85 million of reinsurance coverage excess of the \$600 million layer, bringing total coverage up to \$685 million.

Once the Beach Plan's total claims-paying capacity is exhausted, members assume outstanding liabilities and are liable for assessments. No specific provisions exist for recouping assessments.¹⁹

A series of severe tornadoes hit parts of Alabama in April 2011. Availability and affordability of homeowners insurance is a rising concern given Alabama's exposure to tornadoes and hurricanes.²⁰



8. New York Property Insurance Underwriting Association (NYPIUA)

The New York Property Insurance Underwriting Association (NYPIUA) was established in 1968 following passage by Congress of the Housing and Urban Development Act of 1968. This legislation made federal riot reinsurance available to those states that instituted such property insurance pools.

The plan insures residential and commercial properties in the state where the homeowner cannot find coverage elsewhere. Extended coverage includes windstorm coverage.

Exposure to loss under the NYPIUA more than doubled from \$5.6 billion in 1990 to \$14.2 billion in 2014, even as the plan's policy count went down. The plan's total policy count (habitational and commercial) was 54,283 in 2014, compared with 58,197 policies in 2012 and 73,805 total policies in 1990.

For New York coastal residents trying to obtain homeowners coverage, there is also a Coastal Market Assistance Plan (C-MAP), which was developed by the New York State Insurance Department and is administered by the NYPIUA. C-MAP began operations in 1996.

C-MAP assists policyholders in locating an insurer willing to provide homeowners coverage for certain coastal properties:

- Those on the South Shore of Long Island, Brooklyn, Queens, Staten Island and Long Island's forks that are within one mile of the shore
- Those on the north shore of Long Island, in the Bronx and Westchester within 2,500 feet of the shore

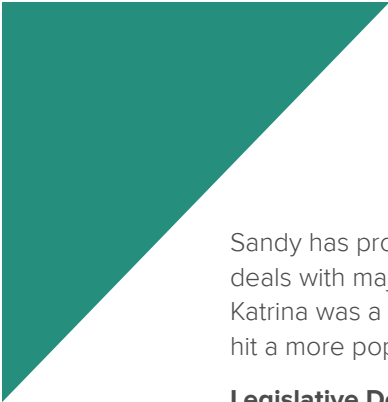
To increase availability, insurance companies voluntarily participate in C-MAP by offering to insure property that they might otherwise reject due to proximity to the coast.

The insured value of coastal properties in New York totaled \$2.9 trillion in 2012—the highest among all coastal states—according to an analysis by AIR Worldwide. New York's coastal exposure represents 62 percent of the state's total insured values.

New York was one of a dozen states impacted by superstorm Sandy in October 2012. Sandy caused \$18.75 billion in insured property losses, excluding flood insurance claims covered by the National Flood Insurance Program (NFIP), according to estimates from ISO's PCS unit, as of January 18, 2013. New York and New Jersey suffered the largest private insurance losses from Sandy. The storm was the largest natural disaster in terms of insured losses in the state's history.

New York was also among the states that felt the impact of Hurricane Irene in August 2011. Irene affected 14 states, causing \$4.3 billion in insured property damage, not including flood losses covered under the NFIP, according to ISO.

Three of the costliest tropical storms to hit the United States, based on insured property losses, caused damage in New York: Hurricane Ivan and Hurricane Frances, both in 2004, and Sandy in 2012.



Sandy has prompted a re-evaluation of how the New York metropolitan area prepares for and deals with major disasters, just as Hurricane Katrina did in Gulf Coast states in 2005. While Katrina was a stronger storm and caused more damage (\$48.75 billion in current dollars), Sandy hit a more populous area, with up to 15 percent of the total U.S. population feeling its impact.

Legislative Developments

In June 2013 the New York State Assembly approved a comprehensive post-Sandy insurance reform package, comprising 14 pieces of legislation.²¹

The approved bills ranged from establishing a Homeowner's Bill of Rights to creating measures that proponents say would increase claims efficiency and fairness to enhancing consumer protection.

The approved bills are being considered by the NY state Senate.



Appendix III

Summary of Major Natural Catastrophe Legislative Proposals

Source: I.I.I. research and Property Casualty Insurance Association of America (www.pciaa.net), as of December 2015.

Homeowners' Defense Act of 2015 (HR 1351)

Summary: Establishes the National Catastrophe Risk Consortium to: 1. maintain an inventory of catastrophe risk obligations held by state reinsurance funds, state residual market entities and state-sponsored providers of natural catastrophe insurance; 2. facilitate the issuance of catastrophe bonds; 3. coordinate reinsurance contracts; 4. act as a centralized repository of state risk information; and 5. establish a database to perform research and analysis of the risk-linked securities market.

Earlier legislation that had been under consideration in 2013/14:

Homeowner Catastrophe Protection Act of 2013 (HR 549)

Summary: Provides tax incentives for homeowners and insurers to allow them to better prepare for natural disasters. Amends the Internal Revenue Code to: 1. allow insurers to establish tax-deferred reserves to cover natural disasters; 2. allow homeowners to create tax-exempt catastrophe savings accounts to help pay for losses resulting from a federally declared natural disaster; and 3. provide tax credits for homeowners who upgrade their homes to mitigate damage due to hurricanes and earthquakes.

Homeowners' Insurance Protection Act of 2013 (HR 240)

Summary: Establishes a federal reinsurance program under the oversight of a National Commission on Catastrophe Preparation and Protection. Allows insurers that participate in state programs to establish Catastrophe Capital Reserve Funds.



ENDNOTES

1. *Partnerships: The Way To Public Sector Risk Financing*, Marsh & McLennan Cos, October 2015.
2. www.artemis.bm/blog/2014/05/02/everglades-re-2014-completes-officially-the-largest-catastrophe-bond-ever.
3. *State Beach and Windstorm Plans*, Insurance Research Council, October, 2010; GAO 10-568R, Natural Catastrophe Insurance Coverage, Government Accountability Office (GAO), October 2010.
4. Ibid.
5. *State of Insurance, 10 Years Post-Katrina*, by James J. Donelan, Louisiana Insurance Commissioner, Louisiana Department of Insurance, August 2015.
6. National Oceanic and Atmospheric Administration (NOAA), *State of the Coast*, Woods & Poole and NOAA 2011, www.stateofthecoast.noaa.gov/population/welcome.html
7. AIR Worldwide, *The Coastline at Risk, 2013 Update to the Estimated Insured Value of U.S. Coastal Properties*.
8. Insurance Research Council (IRC), *Public Attitude Monitor (PAM) 2006*, Issue 2, October 2006.
9. Florida Citizens can assess even property owners that are not its own insureds; people who live on the coast and people who have filed no claims.
10. *State Beach and Windstorm Plans*, Insurance Research Council, October 2010.
11. *Surcharges Help State Insurance Plans Control Rates*, by Thomas Frank, *USA Today*, September 22, 2010.
12. GAO-10-568R, Natural Catastrophe Insurance Coverage, July 2010.
13. Case 1:06-cv-00954-LTS-RHW; United States District Court for the Southern District of Mississippi Southern Division; filed September 15, 2006.
14. For personal lines, excluding wind and hail, the threshold is insurers that have written more than 25 policies in the preceding year.
15. Part of Harris County—when located inside Houston city limits and east of highway 146, the following portions of Harris County are also included: LaPorte, Morgan’s Point, Pasadena, Seabrook, Shore Acres.



16. TWIA, *Clearinghouse Feasibility Study*, December 2013.
17. www.ncjua-nciua.org/DocLib/mbr_co/RiskFinanceStructureFile2014.pdf.
18. www.aiua.org.
19. *State Beach and Windstorm Plans*, Insurance Research Council, October, 2010.
20. Gov. Robert Bentley takes lead on tornado recovery, says buck stops with him, Associated Press interview via AL.com, June 19, 2011.
21. N.Y. Assembly Approves a Flurry of Post-Sandy Insurance Reform Bills, *Insurance Journal*, June 5, 2013.