# An Examination of the Availability and Affordability of Insurance in the Gulf Coast and Other Coastal Regions

Written Testimony of

Robert P. Hartwig, Ph.D., CPCU President & Chief Economist Insurance Information Institute New York, NY

United States Senate Committee on Banking, Housing and Urban Affairs

Washington, DC

April 11, 2007

Tel: (212) 346-5520 Email: <u>bobh@iii.org</u> www.iii.org



Good morning Chairman Dodd, Ranking Member Shelby and members of the Committee. Thank you for the opportunity to discuss the financial vulnerability of the United States to the real and growing threat posed by catastrophic hurricane losses and its impact on the availability and cost of insurance.

My name is Robert Hartwig and I am President and Chief Economist for the Insurance Information Institute, an insurance trade association based in New York City whose primary mission is to improve the public's understanding of insurance: what it does and how it works. Our members consist of insurers and reinsurers that operate on a global scale and account for more than 60% of the premiums written in the United States.

Measured in dollar terms, the United States is arguably the most vulnerable country in the world to natural disaster risk. Hurricanes, earthquakes, tornados, wildfires, floods and severe winter storms on average cost insurers \$14.5 billion annually over the 20-year period from 1986 through 2005. The cost to the overall economy is at least twice that amount. But the toll in recent years has begun to rise rapidly—to \$20 billion annually since 2000 with virtually all of that increase due to hurricane damage. The hurricane seasons of 2004 and 2005 alone produced record insured losses exceeding \$80 billion. Already, leading meteorologists are predicting that the 2007 hurricane season will be 85 percent more severe than average. More ominous is the fact that we may only be on the leading edge of a prolonged period of elevated hurricane activity—lasting perhaps another 15 to 20 years—during which hurricanes will not only be more frequent but also more intense. Today the active planning hurricane event scenario for insurers is now \$100 billion.

These staggering numbers and dire predictions illustrate the magnitude of the threat posed by hurricanes to people who live and businesses that operate in coastal regions as well as the need for a financially strong and resilient insurance industry.

The enormous challenge posed to the nation by natural catastrophes calls on all of us to address the problem as partners in order to find sustainable solutions to protect the millions American home and business owners in harms way. My testimony today will address four major issues:

- The recent history of catastrophic hurricane losses in the United States;
- Drivers of the increase in insured losses in coastal regions exposed to tropical cyclones;
- Implications increased hurricane risk associated on the price and availability of insurance; and
- Current regulatory, legislative, and litigation-related obstacles that are raising costs and reducing choices for insurance consumers in hurricane exposed areas.

#### **Recent Hurricane Activity & Impacts on Insurance Markets**

The hurricane seasons of 2004 and 2005 resulted in insured losses totaling \$81 billion arising from 5.5 million claims across a vast, 1,400 mile arc from East Texas to the Florida Keys. Flood losses paid by the National Flood Insurance Program (NFIP) came to an additional \$20 billion. Hurricane Katrina, of course, was the most devastating of these storms. Katrina was not only the largest, most expensive disaster in the history of the United States—it was also the most costly event in the global history of insurance. Claims payments to restore homes, businesses and vehicle losses totaled \$40.6 billion on some 1.74 million claims filed by policyholders across six states [Figure 1]. It is a similarly remarkable fact that seven of the ten most expensive hurricanes ever to strike the United States occurred in the 14 month interval from August 2004 through October 2005 [Figure 2]. The sharp increase in hurricane activity has also caused a shift in the distribution of catastrophe losses [Figure 3]. Tropical events now account for nearly half of all catastrophe losses over the past 20 years. Prior to 2004, tornados had been the leading cause of catastrophic loss in the United States.

#### Past as Prologue: Lessons Learned from Katrina

Hurricane Katrina was a storm without precedent in scale or scope, occurring amid a hurricane season that itself was without precedent. But the lessons of Katrina and the unparalleled destruction of the 2004 and 2005 hurricane seasons also include a very stark reminder—that living along the hurricane-exposed coastline of the United States is an increasingly risky proposition. Meteorologists predict that the number and intensity of hurricanes will remain at elevated levels for the next 15 to 20 years, even before accounting for any possible effects associated with global climate change.

#### Hurricane Forecast for 2007 and Beyond

Hurricane forecasters are predicting a severe hurricane season for 2007, which begins just 50 days from today. The latest forecast, announced just last week at the National Hurricane Conference in New Orleans by renowned Colorado State University hurricane forecaster Dr. William Gray and his associate Philip Klotzbach, calls for hurricane activity this year to be 85 percent above normal **[Figures 4 and 5]**. This implies not only that more storms are expected, but also that those storms that do occur will be more powerful. The forecast also calls for an increased probability of a major (Category 3, 4 or 5) landfalling hurricane. The likelihood of a Category 3, 4 or 5 storm making landfall anywhere along the United States coast is estimated at 74 percent this year, well above the long-run average of 52 percent.

The Gray/Klotzbach forecast is consistent with conditions that many meteorologists will hold for years to come—a cyclical increase in tropical activity known as the multi-decadal oscillation [Figure 6]. Already during this decade there have been six major landfalling hurricanes and it is likely that there will as many as 9 or 10 by decade's end. The emerging pattern of intense tropical activity appears similar to the last manifestation of the multi-decadal oscillation that occurred in the period from the 1930s through the 1950s.

#### **Population Trends in Coastal Areas**

For the 53 percent of Americans today living within 50 miles of the coastline, hurricanes represent a potentially life-altering economic threat for which many are illprepared. Hurricane Katrina and the other storms of the 2004/2005 hurricane season vividly illustrated the risks of owning coastal property. Yet despite increased awareness of the risk, people continue to be drawn to the coasts in record numbers. According to the US Census Bureau, the population in hurricane exposed states will increase by 43.8 million or 36.3 percent between 2000 and 2030, accounting for 53 percent of the increase in population for the entire United States. As Table 1 indicates, eight hurricane exposed states will experience population gains equal to or exceeding the projected national gain of 29.2 percent. Florida, already the most hurricane vulnerable state in the country, will lead the way with an expected population increase of 12.7 million or 79.5 percent by 2030.

Table 1 (see page 6) indicates that the number of people and businesses threatened by hurricanes will rise rapidly in the future. Yet these trends are merely a continuation of population growth trends that have been underway for some time—mostly in the years since the last period of intense hurricane activity ended about 1960 [Figures 7, 8, 9 and 10] illustrate population increases in a sampling of coastal counties from New England to the Gulf Coast. In each case, sharp population increases are noted in areas that are historically vulnerable to hurricanes. Each figure shows hurricane activity that is far more intense during the period from 1930 through 1960—which was the most recent manifestation of the natural cyclical phenomenon known as the multi-decadal oscillation—which reappeared in the mid-1990s and is expected to last another 15 to 20 years. Because populations in many coastal counties are presently 4 to 6 times what they were in 1960, extremely large numbers of people, their property and the communities in which they live and work are at risk. A recurrence of the frequency and intensity of hurricanes observed during the last oscillation would result in frequent large-scale losses and significant displacements of populations and economic activity.

Change: 2000 to 2030 State	Change: 2000 to 2030 Number	Change: 2000 to 2030 Percent	Change: 2000 to 2030 Rank in percent change
United States	82,162,529	29.2	(x)
.Florida	12,703,391	79.5	3
.Texas	12,465,924	59.8	4
.North Carolina	4,178,426	51.9	7
.Georgia	3,831,385	46.8	8
.Virginia	2,746,504	38.8	11
.New Hampshire	410,685	33.2	15
.Maryland	1,725,765	32.6	16
.Delaware	229,058	29.2	18
.South Carolina	1,136,557	28.3	19
.Hawaii	254,509	21.0	22
.New Jersey	1,388,090	16.5	24
.Maine	136,174	10.7	32
.Massachusetts	662,912	10.4	33
.Rhode Island	104,622	10.0	34
.Alabama	427,143	9.6	35
.Mississippi	247,752	8.7	37
.Connecticut	283,065	8.3	38
.Louisiana	333,657	7.5	41
.New York	500,972	2.6	46
TOTAL	43,766,591	36.3	(x)

**Table 1. Population Growth Projections for Hurricane Exposed States** 

Source: US Census Bureau; Accessed at http://www.census.gov/population/projections/PressTab1.xls.

#### **Insured Exposure: Homes & Businesses**

Rising coastal populations necessarily imply corresponding increases in coastal development. In 2004, the insured value of all coastal property exposed to the threat of hurricanes totaled \$7.2 trillion—equivalent to 62 percent of the US gross domestic product (GDP) [Figure 11]. It is expected that the value of insured coastal property will double within the next decade as coastal populations and property values continue to soar.

Figure 11 shows that Florida is the most exposed state in the country, by far, accounting for 27 percent of all hurricane exposed property in the United States.

Adjusting for growth since 2004, insured coastal exposure in the state now exceeds \$2 trillion. Although New York is a close second, it is statistically less likely to be hit by major hurricanes than Florida. Many interesting lessons can be learned from the distribution of insured exposures in **Figure 11**. The first is that even small states with relatively small amounts of exposure can sustain very heavy losses. Mississippi, with \$44.7 billion in insured exposure in 2004, sustained \$13 billion in property losses arising from some 410,000 claims. The second is that states in the Northeast account for \$3.73 trillion or 52 percent of hurricane exposed property in the United States. Thus while the Northeast is statistically less likely to be struck by hurricanes than the Southeast or Gulf Coast regions, the loss potential is nevertheless considerable. A major landfalling hurricane in the Northeast could produce insured losses exceeding \$100 billion [Figure **12**]. Of related interest is the surprisingly high percentage of statewide insured exposure that is coastal. Unsurprisingly, nearly 80 percent of all insured value throughout the state of Florida is coastal, but the fact that more than 60 percent of all insured property in Connecticut and New York is coastal is startling and further highlights the vulnerability of the Northeast to major hurricanes [Figure 13].

#### Land Use Decisions: A Major Driver of Vulnerability, Loss & Insurance Costs

Despite the well-known vulnerability to hurricanes and rapidly escalating property values, coastal development in vulnerable areas continues at a furious pace. The example of South Miami Beach is illustrated in **Figure 14**. In that narrow strip of land alone, 15 new condominium complexes will be completed by year-end 2009 offering a total of 2,111 individual units at prices ranging up to \$16 million. The average price of the least expensive units exceeds \$940,000 while the average price of the most expensive units is \$6.46 million. The aggregate additional insured exposure is likely to top \$6 billion, further burdening the state's already precarious property insurance market. Rapid build-ups are observed in many other coastal areas, including Galveston Island, Texas, Hilton Head and Myrtle Beach, South Carolina, the Maryland shore, eastern Long Island and Cape Cod.

The vulnerability of communities such as these to catastrophic damage from hurricanes is common knowledge among residents. South Miami Beach, for example, is only 20 miles from where Hurricane Andrew made landfall as a Category 5 storm in 1992, causing more than \$22 billion in damage in current dollars. The same storm striking Miami directly today, or a repeat of the Great Miami Hurricane of 1926, could cause upwards of \$80 billion to \$100 billion in insured losses. Likewise, Galveston Island's seawall and memorials to the 8,000 people who perished in a 1900 hurricane—to this day still the deadliest natural disaster in United States history—serve as stark reminders of the danger.

The lure of warm, sunny oceanfront property is understandable. But the fact that so much coastal development continues to occur despite the lessons offered by the hurricane seasons of 2004 and 2005 suggests that buyers of such property are buying and building in these areas with their eyes wide open, fully cognizant of the risk. Another key to understanding the paradox of rapid coastal development in hurricane vulnerable areas is traceable to land use decisions such as zoning and permitting, which in the United States are largely under the control of local officials. It is in the economic interest of these and other officials to approve continued development in high-hazard zones for many reasons: job creation, inflow of wealth, infrastructure development and increased tax revenue to name just a few. Virtually all of these economic benefits accrue locally. In the event a major hurricane strikes, however, most of the costs are shifted to others elsewhere in the state or country. Depending on the state, the redistribution of costs is commonly achieved via laws that allow state-run insurers (which are often the largest insurer in the most hazardous areas) to recover their losses in excess of their claimspaying resources by assessing (effectively taxing) the insurance policies of home and business owners throughout the state, including those well away from the coast and those who have never filed a claim. In some cases, even unrelated types of insurance such as auto insurance and commercial liability coverage can be assessed. States have also diverted general tax receipts and used federal relief funds to subsidize the cost of The bottom line is that coastal development is insurance for coastal dwellers. economically rational from the perspective of coastal stakeholders only because most benefits are retained locally while a high proportion of costs are redistributed to others.

#### **Impacts of the Price and Availability of Property Insurance**

The price of insurance is determined primarily by the degree of risk assumed by the insurer. Therefore, from an insurance perspective, the prospect of a long-term crescendo in coastal risk is a paramount concern. Key risk-related lessons revealed in the aftermath of Katrina include the following:

- Many, if not most, coastal structures in the United States today are insufficiently well constructed to withstand the forces of a major hurricane, either in terms of wind or flooding;
- The risk and related cost associated with offering insurance in hurricane-prone areas will continue to escalate as coastal populations and property values continue to soar and more and more vulnerable areas are opened to development; and
- Insurance is by far the fastest, most efficient means of recovery for communities affected by disasters large and small. Only an insurance industry that is financially strong, sound and secure can deliver the financial relief necessary to help communities recover from major catastrophic events.

#### **Risk: The Basis of Insurance Pricing**

The price of insurance must ultimately reflect the risk of the property insured and insurance premiums are nothing other than messengers of risk. Any deviation from risk or cost-based pricing leads directly to distortions or dilutions in that message which, in turn, encourages additional development in vulnerable areas. This is exactly what is happening in Florida and many other coastal area today.

Hurricane Katrina and the other storms of 2004 and 2005 provided for insurers and public policymakers with valuable insights into risk/loss reduction and mitigation. The insurance industry's decades-long support of tougher building codes and mitigation technologies, for example, bore fruit throughout the Gulf Coast, with homes built to industry-supported standards faring far better than structures built to less stringent standards. Insurers will continue to invest millions of dollars annually through organizations such as the Institute for Business and Home Safety in order to fund additional research that will save lives and reduce property damage from future disasters.<sup>1</sup>

In the wake of the record hurricane seasons of 2004/2005, insurance prices have climbed sharply for many owners of coastal property. The increase in cost of insuring properties in coastal areas is the direct result of increasing risk. Higher risk means that insurers need to compensate investors/owners of capital with a higher rate of return than is required in less exposed areas. Insurance ratings agencies will also downgrade an insurer if its rates are inadequate for the risk assumed. The increase in the price of homeowners and business property insurance offered by *state-run* insurers in Louisiana and Mississippi are displayed in **Figure 15** and **Figure 16**.

The availability of insurance has also decreased in some areas. Diminished availability is potentially the result of several factors. Insurers that are too exposed to hurricane-related losses could be compelled to reduce their exposure by regulators and/or ratings agencies, for example.

In some coastal areas punitive, burdensome legislation and regulation accompanied by rigid price controls and a surge in litigation are driving-up costs and reducing choices for consumers. Worse still, these measures do nothing to reduce the actual risk faced by people living in harm's way. Put simply, neither laws nor lawsuits can diminish the real, formidable risk associated with catastrophic hurricanes or any other type of disaster.

<sup>&</sup>lt;sup>1</sup> The Insurance Information Institute has produced free, home inventory software available for download at <u>www.iii.org</u>, that allows homeowners to create an electronic archive of their possessions and then email that file to a location that is out of harm's way.

#### Regulatory, Legislative and Litigation-Related Obstacles Impacting Insurance Costs and Availability of Coverage

A state's regulatory, legislative, and tort environment establish the parameters under which insurers operate and compete. The requirements for competitive insurance markets are modest, centering primarily on the ability to (i) price policies that reflect the actual risk or cost; (ii) a judicial system that upholds contract language in policies which have been approved by state insurance regulators, and (iii) a regulatory and legislative environment that is supportive of both requirements.

In most states and for most types of insurance, insurance markets are highly competitive, with dozens of insurers competing for the business of auto, home and commercial policyholders. Indeed the cost of auto, home and business insurance is actually *declining* today. Recently, however, regulatory and legislative actions in a number of states and proposed legislation at the federal level threaten to stifle competition thereby increasing costs for insurers and reducing choices for consumers.

Florida's recent legislative changes illustrate this point. Insurance rating agency A.M. Best in February issued the following ominous statement about recent legislative changes in the state: "A.M. Best views the recent legislative changes as weakening the business profile of companies with significant concentration of Florida business."

In other words, insurers with significant exposure to hurricane risk in the state could see their financial strength ratings downgraded, potentially impairing their ability to operate nationwide. The only way for the insurers to maintain their ratings is to increase rates or non-renew current policyholders. Infusing additional capital could also preserve the insurer's rating, but such an infusion would be tantamount to throwing good money after bad.

That's because the recent actions in Florida also cancelled even previously approved rate changes even though the state's homeowners insurers are already more than \$10 billion in the red since 1992.

Mississippi is another example, with its homeowners insurance market in a freefall, especially in the state's southern tier of counties. Operating in coastal

Mississippi is an extremely risky proposition. The state has been the target of some of the most destructive storms in history, including mega-storms like Hurricanes Camille and Katrina.

Claims from Katrina in Mississippi alone totaled \$13.6 billion. Homeowners insurance losses in the state wiped out approximately 17 years worth of premiums and every dime of profits those insurers had ever earned in the history of the state. In Louisiana, the \$10.9 billion dollars in insured homeowners losses were equivalent to 25 years worth of premiums.

Expectations of an increase in the number and intensity of storms for the next 15 to 20 years compound the risk. These factors mean that property insurance in coastal Mississippi is relatively expensive—but it has nevertheless generally been regarded as a *priceable* risk. It is the actions of men, more than nature, which have crippled the market for insurance in Mississippi.

Litigation is another factor that leads unambiguously to higher costs and reduced availability of insurance. Although the actual number of lawsuits following Katrina is very small relative to the total number of claims filed—estimated at approximately 1 percent of homeowners insurance claims—these claims have an inordinate impact on the health of the marketplace. The litigation in Mississippi, initiated just 17 days after Katrina by the Mississippi Attorney General's Office, followed by civil actions from trial lawyers and compounded by court decisions that have retroactively rewritten the terms of regulator-approved insurance contracts, constitute an *unpriceable* risk. Litigation has pushed uncertainty past the tipping point, leaving insurers with no alternative but to reduce their presence in the state. Litigation in Louisiana is threatening to impair insurers' ability to operate in that state as well.

Remarkably, litigiousness in Mississippi may have accomplished what Katrina did not—delivery of a potentially lethal blow of uncertainty to the viability of a private homeowners insurance market in the state. Today, the only choice for an increasing number of Mississippi homeowners is the state-run insurer of last resort, which itself went broke in 2005, forcing it to make an initial rate hike request of nearly 400 percent.

#### Summary

Population growth, rising property values and continued development in vulnerable areas are the primary driving factors behind the rising cost of property damage inflicted by hurricanes. Cyclical changes in the frequency and intensity of hurricanes have also increased risk. Litigation has also increased uncertainty for insurers, further driving up costs and reducing consumer options. Insurance premiums necessarily reflect the increased costs and risks.

Looking ahead, insurers must operate under the assumption that Hurricane Katrina and indeed the entire 2004/2005 hurricane seasons were not aberrations. If history is any guide, a disaster that will dwarf hurricane Katrina may be just a few months to a few years away. Catastrophic losses associated with hurricanes will almost certainly rise in the years ahead as coastal populations and property values continue to swell. Few communities appear to have heeded the warnings of Katrina, Rita, Wilma and the other major storms of the 2004/2005 hurricane seasons.

The record \$41 billion insurers paid by more than 100 insurers and their reinsurers to more than 1.7 million Hurricane Katrina victims and the \$81 billion paid to 5.5 million policyholders over the course of the 2004/2005 hurricane seasons are vivid and tangible demonstrations of the vital and important role played by insurers in helping families, businesses and entire communities recover the devastation wrought by major disasters.

To conclude, the insurance industry is committed to working in partnership with public policymakers, consumers and business in developing fact-based solutions to the formidable challenge posed by Hurricane Katrina and the other disasters and continuing our tradition of helping families, businesses and communities wherever and whenever disaster strikes.

Thank you for the opportunity to address the Committee today. I would be happy to address any questions you might have.



\*Property and business interruption losses only. Excludes offshore energy & marine losses. Source: ISO/PCS as of June 8, 2006; Insurance Information Institute.





Source: Insurance Services Office (ISO) ..

## Figure 4. Outlook for 2007 Hurricane Season: 85% Worse Than Average

	Average*	2005	2007F
Named Storms	9.6	28	17
Named Storm Days	49.1	115.5	85
Hurricanes	5.9	14	9
Hurricane Days	24.5	47.5	40
Intense Hurricanes	2.3	7	5
Intense Hurricane Days	5	7	11
Accumulated Cyclone Energy	96.2	NA	170
Net Tropical Cyclone Activity	100%	275%	185%

\*Average over the period 1950-2000.

Source: Philip Klotzbach and Dr. William Gray, Colorado State University, April 3, 2007.

# Figure 5.

## Probability of Major Hurricane Landfall (CAT 3, 4, 5) in 2007

	Average*	2007F			
Entire US Coast	52%	74%			
US East Coast Including Florida Peninsula	31%	50%			
Gulf Coast from FL Panhandle to Brownsville, TX	30%	49%			
ALSOAbove-Average Major Hurricane Landfall Risk in Caribbean for 2007					

\*Average over the period 1950-2000.

Source: Philip Klotzbach and Dr. William Gray, Colorado State University, April 3, 2007.







Source: NOAA Coastal Services Center, http://hurricane.csc.noaa.gov/hurricanes/pop.jsp; Insurance Info. Institute.











# Figure 14. New Condo Construction in South Miami Beach, 2007-2009 Number of New Developments: 15 Number of Individual Units: 2,111 Avg. Price of Cheapest Unit: \$940,333 Avg. Price of Most Expensive Unit: \$6,460,000 Range: \$395,000 - \$16,000,000 Overall Average Price per Unit: \$3,700,167\* Aggregate Property Value: At least \$6 Billion

\*Based on average of high/low value for each of the 15 developments Source: Insurance Information Institute from <u>www.miamicondolifestyle.com</u> accessed April 5, 2007.

### Figure 15. Price Increases for Louisiana Citizens— State's High Risk Insurer of Last Resort



