

Testimony of  
The National Association of Insurance Commissioners

Before the  
Subcommittee on Housing and Community Opportunity  
Of the  
House Committee on Financial Services

Regarding:  
Perspectives on Natural Disaster Insurance

March 27, 2007  
Room 2128  
Rayburn House Office Building

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Florida Insurance Commissioner  
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Chairman of the NAIC Property & Casualty Insurance Committee

**Testimony of Kevin McCarty**  
**Florida Insurance Commissioner**  
**On Behalf of the National Association of Insurance Commissioners**

Chairwoman Waters, Ranking Member Biggert and Members of the House Financial Services Subcommittee on Housing and Community Opportunity: Thank you for the opportunity to testify here today on behalf of the National Association of Insurance Commissioners (NAIC) regarding natural disaster insurance. I applaud you for your leadership on this critical issue of national importance.

My name is Kevin McCarty, and I am the Insurance Commissioner for the State of Florida. I serve as Chairman of the NAIC's Property and Casualty Insurance Committee as well as the Committee's Catastrophe Insurance Working Group.

The NAIC, through these groups, has been involved in research and analysis on the impact of natural disasters on our society for a number of years. Insurance Commissioners across the country are working to find solutions to manage the catastrophic risk exposure in their respective states – exposure that grows with increased real estate development, rising property values, and expanding commercial operations in catastrophe prone areas. The NAIC currently is engaged in developing a comprehensive national plan for managing the economy wide risk of catastrophic natural disasters. In addition, the NAIC has adopted resolutions, both in December of 2005 and most recently in June of 2006, supporting a national disaster plan and calling for a Federal Commission to further study the issues, weigh the alternatives, and focus the debate.

**Our Current System for Catastrophic Natural Disaster Insurance**

As we meet today, the ability of housing markets and local and regional economies to withstand and recover from the next natural catastrophe depends critically on what type of peril creates the disaster, where the disaster occurs, and the severity of the disaster event. The varying types of catastrophic natural disasters are managed very differently

within our current insurance framework. This, in turn, can lead to highly different outcomes.

Wind events, including tornados and hurricanes, are considered a basic covered peril in the vast majority of homeowner's insurance policies. Flood, on the other hand, is written only rarely by the private insurance industry for residential property; since 1968 the National Flood Insurance Program (NFIP) has been the public solution to managing this risk. Finally, seismic events, particularly earthquakes, are not considered a standard covered peril, and aside from the California Earthquake Authority (CEA), there is no public mechanism to underwrite the risk; therefore, coverage is restricted to being an optional coverage, where available, in the private insurance market. It also is worth noting that the coverage provided by the CEA is somewhat limited (the standard policy carries a 15 percent deductible and offers \$5,000 for contents coverage and \$1,500 for additional living expenses due to loss of use).

If the next natural catastrophe is a significant flood event, the ability of the affected areas to recover is going to depend critically on the degree to which affected properties were insured with the NFIP. Unfortunately, recent evidence from 2004 and 2005 suggests that far too many properties damaged by flood were uninsured; either they were outside of the mandatory flood plains as dictated by antiquated maps, or they were in the mandated flood zones but were uninsured anyway. A recent study by the Rand Corporation provides evidence that suggests that the rate of take-up (that is how often the coverage is purchased) outside of the mandated zones is around 5 percent, and the take-up rate in mandated zones is only about 75 percent.

If the next natural catastrophe is an earthquake, the ability of the affected regional economy to recover will depend on the degree of disaster relief that comes from the federal government. The reason is really quite simple: the majority of residential property in earthquake prone areas is not insured for this very real risk. In California, for example, it is estimated that the take-up rate for optional earthquake insurance has fallen to about 12 percent or less. The same take-up rate is frequently suggested to be true in

the earthquake prone areas in the Midwest's New Madrid area and along the eastern seaboard's seismically active areas.

As you can see, our current system lacks a comprehensive approach to managing the devastating effects of catastrophic natural disasters. Our current policy relies heavily on the Federal government. For example, the federal government so far has allocated \$110 billion, in addition to insured loss payments, to facilitate recovery and rebuilding following Hurricane Katrina. As generous and compassionate as the American people are, this current system leaves much to be desired. Although our current reliance on federal payments for large-scale disaster spreads the cost of these events across a broad pool – the American taxpaying public – it does so rather ineffectively and inefficiently.

One of the arguments against a comprehensive national approach to manage this nation's natural disasters is that people in areas with lower perceived levels of risk do not want their money paying for events in other areas. This argument ignores the reality that, in the context of a major catastrophe, those areas already pay for risk in other areas – in the most ineffective way and with little tangible benefit going forward. In documents attached to this testimony, you will find some estimates prepared by the Florida Office of Insurance Regulation on the federal tax burden, by state, of the Katrina allocation of \$110 billion. This analysis highlights one important truth about the consequences of large-scale natural disasters: they are a national issue rather than local or regional problems. As the estimates show, the Great Lakes and Plains states will contribute, based on their proportionate percentage of individual federal tax filers, approximately \$26 billion to Katrina initiatives. These tax dollars are not risk-based, and they leave little legacy that guarantees relief for the next natural catastrophe, regardless of where it strikes. Precious little of the money that we spend collectively on catastrophes is invested in lasting solutions or efforts to limit losses. Our current system is based largely on a post-event reaction. The NAIC believes that a more proactive system, which prepares the public and mitigates the potential for catastrophic damage following such an event, is more practical and less expensive in the long run to both affected individuals and the public at large.

The problem of insurance availability and affordability in the Gulf Coast has been widely publicized, but it is a problem that is now affecting other states, as well. The Connecticut Department of Insurance recently conducted a study of its homeowner's insurance market (available on the Department's website at: <http://www.ct.gov/cid/lib/cid/finalcoastalreport.pdf>) and determined that insurance availability within 1,000 feet of the shore is difficult to find in the traditional market. Coverage that is available is often significantly more expensive and available only through the nonadmitted insurance market. Homeowners insurance availability between 1,001 feet and a half mile of the shore is available in the standard market, but appears to be tightening with increased mitigation and underwriting requirements imposed by carriers. Similar problems are being felt from Cape Cod to the Carolinas. The response from insurers is aimed at coastal exposure, but it ignores the very real possibility that the next major catastrophe will not touch a coastline. Our country has a relatively brief history, but in that time virtually every region of the country has experienced some form of catastrophic event. Also in the documents attached to this testimony, you will find maps of the catastrophic exposure to natural disaster facing each state. As these maps show, very few Americans are not moderately or severely exposed to the effects of a natural disaster. The hurricanes in the gulf are only our most recent reminder of the risk from natural disasters, but it would be naïve to think they will be the last.

### **Other Approaches to Managing Disaster Risk and Insurance**

What then can be done to create a comprehensive plan for managing our national natural catastrophe risk? Both within the U.S. and across other developed economies, a variety of programs have been created to manage the economic consequences of catastrophic events. These programs differ in their structure based on underlying premises regarding the nature of the risk. As such, the resulting roles of the private insurance market and government entities vary considerably across programs. The Government Accountability Office (GAO) report, "U.S. and European Approaches to Insure Natural Catastrophe and Terrorism Risks," GAO-05-199 published in February 2005, provides a thorough description of these various approaches.

Public policy frequently enters the debate as to whether or not a natural catastrophe is an insurable risk. Here in the US, with the creation of the National Flood Insurance Program in 1968, it was decided that flood was not an insurable risk. Interestingly, other countries consider flood an insurable risk. Using the same premise, both France and Spain have created risk pools for mandated natural catastrophe coverage that result in the state assuming the risk on an unlimited basis.

On the other hand, many natural catastrophes are considered insurable as a matter of public policy, and government is used sparingly to facilitate the private sector mechanism. Perhaps the most common tool provided under this premise is the insurer's ability to set aside reserves to pay for catastrophic losses on a tax-deferred basis. Although differences exist in how these reserves are structured and monitored, they are common throughout the world. As a measure of their perceived importance, a recent International Accounting Standard ruling (accounting guidance followed by most of the rest of the world except the U.S. at this point) would have done away with this reserving mechanism. Virtually all European nations, along with a number of other jurisdictions, chose not to adopt this new rule.

The U.S. does not allow for the creation of tax-deferred reserves by insurers; however, a number of variants of a tax-deferred reserve have been developed and proposed since Hurricane Andrew in 1992.

A second tool found in many nations is a risk pool funded by private insurers but managed by the government. In Switzerland, for example, coverage for all natural catastrophes, except earthquake, is mandated in property insurance policies. Private insurers as well as state-owned canon specific insurers, pool these risks together and an average actuarial rate is determined and charged by all insurers.

### **Federal Support of Disasters and Disaster Insurance**

As observed from Hurricane Katrina, the Indian Ocean tsunami, and the 2005 earthquake in Pakistan, national governments become involved when a national catastrophe strikes its citizens. One important policy question is whether this support is provided before or after an extreme event. It is like the old television commercial featuring the auto mechanic telling the camera, “You can pay me now, or you can pay me later.” It is always less expensive to finance disaster recovery before a catastrophe occurs than it is after-the-fact. This is precisely the purpose of insurance – to pay prior to the event and provide an economic cushion to survive its adverse effects.

Although I believe this Subcommittee should consider all options for federal involvement, it is important to stress that the solution to handling natural catastrophes, and ensuring a stable insurance market, does not begin or end necessarily with a massive federal program. In its Constitutional powers of taxation and interstate commerce, Congress’ powers directly and indirectly affect state insurance markets. The loan conditions put on federal mortgages, the tax treatment of insurance company’s reserves, economic incentives for individuals to retrofit their homes, improved building codes, and even upgrading our nation’s infrastructure are all areas Congress may address to impact the insurance marketplace positively. In the following section, I will attempt to summarize a few of the key ideas currently being considered.

### **Improve Disaster Preparedness and Disaster Response**

Disaster planning and disaster response are the very first steps to saving lives and protecting communities. The sad evidence from Hurricane Katrina bears solemn testament to this fact. The recently released study of community disaster preparedness by the Department of Homeland Security (DHS) suggests that there is still much to be done around the country. The report states that the “current catastrophic planning is unsystematic and not linked within a national planning system.” It continues that, “this is incompatible with 21st century homeland security challenges,” and suggests the need for a “fundamental modernization of our Nation's planning processes.” The NAIC has

endorsed disaster planning as a top priority and maintains a disaster preparedness manual for use by all states.

### **Build Better Homes**

Although we cannot stop natural disasters, there are measures that we can take to mitigate damage. The first component of any comprehensive national strategy must be mitigation – meaning preemptive measures taken to reduce or eliminate risk to property from hazards and their effects. In practical terms, this involves toughening building codes for new structures by making them more resistant to hazards such as wind, flood, and earthquakes. It also means stricter state and local guidelines to limit construction in highly hazardous areas.

In Florida, we are implementing rules mandating that insurance companies provide appropriate insurance premium discounts for homes that employ mitigation measures. In 2002, the Department of Community Affairs commissioned a study by the Applied Research Associates that calculated potential savings based on mitigation procedures. Shortly thereafter, the Florida Legislature passed a law that requires companies to implement mitigation credits. Initially, the Florida Office of Insurance Regulation adopted one-half of the recommended credits, but after two years of hurricane damage related data, the Florida Cabinet has approved the full ARA credits. The message is clear: we must provide economic incentives for private citizens to protect themselves from catastrophic loss.

The federal government can affect these decisions positively by predicating federal loan decisions through the Federal Home Association (FHA) and Rural Development Home Program to only allow the purchase of homes that meet the most stringent building code standards. If a home does not meet these standards, a procedure for requiring the retrofitting of the home must be enforced.

Mitigation techniques work and are cost effective; we also have witnessed their successful utilization. In Florida, the Department of Financial Services provided \$2.3



million to develop four model “hurricane houses” with advanced building techniques to withstand 140mph winds. In 2004, the eye of Hurricane Frances, a category 2 hurricane passed over one of these houses located in Ft. Pierce. The house survived with no appreciable damage. In Tulsa, the development of education and marketing to extol the value of “saferooms” has met with tremendous success and increased significantly the demand for this tornado mitigation safety device.

Although strengthening building codes for new structures will improve the housing stock on a going-forward basis, it will have a minor impact on the entire book of business for property insurers in the short-run. The majority of the housing stock in the U.S. is built. This is true even in rapidly growing states; the average age of a house in Florida is 24 years. Many of these houses were built prior to any building code standards, much less the most recent, even in areas where building codes are in place.

During last year’s legislative session, the Florida Legislature passed the Florida Comprehensive Hurricane Mitigation Program, which provides for free home inspections, as well as 50 percent matching grants of up to \$5,000 to encourage single-family homes to reduce vulnerability to hurricane damage. The response was overwhelming. The Florida Department of Financial Services received over 65,000 applications for the free home inspections that will alert consumers how to strengthen their homes. Regrettably the target for the year was to inspect 12,000 homes based on resource constraints, but this illustrates the interest homeowners have in protecting their homes when the proper financial incentives are provided. As well, these programs are being expanded moving forward.

### **Mitigate by Improving Infrastructure**

Another element of improving the homeowners market is to improve our nation’s infrastructure. This includes dikes, levees, tunnels, bridges, solid waste facilities, transportation facilities, and roads. During the Hurricane Katrina tragedy in New Orleans, many structures withstood the initial damage of the storm, only to be destroyed

due to the failed levee system. The American Society of Civil Engineers' March 2005 Report Card showed deteriorating conditions in 13 of the 15 infrastructure areas surveyed. In California, low lying areas around the Sacramento and San Joaquin rivers are protected by thousands of miles of earthen levees, many that date to the Gold Rush era. These levees protect a delta that provides freshwater to nearly 25 million Californians. If those levees break, either from disrepair or seismic activity, the consequences could be devastating.

Insurers are factoring in these aspects of infrastructure, and they are becoming reluctant to insure structures in areas with outdated or outmoded infrastructure risks. A commitment to improving our infrastructure, especially as it relates to structures that place homes in greater risk during a catastrophic event, will help prevent or mitigate damages to homes.

### **Expand the Capacity of the Insurance Marketplace**

The current system of insurance effectively handles “normal” disasters ranging from car accidents, to storms, and even to large hurricanes. Catastrophic natural disasters, especially the prospect of mega-catastrophes (i.e. the “big one” hitting California, a category 3 or 4 hurricane hitting New York, major seismic activity along the New Madrid Fault in the Midwest), create risks that simply could destroy an insurance company or potentially the entire industry. This risk of ruin likely will keep the private sector from offering sufficient capacity for entirely rational reasons. No potential rate of return is going to be worth the risk of losing the entire company.

### **Expand Insurance Coverage**

One of the unfortunate truths revealed after every large-scale natural disaster is that a number of affected citizens did not have insurance in place to protect themselves. As Congress considers the challenges of insuring natural catastrophes, care must be given to ensure that any solution has the ability to encourage participation. Part of this is

accomplished through affordability of any insurance solution, but this must be weighed against providing a subsidy that encourages building in risk prone areas or offers post-event assistance that encourages people not to buy insurance to manage their risk.

### **Natural Catastrophe Reserves**

In order to expand the capacity base, both the quantity available and the terms at which coverage is offered, several things can be done. One concept being discussed is to develop a catastrophe reserve for individuals. This has also been articulated as a Catastrophe Savings Account (CSAs). Modeled after the success of the Health Savings Accounts (HSAs), this would allow individuals to set aside money on a yearly basis that would accumulate tax free and that only could be withdrawn for specific purposes, such as paying their hurricane deductible or, perhaps, to take mitigation measures to the homes to lessen hurricane damage. Although originally envisioned for hurricane risk, it is a concept that could be expanded to include all catastrophe risk for homeowners.

Another concept is to amend the IRS tax code to provide incentives for individual insurance companies to set aside reserves for catastrophic losses on a tax-deferred basis. Current tax laws discourage property & casualty insurers from accumulating assets to pay for future catastrophe losses. Payments for catastrophe losses are made from unrestricted policyholder surplus after losses have incurred. Current tax law and accompanying accounting standards require insurers to limit the recording of loss reserves to events which already have occurred, and require the recognition of catastrophe premiums during the periods in which they are written.

Currently, if a company obtains higher than average profits and creates an excess reserve, these reserves would be taxed at an ordinary tax rate, as well as negatively affect future rate requests. These limitations are not necessarily true for alien (overseas) insurers. Some non-U.S. insurers are able to deduct reserves for future catastrophe losses tax-free, which potentially gives them a competitive advantage over their U.S. counterparts. The inability to build catastrophe reserves forces insurers to prepare financially as if they

were going to have a major storm in multiple locations every year. This necessitates annual reinsurance purchases with no credit or residual benefit toward next year if no losses occur. Allowing U.S. companies to join those in most other industrialized nations by setting aside tax-deferred reserves specifically for catastrophes, when structured appropriately as not shelter income, could provide additional capacity for the market. Tax-free catastrophe reserves also could help mitigate some of the “boom or bust” cycle in the property insurance market to everyone’s benefit.

For the creation of a federal backstop, a number of innovative ideas have been proposed. One concept is to have the federal government, through the U.S. Treasury Department, implement a reinsurance program to offer reinsurance contracts sold at regional auctions. A variation of this proposal would be to allow private insurers to obtain reinsurance contracts. Other proposals would restrict these reinsurance funds to authorized state catastrophe funds, similar to our Florida Catastrophe Fund, or the California Earthquake Authority. More recently, there has been discussion of limiting the role of the federal government to providing “credit lines” to state or regional funds, which would be repaid over an intermediate term after a qualifying event.

### **National Catastrophe Reinsurance**

Currently, the United States is one of the only industrialized nations in the world not to have a federal comprehensive catastrophe plan. A multi-layered approach, with the federal government’s commitment to reinsure state entities against a mega-catastrophe as its capstone, will proactively help in any catastrophe recovery effort, as well as provide stability in the housing insurance market by allowing state agencies to diversify their risk. Accomplishing this goal likely will lure additional private capital to the insurance market, thereby stimulating more availability, more competition, and ultimately lower premiums.

Given the variety and complexity of concepts under consideration, the NAIC strongly endorses the concept of a National Commission on Catastrophe Preparation to weigh the merits of each and develop the best mix of solutions. Clearly, there are a number of

forward thinking ideas that require further consideration, but they should be framed to answer the question, “Will this make insurance for individuals and businesses more available and affordable?” State insurance commissioners look forward to working with this Subcommittee to find the right answers to this question. The lessons of recent catastrophes may be the only warning we get to start making those decisions.

Thank you for holding this hearing, for inviting the NAIC here today to participate, and for your continued interest and leadership on this crucial issue. I am pleased to answer any questions that you may have.

## Allocating the Federal Cost of Katrina

United States	# of Individual Returns	% of Individual Tax Returns	Tax Burden For Individual Return*	% Share of Total Tax Burden	Gross State Product (GSP)	Tax Burden/GSP
<b>New England</b>	<b>6,785,928</b>	<b>5.17%</b>	<b>\$5,684,164,730</b>	<b>5.17%</b>	<b>\$690,689,000,000</b>	<b>0.82%</b>
Connecticut	1,663,080	1.27%	\$1,393,062,331		\$194,469,000,000	0.72%
Maine	618,210	0.47%	\$517,837,424		\$45,070,000,000	1.15%
Massachusetts	3,057,144	2.33%	\$2,560,786,100		\$328,535,000,000	0.78%
New Hampshire	642,173	0.49%	\$537,909,792		\$55,690,000,000	0.97%
Rhode Island	499,781	0.38%	\$418,636,557		\$43,791,000,000	0.96%
Vermont	305,540	0.23%	\$255,932,526		\$23,134,000,000	1.11%
<b>Mideast</b>	<b>21,820,285</b>	<b>16.62%</b>	<b>\$18,277,543,527</b>	<b>16.62%</b>	<b>\$2,263,452,000,000</b>	<b>0.81%</b>
Delaware	394,909	0.30%	\$330,791,575		\$54,354,000,000	0.61%
District of Columbia	276,974	0.21%	\$232,004,501		\$82,777,000,000	0.28%
Maryland	2,630,345	2.00%	\$2,203,282,186		\$244,899,000,000	0.90%
New Jersey	4,099,869	3.12%	\$3,434,214,269		\$430,787,000,000	0.80%
New York	8,613,865	6.56%	\$7,215,317,879		\$963,466,000,000	0.75%
Pennsylvania	5,804,323	4.42%	\$4,861,933,118		\$487,169,000,000	1.00%
<b>Great Lakes</b>	<b>21,224,096</b>	<b>16.16%</b>	<b>\$17,778,151,773</b>	<b>16.16%</b>	<b>\$1,836,746,000,000</b>	<b>0.97%</b>
Illinois	5,756,784	4.38%	\$4,822,112,550		\$560,236,000,000	0.86%
Indiana	2,848,276	2.17%	\$2,385,829,909		\$238,638,000,000	1.00%
Michigan	4,560,071	3.47%	\$3,819,697,872		\$377,895,000,000	1.01%
Ohio	5,439,800	4.14%	\$4,556,594,072		\$442,440,000,000	1.03%
Wisconsin	2,619,165	1.99%	\$2,193,917,371		\$217,537,000,000	1.01%
<b>Plains</b>	<b>9,027,463</b>	<b>6.87%</b>	<b>\$7,561,764,107</b>	<b>6.87%</b>	<b>\$794,607,000,000</b>	<b>0.95%</b>
Iowa	1,333,959	1.02%	\$1,117,377,417		\$114,291,000,000	0.98%
Kansas	1,228,885	0.94%	\$1,029,363,231		\$105,448,000,000	0.98%
Minnesota	2,405,900	1.83%	\$2,015,278,076		\$233,292,000,000	0.86%
Missouri	2,583,130	1.97%	\$2,163,733,013		\$216,069,000,000	1.00%
Nebraska	808,565	0.62%	\$677,286,387		\$70,263,000,000	0.96%
North Dakota	304,992	0.23%	\$255,473,499		\$24,178,000,000	1.06%
South Dakota	362,032	0.28%	\$303,252,484		\$31,066,000,000	0.98%
<b>Southeast</b>	<b>32,187,001</b>	<b>24.51%</b>	<b>\$26,961,119,518</b>	<b>24.51%</b>	<b>\$2,779,264,000,000</b>	<b>0.97%</b>
Alabama	1,906,296	1.45%	\$1,596,789,781		\$149,796,000,000	1.07%
Arkansas	1,134,378	0.86%	\$950,200,388		\$86,802,000,000	1.09%
Florida	8,115,915	6.18%	\$6,798,215,041		\$674,049,000,000	1.01%
Georgia	3,775,196	2.87%	\$3,162,255,177		\$364,310,000,000	0.87%
Kentucky	1,755,511	1.34%	\$1,470,486,234		\$140,359,000,000	1.05%
Louisiana	1,886,871	1.44%	\$1,580,518,624		\$166,310,000,000	0.95%
Mississippi	1,174,560	0.89%	\$983,858,438		\$80,197,000,000	1.23%
North Carolina	3,762,836	2.87%	\$3,151,901,947		\$344,641,000,000	0.91%
South Carolina	1,839,987	1.40%	\$1,541,246,711		\$139,771,000,000	1.10%

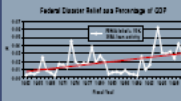
Tennessee	2,603,548	1.98%	\$2,180,835,947		\$226,502,000,000	0.96%
Virginia	3,484,282	2.65%	\$2,918,573,974		\$352,745,000,000	0.83%
West Virginia	747,621	0.57%	\$626,237,254		\$53,782,000,000	1.16%
<b>Southwest</b>	<b>14,095,441</b>	<b>10.73%</b>	<b>\$11,806,905,199</b>	<b>10.73%</b>	<b>\$1,388,035,000,000</b>	<b>0.85%</b>
Arizona	2,365,284	1.80%	\$1,981,256,490		\$215,759,000,000	0.92%
New Mexico	824,600	0.63%	\$690,717,944		\$69,324,000,000	1.00%
Oklahoma	1,474,272	1.12%	\$1,234,909,198		\$120,549,000,000	1.02%
Texas	9,431,285	7.18%	\$7,900,021,567		\$982,403,000,000	0.80%
<b>Rocky Mountain</b>	<b>4,376,074</b>	<b>3.33%</b>	<b>\$3,665,574,625</b>	<b>3.33%</b>	<b>\$410,351,000,000</b>	<b>0.89%</b>
Colorado	2,106,319	1.60%	\$1,764,337,047		\$216,064,000,000	0.82%
Idaho	592,912	0.45%	\$496,646,808		\$47,178,000,000	1.05%
Montana	439,213	0.33%	\$367,902,377		\$29,851,000,000	1.23%
Utah	994,387	0.76%	\$832,938,327		\$89,836,000,000	0.93%
Wyoming	243,243	0.19%	\$203,750,067		\$27,422,000,000	0.74%
<b>Far West</b>	<b>21,805,660</b>	<b>16.60%</b>	<b>\$18,265,293,042</b>	<b>16.60%</b>	<b>\$2,239,824,000,000</b>	<b>0.82%</b>
Alaska	344,971	0.26%	\$288,961,508		\$39,872,000,000	0.72%
California	15,311,402	11.66%	\$12,825,442,771		\$1,621,843,000,000	0.79%
Hawaii	604,667	0.46%	\$506,493,266		\$53,710,000,000	0.94%
Nevada	1,088,156	0.83%	\$911,482,992		\$110,546,000,000	0.82%
Oregon	1,602,105	1.22%	\$1,341,987,232		\$145,351,000,000	0.92%
Washington	2,854,359	2.17%	\$2,390,925,273		\$268,502,000,000	0.89%
	131,321,948	1	\$110,000,516,523	100.00%	12,402,968,000,000	0

Region	# of Individual Returns	% of Individual Tax Returns	Tax Burden	% share of total Tax Burden	GSP	Tx Burden/ GSP
Southeast	32,187,001	24.51%	\$26,961,119,518	24.51%	\$2,779,264,000,000	0.97%
Plains	9,027,463	6.87%	\$7,561,764,107	6.87%	\$794,607,000,000	0.95%
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Rocky Mountain	4,376,074	3.33%	\$3,665,574,625	3.33%	\$410,351,000,000	0.89%
Midwest	21,820,285	16.62%	\$18,277,543,527	16.62%	\$2,263,452,000,000	0.81%
Southwest	14,095,441	10.73%	\$11,806,905,199	10.73%	\$1,388,035,000,000	0.85%

\* - Individual Tax Return burden = \$110,000,000 authorized divided by 131,321,948 tax returns filed in 2005  
Data: Bureau of Economic Analysis, Internal Revenue Service, 2005 (latest data available)

# US Vulnerability to Natural Hazards

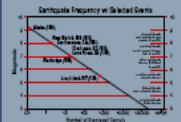
**NATURAL DISASTERS** result from the interaction of natural forces with the built environment. To reduce vulnerability, we need to increase our level of understanding of the physical consequences of high-risk hazards. By incorporating geographic data with published global disaster loss databases, we can better understand the spatial distribution and impact of natural hazards. This visualization shows the spatial distribution of natural hazards and the built environment in the United States. The map displays the location of high-risk hazards across the United States, along with the built environment, including population density, infrastructure, and economic activity. The map also shows the location of major cities and the distribution of population density across the United States. The map is color-coded to show the location of major cities and the distribution of population density across the United States.



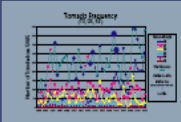
The extent of natural disasters has been increasing exponentially, largely due to increasing population and wealth density in coastal areas. This figure shows the trend of population density in the United States, along with the trend of population density in the United States. The figure shows that the number of people living in coastal areas has increased significantly over the past few decades, and this increase is likely to continue in the future.



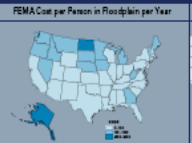
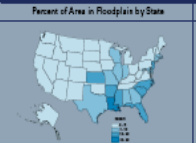
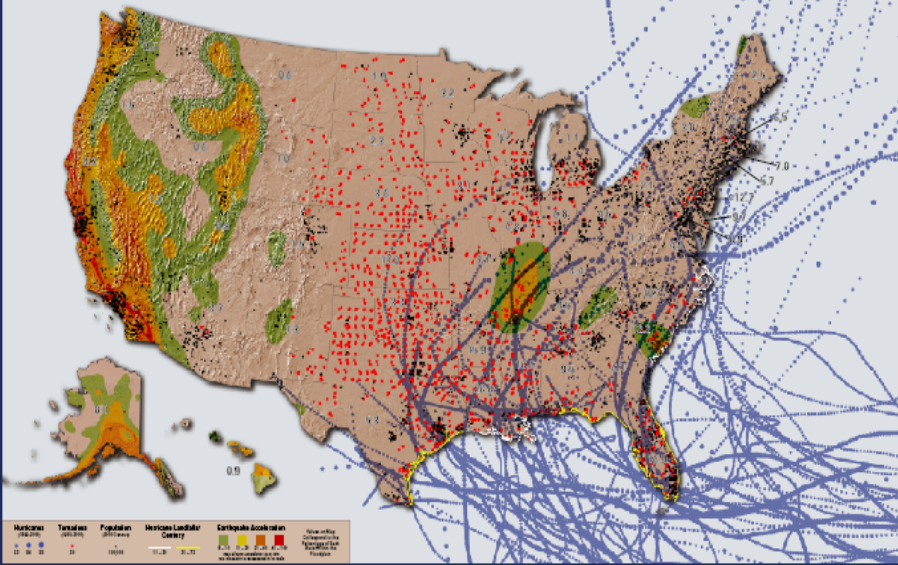
Full consideration of disaster risk, beyond the built environment, requires a broader perspective on the built environment and its relationship to the natural environment. This figure shows the trend of population density in the United States, along with the trend of population density in the United States. The figure shows that the number of people living in coastal areas has increased significantly over the past few decades, and this increase is likely to continue in the future.



In general, the number of earthquakes is higher between a level of 10 to 20 in each unit of distance. This suggests that the built environment is more vulnerable to earthquakes in these areas. The figure shows that the number of earthquakes is higher between a level of 10 to 20 in each unit of distance. This suggests that the built environment is more vulnerable to earthquakes in these areas.



There are about 1,000 tornadoes in the US each year. The highest percentage of tornadoes occur in the central United States. The figure shows that there are about 1,000 tornadoes in the US each year. The highest percentage of tornadoes occur in the central United States.



The area of the United States within the 100 and 500-year floodplains is approximately 10% of the total area. The figure shows that the area of the United States within the 100 and 500-year floodplains is approximately 10% of the total area.

The cost of flooding per person per year is highest in the central United States. The figure shows that the cost of flooding per person per year is highest in the central United States.

In the last century, about 100 hurricanes have struck the United States. The figure shows that in the last century, about 100 hurricanes have struck the United States.

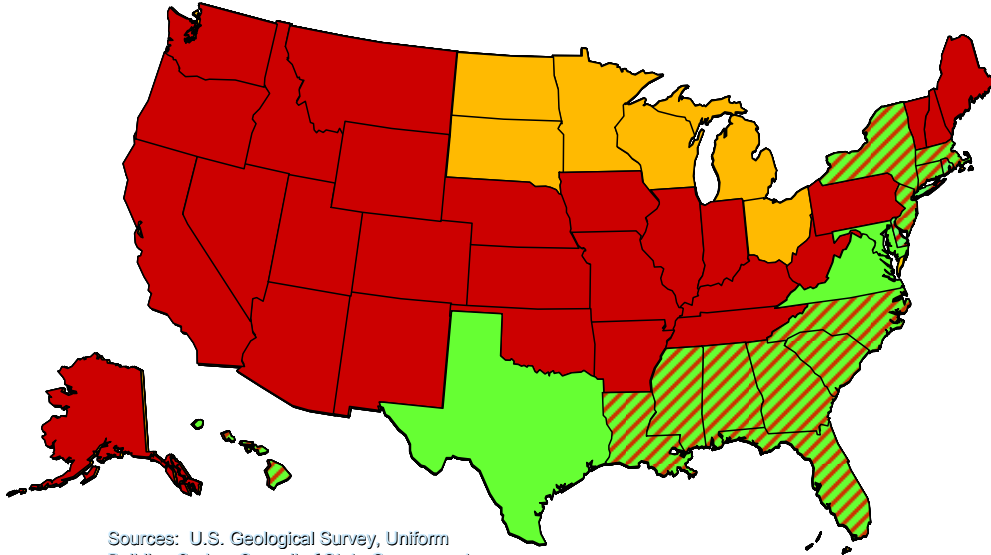
**Coastal Natural Hazards**

Coastal natural hazards are a major threat to the United States. The figure shows that coastal natural hazards are a major threat to the United States.



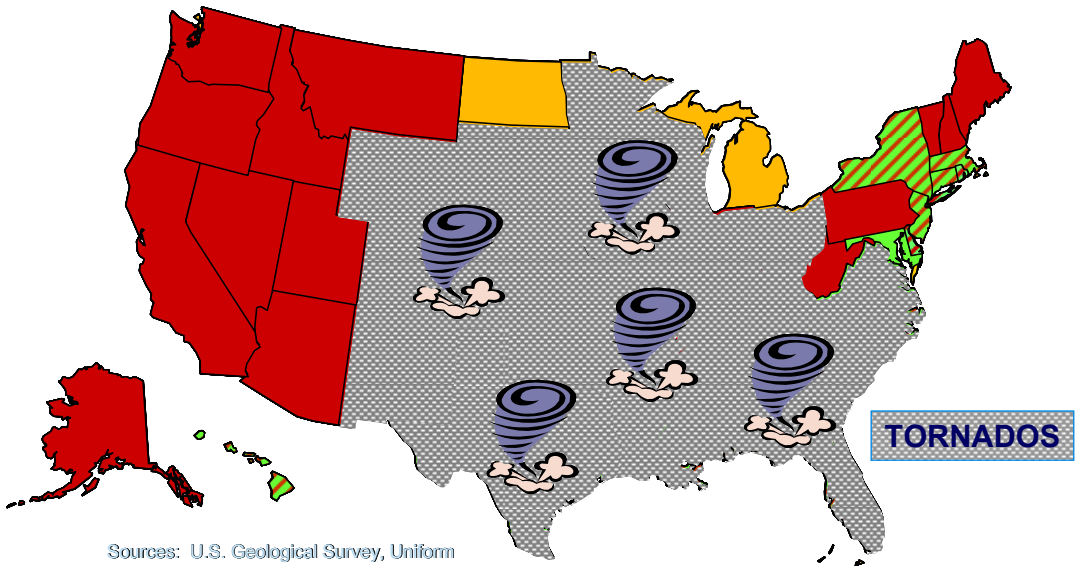


## States With Significant Risk of:



Sources: U.S. Geological Survey, Uniform Building Codes, Council of State Governments

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