

# What's Keeping CEOs Awake at Night?

*Especially in New Jersey*

**Insurance Council of New Jersey  
2006 Annual Symposium  
Iselin, NJ**



**June 16, 2006**

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**Robert P. Hartwig, Ph.D., CPCU, Senior Vice President & Chief Economist  
Insurance Information Institute ♦ 110 William Street ♦ New York, NY 10038  
Tel: (212) 346-5520 ♦ Fax: (212) 732-1916 ♦ bobh@iii.org ♦ www.iii.org**

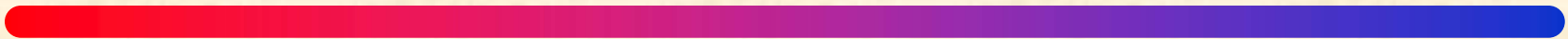


# *Presentation Outline*

- **Catastrophe Loss Management**
- **Catastrophic Loss and Insurer Impairment**
- **P/C Profit Overview**
- **2006 Hurricane Season Forecast**
- **Hurricane Risk in New Jersey State: Is It Real?**
- **Pricing Trends**
- **Capacity Trends**
- **National Flood Insurance Program (NFIP)**
- **TRIA: A Federal CAT Program That Works**
- **Overview of National Catastrophe Plan Proposals**
  - **State CAT Funds: Florida Hurricane Catastrophe Funds**
- **Summary**
- **Q & A**

# CATASTROPHE LOSS MANAGEMENT

*Can Insurers Manage the  
Risk & Meet Demand?*





# *Most of US Population & Property Has Major CAT Exposure*





# U.S. Insured Catastrophe Losses (\$ Billions)\*



\*Excludes \$4B-\$6b offshore energy losses from Hurricanes Katrina & Rita.

**Note:** 2001 figure includes \$20.3B for 9/11 losses reported through 12/31/01. Includes only business and personal property claims, business interruption and auto claims. Non-prop/BI losses = \$12.2B.

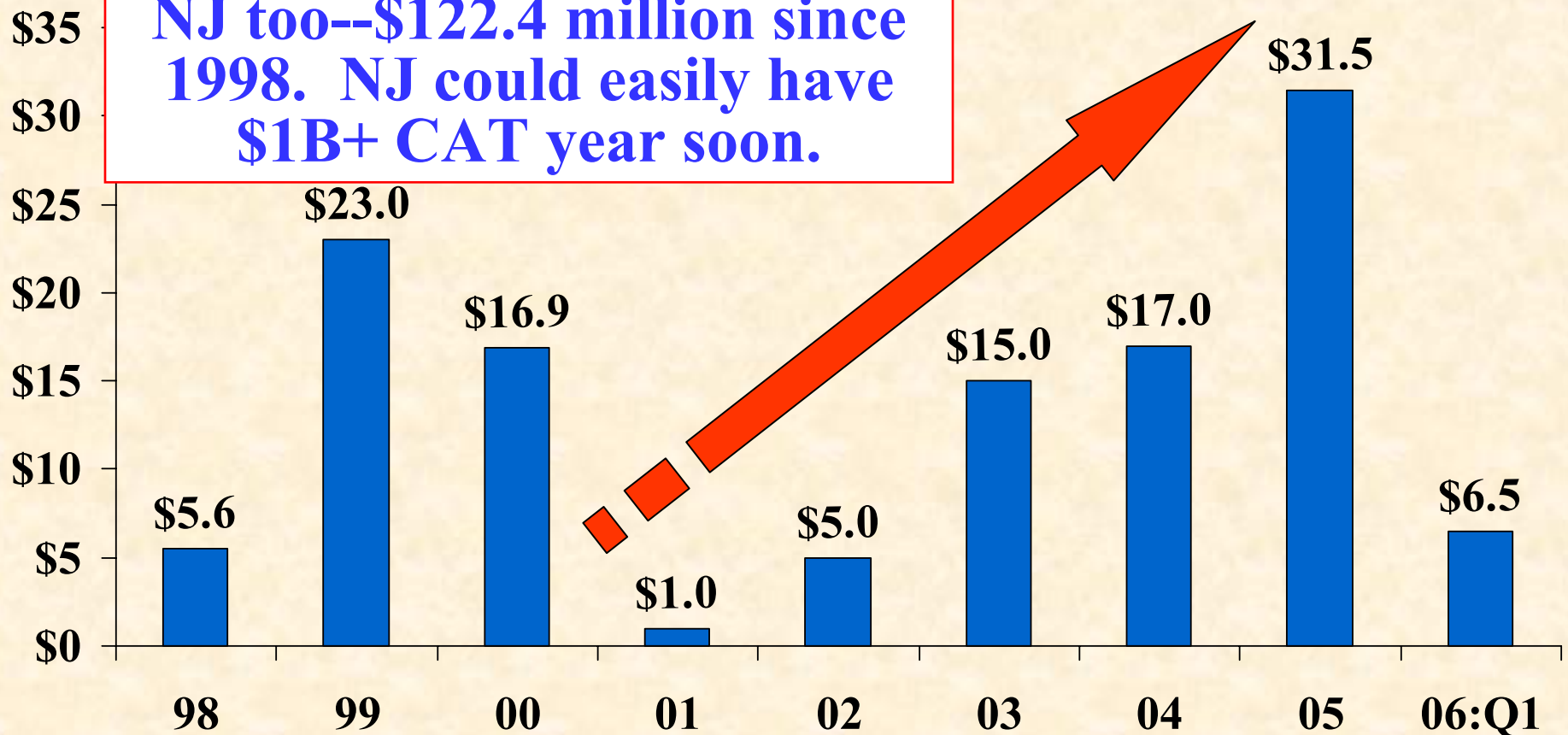
Source: Property Claims Service/ISO; Insurance Information Institute



# *New Jersey Insured Catastrophe Losses (\$ Millions)*

**\$ Billions**

**CAT losses are on the rise in NJ too--\$122.4 million since 1998. NJ could easily have \$1B+ CAT year soon.**

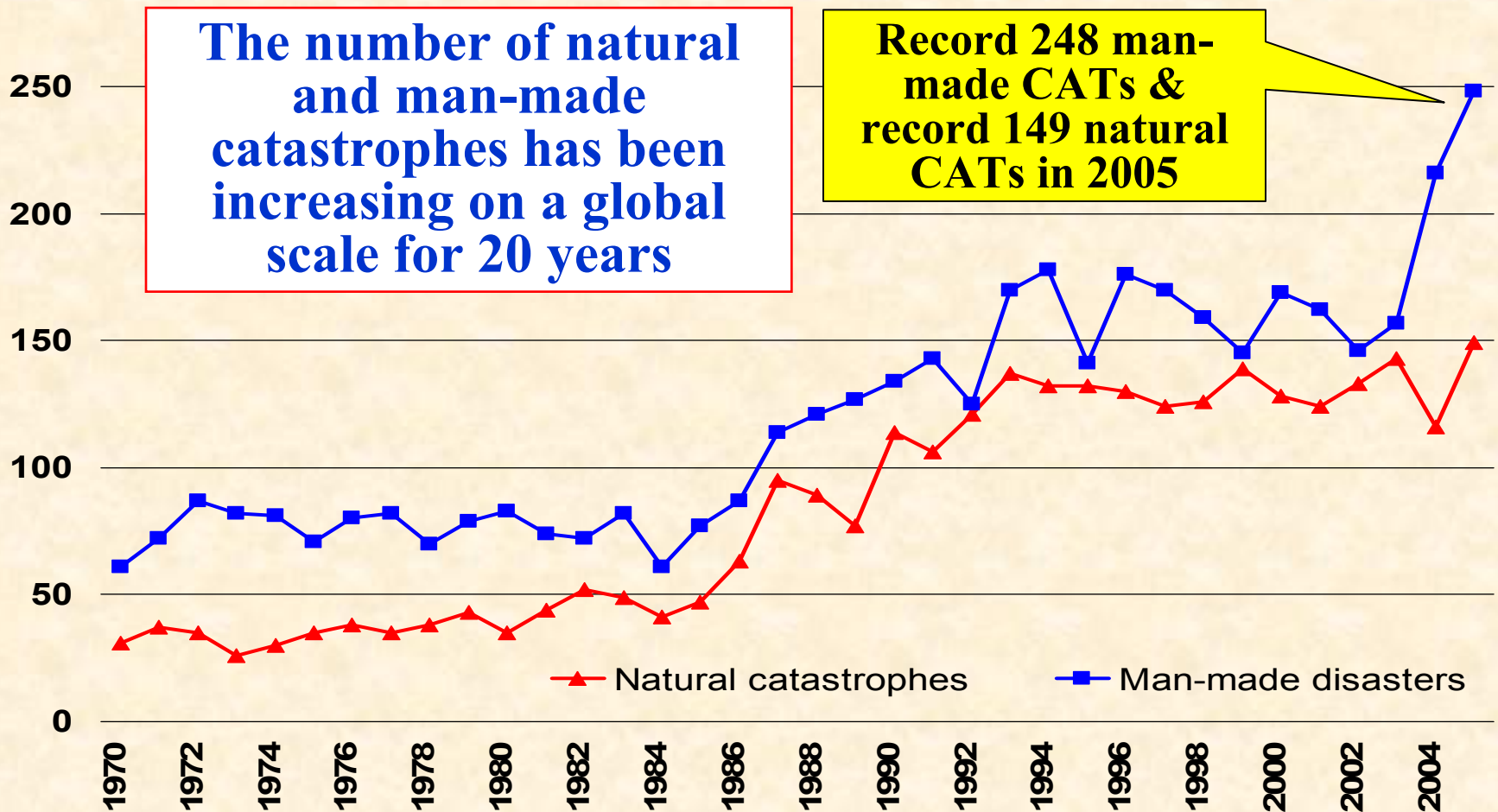


Source: Property Claims Service/ISO; Insurance Information Institute



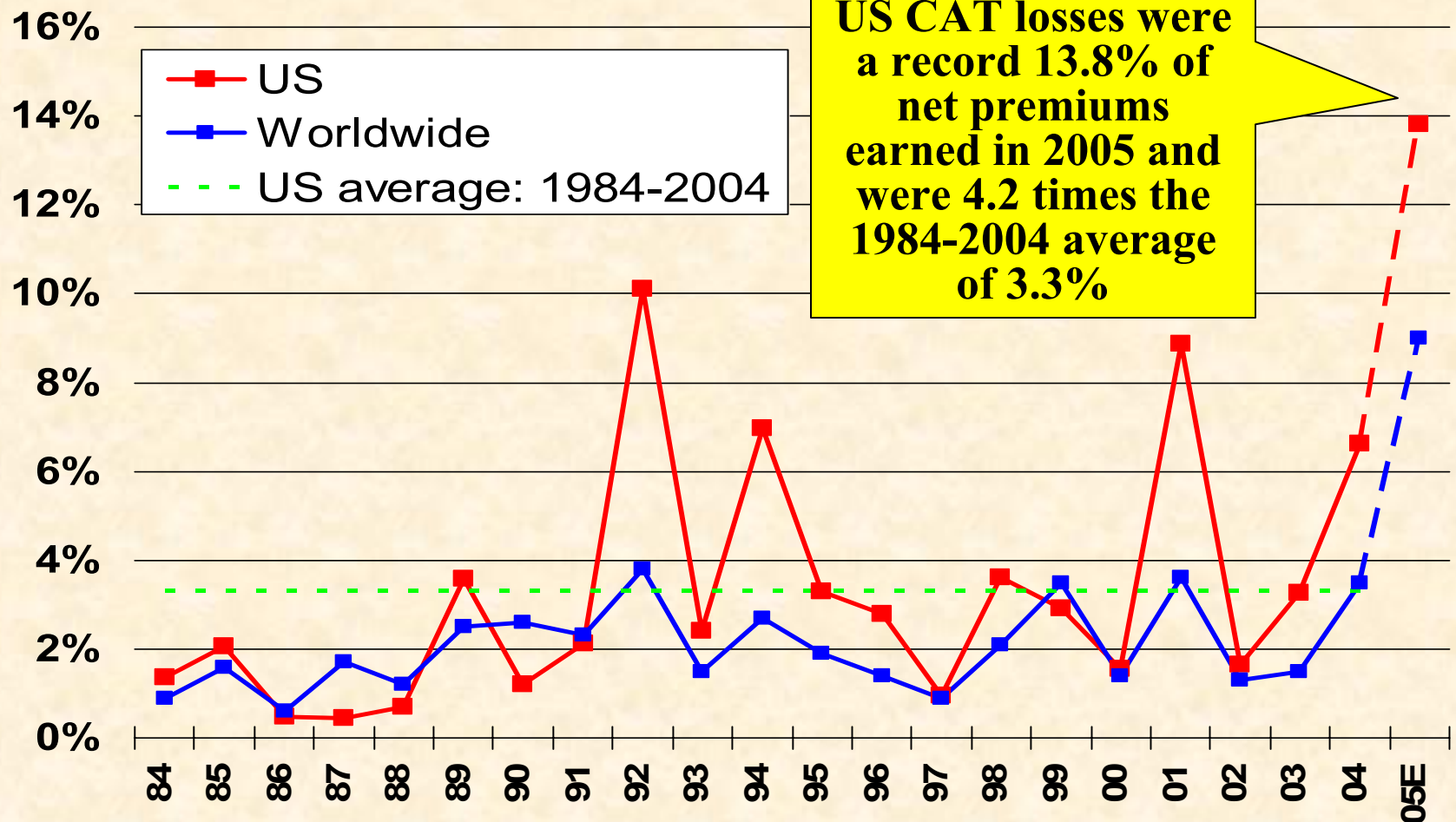


# Global Number of Catastrophic Events, 1970–2005





# Insured Property Catastrophe Losses as % Net Premiums Earned, 1983-2005E



\*Insurance Information Institute figure of 13.8% for 2005 based estimated 2005 DPE of \$417.7B and insured CAT losses of \$57.7B.

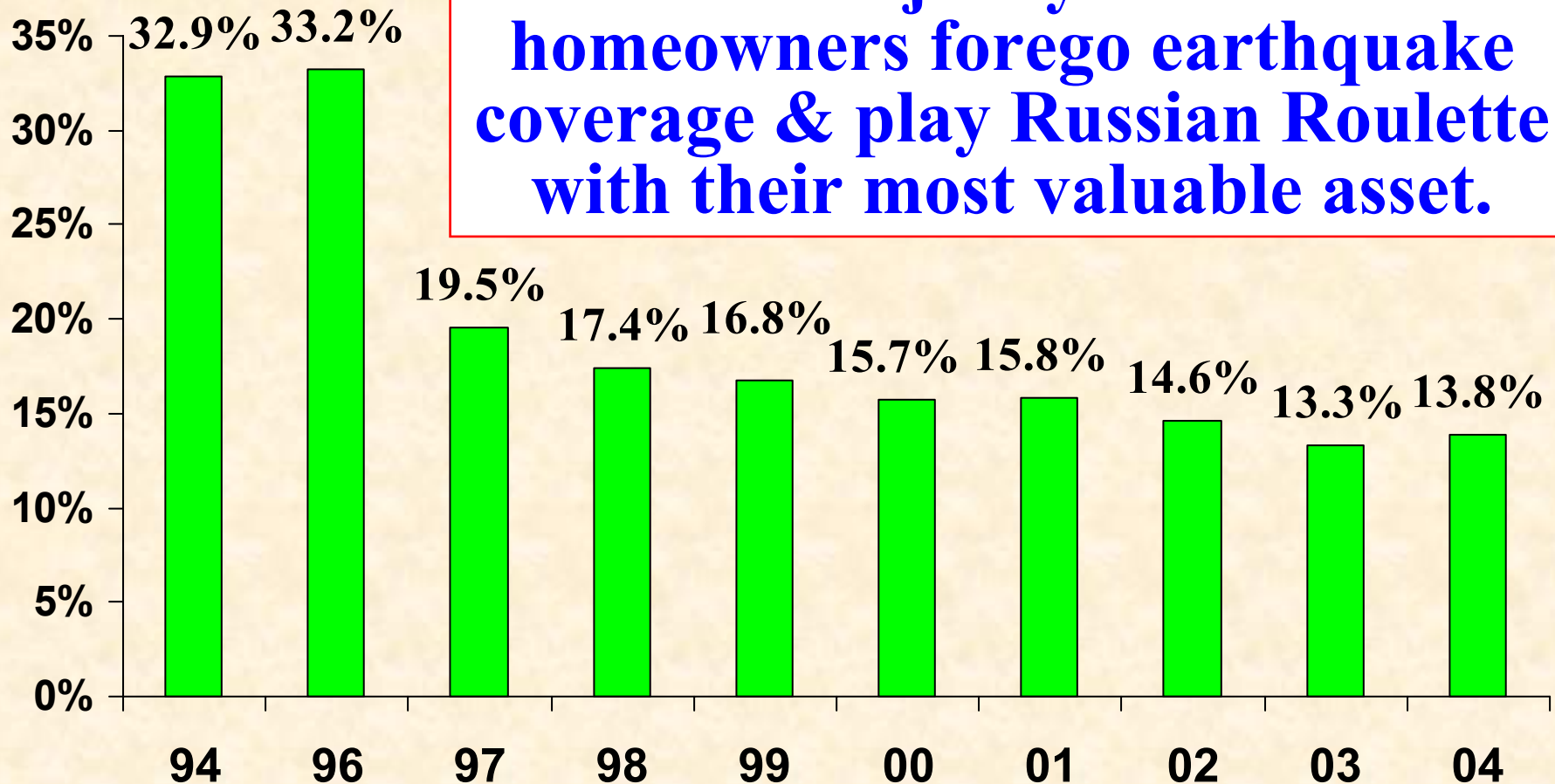
Sources: ISO, A.M. Best, Swiss Re Economic Research & Consulting; Insurance Information Institute.





# *Percentage of California Homeowners with Earthquake Insurance, 1994-2004\**

**The vast majority of California homeowners forego earthquake coverage & play Russian Roulette with their most valuable asset.**

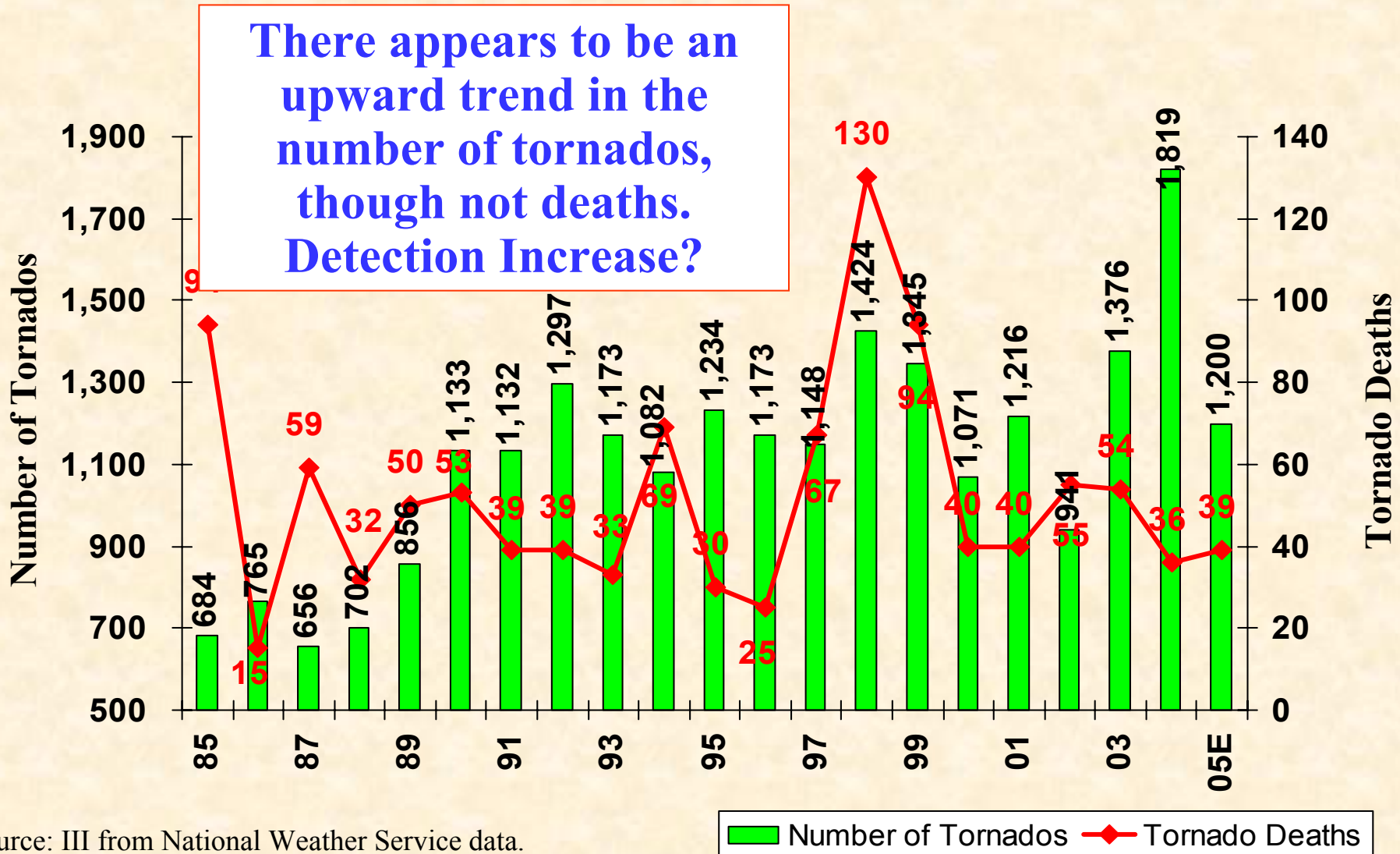


\*Includes CEA policies beginning in 1996.

Source: California Department of Insurance; Insurance Information Institute.



# Number of Tornadoes & Associated Deaths, 1985-2005p

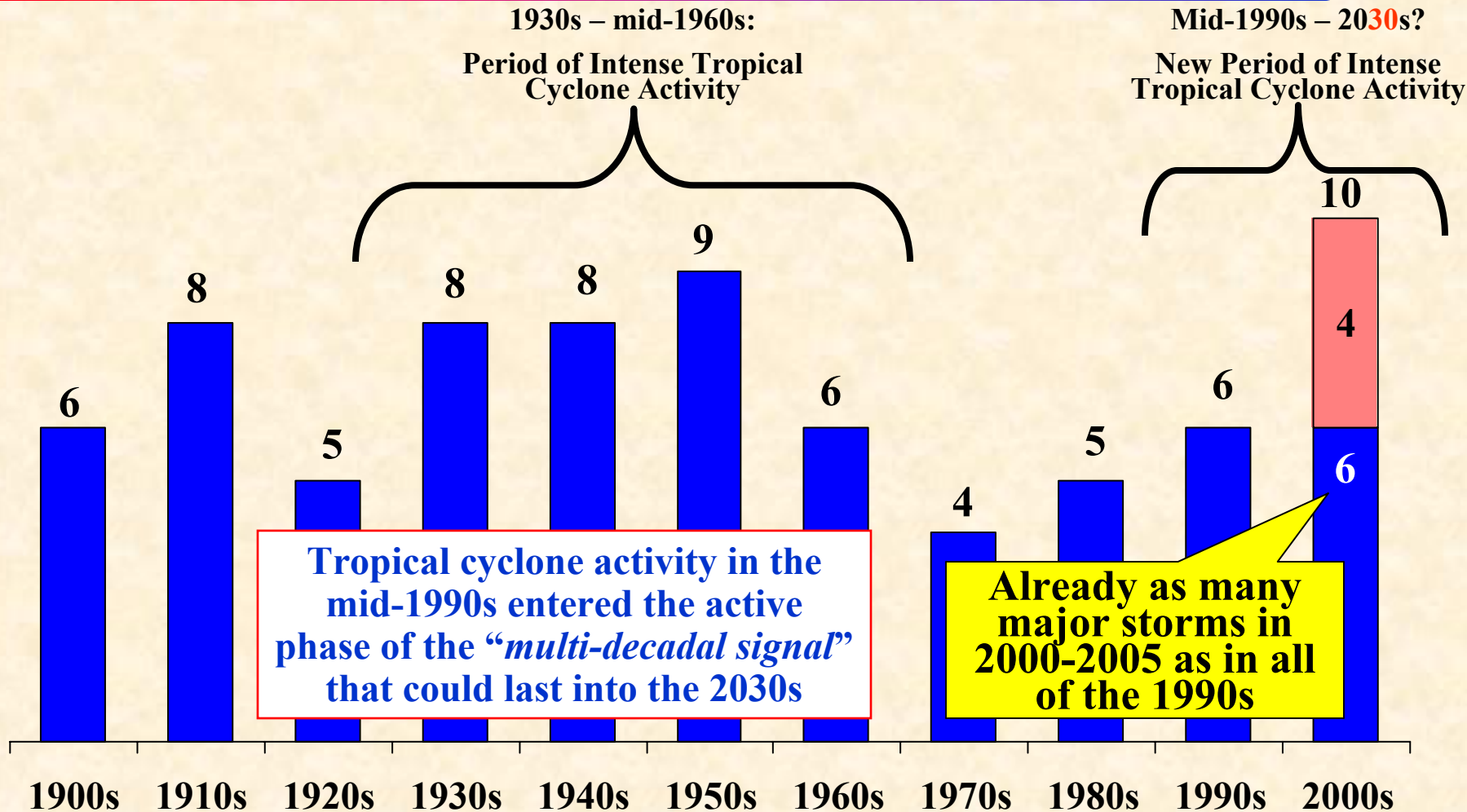


Source: III from National Weather Service data.





# Number of Major (Category 3, 4, 5) Hurricanes Striking the US by Decade

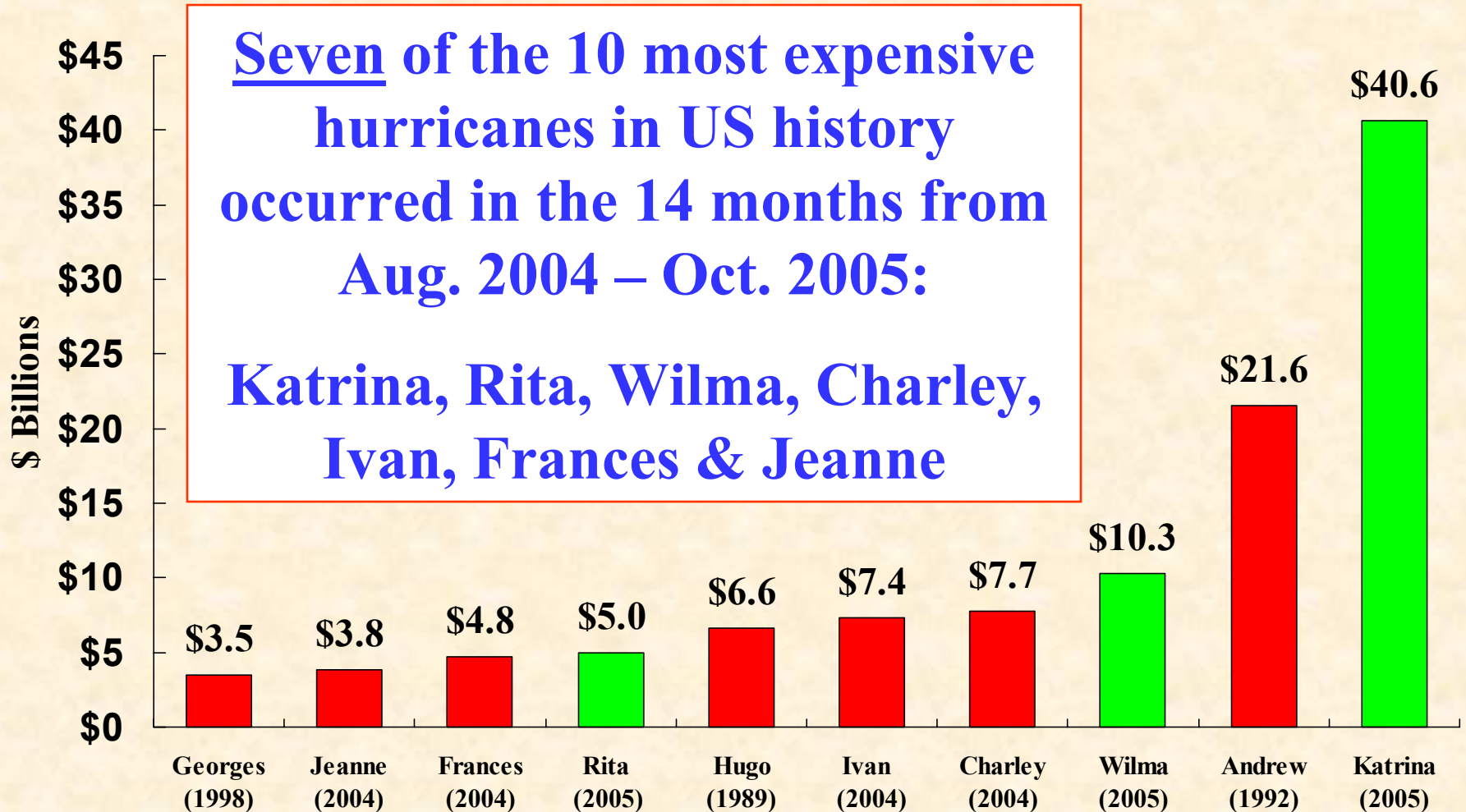


\*Figure for 2000s is extrapolated based on data for 2000-2005 (6 major storms: Charley, Ivan, Jeanne (2004) & Katrina, Rita, Wilma (2005)).

Source: Tillinghast from National Hurricane Center: <http://www.nhc.noaa.gov/pastint.shtm>.



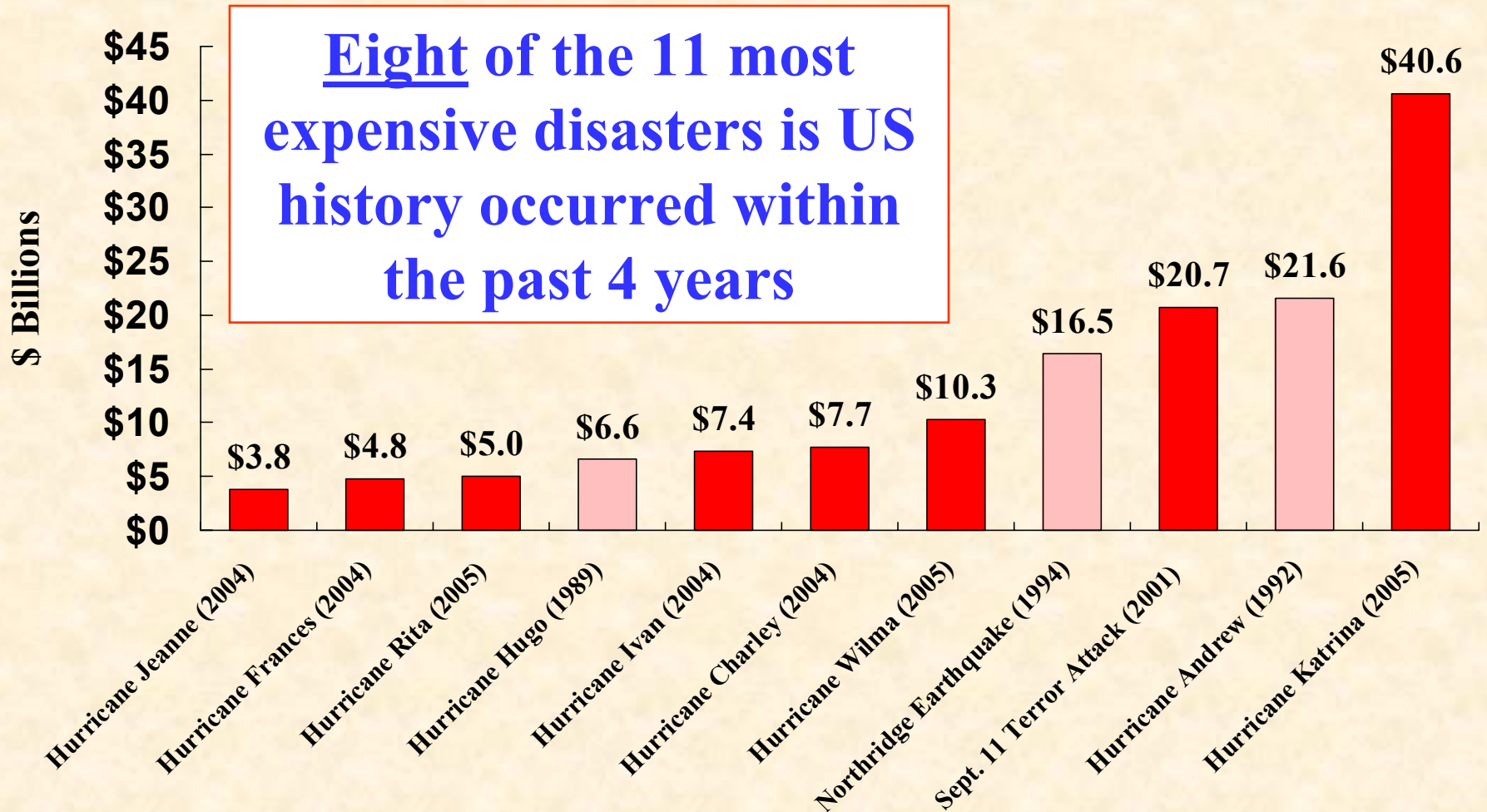
# Top 10 Most Costly Hurricanes in US History, (Insured Losses, \$2005)







# Top 11 Insured Property Losses in US (\$2005)

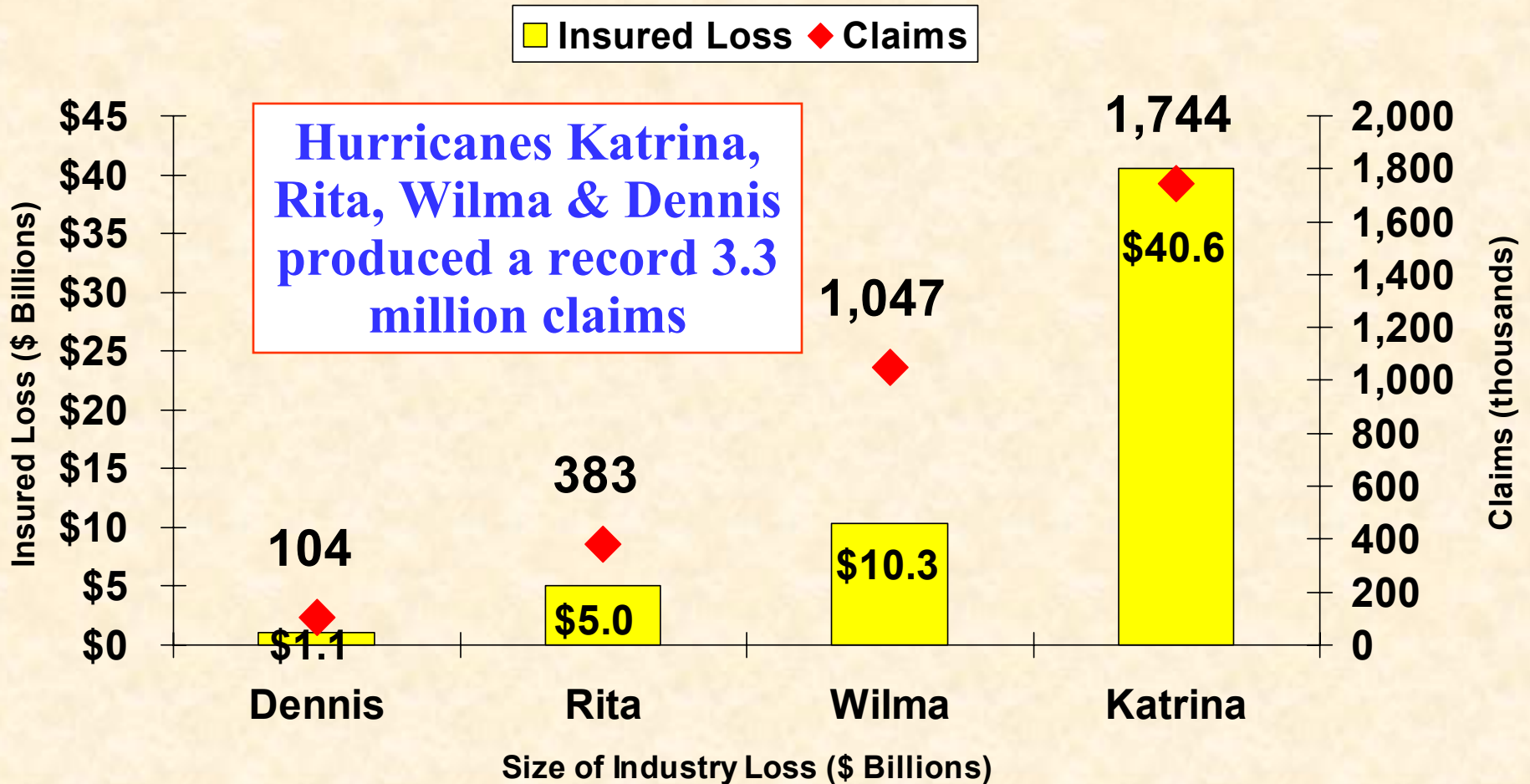


Note: 9/11 loss figure is for property claims only. Total insured losses (\$2004) are approximately \$34B.  
Sources: ISO/PCS; Insurance Information Institute.





# *Insured Loss & Claim Count for Major Storms of 2005\**

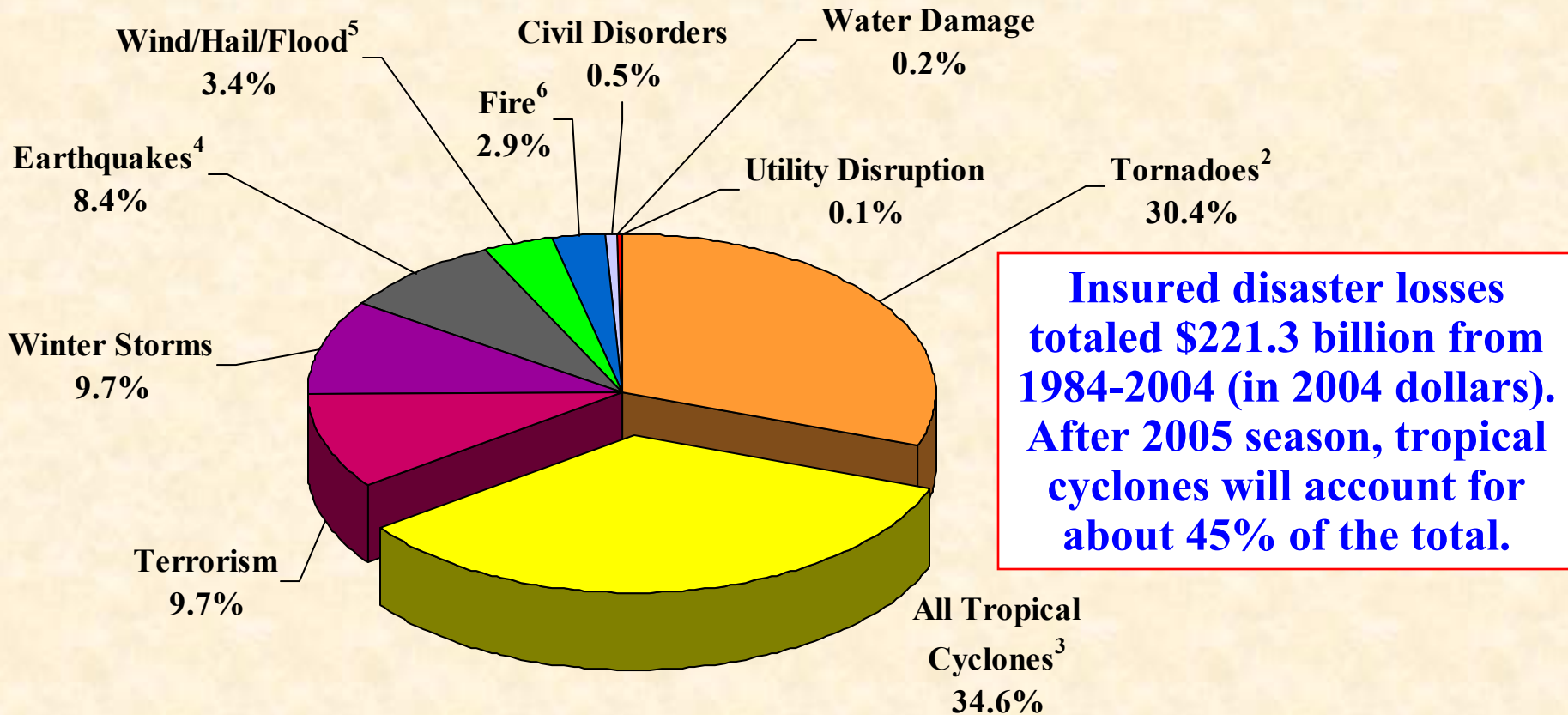


\*Property and business interruption losses only. Excludes offshore energy & marine losses.

Source: ISO/PCS as of June 8, 2006; Insurance Information Institute.



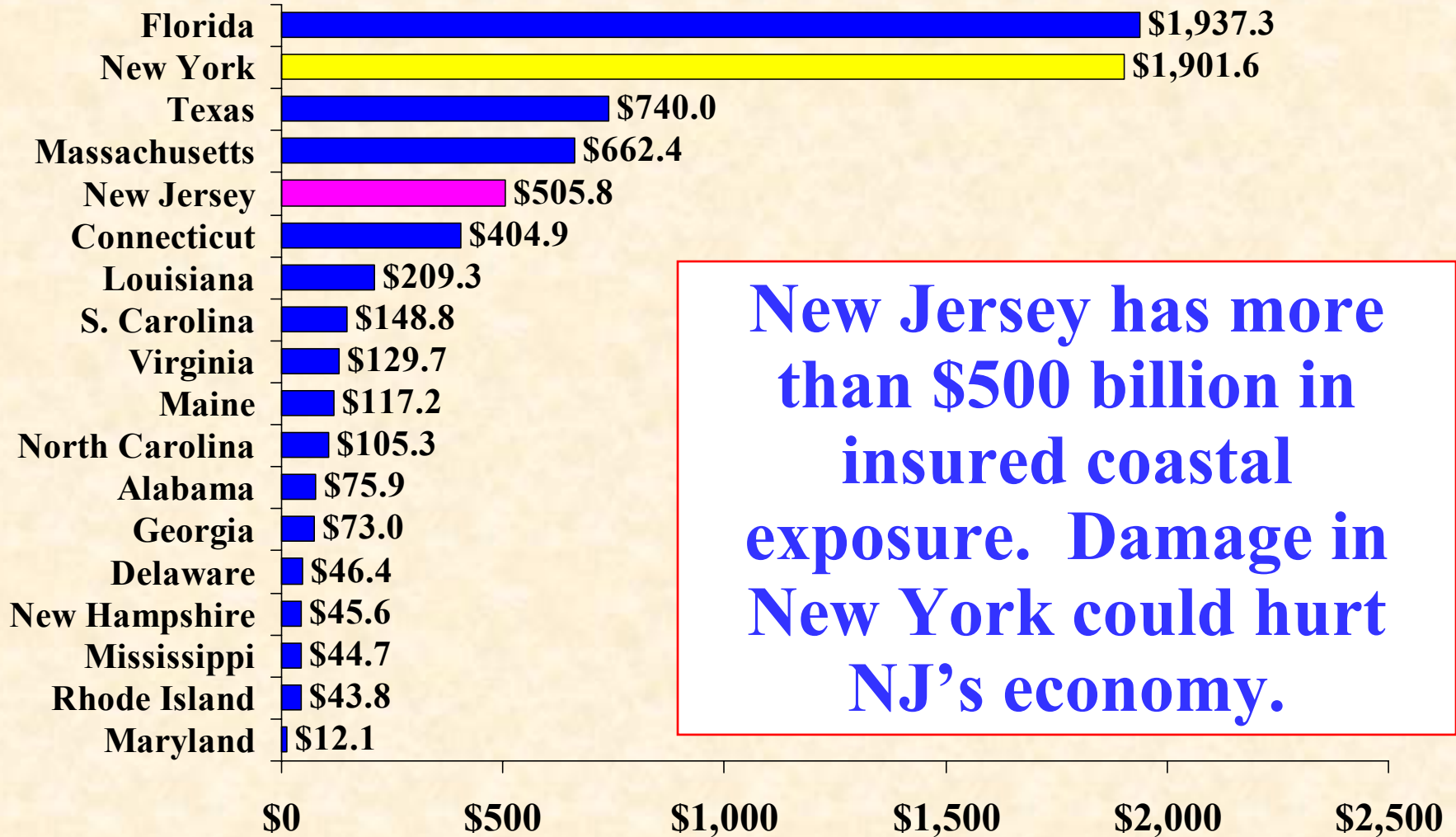
# *Inflation-Adjusted U.S. Insured Catastrophe Losses By Cause of Loss, 1985-2004<sup>1</sup>*



<sup>1</sup> Catastrophes are all events causing direct insured losses to property of \$25 million or more in 2004 dollars. Catastrophe threshold changed from \$5 million to \$25 million beginning in 1997. Adjusted for inflation by the III.  
<sup>2</sup> Excludes snow. <sup>3</sup> Includes hurricanes and tropical storms. <sup>4</sup> Includes other geologic events such as volcanic eruptions and other earth movement. <sup>5</sup> Does not include flood damage covered by the federally administered National Flood Insurance Program. <sup>6</sup> Includes wildland fires.

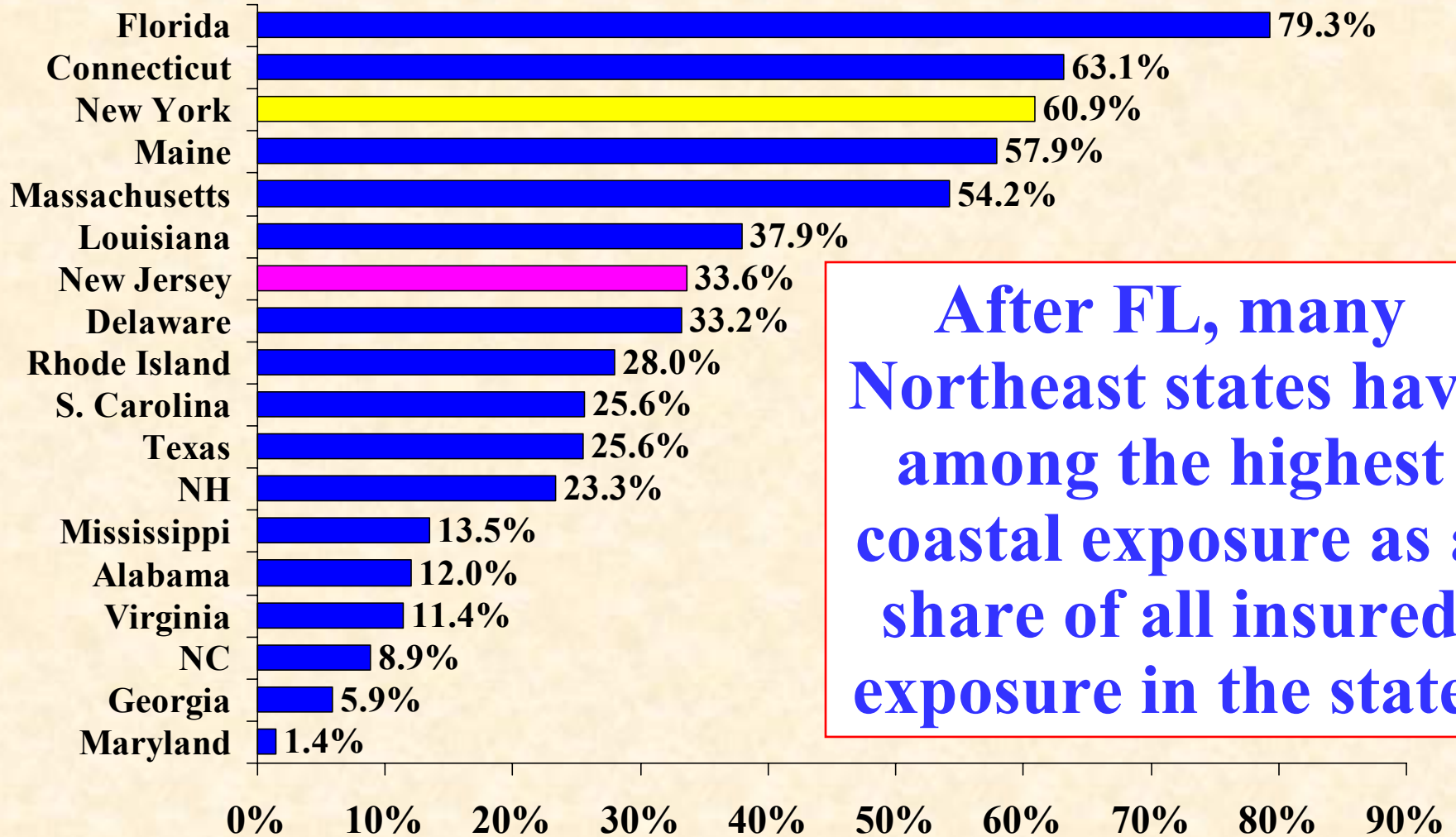


# *Total Value of Insured Coastal Exposure (2004, \$ Billions)*





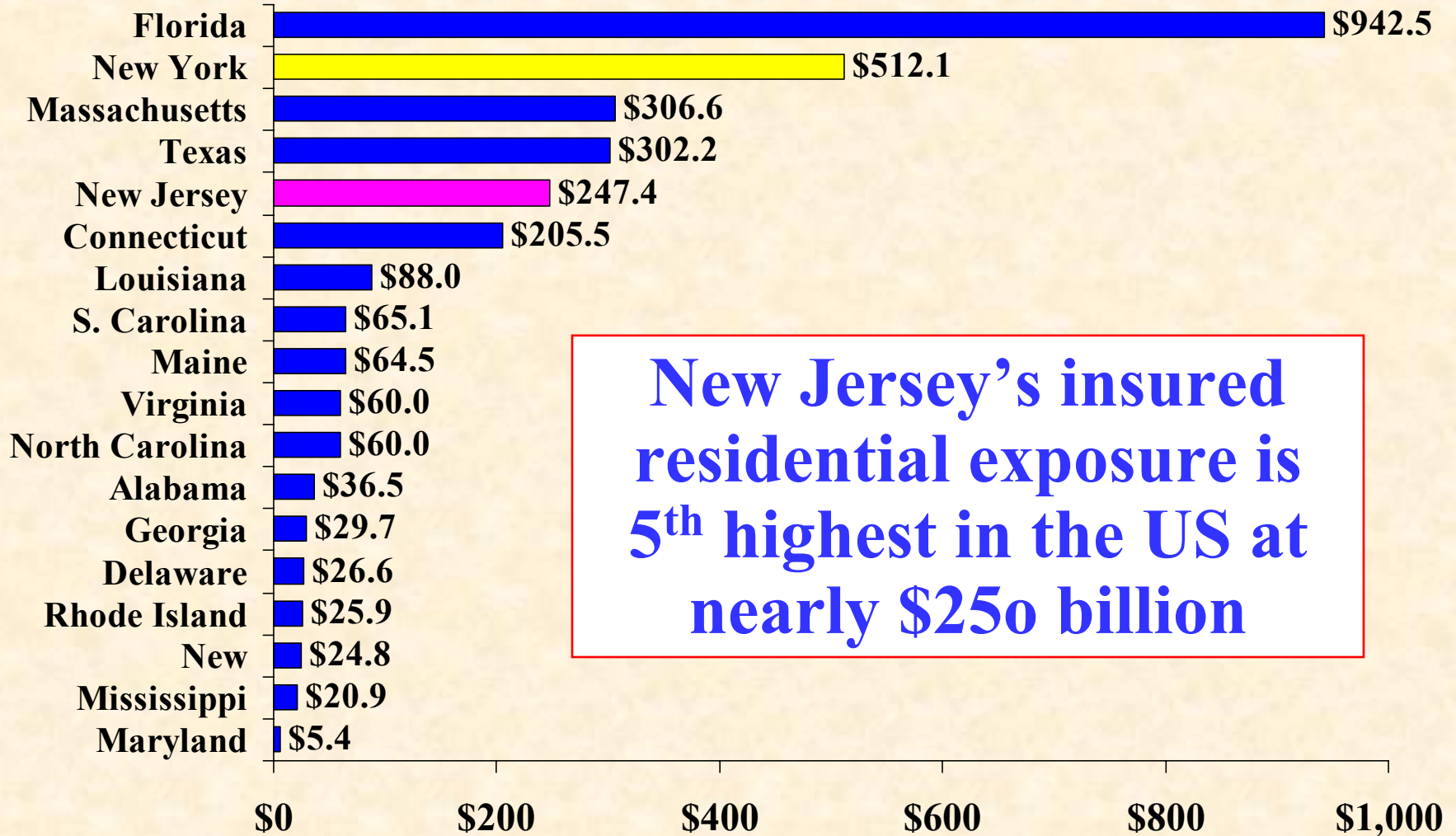
# *Insured Coastal Exposure as a % of Statewide Insured Exposure (2004, \$ Billions)*



**After FL, many  
Northeast states have  
among the highest  
coastal exposure as a  
share of all insured  
exposure in the state.**



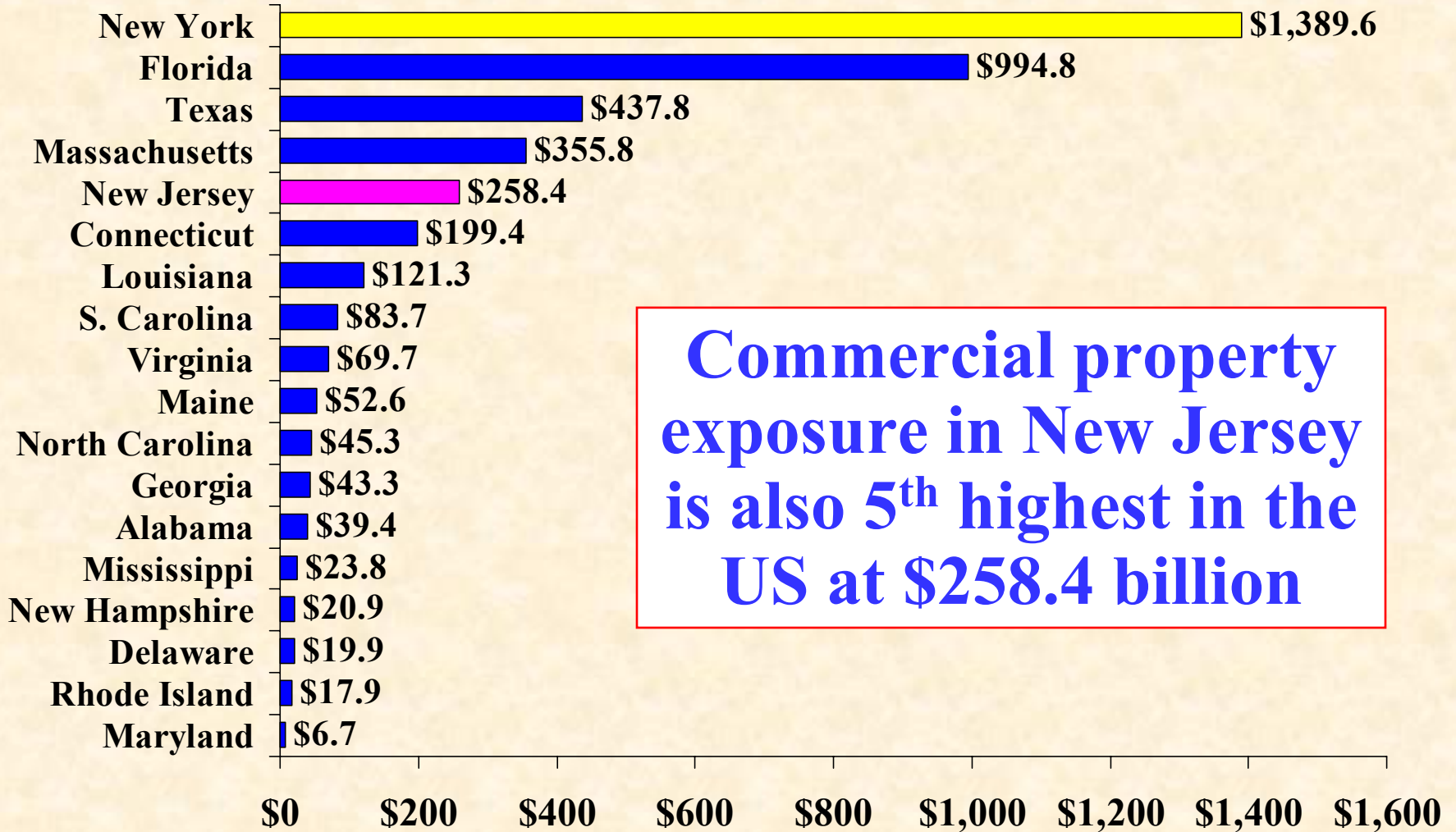
# *Value of Insured Residential Coastal Exposure (2004, \$ Billions)*







# *Value of Insured Commercial Coastal Exposure (2004, \$ Billions)*





# CATASTROPHIC LOSS & INSURER IMPAIRMENT

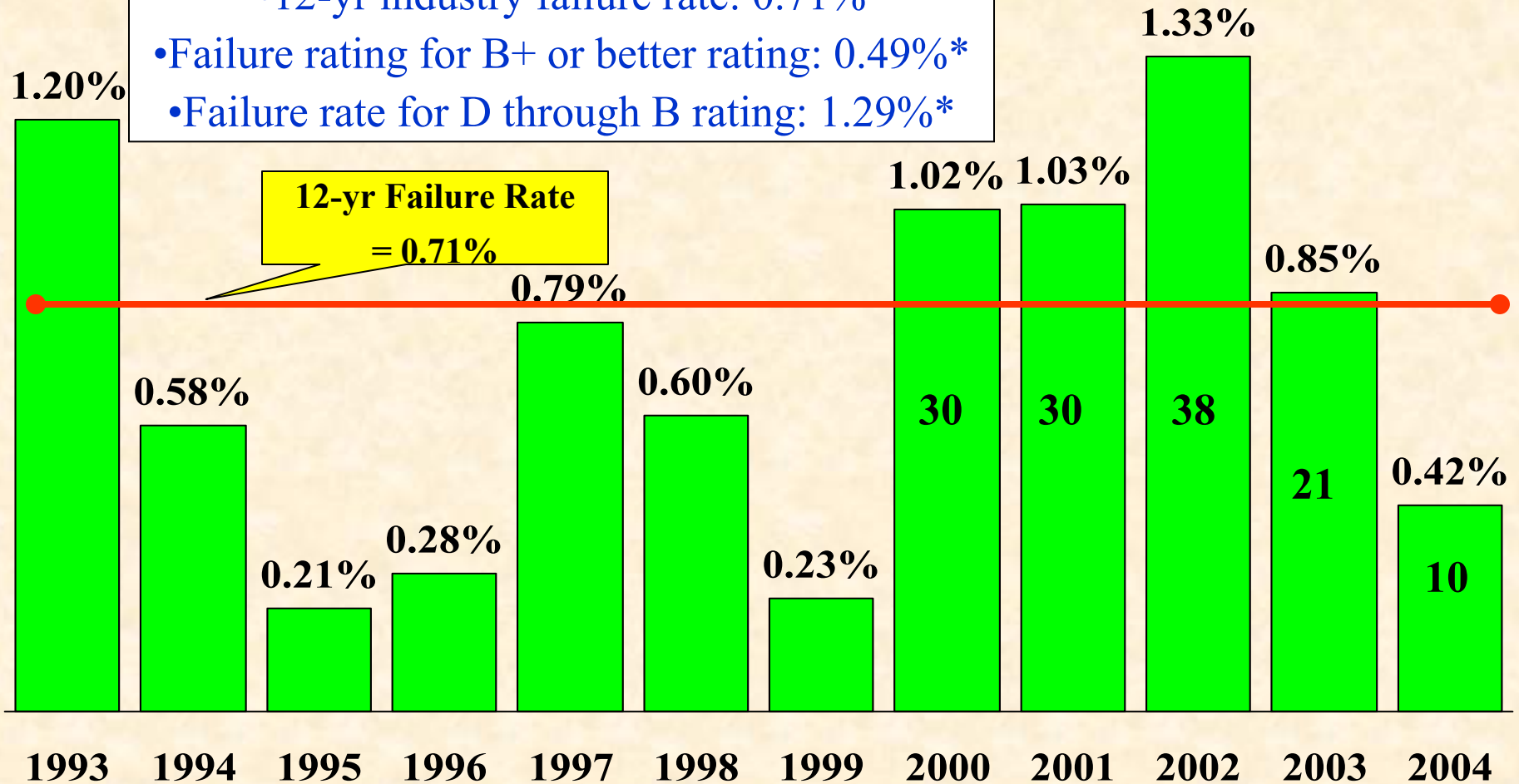
*Is a Fund Needed to Keep  
**iii** Insurers Solvent?*

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# *P/C Company Insolvency Rates, 1993 to 2004*

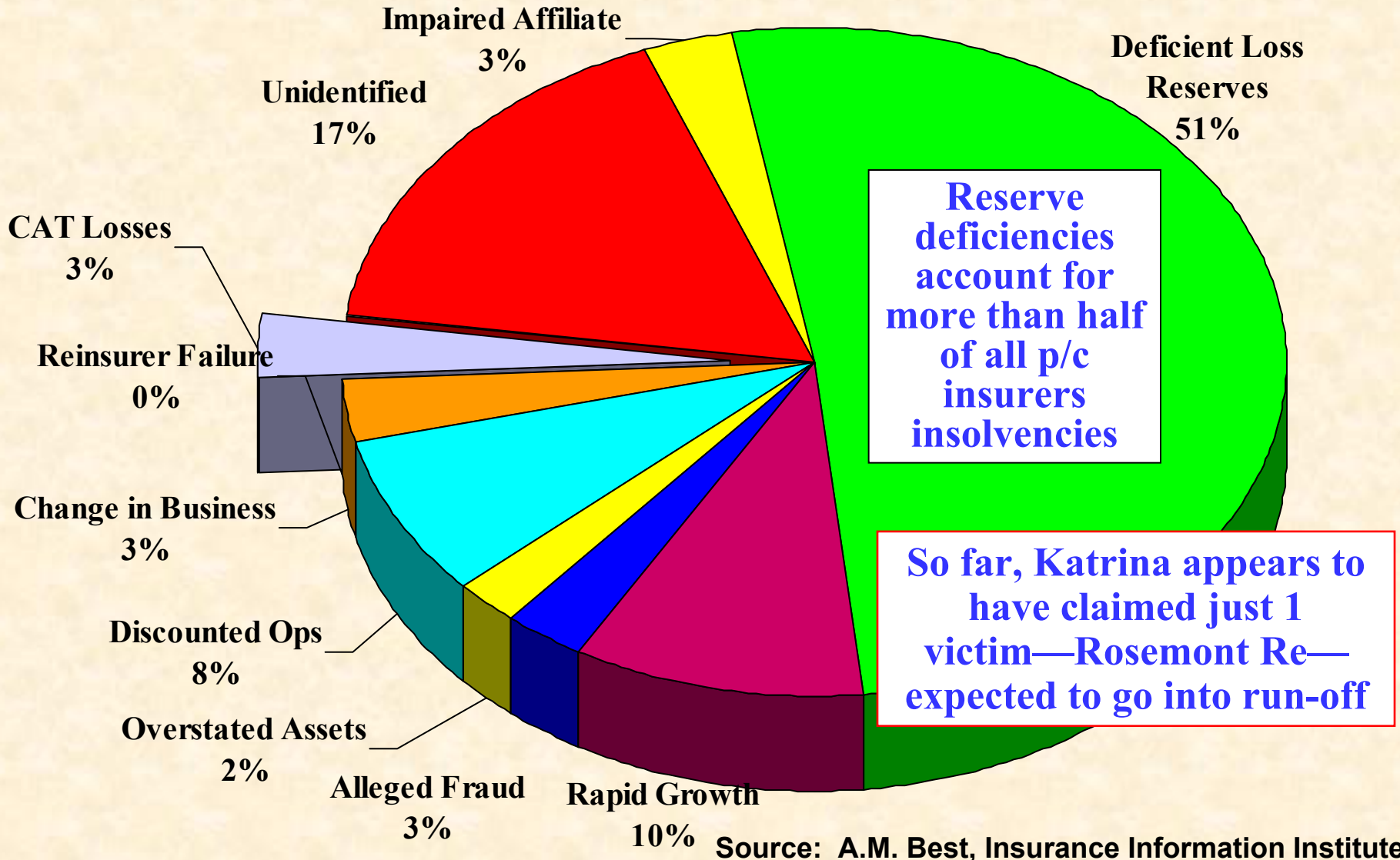
- Insurer insolvencies are decreasing
- 12-yr industry failure rate: 0.71%
- Failure rating for B+ or better rating: 0.49%\*
- Failure rate for D through B rating: 1.29%\*





# Reason for P/C Insolvencies

(218 Insolvencies, 1993-2002)

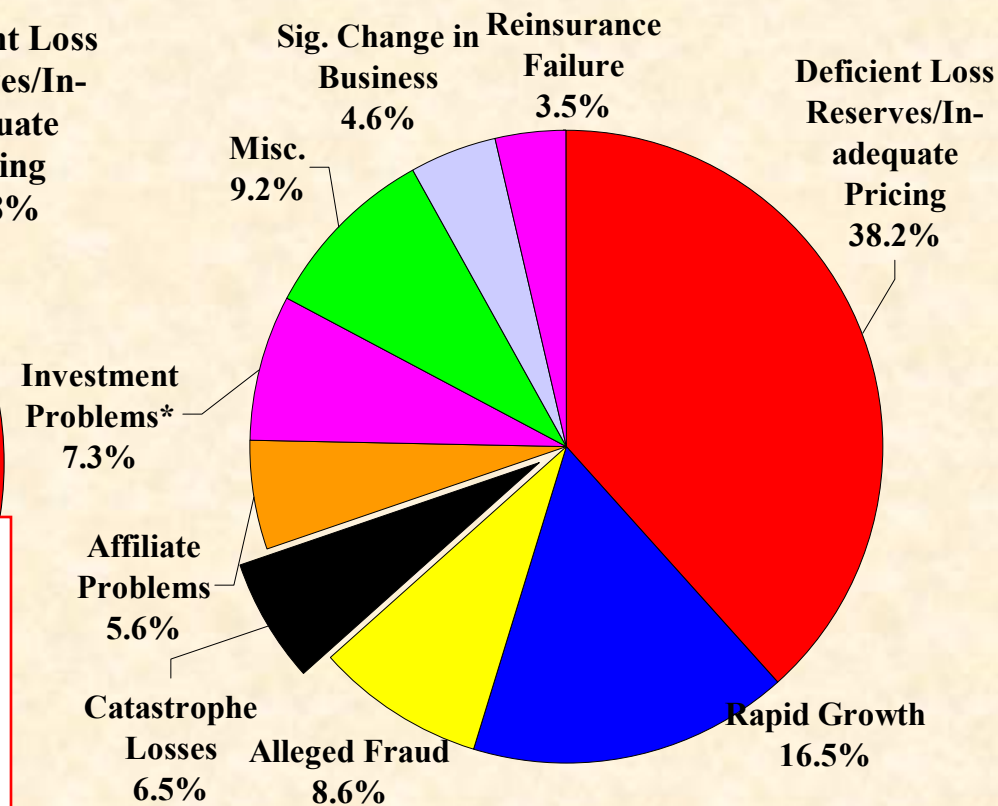
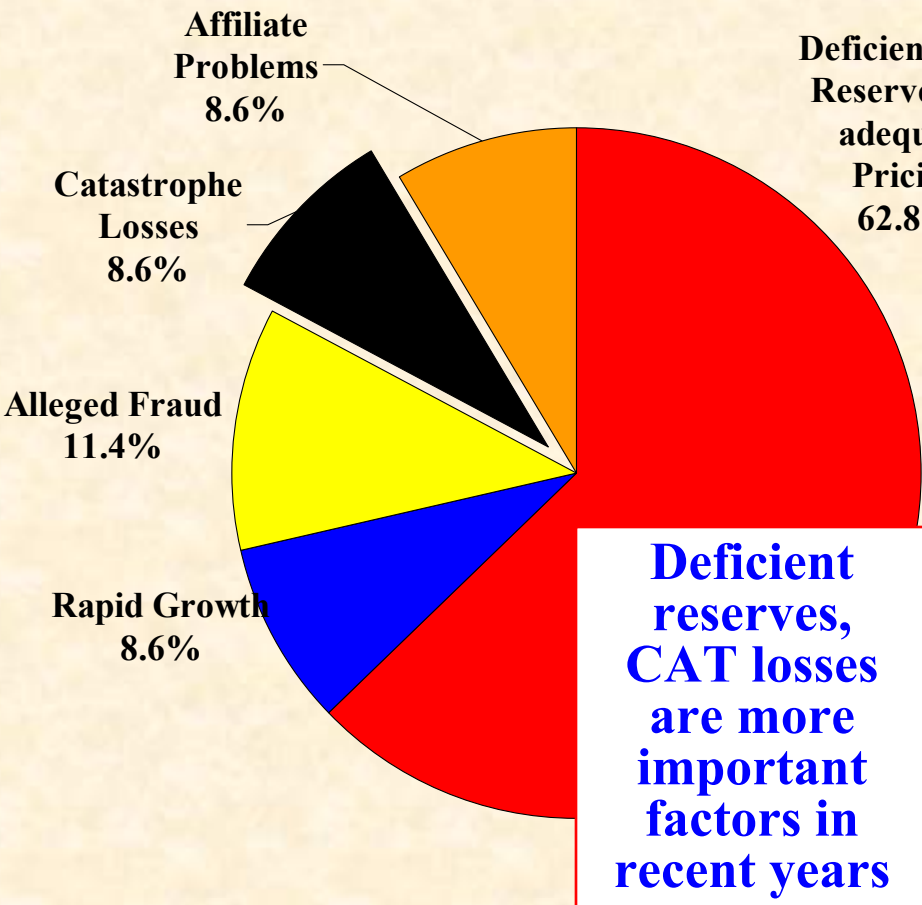




# Reasons for US P/C Insurer Impairments, 1969-2005

**2003-2005**

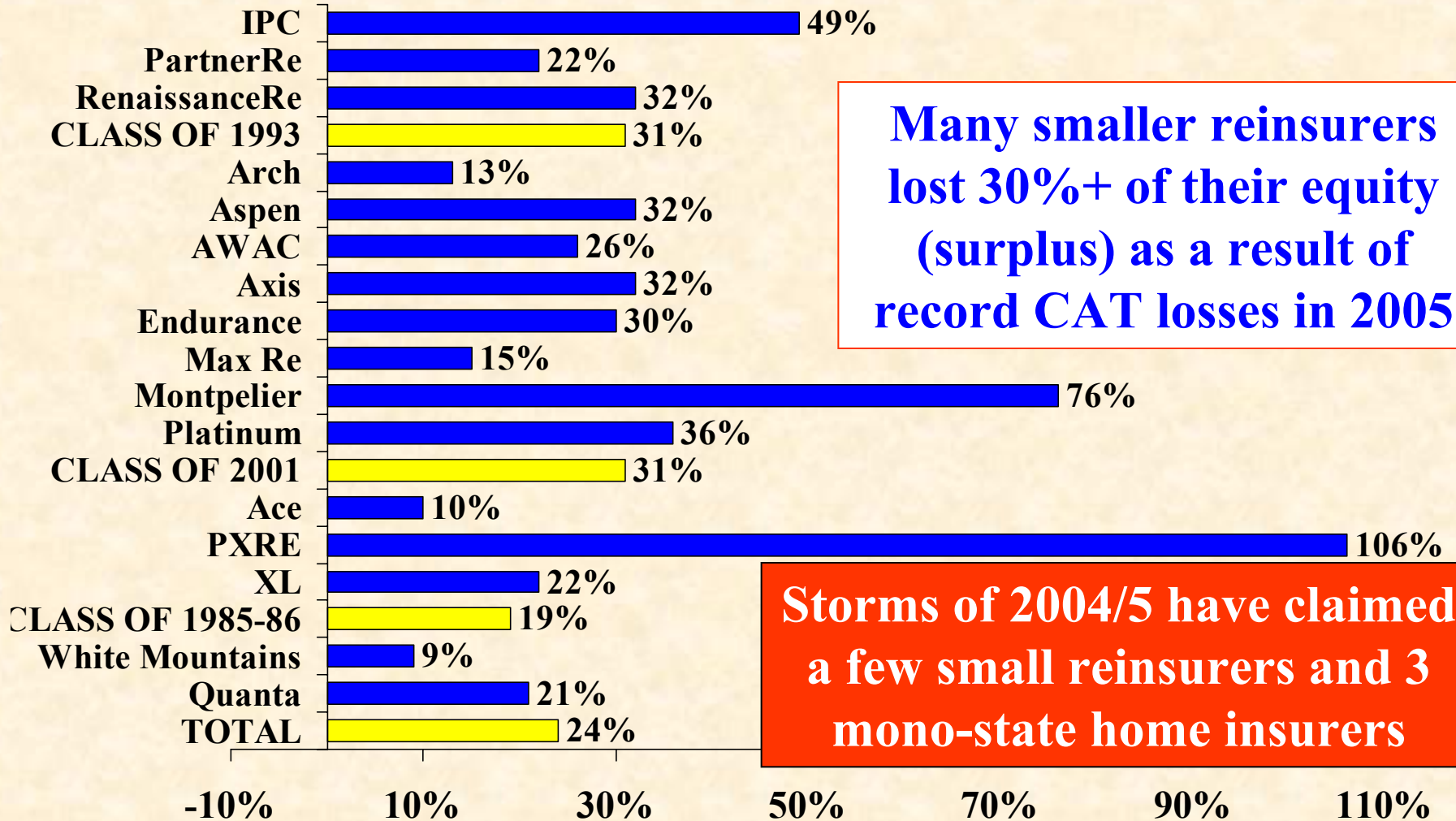
**1969-2005**



\*Includes overstatement of assets.



# *FY2005 Loss as a Percentage of First Half 2005 Shareholder Equity\**





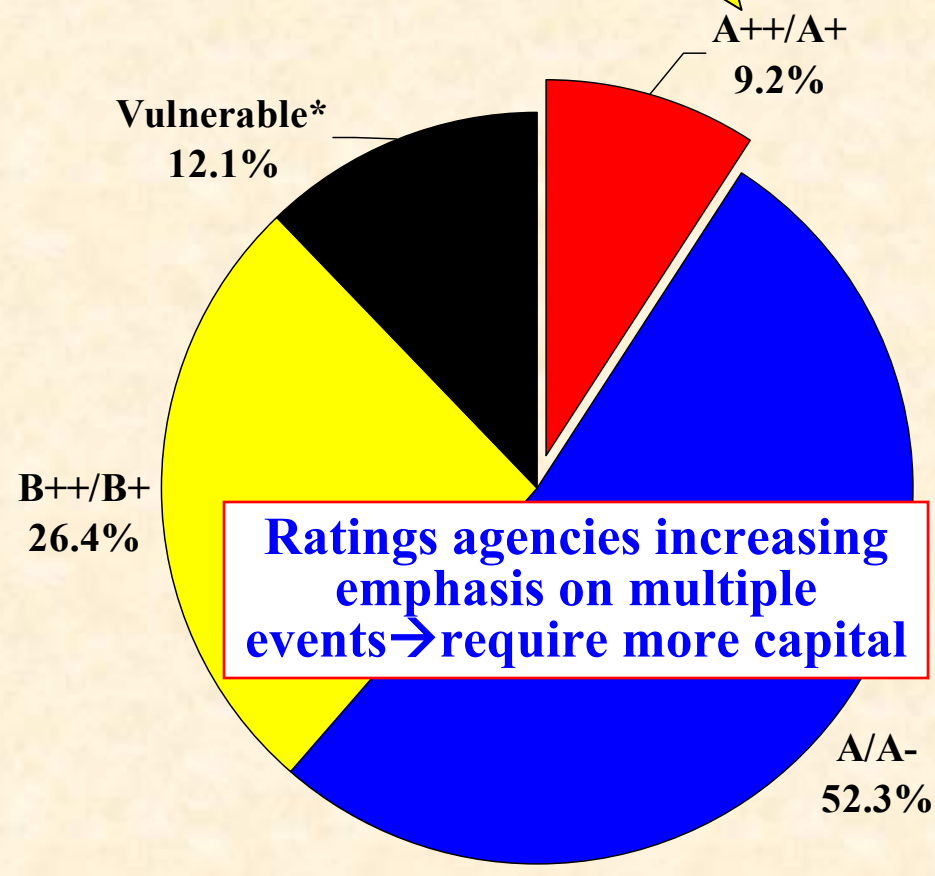
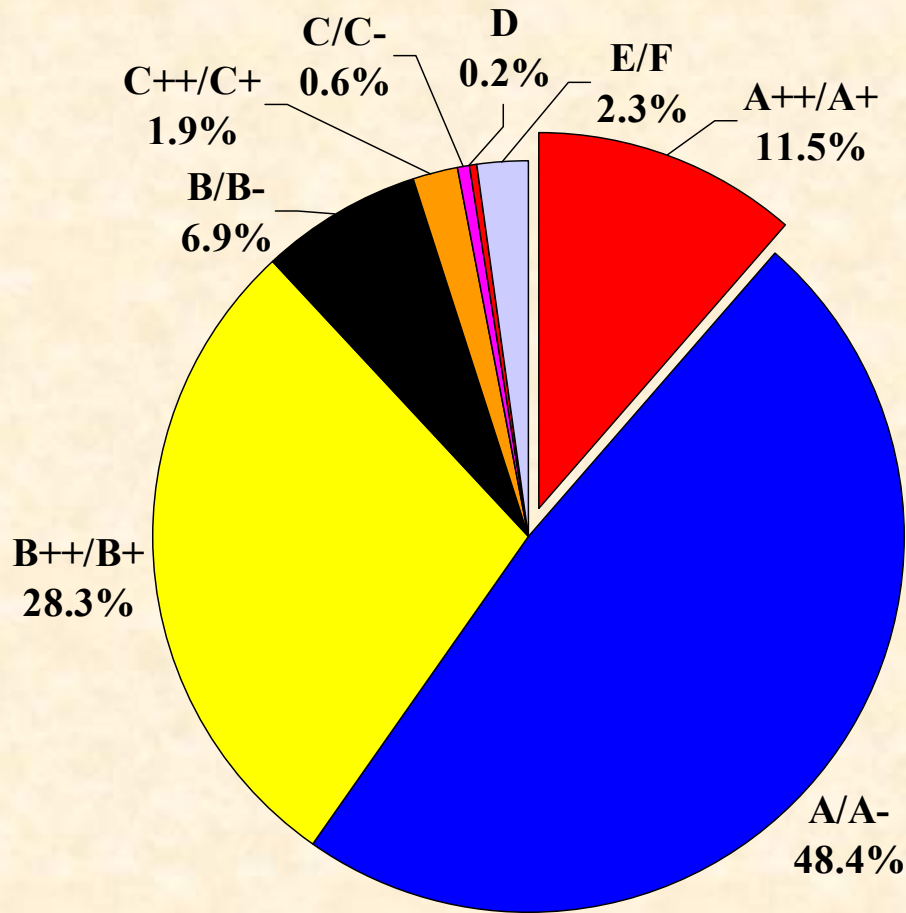


# Historical Ratings Distribution, US P/C Insurers, 2000 vs. 2005

**2000**

**2005**

**A++/A+  
shrinkage**



Source: A.M. Best: *Rating Downgrades Slowed but Outpaced Upgrades for Fourth Consecutive Year*, Special Report, November 8, 2004 for 2000; 2006 *Review & Preview* for 2005 distribution. \*Ratings 'B' and lower.





# Ratings Agencies Tightening Requirements for CATs

## 2006 SRQ CAT Model Reqs.\*

- All Property Exposure
- Auto Physical Damage
- Reinsurance Assumed
- Pools & Assessments
- All Flood Exposure
- WC Losses from Quake
- Fire Following
- Storm Surge
- Demand Surge
- Secondary Uncertainty

**Best currently estimates PML for 100-yr. wind & 250-yr. quake to determine capital adequacy**

ALSO “A.M. Best will perform additional “stress-tested” risk-adjusted capital analysis for a second event in order to determine the potential financial condition of an entity post a severe event.”

**IMPLICATION: Some insurers may be required to carry more capital to maintain the same rating.**

\*SRQ = Supplemental Rating Questionnaire

Source: A.M. Best Review & Preview, January 2006.

# P/C FINANCIAL OVERVIEW

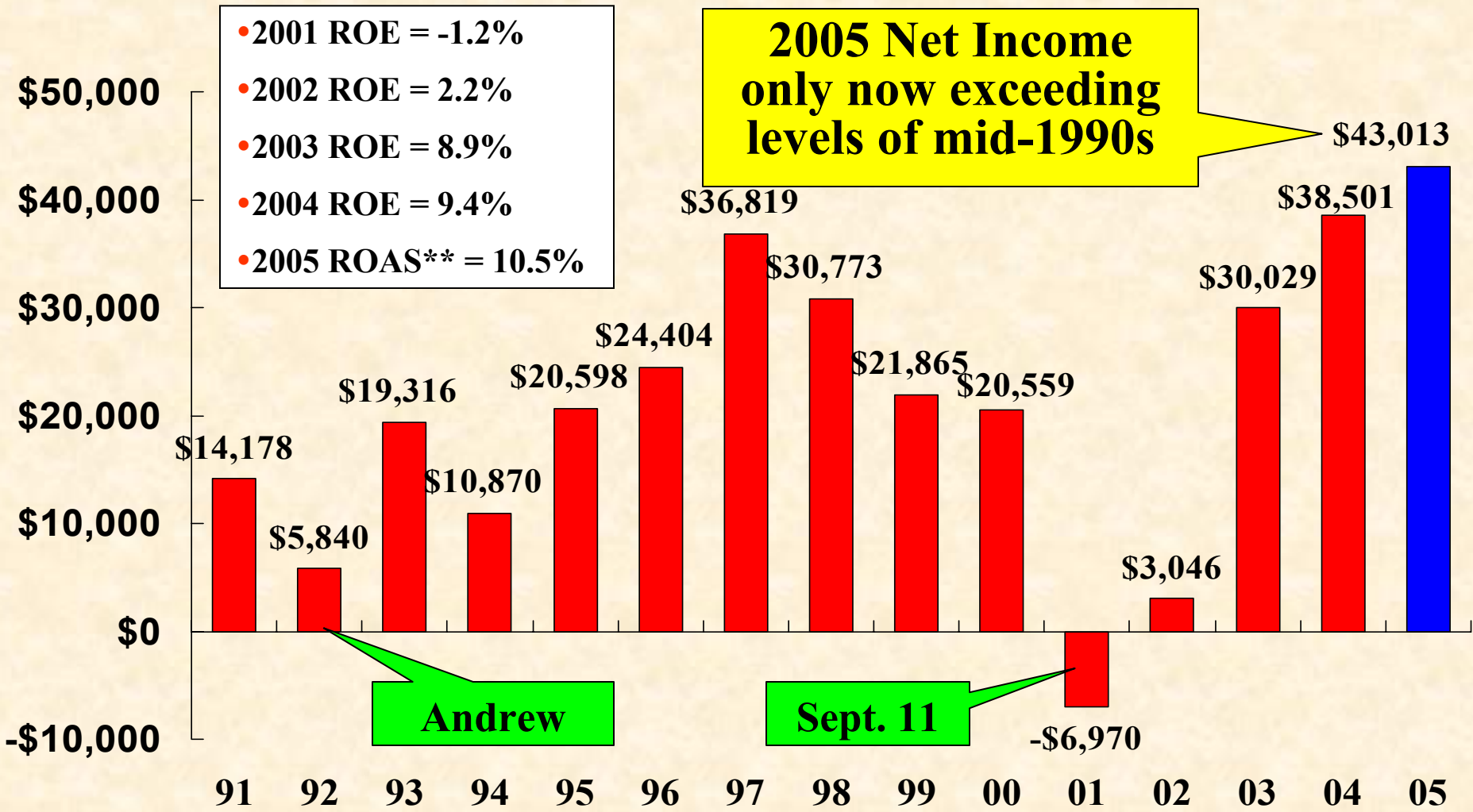
*Do Insurers Need a  
iii Shock Absorber?*

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# *P/C Net Income After Taxes*

## *1991-2005 (\$ Millions)*



- 2001 ROE = -1.2%
- 2002 ROE = 2.2%
- 2003 ROE = 8.9%
- 2004 ROE = 9.4%
- 2005 ROAS\*\* = 10.5%

**2005 Net Income only now exceeding levels of mid-1990s**

**Andrew**

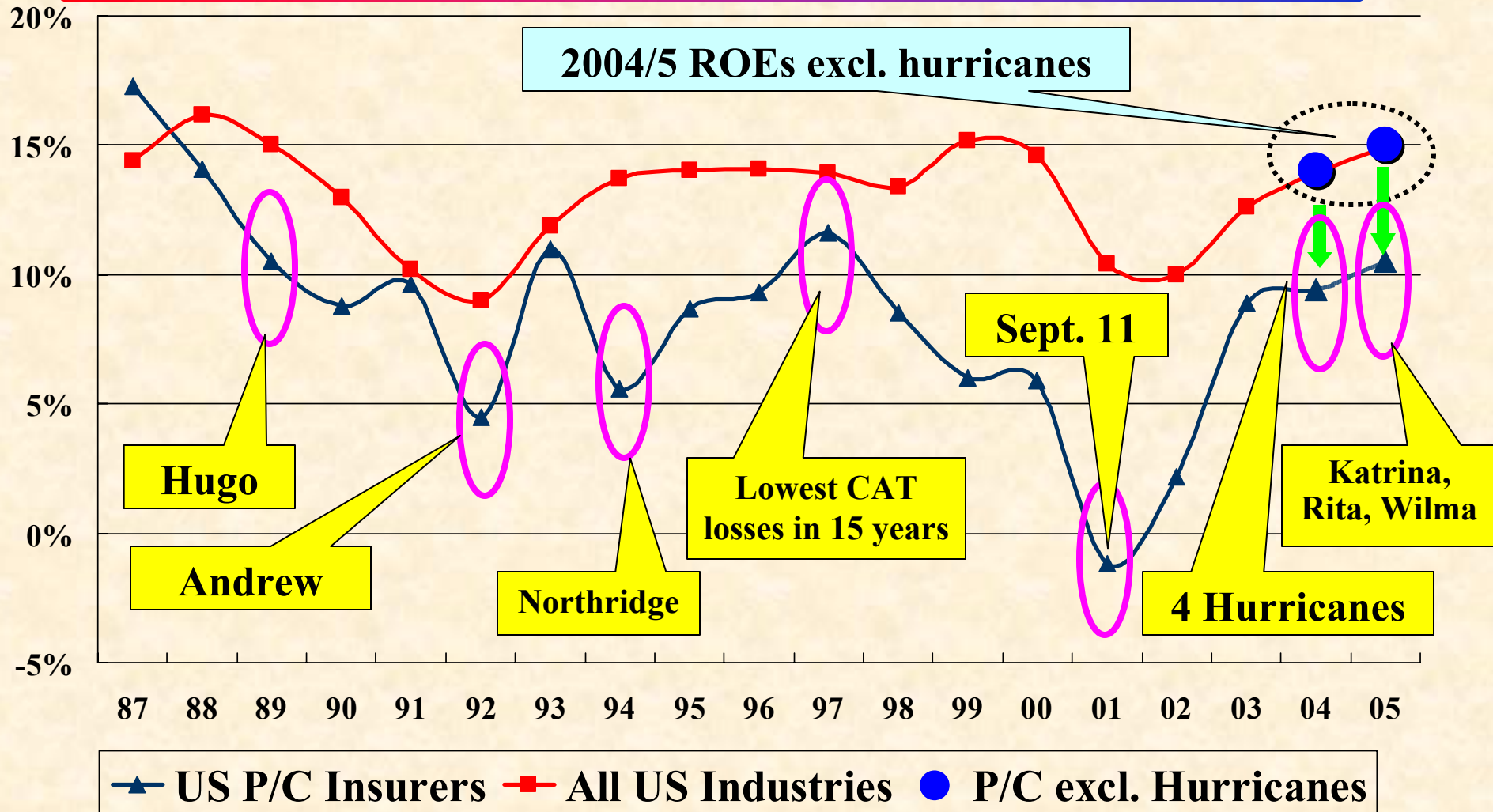
**Sept. 11**

\*ROE figures are GAAP; \*\*Return on avg. surplus. ROAS = 9.8% after adj. for one-time special dividend paid by the investment subsidiary of one company. Sources: A.M. Best, ISO, Insurance Information Inst.



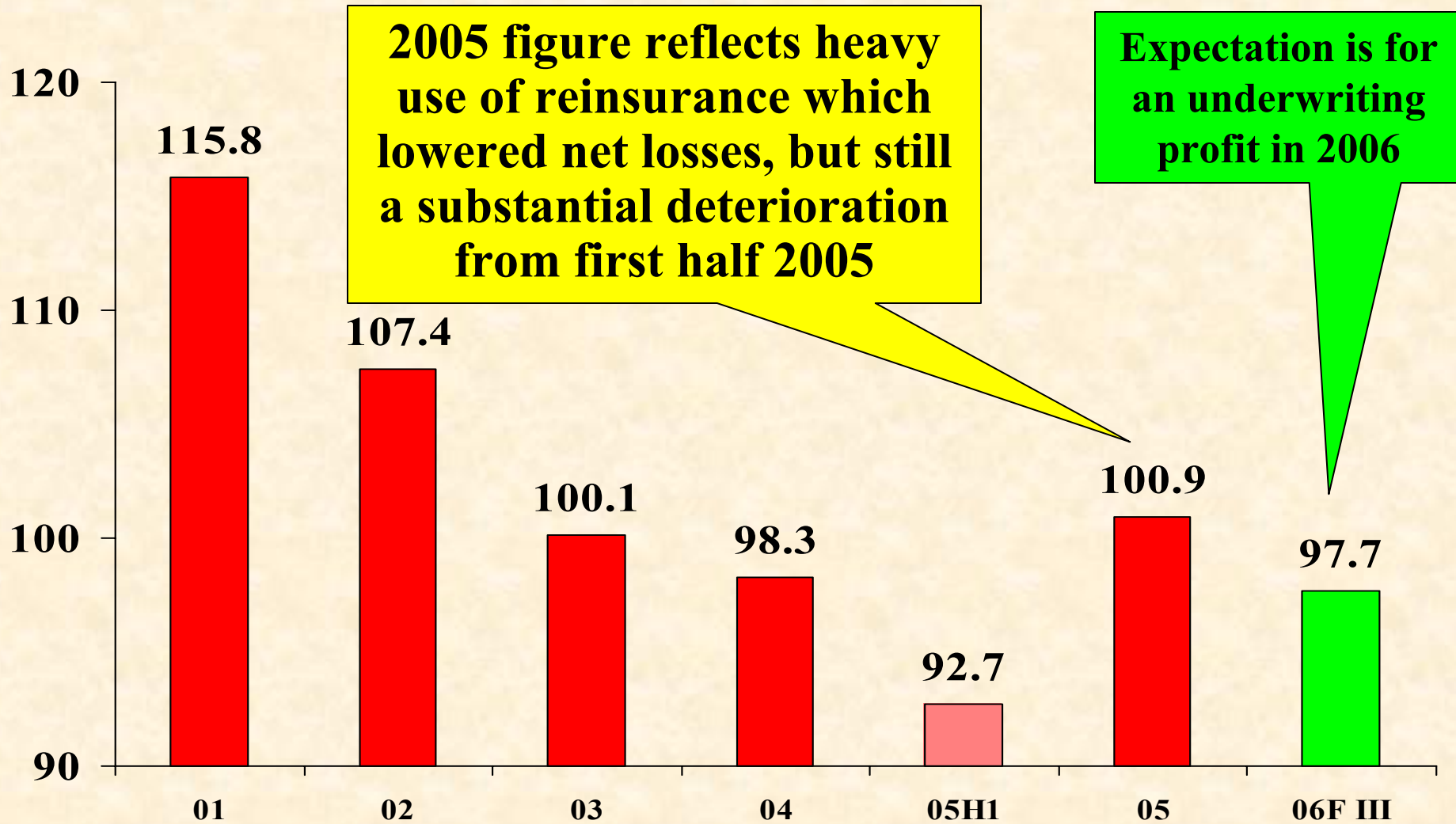
# ROE: P/C vs. All Industries

## 1987–2005





# *P/C Industry Combined Ratio*



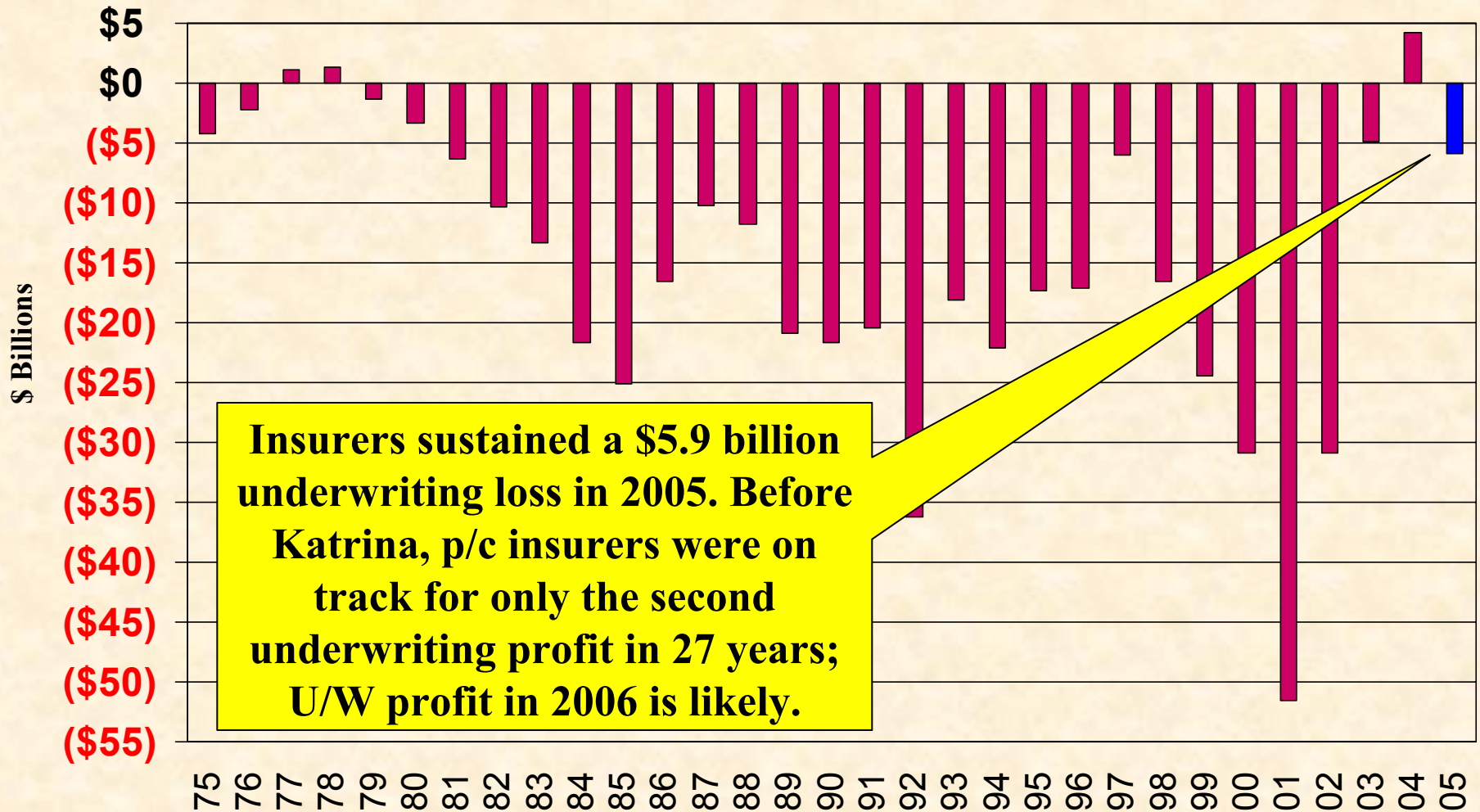
Sources: A.M. Best; ISO, III. \*III forecast for 2006





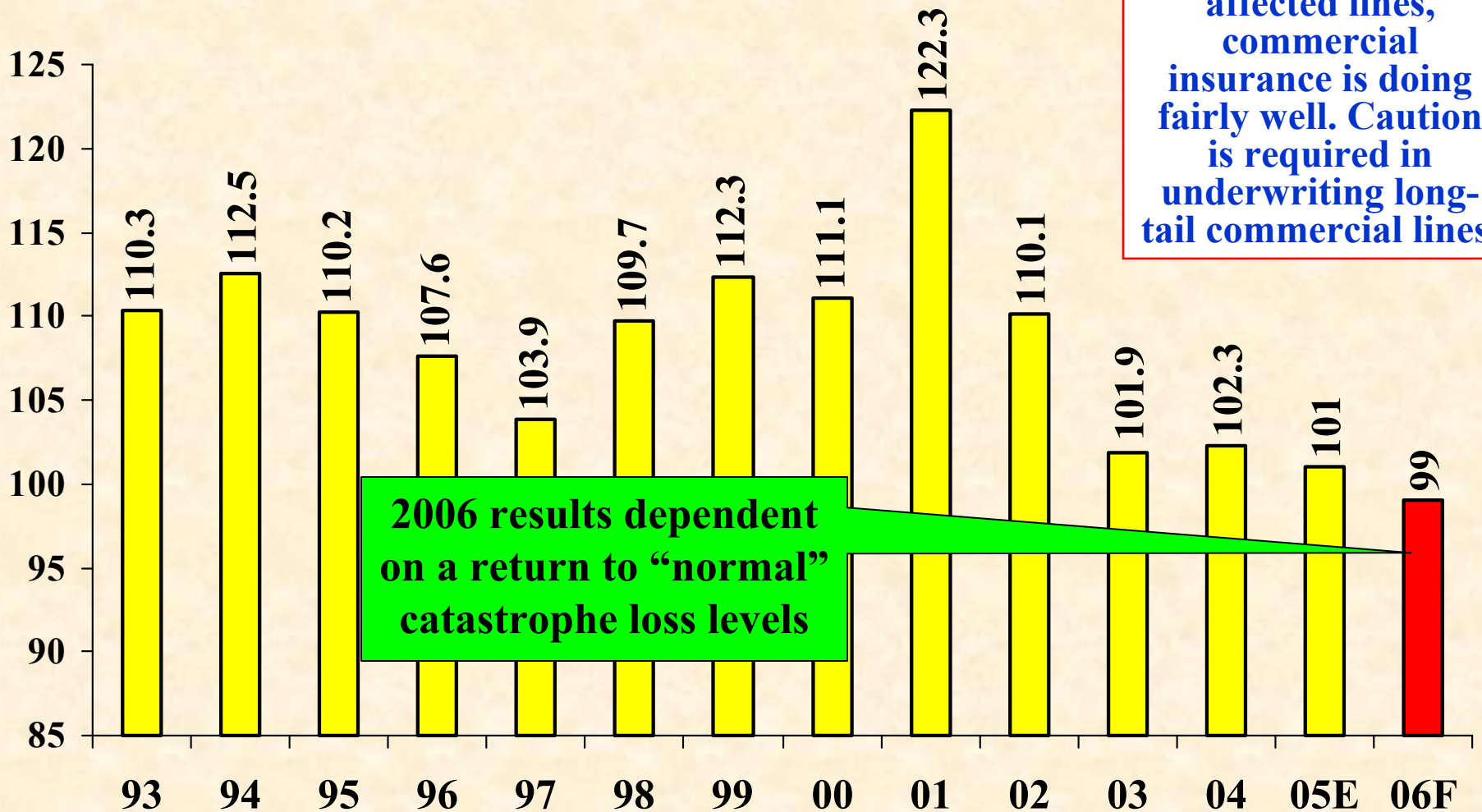
# *Underwriting Gain (Loss)*

## *1975-2005*





# Commercial Lines Combined Ratio, 1993-2006E\*



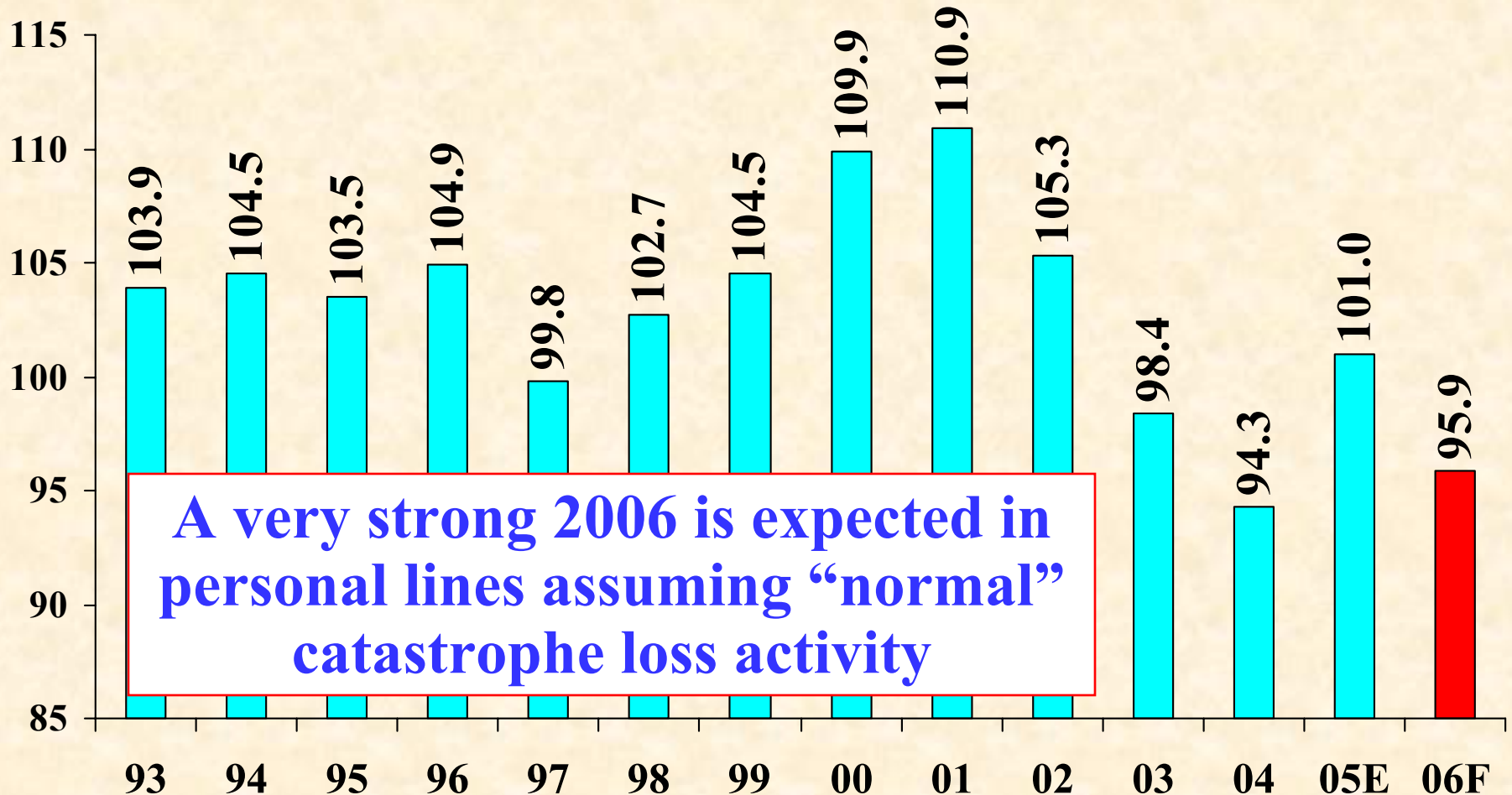
Source: A.M. Best; Insurance Information Institute

\*Fitch estimate for 2005. Actual 1H05 combined ratio all lines was 92.7.



# *Personal Lines*

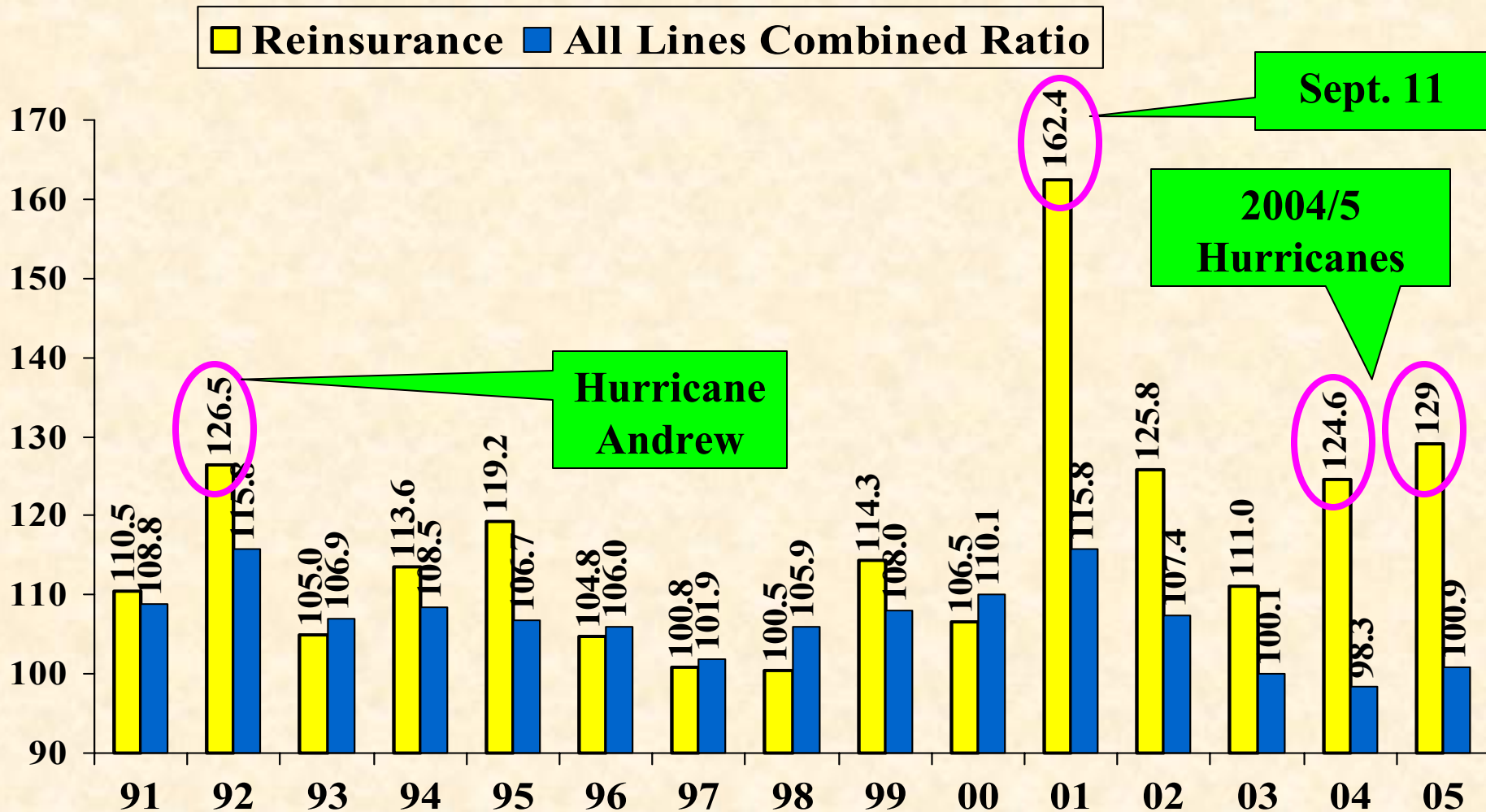
## *Combined Ratio, 1993-2006E*





# Combined Ratio:

## Reinsurance vs. P/C Industry





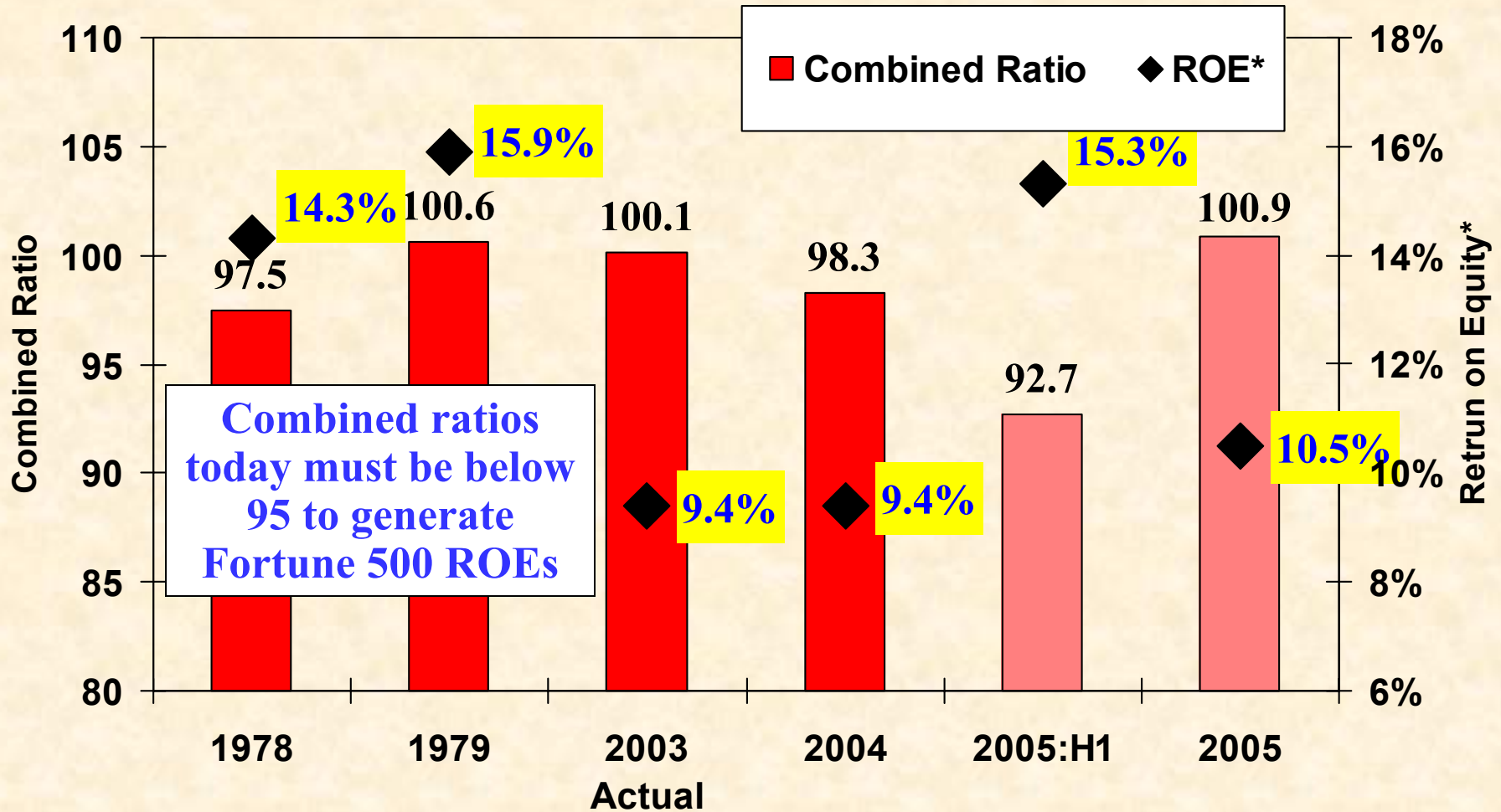
# *Distribution of Katrina Losses by Market (\$Billions)*

<b>Market</b>	<b>Percentage</b>	<b>Amount</b>
Insurers	47% - 53%	\$18.8 - \$28.9
Reinsurers	52% - 44%	\$20.7 - \$24.0
Capital Markets	1% - 3%	\$0.4 - \$1.6
<b>TOTAL</b>	<b>100%</b>	<b>\$39.9 - \$54.6</b>





# *A 100 Combined Ratio Isn't What it Used to Be: 95 is Where It's At*

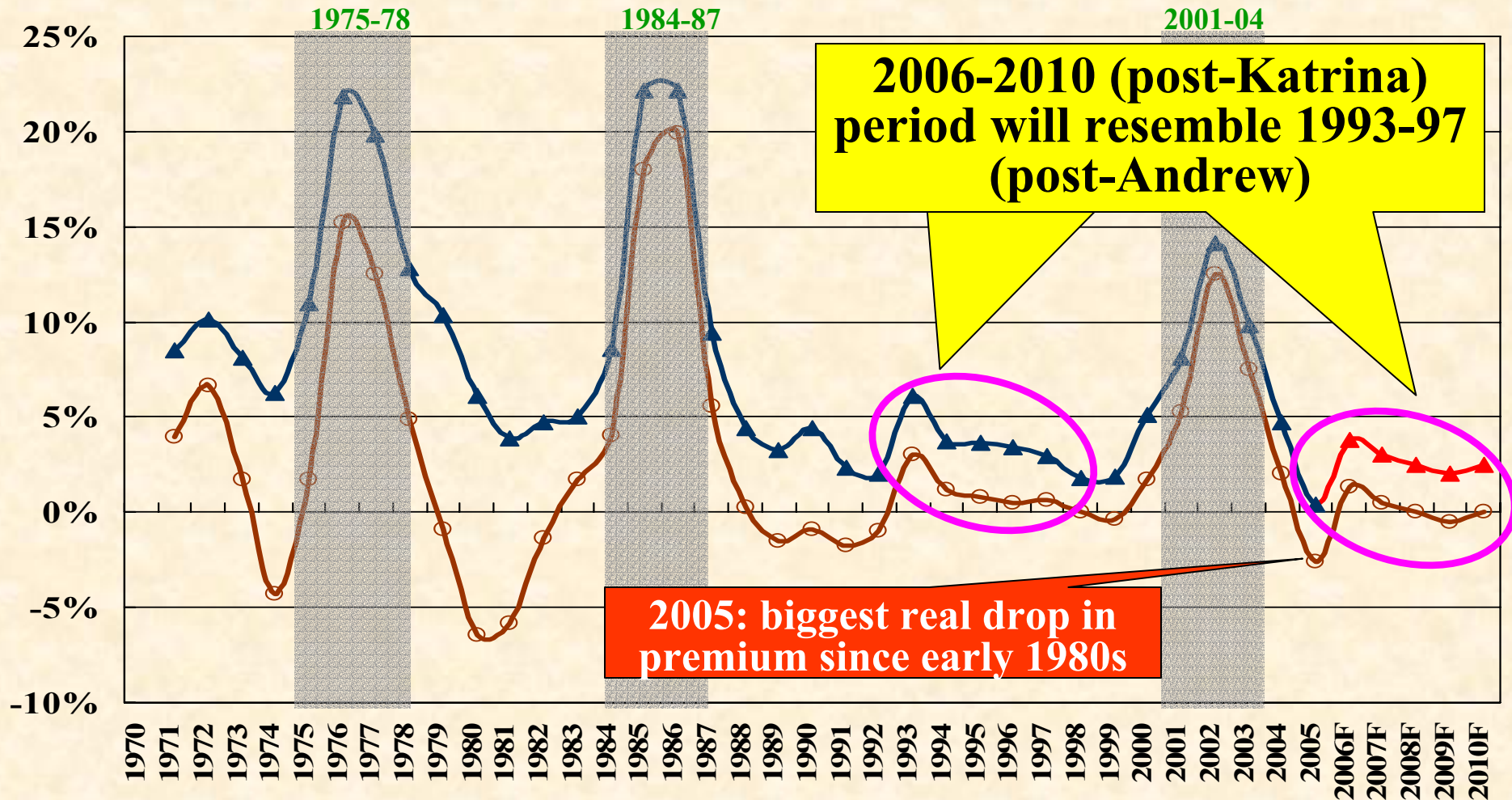


\* 2005 figure is return on average statutory surplus.

Source: Insurance Information Institute from A.M. Best and ISO data.



# Strength of Recent Hard Markets by NWP Growth\*

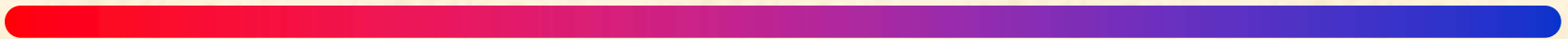


Note: Shaded areas denote hard market periods.  
Source: A.M. Best, Insurance Information Institute

\*2006-10 figures are ILL forecasts/estimates. 2005 growth of 0.4% equates to 1.8% after adjustment for a special one-time transaction between one company and its foreign parent.

# The 2006 Hurricane Season:

*Preview to Disaster?*





# Outlook for 2006 Hurricane Season

	Average*	2005	2006F
Named Storms	9.6	26	17
Named Storm Days	49.1	115.5	85
Hurricanes	5.9	14	9
Hurricane Days	24.5	47.5	45
Intense Hurricanes	2.3	7	5
Intense Hurricane Days	13	7	13
Net Tropical Cyclone Activity	100%	275%	195%

\*Average over the period 1950-2000.

Source: Dr. William Gray, Colorado State University, May 31, 2006.





# *Probability of Major Hurricane Landfall (CAT 3, 4, 5) in 2006*

	Average*	2006F
Entire US Coast	52%	82%
US East Coast Including Florida Peninsula	31%	69%
Gulf Coast from FL Panhandle to Brownsville, TX	30%	38%
<b><i>ALSO...Above-Average Major Hurricane Landfall Risk in Caribbean for 2006</i></b>		

\*Average over past century.

Source: Dr. William Gray, Colorado State University, May 31, 2006.



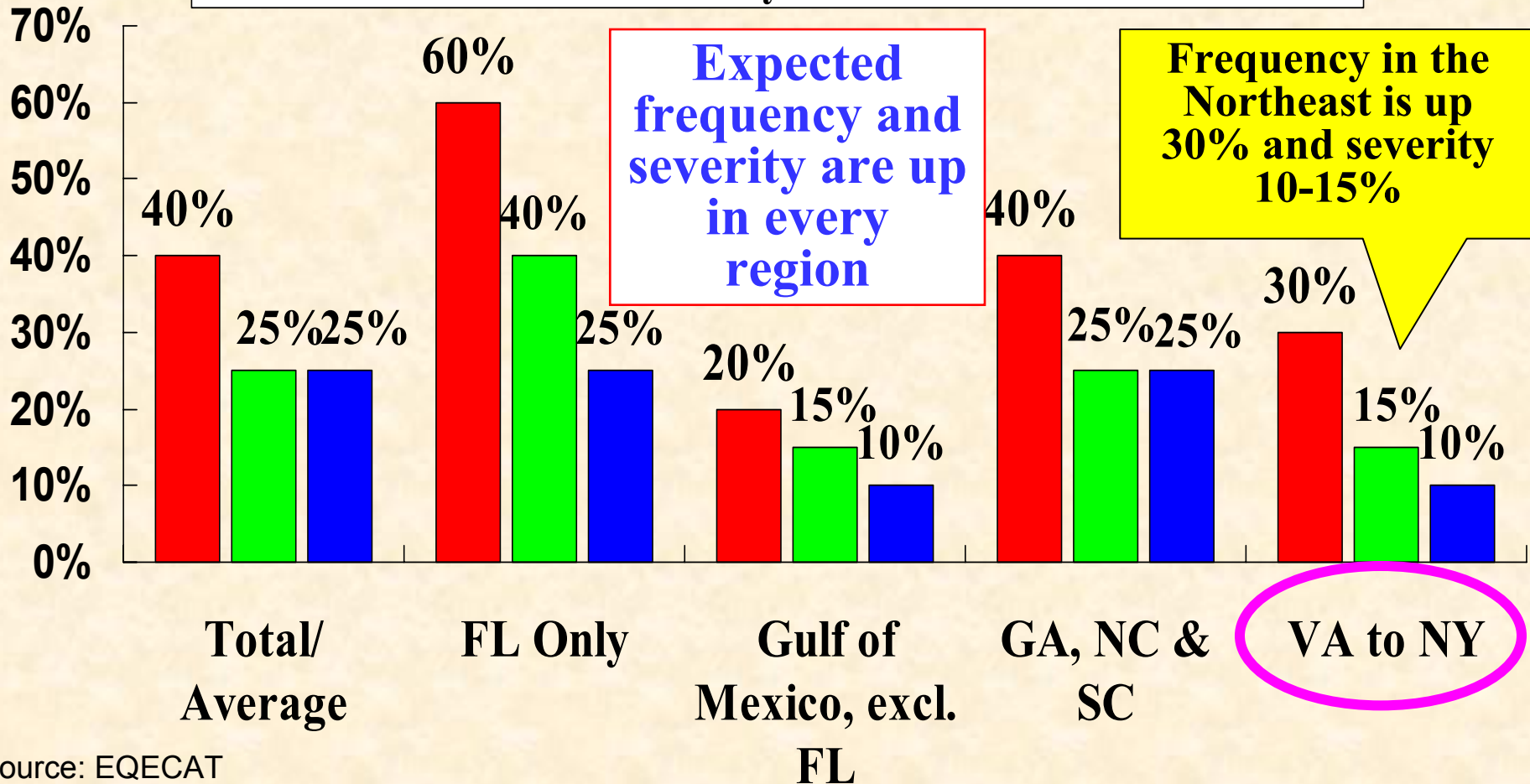


# *Probability of Major Hurricane Landfall (CAT 3, 4, 5) in 2006*

	<b>NOAA</b>	<b>CSU</b>	<b>2005 Actual</b>
<b>Number Named Storms</b>	13-16	17	28
<b>Number of Hurricanes</b>	8-10	9	15
<b>Number of Major Hurricanes (Category 3+)</b>	4-6	5	7

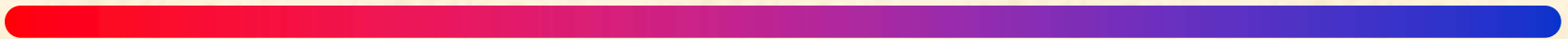
# *CAT Models for 2006 Show Increase in Hurricane Frequency & Severity*

- Increase in Frequency
- Increase in Severity: 1-in-50 Year Event
- Increase in Severity: 1-in-100 Year Event



# Hurricane Risk in New Jersey

*Is it Real?*

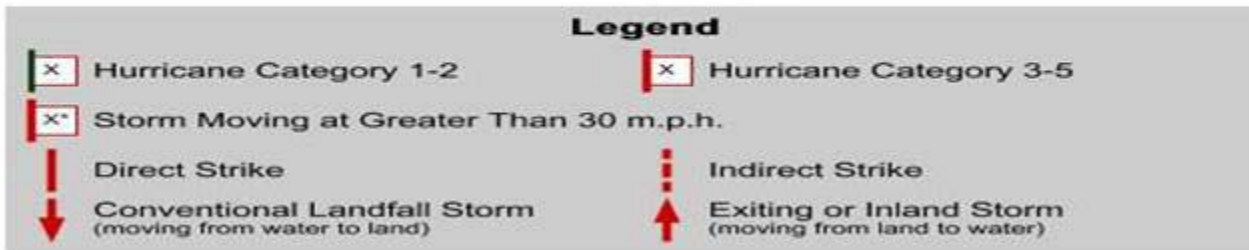
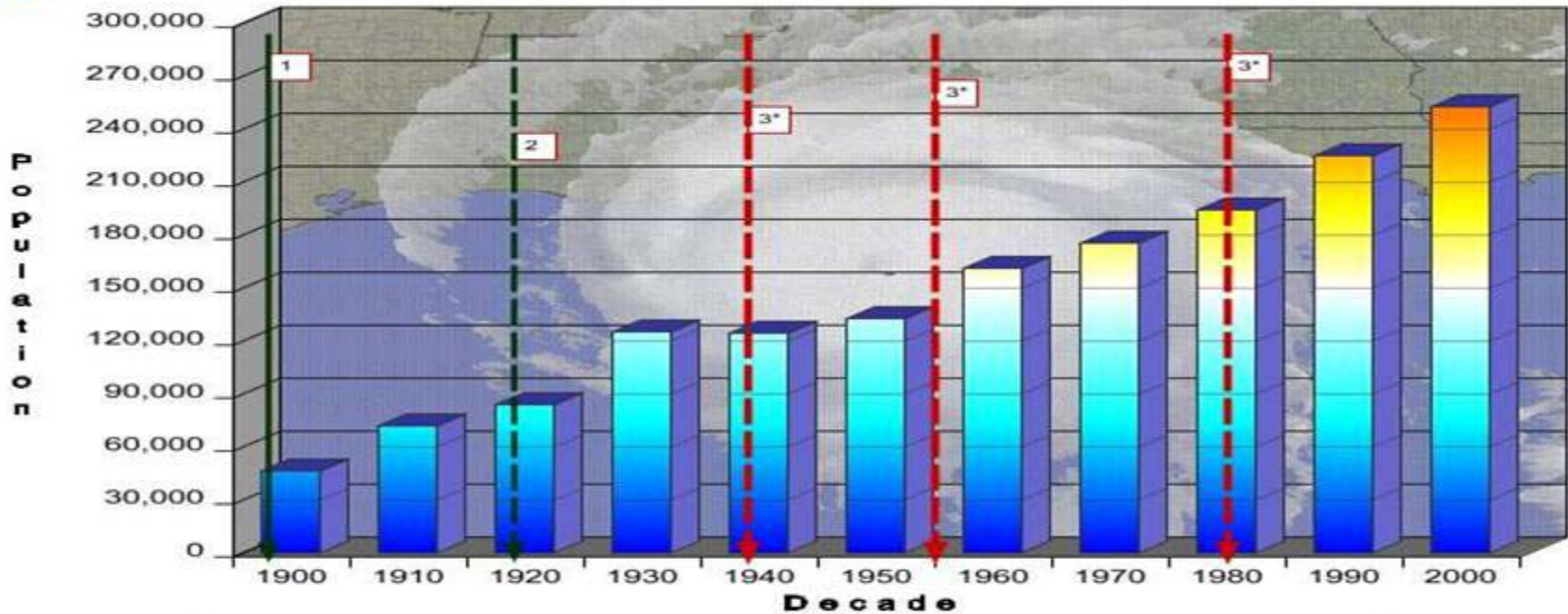




# Historical Hurricane Strikes in Atlantic County, NJ, 1900-2002



## Atlantic, NJ



**NOTE:** Population values may be missing in some counties, particularly for earlier periods. This is most often attributable to the fact that the county had not yet been established.

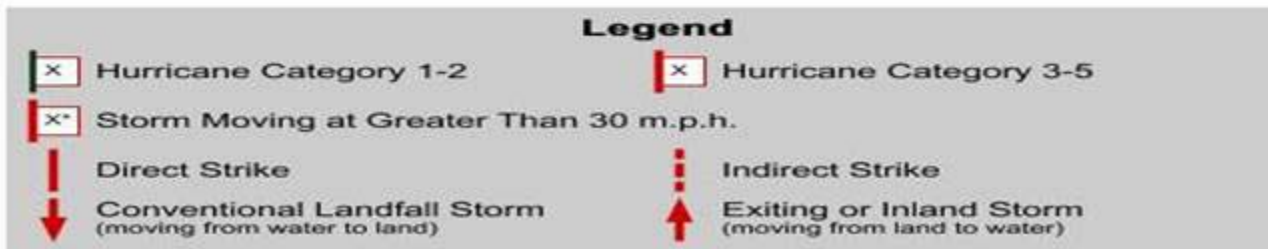
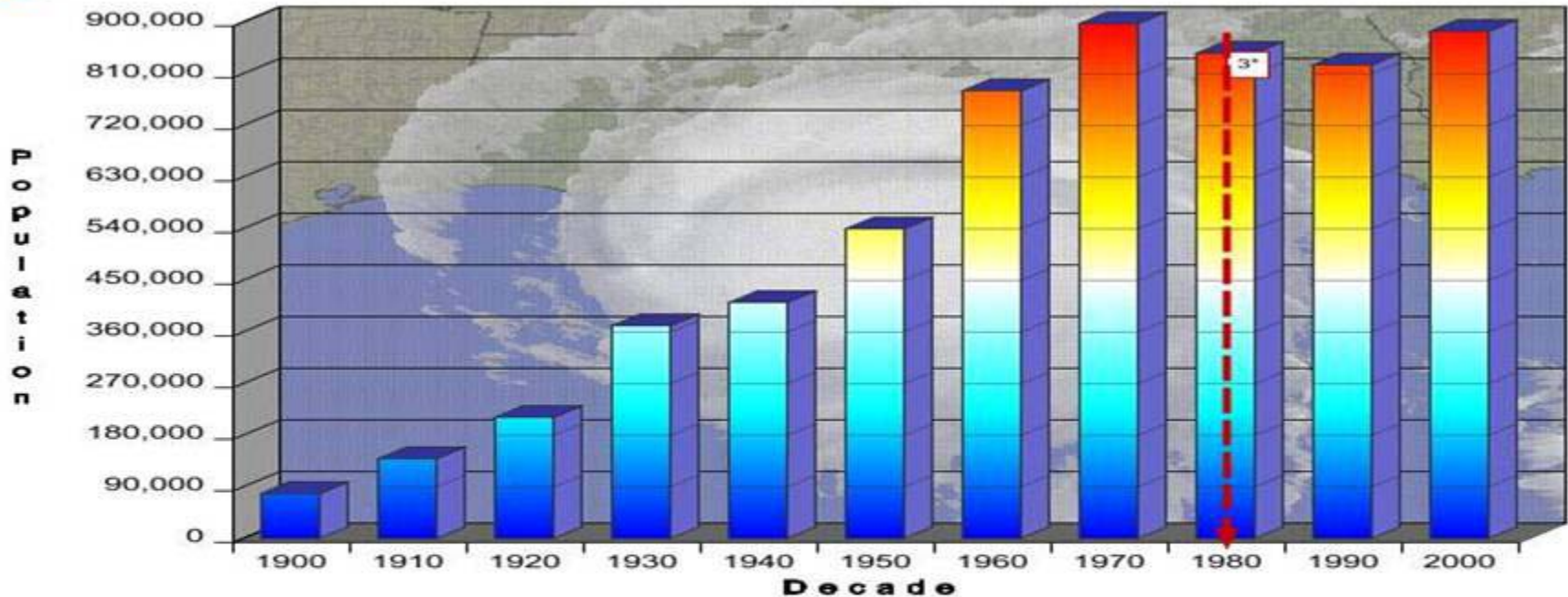




# Historical Hurricane Strikes in Bergen County, NJ, 1900-2002



## Bergen, NJ



**NOTE:** Population values may be missing in some counties, particularly for earlier periods. This is most often attributable to the fact that the county had not yet been established.

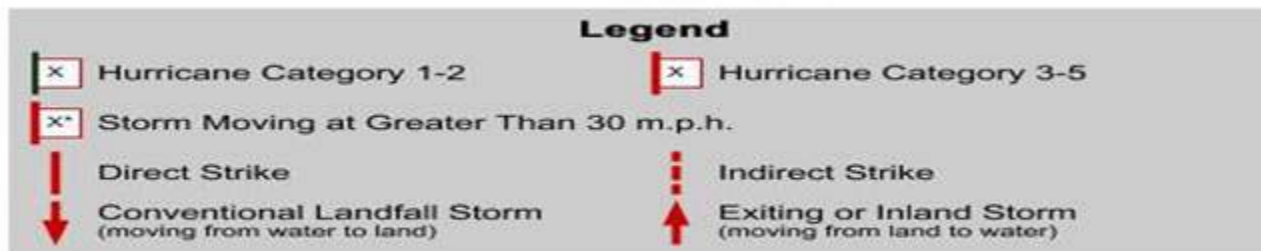
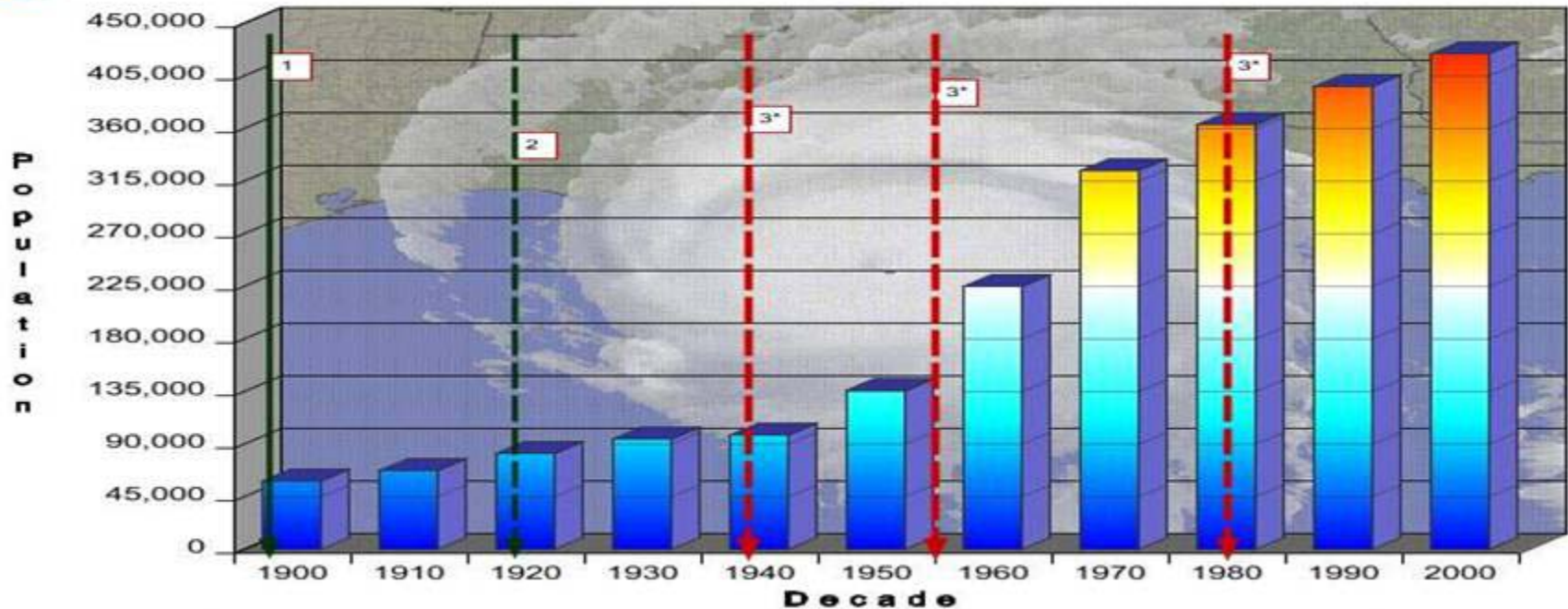




# Historical Hurricane Strikes in Burlington County, NJ, 1900-2002



## Burlington, NJ



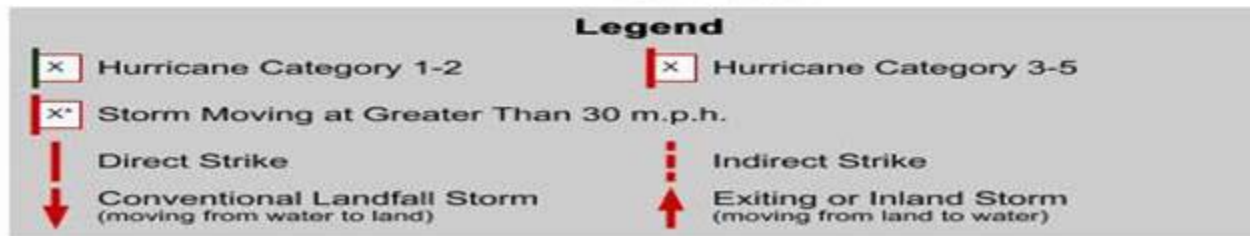
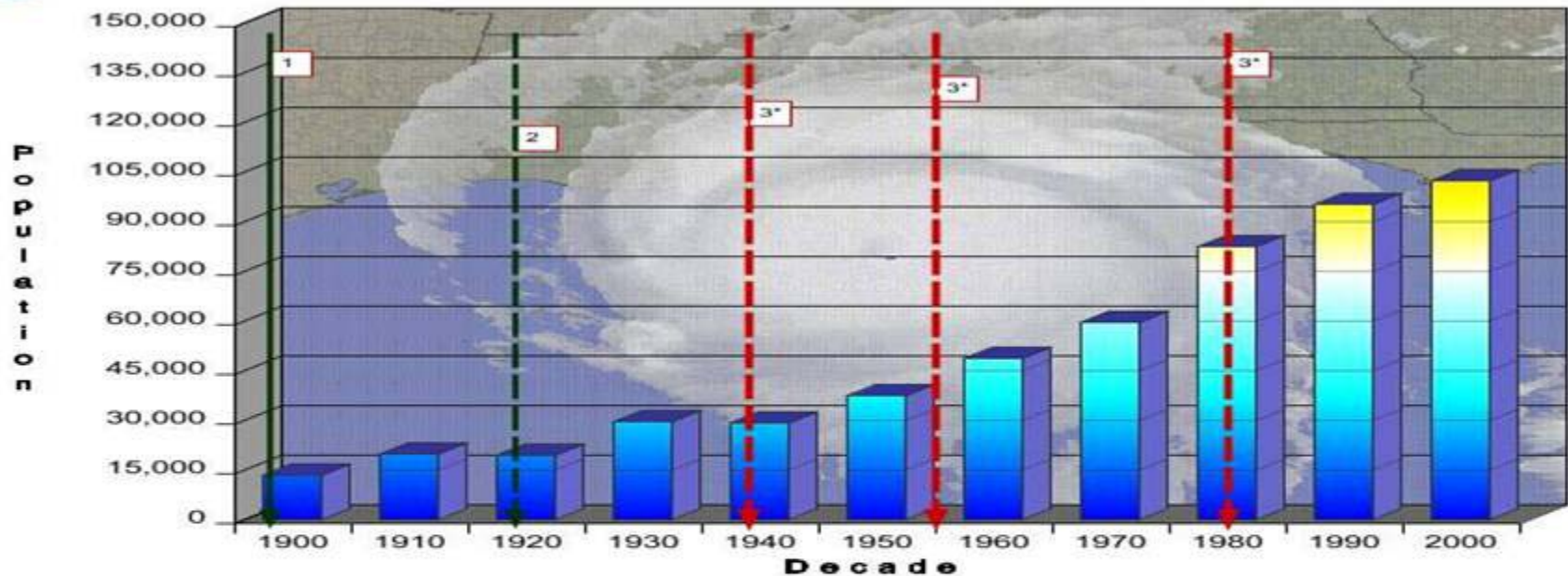
**NOTE:** Population values may be missing in some counties, particularly for earlier periods. This is most often attributable to the fact that the county had not yet been established.



# Historical Hurricane Strikes in Cape May County, NJ, 1900-2002



### Cape May, NJ



**NOTE:** Population values may be missing in some counties, particularly for earlier periods. This is most often attributable to the fact that the county had not yet been established.

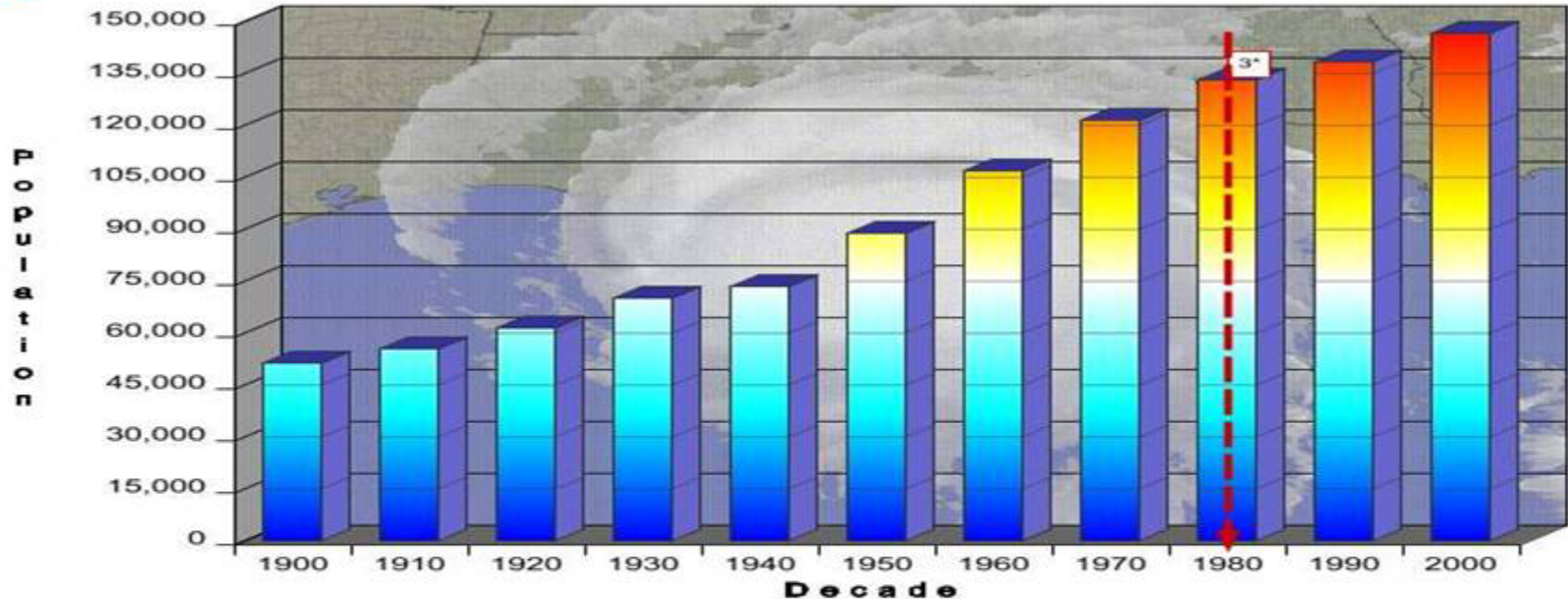




# Historical Hurricane Strikes in Cumberland County, NJ, 1900-2002



## Cumberland, NJ



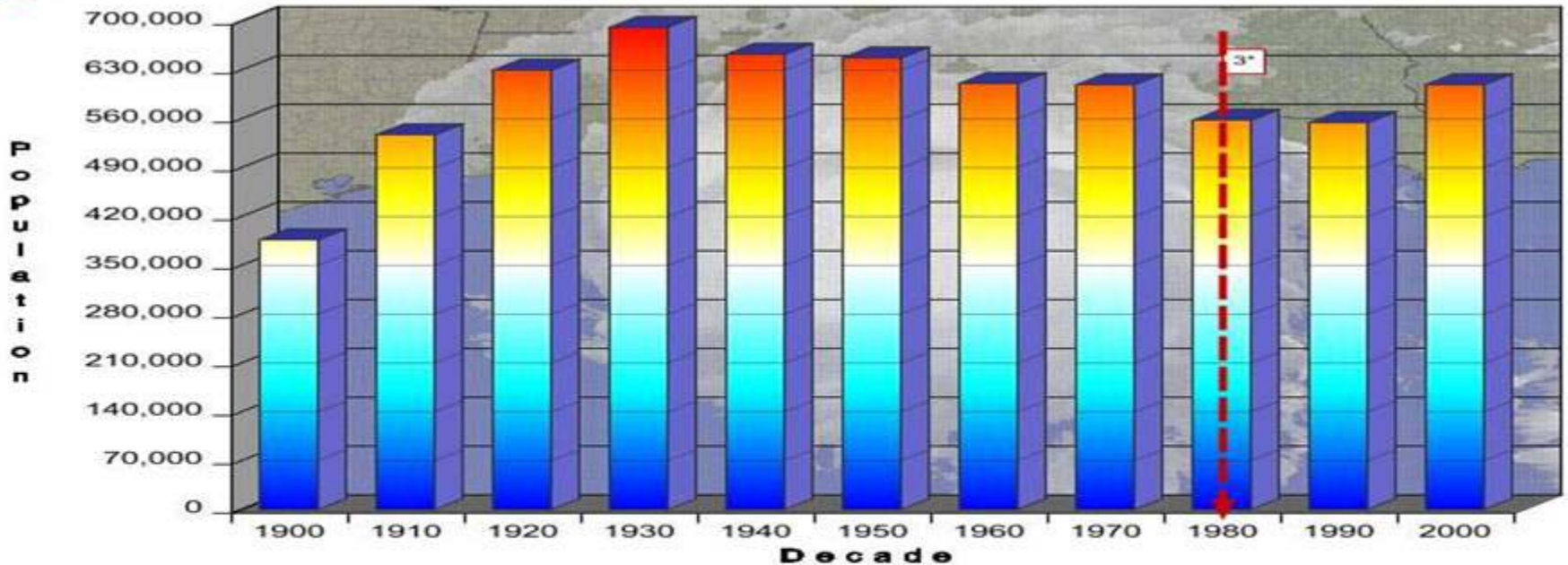
**NOTE:** Population values may be missing in some counties, particularly for earlier periods. This is most often attributable to the fact that the county had not yet been established.



# Historical Hurricane Strikes in Hudson County, NJ, 1900-2002



## Hudson, NJ



**NOTE:** Population values may be missing in some counties, particularly for earlier periods. This is most often attributable to the fact that the county had not yet been established.

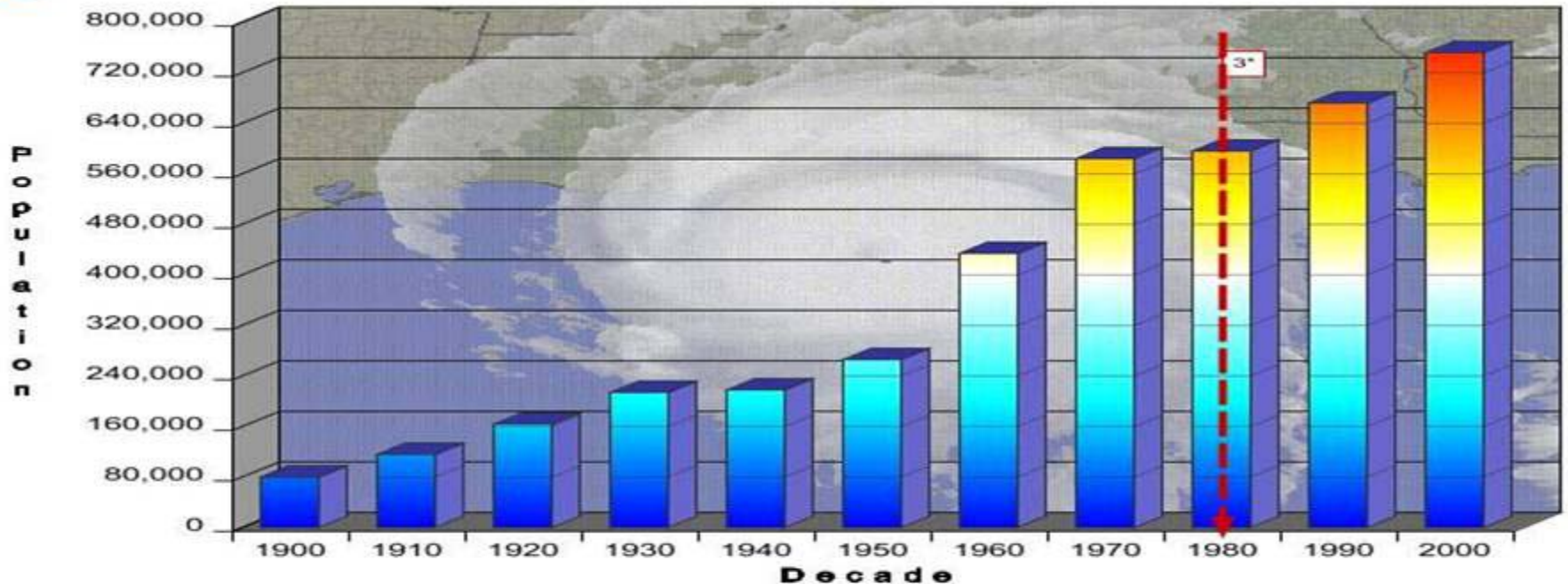




# Historical Hurricane Strikes in Middlesex County, NJ, 1900-2002



## Middlesex, NJ



**NOTE:** Population values may be missing in some counties, particularly for earlier periods. This is most often attributable to the fact that the county had not yet been established.

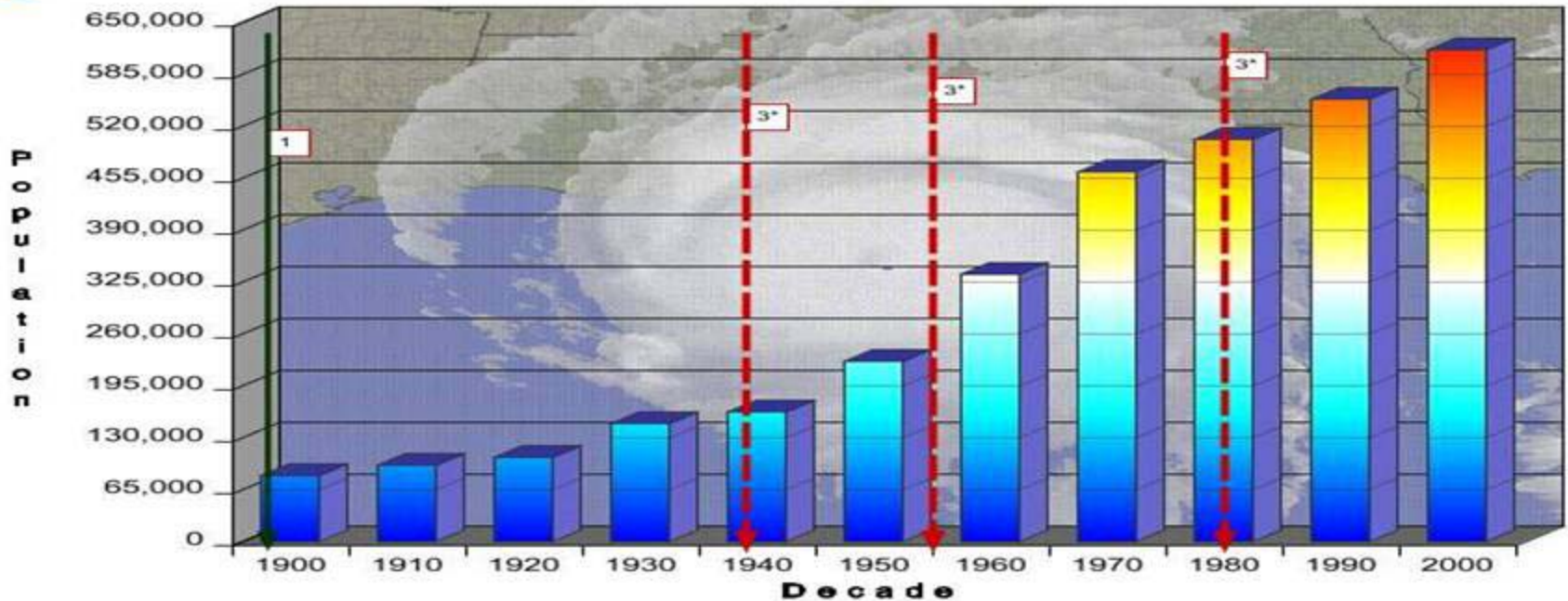




# Historical Hurricane Strikes in Monmouth County, NJ, 1900-2002



## Monmouth, NJ



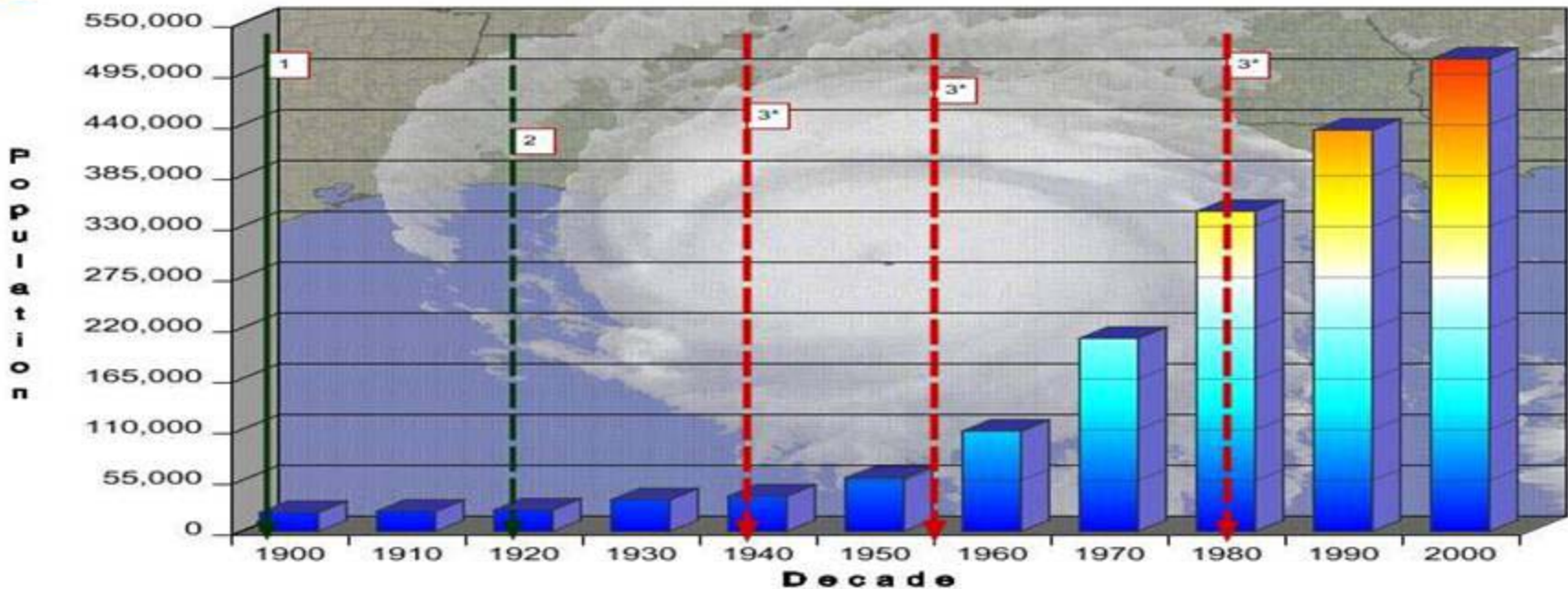
**NOTE:** Population values may be missing in some counties, particularly for earlier periods. This is most often attributable to the fact that the county had not yet been established.



# Historical Hurricane Strikes in Ocean County, NJ, 1900-2002



## Ocean, NJ



**NOTE:** Population values may be missing in some counties, particularly for earlier periods. This is most often attributable to the fact that the county had not yet been established.

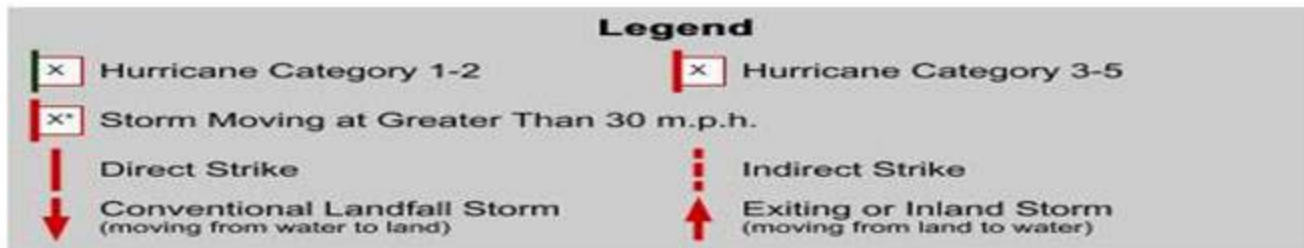
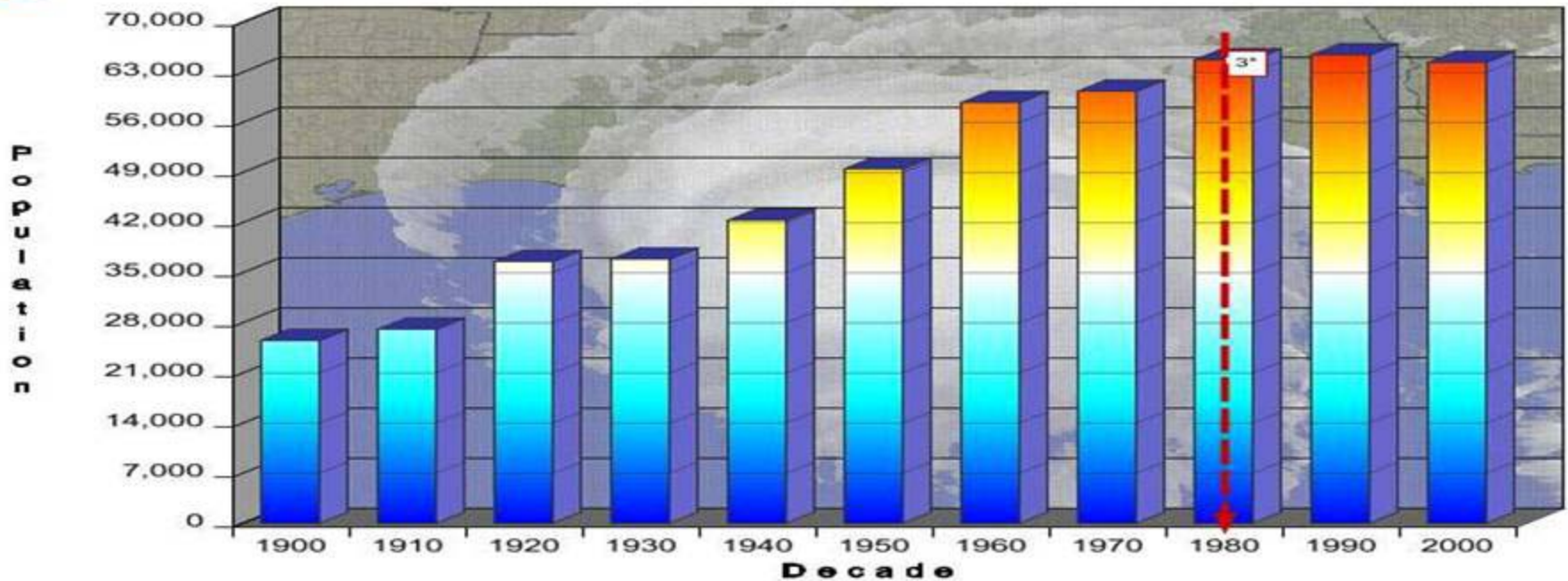




# Historical Hurricane Strikes in Salem County, NJ, 1900-2002



## Salem, NJ

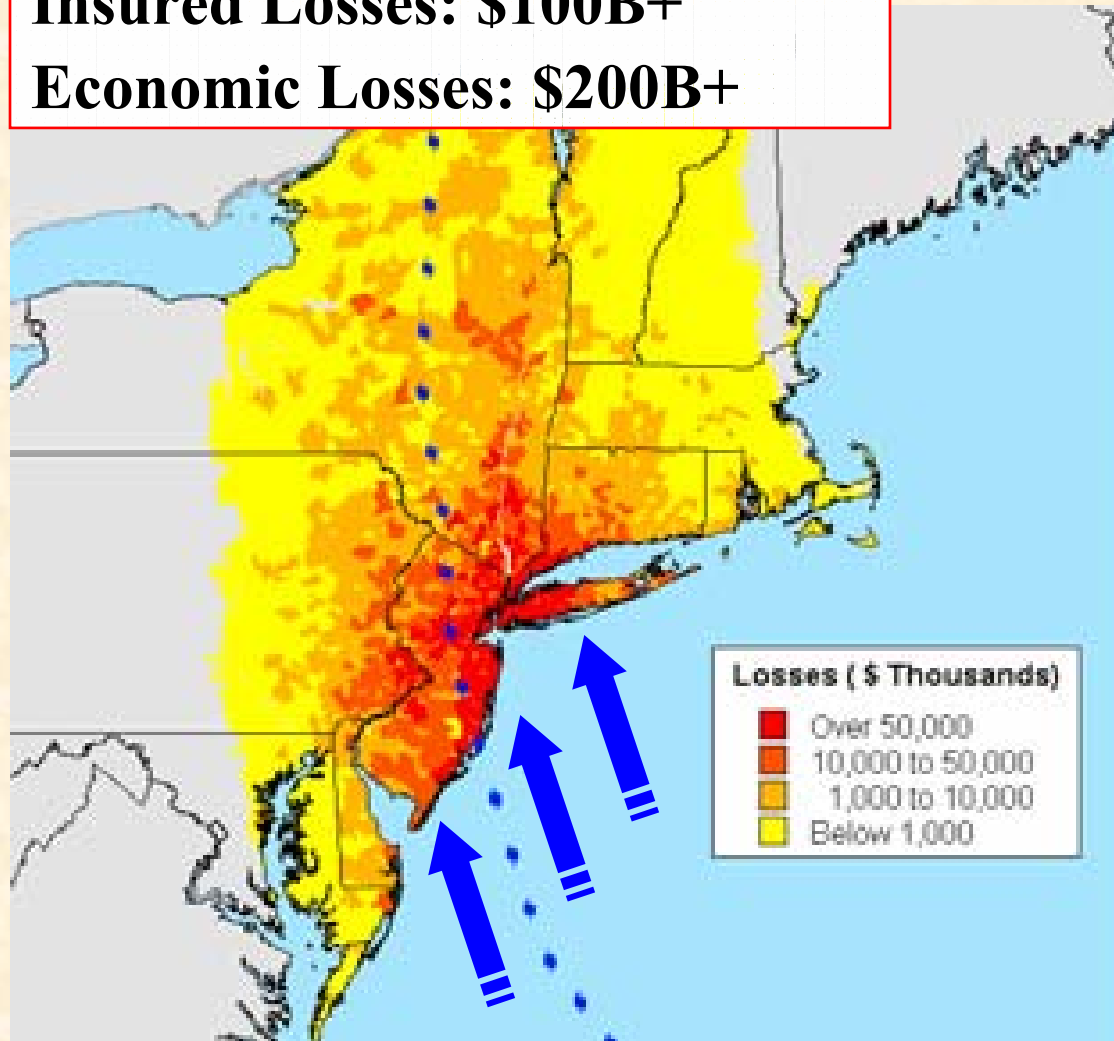


**NOTE:** Population values may be missing in some counties, particularly for earlier periods. This is most often attributable to the fact that the county had not yet been established.



# *Hurricane Nightmare Scenario for the Northeast: \$100B+ Insured Losses*

**Insured Losses: \$100B+**  
**Economic Losses: \$200B+**

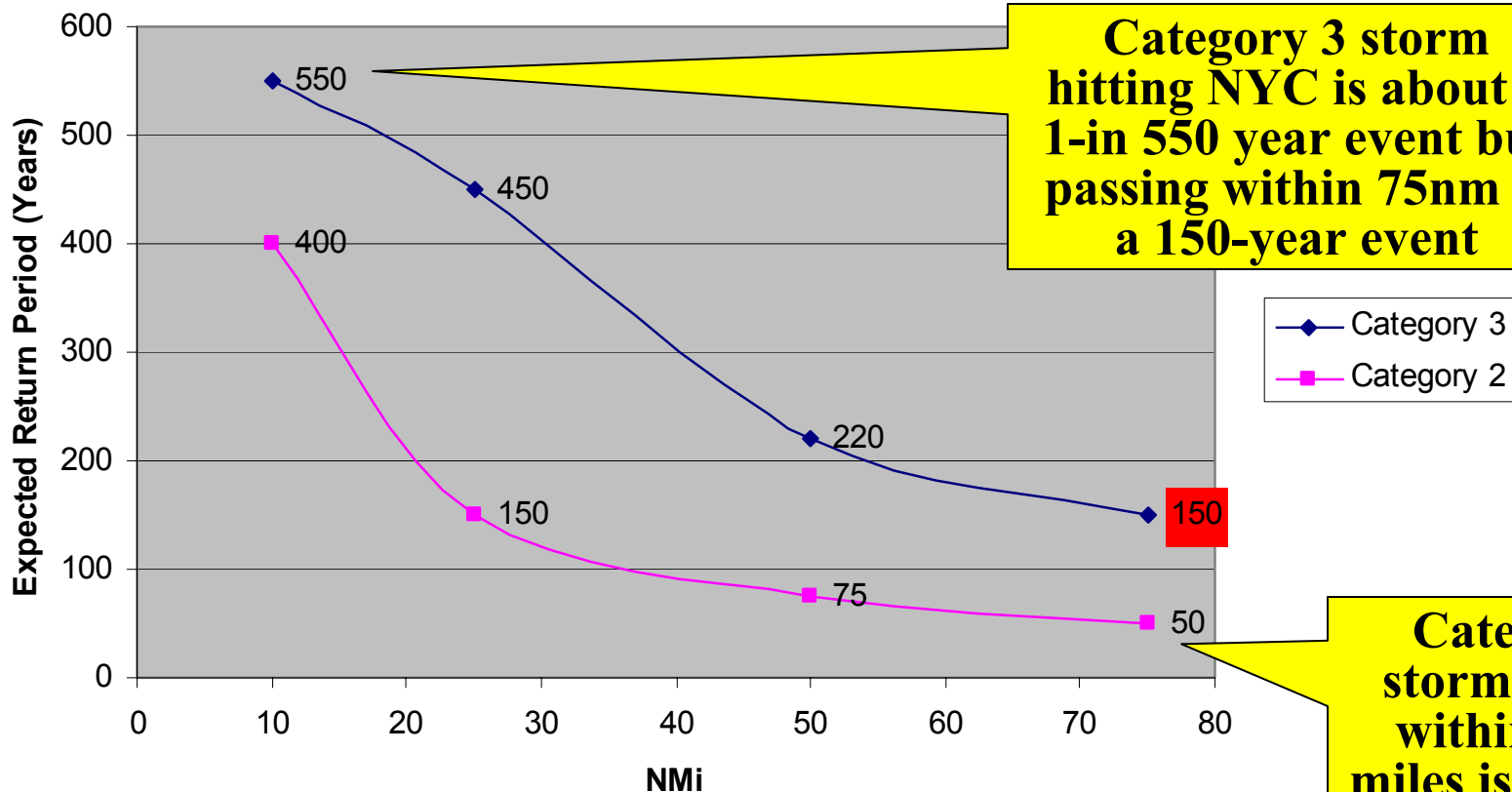


- **Strong CAT 3 or weak CAT 4 could cause \$100B+ in loss in the densely populated Northeast**
- **NJ, NYC and Long Island could expect significant flood damage to property and infrastructure**



# NY Hurricane Risk Data in a More Realistic Context

Expected Return Periods for a Categories 2 & 3 Hurricanes in NY City as a Function of Distance from Storm Center: 1870-2004



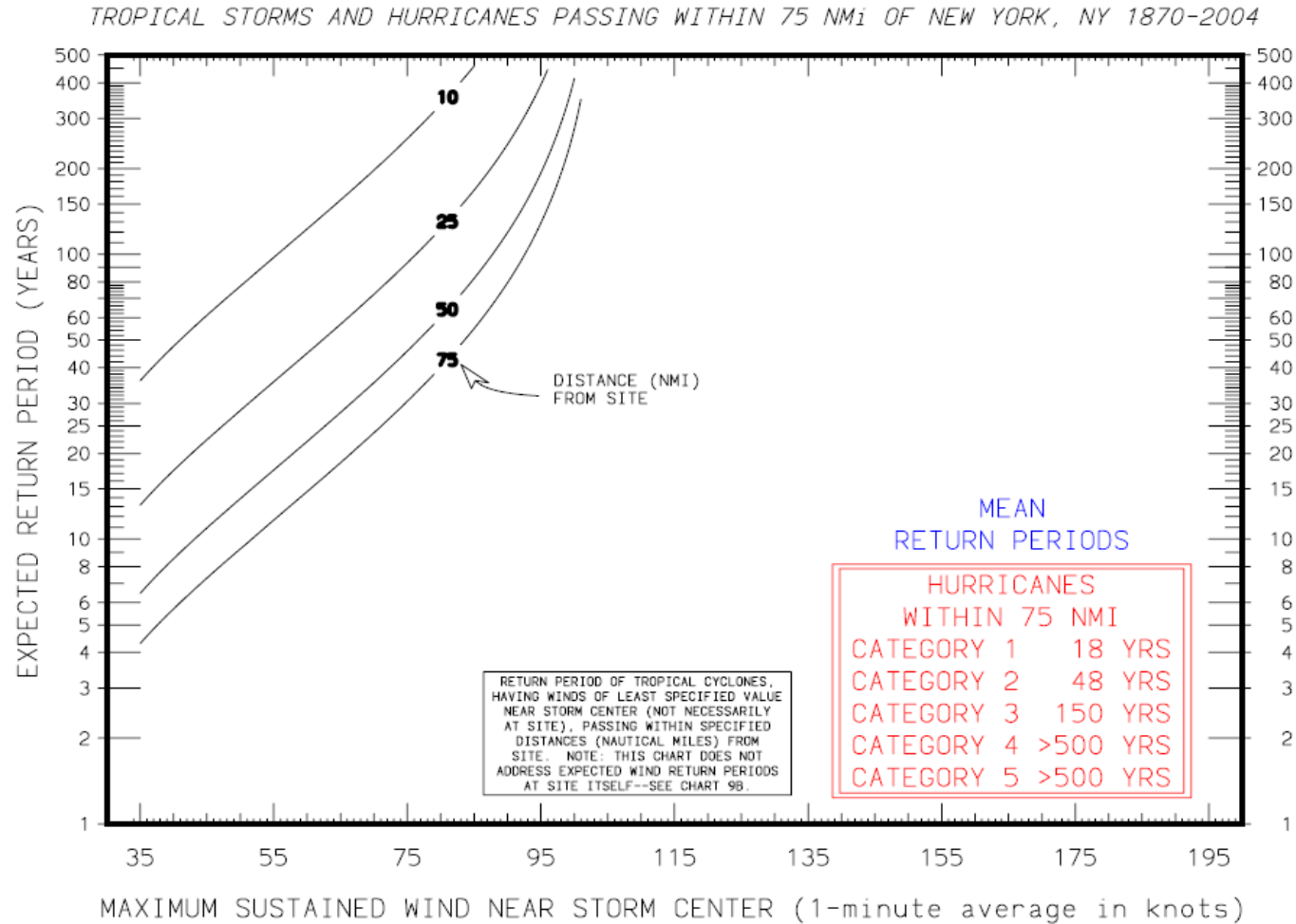
**Category 3 storm hitting NYC is about a 1-in-550 year event but passing within 75nm is a 150-year event**

**Category 2 storm coming within 75nm miles is a 1-in-50 year event**



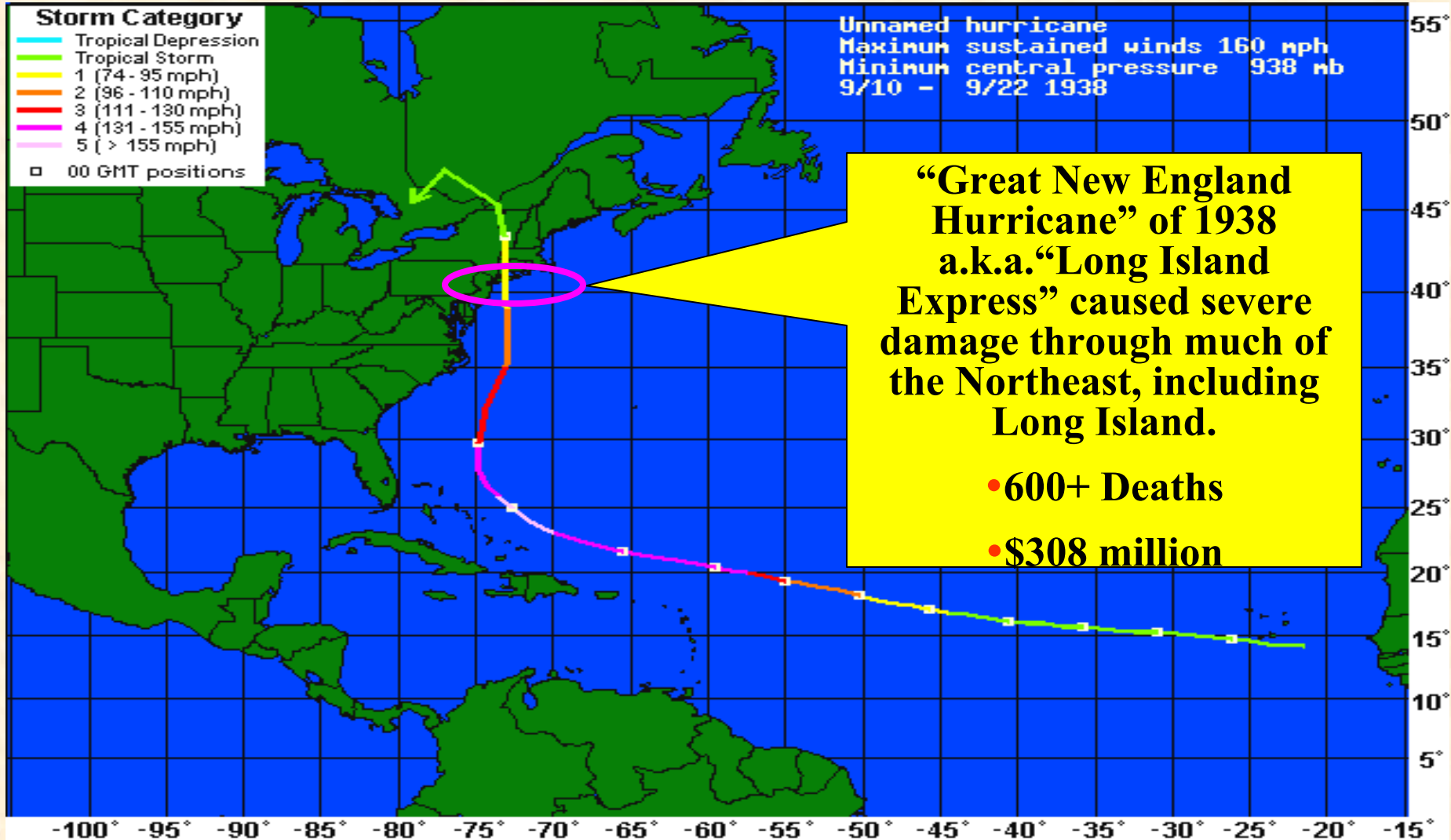


# HURISK Results for Hurricanes Passing Within 75 NM of NYC: 1870 - 2004





# Track of “Long Island Express” Storm of 1938





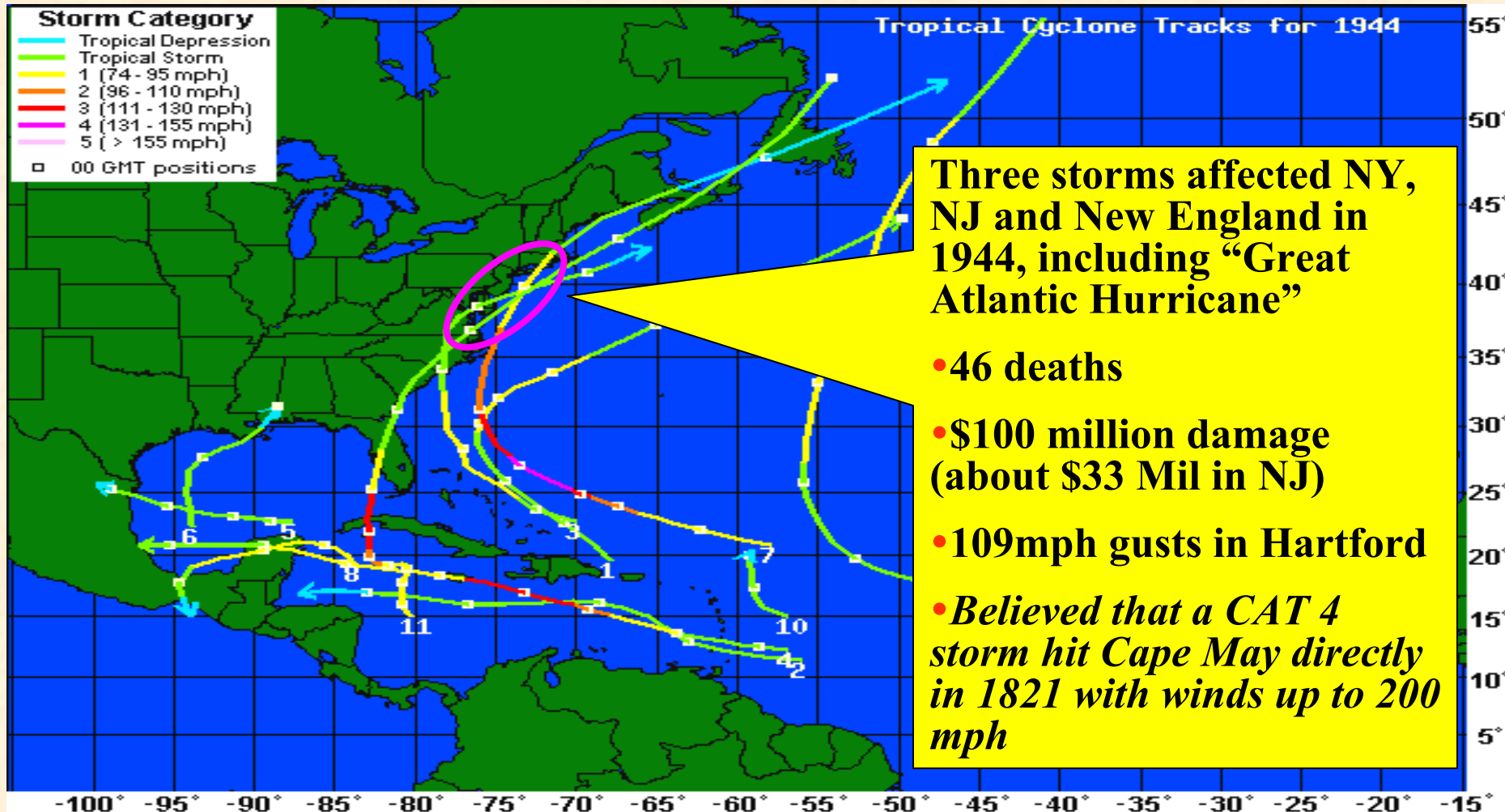
# *Damage Caused by “Long Island Express” Hurricane of 1938*

---

- 700 deaths, 708 injured
- 4,500 homes, cottages, farms destroyed; 15,000 damaged
- 26,000 destroyed automobiles
- 20,000 miles of electrical power and telephone lines downed
- 1,700 livestock and up to 750,000 chickens killed
- \$2,610,000 worth of fishing boats, equipment, docks, and shore plants damaged or destroyed
- Half the entire apple crop destroyed at a cost of \$2 million

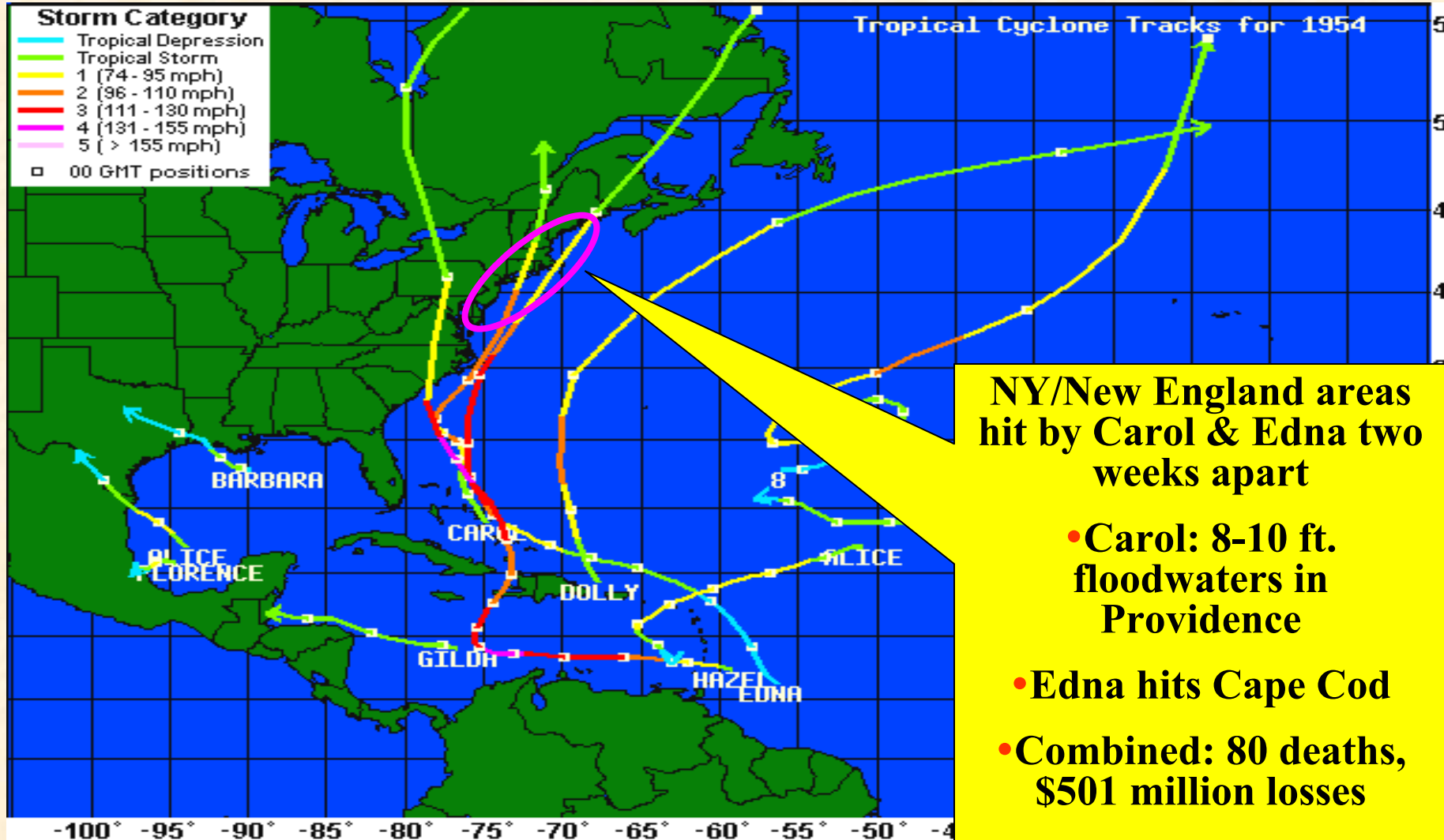


# Storm Season of 1944: A Busy one for the Northeast





# Storm Season of 1954: The Northeast Hit Again

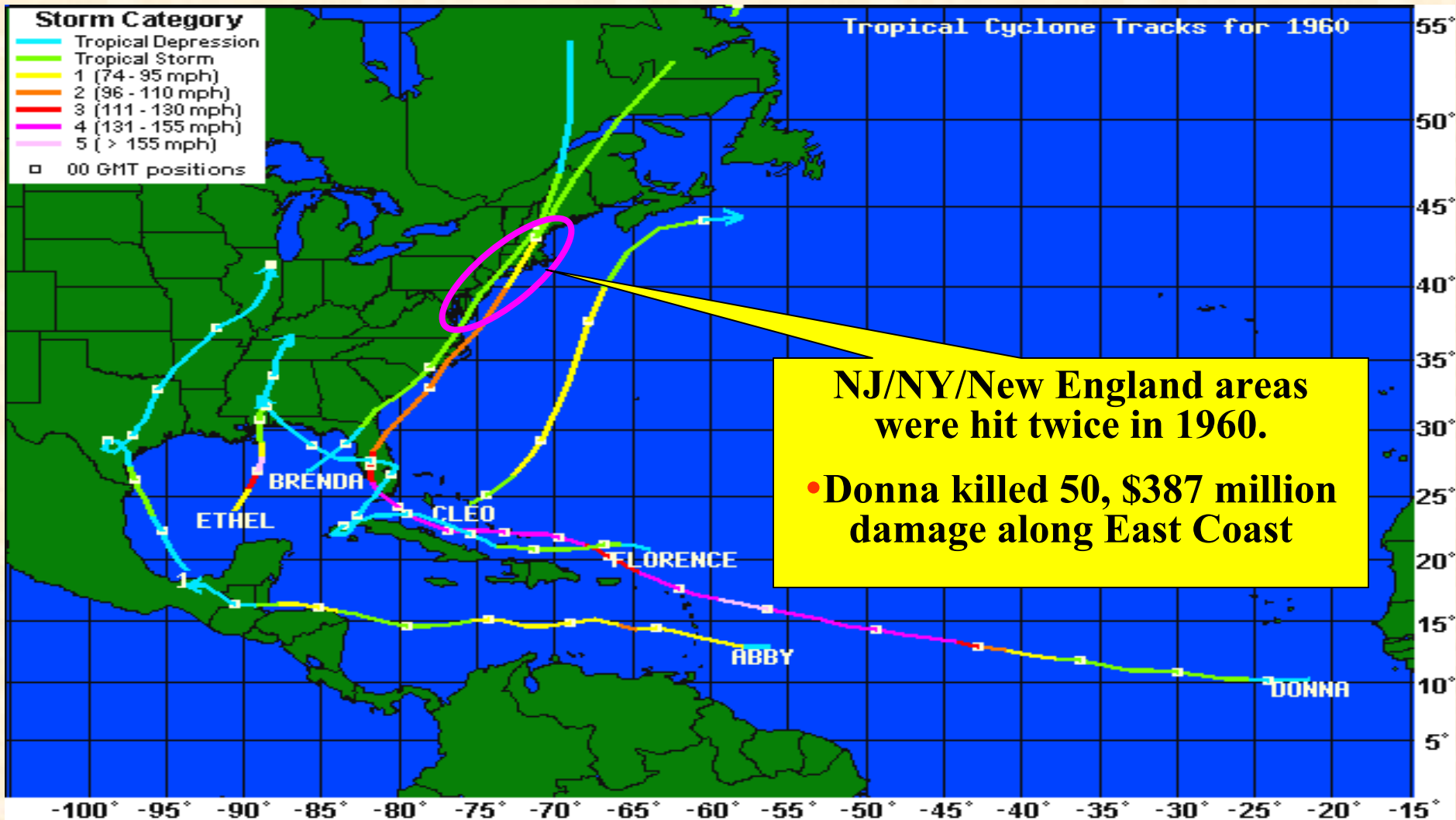






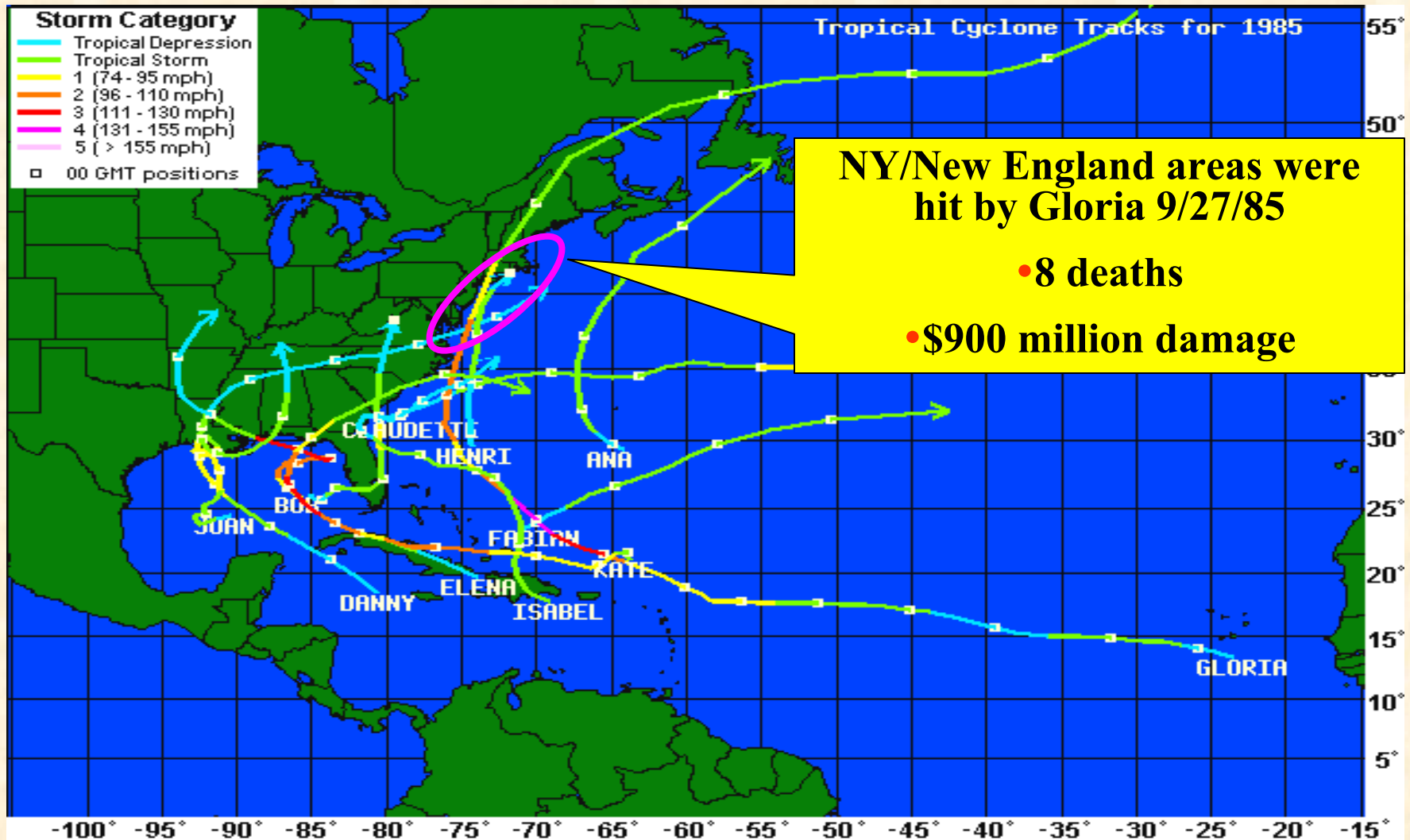
# Storm Season of 1960:

## Brenda & Donna Came to Visit



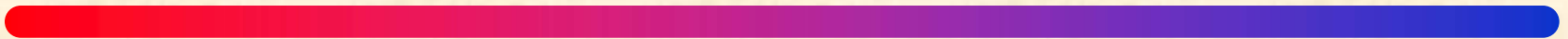


# After a 25 Hiatus, Hurricane Gloria Hit in 1985



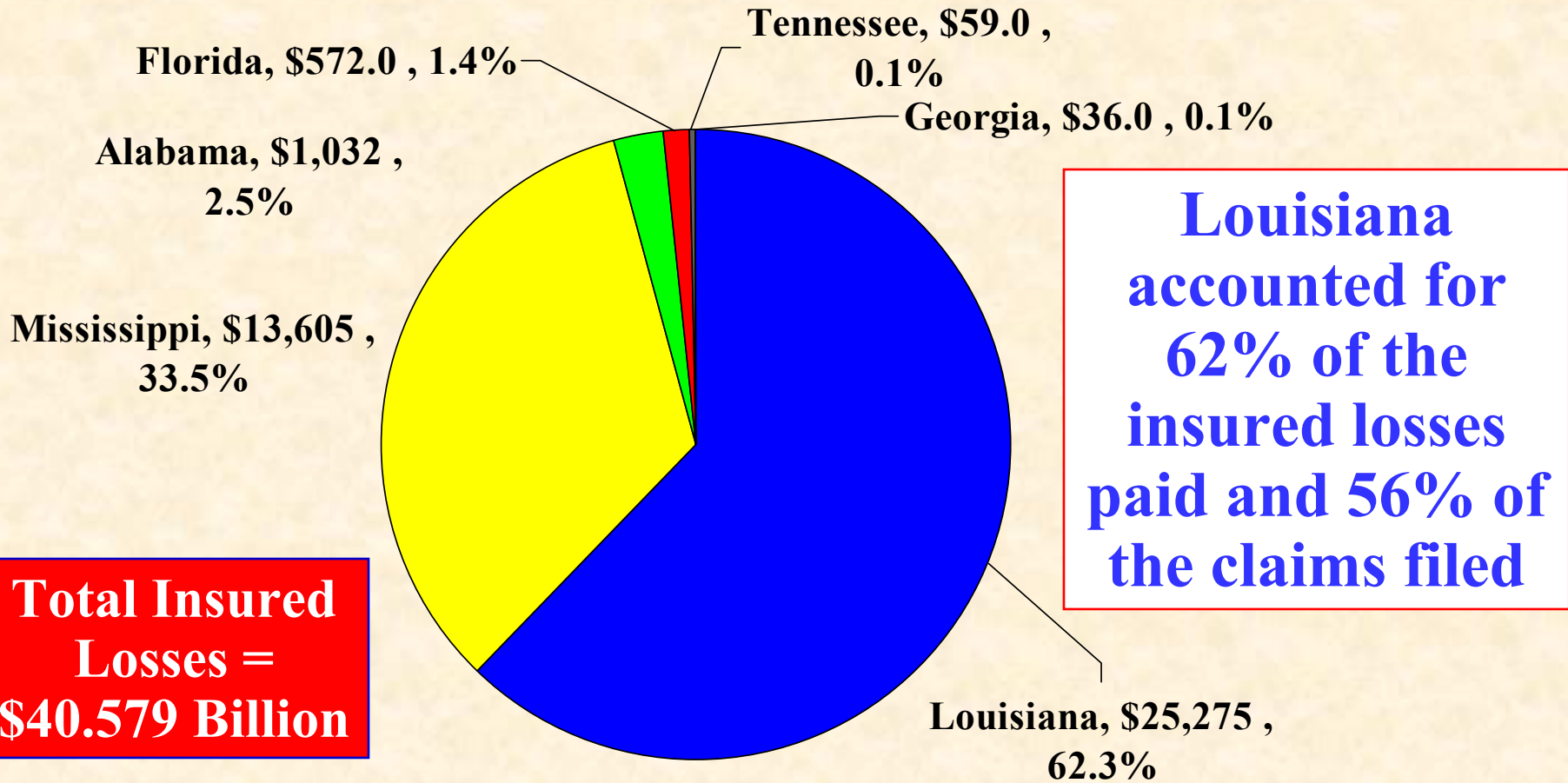
# Hurricane Season of 2005

## *Breakdown of Losses: Katrina*





# *Hurricane Katrina Insured Loss Distribution by State (\$ Millions)\**



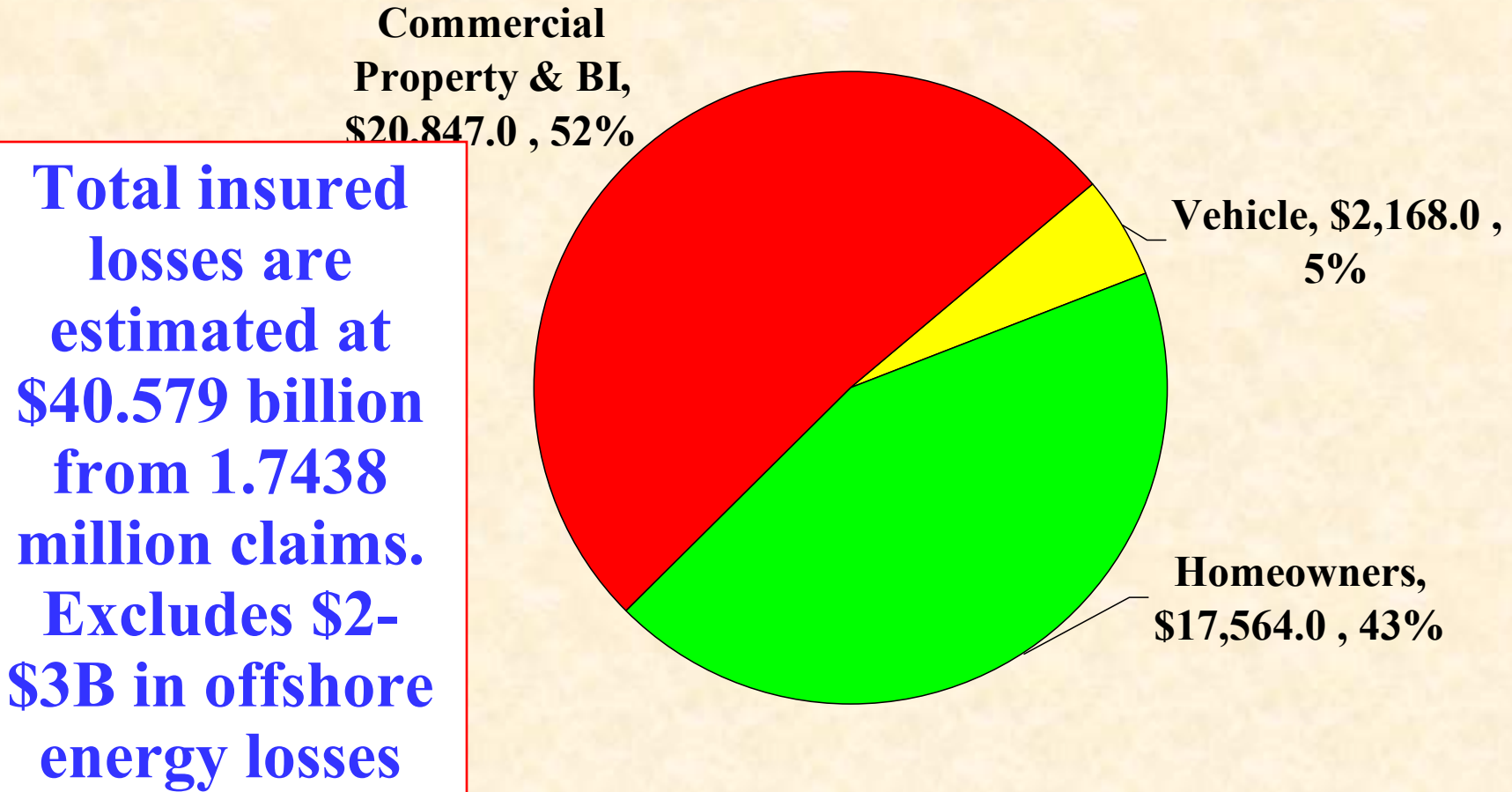
\*As of June 8, 2006

Source: PCS division of ISO.

# Hurricane Katrina Loss



## Distribution by Line (\$ Billions)\*



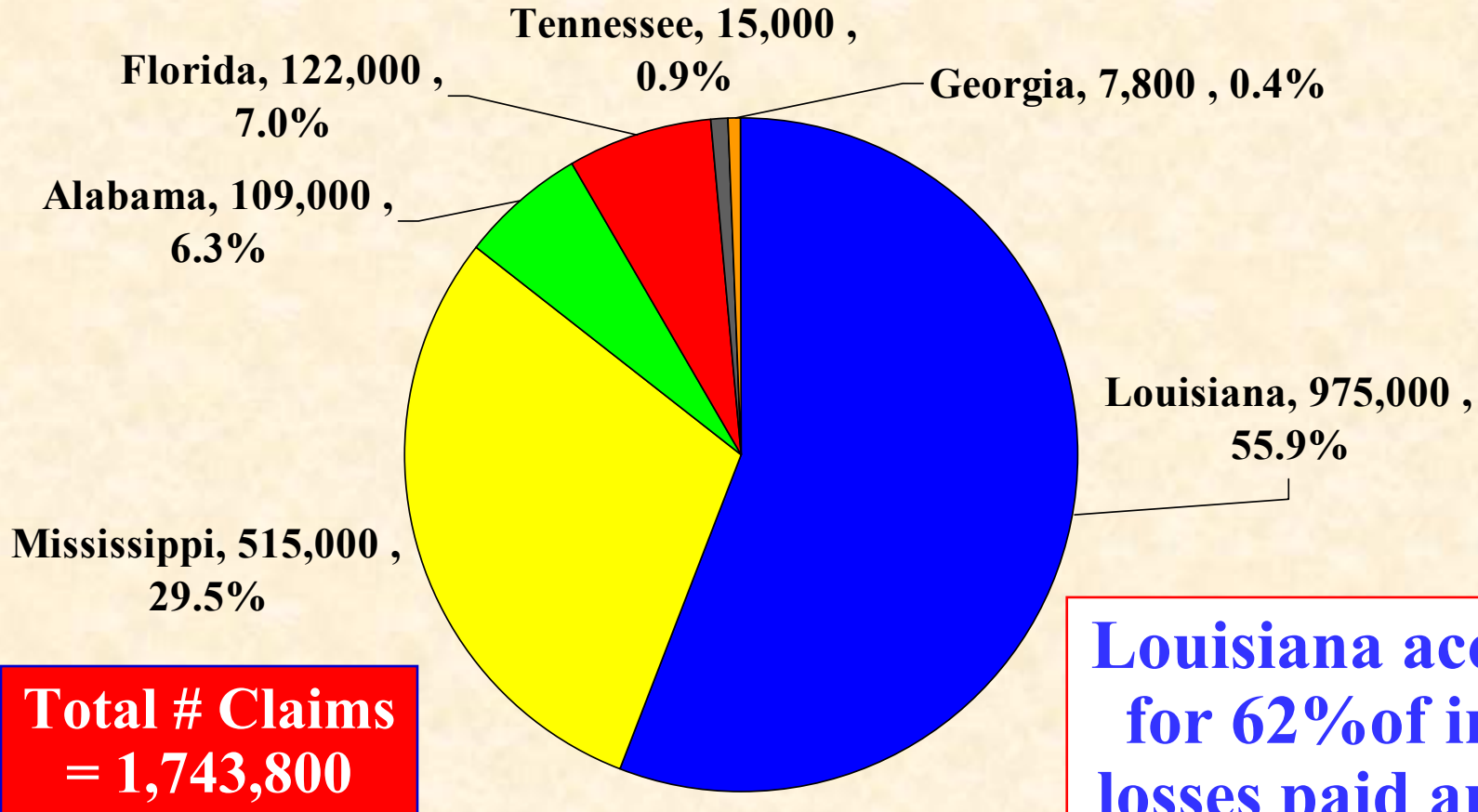
\*As of June 8, 2006

Source: PCS division of ISO.





# Hurricane Katrina Claim Count Distribution by State\*



Louisiana accounted for 62% of insured losses paid and 56% of claims filed

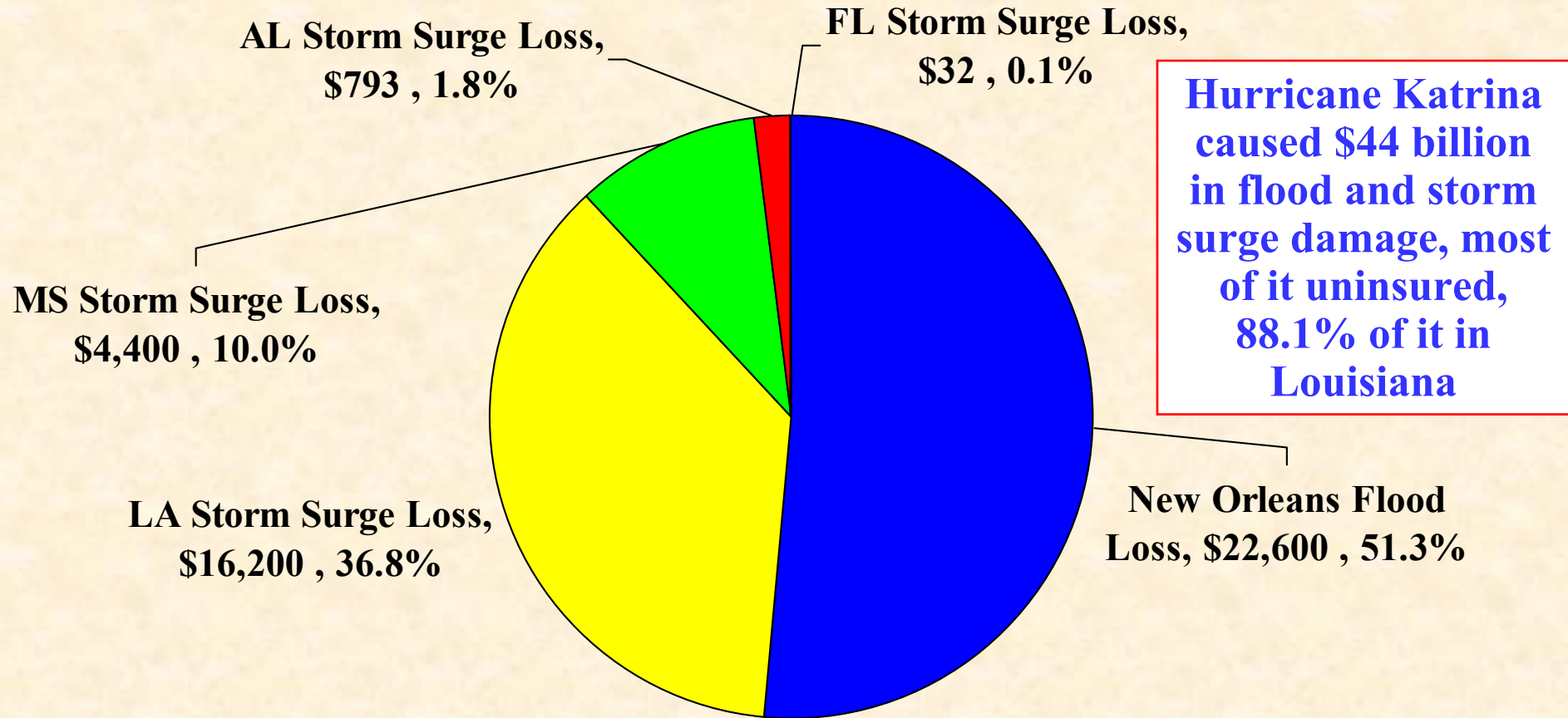
\*As of June 8, 2006

Source: PCS division of ISO.



# Property Damage from Hurricane

## Katrina Flood & Storm Surge (\$ Millions)\*



\*Value of property damage by flood and storm surge *whether or not insured*.

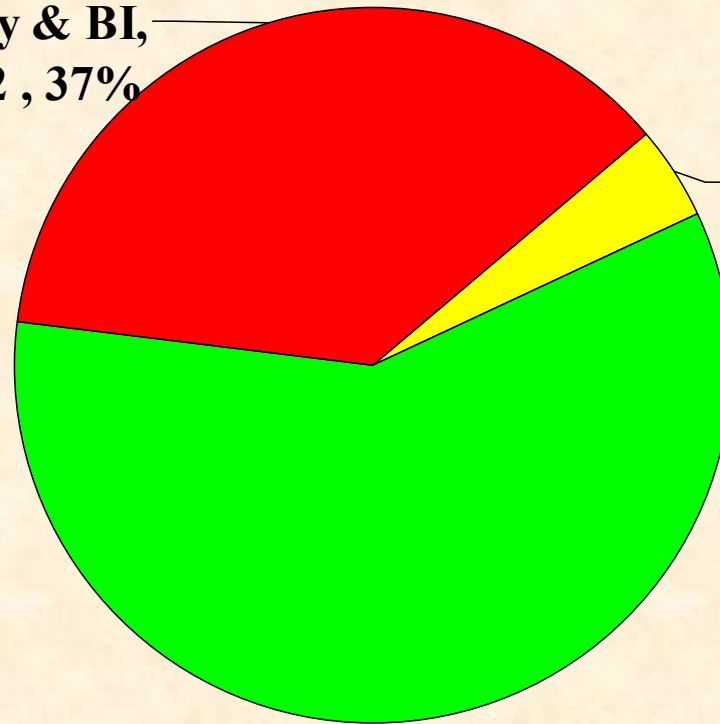
Source: AIR Worldwide, September 29, 2005.



# *Hurricane Rita Loss Distribution, by Line (\$ Millions)\**

**Commercial  
Property & BI,  
\$1,861.2 , 37%**

**Vehicles, \$211.0 ,  
4%**



**Homeowners,  
\$2,974.2 , 59%**

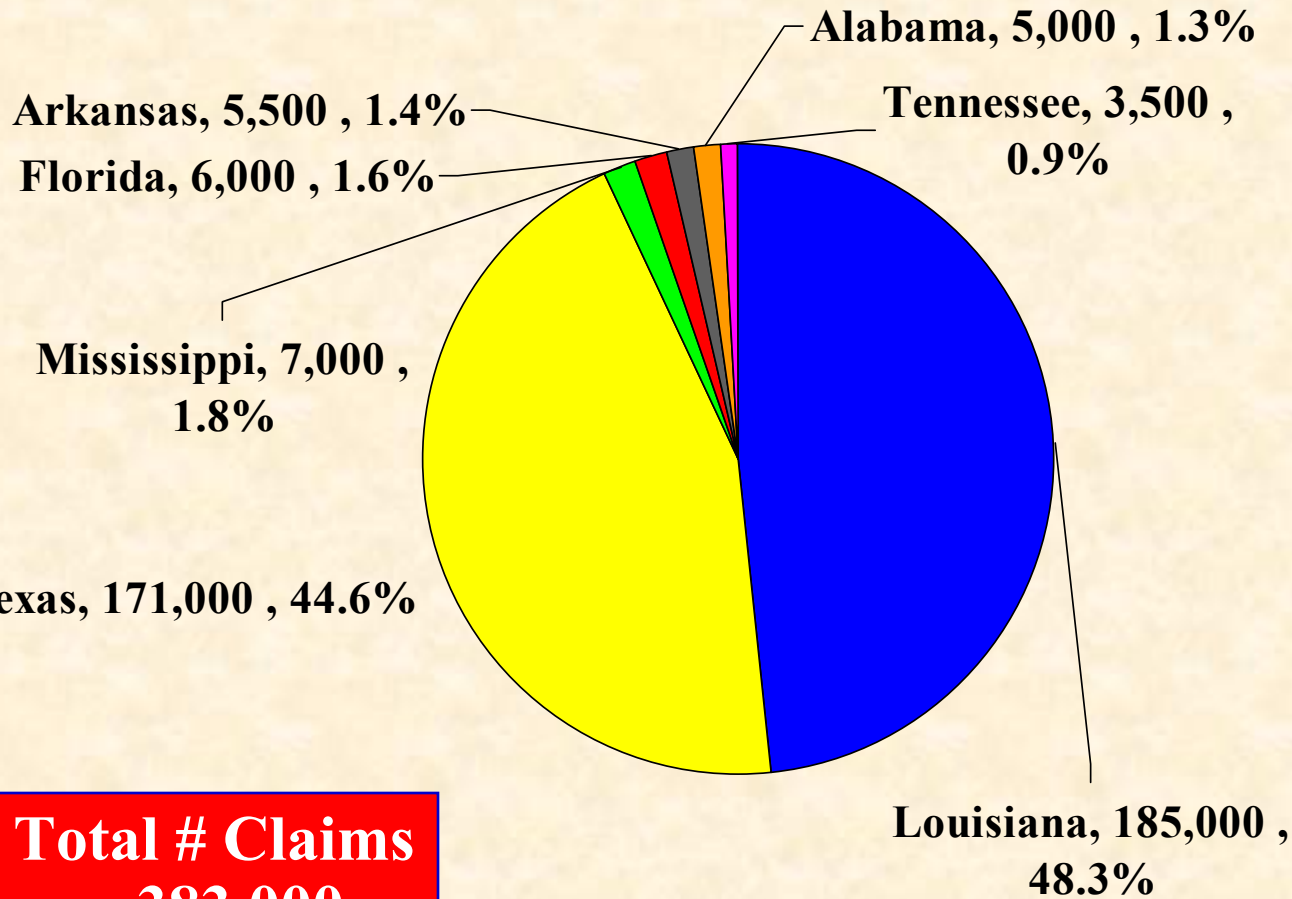
**Total insured  
losses are  
estimated at \$5.0  
billion (excl.  
offshore energy  
of \$2-\$3B) from  
383,000 claims.**

**\*As of June 8, 2006**

**Source: PCS division of ISO.**



# Hurricane Rita Claim Count Distribution by State\*



**Total # Claims  
= 383,000**

**Louisiana  
accounted for  
48.3% of the  
insured losses,  
Texas 44.6%.**

**Excludes  
offshore energy  
losses of \$2-3B**

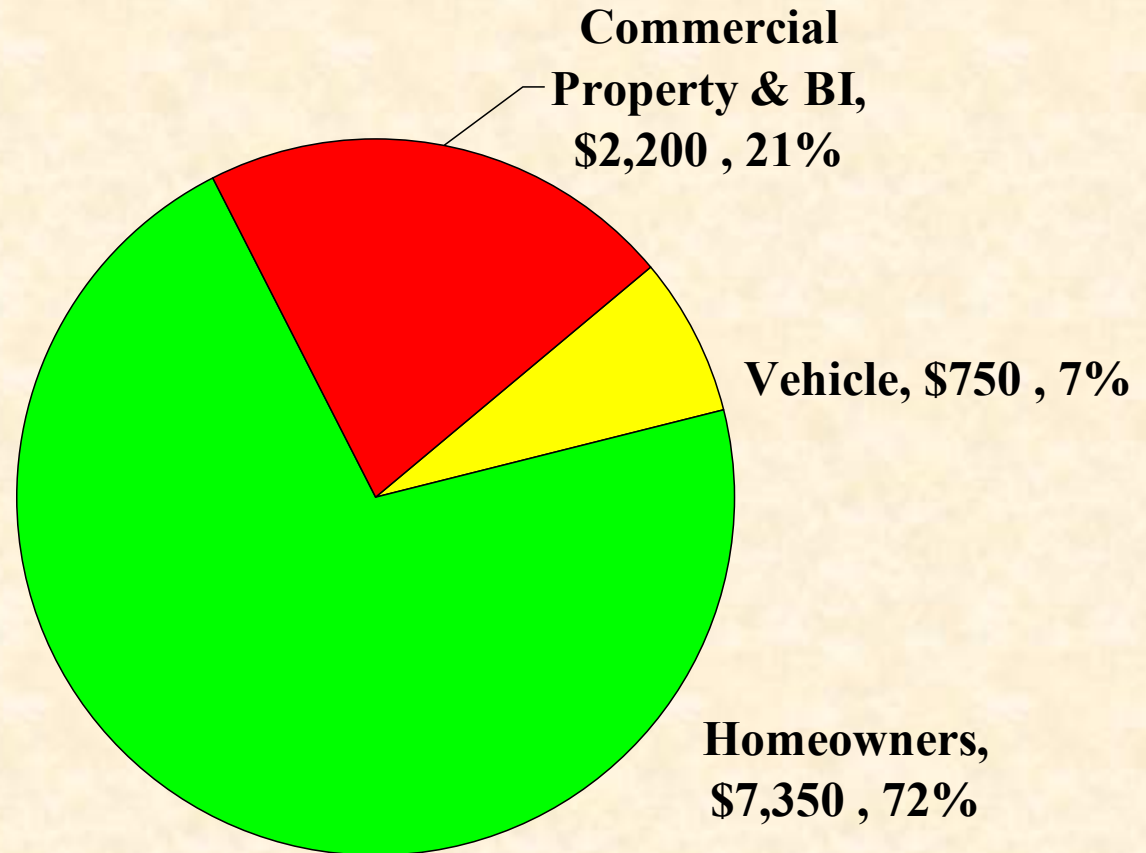
\*As of June 8, 2006  
Source: PCS division of ISO.

# Hurricane Wilma Loss



## Distribution by Line (\$ Millions)\*

**Total insured losses are estimated at \$10.3 billion from 1.047 million claims**



\*As of June 8, 2006. All losses are in FL.  
Source: PCS division of ISO.



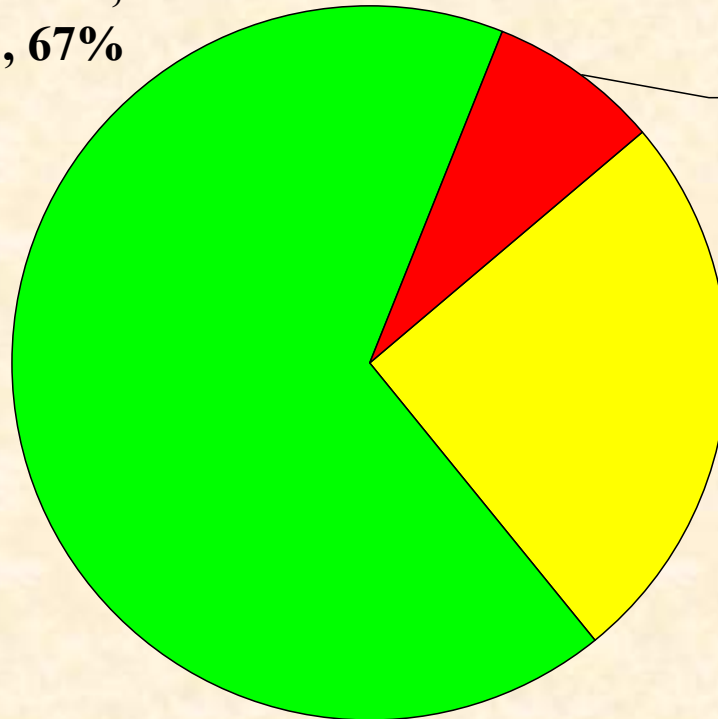


# *Hurricane Wilma Claim Count*

## *Distribution by Line\**

**Total insured losses are estimated at \$10.3 billion from 1.047 million claims**

**Homeowners,  
700,000 , 67%**



**Commercial  
Property & BI,  
82,000 , 8%**

**Vehicle, 265,000 ,  
25%**

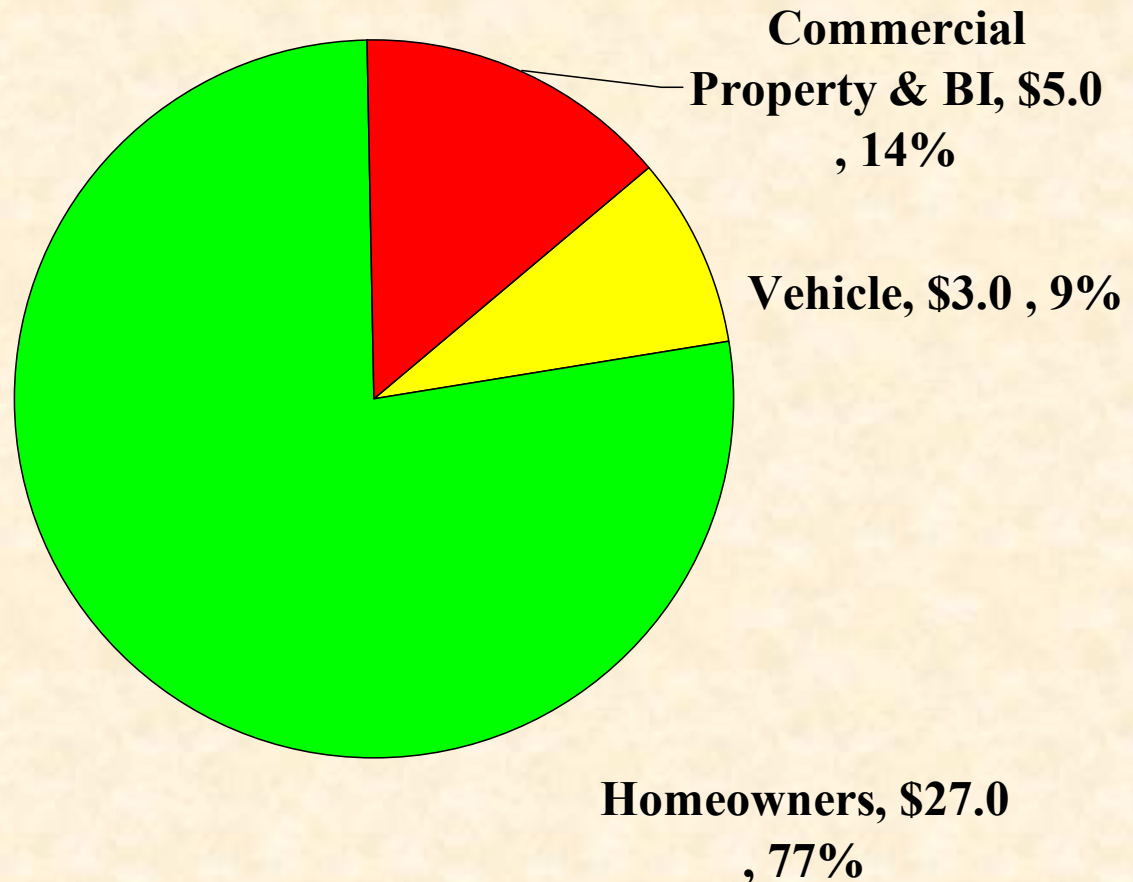
**\*As of June 8, 2006. All losses are in FL.  
Source: PCS division of ISO.**

# Hurricane Ophelia Loss



## Distribution by Line (\$ Millions)\*

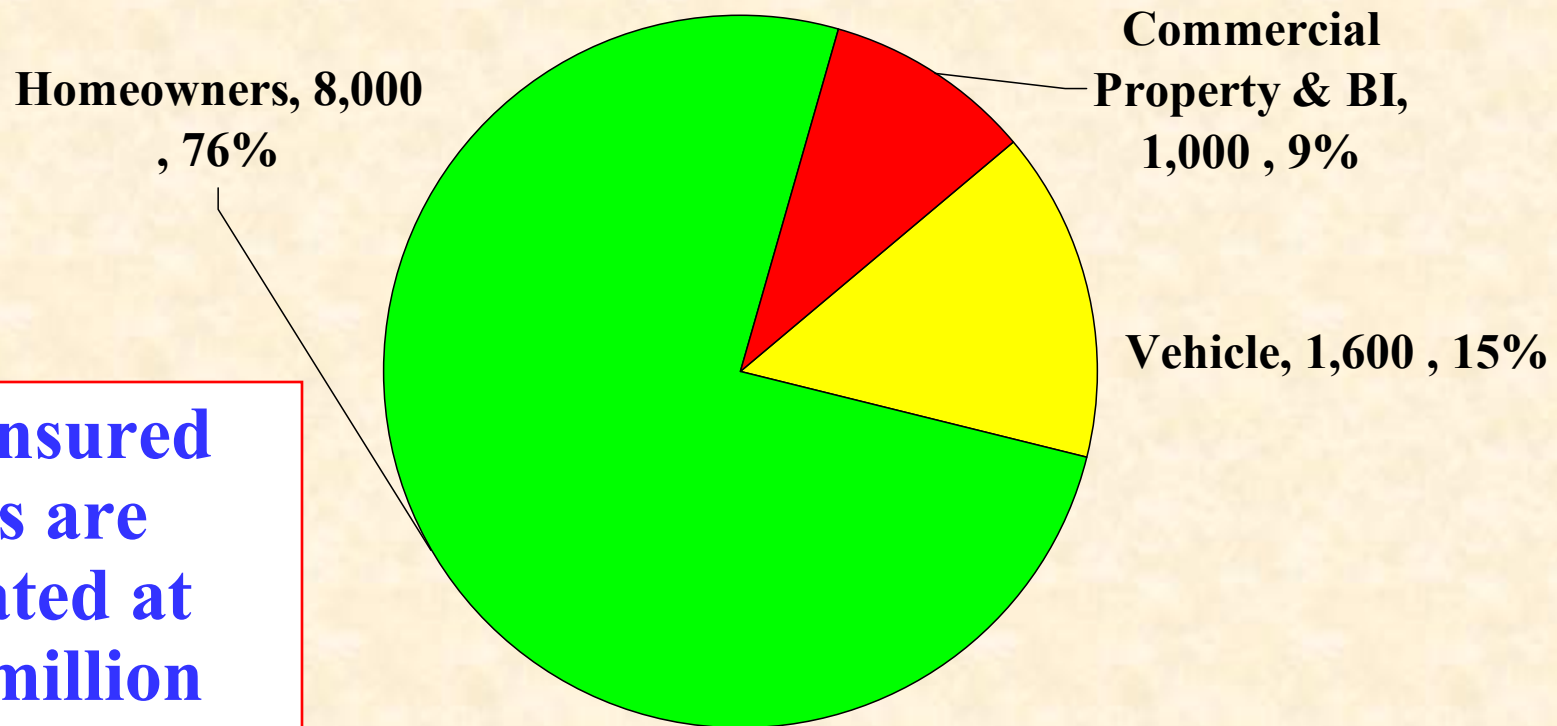
**Total insured losses are estimated at \$35.0 million from 10,600 claims**



\*As of June 8, 2006. All losses are in NC.  
Source: PCS division of ISO.



# *Hurricane Ophelia Claim Count Distribution by Line\**



**Total insured losses are estimated at \$35.0 million from 10,600 claims**

\*As of June 8, 2006. All losses are in NC.  
Source: PCS division of ISO.

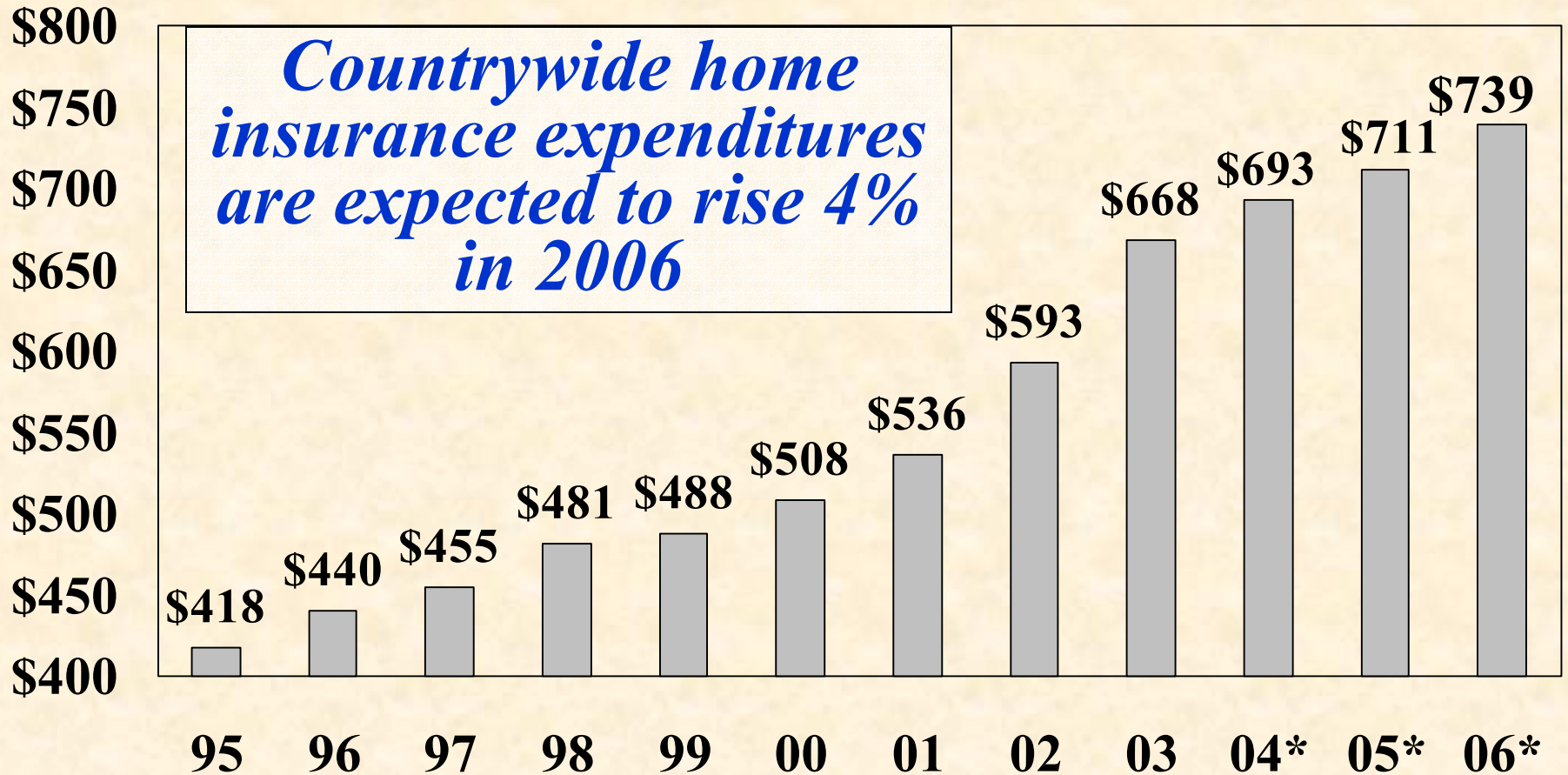
# PRICING

*Can Discipline be  
Maintained?*





# Average Expenditures on Homeowners Insurance

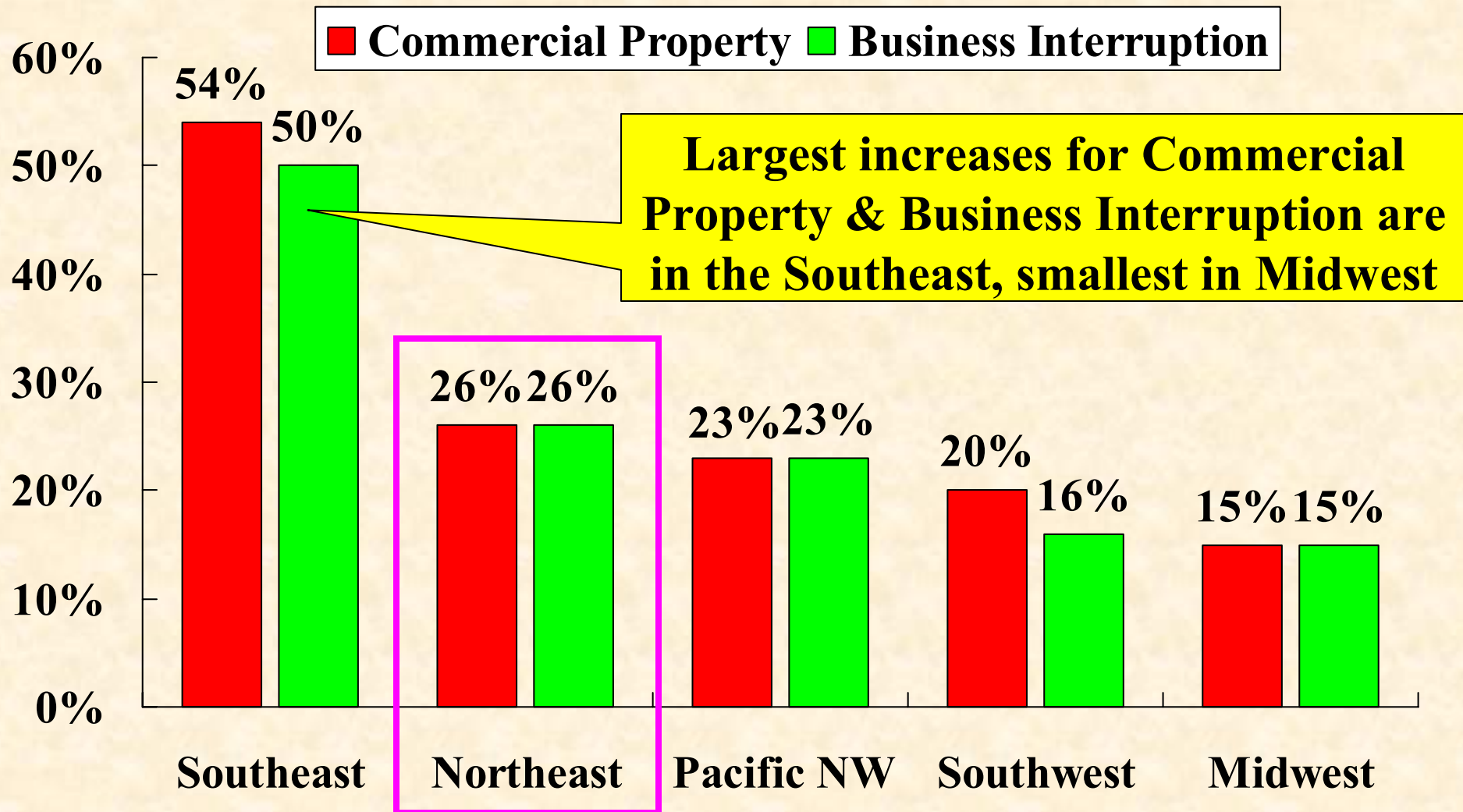


\*Insurance Information Institute Estimates/Forecasts

Source: NAIC, Insurance Information Institute



# Percent of Commercial Accounts Renewing with/Positive Rate Changes, 1<sup>st</sup> Qtr. 2006



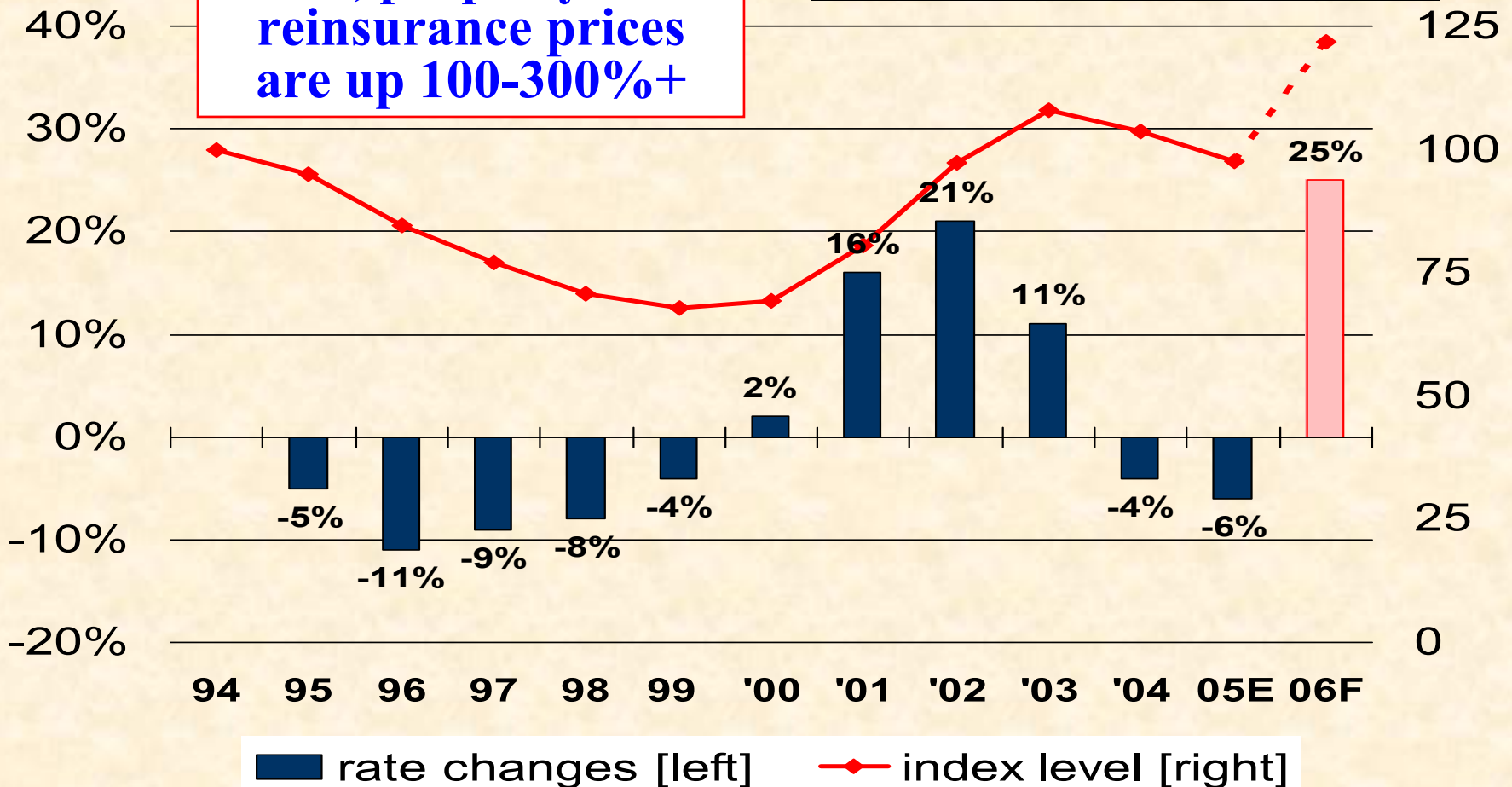
Source: Council of Insurance Agents and Brokers



# Reinsurance Prices Surged in 2006 Following Record CATs in 2005

**In hurricane-prone areas, property CAT reinsurance prices are up 100-300%+**

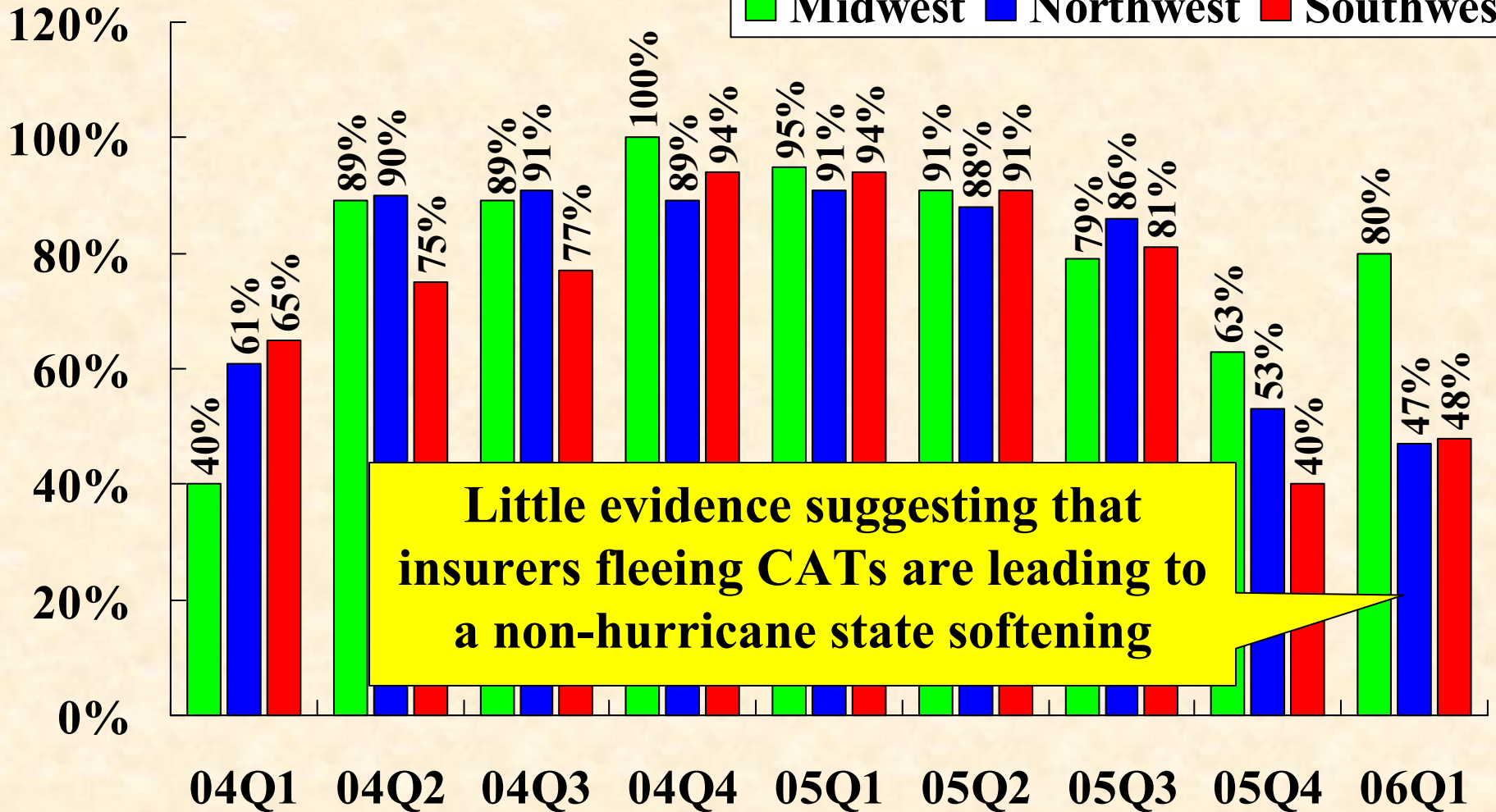
**US cat reinsurance price index:  
1994 = 100**



# Percent of Commercial Property Accounts Renewing Negative, 1<sup>st</sup> Qtr. 2006



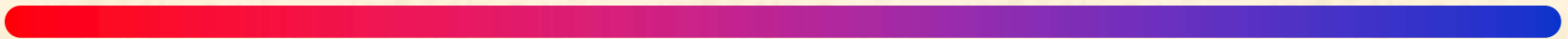
Midwest Northwest Southwest



Little evidence suggesting that insurers fleeing CATs are leading to a non-hurricane state softening

# CAPACITY

*Is There Enough Capital to  
Fund Mega-Losses?*





# *U.S. Policyholder Surplus: 1975-2005\**

**Capacity TODAY is \$427.1B, 9.2% above year-end 2004, 47% above its 2002 trough and 22% above its mid-1999 peak. Sufficient capacity exists to pay all hurricane claims.**

**Foreign reinsurance and residual market mechanisms absorbed \$27-\$32B (57%-67%) of 2005 CAT losses of \$57.7B**

*“Surplus” is a measure of underwriting capacity. It is analogous to “Owners Equity” or “Net Worth” in non-insurance organizations*

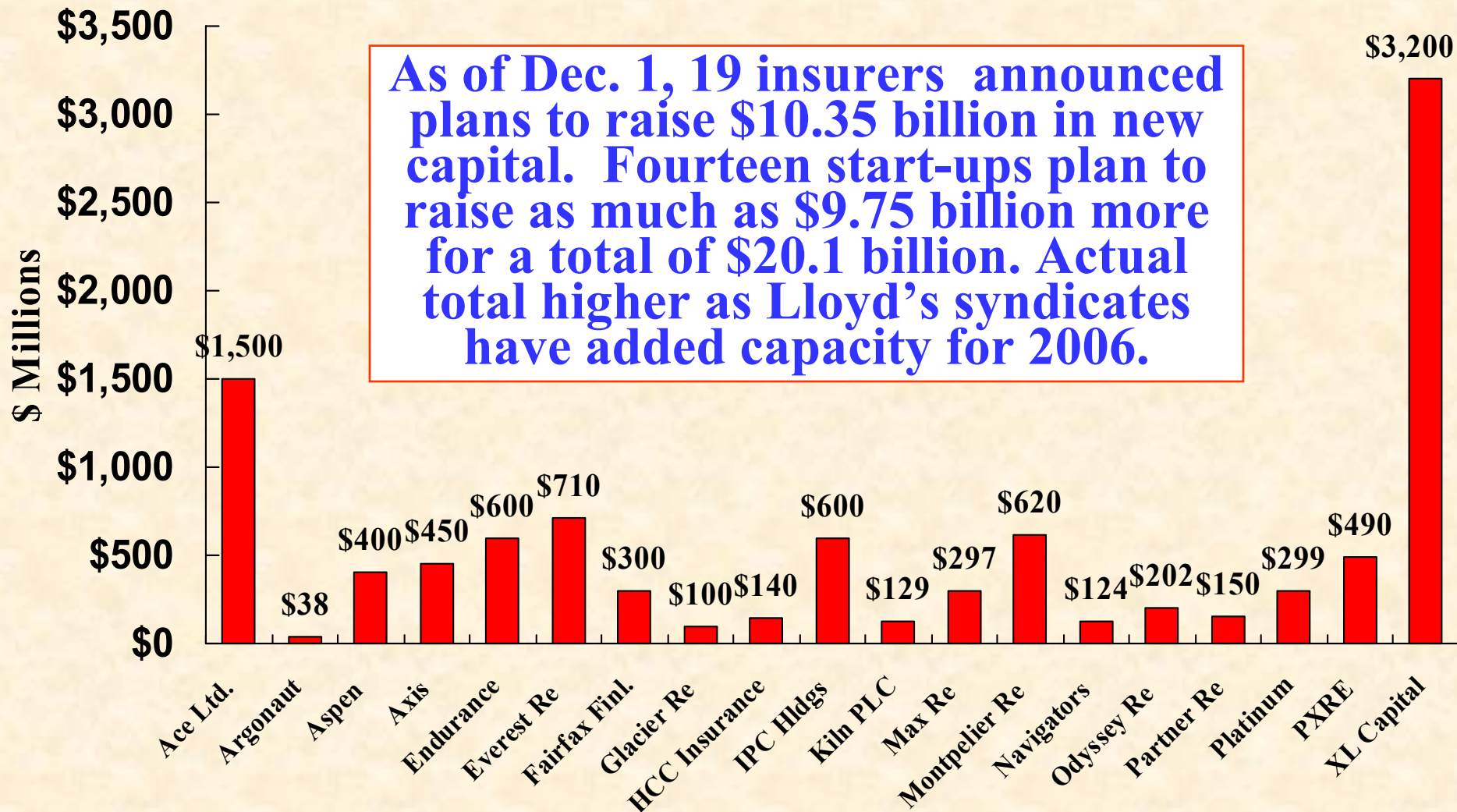
\$ Billions





# Announced Insurer Capital Raising\*

(\$ Millions, as of December 1, 2005)



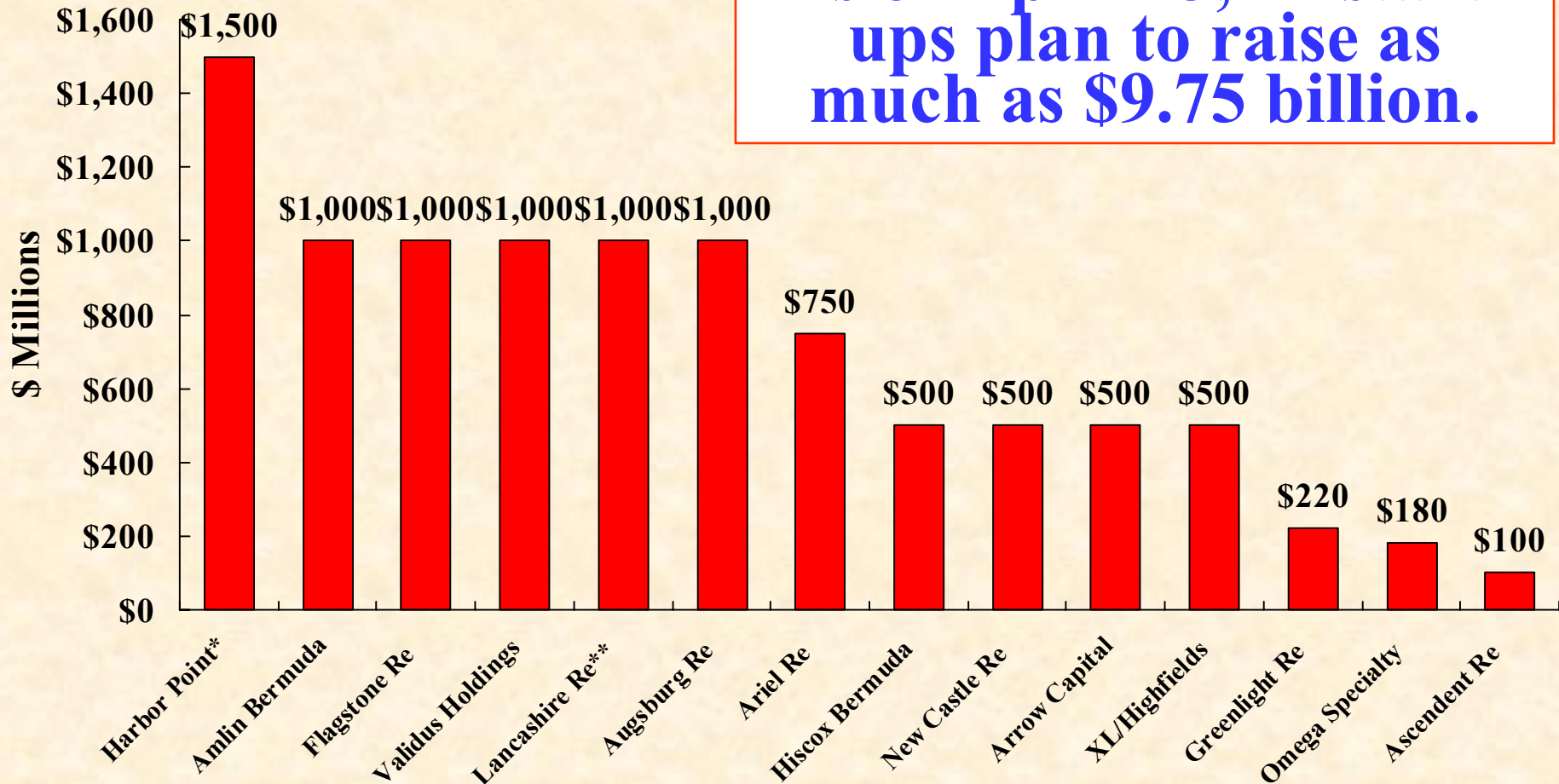
\*Existing (re) insurers. Announced amounts may differ from sums actually raised.  
Sources: Morgan Stanley, Lehman Brothers, Company Reports; Insurance Information Institute.



# Announced Capital Raising by Insurance Start-Ups

(\$ Millions, as of April 15, 2006)

**As of April 15, 14 start-ups plan to raise as much as \$9.75 billion.**

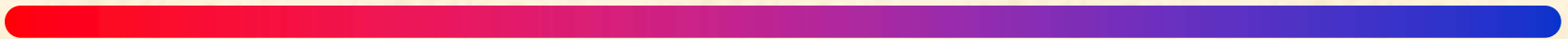


\*Chubb, Trident are funding Harbor Point. Announced amounts may differ from sums actually raised. \*\*Stated amount is \$750 million to \$1 billion. \*\*\*XL Capital/Hedge Fund venture. Arrow Capital formed by Goldman Sachs.

Sources: Morgan Stanley, Company Reports; Insurance Information Institute.

# ***INSURANCE-TO- VALUE:***

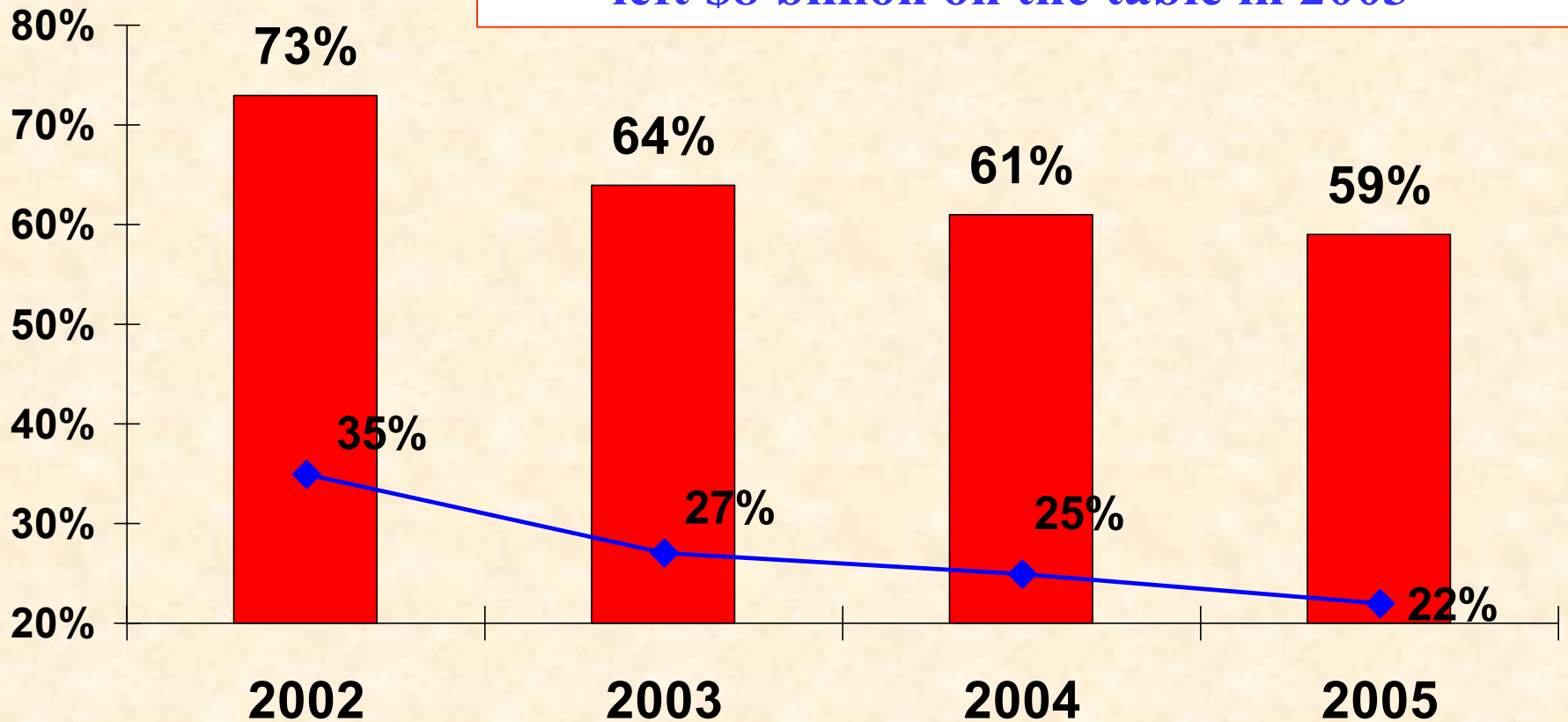
*Ending the Blame Game is a  
Win-Win Situation Deal*





# *Insurance-to-Value in HO is a National Problem, Improved Recently*

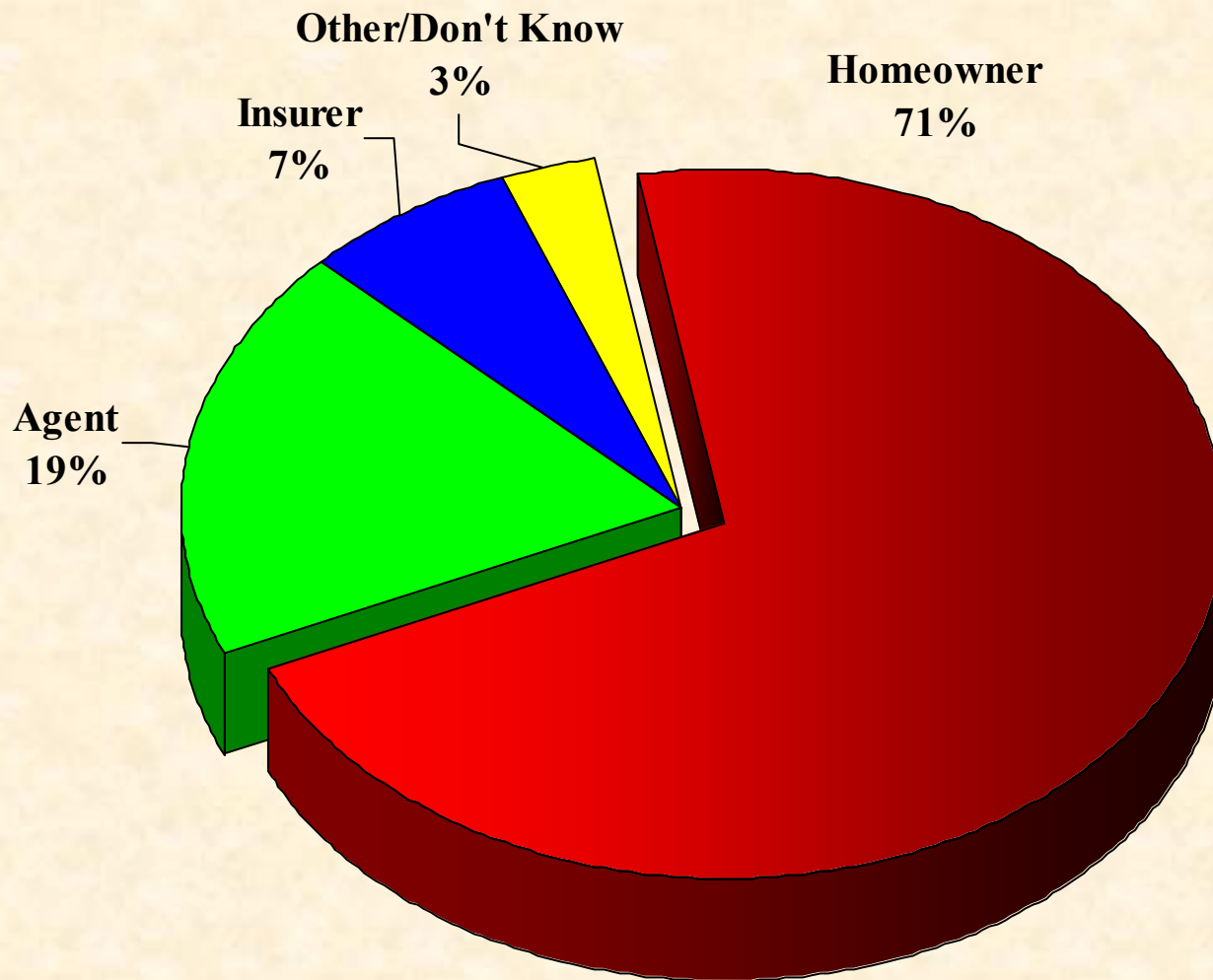
**Less than ITV means homeowners insurers left \$8 billion on the table in 2003\***



\*According MS/B.  
Source: Marshall & Swift/Boeckh

■ Proportion of Homes Undervalued ◆ Average Undervaluation

# Who's Responsibility Is It to Keep Homeowners Policy Up-to-Date?



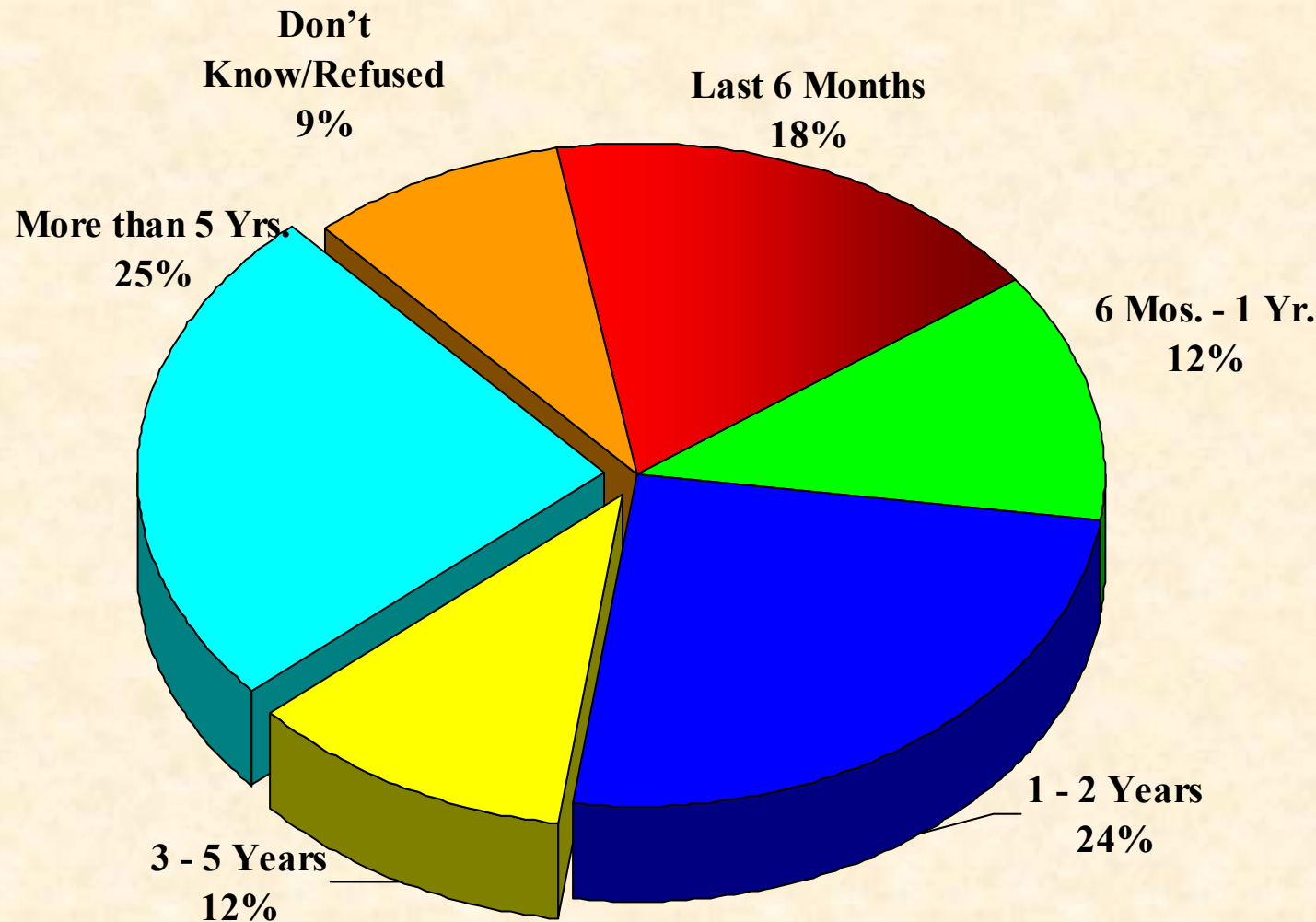
- Nearly 3 out of 4 people, even fire-weary Californians, believe it is the homeowner's responsibility to keep insurance up-to-date
- BUT 26% believe it's the agent's or insurer's responsibility
- This substantial minority is wrong, but gets heard (CA, FL) and comments reflect badly on insurers
- Media, regulators and legislators join fray

Source: September 2004 poll of 800 Californians conducted for the Insurance Information Network of California by Public Opinion Strategies. Margin of error = +/- 3.46%.





# *Time Since Homeowner Last Updated HO Policy*

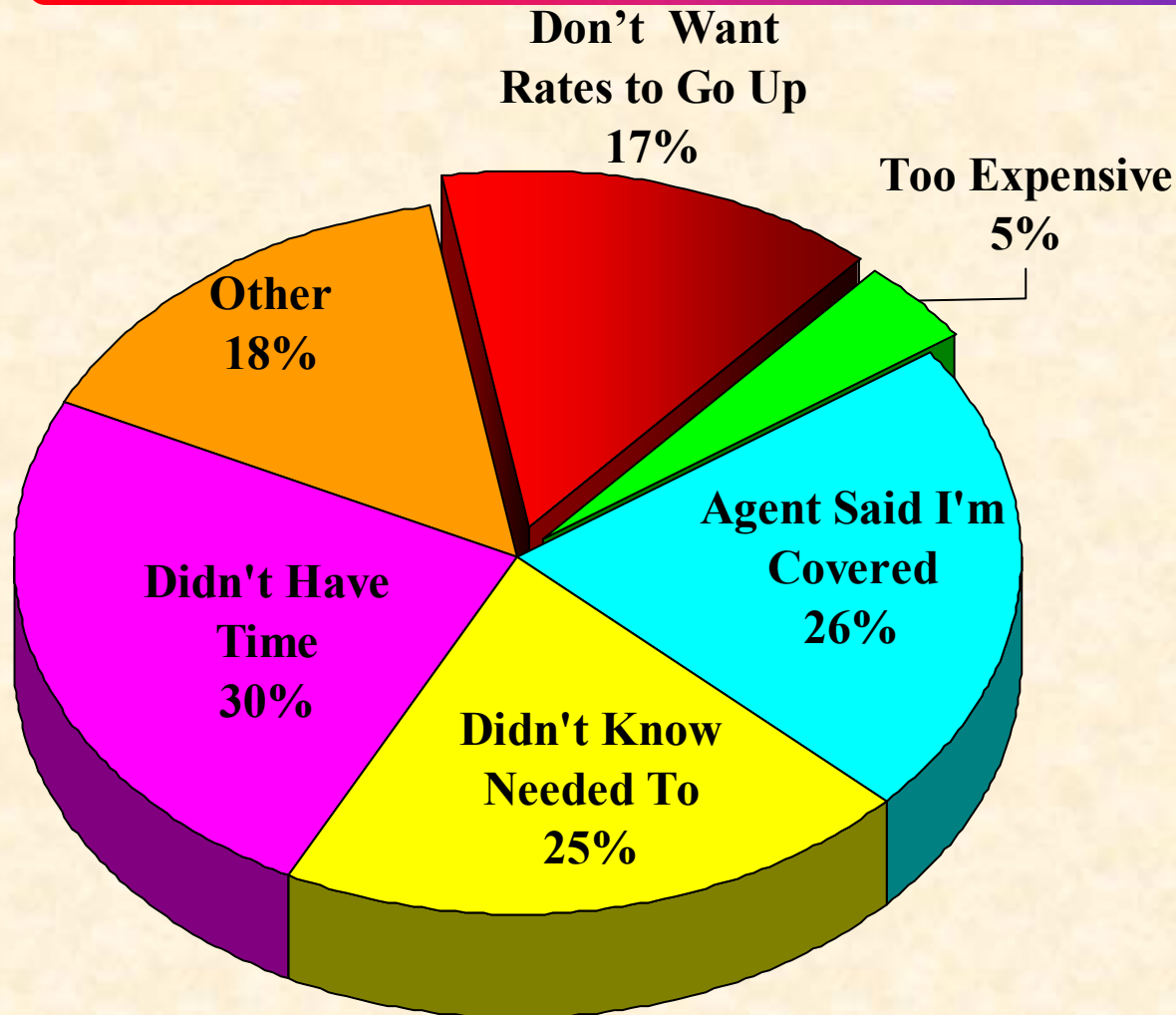


- Nearly 40% of people haven't updated their homeowner's policy within the last 3 years
- Huge potential for problems, especially in disaster-prone states
- Leads automatically to large under-insurance problems

Source: September 2004 poll of 800 Californians conducted for the Insurance Information Network of California by Public Opinion Strategies. Margin of error = +/- 3.46%.



# Why People Don't Increase Homeowners Coverage



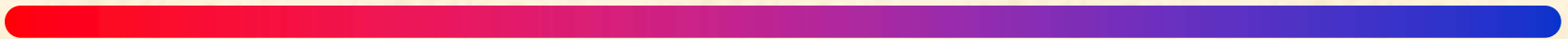
- 22% cite expense as reason they don't adjust they're HO coverage
- 25% don't realize they need to
- 30% say they're too busy (to think about protecting their most valuable asset)
- 25% say their agent said there's nothing to worry about

Source: Harris interactive poll conducted for Fireman's Fund, July 2004.

See: <http://www.firemansfund.com/dcmssites/about/pdf/firemansfundtoplinerev2.pdf>

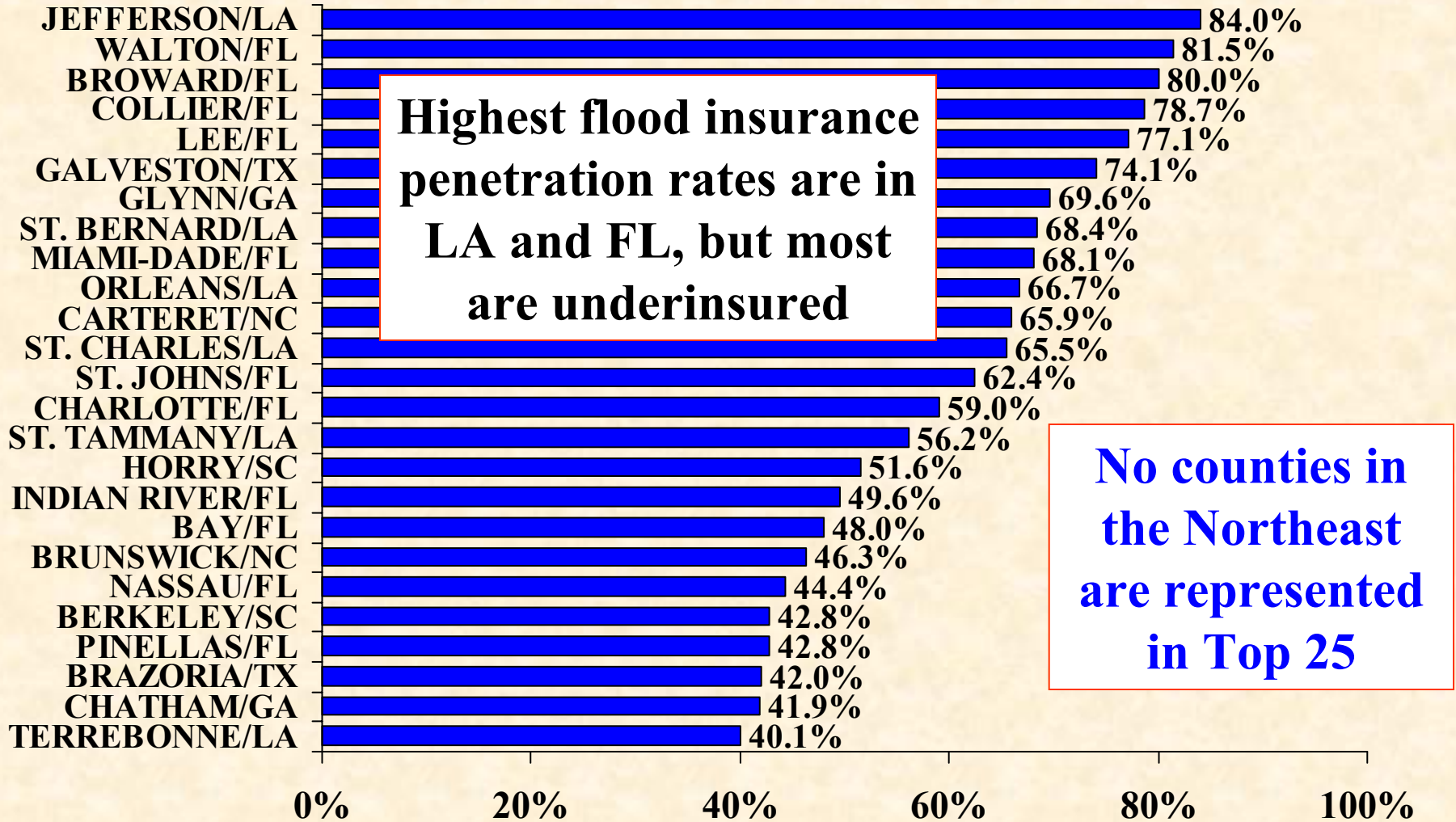
# *National Flood Insurance Program*

*Does the NFIP Help or Hurt  
the CAT Problem?*





# Flood Insurance Penetration Rates: Top 25 Counties/Parishes in US\*

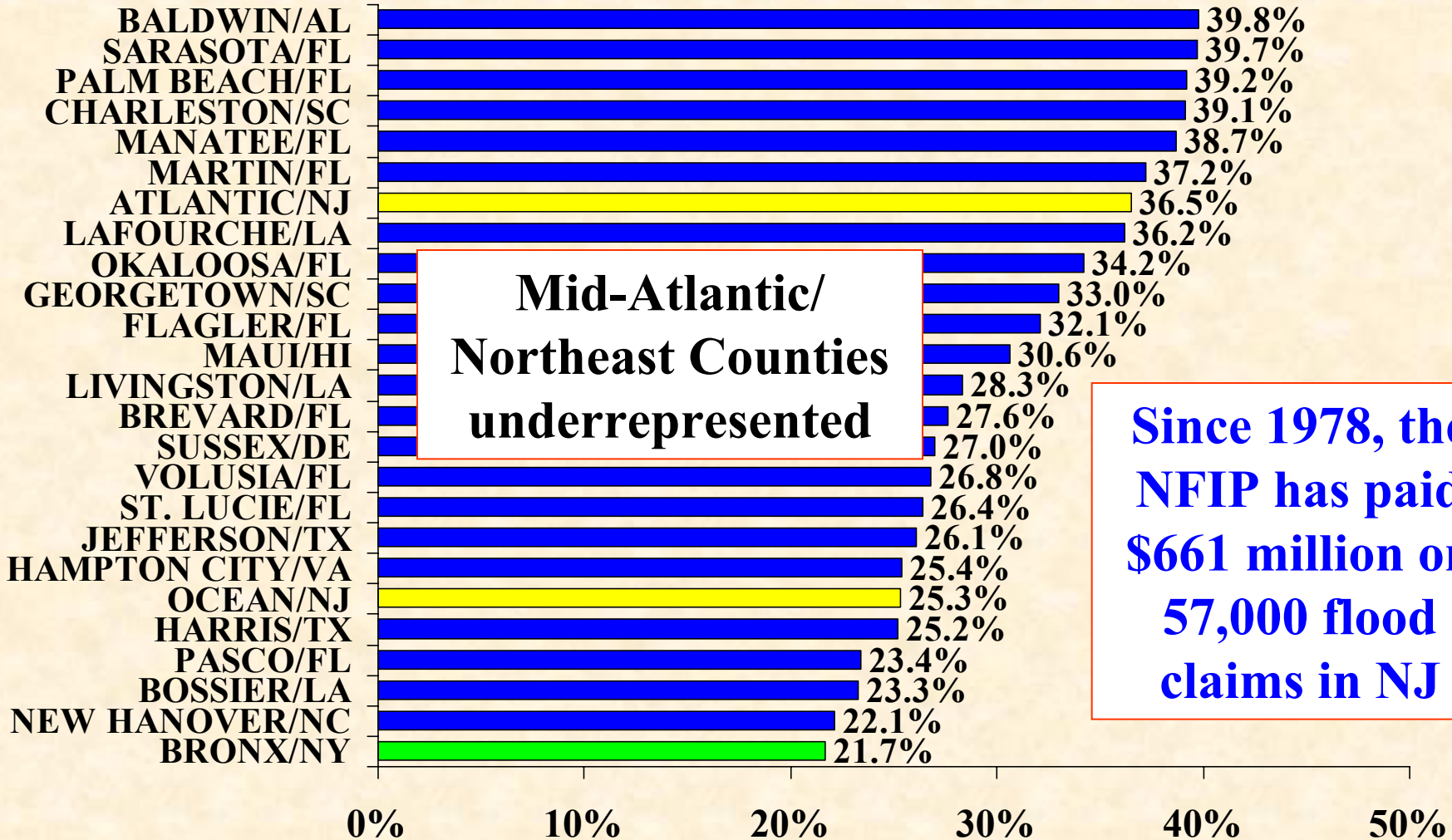


\*As of 12/31/05.

Source: New Orleans Times-Picayune, 3/19/06, from NFIP and US Census Bureau data.



# Flood Insurance Penetration Rates: Counties/Parishes Ranked 26-50\*



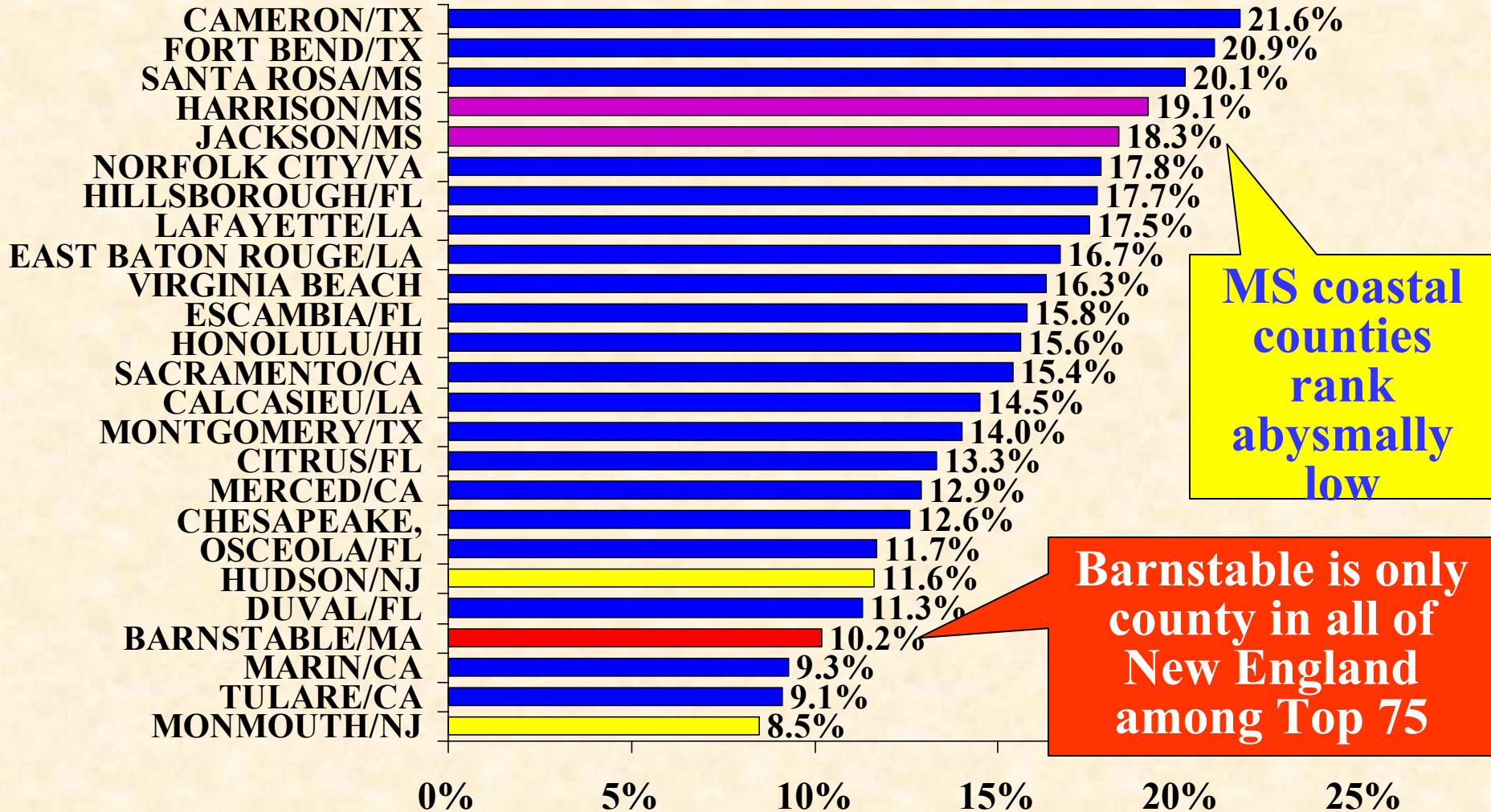
\*As of 12/31/05.

Source: New Orleans Times-Picayune, 3/19/06, from NFIP and US Census Bureau data.





# Flood Insurance Penetration Rates: Counties/Parishes Ranked 51-75\*



\*As of 12/31/05.

Source: New Orleans Times-Picayune, 3/19/06, from NFIP and US Census Bureau data.

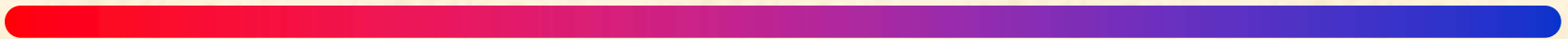


# *Repeat NFIP Flood Losses Cost Taxpayers Big Bucks & Enable Poor Building Decisions*

	<b>Number</b>	<b>Taxpayer Cost</b>
<b>Repetitive Loss Properties</b>	122,000	\$7.6 billion
<b>Repetitive Loss Properties, Louisiana</b>	25,000	\$1.9 billion
<b>Four or More Losses</b>	22,500	\$1.6 billion
<b>Payments Exceeded Property Values</b>	4,600	\$400 million

# TERRORISM

*A Risk to the NY Metro Area*





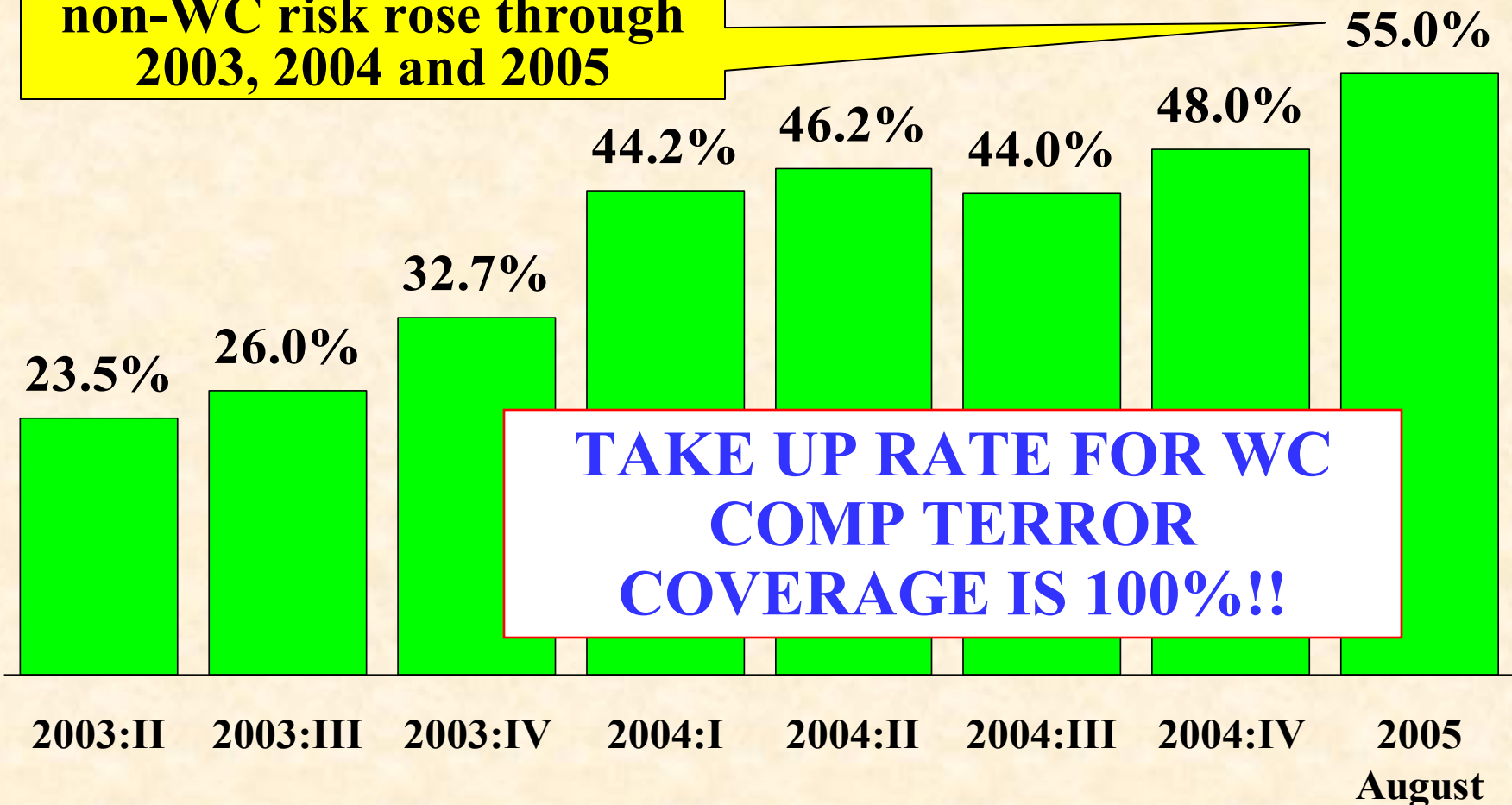
# Insurance Industry Retention Under TRIA (\$ Billions)





# *Terrorism Coverage Take-Up Rate Rising*

**Terrorism take-up rate for  
non-WC risk rose through  
2003, 2004 and 2005**







# *Insured Loss Estimates:*

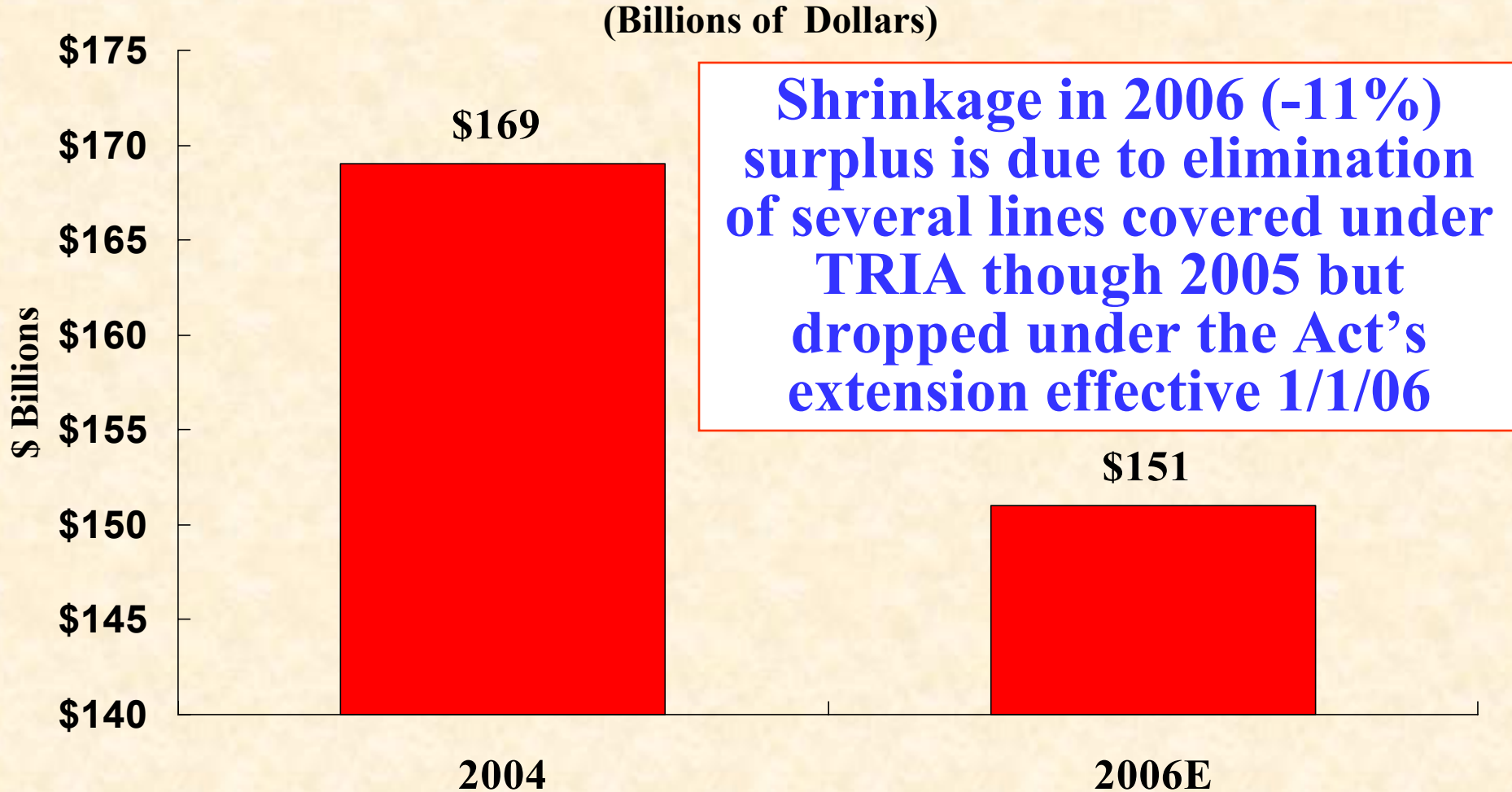
## *Large CNBR Terrorist Attack (\$ Bill)*

Type of Coverage	New York	Washington	San Francisco	Des Moines
Group Life	\$82.0	\$22.5	\$21.5	\$3.4
General Liability	14.4	2.9	3.2	0.4
Workers Comp	483.7	126.7	87.5	31.4
Residential Prop.	38.7	12.7	22.6	2.6
Commercial Prop.	158.3	31.5	35.5	4.1
Auto	1.0	0.6	0.8	0.4
<b>TOTAL</b>	<b>\$778.1</b>	<b>\$196.8</b>	<b>\$171.2</b>	<b>\$42.3</b>

Source: American Academy of Actuaries, Response to President's Working Group, Appendix II, April 26, 2006.



# Surplus Under TRIA/TRIEA Covered Lines



\*2006 figure uses 2005 estimated year-end surplus and premiums by line as basis for calculations.

Source: Insurance Information Institute.

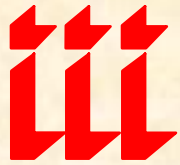


# *Insured Loss Estimates:*

## *Medium CNBR Terrorist Attack (\$ Bill)*

Type of Coverage	New York	Washington	San Francisco	Des Moines
Group Life	\$37.7	\$22.5	\$21.5	\$3.4
General Liability	7.3	2.9	3.2	0.4
Workers Comp	313.2	126.7	87.5	31.4
Residential Prop.	10.3	12.7	22.6	2.6
Commercial Prop.	77.8	31.5	35.5	4.1
Auto	0.2	0.6	0.8	0.4
<b>TOTAL</b>	<b>\$446.5</b>	<b>\$106.2</b>	<b>\$92.2</b>	<b>\$27.3</b>

Source: American Academy of Actuaries, Response to President's Working Group, Appendix II, April 26, 2006.

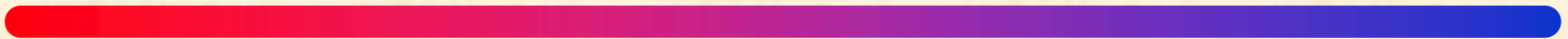


# *Insured Loss Estimates: Truck Bomb Terrorist Attack (\$ Bill)*

Type of Coverage	New York	Washington	San Francisco	Des Moines
Group Life	\$0.3	\$0.2	\$0.3	\$0.1
General Liability	1.2	0.4	0.7	0.2
Workers Comp	3.5	2.8	3.9	1.5
Residential Prop.	0.0	0.0	0.0	0.0
Commercial Prop.	6.8	2.1	3.9	1.2
Auto	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>\$11.8</b>	<b>\$5.5</b>	<b>\$8.8</b>	<b>\$3.0</b>

Source: American Academy of Actuaries, Response to President's Working Group, Appendix II, April 26, 2006.

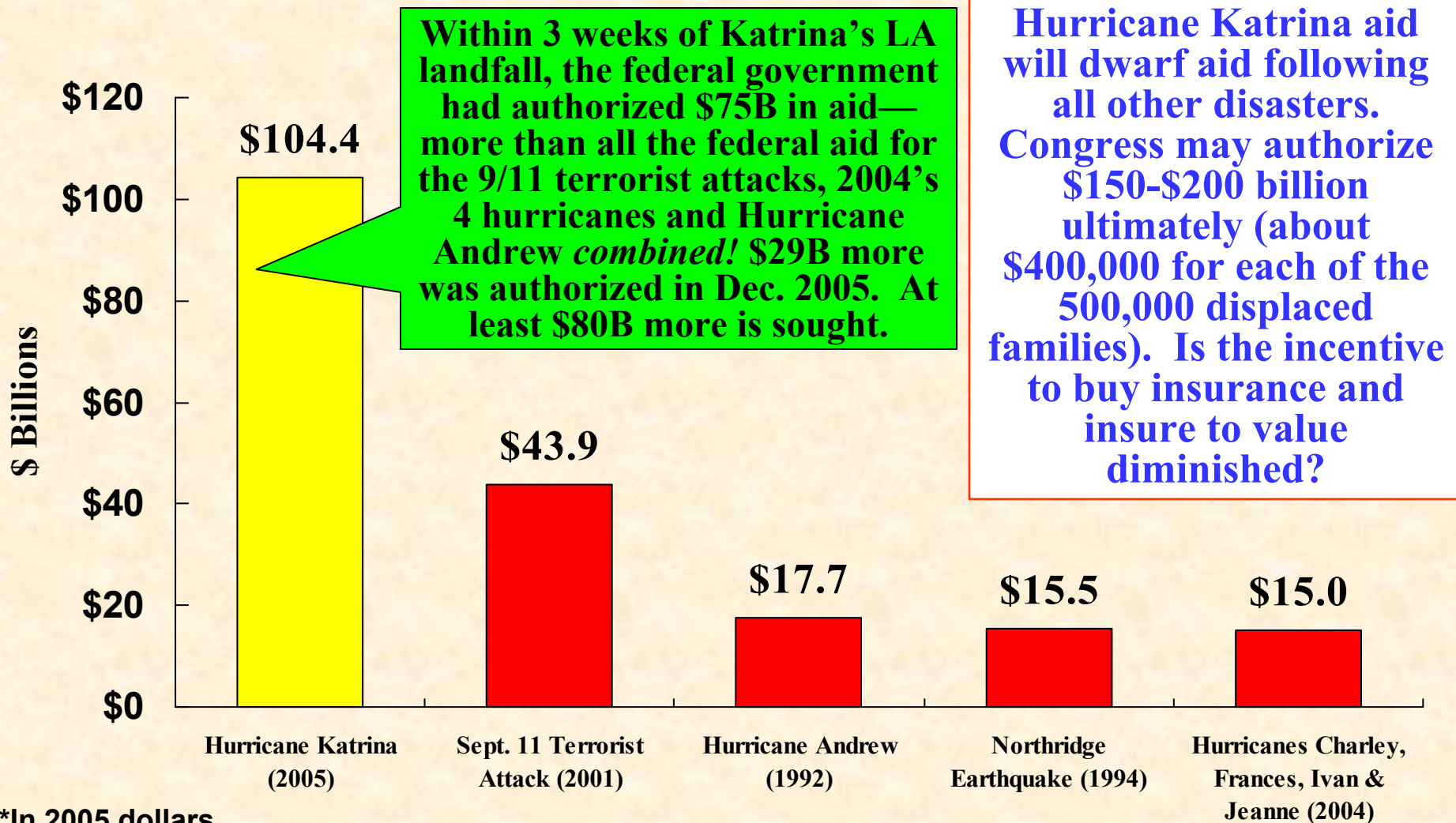
# Overview of Plans for a National Catastrophe Insurance Plan







# Government Aid After Major Disasters (Billions)\*



\*In 2005 dollars.

Source: United States Senate Budget Committee, Insurance Information Institute as of 12/31/05.



# *NAIC's Comprehensive National Catastrophe Plan*

---

- **Proposes Layered Approach to Risk**
- **Layer 1: Maximize resources of private insurance & reinsurance industry**
  - Includes “All Perils” Residential Policy
  - Encourage Mitigation
  - Create Meaningful, Forward-Looking Reserves
- **Layer 2: Establishes system of state catastrophe funds (like FHCF)**
- **Layer 3: Federal Catastrophe Reinsurance Mechanism**



# *Guiding Principles of NAIC's National Catastrophe Plan*

---

- **National program should promote personal responsibility among policyholders**
- **National program should support reasonable building codes, development plans & mitigation tools**
- **National program should maximize risk-bearing capacity of private markets, and**
- **National plan should provide quantifiable risk management to the federal government**



# *Comprehensive National Catastrophe Plan Schematic*

**1:500 Event**

**National Catastrophe Contract Program**

**1:50 Event**

**State Regional Catastrophe Fund**

**State Attachment**

**Personal  
Disaster  
Account**

**Private Insurance**

**Private Reinsurance**



# *Legislation: Comprehensive National Catastrophe Plan*

- **H.R. 846: Homeowners Insurance Availability Act of 2005**
  - Introduced by Representative Ginny Brown-Waite (R-FL)
  - Requires Treasury to implement a reinsurance program offering contracts sold at regional auctions
- **H.R. 4366: Homeowners Insurance Protection Act of 2005**
  - Also worked on by Rep. Brown-Waite
  - Establishes national commission on catastrophe preparation and protection
  - Authorizes sale of federally-backed reinsurance contracts to state catastrophe funds
- **H.R. 2668: Policyholder Disaster Protection Act of 2005**
  - Backed by Rep. Mark Foley (R-FL)
  - Amends IRS code to permit insurers to establish tax-deductible reserve funds for catastrophic events
  - 20-year phase-in for maximum reserve
  - Use limited to declared disasters



# *Legislation: Comprehensive*

## *National Catastrophe Plan (cont'd)*

---

- **S. 3114: Nelson-Landrieu Bill (2006)**
  - **Introduced by Senators Bill Nelson (D-FL) Mary Landrieu (D-LA)**
  - **Calls for creation of bipartisan panel of experts to examine specific proposals before Congress to create federal disaster reinsurance program & that would allow homeowners to set aside tax-exempt cash reserves to pay deductibles and other out-of-pocket disaster-related expenses**
- **IN NEW JERSEY: A. 3236 (June 1, 2006)**
  - **Intro. by Assemblyman Mike Panter (D-Monmouth/Mercer)**
  - **Would create state CAT fund in New Jersey**



# Layer 1: *The Insurance Contract,* *Enhancing Capacity & Shaping the Risk*

- **All Perils Policy**
  - No exclusion except acts of war
  - Contains standard deductibles of \$500 - \$1000 *but requires* separate CAT deductible of 2% – 10% of insured value; Consumer could buy down the deductible to non-CAT fixed dollar amount
- **Encouraging Mitigation**
  - Policy will provide meaningful discounts for effective mitigation measures
- **Creating Meaningful, Forward-Looking Reserves**
  - Change tax law to allow insurers to set aside a share of premiums paid by policyholders as a reserve for future events
  - Amount set aside would be actuarially based
  - Phased-in to maximum reserve over 20 years
  - Use limited to declared disasters

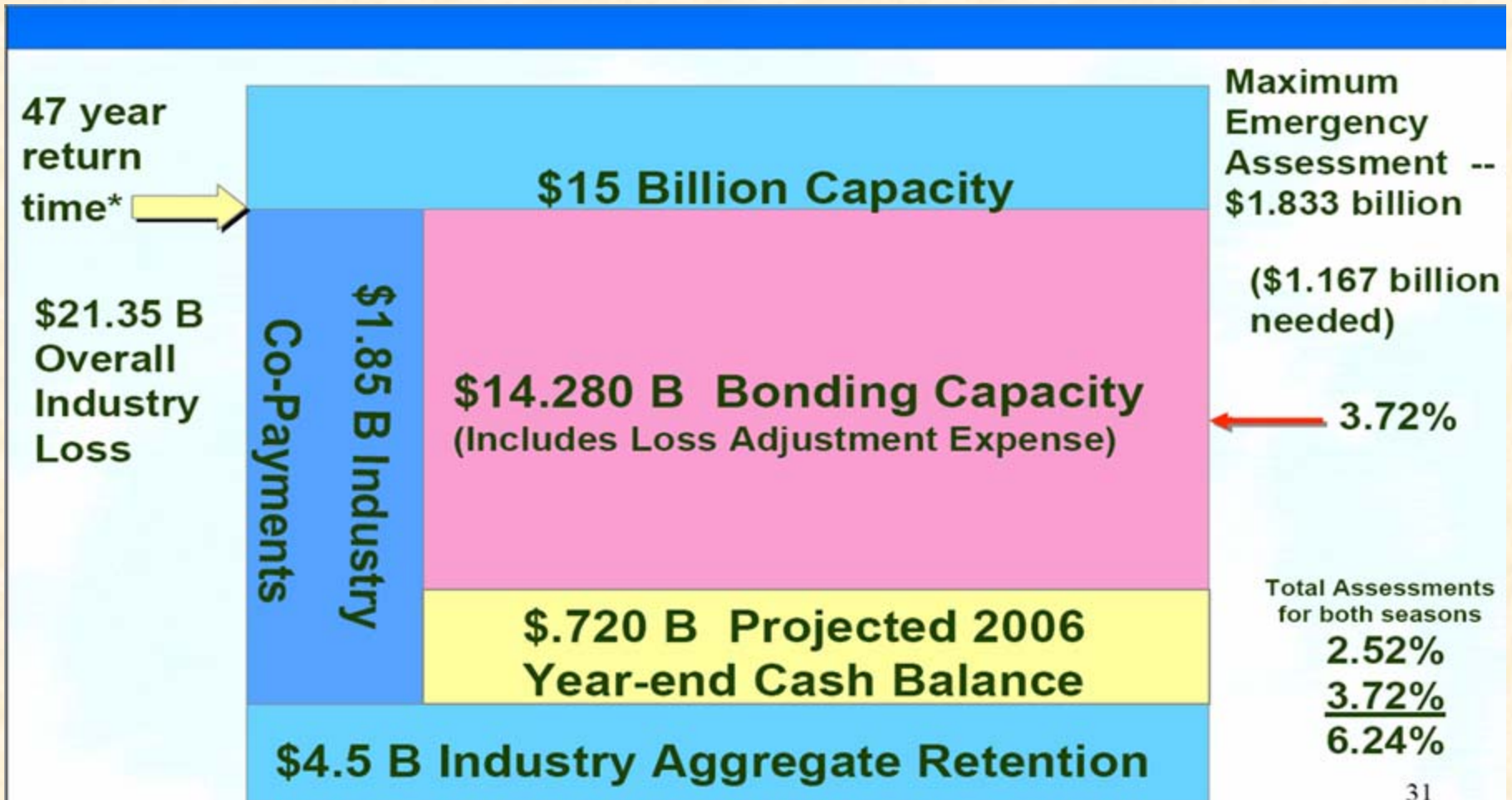


# Layer 2: *State Level Public/Private Partnership (State CAT Fund)*

- **Requirement to Create Fund**
  - **To participate in national fund, states must establish state CAT fund or participate in regional CAT fund**
  - **Funds responsible for managing capacity of their funds up to costs expected for combined 1-in-50 year CAT loss level**
- **Operation of State/Regional CAT Funds**
  - **Operating structures left to states' discretion, including**
    - **Financing mechanism (e.g., debt, pool etc.)**
    - **Trigger point for qualifying loss (if any)**
    - **Amount of retention between private insurers & state fund**
    - **Participation by surplus lines & residual markets**
  - **Requirement that rates are actuarially sound**
  - **Requirement that fund will finance a level of mitigation education and implementation**



# Schematic of Florida Hurricane Catastrophe Fund (2006)



\*Return time not adjusted for premium/exposure growth.

Not Drawn to scale.





## *Layer 2: State Level Public/Private Partnership (State CAT Fund) [Cont'd]*

- **Building Codes**
  - **Participating states expected to establish effective (enforced) building codes that properly reflect their CAT exposures as well as the latest in accepted science and engineering**
  - **States also required to develop high land use plans where appropriate**
- **Anti-Fraud Measures**
  - **State funds and DOIs maintain rigorous anti-fraud programs to ensure losses paid actually due to insured CAT loss**
- **Mitigation**
  - **DOIs required to establish & implement effective mitigation plans**
  - **Review of mitigation plans will be considered as part of an NAIC certification process**



# Layer 3:



## *The Role of a National Mechanism*

- **The National Catastrophe Plan Mechanism**
  - **Federal legislation is needed to create a National Catastrophe Insurance Commission (NCIC)**
    - **NCIC purpose is to serve as conduit between state funds and US Treasury for purpose of providing reinsurance to state funds for insured losses resulting from catastrophic events beyond the state-mandated 1-in-50 year exposure**
  - **States & NCIC will enter into National Catastrophe Financing Contracts**
    - **Reinsurance will attach at 1-in-50 year level and provide protection through the 1-in-500 year level event**

# Layer 3: *[Cont'd]*

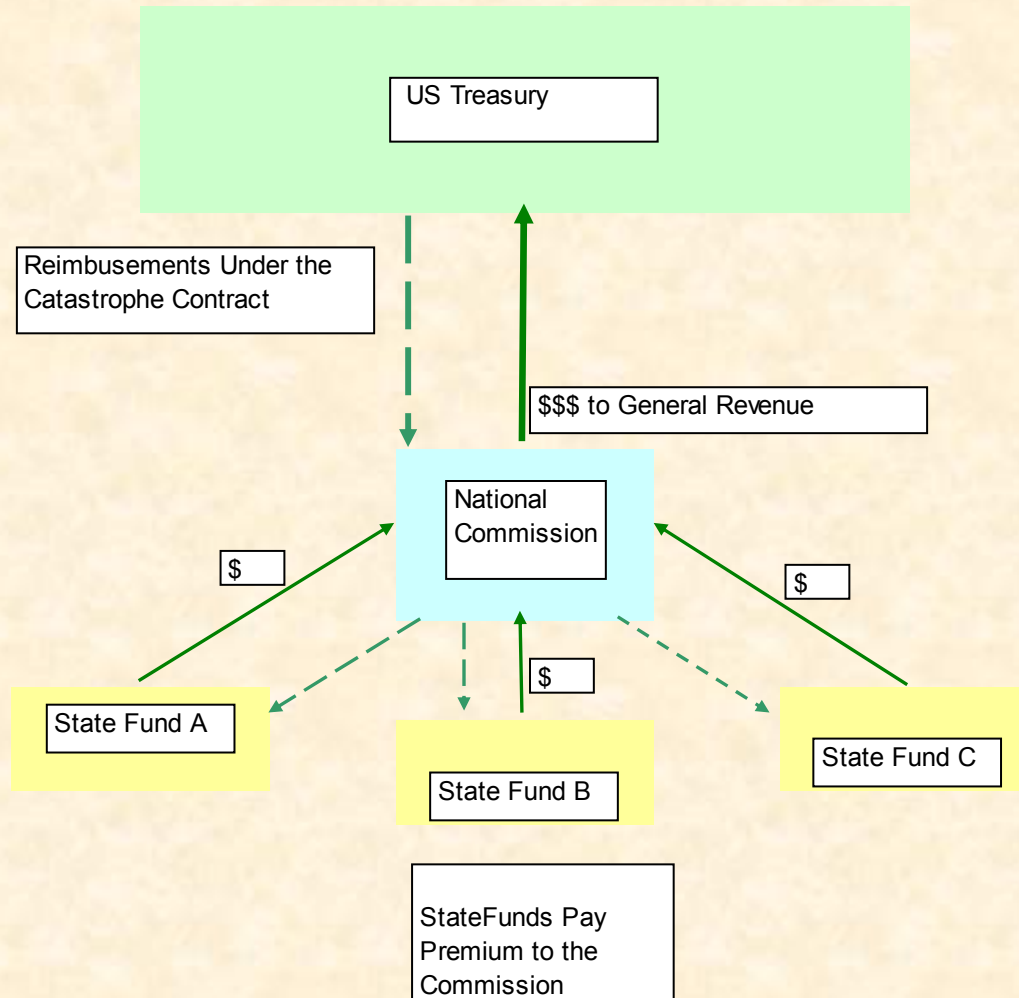


## *The Role of a National Mechanism*

- **The National Catastrophe Insurance Commission Structure & Duties**
  - **NCIC would annually establish actuarially sound rates, with no profit factor, for each state's aggregate catastrophic exposure**
  - **State fund responsible for collecting premium and remitting to NCIC.**
  - **NCIC remits premiums to US Treasury general revenues**
    - **No separate fund is created, nor are any funds accumulated**
    - **In the event of a loss, US Treasury provides funds pursuant to catastrophe financing contract**
  - **NCIC will consist of 11 members serving 6-year terms**
    - **1 member from each of 4 NAIC zones, 1 US Treasury rep., remainder are to be experts in actuarial science, engineering, meteorological/seismic science, consumer affairs & p/c insurance**
    - **Members are selected by the President & confirmed by the Senate with chair appointed by the President**



# Interaction of State Funds, National Commission & US Treasury





# *Pros/Cons of Federal CAT*

## *(Re) Insurance Facility*

### Rationale *FOR* Federal Involvement

- Insurance was not meant to handle mega-catastrophes
- Such risks are fundamentally uninsurable
- Federal government already heavily involved in insuring against weather-related mega-catastrophes (e.g., flood, crop)
- Insurers are not allowed to charge risk appropriate rates (including rising reinsurance costs)
- Price/availability of private reinsurance is volatile

### Rationale *AGAINST* Federal Involvement

- Crowds-out pvt. insurance/reinsurance markets; stifles innovation
- Relationship between price and risk assumed is diminished since fed insurance programs are seldom actuarially sound
- Increases federal involvement and regulatory authority in p/c insurance (*not a negative for some market participants*)
- Cost to US Treasury (esp. taxpayers in less disaster prone states)
- Diminishes incentives for mitigation, tougher building codes and wiser land use policies if Fed rate are politically influenced





# *Proponents/Opponents of National Catastrophe Plan*

## Proponents of a National Catastrophe Plan

- Some major personal lines insurers: Allstate, State Farm
- Insurance regulators from some CAT-prone states: FL, CA as well as NY (but not TX)
- Some elected officials in state legislatures & Congress, esp. from disaster-prone states like FL
- Coalition building on-going (ProtectingAmerica.org)

## Opponents of a National Catastrophe Plan

- Reinsurers, American Insurance Association, numerous large insurers both domestic and foreign, mutual and stock
- Many smaller insurers concerned about federal intrusion into the p/c regulatory arena
- Many insurers operating outside areas prone to major CAT risk
- Some/many regulators in states not prone to major catastrophic risk
- Likely opposition among legislators and policymakers in Washington opposed to deeper involvement of government in p/c insurance sector





## *Notable & Quotable...*

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**“People who willingly and knowingly live in catastrophe-prone areas should assume the risk, and cost, of doing so; government-subsidized insurance just loads the risk, and cost, on average taxpayers.”**

➤ *Edmund F. Kelly, CEO, Liberty Mutual Insurance Company (Wall Street Journal, May 31, 2006)*



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PREPARING FOR AND PROTECTING AMERICA FROM CATASTROPHE

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WHAT ARE YOU AT RISK FOR?

OUR MISSION IS TO RAISE AWARENESS, EDUCATE THE PUBLIC AND POLICYMAKERS, AND OFFER SOLUTIONS THAT WILL BETTER PREPARE AND PROTECT AMERICA FROM MAJOR CATASTROPHE IN A SENSIBLE, COST-EFFECTIVE FASHION.

REPLAY

## AMERICA NEEDS YOUR VOICE!

Our current system leaves too many people unprotected and unable to rebuild their lives following a catastrophe. We need to prepare for future catastrophes and protect ourselves.

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STATS & FIGURES:

Repeat of the 1886 Charleston, South Carolina, earthquake today would cause

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### RECENT NEWS:

- Teaching Earthquake Science Made Easy: USGS Partnership Puts Curriculum into the Classroom  
2.1.06
- Faculty Senate hears report on emergency-preparedness plan  
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- It's Earthquake Preparedness Week In Kentucky  
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REPLAY

## NEW JERSEY NEEDS YOUR VOICE!

System leaves too many people unprotected and unable to rebuild their lives after a catastrophe. We need to prepare for future catastrophes and protect ourselves.

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population is expected to increase by 1 million people over the next 10 years.

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ANNOUNCEMENT

ASSEMBLYMAN MIKE PANTER (DOMONMOUTH/MERCER) INTRODUCES LEGISLATION AIMED AT PREPARING AND PROTECTING RESIDENTS FROM IMPACT OF A CATASTROPHE

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### RECENT NEWS:

- [Bill Would Create N.J. Catastrophe Fund](#)  
Insurance Journal
- [Experts warn: Prepare for rising seas, storms](#)  
Atlanticville (Long Branch, NJ)
- [The 2006 hurricane season begins today](#)  
Is everyone ready?  
USA Today
- [Along Jersey Shore, storm worries are on the rise](#)

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# *Regional Natural Disaster Pool(s)*

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## **KEY ELEMENTS**

- Share of property premiums in certain states (homeowners, commercial property) premiums collected would be ceded to pool and used to finance mega-catastrophes in participating states
- Funds would earn investment income tax-free to speed accumulation
- Federal government would provide a backstop to the pool as:
  - Reinsurance purchased by pool from the government
  - Line of credit offset by assessing authority

## **KEY CHALLENGES**

- Is participation by insureds mandatory or optional?
- If optional, significant adverse selection problem
- Determination of “actuarially sound” rates
- Maintaining role for private reinsurance
- Keeping rates free of political influence and manipulation
- Formula for assessing shortfalls in pool (including taxpayer share)
- Attracting support of states not prone to mega-catastrophes
- Appeasing deficit hawks, advocates of small government



# *Federal Reinsurance Program*

## **KEY ELEMENTS**

- Insurers purchase CAT reinsurance from federal government

## **KEY CHALLENGES**

- Determination of “actuarially sound” rates
- Maintaining significant role for private reinsurers
- Maintaining significant role for ART and risk securitization
- Keeping rates free of political influence and manipulation
- Appeasing advocates of small government
- Keeping natural disaster risk programs separate and distinct from terrorism risk



# *Tax-Preferred Treatment of Pre-Event Catastrophe Reserving*

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- **KEY ELEMENTS**

- Insurers would be allowed to deduct from their taxable income amounts set aside in reserve for natural disaster risks *in advance of the occurrence of the actual event*
- Presently, US tax law does not allow for such treatment
  - Most other countries already permit pre-event reserving

- **KEY CHALLENGES**

- Determination of appropriate reserve levels
- Overcoming criticism of impact on US Treasury receipts
  - Note that impact on Treasury is limited to time value of tax receipts



# Summary

- **Industry results are fundamentally strong except in property lines in CAT-prone areas**
- **Premium growth is very sluggish/negative except for CAT-exposed property lines/territories**
- **NJ has 5<sup>th</sup> largest coastal property exposure in US & largest exposure to terrorism**
- **CAT Fund argument unlikely to be resolved by the current Congress**
- **States haven't taken steps to form own CAT funds**
- **Insurers, lawmakers, regulators deeply divided**
  - **Lack of unity, current profitability & rising capacity & Administration's political philosophy hurt chances for a national CAT fund in the near future**



# *Insurance Information Institute On-Line*

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