

The Challenge of Communicating Flood Risk

**2006 National Flood Conference
National Flood Insurance Program**



May 9, 2006

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Presentation Outline

- **The Media & Flood Insurance**
- **Flood Facts Review**
- **The Flood Insurance Purchase Decision**
- **Summary of I.I.I. Actions to Promote Flood Awareness, Preparedness & Flood Insurance**

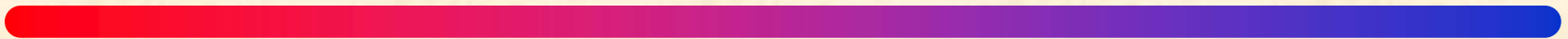
QUESTIONS

- **What Should Have Been Done to Communicate Flood Risk Pre-Katrina?**
- **What Should be Done to Communicate Risk & Reduce Loss Going Forward?**

- **APPENDIX 1: Key Flood Program Statistics**
- **APPENDIX 2: Key Hurricane Statistics**

The Media & Flood Insurance

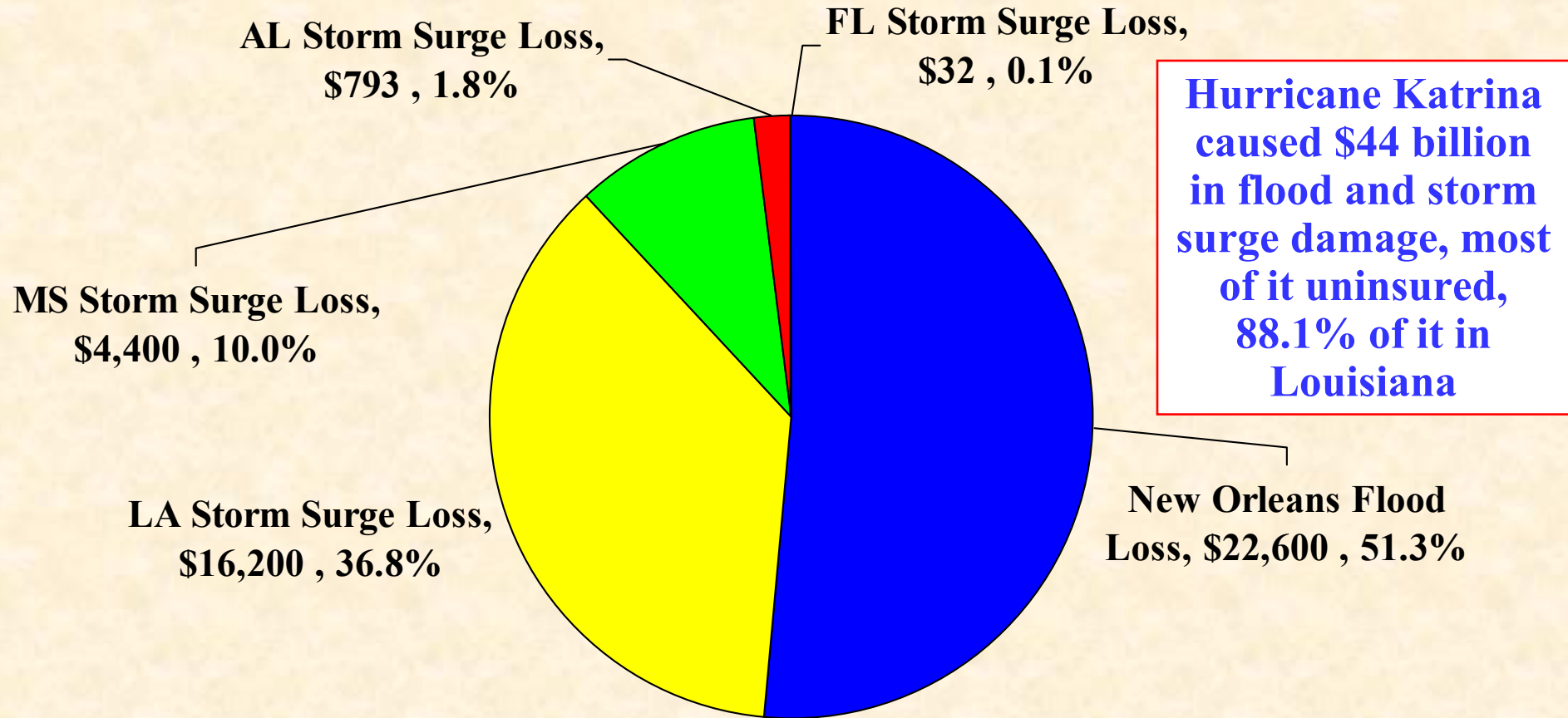
Better Late than Never





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.



*Media Coverage of Flood Insurance, 2000-2006E**

State	2000	2001	2002	2003	2004	2005	2006E
LA	76	111	108	124	122	479	1,518
MS	20	20	26	55	45	349	804
FL	215	227	161	231	463	655	456
NY	64	38	34	36	65	146	171
US*	1,961	1,882	1,919	2,177	2,994	4,647	5,772
US-All Print Media**	2,761	2,714	3,128	3,368	6,377	10,526	13,242

*Newspaper coverage as of May 8, 2006. 2006 is III estimate.

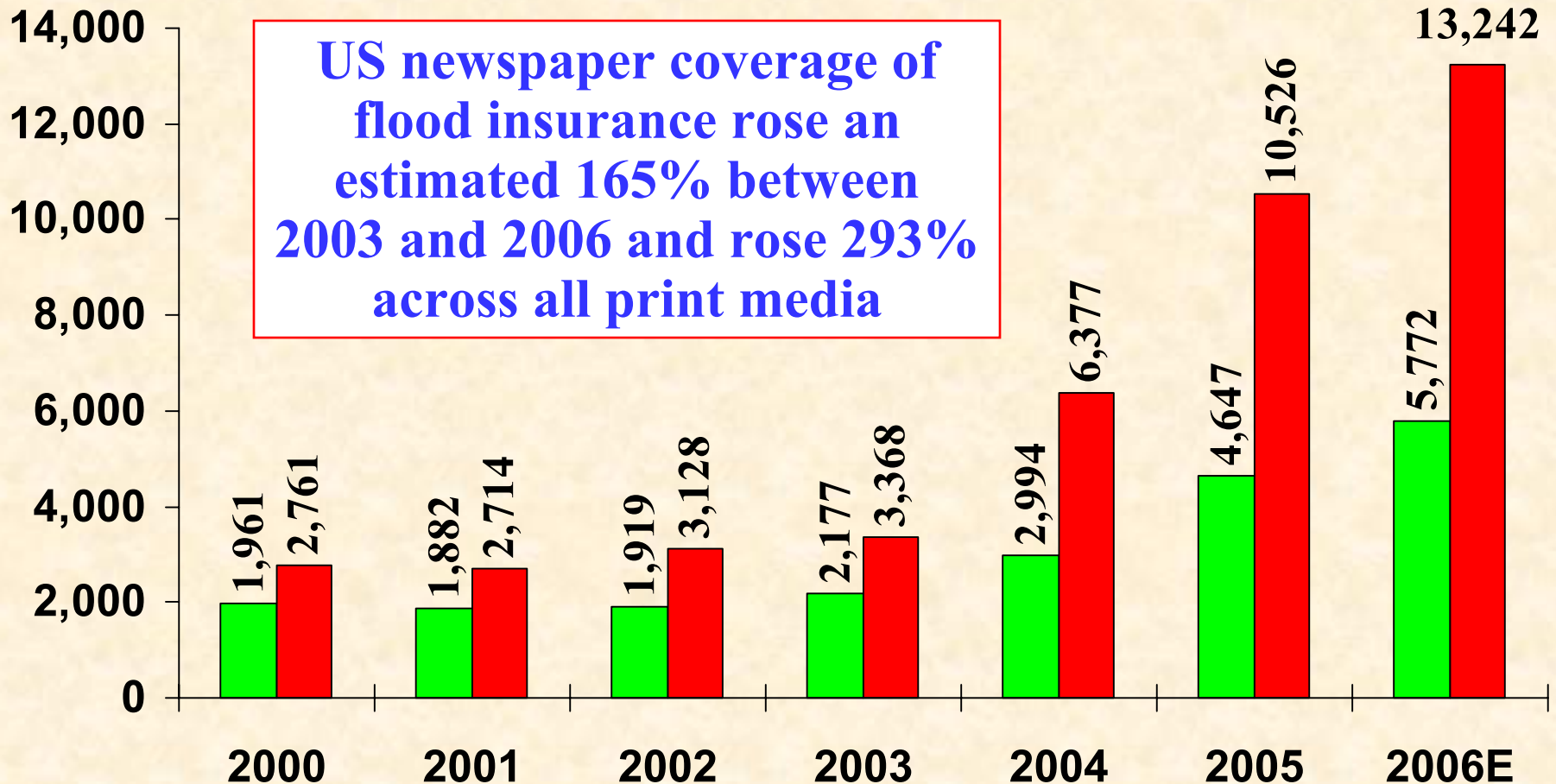
**Includes newspapers, magazines, wire services, etc.

Source: Insurance Information Institute analysis based on Nexis search.



Media Coverage of Flood Insurance in the US Overall, 2000-2006E*

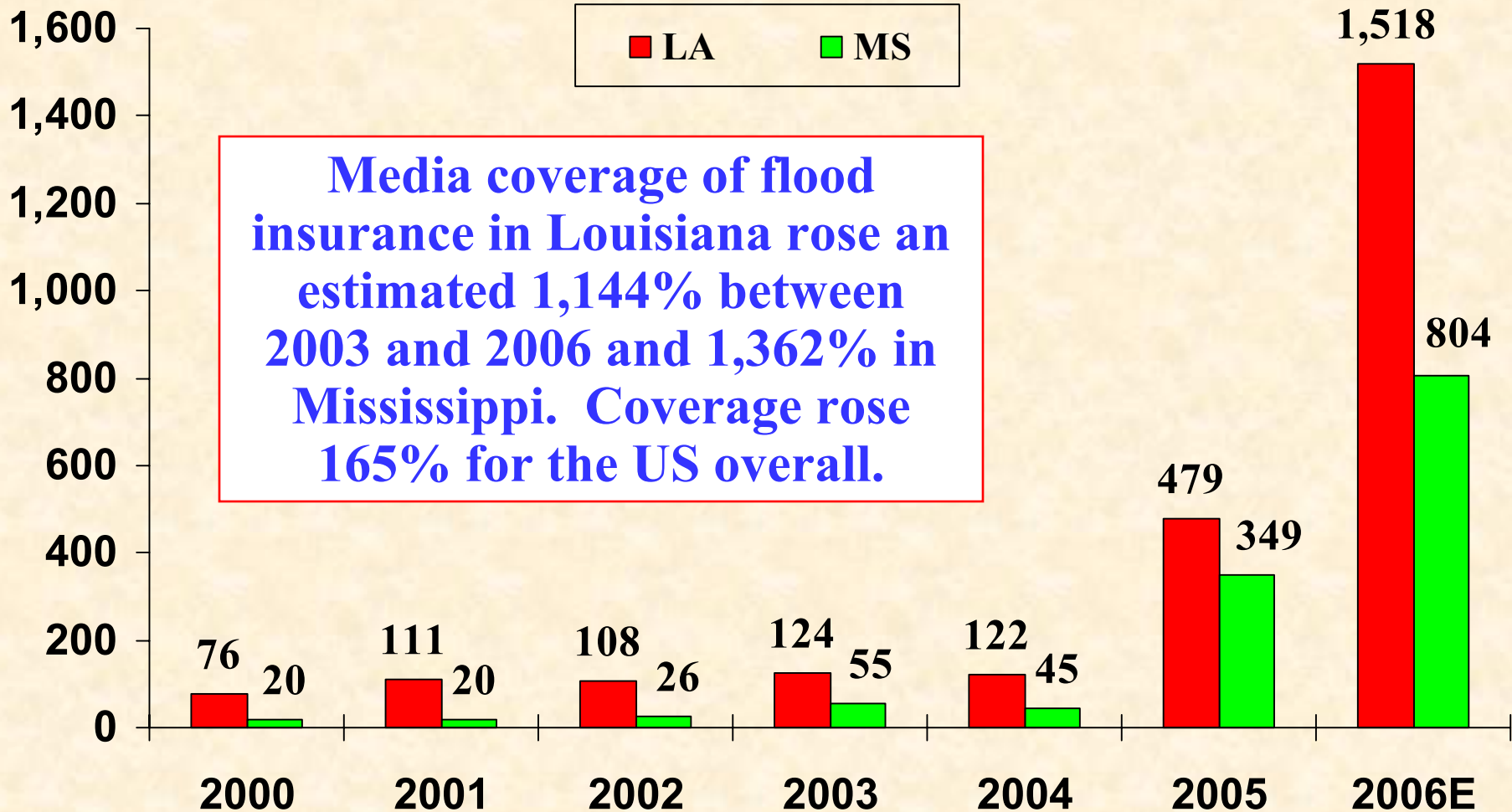
■ US* ■ US-All Print Media**



*Newspaper coverage as of May 8, 2006. 2006 is Ill estimate. **Includes newspapers, magazines, wire services, etc. Source: Insurance Information Institute analysis based on Nexis search.



Media Coverage of Flood Insurance in LA & MS, 2000-2006E*

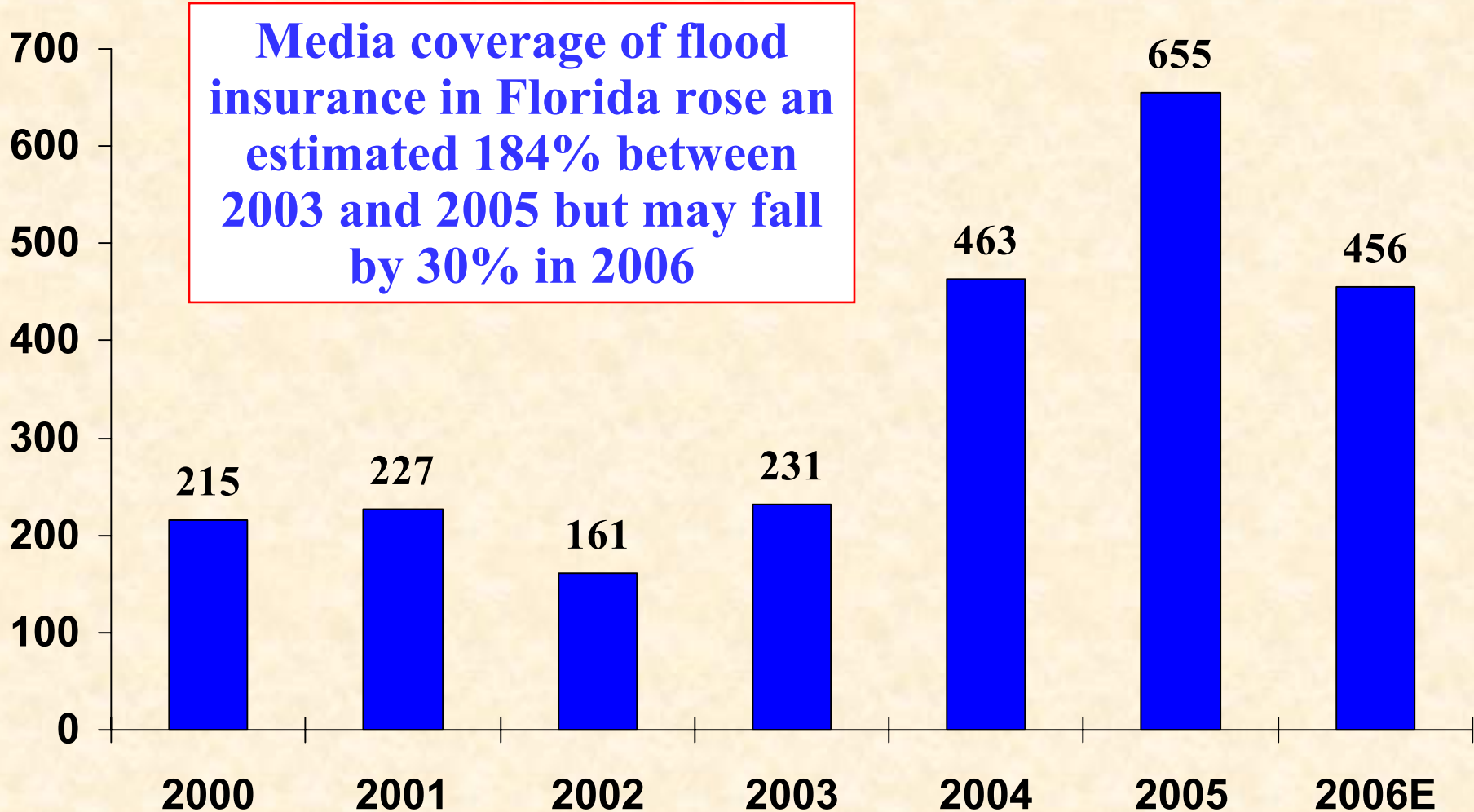


*Newspaper coverage as of May 8, 2006. 2006 is Ill estimate.

Source: Insurance Information Institute analysis based on Nexis search.



*Media Coverage of Flood Insurance in Florida, 2000-2006E**

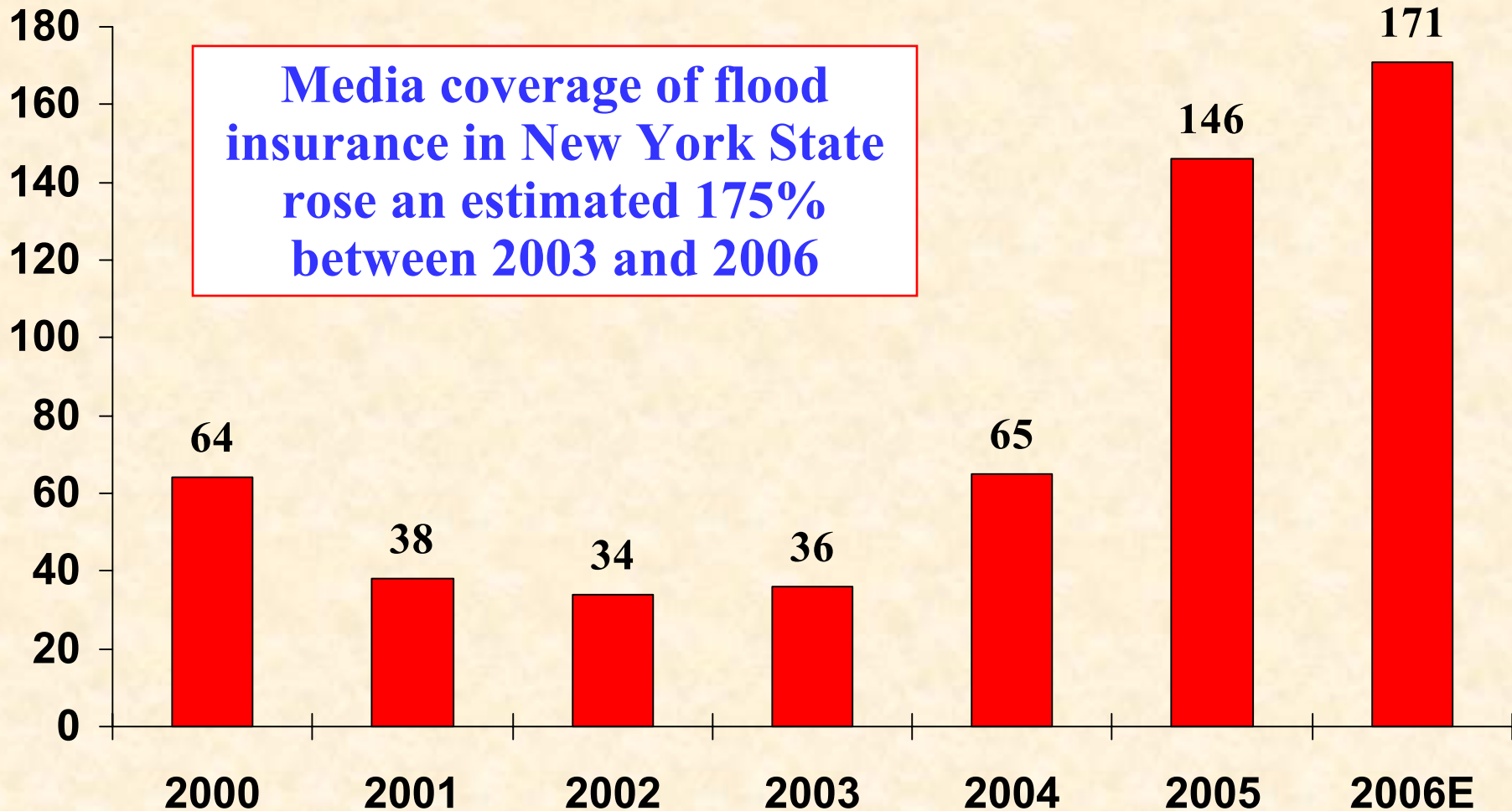


*Newspaper coverage as of May 8, 2006. 2006 is III estimate.

Source: Insurance Information Institute analysis based on Nexis search.



*Media Coverage of Flood Insurance in New York State, 2000-2006E**

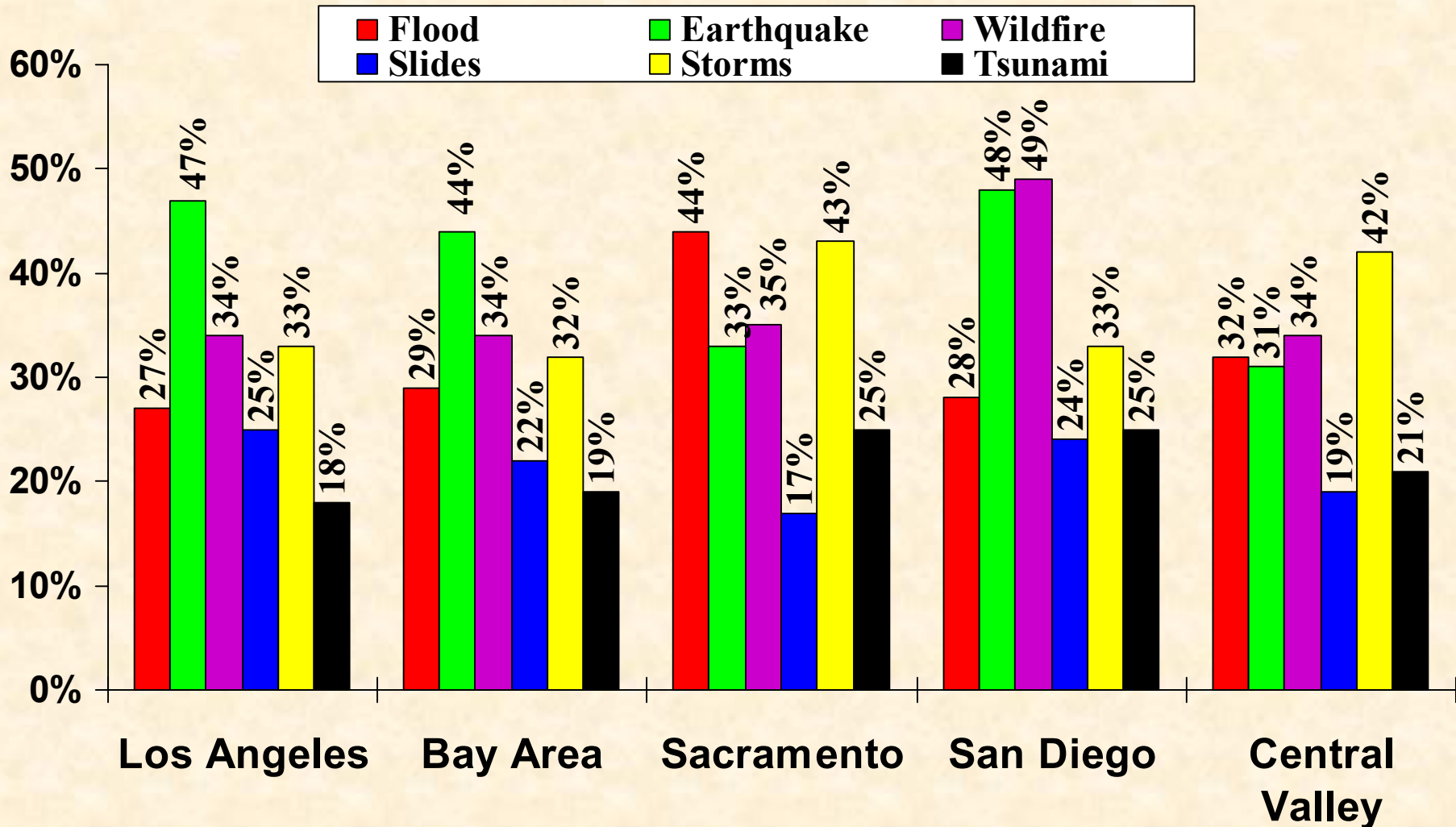


*Newspaper coverage as of May 8, 2006. 2006 is Ill estimate.

Source: Insurance Information Institute analysis based on Nexis search.



California Hazards: % People Stating Prepared/Very Prepared



Source: Insurance Information Network of California Survey, February 2006.

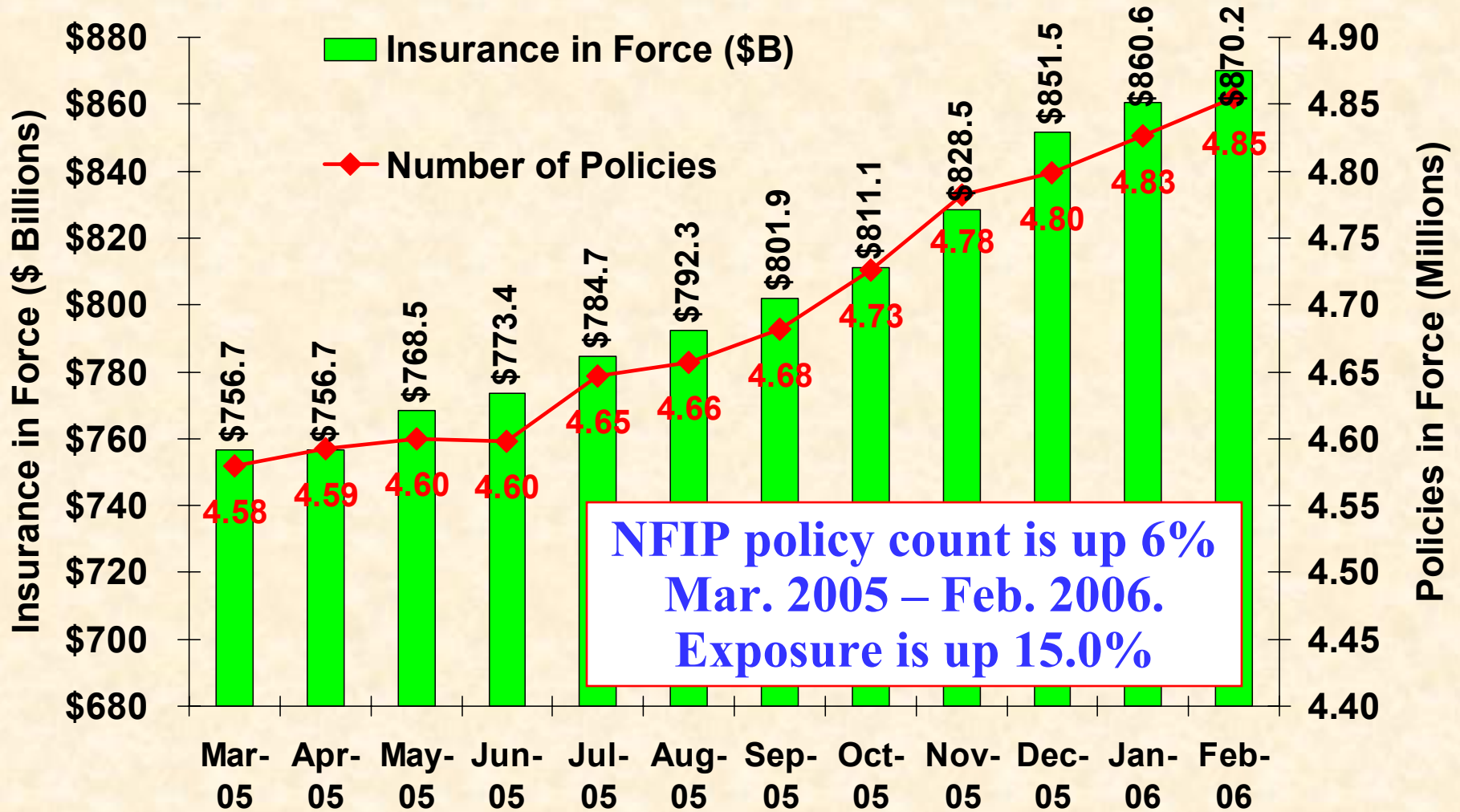
The Flood Insurance Purchase & Retention Decision

*Flood Insurance is a
Tough Sell*



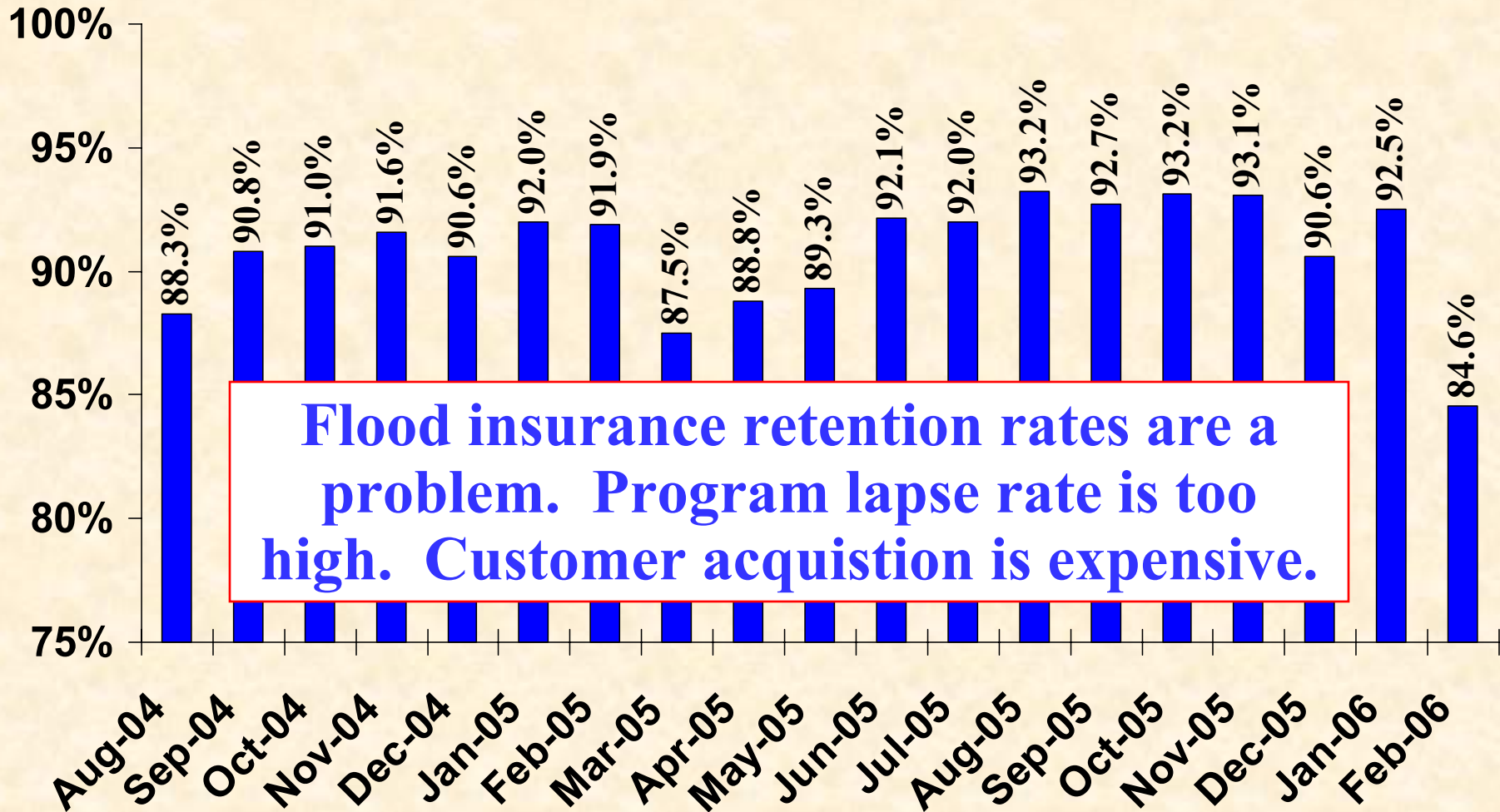


Flood Insurance in Force, March 2005-February 2006





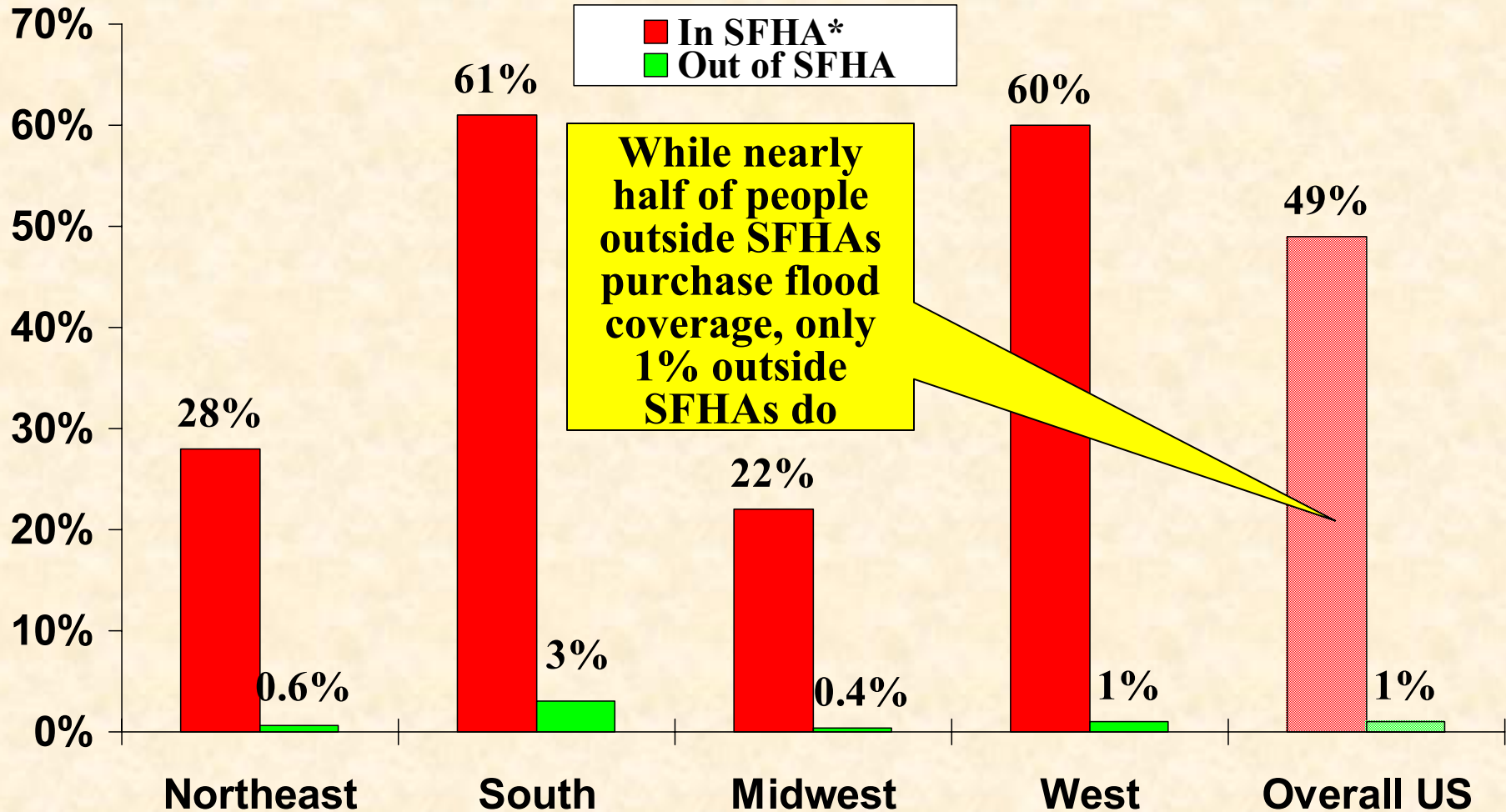
Flood Insurance Retention Rates, March 2005-February 2006





NFIP Flood Policy

Penetration Rates, by Region

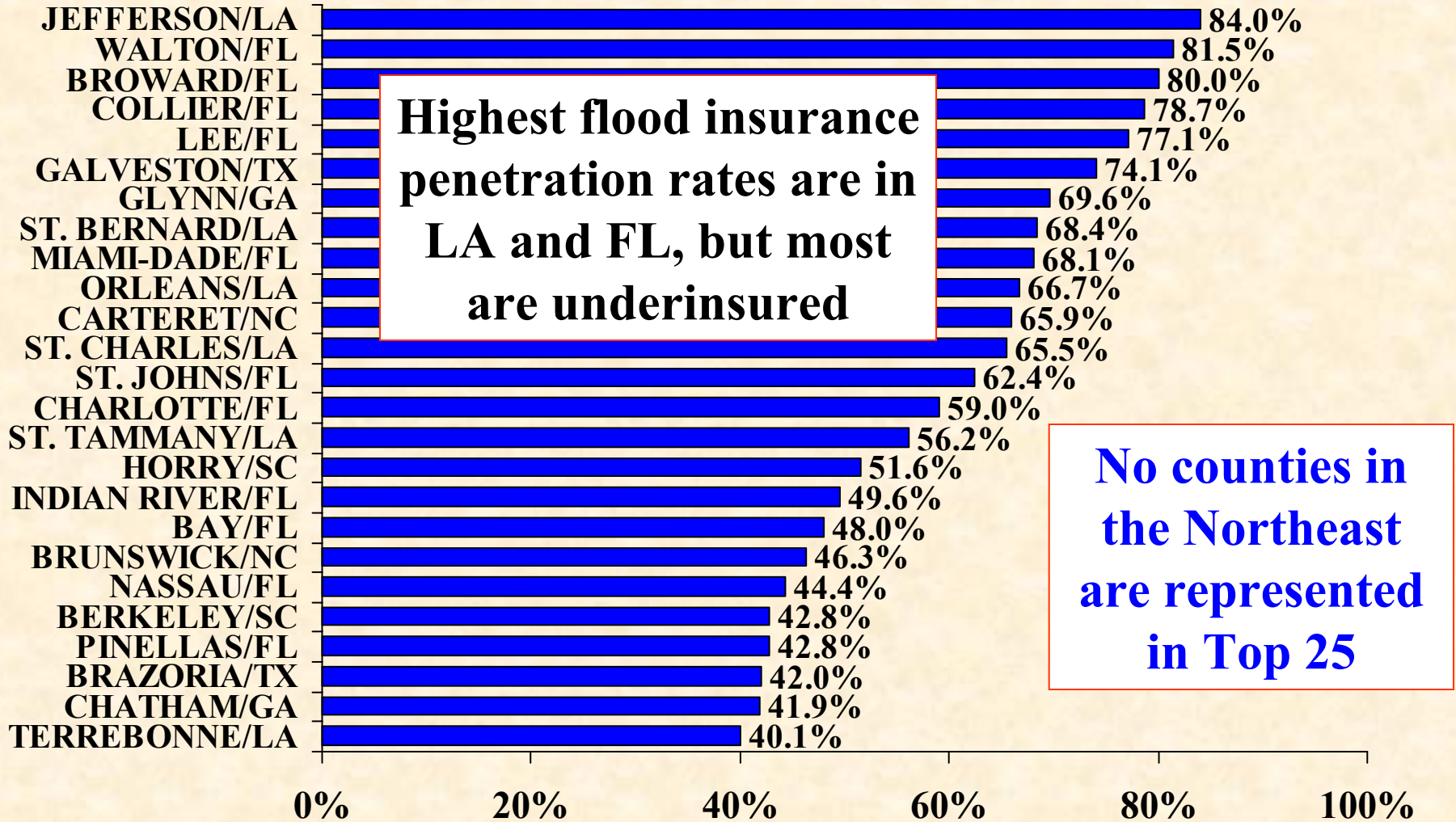


*Special Flood Hazard Areas.

Source: *The National Flood Insurance Program's Market Penetration Rate: Estimates and Policy Implications*, RAND, 2006.



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

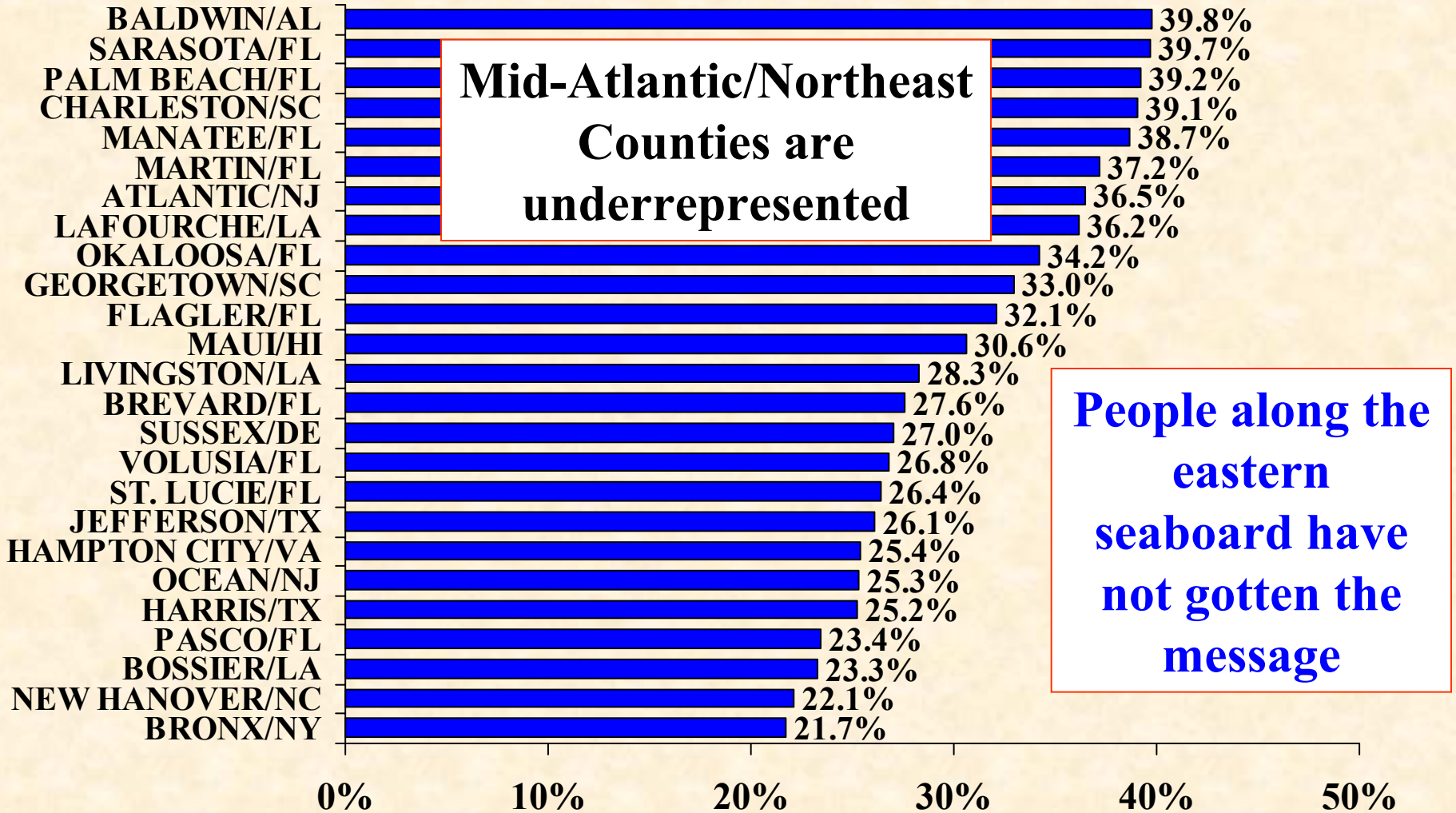


*As of 12/31/05.

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



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

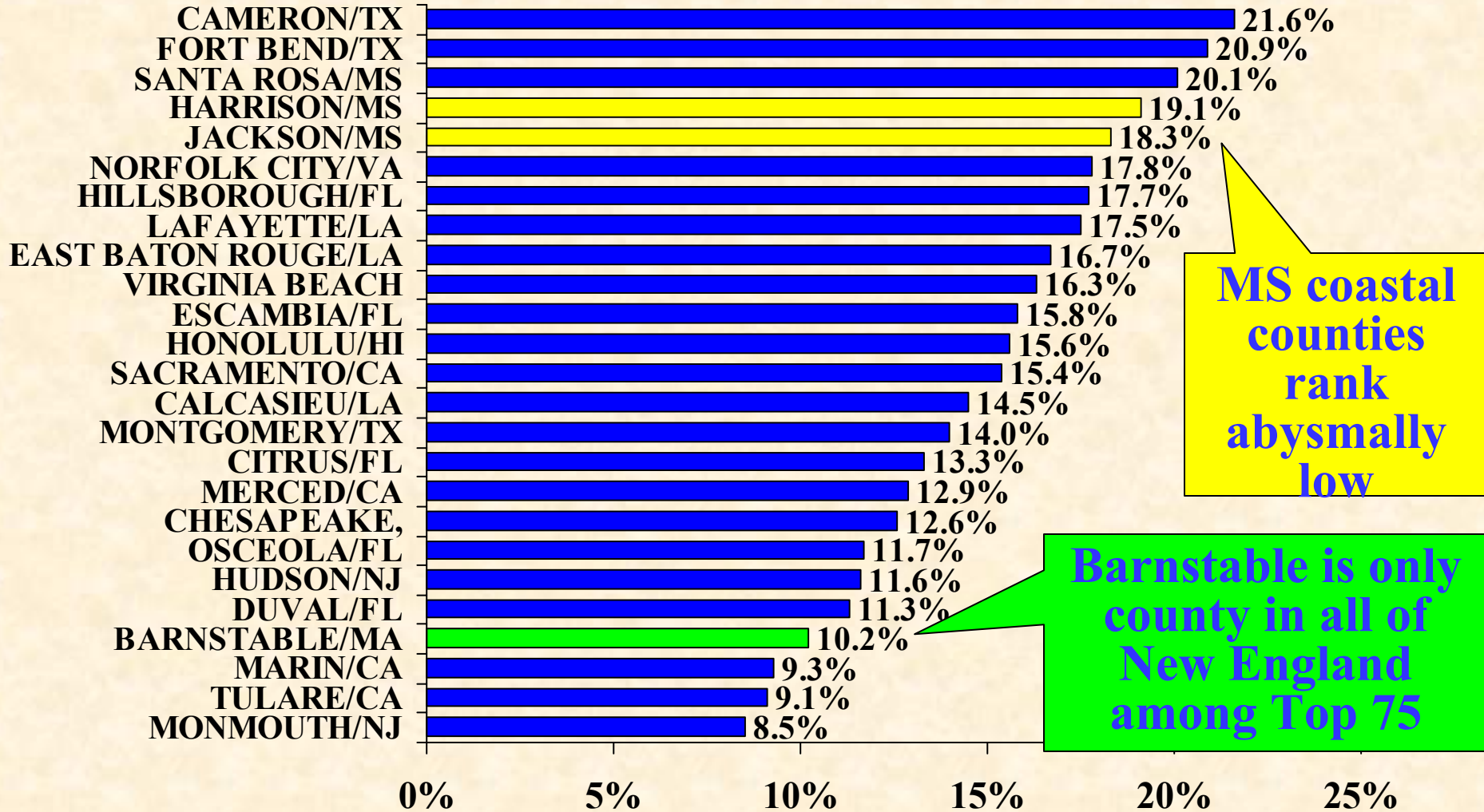


*As of 12/31/05.

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



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

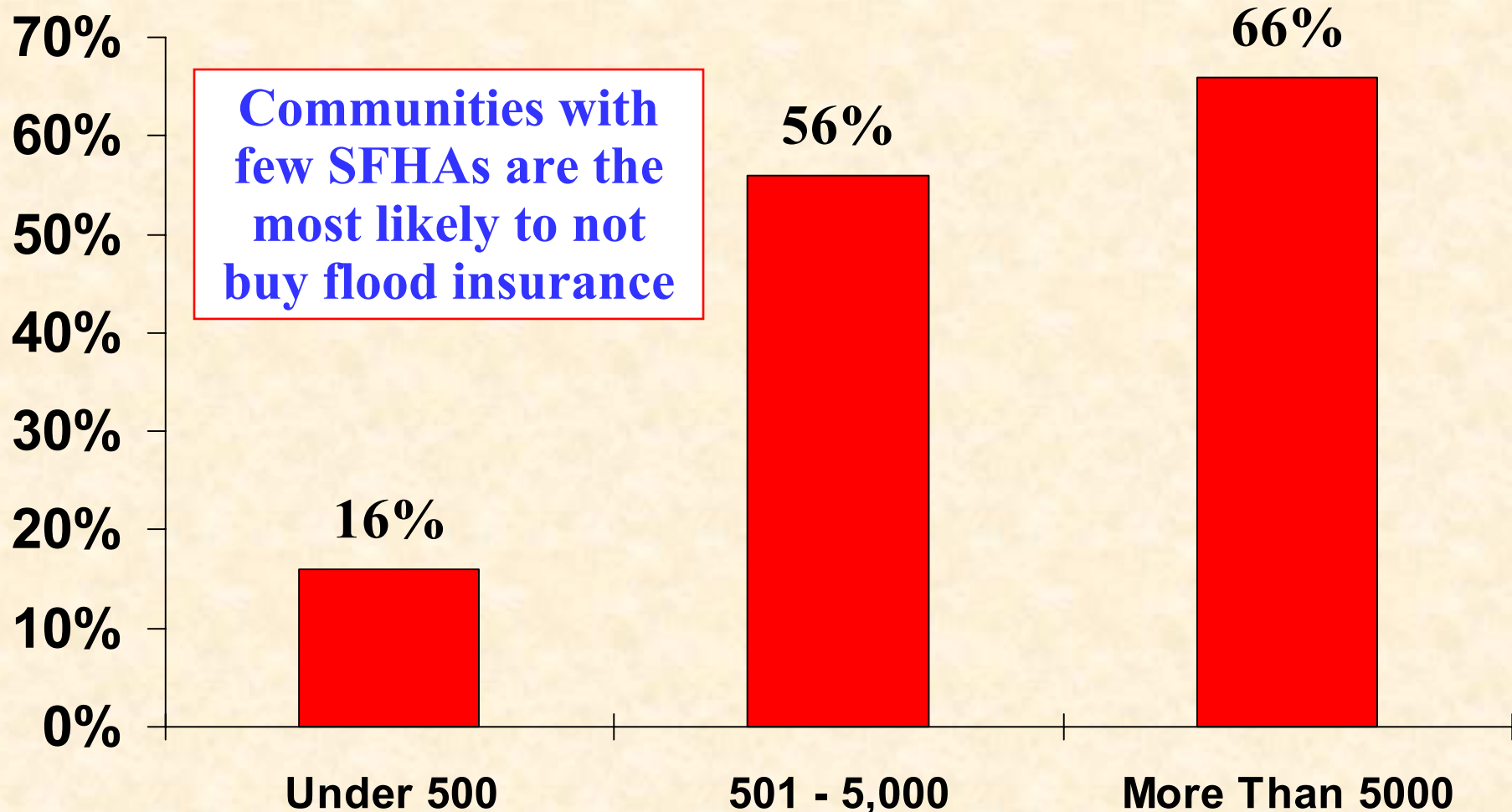


*As of 12/31/05.

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



*Proportion of Homes Buying Flood Insurance by No. of Homes in SFHA**



*Special Flood Hazard Areas.

Source: *The National Flood Insurance Program's Market Penetration Rate: Estimates and Policy Implications*, RAND, 2006.

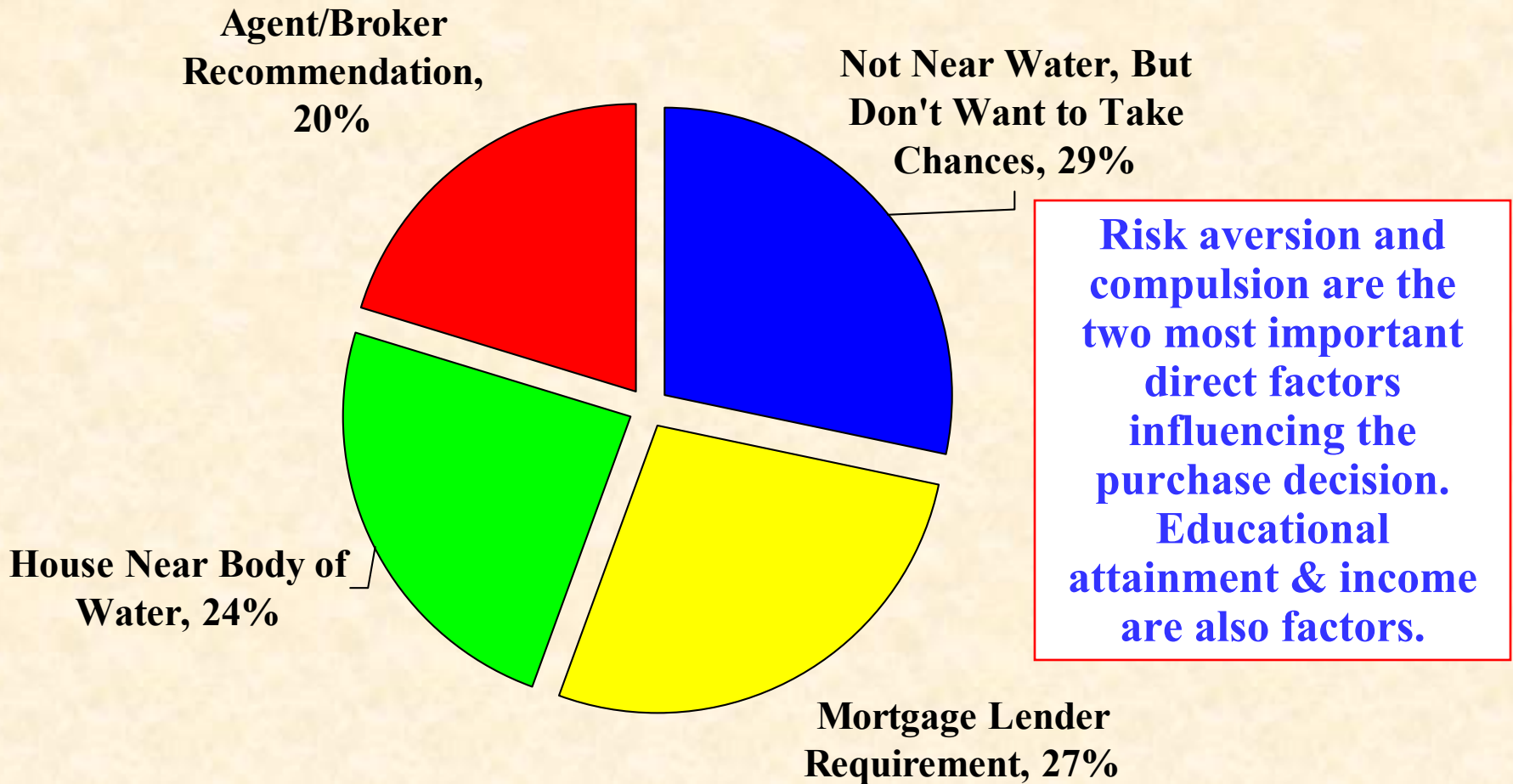


Factors Influencing NFIP Flood Penetration Rates

- **Price**
- **Change in Price**
- **Number of Homes in a Community's Special Flood Hazard Area (SFHA)**
 - **Mandatory purchase requirements less vigorously enforced in communities with fewer structures in SFHAs**
 - **Questions about enthusiasm in selling or knowledge of agents regarding program**
- **Coastal Flooding Potential**
 - **Penetration rate much higher for coastal communities subject to flooding versus those that are not (63% vs. 35%)**
- **Mandatory Purchase Requirement**



Reasons Why People Buy Flood Insurance



Source: Poll of 700 conducted by Opinion Research Corporation by Chubb Group of Insurance Companies, summarized in March 2006 press release "Katrina Doesn't Motivate Many Homeowners to Protect Their Investment."



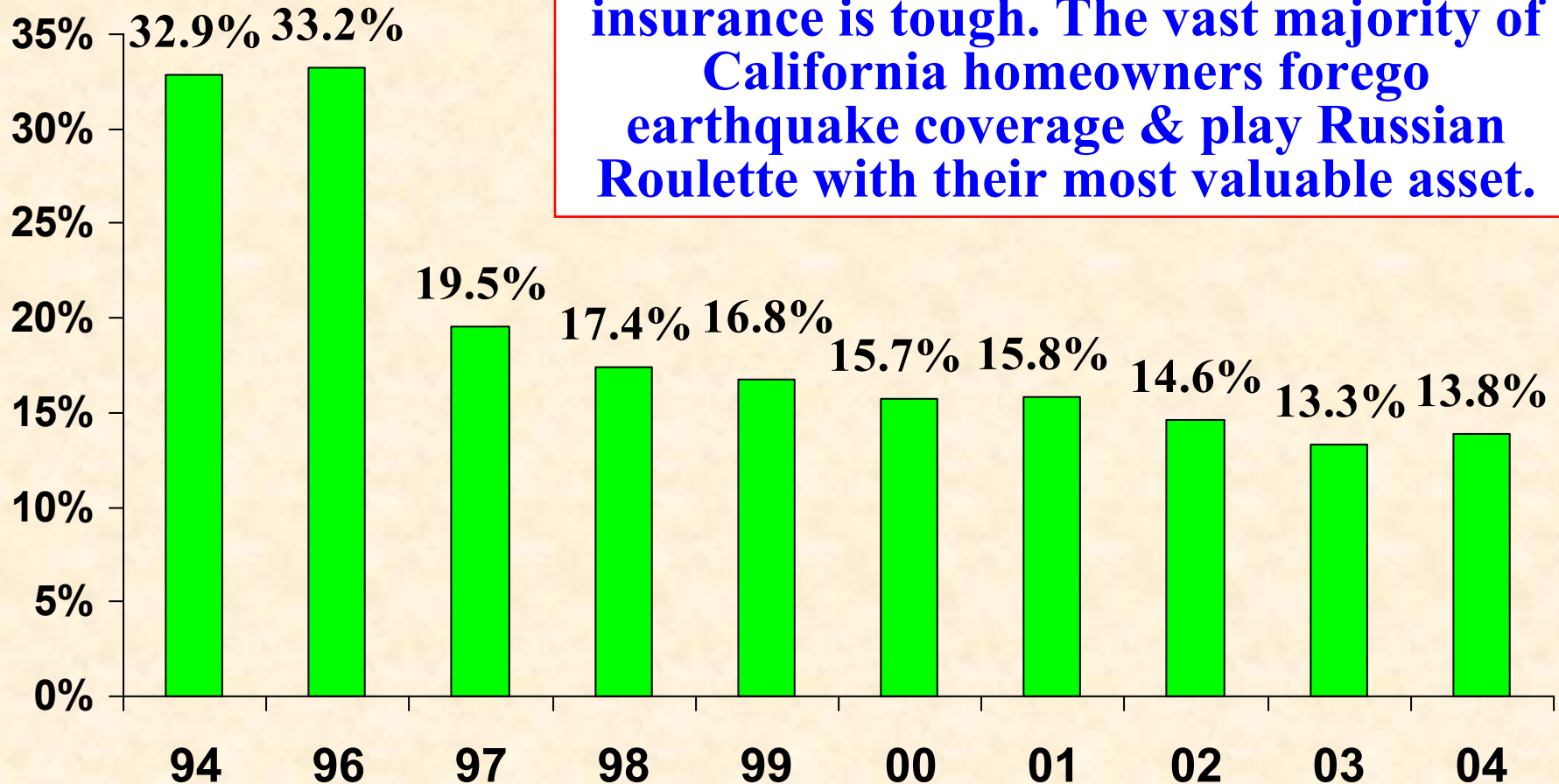
Additional Factors Influencing NFIP Flood Penetration Rates

- **Education/Income of Homeowner**
- **Tendency to Decline Most Optional Coverages**
 - Only 13% of CA homeowners buy earthquake insurance
- **Lack of Understanding of Actual Risk**
 - Most people do not understand the meaning or implications of 1-in-100 year flood risk
 - Most people have never looked at a flood map
- **Coverage Limits (e.g., \$250K cap)**
- **Expectation of Post-Event Aid**
 - Potentially a more important factor for future events
- **Litigation Suggesting that Flood is Covered Under Standard Homeowners Insurance Policies**
 - MS Attorney General Hood, Attorney Richard Scruggs, etc.



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

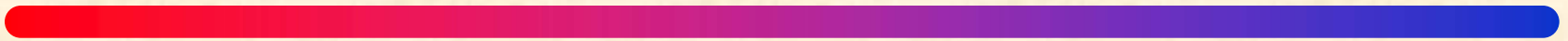
Selling any type of voluntary catastrophe insurance is tough. The vast majority of California homeowners forego earthquake coverage & play Russian Roulette with their most valuable asset.



*Includes CEA policies beginning in 1996.

Source: California Department of Insurance; Insurance Information Institute.

I.I.I. Actions to Promote Flood Risk Awareness & Preparedness



Refer people/media to NFIP resources. Echo message that everyone is at risk.

- Know the Facts
- NFIP Resources
- Insurance Center

EVERYONE IS AT RISK.
Get the Facts. Be Flood Smart.

- 1 Learn the Basics
- 2 What's Your Flood Risk?
- 3 NFIP In Your Community
- 4 Estimate Your Premium
- 5 Find an Agent

Prepare ▶
Test the Waters.
See how much damage a few inches of water can cause with our [interactive demo](#). Also, view our [Risk Scenarios](#) to determine your risk.



Participate ▶
Get involved.
Learn how [community participation](#) is the cornerstone of the National Flood Insurance Program.



Protect ▶
Get covered.
To find out what kind of flood insurance coverage you may need, [find an agent serving your area](#).



2006 Hurricane Season
Experts are predicting another active Hurricane season for 2006. With a 30-day wait before a flood insurance policy takes effect, now is the time to purchase flood insurance. For more information, visit the [2006 Hurricane Season Update](#) page.

Press Room ▶
Visit the [FloodSmart Press Room](#), for news and information about the NFIP.

Secure Site for Agents ▶
The new FloodSmart [agent secure site](#) offers you better, more



I.I.I. Initiatives on Flood Insurance

- **Thousands of Media Interviews**
 - **Stressing importance of purchasing flood**
 - **Providing media with key information**
- **Video News Release (VNR) on Flood Insurance**
 - **Pre-packaged segment for new broadcasts (needs update)**
- **VNR on Hurricane Preparedness**
- **VNR on Disaster Preparedness**
- **Presentations to Agents, Insurer Groups & Others**
 - **Potentially a more important factor for future events**
 - **Testimony before regulatory/legislative bodies**
- **Home Inventory Software (FREE!!)**
 - **Download at www.knowyourstuff.org**
- **Northeast Insurance Summit: July 19, 2006 in NYC**



Know Your Stuff™

- taking a home inventory
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Know Your Stuff Home Inventory Software

Welcome to KnowYourStuff.org, where you can download the I.I.I.'s new home inventory software for free! This software makes creating a home inventory fun and easy. Once you have completed your inventory, it is easy to keep your information up to date.

Click the download button on the top of your screen to receive your free software. You will also find lists of items in typical rooms to help guide you through the inventory process.



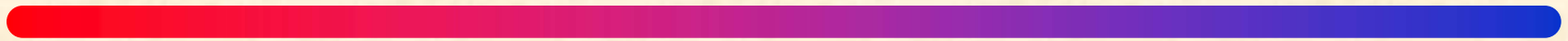
Provided by [Insurance Information Institute](#)



Watch the
"Taking Inventory"
 video news release...

What Should & Could be Done?

Lessons from the Past





What Should Have Been Done Pre-Katrina: Carrots or Sticks?

- **Levees should have been strengthened or land use policies revised decades ago**
- **Offer incentives to mitigate many years ago**
 - **Levees and homes/businesses**
 - **Would have been cost effective**
- **Update of flood maps**
- **Actuarially sound rates—Send Market Signal on Risk**
 - **Stop subsidizing coastal development; burdening taxpayers**
- **Reduce lapse rates: Keep the customers you have!**
- **Experience: Stepped-up marketing is of limited value**
- **Expand Mandatory Purchase Requirement???**
- **Require written affirmation if flood is declined with waiver of rights to federal and state aid???**

What Can be Done?



Pick the Low Hanging Fruit First

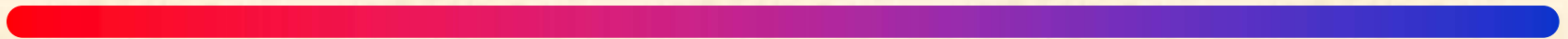
- **Target communities with small numbers of structures in Special Flood Hazard Areas (SFHAs)**
- **Target inland communities vs. coastal: More Potential**
- **Increase coverage carried by coastal dwellers**
- **Increase compliance with mandatory purchase requirement**
- **Expand Mandatory Purchase Requirement???**
 - **Expand mandate beyond 1-in-100 year flood plain??**
 - **Make coverage mandatory irrespective of mortgage status??**

APPENDIX 1

Flood Facts

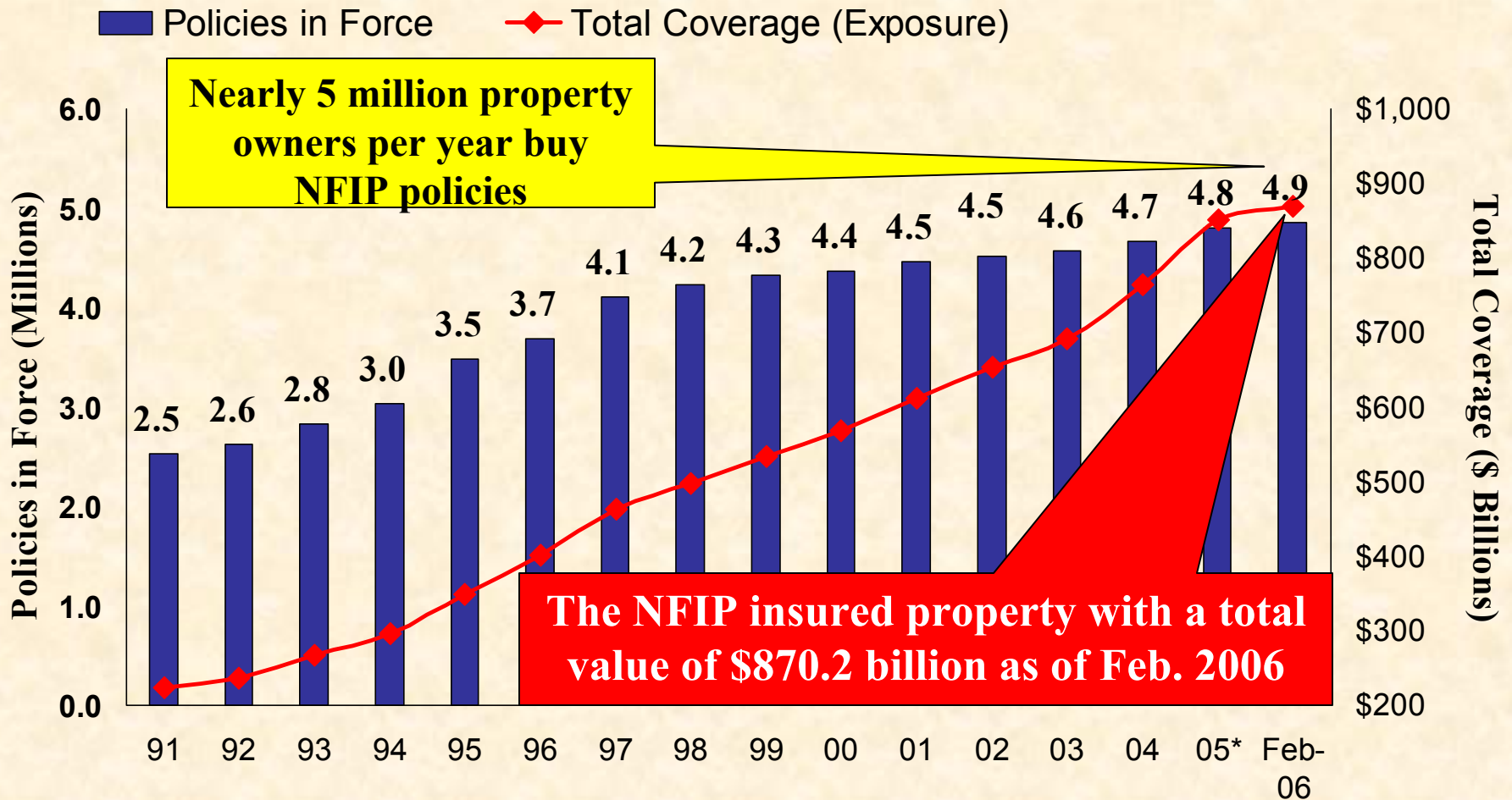
Key Flood Program

Statistics





NFIP: Policies in Force and Total Coverage (Exposure)

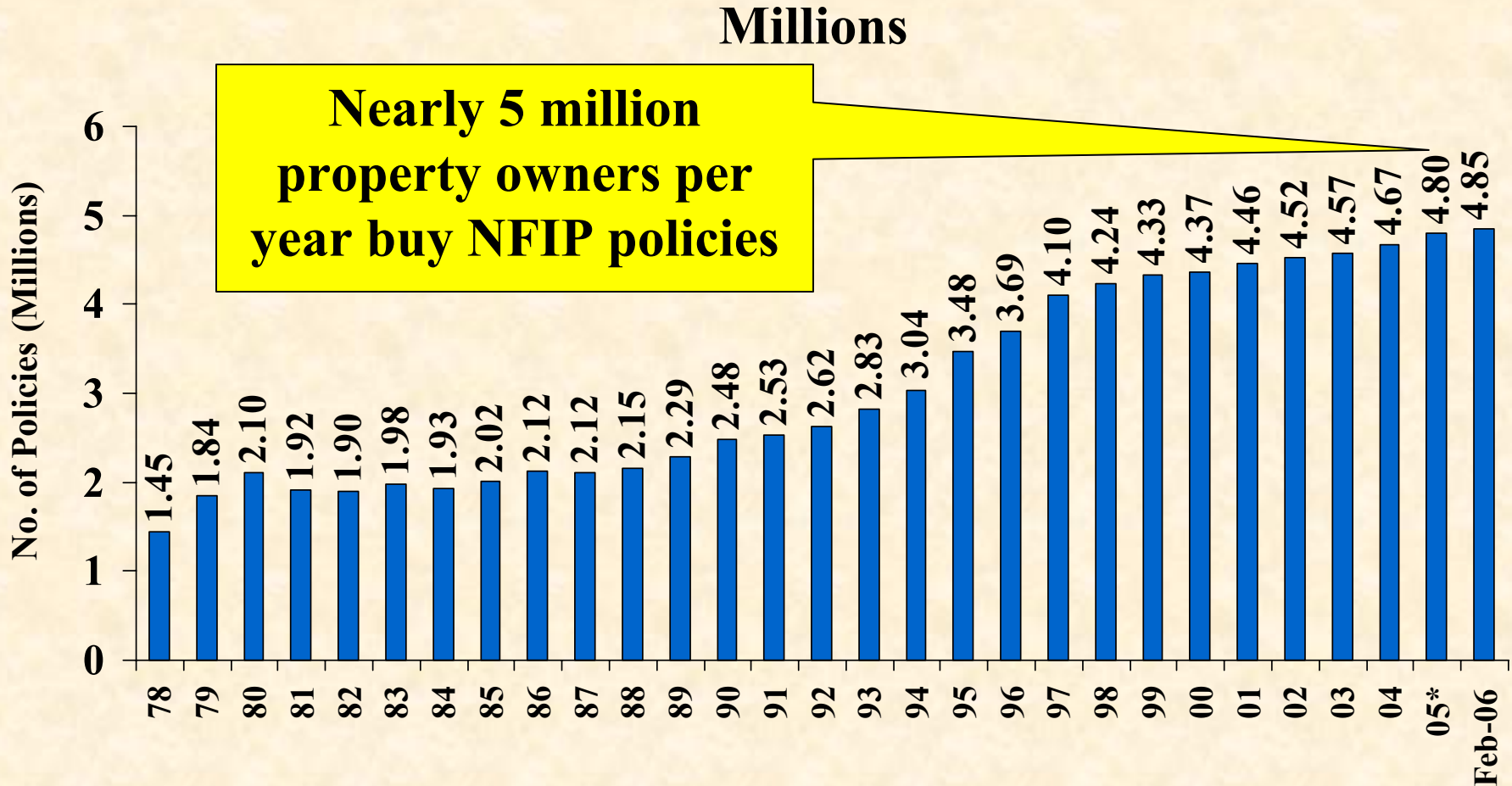


*As of December 2005.

Sources: FEMA, National Flood Insurance Program (NFIP)



NFIP: Total Policies in Force by Calendar Year, 1978-Feb. 2006

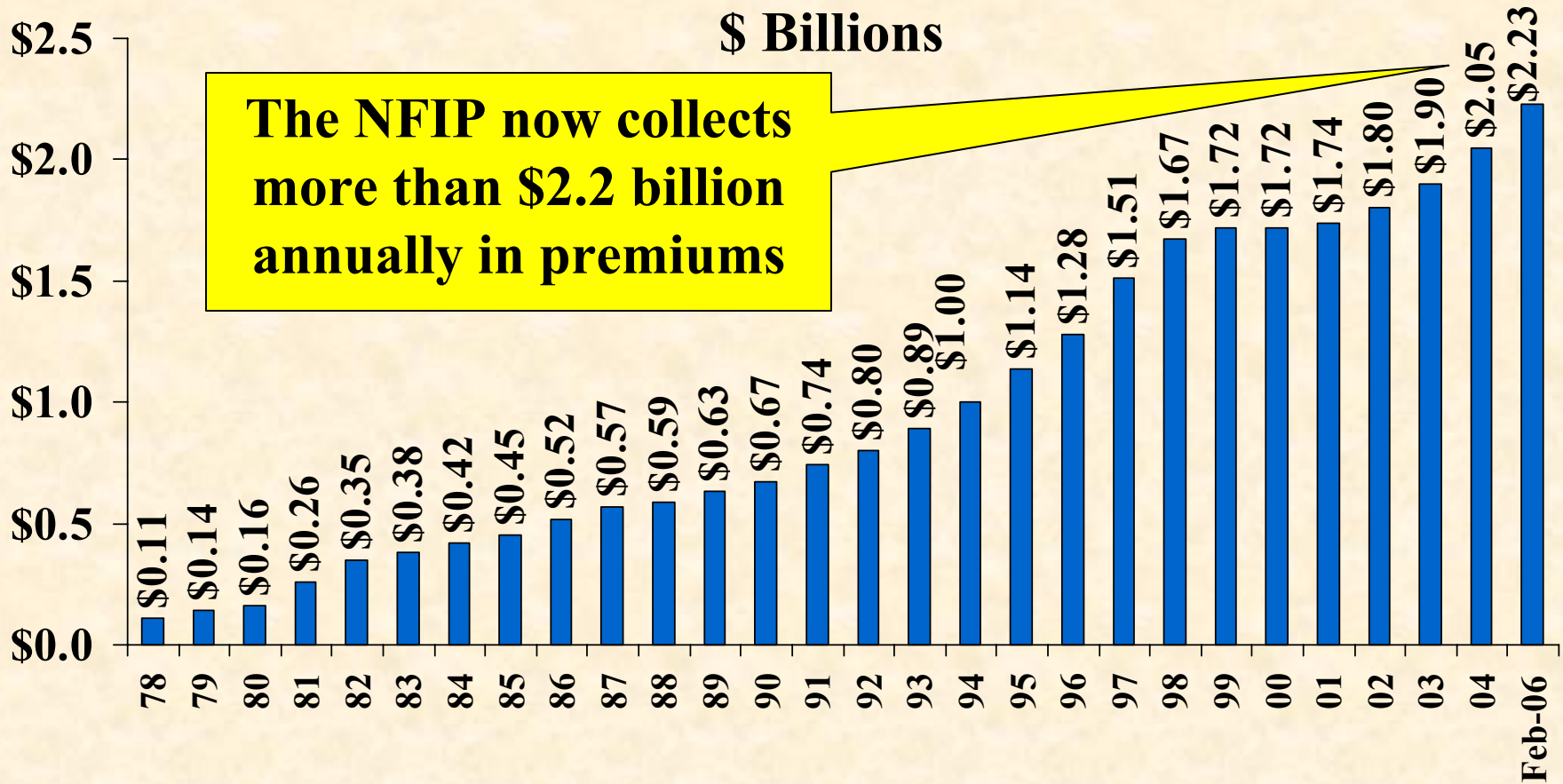


*As of December 2005

Source: FEMA, National Flood Insurance Program (NFIP)



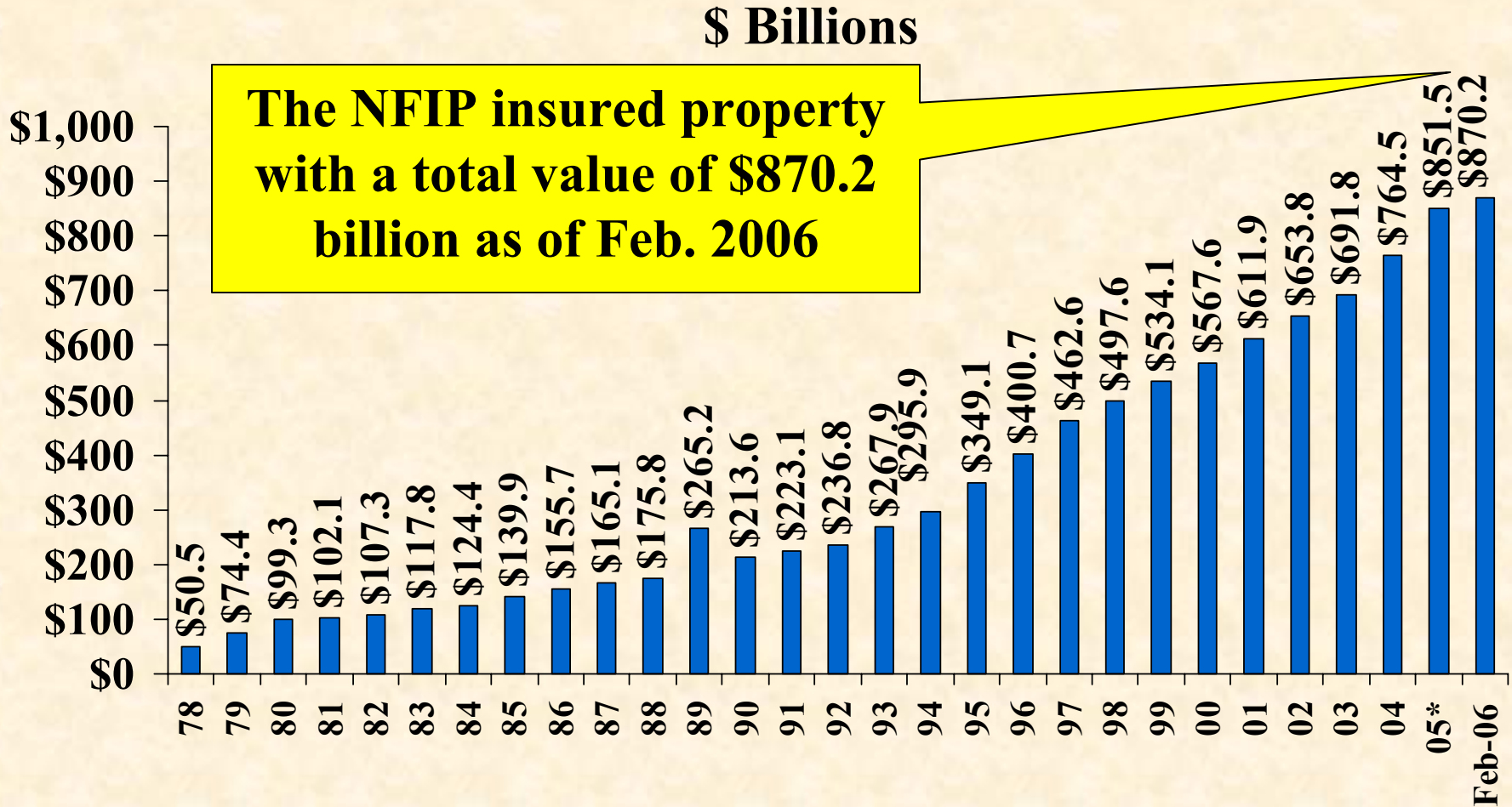
NFIP: Total Premium by Calendar Year 1978-Feb. 2006



Source: FEMA, National Flood Insurance Program (NFIP)



NFIP: Total Coverage (Exposure) by Calendar Year 1978-Feb. 2006

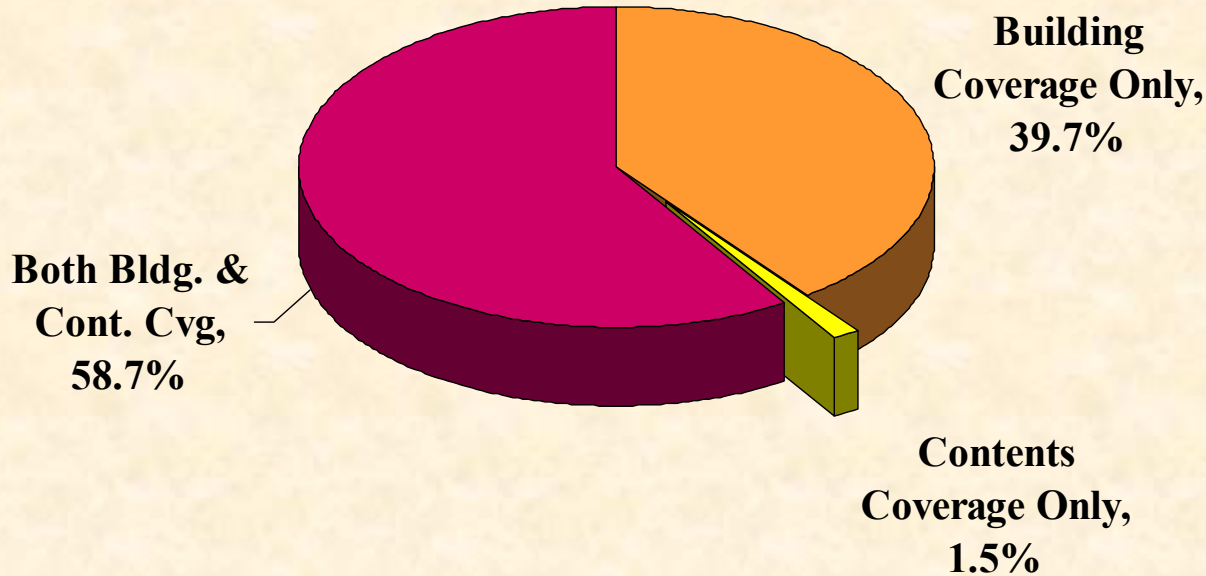


*As of December 2005.

Source: FEMA, National Flood Insurance Program (NFIP)



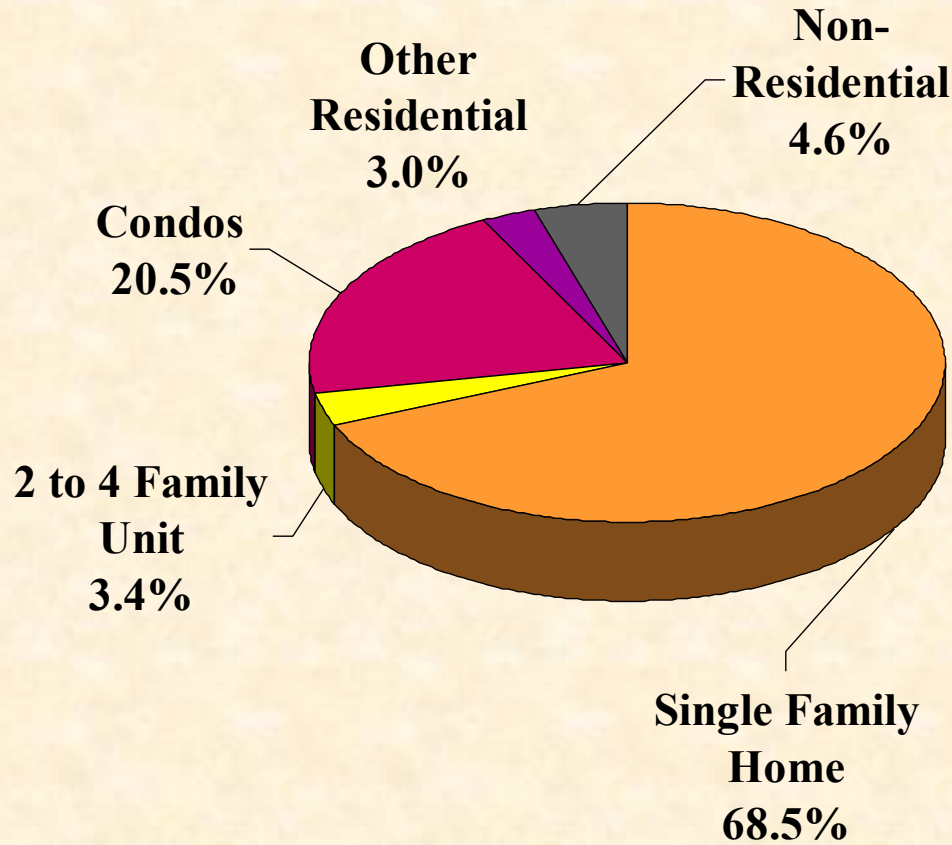
NFIP: Policies in Force By Coverage Type (As of July 31, 2005)



Coverage Type	Policies in Force
Building Coverage Only	1,845,481
Contents Coverage Only	72,008
Both Bldg & Cont Cvg	2,729,267
All Policies	4,646,756



NFIP: Policies in Force By Occupancy Type (As of July 31, 2005)

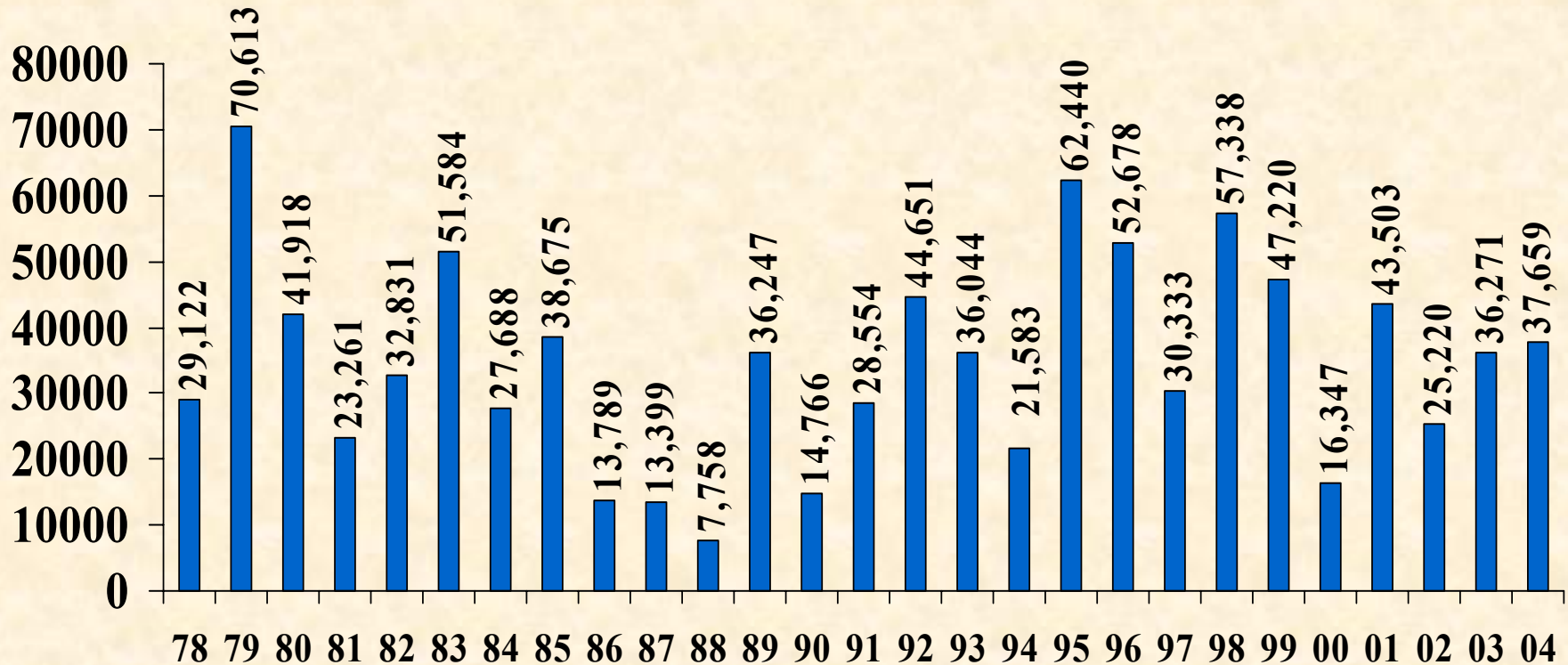


Occupancy Type	Policies in Force
Single Family Home	3,184,010
2 to 4 Family Unit	158,124
Condominiums	951,240
Other Residential	138,583
Non-Residential	214,799
Unknown Occupancy	--
All Policies	4,646,756



NFIP: No. of Losses Paid by Calendar Year 1978-2004

No. of Losses



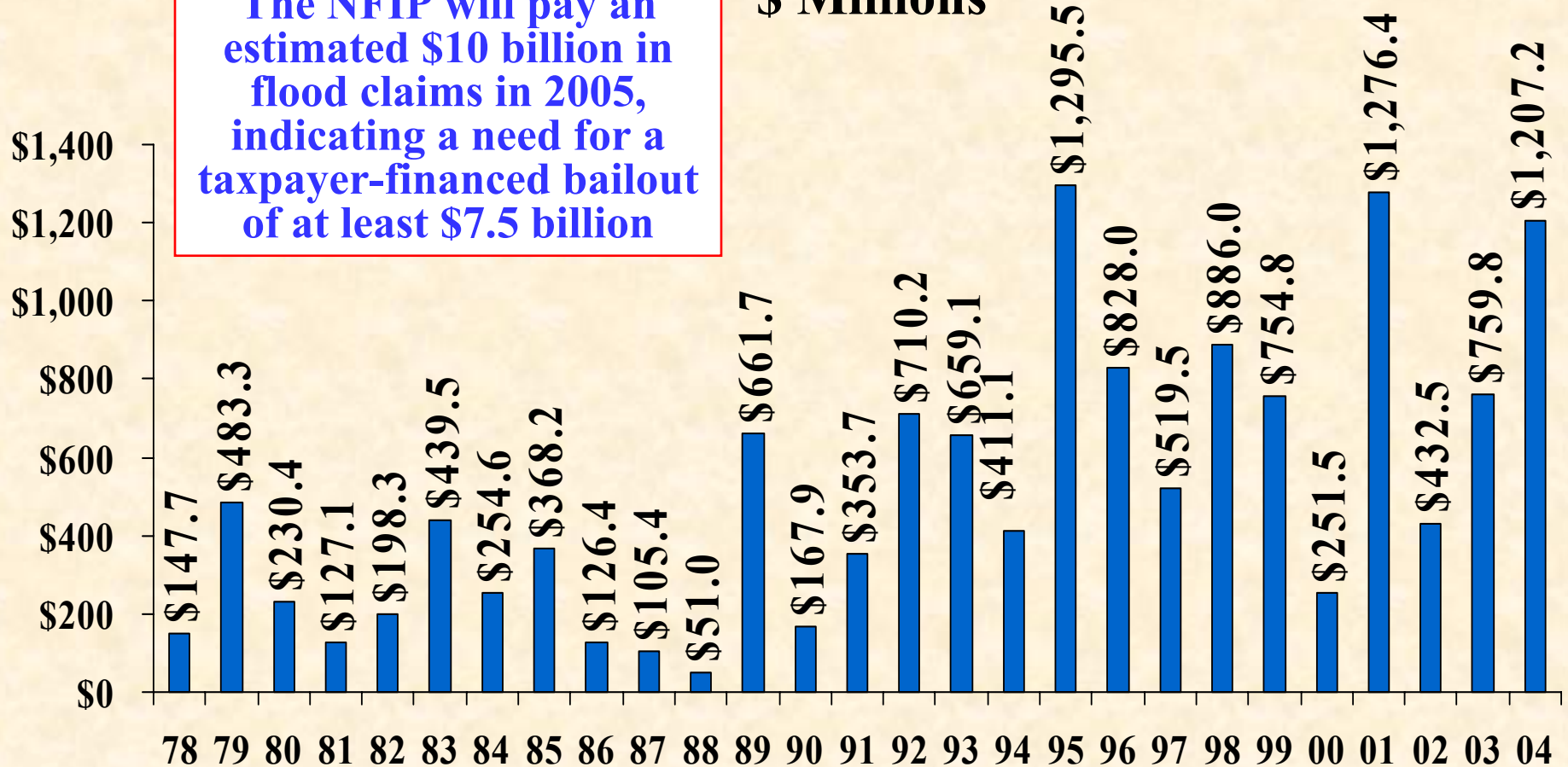
Source: FEMA, National Flood Insurance Program (NFIP)



NFIP: Loss Dollars Paid by Calendar Year 1978-2004

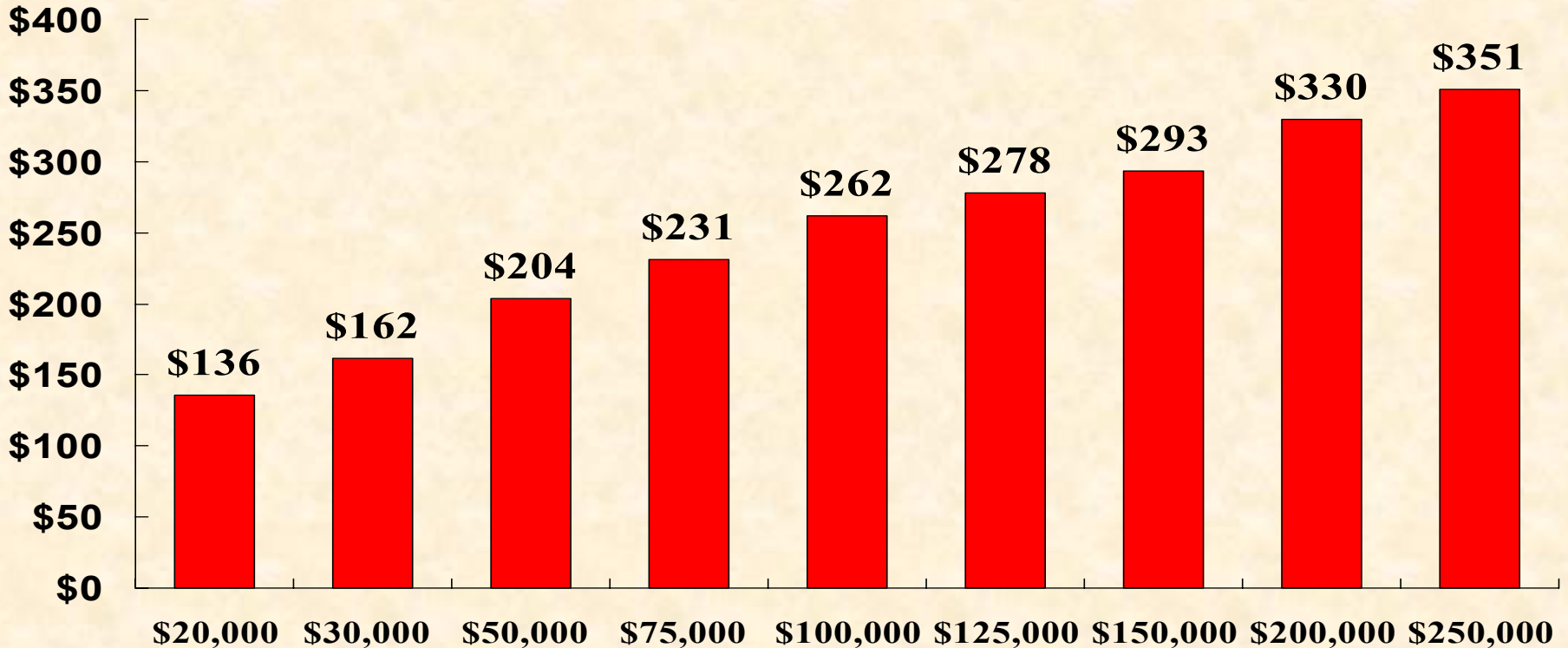
The NFIP will pay an estimated \$10 billion in flood claims in 2005, indicating a need for a taxpayer-financed bailout of at least \$7.5 billion

\$ Millions



*Average Premium Preferred Risk Policy** *For Buildings with Basement Under NFIP*

Average Premium



Building deductible: \$500. Contents deductible: \$500. Deductibles applied separately.

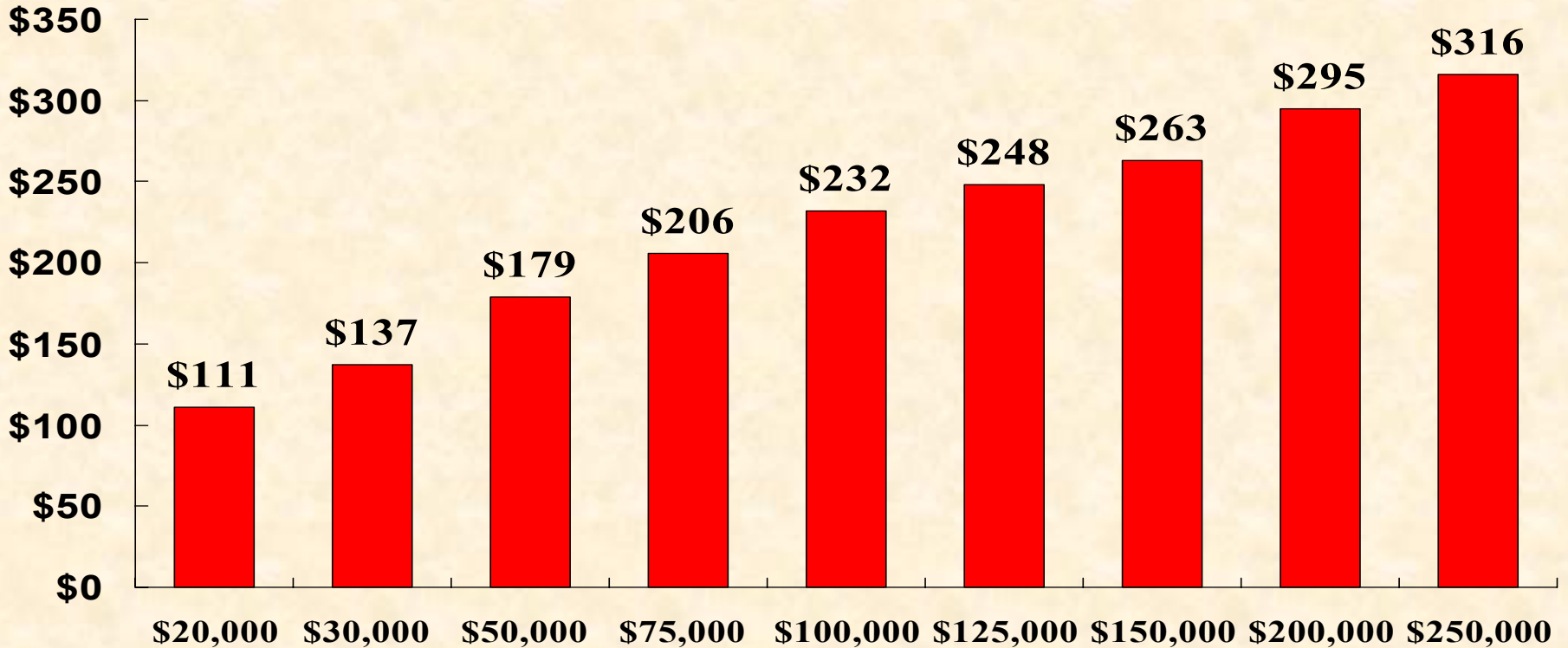
***Under the NFIP a low-cost Preferred Risk Policy is available to homeowners located in low- to moderate-risk areas.**

Sources: FEMA, National Flood Insurance Program (NFIP)



*Average Premium Preferred Risk Policy** *For Buildings without Basement* *Under NFIP*

Average Premium



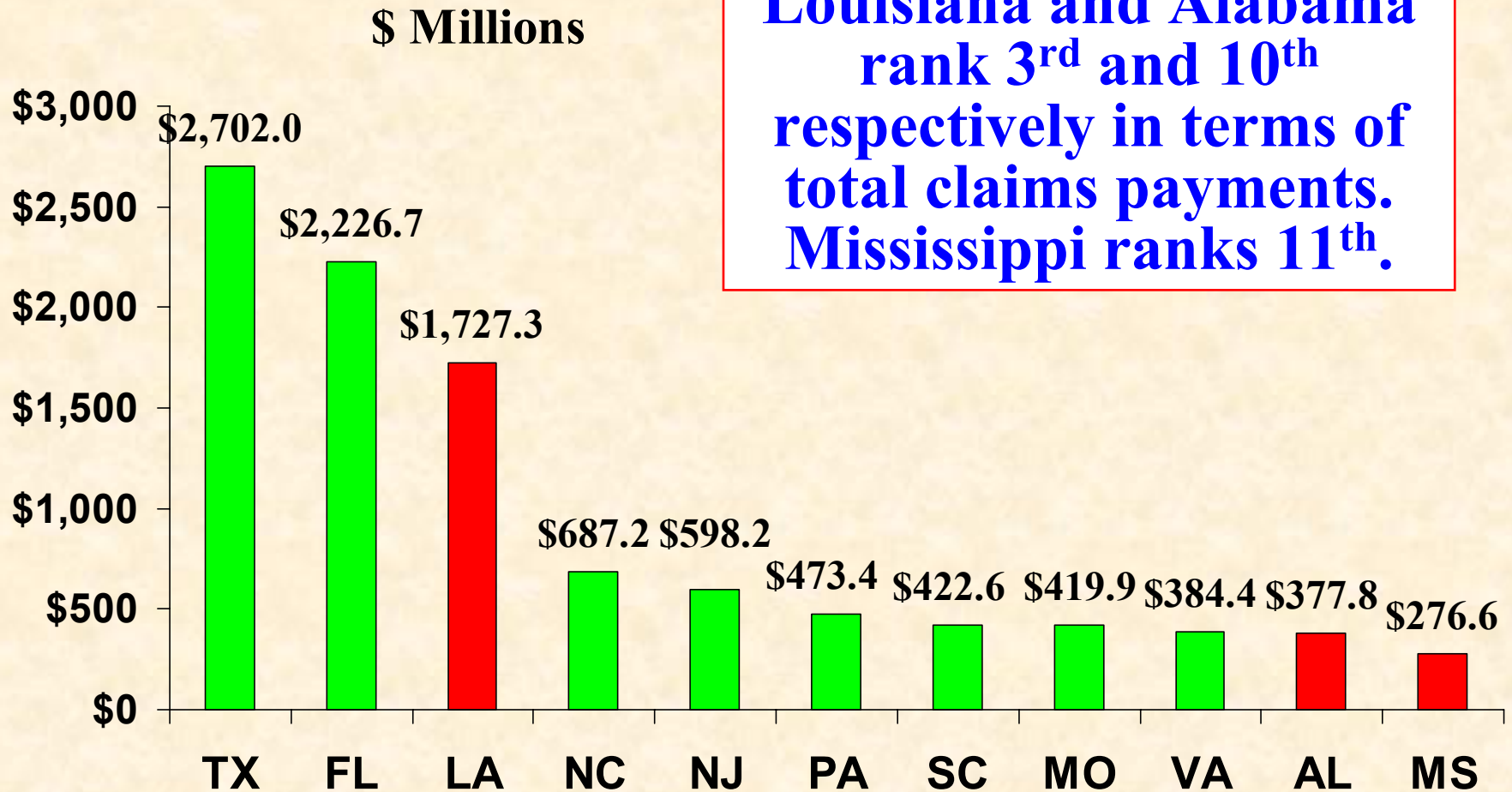
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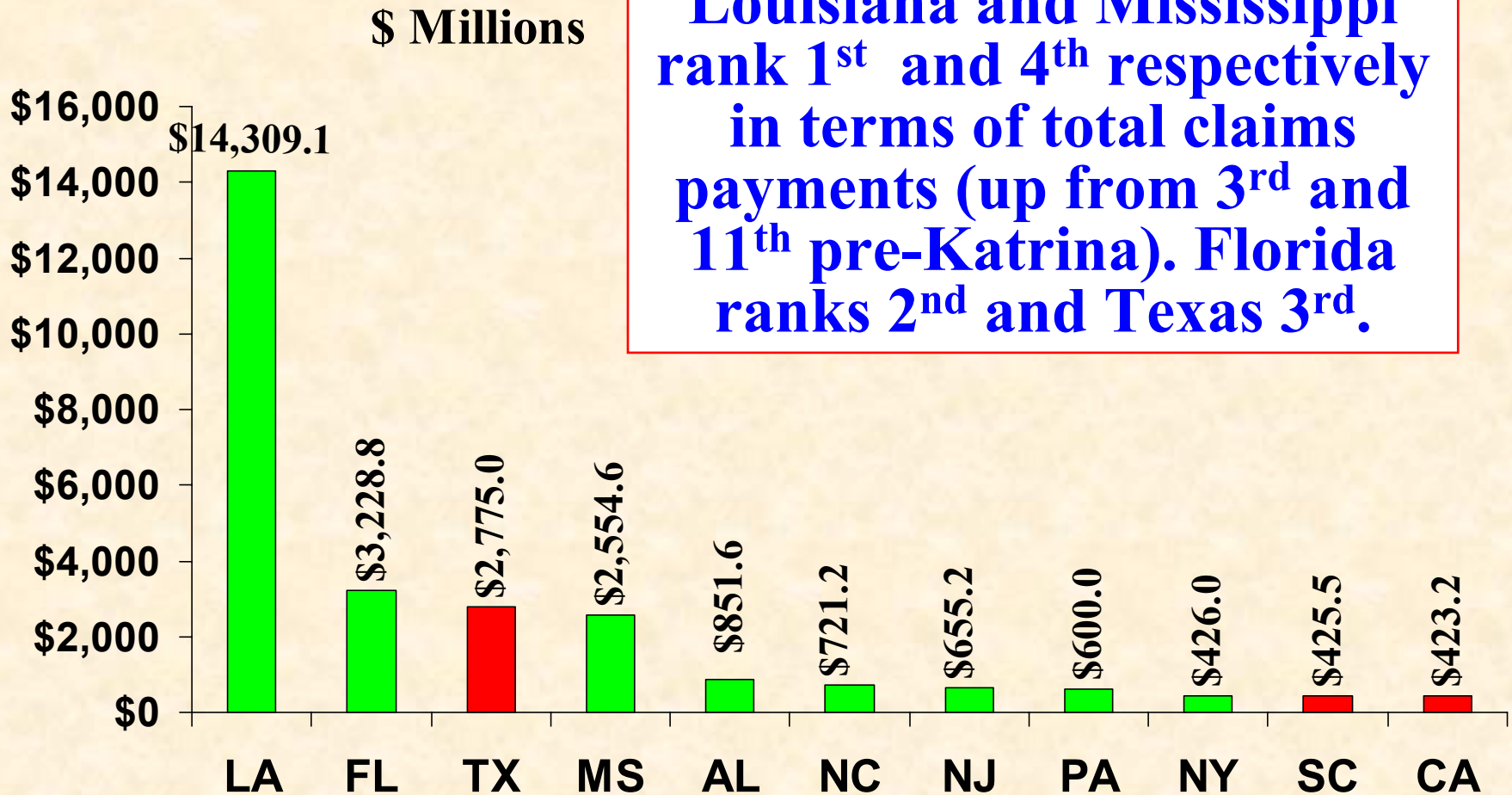


Total Claim Payments by State (Top 11) Jan 1, 1978 - Dec. 2004





Total Claim Payments by State (Top 11) Jan 1, 1978 - Feb. 2006

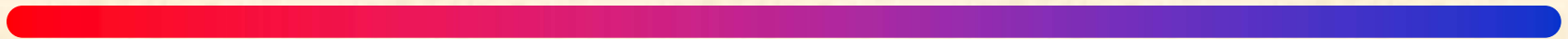


APPENDIX 2

Catastrophe Facts

Key Hurricane

Statistics





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



2005 was by far the worst year ever for insured catastrophe losses in the US, but the worst has yet to come.

\$100 Billion CAT year is coming soon

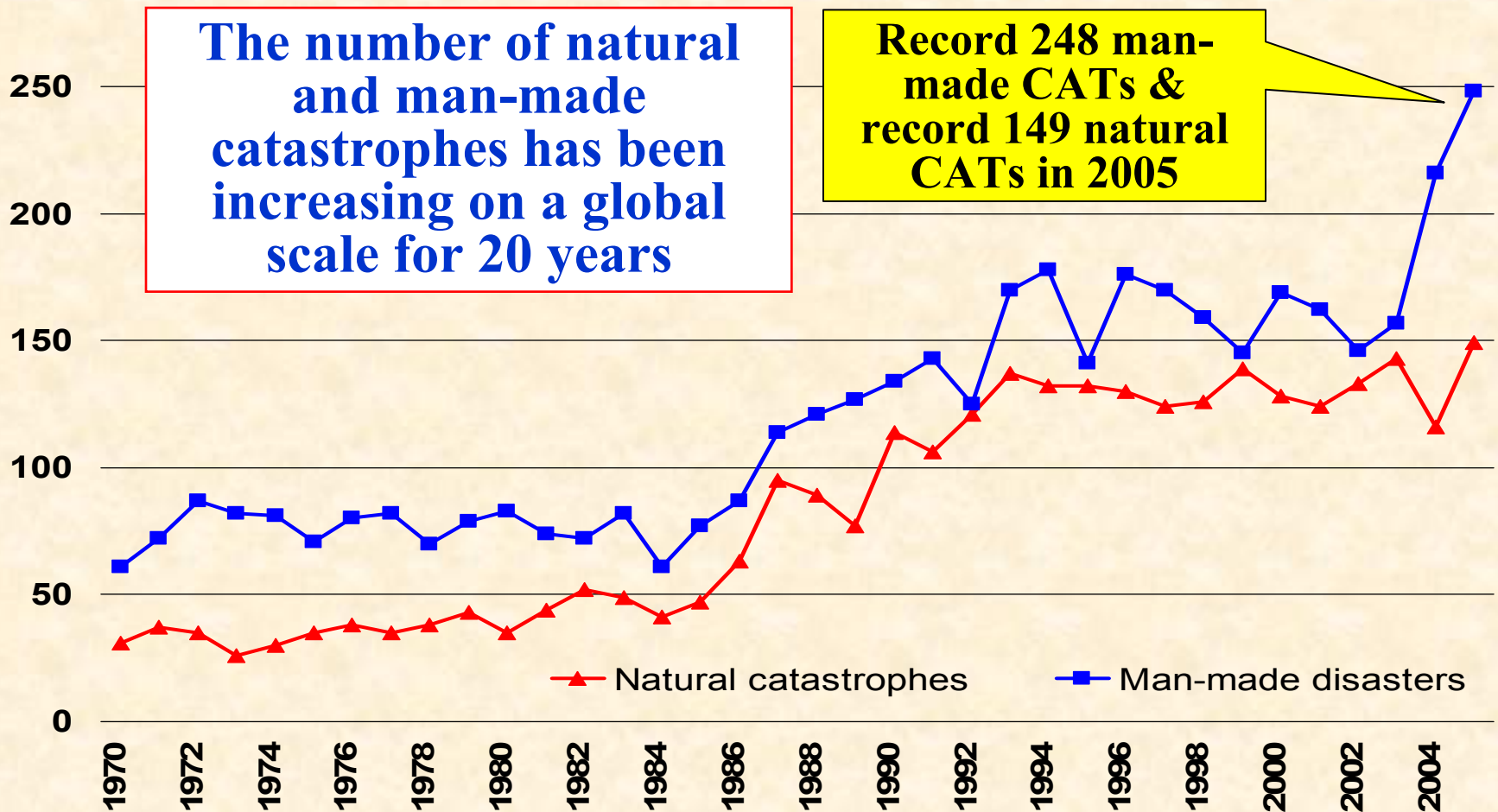
*Excludes \$4B-\$6b offshore energy losses from Hurricanes Katrina & Rita.

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

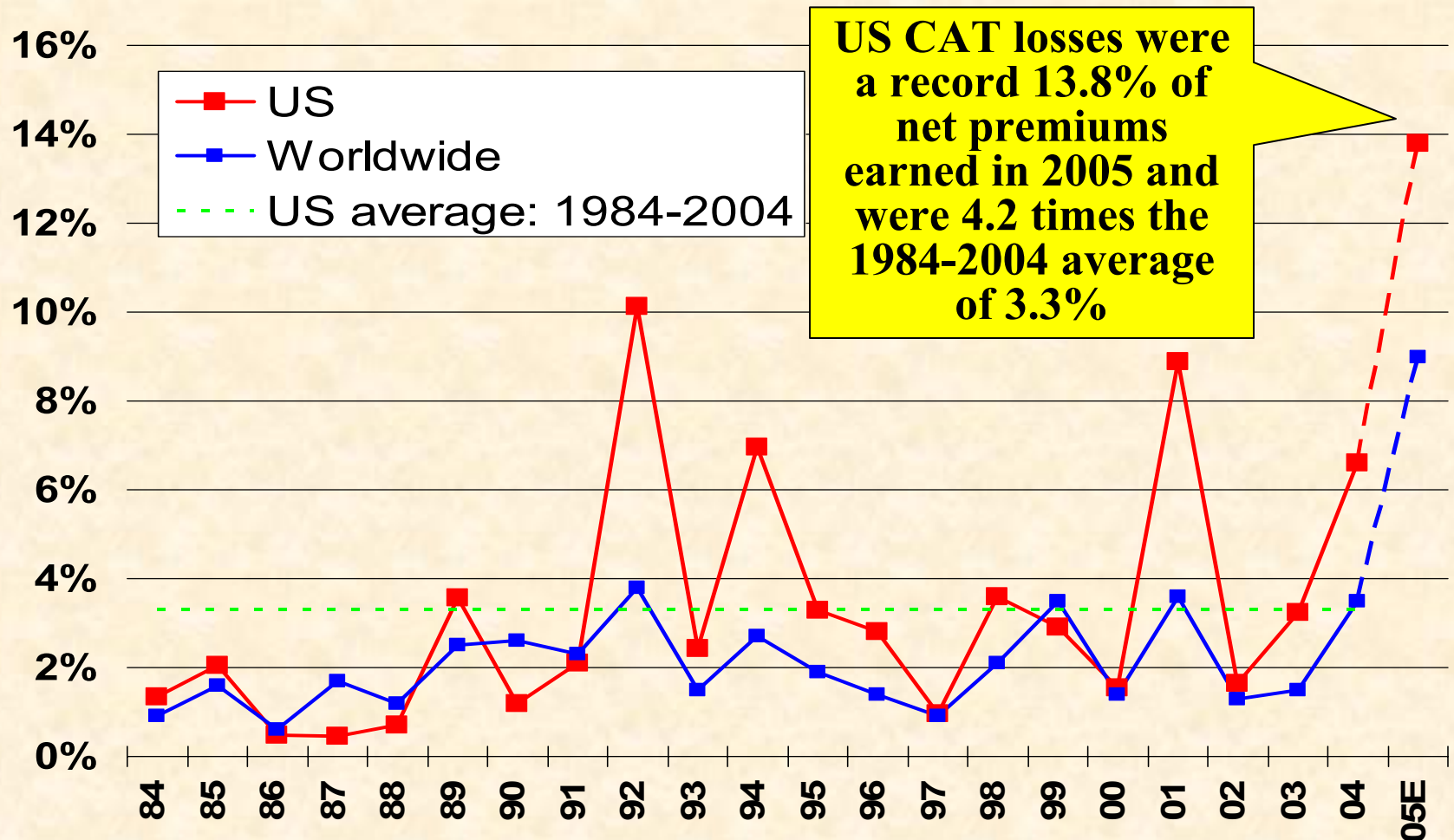


Global Number of Catastrophic Events, 1970–2005





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

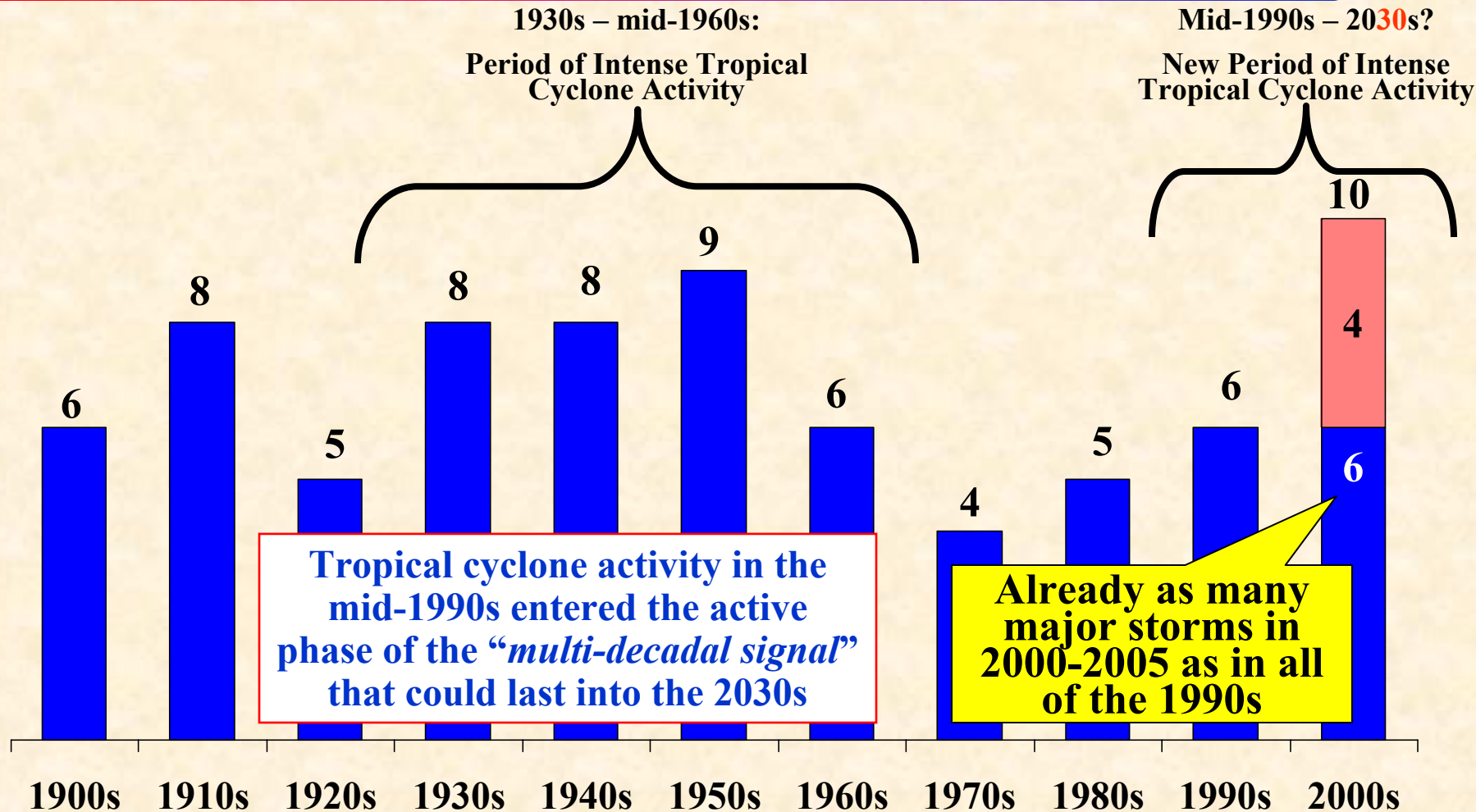


*Insurance Information Institute figure of 13.8% for 2005 based estimated 2005 DPE of \$417.7B and insured CAT losses of \$57.7B.

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



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

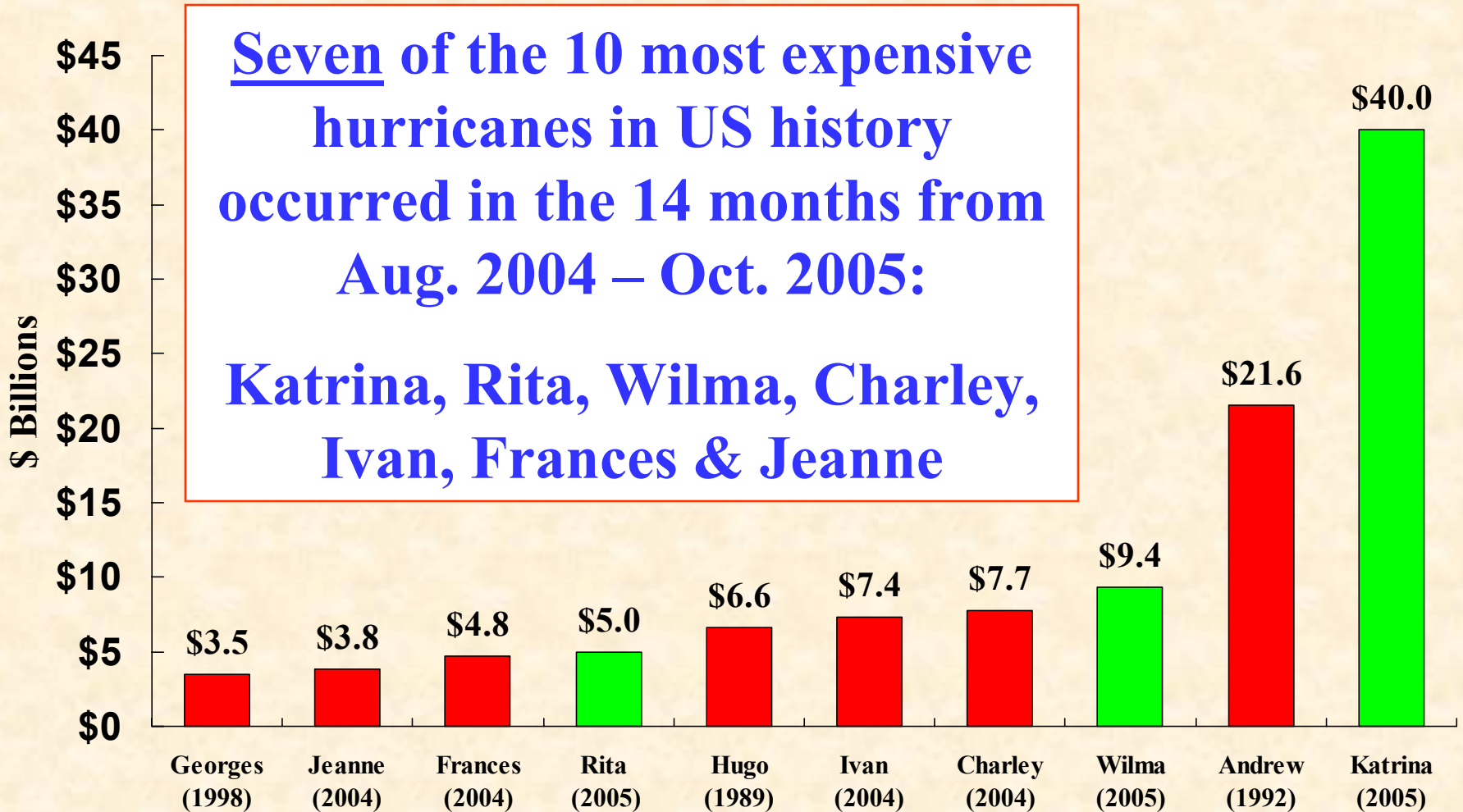


*Figure for 2000s is extrapolated based on data for 2000-2005 (6 major storms: Charley, Ivan, Jeanne (2004) & Katrina, Rita, Wilma (2005)).

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

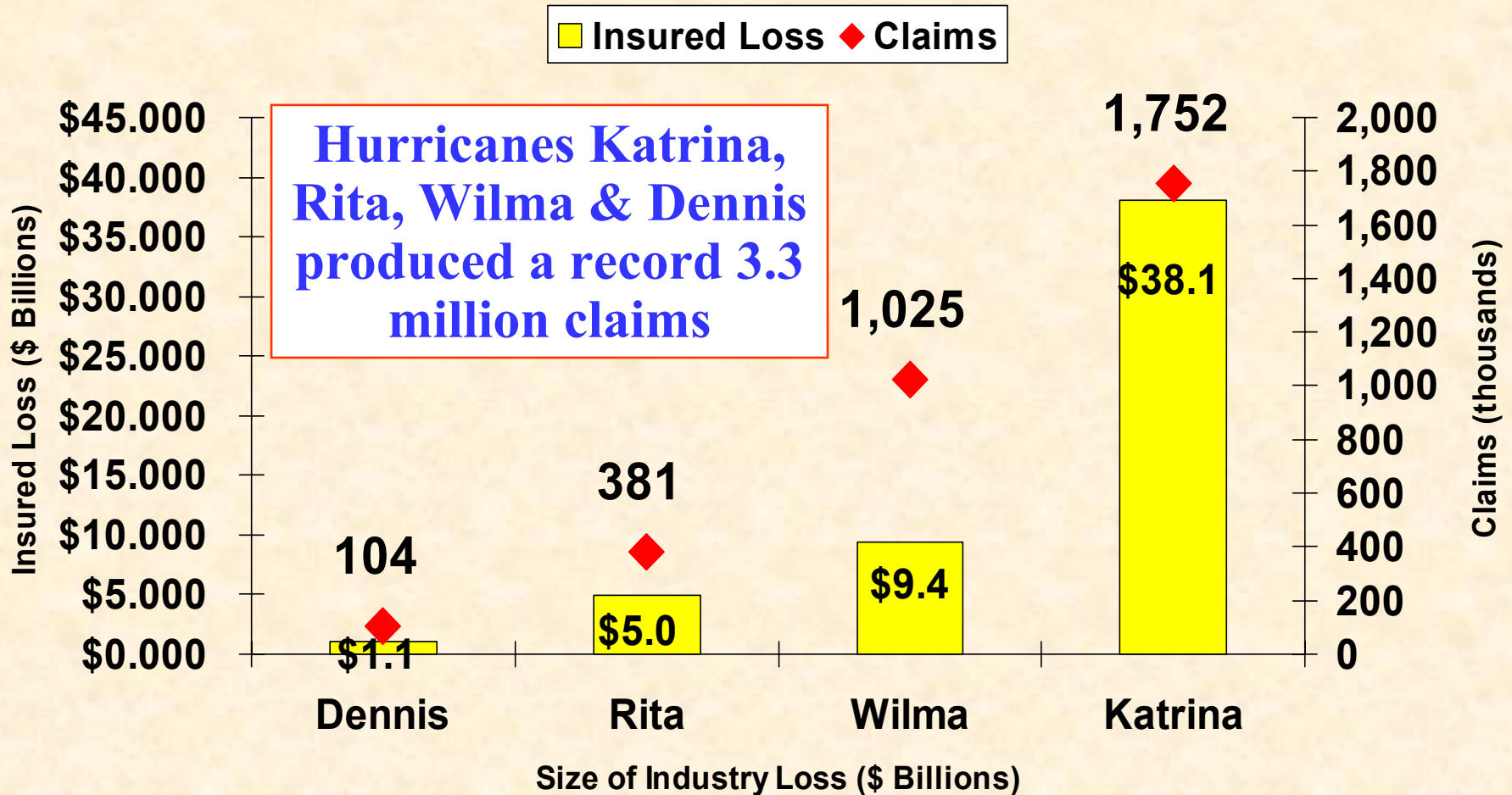


Top 10 Most Costly Hurricanes in US History, (Insured Losses, \$2005)





Insured Loss & Claim Count for Major Storms of 2005*

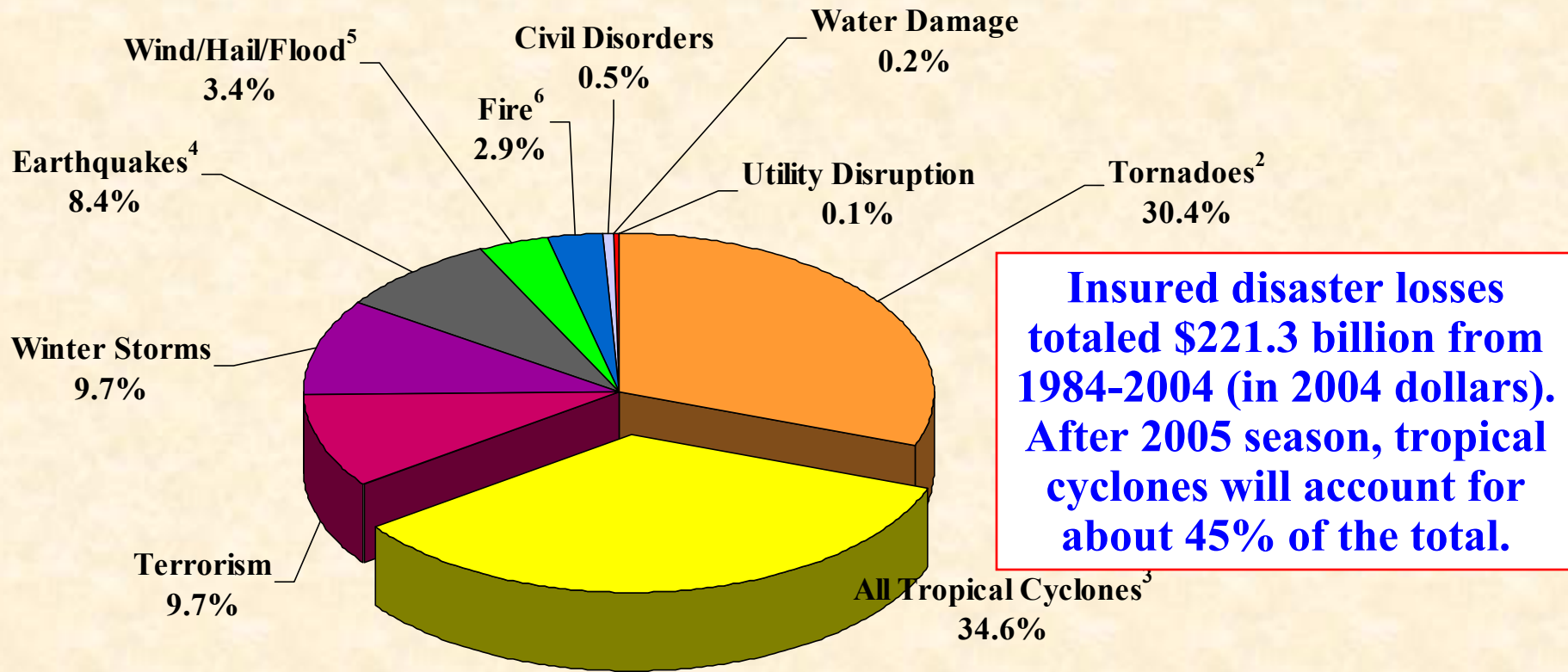


*Property and business interruption losses only. Excludes offshore energy & marine losses.

Source: ISO/PCS as of February 8, 2006 for Dennis, Rita, Katrina and March 27, 2006 for Wilma; Insurance Information



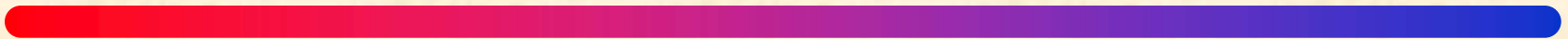
Inflation-Adjusted U.S. Insured Catastrophe Losses By Cause of Loss, 1985-2004¹



¹ 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.
² Excludes snow. ³ Includes hurricanes and tropical storms. ⁴ Includes other geologic events such as volcanic eruptions and other earth movement. ⁵ Does not include flood damage covered by the federally administered National Flood Insurance Program. ⁶ Includes wildland fires.

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, April 4, 2006.



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

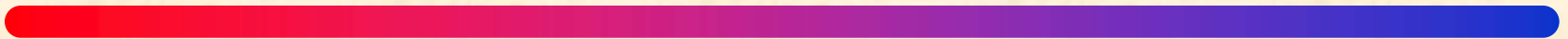
	Average*	2006F
Entire US Coast	52%	81%
US East Coast Including Florida Peninsula	31%	64%
Gulf Coast from FL Panhandle to Brownsville, TX	30%	47%
<i>ALSO...Above-Average Major Hurricane Landfall Risk in Caribbean for 2006</i>		

*Average over past century.

Source: Dr. William Gray, Colorado State University, April 4, 2006.

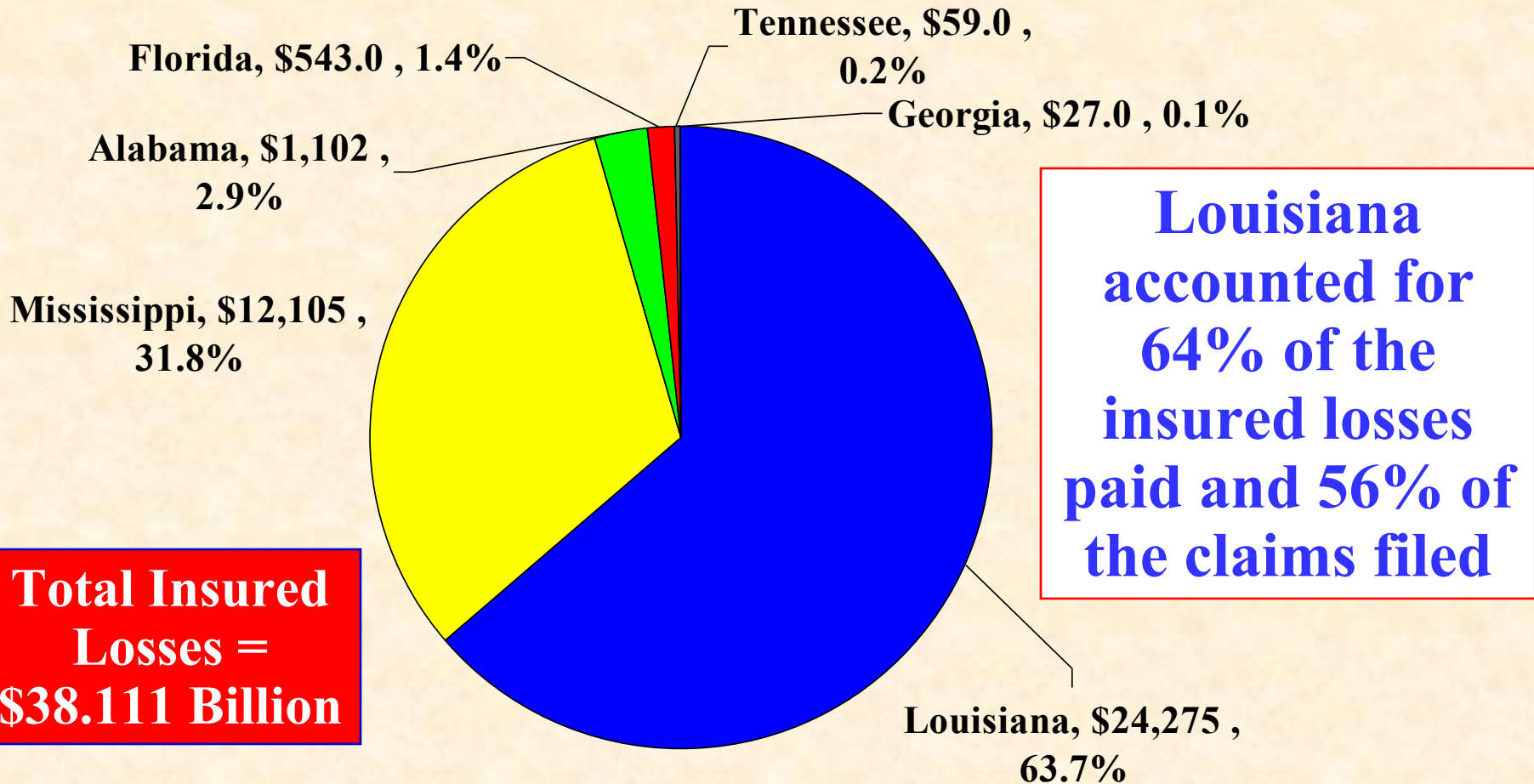
Hurricanes Katrina, Rita & Wilma:

Their Place in History





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



*As of February 8, 2006

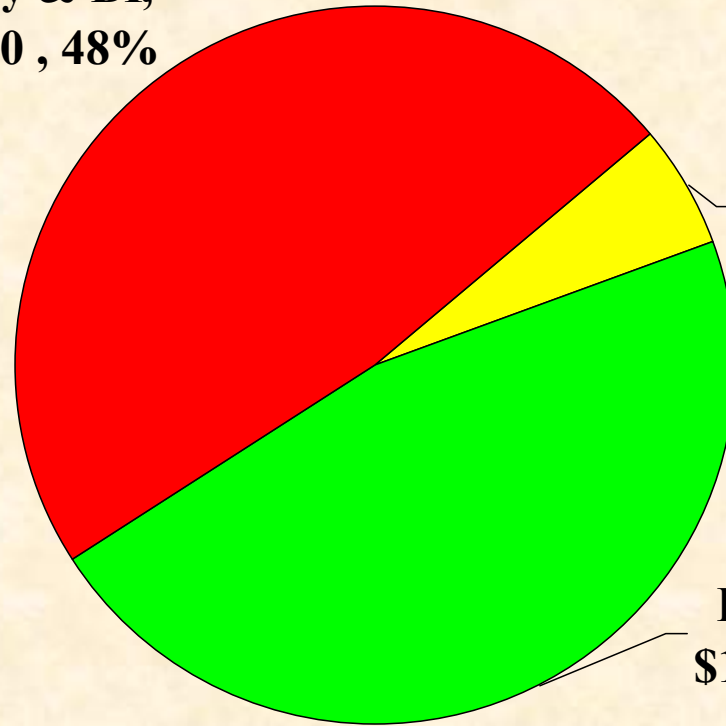
Source: PCS division of ISO.

Hurricane Katrina Loss



Distribution by Line (\$ Billions)*

**Commercial
Property & BI,
\$18,278.0 , 48%**



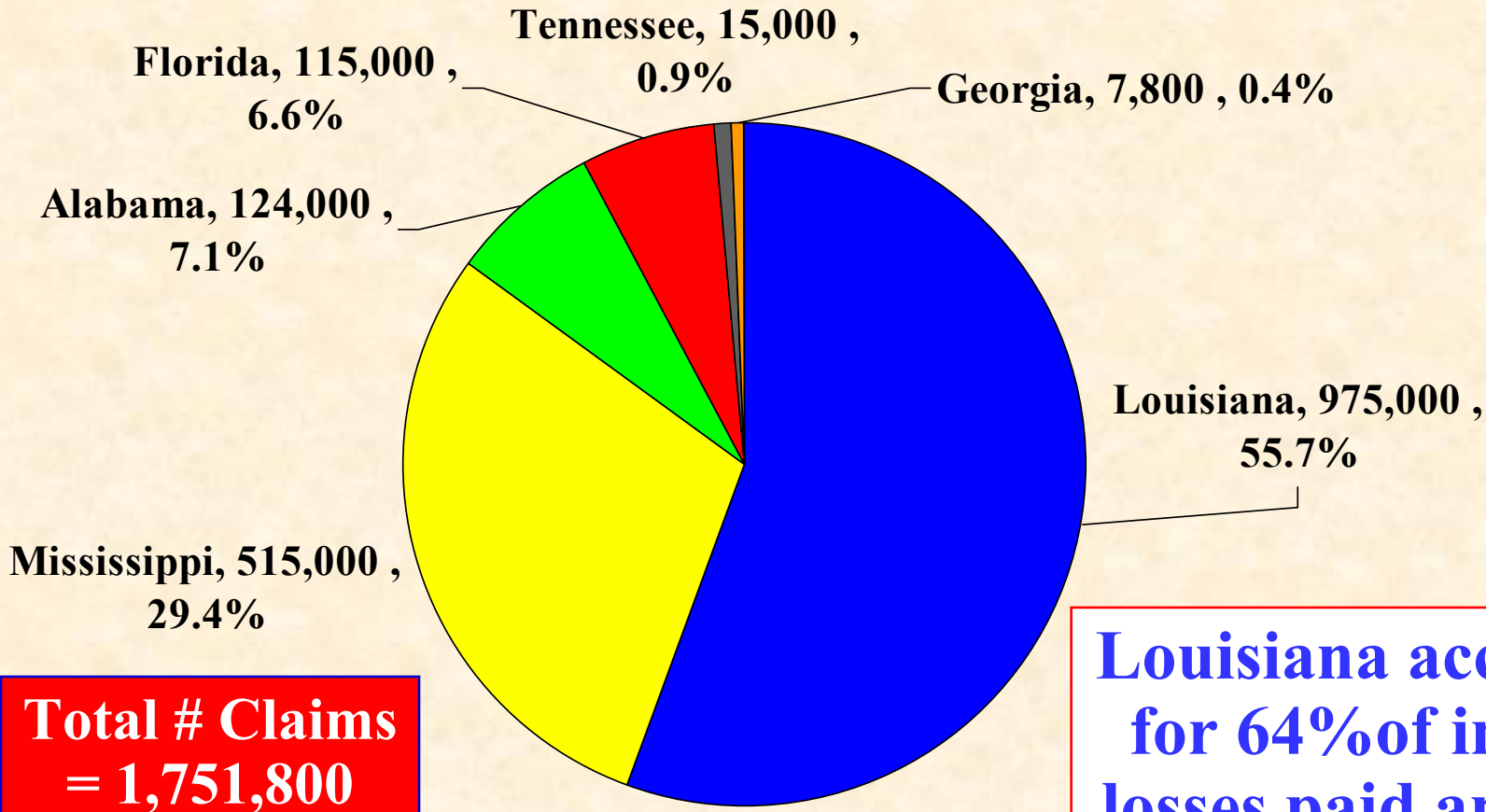
**Vehicle, \$2,139.0 ,
6%**

**Homeowners,
\$17,694.0 , 46%**

Total insured losses are estimated at \$38.1 billion from 1.7518 million claims. Excludes \$2-\$3B in offshore energy losses



Hurricane Katrina Claim Count Distribution by State*



**Total # Claims
= 1,751,800**

**Louisiana accounted
for 64% of insured
losses paid and 56%
of claims filed**

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

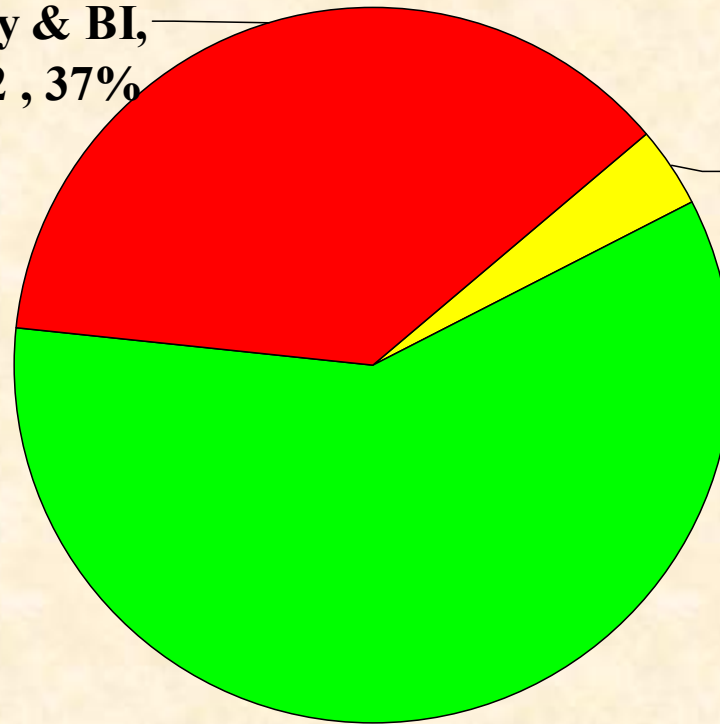


Hurricane Rita Loss Distribution, by Line (\$ Millions)*

Total insured losses are estimated at \$5.0 billion (excl. offshore energy of \$2-\$3B) from 381,000 claims.

**Commercial
Property & BI,
\$1,846.2 , 37%**

**Vehicles, \$186.0 ,
4%**



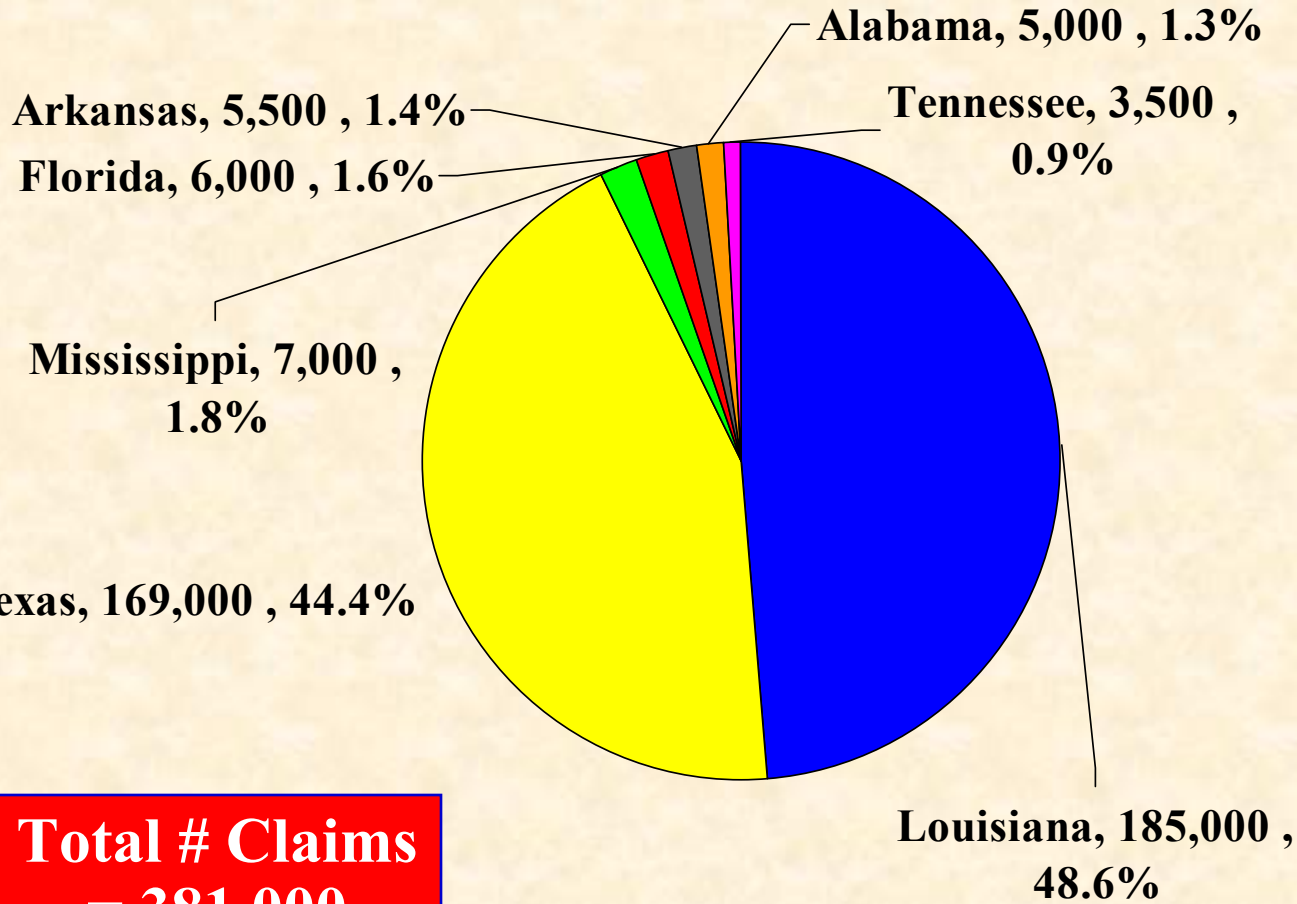
**Homeowners,
\$2,944.0 , 59%**

*As of February 8, 2006

Source: PCS division of ISO.



Hurricane Rita Claim Count Distribution by State*



**Total # Claims
= 381,000**

**Louisiana
accounted for
48.6% of the
insured losses,
Texas 44.4%.**

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

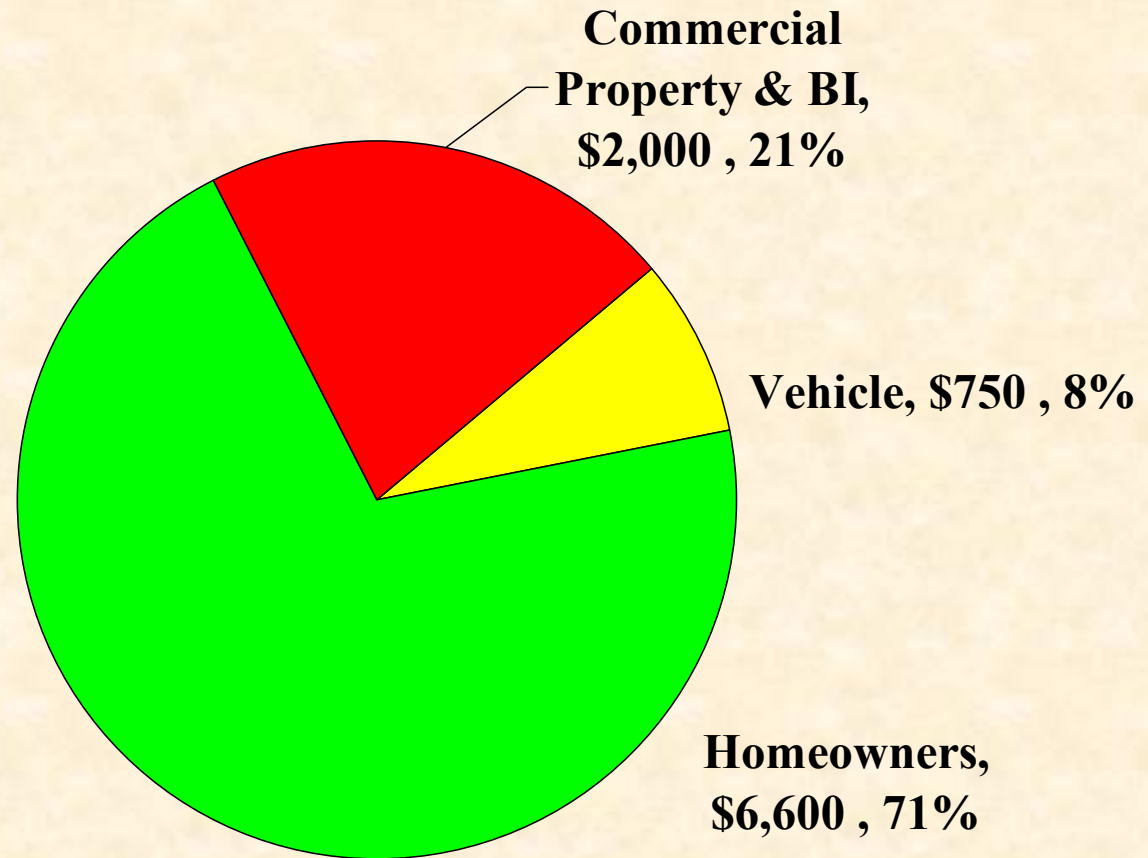
*As of February 8, 2006
Source: PCS division of ISO.

Hurricane Wilma Loss



Distribution by Line (\$ Millions)*

Total insured losses are estimated at \$9.35 billion from 1.025 million claims



*As of March 27, 2006. All losses are in FL.
Source: PCS division of ISO.



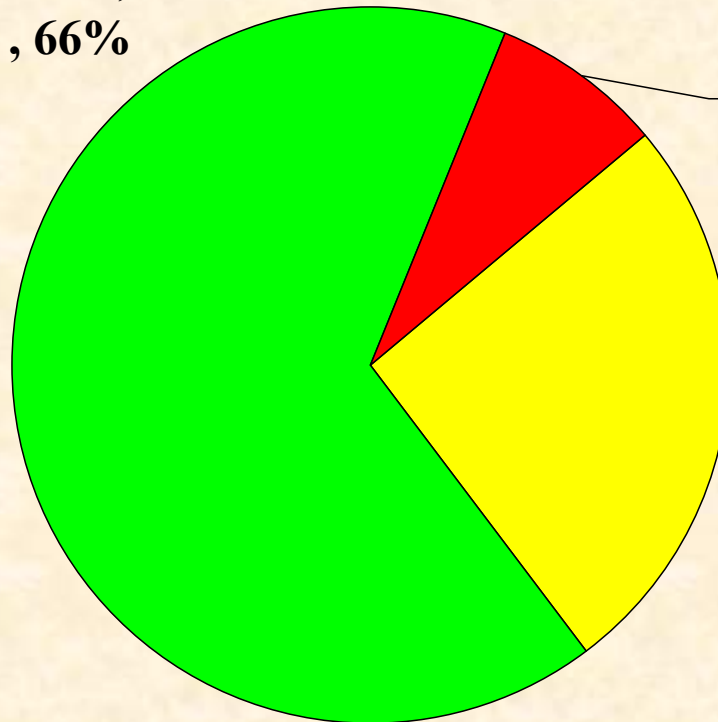
Hurricane Wilma Claim Count

*Distribution by Line (\$ Millions)**

**Homeowners,
680,000 , 66%**

**Commercial
Property & BI,
80,000 , 8%**

**Vehicle, 265,000 ,
26%**



**Total insured
losses are
estimated at
\$9.35 billion
from 1.025
million claims**

***As of March 27, 2006. All losses are in FL.
Source: PCS division of ISO.**



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