

# 2013 CAS/CARe Seminar

Concurrent Session 1  
Negative Frequency Trend!

June 7<sup>th</sup>, 2013



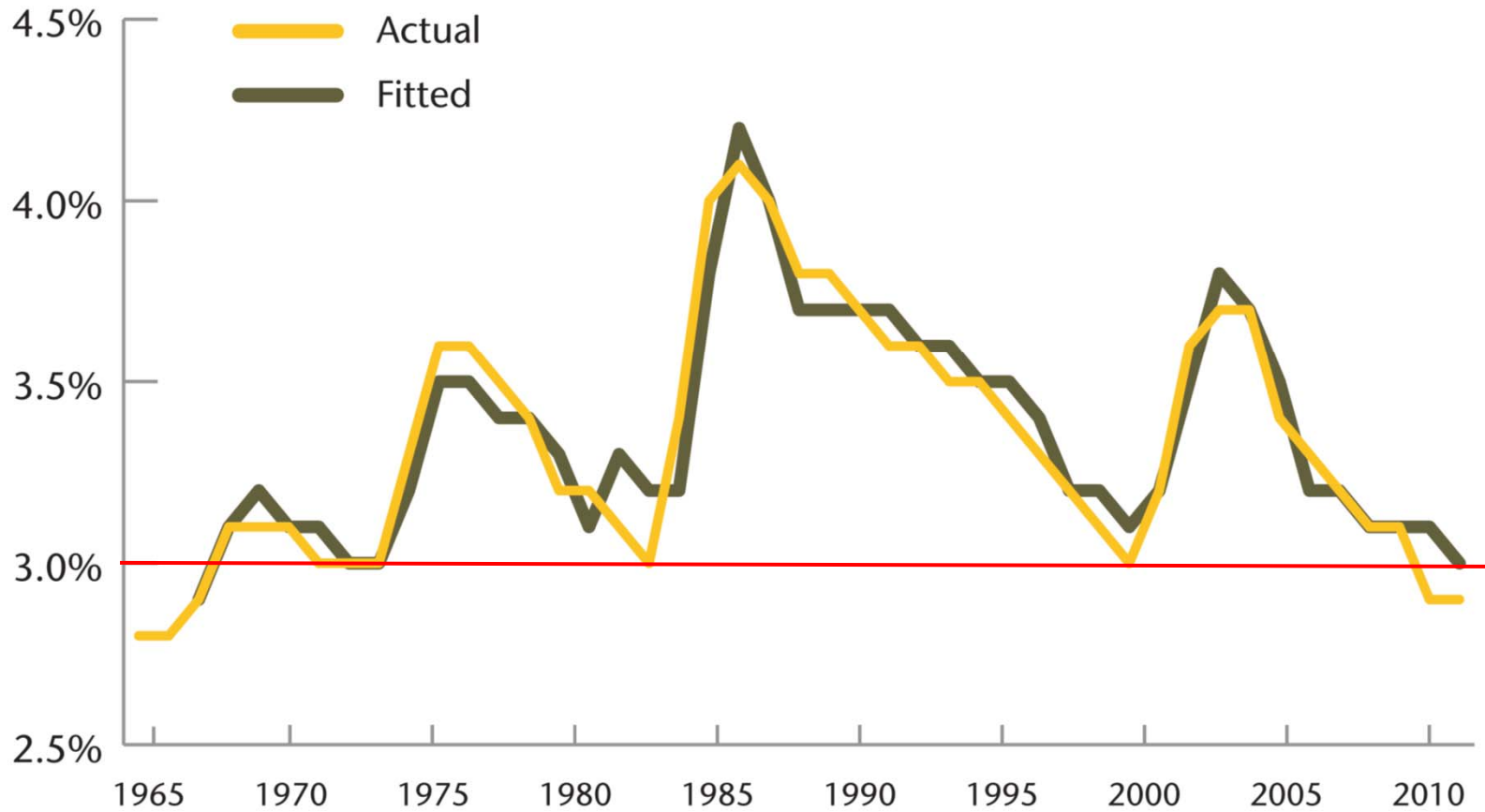
## Antitrust Notice

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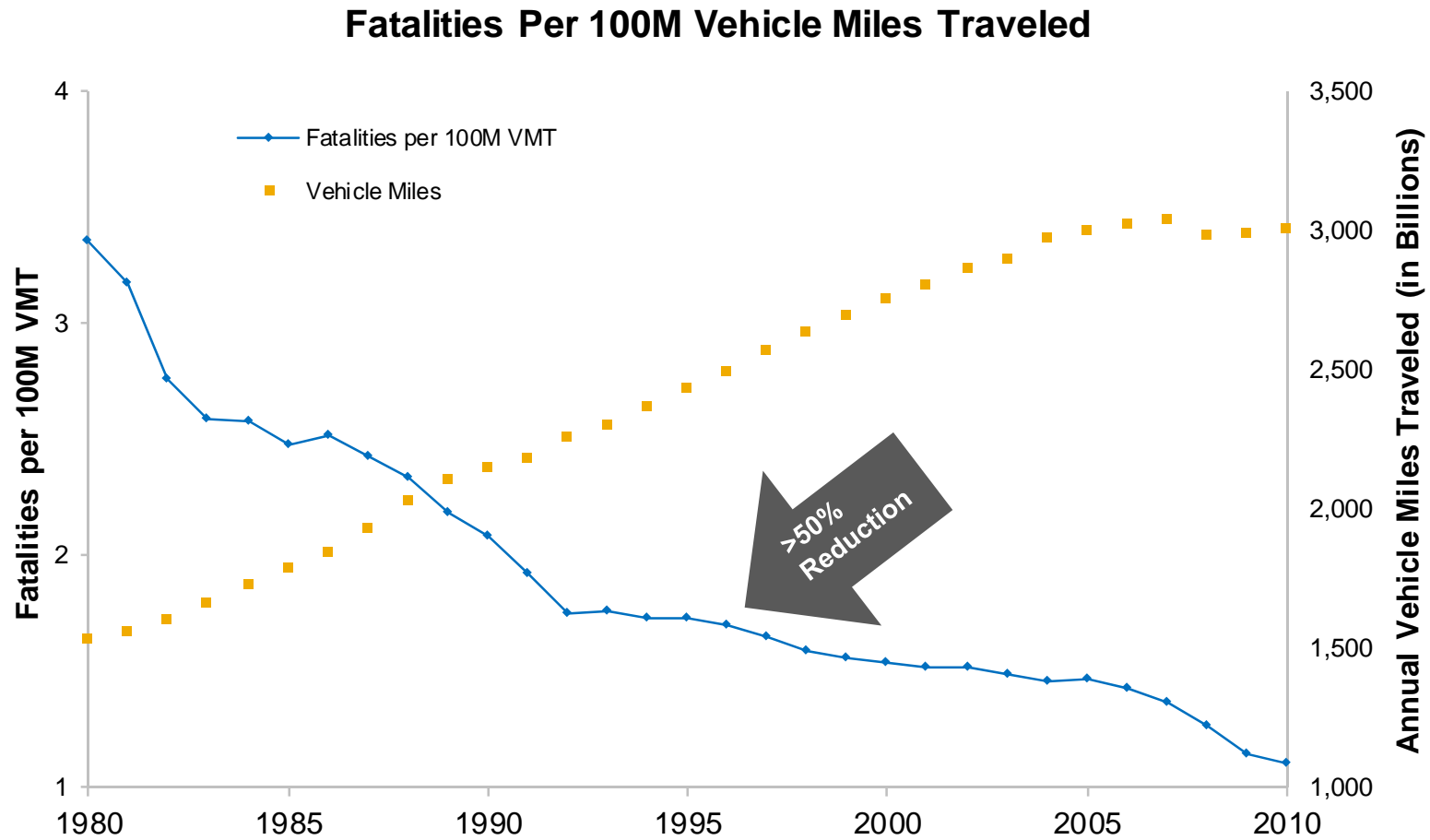
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# Modeling the Underwriting Cycle

## Industry NWP to GDP %

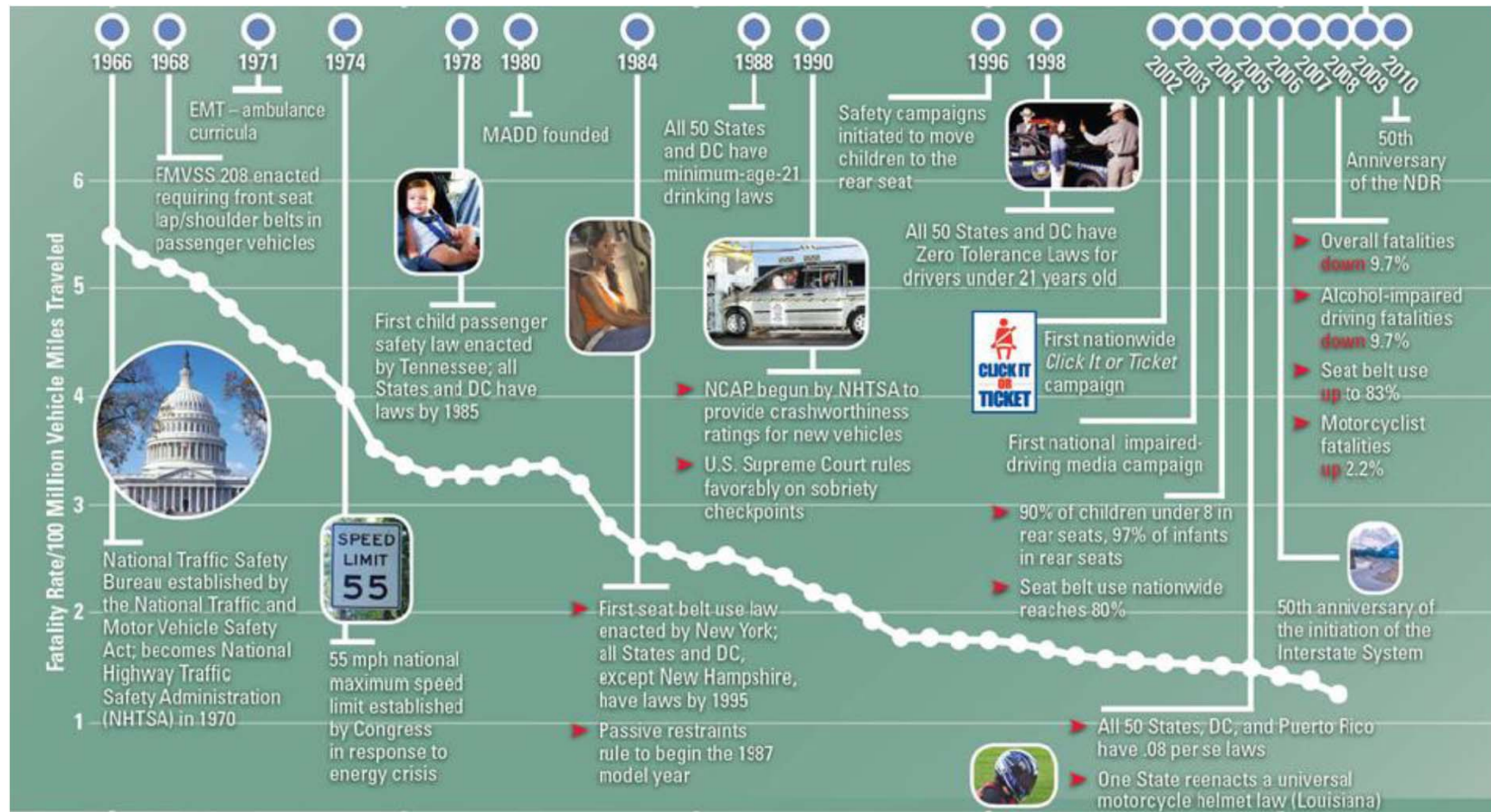


# Auto Frequency **DOWN**



Sources: National Highway Traffic Safety Administration ([www.nhtsa.gov](http://www.nhtsa.gov)) and Aon Benfield Analytics

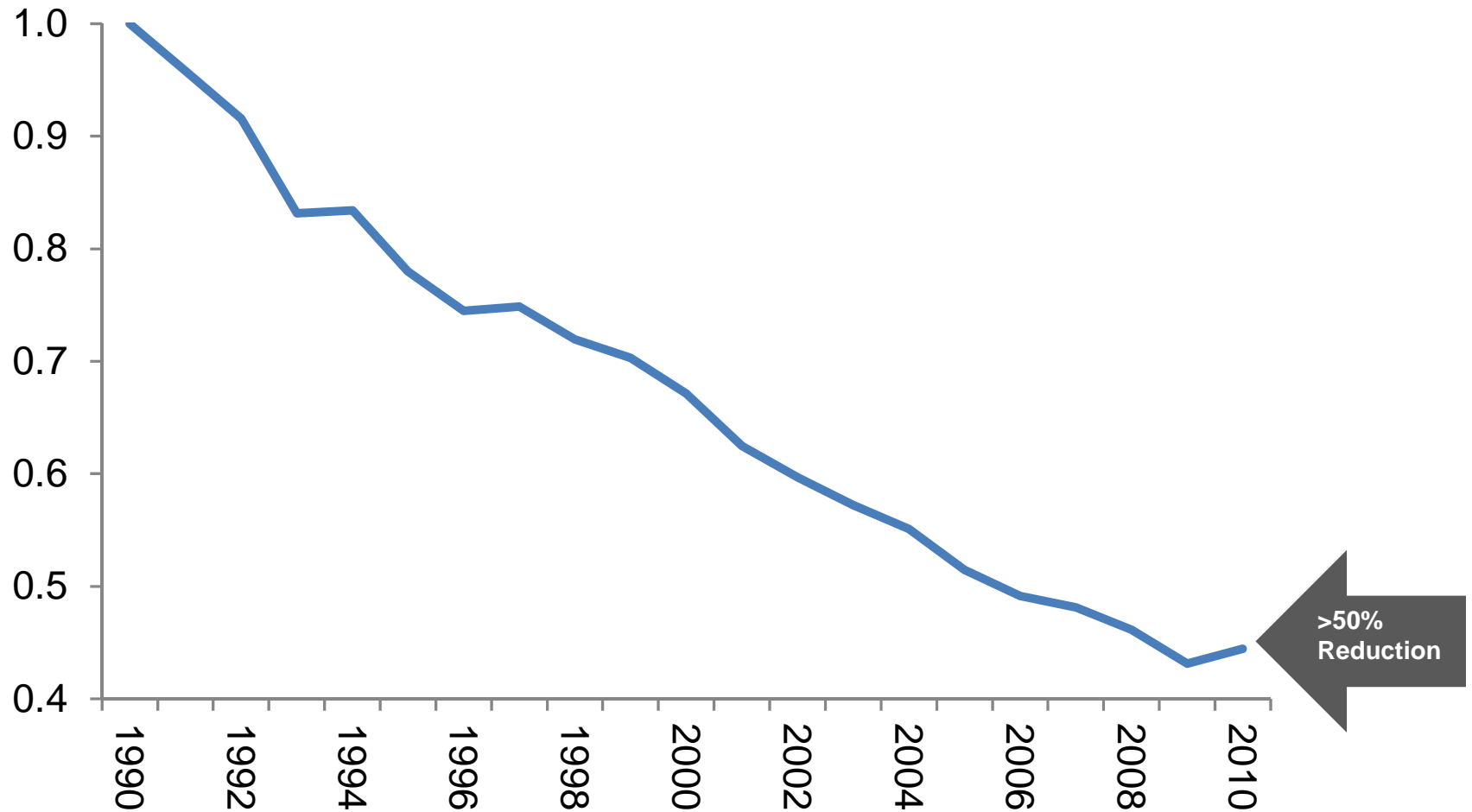
# Behavioral and Vehicle Improvement Milestones and Fatality Rates per 100 Million VMT, 1966 – 2009\*



Source: 1966-1974 – NCHS, HEW and State Accident Summaries; NHTSA FARS 1975-2007 Final and 2008 ARF; \*2009 is an estimate; FHWA. See Appendix for underlying time series data.

- Table from: “An Analysis of the Significant Decline in Motor Vehicle Traffic Fatalities in 2008” – <http://www-nrd.nhtsa.dot.gov/Pubs/811346.pdf>

## WC Loss Time Frequency **DOWN**



Source: NCCI

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**AON** BENFIELD

## Factors Influencing Long-term Decline in Claim Frequency

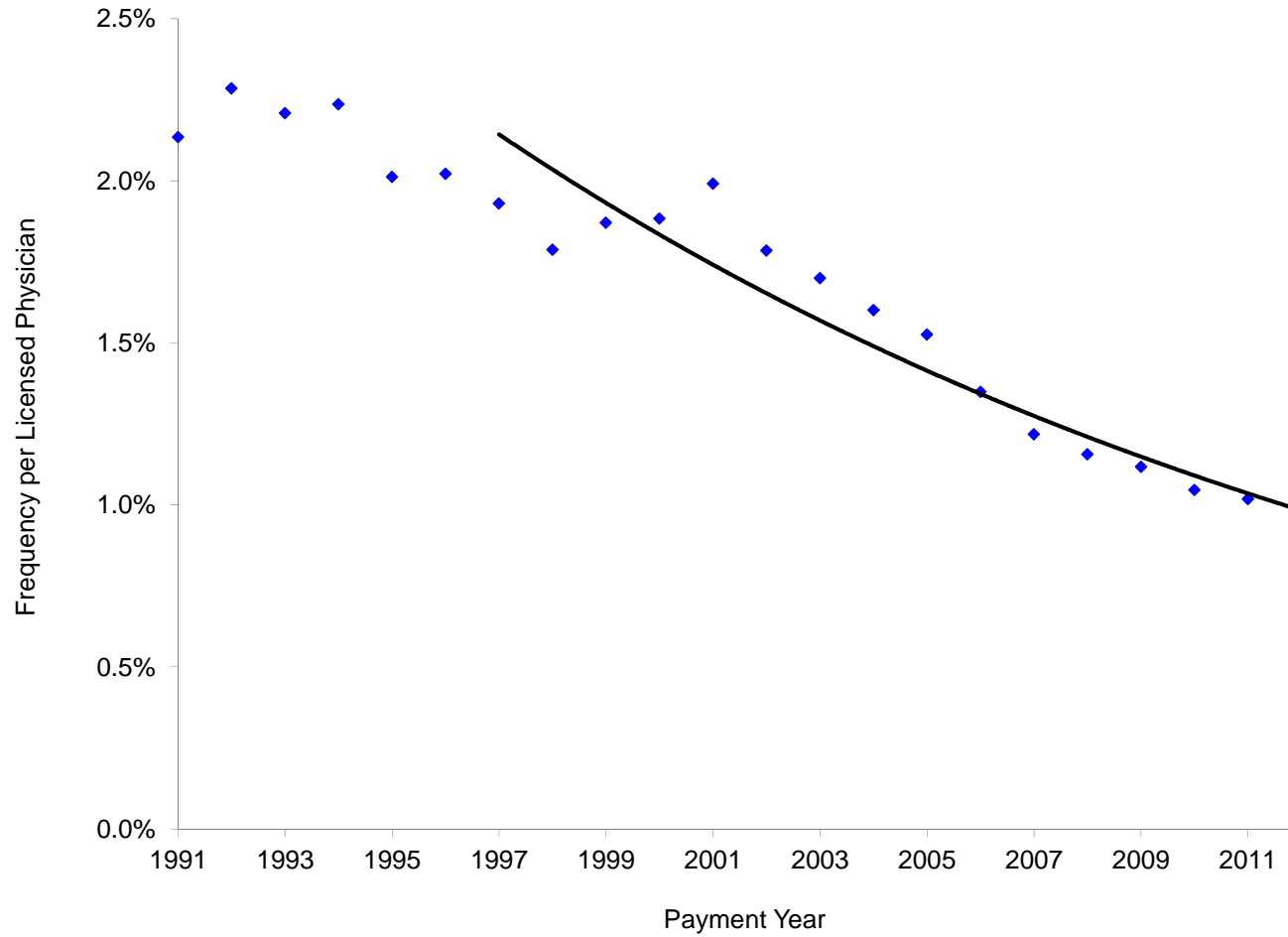
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- Advances in automation, technology and production attributable to global competition
  - Increased use of robotics
  - Increased use of modular design and construction techniques
  - Increased use of power-assisted processes
  - Advances in ergonomic design
  - Proliferation of cordless tools
  
- Aging workforce
  - Older workers tend to experience fewer workplace accidents
  
- Continued emphasis on workplace safety and loss control
  
- Benefit reforms over time have tightened compensability standards
  
- More and better job training
  
- Improved fraud deterrents

Source: NCCI Research Briefs of 2007, 2010, 2012

## NPDB Public Use File - Payment Frequency **DOWN**

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Source: National Practitioner Data Bank Public Use File as of December 31, 2012

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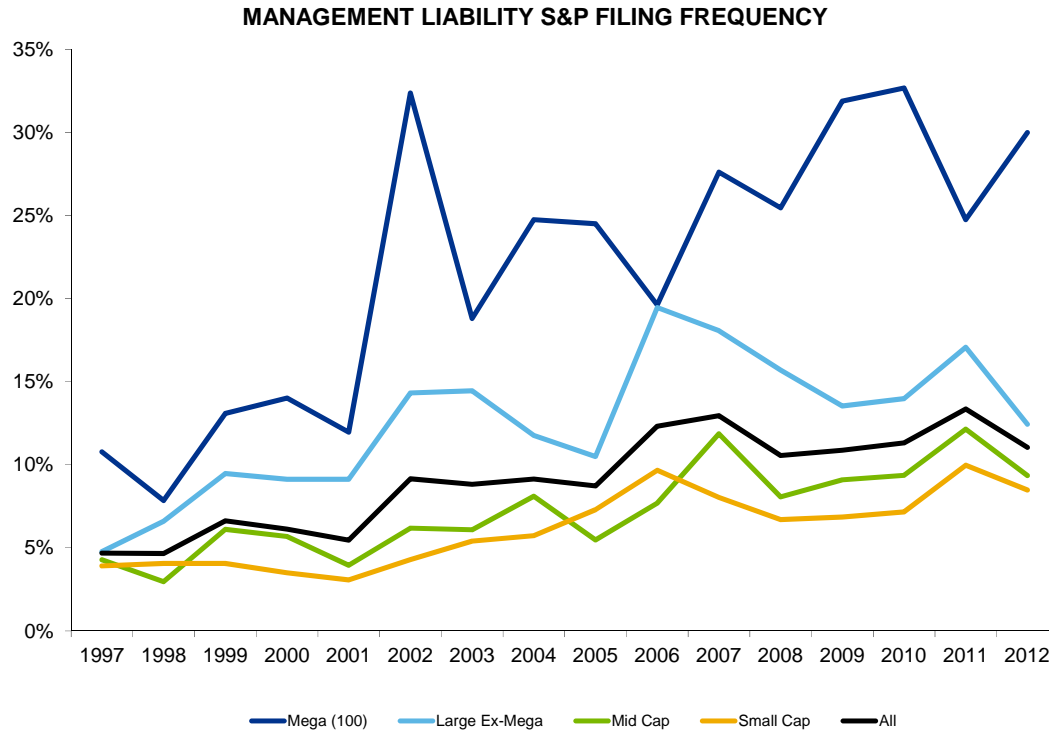


# Medical Liability Claim Frequency

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- Why has it decreased?
  - Enacted tort reform
  - Patient safety / risk management initiatives
  - Defensive medicine
  - More conservative judges / juries
  - Decrease in aggressiveness of plaintiff bar
    - Increased cost to litigate
    - Reduced access to credit
  
- Why might it increase?
  - Increasing shortage of physicians
  - Increasing use of nurses, hospitalists, physician assistants, techs, etc.
  - Consolidation of individual providers to systems, groups, etc.
  - Financial pressure on providers
    - Reduced reimbursements
    - Incentives to reduce cost
  - Increasing demand for coordination of care (changing standard of care?)
  - Increasing use of electronic medical records (increased transparency)
  - Erosion of enacted tort reform
  - Less conservative judges / juries
  - Increase in aggressiveness of plaintiff bar
    - Improved access to credit
    - Better chance to win verdicts / extract settlements

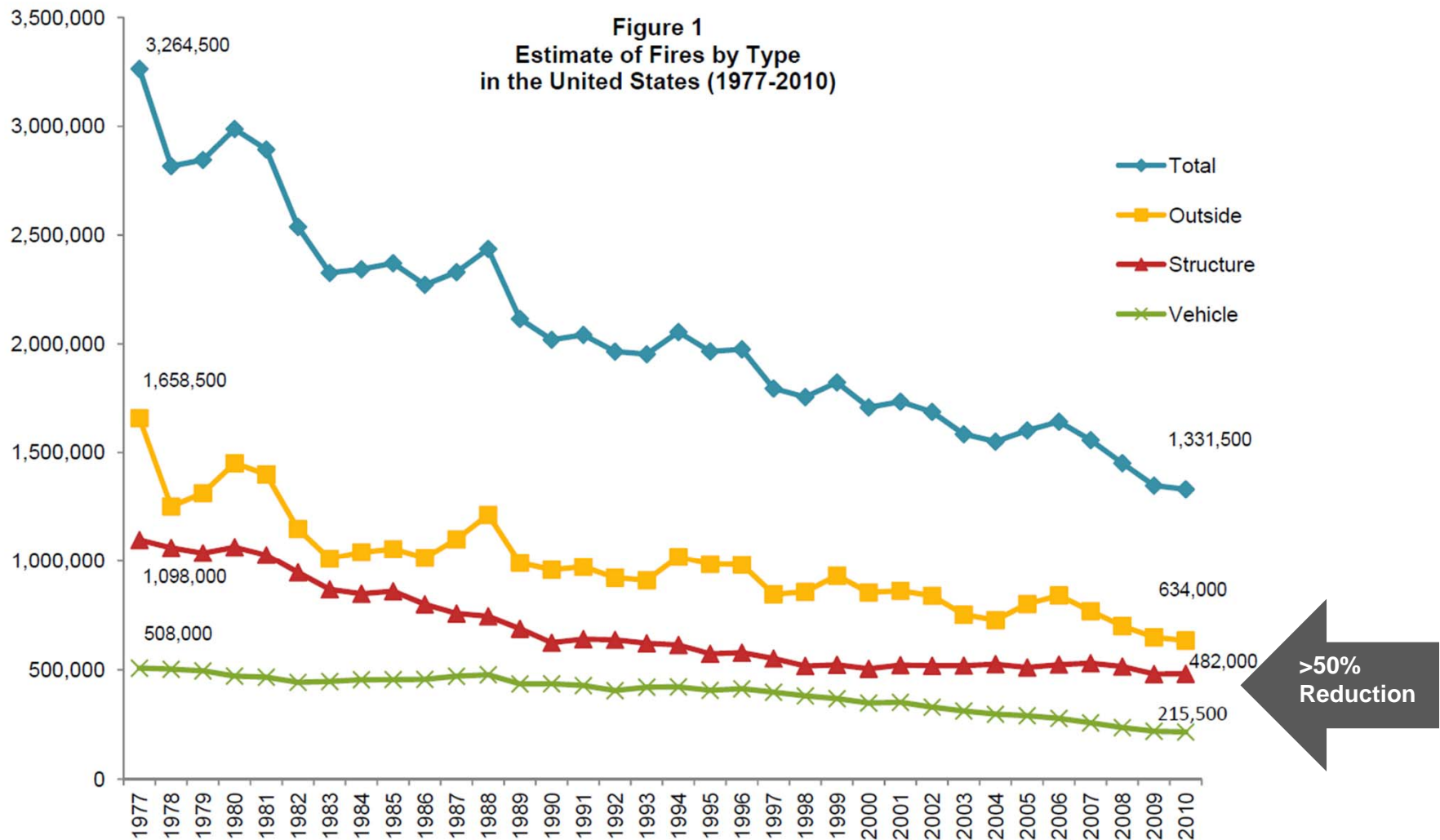
# S&P 1500 Filing Frequency by Capitalization



- Filings tracked by market cap group
  - Use S&P index constituents
  - “Mega” = S&P 100
  - “Large Ex-Mega” = S&P 500 excluding 100
  - “Mid Cap” = S&P 400
  - “Small Cap” = S&P 600
- “Management Liability” includes non-SCA claims
  - Derivative suits
  - Fiduciary
  - FI E&O

Source: Aon Benfield Analysis of Advisen data

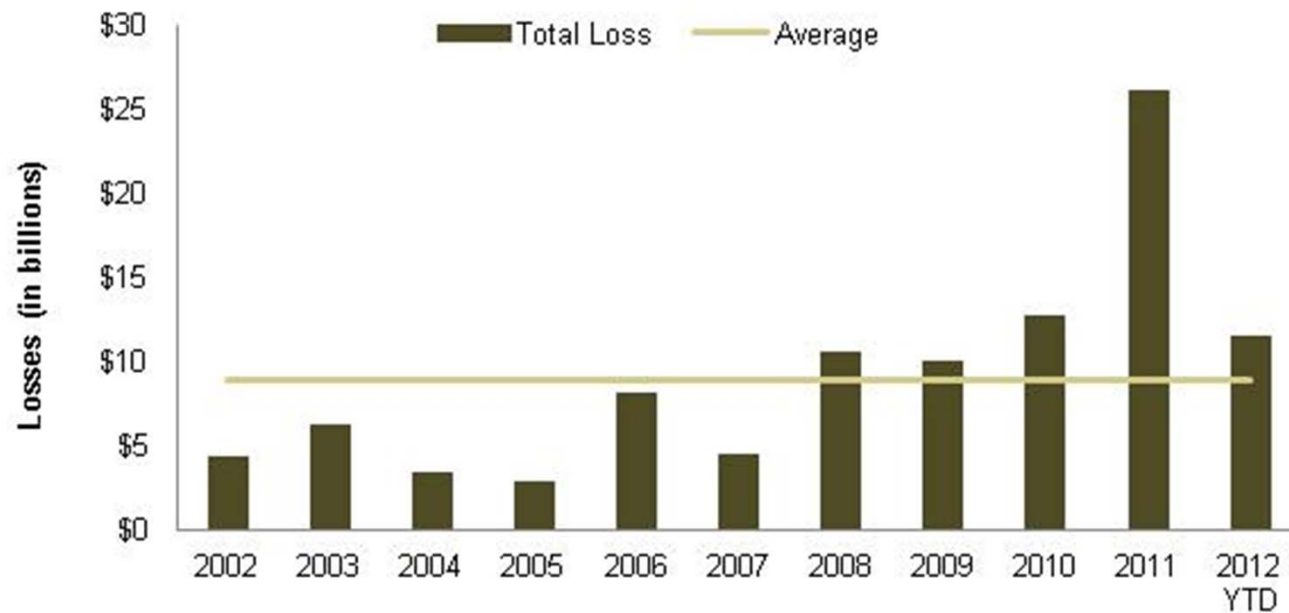
# Fire Loss Frequency **DOWN**



Source: Fire Loss in the United States During 2010, Michael J. Karter Jr., NFPA Boston MA, Sept 2011  
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## Severe Weather Loss Activity by Year

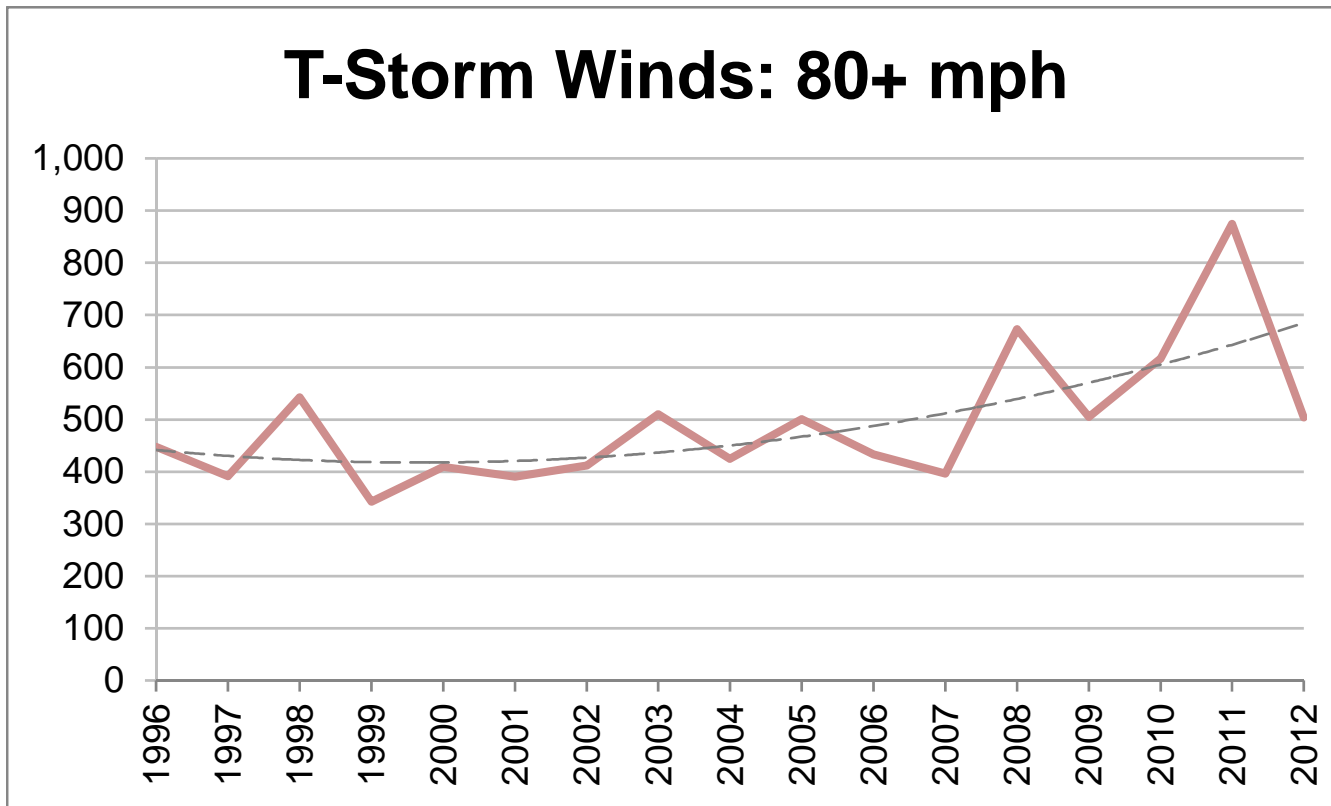
- Severe weather activity in the U.S. again surpasses the recent years' average with USD11.5 billion in losses in 2012
- Losses from 2010 to 2012 have comprised more than 50 percent of the losses since 2001



Source: PCS

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## Severe Weather Counts by Year



Data Source: Storm Prediction Center, National Hurricane Center

## Outside US Trends

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- Complicated, depending on country, line of business and size of claims
- Examples:
  - UK Motor
    - Number of fatalities involving accidents down last 10/15 years
      - ♦ Whiplash claims up
    - Third party property damage down
      - ♦ Bodily injury is up
    - Before taking into account size considerations
  - Ex-US Professional Lines
    - Recession-related spike in 2008, declining since
  - Less-developed countries in Asia
    - Frequency rate increase in light of development of wealth and industries
    - Insurers of developing economies covering large risks
    - Propensity for going to court lower than in more advanced economies