



Workers' Compensation Claim Frequency The California Perspective

**Presented by:
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WCIRB of California**

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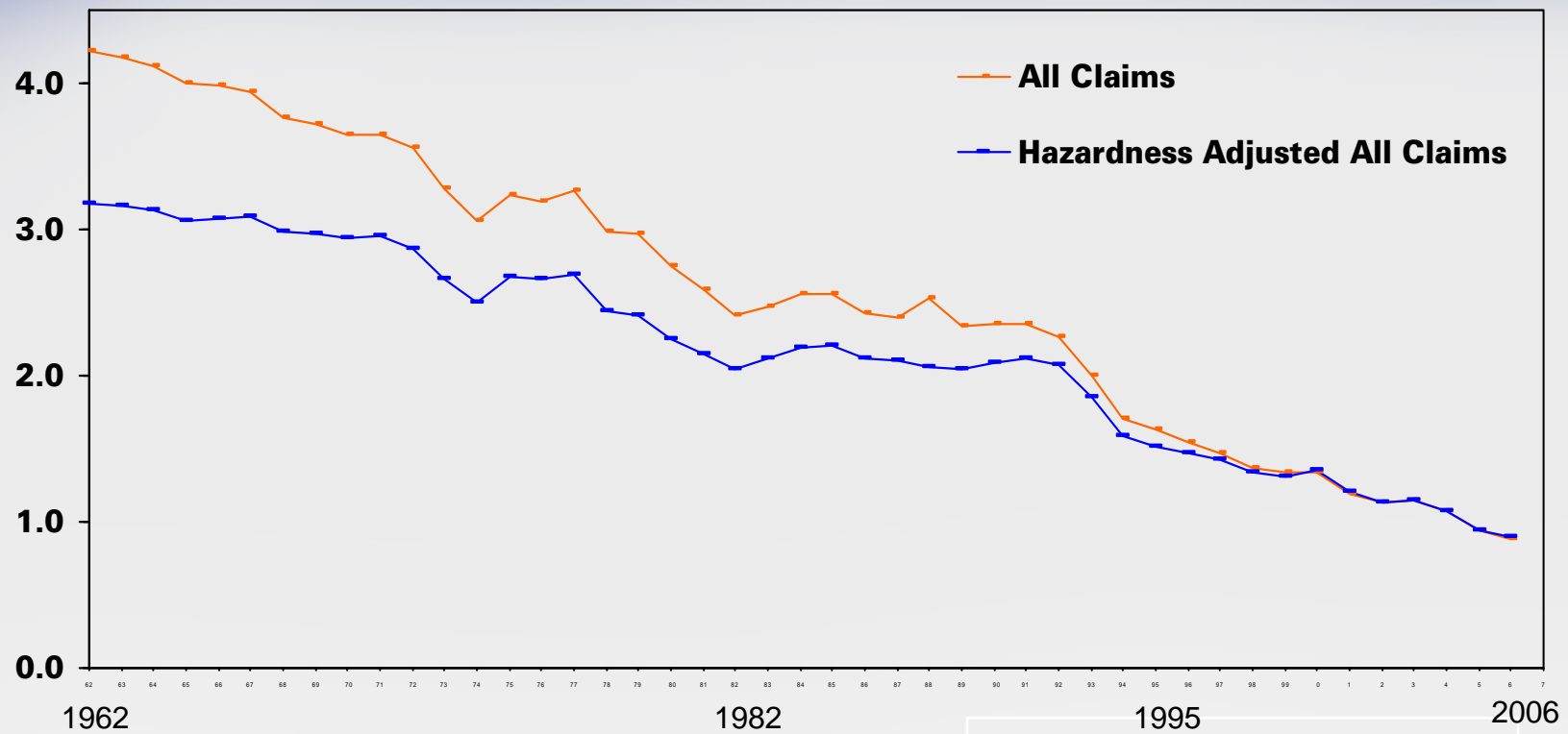
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Summary of Presentation



- Long-term Results
- Recent Patterns
- WCIRB Frequency Model
- Ratemaking Forecasts
- Looking Forward

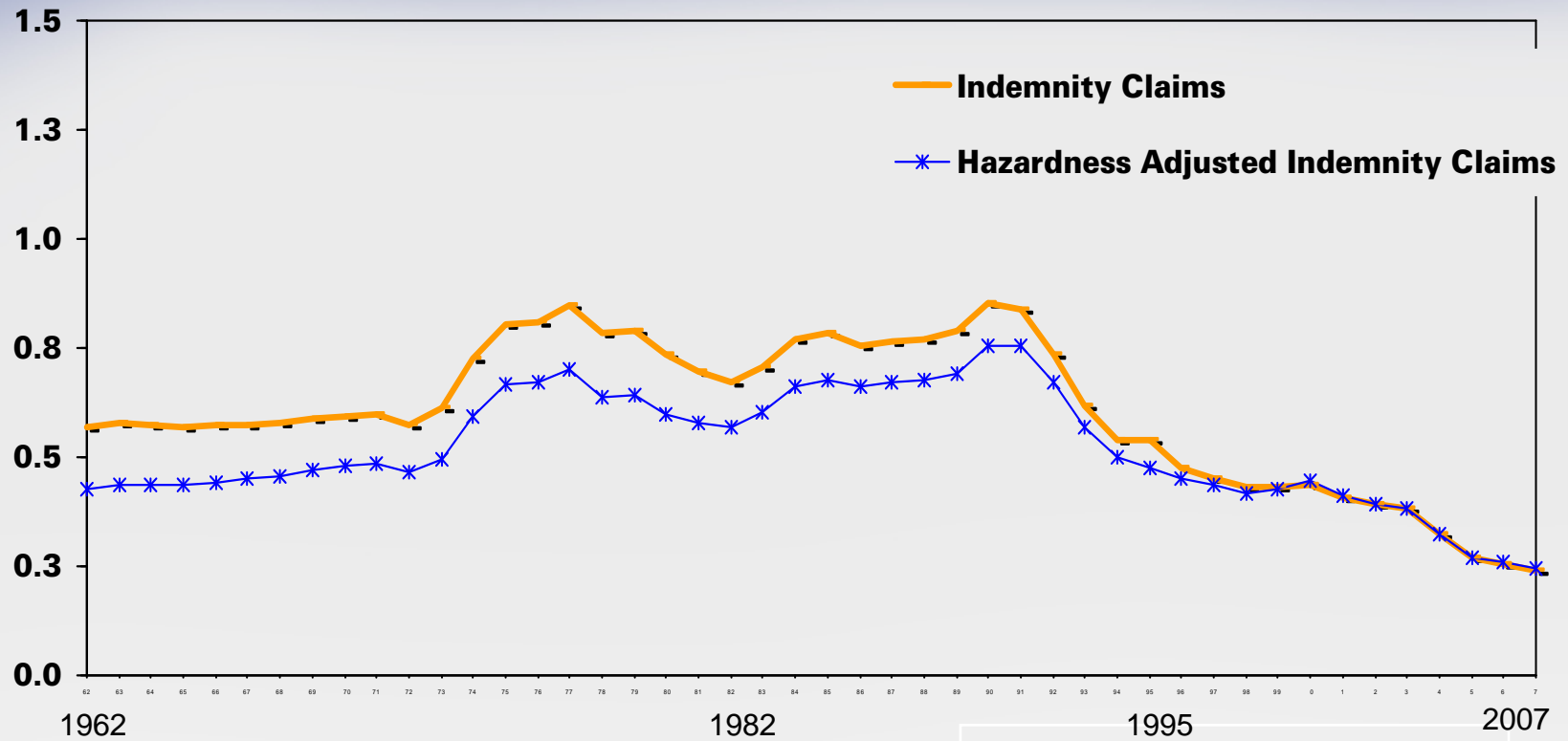
Total Claim Frequency



Frequency is reported claimcounts to payroll adjusted to a common wage level.

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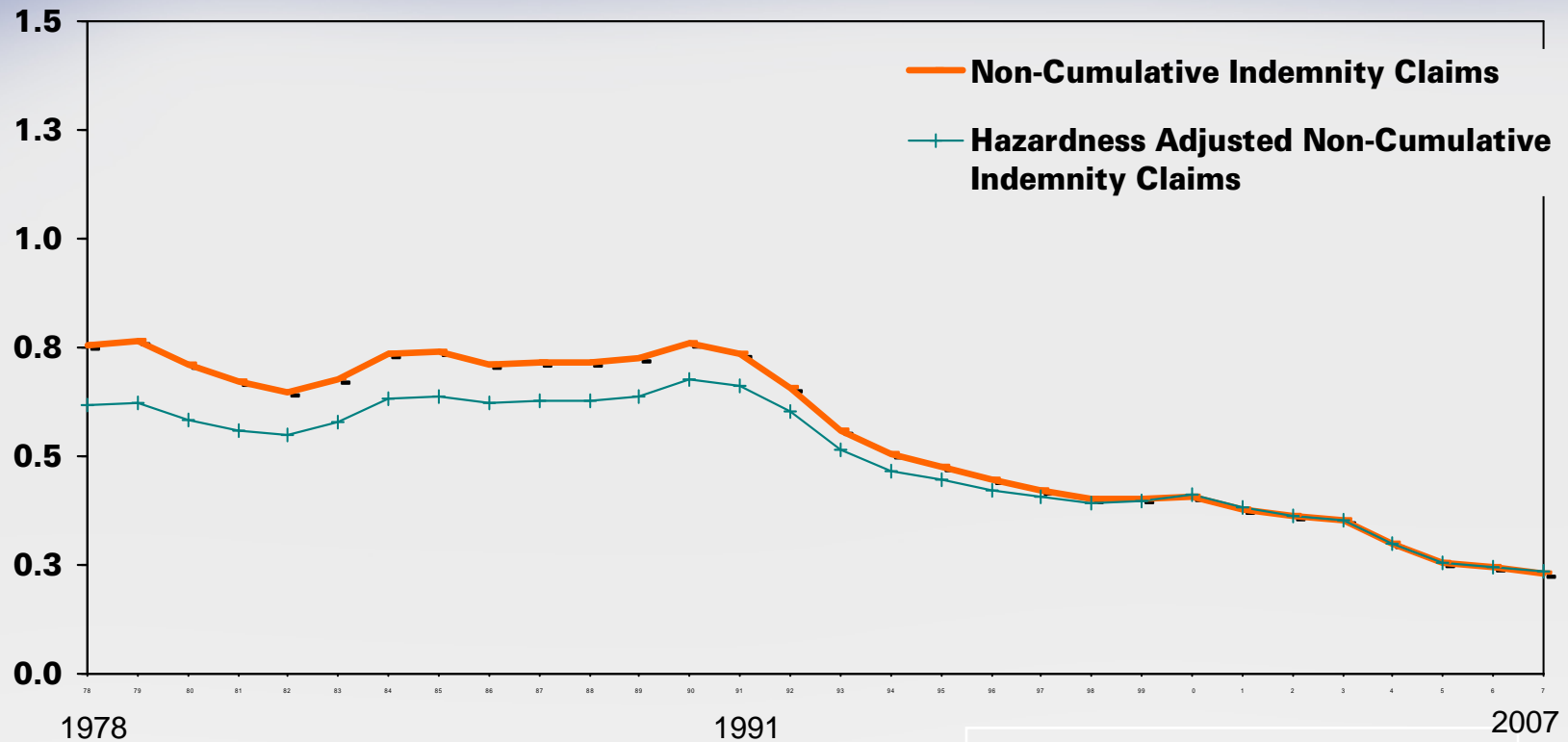
Indemnity Claim Frequency



Frequency is reported claimcounts to payroll adjusted to a common wage level.

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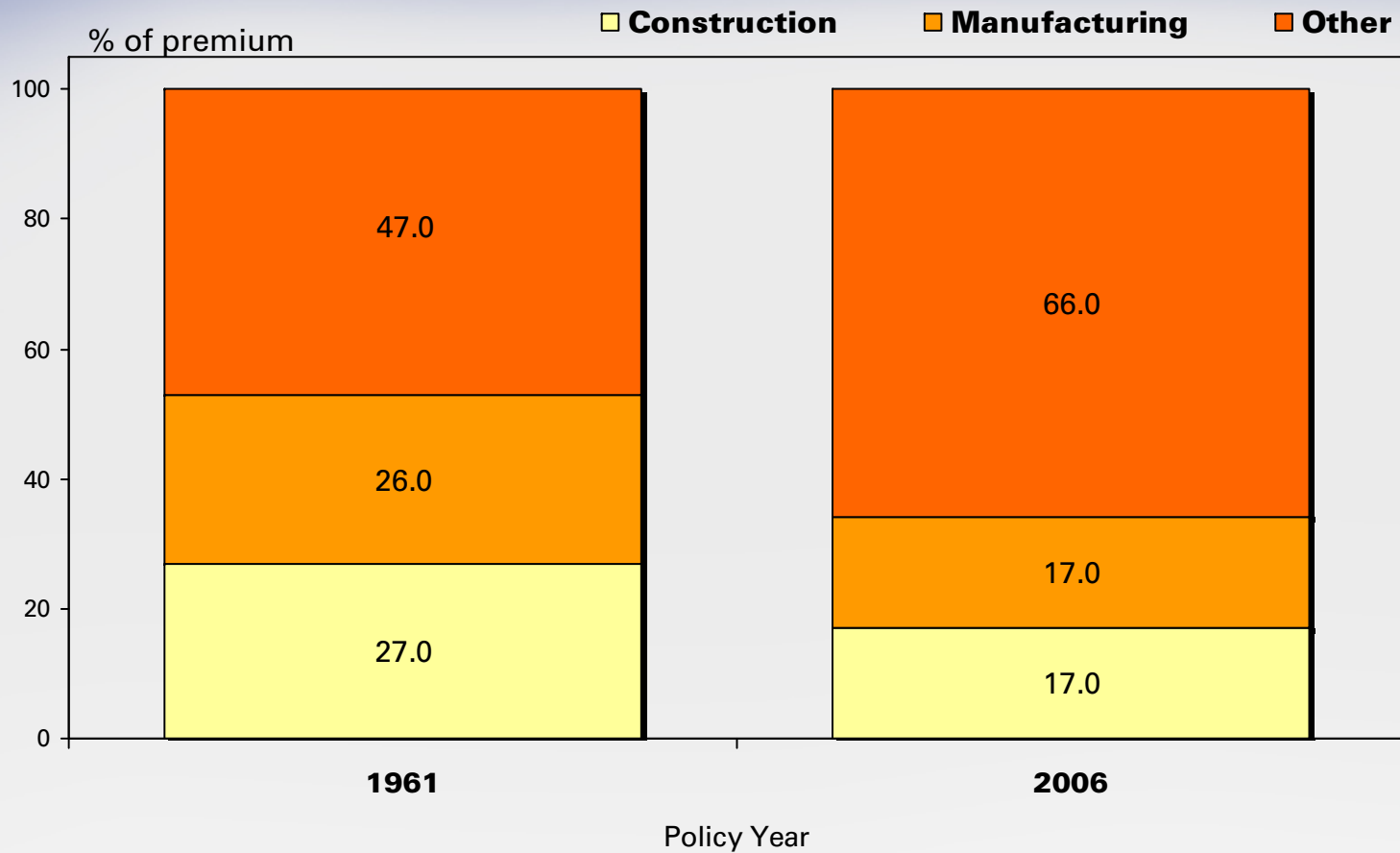
Non-Cumulative Indemnity Claim Frequency



Frequency is reported claimcounts to payroll adjusted to a common wage level.

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Change in Class Mix



Long-Term Results Summary



- **Total Claim Frequency**
 - 3.5% annual decline since 1962
 - Hazardousness of class mix explains about 0.5% per year
- **Indemnity Claim Frequency**
 - Decline less steep and less steady
 - 2% annual decline since 1962
 - Hazardousness of class mix explains about 1% per year
- **Non-Cumulative Indemnity Claim Frequency**
 - 6% annual decline since 1978
 - Hazardousness of class mix explains about 1% per year
 - Volatility in indemnity frequency in part due to cumulative injury claims

Long-Term Results

General Observations



- Trends Partially Explained by Shifting Class Mix
- Potential Other Factors
 - Mechanization within classification
 - Attention to workplace safety
 - Avoidance of workers' compensation system
 - Aging of the workforce
- Subject to Shifts Due to System Shocks

Summary of Presentation

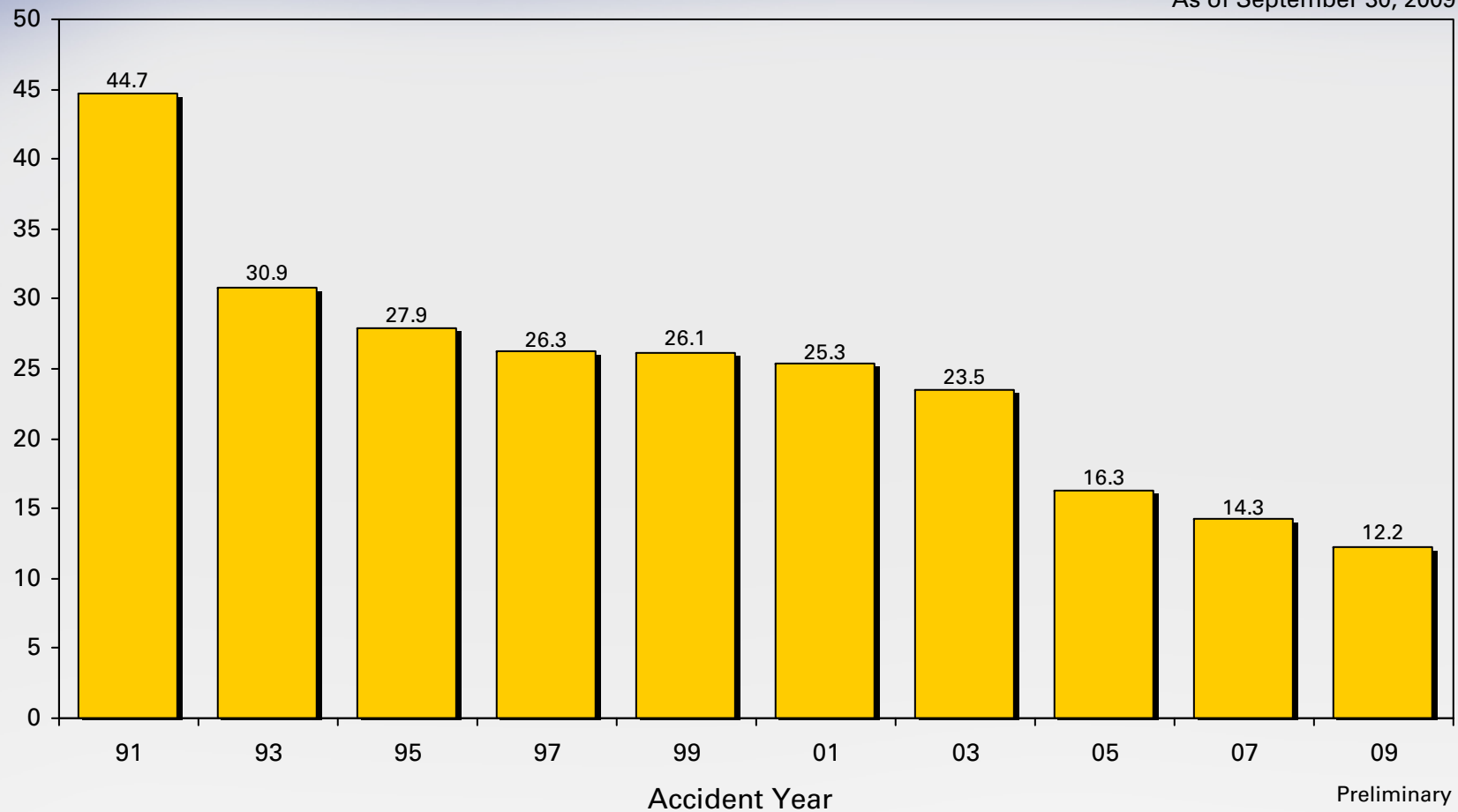


- Long-term Results
- More Recent Patterns

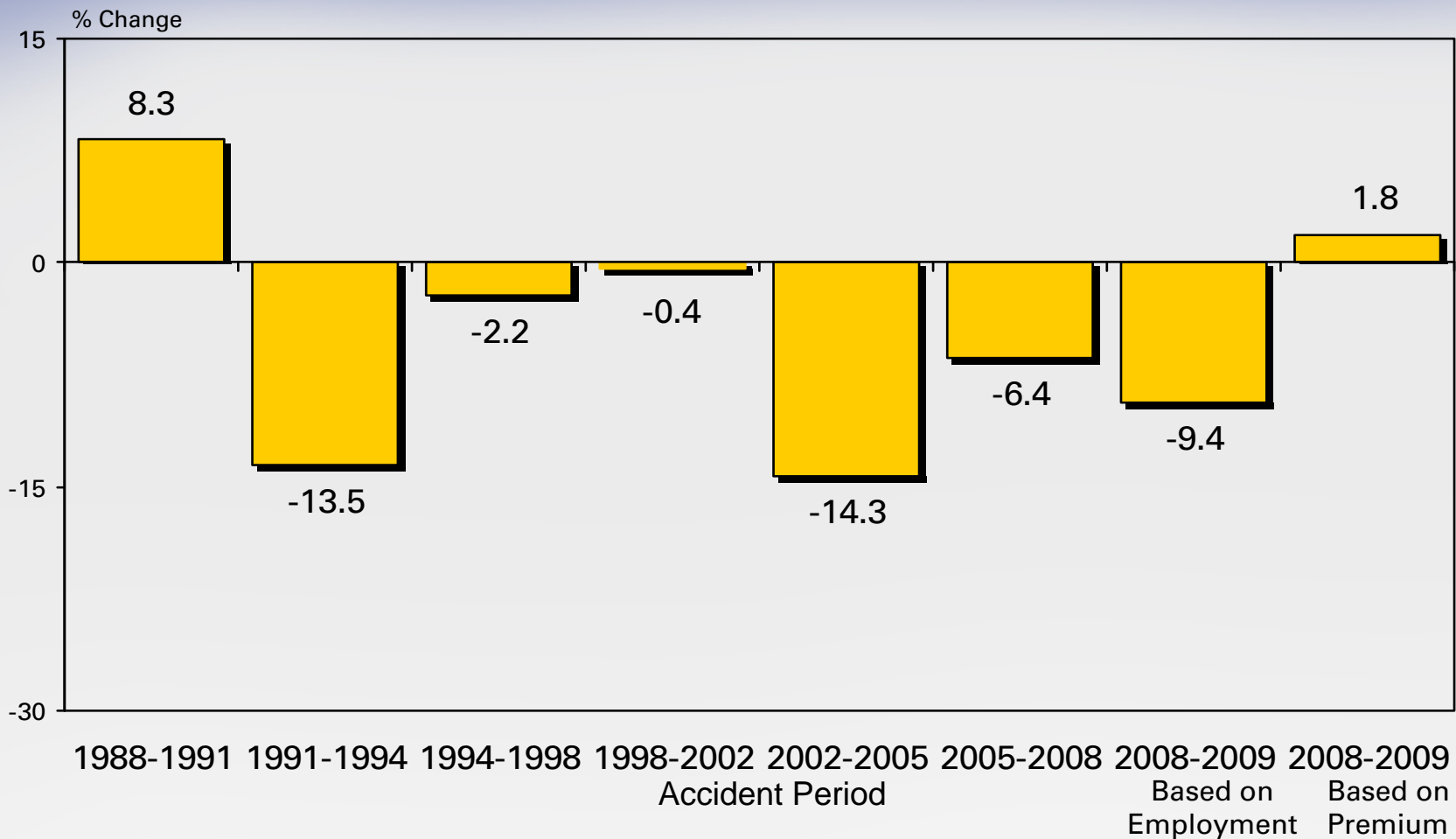
Indemnity Claims Per Estimated 1,000 Full-Time Employees



As of September 30, 2009



Annualized Average Changes in Indemnity Claim Frequency



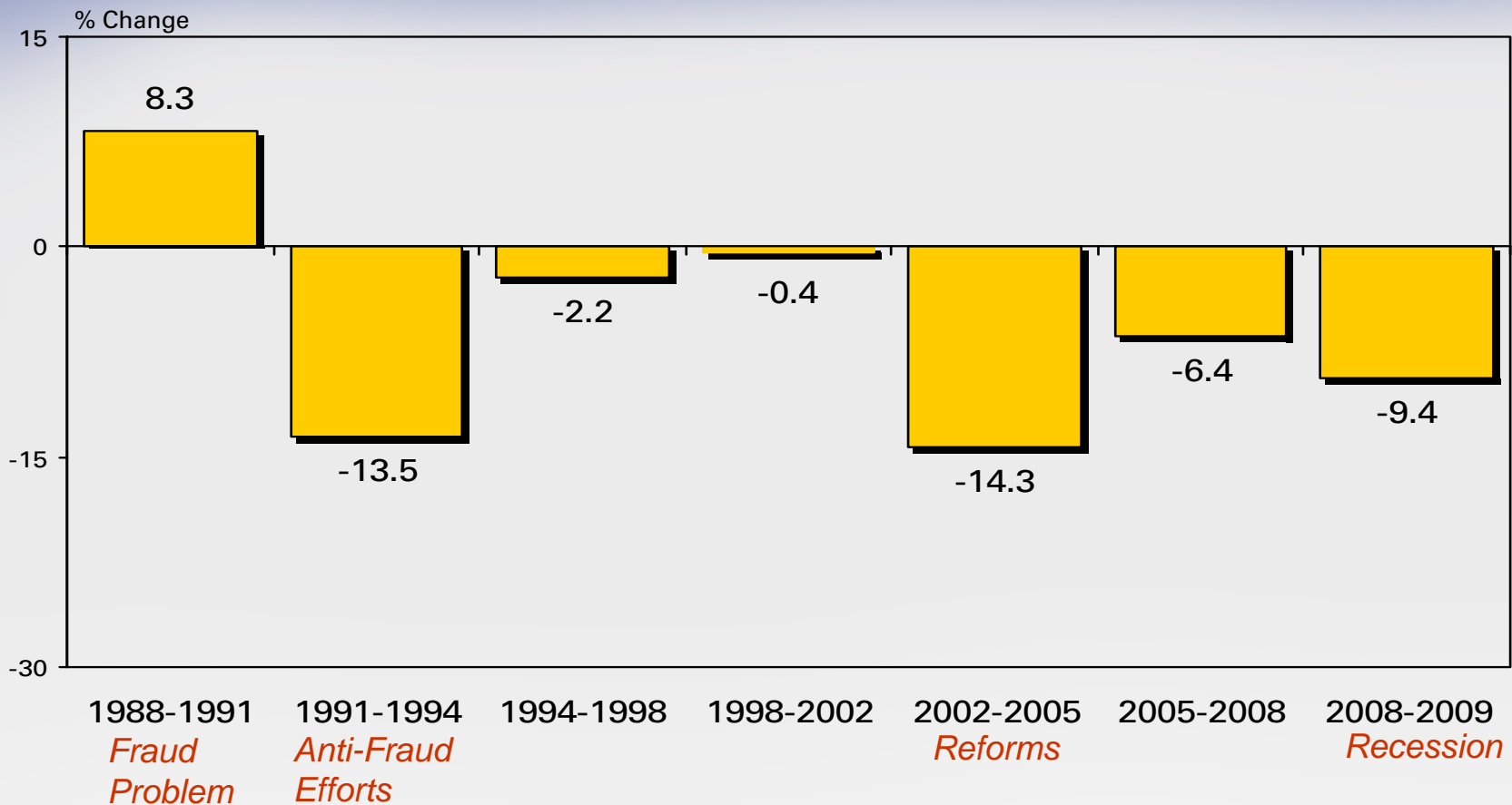
More Recent Patterns

General Observations

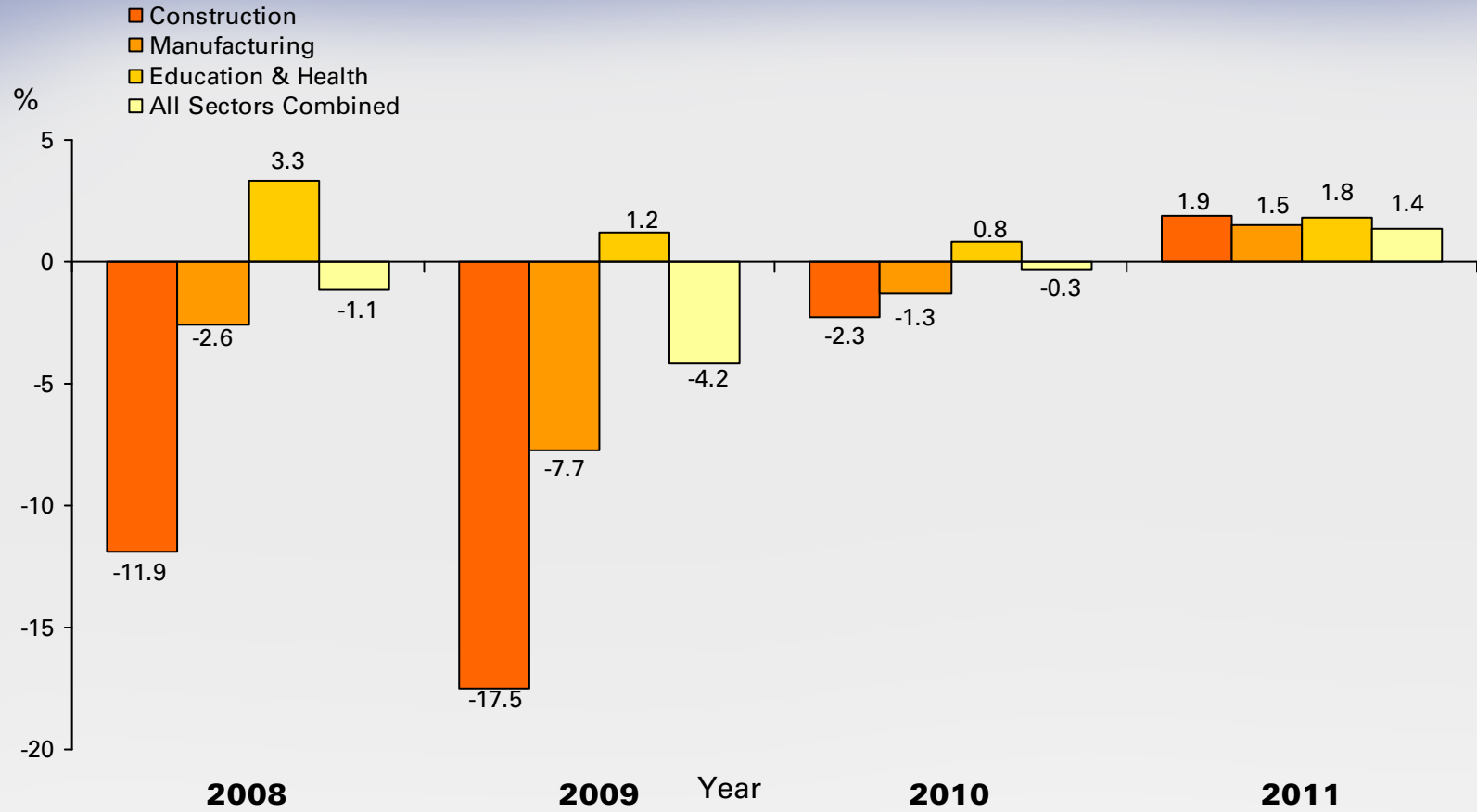


- Continued Downward Trend
- Sharp Shifts Caused by System Shocks
 - 1988-1991: fraud problem
 - 1992-1994: anti-fraud initiatives
 - 2002-2004: reform legislation
 - 2009: recession
- Shifts Can be Difficult to Forecast
 - Increased frequency during late 1980's recession
 - Anti-fraud legislation in 1992-93 relatively minor
 - Nothing in 2002-2004 reforms targeted at frequency
 - Sudden shifts by industrial sector
 - Patterns can differ from other states

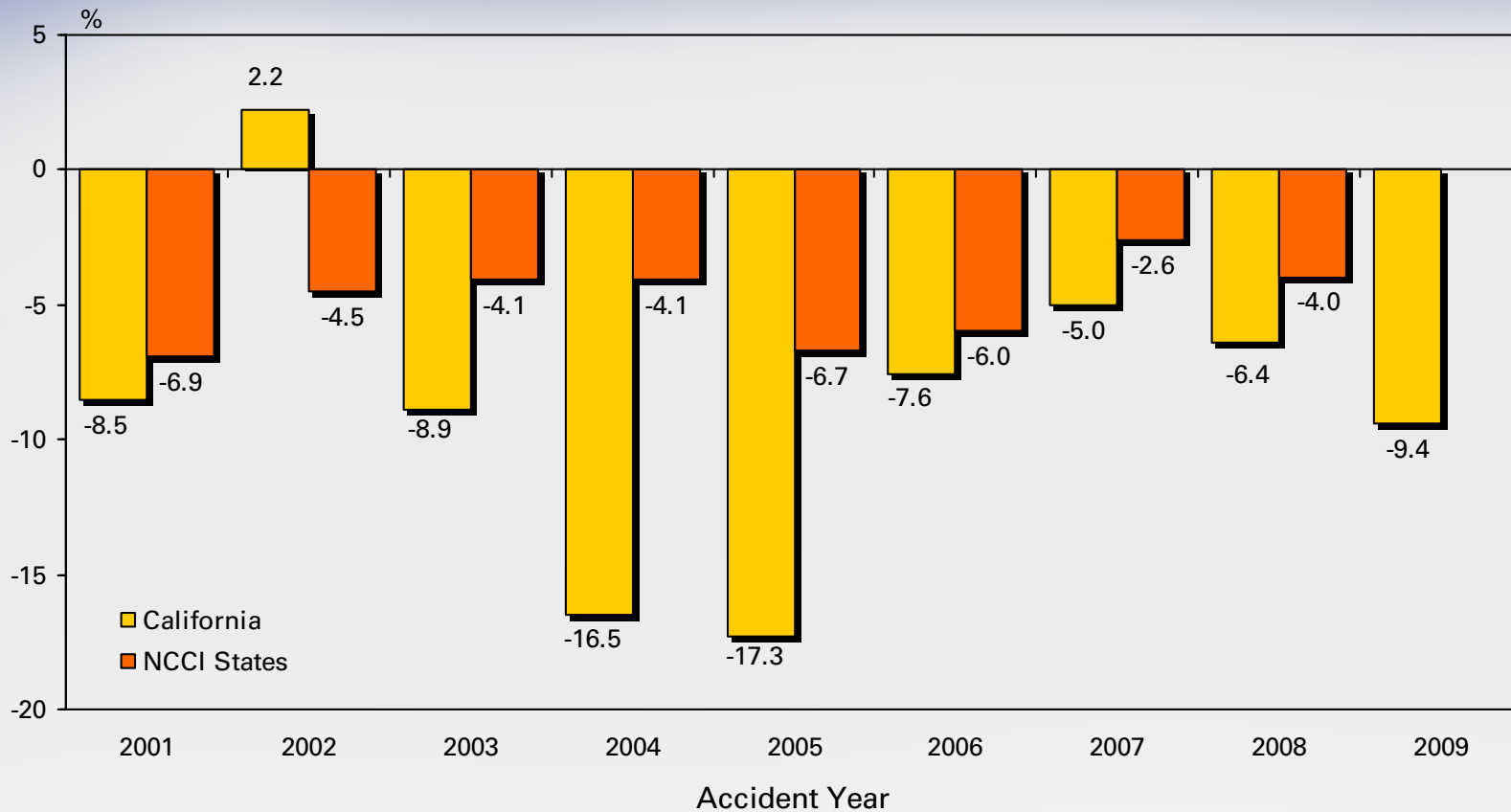
Annualized Average Changes in Indemnity Claim Frequency



Employment Growth By Sector



Change in Claim Frequency California vs. NCCI States



NCCI estimates are based on May 7, 2009 State of the Line Presentation (2008 estimate is preliminary).

Summary of Presentation



- Long-term Results
- Recent Patterns
- **WCIRB Frequency Model**

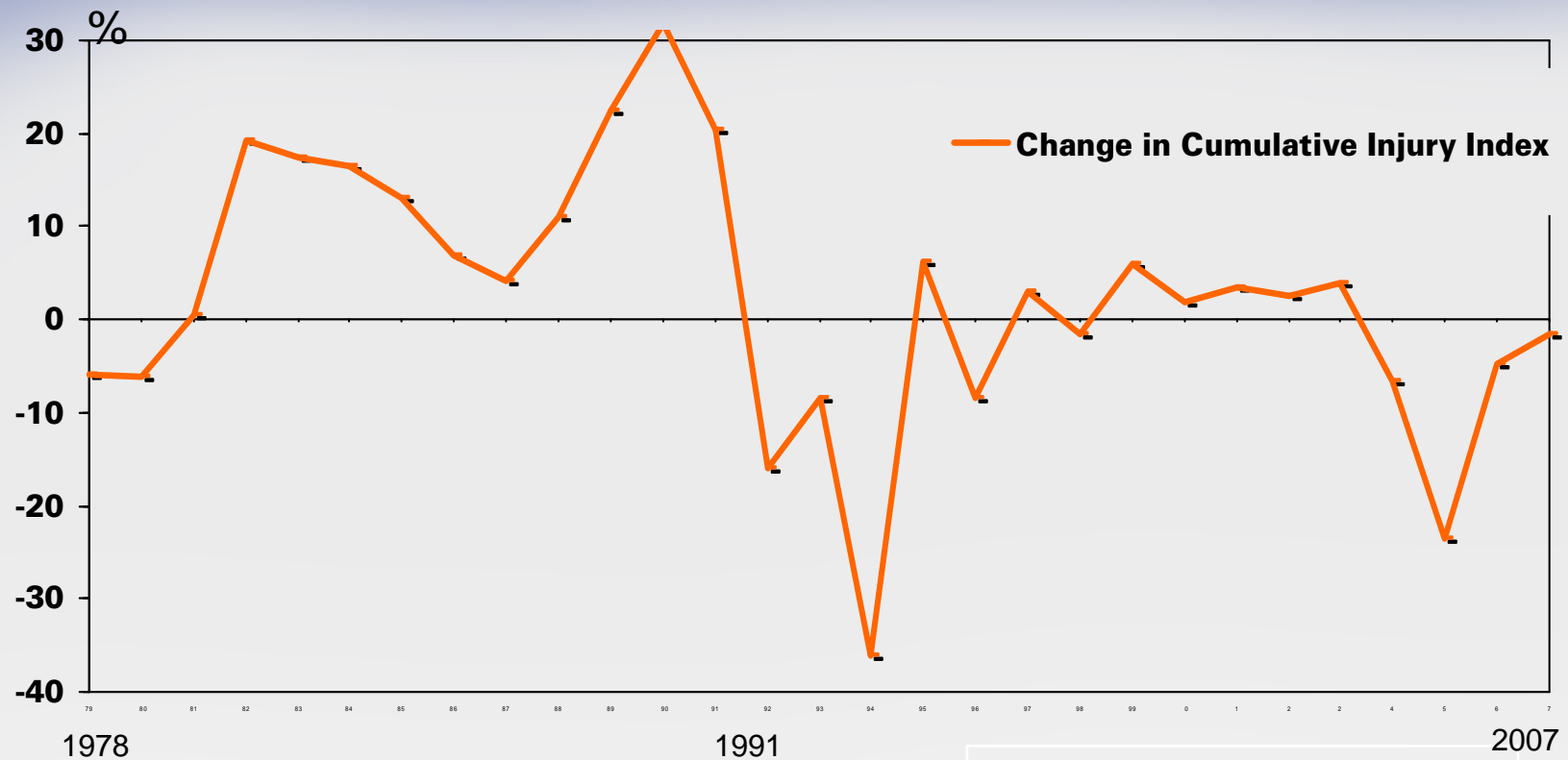
WCIRB Frequency Model

General Observations



- Developed in Late 1990's to Reflect Impact of Benefit Changes on Claim Frequency
- Updated Analyses Have Supported Model Results
- Adjusted for Changes in Hazardousness (Class Mix)
- Non-Cumulative Indemnity Frequency Modeled
- Key Explanatory Variables
 - Indemnity benefit level changes (approx. 22%)
 - Economic Variables: aggregate employment, real GSP, unemployment rate based on principal components (approx. 19%)
 - Cal-OSHA Efforts: inspections, visits, etc. (now used as dummy variable) (approx. 4%)
 - “Cumulative injury index” (approx 27%)

Changes in Cumulative Injury Index



Cumulative injury index is ratio of cumulative to non-cumulative indemnity claims

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- **Ratemaking Forecasts**

Ratemaking Forecasts



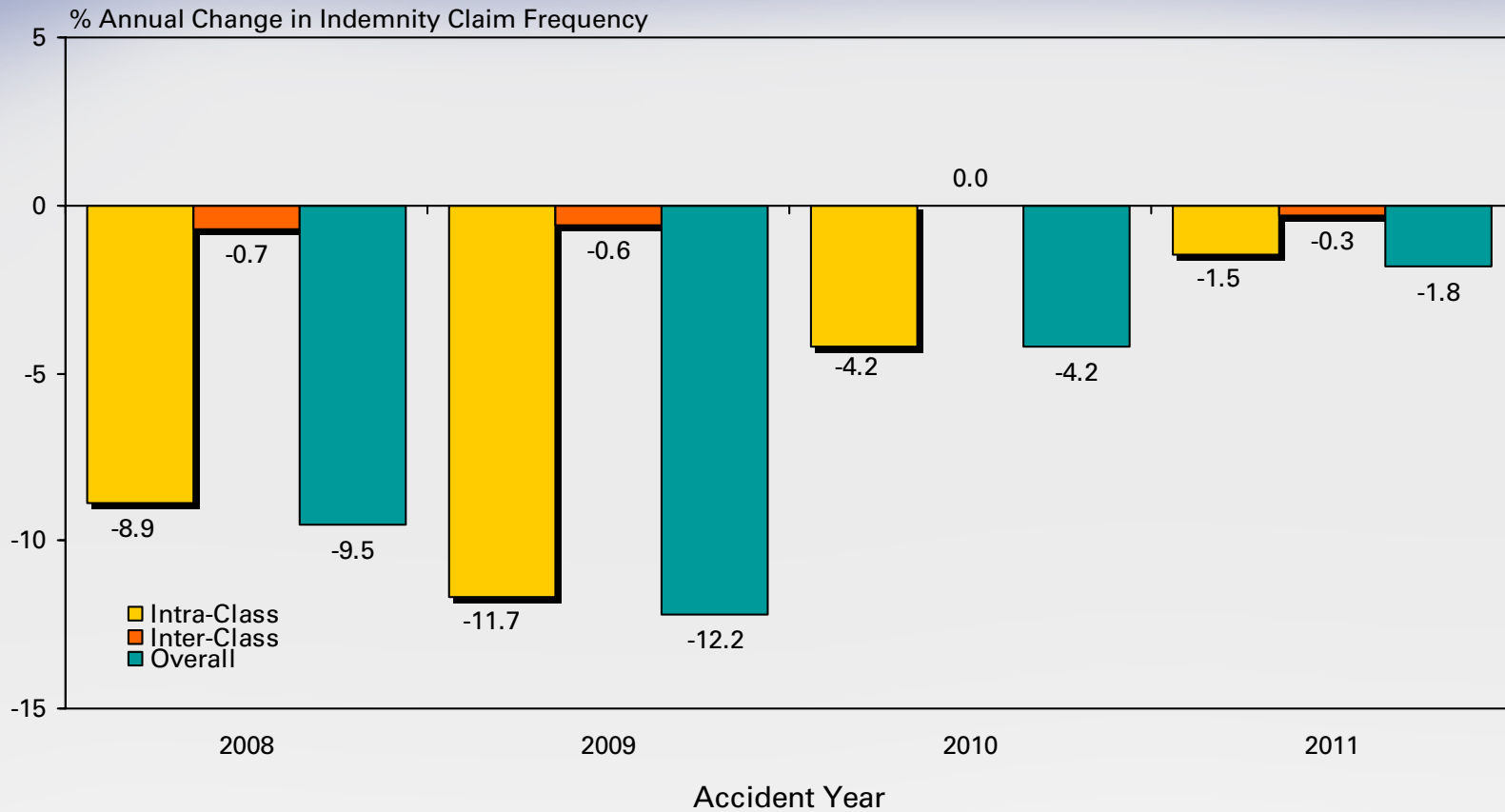
- Used in Past to Support Filing Indication
- 1/1/10 Rate Filing Indication Based on Separate Projections of Frequency & Severity
- Considerations
 - Allows for consideration of economic factors (e.g. impact of recession on claim frequency)
 - Class mix: – interstate vs. intrastate
 - Availability of forecasts of independent variables
 - Volatile economic forecasts
 - Constant term

Ratemaking Forecasts Retrospective Testing



- Tested Over Multiple Years
- Generally Performed Fairly Well
- Understated Frequency Decline Since Reform
 - Initially understated reform impact on indemnity benefit
 - Reform impact on medical not reflected
 - Economic impacts initially understated

Frequency Change Forecasts 1/1/10 Filing Level



NCCI estimates are based on May 7, 2009 State of the Line Presentation (2007 estimate is preliminary).

Constant Term



- Increased Following 2002-2004 Reforms
- Currently at -4%
- Considerations
 - Indemnity benefit level in model at nominal level
 - Long-term trend to economic growth
 - Long-term trends toward safety
 - At times constant has been partially offset in forecasts
 - Currently no offset

Summary of Presentation



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- **Looking Forward**

Looking Forward



- Current Forecasts: Moderate Declines
- Upward Pressure on Frequency
 - Economy expected to grow at modestly
 - Cumulative index still fairly low
 - Impact of WCAB decisions on claim frequency
 - Shifts in hazardousness potentially leveling off
 - Impact of safety trends potentially leveling off