Cost Drivers in South Carolina's Personal Auto & Homeowners Insurance Markets

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Overview: Cost Drivers in SC's Auto & Home Insurance Markets

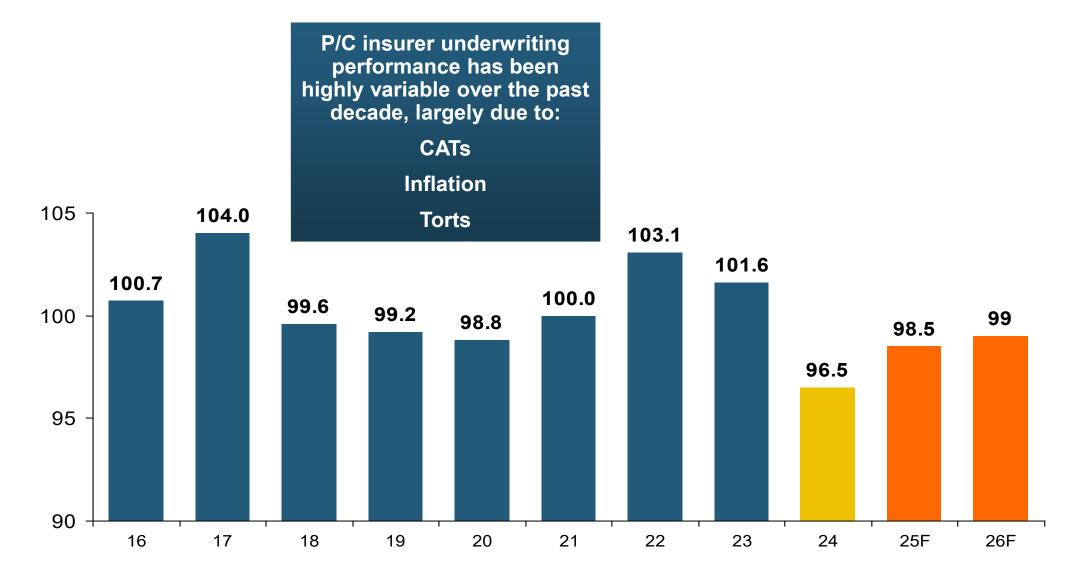
- Property & Casualty Insurance Financial Overview
- Homeowners Insurance
 - Inflation impacts
 - Catastrophe loss trends
 - Loss mitigation effectiveness
- Private Passenger Auto
 - Inflation impacts
 - Claim severity and frequency trends
 - Litigation as a cost driver
 - SC highway fatality data
- Potential Tariff Impacts
- Suggestions to Manage Auto and Home Insurance Premiums
- Q&A

P/C Insurance Industry Financial Overview Challenges Amid Inflation and High Catastrophe Losses

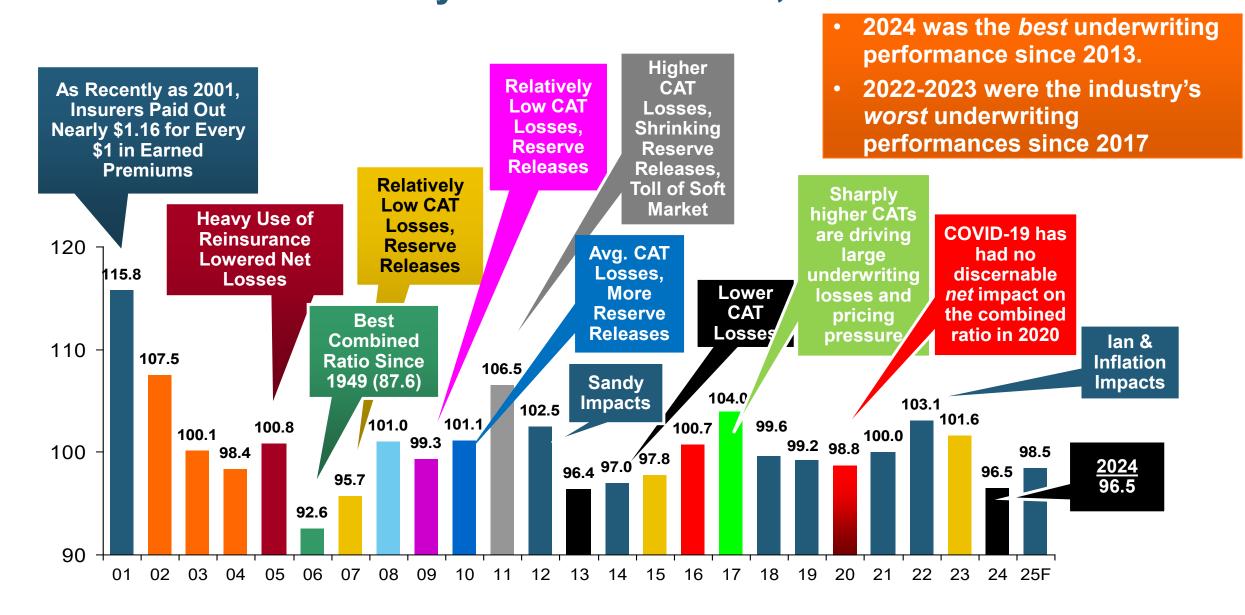
The Current Economic Environment Presents Many Challenges for P/C Insurers

Industry Remains Strong

P/C Insurance Industry Combined Ratio, 2016–2026F

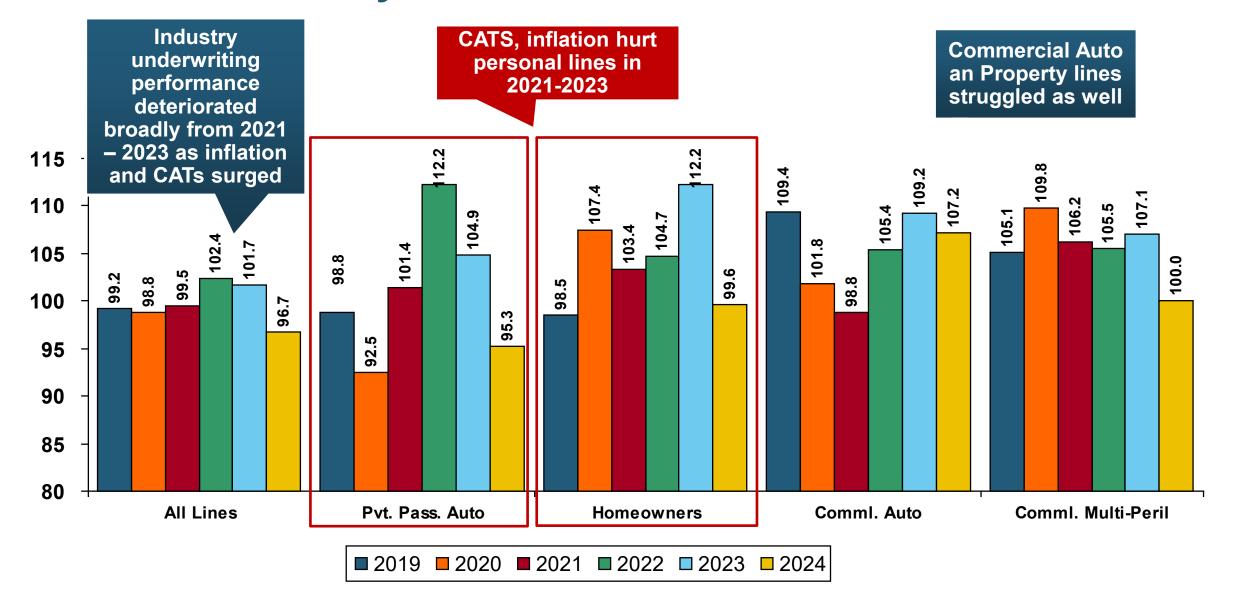


P/C Insurance Industry Combined Ratio, 2001–2025F*

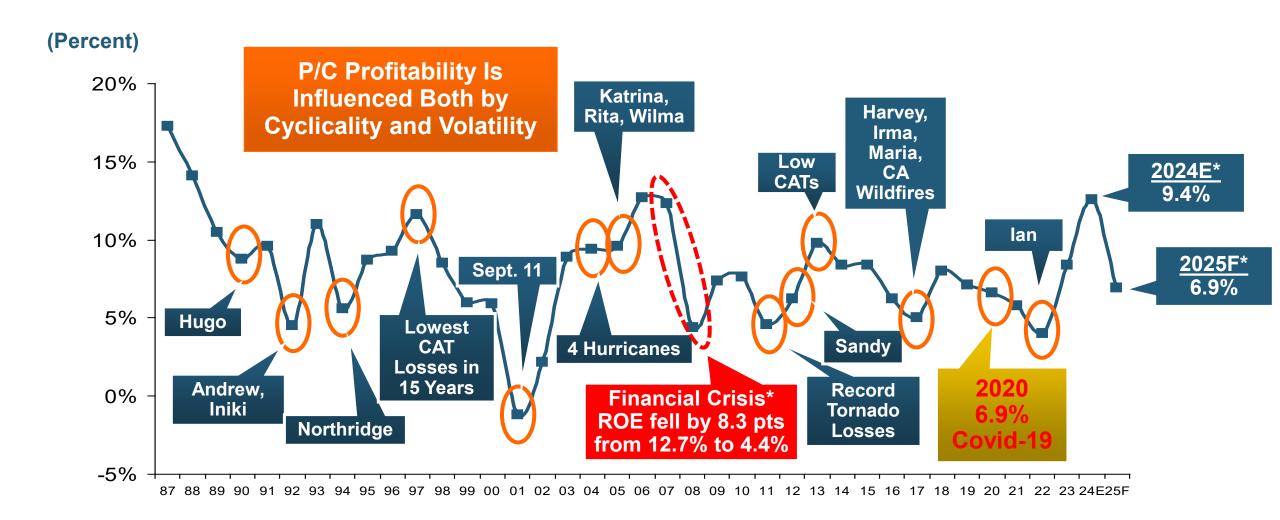


^{*}Excludes Mortgage & Financial Guaranty insurers 2008–2025F. Sources: A.M. Best, ISO (2001-2023). S&P Global Intelligence (2024).

Combined Ratios by Line: 2019 – 2024*

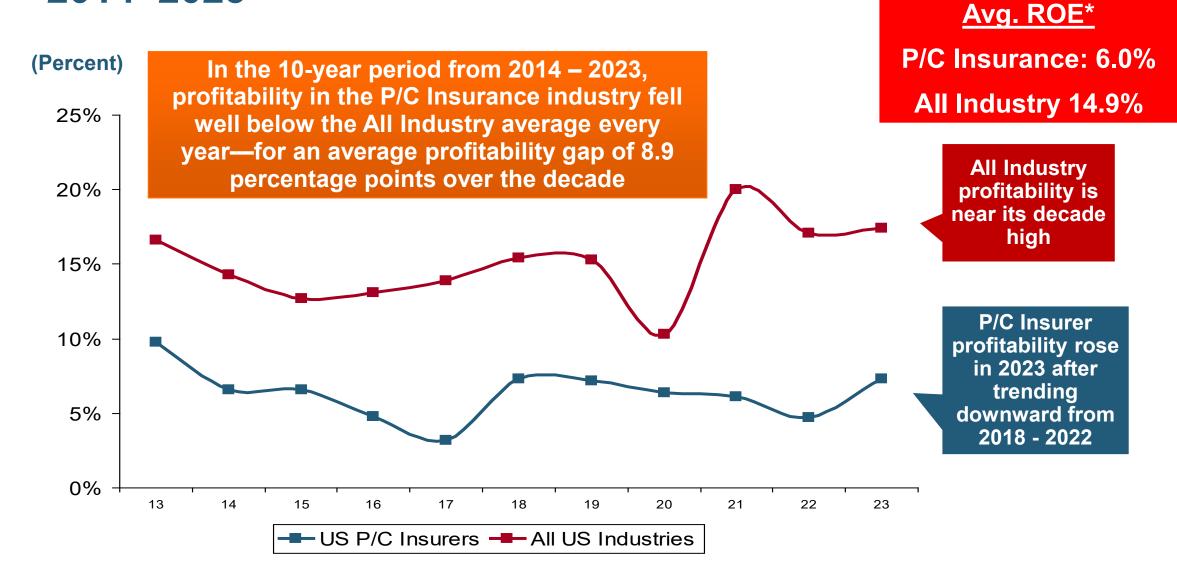


ROE: Property/Casualty Insurance by Major Event, 1987–2025F



^{*}Excludes Mortgage & Financial Guarantee in 2008 – 2025F. Sources: A.M. Best, ISO, *Fortune*, APCIA; USC RUM Center.

ROE: US Property/Casualty Insurance vs. Fortune All Industry, 2014–2023*

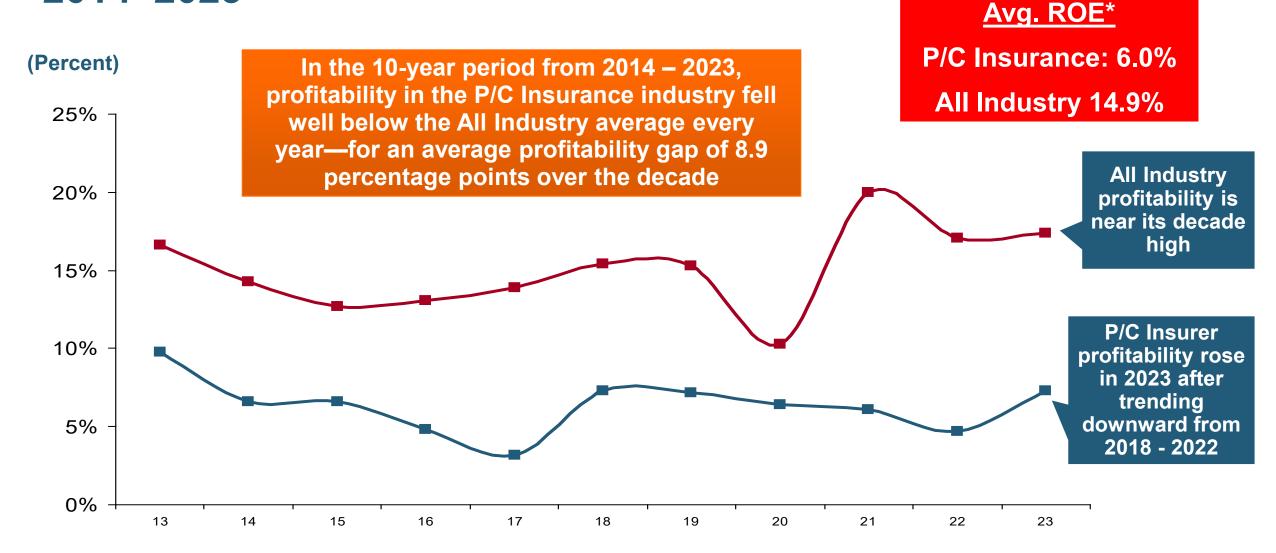


^{*}Latest available from NAIC Profitability by Line, by State reports available at: https://content.naic.org/sites/default/files/publication-pbl-pb-profitability-line-state.pdf. Sources: NAIC; USC RUM Center.

ROE: US and SC P/C Insurance vs. Fortune All Industry, 2014-2023* Avg. ROE* SC P/C Insurance: 7.4% (Percent) In the 10-year period from 2014 – 2023, US P/C Insurance: 6.0% profitability in the US P/C Insurance industry 25% All Industry 14.9% fell well below the All Industry average every year—for an average profitability gap of 8.9 percentage points over the decade. SC was 20% **All Industry** 7.5 points below. profitability is near its decade high 15% **Profitability in SC's P&C** insurance 10% industry is similar to the US overall 5% P/C Insurer profitability rose in 2023 after trending downward 0% from 2018 - 2022 15 18 22 23 13 14 16 17 19 20 21 ■ US P/C Insurers — All US Industries — SC P/C Insurers

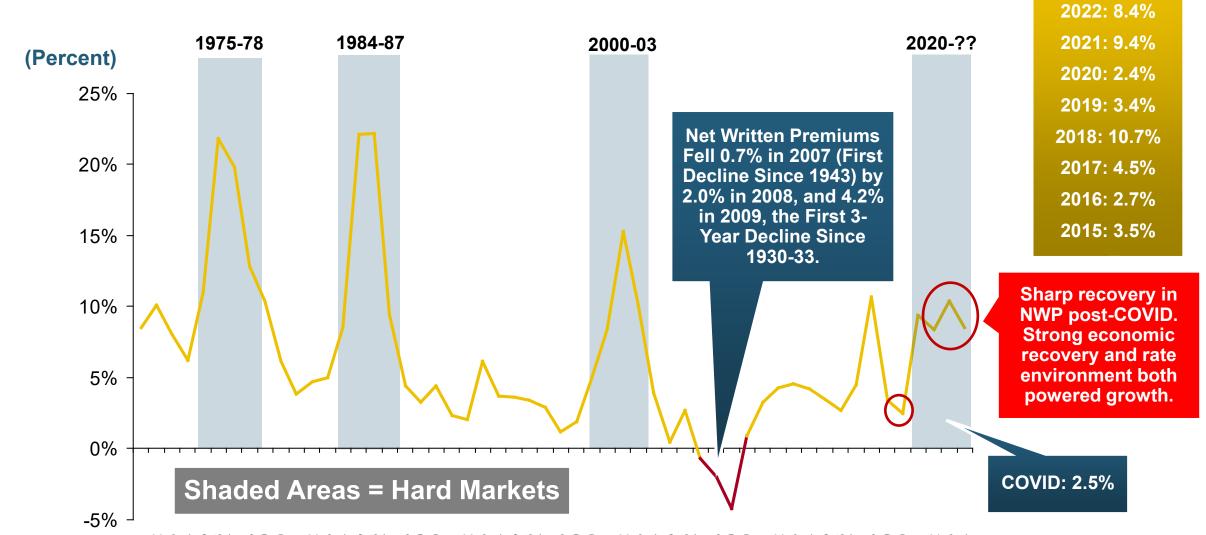
^{*}Latest available from NAIC Profitability by Line, by State reports available at: https://content.naic.org/sites/default/files/publication-pbl-pb-profitability-line-state.pdf. Sources: NAIC; USC RUM Center.

ROE: Property/Casualty Insurance vs. Fortune All Industry, 2014–2023*



^{*}Latest available from NAIC Profitability by Line, by State reports available at: https://content.naic.org/sites/default/files/publication-pbl-pb-profitability-line-state.pdf. Sources: NAIC; USC RUM Center.

Net Written Premium Growth (All P/C Lines): Annual Change, 1971–2024



2024: 8.5%

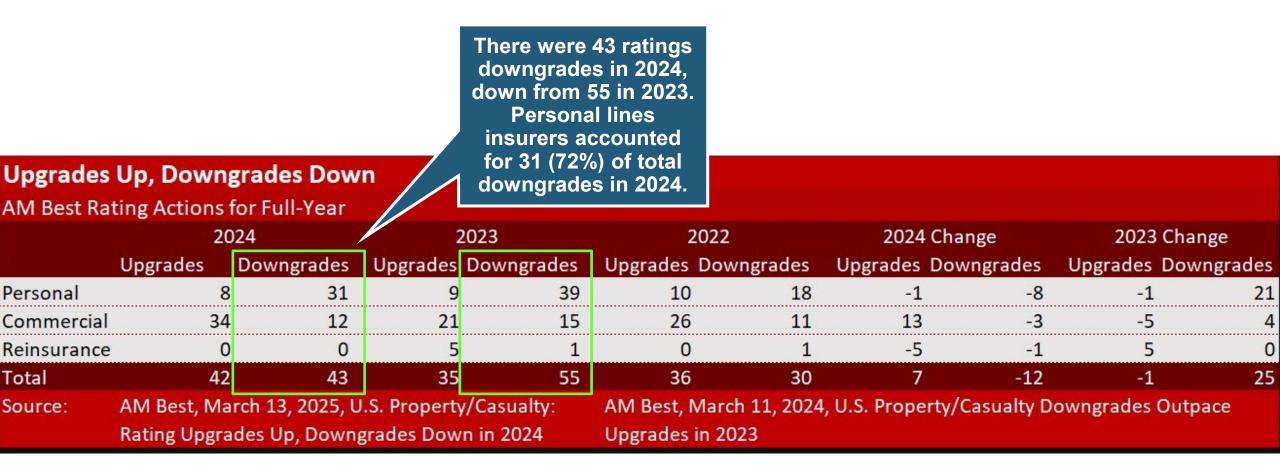
2023: 10.4%

NOTE: Shaded areas denote "hard market" periods. Sources: A.M. Best (1971-2013, 2020-2024), ISO (2014-2019); Risk & Uncertainty Management Center, Univ. of South Carolina

Upgrades and Downgrades

Underwriting Performance, CATs and Capital Are Impacting Insurer Ratings

US P/C: Rating Upgrades & Downgrades, by Segment, 2024

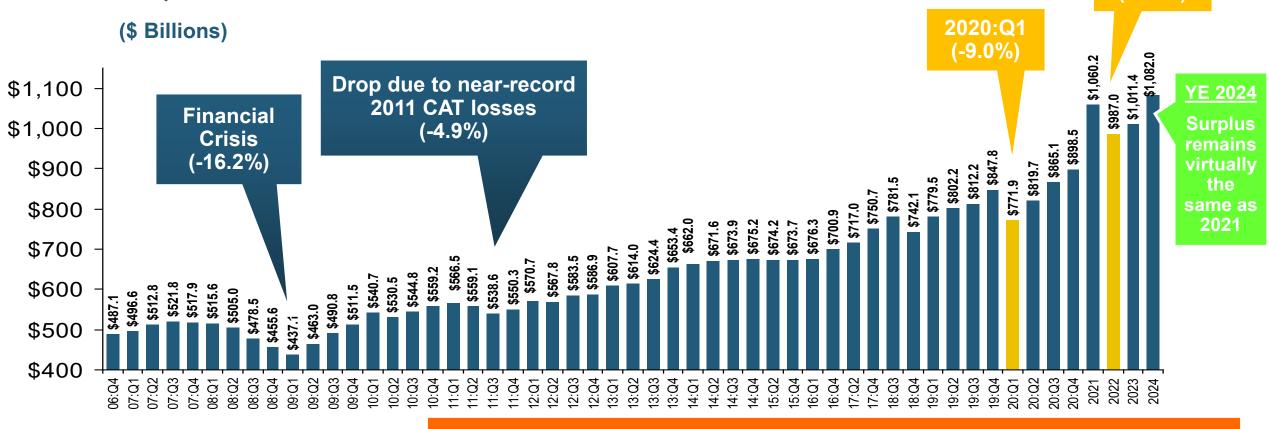


Capital and Capacity

P/C Insurance: Is the Industry's Capital Crunch Over?

Will Industry Capacity Growth Resume?

Policyholder Surplus (Capacity), 2006:Q4 – 2024



Policyholder Surplus is the industry's financial cushion against large insured events, periods of economic stress and financial market volatility. It is also a source of capital to underwrite new risks.

Sources: ISO, A.M. Best, NAIC. Risk and Uncertainty Management Center, University of South Carolina.

Global Reinsurance Capital, 2015 – 2025:Q1

\$ Billions

Traditional

Alternative — Total

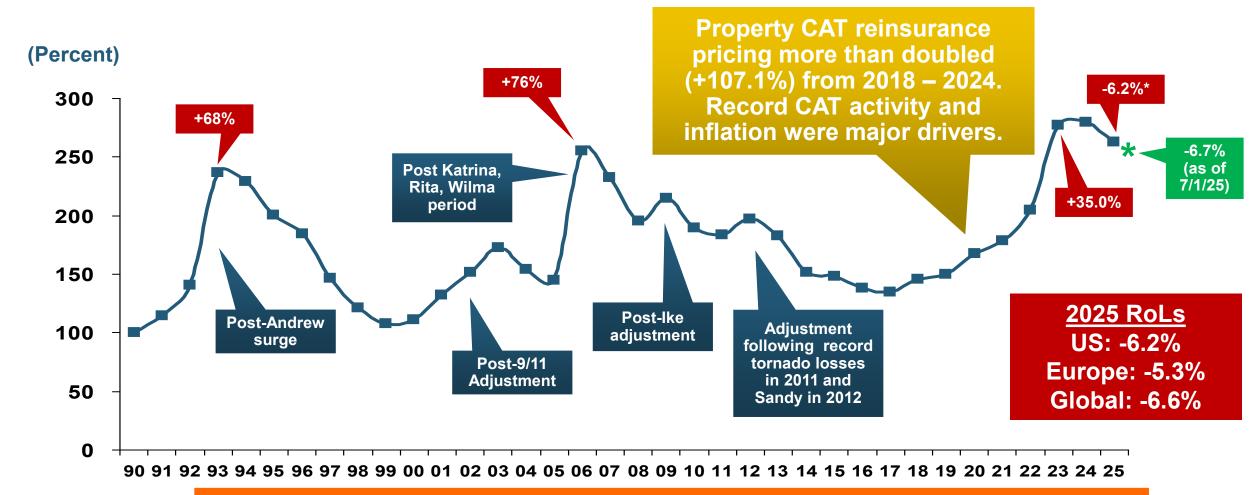


Global reinsurance reached a new high in 2025:Q1, but is only 6.7% above its 2022 peak—far below the increase that would be needed to keep pace with inflation and exposure growth

Global reinsurance capital fell by \$100B or 14.8% in 2022, contributing to recent property insurance challenges. Most of that capital was recovered in 2023—with ILS playing a key role

Source: Aon Reinsurance Solutions/Aon Securities accessed at: https://www.aon.com/en/insights/reports/reinsurance-market-dynamics.

US Property Catastrophe Rate-on-Line Index: 1990 – 2025*



US Property-CAT Reinsurance Pricing Is Sensitive to CAT Activity and Ultimately Impacts Primary Insurance Pricing, Terms and Conditions.

Source: Guy Carpenter; Artemis.bm accessed at: http://www.artemis.bm/us-property-cat-rate-on-line-index

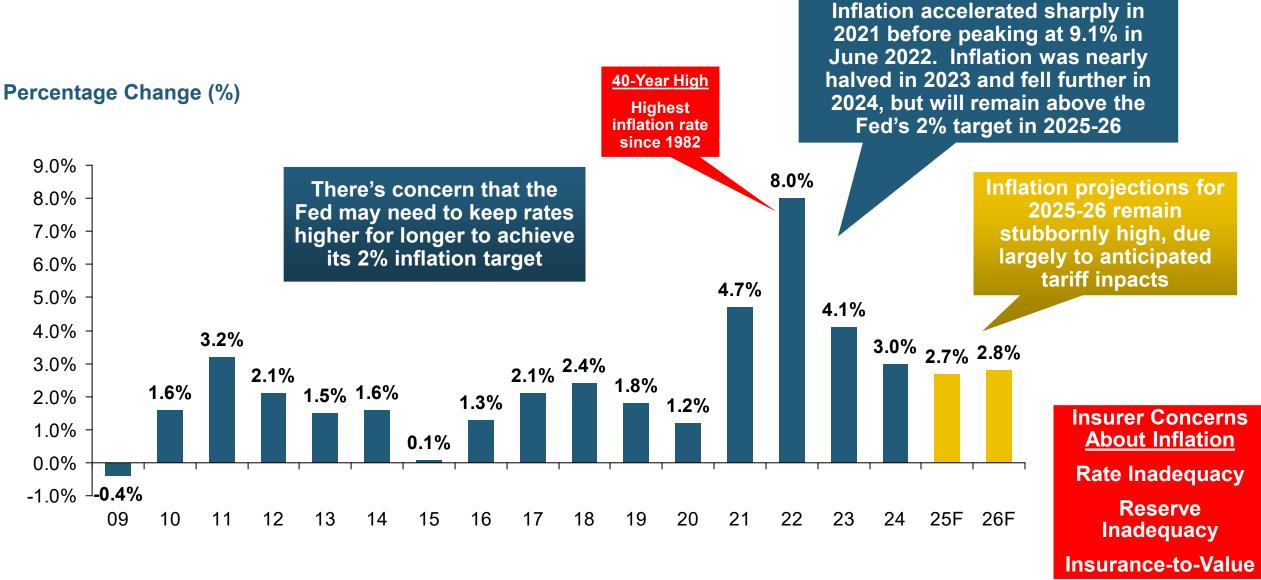
^{*}As of January 1 each year.

The Inflation Threat

Inflation Has Been a Major Driver of Auto and Property Claims Severities

Will Tariffs Fuel Additional Inflation?

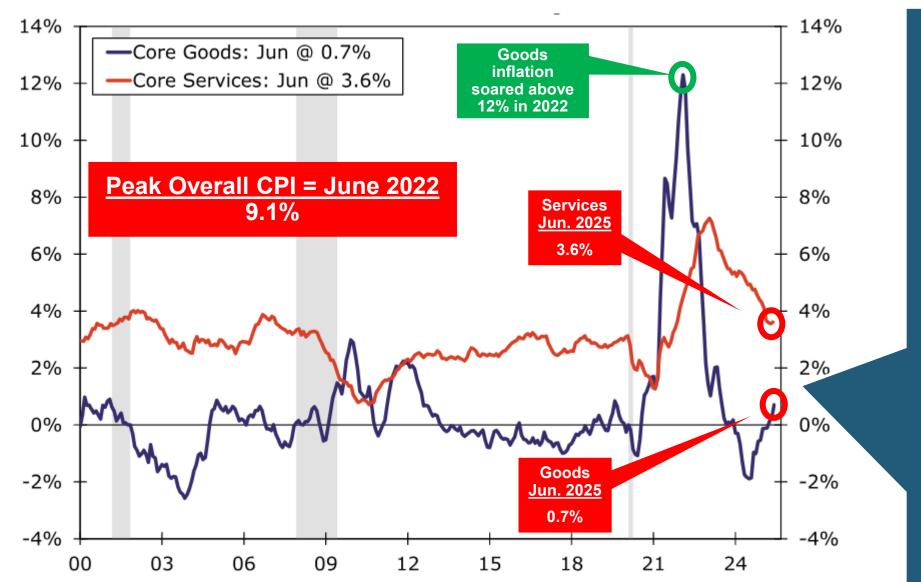
U.S. Inflation Rate: 2009-2026F*



^{*}Annual change in Consumer Price Index for All Urban Consumers (CPI-U).

Source: U.S. Bureau of Labor Statistics; Wells Fargo Securities (7/25); USC Center for Risk and Uncertainty Management.

Core Goods vs. Core Services Inflation: Jan. 2000 – Jun. 2024



The overall Core CPI was up 2.9% in June 2025 vs. a year ago (overall CPI was up 2.7%).

The rapid acceleration in goods prices (including for vehicles, parts and household goods) from late 2020 into 2023 were major factors in recent auto and homeowners insurance rate increases.

Insurance is categorized as a service but one in which prices changes reflect underlying changes in input costs with a substantial lag

Note: "Core" inflation excludes food and energy goods and services which are typically highly volatile. Source: U.S. Department of Commerce and Wells Fargo Economics.

State of the Homeowners Insurance Market

Inflation, High Catastrophe Losses Are Challenges for Insurers and Policyholders in South Carolina and Across the Country

Drivers of Increasing Homeowners Insurance Losses



- Economic growth
- 40-year record inflation
- More severe inflation for building materials/labor



- Demographic shifts to disaster-prone regions
- Increasing weather severity

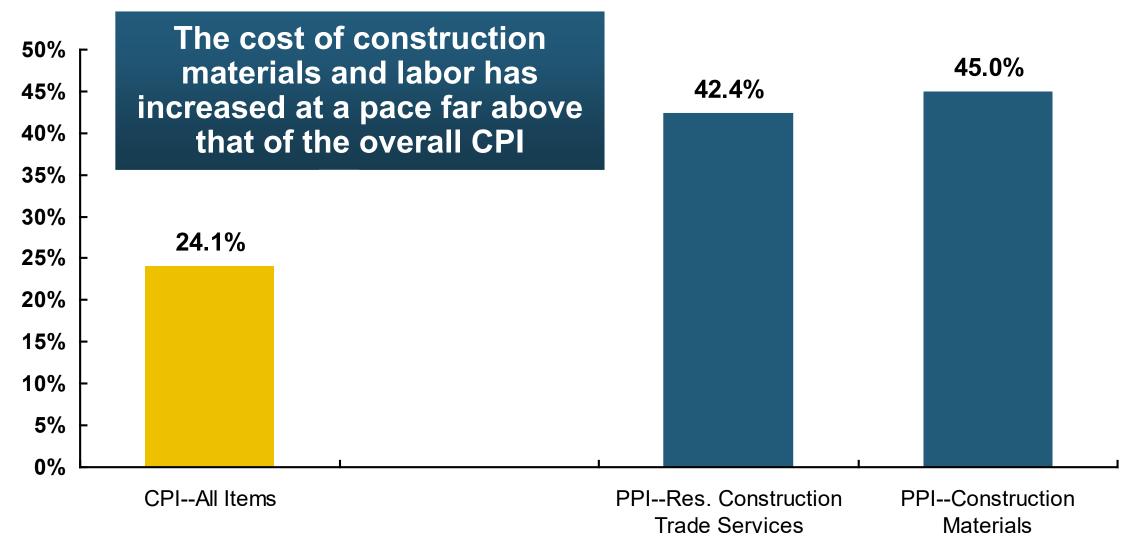


 State coverage mandates, rate suppression, legal system abuse

Homeowners Insurance Combined Ratios: US, 2010 - 2025FAverage: The Homeowners combined 99.0% (2010-2023) ratio from 2017-2023 (106.1) was **Combined** 93.1 (2010-2016) 13 points higher from than from Ratio 2010-2016 (93.1) 113.9% 120% 110% 88.8% 100% 8<mark>6</mark>3% 85.6% 83.3% 90% 80% 70% 60% 50% 40% 30% 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25F

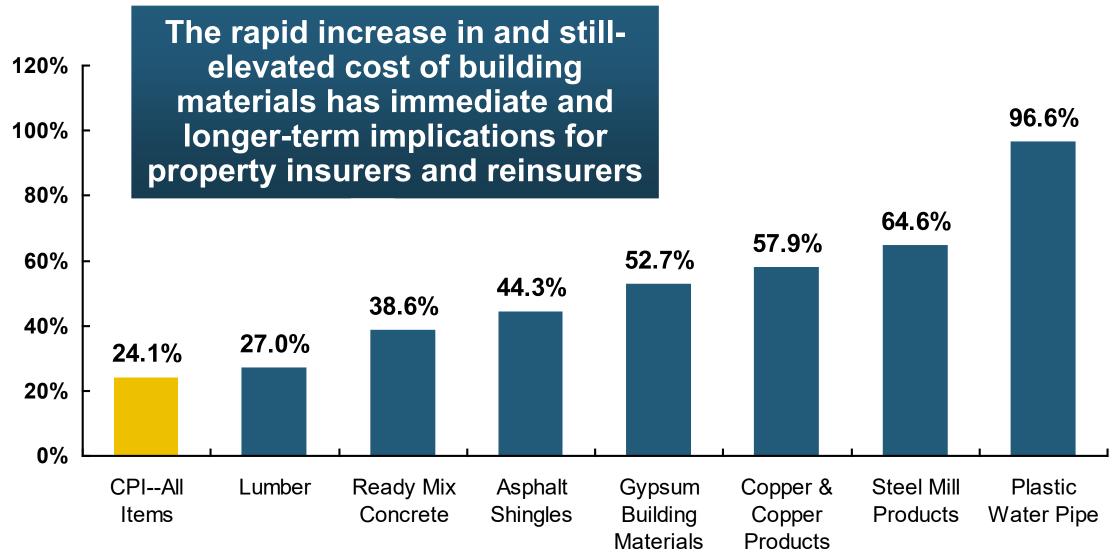
Sources: APCIA estimates using S&P Global Market Intelligence data; A.M. Best Review & Preview (Feb. 20, 2025) for 2024E – 2025F); University of South Carolina, Risk & Uncertainty Management Center.

Cost Indicators for Residential Const., Price Index Changes, Jan. 2020 – June 2025

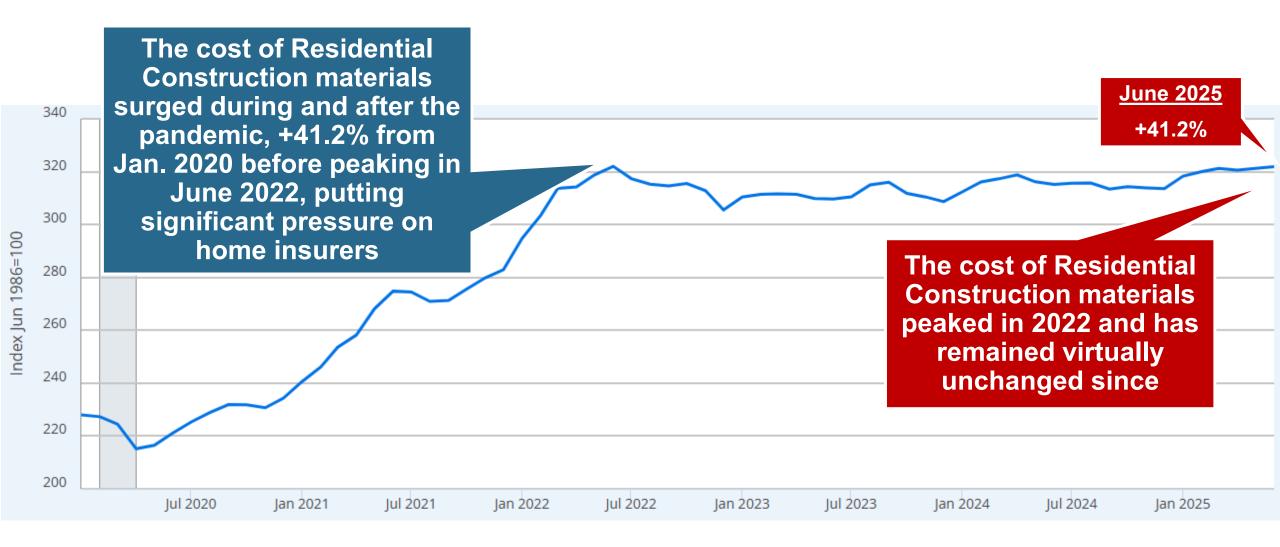


Source: U.S. Bureau of Labor Statistics from Federal Reserve Bank of St. Louis: https://fred.stlouisfed.org/series/WPUIP23111021 (Trade Services) and https://fred.stlouisfed.org/series/WPUSI012011 (Construction Materials).

Change in Cost Indicators for Selected Construction Inputs, Jan. 2020 – June 2025



PPI: Net Inputs to Residential Construction, Goods, Jan. 2019 – June 2025



Sources: Federal Reserve Bank of St. Louis from US Bureau of Labor Statistics: https://fred.stlouisfed.org/series/WPUIP2311001; Risk and Uncertainty Management Center. University of South Carolina.

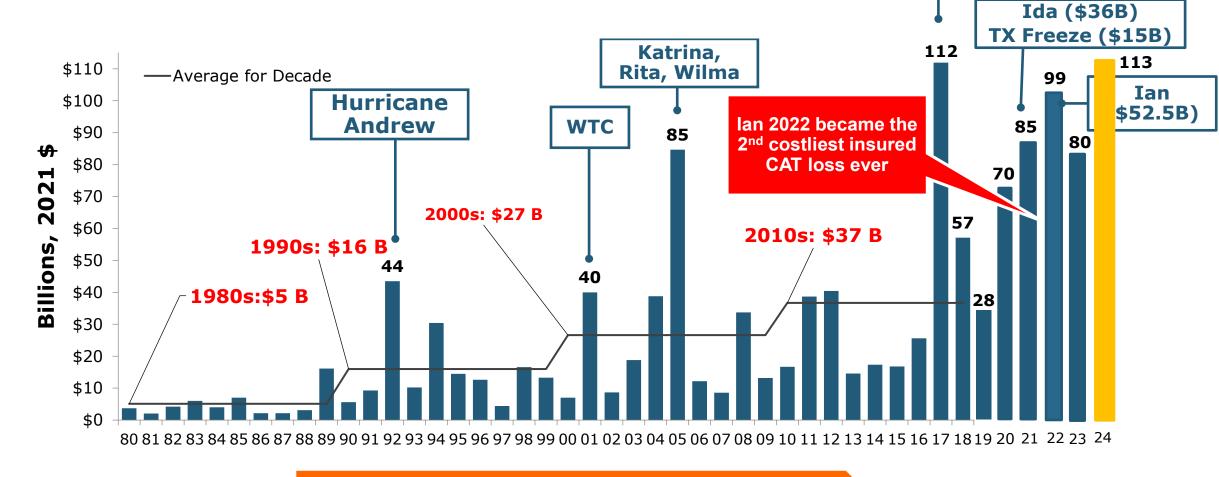
Catastrophe Loss Trends

The Rise in CAT Losses Shows No Signs of Easing

The 2020s Are Off to an Ominous Beginning

The Los Angeles Wildfires, Hurricanes Helene and Milton Are Just the Latest in a Long Series of Mega-Disasters

U.S. Inflation-Adjusted Insured CAT Losses: 1980 – 2024



Average Insured Loss per Year*

1980-2021: \$23.8 Billion 2012-2021: \$44.1 Billion

*Stated in 2021 dollars except 2022 -2024 (in current dollars).

Sources: Property Claims Service, a Verisk Analytics business (1980-2019); 2020-22 figures from Munich Re; 2023 and 2024 figures from Aon. Insurance Information Institute; University of South Carolina, Risk & Uncertainty Management Center.

The 2020s are off to an ominous start with \$89.4B in average annual insured losses (2020-24)

Harvey, Irma, Maria

Top 26 Most Costly Disasters in U.S. History

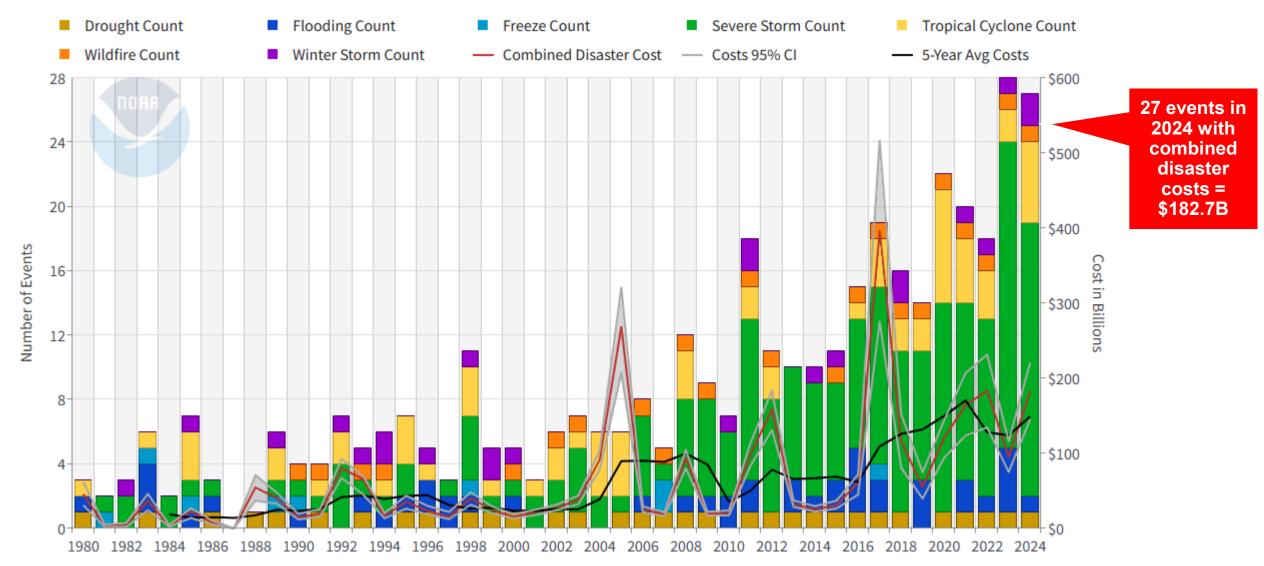
(Insured Losses, 2024 Dollars, \$ Billions)



US History Have Occurred Since 2004.

*2025 dollars; Munich Re estimates as of Jan. 2025 for Hurricanes Helene and Milton; Aon estimate as of Apr. 2025 for LA wildfires. Sources: PCS, RMS, Aon, Karen Clark & Co; USC Center for Risk and Uncertainty Management adjustments to 2024 dollars using the CPI.

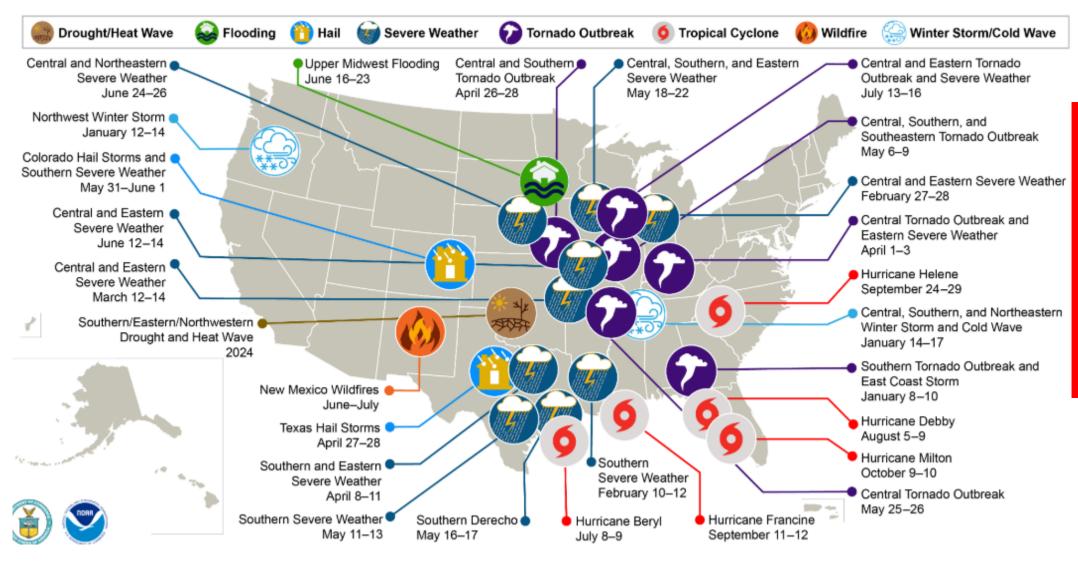
US Billion-Dollar Weather and Climate Disaster Events, Economic Costs, by Type, 1980 – 2024* (CPI-Adjusted)



^{*}As of Jan. 10, 2025.

Source: NOAA. Chart created by USC Risk and Uncertainty Management Center by accessing: https://www.ncei.noaa.gov/access/billions/time-series.

US Billion-Dollar Weather and Climate Disaster Events, Economic Costs, 2024*



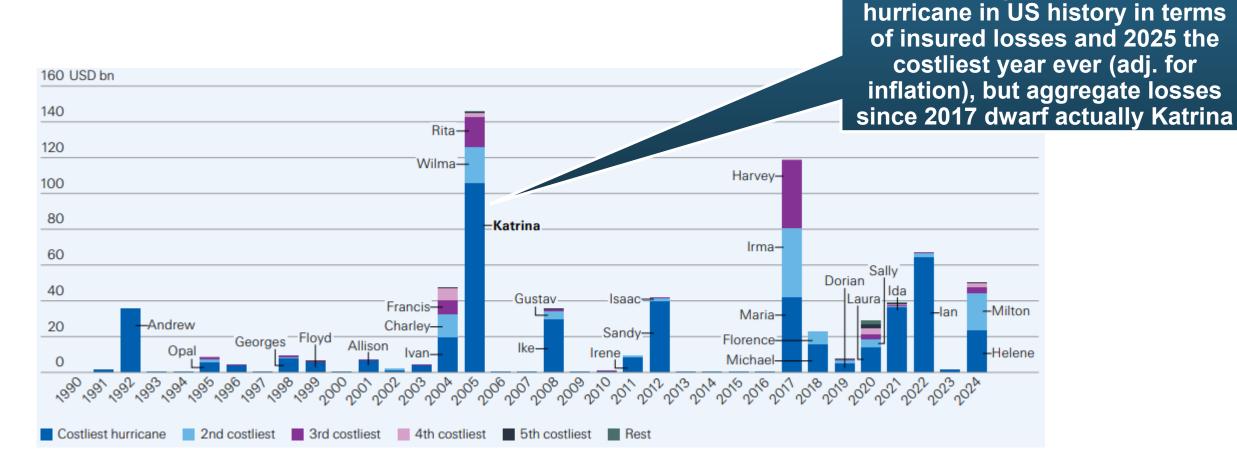
There were 27
events in the
US in 2024
that caused at
least \$1B in
economic
damage, down
from a record
28 in 2023

Source: NOAA, accessed at: https://www.ncei.noaa.gov/access/billions/.

^{*}As of Feb. 1, 2025.

Insured Losses for North Atlantic Tropical Cyclones, 1990 - 2024



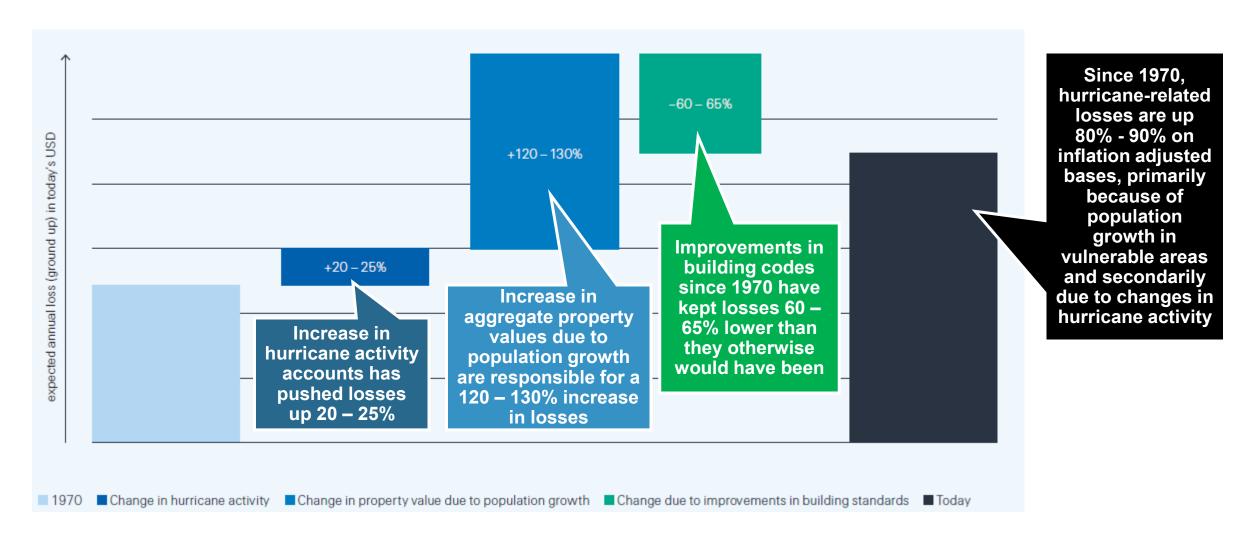


Source: Swiss Re Institute, *Hurricane Katrina: A Watershed Event for Insurance*. (June 23, 2025). Available at:

https://www.swissre.com/institute/research/topics-and-risk-dialogues/climate-and-natural-catastropherisk/hurricane-katrina-watershed-event-for-insurance.html

20 years later, Hurricane Katrina remains—by far—the costliest

Factors Influencing Change in Residential Property Insured Hurricane Losses Since the 1970s (in current dollars)



Sources: Swiss Re, *Ian Revisited: Disentangling the Drivers of US Hurricane Losses*, (Nov. 2023). Accessed at: https://www.swissre.com/risk-knowledge/mitigating-climate-risk/hurricane-ian-revisited.html.

Fortified Home Program: Reduces both Claim Frequency and Severity

Measure / Designation	(1) Average Effects	(2) Average without Trees	(3) Nearest Neighbor without Trees
Frequency Reduction			
Roof	56%	69%	73%
Gold	70%	63%	76%
Severity Reduction			
Roof	20%	20%	15%
Gold	40%	37%	24%
Loss Ratio Reduction			
Roof	55%	69%	72%
Gold	62%	51%	67%

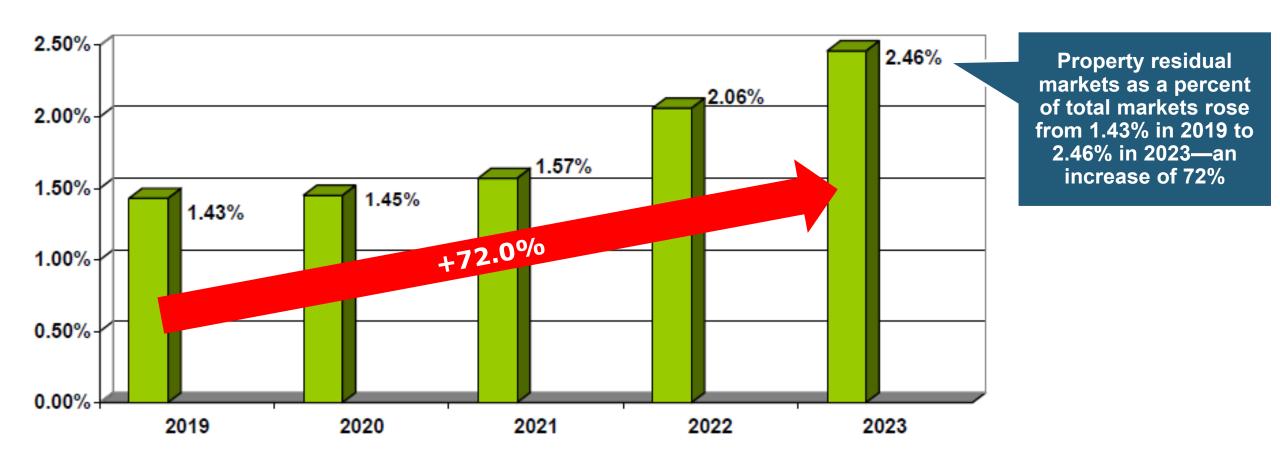
Notes: The percentages shown in the three columns (Average Effects, Average Without Trees, and Nearest Neighbor without Trees) indicate the average reductions in three measures (Frequency, Severity, and Loss Ratio) compared to conventional construction. Nearest neighbor analysis compares the average measure for houses in each Fortified category to the average of the nearest conventional houses within 0.25 miles of the Fortified houses.

Building to the IBHS Fortified standard produced major reductions in both claim frequency and severity

Note: Data are based on a May 2025
Alabama DOI and Insurance Institute for
Business and Home Safety (IBHS) study
evaluating the performance homes built to
IBHS's Fortified standard compared homes
that were not that were damaged by
Hurricane Sally in 2020.

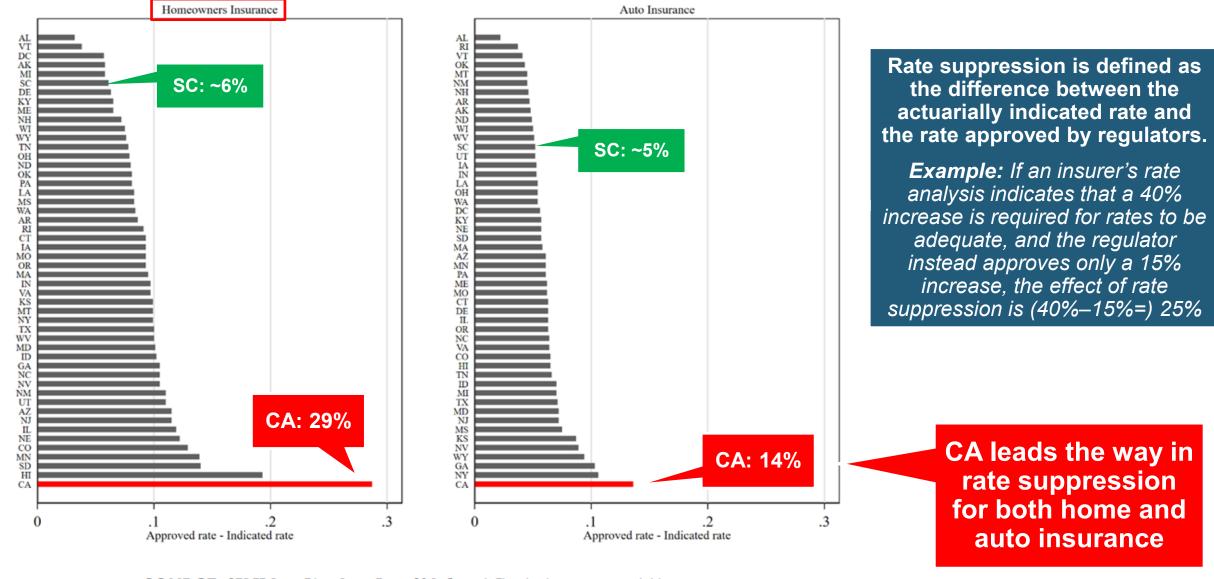
Residual Market (All Plans) Earned Premium as a Percent of Total Market: HO, CMP, Fire and Allied Lines, 2019 - 2023

\$ Billions



Source: Property Insurance Plans Service Office (PIPSO), 2024 FAIR and Beach Plan Underwriting Results and Market Penetration Report, (Fig. 3, p. V).

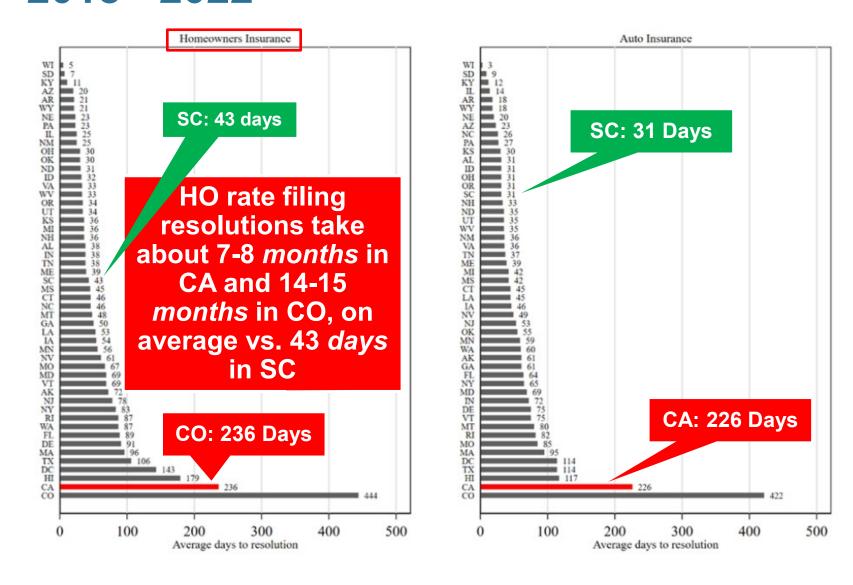
Regulatory Rate Suppression by State, 2018 - 2022



SOURCE: SERFF Rate Filing Data From S&P Capital. Florida data are unavailable.

Source: International Center for Law & Economics, ICLE White Paper 2023-11-06, "Rethinking Prop 103's Approach to Insurance Regulation." Accessed at: https://laweconcenter.org/wp-content/uploads/2023/11/Rethinking-Prop-103s-Approach-to-Insurance-Regulation-2.pdf

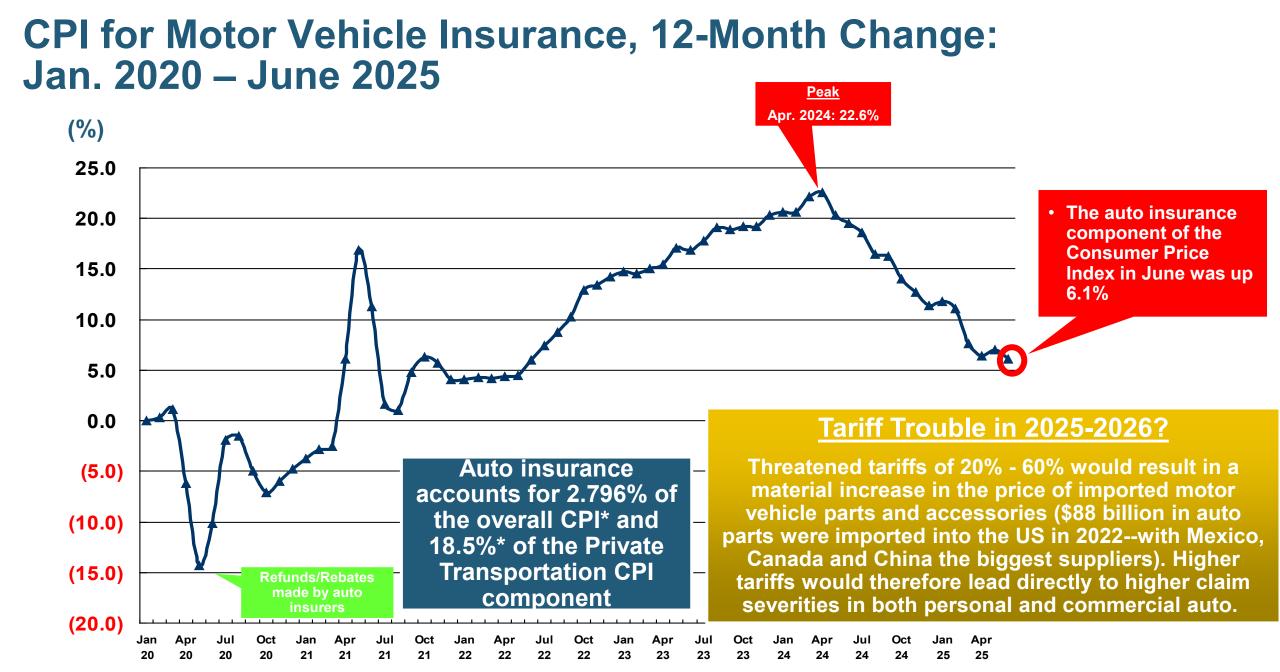
Average Days to Resolution of Rate Filings by State, 2018 - 2022



Source: International Center for Law & Economics, ICLE White Paper 2023-11-06, "Rethinking Prop 103's Approach to Insurance Regulation." Accessed at: https://laweconcenter.org/wp-content/uploads/2023/11/Rethinking-Prop-103s-Approach-to-Insurance-Regulation-2.pdf

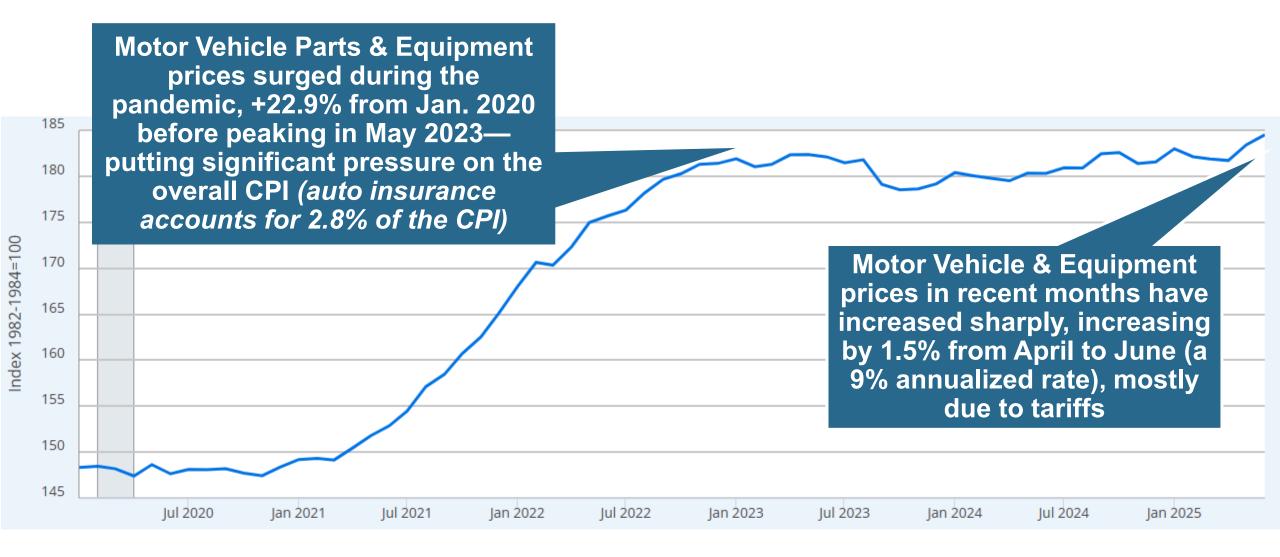
State of the Private Passenger Auto Insurance Market

Inflation, Supply Change Disruptions,
Tort Environment and Driving Behaviors
Have Impacted Auto Insurance
Premiums in South Carolina and Across
the Country

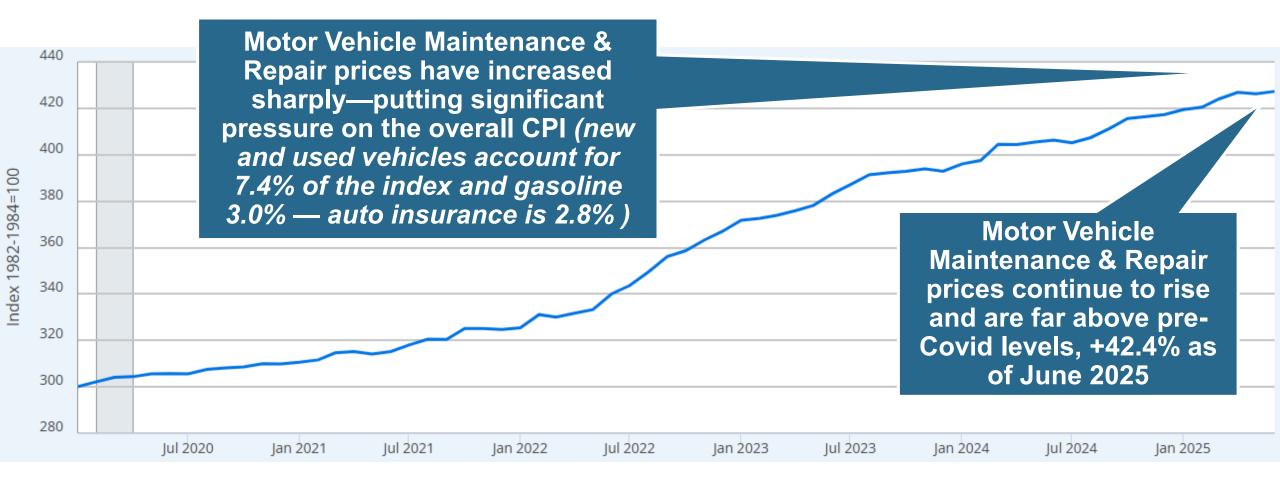


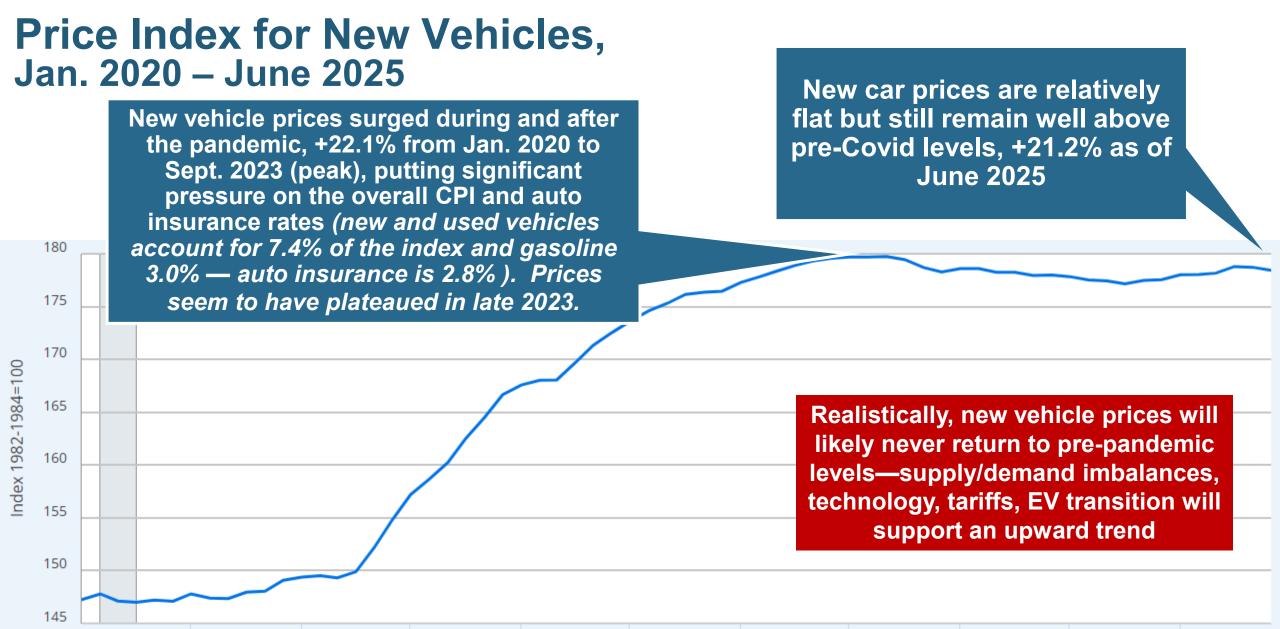
*Weighting as of Dec. 2024: https://www.bls.gov/cpi/factsheets/motor-vehicle-insurance.htm
Sources: US Bureau of Labor Statistics, accessed at: https://data.bls.gov/timeseries/CUUR0000SETE. Risk and Uncertainty Management Center, University of South Carolina.

Price Index Changes for Motor Vehicle Parts & Equipment, Jan. 2020 – June 2025



Price Index Changes for Motor Vehicle Maintenance & Repair, Jan. 2020 – June 2025





Jan 2022

Jul 2022

Jul 2023

Jan 2024

Jul 2024

Jan 2025

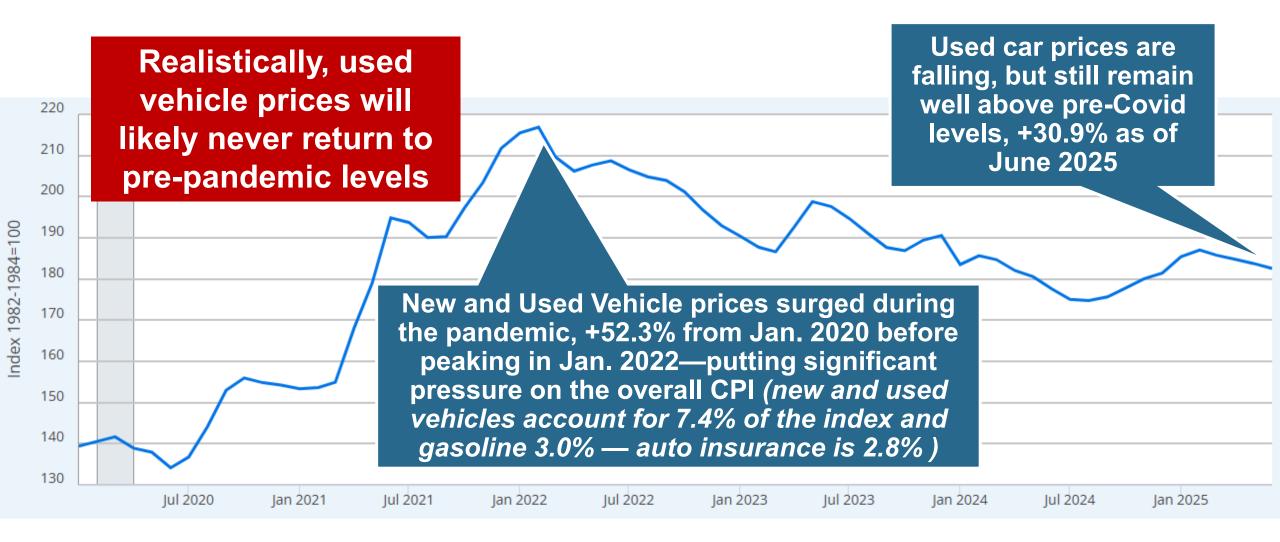
Jan 2023

Jul 2021

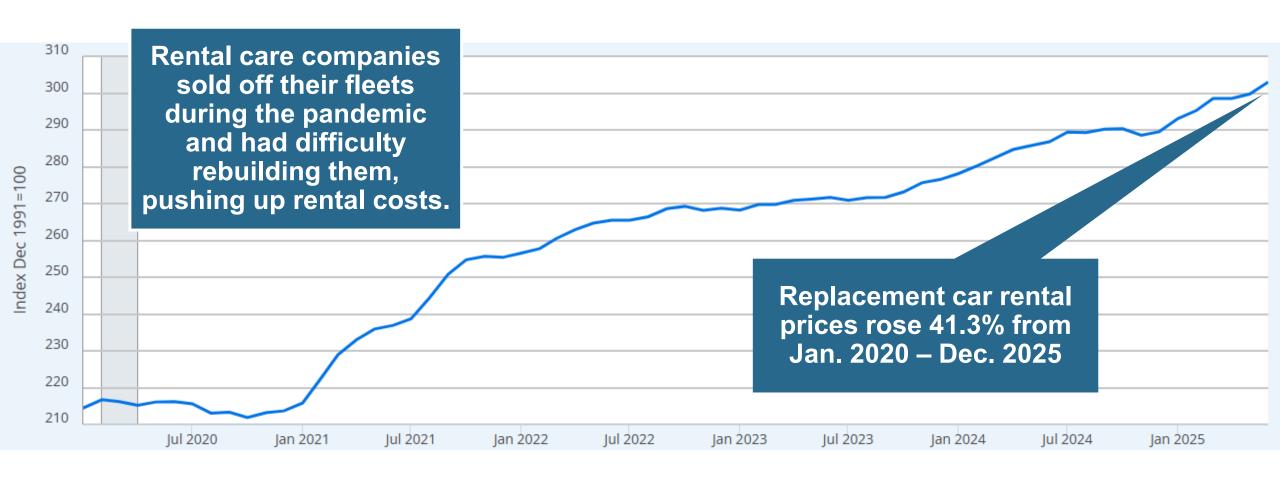
Jan 2021

Jul 2020

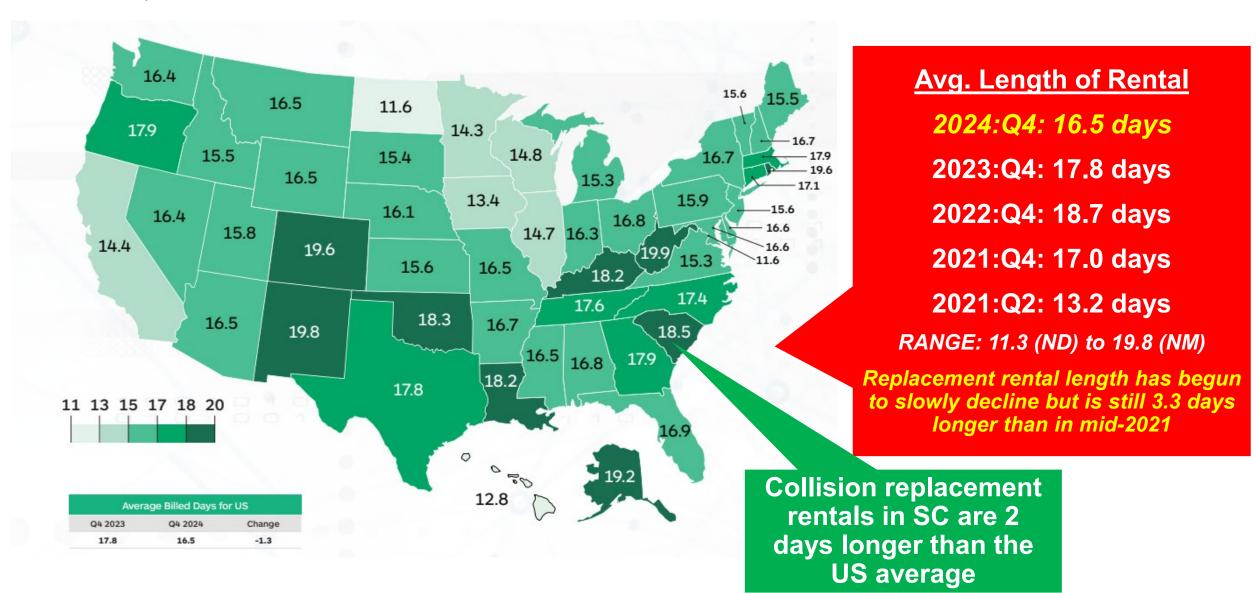
Price Index Changes for Used Cars & Trucks, Jan. 2020 – June 2025



Price Index Change for Replacement Passenger Car Rentals, Jan. 2010 – June 2025 (% Change from Year Ago)



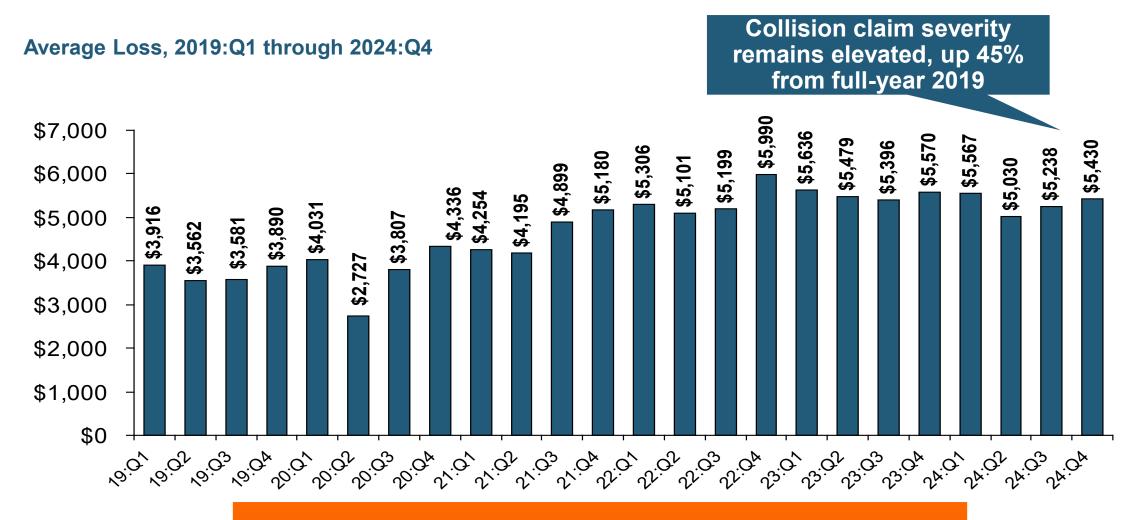
Length of Collision Replacement Rentals by State (Days), 2024:Q4



Source: Enterprise Rental-A-Car U.S. Length of Rental Report accessed at:

https://www.enterprise.com/content/dam/ent-brand/LOB/ReplacementResources/Enterprise-LOR-Q4-2024 USA.pdf

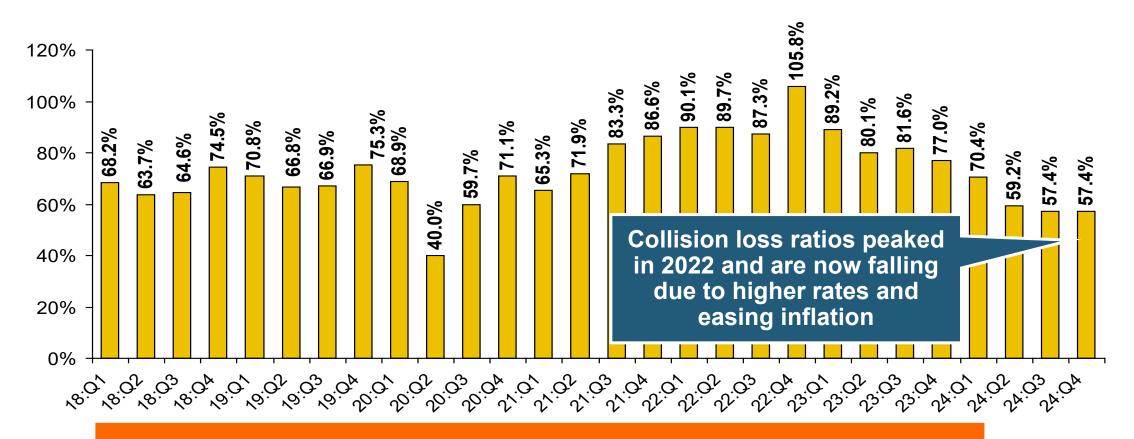
SC Collision Claim Severity: Rising to New Highs



Severities Are Up Sharply—Inflation Is a Major Factor

SC Collision Loss Ratio: Up Sharply but Now Easing, 2018:Q1 – 2024:Q4

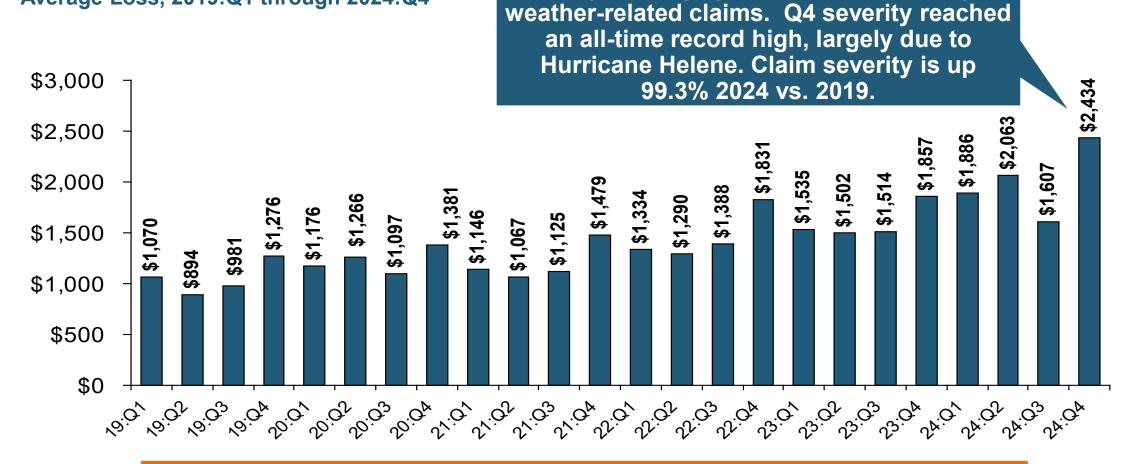
Paid Claim Frequency, 2018:Q1 through 2024:Q4



Collision Loss Ratios Peaked in Late 2022

SC Comprehensive Claim Severity: Rising to New Highs

Average Loss, 2019:Q1 through 2024:Q4



Comprehensive claim severity is rising steadily and highly volatile due primarily to

Severities Are Up Sharply—Weather and Inflation Are Major Factors

Tort Costs Over Time by Category, 2016 - 2022 (\$Bill) (2022)

		2016	2017	2018	2019	2020	2021	2022	Average Annual Growth
Commercial Liability									
General/Professional	[1]	\$176	\$171	\$194	\$205	\$230	\$256	\$291	8.8%
Medical	[2]	\$14	\$13	\$14	\$15	\$16	\$17	\$17	4.3%
Automobile	[3]	\$33	\$35	\$39	\$44	\$45	\$51	\$58	10.1%
Commercial Liability Total	[4]	\$222	\$220	\$247	\$264	\$290	\$324	\$367	8.7%
Personal Liability									
Homeowners (liability portion)	[5]	\$4	\$4	\$4	\$4	\$4	\$5	\$5	5.1%
Automobile	[6]	\$125	\$135	\$145	\$150	\$149	\$152	\$157	3.9%
Personal Liability Total	[7]	\$129	\$139	\$149	\$154	\$153	\$156	\$162	3.9%
Total Tort Costs	[8]	\$351	\$359	\$397	\$418	\$444	\$481	\$529	7.1 %
National GDP	[9]	\$18,701	\$19,508	\$20,536	\$21,395	\$21,193	\$23,462	\$25,598	5.4%
Consumer Price Index	[10]	240.0	245.1	251.1	255.7	258.8	271.0	292.7	3.4%
Total Costs as % of GDP	[11]	1.9%	1.8%	1.9%	2.0%	2.1%	2.0%	2.1%	

Increases in tort liability costs are driven primarily by **Commercial lines**, which are grew at and average annual rate 8.7% from 2016 - 2022, compared to 3.9% for Personal lines. Personal auto liability accounts for 97% of personal liability costs.

Source: US Chamber of Commerce Institute for Legal Reform (Nov. 2024), "Tort Costs in America: An Empirical Analysis of Costs and Compensation of the U.S. Tort System" (3rd Edition) accessed at: https://instituteforlegalreform.com/research/tort-costs-in-america-an-empirical-analysis-of-costs-and-compensation-in-the-u-s-tort-system-third-edition/; Risk and Uncertainty Management Center, Univ. of South Carolina.

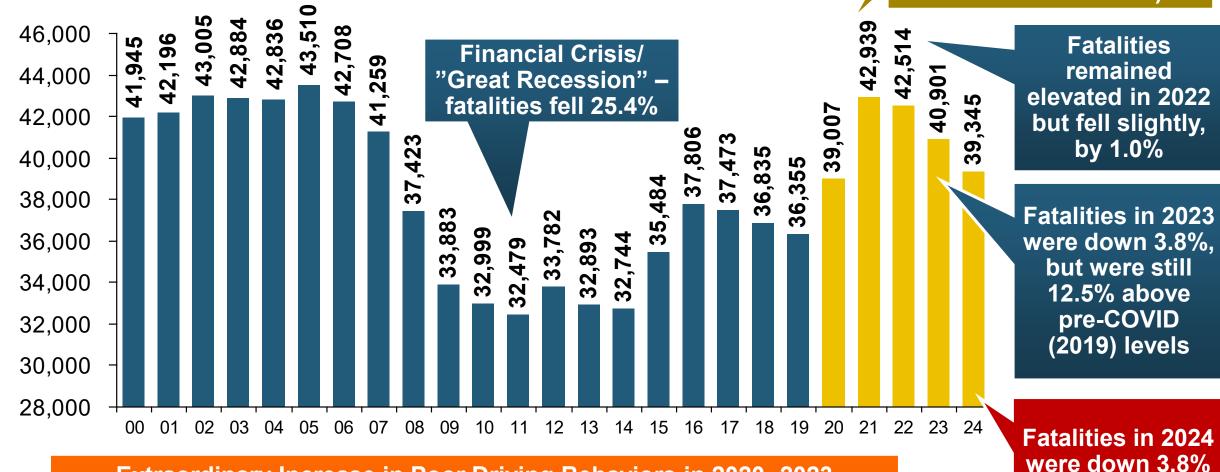
South Carolina's Deadly Highways

Motor Vehicle Fatalities Have Skyrocketed

Driver Behaviors Have Changed for the Worse, Pushing Up Fatality Rates and Claim Costs

Traffic Fatalities in the U.S., 2000-2024

During COVID, fatalities surged by 7.3% in 2020 and 10.1% in 2021 (up 18.1% since 2019)



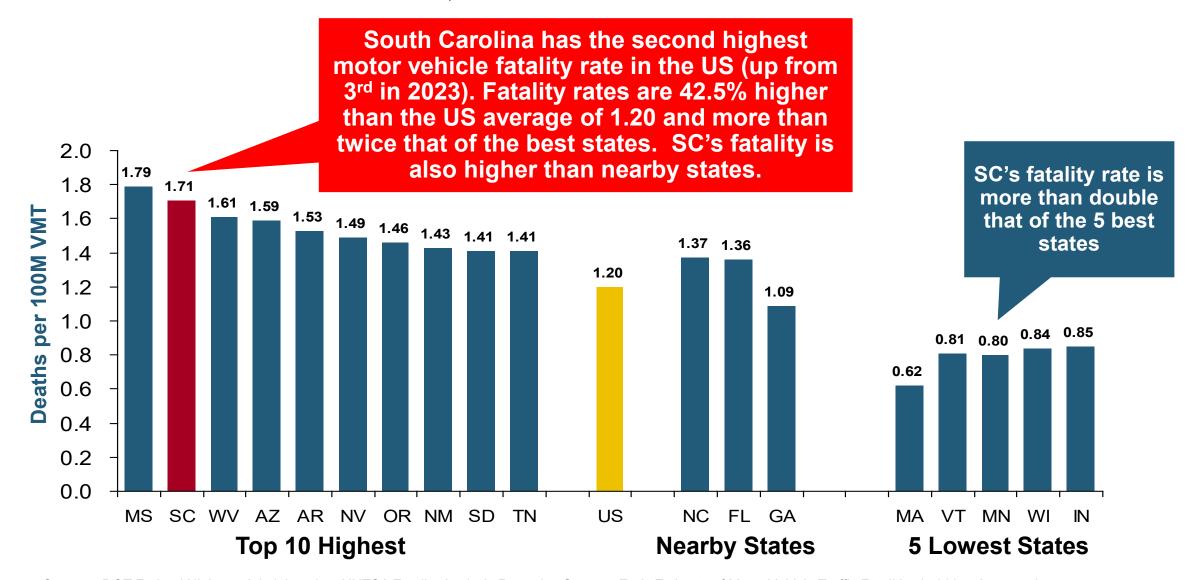
Source: Insurance Institute for Highway Safety and Highway Loss Data Institute: https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813670#; Risk and Uncertainty Management Center, University of South Carolina.

Extraordinary Increase in Poor Driving Behaviors in 2020 -2023

Contributed to Sharply Higher Auto Fatalities

from 2023

Motor Vehicle Crash Deaths per 100 Million Vehicle Miles Traveled, 2024

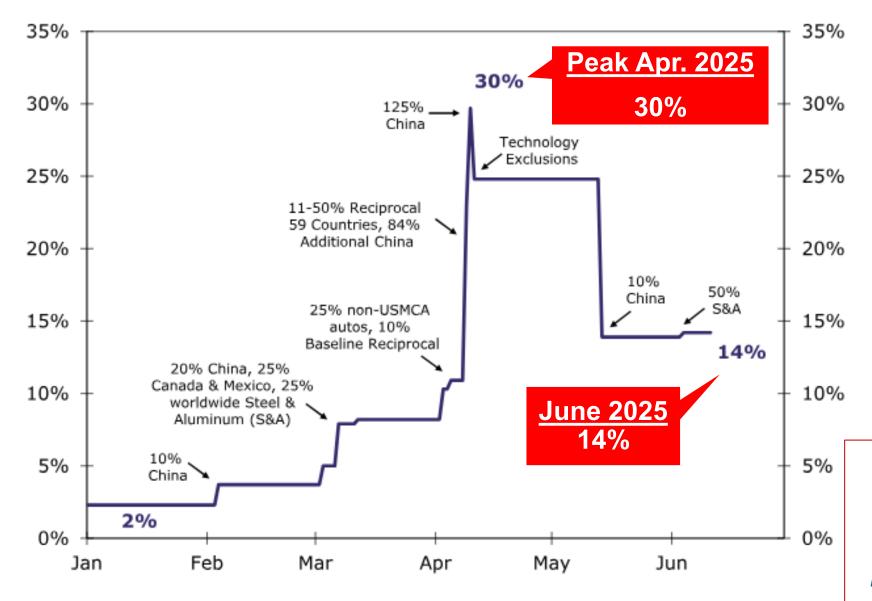


Sources: DOT Federal Highway Administration, NHTSA Fatality Analysis Reporting System, *Early Estimate of Motor Vehicle Traffic Fatalities in 2024*. Accessed at: https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813710.

How Will US Trade Policy Shifts Impact the P/C Insurance Industry?

Tariffs Will Increase Auto and Property Claim Severities

Est. Weighted Tariffs on US Imports, January – June 2025



Effective tariff rates have fluctuated wildly in 2025, starting the year ~2%, peaking at 30% and currently standing at 14%

Renewed tariff threat could push effective rate far higher as of Aug. 1. (e.g., EU, Mexico, Brazil)

Estimated Impact of Tariffs

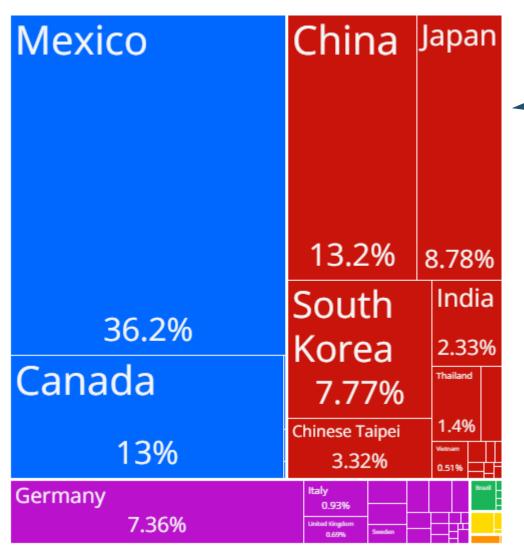
New Home Price: \$9,200 (NAHB)

New Car Prices: \$2,000 - \$15,000 (Anderson Economics Group)

Source: US Dept. of Commerce and Wells Fargo Economics.

US Imports of Auto Parts, by Source Country, 2022

Total = \$88 Billion



36.2% of auto part imports into the US in 2022 were from Mexico. China and Canada are a distant second and third. All are vulnerable to potential sharp price increases due to threatened tariffs ranging from 20% to 60%.

Imported auto parts account for a large share of those used in repairs paid for by insurers (esp. aftermarket parts). Tariffs will likely drive up personal and commercial auto claim severities.

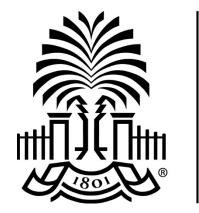
SUGGESTIONS TO LOWER PREMIUMS

Homeowners Insurance

- Evidence is clear that more stringent building standards reduce costs (60 65% for hurricane losses according to cited Swiss Re report; Similar benefits based on AL Hurricane Sally Fortified standards report)
- Zoning that better recognizes wind, flood, storm surge threats
- Improved (mandatory?) disclosure of hazards upon property transactions
- Maintain stable, fair regulatory environment to encourage additional insurers to enter the market (and encourage existing insurers to grow)

Auto Insurance

- Enforcement: SC roads are among the deadliest in the nation
- Infrastructure Investment: Identify and remedy most problematic traffic locations
- Education: Drivers have many options to manage auto insurance premium costs (e.g., shop and compare, raise deductibles, consider insurance costs at time of purchase, increase awareness of leading causes of accidents)



UNIVERSITY OF

SOUTH CAROLINA

Darla Moore School of Business

Thank you for your time and your attention!

For a copy of this presentation, email me at robert.hartwig@moore.sc.edu or

Download at www.uscriskcenter.com