Draft date: 10/21/2026

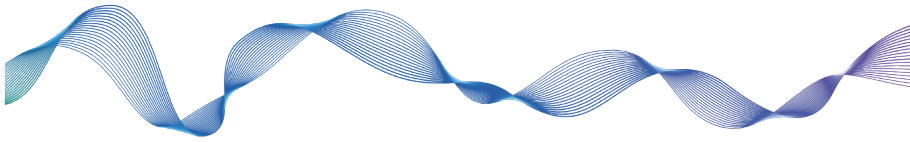
2026 Fall National Meeting
Dallas, Texas

CASUALTY ACTUARIAL AND STATISTICAL (C) TASK FORCE
Monday, November 16, 2026
9:30 – 11:00 a.m.
Convention Center—Grapevine A123—Level 3

ROLL CALL

Angela L. Nelson, Chair	Julie Lederer, Chair	Missouri
Sandra Darby, Vice Chair	Sandra Darby, Vice Chair	Maine
Mark Fowler	Charles Hale	Alabama
Heather Carpenter	Heather Carpenter	Alaska
Ricardo Lara	Tina Shaw	California
Joshua Hershman	Wanchin Chou	Connecticut
Karima M. Woods	David A. Christhilf	District of Columbia
Michael Yaworsky	Richie Frederick	Florida
Holly W. Lambert	Lawrence Steinert	Indiana
Doug Ommen	Travis Grassel	Iowa
Vicki Schmidt	Nicole Boyd	Kansas
Timothy J. Temple	Nichole Torblaa	Louisiana
Marie Grant	Aaron Levine	Maryland
Anita G. Fox	Kevin Dyke	Michigan
Julia Dreier	Phil Vigliaturo	Minnesota
Eric Dunning	Nguyen Thai	Nebraska
Ned Gaines	Gennady Stolyarov	Nevada
D.J. Bettencourt	Sean Rosene	New Hampshire
Susan Ochs	Susan Ochs	New Jersey
Remedio C. Mafnas	Maryann Borja-Arriola	N. Mariana Islands
Judith L. French	Tom Botsko	Ohio
Glen Mulready	Andy Schallhorn	Oklahoma
TK Keen	Eric Bredeson	Oregon
Michael Humphreys	Michael McKenney	Pennsylvania
Michael Wise	Will Davis	South Carolina
Amanda Crawford	Nicole Elliott	Texas
Kaj Samsom	Rosemary Raszka	Vermont
Patty Kuderer	William Wilder	Washington
Erin K. Hunter	Ellen Potter	West Virginia

NAIC Support Staff: Kris DeFrain/Roberto Perez/Sam Kloese



AGENDA

1. Consider Adoption of its Oct. 13, Sept. 2, and Summer National Meeting Minutes—*Julie Lederer (MO)*	Attachments One, Two and Three
2. Consider Adoption of the Reports of its Working Groups	
A. Actuarial Opinion (C) Working Group—*Miriam Fisk (TX)*	Attachment Four
B. Statistical Data (C) Working Group—*Brad Gerling (MO)*	Attachment Five
3. Consider Adoption of its White Paper on Homeowners Rate Regulation and Cross-State Subsidization—*Julie Lederer (MO)*	Attachment Six
4. Discuss 2027 Work Plan—*Julie Lederer (MO)*	
5. Hear Liaison Reports—*Julie Lederer (MO)*	
6. Hear Updates on Activities and Research from Professional Actuarial Associations—*Julie Lederer (MO)*	
7. Discuss Any Other Matters Brought Before the Task Force —*Julie Lederer (MO)*	
8. Adjournment	

Draft: 10/27/26

Casualty Actuarial and Statistical (C) Task Force
Virtual Meeting
October 13, 2026

The Casualty Actuarial and Statistical (C) Task Force met Oct. 13, 2026. The following Task Force members participated: Angela L. Nelson, Chair, represented by Julie Lederer (MO); Sandra Darby, Vice Chair (ME); Mark Fowler represented by Charles Hale (AL); Ricardo Lara represented by Mitra Sanandajifar and Tina Shaw (CA); Joshua Hershman represented by Wanchin Chou and Christian Citarella (CT); Michael Yaworsky represented by Peshala Disanayaka (FL); Doug Ommen represented by Caden Davenport (IA); Holly W. Lambert represented by Lawrence Steinert (IN); Vicki Schmidt represented by Nicole Boyd (KS); Timothy J. Temple represented by Nichole Torblaa (LA); Marie Grant represented by Walter Dabrowski (MD); Anita G. Fox represented by Kevin Dyke (MI); Julie Dreier represented by Phil Vigliaturo (MN); Eric Dunning represented by Nguyen Thai (NE); Ned Gaines represented by Gennady Stolyarov (NV); Judith L. French represented by Thomas Kaiser (OH); Glen Mulready represented by Andy Schallhorn (OK); TK Keen represented by Brian Fjeldheim (OR); Michael Humphreys represented by Michael McKenney (PA); Amanda Crawford represented by Nicole Elliott and Miriam Fisk (TX); Kaj Samsom represented by Rosemary Raszka (VT); and Erin K. Hunter represented by Ellen Potter (WV).

1. Adopted the Report of the Actuarial Opinion (C) Working Group

Fisk reported that the Actuarial Opinion (C) Working Group met Sept. 22, Sept. 10, and Aug. 27 and took the following action: 1) adopted the *Regulatory Guidance on Property and Casualty Statutory Statements of Actuarial Opinion, Actuarial Opinion Summaries, and Actuarial Reports for the Year 2026* (2026 Regulatory Guidance); 2) adopted proposed edits to the *Financial Analysis Handbook's* property/casualty (P/C) and title statement of actuarial opinion (SAO) sections; and 3) discussed proposed changes to the 2027 title SAO instructions.

Fisk made a motion, seconded by Dyke, to adopt the report of the Actuarial Opinion (C) Working Group. The motion passed unanimously.

2. Adopted the Report of the Statistical Data (C) Working Group

Darby reported that the Statistical Data (C) Working Group met Sept. 23 to continue discussion on updating the *Statistical Handbook of Data Available to Regulators*. The Working Group is currently working closely with the statistical agents to ensure that the collection and reporting of the updated elements are consistent for all statistical agents. The Working Group plans to meet Oct. 21 to continue the discussion. The goal is to have the personal line sections, introduction, and reporting process sections completed by the end of the year.

Darby asked for additional regulators to participate in discussions about updates to the handbook. She will send an email requesting a review of data collected and reports to ensure regulators receive the information needed for regulatory analysis and market monitoring. Feedback will help the Working Group determine how to structure the reporting provisions as it works toward completing the personal lines portions of the handbook.

Darby made a motion, seconded by McKenney, to adopt the report of the Statistical Data (C) Working Group. The motion passed unanimously.

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3. Heard a Presentation on Social Inflation Research

Dr. Fang Yang (Georgia State University) presented research funded by the Casualty Actuarial Society (CAS) on quantifying the costs of social inflation (Attachment __).

4. Adopted its 2027 Proposed Charges and Discussed its 2027 Work Plan

Lederer described the results of a regulator survey completed in August about committee priorities (Attachment ___). She said respondents prioritize practical regulatory tools and educational offerings that help them fulfill their regulatory responsibilities, as embodied in the Task Force's rate filing issues calls and book club calls.

Lederer said the 2027 proposed charges were edited for conciseness and to remove charges that will be completed by year-end 2026. In addition to specific charges for producing work products, Lederer said there are some topics that can help the Task Force fulfill its stated mission. She said the topics she would consider placing on the agenda are actuarial-specific, do not fit better in other Property and Casualty Insurance (C) Committee forums, and do not overlap with other groups' activities. She said, for example, that to discuss pricing of pet insurance policies, a specific pet insurance charge is not needed if the Task Force does not intend to produce a work product, such as a white paper, on that topic. She asked members to submit topics to Kris DeFrain (NAIC) over the next week, and then the Task Force will take a straw vote to aid meeting planning in 2027.

Vigliaturo made a motion, seconded by Darby, to adopt its 2027 proposed charges (Attachment XX), including the unchanged charges for its working groups. The motion passed unanimously.

5. Received an Update on the Rate Regulation White Paper and Cross-Subsidization

Citarella said that at the Summer National Meeting, the Task Force heard oral comments from the first exposure of the white paper on homeowners rate regulation and cross-state subsidization. The Oversight Drafting Group considered the comments and produced a revised draft, which was exposed on Sept. 25. Written comments are due Oct. 26, but given the short turnaround time for the national meeting and the planned adoption of a paper, participants were asked to present oral comments early.

Citarella summarized the most substantive changes made. He said there is improved wording and descriptions throughout the paper, plus five key changes. The first is that the scope of the paper was clarified in the introduction and the term "cross-state subsidization" was used in place of "cross subsidization." The second is that statements were softened from "cross subsidization is not occurring" to "we found no evidence of systemic cross-state subsidization." Citarella said it is very difficult, if not impossible, to say something like this does not exist, so the group decided to clarify by saying, "We did not find industry-wide cross-state subsidization, and we described the safeguards in place that serve to prevent cross-state subsidization from occurring." The third is that greater focus is placed on actuarial professionalism with additional references to specific Actuarial Standards of Practice (ASOPs). The fourth is that a new section was added on market-wide changes in future cost estimates, and more detail was provided around catastrophe (CAT) and reinsurance content. The fifth is that potential research ideas about homeowners regulation, CAT models, and pricing were added.

Stolyarov said that various significant wording improvements were made in this version of the paper, and the scope was clarified. He said the type of situation he had raised previously is what the paper now describes as "excess profits" rather than "cross-state subsidization," and that would be a situation where insurers may be getting at least adequate rates everywhere and pushing for above-market returns in certain states that might not rule those rates as "excessive." He will be submitting additional comments in writing.

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6. Received Liaison Reports

Vigliaturo reported that the Natural Catastrophe Risk and Resilience (EX) Task Force and its working groups are discussing next steps in the flood insurance blueprint activities and how regulators can communicate with influencers. The Task Force heard from Munich Re about an inland flood coverage endorsement with a low limit ranging from 5,000 to 50,000. It also discussed the National Flood Insurance Program (NFIP) data-sharing agreements and heard updates on deliverables from the disaster preparedness guide.

Having no further business, the Casualty Actuarial and Statistical (C) Task Force adjourned.

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Draft: 9/2/26

Casualty Actuarial and Statistical (C) Task Force
E-Vote
September 2, 2026

The Casualty Actuarial and Statistical (C) Task Force conducted an e-vote that concluded Sept. 2, 2026. The following Task Force members participated: Sandra Darby, Vice Chair (ME); Mark Fowler represented by Charles Hale (AL); Joshua Hershman represented by Wanchin Chou (CT); Michael Yaworsky represented by Richie Frederick (FL); Holly W. Lambert represented by Lawrence Steinert (IN); Vicki Schmidt represented by Nicole Boyd (KS); Timothy J. Temple represented by Nichole Torblaa (LA); Marie Grant represented by Jessica Blackmon (MD); Anita G. Fox represented by Kevin Dyke (MI); Phillip Vigliaturo (MN); Remedio C. Mafnas (MP); Eric Dunning represented by Nguyen Thai (NE); Judith L. French represented by Tom Botsko (OH); TK Keen represented by David Dahl (OR); and Michael Wise represented by Will Davis (SC).

1. Adopted the *2024 Auto Insurance Database Average Premium Supplement*

The Task Force conducted an e-vote to consider adoption of the *2024 Auto Insurance Database Average Premium Supplement*. The motion passed unanimously.

Having no further business, the Casualty Actuarial and Statistical (C) Task Force adjourned.

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Draft: 8/18/26

Casualty Actuarial and Statistical (C) Task Force
Columbus, Ohio
August 12, 2026

The Casualty Actuarial and Statistical (C) Task Force met in Columbus, OH, Aug. 12, 2026. The following Task Force members participated: Angela L. Nelson, Chair, represented by Julie Lederer (MO); Timothy N. Schott, Vice Chair, represented by Sandra Darby (ME); Heather Carpenter represented by Chad Bennett and Austin Childs (AK); Mark Fowler represented by Charles Hale (AL); Ricardo Lara represented by Tina Shaw (CA); Joshua Hershman represented by Wanchin Chou (CT); Michael Yaworsky represented by Richie Frederick (FL); Doug Ommen represented by Travis Grassel (IA); Holly W. Lambert represented by Lawrence Steinert (IN); Vicki Schmidt represented by Nicole Boyd (KS); Timothy J. Temple represented by Nichole Torblaa (LA); Marie Grant represented by Arthur Schwartz (MD); Anita G. Fox represented by Kevin Dyke (MI); Julia Dreier represented by Phil Vigliaturo (MN); Eric Dunning represented by Nguyen Thai (NE); D.J. Bettencourt represented by Sean Rosene (NH); Ned Gaines represented by Gennady Stolyarov (NV); Judith L. French represented by Tom Botsko (OH); Glen Mulready represented by Landon Hubbart (OK); TK Keen represented by Bet Sims (OR); Michael Humphreys represented by Michael McKenney (PA); Michael Wise represented by Will Davis (SC); Amanda Crawford represented by Matthew Tarpley (TX); Kaj Samsom represented by Zoie Y. Swaim and Rosemary Raszka (VT); Patty Kuderer represented by William Wilder (WA); and Erin K. Hunter represented by Justin Parr (WV).

1. Adopted its Aug. 7, July 14, June 26, June 10, June 9, May 12, April 14, and Spring National Meeting Minutes

Lederer said the Task Force met Aug. 7, July 14, June 26, June 10, June 9, May 12, and April 14. During these meetings, the Task Force took the following action: 1) adopted the *2024 Competition Database Report* (Competition Report); 2) adopted the 2023 *Dwelling Fire, Homeowners Owner-Occupied, and Homeowners Tenant and Condominium/Cooperative Unit Owner's Insurance Report* (Homeowners Report); 3) adopted the *Report on Profitability by Line by State* (Profitability Report); 4) adopted the report of the Actuarial Opinion (C) Working Group; 5) adopted the report of the Statistical Data (C) Working Group; 6) received an update on the state regulation white paper and cross-subsidization; 7) received liaison reports; 8) discussed Schedule P next steps; 9) received an update on its 2026 charges; and 10) discussed rate filing review training.

The Task Force also met July 21, June 16, May 19, and April 21 in regulator-to-regulator session, pursuant to paragraph 3 (specific companies, entities, or individuals) of the NAIC Policy Statement on Open Meetings, to discuss rate filing issues.

Additionally, the Task Force held Predictive Analytics Book Club meetings July 28, June 23, May 26, and April 28. The sessions included the following: 1) a presentation from Rob Lieberthal, PhD, founder and senior principal of Lieberthal & Associates, on large language model (LLM) applications in claims analysis; 2) a presentation from Dave Sandberg, Dorothy Andrews, and Paul Meixler from the American Academy of Actuaries (Academy) on measuring statistical bias in data using entropy; 3) a presentation from Mario DiCaro, vice president of Capital Modeling and Analytics at Tokio Marine HCC Insurance Holdings and Shine Wang from Wawanesa Insurance on artificial intelligence (AI); and 4) a presentation from the NAIC's Sam Kloese and Roberto Perez on the use of AI in reviewing pricing generalized linear models (GLMs).

Botsko made a motion, seconded by Darby, to adopt the Task Force's Aug. 7 (Attachment One); July 14 (Attachment Two); June 26 (Attachment Three); June 10 (Attachment Four); June 9 (Attachment Five); May 12 (Attachment Six); April 14 (Attachment Seven); and March 23 (*see NAIC Proceedings – Spring 2026, Casualty Actuarial and Statistical (C) Task Force*) minutes. The motion passed unanimously.

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2. Adopted the Report of the Actuarial Opinion (C) Working Group

Lederer said the Actuarial Opinion (C) Working Group met July 15 and June 24. During these meetings, the Working Group took the following action: 1) exposed the *2026 Property/Casualty (P/C) Regulatory Guidance* for a 37-day public comment period ending Aug. 21; and 2) discussed the P/C Statement of Actuarial Opinion (SAO), P/C Actuarial Opinion Summary (AOS), and Title SAO instructions for 2027.

The Working Group also met June 10 in regulator-to-regulator session, pursuant to paragraph 3 (specific companies, entities, or individuals) of the NAIC Policy Statement on Open Meetings.

Vigliaturo made a motion, seconded by Botsko, to adopt the report of the Actuarial Opinion (C) Working Group, including its July 15 (Attachment Eight) and June 24 (Attachment Nine) minutes. The motion passed unanimously.

3. Adopted the Report of the Statistical Data (C) Working Group

Darby said the Statistical Data (C) Working Group met July 29, June 17, May 20, and April 8 to continue discussion on proposed updates to the *Statistical Handbook of Data Available to Insurance Regulators* (Handbook). The Working Group has completed an initial review of all personal lines sections within the Handbook, including homeowners, dwelling fire and allied lines, private passenger automobile (PPA), and a new pet insurance section. It plans to segment the Handbook into personal and commercial lines to speed up the implementation of the changes for statistical agents and companies reporting. The Working Group will continue to meet monthly.

Darby made a motion, seconded by Dyke, to adopt the report of the Statistical Data (C) Working Group, including its July 29 (Attachment Ten), June 17 (Attachment Ten-A), May 20 (Attachment Ten-B), and April 8 (Attachment Ten-B1) minutes. The motion passed unanimously.

4. Adopted the Title Schedule P Instructions Proposal

Lederer said the Task Force's proposal to modify the P/C Schedule P Instructions was exposed at the Blanks (E) Working Group for a public comment period ending July 27. After the Task Force submitted that proposal to the Working Group, the Title Insurance (C) Working Group asked if the Task Force would propose similar changes to the Title Schedule P Instructions. Edited Title Schedule P Instructions were exposed for a 45-day public comment period ending July 24. Three comment letters were received, and Lederer drafted responses to each comment (Attachment Eleven). She said that, similar to the P/C Instruction changes, the proposed changes to the Title Instructions are meant to add clarity and do not change the filing company's requirements or modify the blanks.

Frederick made a motion, seconded by Steinert, to adopt the Title Schedule P Instructions proposal to send to the Blanks (E) Working Group for consideration (Attachment Twelve).

5. Discussed Comments Received on the Draft Homeowners Regulation White Paper

The Property and Casualty Insurance (C) Committee adopted the following charge for the Task Force at the Spring National Meeting: "Draft a white paper that explains how homeowners' insurance rates are regulated across states, with particular attention to public questions and academic claims regarding potential cross-state subsidization of catastrophic losses."

Lederer said that on June 26, only two and a half months after adoption of the charge, the Task Force exposed a white paper to seek feedback from all parties. The paper was exposed for a 40-day public comment period ending

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Aug. 5. She said the Task Force received four comment letters (Attachment XII). Those who submitted written comments were invited to present their comments orally.

The Task Force discussed the scope of the paper as directed by the Property and Casualty Insurance (C) Committee. Stolyarov suggested the scope is too narrow. Numerous Task Force members said the draft paper appropriately addresses the charge and that additional research could be requested to dig into specific situations that may not meet the definition of cross-subsidization in this paper.

Stolyarov said regulators have to pay attention to catastrophe models, reinsurance cost allocations to individual states, and other situations to stop attempts at cross-subsidization. He said it is probable that regulators do not catch every situation. He added that the Center for Insurance Policy and Research (CIPR) case studies cited in the paper do not meaningfully represent industry-level evidence, and it would be beneficial to conduct a recent study based on the 2025 Los Angeles wildfires. McKenney said the Task Force was not asked to prove there are never situations of cross-subsidization or identify where regulators have required insurance companies to make changes to avoid cross-subsidization potential, but the Task Force was asked to explain rate regulation with particular attention to these studies that incorrectly conclude that catastrophe losses are spread across states rather than charged to the state(s) where the catastrophe occurred. Stolyarov said the current paper is unlikely to satisfy those asking these questions or raising these observations. He said proof is not needed, but additional evidence would be beneficial. Grassel said he believes the white paper achieves the objectives. He said the CIPR could decide to do further analysis.

Katie Dzurec (Academy) said the Academy recommends a heightened emphasis in the white paper on actuary's obligations under the Actuarial Standards of Practice (ASOPs), the Casualty Actuarial Society (CAS) Statement of Principles, and the Code of Professional Conduct. She said deliberate implementation of cross-state subsidization would violate ASAPs and actuarial principles and could constitute a violation of the Code of Professional Conduct.

Erica Weyhenmeyer (NAMIC) said the draft white paper is thoughtful and balanced, and NAMIC supports its central premise that homeowners insurance rates are prospective state-based estimates for future costs. She said the paper could benefit from strengthening its technical position and further explaining the actual regulatory and market safeguards that protect consumers.

Schwartz said the net cost of reinsurance and how that is allocated among the states was not sufficiently discussed or even touched upon in the white paper. Schwartz said there needs to be regulatory attention to the subject to ensure that reinsurance costs are allocated based on state risks rather than simply on premiums or exposures. He said they should be allocated based on average annual loss or perhaps on the probable maximum loss. Steinert said that it is the regulatory actuary's responsibility to ensure the allocation is appropriate and does not rise to the level of systemic cross-state subsidization. McKenney said the reinsurance topic is addressed in several sections of the paper.

Schwartz said parametric insurance pays based on whether a natural disaster meets certain parameters. He said this topic should be included in the paper because it might be allocated to states differently compared to a standard reinsurance product. He said cross-subsidization also seems to occur when small companies go insolvent, and the costs of the insolvency are spread across states, whether they have the same catastrophe risks.

6. Heard Updates on Activities and Research from Professional Actuarial Associations

The Academy and the CAS provided reports on current activities and research.

Having no further business, the Casualty Actuarial and Statistical (C) Task Force adjourned.

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Draft: 11/3/26

Actuarial Opinion (C) Working Group
Virtual Meeting
October 22, 2026

The Actuarial Opinion (C) Working Group of the Casualty Actuarial and Statistical (C) Task Force met Oct. 22, 2026. The following Working Group members participated: Miriam Fisk, Chair (TX); Julie Lederer, Vice Chair (MO); Susan Gozzo Andrews (CT); David A. Christhilf (DC); Chantel Long (IL); Erica Sanderson (ME); Tom Botsko (OH); and James Di Santo (PA).

1. Discussed Comments and Adopted the 2027 Title Statement of Actuarial Opinion Instructions Document

The proposed 2027 Title Statement of Actuarial Opinion Instructions were exposed for a 32-day public comment period ending Oct. 12. Fisk said one comment letter was received during the public comment period from the American Academy of Actuaries (Academy) Committee on Property and Liability Financial Reporting (COPLFR).

Fisk said the COPLFR letter correctly noted an issue with the "not applicable" response option added to Exhibit B, Item 6, and suggested either removing the option or identifying when it might apply. Fisk said it would not apply to title and proposed limiting the response to "yes" or "no."

Botsko made a motion, seconded by Lederer, to adopt the revisions to the 2027 Title Statement of Actuarial Opinion Instructions, with the change to remove the "not applicable" response option from Exhibit B, Item 6 (Attachment XX). The motion passed unanimously.

Having no further business, the Actuarial Opinion (C) Working Group adjourned.

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Draft: 11/3/26

Actuarial Opinion (C) Working Group
E-Vote
September 24, 2026

The Actuarial Opinion (C) Working Group of the Casualty Actuarial and Statistical (C) Task Force conducted an e-vote that concluded Sept. 24, 2026. The following Working Group members participated: Miriam Fisk, Chair (TX); Julie Lederer, Vice Chair (MO); Susan Gozzo Andrews (CT); David A. Christhilf (DC); Chantel Long (IL); Sandra Darby (ME); Tom Botsko (OH); and Andy Schallhorn (OK).

1. Adopted the P/C and Title Statement of Actuarial Opinion Worksheet

The Working Group conducted an e-vote to consider adoption of the property/casualty (P/C) and title statement of actuarial opinion worksheet in the *Financial Analysis Handbook* and refer it to the Financial Analysis Solvency Tools (E) Working Group for consideration.

A majority of the Working Group members voted in favor of adopting the worksheet (Attachment xx). The motion passed.

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Draft: 11/3/26

Actuarial Opinion (C) Working Group
Virtual Meeting
September 22, 2026

The Actuarial Opinion (C) Working Group of the Casualty Actuarial and Statistical (C) Task Force met Sept. 22, 2026. The following Working Group members participated: Miriam Fisk, Chair (TX); Susan Gozzo Andrews (CT); and Chantel Long (IL).

1. Discussed Comments Received on the P/C and Title Statement of Actuarial Opinion Worksheet in the *Financial Analysis Handbook*

Fisk said the Working Group discussed the proposed edits to the property/casualty (P/C) and title statement of actuarial opinion worksheet in the *Financial Analysis Handbook* during its Aug. 27 meeting and exposed them for a 22-day public comment period ending Sept. 18. She said the worksheet applies to both P/C and title insurers and that most of the edits make the worksheet language consistent with the opinion instructions.

Fisk said one public comment was received. Fisk said Rebecca Armon (TX) commented that the abbreviations "PY" and "PHS" may not be consistent with the rest of the *Financial Analysis Handbook*. She said Julie Lederer (MO) responded by suggesting the worksheet use the names of the Insurance Regulatory Information System (IRIS) ratios as published in the *IRIS Ratios Manual*. Those names are "One-Year Reserve Development to Policyholders' Surplus," "Two-Year Reserve Development to Policyholders' Surplus," and "Estimated Current Reserve Deficiency to Policyholders' Surplus." Fisk said she supported the suggestion.

Fisk said the Working Group intends to send the worksheet to the Financial Analysis Solvency Tools (E) Working Group in time for inclusion this year. As a quorum was not present, the Working Group will consider adoption by e-vote. Members from Connecticut, Illinois, and Texas stated their votes during the meeting.

Having no further business, the Actuarial Opinion (C) Working Group adjourned.

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Actuarial Opinion (C) Working Group
Virtual Meeting
September 10, 2026

The Actuarial Opinion (C) Working Group of the Casualty Actuarial and Statistical (C) Task Force met Sept. 10, 2026. The following Working Group members participated: Miriam Fisk, Chair (TX); Julie Lederer, Vice Chair (MO); Charles Jansen (IL); Sandra Darby (ME); Tom Botsko (OH); Andy Schallhorn (OK); and James Di Santo (PA).

1. Exposed Proposed Changes to the 2027 Title Statement of Actuarial Opinion Instructions

Fisk said the Working Group is considering changes to the 2027 Title Statement of Actuarial Opinion Instructions to align the title instructions with changes made to the Property/Casualty (P/C) Statement of Actuarial Opinion Instructions in recent years.

Fisk reviewed proposed terminology and editorial revisions. The revisions included using the defined term "Appointed Actuary"; standardizing references to "Actuarial Opinion" and "Board of Directors"; replacing "scope paragraph" with "scope"; and changing "officer's name and title" to "individual's name and title." The proposed revisions also clarified the requirements for reconciling and mapping the data used in the Appointed Actuary's analysis to Schedule P, including identifying who performed the reconciliation when it was not produced under the Appointed Actuary's direction.

Fisk invited comments from Working Group members and interested parties. No additional substantive comments were recorded.

Lederer made a motion, seconded by Darby, to expose the proposed changes to the 2027 Title Statement of Actuarial Opinion Instructions for a 32-day public comment period ending Oct. 12. The motion passed unanimously.

Having no further business, the Actuarial Opinion (C) Working Group adjourned.

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Draft: 9/14/26

Actuarial Opinion (C) Working Group
Virtual Meeting
August 27, 2026

The Actuarial Opinion (C) Working Group of the Casualty Actuarial and Statistical (C) Task Force met Aug. 27, 2026. The following Working Group members participated: Miriam Fisk, Chair (TX); Julie Lederer, Vice Chair (MO); Susan Gozzo Andrews (CT); David A. Christhilf (DC); Chantel Long (IL); Sandra Darby (ME); and James Di Santo (PA). Also participating was: Arthur Schwartz (MD).

1. Adopted the 2026 Regulatory Guidance Document

Fisk said the draft *Regulatory Guidance on Property and Casualty Statutory Statements of Actuarial Opinion, Actuarial Opinion Summaries, and Actuarial Reports for the Year 2026* (2026 Regulatory Guidance) had been exposed for a 37-day public comment period ending Aug. 21, and one official comment was received. Fisk stated that the treatment of long-duration property/casualty (P/C) unearned premium reserve items had been discussed over an extended period because actuaries had interpreted the instructions differently. Fisk said that the instructions and guidance were consistent with the applicable *Statement of Statutory Accounting Principle (SSAP) No. 65—Property and Casualty Contracts* and did not support changing the guidance in response to the comment.

Norman Niami (American Property Casualty Insurance Association—APCIA) said that applying the requirement would not be simple or trivial for companies with many affected transactions. Lederer said the items must be listed and that regulators had expected the amounts to be provided regardless of materiality, while relevant comments are required for material items. Fisk said similar guidance was included in the 2025 document before the instruction changes were adopted and that the 2026 guidance now reflects requirements expressly stated in the instructions.

Schwartz asked how long-duration contracts are defined and why the requested treatment would not be adopted. Fisk discussed the definition and provided an example of an extended automobile service contract. Fisk also explained that inconsistent practice arose when amounts were non-zero but small, including uncertainty about whether listing an amount meant the actuary was opining on it. Fisk said the changes were intended to produce consistent treatment.

Andrews identified references on page 11 to Exhibit B, Item 13, that appeared to require correction to Item 12.

Lederer made a motion, seconded by Andrews, to adopt the 2026 Regulatory Guidance with the discussed changes, including correction of references from Exhibit B, Item 13, to Item 12 and review of additional affected references (Attachment XX). The motion passed unanimously.

2. Exposed Proposed Edits to the P/C and Title SAO Worksheet in the *Financial Analysis Handbook*

Fisk said the Statement of Actuarial Opinion (SAO) worksheet is used by state financial analysts and should remain consistent with instruction changes made in recent years. Lederer said the proposed edits were intended to align the worksheet objectively with the instructions. She highlighted proposed language directing analysts to verify the required information in the identification paragraph.

Fisk and Lederer discussed terminology and style changes, including the use of “company” and “insurer,” consistent italics, and placement of “P/C only” parentheticals. Lederer said she had considered separate

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worksheets for P/C and title but drafted one worksheet that identifies provisions applicable to only one type. Fisk supported retaining one worksheet.

Lederer highlighted a proposed requirement directing analysts to look for relevant comments when reserve-related Insurance Regulatory Information System (IRIS) ratios 11, 12, or 13 have exceptional values. She said this requirement and the identification paragraph addition were the principal places where information was added, rather than merely worded. Fisk noted that removing statutory surplus from the relevant comment items was appropriate.

Fisk and Lederer also discussed a drafting comment concerning whether the Casualty Practice Council would review someone who was not an American Academy of Actuaries (Academy) member. Lederer said the proposed worksheet language aligned with the instructions and that her comment supplied background from prior discussions.

Andrews made a motion, seconded by Long, to expose the P/C and Title Statement of Actuarial Opinion Worksheet in the *Financial Analysis Handbook* for a 22-day public comment period ending Sept. 18. The motion passed unanimously.

Having no further business, the Actuarial Opinion (C) Working Group adjourned.

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Draft: 10/19/26

Statistical Data (C) Working Group
Virtual Meeting
September 23, 2026

The Statistical Data (C) Working Group of the Casualty Actuarial and Statistical (C) Task Force met Sept. 23, 2026. The following Working Group members participated: Sandra Darby, Chair (ME); Brad Gerling, Vice Chair (MO); Charles Hale and Ken Williamson (AL); Lori Dreaver Munn (AZ); Christian Citarella (CT); David A. Christhilf (DC); Sean Rosene (NH); Alexander Vajda (NY); Landon Hubbart (OK); David Dahl and Spencer Peacock (OR); and Meredith Ludlow (TX).

1. Discussed Comments on Handbook Sections 1, 2, 3, 5, 7, 8, and 14

Darby thanked the statistical agents for their work in preparing sample data files for the sections of the *Statistical Handbook of Data Available to Insurance Regulators* (Handbook) assigned to them.

Nancy Clark (Insurance Services Office—ISO) said she populated each data element in the pet insurance section of the Handbook with sample data for a few states and ZIP codes. She said the age ranges for cats had not been determined and were shown as "to be determined." NAIC committee support said the pet insurance expert who presented to the Working Group had provided age ranges for dogs and was to follow up with age ranges for cats, but that information was not received. Darby asked NAIC committee support to follow up to obtain the cat age ranges.

Darby reviewed the elements in the sample file, including state, ZIP code, loss date, type of loss, coverage type (illness only, wellness only, and accident and illness), written premium, paid losses, paid allocated loss adjustment expense (ALAE), outstanding losses, outstanding ALAE, policy count, claim count, and total incurred losses. Clark said a separate tab contained a sample report. Gerling said the file looked good and appeared to include everything requested in the latest redline of the Handbook.

Gerling said the Handbook lists a transaction identifier and amount among the data items reported by statistical agents, but the sample file showed each measure in a separate column. He asked how data would be compiled if one statistical agent formatted its data differently than another. Darby said the Handbook sets the minimum data that all statistical agents must collect and that individual statistical agents may collect additional data for their own purposes. Laura Panesso (ISO) said the deliverable to state insurance regulators is usually a report, and if reports are in the same format, they can be aggregated into a consolidated view of the market even if collection methods differ slightly. Al Burton (Independent Statistical Services—ISS) said the first tab of the file shows how data would be collected, while the report would be consistent among statistical agents because each would map its internal codes to the required elements.

Darby said state insurance regulators do not currently see the detailed data collected by statistical agents; they receive reports. She said the Working Group has not yet discussed the contents of the reports for each section and that this will be the next step. NAIC committee support noted that the reports do not go through the NAIC. Clark said that while the sample file aggregated premium and loss records, statistical agents would continue to capture those transaction records separately.

Darby questioned whether a summary by ZIP code would be useful for pet insurance and said she would prefer to see cats and dogs separated. Citarella said pet insurance costs can vary by location depending on the concentration of veterinarians and price competition among them. Vajda said there is an urban-versus-rural

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difference in veterinary prices in New York. Darby asked Working Group members to review the sample report and consider what additional information they would want.

Burton presented the homeowners file. He said the ISS did not prepare a report but provided a sample submission in its current layout, with the fields corresponding to the Handbook requirements highlighted, along with a document mapping some of the codes. He said certain elements, such as the count of claims closed without payment, are not currently captured, so the ISS identified where those fields would be placed. He said the ISS also created a transaction type code to identify premium, paid loss, and other transaction types.

Darby said the reports state insurance regulators receive from the data collection are an important part of the Handbook update, and she wants them to be useful to regulators. Gerling said the Working Group will need to spend time reviewing each field to determine what it wants from the data. Burton asked whether regulators would move toward receiving an aggregate data file rather than a report, which would affect how a report should be designed. Darby said that may still be an option and that the Working Group needs to discuss it. She said a report with a few adjustments may be sufficient for pet insurance, while homeowners may warrant receiving data because it is a high-profile topic. Gerling said a report may be better for some lines of business if the goal is monitoring market performance, while a data file would allow more in-depth analysis. Darby said the Handbook could provide a report for all regulators and a data file available upon request. She asked Burton to bring ideas for a homeowners report, such as views of the market by Coverage A amount or policy form, to the next meeting. Burton agreed.

Becky Konkle (National Independent Statistical Service—NISS) presented the dwelling fire file. She said the NISS provided a record layout and a CSV file, which could be used in Excel or Access, with descriptions converted to codes. She said the sample used one state and included an example of every possible code. In response to questions from Gerling, Konkle said column D contains the transaction amount, column Q contains the amount of insurance, column R contains the year of construction, the exposure in column S is populated only on premium records, and the claim count in column T is populated only on loss records. Konkle said the NISS also provided its current annual dwelling fire report as an example of what is currently provided. Darby said state insurance regulators currently receive the report in PDF format, broken down by subline of business, and that the Working Group has discussed receiving reports in Excel. She said the Working Group needs to determine how to expand the report to include more of the new data. Gerling noted that the report does not include data by deductible, and Darby said the Handbook includes data elements such as construction, occupancy, type of loss, and deductible amount that are not reflected in the current report. She said some regulators will want a full data file, while others may prefer an aggregate file with a few tables.

Andy Regis and Jenny Tornquist (American Association of Insurance Services—AAIS) presented the private passenger auto (PPA) file. Regis said the file contained sample data for one state, Illinois, based solely on the updated Handbook rather than on their statistical plan, with separate tabs for premium and loss data and a reference list tab. Tornquist said the reference list shows the fields added through the redline, including new claim count fields and new types of loss for animal collision and towing and labor. She said no report was prepared.

Tornquist said the four statistical agents had provided four different variations of the assignment, and she asked what state insurance regulators want, how they will use the data, and in what format they want it combined. She said regulators would need to consider how to validate the pieces and avoid overlap in reporting companies when aggregating data. Gerling said these are good questions that warrant further discussion. He said a data file would be most useful to him, but most Working Group members may find a report more useful for monitoring the market. Darby said needs change based on market conditions, such as legislative inquiries, and that she would like the Handbook to provide for both reports and a standardized regulator data file that statistical agents could

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provide upon request. Tornquist agreed and said statistical agents also report data to the Automobile Insurance Plan Service Office (AIPSO), which checks for duplicate reporting companies when combining data.

Darby said that, for the next meeting, state insurance regulators should review the materials distributed by NAIC committee support and consider what they want their reports to look like. She said existing reports should not be eliminated because some regulators use them in their current format, but the data should also be presented in ways that benefit regulators using the new data elements. Gerling agreed and said he would consider reports that could be helpful. Darby asked statistical agents to consider what an aggregated Excel regulator file for their sections would look like and what reports would make sense, and she asked the ISO to expand its pet insurance report. Crews said some Handbook sections include a subsection on reports to regulators, and these could be tailored to each section. Tornquist said feedback from regulators on what they want would be helpful. Darby said she would discuss with the chair of the Casualty Actuarial and Statistical (C) Task Force and bring the topic to the Task Force to obtain input from a broader group of regulators.

Having no further business, the Statistical Data (C) Working Group adjourned.

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Statistical Data (C) Working Group
Virtual Meeting
October 21, 2026

The Statistical Data (C) Working Group of the Casualty Actuarial and Statistical (C) Task Force met Oct. 21, 2026. The following Working Group members participated: Sandra Darby, Chair (ME); Brad Gerling, Vice Chair (MO); Charles Hale (AL); Christian Citarella (CT); David Christhilf (DC); Alexander Vajda (NY); Tom Botsko (OH); Andrew Schallhorn and Landon Hubbart (OK); and Meredith Ludlow (TX).

1. Discussed Comments on Handbook Sections 1, 2, 3, 5, 7, 8, and 14

Darby said the Working Group would continue its discussion from its previous meeting, at which statistical agents presented sample reports and sample data for sections of the *Statistical Handbook of Data Available to Insurance Regulators* (Handbook). She asked the Working Group to discuss how state insurance regulators want to receive reports from statistical agents and how the Handbook could outline this to ensure consistent reporting. She noted that the Working Group had previously discussed the current static reports compared with Excel or CSV data that regulators could use to create their own reports.

Gerling said he sees two categories of use for the data. He said it is most important for him to have data he can use quickly to produce actionable reports that give his director insight into the market. He said data that arrives one to three years after it could be received is less useful, and he would like to increase the speed of reporting so more recent data can be used. He said he uses the NAIC Snowflake environment daily, with his business intelligence tools connected to it, and he would like this data to be available in Snowflake. If that is not possible, he said Excel files from statistical agents that he could compile into his own database would be acceptable. He said he would like more access to underlying data rather than reports. However, he said a succinct summary report may be sufficient for some lines of business, while more granular data is important for larger lines, such as auto, homeowners, and related personal lines, so it can be compared with other data sets. Jenny Tornquist (American Association of Insurance Services—AAIS) said she agreed with this concept.

Darby said statistical agents do not provide all of their data to the NAIC, and she wanted to think through what a Snowflake table would look like. She said the reports the Working Group creates lag for reasons such as loss development, and a previous effort to speed up the reports led to the creation of the auto data supplement.

In response to questions from Darby, Laura Panesso (Insurance Services Office—ISO) and Tornquist said Fast Track reports are provided quarterly, while statistical agents provide annual experience reports by March 31. Darby said Fast Track data is a subset based on the top 10 companies and is intended to provide a pulse on the market. Tornquist said there are some exceptions, such as a Massachusetts homeowners report that uses more responsive data, for which complete company data for 2025 is sometimes not reconciled until later in 2026. Panesso said the Handbook reports are provided March 31 for all states, while the Massachusetts homeowners report is required by statute and used in a report to the legislature, so it differs from traditional statistical data.

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Darby said she receives Fast Track data in Excel, but the March 31 reports are currently provided as static PDF files. She said she wants to ensure Gerling receives what he needs without overburdening the statistical agents. She asked whether a state could request all of its data in Excel on March 31, or whether the NAIC could load the data into a table that regulators could query and compare with homeowners market data. Gerling asked whether statistical agents could upload data to the NAIC RDC platform so the NAIC could move it into Snowflake and make it more available to regulators. Libby Crews (NAIC) said this would depend on the layout of the data and whether it would work well in RDC. Todd Sells (NAIC) said the idea could be discussed.

Darby said statistical agents report data to NAIC staff for specific NAIC reports, such as the auto report, using a set Excel file, and she noted that this reporting is technically voluntary. She said that, separately, each statistical agent collects data internally and provides states with PDF files containing high-level information, such as loss ratios. She said Gerling is asking whether statistical agents could submit the data required by the Handbook to the NAIC so it could be placed in a table, possibly in Snowflake, for regulators to query. Crews said the NAIC does not receive the data underlying the PDF reports provided to states. She said the NAIC receives Fast Track data in Excel and separately receives data for the homeowners and auto reports, which NAIC staff are working to make available to regulators in Snowflake.

Tornquist asked whether the data would be rolled up to a high level, such as written or earned premium. She said statistical agents have different standards and statistical plans with different codes and fields, so the data would need to be harmonized to be useful at a granular field-code level. She said data summarized by coverage or deductible group would be simpler to provide. Darby noted that data from different statistical agents is not currently combined. Panesso said the statistical agents produce an aggregate report across all statistical agents for Washington. She said statistical agent data has historically been transmitted between the statistical agent and the state, and sending it directly to the NAIC would be a paradigm shift that should be considered. Darby said state law requires the reporting to the state. She said Gerling could still obtain data from the statistical agents in an Excel format.

Darby said statistical agents maintain their own statistical plans, which include the Handbook's minimum requirements plus additional data, and they generally provide regulators only what the Handbook requires. She said some states are satisfied with PDF reports, and these should remain an option. She said the Working Group should review each line of business to determine what regulators want to know and refine what the reports should look like. She said a state that wants the underlying data should be able to request it from the statistical agents in Excel instead of a PDF report. She cited pet insurance as an example where determining what regulators want is more difficult because the line has received less review.

Gerling asked whether regulators have access to the statistical agents' statistical plans, which could serve as a data dictionary to convert each statistical agent's codes to a standard used across all statistical agents. Panesso said the ISO's full statistical plan reflects what it collects as an advisory organization at a ratemaking level of detail, while what it collects as a statistical agent is a subset. She said the ISO provides an explanatory memorandum with its annual submission that explains its codes. She said that if regulators provided a master coding scheme, such as a specific code for bodily injury coverage, all

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statistical agents should be able to submit the same codes, which would make combining data straightforward. Gerling said the Working Group might consider this approach.

Darby said the reporting discussion may take longer than planned, but she wants the outcome to be right and does not want the Working Group to feel pressure to make a decision. She said she is sending an email to the members of the Casualty Actuarial and Statistical (C) Task Force asking them to review the materials shared and the changes made to the Handbook to obtain additional regulator input on the reports.

Darby said the Independent Statistical Service (ISS) had submitted a sample report for the homeowners section. Rick Bushur (ISS) said the first tab of the sample report shows initial submission data, the second tab shows a summarized version, and the remaining tabs show potential exhibits. He said the exhibits include homeowners data by territory and policy form, which reflects a main aspect of the compilation the ISS currently provides, as well as amount of insurance by ZIP code and policy form, affordability, type of loss, and cause of loss. He said a historical comparison could be shown with additional data. Darby asked Working Group members and interested state insurance regulators to review it. She said the sample shows different cuts of the data, which would allow a state that does not want to receive full data files to review metrics beyond loss ratio and premium, such as roof and policy form type.

Darby said the Working Group may need to focus on the basic report requirements in Section 3 and then on specific reports for each line-specific section, such as homeowners and dwelling fire. Darby said she had not considered changes to Fast Track because she believes it is appropriate in its current form, but she did not want to assume others agreed. Gerling said he also had not considered changes to Fast Track. He asked whether the Handbook shows the fields collected for Fast Track. Panesso said the Handbook includes a reports section with sample reports for the lines of business, including Fast Track. She said it also still includes the accelerated reports, which were unofficially sunset approximately 16 years ago but never removed. Darby said removing the accelerated reports from Section 3.7 should be added to the Working Group's list of tasks.

Darby said the new pet insurance section of the Handbook creates a new reporting requirement for pet insurers, most of which write only pet insurance. Panesso said ISO has an advisory pet insurance program in some states, and historically some pet insurance may have been reported to statistical agents under inland marine, but not at the level of detail in the new section. She said insurers writing only pet insurance likely were not reporting to any statistical agent. She said Fast Track was historically intended to provide a quick quarterly snapshot of markets in crisis, such as general liability in the mid-1980s. She suggested beginning with annual collection of pet insurance data and assessing the need for Fast Track before adding a quarterly requirement. Darby agreed. She said the new Handbook requirement will already increase the volume of pet insurance data and may meet the needs identified, while also placing a new reporting burden on pet insurers.

Darby asked whether states would need statutory changes to require reporting for a line of business newly added to the Handbook, such as pet insurance. Tornquist said she did not believe lines had been added recently, but noted that the Working Group is removing glass. She said the AAIS does not collect pet insurance data, and she was unsure about the other statistical agents. Darby noted that the annual statement was changed to report pet insurance separately, and adding the line to the Handbook will require pet-only insurers to find a statistical agent. Tornquist asked how compliance is monitored and

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whether there is a premium volume threshold for reporting. Darby said there is no threshold for statistical reporting, although some data collections, such as the Market Conduct Annual Statement (MCAS) and the homeowners market data call, use a $50,000 threshold. Darby said she did not believe it was appropriate to add pet insurance to Fast Track at this time. Tornquist agreed that it should not be a high priority and said statistical reporting requirements should align with the annual statement lines of business. Panesso said that, in her experience, most statutes apply to property/casualty insurance generally rather than to specific lines of business, except for workers' compensation. Darby said she raised the issue so NAIC staff and the Working Group would be aware of it. She said the Working Group is comfortable with the Fast Track monitoring system for now, other than removing the accelerated reports, and would add Fast Track to its list of items to review later.

Gerling asked whether the Handbook includes a concise list of the reporting basis used for each line of business. He said such a list in Section 3.4 would be helpful because calendar year data can be collected faster than policy year data. Tornquist said most lines are reported on a calendar-accident year basis because it aligns premium and losses, a few short-tail lines such as glass use calendar year, and she believed only general liability uses policy year. Panesso said the reporting basis is stated within each section's reports, but not in one place. Darby said a summary could be added to Section 3.4 while retaining the information in each section, and Crews agreed that NAIC staff could add it. Tornquist said a summary chart could be helpful. Panesso and Tornquist noted that personal auto physical damage may use a different basis than personal auto liability, which uses calendar-accident year, resulting in two reporting bases for one line.

Gerling asked about the reporting basis for the homeowners market data call. Darby said it collects calendar year data for policies in force as of Dec. 31, which was intended as a quicker way to collect the data. Gerling said Missouri also uses calendar year for its ZIP code data collection for homeowners, auto, mobile homes, farmowners, and earthquake. He asked why calendar-accident year was chosen for certain lines. Panesso said she assumed the approach had been in place for the life of the report.

Gerling asked whether changing to a calendar year basis would be feasible to speed up reporting or would require a complete rewrite. Darby said the data is already reported by March 31. Panesso said the ISO collects data quarterly and can produce any of the reporting bases for any line, but statistical agents that collect data annually may be limited to the current bases by the detail they collect. Gerling said he had been referring to the recently released homeowners report, which contained 2023 data. Darby said that report is produced through a separate process in which statistical agents combine their data at the NAIC, the NAIC validates it, and regulators review it, and the Working Group has already reviewed that process for speed. She said the reporting bases in Section 3.4 apply to the statistical reports received as PDF files. Panesso said those reports have a 15-month lag, so a report received in March 2026 contains data through 2024 evaluated as of the first quarter of 2026.

Darby asked whether statistical reports are aggregated across statistical agents. Panesso said Washington is the only state that requires an aggregate report across statistical agents, which the statistical agents coordinate. Tornquist said the Washington process allows statistical agents to peer review one another's data. Darby said combining reports from multiple statistical agents for one line would be difficult without the raw data. Panesso said the ISO provides its annual submission in Excel to several states upon request. She said that if all statistical agents used the same codes in an Excel report,

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either a statistical agent or a state could combine the data easily. Darby said this should be discussed further.

Gerling said the charts in Section 3.5 on time frames are confusing and not intuitive, and he suggested updating them using more modern technology. Darby agreed and said she believes the section has not changed since 1990. Crews said NAIC staff would work with Gerling on updated visuals.

Darby reviewed the remaining subsections of Section 3, noting that the accelerated report would be removed from the Fast Track monitoring subsection, the annual statistical report requirements still need to be determined, and the lines of coverage in the subsection on who reports need to be updated. She said the Working Group should finish reviewing Section 3 at its next meeting and then review the reporting subsection of each line-specific section. She noted that these subsections are labeled inconsistently, with commercial lines using "Specific Annual Report Features," other lines using "Standard and Customized Reports for Regulators," and dwelling fire using "Specific Report Features." She said the subsections should be relabeled consistently so each clearly identifies the report for regulators.

Darby said the email to the Casualty Actuarial and Statistical (C) Task Force members will request feedback on the reports and sample data files provided by the statistical agents, with Task Force members given until Nov. 11 to comment. She said she also wants to consider the aggregate report Washington receives, noting that if statistical agents report using the same criteria, states could aggregate the reports themselves. Darby suggested holding the next meeting Dec. 2, after the national meeting.

Having no further business, the Statistical Data (C) Working Group adjourned.

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3. Consider Adoption of White Paper on Homeowners Rate Regulation and Cross-State Subsidization

Attachment Six

Julie Lederer (MO)

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U.S. Homeowners Insurance Rate Regulation–A Regulatory Perspective

Regulation, Consumer Protection, and Market Dynamics in the Modern Era

Casualty Actuarial and Statistical (C) Task Force

2026

Executive Summary

Insurance regulators are frequently asked if ~~Imagine a hypothetical where~~ a multi-state insurer could try ~~tries~~ to charge more premium to homeowners in a state with lower risk of natural disasters to make up for heavy losses in a state with higher risk. This paper addresses this scenario, commonly referred to as "cross-state subsidization" and concludes that, under the state-based system of insurance regulation, homeowners rates are designed and reviewed to reflect the expected future cost of risk in the state where the policy is written, not to intentionally and systemically shift costs from one state's policyholders to another's.

State insurance regulators protect consumers by requiring insurers to justify rates with state-specific data and actuarial analysis. Although the regulatory framework varies by state, insurance rates are generally subject to standards requiring that they not be excessive, inadequate, or unfairly discriminatory. Actuaries evaluate data, assumptions, and methods used to estimate future losses, including inflation, catastrophe risk, and reinsurance costs. Although not all state laws require actuaries to be involved in the development of filed rates, state insurance laws or regulations often include language mandating that proposed rates be "actuarially sound" or justified by data that is "actuarially credible". Regulators ~~use these provisions to hold those filing the rates~~assess rate filing support and its adherence to the Actuarial Standards of Practice (ASOPs) promulgated by the Actuarial Standards Board (ASB) and alignment with the Casualty Actuarial Society's (CAS) Statement of Principles Regarding Property and Casualty Insurance

Ratemaking. Regulators also oversee how insurers classify risk, ensuring that differences in price are tied to real differences in risk and are not arbitrary or unfair.

The existing regulatory frameworks in the United States are designed to constrain cross-state subsidization with the help of laws, actuarial standards, and markets.

So how would those legal, actuarial, and market challenges play out in the real world for our hypothetical multi-state insurer attempting cross-state subsidization?

First, insurers support their homeowners rates with state-specific data and actuarial analysis showing that the rates reflect the expected future cost to cover insured homes in that state.

Regulators review rate filings to identify anything unsupported or inconsistent with the state's actual risk and can challenge the rate, require revisions, or reject the filing altogether. Depending on the state, this process can happen before and/or after the rates go into effect. If an insurer inflates rates to account for losses in another state, it will show up in this review in inflated loss projections, excessive catastrophe loadings, or unsupported expenses.

Regulators look for mismatches between the risk in the state and the costs built into the rate. For example, if an insurer tried to hide cross-state subsidization by charging certain groups more without a risk-based reason, that would likely be deemed excessive or unfairly discriminatory and disallowed.

Second, oversight continues after rates take effect. Follow-up spot checks by regulators verify insurers are treating their customers fairly and help ensure insurers are actually charging the filed rates, not deviating from what was approved. Even if a rate filing is approved, companies could misapply rating factors, overcharge specific consumers, or use unfiled surcharges. Market conduct exams can catch those real-world deviations and protect consumers by, for example, requiring refunds to consumers, imposing fines or penalties, or requiring changes to rating practices. When a state takes regulatory action against an insurer as a result of a market conduct exam, it notifies regulators in other states where that insurer does business.

Third, competitive market pressures act as a backstop. Insurers that price above the risk of the market *in that state* will lose business to competitors *in that state*, making it difficult to sustain rates that are artificially high.

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These safeguards help explain why ~~concerns of~~any attempts at cross-state subsidization would face several structural layers of protection designed to prevent them. ~~may stem from a misunderstanding of how the regulatory system operates.~~ Premiums are forward-looking estimates of future costs, not a way to recover past losses. Differences across states reflect local risks, timing, data limitations, coverage requirements, legal or regulatory requirements, or broader economic factors like inflation and reinsurance, not cross-state cost shifting. While major disasters *can* affect costs nationwide indirectly by raising rebuilding costs due to higher costs of materials and labor, or reinsurance prices, those are market-wide effects, not insurers shifting losses from one state to another.

In short, the regulatory system exists so that if an insurer tried to make one state pay for another, multiple layers of regulatory review are designed to catch it.

Overall, this paper concludes that state-based rate regulation supported by actuarial professionalism creates a holistic core consumer protection system; it ties rates to risk, subjects them to appropriate review, and helps ensure insurance remains both available and financially sound.

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Introduction

Regulators have been asked by legislators, researchers, media, and consumer advocates whether homeowners insurance policyholders in relatively low-risk states are financially subsidizing policyholders in states with high catastrophe exposure. The question is whether insurers spread catastrophic losses across their entire book of business, causing premiums in less disaster-prone states to rise to offset losses sustained in states with recent natural catastrophes.

At the 2026 Spring National Meeting, the NAIC Property and Casualty Insurance (C) Committee adopted the following charge for the Casualty Actuarial and Statistical (C) Task Force:

> ***Draft a white paper that explains how homeowners' insurance rates are regulated across states,[1] with particular attention to public questions and academic claims regarding potential cross-state subsidization of catastrophic losses.***

This white paper is intended to explain the framework of state-based homeowners insurance rate regulation in the United States and to examine how that framework addresses concerns regarding potential cross-state subsidization of catastrophe losses. The paper focuses on the legal, actuarial, regulatory, and market mechanisms that govern the development, review, and oversight of homeowners insurance rates. It discusses how rates are established, how catastrophe risk, reinsurance, credibility procedures, and other ratemaking components are evaluated, and how regulators assess whether rates comply with statutory standards. The paper is designed to provide a regulatory perspective on these issues and to describe the safeguards intended to promote rates that are risk-based, actuarially supported, and consistent with applicable state law. It is not intended to serve as an empirical study of insurer-specific conduct; it does not attempt to determine whether any particular company has engaged in cross-state subsidization; and it does not recommend or endorse any particular actuarial methodology for evaluating the actuarial soundness of rates. Such determinations are appropriately left to the professional judgment of the actuary, based on the specific facts, data, assumptions, and circumstances underlying each filing.

[1] "States" refers to all 56 NAIC member jurisdictions throughout the paper.

Accordingly, this paper should not be interpreted as concluding that insurer-specific cross-state subsidization is impossible or that empirical evidence could never support such a finding. Rather, the focus is limited to explaining how homeowners' insurance rates are regulated across states, with particular attention to safeguards that protect against cross-state subsidization of catastrophic losses.

I. What Is Homeowners Rate Regulation?

Homeowners rate regulation is the framework through which insurance regulators oversee the rates charged for homeowners insurance. It governs the filing and review of proposed rates, the actuarial support insurers must provide, the timing of rate implementation, and the regulator's assessment of whether rates are legal and not excessive, not inadequate, and not unfairly discriminatory. Although many insurers operate across multiple states, homeowners rates are regulated on a state-specific basis.

This section first describes the legal foundations of state-based insurance regulation, explains the core rate regulatory standards, and describes how market forces also impact homeowners rates.

A. State Rating Statutes and Market Regulation

Insurance regulation in the United States is conducted at the state level rather than the federal level. This decentralized structure traces its legal origin to the Supreme Court's 1944 decision in United States v. South-Eastern Underwriters Association, which held that insurance transactions crossing state lines constituted interstate commerce subject to federal regulation. Congress responded with the McCarran-Ferguson Act of 1945, which explicitly preserved the primacy of state regulation by providing that the continued regulation and taxation of the business of insurance by the several states is in the public interest, and that no act of Congress shall invalidate, impair, or supersede any law enacted by any state for the purpose of regulating the business of insurance.

Within each state, the legislature delegates primary regulatory authority over insurance to the Insurance Commissioner, Superintendent, or Director (collectively, the "commissioner"). That official, whether appointed by the governor or elected by the public, exercises broad authority over market entry and behavior, financial solvency, policy forms, and rates.

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The cornerstone of rate regulation in nearly every American jurisdiction is a three-part standard derived from the All-Industry Bills and later the *NAIC Model Rating Law*, which is adopted across all states with variations. Under this standard, insurance rates must be: (1) not excessive, meaning they do not result in unreasonably high profits or financial gains to the insurer; (2) not inadequate, meaning they are sufficient to cover expected losses and expenses and maintain insurer solvency; and (3) not unfairly discriminatory, meaning they do not differentiate among similarly situated risks without actuarial or otherwise justifiable basis.[2]

Each state legislature also defines the rate regulatory filing frameworks which reflect different calibrations of regulatory oversight of the rate filing process itself. These are broadly categorized as prior approval, modified prior approval, flex rating, file and use, use and file, and no file. See "Rate Filing Methods for Property/Casualty Insurance, Workers' Compensation, Title"[3] for definitions. This filing framework varies by lines of business within the state. Included in the architecture of rate regulation are the filing requirements, support of rates (actuarial justification), and review authority.

Rate regulation, as conventionally understood, involves the review of prospective rates that insurers propose to charge. Market conduct regulation addresses a different but complementary set of concerns: whether insurers are, in practice, treating consumers fairly in their claims handling, underwriting, marketing, and billing practices. Market conduct regulation ensures that consumers are being charged premiums in accordance with filed rates and, in coordination or consultation with actuaries, may assess whether rates are excessive, inadequate, or unfairly discriminatory.

Homeowners rate regulation is a customizable framework for evaluating whether the rates charged to consumers are justified, sustainable, and fair. That framework matters because homeowners insurance affects not only the private transfer of risk, but also household financial security, mortgage lending, and the stability of insurance markets. Regulatory oversight of rates, forms, underwriting practices, and market conduct provides a layered system of consumer

[2] See state laws for definitions that apply in each state. For example, some state insurance laws specifically prohibit risk classification based upon race, religion, etc.

[3] https://content.naic.org/sites/default/files/model-law-chart-pa-10-rate-filing-methods-for-property-casualty-insurance-workers-comp-title.pdf

protection that compensates for the limitations of consumer sophistication and the vulnerability of individual homeowners to market failure.

B. Homeowners Insurance and the Importance of Market Forces

Insurers consider competitive dynamics when they price homeowners insurance. Thus, the market can discipline homeowners insurance pricing. This works best when there are a large number of insurers active in the homeowners markets and consumers shop around for insurance. Competitive market dynamics are meaningful, but do not always work efficiently because homeowners insurance policies are complex, making comparison between companies difficult, and there are market disruptions such as when there is withdrawal of coverage in high-risk markets, insolvencies following catastrophic events, and persistent availability and affordability problems in coastal and wildfire-exposed regions. There may also be other issues such as areas with vacant properties and high crime rates. Thus, regulatory engagement is a complement to competitive markets in affecting rates for the consumers' benefit.

Competition remains an important discipline on prices, but homeowners insurance presents conditions in which market forces alone may not fully protect consumers, preserve availability, or ensure that rates remain adequate and fair. The next question is how that balance is implemented in practice: how insurers develop homeowners rates, how those rates are supported actuarially, and how regulators evaluate the data, assumptions, and methods underlying them.

II. How Homeowners Rates Are Built and Reviewed

This section turns to the mechanics of regulatory oversight. Homeowners rates are not arbitrary charges, nor should they be retrospective attempts to recover past losses. They are prospective estimates of the cost of providing coverage during a future policy period, supported by actuarial analysis and reviewed against applicable regulatory standards. The price paid for a homeowners policy provides the consumer with protection during the policy period, referred to as risk transfer, whether or not the policyholder has a claim. This is not a flaw of insurance pricing; it is the purpose of insurance. Rates are established before the outcome is known and are intended to fund the expected cost of coverage, the expenses of providing that coverage, the cost of capital and reinsurance needed to support the obligation, and a reasonable return for assuming the risk.

This section explains how those estimates are developed, how state-specific and broader data may be used, and how catastrophe risk and reinsurance are incorporated into the analysis.

A. Homeowners Insurance Rating

Homeowners Rating Overview

Homeowners insurance is a promise to cover uncertain future losses. The ultimate cost of an insurance policy is unknown at the time of sale, which complicates the pricing process[4]. As a result, the price consumers pay, referred to as the premium, is calculated based on the expected risk of loss to the home. The premium is an estimate of the future costs associated with transferring risk over the policy period. To support this estimation, insurers pool the risks of many policyholders, which allows losses to be financed by the premiums collected from many insureds. This results in diversification across risks and produces more stable outcomes.

A homeowners insurance premium generally includes provisions for expected losses, loss adjustment expenses, underwriting expenses, and profit and contingencies.

$$Premium = Expected\ Losses + Loss\ Adjustment\ Expenses + UW\ Expenses + Profit\ and\ Contingencies$$

For homeowners insurance, the largest component of the premium is the expected losses, also referred to as pure premium or loss cost. This is an estimate of the expected losses over a policy term. Historical loss data is typically used to estimate the expected losses of relatively high-frequency perils, such as fire or water damage. For lower-frequency but higher-severity events, such as hurricanes, wildfires, and earthquakes, insurers may rely on catastrophe models, as discussed in the catastrophe pricing in Section II. The premium is expected to cover future losses; thus, adjustments are made to the historical data to ensure it is predictive of future costs. Trending, the process of adjusting historical data to reflect expected future conditions, is one of the principal tools used in that process. Actuarial Standard of Practice 13[5] (ASOP No. 13), which is part of a comprehensive set of standards promulgated by the Actuarial Standards Board to govern ratemaking analysis, addresses trending procedures in property/casualty (P/C) insurance and states that actuaries can consider historical insurance and non-insurance data when

[4] https://www.casact.org/sites/default/files/old/studynotes_werner_modlin_ratemaking.pdf
[5] https://www.actuarialstandardsboard.org/asops/trending-procedures-propertycasualty-insurance-2/, Effective Date: Nov. 1, 2009.

estimating future expected values. In homeowners insurance, that is especially important because the cost to repair or rebuild a home may change materially between the historical experience period and the future period for which the filed rates are intended to apply. In addition to trending, actuaries adjust historical data for development (the maturation of claims over time) and on-level factors (the conversion of historical premiums to current rate levels).

Insurers also typically refine premiums based on characteristics of the home and the policyholder that are associated with differences in loss experience. These characteristics, known as rating factors, may include such things as the home's construction type, age of the home, geographical location, credit-based insurance score, , and roof type. For example, houses with clay tile roofs tend to be more fire resistant than houses with architectural shingle roofs, and thus usually receive lower premiums if all other characteristics are the same. When developing these rating factors, actuaries consider applicable actuarial standards, including ASOP No. 12[6], Risk Classification. All of the rating factors need to be supported by analyses showing differences in expected loss experience. In addition to expected losses, the premium should also cover the cost of adjusting claims and the expenses associated with issuing, servicing, and administering the policy. Additionally, the premium includes a provision for profit and contingencies, which reflects the need to support the business amid uncertainty. Actuaries consider applicable actuarial guidance, including ASOP No. 30[7], when developing such provisions. The level of that provision may be influenced by expected after-tax investment income and the return required on the capital supporting the insurer's operations.

Homeowners Rating Influences

Although the general actuarial methodology used to determine homeowners premiums is consistent across lines and jurisdictions, homeowners ratemaking is fundamentally state-based. Expected losses are usually derived from expected state experience and from the conditions affecting insured risks in that state, such as local peril exposure, geographic concentration of risk, construction characteristics, legal environment, and claims settlement patterns. However, this does not mean that every input to a homeowners filing is derived from purely local data or is

[6] https://www.actuarialstandardsboard.org/asops/risk-classification-practice-areas/, Effective Date: May 1, 2006.

[7] https://www.actuarialstandardsboard.org/asops/treatment-profit-contingency-provisions-cost-capital-propertycasualty-insurance-ratemaking/, Effective Date: Dec. 1, 1997

unaffected by broader market conditions. Some influences on the indicated rate level can extend beyond a single state, even where the filing itself remains state-specific. One example is repair-and-rebuild cost inflation. Homeowners claim severity is directly affected by the cost of labor, construction materials, transportation, and related rebuilding inputs, some of which can be affected by regional, national, and even worldwide conditions.

Another broader influence is reinsurance. Reinsurance is part of the mechanism through which insurers manage the impact of catastrophes on their enterprise solvency and, consequently, their ability to pay claims. Changes in reinsurance conditions can affect the cost structure underlying homeowners filings.

Broader inputs may also arise for other components of a homeowners rate indication. For example, underwriting expense provisions are often supported by company or countrywide analyses rather than a single state's experience alone. Likewise, where company-specific state data is limited, actuaries may supplement that experience with industry data and apply credibility-weighting[8], a technique that blends limited state data with broader experience to produce more reliable estimates of future loss and projected loss trends.

Given that insurance companies derive their profits from both underwriting and investment income, capital market conditions can also affect homeowners ratemaking. When anticipated investment income is projected to be high, companies often need lower future underwriting profits and vice versa. Higher expected after-tax investment returns can lead to the need for a lower profit provision in the ratemaking process, and ultimately lower rates.

In summary, homeowners rates are derived based on the expected future cost of losses and expenses associated with the insured risks in the state being rated, including catastrophe exposure where applicable. However, some inputs relevant to a state filing may be influenced by broader economic and insurance-market conditions, including rebuilding-cost inflation, reinsurance conditions, capital market expectations, nationwide expense analyses, and updates to catastrophe models. Regulators reviewing rate filings are expected to examine each element of the ratemaking analysis: the adequacy of the historical period; the credibility procedures used to blend the insurer's state-specific experience with other data or experience; the appropriateness

[8] ASOP No. 25 provides guidance concerning credibility procedures and relevant experience. The use of broader information does not eliminate the need for the selected data and resulting adjustments to be appropriate for the risks being rated in the state.

of the assumptions used to bridge from broader datasets to the specific risks of the state in question; the reasonableness of development factors; the appropriateness of trend selection (particularly in a period of rapidly changing loss cost environments); the justification for expense loads; the support for the profit provision; and more. A filing that relies exclusively on nationwide data without any state-specific adjustments, or that applies implausible adjustment factors, raises legitimate regulatory concerns regardless of the ultimate rate level requested. States vary in the depth and formality of this review, but the actuarial framework provides a common language for insurer submissions and for regulatory responses. Two of these influences, catastrophe risk and reinsurance, warrant closer examination because of their significance to homeowners ratemaking and their relevance regarding cost distributions across states.

B. Catastrophe Pricing and Reinsurance Implications in Homeowners Rating

Catastrophe Risk and Pricing

Catastrophe risk is one of the most important and most challenging components of homeowners insurance ratemaking. Catastrophe risk fits within that same prospective pricing framework described in the homeowners rating section but requires unique treatment because catastrophe losses are materially different from the types of losses that occur regularly and independently from house to house. A kitchen fire, theft, non-weather water loss, or isolated liability claim may affect one policyholder at a time. In contrast, a hurricane, wildfire, earthquake, tornado outbreak, hailstorm, or other event can produce concentrated losses across thousands of policyholders. That potential for concentrated losses creates pricing, capital, solvency, and reinsurance considerations that are not fully captured by traditional pricing techniques.

Catastrophe losses are not synonymous with all severe weather or other high-severity losses. Certain catastrophe perils, such as hurricanes, earthquakes, wildfires, and severe convective storms (SCS), are commonly evaluated using catastrophe models, although model availability and usage vary by peril and jurisdiction. Other weather-related or high-severity losses may instead be evaluated using historical experience, other models, scenario analysis, or a combination of methods. Accordingly, “severe weather,” “high-severity loss,” and “modeled catastrophe peril” should not be treated as interchangeable terms.

Because catastrophe losses may be relatively infrequent, severe, and spatially correlated, historical pricing techniques may be insufficient on their own for evaluating these perils. A state may not experience any major hurricane, earthquake, or wildfire losses during a five-, 10-, or even 20-year historical experience period, even though the risk of such an event remains material. Conversely, one or more unusually severe events may dominate a recent experience period and produce an estimate that is not representative of the long-run expected cost for the risk. ASOP No. 39[9]provides guidance to actuaries in evaluating catastrophe exposure and determining a provision for catastrophe losses and loss adjustment expenses in property/casualty insurance ratemaking. It defines a catastrophe as a relatively infrequent event or phenomenon that produces unusually large aggregate losses and defines catastrophe ratemaking procedures as procedures that adjust for catastrophe losses in experience data and determine a provision for catastrophe losses and loss adjustment expenses.

For these reasons, catastrophe risk is often evaluated separately from non-catastrophe homeowners losses. Non-catastrophe losses may be estimated using several years of historical claim experience, adjusted for trend, coverage changes, claim settlement practices, inflation, and other changes in conditions as described in the prior section. For catastrophe losses, historical data remain relevant but may be incomplete or insufficient because the historical period may not include the full range of possible events or may not reflect current exposures, building characteristics, property locations, and environmental conditions. For perils for which suitable models are available, catastrophe models are one commonly used method of addressing these limitations.

A natural catastrophe model is a computerized process that simulates many scientifically plausible catastrophic events and estimates their financial impact on a portfolio of insured properties. For commonly modeled perils, the catastrophe provision included in the overall indicated rate level in a homeowners rate filing may be based in whole or in part on the long-term expected annual cost generated by a catastrophe model. Other rate components, such as retained risk or reinsurance provisions, are also often based at least in part on catastrophe models.

[9] https://www.actuarialstandardsboard.org/asops/treatment-catastrophe-losses-propertycasualty-insurance-ratemaking/, Effective Date: Dec. 15, 2000.

Because catastrophe models are complex and rely on specialized scientific and engineering assumptions, their use in ratemaking requires judgment and review. Depending on the purpose and materiality of the model output, applicable actuarial standards, and jurisdiction-specific filing requirements, relevant filing support and regulatory review may address the specific model or models used, the exposure data entered into the model, the treatment of policy terms, the inclusion or exclusion of secondary perils (e.g., storm surge or wildfire smoke), demand surge, loss adjustment expenses, secondary uncertainty, the selection of model options, and any adjustments made to the model results. This list is illustrative, intending to show the importance of regulatory review of assumptions, and is not intended to suggest that every item is required in every filing by regulation or an ASOP.

Actuaries performing actuarial services involving catastrophe models should consult applicable standards, including ASOP No. 38[10], which addresses the selection, use, review, and evaluation of catastrophe models; ASOP No. 39[11], which addresses the treatment of catastrophe losses in property/casualty ratemaking; and ASOP No. 41[12], which addresses actuarial communications. As relevant under applicable filing requirements, regulators may also review the vendor model documentation, the insurer's use and validation of the model, as well as any rating factors, surcharges, or discounts that may have been informed by catastrophe model output.

The use of catastrophe modeling, when used appropriately, is consistent with the broader actuarial principle that rates should reflect expected future costs. ASOP No. 53[13] states that actuaries estimating future costs should select appropriate methods or models, use reasonable assumptions, consider adjustments for changes in conditions, and consider the treatment of catastrophes and reinsurance when those items are reflected in future cost estimates. For example, a home with materially greater wildfire, hurricane, earthquake, or SCS exposure is expected to incur greater losses than an otherwise similar home with lower exposure. Cost-based rating attempts to reflect these differences through rating variables such as territory, construction, roof characteristics, deductible, coverage, and mitigation discounts, among other factors.

[10] https://www.actuarialstandardsboard.org/asops/actuarial-standard-of-practice-no-38-revised-edition/, Effective Date: December 1, 2021.
[11] https://www.actuarialstandardsboard.org/asops/treatment-catastrophe-losses-propertycasualty-insurance-ratemaking/, Effective Date: December 15, 2007.
[12] https://www.actuarialstandardsboard.org/asops/actuarial-communications/, Effective Date: May 1, 2011
[13] https://www.actuarialstandardsboard.org/asops/estimating-future-costs-prospective-propertycasualty-risk-transfer-risk-retention/, Effective Date: August 1, 2018.

This risk differentiation is also tied to the regulatory standard that rates should not be excessive, inadequate, or unfairly discriminatory. In actuarial terms, unfair discrimination does not mean that all policyholders pay the same rate. Rather, it generally concerns whether differences in premiums bear a relationship to differences in expected losses and expenses. For catastrophe risk, rating factors such as location, roof characteristics, construction type, or mitigation are often appropriate when supported by data, catastrophe modeling, or other credible evidence showing differences in expected costs.

Cost of Reinsurance

Reinsurance is closely related to catastrophe pricing because catastrophe risk can threaten an insurer's surplus, profitability, and solvency. Reinsurance is insurance purchased by an insurer to transfer part of its risk to a reinsurer. In other words, it is often necessary for insurers to have reinsurance which allows them access to market capital in the event of a catastrophic loss. In homeowners insurance, catastrophe reinsurance often protects against losses on a per-risk basis, losses arising from an individual event or occurrence, aggregate losses over a defined period, or a blend of these structures.

The cost of reinsurance is ~~therefore~~ an actuarial ~~legitimate~~ component of the cost of providing homeowners insurance, though its inclusion in the price is subject to state insurance laws and regulations. ~~However,~~ When reinsurance is considered, reinsurance costs must be allocated carefully. Many insurers purchase reinsurance at a portfolio level rather than separately for each state. A single catastrophe reinsurance program may cover homeowners exposures in multiple states and may respond to losses from multiple perils which has the effect of diversifying the insurer's catastrophic risk. For purposes of allocating reinsurance cost to the states in the reinsurance program, it should not be interpreted that the cost should be spread evenly across all policyholders or all states. The actuarially sound approach is to allocate the cost in a manner that reflects the expected benefit and risk contribution of the business being rated. Relevant measures may include modeled catastrophe losses, expected reinsurance recoveries, contribution to reinsured layers, exposure distribution, premium, coverage, peril, and other risk characteristics.

Because the cost of reinsurance ultimately flows into homeowners rating, fluctuations in the cost of reinsurance can cause homeowners rates to change, particularly in catastrophe-exposed markets. The reinsurance market is global, with many reinsurers operating internationally to provide coverage for multiple insurers and risks. On a fundamental basis, reinsurance pricing is

risk-based, just as for primary insurers, and reinsurance protection is not unlimited. The market generally has limited capacity for taking on risk before reinsurance may become unavailable or unaffordable. Recent loss experience on a global scale can impact reinsurer profitability and short-term capacity. As such, seemingly unrelated catastrophe events can affect U.S. homeowners insurance rates. For example, if a major typhoon were to impact Japan, reinsurers would likely pay out on reinsurance contracts and potentially would have lower capacity in the following years to take on additional risk, even in the U.S. This constrained reinsurance market can drive general reinsurance costs upward, causing U.S. insurers to pay more for their reinsurance, and thus pass these higher costs on to their policyholders. While global events may impact the overall reinsurance market conditions and capacity, the reinsurance cost for an individual insurer's program remains specific to the risk characteristics of the underlying exposures.

Reinsurance also interacts with the profit and contingency provision and the cost of capital. Catastrophe-exposed homeowners insurance requires capital because actual losses can deviate substantially from expected losses. Reinsurance can provide an insurer with some relief from required capital by transferring tail risk, but it has a cost. Conversely, retaining more catastrophe risk may reduce reinsurance premium but increase required capital and earnings volatility. A rate indication should avoid double-counting by treating modeled losses, reinsurance recoveries, reinsurance premiums, retained risk, and profit or cost-of-capital provisions consistently. ASOP No. 53 specifically states that when reinsurance is reflected in future cost estimates, the actuary should select appropriate methods or models and reasonable assumptions for estimating the cost associated with expected reinsurance arrangements.

In summary, catastrophe pricing in homeowners insurance applies the same risk-based prospective ratemaking framework used for other homeowners costs, but with additional tools and considerations. Catastrophe models help estimate losses that are too infrequent, severe, and correlated to be measured reliably using only recent historical experience. Reinsurance helps insurers manage the volatility and capital strain created by those losses, and its cost is an appropriate part of homeowners premiums when it is actuarially supported and allocated in relation to risk and expected benefit. Together, catastrophe modeling, risk classification, reinsurance allocation, and capital provisions support the central ratemaking objective: premiums

should be an actuarially sound estimate of the expected future cost of the risk being transferred during the policy period.

III. What is Cross-State Subsidization?

A. Defining Cross-State Subsidization

It is important for researchers and others to define cross-subsidization. At the May 12, 2026, meeting of the Casualty Actuarial and Statistical (C) Task Force, Mike Goldman (Perr & Knight) identified three distinct claims of cross-subsidization. The first was residual markets, such as the Fair Access to Insurance Requirements (FAIR) plan and the Texas Windstorm Insurance Association, where costs are spread within the same state. The second was cross-state subsidization within national carrier portfolios. The third was a federal cross-subsidization through the National Flood Insurance Program (NFIP) and disaster aid, which can be analyzed with NFIP subsidies. This paper is only focused on the second type.

In theory, cross-state subsidization could be structural and systemic across the market or could be focused on an individual company's actions. For purposes of this white paper, the question is whether there is systemic cross-subsidization between states. Structural cross-state subsidization can be described as follows:

> Policyholders in one state systematically pay rates that are inadequate for their own expected costs while policyholders in another state pay more than their expected costs to offset it.

In order for **structural** cross-state subsidization to occur, two conditions need to be met:

1. **Market-Wide Distortion:**
   Structural cross-state subsidization is a market-wide phenomenon. If an individual company determines rates in a way that causes one state to subsidize another, and the subsidization exists only within that company's portfolio, that would likely not be considered ~~regulatory~~ structural cross-state subsidization (unless the insurer was of significant, material size). *(Note: This is still an issue regulators address; it just doesn't meet the definition of structural cross-state subsidization.)*

2. **Not-Actuarially-Justified Rates in Both States:**

> If rates in one or both states are determined to be actuarially justified, structural cross-state subsidization has not occurred. In a market that is structurally cross-state subsidized, one or more states would experience inadequate rates while other state(s) would experience excessive rates.

The above definition and Task Force charge focus on explaining how homeowners' insurance rates are regulated across states, with particular attention to questions regarding potential cross-state subsidization of catastrophic losses.

Because cross-state subsidization is central to the Task Force's charge, only scenarios involving subsidization are evaluated. Scenarios involving high rates in one or multiple states that do not involve inadequate rates in another state fall outside the definition of cross-state subsidization. If rates are excessive in one state but actuarially sound in another, the result is more appropriately characterized as excess profitability rather than cross-state subsidization. Cross-state subsidization requires a transfer effect in which policyholders in one state pay rates above their own expected costs to offset rates that are inadequate to cover expected costs in another state. Policyholders paying actuarially sound rates are not subsidized by policyholders in another state merely because an insurer earns higher profits elsewhere. Accordingly, scenarios in which policyholders are charged actuarially sound rates, even if an insurer earns higher profits in another state, are not considered cross-state subsidization under the framework contemplated by the CASTF charge.

Actuarial work inherently involves professional actuarial judgment, ranges of reasonable outcomes, evolving claims experience, and uncertainty. As discussed in Section III, Part B, Item 6 below, risk or experience in one state may, for legitimate actuarial reasons, affect the expected cost of providing insurance in another state without constituting structural cross-state subsidization. Whether such impacts are appropriate depends on their consistency with applicable actuarial standards and state law. Sometimes, actuarially justified scenarios may lead to the incorrect perception of cross-state subsidization.

B. Mischaracterizations of Cross-State Subsidization

There are numerous scenarios commonly mischaracterized as cross-state subsidization, including the following:

NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

1. Differences in Actuarial Assumptions and Methodologies from One State to Another State

Actuarially justified rates may reasonably differ state by state based on assumptions, credibility treatments, catastrophe loadings, trend selections, development methodologies, expense allocations, reinsurance strategies, or differing views of emerging risk conditions.

Rates in one state may reflect more conservative assumptions or greater provision for uncertainty than rates in another state, while both remain actuarially justified. Actuarial standards do not require uniform assumptions or outcomes across jurisdictions. Reasonable actuarial judgment may support materially different assumptions and levels of conservatism based on each state's unique risk profile, data characteristics, regulatory environment, and market conditions. Consequently, significant differences in indicated or approved rates between states do not, by themselves, imply that one state's rates are more actuarially appropriate than another's. Rather, the relevant consideration is whether the assumptions and methodologies used for each state are reasonable, adequately supported, and appropriate for that state's risks and circumstances.

2. Rate Filing Timing Differences and Non-Mandatory Rate Filings

In many jurisdictions, insurers are not required to submit a rate filing unless they are voluntarily revising rates. A company may choose to absorb year-to-year cost fluctuations rather than regularly adjusting rates. Similarly, a company may delay or sequence filings due to operational considerations, such as competing priorities and limited resources, or regulatory considerations, such as the anticipated time needed for review and approval. These timing differences may create temporary differences between indicated and implemented rate levels across states without the systematic transfer of costs from one state’s policyholders to another’s and therefore, do not constitute structural cross-state subsidization.

3. Mix of Business Considerations

Differences in rate change decisions across states may also reflect varying growth dynamics within an insurer’s portfolio, rather than structural cross-state subsidization.

When a book of business is experiencing rapid growth, insurers may elect to utilize more conservative pricing assumptions to account for uncertainty associated with changing

policyholder composition. Historical experience may also be less predictive for a rapidly growing book of business, as the risks being insured today may differ materially from those reflected in prior years' experience.

Conversely, a shrinking or more stable book of business may support less-conservative assumptions where the insurer believes the underlying risk profile is better understood or more predictable.

As new business enters or existing policyholders exit, the distribution of risks, geographic concentrations, coverage selections, or underwriting characteristics may shift in ways that reduce the predictive value of historical experience.

4. Regulator Disapproval of Rate Filings

Regulatory actuaries are tasked with reviewing a rate indication based on information provided in the rate filing to determine whether it complies with actuarial, legal, and regulatory standards.

Rate regulation is prospective in nature and evaluates whether the proposed rates are adequately supported under the applicable statutory framework and reasonably reflect the underlying risk.

Importantly, regulatory disagreement does not necessarily indicate that an insurer's proposed rates represent a significant departure from accepted actuarial practice. Reasonable actuarial and regulatory differences may arise even when all parties are operating within accepted actuarial and legal frameworks. Different actuaries may reasonably select different assumptions related to trend, credibility, expense provisions, catastrophe and reinsurance provisions, profit provisions or other relevant assumptions. Additionally, regulatory actuaries are highly familiar with the statutory requirements, market considerations, public policy objectives, approved actuarial methodologies, and other constraints unique to their jurisdiction.

In many cases, a regulator's concern may relate to the sufficiency of supporting data, the reasonableness of selected assumptions, the applicability of a methodology, or compliance with a statutory or procedural requirement unique to the jurisdiction. A filing disapproval may also reflect a determination that additional actuarial support or alternative actuarial treatment is necessary before the proposed rates can be approved.

Examples of situations that could result in filing disapproval without establishing that the proposed rates are not actuarially sound include circumstances where sufficient support was not provided, deadlines for submission of additional information were not met, or statutory and procedural requirements were not satisfied.

Insurance markets perform differently across jurisdictions. A rate that is actuarially sound in one state is often not actuarially sound in another state due to differences in laws, regulations, litigation environments, catastrophe exposure, consumer profiles, risk characteristics, and other market conditions.

The existence of a regulatory disagreement or filing disapproval should not be interpreted as evidence of cross-state subsidization. Rather, actuarial review is intended to help ensure that rates remain related to risk within the applicable jurisdictional and regulatory framework.

5. Credibility and Use of Non-State Data as the Complement of Credibility

A common challenge in ratemaking is determining the extent to which an insurer should rely on its own experience as compared to broader company, industry, or other supplemental data sources. Actuaries use credibility procedures to determine the appropriate weight to assign to a particular set of insurance data when developing rates. For example, a large insurer with many years of experience in a given state may receive high credibility on its own statewide data, while a smaller insurer or more niche program may rely more heavily on countrywide data or may rely on other benchmarks that are relevant to the product.

ASOP No. 25[14], titled “Credibility Procedures”, provides definitions for terms such as credibility, credibility procedure, full credibility, and relevant experience, among other concepts important to actuarial credibility analysis.

Credibility procedures are intended to balance responsiveness to actual experience with the statistical reliability needed to support stable and predictive rate indications. These procedures help reduce volatility and lessen the likelihood that isolated or short-term fluctuations disproportionately affect indicated rates.

[14] https://www.actuarialstandardsboard.org/asops/credibility-procedures/, Effective Date: May 1, 2014.

When an insurer's statewide experience is not considered fully credible under actuarial credibility procedures, the statewide experience may be weighted together with a complement of credibility, often referred to simply as the "complement". ASOP No. 25 discusses the importance of the complement reflecting relevant experience, including risk characteristics that are reasonably similar to the product being analyzed.

The complement of credibility may include experience from a broader geographic area or from an industry data source, when the insurer's own experience is not considered sufficiently credible. However, the purpose of a credibility-weighted complement is not to transfer costs from one state to another, but rather to improve the statistical reliability and predictive value of the rate indication. The actuarial appropriateness of a complement depends on whether the underlying data is considered relevant to the risks being evaluated, consistent with the principles described in ASOP No. 25.

Actuarial literature can be consulted for additional guidance regarding credibility procedures and selection of the appropriate complement.

Because professional judgment is required in determining the appropriate credibility treatment and selection of complement, insurer practices may reasonably differ depending on the circumstances and underlying data. Overreliance on broad averages may obscure meaningful emerging trends, while overreliance on limited experience may produce indications that are less predictive of future costs. Actuaries are expected to apply credibility procedures in a manner consistent with applicable actuarial standards and guidance, including the principles in ASOP No. 25 regarding the use of relevant experience and selection of an appropriate complement. Differences among insurers in the application of credibility procedures or selection of complements do not imply that either insurer's rates are not actuarially sound, nor do such differences, by themselves, establish the existence of cross-state subsidization.

6. Market-Wide Changes in Future Cost Estimates

Changes in rates may also result from evolving assessments of future risk and expected costs rather than cross-state subsidization. Rate indications are routinely updated to reflect new information, including changes in catastrophe models, reinsurance costs, loss

trends, rebuilding costs, litigation patterns, and other factors that affect expected future losses and expenses.

These changes are prospective in nature and are intended to estimate the future cost of providing coverage. Although such updates may result in higher indicated rates in one or more states, they do not represent a transfer of costs from policyholders in one state to policyholders in another state. Rather, they reflect revised assessments of the expected costs associated with insuring risks in the applicable jurisdiction.

A common mischaracterization of cross-state subsidization arises when a significant catastrophe in one state contributes to rapidly evolving market conditions that affect insurers' assessments of future risk across multiple states. Large catastrophe events may influence catastrophe model outputs, reinsurance costs, capital requirements, rebuilding cost assumptions, and other prospective ratemaking inputs. As a result, indicated rates may increase in jurisdictions that did not experience the loss event. Such changes generally reflect updated expectations regarding future costs and risks rather than a transfer of costs from policyholders in one state to policyholders in another.

IV. What State-Based Ratemaking Means for Consumers and Markets—Is there Cross-state Subsidization?

Section II explained how homeowners rates are developed and reviewed: as prospective estimates of expected loss, expense, catastrophe exposure, reinsurance cost, and other elements associated with the risk being insured. This section applies that ratemaking framework to a recurring question in public discussion: whether catastrophe losses in one state are being shifted into rates charged to policyholders in another. The answer requires distinguishing direct loss shifting from broader market effects. State-based ratemaking does not support the direct allocation of one state's catastrophe losses to another state's policyholders, but catastrophe events may still affect broader inputs such as rebuilding costs, reinsurance pricing, capital costs, and catastrophe model assumptions.

A. Catastrophe Losses and State-Based Ratemaking

A recurring theme in academic research, media coverage, and consumer advocacy is the concern that homeowners insurance policyholders in relatively low-risk states may be financially

subsidizing policyholders in states with high catastrophe exposure. These sources suggest that insurers spread catastrophic losses across their entire book of business, causing premiums in less disaster-prone states to rise to offset losses sustained in states like California, Florida, or Louisiana.

Several academic studies have examined insurer pricing behavior and rate-change patterns across states following major catastrophe events. Media investigations—particularly following the 2017–2018 California wildfire seasons, Hurricane Ian in 2022, and repeated hurricane seasons in Florida—have amplified these concerns, with reporting suggesting that consumers in other states are bearing costs attributable to coastal or wildfire-zone losses. Consumer advocacy organizations have similarly raised concerns that insurers are insufficiently transparent about cost allocations and that policyholders lack the information necessary to evaluate whether their premiums reflect local risk or a national pooling of catastrophic exposure.

These concerns deserve serious engagement. However, several important methodological limitations and industry structural features are frequently overlooked in both academic and media treatments of this issue and understanding them is essential to evaluating the subsidization hypothesis fairly.

B. How Insurers Deploy Capital and Reinsurance

While catastrophe pricing is state-specific, as discussed in Section II, insurers deploy capital and reinsurance on an enterprise-wide basis to ensure claims-paying ability regardless of where a catastrophe occurs. A national insurer writing policies in all 50 states maintains a single pool of surplus capital that supports its obligations everywhere and for every line of business it writes. When a hurricane causes billions in losses in Florida, the same surplus that backs policies in Ohio is drawn upon—if necessary—to pay those claims.

Additionally, capital supports the entire company and not just its homeowners' line of business. Most insurers do not write only homeowners' insurance policies, and those few that do rely very heavily on reinsurance because of the extreme risk associated with a monoline portfolio. Like the way carriers manage their adopted risk from policyholders by diversifying their exposure geographically, they also mitigate their risk by writing other types of insurance. Most homeowners' carriers will also sell a wide variety of property and casualty coverages including personal auto and personal umbrella policies. Furthermore, these same carriers may sell a wide portfolio of

commercial insurance products including commercial auto and property, plus commercial liability and workers' compensation policies. A carrier's surplus built up by underwriting and investment income associated with all these products is then available to them in the unlikely event of a catastrophic loss.

This enterprise-level capital deployment, however, is not equivalent to Ohio policyholders subsidizing Florida policyholders. The surplus is the insurer's own capital, contributed by shareholders and accumulated from retained earnings. It is the mechanism by which the insurer guarantees its financial promises; it is not a transfer of premium dollars from one state's policyholders to another's.

The reinsurance program layered above the insurer's retained risk functions similarly: reinsurance is purchased at the enterprise level, but its cost is allocated back to individual states based on the catastrophe exposure each state contributes to the reinsurance need. A state with low catastrophe exposure contributes less to the reinsurance cost allocation and, therefore, should have a smaller reinsurance load in its rates.

Different layers of reinsurance protection serve different purposes. Per-risk or per-occurrence excess-of-loss treaties respond to large single-event losses. Aggregate covers respond to the accumulation of smaller losses over a policy period. Catastrophe bonds and other capital market instruments provide additional protection against tail events. The cost of each layer is reflected in state-level rates in proportion to the catastrophe exposure that creates the demand for that layer of protection.

C. What Pooling Does (and Does Not) Mean

Insurance is, by design, a pooling mechanism. A homeowners insurer pools the risks of many policyholders so that the losses of the few are spread across the premiums of the many. This within-state pooling is the core economic function of insurance and is what makes coverage affordable for individual policyholders who could not self-insure against a catastrophic loss.

Cross-state pooling within a national insurer operates on a different principle. The insurer is not pooling the catastrophe losses of State A and State B policyholders together and averaging the cost across both groups. Rather, the insurer is pooling the uncertainty about whether State A losses will be higher or lower than expected, against the uncertainty about whether State B losses will be higher or lower than expected. The insurer benefits from the fact that these two sources of

uncertainty are not perfectly correlated. The economic benefit of this diversification accrues primarily to the insurer's shareholders in the form of reduced capital requirements and to policyholders in the form of improved insurer financial stability; it does not translate into State B policyholders paying for State A losses.

D. Indirect Effects: How Catastrophe Losses May Affect Rates Elsewhere

While direct cross-state premium subsidization does not occur through normal ratemaking, there are legitimate indirect pathways through which a catastrophe in one state can affect premium levels in other states, and these indirect effects are important to acknowledge.

The most significant indirect effect operates through supply chain economics. Following a major catastrophic event, such as a hurricane, wildfire, or flood, the demand for building materials, skilled labor, and construction equipment surges in the affected region. Lumber prices, roofing material costs, drywall, and structural components all experience sharp price increases, driven by both genuine supply constraints and demand concentration in the affected area. These elevated material costs do not remain geographically confined. A homeowner in Indiana filing a non-catastrophic claim, such as a burst pipe, a fallen tree, or a kitchen fire, may find that the cost of repairs has risen meaningfully because the same lumber being used to rebuild Gulf Coast homes is now more expensive everywhere. Insurers writing homeowners policies across the country may experience increased claim severity in all states following a major catastrophe, and this elevated severity can feed into the loss experience used to support future rate changes nationwide. This is a real, quantifiable, and economically rational indirect linkage between catastrophe losses in one state and premium levels in others, and it deserves recognition in the research literature as a legitimate channel distinct from, and not confused with, direct subsidization.

Catastrophic events can also affect reinsurance pricing globally. A particularly severe hurricane season or a large wildfire loss may increase reinsurance costs for the subsequent policy year, and those increased costs are reflected in rate filings across all states that purchase catastrophe reinsurance — even states that were not directly affected by the event. This is not to compensate reinsurance carriers for losses sustained in a prior event; rather, the severe event serves as an additional data point that could cause reinsurers to adjust their predictions of future loss.

As with the rebuilding-cost effects discussed above, this is a market-driven indirect effect, not a regulatory or actuarial mechanism for cross-state subsidization.

Finally, catastrophes provide the opportunity for models to be updated for what is learned about resiliency. Insurers and third-party modelers may calibrate rating values associated with certain types of construction, roof materials, mitigation efforts, etc., and use the revised discounts and factors throughout the country.

E. Could Companies Hide Cross-State Subsidization?

A more sophisticated version of the cross-state subsidization hypothesis asserts that even if rate filings are state-specific, insurers might use the flexibility within ratemaking to shift value between states in ways that are difficult for regulators to detect. For example, an insurer might inflate the profit provision in low-catastrophe states to build a surplus that effectively offsets losses in high-catastrophe states. Or an insurer might systematically understate the catastrophe load in a high-exposure state by using older, less sensitive catastrophe models, while compensating with higher expense loads in other states.

The Center for Insurance Policy and Research (CIPR) performed a qualitative analysis of rate filings to explore the hypothesis that carriers are subsidizing catastrophic losses incurred in one state with higher rates in another state. If the hypothesis were true, the expectation is rate filings would either 1) directly include out-of-state catastrophe losses in the development of the indicated rate need or 2) indirectly increase the indication by changing methodology (e.g. using more conservatism) after catastrophic loss in another state. The analysis, while qualitative and limited in scope, did not support the hypothesis that carriers are raising rates in one state to support losses in another state.

Minnesota Hail Event: Found No Effect on Iowa Rates

For example, in 2017 there was a hail event (part of a June Derecho) in Minnesota. Iowa rate filings were examined for some companies writing insurance in both Minnesota and Iowa. No Minnesota loss data (or any other out-of-state losses) were reflected in five Iowa rate filings prior to Derecho and six after Derecho. Rate provisions and methodologies were also reviewed to test for any indirect cross-state subsidization via selection of more conservative factors or changes in methodology intended to yield a higher indication in the post event filings.

The methodologies and provisions reviewed were: 1) Indication methodology: number of years of experience, weighting of years; 2) Loss and Trend: development and selection of; 3) Catastrophe provision development including which CAT models were used; 4) Reflection of reinsurance; 5) Development of underwriting profit and contingencies provision; 6) Other expense development; 7) Indicated vs proposed rates; 8) Credibility methodology and the selected complement of credibility; 9) Premium Trend; and 10) Other factors (e.g., Large loss procedure that may be impacted by out-of-state losses). No methodology changes were observed that would indicate an indirect allocation of losses from the catastrophe events into Iowa rate indications. "Indirect effects" such as reinsurance costs, countrywide expenses or profit provision selection did not appear to be affected by the experience of out-of-state losses. When indications were higher in the post period, the driver was an increase of in-state losses or loss trends. Changes observed were due to companies having more internal experience to rely on, updates to catastrophe models, updated factors such as profit provisions, or other methodology changes that adhere to standard actuarial principles.

With changes to profit provisions, carriers maintained a consistent methodology to develop their profit provisions, but some updated inputs such as the rate of return, which resulted in small changes in the underwriting profit. In some cases, the underwriting profit provision increased from pre-to-post event filings. One carrier increased their profit provision from 6% to 7%. In some cases, the underwriting profit provision decreased: one carrier decreased its profit provision from 7.2% to 5.4% and another from 7% to 5%.

Regarding methodology changes, one company changed its credibility procedure which resulted in a small increase in the credibility attributed to its own statewide data; the complement of credibility was applied to a trended permissible loss ratio (not to loss experience from other states).

Hurricanes Harvey & Irma and 2018 California Wildfires: Found No Effect on Virginia Rates

Using the same methodology, four Virginia rate filings were studied before and four after the hurricanes Harvey & Irma in 2017 and eight filings before and eight after the 2018 California wildfires (7/23/18-8/30/18). Findings in the Virginia rate filings were consistent with the findings from the review of Iowa rate filings: There were no out-of-state losses included in any of the rate filings in Virginia. There were no methodology changes or rate provision selections that would indicate an indirect allocation of loss experience from the catastrophes to Virigina.

While these are only two limited scope case studies, CIPR has not found support for the subsidization hypothesis. Analyses of profit provisions, expense ratios, and loss ratios across states have not revealed the systematic patterns that would be expected if insurers were deliberately routing value from low-catastrophe to high-catastrophe states. This does not foreclose the possibility that individual insurers in specific circumstances might engage in such behavior. ~~, but t~~The available evidence from the CIPR study does not support~~, is not consistent with~~ cross-state subsidization as a widespread or systematic phenomenon.

F. How Evolving Catastrophe Models Affect the Debate

One final dimension that is essential to understanding the cross-state subsidization debate is the evolution of catastrophe modeling. Insurers and their actuaries rely on probabilistic catastrophe models to estimate the expected losses from hurricanes, wildfires, earthquakes, and other catastrophic perils. These models, developed and maintained by specialized vendors and insurers, translate meteorological, geophysical, and engineering science into probabilistic loss distributions for any portfolio of insured properties.

Catastrophe models have changed significantly over time, and the transitions between model generations can create large changes in rate levels. When a major vendor releases a new version of a hurricane model that substantially increases estimated loss costs for Gulf Coast exposures, insurers using that model will file for rate increases in the affected states. The timing and magnitude of those increases may differ across insurers depending on when they transition to the new model, how much credibility they give to the model versus their own historical data, and how their reinsurance programs respond to the updated loss estimates. A researcher observing this pattern without knowledge of the model transition might incorrectly attribute the rate increases to a redistribution of costs rather than to an improved scientific understanding of the underlying peril.

The practical implication for the subsidization debate is that large, sudden shifts in catastrophe-state rate levels, particularly following a major loss event or a model update, do not indicate that prior rates in those states were subsidized by other states. They indicate that the industry's understanding of the catastrophe risk has changed, and that rates are being updated to reflect that improved understanding. The absence of prior rate increases does not mean policyholders elsewhere were overpaying; it may mean that the risk was systematically underestimated by the best available models at the time.

G. Important Methodological Considerations for Researchers and Media

It is worth flagging several recurring misconceptions that appear in research and reporting on this topic, because they can significantly distort conclusions about cross-state subsidization.

1. Rate Filings Are Not "Exact Rate Needs."

A rate filing reflects an indicated rate need and the proposed rates. Actuarial rate indications involve projecting future (unknown prospective) losses and expenses from historical data using loss development factors, trend factors, and catastrophe load adjustments, and other factors—all of which carry significant uncertainty. The "indicated rate change" in a filing is meant to be a single point estimate within a range of reasonable estimates. No actuary, regulator, or researcher knows with certainty how many claims will occur in a future policy period, or what those claims will cost. After-the-fact comparisons of predicted losses to actual losses do not establish that charged rates were excessive or inadequate. The nature of catastrophes alone renders such comparisons moot; a pricing environment that would react each year to the catastrophes that did or did not occur in the year prior would lead to enormous rate swings that would be not only actuarial unsound but also harmful to consumers.

2. Claim Count Definitions Vary Across Insurers and Datasets.

Comparisons of claim frequencies across companies or states often encounter the problem that insurers define and count claims differently. Some insurers record a claim for each person injured, each site damaged, each coverage affected, etc. Zero-payment claims (opened and closed without indemnity, such as claims below the policyholder deductible or not caused by a covered peril) may or may not be included in reported counts. Researchers using industry databases or statutory filings should account for these definitional differences, as unadjusted comparisons can produce false or misleading conclusions about relative loss frequency and severity, or average claim amounts.

3. The Indicated Rate vs. Rate Received: A Critical Assumption.

Much of the academic literature on cross-state subsidization implicitly or explicitly assumes that the indicated rate need in a filing, represents the true economic cost of risk in that state, and that any gap between the indication and the filed and/or approved rate must be recovered elsewhere, including (potentially) from policyholders in other states.

This assumption does not withstand careful examination. First, as previously described, the rate indication in a filing is but one point estimate among a range of reasonable estimates, a range that is likely to include the proposed rate level when it deviates from the filed point estimate indication. Second, even very large insurers write only a small fraction of the policies in any given state. An insurer whose indicated rates are outside the range of their competitors has to consider whether their estimates are missing the mark. State insurance regulators should be skeptical as well. The impacts of going to market at rates that are too competitive or not competitive enough can be catastrophic. An insurer that charges uncompetitive rates could start an adverse selection spiral that ultimately results in the failure of the product and its withdrawal from the market. Needing to account for adverse selection risk in one state but not another does not mean one state's policyholders are subsidizing the other's.

4. Catastrophe Pricing Is a State-Level Construct.

A foundational principle of property insurance pricing, and one that is frequently misunderstood in cross-state subsidization discussions, is that catastrophe loss costs are estimated for the state where they are expected to occur. California wildfire claims experience does not enter the rating calculation for a homeowners policy in the Midwest. Each state's rate level is derived from that state's own expected loss experience, adjusted for trend and development (among other things), with catastrophe loads built from catastrophe models calibrated to the geographic exposures within that state. State insurance regulators enforce this principle by requiring that rates be filed and justified on a state-specific basis.

Confusion arises because state insurance rating laws may allow insurers to use both state-specific and other data, such as regional or nationwide data. In practice, an insurer will use state-specific data to the extent it is credible and will supplement it with other credible, relevant information where needed. To be "relevant," that data must be a reasonable estimate of expected losses and expenses for the policies to be written in the state.

This distinction is especially important for catastrophe risk. Updated catastrophe models may incorporate new scientific understanding, new claims information, changes in exposure, or changes in environmental conditions that affect more than one state. For

example, a major hurricane in Florida may reveal that certain types of structures perform more poorly than expected, or that loss amplification effects are more significant than previously understood. Though these findings came from experience in Florida, hurricane catastrophe models used across the entire Atlantic coast will be updated to reflect these new learnings, which could impact rates in all states with hurricane risk. While this may appear at the surface to be cross-state subsidization, there is a distinct difference: this is not insurers using out-of-state losses to increase rates (cross-state subsidization), but rather a best practice of using the latest science – catastrophe events in other states that may teach insurers, modelers, and regulators something new about the risk that is relevant to other states exposed to the same peril.

When it comes to certain parts of the insurer's rating plan, such as determining the rates for customers based on their individual risks, insurers are encouraged to use their most credible data, which may include nationwide or regional information on issues such as how fire damages buildings, what roofing materials perform best when neighborhoods burn, etc. When discussing state cross-subsidization, it is the overall indication by coverage or peril that is most relevant and the overall indication is a state-based number. A filing that attempted to recover California wildfire losses through Midwest premiums would be actuarially unsound and unlikely to survive regulatory scrutiny. The regulatory architecture of state-based insurance oversight, therefore, provides a structural barrier to the kind of direct cross-state subsidization that researchers and media often allege, while still allowing insurers and regulators to recognize credible, relevant scientific information that improves the assessment of catastrophe risk within each state.

5. Actuarial standards play an important role in insurance pricing.

The vast majority of property and casualty insurance companies use credentialed actuaries to determine pricing. Those actuaries are bound by professional standards and a Code of Conduct and are subject to discipline if they depart materially from those expectations of professionalism. The standards provide guidance about how actuaries should provide a rate that is the expected value of all future costs associated with an individual risk transfer. Precept 8 of the Code of Professional Conduct specifically states that an actuary "shall take reasonable steps to ensure that such services are not used to mislead other parties," which can include regulators. Deliberate implementation of cross-

state subsidization while developing rates would be in violation of the ASOPs and actuarial principles which may constitute a violation of the Code of Professional Conduct. Such violations could lead to disciplinary review and/or action by the Actuarial Board for Counseling and Discipline (ABCD).

For homeowners insurance, actuaries are not required to provide an attestation as to the appropriateness of rates. However, the actuarial standards are still used by regulators as the expected standard for ratemaking.

6. Refer to the CIPR website for considerations when using insurance data.

This section has distinguished the direct allocation of catastrophe losses from the broader market effects that may influence homeowners rates. That distinction matters because it shows why rate regulation must both recognize genuine cost pressures and require that those costs be reflected through supported, risk-based, and reviewable ratemaking. Section II places that role in the broader architecture of homeowners insurance regulation: a layered system designed to protect consumers, preserve market stability, and maintain actuarial discipline.

The longstanding statutory standard that insurance rates shall not be excessive, inadequate, or unfairly discriminatory provides a rich foundation for future research in insurance rate regulation, including more in-depth study of cross-subsidization and numerous other topics. Building from this white paper, research could examine catastrophe exposure, model updates, and proper use of the models; reinsurance practices; insurer capital allocation; market competition; company filed rate changes vs. implemented rate changes; target underwriting profit provisions vs. historical profitability, and more.

V. Conclusion: Rate Regulation as Layered Consumer Protection

Rate regulation is a calibrated system that supplements the competitive market forces that exist in most states with regulatory oversight proportionate to the degree of market imperfection and the magnitude of consumer vulnerability.

The architecture of state-based regulation described in Sections I through IV, with its uniform three-part legal standard for insurance rating, delegation of authority to state insurance commissioners, and diverse rate filing requirements, and with a complement of market conduct oversight, reflects the accumulated wisdom of more than a century of insurance regulatory experience.

Rate regulation can and should ensure that cost trends are accurately measured, that actuarial justification is genuine, that unfair discrimination is absent, and that insurers are not exploiting information asymmetries or market concentration to extract excessive profits.

Present regulatory needs include attention to using sophisticated actuarial staff (as rate filing models and support continue to get more complex) and effective market monitoring. The engagement of the actuarial profession, through its standards, its certifications, and its independent professional obligations, is indispensable to the integrity of the rate regulatory process. Actuaries who conduct rate indication analysis in rate filings occupy a position of public trust and professional obligation, and the regulatory system depends on the actuarial community's commitment to honest, rigorous analysis as a foundation for sound ratemaking.

The homeowners insurance market faces significant challenges in the years ahead, from increasing catastrophic disasters to rising replacement costs to the evolving legal environment. Rate regulation, when properly designed and effectively administered, will remain an important tool for ensuring that these challenges are met in a manner that protects consumers, maintains market stability, and preserves the availability of coverage that protects the most important financial asset most American families will ever own.

The goal of property and casualty ratemaking is to predict the rates that need to be charged on a specific cohort of insurance policies that will be written in the future. The application of appropriate actuarial practices and techniques ensures that those rates are adequate, but not excessive or unfairly discriminatory for covering the expected losses and expenses on those policies, while also allowing for a reasonable return for the risk undertaken. Ratemaking is inherently a prediction of unknown future values. To the untrained eye, a year with few severe storms and catastrophic events might make it seem as if the rates were excessive. And a year with many severe storms and catastrophic events might look like the rates were inadequate. But the ratemaking process accounts for such random fluctuation and prices to the expected frequency of, and claim values associated with, these events in any given year.

Insurers typically use their own state-specific experience to the extent possible for ratemaking purposes. But that experience often needs to be supplemented with additional information to make credible predictions about future losses and expenses on policies that haven't yet been written. This supplemental information can include catastrophe models, other insurers' experience and their rates, experience and statistics made available by advisory and rating organizations, and regional or even countrywide experience and statistics. However, it is important to understand that supplemental information must be adjusted and used only to the extent that it helps predict expected losses and expenses on a specific set of policies in a specific state that will be written in the future. An insurer that would attempt to charge excessive rates in one state to make up for inadequate rates in another would be in violation of state insurance laws and their actuaries would be in violation of actuarial standards of practice. Complaints about the insurer's actuaries (e.g., submitted by state insurance regulators) to the Actuarial Board on Counselling and Discipline could result in professional discipline, up to and including the revocation of their credentials and ability to practice. The insurer's proposed rates would be subject to regulatory scrutiny, and the insurer would likely fail to meet their business objectives.

Property and casualty insurance ratemaking is a complex endeavor undertaken by professionals with standards of practice governing their work. Those studying the actuarial soundness of insurance rates, and effectiveness of state-based rate regulation, would produce more accurate and beneficial research by meeting with state insurance regulators to discuss their methodology and findings as part of their research and in advance of publishing any reports.

Finally, the authors recognize this paper does not conclusively prove that no cross-state subsidization exists between policyholders in any states. That would require significant additional study well beyond the scope of the charge given to the Task Force which produced this paper. Instead, this paper describes the plethora of safeguards in place that ~~serve~~ are designed to prevent cross-state subsidization from occurring.

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Nevada DOI Comments on the NAIC Draft White Paper on Home Insurance Rate Regulation

August 5, 2026

Thank you for the opportunity to comment on the NAIC's draft white paper addressing home insurance rate regulation and the question of potential cross-state subsidization. I appreciate the significant effort invested in assembling the draft paper's overview of regulatory frameworks, actuarial standards, catastrophe modeling, and market dynamics. However, after reviewing the draft in detail, I offer the following substantive critiques and recommendations aimed at strengthening the paper's analytical rigor, empirical grounding, and clarity.

1. The Paper Frequently Assumes Its Central Conclusion Without Empirical Support.
Throughout the draft, assertions are made that cross-subsidization "often stems from misunderstanding" or "is not occurring," yet these conclusions are reached *prior* to any systematic, multi-state empirical study. Much of the current argumentation relies on theoretical descriptions of how the regulatory system is *intended* to function rather than how it *does* function in practice. A rigorous paper should not presume its conclusion but instead evaluate evidence for how often insurers ***attempt*** cross-subsidization and how often regulators ***successfully block*** such attempts.

2. Insufficient Attention to the Frequency and Nature of Attempted Cross-Subsidization
Even if regulatory systems constrain cross-subsidization, that does not address how frequently insurers attempt it, especially following well-publicized disasters. The paper repeatedly describes mechanisms intended to prevent cost-shifting but does not acknowledge that insurers may still try to engage in such behavior, sometimes in subtle ways, through actuarial assumptions, model configurations, or expense allocations. Empirical research is needed to assess the frequency with which regulators detect and mitigate such attempts.

3. Overly Restrictive Definition of "Structural Cross-Subsidization"
The paper defines cross-subsidization as requiring both inadequate rates in one state and excessive rates in another. This definition is too narrow and excludes practical, real-world avenues through which cross-subsidization may occur even when all rates are technically adequate. Insurers may seek above-market returns on their national portfolios by targeting certain states for rate increases masked within actuarial assumptions, even if rates are not strictly inadequate elsewhere. The definition should be broadened to include attempts to redistribute losses or build surplus differentially across states.

4. Competitive Market Pressures Are Not Uniformly Effective.
While competition is cited as a counteracting force against excessive pricing, the paper does not sufficiently consider insurers that may *prefer* to limit growth in certain states or follow "market leaders" toward greater rate increases, even when their own data do not justify such increases. Some insurers explicitly seek to raise rates to match competitors rather than compete on price or service. This behavior undermines the notion that market pressures always discipline insurer pricing.

5. Credibility Procedures Can Import Catastrophe Experience from Other States.
Credibility weighting is presented as neutral, but it can unintentionally "smuggle" catastrophe

experience from high-risk states into low-risk states—particularly when statewide data are deemed not credible due to low claim volumes. The paper should explicitly address how complements of credibility or countrywide loss trends may embed cross-state catastrophe effects unless safeguards are implemented.

6. Catastrophe Models Can Be Misapplied or Miscalibrated Across States.
The paper presumes that catastrophe models, and especially updated models, necessarily reflect an "improved scientific understanding." This assumption is unwarranted. Models can contain inadvertent biases, rely heavily on data from catastrophe-prone states, or be configured by insurer users in ways that inflate risk in other, less catastrophe-prone jurisdictions. Regulators must scrutinize these models rather than assume that newer equals better. The paper should explicitly acknowledge model uncertainty and the possibility that misapplication may lead to *de facto* cross-subsidization.

7. Reinsurance Cost Allocation Can Be Overly Simplified and Lead to Cross-State Burdens.
Although the paper asserts that reinsurance costs are allocated by risk contribution, in practice many reinsurance treaties cover "all other states" except a few outliers (e.g., California, Florida, New York). This creates potential for simplistic or inaccurate allocation of reinsurance loads, disproportionately burdening lower-risk states. Empirical evidence—not theoretical assertions—is needed to demonstrate that insurers are allocating reinsurance costs appropriately by state.

8. Claims of "No Effect" in Limited Case Studies Are Not Generalizable.
The two case studies cited (Minnesota/Iowa hail, Virginia filings after California wildfires and Hurricanes Harvey/Irma) cover a small number of filings in just a handful of states, and only for disaster events in 2017–2018. They do not meaningfully represent "industry-level evidence." A more relevant analysis would examine insurer rate proposals *in all states* following major disasters such as the 2025 Los Angeles wildfires. Broader, multi-year, multi-insurer studies are necessary to substantiate the paper's conclusions.

9. Greater Emphasis Is Needed on Real-World Regulatory Constraints.
The paper asserts that cross-state subsidization "would not survive regulatory scrutiny." A more realistic statement is that it *should not* survive scrutiny. Regulators in some states lack full prior-approval authority, may face resource constraints, or may experience political pressure. These vulnerabilities should be acknowledged. Market-conduct oversight or competition also only discipline insurers that care about retaining business in a given state in the first place.

10. The Paper Should Highlight Regulators' Protective Work Rather Than Presume No Problem Exists.
A more constructive approach would be to document the specific ways regulators have prevented excessive or unfairly discriminatory rate increases—rather than assuming cross-subsidization does not occur. Demonstrating how regulators protect consumers, including examples where they have moderated excessive proposals, would confer credibility and practical value to the paper.

11. "Homeowners Insurance" Is Not a Grammatically Correct Term and Should Be Replaced.
Potential grammatically correct replacements would be "Homeowners' Insurance", "Homeowner

Insurance", or "Home Insurance". The term "Homeowners Insurance" is both grammatically incorrect (plural possessive nouns need to end with an apostrophe) and also incorrect in substance (as, without the apostrophe at the end, the implication is that homeowners are the peril being insured against, rather than the policyholders and beneficiaries of the insurance).

I use "home insurance" in place of "homeowners insurance" in my markup. The reasons why I prefer this term among the three are that **(i)** its use could bypass the differences between the NAIC publication conventions and long-established English grammar in regard to the use of the apostrophe; and **(ii)** not all products to which this paper is relevant provide insurance to *owners*. For instance, tenants' or renters' insurance could also potentially be subject to cross-subsidization concerns in certain parts of certain states.

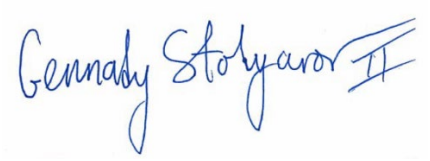
Conclusion

The NAIC draft would be significantly strengthened by incorporating empirical research, expanding the definition of cross-subsidization to reflect some actual observed insurer behavior of concern, acknowledging the vulnerabilities present in catastrophe modeling and credibility-weighting approaches, and more fully recognizing regulatory constraints that may permit attempted cross-subsidization to surface.

The purpose of rate regulation is to ensure that rates are not excessive, inadequate, or unfairly discriminatory. Achieving this requires vigilance—not assumptions—regarding how "additional information" and actuarial flexibility can be used in ways that unintentionally or deliberately shift costs across states. A more empirical and less presumptive treatment of these issues will offer greater value to regulators, policymakers, and consumers.

I appreciate the opportunity to contribute these comments and welcome further discussion on how the paper might evolve to address these concerns.

Respectfully submitted,



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6/26/2026

NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

U.S. Homeowners Insurance Rate Regulation–A Regulatory Perspective

Regulation, Consumer Protection, and Market Dynamics in the Modern Era

Casualty Actuarial and Statistical (C) Task Force

2026

Executive Summary

Imagine a hypothetical where a multi-state insurer tries to charge more premium to homeowners in a state with lower risk of natural disasters to make up for heavy losses in a state with higher risk. This paper addresses this scenario, commonly referred to as "cross-subsidization" and concludes that, under the state-based system of insurance regulation, home insurance rates are designed and reviewed to reflect the expected future cost of risk in the state where the policy is written, not to shift costs from one state's policyholders to another's.

State insurance regulators protect consumers by requiring insurers to justify rates with state-specific data and actuarial analysis. Although the regulatory framework varies by state, insurance rates are generally subject to standards requiring that they not be excessive, inadequate, or unfairly discriminatory. Actuaries evaluate data, assumptions, and methods used to estimate future losses, including inflation, catastrophe risk, and reinsurance costs to ensure alignment with actuarial standards. Regulators also oversee how insurers classify risk, ensuring that differences in price are tied to real differences in risk and are not arbitrary or unfair.

Under existing regulatory frameworks in the United States, cross-subsidization is constrained by laws, actuarial standards, and markets.

So how would those legal, actuarial, and market challenges play out in the real world for our hypothetical multi-state insurer attempting cross subsidization?

Commented [GS1]: This should be "Homeowners' Insurance", "Homeowner Insurance", or "Home Insurance". The term "Homeowners Insurance" is both grammatically incorrect (plural possessive nouns need to end with an apostrophe) and also incorrect in substance (without the apostrophe at the end, the implication is that homeowners are the peril being insured against, rather than the policyholders and beneficiaries of the insurance).

I will use "home insurance" in place of "homeowners insurance" in my markup. The reasons why I prefer this term among the three are that (i) its use could bypass the differences between the NAIC publication conventions and long-established English grammar in regard to the use of the apostrophe, and (ii) not all products to which this paper is relevant provide insurance to owners. For instance, tenants' or renters' insurance could also potentially be subject to cross-subsidization concerns in certain parts of certain states.

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Commented [GS2]: Whether cross-subsidization is constrained by these influences (and good arguments can be made that it indeed could be) does not address the question of whether such cross-subsidization is *attempted* by insurers on a widespread basis. If certain insurers attempt cross-subsidization after natural disasters but are stopped from fully realizing their plans by a combination of regulatory and market forces, then this is a phenomenon worthy of study, and considering it more explicitly could highlight the value that regulators provide in protecting homeowners and other insureds against excessive premium increases.

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First, insurers must support their home insurance rates with state-specific data and actuarial analysis showing that the rates reflect the expected future cost to cover insured homes in that state.

Regulators review rate filings to identify anything unsupported or inconsistent with the state's actual risk and can challenge the rate, require revisions, or reject the filing altogether. Depending on the state, this process can happen before and/or after the rates go into effect. If an insurer inflates rates to account for losses in another state, it will show up in this review in inflated loss projections, excessive catastrophe loadings, or unsupported expenses.

Regulators look for mismatches between the risk in the state and the costs built into the rate. For example, if an insurer tried to hide cross-state subsidization by charging certain groups more without a risk-based reason, that would likely be deemed excessive or unfairly discriminatory and disallowed.

Second, oversight continues after rates take effect. Follow-up spot checks by regulators to verify insurers are treating their customers fairly and help ensure insurers are actually charging the filed rates, not deviating from what was approved. Even if a rate filing is approved, companies could misapply rating factors, overcharge specific consumers, or use unfiled surcharges. Market conduct exams can catch those real-world deviations and protect consumers by, for example, requiring refunds to consumers, imposing fines or penalties, or requiring changes to rating practices. When a state takes regulatory action against an insurer as a result of a market conduct exam, it notifies regulators in other states where that insurer does business.

Third, competitive market pressures act as a backstop. Insurers that price above the risk of the market *in that state* will lose business to competitors *in that state*, making it difficult to sustain rates that are artificially high.

These safeguards help explain why claims of cross-subsidization often stem from a misunderstanding of how the regulatory system operates. Premiums are forward-looking estimates of future costs, not a way to recover past losses, and differences across states can reflect local risks, timing, data limitations, or broader economic factors like inflation and reinsurance, not cross-state cost shifting. While major disasters *can* affect costs nationwide indirectly by raising rebuilding costs due to higher costs of materials and labor, or reinsurance prices, those are market-wide effects, not insurers shifting losses from one state to another.

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Commented [GS3]: This is quite correct. I think that one intent of many of the authors of this paper is to highlight the ways in which effective rate regulation can serve as a safeguard against cross-subsidization, and indeed I would agree that it does. However, observing that this is the case does not speak to concerns that could arise based on (i) how frequently cross-subsidization may be initially *attempted* by some insurers; and (ii) how frequently a degree of cross-subsidization may be implemented by insurers *despite* the best efforts by regulators to prevent it (for instance, due to insufficient resources, insufficient statutory authority to disapprove rates, political pressure, and/or concealed assumptions that could subtly lead to cross-subsidization without being readily discernible at first glance). Both of the above are empirical questions and should be studied instead of the assumption being made that the current regulatory system will always prevent such scenarios from even being possible.

Commented [GS4]: These competitive market pressures are also real. However, their efficacy depends on whether an insurer *cares* about retaining or gaining business in a particular state in the first place. I have encountered a surprising number of instances in which highly profitable insurers with rates below those of their competitors expressed worries about growing "too quickly" and instead stated a preference for raising their rates to match those of competitors. Unfortunately, instead of seeking to compare favorably to their competitors through a combination of lower prices and superior service, some insurers will seek to match the more restrictive, less consumer-friendly changes that their competitors may have implemented. At times, this may be due to the mindset of, "Our competitors are market leaders. What unfavorable ...

Commented [GS5]: The conclusion that such claims "often stem from a misunderstanding" seems to antecede any empirical study of the subject and not be based on any systematic analysis of whether any cross-subsidization is occurring or where. It seems that, in putting forth such an assertion, this paper is ...

Commented [GS6]: This is true, but many insurers may be tempted to see future premiums as a way to offset extreme catastrophe losses from the recent past and thus soften those losses' bottom-line impacts. Whether or not this is theoretically the role that premiums are supposed to serve, the incentive to use ...

Commented [GS7]: Higher reinsurance prices could redistribute the impact of catastrophe losses from one state to another if the same reinsurance treaty covers both more catastrophe-prone states and less catastrophe-prone states, but the less catastrophe-prone states are charged reinsurance loads that are ...

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In short, the regulatory system is designed so that if an insurer tried to make one state pay for another, multiple layers of regulatory review would catch it.

Overall, this paper concludes that state-based rate regulation is a holistic core consumer protection system; it ties rates to risk, subjects them to rigorous review, and helps ensure insurance remains both available and financially sound.

Commented [GS8]: It is designed in that way, but how often does that design hold up in practice? This is where empirical data are needed.

Commented [GS9]: I agree with this conclusion. It would be more effectively demonstrated if concerns about cross-subsidization were not defined away, but rather evidence were presented about how the good work that regulators do has saved consumers large amounts of money relative to some insurers' attempted excessive rate increases for home insurance.

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Introduction

Regulators have been asked by legislators, researchers, media, and consumer advocates whether home insurance policyholders in relatively low-risk states are financially subsidizing policyholders in states with high catastrophe exposure. The question is whether insurers spread catastrophic losses across their entire book of business, causing premiums in less disaster-prone states to rise to offset losses sustained in states with recent natural catastrophes.

At the 2026 Spring National Meeting, the NAIC Property and Casualty Insurance (C) Committee adopted the following charge for the Casualty Actuarial and Statistical (C) Task Force:

> ***Draft a white paper that explains how homeowners' insurance rates are regulated across states, with particular attention to public questions and academic claims regarding potential cross-state subsidization of catastrophic losses.***

I. What Is Home Insurance Rate Regulation?

Home insurance rate regulation is the framework through which insurance regulators oversee the rates charged for home insurance. It governs the filing and review of proposed rates, the actuarial support insurers must provide, the timing of rate implementation, and the regulator's assessment of whether rates are legal and not excessive, not inadequate, and not unfairly discriminatory. Although many insurers operate across multiple states, home insurance rates are regulated on a state-specific basis.

This section first describes the legal foundations of state-based insurance regulation, explains the core rate regulatory standards, and describes how market forces also impact home insurance rates.

A. State Rating Statutes and Market Regulation

Insurance regulation in the United States is conducted at the state level rather than the federal level. This decentralized structure traces its legal origin to the Supreme Court's 1944 decision in United States v. South-Eastern Underwriters Association, which held that insurance transactions crossing state lines constituted interstate commerce subject to federal regulation. Congress responded with the McCarran-Ferguson Act of 1945, which explicitly preserved the primacy of

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state regulation by providing that the continued regulation and taxation of the business of insurance by the several states is in the public interest, and that no act of Congress shall invalidate, impair, or supersede any law enacted by any state for the purpose of regulating the business of insurance.

Within each state, the legislature delegates primary regulatory authority over insurance to the Insurance Commissioner, Superintendent, or Director (collectively, the "commissioner"). That official, whether appointed by the governor or elected by the public, exercises broad authority over market entry and behavior, financial solvency, policy forms, and rates.

The cornerstone of rate regulation in nearly every American jurisdiction is a three-part standard derived from the All-Industry Bills and later the *NAIC Model Rating Law*, which is adopted, with variations, across most states. Under this standard, insurance rates must be: (1) not excessive, meaning they do not result in unreasonably high profits or financial gains to the insurer; (2) not inadequate, meaning they are sufficient to cover expected losses and expenses and maintain insurer solvency; and (3) not unfairly discriminatory, meaning they do not differentiate among similarly situated risks without actuarial or otherwise justifiable basis.[1]

Each state legislature also defines the rate regulatory filing frameworks which reflect different calibrations of regulatory oversight of the rate filing process itself. These are broadly categorized as prior approval, modified prior approval, flex rating, file and use, use and file, and no file. See "Rate Filing Methods for Property/Casualty Insurance, Workers' Compensation, Title"[2] for definitions. This filing framework varies by lines of business within the state. Included in the architecture of rate regulation are the filing requirements, support of rates (actuarial justification), and review authority.

Rate regulation, as conventionally understood, involves the review of prospective rates that insurers propose to charge. Market conduct regulation addresses a different but complementary set of concerns: whether insurers are, in practice, treating consumers fairly in their claims handling, underwriting, marketing, and billing practices. Market conduct regulation ensures that consumers are being charged premiums in accordance with filed rates and, in coordination or

Commented [GS10]: The footnote states that "some" state insurance laws do not allow risk classification based upon race, religion, etc. I think the number of states that prohibit such discrimination is greater than "some". In fact, I am not aware of any state that does not prohibit such unfair discrimination. I would recommend replacing "some" with "essentially all" or similar wording.

[1] See state laws for definitions that apply in each state. For example, some state insurance laws do not allow risk classification based upon race, religion, etc.
[2]https://content.naic.org/sites/default/files/model-law-chart-pa-10-rate-filing-methods-for-property-casualty-insurance-workers-comp-title.pdf

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consultation with actuaries, may assess whether rates are excessive, inadequate, or unfairly discriminatory.

Home insurance rate regulation is a customizable framework for evaluating whether the rates charged to consumers are justified, sustainable, and fair. That framework matters because home insurance affects not only the private transfer of risk, but also household financial security, mortgage lending, and the stability of insurance markets. Regulatory oversight of rates, forms, underwriting practices, and market conduct provides a layered system of consumer protection that compensates for the limitations of consumer sophistication and the vulnerability of individual homeowners to market failure.

B. Home Insurance and the Importance of Market Forces

Insurers consider competitive dynamics when they price home insurance. Thus, the market can discipline home insurance pricing. This works best when there are a large number of insurers active in the home insurance markets and consumers shop around for insurance. Competitive market dynamics are meaningful, but do not always work efficiently because home insurance policies are complex, making comparison between companies difficult, and there are market disruptions such as when there is withdrawal of coverage in high-risk markets, insolvencies following catastrophic events, and persistent availability and affordability problems in coastal and wildfire-exposed regions. There may also be other issues such as areas with vacant properties and high crime rates. Thus, regulatory engagement is a complement to competitive markets in affecting rates for the consumers' benefit.

Competition remains an important discipline on prices, but home insurance presents conditions in which market forces alone may not fully protect consumers, preserve availability, or ensure that rates remain adequate and fair. The next question is how that balance is implemented in practice: how insurers develop home insurance rates, how those rates are supported actuarially, and how regulators evaluate the data, assumptions, and methods underlying them.

II. How Home Insurance Rates Are Built and Reviewed

This section turns to the mechanics of regulatory oversight. Home insurance rates are not arbitrary charges, nor are they retrospective attempts to recover past losses. They are prospective

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Commented [GS11]: Add an apostrophe after "consumers", as this is also a case of the plural possessive form of the noun being used, as in "homeowners' insurance".

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Commented [GS12]: They are not, but some insurer decision-makers may be tempted to see them that way, especially in the wake of large and well-publicized catastrophe losses in one or more of the loss-prone states.

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estimates of the cost of providing coverage during a future policy period, supported by actuarial analysis and reviewed against applicable regulatory standards. The price paid for a home insurance policy provides the consumer with protection during the policy period, referred to as risk transfer, whether or not the policyholder has a claim. This is not a flaw of insurance pricing; it is the purpose of insurance. Rates are established before the outcome is known and are intended to fund the expected cost of coverage, the expenses of providing that coverage, the cost of capital and reinsurance needed to support the obligation, and a reasonable return for assuming the risk.

This section explains how those estimates are developed, how state-specific and broader data may be used, and how catastrophe risk and reinsurance are incorporated into the analysis.

A. Home Insurance Rating

Home Insurance Rating Overview

Home insurance is a promise to cover uncertain future losses. The ultimate cost of an insurance policy is unknown at the time of sale, which complicates the pricing process[3]. As a result, the price consumers pay, referred to as the premium, is calculated based on the expected risk of loss to the home. The premium is an estimate of the future costs associated with transferring risk over the policy period. To support this estimation, insurers pool the risks of many policyholders, which allows losses to be financed by the premiums collected from many insureds. This results in diversification across risks and produces stable outcomes. The premium is not a mechanism to recoup past losses.[4] Thus, at the end of a policy period, the consumer and the insurer are "even"—the insurer having covered the risk of loss for the policy period and the consumer having paid the premium.

A home insurance premium generally includes provisions for expected losses, loss adjustment expenses, underwriting expenses, and profit and contingencies.

$$Premium = Expected\ Losses + Loss\ Adjustment\ Expenses + UW\ Expenses + Profit\ and\ Contingencies$$

For home insurance, the largest component of the premium is typically the expected losses, also referred to as pure premium or loss cost. This is an estimate of the expected losses over a policy term. Historical loss data is typically used to estimate the expected losses of relatively high-

[3] https://www.casact.org/sites/default/files/old/studynotes_werner_modlin_ratemaking.pdf
[4] https://www.casact.org/sites/default/files/2021-05/Statement-Of-Principles-Ratemaking.pdf

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Commented [GS13]: If the insurance pricing mechanism works as theoretically outlined, that is the case. But what happens if the insurer is systematically earning 20%-30% profits year after year in one state, while earning more typical profits in other states - and *still* seeks to raise rates in the highly profitable state? At what point can it be said that a departure from the theoretically intended functioning of the pricing mechanism has occurred? I emphasize that this is an empirical question and cannot simply be assumed away by explaining how the pricing mechanism is *intended* to work. The question before us is whether it *does* work that way, and whether significant attempts have been made to get it to "work" differently.

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frequency perils, such as fire or water damage. For lower-frequency but higher-severity events, such as hurricanes, wildfires, and earthquakes, insurers may rely on catastrophe models, as discussed in the catastrophe pricing in Section II. The premium is expected to cover future losses; thus, adjustments are made to the historical data to ensure it is predictive of future costs. Trending, the process of adjusting historical data to reflect expected future conditions, is one of the principal tools used in that process. Actuarial Standard of Practice 13[5] (ASOP No. 13), which is part of a comprehensive set of standards promulgated by the Actuarial Standards Board to govern ratemaking analysis, addresses trending procedures in property/casualty (P/C) insurance and states that actuaries can consider historical insurance and non-insurance data when estimating future expected values. In home insurance, that is especially important because the cost to repair or rebuild a home may change materially between the historical experience period and the future period for which the filed rates are intended to apply. In addition to trending, actuaries adjust historical data for development (the maturation of claims over time) and on-level factors (the conversion of historical premiums to current rate levels).

Insurers also typically refine premiums based on characteristics of the home and the policyholder that are associated with differences in loss experience. These characteristics, known as rating factors, may include such things as the home's construction type, credit-based insurance score, age, geographical location, and roof type. For example, houses with clay tile roofs tend to be more fire-resistant than houses with architectural shingle roofs, and thus usually receive lower premiums if all other characteristics are the same. All of these factors need to be supported by analysis showing differences in expected loss experience. In addition to expected losses, the premium should also cover the cost of adjusting claims and the expenses associated with issuing, servicing, and administering the policy. Additionally, the premium includes a provision for profit and contingencies, which reflects the need to support the business amid uncertainty. The level of that provision may be influenced by expected after-tax investment income and the return required on the capital supporting the insurer's operations.

Home Insurance Rating Influences

Although the general actuarial methodology used to determine home insurance premiums is consistent across lines and jurisdictions, home insurance ratemaking is fundamentally state-

[5] https://www.actuarialstandardsboard.org/asops/trending-procedures-propertycasualty-insurance-2/, Effective Date: Nov. 1, 2009.

Commented [GS14]: But then the question arises as to whether the catastrophe models are accurate and relevant to the jurisdiction where they are being used to set the rates, or whether there is some implicit cross-subsidization through assumptions or misapplications of the catastrophe model(s).

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Commented [GS15]: What happens if an insurer's actual realized underwriting profit exceeds its own target profit and contingencies provision within its indication for many years consistently and by a wide margin? I would recommend that this paper develop a benchmark - at least for analytical purposes - as to when such an observed phenomenon (when paired with a proposed rate increase by the insurer) could be considered evidence of an excessive rate level for that insurer in the jurisdiction in question.

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based. Expected losses are usually derived from expected state experience and from the conditions affecting insured risks in that state, such as local peril exposure, geographic concentration of risk, construction characteristics, legal environment, and claims settlement patterns. However, this does not mean that every input to a home insurance filing is derived from purely local data or is unaffected by broader market conditions. Some influences on the indicated rate level can extend beyond a single state, even where the filing itself remains state-specific. One example is repair-and-rebuild cost inflation. Home insurance claim severity is directly affected by the cost of labor, construction materials, transportation, and related rebuilding inputs, some of which can be affected by regional, national, and even worldwide conditions.

Another broader influence is reinsurance. Reinsurance is part of the mechanism through which insurers manage the impact of catastrophe on their enterprise solvency and, consequently, their ability to pay claims. Changes in reinsurance conditions can affect the cost structure underlying home insurance filings.

Broader inputs may also arise for other components of a home insurance rate indication. For example, underwriting expense provisions are often supported by company or countrywide analyses rather than a single state's experience alone. Likewise, where company-specific state data is limited, actuaries may supplement that experience with industry data and apply credibility-weighting, a technique that blends limited state data with broader experience to produce more reliable estimates of future loss and projected loss trends.

Given that insurance companies derive their profits from both underwriting and investment income, capital market conditions can also affect home insurance ratemaking. When anticipated investment income is projected to be high, companies often need lower future underwriting profits and vice versa. Higher expected after-tax investment returns can lead to the need for a lower profit provision in the ratemaking process, and ultimately lower rates.

In summary, home insurance rates are derived based on the expected future cost of losses and expenses associated with the insured risks in the state being rated, including catastrophe exposure where applicable. However, some inputs relevant to a state filing may be influenced by broader economic and insurance-market conditions, including rebuilding-cost inflation, reinsurance conditions, capital market expectations, nationwide expense analyses, and updates to catastrophe models. Regulators reviewing rate filings are expected to examine each element of the ratemaking analysis: the adequacy of the historical period; the credibility procedures used

Commented [GS16]: Add a hyphen, as "state-based" is a compound modifier.

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Commented [GS17]: Add a hyphen, as "state-specific" is a compound modifier.

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Commented [GS18]: The issue here arises when changes to the cost of reinsurance due to natural disasters in some states lead to higher reinsurance loads in the rate indications in other states that did not experience those natural disasters.

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Commented [GS19]: If some of these expenses are the result of the insurer responding to a large natural disaster in one state, they should not be allocated to other states. If they are allocated to other states, either explicitly or inadvertently (because the insurer does not distinguish in its expense loads between more and less catastrophe-prone states), this could create a potential for cross-subsidization.

Commented [GS20]: Both the use of industry data and credibility-weighting could lead to catastrophe data from other states being smuggled into a given state's rate indication, unless specific safeguards are implemented to intentionally exclude catastrophe experience from other states from any complement of credibility or industry data set.

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to blend the insurer's state-specific experience with other data or experience; the appropriateness of the assumptions used to bridge from broader datasets to the specific risks of the state in question; the reasonableness of development factors; the appropriateness of trend selection (particularly in a period of rapidly changing loss cost environments); the justification for expense loads; the support for the profit provision; and more. A filing that relies exclusively on nationwide data without any state-specific adjustments, or that applies implausible adjustment factors, raises legitimate regulatory concerns regardless of the ultimate rate level requested. States vary in the depth and formality of this review, but the actuarial framework provides a common language for insurer submissions and for regulatory responses. Two of these influences, catastrophe risk and reinsurance, warrant closer examination because of their significance to home insurance ratemaking and their relevance regarding cost distributions across states.

B. Catastrophe Pricing and Reinsurance Implications in Home Insurance Rating

Catastrophe Risk and Pricing

Catastrophe risk is one of the most important and most challenging components of home insurance ratemaking. Catastrophe risk fits within that same prospective pricing framework described in the home insurance rating section but requires unique treatment because catastrophe losses are materially different from the types of losses that occur regularly and independently from house to house. A kitchen fire, theft, non-weather water loss, or isolated liability claim may affect one policyholder at a time. A hurricane, wildfire, earthquake, tornado outbreak, hailstorm, or other severe weather event can affect thousands of policyholders at once. That potential for concentrated losses creates pricing, capital, solvency, and reinsurance considerations that are not fully captured by traditional pricing techniques.

Because catastrophe losses are low-frequency, high-severity, and spatially correlated, traditional pricing techniques are generally not appropriate for these perils. A state may not experience any major hurricane, earthquake, or wildfire losses during a five, 10, or even 20-year historical experience period, even though the risk of such an event remains material. Conversely, a state may experience one or more unusually severe events, which could dominate a recent experience period and drive rates up, even to the point of being excessive compared to the long-run expected

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Commented [GS22]: This may sometimes be true, but it does not follow from this that any departure by an insurer from traditional pricing techniques is necessarily and automatically reasonable. Many such departures, including incorrect applications of catastrophe models, may result in cross-subsidization if they result in either inflated assumptions pertaining to catastrophe risk in one state or an incorrect configuration by an insurer of the parameters of a model that may be reasonable qua model but is misapplied in this way.

Commented [GS23]: There does, nonetheless, need to be some feedback from empirical experience. One could assert, with some validity, that just because no one has been mauled by a tiger (a large CAT) in a small town in North America in X years, does not mean that it will not happen someday (e.g., a traveling circus might pass through town, and its vehicle transporting animals might take a spill and release such a tiger). However, if for many years or decades no tiger-mauling incidents occur, this would be a justification for revisiting one's priors and re-evaluating the anticipated risk of such losses happening.

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cost for this risk. ASOP No. 39[6] recognizes that catastrophe losses can cause extreme volatility in historical insurance data and generally require separate treatment in ratemaking. This ASOP defines a catastrophe as a relatively infrequent event or phenomenon that produces unusually large aggregate losses, and catastrophe ratemaking procedures as procedures that adjust for catastrophe losses in experience data and determine a provision for catastrophe losses and loss adjustment expenses.

For this reason, catastrophe risk is often evaluated separately from non-catastrophe home insurance losses. Non-catastrophe losses may be estimated using several years of historical claim experience, adjusted for trend, coverage changes, claim settlement practices, inflation, and other changes in conditions as described in the prior section. For catastrophe losses, while historical data remain relevant, they may be incomplete or insufficient because the historical period may not include the full range of possible events, nor the current exposure based on building characteristics, location of the properties, and environmental conditions. Catastrophe models are commonly used to address this problem.

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A catastrophe model is a computerized process that simulates many scientifically plausible catastrophic events and estimates their financial impact on a portfolio of insured properties. The catastrophe provision included in the overall indicated rate level in a home insurance rate filing is typically based on the long-term expected annual cost generated by a catastrophe model. Other rate components, such as retained risk or reinsurance provisions, are also often based at least in part on catastrophe models. Because catastrophe models are complex and rely on specialized scientific and engineering assumptions, their use in ratemaking requires judgment and review. A filing that is based at least in part on catastrophe model output should explain which model or models were used, what exposure data were input, how policy terms were reflected, whether secondary perils (e.g., storm surge, wildfire smoke), demand surge, loss adjustment expense, or secondary uncertainty were included, how any model alternative features were selected, or how the model results were adjusted. When using catastrophe models in ratemaking, actuaries should also refer to ASOP No. 38[7], which applies to actuaries selecting, using, reviewing, or evaluating catastrophe models, including models for perils such as hurricanes, earthquakes, severe

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[6] https://www.actuarialstandardsboard.org/asops/treatment-catastrophe-losses-propertycasualty-insurance-ratemaking/, Effective Date: Dec. 15, 2000.
[7] https://www.actuarialstandardsboard.org/asops/actuarial-standard-of-practice-no-38-revised-edition/, Effective Date: December 1, 2021.

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convective storms (SCS), terrorist acts, and pandemics. Regulators may also review the vendor model documentation and validation of the model by the insurer, as well as any rating factors, surcharges, and discounts that may have been informed or priced using catastrophe model output.

The use of catastrophe modeling is consistent with the broader actuarial principle that rates should reflect expected future costs. ASOP No. 53[8] states that actuaries estimating future costs should select appropriate methods or models, use reasonable assumptions, consider adjustments for changes in conditions, and consider the treatment of catastrophes and reinsurance when those items are reflected in future cost estimates. For example, a home with materially greater wildfire, hurricane, earthquake, or SCS exposure is expected to incur greater losses than an otherwise similar home with lower exposure. Cost-based rating attempts to reflect these differences through territory, construction, deductible, coverage, and mitigation discounts.

Commented [GS24]: Instead of "is consistent", I would recommend stating "may be consistent" - since the specific use and the nature of the assumptions behind it will determine whether the "broader actuarial principle" is satisfied.

This risk differentiation is also tied to the regulatory standard that rates should not be excessive, inadequate, or unfairly discriminatory. In actuarial terms, unfair discrimination does not mean that all policyholders pay the same rate. Rather, it generally concerns whether differences in premiums bear a relationship to differences in expected losses and expenses. For catastrophe risk, rating factors such as location, roof characteristics, construction type, or mitigation are often appropriate when supported by data, catastrophe modeling, or other credible evidence showing differences in expected costs.

Cost of Reinsurance

Reinsurance is closely related to catastrophe pricing because catastrophe risk can threaten an insurer's surplus, profitability, and solvency. Reinsurance is insurance purchased by an insurer to transfer part of its risk to a reinsurer. In home insurance, catastrophe reinsurance often protects against severe aggregate losses from hurricanes, wildfires, earthquakes, severe convective storms, or other large events.

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The cost of reinsurance is therefore a legitimate component of the cost of providing home insurance. However, reinsurance costs must be allocated carefully. Many insurers purchase reinsurance at a portfolio level rather than separately for each state. A single catastrophe

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[8] https://www.actuarialstandardsboard.org/asops/estimating-future-costs-prospective-propertycasualty-risk-transfer-risk-retention/, Effective Date: August 1, 2018.

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reinsurance program may cover home insurance exposures in multiple states and may respond to losses from multiple perils. That does not mean the cost should be spread evenly across all policyholders or all states. The actuarially sound approach is to allocate the cost in a manner that reflects the expected benefit and risk contribution of the business being rated. Relevant measures may include modeled catastrophe losses, expected reinsurance recoveries, contribution to reinsured layers, exposure distribution, premium, coverage, peril, and other risk characteristics.

Because the cost of reinsurance ultimately flows into home insurance rating, fluctuations in the cost of reinsurance can cause home insurance rates to change, particularly in catastrophe-exposed markets. The reinsurance market is global, with many reinsurers operating internationally to provide coverage for multiple insurers and risks. Reinsurance protection is not unlimited; the market generally has limited capacity for taking on risk before reinsurance may become unavailable or unaffordable. Recent loss experience on a global scale can impact reinsurer profitability and short-term capacity. As such, seemingly unrelated catastrophe events can affect US home insurance rates. For example, if a major typhoon were to impact Japan, reinsurers would likely pay out on reinsurance contracts and potentially would have lower capacity in the following years to take on additional risk, even in the U.S. This constrained reinsurance market can drive general reinsurance costs upward, causing U.S. insurers to pay more for their reinsurance, and thus pass these higher costs on to their policyholders.

Reinsurance also interacts with the profit and contingency provision and the cost of capital. Catastrophe-exposed home insurance requires capital because actual losses can deviate substantially from expected losses. Reinsurance can provide an insurer with some relief from required capital by transferring tail risk, but it has a cost. Conversely, retaining more catastrophe risk may reduce reinsurance premium but increase required capital and earnings volatility. A rate indication should avoid double-counting by treating modeled losses, reinsurance recoveries, reinsurance premiums, retained risk, and profit or cost-of-capital provisions consistently. ASOP No. 53 specifically states that when reinsurance is reflected in future cost estimates, the actuary should select appropriate methods or models and reasonable assumptions for estimating the cost associated with expected reinsurance arrangements.

In summary, catastrophe pricing in home insurance applies the same prospective ratemaking framework used for other home insurance costs, but with additional tools and considerations. Catastrophe models help estimate losses that are too infrequent, severe, and correlated to be

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Commented [GS25]: The issue is that many reinsurance contracts do not actually seem to do the latter and may instead cover the ceding insurer's risk exposures in all states but a few highly distinctive ones (e.g., New York, Florida, and California). If a state is not among those, then it would be covered under a reinsurance treaty pertaining to "all other" states, and some reinsurers have asserted that it would be *more* expensive for them to separate coverage out by state and contemplate state-specific terms, even for lower-catastrophe-risk states. Thus, for such a treaty, if the insurer attempted to allocate catastrophe risk by state, artificial (and potentially simplistic or inaccurate) allocation assumptions would need to be made, again creating the potential for cross-subsidization.

Commented [GS26]: Allocating reinsurance costs based on modeled catastrophe losses may be problematic if the catastrophe model either inflates the risk of loss for a less catastrophe-prone state or if its settings are misconfigured by the insurer to produce such an impression.

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Commented [GS27]: If this can happen due to a major typhoon in Japan, it could surely happen due to a major disaster - whether a large wildfire, a hurricane, or a series of tornadoes - in the United States. If policyholders in states that did not experience those disasters (and where the geographical and climate features are not prone to those disasters) end up paying higher premiums because of them, this would *be prima facie* cross-subsidization in my view.

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measured reliably using only recent historical experience. Reinsurance helps insurers manage the volatility and capital strain created by those losses, and its cost is an appropriate part of home insurance premiums when it is actuarially supported and allocated in relation to risk and expected benefit. Together, catastrophe modeling, risk classification, reinsurance allocation, and capital provisions support the central ratemaking objective: premiums should reasonably reflect the expected future cost of the risk being transferred during the policy period.

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Commented [GS28]: This statement assumes that "the expected future cost of the risk being transferred" is accurately reflected *within the jurisdiction in question* - yet the very vulnerability of the above approaches, which this statement assumes away, is that they could indeed be used to allocate losses from one jurisdiction to another if they are improperly configured or applied - and the end result would be the same as overt cross-subsidization: policyholders in some states would be paying higher premiums because of catastrophe losses that occurred in other states.

III. What is Cross-Subsidization?

A. Defining Cross-Subsidization

It is important for researchers and others to define cross-subsidization. At the May 12, 2026, meeting of the Casualty Actuarial and Statistical (C) Task Force, Mike Goldman (Perr & Knight) identified three distinct claims of cross-subsidization. The first was residual markets, such as the Fair Access to Insurance Requirements (FAIR) plan and the Texas Windstorm Insurance Association, where costs are spread within the same state. The second was cross-state subsidization within national carrier portfolios. The third was a federal cross-subsidization through the National Flood Insurance Program (NFIP) and disaster aid, which can be analyzed with NFIP subsidies. This paper is only focused on the second type.

In theory, cross-state subsidization could be structural and systemic across the market or could be focused on an individual company's actions. For purposes of this white paper, the question is whether there is systemic cross-subsidization between states. Structural cross-subsidization between states can be described as follows:

> Policyholders in one state systematically pay rates that are inadequate for their own expected costs while policyholders in another state pay more than their expected costs to offset it.

Commented [GS29]: This definition is highly problematic and assumes away the problem that this paper should be analyzing. The existence of cross-subsidization should not require inadequate rates in any jurisdiction (and I highly doubt that home insurance rates are inadequate in any state, as strong incentives exist for the majority of insurers - especially large, multi-state insurers - to avoid inadequate rates). Rather, if rates are at least adequate in all jurisdictions, but an insurer wishes to earn above-market returns on its countrywide portfolio, the insurer could consider in which jurisdictions it would be possible to implement higher rates than actuarially indicated. Of course, attempting to do so explicitly or announcing such an intention would contravene actuarial standards in the manner that this paper discusses. Therefore, such attempted cross-subsidization, in order to be successful, would need to be masked through ratemaking assumptions (e.g., credibility, trending, catastrophe loads and catastrophe-model applications) that may superficially appear to be relevant to a given state but that in reality smuggle in catastrophe experience from other jurisdictions.

In order for **structural** cross-subsidization between states to occur, two conditions need to be met:

1. **Market-Wide Distortion:**
   Structural cross-subsidization is a market-wide phenomenon. If an individual company determines rates in a way that causes one state to subsidize another, and the subsidization exists only within that company's portfolio, that would likely not be

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considered regulatory cross-subsidization between states (unless the insurer was of significant, material size). *(Note: This is still an issue regulators address; it just doesn't meet the definition of structural cross subsidization.)*

2. **Not-Actuarially-Justified Rates in Both States:**
   If rates in one or both states are determined to be actuarially justified, structural cross-subsidization between states has not occurred. In a market that is structurally cross-subsidized, one or more states would experience inadequate rates while other state(s) would experience excessive rates.

Actuarial work inherently involves professional actuarial judgment, ranges of reasonable outcomes, evolving claims experience, and uncertainty. Sometimes, actuarially justified scenarios may lead to the incorrect perception of cross-subsidization.

B. Mischaracterizations of Cross-Subsidization

There are numerous scenarios commonly mischaracterized as cross-subsidization, including the following:

1. **Differences in Actuarial Assumptions and Methodologies from One State to Another State**
   Actuarially justified rates may reasonably differ state by state based on assumptions, credibility treatments, catastrophe loadings, trend selections, development methodologies, expense allocations, reinsurance strategies, or differing views of emerging risk conditions.

   Rates in one state may reflect more conservative assumptions or greater provision for uncertainty than rates in another state, while both remain actuarially justified.

2. **Rate Filing Timing Differences and Non-Mandatory Rate Filings**
   In many jurisdictions, insurers are not required to submit a rate filing unless they are voluntarily revising rates. A company may choose to absorb year-to-year cost fluctuations rather than regularly adjusting rates. Similarly, a company may delay or sequence filings due to competing priorities and limited resources. These timing differences may create temporary differences between indicated and implemented rate levels across states without constituting structural cross-subsidization.

Commented [GS30]: Again, the criterion that cross-subsidization be market-wide assumes away a lot of the practical problems regarding which regulators must be vigilant. Often it is a single large insurer's countrywide strategy, or a few such large insurers' countrywide strategies, that would lead such an entity or entity to either seek above-market returns or recoup large catastrophe losses incurred in certain jurisdictions. This may also lead to follow-on market distortions if other insurers adopt a "follow-the-leader" mentality and attempt to implement rate increases, despite their own favorable underwriting performance, simply because the "market leaders" are doing this and the smaller insurers fear being adversely selected against.

Commented [GS31]: Again, I strongly disagree with this limitation. Rates may be fully adequate in a state that has had large catastrophe losses - and yet a large insurer which has experienced outsized losses in those states may seek excessive (more-than-actuarially-justified) rate increases in other states, where the insurer may perceive those increases to be more easily attainable.

Commented [GS32]: If there is systematic bias in how actuarial judgment is being applied within potentially individually reasonable ranges of results, depending on the jurisdiction, that may also lead to cross-subsidization in practice.

For instance, if in State X an insurer wishes to maintain a large market share and always prices using the low ends of the reasonable ranges of assumptions, but in State Y (where the insurer might not be as concerned about retaining market share) the insurer always prices using the high ends of the reasonable ranges of assumptions, this means that on a systematic basis over time, rates in State Y will be significantly higher than in State X relative to the risk of loss.

Commented [GS33]: Again, if in one state an insurer always uses more "conservative" assumptions, this raises the concern that the insurer is either intentionally trying to redistribute premium from one state to another, or the insurer thinks that the policyholders in the latter state will tolerate higher premiums relative to their risk of loss, or the insurer does not care about losing business in a less catastrophe-prone state with more favorable loss experience.

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3. Mix of Business Considerations

Differences in rate change decisions across states may also reflect varying growth dynamics within an insurer's portfolio, rather than structural cross-subsidization between states.

When a book of business is experiencing rapid growth, insurers may elect to utilize more conservative pricing assumptions to account for uncertainty associated with changing policyholder composition.

Conversely, a shrinking or more stable book of business may support less conservative assumptions where the insurer believes the underlying risk profile is better understood or more predictable.

As new business enters or existing policyholders exit, the distribution of risks, geographic concentrations, coverage selections, or underwriting characteristics may shift in ways that reduce the predictive value of historical experience.

4. Regulator Disapproval of Rate Filings

Regulatory actuaries are tasked with reviewing a rate indication based on information provided in the rate filing to determine whether it complies with actuarial, legal, and regulatory standards.

Rate regulation is prospective in nature and evaluates whether the proposed rates are adequately supported under the applicable statutory framework and reasonably reflect the underlying risk.

Importantly, regulatory disagreement does not necessarily indicate that an insurer's proposed rates represent a significant departure from accepted actuarial practice. Reasonable actuarial and regulatory differences may arise even when all parties are operating within accepted actuarial and legal frameworks. Different actuaries may reasonably select different assumptions related to trend, credibility, expense provisions, catastrophe and reinsurance provisions, profit provisions or other relevant assumptions. Additionally, regulatory actuaries are highly familiar with the statutory requirements, market considerations, public policy objectives, approved actuarial methodologies, and other constraints unique to their jurisdiction.

Commented [GS34]: Even if assumptions with a rate filing are within some broadly reasonable actuarial range, this does not mean that those assumptions are appropriate for the state in question, and it is ultimately the regulator's responsibility to evaluate this and arrive at a decision consistent with applicable laws.

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In many cases, a regulator's concern may relate to the sufficiency of supporting data, the reasonableness of selected assumptions, the applicability of a methodology, or compliance with a statutory or procedural requirement unique to the jurisdiction. A filing disapproval may also reflect a determination that additional actuarial support or alternative actuarial treatment is necessary before the proposed rates can be approved.

Examples of situations that could result in filing disapproval without establishing that the proposed rates are not actuarially sound include circumstances where sufficient support was not provided, deadlines for submission of additional information were not met, or statutory and procedural requirements were not satisfied.

Insurance markets perform differently across jurisdictions. A rate that is actuarially sound in one state is often not actuarially sound in another state due to differences in laws, regulations, litigation environments, catastrophe exposure, consumer profiles, risk characteristics, and other market conditions.

The existence of a regulatory disagreement or filing disapproval should not be interpreted as evidence of cross-subsidization between states. Rather, actuarial review is intended to help ensure that rates remain related to risk within the applicable jurisdictional and regulatory framework.

Commented [GS35]: Regulatory disapproval of a single filing may not by itself be an indicator of attempted cross-subsidization. But again, how many instances of proposals that appear to be excessive - especially if they pertain to consistently profitable books of business - and that happen to occur or to spike in the aftermath of highly publicized disasters in other states - would be considered sufficient evidence that cross-subsidization is occurring? This paper seems to be assuming that *no* among of such attempts would ever suffice to establish the existence of cross-subsidization, because of how "structural cross-subsidization" is defined. I favor an empirical approach to this question rather than deciding at the onset that structural cross-subsidization cannot occur by definition no matter how many filings regulators disapprove or moderate the impacts of.

5. Credibility and Use of Non-State Data as the Complement of Credibility

A common challenge in ratemaking is determining the extent to which an insurer should rely on its own experience as compared to broader external data sources. Actuaries use credibility procedures to determine the appropriate weight to assign to a particular set of insurance data when developing rates. For example, a large insurer with many years of experience in a given state may receive high credibility on its own statewide data, while a smaller insurer or more niche program may rely more heavily on countrywide data or may rely on other benchmarks that are relevant to the product.

Commented [GS36]: If the countrywide data being relied upon does not explicitly exclude catastrophe losses, then this is a way in which losses from other, more catastrophe-prone states could be redistributed to the lower-catastrophe-risk state in question.

ASOP No. 25[9], titled "Credibility Procedures", provides definitions for terms such as credibility, credibility procedure, full credibility, and relevant experience, among other concepts important to actuarial credibility analysis.

[9] https://www.actuarialstandardsboard.org/asops/credibility-procedures/, Effective Date: May 1, 2014.

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Credibility procedures are intended to balance responsiveness to actual experience with the statistical reliability needed to support stable and predictive rate indications. These procedures help reduce volatility and lessen the likelihood that isolated or short-term fluctuations disproportionately affect indicated rates.

When an insurer's statewide experience is not considered fully credible under actuarial credibility procedures, the statewide experience may be weighted together with a complement of credibility, often referred to simply as the "complement". ASOP No. 25 discusses the importance of the complement reflecting relevant experience, including risk characteristics that are reasonably similar to the product being analyzed.

Actuarial literature can be consulted for additional guidance regarding credibility procedures and selection of the appropriate complement.

Because professional judgment is required in determining the appropriate credibility treatment and selection of complement, insurer practices may reasonably differ depending on the circumstances and underlying data. Overreliance on broad averages may obscure meaningful emerging trends, while overreliance on limited experience may produce indications that are less predictive of future costs. Differences among insurers in the application of credibility procedures or selection of complements do not imply that either insurer's rates are not actuarially sound, nor do such differences, by themselves, establish the existence of cross-subsidization.

IV. What State-Based Ratemaking Means for Consumers and Markets—Is there Cross-subsidization?

Section II explained how home insurance rates are developed and reviewed: as prospective estimates of expected loss, expense, catastrophe exposure, reinsurance cost, and other elements associated with the risk being insured. This section applies that ratemaking framework to a recurring question in public discussion: whether catastrophe losses in one state are being shifted into rates charged to policyholders in another. The answer requires distinguishing direct loss shifting from broader market effects. State-based ratemaking does not support the direct allocation of one state's catastrophe losses to another state's policyholders, but catastrophe events may still affect broader inputs such as rebuilding costs, reinsurance pricing, capital costs, and catastrophe model assumptions.

Commented [GS37]: This section does not sufficiently delve into the specific ways in which credibility assumptions could lead to cross-subsidization. For instance, if a given low-catastrophe-loss state's experience is deemed "insufficiently credible" because of a low number of claims, then the favorable claims experience is necessarily under-emphasized. If the complement of credibility is countrywide experience or experience from more catastrophe-prone states with more claims, then catastrophe experience from other states would get applied to the low-catastrophe-loss state through the complement of credibility and the high percentage of credibility assigned to it. This may occur not just in the credibility-weighting of losses, but in the credibility-weighting of loss trends, where trends from other, more catastrophe-prone states, could be given greater weight than the trends from the subject state.

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Commented [GS38]: It is through these "broader inputs" that a similar effect could be achieved to a direct allocation of one state's catastrophe loss experience to another. For example, if a catastrophe model is predominantly trained on losses in a few large, catastrophe-prone states, this could lead to insufficient emphasis being given to distinctive conditions in other states that lower their risk of catastrophe loss in practice. Moreover, if rebuilding costs and reinsurance pricing pertain to losses in other jurisdictions, but would be less directly relevant to what losses would cost in the specific state in question, then building those countrywide phenomena, or broadly averaging them across states, could lead to rates in some states increasing far beyond the expected costs of losses and expenses.

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A. Catastrophe Losses and State-Based Ratemaking

A recurring theme in academic research, media coverage, and consumer advocacy is the concern that home insurance policyholders in relatively low-risk states may be financially subsidizing policyholders in states with high catastrophe exposure. These sources suggest that insurers spread catastrophic losses across their entire book of business, causing premiums in less disaster-prone states to rise to offset losses sustained in states like California, Florida, or Louisiana.

Several academic studies have examined insurer pricing behavior and rate-change patterns across states following major catastrophe events. Media investigations—particularly following the 2017–2018 California wildfire seasons, Hurricane Ian in 2022, and repeated hurricane seasons in Florida—have amplified these concerns, with reporting suggesting that consumers in other states are bearing costs attributable to coastal or wildfire-zone losses. Consumer advocacy organizations have similarly raised concerns that insurers are insufficiently transparent about cost allocations and that policyholders lack the information necessary to evaluate whether their premiums reflect local risk or a national pooling of catastrophic exposure.

These concerns deserve serious engagement. However, several important methodological limitations and industry structural features are frequently overlooked in both academic and media treatments of this issue and understanding them is essential to evaluating the subsidization hypothesis fairly.

B. How Insurers Deploy Capital and Reinsurance

While catastrophe pricing is state-specific, as discussed in Section II, insurers deploy capital and reinsurance on an enterprise-wide basis to ensure claims-paying ability regardless of where a catastrophe occurs. A national insurer writing policies in all 50 states maintains a single pool of surplus capital that supports its obligations everywhere and for every line of business it writes. When a hurricane causes billions in losses in Florida, the same surplus that backs policies in Ohio is drawn upon—if necessary—to pay those claims.

Additionally, capital supports the entire company and not just its homeowners' line of business. Most insurers do not write only homeowners' insurance policies, and those few that do rely very heavily on reinsurance because of the extreme risk associated with a monoline portfolio. Like the way carriers manage their adopted risk from policyholders by diversifying their exposure

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Commented [GS39]: To seriously engage these concerns, systematic studies across multiple states (not just a handful of examples) are needed to evaluate whether, in the aftermath of disasters in some states, *profitable* insurers in other states have attempted to increase rates there with a greater frequency or to a greater extent than they did during times when such disasters did not happen.

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geographically, they also mitigate their risk by writing other types of insurance. Most homeowners' carriers will also sell a wide variety of property and casualty coverages including personal auto and personal umbrella policies. Furthermore, these same carriers may sell a wide portfolio of commercial insurance products including commercial auto and property, plus commercial liability and workers' compensation policies. A carrier's surplus built up by underwriting and investment income associated with all these products is then available to them in the unlikely event of a catastrophic loss.

This enterprise-level capital deployment, however, is not equivalent to Ohio policyholders subsidizing Florida policyholders. The surplus is the insurer's own capital, contributed by shareholders and accumulated from retained earnings. It is the mechanism by which the insurer guarantees its financial promises; it is not a transfer of premium dollars from one state's policyholders to another's.

The reinsurance program layered above the insurer's retained risk functions similarly: reinsurance is purchased at the enterprise level, but its cost is allocated back to individual states based on the catastrophe exposure each state contributes to the reinsurance need. A state with low catastrophe exposure contributes less to the reinsurance cost allocation and, therefore, pays a smaller reinsurance load in its rates.

Different layers of reinsurance protection serve different purposes. Per-risk or per-occurrence excess-of-loss treaties respond to large single-event losses. Aggregate covers respond to the accumulation of smaller losses over a policy period. Catastrophe bonds and other capital market instruments provide additional protection against tail events. The cost of each layer is reflected in state-level rates in proportion to the catastrophe exposure that creates the demand for that layer of protection. A consumer in a low-catastrophe state is not paying for a reinsurance program designed to protect against losses in a high-catastrophe state; they are paying for the portion of the reinsurance program that protects against losses in their own state.

C. What Pooling Does (and Does Not) Mean

Insurance is, by design, a pooling mechanism. A home insurer pools the risks of many policyholders so that the losses of the few are spread across the premiums of the many. This within-state pooling is the core economic function of insurance and is what makes coverage affordable for individual policyholders who could not self-insure against a catastrophic loss.

Commented [GS40]: It is true that surplus accumulated from operations in some states could (legitimately) be used to pay for losses in other states, and that is not in itself evidence of cross-subsidization. However, if insurers were to set aside specified funds dedicated to paying for catastrophe losses in states where policyholders have paid those funds in premiums, then this could go a long way toward assuring the public that premiums that they paid arising from "catastrophe loads" do not simply get consumed by miscellaneous insurer expenditures, while resources to actually pay for any future catastrophe losses in the state in question might be no greater than before.

Commented [GS41]: One would hope and should seek that this would be the case - but empirically, it has not always been observed to be the case.

Commented [GS42]: Again, this is a conclusion asserted without evidence. It assumes that all insurers' treatments of their reinsurance programs within their rate indications are perfectly allocated among states based on the specific risk of natural-disaster losses in those states. This is a conclusion that would need to be demonstrated empirically, not simply taken as the inevitable way of things. Regulators who review home insurance rates devote considerable effort to ensuring that reinsurance provisions do get allocated more accurately by state than some insurers might initially propose.

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Cross-state pooling within a national insurer operates on a different principle. The insurer is not pooling the catastrophe losses of State A and State B policyholders together and averaging the cost across both groups. Rather, the insurer is pooling the uncertainty about whether State A losses will be higher or lower than expected, against the uncertainty about whether State B losses will be higher or lower than expected. The insurer benefits from the fact that these two sources of uncertainty are not perfectly correlated. The economic benefit of this diversification accrues primarily to the insurer's shareholders in the form of reduced capital requirements and to policyholders in the form of improved insurer financial stability; it does not translate into State B policyholders paying for State A losses.

Commented [GS43]: Differences in loss ratios between State A and State B do not by themselves demonstrate the existence of cross-subsidization. However, if State B is systematically more profitable than State A over the course of many years, *and* the insurer seeks greater rate increases in State B than in State A, at what point does this stop being due to random variation and provide evidence that the insurer is seeking for rates in State B to be systematically higher relative to the risk than in State A?

D. Indirect Effects: How Catastrophe Losses May Affect Rates Elsewhere

While direct cross-state premium subsidization does not occur through normal ratemaking, there are legitimate indirect pathways through which a catastrophe in one state can affect premium levels in other states, and these indirect effects are important to acknowledge.

The most significant indirect effect operates through supply-chain economics. Following a major catastrophic event, such as a hurricane, wildfire, or flood, the demand for building materials, skilled labor, and construction equipment surges in the affected region. Lumber prices, roofing material costs, drywall, and structural components all experience sharp price increases, driven by both genuine supply constraints and demand concentration in the affected area. These elevated material costs do not remain geographically confined. A homeowner in Indiana filing a non-catastrophic claim, such as a burst pipe, a fallen tree, or a kitchen fire, may find that the cost of repairs has risen meaningfully because the same lumber being used to rebuild Gulf Coast homes is now more expensive everywhere. Insurers writing home insurance policies across the country may experience increased claim severity in all states following a major catastrophe, and this elevated severity can feed into the loss experience used to support future rate changes nationwide. This is a real, quantifiable, and economically rational indirect linkage between catastrophe losses in one state and premium levels in others, and it deserves recognition in the research literature as a legitimate channel distinct from, and not confused with, direct subsidization.

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Catastrophic events can also affect reinsurance pricing globally. A particularly severe hurricane season or a large wildfire loss may increase reinsurance costs for the subsequent policy year, and those increased costs are reflected in rate filings across all states that purchase catastrophe

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reinsurance — even states that were not directly affected by the event. This is not to compensate reinsurance carriers for losses sustained in a prior event; rather, the severe event serves as an additional data point that could cause reinsurers to adjust their predictions of future loss.

As with the rebuilding-cost effects discussed above, this is a market-driven indirect effect, not a regulatory or actuarial mechanism for cross-state subsidization.

Finally, catastrophes provide the opportunity for models to be updated for what is learned about resiliency. Insurers and third-party modelers may calibrate rating values associated with certain types of construction, roof materials, mitigation efforts, etc., and use the revised discounts and factors throughout the country.

E. Could Companies Hide Cross-State Subsidization?

A more sophisticated version of the cross-state subsidization hypothesis asserts that even if rate filings are state-specific, insurers might use the flexibility within ratemaking to shift value between states in ways that are difficult for regulators to detect. For example, an insurer might inflate the profit provision in low-catastrophe states to build a surplus that effectively offsets losses in high-catastrophe states. Or an insurer might systematically understate the catastrophe load in a high-exposure state by using older, less sensitive catastrophe models, while compensating with higher expense loads in other states.

The Center for Insurance Policy and Research (CIPR) performed a qualitative analysis of rate filings to explore the hypothesis that carriers are subsidizing catastrophic losses incurred in one state with higher rates in another state. If the hypothesis were true, the expectation is rate filings would either 1) directly include out-of-state catastrophe losses in the development of the indicated rate need or 2) indirectly increase the indication by changing methodology (e.g. using more conservatism) after catastrophic loss in another state. The analysis, while qualitative and limited in scope, did not support the hypothesis that carriers are raising rates in one state to support losses in another state.

Minnesota Hail Event: Found No Effect on Iowa Rates

For example, in 2017 there was a hail event (part of a June Derecho) in Minnesota. Iowa rate filings were examined for some companies writing insurance in both Minnesota and Iowa. No Minnesota loss data (or any other out-of-state losses) were reflected in five Iowa rate filings prior

Commented [GS44]: However, if global reinsurance costs rise because of natural disasters, it would still be unreasonable to allocate any increase in those costs to states that have not had and are unlikely to have those disasters. Rather, states that did or are likely to experience those particular types of disasters should be bearing the increase within the insurer's allocation methodology.

Commented [GS45]: The analysis in question appears to be limited to disasters in a few states in a few years and responses in a few other states as a result. But this is not an across-the-board review of what happened after major, well-publicized disasters in large states that are well-known to be catastrophe-prone - in regard to the indications and rate proposals of insurers in other states (particularly neighboring states) that are less catastrophe-prone.

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to Derecho and six after Derecho. Rate provisions and methodologies were also reviewed to test for any indirect 'cross subsidization' via selection of more conservative factors or changes in methodology intended to yield a higher indication in the post event filings.

The methodologies and provisions reviewed were: 1) Indication methodology: number of years of experience, weighting of years; 2) Loss and Trend: development and selection of; 3) Catastrophe provision development including which CAT models were used; 4) Reflection of reinsurance; 5) Development of underwriting profit and contingencies provision; 6) Other expense development; 7) Indicated vs proposed rates; 8) Credibility methodology and the selected complement of credibility; 9) Premium Trend; and 10) Other factors (e.g., Large loss procedure that may be impacted by out-of-state losses). No methodology changes were observed that would indicate an indirect allocation of losses from the catastrophe events into Iowa rate indications. "Indirect effects" such as reinsurance costs, countrywide expenses or profit provision selection did not appear to be affected by the experience of out-of-state losses. When indications were higher in the post period, the driver was an increase of in-state losses or loss trends. Changes observed were due to companies having more internal experience to rely on, updates to catastrophe models, updated factors such as profit provisions, or other methodology changes that adhere to standard actuarial principles.

With changes to profit provisions, carriers maintained a consistent methodology to develop their profit provisions, but some updated inputs such as the rate of return, which resulted in small changes in the underwriting profit. In some cases, the underwriting profit provision increased from pre-to-post event filings. One carrier increased their profit provision from 6% to 7%. In some cases, the underwriting profit provision decreased: one carrier decreased their profit provision from 7.2% to 5.4% and another from 7% to 5%.

Regarding methodology changes, one company changed its credibility procedure which resulted in a small increase in the credibility attributed to its own statewide data; the complement of credibility was applied to a trended permissible loss ratio (not to loss experience from other states).

Hurricanes Harvey & Irma and 2018 California Wildfires: Found No Effect on Virginia Rates

Using the same methodology, four Virginia rate filings were studied before and four after the hurricanes Harvey & Irma in 2017 and eight filings before and eight after the 2018 California

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wildfires (7/23/18-8/30/18). Findings in the Virginia rate filings were consistent with the findings from the review of Iowa rate filings: There were no out-of-state losses included in any of the rate filings in Virginia. There were no methodology changes or rate provision selections that would indicate an indirect allocation of loss experience from the catastrophes to Virigina.

While these are only two limited scope case studies, they support this paper's assertion that cross-subsidization is not occurring. CIPR has not found support for the subsidization hypothesis. Analyses of profit provisions, expense ratios, and loss ratios across states have not revealed the systematic patterns that would be expected if insurers were deliberately routing value from low-catastrophe to high-catastrophe states. This does not foreclose the possibility that individual insurers in specific circumstances might engage in such behavior, but the available evidence at the industry level is not consistent with cross-state subsidization as a widespread or systematic phenomenon.

F. How Evolving Catastrophe Models Affect the Debate

One final dimension that is essential to understanding the cross-state subsidization debate is the evolution of catastrophe modeling. Insurers and their actuaries rely on probabilistic catastrophe models to estimate the expected losses from hurricanes, wildfires, earthquakes, and other catastrophic perils. These models, developed and maintained by specialized vendors and insurers, translate meteorological, geophysical, and engineering science into probabilistic loss distributions for any portfolio of insured properties.

Catastrophe models have changed significantly over time, and the transitions between model generations can create apparent discontinuities in rate levels that are sometimes misinterpreted as evidence of subsidization or cross-market cost shifting. When a major vendor releases a new version of a hurricane model that substantially increases estimated loss costs for Gulf Coast exposures, insurers using that model will file for rate increases in the affected states. The timing and magnitude of those increases may differ across insurers depending on when they transition to the new model, how much credibility they give to the model versus their own historical data, and how their reinsurance programs respond to the updated loss estimates. A researcher observing this pattern without knowledge of the model transition might incorrectly attribute the rate increases to a redistribution of costs rather than to an improved scientific understanding of the underlying peril.

Commented [GS46]: Not only are the case studies of limited scope, they pertain to the years 2017 and 2018, which predate the major push by some insurers to increase rates in less catastrophe-prone states. A much more relevant study would consider, for example, insurer rate proposals in *all 50 states* in the aftermath of the devastating Los Angeles wildfires of January 2025.

Commented [GS47]: Again, a few examples from a few states in 2017 and 2018 do not equate to "the available evidence at the industry level". They may not even comprise 0.01% of "the available evidence at the industry level" that could be analyzed in a more systematic study.

Commented [GS48]: What justifies the a priori assumption that these discontinuities are "misinterpreted" as evidence of subsidization rather than serving as a mechanism or cover for attempted subsidization?

Commented [GS49]: What justifies the a prior assumption that a later model necessarily reflects an "improved scientific understanding", rather than just a different set of assumptions that could be better or worse than those of the preceding model? It is the job of regulators to evaluate the merits of those assumptions, not simply to take for granted that a later model will be more accurate.

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The practical implication for the subsidization debate is that large, sudden shifts in catastrophe-state rate levels, particularly following a major loss event or a model update, do not indicate that prior rates in those states were subsidized by other states. They indicate that the industry's understanding of the catastrophe risk has changed, and that rates are being updated to reflect that improved understanding. The absence of prior rate increases does not mean policyholders elsewhere were overpaying; it may mean that the risk was systematically underestimated by the best available models at the time.

G. Important Methodological Considerations for Researchers and Media

It is worth flagging several recurring misconceptions that appear in research and reporting on this topic, because they can significantly distort conclusions about cross-state subsidization.

1. Rate Filings Are Not "Exact Rate Needs."

A rate filing reflects an indicated rate need and the proposed rates. As discussed, actuarial rate indications involve projecting future (unknown prospective) losses and expenses from historical data using loss development factors, trend factors, and catastrophe load adjustments—all of which carry significant uncertainty and some of which can vary depending on the degree of conservatism in estimates. The "indicated rate change" is a point estimate within a plausible range. No actuary, regulator, or researcher knows with certainty how many claims will occur in a future policy period, what those claims will cost, or how the catastrophe environment will evolve. What appears to be an over- or under-indication when examined with a fixed historical dataset may look quite different when evaluated across multiple years or under different model assumptions. Research conclusions based on a single point-in-time snapshot of rate indications should be interpreted cautiously and evaluated against longer time horizons.

2. Claim Count Definitions Vary Across Insurers and Datasets.

Comparisons of claim frequency across companies or states frequently encounter the problem that insurers define and count claims differently. Some insurers record a claim for each person injured, each site damaged, each coverage affected, etc. Zero-payment claims (opened and closed without indemnity, such as claims below the policyholder deductible or not caused by a covered peril) may or may not be included in reported counts. Researchers using industry databases or statutory filings should account for these

Commented [GS50]: Is it the "understanding of the catastrophe risk" or, rather, the *fear* of the catastrophe risk? Studies of sociological responses in relation to natural and manmade disasters have indicated that humans are systematically prone to exaggerate and over-respond to the risk of disasters that happened recently and to neglect or disregard the risk of disasters that happened in the more distant past. "Social contagion" effects - including signaling within industry peer groups - can amplify those distortions relative to what would be an objective risk perception.

Commented [GS51]: Again, this paper assumes that the prior models necessarily underestimated the risk and the new models estimate it correctly - but there is no empirical corroboration of this. It could be that the prior models were more accurate in estimating the risk, and the new models exaggerate it, either inadvertently or due to motivated reasoning and assumptions. Regulatory scrutiny exists to help understand which of these scenarios is likely to be the case.

Commented [GS52]: The concerns of those who think that cross-subsidization is happening are not limited to single point-in-time snapshots. Indeed, those who hold such concerns will point to systematic tendencies across time when some insurers will propose increases is less catastrophe-prone states, where their books of business have been profitable for a decade or longer, and may propose lesser increases in states that are more catastrophe-prone and that have recently experienced highly publicized natural disasters.

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definitional differences, as unadjusted comparisons can produce false or misleading conclusions about relative loss frequency and severity, or average claim amounts.

3. The Indicated Rate vs. Rate Received: A Critical Assumption.

Much of the academic literature on cross-state subsidization implicitly or explicitly assumes that the rate a company files, or the actuarially indicated rate, represents the true economic cost of risk in that state, and that any gap between the indication and the approved rate must be recovered elsewhere, including potentially from policyholders in other states. This assumption does not withstand careful examination. Rate indications are inputs to a regulatory analysis, not binding financial obligations. Insurers regularly file for rate changes that are less than their full indication, particularly in competitive markets. The gap between indicated and implemented rates is not uniformly under-charging—it may reflect competitive pricing, regulatory compliance, or the fact there is a range of reasonable actuarial estimates. Research that uses this gap as direct evidence of cross-state subsidization without accounting for these dynamics is fundamentally flawed.

4. Catastrophe Pricing Is a State-Level Construct.

A foundational principle of property insurance pricing, and one that is frequently misunderstood in cross-state subsidization discussions, is that catastrophe loss costs are estimated for the state where they are expected to occur. California wildfire claims experience does not enter the rating calculation for a home insurance policy in the Midwest. Each state's rate level is derived from that state's own expected loss experience, adjusted for trend and development, with catastrophe loads built from catastrophe models calibrated to the geographic exposures within that state. State insurance regulators enforce this principle by requiring that rates be filed and justified on a state-specific basis.

Confusion arises because state insurance rating laws may allow insurers to use both state-specific and other data, such as regional or nationwide data. In practice, an insurer will use state-specific data to the extent it is credible and will supplement it with other credible, relevant information where needed. To be "relevant," that data must be a reasonable estimate of expected losses and expenses for the policies to be written in the state.

Commented [GS53]: This is true. However, the *extent to which* insurers choose to file for increases less than their indications may be reflective of attempted cross-subsidization. For instance, if an insurer always files for its full indication in State A but always files for much less than its full indication in State B, this may be a sign of concern. It could be that the insurer thinks that regulators in State B will be more stringent and thus will attempt at the onset to file what those regulators are likely to approve, whereas the insurer expects less resistance to its full indication in State A, or at least is willing to engage in a more protracted back-and-forth exchange with the regulators of that state.

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Commented [GS54]: This is generally true when it comes to states that are extremely different from one another in terms of the very possibility of certain perils arising. In other words, insurers are generally not going to specifically try to redistribute wildfire losses to states that have little to no wildfire risk at all. Yet somehow, after major California wildfires, some large insurers tend to propose larger rate increases in certain Western states that are not California and that have not had those large wildfires, than they do in California.

Commented [GS55]: Some insurers will take liberties with what they consider "relevant", and regulators will often identify complements of credibility that are of questionable relevance to a given state's experience.

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This distinction is especially important for catastrophe risk. Updated catastrophe models may incorporate new scientific understanding, new claims information, changes in exposure, or changes in environmental conditions that affect more than one state. For example, a major hurricane in Florida may reveal that certain types of structures perform more poorly than expected, or that loss amplification effects are more significant than previously understood. Though these findings came from experience in Florida, hurricane catastrophe models used across the entire Atlantic coast will be updated to reflect these new learnings, which could increase rates in all hurricane states. While this may appear at the surface to be cross-subsidization, there is a distinct difference: this is not insurers using out-of-state losses to increase rates (cross-subsidization), but rather a best practice of using the latest science – catastrophe events in other states may teach insurers, modelers, and regulators something new about the risk that is relevant to other states exposed to the same peril.

When it comes to some parts of the insurer's rating plan, such as determining the rates for customers based on their individual risks, insurers are encouraged to use their most credible data, which may include nationwide or regional information on issues such as how fire damages buildings, what roofing materials perform best when neighborhoods burn, etc. When discussing state cross-subsidization, it is the overall indication by coverage or peril that is most important and the overall indication is a state-based number. A filing that attempted to recover California wildfire losses through Midwest premiums would be actuarially unsound and would not survive regulatory scrutiny, whether through front-end rate regulation or back-end market regulation. The regulatory architecture of state-based insurance oversight, therefore, provides a structural barrier to the kind of direct cross-state subsidization that researchers and media often allege, while still allowing insurers and regulators to recognize credible, relevant scientific information that improves the assessment of catastrophe risk within each state.

5. **Refer to the CIPR website** (*link pending*) **for considerations when using insurance data.**

This section has distinguished the direct allocation of catastrophe losses from the broader market effects that may influence home insurance rates. That distinction matters because it shows why

Commented [GS56]: Again, it is a significant and unproven assumption to assert that these changes that affect more than one state are necessarily in the direction of improvement. The burden of proof here is on the insurer and the modeler; we do not know *a priori* that a newer model will be better or especially that it will be reflective of the risk of catastrophe loss in states where the recent disaster(s) did not occur.

Commented [GS57]: More accurately, such a filing *should not* survive regulatory scrutiny. However, in a state where regulators' authority to disapprove rates is limited, or a state where insurers may exert significant political pressure or informal influence to circumvent any existing regulatory process, these kinds of proposals may have greater survival potential than anticipated or hoped. Market regulation may still serve as a check in those instances, whether explicit market-conduct regulation or regulation through the discipline of the market - but that would only work on insurers that care about gaining or keeping business in the state.

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rate regulation must both recognize genuine cost pressures and require that those costs be reflected through supported, risk-based, and reviewable ratemaking. Section V places that role in the broader architecture of home insurance regulation: a layered system designed to protect consumers, preserve market stability, and maintain actuarial discipline.

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V. Conclusion: Rate Regulation as Layered Consumer Protection

Rate regulation is a calibrated system that supplements competitive market forces with regulatory oversight proportionate to the degree of market imperfection and the magnitude of consumer vulnerability.

The architecture of state-based regulation described in Sections I through IV, with its uniform three-part legal standard for insurance rating, delegation of authority to state insurance commissioners, and diverse rate filing requirements, and with a complement of market conduct oversight, reflects the accumulated wisdom of more than a century of insurance regulatory experience.

Present regulatory needs include attention to using sophisticated actuarial staff (as rate filing models and support continue to get more complex) and effective market monitoring. The engagement of the actuarial profession, through its standards, its certifications, and its independent professional obligations, is indispensable to the integrity of the rate regulatory process. Actuaries who conduct rate indication analysis in rate filings occupy a position of public trust and professional obligation, and the regulatory system depends on the actuarial community's commitment to honest, rigorous analysis as a foundation for sound ratemaking.

The home insurance market faces significant challenges in the years ahead, from increasing catastrophic disasters to rising replacement costs to the evolving legal environment. Rate regulation, when properly designed and effectively administered, will remain an important tool for ensuring that these challenges are met in a manner that protects consumers, maintains market stability, and preserves the availability of coverage that protects the most important financial asset most American families will ever own.

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In summary, the goal of property and casualty ratemaking is to predict the rates that need to be charged on a specific cohort of insurance policies that will be written in the future. The application of appropriate actuarial practices and techniques ensures that those rates are adequate, but not

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excessive or unfairly discriminatory for covering the expected losses and expenses on those policies, while also allowing for a reasonable return for the risk undertaken. Ratemaking is inherently a prediction of unknown future values. To the untrained eye, a year with few severe storms and catastrophic events might make it seem as if the rates were excessive. And a year with many severe storms and catastrophic events might look like the rates were inadequate. But the ratemaking process accounts for such random fluctuation and prices to the expected frequency of, and claim values associated with, these events in any given year.

Insurers typically use their own state-specific experience to the extent possible for ratemaking purposes. But that experience often needs to be supplemented with additional information to make credible predictions about future losses and expenses on policies that haven't yet been written. This supplemental information can include catastrophe models, other insurers' experience and their rates, experience and statistics made available by advisory and rating organizations, and regional or even countrywide experience and statistics. However, it is important to understand that supplemental information is adjusted and used only to the extent that it helps predict expected losses and expenses on a specific set of policies in a specific state that will be written in the future. Any insurer that would attempt to charge excessive rates in one state to make up for inadequate rates in another would be in violation of actuarial standards of practice (and their actuaries subject to discipline by the Actuarial Board of Counseling and Discipline), would receive regulatory disapproval or nonacceptance where rate filing requirements exist, and would fail to meet their growth and retention goals in that state due to the competitive home insurance markets that exist in most states.

Rate regulation can and should ensure that cost trends are accurately measured, that actuarial justification is genuine, that unfair discrimination is absent, and that insurers are not exploiting information asymmetries or market concentration to extract excessive profits.

Property and casualty insurance ratemaking is a complex endeavor undertaken by professionals with standards of practice governing their work. Those studying the actuarial soundness of insurance rates, and effectiveness of state-based rate regulation, would produce more accurate and beneficial research by meeting with state insurance regulators to discuss their methodology and findings as part of their research and in advance of publishing any reports.

Commented [GS58]: It is that "additional information" that makes it easy for cross-subsidization to arise either intentionally or inadvertently, and this underscores the need for regulators to be vigilant. Assuming away the problem by suggesting that all such "additional information" is reasonable to use (because sometimes it theoretically is)does not aid in the task of actually ensuring that rates are not excessive or unfairly discriminatory.

Commented [GS59]: There is a difference between "would" and "should". If the latter word were used here, I would agree. But whether something actually "would" happen is an empirical question, for which the outcome cannot be postulated in advance.

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6/26/2026

NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

References and Further Reading

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Cummins, J. David, and Sharon Tennyson. "Regulation, Efficiency, and Competitiveness in the U.S. Property-Liability Insurance Industry." Journal of Insurance Issues (1994).

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Klein, Robert W. "Insurance Market Regulation: Catastrophe Risk, Competition and Systemic Risk." Working Paper, Risk Management and Insurance Program, Georgia State University (2012).

McCarran-Ferguson Act of 1945, 15 U.S.C. §§ 1011–1015.

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National Association of Insurance Commissioners (NAIC). Property/Casualty Insurance: An Industry Overview. Kansas City, MO: NAIC.

United States v. South-Eastern Underwriters Association, 322 U.S. 533 (1944).

Actuarial Standards Board. Actuarial Standard of Practice No. 25: Credibility Procedures. Washington, D.C.: ASB.

Actuarial Standards Board. Actuarial Standard of Practice No. 53: Estimating Future Costs for Prospective Property/Casualty Risk Transfer and Risk Retention. Washington, D.C.: ASB.

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August 5, 2026

Angela L. Nelson, Chair
Timothy N. Schnott, Vice Chair
Casualty Actuarial and Statistical (C) Task Force
National Association of Insurance Commissioners (NAIC)

Re: CASTF Rate Regulation White Paper Draft

Dear Chair Bettencourt and Vice Chair Nelson:

On behalf of the Casualty Practice Council's Homeowner's Insurance Task Force (Task Force) of the American Academy of Actuaries[1], we appreciate the opportunity to comment on the June 26 draft Rate Regulation white paper from the Casualty Actuarial and Statistical (C) Task Force (CASTF). The Task Force has reviewed the exposure and offers the following comments.

Professionalism and Actuarial Standards of Practice

While the exposure draft touches on actuarial standards of practice (ASOPs)[2] and the duty of actuaries to adhere to professionalism standards, the Task Force recommends this point receive a heightened emphasis throughout the paper. ASOPs and the CAS Statement of Principles[3] provide guidance in how actuaries should provide a rate that is "the expected value of all future costs associated with an individual risk transfer." Precept 8 of the Code of Professional Conduct specifically calls out that an actuary "shall take reasonable steps to ensure that such services are not used to mislead other parties[4]," which can include regulatory audiences reviewing and approving actuarial communications. Deliberate implementation of cross-state subsidization in violation of ASOPs and actuarial principles could constitute a violation of the Code of Professional Conduct. Such violations could lead to disciplinary review and/or action by the Actuarial Board for Counseling and Discipline (ABCD).

Cost of Capital and Reinsurance

The exposure draft provides some detail on the possibility of cross-subsidization if an insurer charges a profit margin different than indicated by the actuarial data in certain states due to regulatory requirements around allocation of capital and profit. The underwriting profit provision in each state's rates compensates the insurer for the surplus allocated to that state based on risk. If the profit provision required by regulatory requirements differs from the indicated profit provision, or if profit provisions are not calibrated to each state's actual cost of capital, there may be cross-subsidization between states.

[1] The American Academy of Actuaries is a 20,000-member professional association whose mission is to serve the public and the U.S. actuarial profession. For 60 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.
[2] "Actuarial Standards of Practice", Actuarial Standards Board
[3] "Statement of Principles Regarding Property and Casualty Insurance Ratemaking", Casualty Actuarial Society, 2021
[4] "Code of Professional Conduct", American Academy of Actuaries, 2001

Within a reinsurance context, the cost of reinsurance is commonly purchased on a company basis, so the reinsurance premium would be allocated among states. For example, consider these four types of reinsurance and how their costs would be allocated among states:

1. Property excess reinsurance can pay when a natural disaster exceeds a specified dollar amount.
2. Parametric "insurance" can pay when a natural disaster meets or exceeds specified parameters, such as wind speed.
3. Facultative reinsurance may cover a specific unique structure, such as a sports stadium or a home along a beach, coast, or river.
4. Proportional reinsurance shares premiums or losses according to an agreed percentage.

Each of these four types of reinsurance has a cost to the primary insurer. There are several possible allocation methods for a catastrophic event that triggers a reinsurance payment, which, if not appropriately accounted for in the allocation methodology, could result in cross-subsidization among states:

- Cost can be allocated by incurred or paid losses by state.
- Cost can be allocated by premiums or exposures (such as average insured home value) by state.
- Cost can be allocated by output from statistical models (such as average annual loss or modeled variability)

CASTF may want to consider the following additional clarifications to identify the advantages and disadvantages of each allocation method, address best practices for allocation among states, or distinguish practices by type of reinsurance, while also showing how limits of reinsurance layers can also impact allocations.

Recommended Revisions to the White Paper

- **Executive Summary.** The discussion should recognize that actuaries have independent professional obligations to use appropriate methods, assumptions, and standards when estimating prospective costs. References to ASOP No. 53[5] and the Statement of Principles would clarify that this discipline applies regardless of the filing framework.
- **II A. Homeowners Insurance Rating: Homeowners Rating Overview.** Consider adding references to ASOP No. 12[6] for risk classification and ASOP No. 30[7] for profit, contingencies, investment income, and required capital.
- **II A. Homeowners Insurance Rating: Homeowners Rating Influences.** Consider adding a reference to ASOP No. 25[8] in the discussion of credibility.
- **II B. Homeowners Insurance Rating: Catastrophe Risk and Pricing.** We recommend distinguishing modeled catastrophe perils from other severe weather or high-severity losses. The text should not imply that every listed model consideration is specifically mandated by regulation or an ASOP. Actuaries should consult applicable standards, including ASOP No. 38[9], ASOP No. 39[10], and ASOP No. 41.[11] Add "among other factors" to the illustrative list of rating variables.

[5] "Estimating Future Costs for Prospective Property/Casualty Risk Transfer and Risk Retention", Actuarial Standards Board
[6] "Risk Classification (for All Practice Areas)", Actuarial Standards Board, 2005
[7] "Treatment of Profit and Contingency Provisions and the Cost of Capital in Property/Casualty Insurance Ratemaking", Actuarial Standards Board
[8] "Credibility Procedures", Actuarial Standards Board, 2013
[9] "Using Models Outside the Actuary's Area of Expertise (ASOP No. 38, Revised Edition)", Actuarial Standards Board
[10] "Treatment of Catastrophe Losses in Property/Casualty Insurance Ratemaking", Actuarial Standards Board
[11] "Actuarial Communications", Actuarial Standards Board, 2010

- **II B. Homeowners Insurance Rating: Cost of Reinsurance.** Consider broadening "aggregate" to "individual event and/or aggregate" to recognize per-occurrence, per-risk, aggregate, and blended structures. Also consider revising the concluding objective to state that premiums should be an actuarially sound estimate of the expected future cost of the risk transferred during the policy period.
- **III B 2. What is Cross-Subsidization?: Rate Filing Timing Differences.** Carriers may sequence filings strategically because filing laws differ, such as prior-approval versus use-and-file systems, and because approval may be perceived as easier in some jurisdictions. Staffing constraints at departments of insurance can also lengthen reviews. The paper should consider acknowledging these operational factors because additional agency funding and hiring could improve oversight and reduce perceptions of cross-subsidization.
- **III B 3. What is Cross-Subsidization?: Mix of Business.** Consider framing rapidly growing books as a credibility and data-reliability issue, as their experience may be less credible or less predictive of future experience.
- **III B 5. What is Cross-Subsidization?: Use of Non-State Data.** Consider replacing "external" with "external to the state" or "non-state data" to accurately describe the contrast with state-specific data.
- **IV B. What State-Based Ratemaking Means for Consumers and Markets: How Insurers Deploy Capital and Reinsurance.** The enterprise-level capital discussion is central and warrants elaboration. Each state's underwriting profit provision is intended to compensate the surplus allocated to that state based on risk, generally through a target return on surplus. The paper should examine how often that target return is set at a flat enterprise-wide level rather than calibrated to each state's actual cost of capital, as this may be a potential source of cross-subsidization.
- **IV G. What State-Based Ratemaking Means for Consumers and Markets: Terminology and Methodology.** Replace "CAT model" with "catastrophe model;" add "among other factors" to the listed indication inputs; use "reasonable range" instead of "plausible range;" and clarify that comparing an indication with later emerged losses does not establish that it was over- or under-indicated.
- **IV G 3. What State-Based Ratemaking Means for Consumers and Markets: Indicated versus Implemented Rates.** The paper should more fully explain why an insurer may file below its full actuarial indication. In particular, the paper should describe what competitive pricing entails and why insurers and regulators may accept it as a valid basis for implementing less than the indicated rate in a state.

The Task Force looks forward to the continued collaborative dialogue with the NAIC as CASTF continues work on this project. If you have any questions or would like to discuss these comments further, please contact Rob Fischer, policy project manager, casualty (fischer@actuary.org, 202-785-7865).

Sincerely,

Ken Doss, MAAA, FCAS
Chairperson, Homeowners Insurance Task Force

August 3, 2026

Kris DeFrain, MAAA, FCAS, CPCU
Director of Research and Actuarial Services
National Association of Insurance Commissioners (NAIC) Central Office
(via email: kdefrain@naic.org)

RE: NAIC CASTF Draft White Paper (U.S. Homeowners Insurance Rate Regulation – A Regulatory Perspective)

Dear Ms. DeFrain,

On behalf of the American Property Casualty Insurance Association (APCIA)[1], thank you for the opportunity to review and provide comments on the draft white paper, U.S. Homeowners Insurance Rate Regulation – A Regulatory Perspective.

Overall, APCIA supports the paper and appreciates NAIC's efforts to explain how state-based risk-based ratemaking operates in practice. The paper appropriately recognizes that homeowners insurance rates are prospective, risk-based, actuarially supported, and subject to state-specific regulatory review. We also agree that competitive market forces serve as an important safeguard against any possible inappropriate pricing practices. The U.S. property and casualty insurance market remains highly competitive, making it difficult for insurers to sustain rates that materially deviate from underlying risk. Any attempt to shift costs across states would be inconsistent with Actuarial Standards of Practice, fundamentals of basic ratemaking, and subject to regulatory review under state insurance laws. For these reasons, APCIA shares the paper's conclusion that systemic cross-state subsidization is not occurring and commends the NAIC for developing a thoughtful, fact-based resource that helps address misconceptions regarding homeowners insurance ratemaking.

While APCIA is supportive of the white paper, we respectfully offer the following recommendations and clarifications.

Recommended Clarification #1: Scope of the Paper and Individual Company Conduct

Clarify that the paper is evaluating whether state insurance regulation permits or results in systemic, market-wide cross-state subsidization. The paper should not be interpreted as suggesting that insurer-specific cross-state subsidization is occurring.

Recommended Clarification #2: Avoiding Absolute Statements Regarding Regulatory Detection

[1] The American Property Casualty Insurance Association (APCIA) is the primary national trade association for home, auto, and business insurers. APCIA promotes and protects the viability of private competition for the benefit of consumers and insurers, with a legacy dating back 150 years. APCIA represents the broadest cross-section of home, auto, and business insurers of any national trade association. APCIA membership consists of over 1,200 member companies (or over 300 member groups). APCIA member companies P&C countrywide market share is 66% (total 74% commercial lines, 60% personal lines).

Replace statements suggesting regulators will always identify cross-state subsidization with language stating that the regulatory framework is designed to identify, evaluate, and prevent unsupported attempts to allocate costs across states.

Recommended Clarification #3: Distinguishing Market-Wide Cost Pressures from Cross-Subsidization

Reinforce that changes in reinsurance costs, catastrophe models, rebuilding costs, and other market-wide inputs reflect evolving assessments of future risk and cost rather than allocation of prior losses across states.

Recommended Clarification #4: Context Regarding the Role of Reinsurance in Homeowners Insurance Pricing

Several references may overstate the impact of reinsurance on homeowners premiums. Reinsurance is an important component of insurer risk management, but for most homeowners policies the primary drivers of premium remain expected claims costs, loss adjustment expenses, administration, distribution expenses, taxes, and capital costs. Reinsurance costs are typically a relatively small component of the overall premium and often reflect the same underlying cost pressures affecting the primary market, including construction inflation, catastrophe losses, legal system costs, financial market conditions, and supply-demand dynamics for reinsurance capacity.

Additional Observation Regarding International Reinsurance References

The discussion of global reinsurance markets would benefit from emphasizing that reinsurance pricing remains fundamentally risk-based. While global events may affect overall market conditions and capacity, coverage for specific perils and exposures is generally priced according to the risk characteristics of those exposures rather than as a direct allocation of losses from unrelated geographies. The paper’s statement that consumers pay for the portion of reinsurance that protects the risks in their own state is an important principle and a similar concept applies internationally.

Thank you again for the opportunity to comment. APCIA appreciates the Task Force's work and hopes the final paper will help inform policymakers, researchers, regulators, and consumers while countering inaccurate narratives regarding alleged cross-state subsidization.

Sincerely,



Norman Niami, FCAS, MAAA, Affiliate IFoA
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Cell: 202-880-4082

August 5, 2026

Julie Lederer (MO), Chair
NAIC Casualty Actuarial and Statistical (C) Task Force
c/o Kris DeFrain, Director, Research and Actuarial Department
Via email kdefrain@naic.org

Re: NAMIC Comments on the Draft White Paper

Dear Chair Lederer and Members of the Task Force:

On behalf of our members, the National Association of Mutual Insurance Companies (NAMIC)[1], this letter offers comments on the draft white paper *U.S. Homeowners Insurance Rate Regulation- A Regulatory Perspective.* Overall, the draft is thoughtful, balanced, and useful; it does a strong job explaining that homeowners' insurance rates are prospective, state-based estimates of expected future costs rather than mechanisms to recoup prior losses or shift catastrophe costs from one state's policyholders to another's.

The draft also effectively explains several issues that are frequently misunderstood in public discussion, including the role of catastrophe modeling, reinsurance, state-specific regulatory review, and competitive market forces. With targeted revisions, the paper would even more clearly reflect the legal, actuarial, and market disciplines that constrain unsupported claims of cross-state subsidization while remaining accessible to regulators, policymakers, researchers, and other non-technical audiences.

NAMIC offers the following comments for the Task Force's consideration.

Actuarial Standards
A central recommendation is to expand the discussion of actuarial professionalism and standards of practice. The current draft notes that actuaries evaluate data, assumptions, and methods and references ASOP Nos. 13, 25, 38, 39, and 53 in specific sections, but

[1] *The National Association of Mutual Insurance Companies (NAMIC) is the foremost trade association representing the property/casualty insurance industry. Serving more than 1,300 member companies—including local and regional insurers as well as some of the nation's largest carriers—NAMIC members collectively write $467 billion in annual premiums, representing 61% of the homeowners and 53% of the automobile insurance markets. For more than 130 years, NAMIC has been the leading voice advancing public policy solutions and regulatory frameworks that promote a strong, competitive market and protect our members and their policyholders.*

the paper would be stronger if it more directly explained that actuaries are independently bound by professional standards and subject to discipline for material departures from those.

The concept of actuarial professional obligations should be added in at least two places. First, the executive summary or introduction should note that the actuarial profession provides an independent layer of consumer protection because ratemaking actuaries must estimate future costs using appropriate methods and assumptions under applicable professional standards, not merely satisfy a filing requirement.
Second, the conclusion should retain and modestly strengthen the sentence recognizing that actuaries who depart from professional standards may be subject to discipline, including the potential loss of credentials and ability to practice. The gravity of such a consequence helps explain why intentional cross-state subsidization would be inconsistent not only with regulation but also with actuarial ethics and professionalism. We additionally recommend the paper modestly expand the references to specific standards where relevant. For example, the discussions of risk classification, credibility, profit and contingencies, catastrophe modeling, and actuarial communications may benefit from references to the most directly applicable standards in each instance, so readers better understand the professional framework underlying those topics.

Technical Revisions
NAMIC supports several targeted edits that would improve technical precision without changing the overall substance of the draft. First, the statement on page 6 that the NAIC Model Rating Law [2]is adopted, with variations, "across most states" should be revised to "across all states, with variations," consistent with the current state adoption status.

Second, several passages would benefit from modest wording changes:

- On page 8, revise "produces stable outcomes" to "produces more stable outcomes" or "less variable outcomes."
- On page 8, remove "typically" from the sentence stating that expected losses are the largest component of homeowners' premium.
- On page 9, clarify that "age" refers to the age of the home, or reorder the illustrative rating variables to make that clear.
- On page 9, move credit-based insurance score later in the list of illustrative variables so that the discussion begins with more direct property-related characteristics.
- Ensure the first several footnotes are formatted consistently with the linked footnotes that appear later in the paper.

[2] https://content.naic.org/model-laws

Several passages would also benefit from minor refinements for completeness and consistency. Where the paper lists factors affecting actuarial indications, it should note that those lists are illustrative, not exhaustive, and may refer to development, trend, catastrophe provisions, expenses, credibility, reinsurance, capital, and other relevant items among other factors. Likewise, the paper should use "reasonable range" rather than "plausible range," and "non-state data" or "data external to the state" where the intended distinction is between state-specific experience and broader data sources.

Competition, Catastrophe Risk, and Reinsurance

The discussion of market forces is generally sound, but several edits would improve balance and precision. On page 7, the sentence describing competition should acknowledge that competitive market dynamics are meaningful, but do not always function totally efficiently because homeowners' insurance policies are complex and market disruptions can interfere with comparison shopping and normal competitive responses. On page 30, the paper should refer to the competitive homeowners' insurance markets that exist in most states, rather than phrasing that could be read to imply equally robust competition in every jurisdiction.

The catastrophe and reinsurance sections would also benefit from several clarifications. The catastrophe discussion should distinguish perils commonly modeled from other severe weather or high-severity losses; the catastrophe-model section should avoid implying that every listed item is universally required in every filing; and the reinsurance section should recognize that programs may protect against individual-event and/or aggregate losses. NAMIC also supports adding that enterprise-level reinsurance purchasing is often more efficient than state-by-state purchases and can benefit policyholders when costs are reasonably allocated according to expected benefit and risk contribution.

The section addressing whether catastrophe losses may affect rates elsewhere should also sharpen the distinction between true cross-state subsidization and broader market consequences. A company's intentional decision to require a higher future profit provision in one state because it expects another state to be unprofitable may raise subsidy concerns, but changes in future countrywide reinsurance costs, reduced reinsurance capacity, or higher overall cost of capital following major catastrophe losses are not cross-state subsidies in the ordinary regulatory sense. Clarifying that distinction would strengthen the paper's treatment of the issue and help prevent mischaracterization of normal market-wide effects as impermissible cost shifting.

Conclusion

NAMIC appreciates the substantial work reflected in this exposure draft and supports its central premise that state-based rate regulation provides important consumer protections while requiring rates to reflect expected future costs. With the revisions described above, the final paper will fully reflect the layered safeguards that constrain unsupported cross-state subsidization, including state rating laws, actuarial standards, market conduct oversight, and competition where present.

Sincerely,



Erica Weyhenmeyer, CPCU, MCM, AIE, WCP
Sr. Policy Vice President- Market Regulation & Workers' Compensation
NAMIC

6. Hear Updates on Activities and Research from Professional Actuarial Associations

Julie Lederer (MO)

NAIC NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

12

Academy Professionalism Update

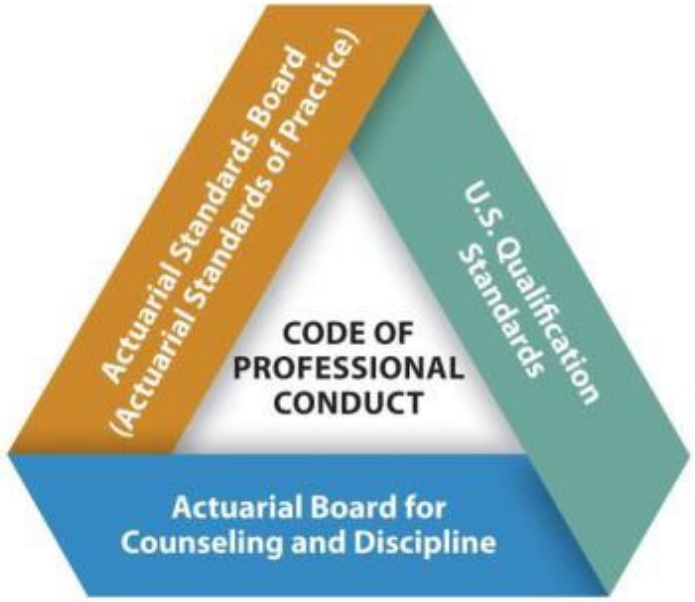
NAIC Fall National Meeting

November 2026

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American Academy of Actuaries

Housed in the Academy: The Professionalism Framework



- **U.S. Code of Professional Conduct**
  - Joint Committee on the Code of Professional Conduct
- **U.S. Qualification Standards (USQS)**
  - Committee on Qualifications
- **Actuarial Standards of Practice (ASOPs)**
  - Actuarial Standards Board (ASB)
- **Counseling and Discipline**
  - Actuarial Board for Counseling and Discipline (ABCD)

actuary.org/professionalism

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Committee on Qualifications (COQ)

- Recommends to the Academy's Board of Directors the minimum qualification standards, including continuing education requirements, necessary to qualify credentialed actuaries to issue statements of actuarial opinion in the United States.
- Answers questions relating to qualifications.
  - As of early October, the COQ received 20 questions in 2026, covering qualifications for non-US actuaries to issue SAOs, specific qualifications, CE, and documentation requirements.

The most recent U.S. Qualification Standards took effect Jan. 1, 2022.

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Actuarial Standards Board (ASB)

General ASOPs—Recently Approved

- ASOP No. 41, *Actuarial Communications*

General ASOPs—Under Revision

- ASOP No. 1, *Introductory Standard of Practice*
- ASOP No. 12, *Risk Classification (for All Practice Areas)*

Learn more at: www.actuarialstandardsboard.org

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Actuarial Standards Board (ASB)

Property/Casualty ASOPs under revision

- ASOP No. 30, *Profit Provisions, Contingency Provisions, and the Cost of Capital in Property/Casualty Risk Transfer and Risk Retention*
- ASOP No. 39, *Treatment of Catastrophe Losses in Property/Casualty Insurance Ratemaking*
- ASOP No. 43, *Property/Casualty Unpaid Claim Estimates*

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Actuarial Board for Counseling and Discipline (ABCD)

Recent ABCD activities

- During the first three quarters of 2026, the ABCD handled a total of 116 cases, consisting of 85 requests for guidance (RFGs) and 31 inquiry cases.
- The ABCD conducted ten outreach presentations, via the Academy's Speakers Bureau, for actuarial organizations, regulators, clubs and firms across the United States.

Up to Code in *Contingencies* magazine

- Perspectives from the ABCD—Moral Turpitude (September/October 2026)
- Don't Be 'That Actuary' (July/August 2026)
- Are You Offside? (May/June 2026)



Learn more at: *www.abcdboard.org*

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Upcoming Professionalism Webinar

Tales from the Dark Side

Presented by members of the ABCD

December 18, 2026

12:00-1:30 pm eastern

Register here

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Questions?

For more information, or to send suggestions/comments on the U.S. Qualification Standards, please contact

Virginia Hulme, Assistant Director, Professionalism

professionalism@actuary.org

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Academy Update—Casualty Practice Council

Casualty Actuarial and Statistical (C) Task Force (CASTF)

Nov. 16, 2026

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About the Academy



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To serve the public and the U.S. actuarial profession



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Serving over 20K MAAAs & public stakeholders for 60 years



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Impact:
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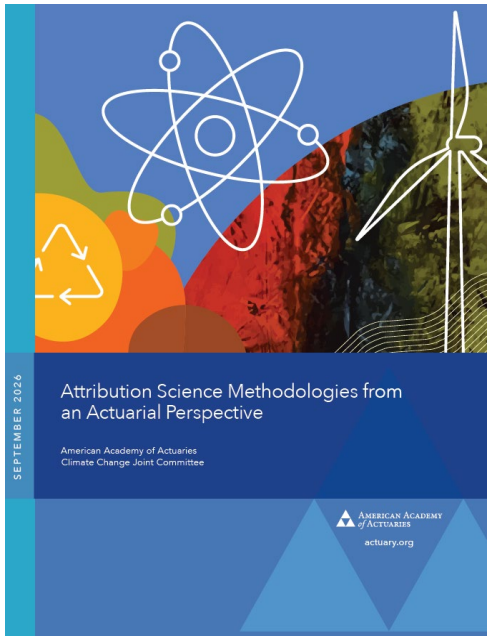
Casualty Practice Council Priorities

Recent Activities

- Webinar: Cost Drivers and Affordability in Automobile and Homeowners Insurance
- Webinar: Cyber Risk in the Age of AI: Market Trends and Emerging Challenges
- Updates to the Cyber Risk Toolkit: Intro Paper and Cyber Risk Accumulation

Cross Practice Areas of Interest

- Attribution Science Methodologies from an Actuarial Perspective
- Climate Change Impact on Insurance Affordability, Availability, and Accessibility
- Artificial Intelligence Governance: What Counts as AI?



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Casualty & Risk Management Preview

- Anatomy of Bias in a Commercial Multi-Peril policy paper
- Portability of Telematics Data brief
- Survey of the Commercial Liability Market
- Update to the 2022 Wildfire Monograph
- Annual P/C practice note, law manual, and Opinion Seminar
- Auditing Algorithms for Bias-Performing an Audit paper
- The Climate Impact of AI Data Centers brief
- Climate Risk and Insurance Innovation—An Actuarial Perspective on Current and Emerging Products paper

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Cost Drivers and Affordability in Personal Automobile and Insurance

- Insurance affordability is influenced by the relationship among premiums, underlying risk, claim costs, coverage, and household income.
- Affordability concerns are not uniform and can vary substantially by geography, peril, population, and type of coverage.
- Rising premiums may reflect increases in expected losses and expenses, rather than pricing decisions alone.
- Availability and affordability are interconnected, as reduced insurer participation can limit consumer options and increase coverage costs.
- Broad affordability measures may mask significant differences among individual consumers and communities.

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Cost Drivers and Affordability in Personal Automobile and Homeowners Insurance (contd.)

Auto Insurance	Homeowners Insurance	Tariffs
• Rising vehicle repair costs • More complex technology • Higher medical costs • Increased claim severity	• Increasing catastrophe exposure • Higher construction and labor costs • Growing reinsurance expenses	• Vehicles • Auto parts • Building materials • Other imported goods

- These pressures may develop differently across markets, but all contribute to a widening gap between insurance costs and household income.
- Because many of these cost drivers originate outside the insurance system, improving affordability will require attention to broader economic conditions and the underlying cost of insured losses.

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Cyber Risk in the Age of AI: Market Trends and Emerging Challenges

AI can strengthen cyber defense but expands the attack surface

Threat actors are using AI

Emerging cyber exposures

AI-related cyber losses may extend beyond traditional data breaches

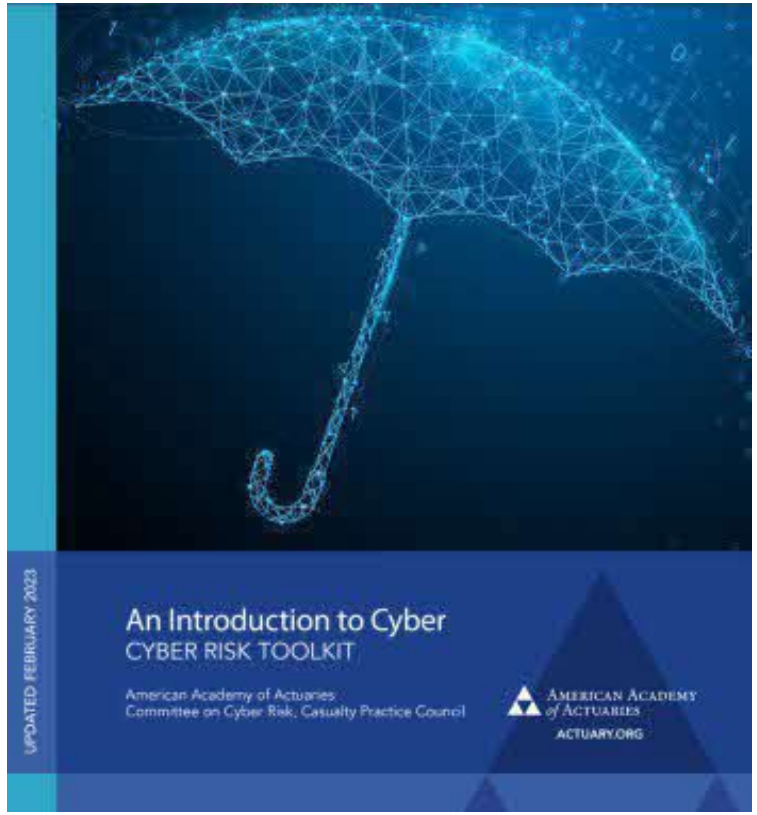
- Cyber models are beginning to incorporate AI-driven threats and systemic exposures, reflecting the potential for correlated losses across organizations and multiple insurance lines.
- These evolving risks increase the importance of underwriting controls, continuous monitoring, incident-response capabilities, and clear policy language addressing AI-related coverage.

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Cyber Risk Toolkit

Access at: actuary.org/cybertoolkit

- Developed by the Academy's Committee on Cyber Risk
- Papers in the toolkit address issues pertinent to cyber risk and exposure which are now impacting most lines of business
- Intended to be a resource for the general public, public policymakers, the actuarial profession, the insurance sector, and other stakeholders



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Questions?

For policy information, please contact

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Policy Project Manager, Casualty
fischer@actuary.org

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Upcoming Events & Webinars

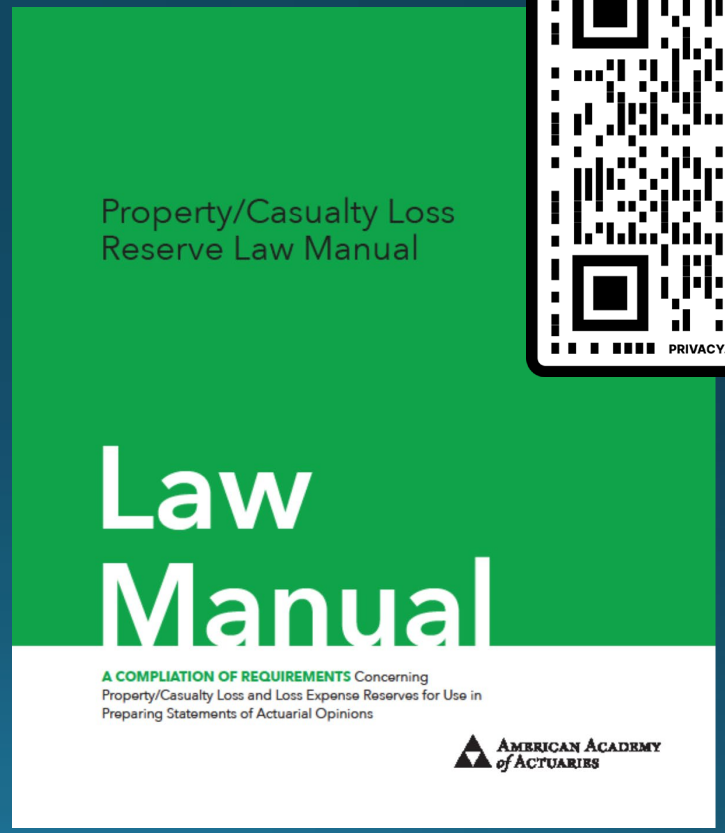
- **Webinar on New Opinion Writer's Guide to the SAO,** Nov. 17, 2026
- **Seminar on Effective P/C Loss Reserve Opinions, Nashville,** Dec. 7-8, 2026
- **Leadership Summit & Governance Transition,** Dec. 10, 2026
- **Professionalism Webinar: Tales from the Dark Side,** Dec. 18, 2026
- **Policy Summit & Hill Visits,** March 8-9, 2027

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Property/Casualty Loss Reserve Law Manual

What's Inside?

- SAO requirements and the laws and regulations establishing those requirements;
- Annual statement instructions for the SAO for property/casualty, title loss, and loss expense reserves; and
- Other pertinent annual statement instructions.



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