### CASUALTY ACTUARIAL AND STATISTICAL (C) TASK FORCE

Casualty Actuarial and Statistical (C) Task Force Aug. 13, 2024, Minutes
Casualty Actuarial and Statistical (C) Task Force July 9, 2024, Minutes (Attachment One)
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Draft: 8/23/24

### Casualty Actuarial and Statistical (C) Task Force Phoenix, Arizona August 13, 2024

The Casualty Actuarial and Statistical (C) Task Force met in Chicago, IL, Aug. 13, 2024. The following Task Force members participated: D.J. Bettencourt, Chair, represented by Christian Citarella (NH); Chlora Lindley-Myers, Vice Chair, represented by Cynthia Amann and Julie Lederer (MO); Lori K. Wing-Heier represented by Sian Ng-Ashcraft (AK); Mark Fowler represented by Charles Hale (AL); Barbara D. Richardson represented by Tom Zuppan (AZ); Ricardo Lara represented by Tina Shaw and Mitra Sanandajifar (CA); Andrew N. Mais represented by Wanchin Chou and George Bradner (CT); Michael Yaworsky represented by Bob Lee (FL); Gordon I. Ito represented by Kathleen Nakasone (HI); Doug Ommen represented by Travis Grassel (IA); Amy L. Beard represented by Larry Steinert (IN); Vicki Schmidt represented by Nicole Boyd (KS); Timothy J. Temple represented by Nichole Torblaa (LA); Joy Y. Hatchette represented by Walter Dabrowski (MD); Robert L. Carey represented by Sandra Darby (ME); Anita G. Fox represented by Kevin Dyke (MI); Grace Arnold represented by Phil Vigliaturo (MN); Eric Dunning represented by Nguyen Thai (NE); Justin Zimmerman represented by Seong-min Eom (NJ); Alice T. Kane represented by Melissa Robertson (NM); Judith L. French represented by Tom Botsko (OH); Michael Humphreys represented by Michael McKenney (PA); Alexander S. Adams Vega represented by Glorimar Santiago (PR); Cassie Brown represented J'ne Byckovski and Miriam Fisk (TX); Kevin Gaffney represented by Rosemary Raszka (VT); Mike Kreidler represented by Eric Slavich (WA); and Allan L. McVey and Melinda Kiss (WV). Also participating was: Gennady Stolyarov (NV).

### 1. Adopted its July 9, June 17, May 7, March 20, and Spring National Meeting Minutes

Citarella said the Task Force met July 9 and May 7 and conducted e-votes that ended June 17 and March 20. The June 17 e-vote included adoption of the *2022 Auto Insurance Database Average Premium Supplement* (Auto Supplement). The March 20 e-vote included adoption of the *Report on Profitability by Line by State* (Profitability Report) and the *Competition Database Report* (Competition Report).

The Task Force also met April 16, May 21, June 18, and July 16 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.

The Task Force held the following Predictive Analytics Book Club meetings: 1) April 23: Sam Kloese (NAIC), April Yu (NAIC), and Roberto Perez (NAIC) of the NAIC Rate Model Review Team presented recommendations for non-GLM model documentation; 2) May 28: Matt Moore (Highway Loss Data Institute—HLDI) presented on electric vehicles; 3) June 25: Tammy Schwartz (Guidewire) and Paul Harper (Guidewire) introduced their HazardHub property risk tool; and 4) July 23: Gary Wang (Pinnacle Actuarial Resources—Pinnacle) and Joey Sveda (Pinnacle) advised state insurance regulators about mathematical paradoxes in modeling.

Chou made a motion, seconded by Dyke, to adopt the Task Force's July 9 (Attachment One); June 17 (Attachment Two); May 7 (Attachment Three); and March 16 (*see NAIC Proceedings – Spring 2024, Casualty Actuarial and Statistical (C) Task Force*) minutes. The motion passed unanimously.

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

Fisk said the Actuarial Opinion (C) Working Group met June 25 in regulator-to-regulator session, pursuant to paragraph 3 (specific companies, entities, or individuals) of the NAIC Policy Statement on Open Meetings, to

discuss observations resulting from state insurance regulators' review of the 2023 Statements of Actuarial Opinion (SAOs).

The Task Force also met Aug. 6 and July 23. During these meetings, it discussed potential changes to the 2024 regulatory guidance document and the 2025 opinion instructions. Proposed changes resulted from the following: 1) revision of Actuarial Standard of Practice (ASOP) No. 36, which will be effective in October of this year; and 2) planned changes to the Society of Actuaries (SOA) educational program to be implemented in 2025. Fisk said the SOA's program changes will impact the definition of "Qualified Actuary" in the opinion instructions. However, educational materials for the exams under the revised Fellow of the Society of Actuaries (FSA) pathway and optional regulatory certificate are not yet available. As such, state insurance regulators cannot yet assess the conditions under which an actuary who obtains an FSA designation under the revised pathway would meet the definition of a Qualified Actuary.

The Working Group plans to meet this month to hear a presentation from Willis Towers Watson (WTW) on machine-led reserving and to continue discussing potential changes to the 2024 regulatory guidance document and the 2025 opinion instructions.

Fisk made a motion, seconded by Darby, to adopt the report of the Actuarial Opinion (C) Working Group, including its combined Aug. 6 and July 23 minutes (Attachment Four). 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 and May 30. During these meetings, it discussed proposed changes to the statistical reports. The Working Group heard from Arthur Schwartz (LA), who proposed several additions to the *Dwelling, Fire, Homeowners Owner-Occupied, and Homeowners Tenant and Condominium/Cooperative Unit Owner's Insurance Report* (Homeowners Report), including adding a table showing average premium and median insured value. Other suggestions included adding data for mobile and manufactured homes, catastrophe losses, and losses by peril. The NAIC is surveying submitting statistical agents to determine what data in these proposals is available in the timeline needed for inclusion in the report. The Working Group also heard Brian Sullivan's (Risk Information Inc.) suggestions for changes to the Profitability Report, including adding a profit margin metric and a 10-year weighted average to the 10-year summary. There is also a suggestion to add coverage limits by state in the *Auto Insurance Database Report* (Auto Report).

The Working Group plans to continue discussing these changes during a meeting in September, and any adopted changes will be brought before this Task Force for consideration.

Darby made a motion, seconded by Chou, to adopt the report of the Statistical Data (C) Working Group, including its July 29 (Attachment Five) and May 30 (Attachment Six) minutes. The motion passed unanimously.

#### 4. Heard a Presentation from the CAS on Race and Insurance

Ken Williams (Casualty Actuarial Society—CAS) presented the CAS race and insurance pricing 2024 projects. Williams said CAS launched its "Approach to Race and Insurance Pricing" in February 2021, with four areas of focus: 1) collaboration; 2) research; 3) basic and continuing education (CE); and 4) leadership and influence. In 2022, the CAS published the following four research papers: 1) *Defining Discrimination in Insurance;* 2) *Understanding Potential Influences of Racial Bias on P&C Insurance: Four Rating Factors Explored;* 3) *Methods for Quantifying Discrimination Effects in Protected Classes in Insurance;* and 4) *Approaches to Address Racial Bias in Financial Services: Lessons for the Insurance Industry.* 

In 2024, the CAS published the following four papers: 1) *Comparison of Regulatory Framework for Non-Discriminatory AI Usage in Insurance*; 2) *Regulatory Perspectives on Algorithmic Bias and Unfair Discrimination*; 3) *A Practical Guide to Navigating Fairness in Insurance Pricing*; and 4) *Balancing Risk Assessment and Social Fairness: An Auto Telematics Case Study.* Phase 2, "Preparing for Tomorrow," focuses on regulatory insights and strategies for mitigating potential bias in insurance pricing. Two final papers are coming soon: 1) Practical Applications of Bias Measurement and Mitigation Techniques; and 2) *Potential Unintended Impacts of Bias Mitigation on Other Protected Classes.* 

Williams said some findings include: 1) motor vehicle and credit score are impacting race less than expected, but geographic location and, especially, homeownership are showing concerns; 2) countries regulate artificial intelligence (AI) differently depending on the philosophy behind insurance systems and who is responsible for regulating AI models; 3) regulatory concerns are documented; 4) state insurance regulators tend not to like inference methods to determine race from insureds' names; 5) age and gender lose value as rating variables when telematics is used but whether insurance scores would lose value could not be validated; and 6) adopting bias methods may produce other unintended issues.

### 5. Discussed the Private Flood Insurance Supplement

McKenney said that in April 2020, the NAIC issued a data call and collected 2019 and 2020 data on the private flood insurance market. The data call morphed into the private flood insurance supplement, which collected 2020–2023 data in the annual statements due in April 2021–2024. While strides have been made, issues still exist, including private insurers writing flood insurance who are not completing the supplement. In some cases, insurers are unaware of the supplement or believe they do not need to complete it.

McKenney said there is an inconsistency in how insurers interpret the supplement instructions: the definitions of "first dollar in excess" and meanings of reporting standalone and writing flood insurance by endorsement. Additionally, the supplement does not differentiate between the types of risks beyond personal and commercial.

McKenney expressed that there is value in examining the Private Flood Insurance Supplement instructions to see if they can be improved. He said he would like to get a greater sense of who is writing private flood insurance in state insurance markets, including alien insurers. McKenney said the International Insurance Department (IID) is collecting data on alien insurers, but it is unclear whether that data matches the supplement data.

A small group will be working on drafting an initial proposal for the Task Force. Any additional volunteers should contact McKenney.

#### 6. Received an Update on the NAIC Rate Model Review Team

Kris DeFrain (NAIC) said the NAIC Rate Model Review team assists state insurance regulators with reviewing rate models in rate filings. The team initially aimed to have a queue of about 30 days; however, the queue is currently nine months. She said the NAIC is, effective immediately, not accepting any new rate model filing submissions. She said the team will focus on all the currently booked rate model filings and any related objection responses. During this time, the Task Force will be asked to consider adjustments to the program. This may include adding efficiencies to the process and perhaps charging for the service. The Executive (EX) Committee will discuss budget considerations and staffing.

Stolyarov said he is mindful not to submit rate filings at this time because of the workload. He said states are challenged with an overwhelming volume of filings and limited staff resources to handle those. He wondered if a possible solution would be a massive expansion of NAIC staff to review complex filings to help reduce the backlog. He said it might be easier for the NAIC to increase staffing than the state department.

Chou said a couple of NAIC staff visited Connecticut in the past week. He said the collaboration could be expanded so that experienced actuaries in states might work with the team to review rate model filings.

### 7. <u>Received Liaison Reports</u>

Amann said the Cybersecurity (H) Working Group has worked with the Task Force and the Statistical Data (C) Working Group on past cyber supplement changes. She said there may be a need to discuss more changes, potentially concerning cybersecurity and cyber coverage. She said the Working Group might ask the Task Force for guidance. She said there may be potential to create a cyber supplement on the market side rather than in the blanks.

Darby provided an update on the System for Electronic Rates & Forms Filing (SERFF) Modernization Project. Rollout for using the new SERFF platform for review of filings by the Interstate Insurance Product Regulation Commission (Compact) will happen at the following times: 1) life filings will be reviewed this fall; 2) life and annuity and credit filings will be reviewed the second quarter of 2025; 3) P/C filings will be reviewed the fourth quarter of 2025; and 4) health filings will be reviewed following the P/C filings.

The SERFF Modernization Project will include the ability to do checks within SERFF, such as whether the insurer is licensed (eliminating the need to exit the system for those tasks), a manager dashboard, analytics and workflow, and AI capabilities. Darby recommended that those who use SERFF attend a demonstration.

Botsko provided an update on the Risk-Based Capital Investment Risk and Evaluation (E) Working Group of the Capital Adequacy (E) Task Force. Property and casualty (P/C) factors and health factors will stay at the current 20% for tranches but will be updated once the American Academy of Actuaries (Academy) completes work. He said other topics this week for the Capital Adequacy (E) Task Force will be: 1) a minor change to procedures of extending the deadlines to get proposals in and/or when those are approved; and 2) a new risk research group that will discuss the preamble to capital adequacy as well as research non-investment related factors for risk-based capital (RBC) across all lines, including P/C.

Botsko reported that the Speed to Market (D) Task Force published an updated *Product Filing Review Handbook* on the NAIC website.

Bradner said the Climate and Resiliency (EX) Task Force released its *NAIC National Climate Resiliency Strategy for Insurance* (Climate Resilience Strategy) in March 2024. The document highlights several goals and action items, including the creation of a climate risk dashboard to assess risk and address protection gaps and the study of flood risk and flood mitigation, creating strong messaging for consumers to promote the private flood market using data from the Property & Casualty Marketing Intelligence (PCMI) data call to understand trends and actions taken by insurers in climate affected regions. The plan is to continue to expand the NAIC advocacy for both increased federal investment in existing risk mitigation programs and tax parity among federal and state risk mitigation programs to achieve more successful risk mitigation.

The Climate and Resiliency (EX) Task Force is expanding solvency tools related to climate scenario analysis and climate stress testing. This year, the Task Force has heard presentations on how companies can bring innovative approaches to climate risk issues and how local communities are working to develop climate action plans to help educate residents on mitigation and resiliency efforts.

The Climate and Resiliency (EX) Task Force's Climate Risk Disclosure Workstream has held two meetings this year. The first meeting highlighted best practices for small and medium-sized companies for completing their climate

risk disclosures. The second meeting included a presentation on the climate risk disclosure survey analysis recording.

On Aug. 2, the Financial Condition (E) Committee adopted the joint P/C trades' RBC proposal for climate scenario analysis, which was a modification of the proposal developed by the Climate and Resiliency (EX) Task Force's Solvency Workstream.

Citarella noted that NAIC Connect is expected to become the main source of information for state insurance regulators.

#### 8. <u>Considered Exposure of a Draft White Paper Appendix on Penalized Regression</u>

Sam Kloese (NAIC) presented proposed changes to the white paper appendix to include penalized regression (e.g., Lasso and Ridge Regression) modeling. Citarella said the draft will be exposed for a 30-day public comment period ending Sept. 13.

#### 9. <u>Heard Activity and Research Updates from Professional Associations</u>

The Academy, Actuarial Board for Counseling and Discipline (ABCD), Actuarial Standards Board (ASB), CAS, and SOA provided reports on current activities and research.

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

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### Casualty Actuarial and Statistical (C) Task Force Virtual Meeting July 9, 2024

The Casualty Actuarial and Statistical (C) Task Force met July 9, 2024. The following Task Force members participated: Chlora Lindley-Myers, Vice Chair, represented by Cindy Amann and Julie Lederer (MO); Lori K. Wing-Heier represented by Sian Ng-Ashcraft (AK); Mark Fowler represented by Charles Hale (AL); Barbara D. Richardson represented by Tom Zuppan (AZ); Ricardo Lara represented by Mitra Sanandajifar (CA); Andrew N. Mais represented by Wanchin Chou (CT); Karima M. Woods represented by David Christhilf (DC); Michael Yaworsky represented by Virginia Christy (FL); Doug Ommen represented by Travis Grassel (IA); Amy L. Beard represented by Patrick O'Connor and Larry Steinert (IN); Vicki Schmidt represented by Nicole Boyd (KS); Timothy J. Temple represented by Arthur Schwartz (LA); Robert L. Carey represented by Sandra Darby (ME); Anita G. Fox represented by Kevin Dyke (MI); Eric Dunning represented by Michael Muldoon (NE); Justin Zimmerman represented by Sam Sackey (NJ); Alice T. Kane represented by Christian Myers (NM); Judith L. French represented by Tom Botsko (OH); Glen Mulready represented by Andrew Schallhorn (OK); Michael Humphreys represented by Michael McKenney (PA); Cassie Brown represented by Miriam Fisk (TX); Kevin Gaffney and Rosemary Raszka (VT); Mike Kreidler represented by Eric Slavich (WA); and Allan L. McVey (WV).

#### 1. Heard an Update on Rate Filing Issues

Lederer chaired the meeting and reported on two rate filing issues.

The first issue is that some companies are creating unknown or missing rates in inappropriate situations. For example, if the missing information is something that the company is responsible for collecting (e.g., limits, deductibles, mileage, vehicle model), many regulators find that the company is responsible for obtaining that information and recording it in the customer's file before rating.

The other issue is whether to apply a rating variable to a geographical area rather than at an individual insured level. For example, rating dog ownership in a geographical area is not considered appropriate. Dog ownership varies by individual household, and data should be collected to appropriately rate this at the household level. Just because data is available by geographical area does not mean that the insurance rating is appropriate.

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

Fisk said the Actuarial Opinion (C) Working Group met on June 25 in regulator-to-regulator session, pursuant to paragraph 3 of the NAIC Policy Statement on Open Meetings, for the annual discussion of observations resulting from regulators' review of the 2023 Statements of Actuarial Opinion. She said that in the coming weeks, the Working Group will begin discussing potential changes to the 2024 Regulatory Guidance document and the 2025 Statement of Actuarial Opinion instructions.

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

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

Darby said the Statistical Data (C) Working Group met May 30 to discuss proposed changes to the *Report on Profitability by Line by State* (Profitability Report) and the *Dwelling, Fire, Homeowners Owner-Occupied, and Homeowners Tenant and Condominium/Cooperative Unit Owner's Insurance Report* (Homeowners Report). She said no changes were adopted. The Working Group will meet again in late July.

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

#### 4. Discussed the Academy's Cyber Risk Toolkit

Citarella, Lederer, Darby, Grassel, Schwartz, and Kris DeFrain (NAIC) began a presentation about the American Academy of Actuaries' (Academy's) Cyber Risk Toolkit at the Task Force's May 7 meeting. The presentation concluded during this meeting.

#### 5. Heard a Report on the Cybersecurity (H) Working Group

Amann and Miguel Romero (NAIC) provided the Task Force with a presentation on activities of the Cybersecurity (H) Working Group (Attachment One-B)

#### 6. <u>Discussed Reporting for the Private Flood Insurance Supplement</u>

McKenney said that there have been many reporting issues with the NAIC Private Flood Supplement to the Annual Statement. He said some insurers are interpreting "first dollar" to mean there cannot be any deductible, while others are interpreting it to mean "primary insurance regardless of the existence of any deductible." Other issues include writing flood insurance by endorsement combined with other perils and not completing the supplement, as well as not excluding flood on some residential insurance policies and not completing the supplement.

He said the entirety of the flood insurance coverage should be reported, and he did not think that was happening. He said he thought reporting should also be separated by owner-occupied private residential dwellings, renters, condo owners, mobile homeowners, and secondary/seasonal. Also, he recommended ensuring consistency with what is reported by alien insurers to the NAIC International Insurers Department (IID).

Schwartz, Chou, J'ne Byckovski (TX), and Jackie Horigan (MA) volunteered to join McKenney on a volunteer drafting group to write a proposal. The Task Force will consider whether to submit to the Blanks (E) Working Group a proposal to change the Private Flood Insurance Supplement. McKenney said other volunteers are welcome to participate.

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

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# Cybersecurity (H) Working Group Update

Cynthia Amann, Chair of Working Group Miguel Romero, NAIC Staff Support of Working Group



# **Objective for 2024**

Meet with subject matter experts to understand data and what the data says about cybersecurity and cyber insurance trends



### **Richard Gibson-American Academy of Actuaries**

- The Academy's Casualty Practice Council has a Committee on Cyber Risk that monitors the actuarial aspects of cyber risks.
- The Committee has created the Cyber Risk Toolkit, which includes papers addressing issues related to cyber risk insurance and cyber exposure.
  - This toolkit is intended to be a resource available for stakeholders to provide an overview of the challenges in the cyber insurance market, with periodic updates to reflect new and emerging issues.
- The Committee is currently working on a cyber vendor model review, to understand parameters and the output provided as well as an outline of cyber insurance and directors & officers coverage.

### Mark Camillo and Monica Lindeen- CyberAcuView

- CyberAcuView was created by insurance industry leaders, to act as thought leader on issues surrounding cyber insurance.
- Their core activities include data aggregation, reporting and standards; systemic risk evaluation; regulatory collaboration; law enforcement coordination; and other priorities to improve market efficiencies.
- CyberAcuView shared the results of a data call focused on 2019-2023 third-quarter data.
  - Notably, its clients include approximately 60% of the cyber insurance market.
  - 30,000 claims have been submitted since 2019.
  - Approximately \$4 billion in payments, more than half of the losses were

### **Stephen Viña- Office of the National Cyber Director**

- ONCD developed the National Cybersecurity Strategy, representing a fundamental shift in rebalancing the responsibility to defend cyberspace and realigning incentives to favor long-term investments.
- ONCD and Treasury Department continue the study of a cyber insurance federal backstop.
  - Including responses to their 2023 request for input.
- ONCD has observed ransomware payments have become less common, but more severe.
  - Indicating threat actors are seeking larger payouts for their activities.
  - Ultimately, the federal government strongly discourages payments, to avoid encouraging continued activity by the threat actors.

### Rebecca Bole and Jon Laux- CyberCube

- CyberCube seeks to provide analytics to quantify cyber risk and partners with insurance regulators, rating agencies, and government agencies to create frameworks for governance.
- Cyber risk data is abundant, everything digital is tracked in a way the physical world is not. Detailed analysis of information signals can indicate an organizations risk posture.
- Understanding an insurers use of data, level of testing, and adaptability to change are important criteria for underwriting maturity.
  - Organizations are using a combination of external and internal network scanning tools to inform decision-making.
  - Underwriting questionnaires should be used to fill in the gaps.
- Many carriers are seeking mitigation strategies via active risk monitoring.
  - Developing alerts and notifications to policy holders to improve resilience.

### Sezaneh Seymour and Daniel Woods- Coalition

- Coalition, Inc., utilizes an active insurance model to approach the cybersecurity risk of their policyholders.
  - Data suggests their policyholders experienced 64% fewer claims than the market average.
  - Coalition has a team of security experts available to provide technical assistance throughout the lifecycle of the policy.
- Academic and industry research identify technical controls such as, patch cadence, multi-factor authentication, attack surface management, and boundary devices as the most important technical predictors of an organizations likelihood to suffer claims.
- Cyber insurance has become a market-based tool to drive security improvements across businesses and infrastructure.

### Ignace Ertilus and Gregory Crabb- FBI/10-8, Ilc

 On July 9<sup>th</sup>, the Cybersecurity Working Group will hear a briefing from Ignace Ertilus of the FBI and Gregory Crabb of 10-8, LLC about the operations of the FBI IC3 division, their approach to cybersecurity incidents, and insights into threat-informed defense strategies.

### What's Next

- As the Working Group reflects on insights gained throouhgout the year, the Working Group may:
  - Send referrals suggesting updates to Handbooks or related to other publications
  - Work with NAIC staff to develop additional training on the topics of cyber insurance and cybersecurity
  - Enhance the Cybersecurity Event Response Plan (CERP)

# **Questions?**



Draft: 7/9/24

### Casualty Actuarial and Statistical (C) Task Force E-Vote June 17, 2024

The Casualty Actuarial and Statistical (C) Task Force conducted an e-vote that concluded June 17, 2024. The following Task Force members participated: D.J. Bettencourt, Chair, represented by Christian Citarella (NH); Chlora Lindley-Myers, Vice Chair, represented by Julie Lederer (MO); Lori K. Wing-Heier represented by Sian Ng-Ashcraft (AK); Barbara D. Richardson represented by Tom Zuppan (AZ); Andrew N. Mais represented by Wanchin Chou (CT); Karima M. Woods represented by David Christhilf (DC); Michael Yaworsky represented by Alexis Bakofsky (FL); Doug Ommen represented by Travis Grassel (IA); Amy L. Beard represented by Larry Steinert (IN); Vicki Schmidt represented by Nicole Boyd (KS); Robert L. Carey represented by Sandra Darby (ME); Grace Arnold represented by Phil Vigliaturo (MN); Justin Zimmerman represented by Sam Sackey (NJ); Judith L. French represented by Tom Botsko (OH); Glen Mulready represented by Andrew Schallhorn (OK); Andrew R. Stolfi represented by David Dahl (OR); Michael Humphreys represented by Michael McKenney (PA); Michael Wise represented by Will Davis (SC); Cassie Brown represented by Nicole Elliott (TX); Kevin Gaffney represented by Rosemary Raszka (VT); Mike Kreidler represented by Eric Slavich (WA); and Allan L. McVey (WV).

### 1. Adopted the 2022 Auto Insurance Database Average Premium Supplement

The Task Force conducted an e-vote to consider adoption of the 2022 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: 7/31/2024

### Casualty Actuarial and Statistical (C) Task Force Virtual Meeting May 7, 2024

The Casualty Actuarial and Statistical (C) Task Force met May 7, 2024. The following Task Force members participated: D.J. Bettencourt, Chair, represented by Christian Citarella (NH); Chlora Lindley-Myers, Vice Chair, represented by Julie Lederer (MO); Lori K. Wing-Heier represented by Sian Ng-Ashcraft (AK); Mark Fowler represented by Charles Hale (AL); Ricardo Lara represented by Mitra Sanandajifar (CA); Andrew N. Mais represented by Susan Andrews and Qing He (CT); Michael Yaworsky represented by Peshala Disanayaka (FL); Gordon I. Ito represented by Randy Jacobson (HI); Doug Ommen represented by Travis Grassel (IA); Vicki Schmidt represented by Nicole Boyd (KS); Timothy J. Temple represented by Arthur Schwartz (LA); Kathleen A. Birrane represented by Walter Dabrowski and Bill Fawcett (MD); Timothy N. Schott represented by Sandra Darby (ME); Anita G. Fox represented by Kevin Dyke (MI); Grace Arnold represented by Sam Sackey (NJ); Alice T. Kane represented by Christian Myers (NM); Judith L. French represented by Tom Botsko (OH); Glen Mulready represented by Andrew Schallhorn (OK); Michael Humphreys represented by James DiSanto and Bojan Zorkic (PA); Michael Wise represented by Will Davis (SC); Cassie Brown represented by J'ne Byckovski and Miriam Fisk (TX); Kevin Gaffney represented by Zoie Y. Swaim (VT); and Mike Kreidler represented by Eric Slavich (WA).

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

Fisk said the Actuarial Opinion (C) Working Group plans to meet in June in regulator-to-regulator session, pursuant to paragraph #3: *Specific companies, entities or individuals, including, but not limited to, collaborative financial and market conduct examinations and analysis* of the NAIC Policy Statement on Open Meetings, to discuss observations and issues that have come up during the process of reviewing 2023 opinions. Next, the Working Group plans to discuss 2024 regulatory guidance and 2025 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

The Statistical Data (C) Working Group met April 25 in regulator-to-regulator session, pursuant to paragraph #3: Specific companies, entities or individuals, including, but not limited to, collaborative financial and market conduct examinations and analysis of the NAIC Policy Statement on Open Meetings, to discuss data for the Auto Insurance Database Average Premium Supplement (Auto Supplement) and the Dwelling, Fire, Homeowners Owner-Occupied, and Homeowners Tenant and Condominium/Cooperative Unit Owner's Insurance Report (Homeowners Report). The Working Group also discussed a work plan that includes building and updating Tableau dashboards with the statistical data collected for its statistical reports. NAIC staff will work on the initial buildout of the dashboards, and the Working Group will meet this summer to review and discuss the dashboards.

The Auto Supplement has been adopted by the Working Group and will be sent to the Task Force for review and adoption. The Working Group plans to meet in May in regulator-to-regulator session to continue reviewing the data for the Homeowners Report. The Working Group will also meet in open session to hear proposed updates to various statistical reports.

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

#### 3. <u>Heard a Presentation on Reserving Analytics for Regulators</u>

Charlie Stone and Cat Drummond (InsurSight) presented on reserving analytics for regulators.

#### 4. Discussed the Academy's Cyber Risk Toolkit

Citarella, Lederer, Darby, Grassel, Schwartz, and Kris DeFrain (NAIC) presented the American Academy of Actuaries' (Academy's) Cyber Risk Toolkit to the Task Force (Attachment Three-B). The discussion of the toolkit was tabled.

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

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# American Academy of Actuaries' Cyber Risk Toolkit

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

May 7, 2024



# AN INTRODUCTION TO CYBER

# The cyber market is relatively new, image at the end of each o

- Per a 2021 study, only 47% of all U.S. companies purchase coverage, either stand-alone or packaged policies.
- Some of the policy coverages, exclusions, conditions, and terminology are not as uniform as they are for other mature and developed lines of business.
- The cyber insurance market is still relatively young, and its true claim cost is still uncertain since we have yet to observe a global market-wide catastrophic insurance loss.
- Cyber premiums more than doubled between 2019 and 2021.
  - Excluding surplus lines cybersecurity policies, both the stand-alone and packaged policies combined to a \$4.6 billion U.S. market in 2021. Cyber made up 0.6% of the total direct premiums written in the U.S. P&C market.
- Loss ratio performance has been favorable compared to the overall P&C market, but the recent increase in
  cyberattacks and ransomware demands has increased the loss ratio. The growth in the Internet of Things
  and the expansion of virtual work/educational environments could put further pressure on the loss ratio.
- Commercial insurance across all lines had an average rate increase of 6% overall during the first quarter of 2022, but cyber insurance rates increased 19.75% on average.
  - Cyber insurers are increasing prices and reducing coverage by increasing retentions, reducing overall policy limits, incorporating new coinsurance provisions and introducing other exclusions.
    - For each cyber insurance policy, there is generally a maximum policy aggregate that caps all insurance loss payouts, in addition to each coverage's limits.
  - Cyber insurers are also requiring greater cyber security from their policyholders and are providing pre-breach services to aid insureds to identify, mitigate, and reduce cyber losses.

# Affirmative<sup>^</sup> cyber coverage typically as the field of t

### First party coverages:

- Business interruption\*
- Property damage\*
- Privacy breach response services
- Computer attack and cyber extortion
- Computer and funds transfer fraud
- Identity recovery

\* Often include a time retention whereby actual coverage will trigger after the designated period has elapsed (like a deductible, but stated in terms of hours instead of dollars)

### Third party coverages:

- Electronic media liability
- Regulatory defense and penalties
- Payment card industry fines and penalties
- Information security and privacy liability
- Network security liability

^ Non-affirmative coverage, more commonly known as "silent cyber," is triggered when cyber perils are not explicitly included or excluded in the policy wording. Silent cyber can cause insurers to pay losses from cyberattacks on policies that were not intended to offer cyber coverage. Insurers are dealing with silent cyber by explicitly including or excluding coverage for some aspects of cyber-related losses.

### Cyber insurance premiums are typically rated based of Task Force traditional actuarial ratemaking using schedule rating modifications.

- A simplified example of a rating plan: Premiums = Base Rate x Increased Limits Factors x Deductible Factor x Cyber-specific Rating Factors x Schedule Modifications
- The most common exposure base for cyber insurance policies is revenue, but insurers are considering other exposure bases that might be a better measure of an insured's risk level, like number of connected devices, number of records, IT spend, or number of employees. Some carriers account for these elements instead in schedule rating.
- Other characteristics commonly used in schedule rating:
  - Loss history
  - Type and nature of sensitive information
  - Dependency on network
  - Merger-acquisition activity
  - Age of company
  - Financial condition
  - Data encryption and security patch processes
  - Privacy and security control procedures, including awareness training
  - Business continuity and disaster recovery plan
  - Use of third-party vendor management
- Common variable in cyber coverage: Hazard group that differentiates the riskiness of industries. Businesses
  that store and utilize numerous PII or sensitive information such as the healthcare and professional services
  industry will be classified as higher risk hazard groups over others.

# CYBER THREAT LANDSCAPE

### Cyber Threat Landscape

Due to heavy reliance on computer systems, businesses are susceptible to significant risks when those systems are unavailable or corrupted:

- Business Interruption
- Competition
- Liability
- Direct Loss

### Cyber Threat Landscape

**Threat Vectors:** 

- Phishing
- Software Vulnerability
  - Misconfiguration or bugs
  - Lack of regular patches or system updates
  - Inside Jobs
- Simple/Weak Passwords
  - Brute force programs can solve short and simple passwords
  - Credential stuffing

## SILENT CYBER

# Silent cyber can trigger unexpected payouts.

Attachment Three-A

- Silent cyber coverage: coverage for cyber risk that the insurer did not consider and/or did not price
  - Most typical under traditional insurance policies (general liability, property, etc.) but can also occur in policies that provide affirmative coverage of cyber perils
- Drivers of silent cyber:
  - The wording of policy terms has not evolved as rapidly as technology; ambiguous language may make cyber coverage available under policies that were not originally designed for this exposure.
    - Ambiguous language is typically viewed in favor of the insured. The insured may expect that cyber coverage exists in traditional lines policies that do not explicitly include or exclude cyber risks.
  - Cyberattacks are rapidly evolving beyond what was anticipated when the insurance policy forms were written.
  - If a policy does not have named perils coverage, there is a potential for coverage for anything that is not explicitly excluded.
  - Businesses, infrastructure systems, cars, and homes have increased their dependence on technology, so silent cyber is becoming prevalent in virtually every type of insurance coverage.

Attachment Three-A

### Insurers face challenges when trying Cate Content of Co manage silent cyber.

Ways to manage silent cyber exposure:

- Explicitly exclude cyber risk from standard policies.
- Grant affirmative cyber coverage for an additional premium via a standalone cyber policy or endorsement; implement sublimits on cyber exposure.
- Try to quantify silent cyber exposure by determining the range of potential exposures from a cyber event and overlaying these exposures with the existing portfolio.

Challenges in managing cyber exposure:

- Rapid expansion and evolution of cyber risk makes it hard to predict what future claims may look like and to keep cyber models up to date.
- Data needed for cyber risk assessment (e.g., an insured's supply chain dependencies and cybersecurity protocols) may not be collected in traditional P&C exposure datasets.
- Historical data is limited and therefore not sufficient for pricing.
- Losses that were cyber-related may not have been coded as such, so there's no reliable database of silent cyber events.
- It's not clear how the legal system will treat non-affirmative policy wordings.

## CYBER DATA

### CYBER DATA - AVAILABILITY

- Limited data
- Exposure is evolving
- Not all events are insured
- Growing amounts of data due to digitization which helps
- Historical events do not always predict future ones
- Knowledge of the common software makes threats change
- New laws surrounding cyber security and data privacy

### **CYBER DATA - CHALLENGES**

- New market so insurers hesitant to underwrite risk they do not understand
- Coverage structured with narrow terms and conditions
- Similar evolution as with other lines as time goes on insurers broaden coverage
- Concern over organizations understanding of cyber insurance coverage leading to lack up take in coverage and data
- Lack of data leads to supplementing with third party data
- Historical claim data not keeping up with evolving nature of cyber polices

### CYBER DATA

- Enhanced Data Collection
  - Third Party vendors
- Which Data Elements Should be collected and why
  - Inconsistent data collection results in issues while evaluating risk
- Ways to over come challenges
  - Expand sources and collection of data
  - Receive input from a variety of subject matter experts
  - Obtain and understanding of the industry and its exposure to risk
  - Leverage third-party cyber vendors information
- Technology firms

# CYBER RISK ACCUMULATION

# **CYBER RISK ACCUMULATION**

Attachment Three-A Casualty Actuarial and Statistical (C) Task Force 8/13/2024

- Accumulation risk in insurance, also known as aggregation risk, refers to the likelihood of a greater than-anticipated accumulation of claim costs due to multiple exposures being tied to the same event or a related event.
  - Example: Web services disruption that spreads to multiple businesses
- Modeling can be difficult as it's challenging to identify all the dependencies of the risks
  - Reliance on Cyber Experts
- Although, Statistical data can be derived from past cyber incidents the ever-changing environment new threats develop
  - > Example: Significant increase in working from home during pandemic

### Casualty Actuarial and Statistical (C) Task Force **CYBER RISK ACCUMULATION- MODELING**

Attachment Three-A

8/13/2024

### > Deterministic

- Simple approach using market share. If 20% of market than similar exposure to cyber threats.
- Alternatively gather data on technology providers so exposure can be linked to aggregation points. More accurate but more effort

### Probabilistic

- Losses are modeled using distributions.
- Need to be continually reviewed for changes in cyber environment

# **CYBER RISK ACCUMULATION**

Attachment Three-A Casualty Actuarial and Statistical (C) Task Force 8/13/2024

### Emerging issues

- Various models to help manage cyber accumulation
- Gap in understanding of motivations for attacks
- > Technological vulnerability alone not an adequate predictor of cyber risk
- Manmade risk, Cyber events much less random than they seem
- Vendor Models
  - Traditional catastrophe insurance modelers expanding into cyber risk
  - Newer Cyber risk Service providers moving into insurance

# CYBER RISK AND REINSURANCE

# Cyber Risk and Reinsurance

Because of uncertainty in the Cyber Risk primary market a larger portion of the risk is reinsured relative to more traditional lines of business.

- 40% of cyber coverage premium is ceded
- 10-15% for Property and Liability LOBs

Underwriting remains a challenge

- Chicken and egg problem
- Risk aggregation and Silent Cyber
- TRIA does provide a backstop

# Cyber Risk and Reinsurance

Alternative Risk Transfer

- Insurance Linked Securities might be a possibility because they are looking to expand beyond natural catastrophe risks but lack of quality loss models in cyber is a deterrent.
- Cat-Bond Structure
- Contingency Capital
- Loss Warranty Arrangements

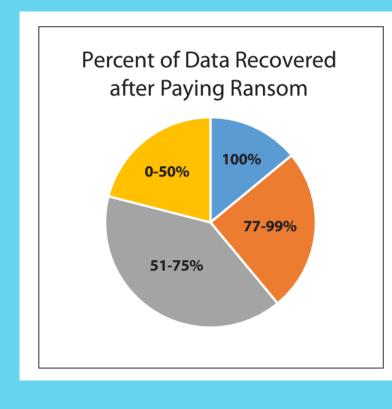
# RANSOMWARE

### Ransomware https://www.Actuary.Org/sites/default/files/2023-02/7ransomware.Pdf

Attachment Three-A Casualty Actuarial and Statistical (C) Task Force 8/13/2024

- Data loss, operational shutdown, hardware inoperable
- Double: release of data
- Triple: threaten customers

**Choice:** pay the ransom or invest the cost and time in repairing the infected system.



"Organizations are Better Prepared to Fight Ransomware but Gaps Remain", Tech Republic, April 12, 2022.

# WAR, CYBERTERRORISM, AND CYBER INSURANCE

# Cyber insurance coverage continues to evolve and grow in application

Increasing concern among policyholders whether policies will cover them when cyber incidents impacting them are tied to cyber and technology disruptions stemming from attacks that may be supported by nation-states and state-backed military units.

Gray areas exist due to:

- No existence of publicly known denial of a cyber incident corresponding to the War Exclusion under a cyber insurance policy.
- Attribution (who was behind the attack) may take time to identify as well as difficult to achieve and prove.

# Within Cyber Insurance Policies are War Exclusions with Cyberterrorism Endorsements

Most, if not all, cyber insurance policies include an explicit exclusion to losses arising out of or attributable to war and military actions.

War Exclusion (AIG & AXIS combo): Insurer not liable for losses from war, invasion, hostilities/warlike operations/military action – declared or not, strike, lock-out, riot, civil war, mutiny, popular or military uprising, insurrection, rebellion, revolution, military or usurped power, or any action taken to hinder or defend against any of these events.

Cyberterrorism as defined by AIG: Premeditated use of disruptive activities against any computer system or network by an individual or group of individuals, or the explicit threat by an individual or group of individuals to use such activities, with the intention to harm, further social, ideological, religious, political or similar objectives, or to intimidate any person(s) in furtherance of such objectives.

# Endorsements to the War Exclusion and Casualty Atuarial and Statistical (C) Task Force 8/13/2024 Defining Cyberterrorism

- 1. The definition of the War Exclusion is amended such that it does not apply to acts of Cyberterrorism.
- 2. The coverage sections are amended such that acts of Cyberterrorism are included within the coverage.
- 3. The term Cyberterrorism is defined accordingly.

Ambiguity may still exist and may create uncertainty for policy issuers, policyholders, and regulators. Attorneys will likely continue to be heavily involved! Other insurance professionals, such as actuaries, will have credible and valuable input as well as this coverage continues to evolve from larger data sets.

# **Actuarial Responsibilities**

Attachment Three-A Casualty Actuarial and Statistical (C) Task Force 8/13/2024

- 1. Gain familiarity with coverage clauses and endorsements to understand what they say may or may not be covered.
- 2. Understand that the impact of potential systemic, war-related, and military-related cyber incidents will influence both the pricing and reserving of losses falling under cyber policies.
- 3. Realize that unique events that cross the line from cyberterrorism to acts of war and invoke exclusions under the policy will likely be litigated in court (similar to 9/11 and COVID-19 claims/events).
- 4. Uncertainty around payouts from litigated coverage cases will add complexity to the overall reserving process.
- 5. Greater clarity will come with time awareness of nuances and uncertainties is very important until that time comes.

# AUTONOMOUS VEHICLES AND CYBER RISK

### AUTONOMOUS VEHICLES AND CYBER RISK

Three key cyber risks:

- Cars or trucks can be stolen by hacking into their locking or ignition systems
- A car hacked into, could be driven remotely to commit crimes. For example, as a "getaway" car
- Personal data or trip data can be stolen from the car

# DIGITAL ASSETS AND THEIR CURRENT ROLES WITHIN CYBERCRIME

### **Digital Assets And Their Current Roles Within** Casualty Actuarial and Statistical (C) Task Force Cybercrime

Https://Www.Actuary.Org/Sites/Default/Files/2023-07/Digitalassetcyber.Pdf

- Cryptocurrency ۲
- Drop in \$ in 2022 from
  - 1) decrease in willingness to pay
  - 2) not finding the criminals' changed addresses
  - 3) insurance companies incentivize insureds
  - to strengthen controls and backup measures
  - 4) increase in sanctions from governmental entities
- Direct theft of digital asset from exchanges and DeFi platforms.

Table 2. Share of	f Companies	That Paid	a Ransom
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Year	Paid Ransom	Did Not Pay
2019	76%	24%
2020	70%	30%
2021	50%	50%
2022	41%	59%

Coveware

Attachment Three-A

8/13/2024



# PERSONAL CYBER

### EIGHT KEYS TO PROTECT YOURSELF FROM CYBER ATTACKS (1 OF 2)

- First, create strong passwords, especially for financial websites, and change the passwords often
- Second, embrace multi-factor authentication, more than one authentication method is used to access a website
- Third, copy important documents and photos to an external drive, and update that external drive regularly
- Fourth, add a Cyber or Identity theft endorsement to a home insurance policy



### EIGHT KEYS TO PROTECT YOURSELF FROM CYBER ATTACKS (2 OF 2)

Don't send	<ul> <li>Fifth, don't send money or provide a password or personal information (such as a home address) without verifying that the request is legitimate, such as by a phone call</li> </ul>	
Кеер	<ul> <li>Sixth, keep anti-virus software up to date</li> </ul>	
Lock	<ul> <li>Seventh, lock or freeze your credit report</li> </ul>	
Scan	<ul> <li>Eighth, scanning your cell phone for viruses or malware regularly</li> </ul>	

achment Three-A Casualty Actuarial and Statistical (C) Task Force 8/13/2024 CYBER SECURITY TTTT L Usenname Password center ne 3 forpt prov DATA

Draft: 8/8/24

#### Actuarial Opinion (C) Working Group Virtual Meeting July 23, 2024 / August 6, 2024

The Actuarial Opinion (C) Working Group of the Casualty Actuarial and Statistical (C) Task Force met July 23, 2024, and Aug. 6, 2024. The following Working Group members participated: Miriam Fisk, Chair (TX); Julie Lederer, Vice Chair (MO); David Christhilf (DC); Chantel Long (IL); Sandra Darby (ME); Tom Botsko (OH); Andy Schallhorn (OK); and Kevin Clark and James DiSanto (PA).

#### 1. Discussed the Regulatory Guidance

During its July 23 meeting, the Working Group discussed potential changes to regulatory guidance and continued the discussion Aug. 6. The Working Group discussed the following changes:

- Because of a change in 2024, qualification documentation is only required at the initial appointment of an appointed actuary and no longer required annually thereafter.
- A new Actuarial Standard of Practice (ASOP) No. 36 version was modified, re-titled, and adopted by the Actuarial Standards Board (ASB) in 2024. "Other" reserves are added to the title. The new title is ASOP No. 36, *Statements of Actuarial Opinion Regarding Property/Casualty Loss, Loss Adjustment Expense, or Other Reserves.* Changes to Regulatory Guidance include: 1) removing some disclosures that are no longer required by ASOP No. 36 to be included in a public actuarial opinion; and/or 2) requesting specific disclosures regardless of whether required by an ASOP(s) in the public actuarial opinion or confidential actuarial report.

#### 2. Discussed Instructions for the Actuarial Opinion

Fisk suggested some changes to 2025 instructions for the Property/Casualty Statement of Actuarial Opinion related to the Society of Actuaries modifying its educational program effective in 2025. Until state insurance regulators can review the educational program to determine whether it will meet regulatory requirements for Appointed Actuaries, the instructions for 2025 will need to mention a review will take place. The Working Group will also consider mentioning this forthcoming change in the 2024 regulatory guidance.

Discussion on the regulatory guidance and opinion instructions will continue in late August.

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

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Draft: 8/7/24

#### Statistical Data (C) Working Group Virtual Meeting July 29, 2024

The Statistical Data (C) Working Group of the Casualty Actuarial and Statistical (C) Task Force met July 29, 2024. The following Working Group members participated: Sandra Darby, Chair (ME); Qing He, Vice Chair, and George Bradner (CT); David Christhilf (DC); Arthur Schwartz and Tom Travis (LA); Cynthia Amann (MO); Christian Citarella (NH); Alexander Vajda (NY); Tom Botsko (OH); David Dahl and Ying Liu (OR); and Nicole Elliot (TX).

#### 1. Adopted its May 30 Minutes

The Working Group met May 30 to discuss proposed changes to the *Dwelling, Fire, Homeowners Owner-Occupied,* and Homeowners Tenant and Condominium/Cooperative Unit Owner's Insurance Report (Homeowners Report) and the Report on Profitability by Line by State (Profitability Report).

Qing He made a motion, seconded by Botsko, to adopt the Working Group's May 30 minutes (Attachment Six). The motion passed unanimously.

#### 2. Discussed Proposed Changes to the Homeowners Report

Darby said the Working Group will continue the discussion from the last open meeting on Schwartz's proposed changes to the Homeowners Report.

Schwartz said the format of the Homeowners Report has not changed since 2003. He said his proposals would be a change to both the format and the data elements collected. He would like to see a table that shows the average premium for each state, along with the median insured value to account for the difference in home values in each state. This table would also include a column showing the premium per thousand dollars of median insured value. He said the report should also include a table that shows the ranking of each state for average premium and the ratio of premium to median insured value.

Birny Birnbaum (Center for Economic Justice—CEJ) said median insured value is a good metric to include, and this proposed table should also include median premium. He said using a ratio of premium to median insured value is not an accurate measure of cost of insurance, and he recommends against using this measure or using it to rank states.

Bradner said state insurance regulators want to see data on premium and insured value in different ranges within their state. He said regulators take exception to media reporting average premium values and comparing states without including caveats on the many factors that can impact pricing. Birnbaum said the report offers extensive explanations of these caveats. He said the best way to get the granular data that regulators are looking for is to update the NAIC Statistical Plan and mandate transaction-level data reporting. Bradner said if this report did include a ranking, the report should also describe metrics and methodology behind the ranking. Birnbaum said the NAIC has never endorsed ranking states. Brian Sullivan (Risk Information Inc.) said he publishes a table using HO-3 data from the Homeowners Report that includes home value distribution by state. Birnbaum said only using HO-3 data can be misleading because, for example, it would not include wind coverage in certain states.

Schwartz said the report currently does not capture data on manufactured and modular homes. He said these types of homes comprise a large percentage of homes in many states. He said the report should also look into

capturing data on additional dwelling units (ADUs). Birnbaum said he agrees the report should collect data on manufactured and modular homes. He said the report should also collect data on commercial coverages for homeowners associations and condominium associations. Libby Crews (NAIC) said data for manufactured homes written on HO-7 policies are not collected for this report. Bradner said not every state has HO-7 forms so the Working Group needs to investigate how data for manufactured homes is collected by the statistical agents and how that data can be reported for the Homeowners Report.

Schwartz said the report does not capture data on catastrophe losses, but that information is available in fast track reporting from statistical agents so it could be available for the Homeowners Report. He said capturing this data by state for the last 10 years would be important for all users of the report. He said he would also be interested in collecting data on losses by peril, separated by coverage type. Birnbaum said all of the proposals mentioned today do not distinguish between what a company is required to report versus what would be included in an NAIC statistical report. He said some data elements found in the proposals could be collected from the recent NAIC Property and Casualty Market Intelligence data call. He said a transaction-level data collection mechanism would allow regulators to answer questions about the market in real time.

Darby said the Working Group would investigate which data elements from the proposals for the Homeowners Report can be reported by statistical agents, and the Working Group would go over the findings during its next meeting.

#### 3. Discussed Additional Proposed Changes to NAIC Statistical Reports

Sullivan said he would like to have further discussion on creating a profit margin metric in the Profitability Report, using return on net worth as a percentage of earned premium to net worth. Birnbaum asked how the profit measure Sullivan uses is different than the underwriting profit in the Profitability Report. Sullivan said the underwriting profit does not include investment gains on insurance transactions or tax on insurance transactions. Birnbaum said the profit on insurance transactions number published in the Profitability Report would be similar to the profit measure Sullivan is calculating.

Sullivan would like to see the Auto Insurance Database Report (Auto Report) include coverage limits. He said coverage limits are a useful proxy for understanding the relative cost of insurance.

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

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Draft: 7/24/24

### Statistical Data (C) Working Group Virtual Meeting May 30, 2024

The Statistical Data (C) Working Group of the Casualty Actuarial and Statistical (C) Task Force met May 30, 2024. The following Working Group members participated: Sandra Darby, Chair (ME); Qing He, Vice Chair (CT); Charles Hale (AL); Arthur Schwartz and John Sobhanian (LA); Christian Citarella (NH); Tom Botsko (OH); David Dahl and Ying Liu (OR); and Nicole Elliot (TX).

#### 1. Discussed Changes to the Profitability Report

Darby said the Working Group has been meeting over the last year to review proposals to update various statistical reports. She said it is important to continually review the usefulness of the reports for state insurance regulators and others using them. She said since the last meeting, Brian Sullivan (Risk Information Inc.) has reviewed the changes implemented in the *Report on Profitability by Line by State* (Profitability Report) and asked to share his thoughts.

Sullivan said this report is used to calculate and include an after-tax profit number, but that data element was removed from the report about 25 years ago. Sullivan said he has recreated this calculation on his own and uses this number to more accurately capture the high levels of reserves seen in the insurance industry. He said he would like to discuss whether the after-tax profit number or the profit on insurance transactions number in the Profitability Report would be more accurate. He said the return on net worth number can be misleading because some large companies carry a large amount of net worth, which can distort the comparison to other industries.

Sullivan said he would like to better understand the calculation and wide disparity across lines and states in earned premium to net worth.

Sullivan said he would like to see a 10-year weighted average of profit numbers included in the report. Aaron Brandenburg (NAIC) said the Profitability Report currently has a 10-year average for multiple data elements. Sullivan said he would like to see a weighted average because the premium can increase drastically in certain lines in a 10-year period. Darby asked NAIC staff to put together an example of what adding a weighted average column would look like in the report.

Sullivan said that many years ago, the Profitability Report had a section that explained and normalized Michigan personal auto insurance data. He said he would like to discuss including that in the report again. Brandenburg asked if this is still an issue with the reforms that happened a few years ago in Michigan. Sullivan said the Michigan Catastrophic Claims Association (MCCA) reports incurred losses but not premiums, affecting the incurred loss ratio.

Darby asked Sullivan to send more information regarding his calculations and suggestions to the Working Group so it can discuss them further on a future call.

#### 2. <u>Discussed Proposed Changes to the Homeowners Report</u>

Schwartz said the *Dwelling, Fire, Homeowners Owner-Occupied, and Homeowners Tenant and Condominium/Cooperative Unit Owner's Insurance Report* (Homeowners Report) gets a tremendous amount of attention and media coverage. He said the report would benefit from having a table that shows the average

premium by state. He said this table should also show median home value because home values differ greatly between states. Darby asked where the median home value data would come from. Schwartz said he would have to check where he got the data but that each state had a range of home values, and he took the middle value in those ranges for each state. Darby said this report has not historically included a table with average premiums because it is hard to compare when the home values differ across states.

Sullivan said Risk Information Inc. publishes a similar table in its Property Insurance Report, using premiums and exposures from the \$175,000 to \$199,999 insured value range. He said the report clarifies that looking at the insured value changes the importance of the average. He said the report also includes a table with the distribution of home values by state. Darby said this kind of apples-to-apples comparison makes sense, but you cannot make the same comparison when the distribution is different by state. Sullivan said one solution would be to calculate a premium to medium household income ratio. Schwartz said he had considered including a column with a calculation of average premium divided by median home value in thousands, or cost per thousand dollars of insurance. Dahl said some states have standard fire policies, and others do not, which would increase the cost and add another comparison issue. Sullivan said the same problem exists in personal auto insurance. Dahl said he uses income data as a proxy because those making more money will likely buy nicer cars and carry higher liability insurance. Darby said the issue with using income is that you have to find a source for the data and then take an average for the state.

Schwartz said the Homeowners Report does not currently include data for manufactured or mobile homes, but it should be included due to the large number of these home types in the U.S.

Schwartz said he would like to see data on the effects of catastrophes. He said Fast Track data breaks down data by catastrophe losses, so the data is available from statistical agents. He said he would like the report to show the data, including and excluding catastrophes.

Schwartz said he would also like to discuss the idea of including the data by peril in the Homeowners Report.

Darby said the Working Group will continue this discussion during its next open meeting.

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

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