Overview

Few financial regulators have more experience and insight into the macroeconomic effects of climate risk than U.S. state insurance regulators. For over 150 years, state insurance regulators have coordinated regulatory priorities and interventions with other states and jurisdictions through the National Association of Insurance Commissioners (NAIC). NAIC members have long been committed to monitoring and addressing how climate risks impact policyholders and the insurance industry. When disaster strikes, long after national attention turns elsewhere, state insurance regulators remain in the community helping policyholders understand their insurance coverage, so they are able to rebuild their homes, reopen businesses, and ultimately strengthen the economic and physical recovery of local communities in the wake of climate-related losses. In 2020, recognizing the scope, severity and duration of climate risks and resiliency issues, and the emergence of innovative insurance approaches used for storm, drought, and flood risks, the NAIC launched a new Climate and Resiliency Task Force, reporting to the Executive Committee, to serve as the coordinating NAIC body for engagement on climate-related risk and resiliency issues.

Since 2020, the Climate and Resiliency Task Force has worked collaboratively, building capability to identify, communicate, and reduce climate risks to insurance markets. The Climate and Resiliency Task Force has focused on five workstreams: Solvency, Pre-
disaster mitigation, Climate Risk Disclosure, Technology and Innovation. The Task Force has produced real deliverables that improve the capabilities of NAIC members and demonstrate the experience and unique role that insurance regulators have in addressing climate risk in their states. This progress report describes the steps and deliverables that the state insurance regulators have produced through the Climate and Resiliency Task Force as of the first half of 2023.

**Role and Activities of the NAIC Climate Task Force**

As one of the largest insurance markets in the world, the leadership of state insurance regulators is essential to achieving insurance access and reliability, not only in the U.S., but also in alignment with international goals. An exemplary demonstration of this leadership is observed through the NAIC Climate and Resiliency Task Force, which focuses on five essential workstreams that align with climate and resilience-related initiatives of the International Association of Insurance Supervisors (IAIS). This includes addressing natural catastrophe protection gaps faced by uninsured and underinsured communities, which also is aligned with Sustainable Development Goals (SDGs) established by the United Nations. NAIC members participate and provide leadership at the international level, such as at the IAIS Climate Risk Steering Group and the United Nations Development Programme’s Sustainable Insurance Forum (SIF). The NAIC is also a member of the EU- US Insurance Dialogue Project which currently has two climate-related workstreams on climate risk oversight and on climate risk and resilience. Insurance and reinsurance companies operate across jurisdictional borders, making it imperative that the NAIC members work with international regulators to
effectively gather information, assess risks, and harmonize strategies to ensure strong, competitive insurance markets for consumers.

The NAIC also serves as a data hub for insurance information, filling critical data gaps for financial and market data. The NAIC collects data on behalf of the individual states and brings together the datasets to identify relevant market information, such as premiums written and earned, loss and expense incurred, assets held, and other financial and market conduct related information. For example, on an annual basis the NAIC collects information from insurance companies to identify trends in the uptake of private flood insurance in the United States. This flood insurance data is used to support efforts of insurance regulators to grow the private flood insurance market and close flood coverage gaps. The NAIC also collects information on investments made by insurance companies, which is used by state insurance regulators and external stakeholders to monitor that insurers are well positioned to ensure their financial solvency. This information can also be used for analysis of potential climate-related risk, such as scenario analysis.

The depth and diversity of experience of state insurance regulators is an asset to achieving comprehensive solutions. Over the past three years, state insurance regulators from diverse regions such as South Carolina, Rhode Island, Louisiana, Nevada, Florida, Washington, Wisconsin, Nebraska, Hawaii, Maryland, Alaska, and California have actively led workstreams and successfully generated outcomes that strengthen nationwide resilience and demonstrate NAIC leadership. These efforts have produced impactful discussions and the development of recommendations and deliverables.
The work of the Task Force has included discussions on closing insurance protection gaps for vulnerable communities and addresses international sustainable development goals, such as ending poverty (SDGs 1.3, 1.5) and strengthening capacity of domestic financial institutions to encourage and expand access to financial services (SDG 8.10), as well as many others: early warning systems (SDG 13.3), pre-disaster preparedness (SDGs 11.5, 11.b, 13.1), climate-related disclosure policies (SDGs 13.2, 12.6), resilient building codes and structures (SDGs 9.1, 9.4), and strengthening insurance supervision and transparency (SDGs 10.5, 16.10, 17.13).

Moreover, the Task Force’s efforts across its five workstreams on climate risk demonstrates U.S. leadership in insurance supervision. Its valuable examples and deliverables serve as clear and insightful contributions during collaborative efforts at international organizations such as the IAIS and the Organization for Economic Cooperation and Development (OECD), and engagement with other jurisdictions and regions, such as through the EU-US Insurance Dialogue Project and with the Association of Latin American Insurance Supervisors (ASSAL). The NAIC's active participation and substantive contributions at the international level significantly enrich the discussions and offer important perspectives in the global insurance landscape.

I. Solvency Workstream

A core responsibility of insurance regulators is financial supervision of insurance companies to understand and address financial risks in the insurance sector. Monitoring insurer solvency is a core element of financial regulation. State insurance
regulators have an essential consumer protection role in monitoring insurance markets to identify growing risks and intervene to avoid insolvencies where possible. State insurance regulators also continuously monitor the capital adequacy of insurers to ensure their ability to pay claims following catastrophic events. In 2022, the Solvency Workstream finalized four recommendations for consideration by NAIC standing committees or working groups.

First, the Solvency Workstream recommended that the peril of wildfire be added to the Risk Based Capital (RBC) framework for catastrophe risk exposures. The NAIC RBC formula determines the minimum amount of capital an insurer should hold based on its risk profile and is a fundamental tool for monitoring capital adequacy. State insurance regulators continually update RBC charges to address the evolving risk landscape. This recommendation builds on earlier enhancements in 2017 that expanded the catastrophic risks quantified and reported separately in the RBC formula hurricane and earthquake catastrophe risk in order to recognize increased exposure to catastrophic events.

Secondly, the Solvency Workstream recommended that the NAIC’s Financial Condition (E) Committee consider specific enhancements to the solvency oversight tools used by state insurance regulators to expand the evaluation of an insurer’s exposure and response to climate-related financial risk. This recommendation has two parts:

- A recommendation to the Financial Analysis Solvency Tools (E) Working Group to consider modifications to incorporate particular concepts as it pertains to
climate risk and offer high-level principles to consider and develop, as appropriate, for inclusion in the *Financial Analysis Handbook*. For more details, please see full recommendation: [ReferraltoFASTWG.pdf](ReferraltoFASTWG.pdf)

- A recommendation for the Financial Examiners Handbook (E) Technical Group’s consideration comprised of a list of climate risk-related enhancements to the *Financial Condition Examination Handbook*. For more details, please see full recommendation: [ReferraltoFEHTG.pdf](ReferraltoFEHTG.pdf)

The third recommendation from the Solvency Workstream focuses on possible climate risk-related enhancements to the Own Risk Solvency Assessment (ORSA) Guidance Manual presented as high-level principles for the ORSA Implementation (E) Subgroup to consider and develop, as appropriate. For more details, please see full recommendation: [ReferraltoORSASubgroup.pdf](ReferraltoORSASubgroup.pdf)

In addition, the Solvency Workstream held multiple sessions to discuss and hear from supervisory authorities regarding climate scenario analysis approaches and is evaluating the need for a framework to be developed through the NAIC.

**II. Pre-Disaster Mitigation Workstream**

State insurance regulators provide critical, statewide resources for consumer awareness and understanding of climate risks and insurance options. In 2021, the NAIC’s Center for Insurance Policy and Research (CIPR) conducted a survey to identify steps
consumers would be willing to take to protect their property and reduce future losses. More than two-thirds of the insurance consumers surveyed were aware of actions they can take, but only half had made changes to their property to reduce risks. Building further consumer awareness of climate adaption strategies and resilience is a key part of pre-disaster mitigation and, in 2022, the NAIC continued coordinating with FEMA, identifying opportunities for collaboration and for state insurance regulators to expand expertise and access to federal resiliency funding.

The Pre-Disaster Mitigation Workstream was also able to coordinate discussions on emerging research that identifies high priority risk mitigation strategies for reducing future losses. The Institute for Business and Home Safety (IBHS) continues to publish experimental research, identifying and describing home hardening actions that reduce losses. In 2022, IBHS launched the “Wildfire Prepared Home,” a combination of several risk mitigation actions on the structure and in the immediate surroundings of homes facing wildfire risks. This information is critical for those NAIC members whose states have significant populations facing wildfire risks. The continued coordination of the NAIC Climate and Resiliency Task Force with timely research puts state insurance regulators in the position of being experts on risks and insurance in their own states.

By building consumer awareness and supporting risk reduction measures, state insurance regulators contribute to the creation of more resilient and sustainable communities. Several states have successful state-level mitigation programs to provide financial assistance to homeowners for reducing risks to their home or business. The Pre-Disaster Mitigation Workstream has harnessed the knowledge from these programs
and is building tools to help state insurance regulators improve risk communication and expand funding opportunities for consumers to harden their home or community against the risks of wildfires, flooding, severe storms, and other perils. State insurance regulators have built expertise through years of experience educating consumers about how to reduce their risk to common local perils. Many states have established effective engagement strategies with the public on pre-disaster mitigation.

In recognition of the value of sharing best practices and fostering mutual learning, the Climate and Resiliency Task Force established a dashboard of risk mitigation programs in 2022. This serves as a collective tool enabling states to access and establish mitigation programs similar to those used in other states, promoting the adoption of effective adaptation strategies. Each location has its own complexity of hazard risk, combined with unique building characteristics, making risk reduction a very localized issue that requires localized expertise. Local expertise combined with shared knowledge, sets the stage for a successful resilience strategy.

In December 2022, six states presented their successful templates for risk mitigation incentive programs to the Task Force. For example, several states have mitigation grant programs, designed to help consumers reduce their risk of property loss. The structure of the programs differs but they all share a common purpose of making properties safer, keeping people in their homes and reducing the disruption to local communities and economies caused by severe weather events.
• The **Strengthen Alabama Homes program** provides grants to Alabama residents for residential wind mitigation on existing owner-occupied, single-family homes.

• **MySafe Florida Home** provides free home inspections and a matching grant program to help homeowners retrofit properties making them less vulnerable to hurricane damage.

• The **Louisiana Fortify Homes** program authorizes the insurance commissioner to make grants to retrofit roofs of insurance property using the IBHS fortified standards.

• The **North Carolina Insurance Underwriting Association Strengthen Your Roof** program offers grants to help eligible policyholders in beach communities better protect their homes against the threat of hurricanes.

• The **South Carolina Safe Home** program provides matching and non-matching grant funds to help property owners retrofit their homes to make them more resistant to damage from hurricanes and high wind.

• California and Oregon presented wildfire risk mitigation strategies that include premium incentives for reducing wildfire risk through home hardening. In California, the Department of Insurance partnered with emergency preparedness and response agencies to establish a consensus list of priority home and
community hardening actions to clarify communications to consumers.
California applied the list of risk mitigation actions to new regulation that requires insurance companies to offer incentives for ten specific risk reduction factors.

III. Technology Workstream

New technologies that strengthen risk assessment and communication, and those technologies that reduce future risk of insured losses, can make insurance more available and affordable. For insurance regulators, having the capability to better understand and plan for climate related events is important. In 2022, the Task Force took a significant step by establishing a Catastrophe Model Center of Excellence within the NAIC’s CIPR. The Center of Excellence is already in use, providing resources for state insurance regulators, including access to catastrophe model documentation, technical education and training, and applied research to proactively address regulatory climate risk and resilience priorities. The Center of Excellence works with catastrophe modeling providers to understand how climate change is or is not incorporated into their models and provides this information to state insurance regulators. By doing so, it enables state insurance regulators to better comprehend the use of these models in projecting risks and losses and identifying factors that could either increase or reduce risks.

The creation of the Center of Excellence is an important enhancement to the skills and expertise of the NAIC and its members. Insurance losses occur as a consequence of extreme wildfires, storms, atmospheric rivers, flooding, snowfall, and heat waves.
Catastrophe modeling is being used by insurance companies to assess these risks to better plan and manage the risk of natural disasters. The Center of Excellence has provided presentations and training for NAIC zones to discuss how catastrophe losses impact insurance markets, ongoing research, and potential solutions for common perils. The Center of Excellence will assist state insurance regulators to understand and regulate the use of catastrophe models. It offers shared resources and technical training, enabling regulators to strengthen their understanding of risk within their jurisdictions and facilitate effective risk mitigation strategies to support competitive insurance markets. By leveraging new technologies and enhancing the capacity of state insurance regulators, the Center of Excellence contributes to the availability of affordable insurance and the overall resilience of communities in the face of climate-related challenges.

IV. Climate Risk Disclosure Workstream
Climate risk disclosures are currently implemented in jurisdictions such as New Zealand, Switzerland, France, and Japan to monitor and evaluate climate-related risks and insurer strategies to mitigate those risks. In 2010, California, Washington, and several other states began administering an annual Climate Risk Disclosure Survey of insurance companies operating within its jurisdiction. Since 2010, additional states have voluntarily agreed to join the annual survey, and for the past several years the survey has included all insurers with at least $100 million in direct written premium, operating in at least one of the participating states. As of 2022, fifteen states are participating in the survey with over 80 percent of the market captured by direct written premium.
In the past few years, insurance companies have been increasingly adopting climate risk disclosures that are consistent across financial institutions. For 2019-2021, the participating states in the Climate Risk Disclosure Survey allowed insurers to submit a report aligned with the guidelines and questions of the Task Force on Climate-related Financial Disclosures (TCFD) in lieu of the existing Climate Risk Disclosure survey version.

In 2022, the Task Force updated the Climate Risk Disclosure Survey to align with the TCFD standards. The TCFD standards were the product of collaborative contributions from over 1500 businesses and environmental organizations coming to consensus in 2023. The updated, TCFD-aligned Climate Risk Disclosure Survey reduces duplication for insurance companies, enables state insurance regulators to better evaluate climate risk to insurance companies, and provides the public information on best practices and an understanding of big-picture trends in how insurers are approaching climate risks the insurance sector is facing, and works to fill critical climate data gaps. In 2022, when over 80% of the market was covered, the participating states received submissions from over 1500 companies.

V. Innovation Workstream

In 2022, the Innovation Workstream played a crucial role in organizing presentations from researchers and stakeholders on innovative insurance concepts specifically designed to tackle climate-related challenges and close protection gaps.
These presentations explored insurance concepts that go beyond individual coverage and focus on protecting entire communities. For example, one concept discussed was community insurance aimed at addressing protection gaps for flood risks for low-income communities. By developing insurance solutions that cater to the needs of the community as a whole, these innovative policies can provide much-needed coverage where it may be lacking.

In addition, in 2022, the Task Force heard a presentation on a flood insurance approach that combined risk mitigation and insurance along the Missouri River. This approach aimed to decrease premium costs for consumers by making investments in risk reduction efforts along the floodplain.

Throughout 2022, the Innovation Workstream continued its efforts to review and summarize emerging insurance policies in the U.S. that address climate risks, which can be found on the Climate Risk and Resiliency Resource Center webpage. These include innovative insurance policies specifically tailored for protecting coral reefs in Hawaii, community insurance for low-income residents facing flood losses in New York City, and parametric insurance policies. They also learned about strategies developed in other countries to provide financial tools for small-scale farmers and governmental interventions to establish insurance where it was previously unavailable.

Recognizing the importance of effectively communicating and disseminating information on these innovative policies, the Innovation Workstream focused on developing strategies to summarize and convey the key insights to the Task Force.
By exploring new avenues to close protection gaps and address climate risks, these initiatives contribute to enhancing the availability and effectiveness of insurance coverage, ultimately supporting the sustainable management of natural resources and the protection of vulnerable communities.

VI. State Insurance Regulator Leadership

In 2022, multiple state insurance regulators continued to provide examples of state leadership on climate and resiliency concerns focused on their individual jurisdictions. One of the strengths of the Task Force is the ability to coordinate multi-state initiatives, and in parallel, allow individual states to show leadership on specific issues. Examples include:

1. Connecticut Department of Insurance – In 2022, the Connecticut Insurance Commissioner, Andrew Mais, hosted the Connecticut Conference on Climate Change and Insurance.

2. Washington Office of the Insurance Commissioner – In 2022, the Washington Insurance Commissioner, Mike Kreidler, hosted the Climate Summit Series. This provided an opportunity to build new state-federal and inter-agency partnerships and to engage with climate risk stakeholders.

3. NAIC members regularly contribute to public discussions on climate risk and insurance. For example, multiple state insurance regulators have contributed perspectives by taking part in meetings of the United Nations Framework Convention on Climate Change (UNFCCC) Conference of Parties (COP) meeting in 2021 and 2022. In 2021, Commissioners from Florida, South Carolina,
Maryland, California, Connecticut, and Washington shared the ongoing work at the NAIC on climate-related risks at the premier insurance event at the COP, hosted by the United Nations. In 2022, Commissioners from Rhode Island, Oregon, Minnesota, California and Maryland participated in a virtual panel with the SIF to contribute the expertise and perspectives of state insurance regulators, and to share the important deliverables produced by the NAIC, including pre-disaster mitigation advances, the creation of the Center of Excellence on catastrophe modeling, revision of the climate risk disclosure survey, and exploration of new climate-related solvency initiatives.

4. In 2022, the California Insurance Commissioner, Ricardo Lara, released the California Sustainable Insurance Roadmap, a vision and action plan for achieving sustainable insurance markets that grew out of a specific partnership with the United Nations Principles for Sustainable Insurance. The Roadmap, which is aligned with the UN SDGs, demonstrates the value of state-based insurance regulator leadership and provides an action plan to address insurance availability and affordability, empower more climate resilient and adapted communities, support sustainable investment strategies, and catalyze new insurance products.

**Conclusion**

The NAIC and its Climate and Resiliency Task Force demonstrate strong leadership in addressing climate risks and promoting resilience in the insurance industry. Through their work in various workstreams, including solvency, pre-disaster mitigation, climate risk disclosure, technology, and innovation, state insurance regulators have made
significant progress in identifying, measuring, and reducing climate risks in insurance markets.

The Solvency Workstream has recommended important updates to the RBC framework and solvency oversight tools, enhancing the ability of state insurance regulators to evaluate insurers' exposure to climate-related financial risks. The Pre-Disaster Mitigation Workstream has focused on raising consumer awareness and expanding funding opportunities for risk reduction measures, contributing to the creation of more resilient communities. The Technology Workstream has established a Catastrophe Model Center of Excellence, providing resources and training to regulators to proactively address climate risks. The Climate Risk Disclosure Workstream has aligned the NAIC's Climate Risk Disclosure Survey with international standards, improving the evaluation of climate risk in the insurance sector. Lastly, the Innovation Workstream has explored innovative insurance concepts to address climate challenges and close protection gaps.

The leadership of NAIC members extends beyond their jurisdictions, with active participation in international activities and collaboration with regulators from around the world. This engagement enriches global discussions on climate risk and enhances the understanding of insurance regulators' perspectives. The NAIC's coordination of multi-state initiatives, combined with individual state leadership on climate and resiliency concerns, creates a strong framework for addressing climate risks in the insurance industry. Overall, the NAIC and its Climate and Resiliency Task Force have demonstrated the importance of insurance regulators in monitoring and addressing
climate risks, contributing to the strength and resilience of insurance markets and the communities they serve.