JOINT MEETING OF THE CATASTROPHE INSURANCE (C) WORKING GROUP AND THE NAIC/FEDERAL EMERGENCY MANAGEMENT (FEMA)(C) WORKING GROUP

Wednesday, December 10, 2025
8:00 – 9:30 a.m.
Diplomat Convention Center—Atlantic Ballroom—Level 2

CONSIDER ADOPTION OF ITS 2025 SUMMER NATIONAL MEETING MINUTES

Draft: 8/19/25

Joint Meeting of the Catastrophe Insurance (C) Working Group and
the NAIC/Federal Emergency Management Agency (FEMA) (C) Working Group
Minneapolis, Minnesota
August 12, 2025

The Catastrophe Insurance (C) Working Group and the NAIC/FEMA (C) Working Group of the Property and Casualty Insurance (C) Committee met in joint session in Minneapolis, MN, Aug. 12, 2025. The following Catastrophe Insurance (C) Working Group members participated: Angela L. Nelson, Chair, and Jo A. LeDuc (MO); Mark Fowler (AL); Russ Galbraith (AR); Lucy Jabourian and Mitra Sanandajifar (CA); George Bradner (CT); Nicole Crockett (FL); Jerry Bump (HI); Travis Grassel (IA); Julie Holmes (KS); Chuck Myers (LA); Jackie Horigan (MA); Joy Y. Hatchette (MD); Peter Brickwedde (MN); Mike Chaney (MS); Elouisa Macias (NM); Roger Hayashi (NV); Glen Mulready (OK); David Buono (PA); Maria Morcelo (PR); Zachary Crandall (TN); Randall Evans and Marianne Baker (TX); and David Forte (WA). The following NAIC/FEMA (C) Working Group members participated: Glen Mulready, Chair (OK); Mark Fowler (AL); Lucy Jabourian and Mitra Sanandajifar (CA); George Bradner (CT); Nicole Crockett (FL); Travis Grassel (IA); Julie Holmes (KS); Joy Y. Hatchette (MD); Jo A. LeDuc, Angela L. Nelson, and Brad Gerling (MO); Elouisa Macias (NM); Tony Dorschner (SD); and David Forte (WA). Also participating were: Ronda Ankney (IN); and Robert L. Carey (ME).

1. Adopted its Spring National Meeting Minutes

Commissioner Chaney made a motion, seconded by Commissioner Fowler, to adopt the Working Group's March 25 minutes (*see NAIC Proceedings – Spring 2025, Property and Casualty Insurance (C) Committee, Attachment Two*). The motion passed unanimously.

2. Heard a Presentation on Recent Catastrophic Events in Missouri

Gerling said that on May 16, an EF3 tornado with maximum sustained winds of 152 miles per hour swept through parts of the St. Louis, MO, metropolitan area. The tornado began near the Saint Louis Zoo and moved northeast toward north St. Louis.

The estimated cost of this event is $1.6 billion and is considered the costliest weather event since the disastrous 2011 Joplin, MO, tornado. Despite the catastrophic losses, the estimated total insured losses for personal lines are expected to reach $330 million, just 21% of the total loss. To put that into perspective, the Insurance Information Institute (III) estimates that 52% of U.S. catastrophes were covered by insurance in 2024.

On May 20, Director Nelson visited the damaged areas in St. Louis to speak with the public and the insurance industry about the Missouri Department of Commerce and Insurance's (DCI's) response to the tornado. While there, she discerned that some of the damaged homes may have been uninsured. When she returned to the office, she instructed Gerling's team to develop a method for estimating the uninsured population in St. Louis. If the number of dwellings in a ZIP code is available, and the number of dwellings with coverage in that same ZIP code is available, then it is easy to figure out the number of dwellings that do not have coverage. The trick, though, is finding the right data sources. It is necessary to find the right data sources to figure out those two estimates and determine the reliability of those numbers.

Missouri was fortunate because, since 1988, it has been collecting a data set that provides the DCI with the number of dwellings with coverage. The Missouri ZIP code data collection estimates the number of annual exposures for both homeowners and renters policies, which Missouri uses to estimate the number of owner-occupied and renter-occupied dwellings in the affected St. Louis ZIP codes.

To figure out the number of dwellings, Missouri uses the American Community Survey (ACS), which provides estimates of the number of owner-occupied and renter-occupied dwellings by ZIP code. So, Missouri uses the Missouri ZIP code data for the number of dwellings with coverage, and the ACS for the number of dwellings, and it was able to perform its analysis to confirm what Director Nelson suspected. There was, in fact, an uninsured issue in St. Louis for the ZIP codes impacted by the tornado. Missouri estimated that some ZIP codes had up to 70% owner-occupied dwellings that were uninsured, and 90% of renter-occupied dwellings were uninsured.

Gerling said he would be remiss not to discuss the qualifiers and conditions for performing such an analysis. The uninsured rates calculated are just estimates, and these estimates will have a corresponding margin of error. In fact, the ACS publishes margins of error with every estimate that it provides. In general, the smaller the population of the geography, the greater the margin of error and the less reliability that can be placed on the estimate.

It was also necessary to factor in that Missouri's ZIP code data collection only covered 88% of the homeowners market. There was no way of incorporating dwelling fire policies, as there was no way to separate the data by occupancy type. Even if there was a way to separate by occupancy type, there would not be a way to separate which dwelling fire policies had windstorm coverage.

Once Missouri had estimates of the uninsured, it was able to produce a map of the affected ZIP codes in St. Louis. Missouri borrowed the data that the National Weather Service publishes on damage assessment and overlaid those estimates and points on a map of the uninsured. The data showed that the strongest parts of the storm, causing the most damage, hit the ZIP codes with the most uninsured communities in St. Louis.

Almost immediately, the Missouri DCI began receiving questions from the media, and to properly answer them, it needed data. The ZIP code data available for Missouri only covers the year prior, so there was no data for 2025. The Missouri DCI issued a data call to collect 2025 data, and the data was collected through the NAIC.

Within a few weeks, the Missouri DCI started receiving data sets from insurance companies. The data call collected data monthly for residential property, comprehensive personal auto insurance, and renters insurance. These data elements included: 1) the number of claims received; 2) the number of claims with payment; 3) the number of claims closed without payment; 4) the total amount of claims paid; and 5) the total amount of case incurred losses.

Additionally, the data set had a geographic identifier indicating the ZIP code for reference. However, the Missouri DCI also collected statewide 2025 catastrophe losses year to date, which proved to be very valuable. The Missouri DCI collected 99% of the Missouri homeowners markets that responded to this data call.

Since the Missouri DCI receives a monthly data set, it needed a way to perform an analysis without a lot of front-end work each month. The Missouri DCI uses a Tableau dashboard and can upload a data set, and it automatically updates this dashboard.

The Missouri DCI produces four dashboards, two of which are specific to the insurer. The statewide data has four filters that let the user organize the data. There is a coverage type filter that allows users to narrow the specific coverage they are looking for, and a company type filter that has specific company types, such as surplus lines,

farm mutuals, licensed property and casualty companies, and the Missouri FAIR Plan. A live version of the Tableau dashboards will be presented during the Insurance Summit.

One of the dashboards showed that $1.6 billion of homeowners' catastrophe losses were paid in Missouri in 2025, making it one of the worst years for losses on record. Another dashboard, similar to the statewide dashboard, illustrates the data specific to the St. Louis tornado. This dashboard now has a map showing ZIP-code-level data, and there is a filter that allows the user to specify which ZIP code they want to see. All five data elements are included in the dashboard. The Missouri DCI plans to do this analysis annually, so that if another tornado touches down in St. Louis or Joplin, it will be ready to alert officials of the community's needs.

The two largest cities in Missouri are Kansas City and St. Louis. The suburbs in these two cities appear to be insured. However, both cities suffer from uninsured dwellings in the inner city. But Kansas City and St. Louis are not the places with the highest uninsured rates in Missouri. Most of the uninsured locations are in northern Missouri, which is home to much of Missouri's corn and soybean production. Farms in this part of Missouri are often passed down from generation to generation. Since the mortgages on those properties were likely paid off generations ago, homeowners feel like they do not need to purchase insurance coverage. This is the mindset of many residents in the state.

To begin addressing the uninsured problem, the Missouri DCI needs to continue performing an annual assessment of the uninsured population in Missouri to better prepare for future catastrophes. The Missouri DCI plans to meet with local officials to be sure that they are aware of the situation. Secondly, the public needs to be informed of the consequences of being uninsured.

Bradner asked if the Missouri DCI could use data from the property/casualty (P/C) insurance market intelligence (PCMI) data call. Gerling said it did not, but it could have. Since Missouri ZIP code data has been collected for almost 40 years, the data could be used more reliably.

Director Nelson said what she finds interesting is that when looking at St. Louis's history, one would think anecdotally that St. Louis would have a shorter tenure of multi-generational homes, but that is not true. She said that in many circumstances, five generations have passed those homes down. Director Nelson said the most interesting thing, which was a complication during the recovery assistance, was that the Missouri DCI had not contemplated the fact that many titles were never transferred from generation to generation in the St. Louis area. This is likely because an estate had not been probated, where the title was transferred, which was a complexity that had not been encountered in the past.

3. Heard a Presentation on Recent Catastrophic Events in Texas

Evans said that on the evening of July 4, parts of central Texas experienced catastrophic flooding in less than an hour. Water levels rose by up to 30 feet. Several counties were severely impacted, including Burnet, Tom Green, Kerr, Williamson, Travis, San Saba, and others.

Within 24 hours, the Texas Department of Insurance (TDI) was activated by the Texas Division of Emergency Management (TDEM) to help at the State Operations Center. From that point forward, TDI disaster response shifted into high gear. The immediate response included consumer contact centers and communication with consumers.

On July 6, just two days after the floods, the TDI opened consumer contact centers for extended weekend hours to support impacted Texans.

The TDI's response team pushed out guidance and updates through its blogs and website, social media platforms, email subscriber lists, and one-minute insurance videos that educate consumers on flood, flood claims coverage, and fraud awareness.

Starting July 9, the TDI began hosting weekly meetings with the Texas State Disaster Coalition. This forum includes insurers, industry associates, associations, state agencies, and other stakeholders. The forum provides a coordinated space for sharing information, surfacing issues early, and aligning messages and response efforts. These meetings have been vital in ensuring transparency and agility throughout the response phase.

On July 10, Commissioner's Bulletin #B-0007-25 was issued. The bulletin offered regulatory guidance related to the flood event. The regulatory topics included consumer education, flooded vehicles, vacancy provisions, grace period for premium payments, claims adjusting and adjusters, claims settlement, prohibited nonrenewal practices, restricting new business, and medical services. The bulletin also balanced regulatory clarity with consumer protections, which is a model the TDI continues to refine with ongoing events.

The TDI disaster response team deployed seven disaster recovery centers in six counties. It also supported two multi-agency resource centers and a family assistance center in Kerr County, which is the area where most of the damage occurred. To date, this effort has resulted in the deployment of 27 staff volunteers and 21 consumer protection staff working extended hours in the contact center. In addition, six fraud investigators were on the ground in community centers, churches, and schools, as well as disaster recovery centers. The TDI's boots on the ground deployments allowed responders to speak directly with policyholders, guide them through their insurance concerns, and spot potential fraud in real time.

To date, six weeks after the event, TDI continues to staff these State Operations Centers as the field locations previously mentioned. The TDI's consumer contact center is still operating at extended hours, and the communications team is still producing timely information not only for this disaster but also to help Texans prepare for future events.

From previous experience, a few tools and tactics stand out, including the TDI's centralized coordination with TDEM deployment-ready volunteers. The Disaster Assistance Response Team (DART) is composed of staff volunteers, a well-trained surge-ready contact center, industry collaboration, weekly coalition meetings, and multi-platform consumer education, including short-form video and social media. The team also provides rapid response and deployment for regulatory guidance and a field presence for prevention and community support.

This flood event caused a 30-foot flood surge in less than one hour, which did not give people adequate time to respond. The TDI's ability to respond swiftly came from its preparedness and addressed some consumer needs.

In Texas, there are two main storm seasons: severe spring weather from March to May and hurricane season, which runs from June to November. Peak activity typically occurs from August to September, which is right now. With this in mind, the TDI's communications team continues to publish storm-related information via different media outputs to help Texans stay informed and be prepared.

4. Heard Federal and FEMA Updates

Alexander Swindle (NAIC) said that with more than $100 billion in insured catastrophe losses already reported this year, disaster policy remains a top issue in Washington, DC. Since March, the administration has advanced reforms aimed at reducing the federal footprint in disaster response, shifting FEMA's role, and placing more responsibility on the states. These changes will have significant implications for mitigation, consumer protection, and insurance markets.

As FEMA reconsiders its role in disaster response, the agency sought public input on how to better align federal recovery programs with on-the-ground needs. In May, the NAIC submitted a letter to U.S. Secretary of Homeland Security Kristi Noem following FEMA's request for information (RFI) on disaster response. The letter outlined how state insurance regulators have supported recent recovery efforts in Oklahoma, Tennessee, and Virginia, among others.

The NAIC called for improved coordination, streamlined National Flood Insurance Program (NFIP) claims and appeals, clearer messaging on private versus federal coverage, and stronger alignment between FEMA funding and state-based resilience programs. Finally, the NAIC emphasized the need for state insurance regulators to have a formal role in federal mitigation program design.

The FEMA Review Council, established by Executive Order 14180—Council To Assess the Federal Emergency Management Agency, held its first public meeting May 20 and its second July 9. The group includes governors, former FEMA officials, local leaders, and private sector representatives. Both meetings were chaired by Secretary Noem, who framed FEMA as overly bureaucratic, too slow in disaster response, and in need of a major structural reset. Secretary Noem has repeatedly stated her goal is to eliminate FEMA "as it currently exists" and reconfigure it as a lean support agency focused on funding and logistics, with states in the lead.

In July, at the group's most recent meeting, former Mississippi Governor Phil Bryant noted FEMA's past failures and called for greater clarity. In addition, the federal State Coordination Subcommittee, led by Virginia Gov, Glenn Youngkin, is mapping FEMA score capabilities and exploring how it could shift those responsibilities back to states. The council is expected to deliver its final recommendations in November 2025.

FEMA itself has been undergoing dramatic shifts. It has halted the implementation of the federal flood risk management standard and removed elevated sighting requirements for federally funded projects. These changes are aimed at speeding up recovery and reducing long-term exposure. However, they represent a shift in messaging and in the NAIC's contact with FEMA.

FEMA is rolling out a new post-disaster message: contact your insurance company before applying for federal aid. FEMA emphasizes that its role is ensuring habitability, not necessarily making individuals whole. The NAIC is working on ways to strengthen state coordination, consistently communicate with FEMA, and have more joint communications in future NAIC events in Congress. It continues to engage a lot with insurance. Given recent events, there is a lot of pressure from constituents to do something.

Some of the legislation the NAIC has been paying attention to most is the FEMA Act of 2025, a bipartisan, comprehensive bill. It would remove FEMA from the U.S. Department of Homeland Security (DHS) and establish it as an independent agency. It would also create a 30-member peer review panel for state mitigation plans and encourage resilient building codes and the use of the community rating system. It does not propose any changes to the NFIP. The NAIC has not taken a position, but this is something the NAIC is engaging in.

Another bill recently reintroduced was the Insurer Act by Sen. Adam Schiff (D-CA). This bill proposes federal reinsurance for homeowners' insurance in catastrophe-exposed areas. Swindle said the NAIC has some concerns about this bill and has been engaging with Senate staff to voice them. The NAIC's concerns include the sustainability of how the bill would work and the potential moral hazards of encouraging people to continue to live and build in riskier areas.

A recent package that the Senate advanced is the Road to Housing Act. This was a bipartisan housing package led by Sen. Tim Scott (R-SC) and Elizabeth Warren (D-MA). One provision that the NAIC was happy to see was that the act would permanently authorize the community development block grant disaster resilience program and allow the U.S. Department of Housing and Urban Development (HUD) and FEMA to set minimum construction standards for projects in hazard-prone areas.

During the Commissioner DC Fly-In in May, NAIC members met with 145 congressional officers. The NAIC's top priority remains mitigation, and it emphasizes the value of supporting policies that reduce losses, lower consumer costs, and strengthen resilience.

The NAIC continues to support the Disaster Resiliency and Coverage Act and the Disaster Mitigation and Tax Parity Act. Both proposals enjoy broad support from state regulators and would provide homeowners in high-risk areas with incentives to harden their homes. Meanwhile, more states continue their own mitigation grant programs.

Another agency the NAIC has been engaging with is the National Oceanic and Atmospheric Administration (NOAA), which resides within the U.S. Department of Commerce (DOC). Accurate federal weather data remains essential to solvency oversight, rate review, and catastrophe modeling. In May, the NAIC sent a letter to Secretary of Commerce Howard Lutnick and the DOC, urging uninterrupted public access to NOAA weather data and emphasizing the value of pricing, solvency, oversight, and uninterrupted public access.

Some of the cuts to NOAA weather data have resulted in a reversal in funding decisions. Recently, it hired 400 meteorologists amid hurricane season to ensure that it is ready to respond. With FEMA's structure under review and new messaging rolling out nationally, however, it's shaping up to be a pivotal year.

The NAIC will continue monitoring these developments and educating staff and agencies. This fall, it will also monitor the FEMA Review Council's final recommendations on how it plans to move forward.

Commissioner Mulready asked Swindle if he had heard any conversations about funding for disaster response responsibilities at the state level if the responsibility is given to the state. Swindle said there is a lot of concern about this responsibility being shifted to the states and where the money will come from. FEMA recently announced nearly a billion dollars in new funding across 15 preparedness grant programs to help communities respond to floods, fire, earthquakes, and cyber-attacks.

Horigan asked if the NAIC's letters are publicly available. Swindle said they are on the NAIC's government affairs web page. He said he could also send them to her.

Horigan asked if there is a clear understanding of what might happen to the NFIP if FEMA is restructured. She also asked what would happen to the policies that have already been issued. Swindle said that for now, FEMA is leaving the NFIP alone, but if anything, the NFIP might be put under another agency. He said he would continue to keep the Working Groups updated.

5. Heard a Panel Discussion on Developments Impacting Weather Data Collection

Director Nelson said Swindle mentioned that the NAIC sent a letter in May, urging the federal government to ensure uninterrupted public access to NOAA weather data, and that this is important to the insurance industry. She said that while there have been reversals in some of those decisions, it was still worth exploring the possible repercussions if there was a change in the weather data collection at the federal level due to the weather disasters occurring through the first part of the year.

Matthew Nielsen (Moody's) said he would begin by incorporating information and data from the National Weather Service (NWS) and how it is used in catastrophe models. This will set the stage for the discussion about what happens if the data stream changes.

Nielsen said catastrophe modelers provide three different functions. Insurers use catastrophe models for a variety of applications, including general portfolio management, structuring risk transfer and reinsurance transactions, and understanding structures on an individual basis for underwriting and rating.

Nielsen said the goal when building these models is to expand historical event sets and identify any gaps because history does not tell everything. Catastrophe models, for example, in the hurricane database have 125 years of information. These models expand this database to turn existing data into 10,000 years of simulation or 100,000 years of simulation. They give 100,000 different possibilities of what next year's hurricane season might be like.

Nielsen said that to predict these possibilities and build these models, historical weather information from the weather databases, particularly for hurricanes, is used as an input, so modelers can understand where hurricanes have occurred historically, how intense they have been, their average forward speed, the radius of maximum winds, etc. These parameters are used as a starting point.

Nielsen said catastrophe modelers also use some weather data to help set up the background, which is called the background field in the models. The historical background information for a severe convective storm comes from reports from storm chasers, people who have sustained damage, and weather observers who identify where things like tornadoes or hail occurred. Nielsen said the interesting part is that the damage to the background state of the atmosphere needs to be connected to ensure there is an understanding of what those ingredients were everywhere. It is similar to the same information that storm chasers use, for example, when they are going out and preparing for an outbreak.

Nielsen said upper air soundings, which come from weather balloons, are extremely important when trying to predict severe weather because they provide information about the instability of the atmosphere. He said that even with other perils like wildfire, catastrophe modelers want to be able to identify areas with low humidity, high winds, and high temperatures.

Nielsen said catastrophe modeling is also used to prepare for a real-time event response. For example, when a hurricane is known to be coming, modelers try to use forecast models to understand where it will hit. However, to have good forecasts, the exact location of the storm, the forward speed, and the intensity are needed. Hurricane hunters fly into the hurricane, which is important because they are out there taking real-time measurements and updating forecast models using that information. Nielsen said real-time weather monitoring

is important because it helps the insurance industry know where to send adjusters and how much capital they might need to prepare to start paying out claims as quickly as possible after an event.

Nielsen said climate condition models are also important as they provide information about the current climate. This could be an interesting problem depending on which peril the modelers are examining, because, for some, like hurricanes, there has been good satellite data since the 1950s. However, perils like severe convective storms have only become available more recently. It is important to understand the current climate, frequency, and severity of events, which makes getting the information that comes from the NWS extremely important.

Jennifer Gardner (Insurance Institute for Business & Home Safety—IBHS) said the IBHS uses the data for mitigation through post-disaster and pre-disaster investigations. An example of this would be when, during Hurricanes Debbie and Helene, crews set up equipment before the storms hit. This equipment measures precipitation and wind speeds and uses this information to determine the damage that is done to the properties in the surrounding area. This is a small piece of the puzzle, and it makes a big difference if it is a three-second gust of 70 miles per hour wind or a sustained period of 20 miles per hour wind.

Steve Bowen (Gallagher Reinsurance Brokers—Gallagher Re) said he believes that, ultimately, the data is all about communicating risk. The data is foundational in terms of how insurers can tell a story to their clients, whether that is a policyholder, a regulator, or a bank. It tells the story of how the risk profile looks today and what it may look like in the future. Bowen said part of his job is to conduct post-event damage surveys and visit communities that have suffered catastrophic impacts. He said the number one piece of information or feedback that he hears is from people who have been affected is that they did not know their home could flood, or burn down, or be affected by a tornado. Most homeowners do not understand the risk in the area where they live.

Bowen said getting this free data from NOAA, FEMA, the U.S. Geological Survey (USGS), and the National Aeronautics and Space Administration (NASA) is critical to helping to tell that story. He said it is necessary to be able to go from a global and national level down to a policyholder level, utilizing data that is going into the catastrophe models. He said this data also allows IBHS to simplify the messaging because, at the end of the day, a privatization model does not work when it comes to meteorology. Even the data provided for weather forecasts received on a smartphone comes from NOAA. If NOAA data goes away, the fundamental premise of all these private companies goes away as well because they are solely dependent on that information; it is not just an insurance industry challenge.

Nielsen said he heard Commissioner Fowler and Brian Powell (AL) speak about the performance of the IBHS FORTIFIED structures in Alabama. He said he believes this is an excellent program and is glad to see it making its way to other states. He said a key component of the program is understanding the wind speed that those structures that were IBHS FORTIFIED suffered to know if more research is needed. He said this is extremely important for catastrophe modeling as well to be able to connect what that ultimate hazard was, those wind speeds, those flood depths, etc., to understand how those buildings performed and build fragility curves and relationships.

Gardner said this is the perfect example of how IBHS FORTIFIED homes help in the solvency realm and how they affect a property's ability to circumvent damage. Insurers' damage estimates are focused on after an event occurs because they are looking at not only where they need to send claims adjusters, but also to see what the solvency risk is in those exposures.

Bowen said the challenge is not just about weather data and understanding how the hazard risk is evolving, because that is known. He said it is also because more people are moving into harm's way. He said that what is being seen in the insurance industry, and for someone like him, having a chief science officer title 10–15 years ago was largely unheard of. There is a continued investment by the insurance industry to bring more scientists into the industry to better understand the risk. There are more public and private collaborations with academics to start directly integrating research into day-to-day planning. This helps clients get a better understanding of what their portfolio risk looks like and whether they need to diversify to try to manage and balance high- and low-level risk areas.

Bowen said it is also important to integrate mitigation options directly, especially the work from IBHS, because risk will never be reduced to zero. He said that if some cost-efficient steps are taken to build and retrofit better, the eventual cost of these disasters will be significantly reduced.

Commissioner Fowler expressed concerns about the data's lack of updating and its effects on trendlines and, therefore, forecasting. He asked how that gap would be filled if the data went away. Nielsen said he believes the benefit of the current situation is that current catastrophe models already use the available data, so they will be good until their shelf life runs out. He said catastrophe modelers typically like to update the models every couple of years, looking at real-time event information. They also do damage surveys and look at the research that is coming out of the IBHS.

Nielsen said the lack of data would cause a blind spot in determining how the weather is evolving and what is being learned. This would raise uncertainty because the older models would need to be used to fill the gaps. This would be more detrimental for real-time catastrophe response.

Bowen said that while the private sector has discussed filling these gaps, the problem is the cost. It would take billions of dollars over decades of satellite data that has been put into place. Additionally, the observational sites have been established over the course of decades. Trying to expect one or two companies to come in and try to fill those gaps quickly is largely unrealistic at this stage. There have already been staffing shortages in many of the NWS offices. Historically, the data has also been free. He asked whether it would still be free. He also asked if companies will be willing and have the budgets to pay for data that has been freely available in the past.

Bowen said the existing NOAA data is known as the gold standard internationally, and the data is quality-controlled. He said that taking a step back would mean ceding more funding opportunities for European and Asian agencies to come in and basically take over what America has largely led in the past when it comes to NOAA and the quality of data that has been freely available.

Commissioner Mulready asked Gardner how the IBHS is evolving in terms of its studies. He asked if there is a realization that asphalt shingles may not be the answer in the future, with the wind and the hail that is occurring, or any other developments that IBHS is looking ahead to.

Gardner said the IBHS is looking at precipitation trends, wind speeds, and other factors that go into its standards. The IBHS pushes for better building codes through the International Code Council (ICC) and updates its own fortified model on a three-year basis, the same as the code updates. She said the IBHS is looking at introducing more shingles as well as doing more shingle testing. Currently, the IBHS tests about 20% of the market, but it is looking to grow that market so that it has an overall picture of how shingles perform, especially as they age. This will provide more details about what goes into the FORTIFIED program.

Gardner said that currently, one of the largest components of the FORTIFIED program is a sealed roof deck. The other components of the hail supplement are the shingle type and the quality of the roof shingles. She said she believes the wildfire space is important, too. The IBHS had crews on the ground at the Los Angeles County fires in Pasadena, CA, and Altadena, CA, while the fires were ongoing. The crew was out with the California Department of Forestry and Fire Protection (Cal Fire), looking at the damage and doing damage assessments. Having information about wind speeds is also critical in the wildfire zone to determine whether the property survived due to mitigation or because the wind changed directions.

Director Nelson said people have a sense of invincibility about accidents, illnesses, or perils, but it seems like much of this data could be used to educate the public about why it can happen to anyone, why it is important to think ahead, and why insurance is such a big part of one's own disaster preparedness and response plan. She asked if the NAIC and consumers are missing out by not utilizing this information more.

Bowen said this is an area where there is more direction in the industry. He said weather risk information is starting to become available on sites like Zillow and Redfin. He said he hopes to see more risk layer mapping for individual perils down to the asset location, working with banks or lenders to get a better understanding of whether a home loan is available. These are the risks that should be considered for a property someone is looking to purchase.

Bowen said he believes most people do not understand that, using the basic statistics, living in a 100-year floodplain over the life of your 30-year mortgage means there is more than a 25% chance that the property will see a flood during that 30-year period. He said we need to do a better job of informing consumers. Bowen said that the modeling work being done is the type of work that needs to be integrated down to an asset location so that people understand their risk where they live.

Nielsen said having information, like the flood depth in a 100-year flood depth zone, provides someone with information about how severe an event could be. More information provides a homeowner with helpful information. He said he believes there is an onus on the insurance industry to make sure that it communicates as much as it can because it is important for the public, not just the insurance industry, to understand. He said he believes the IBHS could almost make the argument that an informed consumer, that is, for instance, building a house, might make better choices if they have information about various building materials and supplies and how those would withstand certain risks.

Gardner said that the IBHS does provide a lot of consumer guidance around mitigation and the ways to minimize risk. This guidance is passed down to IBHS members who can pass it along to the policyholder. The IBHS also works with homebuilders and contractors to try to improve the building materials, as well as to make them more informed so that they can build to the fortified level.

Director Nelson asked how the NOAA database helps when it assesses loss trends related to perils, like a cyclone resulting from a hurricane.

Nielsen said the dataset that comes from NOAA is foundational in terms of understanding where the trends are evolving. Starting from 1990 to today, for severe convective storms, it is typically called the Doppler radar era. This is when the data is of the highest quality. There have been some individual shifts in terms of not necessarily frequency, but on a per-outbreak basis, say more outbreaks of tornadoes, larger reports of hail damage, and straight-line winds per occurrence. If one takes all that data to show where there is a change in the hazard, then overlays that with the fact that this is expanding from urbanized areas into the suburbs, deeper into the exurbs, that footprint of potential impact continues to grow. Putting all these pieces together just leads to a higher cost.

Nielsen said that inflation, supply chain concerns, and uncertainty about tariffs, considering how much of the country's lumber is coming from Canada, is playing into additional higher costs from a replacement standpoint. In terms of the hazard, the data coming from NOAA is critical to understanding the science and how it is evolving.

Nielsen says he thinks about what has traditionally been called primary perils: hurricanes and earthquakes, which have large and uniform footprints. Regarding a hurricane, tracking and shifting it by five miles in either direction means your overall loss will be within a certain, small margin of error. However, shifting a wildfire or tornado by five miles in either direction can be a completely different story. The intricacy and the detail of the data necessary to model flood, wildfire, and severe convective storms are of a much higher resolution. That helps us better understand not just where things are happening but how wind topography and other fine resolution details will affect whether one house gets burned or one house gets saved, for example, in a wildfire.

Gardner said the IBHS did a six-week hail study this year and is tracking storms. This was a National Science Foundation (NSF)-funded opportunity that included 15 different organizations in the U.S. and four international operations. Multiple crews were out chasing storms to put equipment down in the fields, and they used the radar data to do that. That job cannot be done without accurate forecasting information.
Gardner said the information from the collected data was used to develop different hail recipes that the IBHS recreates in a lab and then tests, such as shingles. This information is collected to determine the frequency, density, and structure of hail and how it impacts the built environment. Without that kind of information, a lot of the new online exposures are missed.

Commissioner Chaney said he knows that the IBHS has a research center in South Carolina and has done extensive research on shingles. He asked if any of the research has been released to the public, or if it is all in the hands of the companies that are now saying they are not going to write to a consumer if their roof is more than 15 years old.

Gardner said the IBHS has impact ratings that are publicly available. She said the IBHS also released a couple of new tools this year, Roof 101 and Hazard 101, to help educate consumers about the different issues that can arise with roofs and the impact of natural hazards. Gardner said IBHS is looking at expanding the number of types of shingles on the impact rating test.

Nielsen said the catastrophe models reflect all the different types of shingles, including the IBHS tests, as well as some others. He said they look at providing this type of information in a model first and foremost if the insurer has that information on the structure that is going to be analyzed. If they know that there is a tile, a clay, or an asphalt roof, that is exactly what the model will use. However, not a lot of insurers are capturing that data for every location.

Nielsen said their model has distributions of construction materials, so understanding the typical distribution by postal code would help them understand the typical distribution in that postal code of those varying types of roof shingles. He said they provide an average and do not give a penalty for not knowing. In general, state insurance regulators have many concerns about the type of shingle being used on a structure and the differentiation because it does not appear that this is done when the risk is being underwritten.

Gardner said one of the hurdles faced is that most people do not know what kind of shingles they have on their roof. So, the insurer does not have the information to support whether it was a well-performing product or not. She said she believes progress starts with trying to educate consumers so that they can make better choices.

Gardner said that while there is a disconnect regarding the warranty, the actual installation of the shingles plays a part in the length of time they last, too.

Nielsen said it is true that roof performance varies across the country, even if the shingle is the same. The differences are considered by region in the model being used. State insurance regulators do not believe that this is being considered in the underwriting process, as the same standards are applied across all regions. Additionally, shingle warranties are not in line with the length of time the roof will last. Many homeowners also do not know what kind of shingles they have on their roofs.

Gardner said that construction quality, as well as state mandates about building codes and the enforcement of quality construction, can also vary by state. It is important to remember that a roof that is improperly installed will also be more vulnerable.

State insurance regulators are learning from each other and sharing information about the mitigation programs their states have implemented. This learning allows states to refine their programs.

Commissioner Fowler asked if the IBHS has information on the new technologies for concrete buildings and metal roofs. Gardner said the IBHS has had conversations with builders about concrete buildings, but has not yet been able to test this. She said metal roofs have been added to hail ratings as well; however, they are not publicly available.

Commissioner Carey said entities have used NOAA data and monetized it. He said he believes there must be a way for the insurance industry to step up and say this data is of such importance that it will work out some type of financing model where each individual company is not on the hook for the data, but the responsibility will be shared if they wish to use the data.

Macias said that New Mexico has structures with flat roofs, which is rare in other places. She asked if there had been any studies on materials that could be used on flat roofs to withstand wildfire. Gardner said the IBHS had low-slope roofs on the farm. She said these are usually seen on commercial structures but can also be residential. To date, the IBHS has studied only wind on this type of roof.

Brickwedde said this concept of data being foundational to the communication of risk is important. He said Alabama has done a great job of communicating risk to homeowners' homes, health, and safety. Losing a roof is costly and can have major impacts on a family. The risk is an important thing to communicate.

Having no further business, the Catastrophe Insurance (C) Working Group and the NAIC/FEMA (C) Working Group adjourned.

SharePoint/NAIC Support Staff Hub/Committees/C Cmte/Catastrophe Insurance/CatFEMA Minutes 8_12_25.docx

HEAR FEDERAL AND FEMA UPDATES

HEAR A PRESENTATION FROM THE NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA)

HEAR A PRESENTATION FROM THE ASPHALT ROOFING MANUFACTURING ASSOCIATION (ARMA)

DISCUSS ANY OTHER MATTERS BROUGHT BEFORE THE WORKING GROUPS