NAIC/Center for Insurance Policy and Research (CIPR) Catastrophe Model
Center of Excellence (COE)
Frequently Asked Questions (FAQ)
November 16, 2021

Governance & Oversight

Topic: Vendor and Insurer Continued Engagement with Departments of Insurance (DOIs)

Is the intent for the COE to become the primary point of contact between state insurance regulators and modelers?

No. As stated in the proposal, “identified support services will not be taking the place of state DOI activities involving CAT models, such as model and rate filing reviews, nor will the CAT Modeling COE be approving vendor models.” However, we do envision the COE providing access to CAT modeling expertise to support state insurance regulator understanding, training, etc.

Will state insurance regulators continue to be open to discussions with modelers (and insurers) about models?

Yes. In fact, the COE will seek to improve communication between state insurance regulators and modelers/insurers, supplying state insurance regulators with expertise and information to help facilitate such discussions.

Topic: Transparency and Potential Bias of Modeled Results/Usage

How will the COE engage with interested stakeholders to remain transparent?

Most NAIC support resources interact with a committee for reporting and oversight. In this instance, at least for now, we propose that the catastrophe resource center will report to the Technology Workstream under the Climate and Resiliency (EX) Task Force, as well as coordinate with the Property and Casualty Insurance (C) Committee.

How will the COE work to ensure impartiality of vendor models?

The COE will make every effort to engage with all vendors willing to participate for all perils with available technical documentation. Furthermore, the COE will establish a governance structure to ensure that partiality is not provided to any model or vendor.

Would the COE be engaging to connect learnings from the CAT model to specific insurer rate-making, solvency, and/or business—i.e., strategic, reinsurance, claims management—decisions?
The COE support services will not take the place of state DOI activities involving CAT models, such as model and rate filing reviews, nor will the CAT Modeling COE be approving vendor models. The COE will work to understand models objectively from a general sense, not for individual rate filings or solvency assessments. We acknowledge that each insurer has their own risk profile that would need to be considered on an individual basis, which is outside the scope of the COE.

**Topic: Objective Science**

**Would the kind of information the COE conveys be facts-based or would it include opinions or analysis?**

The information provided to the state DOIs would be fact-based with relevant objective analysis, as requested. Providing this type of information to states highlights the importance of the placement of the COE within the NAIC’s independent research center, the CIPR.

**Topic: Addressing Regulatory “So What” Questions Through Applied Research**

**What are regulatory “so what” questions in support service #3 of the proposal conducting applied research analysis?**

State insurance regulators are responsible for maintaining well-functioning competitive insurance markets. Forward-looking models can be utilized to help analyze market performance, especially regarding the need for improved resilience. As stated in the proposal, CAT models are tools for catastrophe risk assessment. State insurance regulators can apply these tools in much the same way as the industry, albeit for regulatory resilience priorities. For example, models can be used to identify high-risk areas and where proliferation of home hardening activities can improve resilience to natural hazards, including hurricane, flood, severe convective storm, tornado, wildfire, and earthquake. Such mitigation activities are critical to reduce probable losses. Lower losses over time can improve the availability and affordability of coverage in the future. Applied research utilizing CAT models can demonstrate the economic value of mitigation activities. One description provided via public comments that we considered useful is, “conducting applied research analysis that utilizes or analyzes the potential to utilize CAT models to further public and private risk mitigation and resiliency efforts; benefits and opportunities at the individual consumer or business; or public agency at the community, regional, state, or national level.”

**Regarding conducting applied research analyses utilizing CAT models, we would like to understand the research and support expectations from the COE on modelers.**

We envision working with modelers on applied research activities as applicable. We are requesting funding to allow for modeler engagement.
Depending on the expected level of granularity for COE work, additional questions may be relevant, such as whether the COE (NAIC/CIPR) would need to be prepared to go to a hearing to testify or respond to discovery?

It is not anticipated that the COE would maintain granular information about individual insurer use of CAT models. The level of detail would be around the actual CAT model to provide education and training to state DOIs.

Will the COE be used to conduct research and analysis into the markets for CAT models. Will conflicts of interest or market failures distort the use of CAT models?

No. It is not envisioned that the COE would set out to conduct this type of research and analysis.

**Implementation Considerations**

**Topic: COE Communication of Various Results, Information, and Observations to DOIs**

Given the complexity of models and breadth of expertise required to build and maintain them, there is a risk that any third party cannot adequately communicate the nuances and justification of models. Will the COE plan to coordinate model presentations from the modelers, rather than only relaying this information second-hand?

Yes. The COE would plan to coordinate model presentations from modelers.

How will information, observations, and/or questions about models be conveyed to state insurance departments? What kind of output will be generated?

We plan to hire a relationship manager responsible for communicating with the CAT model vendors and state insurance regulators. A regulator-only technology platform will help facilitate information sharing with state insurance regulators. Research output could take multiple forms depending upon the nature of the analysis undertaken.

What kinds of data fields will be included? Will others provide input into the design?

The data fields selected would be contingent on the models being used and the research project under consideration. Data fields would follow from model inputs and outputs.

Will the COE reviews and/or output be designed to be geography-specific?

Yes. That is possible.

Once a model has been reviewed, what renewal process is envisioned?
Models will not be reviewed, nor would they be posted on the state insurance regulator-only website. However, model technical documentation and information will be updated as new versions of the models are released.

**Topic: Model Vendor Intellectual Property (IP) Protection**

**How will the COE safe-guard intellectual property of the participating CAT model vendors?**

All modeling documentation, access, and usage will be centralized and monitored through the COE via legally binding data use agreements. The NAIC has an extensive track record of experience in collecting and protecting proprietary information. The actual models will not be posted on the state insurance regulator website, only the model documentation will be posted.

**Topic: Interaction with Modelers and Other External Experts**

**Will modelers engage in discussions with the COE about specific models? Do you expect insurers would be involved in model-related discussions?**

Yes. The COE would be engaged with modelers on the modeling technologies and inputs in a similar fashion as insurers and reinsurers and have access to the same modeling documentation to develop internal expertise. It is possible that insurers could be involved in model-related discussions with the COE, but the COE will not review individual insurer’s use of models.

**Is the CIPR planning to license and use modeler software or engage in paid consulting studies for their research and development of processes?**

Yes, depending on COE resources and the specific research use case. The CIPR would be willing to either license modeler software and/or engage in paid consulting studies for research and educational/training purposes, as directed by the appropriate NAIC authorities.

**How will results and underlying assumptions from licensed models be communicated to state insurance regulators?**

Any use of a licensed model, including distribution of modeled results, would be subject to the model license agreement and/or model vendor negotiated research consulting contract. Underlying assumptions from the various models utilized would be collected via the model technical documentation as part of the model vendor data use agreement. Note that it is possible that the model technical documentation, including underlying model assumptions, could be collected through a COE data use agreement without an associated model-based research project. If we were to license a model, the actual model would not be posted on the state insurance regulator-only website.
Will modelers be involved in establishing workflows, best practices, agendas, and expectations of the COE, including timing?

We anticipate that modelers will be actively engaged with the COE staff, advising on these items as appropriate.

How many vendors is the COE considering supporting?

The COE will not be “supporting” vendors, but rather the COE will collect model documentation and engage with model vendors. The COE will engage with any model vendor serving insurance markets where the information is relevant to state insurance regulators.

Does the COE anticipate looking to external experts for some of the implementation or ongoing work?

Yes. External collaboration would be welcome, whether that be with industry experts, public agencies, or the academic community.

Topic: Resources – Staffing and Funding

How many states do you expect to be interfacing with the COE?

The COE will be a resource of the NAIC potentially interfacing with all 56 jurisdictions.

Beyond recruiting for the identified new roles of CAT modeling relationship manager and CAT model research analyst, how many people at the NAIC/CIPR will be contributing to COE activities? Do you expect that to change over time?

The CIPR director, the NAIC solvency enterprise risk management (ERM) advisor, and potentially Property and Casualty Insurance (C) Committee staff support will have a role in supporting the work of the COE. We anticipate that additional technical and administrative support resources may be necessary as the workload and demand for services evolve with demonstrated success.

Will the staffing level proposed by the NAIC be able to provide meaningful analysis in the broad category of catastrophe modeling?

Prior to the creation of the COE, CIPR and NAIC staff have provided meaningful analysis on wildfire CAT modeling and applied wildfire resilience research. We aim to build off this success and need to start somewhere. Every little bit helps for the states, as stated by one industry commenter, “[t]he staffing issues mentioned above regarding experts at the NAIC are even larger for state insurance departments. Most states are not going to have enough or the right staff to review these models. They will have to rely on others to
evaluate catastrophe model validity, and most likely will have to rely heavily on the
decisions and evaluations made by others.”

**Have long-term plans been prepared? Are there budget implications?**

No long-term plan has been developed for the COE. The expenses associated with the
COE would be subject to the NAIC budget process and have no special assessments or
fees for service.