

Cat Modeler's Review Highlights Necessity To Integrate Models Throughout Operations

Property/casualty companies rely on catastrophe models to determine their probable maximum loss, but often fail to incorporate their catastrophe modeling into other aspects of their business, said John Tierney, senior vice president of catastrophe consulting firm Karen Clark & Co.

The company has introduced a catastrophe management operational review to examine a company's use of catastrophe models and the integration of catastrophe loss analytics into risk management operations.

"Our perception...is that catastrophe models are a very valuable and important tool, but probably are not being fully utilized by companies in a way to enhance their operations," Tierney told *BestWeek*. "It's important to remember that models are indicators, not answers, and companies need to do a better job of integrating their catastrophe analysis process into their operations."

He said most companies use catastrophe models to determine how much reinsurance they should buy. "There's much more that can and should be done," Tierney said.

One client was able to use their catastrophe modeling results to discover they were able to write more business in an area where they'd been reluctant to do so before, he said. "We were able to take the results from the catastrophe model and align that with other information to demonstrate areas where the catastrophe potential varied within the rating territory," Tierney said.

"Whether it's on the front end, in terms of underwriting and accepting new business, or on the back end, in terms of using the information to develop better pricing metrics, you want to make sure the catastrophe risk management is fully integrated and not just a single, isolated process," he said.

The issue might be more important to smaller, regional companies versus national carriers because catastrophes often have a big regional impact, Tierney said.

Also, catastrophes are more than just hurricanes and earthquakes, he said, citing a growing awareness of frequency risk due to winter storms and tornados in the Midwest.

"More companies are realizing that a high frequency of a moderate-size catastrophe is just as important to manage and control as a larger event," Tierney said.

He suggested companies consider catastrophe risk management in terms of data management, catastrophe modeling, underwriting and pricing, and risk management.

Among other benefits, the review helps insurers determine whether they accurately collect information pertaining to the exposure associated with new business and use appropriate and analytic tools as applied to their book of business, among other factors.

In August, Karen Clark, a pioneer in the catastrophe-modeling field and president of Karen Clark & Co., said insurers rely too heavily on catastrophe models and often put too much weight on the probable maximum loss.

Clark said she's not saying that companies should not use cat models at all, but that companies should examine the detailed model output to see if it makes sense for their specific book of business, for individual geographic regions and even for specific policies. Then companies should select a range of loss scenarios for risk management, rather than use a specific point estimate such as the probable maximum loss, Clark said (*BestWire*, Aug. 10, 2009).

—Meg Green



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