

Garbage in, garbage out...

A convenient crutch for the modelling firms after the latest event, or an analyst's friend that justifies modelled losses that are not what was expected by company management? **Dickie Whitaker** investigates



Damage from Katrina caught modellers by surprise

Like all maxims, however, it's not that simple. Today, more than ever, the market is being driven to maximise financial return while keeping regulators and rating agencies happy.

In practise, deciding what data to capture and what assumptions to make is more important than ever, and organisations that don't triage this process are wasting time and effort.

UNCERTAINTY ON THE INCREASE

Analysis done by Guy Carpenter

confirms the importance of capturing data for industrial business that is not generalised to the default category of 'unknown' in the models. With this in mind, modelling agency RMS recently launched a service that aims to evaluate catastrophe data and foster a better understanding of its importance. Not surprisingly, RMS has observed that as more complete and granular information is added, loss estimates will change. Also, as geocoding resolution increases, the uncertainty with respect to the modelled losses (CV) decreases.

ANALYSIS OF EXPOSURE DATA IN FIVE STATES (CA, FL, TX, LA, NY)				
EXPOSURE DATA	#LOCATIONS	% TOTAL COUNT-BASED	#LOCATIONS	% TOTAL COUNT-BASED
TOTAL LOCATIONS	RESIDENTIAL: 287,202		COMMERCIAL: 1,108,8676	
Geocoding<Street level	54,241	19	263,106	23
Unknown Construction	46,061	16	517,735	47
Unknown #Stories	150,027	52	704,248	64
Unknown Year Built	46,843	16	634,882	57

DATA QUALITY

In order to understand the current 'state of data quality' RMS performed analysis of some sample data that is being used in the industry. Statistics were generated for exposure data from five US states – California (CA), Florida (FL), Texas (TX), Louisiana (LA), and New York (NY) – using a single wind speed. It is notable that, of the commercial locations, over 20% were geocoded at postal code level or worse; nearly 50% had an unknown construction type; and nearly 60% had unknown values for year built (see table left).

RMS is also developing tools to help assess the quality of exposure data that evaluate the three key elements of data quality: resolution, completeness and accuracy. Resolution and completeness are quantified by an objective scoring methodology that is

COMING UP TOMORROW

KEVIN GRIFFITHS on casualty modelling.

business-specific and peril-dependent. With experience or expert help, practitioners can make more informed decisions about where data capture can make a significant impact on their business and guide underwriters, brokers and IT departments in a direction that can result in more certainty in the results from models they use.



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