



Construction, Occupancy, Protection and Exposure (COPE) Data Services

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We have seen increased underwriter demand for accurate data, both in terms of values and physical properties of risks. In catastrophe-prone areas of the country, this data is being used in sophisticated modeling software to predict the impact of different catastrophe scenarios. However advanced the catastrophe modeling software, the results are reliant on the veracity of the input data.

In response to this demand, Duff & Phelps has experienced a significant increase in clients requesting COPE data elements when conducting insurance valuations of buildings and their contents. We started to provide primary COPE data collection services 15 years ago; more recently, we also have been providing secondary windstorm data elements for certain clients. In some instances, we conduct non-value inspections purely to collect primary and secondary COPE data for our clients.

Primary COPE data elements included as standard service in our inspection and appraisal reports are:

- Property description
- Address
- Class of construction
- Year of construction
- Square feet of space
- Number of stories
- Average story height
- Wall construction
- Roof construction
- Heating system
- Cooling system
- Fire alarm
- Sprinklers
- Entry alarm
- GPS coordinates
- Roof covering
- Roof geometry
- Roof equipment hurricane bracing
- Appurtenant structures
- Roof sheathing attachment
- Ground-level equipment protection
- Flashing and coping quality
- Flood zone indication

Optional secondary windstorm COPE data elements include:

- Building construction quality
- Roof age
- Roof anchor
- Basement flood protection
- Cladding type
- Frame-foundation connection
- Opening protection
- Content damage-proneness grade

Updated Models Drive Increased Demand

In February 2011, catastrophe modeling firm RMS released an update, commonly known as RMS v11.0, to its hurricane risk model. The updated model was based in part on:

- Three years of research and development
- A research project with the University of Miami on how hurricanes weaken after landfall
- Tens of thousands of wind-speed observations – 10 times more than those available for the last update
- \$18 billion of actual claims data from 12 major windstorms over the last 20 years

- Updated storm surge modeling
- Losses from Hurricane Ike that identified quality of construction and building vulnerability issues
- Regional building codes and compliance issues

RMS subsequently validated its model using:

- Its largest database of historical wind observations
- Claims data from clients and industry levels (\$200 billion over 30 years)
- Testing and adoption by clients

In addition, the model was passed by the Florida Commission on Hurricane Loss Projection Methodology (FCHLPM) after rigorous review by a panel of experts.

Major changes in RMS v11.0 included projecting a much less drastic falloff in wind speeds for storms once they head inland, as well as heightened building vulnerability and increased losses due to storm surge. These and other key changes represented a major change in catastrophic risk exposure for both insurers and insureds. It was thought that the largest impact was felt by non-coastal wind risk. Effects on insurance companies included the need to purchase more reinsurance, having to reallocate capital, reduced capacity and increased pressure on pricing.

The subsequent release of RMS v13, featuring updates to the storm surge model and slight decreases to the long-term and midterm rates for storm activity, did not have the gamechanging impact of v11.

Summary

When property portfolios lack data, risk models will default to a worst-case scenario. Property portfolios with superior valuation and COPE data and documentation also receive preferential underwriting attention. Now is the time to research missing data elements.

Contact Duff & Phelps to see how we can assist in maintaining accurate, reliable data for your property portfolio.



For more information please visit:

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