

White Paper

## Strategic Visualization: Evolving How You View Commercial Property Insurance Underwriting

Empowering Underwriters With a Clearer Picture  
of a Location's Risk

September 2015

## Executive Summary

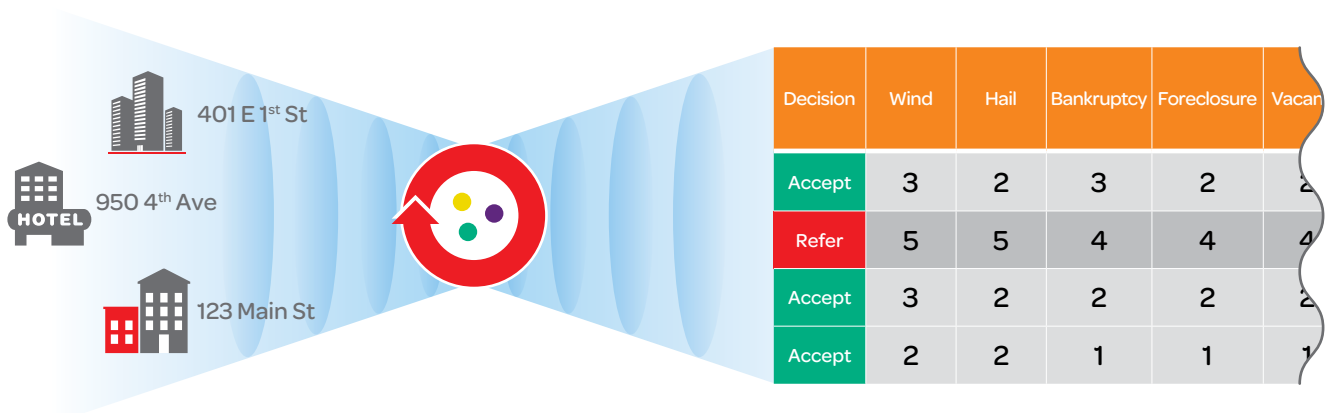
Location information is a key factor for assessing risk and effectively underwriting commercial property insurance. Currently, most commercial property underwriters are limited by an inefficient manual information gathering process; and also limited by incomplete data consisting primarily of policy input data and traditional government peril data. Fortunately, access to additional data sources and recent advancements in geo-spatial technology has allowed carriers to:

- Expand the breadth of the risk peril data and the assessment categories
- Improve the predictive accuracy of analytic models and risk-based scoring
- Include loss history and policy accumulation analysis in underwriting
- Automate peril-specific underwriting and focus on those risks that exceed underwriting tolerance thresholds
- Utilize a visualization tool to review the risks and gain more insights

## Transforming data into intelligence

Having access to raw data is essentially useless if there is so much of it that it becomes impossible (or unrealistic) to interpret, understand and use. That's why the evolution of underwriting technology includes the conversion of the raw peril data into machine-readable risk scoring indices. Peril-specific risk scoring indices are produced by taking historic peril-specific data on an address and assigning a number from 1 to 5 to indicate the intensity of peril exposure at that property location. For example, a property that sits in a location that has a long history of hail events will have a hail score of 5. A property that has little or no hail event history may have a hail score of 2.

The following illustration depicts a process where new property locations go into an automated scoring engine that provides location-specific indices across many peril types (e.g., wind, hail, fire, flood and more) for each address.



Automate risk information into your workflow and gain efficiencies



### About the Author

Ernie Feirer, CPCU, is the Vice President and General Manager of Commercial Insurance for the Risk Solutions business of LexisNexis®, where he is responsible for the portfolio of solutions serving the commercial insurance market. He has more than 25 years of experience.

Feirer has been part of the insurance leadership team since 2000, leading the product management and analytics teams, the claims solutions division and most recently the commercial insurance business starting in 2012.

Carriers then establish peril-specific thresholds by peril indices. For example, a carrier may not have the appetite for properties with a wind peril score of 4 or higher. They may want to apply additional underwriting attention on a wind peril score of 3. Having these tools in place positions the carrier to implement a process we call Strategic Visualization.

## Strategic Visualization

Underwriters do not have the time or the ability to visualize every property across more than a dozen different parameters. In implementing indices across different risk types, the automated scoring engine will identify those risks that are below risk thresholds and can be automatically sent through to bind. Risks that exceed underwriting thresholds are referred for further action and underwriter attention.

Strategic visualization is simply an automated process that leverages risk-specific indices to identify those risks that require additional underwriter attention. By automating the indices into the underwriting workflow, carriers are able to know which risks fall outside of their risk appetite and then utilize a visualization tool to gain additional insights.

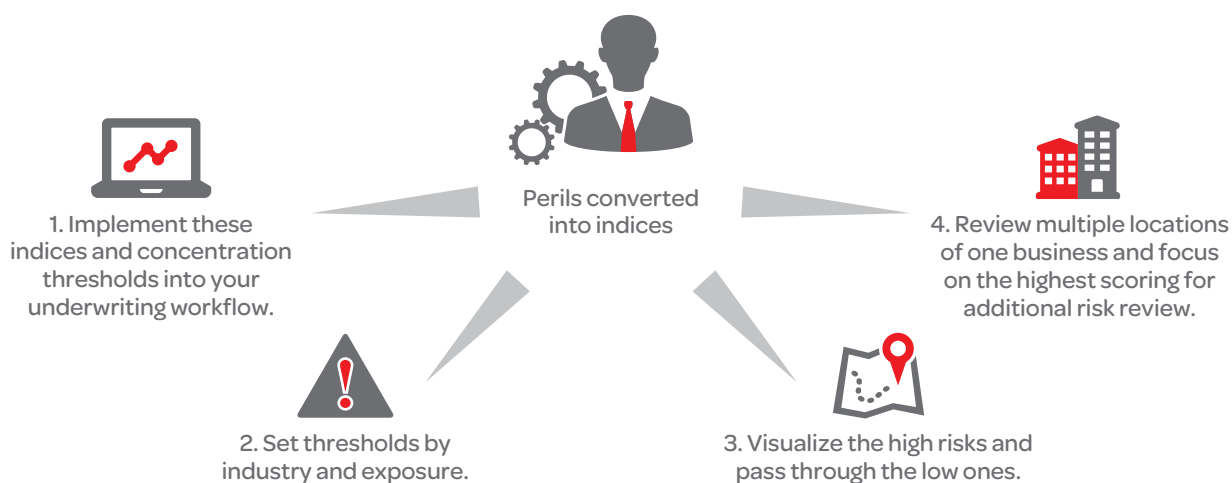
## Setting risk thresholds by business type

The scoring solution can be fine-tuned to match organizational risk tolerances at the SIC or business category level. Carriers can implement peril-specific indices and/or concentration thresholds, by business type, into existing underwriting workflows. For example, a carrier underwriting a car dealership may set a lower risk threshold for hail while jewelry store underwriting may necessitate a lower threshold for theft.

**By implementing a strategic visualization strategy carriers are able to automate comprehensive peril data into their workflows. They are then able to set risk thresholds by business type and only visualize the risks that are above the threshold and in turn, improve productivity and their bottom line.**

Strategic visualization enhances the underwriter's ability to easily access and digest comprehensive data regarding a specific location and its surrounding areas and utilize a visual mapping tool to analyze specific details when necessary. Due to the aggregation of multiple types of data and major advancements in data analytics technology, underwriters now have access to far more information—and powerful tools that transform that information into usable intelligence.

### Technology allows for increased automation in what previously was an extremely manual underwriting process



## Five valuable types of geospatial underwriting data

Technology is the driving force behind the evolution of underwriting. The types of risk-relevant information available to underwriters are constantly expanding. Let's examine five categories of risk indicator data made readily available through today's innovative data technology.



### Location Risk Factors

Location risk factors are business-related information at the geocode level. This type of data encompasses risk-related attributes associated with other businesses in the area, such as: bankruptcies, foreclosures, vacancies, business failures, business creation and business change rates. Without information like this, the underwriter may not truly understand the type of neighborhood and environment in which the business is operating. For example, a neighborhood in economic decline leaves a trail of failed businesses, bankruptcies, foreclosures and vacant buildings, all of which are strong indicators of high risk. The more innovative solutions analyze all of these location risk factors and generate a single risk proximity score.



### Natural Hazard Data

Natural hazard data will provide carriers with information indicating the propensity for certain types of perilous weather to occur in a given area and increase the potential for property damages. These dangerous weather activities may include: floods, high winds and tornadoes, hail, brush fire and earthquakes. While gathering basic levels of "natural disaster" data is not new to underwriters, the depth and breadth of data now available is far more granular and the scores and visual maps are far more telling.



### Firmographic Data

Firmographic data is information related to the business and the businesses around the one being underwritten. This category of data includes details like: business names, business types, addresses, and SIC and NAICS codes. How is firmographic data able to serve as a risk indicator? A day care sandwiched between a bookstore and an elementary school is probably going to have a different level of risk than a day care adjacent to a liquor store and a pawn shop. These data sets will also include negative red flags, like judgments or liens against area businesses.



### Loss Data

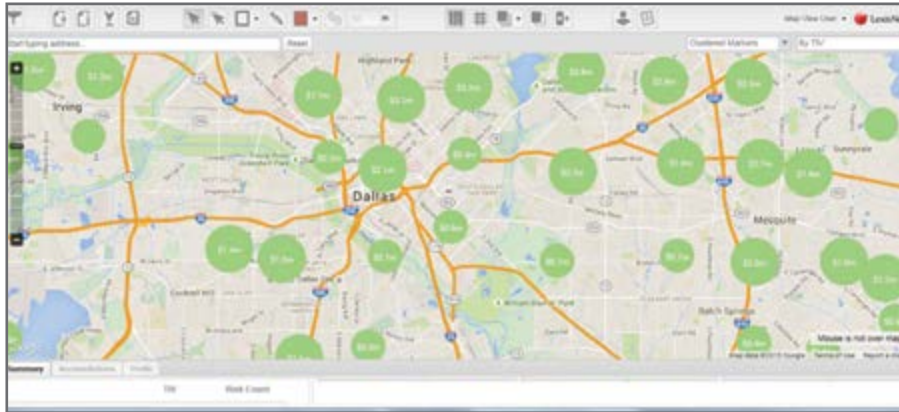
No data is more effective at exposing patterns and potential risk than actual historical loss data. The information in these loss history indices is aggregated from industry-wide contributory databases and provides valuable insights regarding theft, wind, hail, lightening, fire, water, liability and more. You can review the loss history for not only the business you are underwriting, but the property location as well, providing multiple levels of insight regarding previous claims.



### Existing Policy Data

By looking at an overview of risk exposure resulting from existing policies and their historical data within a given geographical area, carriers can anticipate the impact of taking on a new piece of business and adding additional levels of risk in that same area. Thorough and robust data paints a more complete picture of potential exposure and enables faster and more accurate underwriting—reducing risk and potentially creating new opportunities for profitable business growth.

## Visual tools can provide a clear overview of policy clusters within a given geographical area.



By reviewing an entire policyholder portfolio as input data, insurance providers can use analytics and visual mapping tools to generate a clear view of their entire book of business. A mapping tool provides a graphical overview of policy clusters within a given geographical area. Then various risk filters can be overlaid onto the map to reveal at-a-glance exposure levels. This level of transparency offers valuable insight into existing risk and equally valuable intelligence for underwriting new business. More relevant information results in improved understanding of potential risk, which results in the ability to more finely tune underwriting decisions. Finely tuned underwriting ultimately improves the profitability of an entire commercial property policyholder portfolio.

### Technology enables clarity and insight

While no amount of information will ever be enough to create completely predictable outcomes or absolute certainty in risk assessment, the effectiveness of underwriting has a direct relationship with quantity, quality and relevancy of the information about the property being underwritten. Access to massive amounts of data through public records, contributory databases and other sources, combined with the advanced analytics necessary to transform that data into valuable intelligence, has given underwriters an unprecedented level of clarity and underwriting precision.

#### Benefits of strategic visualization include:



Improved underwriting risk assessment and pricing



Bolstered exposure management



New insights

## Conclusion

Location data is an integral part of assessing commercial risk. Technology and access to new categories of large-scale location data have provided commercial property underwriters with more transparency, predictive power and risk-based intelligence than ever before. This advanced location intelligence greatly enhances a carrier's ability to optimize underwriting performance and build a healthier book of business. By overlaying location data, carriers can easily see where they are underexposed and overexposed, and can adjust decisions and rates accordingly. Additionally, the ability to prioritize and conduct robust investigations with advanced visual mapping tools allows for increased productivity and efficiency.

## Finding the right solution

Implementing a strategic visualization approach to commercial underwriting is a surprisingly simple action that offers profound benefits. However, there are some important considerations when evaluating and selecting a data technology service provider. LexisNexis can help you implement your strategic visualization solution by:

1. Hosting a contributory database of claims history and policy records to ensure a comprehensive foundation of reliable data
2. Leveraging our ability to aggregate contributory and geospatial data into usable indices
3. Being a trusted partner with the expertise to assist in the implementation and calculation of these risk indices to utilize in risk assessments
4. Providing a mapping tool to maximize the efficiency of your strategic visualization efforts

The future of commercial underwriting has arrived—and it's fueled by an innovative and comprehensive strategic visualization process made possible by powerful new data analytics technology.

## For more information:

Call 800.458.9197 or email  
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### About LexisNexis Risk Solutions

LexisNexis Risk Solutions ([www.lexisnexis.com/risk](http://www.lexisnexis.com/risk)) is a leader in providing essential information that helps customers across all industries and government predict, assess and manage risk. Combining cutting-edge technology, unique data and advanced scoring analytics, we provide products and services that address evolving client needs in the risk sector while upholding the highest standards of security and privacy. LexisNexis Risk Solutions is part of Reed Elsevier, a leading publisher and information provider that serves customers in more than 100 countries with more than 30,000 employees worldwide.

Our insurance solutions assist insurers with automating and improving the performance of critical workflow processes to reduce expenses, improve service and position customers for growth.



Insurance

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