LaSalle Investment Management

Evaluating climate risk

What the data tells you and what it does not

Chase McWhorter, Institutional Real Estate, Inc.'s managing director, Americas, recently spoke with **Elena Alschuler,** head of sustainability, Americas, and **Julie Manning,** global head of climate and carbon, both with LaSalle, about how investors are gathering and using climate-risk data in their investment decision making. Following is an excerpt of that conversation.

Given the growing evidence of physical climate risks, how are leading firms shifting their risk-management strategies? How does data interpretation fit into this picture?

Julie Manning: The incorporation of climate risk into industry processes has emerged as a relatively new focus in recent years. This necessitates a thoughtful approach to assessing and enhancing the resilience of buildings, as well as making informed decisions regarding portfolio risk mitigation. To address these concerns, LaSalle has partnered with ULI to release two reports on climate risk. The first report, *How to Choose, Use and better Understand Climate-Risk Analytics,*[1] published in 2022, focused on evaluating various climate-risk data providers. We followed that up with a second report, *Physical Climate Risks and Underwriting Practices in Assets and Portfolios,*[2] this spring, which delved into how climate-risk data is integrated in the investment decision–making process. Specifically, we explored implications for the market-assessment process, deal identification, due diligence for new acquisitions, asset management, portfolio management, and finally, to the hold-sell analysis.

Climate-risk data serves as a directional indicator to tell us what the major hazards and levels of exposure are associated with specific assets. It prompts us to consider the surrounding area of a building and assess whether there are any mitigations in place at the municipality level that the data may not acknowledge. Ultimately, our goal is to work to enhance and protect value by understanding the resiliency of our buildings and their ability to withstand identified climate-risk hazards. LaSalle's global strategy focuses on driving investment performance through solutions that enhance asset value, meet our decarbonization commitments and prioritize the future of our communities, all while fulfilling our fiduciary obligations.

What added value can climate risk–scenario modeling tools offer in identifying physical risk? And how do they assist in data interpretation?

Manning: It is important to recognize that most of the data from these tools serves as a directional indicator of the risk to a generic building at that location, rather than precise information. We see a range of different metrics that help evaluate risk, such as climate value at risk (CVAR), red-amber-green or a low-medium-high evaluation, or average annual loss. There's a lot of debate in the industry about what is the best metric. The data itself, regardless of metric, is very useful directionally, but not necessarily precise as it is all predictions. Climate-risk forecasting tools and data providers are continuously improving by adding more hazards, increasing granularity, enhancing underlying data and metrics, and improving user-friendliness on their platforms.

Elena Alschuler: In climate-risk assessment, we're always dealing with scenarios, so we're never going to get to a place where all the models agree. It would be beneficial, however, to have more alignment in terms of common terms and definitions being used, similar to what we see in economic forecasting. Right now, the range of climate-risk providers have such different approaches, concepts and terms they're using, making it very challenging to compare results. They're not even using the same units of measure in a way that would allow some comparative analysis. That said, as Julie mentioned, they are generally directionally correct, pointing to a risk you need to explore.

Manning: Then the next step for the real estate industry is to be able to evaluate whether that building is going to be resilient in the face of a given risk. Say you've identified there is a flood risk on a building. Physical engineering firms and data providers are working on incorporating resilient-building evaluations, some even remotely. Making buildings more resilient presents a challenge, as there is no standardized approach. While there are best practices, each building requires an individualized solution.

Alschuler: To some extent, there's a toolkit for addressing different kinds of hazards. In North America, many modern buildings are already built to the best hurricane code. A lot of the same areas were already identified as hurricane risks because they're quite wide swaths of space, and the level of risk is just increasing.

But with the expansion of potential flood areas, you have new buildings being exposed to flood that weren't in the past. And how do we make those buildings more resilient to floods? It becomes a technical challenge. Many of the engineering solutions, such as flood barriers, exist, but it's a matter of determining how to apply them to a particular building and assessing how much it will cost.

Given the complexity of physical climate-risk reports, what are some recommended methods to transform these into actionable insights?

Alschuler: Yes, the real question is: How do you use this data in investments? Our latest ULI paper surveys what LaSalle and our peers are doing. For an asset in our pipeline, a climate-risk analysis is conducted before making a bidding decision. If an asset gets flagged as having a potential risk, we try to dig in, because you're not just going to say yes or no at that point. For example, perhaps you are looking at an asset that is in a hurricane-prone area such as Florida or a flood-risk area on the waterfront in New York, Boston or San Francisco. The focus would be on assessing the physical condition of that specific property to withstand the identified risk. If the site was elevated two feet or built to the latest hurricane standard, it may offer some level of protection. Or, on the other hand, maybe the flood plain has changed since this asset was built, and half of the building is now at increased risk of flooding. Or, if this is a distribution asset that is heavily reliant on a rail line, considerations are made about the potential impact if the rail line goes out, even if the site is elevated. These asset-specific conversations are crucial in making informed decisions.

Based on these assessments, different courses of action can be taken. It may mean passing on the asset altogether if the risks are significant. Alternatively, if the risks are manageable,

measures such as implementing flood barriers in the parking garage can be considered and factored into the investment underwriting. Sometimes you see something that really makes you nervous, but there are many assets that fall in between a clear yes or no decision. In such cases, further evaluation is needed to understand the implications for potential capital costs and exit strategies. You've just put a little more risk on the scale, and you must fold that into your investment plan.

In the process of interpreting and applying physical climate-risk data, what significant obstacles are firms likely to encounter? How do these challenges affect risk management, and how can they be overcome?

Manning: One challenge is understanding what the data is telling you and what it is not telling you. For example, when looking at investments in Amsterdam, the data tells us that our assets are anywhere between 50 percent and 100 percent at risk for being completely inundated by water, as the city is at or below sea level. It's essential to recognize, however, the data does not account for the tremendous dyke system Amsterdam has built during the past few hundred years and continues to improve. It's crucial to combine the data's indicator risk with the knowledge of the metro area's mitigation efforts. Another consideration is the usage of the building. If you have a tall tower located in an area at risk of flooding, you have to think not only about the municipal-level mitigations in place but also how that tower is being utilized. If the tower serves as an office building for financial or law firms where remote work is feasible, the risk of business interruption is minimized. If it is a multifamily tower, however, access to food and emergency services becomes crucial. These different usage scenarios result in two distinct risk profiles for the same physical structure and location.

How does the interpretation of physical climate-risk data vary across different geographical and regional contexts?

Manning: The most significant physical climate-risk hazards we see are in the coastal United States and parts of Asia, such as China and Tokyo, where water and wind hazards pose substantial financial risks. These regions require specific attention to mitigate the potential damages caused by these hazards. In Europe, flood risks and wind risks have increased, especially in areas such as the United Kingdom, as the changing climate is wreaking havoc on our jet streams. Tokyo is prone to earthquakes, which has led to the implementation of strict building codes in the area. It is important to understand the local market, regulations and infrastructure mitigations in place, which will be different for every asset.

How should investors be thinking about climate-related migration? Does the climate risk of drought, for example, increase in the Southwest as the population increases?

Manning: We think about that in a couple of ways. One is, as real estate investors, it is crucial to understand where population growth is occurring. Our recent briefing on climate risk[3] demonstrates a correlation between areas with high climate risk and high population growth. Coastal areas, for example, are attractive to people despite the associated hurricane and flood risk. At some point, will we start seeing that trend start to reverse? Is there a turning point where, someone's house being flooded five or six times in a row finally puts them over the edge and they decide to move? Factors such as repeated flooding events, soaring

insurance costs or limited availability of insurance coverage could influence migration patterns. Dense population centers such as New York City may have more resources to build the resilience measures they need, compared with areas where the real estate stock and tax value is lower and/or more physically disperse.

The water stress in the Southwest is a significant issue, and investors need to be mindful of local rules and regulations and closely monitor how the local population is managing their climate risks. For example, Arizona's new governor has implemented restrictions on new developments unless developers can actually source water. In any location, understanding how the local population is managing their climate risk is essential to making informed decisions.

The recent ULI report suggests tools to understand and price physical risk are still being developed. Do you foresee these evolving to specifically aid data interpretation in the near future?

Alschuler: Part of the purpose of our first ULI report, and our "10 questions to ask Climate Risk Providers" resource, was to encourage everyone to ask the same things. Which risks are they including? Are they looking at existing risk or just change in risk? What climate-change scenario are they using? Are they accounting for regional mitigations? By asking the same questions, we will promote transparency and establish common terms and definitions, and we can enhance our understanding of the drivers of variations in results among different data providers. They don't have to fully open their black box, but there should be an expectation for providers to move toward more transparent methodologies and foster a better understanding of the factors driving forecast differences. That's a reasonable expectation for the market, just like economic forecasting.

Notes: [1] https://www.lasalle.com/research-and-insights/how-to-choose-use-and-better-understand-climate-risk-analytics, Sept. 16, 2022; [2] https://www.lasalle.com/research-and-insights/physical-climate-risks-and-underwriting-practices-in-assets-and-portfolios, April 11, 2024; [3] "ISA Briefing: Climate risk in practice: Regional, market and asset-level views," https://www.lasalle.com/research-and-insights/isa-briefing-climate-risk-regional-market-and-asset-level-views, April 17, 2024

CONTRIBUTORS

Elena Alschuler
Head of Sustainability, Americas
LaSalle

Julie Manning
Global Head of Climate and Carbon
LaSalle

COMPANY OVERVIEW

LaSalle Investment Management is one of the world's leading real estate investment managers. On a global basis, the firm manages approximately $87 billion of assets in private equity, debt and public real estate investments, as of the first quarter of 2024. The firm sponsors a complete range of investment vehicles, including open- and closed-end funds, separate accounts, and indirect investments. Its client base includes public and private pension funds, insurance companies, governments, corporations, endowments, and private individuals from across the globe. For more information, visit **www.lasalle.com.**

CORPORATE CONTACT
Alissa Schachter | LaSalle
+1 312 228 2048 | www.lasalle.com

LaSalle®