Project

Haley & Aldrich develops large-scale resilience action plan on tight timeline

$6

per FEMA, the ROI for each dollar spent on mitigation measures when recovering from a natural disaster

6 months

tight timeline for the assessment

150 properties

we assessed

Summary

- A real estate client aimed to assess 150 properties in multiple states for climate resilience in only six months and needed experts who could work quickly to deliver actionable results.
- Haley & Aldrich's engineers created an easy-to-understand vulnerability rating for each property using flood maps and other site-specific data. The custom rating system allows our client to easily communicate each property's risk and set data-driven priorities.
- Our team offered multiple tiers of mitigation recommendations, factoring in effectiveness, cost, and timeframe, which helps our client identify the right approach for each property.

Client challenge

Our long-term client, a leading real estate owner and operator, provides innovation spaces for crucial research across the United States. They are committed to safeguarding their tenants' work and recognized they needed to proactively plan for potential impacts caused by extreme weather events due to climate change. Additionally, they wanted to get ahead of the imminent U.S. Securities and Exchange Commission (SEC) climate risk disclosure rule requiring U.S. companies to publicly report information about the associated risks of climate change as well as greenhouse gas emissions.

To achieve these goals, they sought to increase climate resilience for more than 150 properties in their portfolio across multiple states, which required a vulnerability assessment and mitigation recommendations for each building. They had an aggressive six-month window to complete the assessments and summarize the results into an easy-to-understand climate resilience plan for a range of stakeholders.

Haley & Aldrich was invited to assist with this large portfolio-wide resiliency study based on our strong standing relationship providing geotechnical and environmental services for many years and our ability to communicate technical concepts to non-technical stakeholders.

Our approach

To meet the aggressive timeline, the Haley & Aldrich team moved quickly to create a specialized vulnerability rating for each property by using flood maps, projecting downtime after potential disasters, and estimating potential damage from climate-related perils such as flooding and wildfires. This custom rating system will help our client easily understand and communicate risk for each building and assist with making data-driven business decisions.

To develop resilience measures specific to each property, we first identified the most practical, cost-effective mitigation strategies with the highest return on investment, such as flood barriers and waterproofing of utility conduits and other entry points. We also offered more extensive mitigation recommendations such as façade waterproofing or raising critical equipment above flood elevations.

This portfolio-level planning approach allowed our client to easily view mitigation measures for each property and identify the most appropriate and tangible approach for each building. As a result of the vulnerability assessment, our client is now well-positioned to protect against property and business continuity loss. Per a Federal Emergency Management Agency estimate, each dollar spent on mitigation measures is estimated to return six dollars in savings from recovering from a natural disaster-related event.

Value delivered

- Completed climate resilience vulnerability evaluation for more than 150 buildings in six months
- Interpreted complex data for presentation to senior management and key stakeholders
- Reduced the risk of multimillion dollar tenant loss and rising insurance premium costs
- Delivered cost-effective ways to reduce impacts from climate hazard events and extend building design life

- Recommended high return-on-investment risk mitigation measures
- Prepared our client to quickly respond to the forthcoming SEC climate risk disclosure mandate

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