



APRIL 12, 2024 | NEW YORK  
**RESILIENCE SUMMIT**

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## Event Summary and Key Findings





# About the Urban Land Institute

The Urban Land Institute is a global, member-driven organization comprising more than 48,000 real estate and urban development professionals dedicated to advancing the Institute's mission of shaping the future of the built environment for transformative impact in communities worldwide.

ULI's interdisciplinary membership represents all aspects of the industry, including developers, property owners, investors, architects, urban planners, public officials, real estate brokers, appraisers, attorneys, engineers, financiers, and academics. Established in 1936, the Institute has a presence in the Americas, Europe, and Asia Pacific regions, with members in 84 countries.

Drawing on the work of its members, the Institute recognizes and shares best practices in urban design and development for the benefit of communities around the globe.

More information is available at [uli.org](https://uli.org). Follow ULI on [X \(formerly known as Twitter\)](#), [Facebook](#), [LinkedIn](#), and [Instagram](#).

# About the Urban Resilience Program

ULI's Urban Resilience program is focused on how buildings, cities, and communities can be more resilient to the impacts of climate change and other environmental vulnerabilities. The program works with ULI members to provide technical assistance, advance knowledge through research, and catalyze the adoption of transformative practices for real estate and land use policy. For more information, visit [uli.org/resilience](https://uli.org/resilience).

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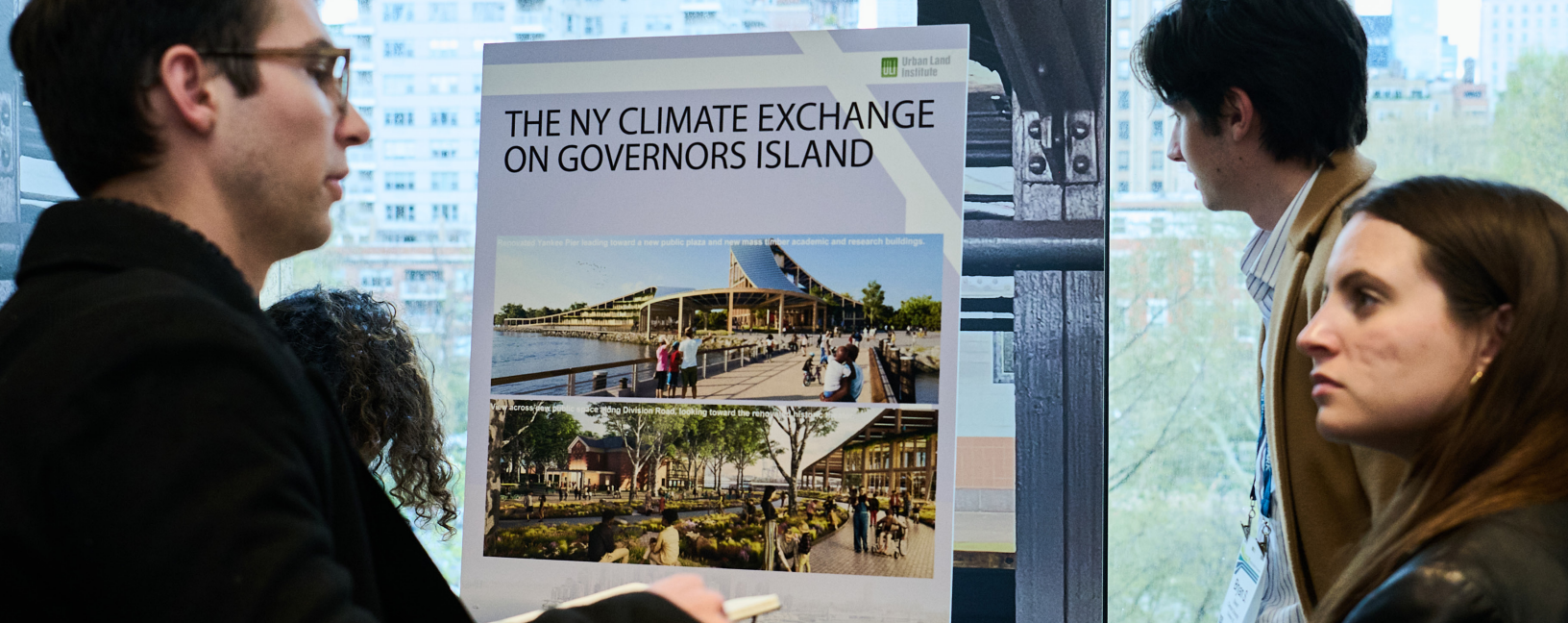
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The 2024 Resilience Summit featured an exhibit of New York–based resilience case studies developed by New York University students.

## Overview: 2024 ULI Resilience Summit

Across the globe, disasters are increasing in frequency, intensity, and cost. In 2023, there were 37 disasters across the Americas; Europe, the Middle East, and Africa; and Asia Pacific that brought a price tag of [more than \\$1 billion in damages](#). This rising cost is spurring actors across the real estate sector to take action.

The Resilience Summit, ULI’s flagship climate adaptation event, brings together

industry leaders including property owners, developers, architects, government officials, and urban planners from across the real estate and resilience sectors to tackle the challenges and capitalize on the opportunities presented by climate-related risks. The 2024 Resilience Summit occurred concurrently with ULI’s 2024 Spring Meeting in New York City and drew a record-breaking turnout.

This year’s event was hosted by [NYU Urban Lab](#) and featured an exhibit curated by NYU students showcasing New York–based resilience case studies, modeled on [ULI’s signature project profiles that demonstrate how resilience creates value](#).

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**ULI has really grown this event to be such an amazing experience—the information sharing, high-quality panelists, and the boom in attendance were so inspiring. I came out of Friday so excited about the work we’re all collectively doing!”**

– 2024 RESILIENCE SUMMIT ATTENDEE

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The 2024 Summit explored a wide range of topics related to climate adaptation, urban resilience, and sustainable development, fostering collaboration and knowledge sharing among industry leaders and stakeholders. The event had a specific thematic focus on the following key areas:

1. Climate risk and real estate
2. Financing decarbonization and resilience
3. Solutions for reducing climate impacts on assets and cities



## DEFINING SHOCKS AND STRESSES

Shocks are sudden and extreme events or disasters, whereas stresses are long-term social, economic, and environmental issues that undermine system responses to hazards. Stresses can increase a community's vulnerability to shocks and limit its ability to bounce back after a major event. Shocks and stresses can include the following:

### EXAMPLES OF SHOCKS

- Coastal flooding
- Earthquakes
- Heat waves
- Hurricanes
- Infrastructure failure
- Landslides
- Rainwater/nuanced flooding
- Riverine flooding
- Terrorist attacks
- Tornadoes
- Wildfires

### EXAMPLES OF STRESSES

- Air quality problems
- Droughts
- Failing infrastructures
- Food deserts and lack of food access
- Heat islands
- Lack of affordable housing
- Lack of social cohesion
- Potential population influx/decline
- Poverty/inequality
- Sea level rise, subsidence, and coastal erosion
- Water quality and management problems

Read more in ULI's

[Ten Principles for Building Resilience.](#)

Looking ahead, the 2025 Resilience Summit will be held during ULI's Spring Meeting in Denver, Colorado, continuing the momentum and advancing the dialogue on urban resilience and climate adaptation strategies within the real estate industry.

## KEY TAKEAWAYS

The Resilience Summit explored how the real estate industry can better account for physical climate risk, the creative ways resilience is being funded across cities and portfolios, and the innovative policies, urban strategies, and design interventions that are being used to enhance resilience. The event's key takeaways include the following.

### **Physical climate risk cannot be ignored.**

The adoption of climate risk disclosure requirements by regulatory bodies such as the U.S. Securities and Exchange Commission (SEC) has driven the need for standardized and transparent reporting on physical climate risks in the real estate industry. With these new requirements, coupled with the increasing availability of detailed climate risk data and rising insurance costs, it is now essential for investment managers to incorporate physical climate risk information into their decision-making processes to take control of their climate risk narrative and protect asset value.

**Metrics of success, tailored financial products, and incentives are needed to justify investment in resilience.** Although the need for climate adaptation and resilience measures is clear, investors and developers face challenges in financing these measures. Uncertainty in how

to quantify the return on investment remains, and the limited availability of tailored financial products and incentives makes it difficult to justify investments in resilience.

**Collaboration is crucial.** As shocks and stresses—such as extreme heat, flooding, and water scarcity—grow, a blend of public and private financing strategies and cross-sector actions is needed to implement innovative solutions that protect buildings and communities and the infrastructure they rely on.

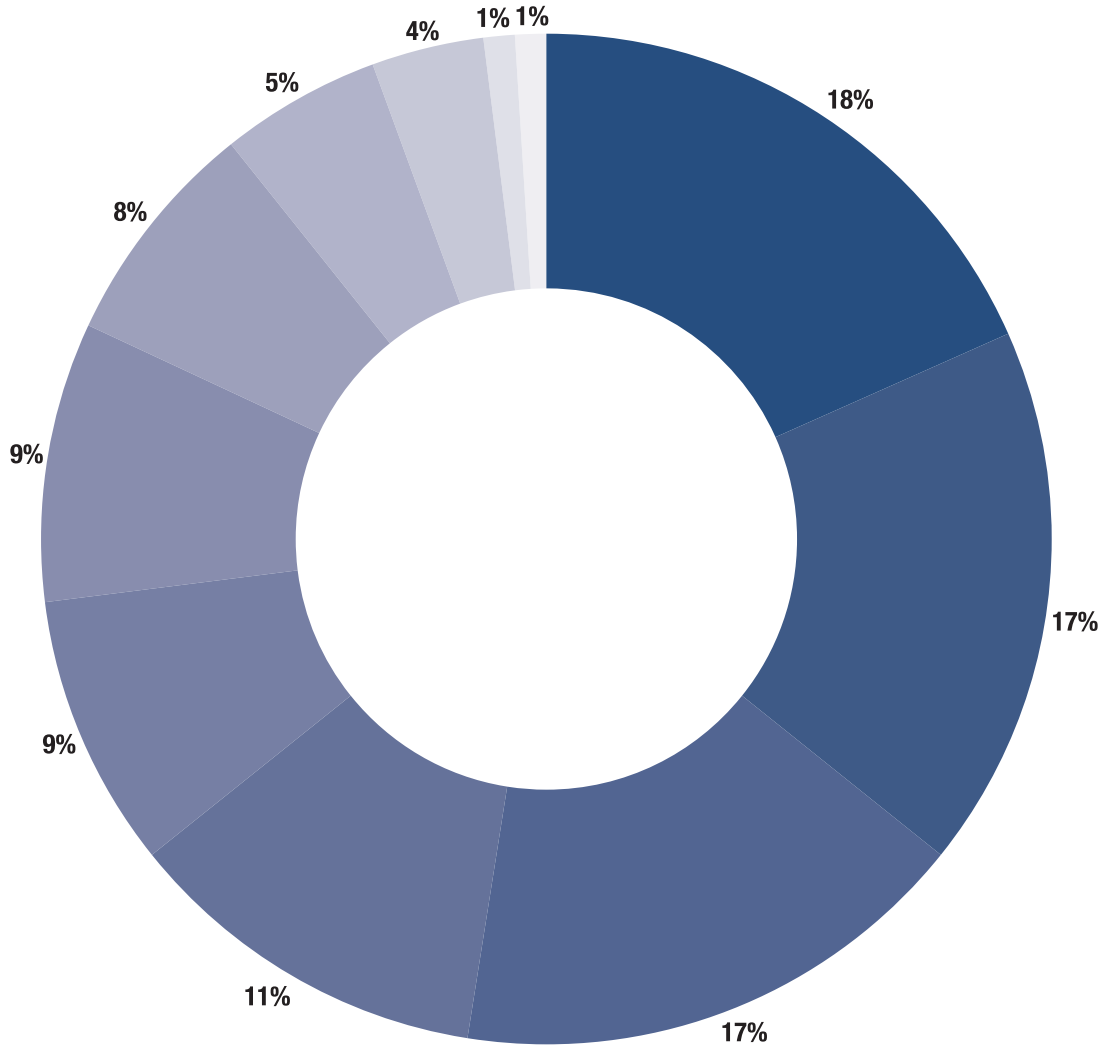
### **Collaborative investments in sustainable technologies and systems can build socioeconomic resilience and address injustices in marginalized communities.**

Achieving a successful green transition requires integration of social equity into sustainability initiatives to ensure that all communities can direct and benefit from economic and environmental advancements.





The Resilience Summit attendees represented a wide range of professional backgrounds.

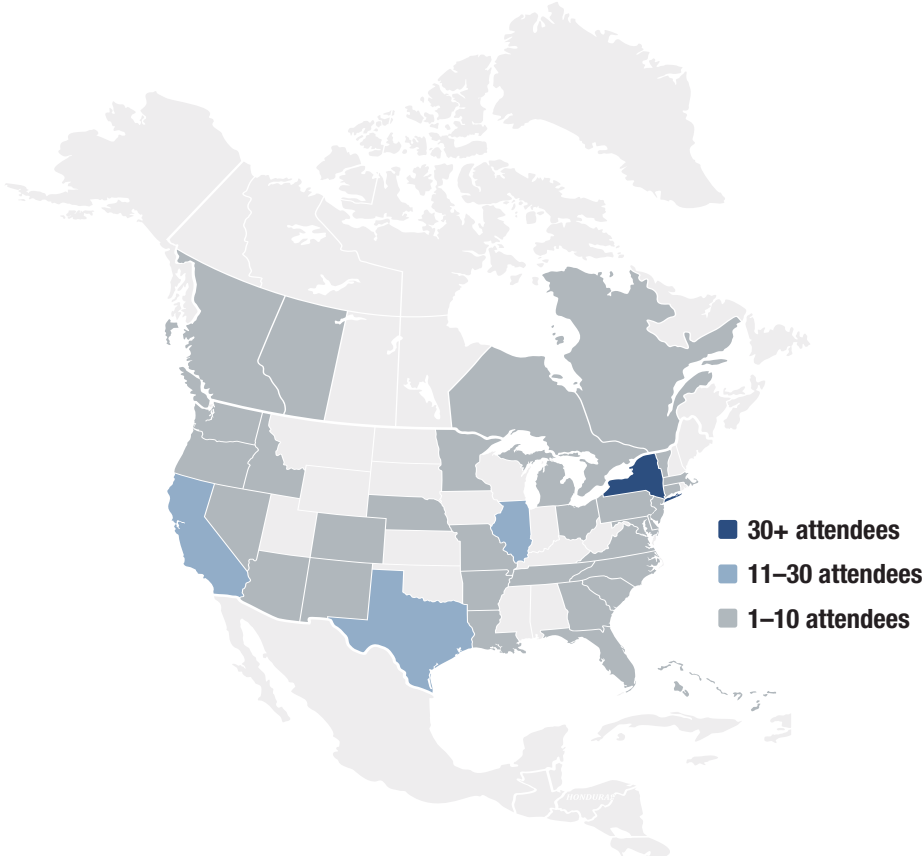


- Other
- Investment and finance professionals
- Government officials, nonprofit employees, and academics
- Developers
- Engineers
- Architects
- Consultants
- Urban Planners
- Landscape Architects
- Brokers
- Attorneys

# REGIONAL AND GLOBAL ATTENDANCE

The 2025 Resilience Summit saw record-breaking attendance. While the Resilience Summit drew many attendees from the local market, the event also attracted attendees from across North America. A growing number of international attendees participated as well.

## REGIONAL



## GLOBAL







Opening keynote by Elijah Hutchinson, executive director at NYC Mayor's Office of Climate and Environmental Justice.

## Session Summaries

The following session summaries offer an overview of the key discussions and insights shared during the 2024 Resilience Summit.

### WELCOME AND OPENING KEYNOTE

THIS SESSION FEATURED:

**GREG WEST**, ZOM LIVING

**CRYSTAL BERGEMANN**, WHITE HOUSE COUNCIL ON ENVIRONMENTAL QUALITY

**FELIX CIAMPA**, ULI NEW YORK

**ELIJAH HUTCHINSON**, NEW YORK CITY MAYOR'S OFFICE OF CLIMATE AND ENVIRONMENTAL JUSTICE

The 2024 ULI Resilience Summit opened with remarks from Randall Lewis Center for Sustainability in Real Estate board member and ULI America's Executive Committee member Greg West, who acknowledged ULI's longstanding commitment to resilience, citing impactful work happening in southeast Florida spurred by ULI's Advisory Service panels and urging the continuation of collaborative efforts to address climate challenges.

After opening remarks, Crystal Bergemann, senior director for resilience at the White House Council on Environmental Quality, discussed the Biden administration's new [National Climate Resilience Framework](#). This framework presented a timely update to a call for such a framework by the [2022 ULI Resilience Summit](#) keynote presenter, Alice Hill. The new framework identifies "key values, priorities, and objectives to help expand and accelerate nationally comprehensive, locally tailored, and community-driven resilience strategies." At the close of her address, Bergemann called on the audience to contribute to this broader initiative through their ongoing work.

Following Bergemann, Felix Ciampa, executive director of the ULI New York district council, provided examples of how ULI NY is contributing to local and national resilience goals and introduced the opening keynote speaker, Elijah Hutchinson, executive director of the NYC Mayor's Office of Climate and Environmental Justice (MOCEJ).

Hutchinson, in his keynote address, highlighted MOCEJ's mission to develop innovative climate policies and programs to improve quality of life, address climate change, and ensure environmentally just outcomes for all New Yorkers. He discussed how Superstorm Sandy in 2012 was a catalyst for New York City's focus on resilience planning.

In the decade since Sandy, the city has taken major steps, including securing nearly \$17 billion in federal funding for rebuilding and protection projects, integrating emergency preparedness into climate strategy, and preparing for climate hazards such as extreme heat, rainfall, coastal flooding, and sea level rise based on the latest climate science. Major resilience initiatives highlighted included the Climate Strong Communities engagement program, delivering multipurpose coastal protection infrastructure, implementing building emissions limits under Local Law 97, supporting low-carbon construction, piloting the *Climate Resilient Design Guidelines*, and embedding climate into all city funding decisions through climate budgeting. Hutchinson also acknowledged challenges, for instance, securing a fair share of state funding, the slow pace of building urban infrastructure, political headwinds, and maximizing impact through partnerships with the private sector.

After the keynote, attendees had the opportunity to attend concurrent sessions organized into three tracks:

- **Climate Risk and Real Estate**
- **Financing Decarbonization and Resilience**
- **Solutions for Reducing Climate Impacts on Assets and Cities**

## CLIMATE RISK AND REAL ESTATE TRACK

The climate risk and real estate track explored how leading real estate developers and investors tackle climate risk in their real estate decision-making—leveraging new data and tools for climate risk assessment, preparing for greater climate risk disclosure, and navigating the changing landscape of legal and insurance risks driven by climate change.

### 1 Climate Risk Disclosure: How to Assess and Report Assets' Physical Climate Risk

THIS SESSION FEATURED:

**LAURA CRAFT**, HEITMAN

**DANIELE HORTON**, VERDANI

**JESSICA LONG**, NAREIT

**CRAIG MOREY**, SCHRODERS

**SARA NEFF**, LENDLEASE AMERICAS

After climate-related financial disclosure regulatory moves by Brazil, the European Union, Hong Kong, Japan, New Zealand, Singapore, Switzerland, and the United Kingdom, in 2024 the U.S. Securities and Exchange Commission (SEC) [adopted rules](#) requiring publicly traded companies to disclose climate-related risks and their predicted impact on business operations. This session focused on the latest practices for reporting on climate-related physical risk, zeroing in on the new California disclosure rules as well as the Task Force on Climate-Related Financial Disclosures, SEC, and sustainable finance disclosure regulation reporting landscape.



Facilitated by Jessica Long, senior vice president, environmental stewardship and sustainability, at Nareit, the session kicked off with a brief introduction to climate disclosure frameworks. Panelists emphasized that improved communication about climate risks is imperative as the industry transitions from voluntary to mandatory reporting regimes. They provided insights into assessing the materiality of these risks and communicating their implications for real estate investments and infrastructure projects, a critical competency in today's climate-conscious market.

Laura Craft, global head of portfolio sustainability strategies at Heitman, shared an overview of the [climate risk and real estate investment decision-making guidance](#) that Heitman and ULI created and described the process Heitman uses to understand physical climate risk at the market and asset scales as well as across their portfolio.

Craig Morey, climate lead, real estate, at Schroders, provided a European perspective on disclosure regulations; the integration of environmental, social, and governance factors; and the growing need to examine physical climate risk in the region.

Danielle Horton, founder and chief executive officer at Verdani, discussed how regulations are affecting the public and private sectors, the importance of alignment of frameworks, and the need to ensure that climate risk information is put in front of the right decision-makers.

To illustrate some of the practices discussed, Sara Neff, head of sustainability at Lendlease Americas, exemplified the integration of climate risk disclosure into strategic

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**“ Regulations are not just about disclosure; they’re an opportunity to control your own narrative. Acknowledge the risk and describe how that risk is being managed.”**

– SARA NEFF, LENDLEASE AMERICAS

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business processes through a discussion of Lendlease's [Clippership Wharf](#) project. By publishing resilience measures and quantifying financial implications, Lendlease enhanced the resilience and sustainability of real estate projects, including those at Clippership Wharf.

## 2 Integrating Climate Risk Data into Real Estate Investment Decision-Making

THIS SESSION FEATURED:

**JONATHAN FLAHERTY**, TISHMAN SPEYER

**YETSUH FRANK**, EVORA GLOBAL

**JULIE MANNING**, LASALLE INVESTMENT MANAGEMENT

**SPENSER ROBINSON**, CENTRAL MICHIGAN UNIVERSITY

**CYNDI THOMAS**, RCLCO

As the real estate industry comes to terms with the complexities of climate risk, physical-risk data are becoming an increasingly important tool. This session explored tactics for integrating comprehensive physical-risk assessments into real estate investment processes and decisions and discussed the latest strategies for managing the impact of physical risk on portfolios and asset values.

Spenser Robinson, professor and director of real estate at Central Michigan University, served as both educator and facilitator, sharing that the industry is still in the experimental phase, with firms trying various methods and approaches to integrate climate risk into their decision-making processes. He acknowledged the collective effort in the industry to learn and adapt to these new challenges, emphasizing that there is no one-size-fits-all solution and that the approaches are as varied as the firms implementing them.

Panelists shared how leading investment firms leveraged physical climate risk data—from due diligence to acquisition and underwriting—and how attendees could apply these insights to their own climate risk management at the asset level and the portfolio level. At the asset level, Jonathan Flaherty, global head of sustainability and building technology innovation at Tishman Speyer, shared that Tishman Speyer has implemented a standard approach to evaluating climate risks for every potential investment, including a process for competitive selection of data providers and a consistent evaluation framework in all investment committee memorandums.

Julie Manning, global head of climate and carbon strategy at LaSalle Investment Management, discussed LaSalle’s proactive portfolio-level strategy, noting that ongoing assessment helps in proactive risk

management across the portfolio. For asset managers, physical risks are evaluated for various funds and portfolios to ensure diversified risk exposure, providing a comprehensive view that aids in balancing risks among various investments.



### Physical Climate Risks and Underwriting Practices in Assets and Portfolios

This new report from ULI and LaSalle Investment Management examines the following:

- The current state of climate risk assessment in the industry
- How firms are applying climate data to acquisitions, underwriting, and dispositions
- Emerging best practices for interpreting and integrating physical-risk information
- Key challenges regarding data uncertainty, resilience projections, and pricing risk

This report provides an in-depth look at how leading firms are leveraging physical climate risk data in their underwriting and decision-making practices. [Access the report.](#)

“ We reevaluate climate risks and climate resiliency on an annual basis.”

– JULIE MANNING, LASALLE

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“ The panel on integrating physical risk into real estate investment decision-making was the best I’ve seen on the topic! Loved the very detailed examples of ways in which integrating physical risk depends on investment strategy, etc.”

– 2024 RESILIENCE SUMMIT ATTENDEE

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Consultants Yetsuh Frank, executive vice president at Evora Global, and Cyndi Thomas, managing director at RCLCO, emphasized the uniqueness of assessments. Limited partners often commission bespoke studies to understand how their managers are assessing and addressing climate risks for their investments, ensuring direct knowledge of the risks involved.

One of the main challenges in decision-making is simplifying complex information related to climate risks into actionable insights that portfolio managers and investment committees can easily understand and act upon. In underwriting and decision-making, firms use various strategies, such as adjustment of cap rates or implementation of resilience measures, based on the degree of physical risk associated with an asset. This involves a deep dive into the specifics of each risk and its potential impact on the asset’s value and operability.

Strategically, firms view climate risks not just as threats but as opportunities to make decisions that could benefit long-term investments. This involves understanding which markets or regions might become more attractive because of their relative resilience to climate impacts.

## 3 Climate Risk and the Future of Liability and Insurance

THIS SESSION FEATURED:

**HELENA ARIZA**, AEI CONSULTANTS

**SAIRAH BURKI**, CRE FINANCE COUNCIL

**MATHEW CHAMISH**, CBRE IM

**BRETT STEWART**, AXA XL

Insurance and reinsurance providers worldwide are [struggling](#) to keep pace with the mounting costs of damage due to climate-related events. The sharp increase in disaster impacts is creating new financial and liability risks for designers and owners alike. During the session, participants heard from experts who discussed the ways climate risk was transforming the real estate industry, consequences of increasing insurance premiums, and what may be on the horizon.

Moderated by Helena Ariza, vice president, sustainability and resilience, at AEI Consultants, the session began with a scene-setting overview by Ariza highlighting the [record number of billion-dollar disasters that struck the United States in 2023](#), the uncertain regulatory landscape, and the shifting legal expectations affecting design professionals.

The panel discussion expanded on these emerging risks for owners, lenders, and design professionals. Sairah Burki, managing director and head of regulatory affairs and sustainability at CRE Finance Council, discussed concerns from lenders, insurance requirements and standards, regulatory and legislative trends, and data requirements.



Mathew Chamish, director of sustainability for the Americas at CBRE IM, described the challenging increase in insurance premiums and fear of insurance availability as a business risk for real estate as well as tactics for navigating the hard market.

Brett Stewart, manager for loss prevention and education at AXA XL, explored how climate change is changing the standard of care and creating new liability risk for architects and engineers and discussed contractual provisions that can protect design professionals and the importance of assessing and communicating climate risk to clients.

## FINANCING DECARBONIZATION AND RESILIENCE TRACK

This track raised new and emerging opportunities to channel private and public capital into development projects that help communities and building owners achieve their resilience, decarbonization, and equity goals.

### 1 Creating a Green Transition for All Communities

THIS SESSION FEATURED:

**CARLTON BROWN**, DIRECT INVEST DEVELOPMENT

**ANDRE BRUMFIELD**, GENSLER

**NSE ESEMA**, NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION

**WESLEY JACOBS**, INVENERGY

This session examined how collaborative investments in sustainable technologies and systems can build socioeconomic resilience in marginalized communities by expanding access to decision-making power

and the benefits of the green transition. As moderator, Carlton Brown, founding principal from Direct Invest Development, introduced the audience to the session's overarching themes, including equitable resilience and the importance of community involvement in development projects. Attendees then gained insights from a series of case studies, each demonstrating how real estate can drive equitable and sustainable development.

Andre Brumfield, principal and global director of cities and urban design of Gensler, offered a series of practical examples focusing on community-centric planning and innovative solutions, particularly in urban design and planning that incorporated community feedback and preserved cultural and historical elements in new developments. Brumfield discussed the transformation of a coal-fired power plant in Avon Lake into a new development that reconnects the neighborhood with its waterfront, emphasizing the process for collaborating with the community.





Nse Esema with the NYC Economic Development Corporation speaks alongside Andre Brumfield with Gensler (left), Wesley Jacobs with Invenergy (right), and moderator Carlton Brown with Direct Invest Development (far right) on the Creating a Green Transition for All Communities panel.

Nse Esema, senior vice president for green economy from the New York City Economic Development Corporation, discussed comprehensive approaches to development, regulatory, and financial frameworks in New York. Her presentation stressed the role of local governance and partnerships, particularly with regard to the [NYC Green Economy Action Plan](#), which aimed to create jobs and economic growth, focused on low-income communities and communities of color, while supporting the transition to a green economy.<sup>1</sup>

The presentation by Wesley Jacobs, vice president for offshore wind development for Invenergy, concentrated on innovative and localized solutions in the context of clean energy, specifically discussing how offshore wind projects such as Leading Light Wind in New Jersey can enhance local job creation and economic opportunities, aligning with [incentives](#) such

as those in the Inflation Reduction Act. Jacobs stressed the significant economic opportunities that might be realized through such projects, including job creation and emissions reduction.

The panel discussion that followed yielded additional insights, including the potential for federal incentives such as the Investment Tax Credit to promote responsible development *and* engagement with local communities, as well as challenges and barriers to equitable change and the necessity of regulatory frameworks that facilitate equitable opportunities and address socioeconomic disparities exacerbated by environmental issues.

<sup>1</sup> The United Nations defined the “green economy” as “low carbon, resource efficient, and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure, and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services.” <https://www.unep.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/green-economy>



## 2 Funding City-Scale Resilience

THIS SESSION FEATURED:

**CHANTE HARRIS**, EUNOIA GROUP

**JEFF HÉBERT**, HR&A

**MARION MOLLEGEN MCFADDEN**, U.S. DEPARTMENT  
OF HOUSING AND URBAN DEVELOPMENT (HUD)

**VICTORIA SALINAS**, FEDERAL EMERGENCY  
MANAGEMENT AGENCY (FEMA)

**SHAUN O'ROURKE**, QUANTIFIED VENTURES

A building is only as resilient as the city it's a part of. This panel explored strategies and instruments for directing both public and private funds into resilience projects at the neighborhood and district levels to benefit individual assets as well as the broader community. Led by moderator Jeff Hébert, partner and CEO with HR&A Advisors, the session began with a presentation by Marion Mollegen McFadden, principal deputy assistant secretary for community planning and development at HUD. McFadden discussed the new requirement to integrate climate vulnerabilities into planning for jurisdictions receiving federal funding, marking a significant policy shift toward proactive resilience planning.

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“What does it really look like to think through shared risk and opportunity and ensure that implementation includes these communities?”

– CHANTE HARRIS, EUNOIA GROUP

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Building on the theme of proactive measures, Victoria Salinas, associate administrator for resilience from FEMA, continued the conversation by highlighting current challenges in municipal compliance with building codes. Salinas described the agency's ongoing work to increase the capacity of building departments and to incentivize the adoption and enforcement of the most recent model building codes, noting that adoption of disaster-resistant building codes is the baseline for resilience.

Echoing the need for structural resilience and bringing in the role of the private sector, Shaun O'Rourke, managing director of climate finance from Quantified Ventures, focused on the financial strategies required to support resilience initiatives. He discussed innovative financing mechanisms that accelerate the implementation of resilience projects by using various financing sources and fostering partnerships. To illustrate these concepts, O'Rourke discussed the firm's ongoing work in Cincinnati as well as in the Duwamish Valley in Seattle toward development of a resilience district.

Chante Harris, founder and managing partner with Eunoia Group, emphasized the need to align infrastructure investments for greater climate impact, describing her efforts in World Cup host cities where pre-event investments are being used to enhance urban resilience and

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“Only about 30 percent of municipalities have adopted the latest building codes.”

– VICTORIA SALINAS, FEMA

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sustainability through better infrastructure and climate-focused technologies. Harris drove home the criticality of including underrepresented communities in resilience planning; advocating for shared risks and benefits to ensure inclusive and effective implementation and collaboration between technology firms and established industries to adopt new methods while learning from past mistakes would ease this process.

### 3 Financing Resilient Real Estate

THIS SESSION FEATURED:

**REBECCA BECKER**, EQUITY RESIDENTIAL

**SADIE MCKEOWN**, COMMUNITY PRESERVATION CORPORATION

**KARYN SPER**, FANNIE MAE

**STACY SWANN**, RESILIENT EARTH CAPITAL

Between 2020 and 2022, annual investment in resilience and adaptation grew to \$63 billion. By contrast, investment in climate mitigation reached [\\$1.2 trillion in the same period](#). This session explored the state of climate adaptation financing and opportunities for the future.

Moderated by Rebecca Becker, vice president of environmental and climate adaptation at Equity Residential, the session began with a clarification of the concepts of decarbonization and physical resilience and a discussion of how strategies for resilience are financed in the real estate sector. Next, Sadie McKeown, president at The Community Preservation Corporation, elaborated on the evolution of her organization's focus from tackling disinvestment in urban centers to championing sustainable and affordable housing. She

emphasized the transformative role of the first-mortgage market in improving the physical condition of buildings and underscored the necessity of regulatory support for investments in cleaner energy and resilience.

Continuing the discussion, Karyn Sper, senior director of Multifamily Green and Duty to Serve with Fannie Mae, described how she integrated resilience into the financing models at the organization. She discussed the initial hurdles in justifying investments in resilience, which often have preventative benefits and uncertain cost advantages compared to direct energy efficiency upgrades. Sper also highlighted the increased urgency for resilience strategies due to the escalating frequency and severity of climate-related events.

Stacy Swann, founder of Resilient Earth Capital, rounded out the session by focusing on the local and physical aspects of resilience, pointing out that strategies must be customized to the specific regional challenges posed by climate change. Swann advocated for innovation in financial products to stimulate investments in resilience and critiqued current insurance models for not incorporating resilience into premium calculations, which could align financial incentives with long-term resilience objectives.

Overall, the discussion emphasized the complexities of financing resilience within the real estate sector, pointing to the necessity for localized solutions and innovative financial instruments that can accommodate and promote long-term resilience goals. The collective insights from the speakers highlighted an urgent need for adaptable, forward-thinking financial strategies to support resilient infrastructure development.



## SOLUTIONS FOR REDUCING CLIMATE IMPACTS ON ASSETS AND CITIES TRACK

This track offered an interactive opportunity to explore policies, urban planning strategies, and design solutions that mitigate physical climate risk at the building, city, and state levels.

### 1 Implementing Extreme Heat Strategies

THIS SESSION FEATURED:

**SABRINA BORNSTEIN**, BURO HAPPOLD

**LIEPA BRACIULYTE**, NEW BUILDINGS INSTITUTE (NBI)

**ERIKA JOZWIAK**, NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY (NYSERDA)

**KIM PEXTON**, JBG SMITH

More than 3.8 billion people across the globe experienced extreme heat events between June and August 2023. As asset owners and public officials work to adapt to increasing temperatures, this session provided attendees with a forum to discuss policies and strategies aimed at mitigating the urban heat island effect, controlling energy expenses, and protecting people.

Facilitated by Sabrina Bornstein, head of climate resilience at Buro Happold, the session began with context on climate trends causing increased extreme heat that affects real estate, land use, and people. Bornstein then invited the audience to share why they had joined the session and any barriers they face in implementing extreme heat strategies.

Presentations after Bornstein's introduction focused on city- and state-scale policies and asset-scale strategies aimed at addressing extreme heat in built environments. Liepa

Braciulyte, project analyst, codes and policy, at NBI, discussed NBI's "Extreme Heat and Urban Heat Island Code Overlay," which provides language for jurisdictions to implement cool roofs/walls, cool/permeable pavement, trees/vegetation, and a maximum temperature set point.

Erika Jozwiak, climate resiliency lead at NYSERDA, highlighted New York's co-design process for its forthcoming extreme heat action plan and covered implementation strategies such as distribution of heat pumps, expansion of cooling access, nature-based solutions, communication and guidance, and institutionalization of cooling and resilience considerations.

Kim Pexton, head of sustainability at JBG SMITH, provided examples of real estate asset-scale solutions such as glass coatings, green space, and cool pavements and roofs, describing the process for identifying top physical heat hazards and solutions across JBG's portfolio.

The audience Q&A and discussion portion allowed for deeper discussion on urban design and real estate development elements, such as cool corridors, nature-based solutions, building electrification, and multibenefit projects that address extreme heat. Participants had the opportunity to discuss overcoming the barriers they had raised

earlier in the session regarding implementing extreme heat strategies in their own work.

## 2 Enhancing Flood and Coastal Resilience

THIS SESSION FEATURED:

**LAURIAN FARRELL**, NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION

**JENNIFER GONZALEZ**, CITY OF HOBOKEN

**VINCENT LEE**, ARUP

**SARA LEVENSON**, L&M DEVELOPMENT PARTNERS

**CORTNEY WORRALL**, WATERFRONT ALLIANCE

As coastal storms grow stronger and buildings and infrastructure face the challenges of sudden, intense flooding, cities, developers, and building owners need to reconsider their approaches to managing water. This session provided an interactive exploration of practices and policies aimed at safeguarding coastal properties and communities.

Following a brief introduction by moderator Vincent Lee, principal at Arup, the "Enhancing Flood and Coastal Resilience" session launched into a series of presentations and group discussion about strategies that cities, developers, and property owners can use to adapt to increasing flood risks and coastal challenges from climate change.

Laurian Farrell, deputy commissioner at the NYC Department of Environmental Protection's Bureau of Coastal Resilience, presented on how New York City is tackling flood and coastal resilience through planning, zoning, building codes, green space and wetlands

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**“ The Resilience Summit was a great learning opportunity for me, and I am taking many things back to my work.”**

– 2024 RESILIENCE SUMMIT ATTENDEE

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management, and coordinated efforts among agencies at the local, state, and federal levels. She advocated for pooling resources to fund resilience projects and for fostering collaboration between various stakeholders.

Cortney Worrall, president and CEO at the Waterfront Alliance, discussed the Waterfront Edge Design Guidelines, which provide design and planning strategies to make waterfront spaces more resilient and ecologically robust.

Jennifer Gonzalez, director of climate action and innovation for the city of Hoboken, shared Hoboken's integrated urban water management strategy, featuring parks and green infrastructure, pumping stations, and other resilience measures for both coastal storm surges and heavy rainfall events.

Sara Levenson, managing director at L&M Development Partners, presented the case study of [Arverne East](#), a mixed-use development on a 116-acre oceanfront site within the Arverne and Edgemere neighborhoods of Queens, New York, which is designed to be resilient to climate change impacts such as flooding and coastal storms. Her presentation showcased specific resilient design features and construction techniques employed to protect more than 1,320 units of beachside affordable housing with features including on-site renewables, 60.5 acres of natural preserves and open space, community facilities, and local enterprises.

The panel discussion that followed examined common challenges such as coordinating across multiple agencies and stakeholders, engaging private property owners in resilience planning, securing financing for projects, and navigating regulatory

reviews. Panelists shared examples in which cities transformed policies, zoning, and infrastructure after events like Hurricane Sandy to enhance future flood and coastal hazard preparedness.

## 3 Addressing Water Scarcity

THIS SESSION FEATURED:

**AL APPLETON**, CONSULTANT ON SUSTAINABILITY, WATER, INFRASTRUCTURE

**KAREN MAHROUS**, CLARION PARTNERS

**HYON RAH**, DWS GROUP

Every continent, with the exception of Antarctica, is experiencing [unprecedented drought conditions](#). Furthermore, the aquifers that provide [90 percent of the U.S. water supply](#) are facing significant depletion. In this session, attendees explored policies, urban planning strategies, and real estate solutions aimed at tackling freshwater scarcity.

Moderated by Hyon Rah, head of sustainability for U.S. real estate at DWS Group, the session began with a scene-setting introduction of ULI's [Water Wise report](#) on drought-resilient development strategies.

Al Appleton, a consultant on sustainability, water, and infrastructure, presented policy solutions and shared his experiences advancing New York City's water conservation program that saved \$5 billion by avoiding desalination infrastructure.

Karen Mahrous, head of environmental, social, and governance at Clarion Partners,

described how real estate portfolio- and asset-scale solutions, such as retrofitting hotel bathrooms with water-efficient toilets and showerheads, industrial water metering and leak detection, and water-smart landscaping practices, resulted in significant financial and water savings.

The session culminated in a panel discussion and audience Q&A centered on integrating policy initiatives with practical urban planning and real estate solutions to enhance freshwater resilience. The discussion also touched on urban-rural water connections and dependencies, effective municipal policies, incentives for water-smart real estate development, prioritization of water conservation, groundwater depletion, the water-energy nexus business case, and projections for rising water prices.

Key strategies included developing water-wise buildings and communities, implementing city- and regional-scale water conservation programs, and innovations such as water recycling and reuse systems.

The session underscored the importance of cross-sector collaboration involving policymakers, planners, and real estate professionals to advance critical water-smart approaches for sustainable urban development amid increasing freshwater scarcity.

## **CLOSING KEYNOTE: SHALINI VAJJHALA**

Shalini Vajjhala, PhD, executive director of PRE Collective and founder and CEO of re:focus partners, delivered the closing keynote presentation at the ULI Resilience Summit. As a nationally recognized expert in infrastructure and climate resilience,



Shalini Vajjhala with PRE Collective delivers the Summit's closing keynote address.

Vajjhala structured her talk around “Ten Questions to Spark Resilience Innovation and Collaboration,” as follows:

- 1. What is the bigger picture?**
- 2. Who is losing money today?**
- 3. Who suffers if we don't act now?**
- 4. Where are the underappreciated experts?**
- 5. Who is working at the “seams”?**
- 6. When was the last time you heard “If they would just . . .”?**
- 7. What connections need to be built?**
- 8. How can we make innovation more accessible (and less scary)?**
- 9. What is the greatest unspoken need?**
- 10. What are you most excited about?**

These questions prompted attendees to consider various dimensions of resilience, from identifying key stakeholders and underused resources to fostering collaboration among sectors to enhance resilience measures. Offering tangible examples of each question, aimed at deepening understanding and encouraging proactive actions in the face of climate challenges, Vajjhala called for physical, financial, and digital connections that support resilience initiatives and addressed the critical role of local governments, design professionals, and individuals in shaping resilient communities. She also emphasized the importance of making innovation accessible and engaging all relevant actors to address the pressing needs of today's urban environments in the context of climate change.

# Acknowledgments and Sponsors

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Event Summary and Key Findings



Urban Land Institute  
2001 L Street, NW  
Suite 200  
Washington, DC 20036-4948  
[uli.org](http://uli.org)