

2019 ULI Resilience Summit

Summary and Key Findings



**Urban Land
Institute**

Center for Sustainability
and Economic Performance





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Cover: Speakers Jainey Bavishi (left) and Tommy Wells discuss emerging resiliency solutions for cities and policymakers.

Overview: 2019 Resilience Summit

ULI members, the real estate industry, and city leaders across the United States are increasingly acknowledging climate risk and resilience as issues that are core to their business interests and to the well-being of cities. In response, ULI's Urban Resilience program in 2019 hosted its first-ever Resilience Summit, an all-day event held in conjunction with the 2019 ULI Fall Meeting, to elevate climate resilience topics and bring members firsthand expertise about how to take action to better prepare for climate change impacts.

Climate change is leading to more frequent and intense weather events, including devastating storms such as 2017's hurricanes Harvey, Irma, and Maria, as well as chronic risks such as sea level rise and extreme heat that can cause significant damage to human health and property. These risks create complex challenges that put people, businesses, and property at risk. Failure to address and mitigate such risks threatens the built environment and economy in ways that have serious consequences for the quality of life and the economic vitality of communities.

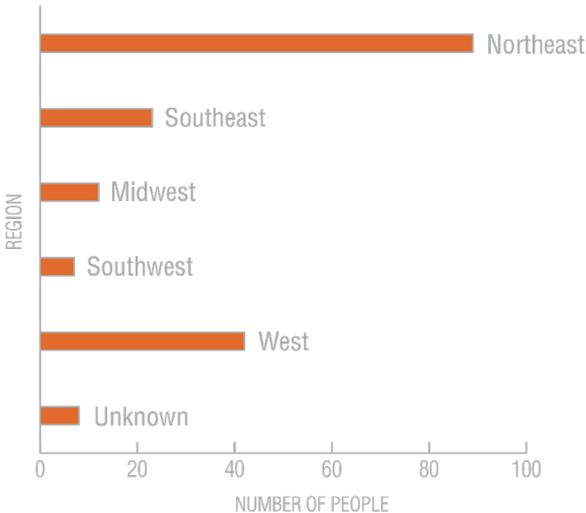
At the summit, 180 attendees heard from global leaders in the real estate, land use, and urban policy sectors taking action on climate change mitigation and adaptation. Their lessons provided opportunities for ULI members to learn about others' approaches to real estate investment, development, and city policy, and to adjust their own responses. These strategies have the potential not only to prepare and protect assets and communities from extreme weather events and chronic threats, but also to build value and create other social benefits.

After the successful 2019 gathering, ULI looks forward to hosting a Resilience Summit at the 2020 ULI Fall Meeting in San Francisco. The event will highlight resilience innovations in the Bay Area, examine how to further protect communities and investments, and explore how to better measure climate risk to inform decision-making for a more resilient future.

ATTENDEES' PROFESSIONS



ATTENDEES' HOME REGIONS



Takeaways and Trends

The Resilience Summit highlighted that the physical and transition risks arising from climate change are increasingly influencing investment strategy, design development, and land use policies in cities across the United States and internationally. The event's key takeaways include:

- **Acceleration of climate mitigation and adaptation strategies is essential.** From the call-to-action keynote address to the presentations by industry leaders, the theme emerged that vulnerability to climate change is not adequately mitigated by current industry and policy action. ULI members and other leaders need to do more to recognize the extent of climate risk and engage in adaptation and mitigation accordingly.
- **The business case for resilient real estate continues to develop.** Industry leaders emphasized that resilience is a vital component of thriving economies. Resilient development can lead to value creation and co-benefits in certain markets through such factors as improved tenant retention and safety, avoided losses, operational efficiencies, and brand development. In the public sector, the co-benefits of public safety and equitable community development are a key motivation for many new policies. Resilience projects undertaken in the context of broader community goals often address climate risks and enhance the public realm.
- **Incorporating more sustainably designed open space and green space is an emerging best practice** incorporated into many leading new urban developments. Strategically designed open/green spaces can increase resilience by mitigating the harsh impacts of climate change—for example, by retaining floodwater to lessen impacts elsewhere or by providing a cool place of refuge during heat waves—and by promoting health and community.
- **A movement to net zero energy is supporting resilience efforts.** Real estate and city leaders are continuing to emphasize energy efficiency and renewable energy to reduce greenhouse gas emissions and to reduce the demand on utility infrastructure. Net-zero-energy buildings are the current industry best practice.

Session Summaries

Many speakers at the Resilience Summit highlighted how climate-resilient development and informed decision-making can support economically vibrant cities and healthy, equitable communities. Key discussion items and solutions are summarized below, and the full agenda is available online at uli.org/2019resiliencesummit.

Keynote—Climate Risk and Real Estate: Assessing and Recognizing Vulnerabilities

Spencer Glendon, senior fellow at Woods Hole Research Center, delivered the summit's keynote address, discussing real estate challenges in 2019 within the context of climate's historical impacts on land use, economies, and communities. Citing examples and data from Cairo to Detroit to Washington, D.C., Glendon reminded attendees that the success and prosperity of cities around the world is linked to climate stability. He emphasized the magnitude of climate change impacts as well as the urgent need for consequential, data-informed action by the real estate sector. Many attendees highlighted his keynote as a vital and informative call to action that framed their experience at the Resilience Summit and Fall Meeting.



Keynote speaker Spencer Glendon discussed impacts that the real estate industry will face in regards to climate change.

Discussion Panels

The summit's three panels emphasized climate change solutions leveraged by investors, cities, and policymakers, and specifically in the Resilience Summit host city, Washington, D.C.

Emerging Solutions for Investors

This panel, moderated by Brian Swett, Resilience Summit co-chair and cities lead at Arup, focused on how the industry accounts for climate risk exposure and how resilient buildings and communities may be valued in investment decision-making processes. Mary Ludgin, managing director at Heitman, said the industry is better positioned today to understand climate-related risk through the use of comprehensive data, models, and tools, and that investment firms are leveraging these resources to integrate information from climate analyses in order to balance riskier real estate portfolios.

Regarding the public sector, Leonard Jones, managing director, public finance, at Moody's, discussed how climate shocks are affecting local governments' economic health, diversity, and fiscal strength and are therefore now considered in credit rating scores. Eric Schlenker, portfolio manager at CalPERS, said his agency has changed its structure to elevate the importance of sustainable and resilience investments in real estate.

The speakers expect climate-related impacts as well as actions taken to be more resilient to be factored into real estate pricing in the near term.



Resilience Summit attendees engaged with panelists during the day's first session, Emerging Solutions for Investors.

Emerging Solutions for Cities and Policymakers

Jeff Hebert, Resilience Summit co-chair and partner at HR&A, moderated a panel of city leaders who highlighted that cities are increasingly implementing comprehensive resilience programs, emphasizing prepared infrastructure and community empowerment. Specific solutions presented include resilience development guidelines, energy performance standards, technical assistance to small businesses, a policy advisory group of local scientists, a green bank to support clean energy, expanded energy planning, and support of infrastructure with co-benefits.

“It was a very good day, with action-provoking, not just thought-provoking, discussion.”

Resilience Summit attendee

Jaimey Bavishi, director at the New York City Mayor's Office of Resiliency, emphasized the OneNYC 2050 initiative, a multilayered resilience strategy with key focus areas of upgrading infrastructure, empowering residents and businesses, ensuring science-informed adaptation, and streamlining policies. Teng Chye Khoo, executive director of the Centre for Liveable Cities and the Ministry of National Development in Singapore, noted that low-lying Singapore is leveraging parks as critical flood-mitigation infrastructure. Tommy Wells, director of Washington, D.C.'s Department of Energy & Environment, described how the District is balancing valuable waterfront redevelopment with sea level rise and flood projections.

Although optimistic about these programs, speakers noted the challenges of reforming building codes and zoning laws, retrofitting aging infrastructure, and ensuring equitable solutions for all residents.

Resilience on D.C.'s Waterfront

Uwe Brandes, professor of Urban and Regional Planning at Georgetown University and advisory board member for the ULI Center for Sustainability, moderated this panel on how local experts are reactivating the D.C. waterfront while enhancing community resilience.

Jim Foster, president of the Anacostia Watershed Society, discussed that group's ambitious goals for the Anacostia River; the importance of clean waterways for residents, visitors, and local businesses; and how a "watershed approach" to stormwater management can lead to a healthier, sustainable, and more equitable community. Vaughn Perry, equitable development manager for 11th Street Bridge Park, reviewed the equitable development plan his team created for the anticipated park to ensure that it generates inclusive development and economic opportunity, especially for residents living in lower-income, underserved neighborhoods.

Around the bend from the proposed park site is District Wharf, a 3.2 million-square-foot mixed-use development. Matt Steenhoek, vice president of development at Hoffman & Associates, described how the development team accounted for sea level rise and tidal fluctuations in District Wharf's design and construction, highlighting the use of green infrastructure and grade elevation. His team also focused on economic and cultural resilience by supporting local businesses and creating an ample amount of social spaces, he said. The group concluded the day with a boat ride to District Wharf, where participants joined the opening reception of the ULI Fall Meeting.

"This summit was truly one of my highlights of the ULI conference in D.C.! The programming was fantastic and the conversations with other attendees relevant."

Resilience Summit attendee

Concurrent Sessions and Tours

Resilience Summit participants chose among three subject-specific panel discussions and tours.

Climate, Health, and Public Space Solutions

The opening panel of this session discussed how climate change harms human health, especially for historically marginalized and low-income communities. Panelists shared replicable solutions from New York City, including the Gowanus Eco-District and a community health and racial equality impact study; and Baltimore, where the Fleming Park restoration and Project Birdhouse are open-space projects designed to improve the well-being of residents and contribute to social and racial equity.

The session concluded with a tour of Canal Park, a three-acre SITES- and LEED Gold–certified space known for its stormwater capture and reuse, geothermal wells for energy supply, high-albedo paving, dark-sky lighting, and welcoming recreation and dining space.

Monica Hobbs Vinluan, senior program officer at the Robert Wood Johnson Foundation, moderated the session. Panel speakers were Surili Patel, deputy director of public health policy at the American Public Health Association; Isaac Hametz, principal and research director at Mahan Rykiel Associates; and Michelle de la Uz, executive director of the Fifth Avenue Committee. The tour was led by Dan Melman,



Speaker Surili Sutaria Patel discussed how climate change affects human health and prosperity during the Climate, Health, and Public Space Solutions concurrent session.

vice president of parks and finance, and Grace Aucella, park events and marketing manager, both from the Capitol Riverfront Business Improvement District.

Net Zero Hero: Adapt, Mitigate, Decarbonize

Session leaders emphasized that though net zero energy (NZE) is the gold standard in sustainable building design, it remains difficult to achieve because of challenges involving permitting, energy storage, and tenant expectations. Speakers praised the American Geophysical Union building (a retrofit project and the only NZE building in D.C.) and recommended the Embodied Carbon in Construction Calculator (EC3) as a new best-in-class resource.

Attendees toured the nearby DC Water headquarters, a LEED Platinum-rated building with innovative design elements such as shaded and tinted windows to optimize natural daylight but avoid excessive heating of the building, and an advanced heating/cooling and sewage system that traps heat from sewage for use in building heating systems.

Craig Applegath, founding principal of DIALOG, moderated the session. Panel speakers were Yolanda Cole, Resilience Summit co-chair and senior principal and owner of Hickok Cole; Eric Duchon, head of sustainability at LaSalle Investment Management; and Sarah King, sustainability director at Skanska USA Commercial Development. The tour was led by Sven Shockey, design director, and Dayton Schroeter, design principal, both of SmithGroup.

“The various panels gave me new ways discuss climate change and its impact on real estate with my clients.”

Resilience Summit attendee

Resilient Coastal Development Best Practices

Speakers discussed the tension between the vulnerability and desirability of coastal areas, focusing on integrating resilient design principles into coastal neighborhood revitalization projects. Panelists shared their insights on complying with new city-level resilience standards in large markets, especially in New York City and Washington, D.C.

Participants toured D.C.'s newest coastal district-scale project, Buzzard Point, learning how the project team partnered with the District government and the National Park Service on creating a dynamic waterfront park space that protects the new development from flooding, as well as on other mitigation and adaptation strategies.

Speakers on the panel were Jack Smith, chair of the ULI Coastal Forum and partner at Nelson Mullins; Chris Shaheen, program manager, public spaces, at the Washington, D.C., Office of Planning; and Jay Valgora, founder and principal at Studio V Architecture. Representatives from Douglas Development, Urban Alchemy, and Antunovich Associates led the tour.



Participants learned more about Washington, D.C.'s coastal revitalization projects from speaker Dan Melman.

Acknowledgments and Sponsorship

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ULI would also like to thank the ULI members on the Host Committee who contributed their time and expertise to shaping the event. Committee co-chairs were Yolanda Cole, senior principal at Hickok Cole; Jeff Herbert, partner at HR&A Advisors; and Brian Swett, director of cities at Arup.

To learn more about future events, including the Resilience Summit in 2020, reach out to resilience@uli.org.

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