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BOSTON'S CLIMATE

VULNERABILITIES & SOLUTIONS

SYMPOSIUM

SEPTEMBER 15, 2016 | POST-SYMPOSIUM SUMMARY

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CLIMATE VULNERABILITIES & SOLUTIONS SYMPOSIUM

The Climate Vulnerabilities and Solutions Symposium brought together over 325 participants from the public, private, and non-profit sectors. Boston's Climate Ready Boston team shared climate projections, vulnerability assessments, and resilience strategies. Panels focused on examples of Boston's private sector resilience interventions and resilience financing and policy options, and provided an opportunity for participants to discuss next steps in preparing facilities and the Greater Boston community for climate impacts. The event was held at the Morris Auditorium and Beehive at the Federal Reserve Bank of Boston. Sponsors included the Federal Reserve Bank of Boston, Aquafence, and the Massachusetts Clean Energy Center.

Since 2014, A Better City and the Boston Green Ribbon Commission's Commercial Real Estate Working Group have prioritized climate preparedness, working collaboratively with the City of Boston to educate the private sector and take action to build resilience. This collaboration began with the Building Resilience Toolkit, which was supported by the Boston Planning and Development Agency (formerly Boston Redevelopment Authority) and Dutch Consulate at its launch in 2014. A Better City has remained engaged in local and regional climate conversations and throughout 2016 has supported the City's Climate Ready Boston initiative through feedback and engagement. The Climate Vulnerabilities and Solutions Symposium was the flagship event for private sector engagement with the first phase of Climate Ready Boston, and focused on shifting from planning for climate change towards taking action.

BUILDING RESILIENCE TOOLKIT & VENDOR EXPO

In coordination with the Climate Vulnerabilities and Solutions Symposium, A Better City updated its Building Resilience Toolkit with 11 additional technology options for facilities to invest in enhancing their resilience. A Better City also invited technology vendors from the Toolkit to showcase their products to attendees during two sessions at the Expo. Twelve organizations showcased tools and technologies to support climate adaptation within Boston: AquaFence; Co-Energy America; FloodBreak; Fuel Cell Energy; Presray; Recover Green Roofs; Smart Vent; SolarOne; Sparkplug Power; the Trust for Public Land; VPdelta; and Walz & Krenzer.



INTRODUCTION

BOSTON'S CLIMATE VULNERABILITIES & SOLUTIONS SYMPOSIUM

WELCOME ADDRESS



RICK DIMINO
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President & CEO,
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MICHELLE WU
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President,
Boston City Council

Rick Dimino, President & CEO of A Better City, opened with a warm thanks to the event partners, sponsors, and vendors for their support and for their engagement in climate change and resilience in Boston. He remarked on the need for bold engagement from all sectors on climate change mitigation and resilience, and said that in the same way that green energy has become an economic powerhouse for Massachusetts, the opportunity exists for resilience planning to do the same.

Michelle Wu, President of the Boston City Council, shared her pride in working for a city where climate change is a priority every day. She also reflected on factors that make climate action in Boston uniquely difficult, starting with the age of the built environment in the city. She then spoke to parallels she noticed in three European cities – Amsterdam, Rotterdam, and Copenhagen – during the Green Ribbon Commission’s Climate Innovations Study Tour in June 2016. She shared three key observations from the trip that she sees as opportunities for Boston: 1) building a framework around climate change that enhances opportunity for everyone; 2) developing a pervasiveness of climate change across every City department; and 3) fostering a conversation that includes all stakeholders.



OPENING REMARKS

BOSTON’S CLIMATE VULNERABILITIES & SOLUTIONS SYMPOSIUM



OVERVIEW OF CLIMATE READY BOSTON

The opening presentations provided an overview of the findings from the first phase of Climate Ready Boston.

Carl Spector stressed the importance of all sectors of society working together to address climate change. He spoke to the climate action the City has taken since 2007, and the opportunities the Climate Ready Boston initiative presents. Ellen Douglas presented Boston's climate change consensus projections. These include increased precipitation, more high heat days per year, and sea level rise. Drought was evaluated to be less of a critical risk to Boston. The future projections are all contingent on the level of global reduction of GHG emissions. Jason Hellendrung presented findings that identify the areas of Boston most vulnerable to climate change impacts such as coastal and inland flooding and heat waves. He gave examples of the financial, social, and infrastructural impacts of climate change within Greater Boston and some of the most vulnerable communities.

Spector then shared 11 draft strategies that the City of Boston is exploring to respond to these findings. These include a coastal protection system, implementing resilience area plans, coordination of infrastructure preparedness, retrofitting existing buildings, and updating building regulations to support climate change. He also shared that the City is looking seriously at options to move towards its carbon neutrality goal by 2050. The City expects to release the complete findings from Climate Ready Boston this fall.



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CLIMATE READY BOSTON

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RESILIENCE INTERVENTIONS IN BOSTON



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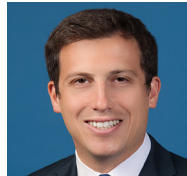


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PANELIST

JEFF WESCHLER

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Marketing Director - Acquisitions,
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John Cleveland framed this panel by saying the movement from resilience planning to implementation within the commercial and business sectors takes place with property owners and managers. John Messervy introduced Partners Healthcare's aggressive efforts to reduce their emissions. He recounted Partners' recent evaluation of facility vulnerabilities to climate impacts (see the resilience checklist for hospitals). Their planning focuses on staying open and operational, and caring for those especially vulnerable to climate change impacts.

Ben Myers introduced Boston Properties' work on climate mitigation and energy management. He also shared his company's climate preparedness efforts; examples included conducting facility vulnerability assessments, procuring temporary flood barriers, investing in on-site power generation, and locating critical systems well above potential flood lines. Jeff Wechsler shared how Tishman Speyer has worked to incorporate climate vulnerabilities into their decision-making processes for purchasing new properties and retrofitting existing buildings. He recommended the SASB (Sustainability Accounting Standards Board), which helps quantify how much of a portfolio is vulnerable and how to prioritize potential actions.

Useful resources cited by the panelists included working with utility partners, and reading studies conducted by cities and organizations that standardize climate information and inform decision making and site-level vulnerability assessments. When asked what building regulation updates they would recommend, the panel said regulations that allow for whole-building design and incentives to encourage microgrids, green roofs, and other strategies at the intersection of mitigation and resilience.

RESILIENCE INTERVENTIONS

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VENDOR EXPO

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VENDOR EXPO

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VENDOR EXPO

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FINANCING AND POLICY SOLUTIONS FOR RESILIENCE

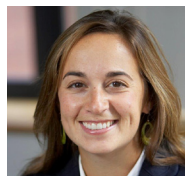


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Director of Planning,
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Michael Mooney opened this panel with a statistic from FEMA – for every \$1 of resilience spending, \$4 in costs is avoided – as a segue to this panel discussion on the two key leverage points for resilience investments: finance and policy. Sara Myerson introduced the BRA’s work on climate change, which is part of Boston’s comprehensive planning process, Imagine Boston 2030. She highlighted existing zoning regulations and guidelines already in place, plans to prepare the Boston waterfront for climate change, and climate-friendly zoning in the city that allows and encourages building owners to take proactive steps to prepare. Myerson shared that climate change is an opportunity to improve people’s quality of life in Boston.

John Markowitz explained the three infrastructure bond programs available from MassDevelopment. The programs create districts that capture value from new development to finance public infrastructure, which could include resilience interventions such as green infrastructure, barriers, storm water systems, and more. Rebecca Davis introduced the Metropolitan Area Planning Council’s (MAPC) efforts to develop resiliency solutions through regional governance. This included creating a Regional Climate Change Strategy and establishing a Metro Mayors Coalition and associated Climate Preparedness Taskforce of 15 municipalities to work across jurisdictional boundaries. MAPC has supported capacity building for vulnerability assessments in municipalities involved in the Coalition.

When asked how they would allocate funds if they had full discretion towards climate resiliency, Davis chose transportation; Markowitz noted sharing investment risks between state, localities, and private sector; and Myerson indicated exploring regional solutions in relation to sea level rise.

CHIEF AUSTIN BLACKMON, CITY OF BOSTON

Austin Blackmon, Chief of Environment, Energy & Open Space for the City of Boston, delivered the closing remarks. He started by reminding the audience that they are the people who are going to translate climate plans into action.

Blackmon encouraged the audience to see the risks they heard about throughout the Symposium as opportunities that could benefit the region. He gave an example of carriage makers who did not adapt to changing times and were left behind as cars and buses infiltrated the transportation sector. On the other hand, the invention of the elevator revolutionized the landscape of buildings and cities from triple-deckers to sky scrapers. He then closed by asking the audience to think about what the presented climate projections mean for Boston and for their businesses, and how these projections may redefine what business they are in.

The event closed with a Vendor Expo Session: an hour-long opportunity for attendees to visit the vendors and organizations showcasing resilience technology solutions.



**“I WOULD SAY TO YOU: YOU ARE NO LONGER JUST IN THE COMMERCIAL REAL ESTATE BUSINESS – YOU ARE IN THE CLIMATE PREPARED, CONNECTED BUILDING BUSINESS”
– AUSTIN BLACKMON**

CLOSING REMARKS

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