

COLLABORATION FOR CLIMATE RESILIENCE IN STAMFORD, CONNECTICUT



BACKGROUND

The city of Stamford, Connecticut, is a corporate hub with more than 125,000 residents, the third largest city in the state. As a coastal city, Stamford is vulnerable to threats of climate change, extreme weather, and natural disasters, making it imperative for the city's leadership to plan for resilience.

Stamford is at risk for heavy precipitation events (rain and snow), floods, droughts, and occasionally tropical storms. Four major storms have hit the city since 2009. The strongest was Hurricane Sandy in 2012, which brought 60 to 70 mph winds to the city and a record storm surge. Two-thirds of the city was left without power for up to a week following the storm. Costs to the city were estimated at \$7 million. New economic growth expected in Stamford will put pressure on its aging building infrastructure, making the impacts of climate change and future severe weather events more acute.¹

Recognizing these vulnerabilities, Stamford has undertaken a coordinated response to local climate resilience, including by working with local businesses. Much of this effort has taken place through the Stamford 2030 District. Stamford is one of 12 cities to join a North American network of 2030 Districts. Each district is a public-private partnership of property owners, managers, and developers with local governments, businesses, and community stakeholders to provide a business model for urban sustainability through collaboration, leveraged financing, and shared resources. The 2030 Districts are charged with the long-term effort of achievable and measurable goals for renovating hundreds of millions of square feet of existing urban and suburban areas and infrastructure, as well as for infill development and redevelopment. The districts are aimed at achieving reduced

energy and water use and emissions from the commercial building sector and transportation.² Stamford is going a step further by making resilience a unique focus for the Stamford 2030 District.

STAMFORD 2030 RESILIENCE STRATEGY

As a part of its resilience strategy, Stamford 2030 is leveraging public-private partnerships to assess vulnerability, create appropriate metrics and new baselines for resilience.

The process began in March 2015, when Stamford 2030 partnered with IBM, AECOM, and city departments to assess the vulnerability of Stamford to natural disasters using the City Disaster Resilience Scorecard. The scorecard provides a questionnaire that allows cities and local government agencies to understand how resilient their city is to natural disasters. The intent of the scorecard is to guide cities towards optimal disaster resilience and to challenge them to be more aggressive in their resilience goals. The scorecard strives at an aspirational state of disaster resilience to remind cities that there is always more that could be done and to establish investment goals for achievement over a period of years. The scorecard is based on 10 essentials of disaster management and adds significant additional detail and quantification.³

In March 2015, Stamford 2030 held a workshop along with IBM, AECOM, and the City of Stamford to construct an overview of the city's resilience to storms and determine meaningful actions that can make it more resilient. The participants represented diverse stakeholders, including city officials; representatives from the regional planning agency (Western Connecticut Council

of Governments); the business community including the Business Council of Fairfield County, utilities and the hospitality sector; and non-governmental organizations.

The preliminary assessment from the workshop represented the consensus views of participants in the 10 essential areas of analysis. It showed agreement that Stamford had many key strengths, including immediate emergency response, a good core of hazard data, and engagement of the primary electric utility in Stamford's disaster planning. Areas that needed improvement included creation of a long-term resilience strategy, formulation of specific post-event recovery plans, and better engagement with citizens and the business community on dissemination of hazard data. The scorecard also indicated some shortfalls regarding the age and maintenance of Stamford's existing infrastructure.⁴

The completed scorecard helped participants identify a strategy to focus on the right projects and develop a baseline for future action on resilience planning. Stamford 2030 is working with C2ES and other organizations to determine next steps, including a cross-sector roundtable to achieve a Fairfield County working definition of resilience and to compile a composite picture of vulnerability and readiness for businesses in the region.

In order to track progress, the Stamford 2030 District is also evaluating the use of a stormwater-specific baseline for property owners to promote on-site stormwater management best practices, a methodology created in Seattle. Stamford 2030 also recently received a grant to help communities plan and adapt to future extreme events by mapping out scenarios of precipitation thresholds and sea-level rise, which will be used to evaluate development options and create a model planning process

for cities in Connecticut.⁵

CONCLUSION

The need for cities and companies to address climate resilience is growing. Stamford 2030 serves as an innovative model for cities and companies interested in developing and advancing their resilience strategy.

ENDNOTES

- 1 Emily Gordon and Megan Saunders, *Stamford 2030: 2015 Annual Report* (Stamford, Connecticut: Stamford 2030 District, 2015), http://www.2030districts.org/sites/default/files/atoms/files/2030AnnualRep_022516_0.pdf.
- 2 "About the 2030 Districts," 2030 Districts, last accessed March 25, 2016, <http://www.2030districts.org/about-2030-districts>.
- 3 IBM and AECOM, *Disaster Resilience Scorecard for Cities* (Geneva, Switzerland: United Nations International Strategy for Disaster Risk Reduction, 2014), <http://www.unisdr.org/2014/campaign-cities/Resilience%20Scorecard%20V1.5.pdf>.
- 4 IBM and AECOM, *UNISDR Disaster Resilience Scorecard Preliminary Review: IBM / AECOM Workshop with the City of Stamford, Connecticut* (Stamford, Connecticut: Stamford 2030 District, 2015). http://www.2030districts.org/sites/default/files/atoms/files/UNISDR_STAMFORD%20REPORT_NOV2015.pdf.
- 5 Megan Saunders (Executive Director, Stamford 2030 District), email message to author, March 21, 2016.



The Center for Climate and Energy Solutions (C2ES) is an independent, nonprofit, nonpartisan organization promoting strong policy and action to address our climate and energy challenges. The C2ES Solutions Forum brings together businesses, states, and cities to expand clean energy, reduce greenhouse gas emissions, and strengthen resilience to climate change.

