

NIST COMMUNITY RESILIENCE PLANNING GUIDE **SUCCESS STORY**

NASHUA, NEW HAMPSHIRE



STAKEHOLDER QUOTE

"The performance goals were the number one thing we got out of using the NIST Guide. They kept conversations anchored."

- Justin Kates, Director of Emergency Management, City of Nashua

HIGHLIGHTS

- **The NIST Planning Guide was used in Nashua's FEMA Hazard Mitigation Plan update to get buy-in from the community.**
- **The planning team completed the first steps in parallel rather than sequentially.**
- **Nashua is using Hazus to determine the built environment's anticipated performance.**

SITUATION

Nashua, New Hampshire, faces a variety of potential hazards, including earthquakes, hurricanes, flooding, blizzards, and infrastructure failures. In addition to riverine flooding, Nashua regularly experiences flooding due to an overwhelmed stormwater infrastructure and impervious cover such as roadways, parking lots, rooftops, and sidewalks. Making the flooding more concerning, a recent report projects average annual precipitation will increase 17 to 20 percent by 2100. The failure of difficult-to-maintain infrastructure typically results in "band-aid" fixes instead of creative and economically feasible techniques to manage these assets long-term.

Residents and the broader community, including government, increasingly share the vision of achieving a more resilient city by better managing and mitigating the City's risks. Community leaders are addressing the City's climate resilience and hazard mitigation portfolio through proactive planning, rather than reactive responses.

PROCESS

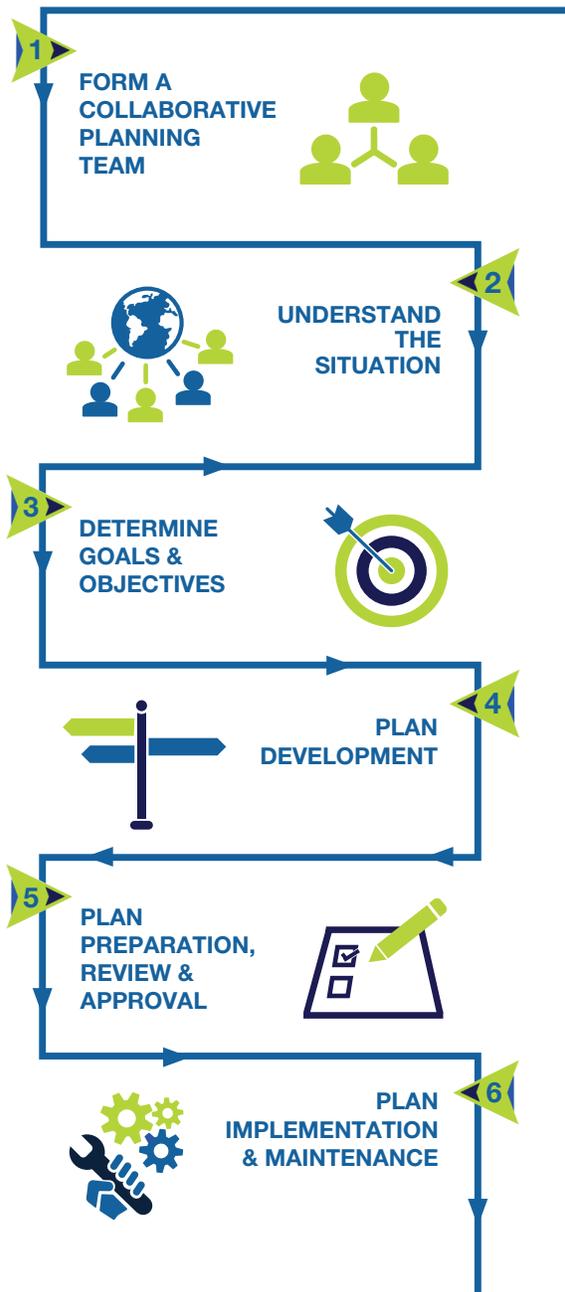
Partnering with the Environmental Protection Agency, the National Institute of Standards and Technology (NIST), and others, Nashua is making its first attempt to develop a proactive and integrated plan that addresses shocks and stressors ranging from natural disasters to adverse socio-economic trends. Through Resilient Nashua, the City is engaging with diverse community stakeholders. Nashua is using the six-step planning process in NIST's Community Resilience Planning Guide to assist in its initiative. To date, the community has completed Steps 1 and 2 and is in the middle stages of Steps 3 and 4. Nashua's planning process followed NIST's first three steps, with some iteration between steps. Efforts to understand the situation and some aspects of determining goals and objectives were under way prior to formation of the collaborative planning team, which was set up in three layers. Nashua has developed its performance goals and is in the process of using Hazus to determine the anticipated performance of its buildings.

RESULTS

Nashua's 2018 planning confirmed five previously identified resilience focus areas: (1) aging infrastructure; (2) climate change and adaptation; (3) services for an increasingly diversified population; (4) resiliency as a culture; and (5) community health. In 2019, the City's resilience planning efforts will culminate in a combined updated Hazard Mitigation Plan and a first-time Community Resilience Strategy. The document will contain required FEMA hazard mitigation components and also present a strategy for community resilience-oriented preparedness, continuity of operations, and social programs.

When communities decide to become more resilient, they need an approach that helps them identify and prioritize options consistent with their goals. The National Institute of Standards and Technology (NIST) Community Resilience Planning Guide for Buildings and Physical Infrastructure Systems helps communities do that by focusing on the role of the built environment in enabling the community to rapidly recover from disruption. It provides a clear process for communities to better prepare for the future.

SIX-STEP PLANNING PROCESS



- Identifying a central goal toward which the planning team was working was critical. Nashua's resilience efforts have focused on updating its FEMA-required Hazard Mitigation Plan and developing a complementary, first-time resilience strategy.
- Prior to applying the Guide, Nashua used the Department of Homeland Security's Coastal Resilience Center's *Plan Integration for Resilience Scorecard Process*, to better align existing community plans and activities.
- Collaboration with partners at many levels has been critical to successful development of Nashua's Resilience Strategy, and a diverse and engaged multi-layered collaborative planning team has been very helpful.
- The City's resilience leadership recognized that it is essential to engage the community at large, bringing residents along in real time through the various steps of the planning process. This experience has reinforced that engagement needs to take different forms since not everyone will attend a meeting. For example, social media was an important way to share information about the planning process and to encourage community participation in Nashua.
- Nashua found that steps 1 to 4 took more time than officials had anticipated, and the process was not linear. Progressing through steps 2 to 4 in parallel has advantages, including keeping stakeholders engaged.
- The NIST Guide's performance goals were its number one contribution. Using these goals helped Nashua to organize and ground the discussion and to eliminate time-consuming exploration on topics that were less realistic.
- Nashua would have benefitted from a streamlined process to determine anticipated performance, and improved links to the Hazus tool.

WHAT'S NEXT?

Nashua's planning process is ongoing. In 2019, the City plans to engage in additional resilience-related activities. Nashua will seek ways to fund and update the City's Master/Comprehensive Plan. Additionally, the City would like to obtain the resources—including funds, time, and expertise—to analyze the benefits and costs of the various proposed resilience projects. Nashua is investigating the possibility of using NIST's EDGe\$ (Economic Decision Guide Software) to assist in that analysis.

CONTACT INFO/RESOURCES

Community Contact

Justin Kates

Director of Emergency Management, City of Nashua

Resilient Nashua Initiative

<https://www.livablenashua.org/resilient-nashua-initiative>

NIST Community Resilience Program

<https://www.nist.gov/topics/community-resilience>

NIST Contact

resilience@nist.gov