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“Adaptation to Resilience Planning: Alternative Pathways to Prepare for Climate Change”

By Sierra C. Woodruff, Sara Meerow, Missy Stults, and Chandler Wilkins. 2018.

Until recently, sustainability was a core planning goal. In the last decade, greater unease about climate change and instability has changed the focus to climate change reduction, adaptation and resilience. Resilience, a term broadly defined as the ability to bounce back from external shocks like disasters, has gained attention in urban planning. Local governments are now creating more resilience plans than adaptation plans to prepare for the impacts of climate change.

This study is the first to compare these two types of plans across U.S. cities and advise on the limitations and strengths of each plan type. Resilience plans focus on being able to resist and bounce back from disruptions and take more of a unified approach to managing environmental risk. Adaptation plans focus on actions that limit the negative consequences of climate change, such as sea level rise. With resilience being a new focus of planning for local communities to prepare for climate change, it's important to identify these efforts and understand how they connect to other plans cities make.

Findings

This study compares the contents of the first 10 resilience plans made by U.S. cities in the 100 Resilient Cities program funded by Rockefeller Foundation and compares them to 44 climate change adaptation plans from U.S. cities. The study scored the resilience plans on 124 criteria associated with six well-established plan quality principles: (1) goals that describe future desired conditions; (2) a fact base that identifies community issues, providing the empirical foundation for identified strategies; (3) strategies that guide decision-making to ensure plan goals are achieved; (4) public participation in plan creation; (5) interdependent actions of multiple organizations and the need for coordination; and (6) guidance to translate strategic plans into actions and approaches to overcome uncertainty in the future climate projections. The authors also talked with city officials working on these topics.

Compared to adaptation plans, resilience plans show more attention to goals, coordination, and participation, but they didn't address the uncertainty in climate change impact predictions nor have a strong fact base as adaptation plans. Resilience plans are also more inclusive to a variety of public stakeholders through participation in the planning process. Resilience plans also are more likely to identify underlying social factors, like racism, that affect communities' ability to resist the impacts of climate change. For example, cities like Boston are centering justice concerns when looking at resilience. Resilience plans in general seem to have “stronger goals and strategies than hazard mitigation and sustainability plans” analyzed by previous researchers.

“Resilience planning appears to encourage coordination, wider participation, and a broader approach to risk management. However, this breadth may come at the expense of detail, for example, a lack of a strong fact base.”

Implications

Resilience and adaptation plans help communities prepare for climate change impacts and an uncertain environmental future. Resilience plans create a broader space to look at the economic, social, and environmental strategies that will increase or decrease climate change impacts. Thus, they can connect climate to other community concerns. As more communities begin planning for the impacts of climate change, they should consider which approach is best suited to achieve their goals.