

Hazard Reduction & Recovery Center

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"Evaluation of Networks of Plans & Vulnerability to Hazards & Climate Change: A Resilience Scorecard." By Phil Berke, Galen Newman, Jaekyung Lee, Tabitha Combs, Carl Kolosna, & David Salvesen.

Isolation of planning to mitigate hazards from other planning efforts governing land use and development in hazardous areas has led to geometric growth in losses from disaster, which are likely to worsen because of climate change. To address this concern, the National Research Council recommends the development of a resilience scorecard, which tracks a community's progress towards resilience and see where they need to improve their efforts. This study reviews the potential role of different types of local plans in reducing the destructive effects of hazards.

Findings

The study develops a resilience scorecard to look at how much the the local plans network targets areas most likely to suffer from hazards and assess the coordination of local plans. The study tested the resilience scorecard in Washington (NC), a community vulnerable to coastal floods and projected sea-level rise. The Washington research shows that communities can use a resilience scorecard to evaluate the degree of coordination among local planning programs and the level of weakness for current hazards and future climate change. Research from the study finds that local plans are not fully consistent and do not always appropriately deal with the areas in a community most vulnerable to floods or sea level risks. However, some plans can actually increase physical and social vulnerability to hazards.

Implications

In this study, the resilience scorecard guides an analysis of the degree to which a network of local plans decreases physical and social risks to hazards in the city of Washington. By using the scorecard, planners can ask questions that point out priorities, goals and needs, ultimately improving the blend of measures and policies that reduce vulnerability across the plans. Planners can fill a key role in improving planning for hazards by using the scorecard to identify conflicts among local plans, assessing whether areas most vulnerable to specific hazards are targeted by local plans.

"Takeaway for practice: Planners can assume a crucial role in improving planning for hazards by using the scorecard to identify conflicts among local plans, assessing whether local plans target areas most vulnerable to specific hazards. Planners can inform the public and decision makers about missed opportunities to improve local hazard mitigation planning. To support such important efforts, the U.S. Federal -Emergency Management Agency and other federal agencies should consider developing additional databases that are widely applicable and available."