

An Extension of the Plan Integration for Resilience Scorecard™ (PIRS): Coupling PIRS™ with Plan Quality Evaluation Tools

Jaimie Hicks Masterson and Philip Berke

SHORT DESCRIPTION

The Plan Integration for Resilience Scorecard™ (PIRS) assists local practitioners to assess the degree to which networks of local plans target geographic areas most prone to hazards and evaluate the coordination of local plans. We partner with 1-2 low-capacity communities with higher proportions of low-income people of color to explore the intersection between two types of tools: 1) well-established plan quality evaluation protocols to guide and enhance individual plans and 2) PIRS to guide the coordination of individual plans.

In addition, the PI is in regular contact with Dr. Cassandra Davis for recommendations on other ways to categorize the types of communities that this project is seeking to work with.

ABSTRACT

Fragmentation and poor integration have led to siloes in which mitigation planning is isolated from other local planning sectors (land use, hazard mitigation, economic development, transportation). Hazard mitigation specialists have long been concerned about the implications of the lack of integration of mitigation across local planning sectors, which can significantly compound future risks. In Years 1-6, the project team developed, tested, and engaged communities and practitioners on the Plan Integration for Resilience Scorecard™ (PIRS) to address this problem.

As an additional complexity, researchers continue to find low quality hazard mitigation plans with inconsistencies between the fact basis and mitigation policies, weak implementation elements, and vague mitigation policies that lack spatial specificity. Comprehensive plans, or a community's general or master plan, are also weak. For instance, comprehensive plans oftentimes fail to mention hazards and lack the quality and quantity of policies that target mitigation and community hazard exposures. When hazards and climate change are mentioned, they are not linked to policies and fail to articulate a clear and holistic hazard mitigation strategy.

The research outlined here directly builds from previous research and engagement of years 1-6 which found that some communities that scored relatively well in terms of plan integration, lacked quality hazard mitigation plans and comprehensive plans. The project team will engage 1-2 low- capacity communities with higher proportions of low-income people of color to apply PIRS and two well-established plan quality protocols: 1) hazard mitigation plan evaluation protocol developed by Berke, Lyles, and Smith (2014) as documented on the website Beyond the Basics: Best Practices in Local Mitigation Planning (mitigationguide.org) and the American Planning Association's (APA) PAS Report 578 Sustaining Places: Best Practice Standards for Comprehensive Plans (Godschalk & Rouse, 2015). The project will result in 1) guidance for the efficient application of plan quality tools and PIRS, including a crosswalk of linkages, 2) a case study write-up with lessons learned, 3) additional PIRS training materials to be used in coordination with APA training modules 4) a web page with resources and materials from the research project, and 5) a presentation of findings at one national conference. The ultimate project goal is to demonstrate the power of well-coordinated and integrated high-quality plans.

The PI is going beyond the planning elements to incorporate logic model consequences analysis and economic analysis. Specifically, three actions have responded to this: First, we have developed and applied a logic model in two of our pilot communities – Norfolk, VA and Nashua, NH. We just published in a peer review journal that focuses on tracking outputs, outcomes and impacts generated by utilization of PIRS in the two cities: Berke, P., J. Kates, M. Malecha, J. Masterson, P. Shea, S. Yu (2021) Using a resilience scorecard to improve local planning for vulnerability to hazards and climate change: An application in two cities. *Cities* Vol. 119 (December).

Masterson and Berke will apply the logic model in the current project focused on two low-capacity communities. We will track results from the combined application of PIRS and APA's best practice standards.

Second, the PI's former doctoral student, Matt Malecha, currently a post-doc with NIST, is collaborating with NIST to explore development of a proposal to link NIST's economic decision guide and tool to PIRS. The proposal will be submitted to DHS through CRC.

Third, one of the tasks under the project with Drs. Davis and Hino is focused on linking social equity outcomes to planning under BRIC. We will also examine the linkages between application of equity indicators and resilience/hazard mitigation planning associated with PIRS.

In addition, given the growing uncertainties of future hazards exposure and impacts

due to climate change, communities cannot take the traditional approach of predict and plan for a single future. Use of logic models and economic impact assessment tools can assist communities to achieve their visions and aspirations by understanding consequences of alternative community futures.