



## PROJECT OUTCOMES

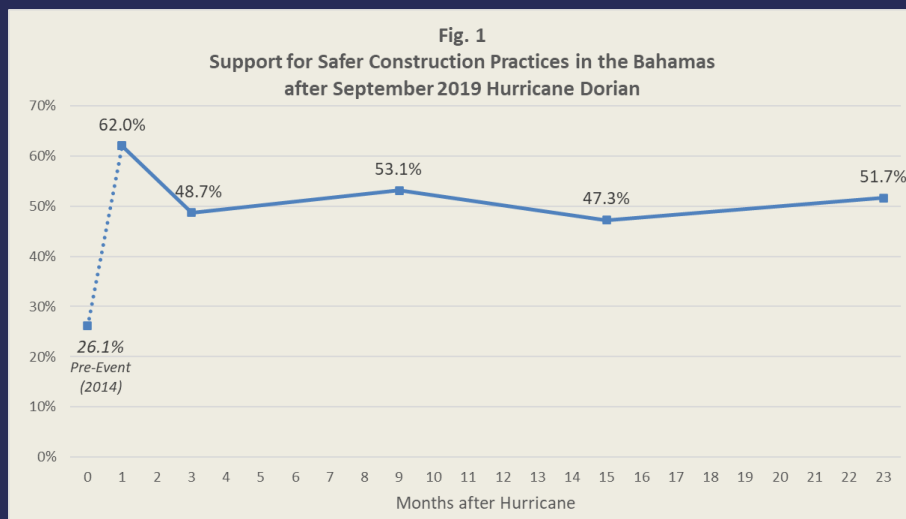
### NSF RAPID: Public Support for Disaster Risk Reduction Policies in the Bahamas after Hurricane Dorian (Award# 2011872)

This project assessed the impact of a country experiencing a disaster on its people’s attitudes towards disaster risk and, especially, disaster risk reduction (DRR) practices and policies. Researchers collected and analyzed public opinion data from the Bahamas, parts of which were devastated by the Category 5 Hurricane Dorian in early September 2019.

The project sought to determine whether and how disasters serve as “focusing events” that, among other effects, shift public awareness and opinion and, potentially, open “windows of opportunity” for changing the design or implementation of relevant policies—in this instance, building codes and construction regulations. Do disasters indeed affect people’s attitudes towards future disaster risk and risk reduction? Are these changes enduring or ephemeral? If shifts in public opinion are short-lived, how quickly do they begin to revert back to baseline values? (And if so, does public sentiment fully revert to pre-event levels or, instead, stabilize at some other level?)

Working with a locally-based survey research firm, the project collected three waves of survey data—in June 2020, December 2020, and July-August 2021—with sample sizes each n=1000. The resulting dataset was merged with two waves of survey data collected in the Bahamas prior to the start of the project (in October and December 2019), as well as baseline measurements from a 2014 cross-national survey.

Tracking change over time in aggregate public opinion, project researchers found that Bahamians’ support for safer construction practices increased after the 2019 hurricane, then declined. As of August 2021, nearly two years after Hurricane Dorian, Bahamians’ collective support for DRR practices was lower than its post-event high—but had, in fact, stabilized at a higher level than was measured prior to the hurricane (see Fig. 1).



Similarly, average levels of support for increased government enforcement of DRR policies was high—75% (a percentage adapted from a seven-point Likert scale)—a month after the 2019 hurricane, then declined to 66% at the three month mark (though support increased again in 2020-2021, coinciding with the COVID-19 pandemic; see below).

Regression-style analysis of individual level data confirmed that, controlling for demographic traits and relevant attitudinal variables, the passage of time since the hurricane did significantly erode support both for DRR practices and for enforcement of DRR policies and regulations. Multivariate analysis also revealed that:

- Higher perception of future risk from a disaster significantly increases one's support for DRR policies relevant to that specific type of disaster.
- Higher perception of future risk from one kind of disaster is associated with a higher perception of future risk from *other* kinds of disasters. (Here, the COVID-19 pandemic may have indirectly contributed to Bahamians' renewed support for DRR policies—not only for public health programs but for building codes and construction regulations as well.)
- Belief in the efficacy of DRR—believing that better building code enforcement would have prevented harm from the hurricane—strongly predicts support for DRR policies and practices (and this perception of efficacy, too, declined over time).
- How severely one was affected by a disaster does not significantly shape subsequent support for relevant DRR policies and practices.

The dynamics of public support for DRR have immense theoretical and practical implications. Project findings are contributing to the accumulation of knowledge in such fields as public policy, the psychology of risk, and public opinion / political culture, as well as the growing multidisciplinary field of disaster studies. Most impactfully, the project provided a rare opportunity to study changing support for public policies in a timely manner and to test hypotheses about disasters as *potential* “focusing events,” before it was known whether this particular disaster would or would not shift the politics of policy. The study thus overcame a methodological problem (selection bias) that previously hampered much of the existing research on this topic.

The project also provides a framework for governments at all levels (local to national) and other stakeholders (NGOs, interest groups, international aid agencies) to better understand the timing of opportunities to strengthen and improve the implementation of DRR policies and practices—and to build public support for those efforts. Finally, by creating new tools and generating new knowledge that might reduce injuries and deaths, material losses, and social instability in the wake of future hazard events, this project serves to improve the well-being of individuals in society; strengthen U.S. humanitarian and security interests; and increase public engagement with science and technology, among other socially-relevant outcomes.