When it Comes to Disaster Preparedness, Local Innovation Equals Global Resilience

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Throughout the United States, cities are building risk-reduction programs by working with non-traditional and non-governmental entities. Traditionally, such partnerships formed at the local intra-governmental level. The Hyogo Framework of 2005 initially promoted multi-stakeholder partnerships as a worldwide disaster risk reduction strategy.[1] In 2015, the United Nations adopted the 2015-2030 Sendai Framework for Disaster Risk Reduction.[2] One of its guiding principles is risk reduction and management through cross-sectional collaboration. In the last decade, Delaware, New Orleans, Portland, San Francisco, and New York have done an exceptional job of pushing the boundaries for American risk reduction efforts through novel partnerships.

New Orleans, Louisiana – Evacuteers

New Orleans' Evacuteer program[3] is not necessarily new, as it's been around since 2009, but it is still one of the best examples of integrating public art into a disaster preparedness program (see Figure 1). According to the program's website, "Evacuteer.org recruits, trains, and manages evacuation volunteers (Evacuteers) who assist with New Orleans' public evacuation option called City Assisted Evacuation (CAE). CAE activates when a mandatory evacuation is called, and is designed to move 35,000-40,000 New Orleanais without a safe or alternative option to evacuate."

Figure 1. The Evacuteer Program. Credit: https://evacuteer.org

The Evacuteers placed 17 14-foot tall statues at pre-determined evacuation points known as "Evacuspots." The Arts Council of New Orleans and the New Orleans Office of Homeland Security and Emergency Preparedness (NOHSEP) installed these statues in high-risk neighborhoods so that residents without personal vehicles can meet there for evacuation by mass transit. The program utilizes volunteers and community partners to advertise and staff the Evacuspots. They organize outreach events like their "Bye Bye Hurricane Season" party (which marks the beginning and end of each hurricane season) and stage volunteers at Union Terminal for out-of-town connections and at City Hall to assist with the City's 3-1-1 network.

Fortunately, there has not been the need for another evacuation at the scale of Hurricane Katrina. The Evacuteers have done a phenomenal job at utilizing art and a very New Orleans-style community engagement strategy to get their message into the community. They improve the program through innovative outreach efforts like their current Love, Write, Light project.

Portland, Oregon - Airbnb

In 2015, The New Yorker magazine published the article, "The Really Big One" by Kathryn Schulz that achieved viral status.[4] Her composition created such a nationwide run on earthquake preparedness kits that it warranted a follow-up article, "How to Stay Safe When the Big One Comes," and evoked endless social media commentary.[5]

Emergency managers always appreciate when families become more prepared. However, they realize that a catastrophic event like a major earthquake or Hurricane Dorian's devastation in the Bahamas would be incredibly complex to manage. It would also be devastating for any city and emotionally and mentally taxing for those being sheltered.[6] A dispersed community sheltering model supplements traditional shelters, such as a gymnasium filled with cots, with peer-to-peer

room rental services, like Airbnb, Inc., which arranges lodging online. In July 2014, Portland officials were one of the first communities to sign a Memorandum of Understanding (MOU) with Airbnb, Inc. to activate its service in Portland during a declared disaster.

Airbnb will automatically notify users who have signed up as disaster response hosts, waive Airbnb's normal booking fees, and put out an all-call to users in the area.[7] This dispersed sheltering method was proven as a viable concept during Superstorm Sandy, when 1,400 hosts first participated in Airbnb's Open Homes program.[8] In addition to the physical benefits of dispersed sheltering, the Sandy rollout showed Airbnb's potential to cash in on post-disaster altruism, sometimes referred to as the therapeutic community,[9] while connecting neighbors who were willing to help those in need of shelter. According to Shell, an Airbnb host from Clinton Hill, NY during Hurricane Sandy, "Sometimes people don't connect that much in New York, and you can feel isolated. Inviting guests in during Hurricane Sandy brought a sense of community right into my home."[10] According to a 2014 study, Airbnb generated $61 million in economic activity, in a twelve-month span from February 2013-January 2014, in Portland and helped support 660 local jobs.[11] This is a great example of how a city and the private sector can leverage a common goal into a win-win situation for the community.

San Francisco, California - SF72

So many disaster preparedness websites exist that they tend to bleed together after a while. While these are fitting for many communities, they are not appropriate for every community, especially where a large portion of the target population cannot be reached online.

To reach its tech-savvy Millennials, the San Francisco Department of Emergency Management designed a sleek and user-friendly disaster preparedness website around a very simple message: "You are More Prepared than You Think" on SF72.[12] The majority of the site is dedicated towards identifying and using everyday items that can also come in handy during an emergency. Accessing NextDoor.com, stocking board games, and repurposing a grill are a few of the more unique suggestions. As if SF72's slick design was not innovative enough for an emergency preparedness site, its more impressive features are the open source toolkit, personal stories, and a blog. SF72's content is open and available for use by other emergency preparedness organizations and non-profit agencies and is one of the most innovative emergency preparedness sites in the world.

New York, New York - Rebuild by Design

Following Hurricane Irene in 2011 and Hurricane Sandy in 2012, the U.S. Department of Housing and Urban Development (HUD) launched a design competition in New York. HUD used its Community Development Block Grant Disaster Recovery Program and called the competition "Rebuild by Design" (see Figure 2).[13]

Figure 2. Rebuild by Design. Photo Credit: www.rebuildbydesign.org

"Rebuild by Design is pioneering new ways to design, fund, and implement a resilient future," the program's website states. "Launched by HUD in the wake of Hurricane Sandy, Rebuild by Design marshals the world's greatest talents to answer a region's greatest needs, while placing civic leaders and communities at the heart of the design process. Its method maximizes inter-agency communication and cross-sector communication, and delivers innovative, implementable, large-scale infrastructural solutions that embody a people's unique vision of their own resilient future." Since the program's initial round closed in 2013, six projects were funded in New York City by the initial $930 million federal commitment, received funding, and are scheduled to break ground by early 2020. Meanwhile, the Rebuild by Design organization promotes the projects and engages the community through outreach efforts.

Programs that build disaster resilience and preparedness come in many forms. What works for one location may not work in another. However, what matters most is that a message or program targets its population efficiently. Delaware is doing just that through the preparedness website, PrepareDE.org, created by the Division of Public Health and the Delaware Emergency Management Agency, and Delaware Citizens Corps.[14] Delaware's communities should look towards like-minded organizations for inspiration when developing disaster risk programs. One innovation at a time, they can move the state and, ultimately the world, toward the 2015 Sendai framework's goal of a more resilient humanity.

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