Seattle's Community Emergency Hubs: Public Spaces as Post-Disaster Organizing Tools

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As the impacts of climate change continue to manifest throughout the world with greater frequency, addressing the question of how to best prepare for and recover from disasters is more crucial than ever. Evidence shows that beyond ripping through physical infrastructure and claiming lives, disasters also damage social networks and community bonds, making the impacts perceptible long after houses are rebuilt. The importance of social infrastructure in disaster planning is becoming more widely researched and considered, and it is consistently shown that communities with strong social ties are better prepared for the inevitable effects of climate change (Aldrich 2015). Recognizing this, many cities have begun to implement and support preparedness and response plans at a community level.

Public space is a crucial tool and resource in determining how to build more socially resilient communities. There has been significant research proving that connection to place and neighborhood contributes to increased civic participation, better social bonds, and higher gross domestic product (Johnston 2015). Additionally, public space has long been used as an organizing tool in the wake of disaster (Low 2006).

The strongest community plans rely on physical spaces and foster community ties that can be relied on during emergencies. As communities begin to recover from past disturbances, they need to continuously anticipate future emergencies and disasters. Alongside community-based attempts to bolster disaster response, cities across the world are creating plans and policies to help build preparedness at the neighborhood level. The goal of these plans is to help communities become better informed and prepared in the event of future disasters.

In Seattle, WA, the inevitability of future earthquakes has prompted community members to focus on emergency preparedness. Because the timing and the exact damage of the expected earthquake are unpredictable, the Seattle Office of Emergency Management (OEM) seeks to draw upon the things they can control, such as community response, by establishing a Community Emergency Hub program. Seattle's Community Emergency Hubs program draws upon social resources, community assets, and proven disaster response strategies in order to create a framework for communities to adapt to their own needs. Hubs attempt to address the gap between community and city response to disaster by allowing for more grassroots efforts that are informed, rather than dictated by the city government. This chapter will focus on the importance of social capital and public space in disaster resilience, and introduce a unique model in Seattle that centers disaster response around physical space. The chapter will conclude with recommendations for practitioners on how to use this approach as a prototype for communities across the country.

Background: Social Capital and Place Attachment in Community Resilience

Seattle OEM relies on existing social ties to create and implement Hubs throughout the city, and participation in Hubs has in turn enhanced these bonds for many community members. Social ties are important in emergency planning and response because disasters cannot be understood without looking at the social impact they have. Disasters become disastrous not because of physical damage alone, but because of how they are managed politically, institutionally, and socially; areas that are equally affected geographically will differ in their recovery based on environmental, economic, and community vulnerability. According to Daniel Aldrich, director of the Security and Resilience Studies Program at Northeastern University, one of the greatest threats of disaster is the displacement and broken social networks they cause (Aldrich 2015). Eric Klinenberg's book "Heat Wave: A Social Autopsy of Disaster in Chicago," addresses the importance of social networks in the outcome of the 1995 heat wave. In addition to the expected inverse correlation between neighborhood median income and damage suffered in a disaster, he points to the crucial role of social infrastructure. Communities with more social ties—fostered by active commercial corridors and social networks such as block clubs—fared much better than neighborhoods with similar demographics that were suffering from disinvestment and broken social networks (Klinenberg 2013). This concept applies to recent disasters as well.

Researchers from John Jay College and the Institute for Environmental Sciences and Technology found that between the Lower East Side and the Rockaways, New York City neighborhoods with similar levels of physical damage from Superstorm Sandy, the Lower East Side was at an advantage because of its pre-existing civic infrastructure. Both neighborhoods had a high concentration of public housing and poverty, but the Lower East Side had stronger social cohesion due to the number of community organizations that had worked together in the past, primarily on anti-gentrification activism. The history of community involvement on the Lower East Side allowed for a more effective response and recovery process after the storm (Graham et al. 2016). This can be explained by the varying levels of social capital in different communities.

The term social capital is primarily used to discuss the potential and the actual social networks that can be relied on in times of stress. In 1915, Louis Hanifen defined social capital as "the good will, fellowship, mutual sympathy, and social intercourse among a group of individuals and families who make up a social unit" (Aldrich 2015, p. 256). It can be more broadly understood as the "community/network relations that affect individual behavior" (Shimada

2015, p. 378). Sociologist Robert Putnam, author of "Bowling Alone," explains social capital in the terms of networks and norms that have value in their social reciprocity (Putnam 2001). Social capital is typically measured by community involvement (volunteer engagement, registered voters, etc.), as well as through surveys that inquire the level of trust among neighbors. Aldrich has done extensive research on the importance of social capital within the context of disaster planning and recovery. Social capital is crucial in communities that face disaster because the most frequent first responders are not national aid groups or police, but rather neighbors and friends (Aldrich 2015).

Aldrich, Putnam, and other researchers identify multiple forms of social capital that can and should be utilized in disaster relief work. The first and most essential form according to Aldrich is *bonding social capital*, which refers to the closest social groups (family and close friends) and is often formed based on similarity of location, background, and income. This is the most helpful in disaster situations because so many people rely on family and close friends as their primary networks in the case of emergencies. Next is *bridging social capital*, which connects people at an organizational level. Examples include schools and places of worship, which have the possibility of also bridging differences in race and class.

Finally, *linking social capital* connects regular citizens to people in positions of power, such as elected officials and traditional first responders. Connections to people in power act as a kind of social insurance, as communities with strong ties to leaders are less likely to be overlooked following disaster. The Ninth Ward in New Orleans is an example of a community with strong bonding social capital, but the lack of linking social capital there contributed to overwhelming displacement following Hurricane Katrina. Without support from the government, decisionmakers saw the neighborhood as low priority; housing was torn down and left in disrepair, preventing residents from returning to their homes. Those forced to move following Katrina lost their main networks, depleting the original social strength of the neighborhood (Bier 2006, p. 243).

In the aftermath, it became clear that the systemic failure of the response to Katrina was not the fault of any one organization or person, but rather the lack of coordination between the many players, from communities to every level of government. The cyclical relationship of social capital, community cohesion, and resilience shows the importance of building networks and improving lines of communication as part of disaster planning. All three forms of social capital play an important role in reducing the impact of disaster, both before and after the event (Aldrich 2015). All three are employed in the Seattle Hubs, with the connection to OEM working to enhance linking social capital through communication with government.

Social capital is also seen as an asset in community development. Asset-based community development (ABCD) emerged out of a response to the needs-based development that focused on what communities were lacking, rather than a more positive approach of looking at their strengths. ABCD encourages communities to search for unrecognized assets—anything from specific skills community members can offer, to the very relationships that form that community (Mathie and Cunningham 2003, p. 476).

In addition to social assets, physical assets are an important part of organizing for disaster response. Place attachment, or the importance of psychological ties to place, primarily looks at the relationship between people and their residences or neighborhoods. Place attachment can be defined as an effective bond between people and places (Low and Altman 1992). At an individual level, it is impacted by a combination of the memories connected to a specific place, and the extent to which a person's values are reflected in the space around them. It can also be applied at the community level, suggesting that communities with stronger attachment to place benefit from higher social cohesion (Brown et al., 2003). Place attachment has also been linked to neighborhood cleanup and revitalization (Manzo and Perkins 2006, p. 337), suggesting that individuals in communities with higher place attachment invest more time and energy in their neighborhoods.

The development of place attachment has helped explain the importance of community investment in disaster recovery. Resident attachment to place is correlated with higher economic outcomes and civic engagement. "There is an important and significant correlation between how attached people feel to where they live and local GDP growth" (Loflin 2013). Loflin explains: "What most drives people to love where they live (their attachment) is their perception of aesthetics, social offerings, and openness of a place." People who feel connection to and investment in their communities are more likely to form strong social ties and be civically engaged, subsequently creating resilient communities.

A common exercise to identify community assets is asset mapping. Geographically mapping community assets helps residents visualize the strengths of their neighborhood and identify the places, including open and green spaces, which can be used to their advantage. In their new Community Emergency Planning Toolkit, New York City Emergency Management (NYCEM) encourages communities to create neighborhood asset maps in order to identify potential spaces and resources that can be used in disaster preparedness. In Seattle, Hubs are often based out of these same spaces. Residents typically identify spaces that already serve as natural meeting points as Hubs, including churches, playgrounds, and community centers. Figuring out how to use these shared spaces is an important step toward building social capital and resilient communities.

Emergency and Disaster Preparedness

Planning for disaster requires an understanding of the resources and the capacity, both physical and social, of the specific community. Resilience at the community level can be defined as "the collective ability of a neighborhood or geographically defined area to deal with stressors and efficiently resume the rhythms of daily life through cooperation following shocks." (Aldrich 2015, p. 255) It can be further broken down as a combination of economic development, social capital, information, communication, and community competence (Sherrieb and Norris 2010, p. 228).

Community resilience looks different from one community to the next. The variables used to measure potential resilience indicators, such as the number of civic organizations per block, are dependent on each geographic space and the people who live there. Across the board, communities with economic, social, and geographic vulnerabilities have a harder time returning to their previous state following a disaster or stressor. Community resilience plays a large role in disaster recovery, which can be divided into multiple phases of impact, recovery, and reconstruction (Shimada 2015, p. 373), and is widely discussed in this book.

One of the strengths of the Seattle OEM Community Emergency Hubs is the adaptability of the program to change from neighborhood to neighborhood to reflect the needs of each specific community. Taking into consideration the specific assets of each neighborhood, both social and spatial, the model can be used as a starting point for any community looking to organize around resilience and emergency preparedness.

Community Emergency Hubs

Seattle residents are working with OEM to build communities that are better prepared for any number of emergencies, from low-level flooding to the impending earthquake. Community Emergency Hubs developed after the major snowstorm in Seattle in 2009, nicknamed "snowmageddon".[1] The city had no recent experience or plans in place to handle that much snow, and subsequently, the storm led to traffic issues and stranded some Seattleites in their homes. Meanwhile, community leaders in Seattle had long been noticing potential issues that could arise in the case of emergency. For example, residents in West Seattle only have one bridge to access major hospitals, meaning they could potentially be left on their own without medical care in the case of a large-scale disaster. Cindi Barker, Seattle resident and member of the Precinct Advisory Committee noticed that even during small-scale disasters such as a windstorm in 2006, people naturally came together in shared spaces looking for

1. Debbie Goetz, pers. comm., April 15, 2016.

information and support.[2] Volunteers such as Ms. Barker connected with OEM, to establish the Seattle Emergency Hub program.

Community Emergency Hubs are an effort to ensure that neighborhoods at least have a basic starting point to create an important layer of preparedness. Seattle OEM consistently teaches community members to prepare to support themselves and each other for 7–10 days before a government response will be in place to provide disaster assistance. The Community Emergency Hub program in Seattle is a strong example of a place-based model that activates a specified location in the case of an emergency. Hubs are simply predetermined "places where people go after an emergency to help each other" (Seattle OEM 2016). Some Hubs are part of a larger community emergency planning effort across Seattle, called Seattle Neighborhoods Actively Prepare (SNAP), and exist within neighborhoods that actively organize around emergency preparedness. Others are the first step to beginning a community conversation around resilience, and some are simply a place to meet up, with no plan or promise of a specific disaster response. This variation comes from the fact that both Community Hubs and communities themselves are self-defined by residents. Some self-defined communities organize around houses of worship and other spaces with inherent social ties, and others are based entirely on geographic proximity. All have access to resources, such as toolkits, trainings, and direct communication with OEM, and complete a step-by-step process to organize and test a disaster plan.

Hubs are documented on a Seattle OEM map, which anyone can access to find their nearest Hub. In addition to the city's resources, volunteers have created a Hub Captain's Network, operating independently from OEM. Hubs can opt into this network to receive more regular communication about best practices, resources, and annual practice emergency drills. The Hub Captains Network, led by Cindi Barker, also operates a Website and a live "NeighborLink" map with help from Seattle Central College web developers. The NeighborLink map shows Hubs, Community Emergency Response Team (CERT) locations, SNAP neighborhoods, and block watch groups, with contact information for each.

In November 2016, there were 67 designated community emergency Hubs across Seattle (Figure 1). A closer look at the map showed some gaps within the central Seattle area, and demographic analysis of central Seattle provided a few explanations as to why Hubs had not been established in the same quantity there as in other neighborhoods. Debbie Goetz, Community Planning Coordinator with Seattle OEM, suggested the following possibilities. First, these neighborhoods tend to have more renters versus homeowners. There are also more young people in central Seattle, who may connect more on

2. Cindi Barker, pers. comm., October 29, 2016.

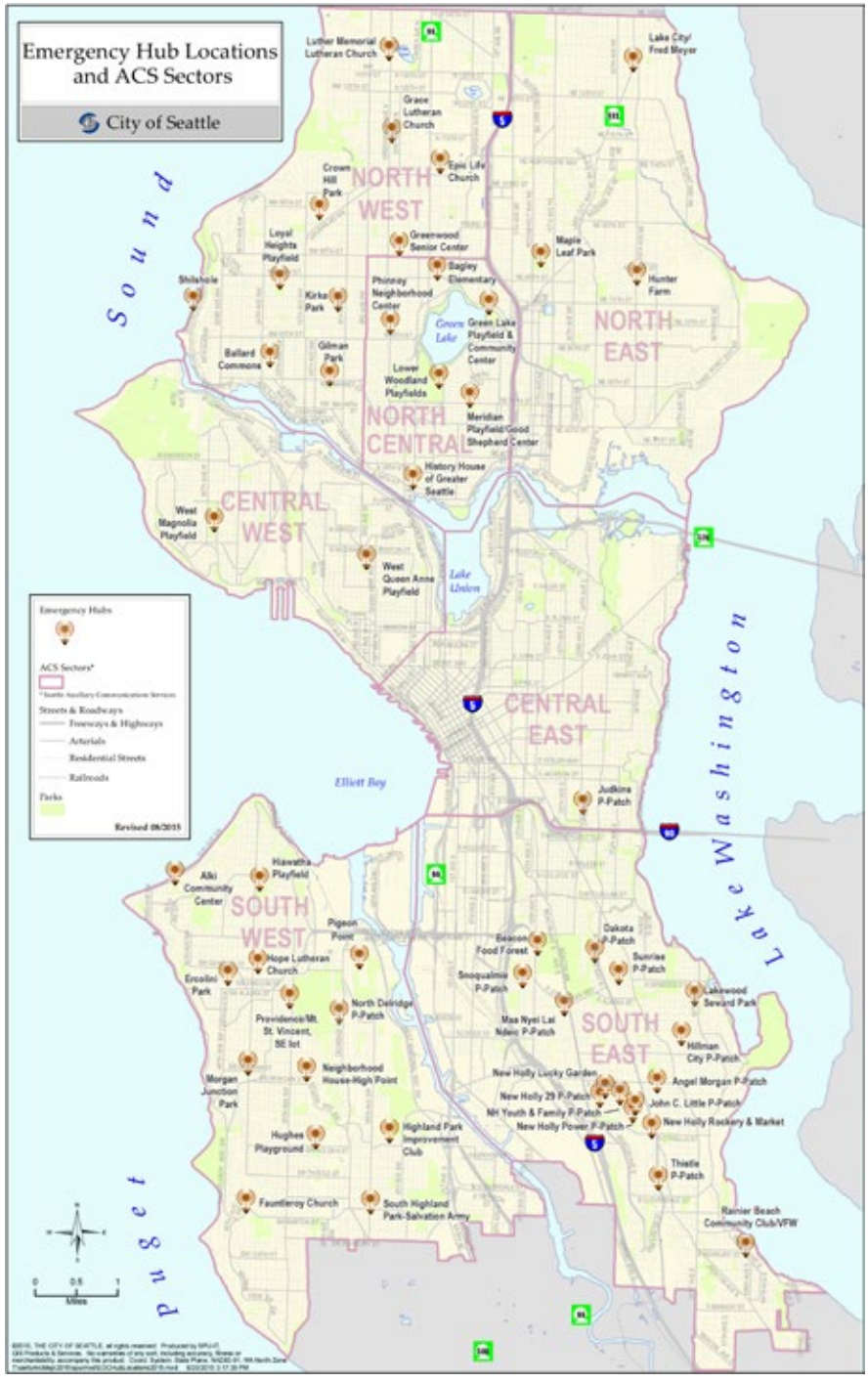

Figure 1: Map of Seattle Community Emergency Hubs, 2015.

Seattle Office of Emergency Management, used with permission.

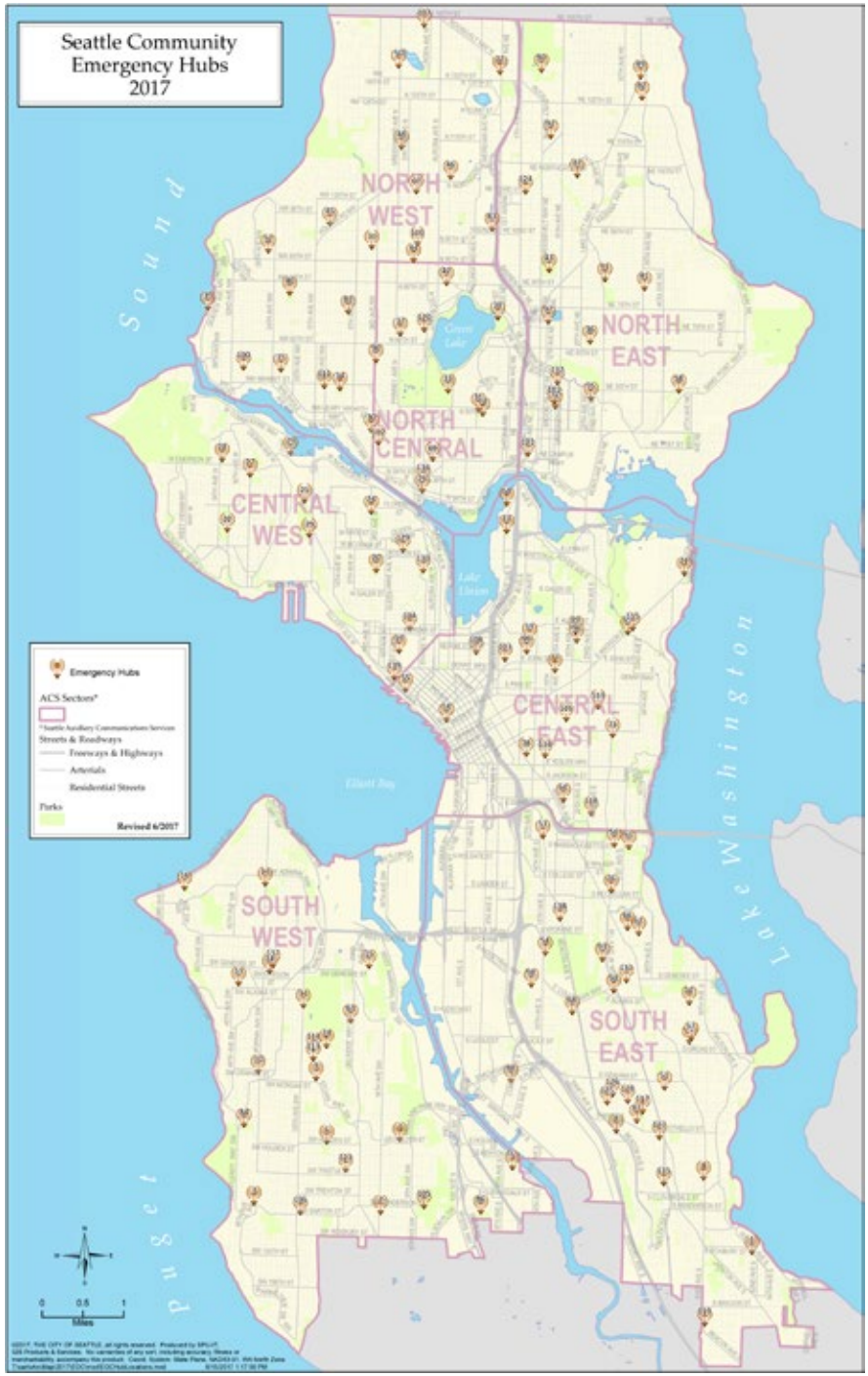

Figure 2: Map of Seattle Community Emergency Hubs, 2017.

Seattle Office of Emergency Management, used with permission.

social media than in person. Finally, some of the neighborhoods in central Seattle have less social cohesion, or have less trust in government and are thus less likely to choose to participate in city programs.[3] In order to rectify this and ensure that Hubs are available to residents in every neighborhood, OEM looked to the P-Patch community gardens. P-Patch community gardens are overseen by the Seattle Department of Neighborhoods, and encourage communities to engage in urban environmental stewardship through community gardening, market gardening, youth gardening, and community food security programs. These gardens are natural Hub locations because they already have both social networks and established ties to place, and many are located within the Hub desert.

In April 2017, following a series of community meetings to bring gardeners on board, all of the P-patch community gardens were added to the map as Hub locations. These gardens are already sites with community ties, and are therefore natural meeting spots for people looking to connect with their neighbors. Beyond just increasing the number of Hubs, the addition of these gardens has presented some exciting new collaborations. One community had an existing Hub in Magnolia Manor Park, a place they had identified as a spot where people tend to congregate. Once the P-patch garden within the park became a Hub, the two decided to join forces. The city introduced the Hub organizers to the community gardeners, and now they are committed to coming together in the event of an emergency. The latest Hub map, updated in June 2017, shows 139 Hubs spread across the city (Figure 2). An interactive online map allows users to enter their address and view all of the nearby Hubs they can reach.

Two factors make this program stand out among other community preparedness plans: first, community Hubs are place-based, beginning with a physical point of connection. This ensures that there is a base expectation of what will occur in a response: regardless of the plan details, people will have a place to go to meet with others. Second, community Hubs are entirely determined and governed by community members. Each Hub represents a different community, and therefore has a different mission and process to achieve its unique goals. Becoming a Hub is straightforward; it simply requires a community to designate a location and submit an online registration to be added to the Hub map. Hub members, along with all Seattle residents, are eligible to apply for grants if they want to begin organizing together as a group.

One important tactic the Hub program employs is the leveraging of existing community organizational structures to avoid creating unrealistic amounts of work for communities or to replicate work that has already been done. Hubs are sometimes centered on existing communities that are looking for a

3. Debbie Goetz, pers. comm., October 25, 2016.

way to be better prepared in the event of an emergency. Churches and faith-based communities, ethnic community groups, and community gardens all have existing social networks. When there is not a clearly identifiable community, designating a Hub can actually help build social capital and better establish social cohesion, like when a group of neighbors decides that their local park or playground can serve as a Hub, and then reaches out to others to increase involvement and build social ties.

While the Hubs have thankfully yet to be tested by a major disaster in Seattle, there have been a series of trials and drills to test the efficacy of the Hubs and encourage people to become familiar with their disaster plan. In July of 2017, eleven Hubs, both newer and more experienced, participated in drills simulating an actual crisis. West Seattle Blog (http://westseattleblog.com) wrote about the event:

> The scenario citywide was: Sixth day after a big earthquake. Three of West Seattle's Hubs were part of it. For the Sunrise Heights Hub at EC Hughes Playground and the Junction Hub behind Hope Lutheran Church, it was their first drill. We visited both. "If we can't communicate, we can't allocate," observed Junction Hub captain Delores Kannas. "Our big goal is to match resources with needs. Different people will show up, and it will evolve."

Because of the success of the program, there is an effort to establish community Hubs in neighboring King County organized by Seattle-King County Public Health, and partnering with Medical Reserve Corps volunteers. Although needs vary greatly by city and community, the basic principle of the Hub program—identifying a place to go in the event of an emergency—can be applied anywhere. As the program grows, it is important to recognize both the strengths and limitations of community Hubs.

Lessons and Takeaways for Other Cities

1. **Identify a physical meet-up place:** While different emergencies may call for different kinds of facilities, having at least a tentative meet-up point can make preparedness plans more accessible to community members who were not able to take part in the entire planning process. Hub Captain Cindi Barker suggests that the best approach to emergency preparedness is a combination of place-based and community-based. A place is an important first step to organize around, but without community support, a place is not going to be able to accomplish anything. Likewise, a community without a meeting place will have trouble attracting people

and getting their efforts off the ground.[4] In addition, mapping these meet-up points offers residents who have never participated in preparedness planning the chance to know where to go in the event of an emergency.

2. **Emphasize communication between city government and the community:** The volunteer-led Hub Captain network serves as a link between Seattle OEM and the communities they serve. Barker meets with Debbie Goetz monthly to discuss issues of concern in the Hubs and receive updates on the growth of the program, such as the P-Patch expansion. This is an important way of bridging the gap between community-level organizing and city-level planning, to ensure that efforts are supported and not duplicated.

3. **Consider unique assets and weather conditions:** Different cities have different needs when it comes to disaster. In Seattle, many Hubs are outdoors in parks, playgrounds, or gardens because these places are visible and will be safer than buildings in the event of an earthquake. Other cities may be preparing for flooding, extreme heat, or other weather conditions that would make meeting outside impossible. Hubs can be adaptable depending on the weather and the available assets within a community. Cities looking for indoor spaces can consider meeting up in libraries and even supermarkets, and can look into the use of trailers or modular sheds in outdoor spaces. Online resources can also be employed to create virtual "Hubs" in communities that have the ability.

Conclusion

In considering Community Emergency Hubs, a few general themes have emerged. First, communities are strongest when they have high levels of social capital and cohesion, allowing community members to look out for one another and work collaboratively following emergency. Second, place-based approaches to disaster response can help ensure that in the event of a disaster, people will be able to come together and assess their needs and resources in real-time. Finally, plans that provide a structure of connectivity, space, and communication strengthen the resource sharing and spontaneous efforts that are bound to emerge after an emergency. Using the Seattle Hub model as a template, communities can begin to create personalized plans that improve disaster response and boost resilience.

4. Cindi Barker, pers. comm., October 29, 2016.

Literature Citied

Aldrich, D.P.; Meyer, M. 2015. Social capital and community resilience. American Behavioral Scientist. 59(2): 254–269. https://doi.org/10.1177/0002764214550299.

Bier, V. 2006. Katrina as a bureaucratic nightmare. In: Daniels, R.J.; Kettl, D.F.; Kunreuther, H., eds. On risk and disaster: lessons from Hurricane Katrina. Philadelphia, PA: University of Pennsylvania Press: 243–254.

Brown, B.; Perkins, D.D.; Brown, G. 2003. Place attachment in a revitalizing neighborhood: Individual and block levels of analysis. Journal of Environmental Psychology. 23: 259–271. https://doi.org/10.1016/S0272-4944(02)00117-2.

Graham, L.; Debucquoy, W.; Anguelovski, I. 2016. The influence of urban development dynamics on community resilience practice in New York City after Superstorm Sandy: experiences from the Lower East Side and the Rockaways. Global Environmental Change. 40: 112–124. https://doi.org/10.1016/j.gloenvcha.2016.07.001.

Johnston, S. 2015. Finding data to measure "place capital". Minneapolis, MN: Citiscope. http://citiscope.org/story/2015/finding-data-measure-place-capital (accessed Jan. 31, 2018).

Klinenberg, E. 2013. Adaptation: how can cities be "climate-proofed"?. The New Yorker magazine. January 7, 2013.

Loflin, K. 2013. Learning from the Knight's Soul of the Community, leaning toward the future of placemaking. New York, NY: Project for Public Spaces. http://www.pps.org/blog/learning-from-knights-soul-of-the-community-leaning-toward-the-future-of-placemaking/ (accessed Jan. 31, 2018).

Low, S.M.; Altman, I. 1992. Place attachment: a conceptual inquiry. In: Altman, I.; Low, S.M., eds. Place attachment; Human behavior and environment volume 12. New York, NY: Plenum Press: 1–12.

Low, S.; Smith, N. 2006. The politics of public space. London: Routledge. 200 p. ISBN: 978-0415951395.

Manzo, L.; Perkins, D. 2006. Finding common ground: the importance of place attachment to community participation and planning. Journal of Planning Literature. 20(4): 335–350. https://doi.org/10.1177/0885412205286160.

Mathie, A.; Cunningham, G. 2003. From clients to citizens: asset-based community development as a strategy for community-driven development. Development in Practice. 13(5): 474–486. https://www.jstor.org/stable/4029934.

Putnam, R. 2001. Social capital: measurement and consequences. Isuma: Canadian Journal of Policy Research. 2001(2): 41–51.

Seattle Office of Emergency Management [OEM]. 2016. 2016 Annual report. Seattle, WA: Office of Emergency Management. https://www.seattle.gov/Documents/Departments/Emergency/AnnualReports/2016-Annual-Report_FINAL_Single-Page.pdf (accessed Oct. 17, 2018).

Sherrieb, K.; Norris, F.H.; Galea, S. 2010. Measuring capacities for community resilience. Social Indicators Research. 99(2): 227–247. https://doi.org/10.1007/s11205-010-9576-9.

Shimada, G. 2015. Towards community resilience: the role of social capital after disasters. In: Chandy, L.; Kato, H.; Kharas, H., eds. The last mile in ending extreme poverty. Washington, DC: Brookings Institution Press: 369–397.

West Seattle Blog. 2017. Getting ready: emergency communication Hubs' latest drill. http://westseattleblog.com/2017/07/getting-ready-emergency-communication-Hubs-latest-drill/ (accessed Jan. 31, 2018).