

*Mitigation insights from emergency managers
on working with stakeholders*

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ABSTRACT

Emergency managers have the important responsibility of planning and implementing mitigation policies and programs to reduce losses to life and property. To accomplish these goals, they must use limited time and resources to ensure the communities they serve have adequately mitigated against potential disasters. As a result, it is common to collaborate and coordinate with a wide variety of partner agencies and community organizations. While it is well established that strengthening relationships and increasing familiarity improve coordination, this article advances that narrative by providing direct insights on the ways a select group of local, state, and federal emergency managers view relationships with other mitigation stakeholders. Using insights from a 1-day workshop hosted at the University of Delaware to gather information from mitigation stakeholders, this article provides a discussion of commonalities and challenges workshop participants identified with other stakeholder groups. These insights can inform other emergency managers about potential collaborators and coordination opportunities with similar stakeholders in their own communities.

Key words: mitigation, mitigation stakeholders, emergency management, disaster mitigation, hazard mitigation

INTRODUCTION

Emergency managers have the essential role of creating, planning, and implementing policies to

reduce losses to life and property that may occur when natural and technological hazards intersect with at-risk communities. Emergency managers must use their limited time and resources to ensure communities are ready for disasters. The important work of emergency managers requires extensive collaboration to ensure their communities are resilient in the face of a disaster.¹⁻³ However, the time constraints they face mean that building professional networks can be prohibitively difficult.^{3,4} Yet, the nature of planning for emergencies and disasters requires team-based collaboration and ongoing coordination agreements with partner agencies and organizations to ensure the vast needs of the community are met.⁵⁻⁷ Meeting the needs of each region, each community, and each event requires flexibility, trust, and credibility. Establishing the infrastructures for effective coordination involves deliberate conversations, requires transparency and compromises, and costs valuable time.

Much focus on coordination in emergency management has explored how agencies and organizations work together during responses to emergencies and disasters (for overview, see Drabek⁸). Agencies should also engage with one another prior to an event to build trust, improve familiarity, and explore ways they can work together to best and most efficiently benefit the community.⁸⁻¹⁰ Hazard mitigation planning and implementation are opportunities for emergency managers to work together with partner agencies and community organizations to strengthen

relationships. Mitigation involves actions taken within communities predisaster to reduce the loss of life and property.⁷ Mitigation planning and implementation involve strong partnerships with other stakeholders, including all levels of government and the local community.^{4,11} Through the development of these partnerships, stakeholders will be able to plan and implement mitigation actions to reduce risk in communities.¹² The Federal Emergency Management Agency (FEMA) has promoted better communication between emergency managers and local, state, and federal stakeholders in the development of mitigation plans to enhance both planning and emergency response.^{2,7,13} Better communication serves as the foundation for private–public partnerships aiming to develop resilient households and jurisdictions nationwide.¹⁴

To better understand how to improve relationships between these mitigation stakeholders, the research team developed a 1-day workshop. In September 2019, 49 emergency managers and mitigation professionals from public, private, and academic backgrounds from New York to Florida to Colorado attended a workshop at the University of Delaware. One of the main purposes of the workshop was to facilitate conversations with mitigation and emergency management specialists to identify common interests and barriers to their work (see Slotter et al.¹⁵ for a full report covering the workshop). This article presents a compilation of the conversations about how the work of the workshop participants fits into larger systems of government agencies, community stakeholders, and private sector individuals and businesses. This work enhances the existing disaster coordination and mitigation literature by providing novel insights on the ways in which the diverse range of mitigation stakeholders work together to improve community resiliency. Specifically, commonalities and conflicts identified in their work likely resonate with the experiences of emergency management practitioners at large. The findings and discussion from this research also contribute to practice by identifying meaningful ways that relationships between stakeholders can be improved to benefit the ongoing mitigation planning and implementation processes in communities nationwide.

METHODS

Many of the workshop attendees were public sector emergency managers (23 or 44.2 percent). There were seven representatives of federal government agencies such as FEMA and the National Institute of Standards and Technology. At the state level, there were 13 attendees who were involved with statewide mitigation planning and flood insurance policymaking. There were also nine attendees who worked for local government, which included county level emergency managers and city planners. In addition, there were five members of professional associations, eg, International Association of Emergency Managers, and three representatives from private sector emergency management consultancies. There were also 11 academics whose research overlapped with mitigation, planning, and recovery from hurricanes and flooding and one representative from a nonprofit organization.

The workshop included a series of facilitated, structured conversations about common goals, complementary objectives, and conflicting interests within hazard mitigation and planning specifically related to hurricanes. In this article, those conversations are systematically analyzed using a qualitative research methodology. Conversations were moderated, and feedback was captured by a group notetaker on a poster board. In total, there were eight groups ranging in size from six to eight participants per group. There were three separate discussion sessions during the workshop. Participants spent two sessions with one group and moderator, and one session with a new group and moderator. After the workshop, each notetaker recorded summary statements for each discussion. The summary statements were transcribed, and transcriptions were used to conduct inductive content analysis. Additional rounds of coding were axial and used language and word choice commonalities to group codes into common themes. For example, the codes such as “state against federal” and “not working well with political leadership” were both grouped under the same theme, *conflict with*, during the axial coding step. Similarly, the codes of “works with real estate,” “works with builders,” and “works with other state agencies” were all categorized in the theme of

collaboration during axial coding. Comments discussed in the remainder of the article are attributed to broad professional categories, and feedback is generalized into aggregated categories. The discussion yielded clear groups with whom emergency managers collaborated and groups who have conflicting interest with the work of the emergency managers. The following sections discuss commonalities across all emergency managers, and then results are presented by public sector groupings: local, state, and federal government.

RESULTS

Commonalities

There were several overarching goals, concerns, and recommendations that emerged across the workshop discussions. Everyone agreed that their priorities were to save lives and reduce the losses from hurricanes and to lessen the impacts of storms on communities, residents, and the strain on social systems like healthcare and education. Participants recognized that they had common interest in minimizing disruptions to the daily lives of the impacted populations, and that they wanted to help communities return to normal levels of productive activities. The nuances of how those common objectives manifested depended on the participants' service constituencies and their scopes of work. Participants across the board favored:

- creating a culture of preparedness,
- increasing the use of mitigation to avoid damages to property and to save lives,
- building more cohesion between mitigation strategies and insurance offerings,
- highlighting the importance of insurance to speed recovery for individuals and communities,
- expanding risk pools for insurers and expanding risk-sharing arrangements at the local and regional levels,

- investing in education about risks, hazards, and mitigation and insurance options,
- utilizing technology for education and outreach efforts, and
- keeping residents in their homes, ideally to increase stability, community resiliency, and economic recovery.

These commonalities may provide a starting point for the various stakeholders to find other groups with shared interests with whom they can collaborate. The laudatory goals of saving lives and reducing risk could be overwhelming in isolation; however, when individuals and groups see themselves as part of a network, their efficacy and job satisfaction can improve. A community of other professionals can expand the impact and efficacy of their efforts.^{5-7,9} Connections with other stakeholders can be leveraged to enhance programs, messaging, planning, and responses.^{1,2,5,8} Several participants talked about the importance of educating the public about risks, hazards, and policy options available through government programs and insurance. Having a knowledgeable network can reinforce messaging to the public about risks and risk management.

The following three sections describe feedback from (1) the local level emergency management participants, (2) the state level emergency management participants, and (3) the federal level emergency management participants.

Local emergency managers

Local level emergency managers included representatives of municipal and county level agencies. To capture how often specific stakeholder groups were mentioned in conjunction with the work of local emergency managers, frequencies of comments are presented in Figure 1. These comments were in response to questions asked about their own prior work experience, including within their work, with whom did they collaborate, and with whom did they have conflicts.

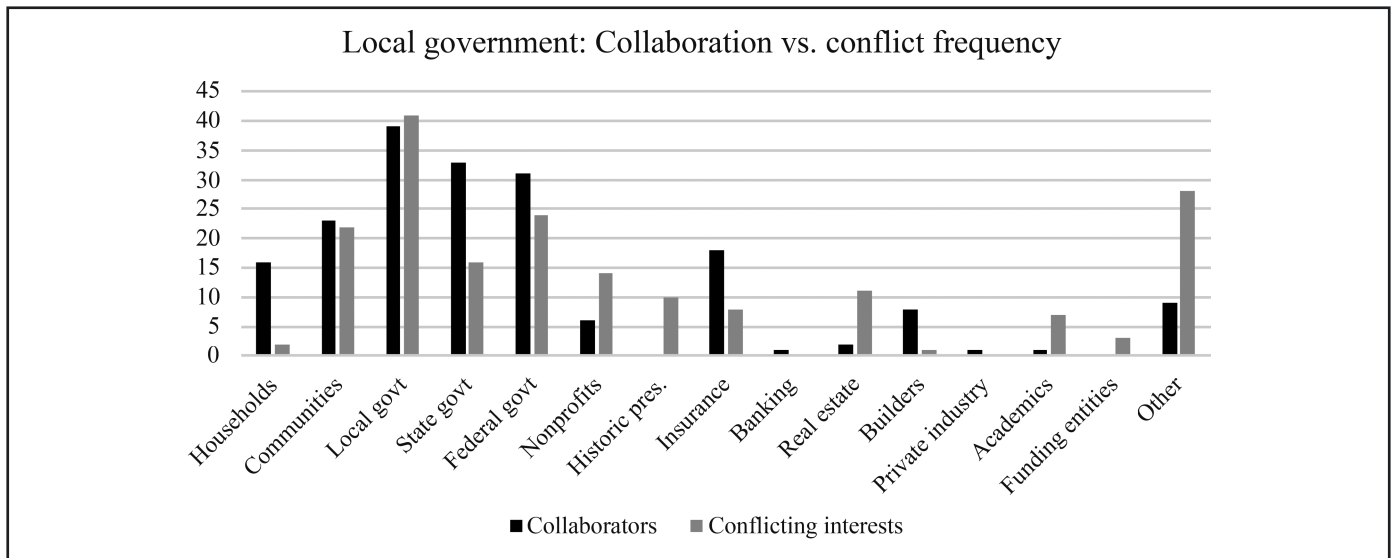


Figure 1. Frequency of collaboration and conflicting interests with local emergency managers.

The local emergency manager workshop participants commented most about their collaborative work with other public sector emergency managers. Frequencies of mentions are depicted in black in Figure 1. Noticeably, these are the groups participants both collaborated with and had conflict with the most. Local intragovernment collaborations were mentioned 39 times. The work was primarily with planning commissions, city councils, and other local organizations working on natural hazard issues. Their common interest was in community resilience, economic stability, and sustained local tax revenues. Local emergency managers mentioned collaborating with state level agencies 33 times, which included connections with emergency management agencies, education agencies, planning commissions, response agencies, and policy makers. Descriptions of their work experience included 31 mentions of collaborations with federal emergency managers including work with FEMA and other federal agencies.

Workshop participants were also asked to identify conflicting interests. Frequencies of mentions are depicted in gray in Figure 1. Local emergency managers' conflicting interests could broadly be characterized as factors that inhibited their work including bureaucratic and logistical constraints, effort redundancies, and missed coordination opportunities

with other local agencies (cited 41 times). They also described incidents of local political leadership sending mixed or ineffective messaging to the public about pre-event safety issues and post-event recovery. These types of work barriers, inefficiencies, and redundancies were also evident in their work with state and federal agencies (cited 16 and 24 times, respectively). For local level emergency managers, it is somewhat surprising that other public sector employees are both their most mentioned collaborators and the groups with whom they have the most conflicting interest. Based on the frequency of mentions, it is clear that local emergency managers interact most frequently with other public sector agencies in their mitigation work compared to the other groups.

Beyond the public sector, local emergency managers shared mutually beneficial mitigation strategies with community organizers and planners (cited 23 times). For example, buyouts of at-risk homes cleared space for planners to use for community projects; buyouts also reduced the inventory of high-risk properties, which helped local emergency managers. Local emergency managers had shared interests with the private sector, such as insurance (cited 18 times), households (cited 16 times), builders (cited eight times), real estate (cited two times), and banking (cited once). For example, when a hazard event

occurred and people had purchased insurance, the inflow of insurance claims sped recovery efforts, which benefited emergency managers, households, insurance companies, builders, and property values.

There were also examples of how the local emergency managers' work conflicted with community members' interests (cited 22 times). As an example, when emergency managers close roads to divert traffic from risky areas, residents tend to focus on the inconvenience of the closures rather than the danger avoided. Another community concern expressed by the local emergency managers was the propensity for local mitigation investments to be concentrated in high-income, well-networked areas rather than in high-risk properties in poor and vulnerable neighborhoods. This is exacerbated by a lack of affordable residential alternatives that financially traps low-income households in high-risk areas. Local emergency management participants also identified conflicting interactions with nonprofit organizations (cited 14 times), the real estate industry (cited 11 times), and historic preservation groups (cited 10 times). For example, historic preservation groups can perceive buyout programs as undermining the historic significance of an area, while emergency managers largely interpret those same programs as serving to move vulnerable populations out of harm's way.

State emergency managers

State level emergency management participants included leaders, supervisors, and planners from agencies such as the Emergency Management Agency, Housing Authority, Department of Insurance, and Department of Natural Resources. Figure 2 depicts groups whose work aligned with state emergency managers in black and groups whose objectives were conflicting in gray.

State emergency managers identified collaborating interests with other state agencies (cited 28 times); specifically, they cited cross-agency coordination in areas such as strengthening of physical and socioeconomic infrastructures, fostering economic growth, sustaining financial stability, and addressing equity concerns. They also described conflicting interests with other state government agencies (cited 11 times) and the federal government (cited 11 times) primarily related to a lack of coordination, duplication of efforts, and other inefficiencies. They wanted to see better linkages between pre-event mitigation plans and post-event response and recovery across all levels of government.

For state emergency managers, the tension between collaborating and conflicting interests is most evident when they interact with local governments and communities. They collaborated with

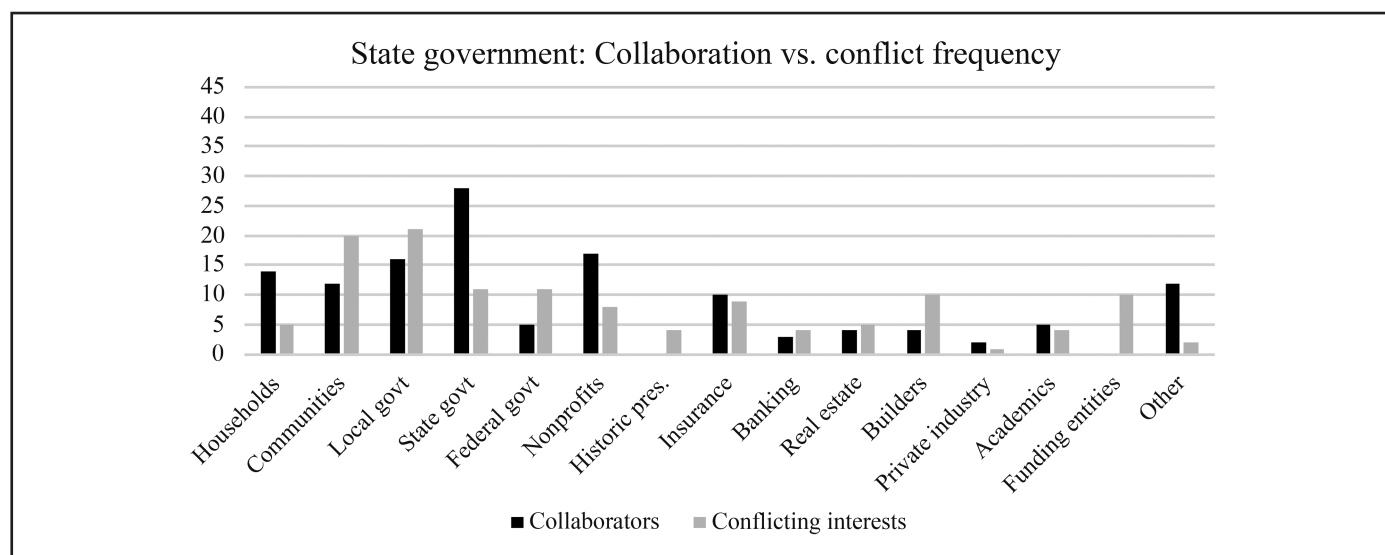


Figure 2. Frequency of collaboration and conflicting interests with state emergency managers.

local governments (cited 16 times) and communities (cited 12 times) to develop holistic plans that reflect the specific needs of the communities. For example, tourism-based economies have seasonal cycles and need to return to normal activity levels quickly. Their priorities differ from communities that focus on historic preservation. However, they also noted that communities (cited 20 times) and historic preservation (cited four times) have conflicting interests as evidenced by resistance to mitigation strategies due to esthetic preferences and sentimental and historic ties to neighborhoods, buildings, and houses. Other inhibitors of mitigation and risk reduction were local governments (cited 21 times) who advocated for sustaining and expanding their economic base. They have incentives to encourage development, even in at-risk locations, and to resist buyouts. Local builders (cited 10 times) and real estate (cited five times) also wanted to encourage development in high value, high-risk coastal areas.

State emergency managers worked with nonprofit organizations (cited 17 times) to facilitate communications with local communities and with environmental organizations to restrict residential development in risk-prone areas. When state emergency managers described their positive interactions with households (cited 14 times), they found that consumers wanted holistic, integrated mitigation alternatives that were affordable and protected them from significant financial setbacks. However, they also noted conflicts with households (cited five times). When households did not have realistic assessments of their property's risk, they underinvested in insurance.

State emergency managers collaborated with insurance professionals (cited 10 times), including the commissioner, the insurance wind pool, and individual agencies. These stakeholders had shared interest in educating and encouraging households to purchase insurance coverage. Banks were also potential collaborators (cited three times) and can be key in encouraging insurance purchases through their influence on mortgage holders. But, banks were also a source of conflict (cited four times) because they did not consider the costs of flood insurance when calculating affordability criteria when issuing mortgages.

The real estate industry (cited four times) can assist in residential relocations and sales through the accurate valuation of property risk and value-added from mitigation and retrofits. Builders (cited four times) benefit when consumers retrofit their homes and build with safer, higher cost materials; more resilient homes, in turn, help emergency managers. State level government agencies also collaborated with academic researchers (cited five times). A general concern expressed by state level emergency managers was that mitigation program funding tended to support high wealth households leaving vulnerable, low-income households behind or worse, crowded out of their homes by gentrification without low-cost, safe alternatives.

Federal emergency managers

The federal emergency managers at the workshop included administrators, planners, and researchers from agencies such as FEMA and the National Institute of Standards and Technology. They described collaborations with local and state planning agencies and elected officials to develop community-specific and region-specific mitigation plans (local cited 21 times and state cited 19 times). They noted that state and local compliance with federal guidelines aligned their actions with an aggregated, national agenda. Federal emergency managers also collaborated with other federal agencies (cited 11 times). These coordinated programs and policies at all levels improved the efficacy of the governance system. Notably, within the workshop, representatives from each level of government, federal, state, and local, lauded the advantages of working together. They all defined their objectives as keeping people safe, minimizing property loss, and facilitating community resilience. Even with the acknowledgment of benefits of collaboration though, the federal emergency managers cited having near equal conflict with local government (cited 18 times). This conflict was due to local governments' resistance to mitigation practices if they perceived it would interfere with economic development or local tax revenues (Figure 3).

Broadly, federal level participants preferred innovations in practice over deference to established

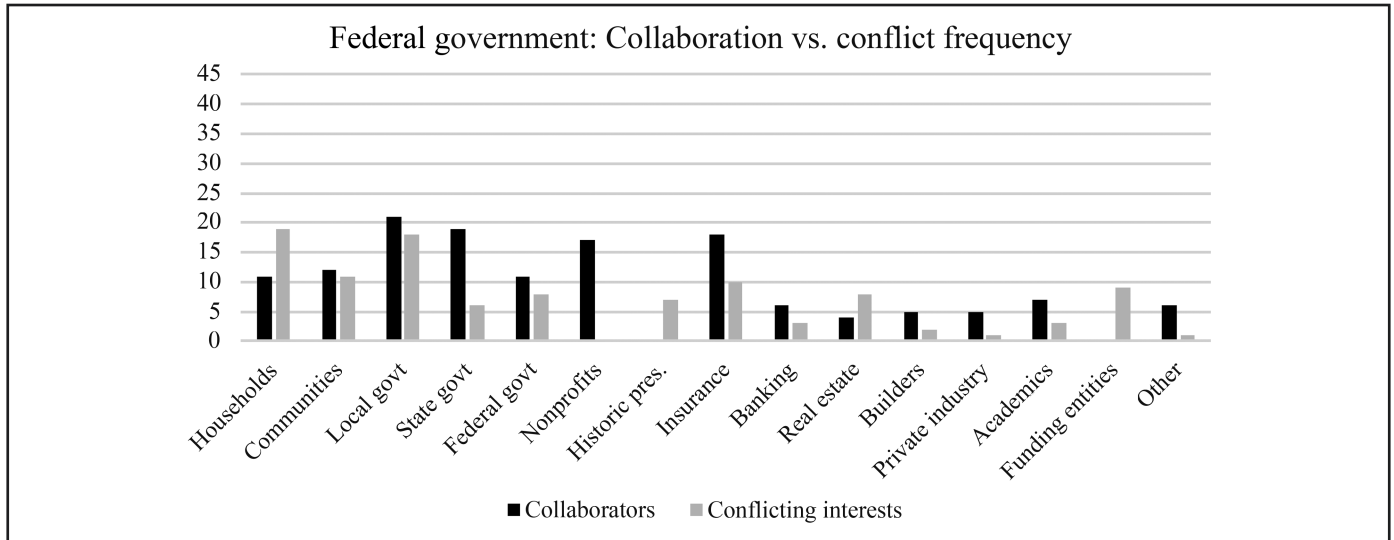


Figure 3. Frequency of collaboration and conflicting interests with federal emergency managers.

norms. They also favored collaboration and communication over redundancies in efforts across agencies. They reported conflict with other federal agencies (cited only eight times) and state agencies (cited only six times). Additionally, the federal agencies worked with households (cited 11 times) to offer holistic risk mitigation packages that could lower insurance costs. In addition, community stakeholders (cited 12 times) provided local perspectives to ensure that mitigation strategies aligned with the interests and values of their constituencies. Participants noted that when they worked with cultural brokers, they had improved community engagement with mitigation. As an example of how community values impacted planning, they described how tourism-dependent areas want to retain visitor appeal while managing their risk to minimize property loss and down-time. At times, communities (cited 11 times) resisted mitigation changes when they interfered with historic preservation, changed the esthetics of the community, drew attention to at-risk areas, or impinged development efforts.

Federal emergency managers also had shared interests with environmental organizations and disaster recovery nonprofit organizations (cited 17 times). Environmental groups and emergency managers both wanted to restrict development in sensitive or risky areas. In contrast, bankers (cited three times), real

estate agents (cited one time), and builders (cited two times) had incentives for overdevelopment and preferences for high-income occupancy. Disaster recovery groups, emergency managers, and insurers (cited 18 times) were interested in educational outreach to communities about assessing risk, encouraging mitigation strategies, and understanding insurance options.

Federal emergency managers also identified the banking sector (cited six times) as partners in incentivizing homeowners to retrofit their property and to purchase insurance. The real estate sector (cited four times) and builders (cited five times) could inform home buyers about the value and benefit of retrofits. Emergency response efforts would be improved if households invested in such retrofits or if they shifted occupancy away from high-risk areas. They saw collaborators in the building and real estate sectors as key to educating homeowners about risk and mitigation options. Federal emergency managers also worked with academic researchers (cited seven times) whose work could inform their decisions and could assess the efficacy of different programs.

Workshop participants from federal agencies identified ways that aid programs have been ineffectively utilized. They offered examples of how homeowners shopped for different flood insurance programs to find the highest expected payouts. Other homeowners

were intentionally uninsured or underinsured and relied on federal relief programs as bailouts. Those same relief programs were sometimes dispersed to “repeat offenders,” people whose properties had recurring claims. These types of conflicts with households were mentioned 19 times in the workshop discussions. They also expressed concern that insurers (cited 10 times) might not offer sufficient price discounts for retrofitting homes, and that they could delay or withhold policy payouts in the event of a storm. These types of decisions could have short-term benefits to the company but would undermine the recovery of households and communities.

DISCUSSION AND CONCLUSIONS

As is often the case with complicated policy issues, delivering results often requires collaborative governance.¹⁶ As noted above, when it comes to mitigation, the participants saw a great deal of shared understanding of the problems, which was demonstrated by their consistent articulation of common objectives. Beginning with a focus on these already aligned notions may enable stakeholders to explore policies, actions, and strategies that improve mitigation significantly. Such work could allow for increased collaboration among different stakeholders, a reduction of fragmentation, and improved community resilience.¹⁴ Participants noted that collaboration, engagement, and education are key for developing and implementing holistic hazard mitigation for households and for communities. They also noted that coordination across agencies and at all levels of government could improve the efficiency and efficacy of mitigation, response, and recovery.

In terms of collaboration and conflict, our results showed complexity in the interactions emergency managers had with other groups, evidenced by their naming the same entities as both sources of both collaboration and conflict. More work could be done to clarify the nuances of these relationships in mitigation work. Given the simultaneous shared and conflicting objectives, future research could focus on specific tactics to leverage commonalities and resolve conflicts.

Finally, it is important to consider how more complete engagement with a broader range of stakeholder

groups could improve our understanding of key complementary and conflicting interactions. For example, future work could focus on recommendations for policy and action modifications to better serve at-risk households, perhaps including community representatives from these groups. Another group to consider for future workshops is historic preservationists. At the federal, state, and local levels, emergency managers consistently viewed historic preservation as an obstruction to their work. Perhaps including them in the conversation about strategies and implementation could open a dialog of mutual benefit. Complicated problems require real engagement with the related stakeholders. This paper identifies groups with whom emergency managers might consider further engagement to improve mitigation programs and policies in their communities.

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