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Innovations in buyouts: lessons from lived and learned experience

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Across the United States, tens of thousands of people have sold their homes to the government to address risk from flooding or another natural hazard. After the sale, the structure is typically demolished and the land preserved as open space. This process, referred to as a home buyout, is the nation's primary mechanism for relocation assistance in the aftermath of a disaster or in the face of recurring hazards, and the number of homes that have been purchased and demolished in the past is dwarfed by the number that is anticipated in the future. Community members, researchers, practitioners, and advocates have long observed challenges with government-funded home buyout programs in the United States. Often, home buyouts do not meet communities' needs and can even create new problems. At the same time, demand for relocation support is growing in many areas, while current funding, programming, and expertise is insufficient to address the scale of the challenge. We need better buyouts that work for residents and local governments alike. To build a better buyout, we need to draw from the lived and learned experiences of both community members and practitioners. Between December 2021 and October 2022, the Natural Resources Defense Council (NRDC), in partnership with the Federal Emergency Management Agency (FEMA), CH Consulting, The Nature Conservancy (TNC), and the Climigration Network, convened conversations with buyout practitioners and buyout participants/residents of communities affected by buyouts. The participants spanned 14 states, from coastal to inland locations across the contiguous United States. This policy and practice review summarizes the recommendations generated through these workshop series, as well as the methods used to design and facilitate the sessions and subsequent work done to implement the recommendations and develop a community of practice for better buyouts.

KEYWORDS

managed retreat, home buyouts, climate adaptation, flood mitigation, community resilience

1 Introduction

Millions will be uprooted due to the effects of climate change in the coming decades, with as many as 13 million displaced due to sea level rise alone in the United States (Hauer et al., 2016). However, in many cases, only the most privileged will be able to move without financial and other assistance. Home buyouts are the country's primary tool for supported relocation out of harm's way, but community members, researchers, practitioners, and advocates have long observed barriers and inequities in these programs that make them challenging for both governments and communities (e.g., Mach et al., 2019; Siders, 2019). Federal assistance is often inaccessible to communities and programs themselves are flawed, often reproducing or exacerbating the effects of structural racism, colonialism, forced relocation, and inequitable

investment in disaster response and hazard mitigation (Reeves, 2011; Drakes et al., 2020; Emrich et al., 2022; Waters et al., 2024).

While federal, state, and local agencies have conducted home buyouts across the United States for decades, iterative policy improvement and innovation has historically been limited (Greer and Binder, 2017). The Innovations in Buyouts workshop series was convened to help close that innovation gap by leveraging the perspectives of individuals with lived experience and professional experience with home buyouts (Climigration Network, 2024). While it may not be possible to create a home buyout program that leaves everyone involved better off than before—the fact that relocation may be necessary in a given situation points to historic and ongoing policy failures that have placed people in harm's way—buyouts will remain an important tool for risk reduction in the face of a changing climate. The workshop discussions summarized below and the accompanying policy recommendations aim to address issues with buyouts as they are conducted today, as well as to provide a foundation for more holistic approaches to climate-related mobility.

1.1 The challenges of home buyouts

In the context of hazard mitigation, a buyout refers to a particular type of property acquisition: one in which a government entity purchases private property, demolishes the structures, and preserves the land for public benefit (Horn, 2024). This can be an attractive option from a fiscal or emergency management perspective, because the goal is to permanently remove risk to life and property at the site. As a result, buyouts provide a method to stop the repeated rebuilding cycle that underpins the National Flood Insurance Program (NFIP) and other disaster-related programs (Moore, 2017).

In the United States, buyouts are typically funded with federal grants and administered by state or local agencies; some funding sources, such as Federal Emergency Management Agency (FEMA) Hazard Mitigation Assistance grants, require that acquired land be maintained as open space to prevent future damage at that location and, ideally, to benefit the surrounding community via restored natural functions, recreation opportunities, etc. While larger, community-scale relocations have taken place using a buyout model (e.g., Tobin, 1992; Knobloch, 2005), most FEMA-funded buyout projects cover the acquisition of five or fewer properties at a time (Weber and Moore, 2019).

Ideally, buyout plans would be community-driven and developed before (rather than in response to) a disaster; buyout offers would be sufficient for participants to acquire comparable housing in a safer location; and the entity holding the land would maintain it in a way that improves community resilience. In practice, this is very challenging to achieve. Many issues with buyout program implementation are documented in the literature, including perceived or real coercion to participate (de Vries and Fraser, 2012; Binder and Greer, 2016; de Vries, 2017); lack of transparency (Binder and Greer, 2016; Siders, 2019); the long timeframes associated with federal grant programs and a mismatch in timing between recovery and hazard mitigation needs (Weber and Moore, 2019; Binder et al., 2020); no assurance that participants will have the ability or desire to relocate to places with lower risk (Loughran and Elliott, 2019; McGhee et al., 2020; Shi et al., 2022); and post-buyout land use that often provides little community benefit (Zavar

and Hagelman, 2016). Overall, there is conflicting evidence for the long-term effects of buyouts in terms of community resilience, wealth, and wellbeing (Binder et al., 2019), and even the notion of “success” in a buyout context is challenging to define (Manda et al., 2023).

As buyouts are located at the intersection of housing and disasters, they interact with the underlying inequities in both systems, rooted in racial and socioeconomic dispossession and segregation that has concentrated risk in communities of color and low-wealth communities. While whiter, wealthier jurisdictions are more likely to receive buyout grants and have the capacity to execute them, researchers have found that buyouts are more likely to take place in less wealthy neighborhoods and communities of color within those jurisdictions (Tate et al., 2016; Loughran et al., 2019; Mach et al., 2019; Elliott et al., 2020). Buying out devalued homes in redlined or disinvested neighborhoods can be attractive from a cost–benefit perspective. This, however, places low-income communities and, disproportionately, communities of color in a position where they are more likely to face the emotionally and logistically challenging buyout process, while being less likely to have control over the process's conditions, requirements, and scope. Indeed, long-term outcomes from North Carolina locations where buyouts took place after Hurricanes Fran and Floyd suggest that buyouts contribute to market conditions that further segregate residential areas (Durfee, 2018).

Despite this, the realities of climate change mean that more households will want or need to move in the coming decades. Already, particularly after large flood disasters, local buyout programs may have more interest than available funding. For example, since Hurricane Harvey in 2017, Texas' Harris County Flood Control District has received a total of over 4,000 buyout applications—two and a half times more than the District has approved as of late 2024 (Harris County Flood Control District, 2024). Growing need and demand for relocation support will likely require building upon the flawed tool of buyouts not just to improve the outcomes of individual buyout projects but perhaps also to form the foundation of larger-scale managed retreat.

1.2 Centering community members as experts

The underlying framework for the Innovations in Buyouts workshop series was inspired by the founding principles of the Climigration Network, an organization bringing together people with lived and learned expertise to advance transformative, community-led approaches to climate displacement and relocation in the United States. The Network's experience is that the most innovative, important, and practical questions and approaches emerge when community members are centered as experts. Community and Indigenous leaders:

- Provide essential services in disasters and are passionate about helping residents make informed decisions about their future.
- Have an unparalleled understanding of the history, culture, and lived experiences within their communities, enabling them to advocate for policies and actions that meet the needs of residents.
- Have first-hand knowledge and experience of how climate change risks manifest at the community level.

- Have connections and established trust with residents who may otherwise be hard to reach.

The Network also asserts that missing representation of community voices in programs leads to gaps in goals and services. The Network builds teams of people with subject matter expertise and people from communities facing displacement or relocation to address challenges together.

Lead with Listening: A Guidebook for Community Conversations on Climate Migration (Climigration Network, 2021)—a resource developed by Network members, a creative team led by Scott Shigeoka and Mychal Estrada, and 40 co-creators with lived experience of climate risk and displacement—offers the following:

Some communities may be just starting to experience the impacts of climate change, and thinking about moving may be new. However, we heard that for others, climate change and climate migration is not a “future” problem—it is happening to them now. More than 40,000 households have received home buyouts from the Federal Emergency Management Agency since 1989, primarily in the form of post-disaster assistance. Communities such as Isle de Jean Charles in Louisiana, and Newtok in Alaska, have already faced the difficult decision to relocate and have struggled through the problems of inadequate relocation assistance.

Community members are the experts on their lived experience—they are likely to have already witnessed or experienced the impacts forecasted by climate models and policy briefs. They may have been grappling with the emotional consequences of this challenge for a long time. It is imperative to first listen—and lead with questions, not answers—to learn from their knowledge and hear their needs before making recommendations. Overlooking their experience will likely lead to them feeling dismissed and ignored and will miss opportunities to leverage their valuable partnership.

It’s important to encourage people to listen to and share lived experiences. Creating space for this vulnerability, when done in a trauma-informed way, repositions people who have lived experience as experts in the conversation.

Conversations about buyouts and relocation need to extend far beyond discussions of risk and real estate to include culture, relationships, and identity. Culture and social cohesion is essential to many communities’ well-being, resilience and adaptive capacity, and cultural continuity, especially for Indigenous communities, communities of color, and other communities that have struggled through injustices to claim a place as their own (Climigration Network, 2021; Urban Ocean Lab and Office of the New York City Comptroller, 2022; Tamasiga et al., 2024). Buyout programs may present a threat to the connections to people and place that many communities rely on to sustain themselves.

Practitioners should prepare to hold space for conversations within the community that acknowledge that a buyout may not just represent loss of a home, but loss and grief of social networks, livelihoods, generational connections to land, and more (e.g., Jerolleman et al., 2024). And conversations are just the beginning—practitioners need to deeply and genuinely engage with community members in planning and designing programs that meet their needs.

2 Process

This paper captures the ideas generated from two sets (“tracks”) of workshops:

- 1 Track 1: Six sessions held over 7 months with 30 buyout practitioners (defined as individuals with experience managing or administering buyout projects as part of their employment, including current and former federal, state, and local employees and individuals from academic and private organizations). This track was convened by NRDC in coordination with staff from FEMA. The process was designed and facilitated by CH Consulting, LLC, who also led the creation of a white paper/workshop synthesis document (*Innovations in Buyouts Workshop Team, 2022*).
- 2 Track 2: Three sessions held over 4 months with buyout recipients/community members (defined as individuals with personal experience of a buyout and/or who have served in a community organizing capacity in an area offered buyouts). This track was hosted jointly by NRDC, CH Consulting, TNC, and the Climigration Network and participants were offered compensation for their participation. A separate white paper/workshop synthesis summarizes the outputs of these conversations (*Innovations in Buyouts Workshop Team, 2023*).

Recognizing the complex relationship between community members and program staff, we deliberately hosted separate spaces for each track to foster a safe atmosphere for sharing information. The Track 1 conversations were held first, so that Track 2 participants could review and critique their recommendations. Each group was made aware of the others’ activities and the ultimate goal of the sessions, namely, to:

- Articulate a set of concrete ideas for innovative actions to make buyouts faster, easier, and fairer across the country.
- Identify areas of alignment between the recommendations of buyout practitioners and recipients.

The geographic distribution of workshop participants is shown in [Figure 1](#). Practitioners and recipients represented a diverse array of program types and geographies, including differences in jurisdiction size, community demographics, program scale/number of properties acquired, hazards intended to be addressed, funding source(s), and program voluntariness.

The Track 1 practitioners spent the first session reviewing existing critiques of buyout programs and the federal agencies and funding sources that support them, as documented in a variety of reports, scholarly articles, conference presentations, and other publications. In subsequent sessions, they shared the innovations they had tried in their own programs and discussed the results. The Track 2 conversations began with story sharing and efforts to build relationships and trust. Workshops with community members were carefully designed to acknowledge trauma and participants were able to pause or leave the discussions at any time, for any reason. Live English/Spanish interpretation and translated materials were provided so everyone could participate in their preferred language, and participants were offered compensation for their time and expertise.



This policy and practice review represents a synthesis of the observations, ideas, and recommendations provided by workshop participants. Some are new ideas: approaches that have only been imagined or are in the process of being developed. Most, however, are innovative approaches implemented or attempted in one place that could be adapted in other places. This paper is not intended to be a consensus document; individual workshop participants should not be considered to endorse any specific suggestion.

3 Recommendations from lived and learned experience

The following framework identifies five key shifts that buyout programs should strive to make and that partners and stakeholders, including the federal government, philanthropic organizations, and private sector, should seek to enable and reinforce. The five shifts are:

- 1 From building for the past to planning for the future.
- 2 From reactive projects to proactive programs.
- 3 From valuing property to valuing people.
- 4 From insufficient to innovative funding.
- 5 From silos to partnerships.

Workshop participants emphasized that institutional buyout program support should exist across levels of government, and particularly at the state or sub-state scale, to enable these shifts. Applying lessons and avoiding reinvention of the wheel requires a certain level of sustainable, ongoing institutional capacity. This capacity must exist at an appropriate scale, whether that is at the municipality or county level (e.g., for larger or higher-capacity jurisdictions) or the state or watershed level (e.g., for areas with smaller or lower-capacity communities).

In the following section, each shift is described using examples from workshop discussions, followed by opportunities for policy change as identified by workshop participants. Because most buyout funding has federal sources, the policy recommendations focus on

federal actions (for Congress and/or administrative agencies). However, state, local, or regional entities may also be able to implement versions of these actions. A compiled table of policy changes for each shift appears in Section 4.

3.1 Shift 1: from building for the past to planning for the future

Buyouts should be situated within a context of forward-looking planning. In short: buyouts should never be a surprise. Incorporating the possibility of buyouts into formal planning allows for a connection to the community's values and priorities, and it enables the other shifts to occur.

3.1.1 Description and examples

Formal planning processes, such as for hazard mitigation or economic development plans, provide an opportunity to consider buyouts in the larger context of a community. Incorporating the potential for buyouts into formal plans lays the groundwork for securing resources and building necessary relationships inside and outside government. It positions leaders both to act proactively in non-emergency situations and to be nimbler in the post-disaster environment. It also situates buyouts as one part of a holistic approach to meeting the community's needs in the face of flooding or other risk.

Practitioners and buyout recipients agreed that good planning requires real partnership, not just "outreach," early and often with the groups and individuals who have a direct stake in the outcomes. Beyond formal public participation requirements, thoughtful community partnership at this step provides a powerful opportunity to introduce buyouts as a tool to the broader public, gauge potential interest from residents, and work with interested residents to design the program. Buyout recipients shared details about how their community's lack of participation in planning affected them and their perception of subsequent buyout programs. One reported that she and her neighbors received notices about mandatory buyouts in their neighborhood in the middle of the pandemic, when "the stress was

double.” The neighbors soon came to learn that their low-income, primarily Spanish-speaking neighborhood was being bought out, while an adjacent golf course was being preserved: “They were destroying our homes to benefit another community with better resources.” While the local government’s intent was to offer residents a way out of a dangerous situation, the lack of transparent planning and coordination with the residents generated suspicion, defensiveness, and fear. The residents wanted more respect through a process that reinforced their voices, rights, and decision-making power. As one participant said, “The community that is going to move [should be] the one that matters most in the program.”

At the same time, governments should not rely on the free labor of community members to advise them throughout the planning process. One buyout recipient who saw the need for a solution to flooding in her community reported becoming the local expert through her own efforts, then spending countless hours educating local officials so they could advocate for the community with state and federal agencies. Ideally, such community experts should receive compensation, either directly or via community-based organizations or other non-government partners; practitioners should also identify additional opportunities for training and knowledge building, for example through professional associations or informal knowledge-sharing with other practitioners.

Planning also offers a chance to identify capacity gaps and opportunities for addressing them. Practitioners emphasized the need for capacity building support from state and federal agencies. In the words of one participant, “Right now, buyouts have been done *ad hoc*. Someone gets the job, [for example] the floodplain manager gets the job, and then they assemble a team and all those other city staffers that are pulled into the project, they have full-time jobs too, and this is not an easy task [...] But, if there’s federal support, that’s great. Having a back bench to go to or a set of experts or an entity in the county or the state who have done this a lot [...] having a panel of experts at the state level would be really important for us to have.”

Finally, realistic, forward-looking planning should also help avoid the need for future buyouts. The primary recommendation of workshop participants who had been through a buyout was to prevent the need for (additional) buyouts by building homes in safe locations. Several participants expressed sentiments like “my house should never have been built in this area in the first place” or “someone should have told us about the risk.” As one participant noted, “[You] would think that this type of development would not keep occurring, but it does.” Buyout recipients also wanted evidence that their local officials were taking risk seriously and not creating future problems; to continue placing people in harm’s way would mean nothing had been learned from the buyout recipients’ struggles.

3.1.2 Opportunities for policy change

The Disaster Mitigation Act of 2000 requires approved hazard mitigation plans as a prerequisite for receiving certain FEMA grants. However, local hazard mitigation plans are often very general and not well coordinated with land-use planning, zoning, or community visioning for the use of open space (Lyles et al., 2014). As described by practitioner participants, these plans tend to focus on identifying locations at risk and typically do not take the next step to identify projects, funding needs, and residents’ priorities to reduce risk. Communities should take advantage of state and local hazard mitigation planning cycles to build political and financial support

where residents have expressed interest in buyouts. Loss avoidance studies could also be persuasive to local decision makers.

Planning and land use are largely local responsibilities, but state and federal agencies can provide funding and other support. Specific recommendations from workshop participants included:

- Making federal funding for hazard mitigation, economic development, and similar efforts contingent upon adherence to strong floodplain management standards and avoidance of risky siting and construction, e.g., via implementation of the Federal Flood Risk Management Standard.
- Supporting (and enforcing) project development as an important component of hazard mitigation planning.
- Providing resources for state and local capacity building with accessible, up-front funding and technical assistance. Opportunities for increasing capacity building support include programs such as FEMA’s Emergency Management Performance Grants and the “Building Resilient Infrastructure and Communities (BRIC) Direct Technical Assistance” (i.e., defining the BRIC acronym and capitalizing Direct Technical Assistance) program.
- Improving intra- and interagency coordination, e.g., between programs and agencies with hazard mitigation and disaster recovery roles, as well as communication between levels of government.
- Maintaining centralized, user-friendly repositories for locally relevant data to be used in planning, and creating additional data products to fill existing gaps (e.g., advisory layers for FEMA flood risk maps that depict current and projected flood elevations along with the lateral extent of high-risk areas).

3.2 Shift 2: from reactive projects to proactive programs

From the perspective of a government agency, buying a household out of their home is a complicated and sensitive process. It requires expertise and the time to develop that expertise. From the resident’s perspective, it’s a life-altering decision and the implications are best considered during a time of relative calm and security—not in the wake of a devastating crisis. Completing as much as possible before a flood or other disaster strikes (including building trust and communication channels, as well as administrative work) allows for quicker action when homeowners are ready to move.

3.2.1 Description and examples

In the immediate aftermath of a disaster, people may be ready to move, and a quick buyout offer might be welcome. Unfortunately, even solicitations of interest may take weeks or months and, by the time funding actually arrives, potential participants may have invested in costly repairs, sold the property on the private market, or even foreclosed or walked away. Homeowners cannot be expected to pass up opportunities to sell if a buyout is not swift or guaranteed. They also cannot be expected to live in damaged homes (or pay for alternative housing) for long, nor is the cost benefit calculation for making “interim” repairs easy to do in the face of long-term uncertainty.

The largest sources of federal funding for buyouts, such as FEMA Hazard Mitigation Grant Program (HMGP) and Department of Housing and Urban Development (HUD) Community Development

Block Grant-Disaster Recovery (CDBG-DR) funds, are only made available after a declared disaster, often months or even years after the event itself. However, there are ways that programs can work around this timing challenge by preparing as much as possible in advance. In communities that experience regular storms, and where residents may already be interested in a future buyout, there is no need to wait for the disaster to occur in order to get ready for the funding.

Practitioners can complete basic documentation on the homes and sellers, conduct initial reviews of eligibility and costs and benefits, and in some cases begin or even complete environmental and historic preservation or similar reviews. It takes time to assess the applicability of pre-calculated benefits or to identify title issues or remediation needs, for example. Shifting these time-consuming activities to the “pre-disaster” timeframe could enable many more people to be in a position to accept a buyout when it is formally offered.

Having more time also allows program staff to manage their own workloads and build expertise. As one practitioner said, “We as a city need to have more capacity so that, if there is an event that occurs and we have a homeowner pondering or agreeing to a buyout [we can act]. There’s a series of efforts that are needed [...] So many different things. How long is the process going to take? What does the homeowner have to do? What kind of other responsibilities are they accepting when they go through the buyout process? Where can they move to that is reasonably affordable given the buyout amount? What does that look like for their kids in their schools and their community and their churches and all those things that go along with that?”

Doing the administrative work gradually has capacity- and trust-building benefits, too. When buyout program managers have time to build relationships with potential buyout recipients, and explain options without the pressure and chaos of a post-disaster environment, there may be more trust and buy-in for the buyouts. Workshop participants that had received a buyout reported wildly varying experiences finding out about the program in their area. Some knew about it for years because their local government had been sending out information on a regular basis. Some learned about it from officials as part of a post-disaster emergency response effort. Some only learned about the buyout opportunity because a friend mentioned it, or because they happened to read about it in the news or on social media. All participants felt that people who are eligible or might become eligible for a buyout should be regularly communicated with, ideally long before a disaster happens.

Importantly, this information should be provided equitably across neighborhoods and in all relevant local languages. According to one buyout recipient, “This part is where we had a lot of problems. Because we are Hispanic and Latino [...] Trying to gather information, especially the way they would treat us, lack of communication. There was no one that spoke our language, Spanish, so there was a lot of conflicts, and it was very frustrating. We did not speak English, so I could not understand anything about that mail that was coming in.” Programs should not only ensure compliance with applicable language access requirements (e.g., under Title VI of the Civil Rights Act of 1964) but proactively identify approaches to ensure all residents can fully participate.

3.2.2 Policy change to reduce barriers

FEMA’s own guidance documents have encouraged prospective grantees to “frontload” work on buyouts (Federal Emergency Management Agency, 2015) but that is challenging to do in practice.

Shifting administrative work to a pre-disaster (and, often, pre-funding) timeframe requires capacity, resources, and certainty. Federal agencies can help with this in several ways, and specific recommendations from workshop participants include:

- Providing up-front (pre-disaster) funding for preparatory work and making such work explicitly eligible under opportunities such as Advance Assistance for FEMA’s Hazard Mitigation Assistance grants.
- Authorizing a certain amount of funding to flow to a jurisdiction upon completion of their hazard mitigation plan to take immediate action on the preparatory activities described therein.
- Allowing buyout-related work begun before a federal grant is awarded to be eligible for reimbursement¹.
- Simplifying funding application processes across agencies, such as by implementing a federal government-wide uniform application process for hazard mitigation and related grants.
- Streamlining federally required benefit–cost analysis (BCA) processes, for example via:
 - o Allowing “durable” area-wide BCA pre-approval, where average BCA values would cover a specified area over a particular timeframe.
 - o Allowing for proxy evaluations, like severe repetitive loss status or the use of flood depth–damage curves, in BCA calculations.
 - o Expand pre-calculated benefits to cover more activities, costs, and scenarios.

3.3 Shift 3: from valuing property to valuing people

Buyouts have well-documented social justice implications, especially (but not solely) with respect to racial equity (Elliott et al., 2020). From the perspective of government hazard mitigation or disaster recovery funding programs, grants for buyouts are a public benefit and awarding funds to a so-called disadvantaged community is a move toward equity. However, a buyout offer is unlikely to be experienced as a benefit by someone who does not want to move and sees buyouts as a tool for forced displacement. Siders (2019) conveys this tension as follows:

The USA has a long history of social inequality that has manifested in low-income and minority populations living in vulnerable areas. When buyouts disrupt communities, they may exacerbate this inequality. But not acting—leaving low-income and minority populations in areas known to be hazardous or using federal funding to rebuild in those areas—also perpetuates inequality.

¹ In January 2023, after the conclusion of the workshops, Congress passed the Hazard Eligibility and Local Projects Act, H.R.1917. This legislation allows certain eligible acquisition and demolition activities to be eligible for Hazard Mitigation Assistance funding even if they began before a grant award; historically, this was not allowed.

Accordingly, buyout programs should be tailored to—and designed in partnership with—the needs and goals of the actual people facing the hazards, with actions rooted in the human context of the community and members' ties to place and nature, rather than just the community's physical or financial risk.

3.3.1 Description and examples

Flood risk is disproportionately borne by low-wealth communities, and climate change is expected to further concentrate flood risk in Black communities and other communities of color (Wing et al., 2022). This is not a coincidence. Past and current laws and policies, along with disinvestment in housing and infrastructure, have forced households with historically low levels of political power into more vulnerable areas. When conditions are dire enough for buyouts to be proposed, they are likely just one more burden on top of the cumulative effects of long-term structural inequities.

Flood-prone communities are not a monolith and residents all have different risk tolerances, preferences, and circumstances. Even within the same community, some may want to leave and some may want to stay. However, buyout practitioners and recipients describe inequities in both situations, where communities or households that *want* buyouts have trouble accessing the resources to do so, and those that *do not want* buyouts feel that they have no other options. Buyout recipients reported a strong desire for programs to both feel fair and result in fair outcomes, but they agreed that exactly what this looks like will differ from place to place.

To achieve this, buyout program staff should be educated on how current and past laws, policies, land use decisions, previous buyout programs, and other local factors have contributed to distributions of risk, vulnerability, and investment. Staff should understand how the prioritization of lower-wealth communities and/or communities of color for buyouts can be experienced by residents as yet another target on their backs—a sacrifice zone populated by those who have already sacrificed the most. If residents perceive that the buyout program staff are ignorant or unfeeling about these forces beyond the residents' control, they may justifiably lack trust in the program, making it harder for those who might benefit from a buyout to even consider or explore it.

Even more important is designing the policies and procedures of the programs with equity as a goal and a measure of success. Understandably, compensation was a key focus of workshop participants, who emphasized that a household should be made better off by a buyout, regardless of their particular circumstances. Specific aspects of the discussion focused on the following:

- Home valuation: Buyout funding sources typically limit the actual purchase price of the home to fair market value (FMV), but reasonable people can disagree on what is fair, or which “market” is relevant. Even when the FMV is not disputed, the base price of the home is often not enough to make residents whole because of the additional expenses associated with moving and becoming reestablished in a new location, and the fact that comparable housing in a low-risk neighborhood is often extremely difficult to find at all, let alone for the same price as a (possibly severely devalued) home in a vulnerable location. Workshop participants recommended finding ways to supplement the purchase price of the home to make it possible for households to participate and move forward with their lives.
- Relocation incentives: Often those in the highest risk zones are the lowest wealth, or otherwise least able to relocate without additional resources. As it is in the best interest of the public to create open space in the highest risk areas, programs should consider “relocation incentives” or other supplemental funding that can be offered to people who volunteer for the buyouts in those areas. For example, some programs offer incentives to participants who relocate within the municipality or region as part of a strategy to disrupt the community as little as possible while still helping people move out of harm's way. However, this must be done carefully to avoid coercion to participate.
- Tenant support: Buyouts can be particularly hard on people who rent their homes, as funding programs are designed for property owners rather than tenants. When the owner takes a buyout, it essentially forces an eviction on the tenants. A program with equity as its goal will be able to justify compensation and other assistance to renters. For example, local buyout programs could provide assistance with finding and securing housing through housing counselors or similar services.

Beyond the property transaction itself, workshop participants stressed the need for personalized communication and guidance. The key difference between buyout recipients who reported an overall positive experience and those who did not was the guidance and support they received from at least one person they trusted. As one buyout recipient said, “[It is] so difficult to go through because you have already been through so much... [you need] a direct line to someone you can discuss things with on a regular basis.” This should be the one and only time a household goes through this, so buyout recipients should have someone knowledgeable guiding them along the way.

Specific examples include:

- Competent, compassionate case management: The face of the buyout program is the case manager. Case managers should have the knowledge, cultural competence, time, and fortitude to patiently, compassionately, and skillfully walk with residents through their buyout process. Case managers can make sure that every household, regardless of their language, education, wealth, race, or any other potentially limiting factor, is able to access the information they need and the benefits the program offers that would be most helpful to them.
- Locally rooted staff: Where possible, buyout programs should employ members of the community, particularly in any aspects of the work that require outreach (e.g., case management and communications). This can build trust in the program, while also generating meaningful, visible jobs. One participant said that, after her community was decimated by Superstorm Sandy, dozens of members of the community sprang into action to help, even if they were affected themselves. She said “teachers, nurses, construction guys, healthcare workers, bankers, etc.” were all willing to give their time and expertise to the challenges at hand. She lamented, however, that there wasn't a system in place to harness their energy and expertise in an organized fashion because, over time, it wasn't sustainable for everything to be done by volunteers. Buyout programs would be wise to prepare to fill positions with local people, because, as one participant observed, “they will stay if [...] they are empowered to help.”

- Culturally competent communication: Programs should be transparent while protecting confidential information. Programs in communities that have historic reasons to be skeptical of government programs, particularly government programs that involve relocation, can build trust by making sure that the information everyone needs is as clear, transparent, and accessible as possible. At the same time, through the case managers, individual households need to be able to ask questions that are sensitive to them in a private setting.
- Wrap-around services: Moving is stressful for most people, regardless of circumstance. In a buyout, the stresses are magnified by the bewildering process, often in a post-disaster context. Buyout recipients agreed across the board that buyout programs should offer services that help mitigate those stresses. Some examples include:
 - o Emergency and transitional housing support services, such as providing places for people to safely shelter during emergencies and short-term housing for people who cannot stay in their homes until a buyout is finalized.
 - o Financial services, such as mortgage negotiations and forgiveness, down payment assistance, low interest loans, financial counseling or planning, and moving assistance, including cash support or contracts.
 - o Social services, such as school enrollment support for households with children, estate planning resources and other supports for elder residents, disability assistance, and employment and job training or placement assistance.
 - o Mental health services for trauma and stress and physical health services for long-term impacts from flood or fire exposure. Recipients noted that one of their chief needs throughout and after the buyout was mental health support.
 - o Legal services to support households as they review the legal implications of participating in a buyout program, immigration services for households with undocumented family members, and real estate legal services such as titling assistance.
- Allowing funding programs to compensate participants based on local housing needs rather than the market value of the homes they are acquiring. For example, FEMA Hazard Mitigation Assistance funding allows for a “shortfall” cost of up to \$31,000 if housing in a safer location is more expensive than the buyout payment (Federal Emergency Management Agency, 2024). However, this amount is often insufficient and should be updated to reflect the reality of current housing markets.
- Making homeowners participating in voluntary buyouts eligible for URA relocation benefits in cases where fair market value will not meet rehousing needs.
- Simplifying benefit–cost analysis requirements and making reduced/zero cost shares for underserved communities more widely available.
- Allowing funding programs to fund and staff “wrap-around services” for participants and explore innovative approaches to supporting and incentivizing equitable practices among local programs.
- Supporting the development of methods for evaluating the equity of buyout programs, especially for more complex cases like tenant-occupied housing and mobile/manufactured homes.

3.4 Shift 4: from insufficient to innovative funding

FEMA and HUD grant programs are the primary sources of buyout funding in the country, but they are not the only options (Peterson et al., 2020). There are other federal agencies that fund acquisitions for the purpose of meeting their missions, such as land management, habitat restoration, or building and maintaining key public infrastructure (Horn, 2024). Often, federal funding must be supplemented by a non-federal match, typically made up of state or local dollars but sometimes borne by participants in the form of decreased offer amounts. Blending government funding sources can lead to increased complexity; in some cases, buyout programs avoid federal funding entirely to gain more control and flexibility. However, few jurisdictions can support a fully self-funded program. Better buyouts require better funding and, in many cases, this will require creative, streamlined combinations of multiple sources.

3.4.1 Description and examples

To meet demand and fill in the gaps left behind by federal funding sources, workshop participants suggested looking beyond the public sector. Creative, experimental thinking to reduce the economic burden of flood risk is already happening in the insurance sector, including experiments with catastrophe bonds and parametric insurance (e.g., Kousky et al., 2021). Philanthropy is another relatively untapped source for buyout funding, even though many charitable organizations and large donors have made addressing climate change their number one priority in recent years. Another area for innovation might be public-private partnerships, for example, with local businesses whose workforce draws significantly from communities in high-risk areas. Business leaders could become advocates and funders for buyouts and the construction or reconstruction of replacement housing in areas outside of floodplains near key places of employment. Additional possibilities noted by workshop participants include sales taxes, stormwater utility fees, and a tax on diesel. Some are considering

3.3.2 Policy change to reduce barriers

Many policy barriers to more equitable buyouts exist in the funding process itself, especially when it comes to smaller, rural, disinvested, or otherwise lower-capacity communities. Funding for “wrap-around services” like movers or mental health support, or for additional payments to supplement an offer, may not be eligible under federal grants and thus out of reach for lower-resourced jurisdictions. In addition, federal grants typically waive Uniform Relocation Assistance and Real Property Acquisition Act (URA) benefits for homeowners participating in voluntary buyouts, because they are not considered to be displaced. Federal agencies providing funding should ensure that their programs fund and support localities starting with a community vision that reflects residents’ top priorities.

More broadly, FEMA should act on recommendations from the Department of Homeland Security Office of Inspector General (2022), the U.S. Government Accountability Office (2022b) and from community members, advocates, and other experts who submitted feedback via recent comment periods (Federal Emergency Management Agency, DHS, 2021, 2022) to advance equity and address historical/current harms that its programs have caused.

Specific recommendations from workshop participants include:

using resilience bonds or green bonds as a way to finance work without harming municipal credit ratings.

However, securing support for local funding of any kind requires persuading elected officials and other decision-makers that the buyout program plays a significant role in achieving key community goals. As noted in Section 3.1, planning for buyouts is critical for building the case that they deserve to be funded with local revenue, bonds, loans, or other sources. Local officials are often concerned with loss of tax base when converting structures to open space. A well-designed buyout program must account for this tension and seek to balance losses with well-articulated public benefits that are supported by evidence and data over time. This challenge is being met with various experiments, including an increasing number of methodologies to quantify and compare the costs of providing public amenities and services to vulnerable areas versus the income they generate over time in order to justify the right timing for buyouts. Financial mechanisms, such as a schedule of payments in lieu of taxes, could also provide an “off-ramp” of supplemental revenue and ease the transition.

Regardless of funding sources, workshop participants emphasized that buyout programs should cover all relevant expenses and be distributed according to community priorities and goals. Buyout recipients reported that, while the amount of money they received for their house and relocation expenses was adequate, it did not make them whole, and in some cases they were worse off after the buyout due to increased living expenses and the mental health and other impacts they and their neighbors experienced. The group offered several thoughts on how to adequately compensate buyout recipients:

- The traditional model of paying “pre-storm” fair market value is not appropriate in areas with rapidly increasing housing costs, especially in programs with long wait times. If a jurisdiction’s priority is to prevent rebuilding in risky areas, they must be able and willing to make offers appropriate for the local housing market.
- Funding should be guaranteed before community members are required to complete paperwork, provide documentation, or complete other administrative steps.
- Relocation incentives and other supplemental payments can encourage greater participation by making buyouts a more viable option for more community members. However, they must be used carefully to avoid coercion and social pressures.
- Shorter timeframes (e.g., on the scale of a typical real estate transaction) make standard fair-market offers more feasible for sellers.
- Buyout recipients should be able to take appliances, fixtures, and other transportable items that are in good condition without risking offer amounts. Any salvage and recycling plans should be clearly communicated, so that buyout recipients understand how materials might be re-used and who might benefit.
- Funding for wrap-around services, particularly mental health support, should be a standard component of buyout programs. Whenever possible, programs should avoid reimbursement-based payments for moving services and similar benefits, because buyout recipients may not be able to front the cost.

3.4.2 Policy change to reduce barriers

Refer to Section 3.3 for discussion of funding-related recommendations for more equitable outcomes. Workshop

participants recommended the following additional policy changes to make funding sources more flexible and easier to use:

- Simplifying processes/requirements for using multiple funding sources. Agencies need to align funding opportunities temporally as well as administratively (e.g., state and federal timelines can be misaligned, causing local programs to fail).
- Allowing use of NFIP funding streams, for example increasing the amount of Increased Cost of Compliance (ICC) coverage and making it explicitly applicable to/available for buyouts (for more information on ICC coverage, see [Association of State Floodplain Managers, 2016](#); [Wharton Center for Risk Management and Decision Processes, 2017](#)). Another approach could be authorizing buyout funding via the NFIP claims process, so that eligible buyout recipients could be pre-approved and guaranteed a certain minimum offer as part of their insurance policy ([Weber and Moore, 2019](#)).
- Broadening the eligible activities supported by traditional buyout funding sources (see Section 3.3).
- Increasing federal support (financial and otherwise) for local and state capacity building. This could include creating capacity building set-asides within federal grant programs, providing expanded non-financial capacity building assistance via programs like FEMA’s BRIC Direct Technical Assistance initiative, and incorporating capacity-focused metrics like the Rural Capacity Index ([Headwaters Economics, 2024](#)) into funding prioritization and evaluation processes.
- Supporting implementation of innovative local funding mechanisms, like resilience-based zoning ordinances.
- Increasing funding for resilient affordable housing development and residential retrofits.

3.5 Shift 5: from silos to partnerships

Buyouts are part of a larger ecosystem of hazard- and disaster-related programs, which is heavily fragmented and siloed ([U.S. Government Accountability Office, 2022a](#)). For buyouts to serve as the basis for a more holistic vision, it is critical for programs to work across silos—both within and across levels of government, and by forging genuine partnerships between governments, communities, and other actors. In the words of a workshop participant, “Partnerships can be very complicated and a headache, but they are really important and a part of good government.”

A comprehensive buyout program could contribute to multiple local priorities, such as stormwater management, housing justice, climate resilience, economic development and workforce support, biodiversity, and/or recreation. These multiple benefits are more likely to be realized when the people committed to these various community and environmental benefits are brought into collaboration with each other to explore how buyouts could contribute to their respective missions.

3.5.1 Description and examples

Collaborative efforts within and across jurisdictions are not easy. Buyout programs can start small by leaning on existing collaborative

efforts, such as standing inter-departmental committees or working groups, to build awareness and test interest in further conversations about how buyouts might enable other priorities. If a regional approach is more appropriate, existing collaborations like regional planning agencies or watershed associations may be good places to start. Beyond government entities, building relationships with local community-based organizations (CBOs) can be critical. Often, CBOs are in the best position to represent community values and liaise between the government-sponsored buyout program and the residents who are, or may become, interested. Buyout managers may also wish to seek professional assistance from collaboration experts to develop and facilitate a strategy that is appropriate for their context and goals.

Each community is unique, so the range of actors that could be brought into the buyout conversation differs from program to program. Workshop participants offered suggestions for non-traditional collaborators and knowledge-sharing partners including the following: community land trusts, housing advocates, local history experts, landscape architects, faith communities, and academic institutions. They also named the need for collaborative evaluation and standard-setting: for example, developing best practices and quality standards so there is less variation in the information, resources, and level of care people receive in different areas.

As buyout practitioners work to build partnerships, they should be ready to face head-on the many potential tensions between buyouts and other community priorities. An example of this currently faced by many communities is housing scarcity: there is not enough housing or not enough affordable housing to begin with, so the idea of removing homes and driving residents into an already overwhelmed housing market is a difficult policy to pursue. This tension may be mitigated by a holistic approach to buyouts that includes building or rebuilding replacement housing and subsidizing it appropriately, but there are few examples of successes to draw on. It is a challenge that begs for creativity and experimentation and requires buyouts to work in concert with other solutions to community needs.

Finally, collaboration is critical for long-term land management. Ideally, buyouts begin with the end in mind—with a plan to use the land that is vacated to protect others by creating a buffer, to create natural spaces for habitat and other restorative functions, or to provide any number of public amenities. Tensions around buyouts can be mitigated substantially when they benefit both those who leave and those who stay. Strategic partnerships make this real, with community-based interest groups like advocacy organizations, non-profits, businesses, and academic or cultural institutions. Open-space experts are particularly important, such as landscape architects, garden centers, or others who can envision the spaces with engagement in the community, identify and connect with additional sources of funding to design and build them, and maintain them over the long run.

3.5.2 Policy change to reduce barriers

Many of the aforementioned policy recommendations also support partnership development, e.g., by helping governments and communities to build capacity. Additional recommendations include:

- Expanding the eligibility of nonprofits, such as land trusts and social justice organizations, to directly access federal hazard mitigation funding.
- Leveraging conservation tools (e.g., public lands designations) to support long-term land restoration, conservation, and maintenance.
- Supporting and/or facilitating cross-jurisdictional knowledge sharing, including from other countries.
- Funding cross-sector training and technical assistance.

4 Conclusion

By sharing their lived and learned expertise across a wide range of geographies and buyout experiences, Innovations in Buyouts workshop participants envisioned a more holistic buyout process that provides a better experience to both residents and implementing agencies. Instead of thinking of buyouts as discrete hazard mitigation projects, workshop participants emphasized that we need a structure that allows a community to plan ahead, complete as much work as it can before a disaster hits, and be ready to plug in sources of funding when and where they meet the community's specific needs. This institutional capacity might sit at the local government, county, watershed, or state level, but it must be informed by both local community members and the experiences of other programs from across the country. In particular, our community participants recommended tangible ways to incorporate lived experience into government programs.

Workshop participants noted the value of providing a concise reference for policymakers who are in a position to address issues with home buyouts. In that vein, [Table 1](#) presents a compilation of the policy changes that could help enable those shifts, as listed in the preceding sections. Workshop participants also emphasized that people involved with buyouts need to continue to learn from one another and imagine new ideas together. As of late 2024, the Innovations in Buyouts workshop team is beginning to reconvene participants for additional conversations and encourages readers to explore ways to leverage both lived and learned experience in their own work. Beyond buyout practitioners and participants, other actors including funders, technical assistance providers, insurers, researchers, and policymakers all have a role to play.

Importantly, implementation of the recommendations presented here will require genuine partnership between governments and communities. Above all, state and local agencies are encouraged to build relationships with people facing current and future hazards and to build pathways for generative, non-extractive, two-way communication. Honest conversations held from a place of mutual trust can help practitioners and community members weigh options, costs, and tradeoffs and build the political and social will to pilot innovative approaches.

For communities where adapting in place is not a possible or desired outcome, residents and the public agencies that serve them should have a dignified, fair, and efficient system supporting relocation. Buyouts are a tool that can be employed to this end—but, like any tool, they are not in and of themselves a solution, and in many ways they are ill suited to current environmental and social contexts. In an ideal world, perhaps home buyouts could be avoided

TABLE 1 Compilation of opportunities for policy change, as recommended by workshop participants.

Shift	Recommendations
From building for the past to planning for the future	<ul style="list-style-type: none"> • Making federal funding for hazard mitigation, economic development, and similar efforts contingent upon adherence to strong floodplain management standards and avoidance of risky siting and construction, e.g., via implementation of the Federal Flood Risk Management Standard. • Supporting (and enforcing) project development as an important component of hazard mitigation planning. • Providing resources for state and local capacity building with accessible, up-front funding and technical assistance. Opportunities for increasing capacity building support include programs such as FEMA’s Emergency Management Performance Grants and the BRIC Direct Technical Assistance program. • Improving intra- and interagency coordination, e.g., between programs and agencies with hazard mitigation and disaster recovery roles, as well as communication between levels of government. • Maintaining centralized, user-friendly repositories for locally relevant data to be used in planning, and creating additional data products to fill existing gaps (e.g., advisory layers for FEMA flood risk maps that depict current and projected flood elevations along with the lateral extent of high-risk areas).
From reactive projects to proactive programs	<ul style="list-style-type: none"> • Providing up-front (pre-disaster) funding for preparatory work and making such work explicitly eligible under opportunities such as Advance Assistance for FEMA’s Hazard Mitigation Assistance grants. • Authorizing a certain amount of funding to flow to a jurisdiction upon completion of their hazard mitigation plan to take immediate action on the preparatory activities described therein. • Allowing buyout-related work begun before a federal grant is awarded to be eligible for reimbursement. • Simplifying funding application processes across agencies, such as by implementing a federal government-wide uniform application process for hazard mitigation and related grants. • Streamlining federally required BCA processes, for example via: <ul style="list-style-type: none"> ◦ Allowing “durable” area-wide BCA pre-approval, where average BCA values would cover a specified area over a particular timeframe. ◦ Allowing for proxy evaluations, like severe repetitive loss status or the use of flood depth-damage curves, in BCA calculations. ◦ Expand pre-calculated benefits to cover more activities, costs, and scenarios.
From valuing property to valuing people	<ul style="list-style-type: none"> • Allowing funding programs to compensate participants based on local housing needs rather than the market value of the homes they are acquiring. For example, FEMA Hazard Mitigation Assistance funding allows for a “shortfall” cost of up to \$31,000 if housing in a safer location is more expensive than the buyout payment. However, this amount is often insufficient and should be updated to reflect current housing markets. • Making homeowners participating in voluntary buyouts eligible for URA relocation benefits in cases where fair market value will not meet rehousing needs. • Simplifying benefit–cost analysis requirements and making reduced/zero cost shares for underserved communities more widely available. • Allowing funding programs to fund and staff “wrap-around services” for participants and explore innovative approaches to supporting and incentivizing equitable practices among local programs. • Supporting the development of methods for evaluating the equity of buyout programs, especially for more complex cases like tenant-occupied housing and mobile/manufactured homes.
From insufficient to innovative funding	<ul style="list-style-type: none"> • Simplifying processes/requirements for using multiple funding sources. Agencies need to align funding opportunities temporally as well as administratively (e.g., state and federal timelines can be misaligned, causing local programs to fail). • Allowing use of NFIP funding streams, for example increasing the amount of ICC coverage and making it explicitly applicable to/available for buyouts. Another approach could be authorizing buyout funding via the NFIP claims process, so that eligible buyout recipients could be pre-approved and guaranteed a certain minimum offer as part of their insurance policy. • Broadening the eligible activities supported by traditional buyout funding sources. • Increasing federal support (financial and otherwise) for local and state capacity building. This could include creating capacity building set-asides within federal grant programs, providing expanded non-financial capacity building assistance via programs like FEMA’s BRIC Direct Technical Assistance initiative, and incorporating capacity-focused metrics like the Rural Capacity Index into funding prioritization and evaluation processes. • Supporting implementation of innovative local funding mechanisms, like resilience-based zoning ordinances. • Increasing funding for resilient affordable housing development and residential retrofits.
From silos to partnerships	<ul style="list-style-type: none"> • Expanding the eligibility of nonprofits, such as land trusts and social justice organizations, to directly access federal hazard mitigation funding. • Leveraging conservation tools (e.g., public lands designations) to support long-term land restoration, conservation, and maintenance. • Supporting and/or facilitating cross-jurisdictional knowledge sharing, including from other countries. • Funding cross-sector training and technical assistance.

altogether. However, with institutional capacity at the appropriate scale, and with the combined insights of lived and learned experience, buyouts can serve as a foundation for a better approach to climate-driven relocation.

Author contributions

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