



Home is where the safer ground is: the need to promote affordable housing laws and policies in receiving communities

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Abstract

Increasingly frequent and intense extreme weather events are pushing communities to confront difficult decisions in order to protect people and infrastructure sitting in harm's way. One decision is around managed retreat or the voluntary movement and transition of individuals and communities away from coastal and other climate-vulnerable areas. “Receiving communities” and other low-risk areas where people may choose to relocate must adopt a multi-pronged strategy that addresses the full breadth of services and resources that relocating residents will need in order to adapt to their new communities, such as in areas of health, education, and workforce development. A critical consideration for receiving communities is the provision of adequate and affordable housing for new residents, many of whom have been driven to relocate due to housing insecurity caused by climate change impacts. Climate change can contribute to housing insecurity in multiple ways, such as when insurance rates increase for low-income homeowners living in flood-prone areas, or when disasters destroy existing affordable housing stock. These impacts can trigger the displacement of individual households or entire communities, requiring local governments to plan ahead for community-centered housing solutions. This article (1) explores the affordable housing crisis in the USA and the compounding impacts of climate change; (2) analyzes the concept of receiving communities and the unique considerations for preparing and investing in affordable housing; and (3) recommends how local governments can use new and existing planning, funding, and legal tools to ensure an effective and inclusive housing strategy for receiving communities.

Keywords Managed retreat · Affordable housing · Receiving communities or receiving areas · Equity and environmental justice · Planning · Land use and zoning

Introduction¹

Each year, the news cycle is inundated by reports of lives lost and catastrophic damage to property and infrastructure from hurricanes, wildfires, and other climate hazards that have grown in both frequency and intensity. Equally urgent, though perhaps less conspicuous in the headlines, is the more gradual but increasing

threat of climate change impacts that may require communities across the country to consider relocating elsewhere when sea-level rise, flooding, or land loss make it impossible for residents to stay in place. More and more, decision-makers in climate-vulnerable communities are planning and implementing adaptive strategies to prepare for these climate change impacts before hurricanes and other climate disasters strike and force residents from their homes and communities—sometimes permanently.

Among these adaptive measures is the concept of “managed retreat,” or the voluntary transition of people and ecosystems away from vulnerable coastal areas. The aim of managed retreat is to proactively move people and property

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¹ This article is informed in part by the authors' development of and contributions to two online legal and policy resources from the Georgetown Climate Center: the Managed Retreat Toolkit (<https://www.georgetownclimate.org/adaptation/toolkits/managed-retreat-toolkit/introduction.html>) and the Equitable Adaptation Legal and Policy Toolkit (<https://www.georgetownclimate.org/adaptation/toolkits/equitable-adaptation-toolkit/introduction.html>).

out of harm's way before disasters or other threats occur to maximize benefits and minimize costs and damage for communities. Ideally, managed retreat should be coordinated through an equitable and purposeful process that relocates people, development, and infrastructure inland and away from coastal areas that are vulnerable to episodic or chronic climate threats (Spidalieri and Bennett 2020). In practice, managed retreat is an inherently complex adaptation option and a difficult subject for local governments and affected communities to consider, let alone implement.

One of the most challenging aspects of developing successful managed retreat strategies is encouraging policymakers to think proactively and holistically about where people who choose to leave the coast may be going, not merely helping to move them out of harm's way. In the USA, the need for affordable housing, even absent climate shocks and stressors, has been a common policy refrain, reflecting the chronic undersupply of affordable housing and the systemic barriers that hinders access to such housing.² However, ensuring the availability of affordable housing specifically in “receiving communities” adds an additional layer of complexity for policymakers.

“Receiving communities” refers to locations where people may be relocating in response to coastal hazards and climate impacts (Spidalieri and Bennett 2020). They can be located within the same municipality or county as a coastal “sending” area, or in an altogether different municipal, county, or state jurisdiction (Spidalieri and Bennett 2020).³ Notably, comprehensive managed retreat strategies require careful consideration of viable housing solutions that account for not only the housing needs of displaced and transitioning residents, but also their economic and cultural priorities. In addition, these strategies should be implemented through a process that is least disruptive to the existing residents in the communities that receive them.

² See *infra* Part II. In the USA, housing affordability is measured as a percentage of household income. According to the U.S. Department of Housing and Urban Development (HUD), housing is deemed “affordable” if it can be obtained for 30 percent or less of monthly household income. By contrast, “cost-burdened” households are those that spend more than 30 percent of monthly income on rent or other housing expenses. Federal and local housing programs typically base housing assistance on income limits set by the area median income (AMI), which vary by city. This formula, however, does not accurately capture the full breadth of housing expenses, such as the cost of transportation. Therefore, using AMI as the sole measure of housing affordability can severely overestimate the affordability of housing for many low- and extremely low-income residents.

³ International migrations of people between different countries raise different legal and policy issues and are thus beyond the scope of this article, which is focused on intra-US population shifts due to climate change.

Some local policymakers are only beginning to plan for and make investments in affordable housing in receiving communities. This delay both exacerbates and is compounded by the affordable housing crisis in the USA, inextricably linking policy challenges for housing, equity, and climate change adaptation. Climate change impacts that cause sudden displacement of communities or gradually affect the housing stock can place additional stress on an already fractured housing system in communities across the country. The current housing crisis has also been perpetuated by deeply entrenched and racist housing policies—such as redlining—that still pose barriers to accessing affordable and available homes for low-income residents, Black Americans, Latinx, and other communities of color.⁴ Additionally, access to secure and stable housing is a key social determinant of individual and public health, while housing insecurity remains one of the key drivers of poverty in America and vice versa. It is no surprise, then, that the frontline communities of climate change are frequently the same frontline communities as the housing crisis.⁵

This article identifies the need for local, proactive planning and investments in affordable housing in receiving communities. Part II of this article explores the mutually reinforcing relationship between the housing and climate crises in the USA. Part III provides an overview of the concept of receiving communities in a managed retreat context, and Part IV highlights the role of receiving communities in providing affordable housing. Part V concludes with four legal and policy recommendations that local governments can consider in order to advance comprehensive managed retreat strategies that contemplate helping people find a new, comparable home when they choose to relocate away from the coast.

The complex and interdisciplinary nature of this problem merit a much longer and deeper dive that is outside the scope of this article. Accordingly, several framing elements must be considered in context. First, local governments will need to advance many different types of plans and investments for a myriad of issues related to affordable housing, including policies for anti-displacement and anti-gentrification efforts, infrastructure, and critical social resources (e.g., access to

⁴ Redlining is a discriminatory practice under which real estate agents, insurance companies, banks, and other housing institutions deny mortgages (or make them much more difficult to obtain) to individuals in certain neighborhoods based on race or ethnicity. While technically made illegal under the Fair Housing Act of 1968 and the Community Reinvestment Act of 1977, predatory lending still exists today. Additionally, the decades of redlining practices have denied Black families an estimated \$212,000 in personal wealth that could have been generated by increases in property value (Anderson 2020).

⁵ “Frontline communities” refer to individuals and communities who face disproportionate risk to climate impacts. In addition to being the first to experience the impacts of climate change, frontline communities also include those who have the least resources to adapt to and recover from these climate hazards. Frontline communities frequently include low-income individuals, communities of color, and indigenous communities.

employment and education).⁶ Although these sectors are important and interconnected, given space constraints, this article focuses specifically on strategies for preserving or creating affordable housing in receiving communities. Moreover, the decision to move away from the coast or stay in their homes is an inherently personal and difficult decision that has significant short- and long-term social, psychological, economic, and cultural impacts. Given the limited focus of this article, the authors are unable to address how local policymakers can ease all of the burdens associated with relocation for individuals and communities. The hope is that at a minimum, proactive investments in housing can mitigate the many related consequences and challenges of finding a new home.

Second, local actions cannot be viewed in isolation: Federal and state governments must play a key role in supporting the preparation of receiving communities.⁷ In particular, local governments need increased amounts of federal funding to support investments in receiving communities specifically and affordable housing development and climate adaptation and hazard mitigation more broadly. This article does not put forward standalone federal or state policy

⁶ Although beyond the scope of this article, it is critical to note that providing affordable housing to individuals and families in receiving communities extends well beyond merely providing physical housing units. The traditional measure of affordability (see *supra* n.2) does not take into account “total housing costs,” which include the cost of utilities, taxes, insurance, and other housing expenses. Additionally, the traditional 30 percent threshold, which has been used by federal housing assistance programs since the 1980s, has not kept pace with the fact that while housing prices have increased, incomes for those at the lowest income levels have not. Due to these reasons, the traditional notion of what it means to be “cost-burdened” could underestimate the challenges of securing affordable housing. Additionally, long-term housing solutions must also connect residents to opportunity. Metrics for affordable housing must include not only the base cost of housing-related expenses, but also the availability of other critical community resources—particularly for new residents who may not have had time to develop the same social safety nets, as discussed below. New residents in receiving areas will need access to jobs and workforce development opportunities. In order to commute to these jobs, residents also need to live in neighborhoods that provide them access to public transportation, such as buses, rails, or shuttles. Limited access to transportation could deprive residents from access to critical community amenities, such as grocery stores, schools, and healthcare services. In many low-income households, the cost of transportation is the greatest source of expenses after housing costs, particularly in areas with large urban or suburban sprawl, where low-income housing is frequently situated farthest from downtown areas or neighborhoods with job opportunities. Even if residents were able to secure affordable housing, without access to transportation or other essential services, these residents may be at additional risk of further displacement.

⁷ For example, federal partners can play a key role in increasing the climate resilience of public housing and subsidized housing. For example, the U.S. Department of Housing and Urban Development (HUD), through the National Disaster Resilience Competition, provided \$35.8 million to New York State to fund a program to make resilience improvements, among other services, to public housing located in coastal and riverine communities. See HUD Archives 2016.

recommendations and only discusses federal and state actors and levers in the context of locally led actions to prepare receiving communities with adequate affordable housing.

Third, the establishment of receiving communities will be evaluated only in the context of decisions to leave coastal areas in response to episodic hazard events and chronic climate threats like sea-level rise, flooding, and land loss. Most real-world examples and the academic treatment of this subject to-date focus on the coastal environment. Although other types of receiving areas have emerged in response to wildfires and other climate threats, this article is limited to coastal disasters and related threats. Regardless, some or most of this article’s takeaways and recommendations could also apply to and inform local decision-making around population shifts caused by other types of climate impacts.

Fourth and finally, there are few domestic examples of managed retreat and the development of receiving areas at a community-wide scale.⁸ This is in contrast to the more common phenomenon of people moving individually, which will in turn lead local policymakers to plan for incremental population changes over time. Again, legal and policy recommendations will vary based on the scale of who is relocating, and so only the latter scenario will be discussed.⁹

⁸ For example, the Isle de Jean Charles in Louisiana and Village of Newtok in Alaska are in the process of conducting community-scale tribal and Native Alaskan tribal relocations, respectively.

Isle de Jean Charles is an island in Terrebonne Parish that has suffered from dramatic land loss and repeated flood events. The island’s approximately 100 residents, who are predominantly members of the Isle de Jean Charles Band of Biloxi-Chitimacha Confederation of Muskogees and United Houma Nation tribes, have been dubbed the nation’s first “climate refugees” as a result of loss of their home to sea-level rise and erosion. In 2016, the State of Louisiana was awarded \$48.3 million in the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant–Disaster Recovery funding to facilitate the resettlement of Isle de Jean Charles residents to an upland 550-acre site, 40 miles north of the island in Schriever, Louisiana, which was selected through a community engagement process with residents. See GCC Louisiana Land Trust 2020g.

The Village of Newtok is in the process of actively relocating to a new site, Mertarvik, which was conveyed to Newtok through a federal land grant. The project goal is to relocate everyone in Newtok to Mertarvik by 2023. The Newtok relocation has been funded by a patchwork of federal and state agencies for over 20 years. See GCC Newtok 2020f.

⁹ In elevating and prioritizing considerations about receiving communities, it is important for governments to simultaneously recognize that not everyone will choose or be able to move away from vulnerable coastal areas (e.g., people who desire to stay in place and/or lack the financial resources to leave). Different adaptation strategies are needed for low-risk receiving areas with growing populations and high- and moderate-risk areas that may be losing population; therefore, measures are also needed to help residents and businesses that will continue to occupy higher risk areas. Policies and programs can be designed to help communities transition and mitigate impacts from population losses and reduced tax bases—for example, by making investments to sustain communities by enhancing the resilience of homes and infrastructure (e.g., through floodproofing or elevation).

Relocation at both scales, however, reflects the need for policymakers to acknowledge that these processes are evolving and indeterminate, not finite in nature.

The housing challenges and recommendations presented in this article are only one part of a much broader and deeper conversation about preserving and increasing affordable housing, relocation challenges, and climate adaptation. While limited in scope, this article introduces some of the legal and policy considerations that policymakers and affected individuals will continue to encounter when tackling the complex challenges of preserving and increasing affordable housing in receiving communities. Therefore, the guiding purpose of this article is to encourage contemporaneous acknowledgement of and discussions around these issues. The hope is that increased attention and awareness among local policymakers and community residents can support proactive actions that minimize the potentially significant financial and social costs, among others, associated with unplanned population growth.

When crises converge: the need for proactive solutions for climate resilience and housing security

In 2005, Hurricane Katrina led to the largest internal migration in the USA since the Dust Bowl in the 1930s. An estimated 1.5 million residents on the Gulf Coast, including 400,000 in New Orleans, fled or were evacuated. Over 15 years after Hurricane Katrina, thousands of residents remain permanently displaced from their homes and communities in New Orleans (Baussan 2015).

Climate-induced displacement can be triggered by sudden-onset disasters, as experienced by residents in the aftermath of Hurricane Katrina and scores of other incidences of climate disasters.¹⁰ Less visible, however, are the millions of people who make the difficult decision to move from their communities as a result of slow-onset threats like rising sea levels and land loss. The number of residents who move due to these climate-induced challenges is difficult to estimate; the move may occur over a longer period of time rather than suddenly, and residents who leave behind their homes and communities often do so without formal public assistance, which makes tracking the exact number of climate-induced relocations difficult.¹¹

The frequency of sudden-onset climate disasters and increasing threat of slow-onset climate impacts, combined

with the challenges of monitoring and financially supporting internal migration patterns resulting from these hazards, underscores the urgent need to proactively prepare receiving communities for relocating displaced people. A critical priority for receiving communities will be the ability to accommodate the housing needs of new populations, which will be made more challenging by the nation's chronic housing shortage and the disparate impact of housing insecurity on low-income residents and people of color—the same frontline communities who are likely to be hardest hit by the impact of climate change. The need for permanent and affordable housing will continue to be a prerequisite for not only newly displaced residents, but also for existing residents in receiving communities. In short, any strategy for preparing receiving communities would be incomplete without concurrently addressing the housing challenges already endemic to so many communities across the country.

The housing crisis

Even prior to the 2020 coronavirus (COVID-19) pandemic, the USA faced a nationwide shortage of seven million affordable and available homes for the lowest income renters, a problem that has been exacerbated with regularity by climate disasters (NLIHC 2020).¹² The chronic shortage of housing in the USA and elsewhere has been compounded by the COVID-19 pandemic. At the start of the public health and economic crises, 50 million renters in the USA lived in households that suffered COVID-related income or job loss (Kneebone and Murray 2020; Levitz 2020). By September 2020, as cities and states began lifting moratoria on evictions and unemployment remains high, it was projected that an estimated 28 million renters would be evicted from their homes—nearly three times the number of individuals who lost their homes during the 2006–2014 housing foreclosure crisis (Levitz 2020; Murillo 2020). In the impending “tsunami of evictions,” Black and Hispanic renters will be hit hardest (Merle 2020).

¹¹ See supra n.8. The Isle de Jean Charles resettlement project is notable not only for its efforts to incorporate community engagement into the planning process for managed retreat, but also for the tremendous financial resources dedicated to this effort. Most managed retreat processes, however, are unlikely to be similarly funded, thus requiring an even greater degree of purposeful collaboration and planning.

¹² A 2020 study by the National Low Income Housing Coalition identified a shortage of seven million affordable and available homes for extremely low-income renters, or households either at or below the poverty line or 30 percent of the area median income, whichever is higher (NLIHC 2020).

¹⁰ In 2019 alone, 1.2 million Americans were displaced by weather-related disasters (Internal Displacement Monitoring Centre 2019).

The housing crisis is not new. The chronic shortage of housing that is affordable and accessible has been attributed to many factors, such as the fact that income levels have not kept pace with the rising costs of housing expenditures (NLIHC 2020). Additionally, since the 1980s, federal funding has been redirected from projects creating public and subsidized housing to those that leverage the private market through tax incentives. However, in recent years, federal funding of affordable housing through the Low-Income Housing Tax Credit program—one of the primary incentives for producing affordable housing in the private market—has diminished significantly. With decreased funding and increased demand, existing programs administered under the U.S. Department of Housing and Urban Development (HUD) have failed to keep pace with modern affordable housing needs, spurring a housing affordability crisis in many cities and regions across the USA. Accordingly, municipalities and local governments are now playing an increasingly larger role in the creation and preservation of affordable housing, such as by encouraging inclusionary zoning¹³ to trigger private development of affordable homes.

The legacies of discriminatory housing policies have also deepened to the chronic nationwide housing shortage that continues to restrict access to affordable housing for low-income households and communities of color. Policies like exclusionary zoning¹⁴ have segregated the most disenfranchised communities into high density areas, creating a physical divide from neighborhoods with higher-income levels and greater access to community resources. Meanwhile, the practice of redlining¹⁵ discouraged investments in communities of color and limited access to financial resources for securing affordable and stable housing, creating significant barriers to wealth generation and upward mobility that persist today. Recent studies indicating the positive correlation between redlined neighborhoods and areas with increase

flood risk underscore the insidious and causal relationship between housing policies and present-day climate risk (Katz 2021).

Climate change exacerbates housing insecurity

The example of Hurricane Katrina and its role in contributing to massive housing insecurity¹⁶ in the New Orleans area has been a familiar story through successive climate disasters. In the last decade, the repeated incidences of wildfires, hurricanes, and other extreme weather have only multiplied the number of climate-displaced individuals.¹⁷ In 2020, many of these same frontline communities confronted an all too familiar scene, with wildfires burning through millions of acres on the West Coast and sending toxic haze as far as the East Coast, while states along the Gulf Coast faced the consecutive forces of Hurricanes Laura and Sally (CRS 2020; Bryan 2020). Climate disasters are no longer an occasional or once-in-a-lifetime event. Their now routine nature is prompting more conversations about proactively moving people and communities away from high-risk areas.

Even without climate disasters and sudden, large-scale dislocations, sea-level rise, repetitive flooding, and other extreme weather pose threats to the availability of safe, secure, and affordable housing for frontline communities. In Miami, homes in historically segregated and underinvested-in neighborhoods—frequently located on higher ground—are seeing faster rates of appreciation than homes in wealthier neighborhoods that are located at lower elevations and more physically exposed (Keenan et al. 2018). In neighborhoods like Little Haiti and Liberty City, Black and Latinx residents are facing development pressures that increase the cost of living and housing, which is contributing to the displacement of entire communities as wealthier residents move in (Kormann 2018).

Climate change and housing insecurity, whether caused by sudden disasters or gradual gentrification and displacement, is a symptom of environmental and economic

¹³ Inclusionary zoning (IZ) is a process through which city governments can generate affordable housing in the private market by requiring developers to designate a percentage of units in new housing projects at below market rate (BMR). The price of BMR units is typically determined by the area median income (AMI). Some IZ programs are mandatory and require by law that developers set aside affordable units in exchange for subsidies to the developer that can help offset the cost of producing affordable units. Under voluntary IZ programs, developers can provide affordable housing in exchange for density bonuses (the right to build larger and a higher number of units above existing zoning regulations), reduced property taxes, relaxed design guidelines, and other incentives (NHC 2020).

¹⁴ Exclusionary zoning describes land-use practices (e.g., minimum lot size requirements or costly building codes) that have been used to prevent people of color, low-income residents, and other communities from living in certain neighborhoods, often designed to preserve home values and the racial and economic makeup in these neighborhoods (Mangin 2014).

¹⁵ See supra n. 4.

¹⁶ Housing insecurity can refer to a myriad of housing challenges that residents may face, including not only affordability, but also quality of the housing, percentage of income spent on housing relative to other essentials like food, safety of the home and neighborhood, and the frequency of needing to move, among other considerations (Leopold et al. 2020).

¹⁷ In the wake of Superstorm Sandy in 2012, more than 700 home-owning families in New York relocated elsewhere, and nearly three times that number of renters and public housing tenants were displaced and applied for affordable housing (Tempus 2016). In 2018 alone, the combined forces of Hurricane Florence, Hurricane Michael, and the California wildfires displaced more than 1.2 million residents in the USA, accounting for one-tenth of disaster-related displacement worldwide that year (Internal Displacement Monitoring Centre 2019).

injustice, and these complex and interrelated challenges cannot be meaningfully addressed without prioritizing the communities that are hardest hit.¹⁸ In the face of systemic obstacles to accessing affordable housing and the increasing toll of repetitive and overlapping disasters, communities of color, low- and moderate-income residents, and other front-line communities must grapple with difficult decisions about whether to stay in place as sea-level rise and repetitive flooding encroach upon their livelihoods and housing stability or whether to leave when disasters strike.

While this background on the affordable housing crisis raises several questions that need to be addressed urgently, another related and emerging priority is the need for affordable housing in receiving communities. In addition to many of the problems cited above, creating and preserving affordable housing in receiving communities raises unique considerations that will be discussed in the next section.

Receiving communities¹⁹

Defining receiving communities

Receiving communities is the technical term used to refer to places where people may relocate to in response to coastal hazards and climate impacts. The location of receiving areas will likely vary—from higher ground within sending municipalities to different regions or states. Ideally, the proactive development of receiving communities will be more localized and closer to people's original "sending" homes and communities to facilitate easier transitions (e.g., social, psychological, economic) and also to minimize losses to local tax bases, among other reasons. While the geographic characteristics and land-use patterns of individual receiving

¹⁸ The impacts of climate and other disaster-driven housing crises place the highest burden on low-income residents, communities of color, the elderly, and disabled people. These frontline communities are more likely to live in flood-prone areas or in neighborhoods that require the most resilience investments, but have limited resources to recover physically, economically, and socially from extreme weather events. Households with lower rent burdens have more resources and adaptive capacity to bounce back and stay in place after a natural disaster. Meanwhile, cost-burdened households—or those that spend over 30 percent of income on housing—are more likely to face poor health and underemployment and less likely than other households to access educational opportunities or increase wealth (NHS 2016). Housing stability is also integral to community resilience, helping to enhance social cohesion, build community ties, and enable residents stay better connected (Enterprise 2015). Therefore, housing stability is a critical metric of a community's climate resilience, just as the ability to withstand and/or recover from climate hazards is an increasingly important element of housing stability.

¹⁹ Content in Parts III and IV of this article are informed in part by Spidalieri and Bennett 2020. This general citation to that resource is provided here in lieu of individual citations throughout this section.

communities will vary, they will ideally be located at a higher elevation and/or further inland, away from more vulnerable coastal sending areas. This will better ensure that people are safer and better off at least from a reduced physical risk standpoint. People may choose to stay in a receiving community temporarily or indefinitely. As noted earlier, the focus of this article is on receiving communities where people are relocating more permanently.

In regard to managed retreat, areas can serve as a receiving site under a number of different circumstances. Where governments implement managed retreat tools that encourage or provide opportunities for people to physically relocate from one area to another—like hazard mitigation buyouts,²⁰ land swaps,²¹ or Transfer of Development Rights (TDR) programs²²—policymakers will be directly confronted with affordable housing considerations. However, some areas will indirectly receive people from outside their jurisdiction and not as a direct result of their managed retreat policies. For example, some places that will serve as receiving communities will choose to adapt through non-retreat strategies or will not experience significant sea-level rise or coastal erosion. These locations include urban cities with seawalls that protect shorelines and others like Buffalo, New York, and Cincinnati, Ohio that are anticipating future population growth as people leave the coast (Rossi 2019). Regardless of the cause or impetus, governments should be aware of the potential ways they could become receiving communities.

²⁰ Generally, a buyout is a tool that enables governments to purchase flood-prone, developed properties from willing sellers (usually at the price of fair market value). After the purchase and title transfer of a home are completed, homeowners move away, the structures on the property are demolished, and the property is preserved as open space in perpetuity. Different entities, including state and local governments and land trusts, can hold title to bought-out properties. For more information, see the Georgetown Climate Center Managed Retreat Toolkit section on Voluntary Buyouts (Spidalieri and Bennett 2020).

²¹ A land swap is the exchange or "swap" of title to land in perpetuity between two or more property owners. This acquisition tool typically involves an in-kind exchange of property between parties instead of the purchase of land. Governments that own public land, including vacant lots, may consider land swaps to implement managed retreat to facilitate affordable housing transitions away from vulnerable coastal areas by acquiring higher ground capable of supporting safer, thriving communities. For more information, see the Georgetown Climate Center Managed Retreat Toolkit section on Land Swaps (Spidalieri and Bennett 2020).

²² TDR Programs are a land-use and zoning tool that allow local and regional governments to create market incentives to shift development away from areas where it is discouraged ("sending areas") to areas where development is preferred ("receiving areas"). TDR Programs could be used in a managed retreat context to increase density inland away from areas experiencing sea-level rise, flooding, and coastal erosion. For more information, see the Georgetown Climate Center Managed Retreat Toolkit section on Transfer of Development Rights (Spidalieri and Bennett 2020).

Using data to determine whether an area is a receiving community

Before local policymakers and communities can evaluate whether to plan for and make affordable housing investments in receiving communities, they must have a reasonable degree of certainty as to whether their communities are serving as or will become a receiving community. In most cases, this will be a threshold or dispositive question before governments take any actions to make more efficient use of resources during an already amplified climate and housing crisis (see *supra* Part II). Thus, an answer to this question should be data-driven and data-supported.

Through one approach adopted by the State of Louisiana through its Louisiana Strategic Adaptations for Future Environments, or “LA SAFE” program, governments can overlay demographic and economic data with physical risk data (i.e., rate of sea-level rise and erosion, flooding) to identify low-risk areas that may be more likely to receive people migrating away from the coast. LA SAFE is a community-based planning and capital investment program that will help the state fund and implement 10 projects in six parishes, including for managed retreat, to make its coasts more resilient (Li and Love, LA SAFE 2020).²³ By applying demographic and economic data, the state can identify potential places experiencing population gains (compared to losses) over specific time periods to inform where receiving regions and municipalities may be located. The state used this model to help guide community discussions with six coastal parishes experiencing significant rates of sea-level rise and land loss. Based on demographic, economic, and physical risk data, the state identified three levels of flood risk—high, moderate, and low—that correspond with different development principles to adapt to that flood risk. Notably, the state characterized low-risk areas as having relatively favorable future flood risk projections for 0–3 feet in a 100-year or one-percent-chance flood event over a 50-year planning horizon. In general, the state recommended that based on this low risk, these areas could present new development opportunities and could receive populations and businesses supporting economic activities that are relocating away from moderate- and high-risk areas.

It is important to recognize that data will largely serve a predictive function with varying degrees of accuracy. One of the greatest challenges demographers and other experts will encounter is how to account for personal preferences

and choices of where people will select their new homes when building predictive models to show future population patterns (see Hauer et al. 2020). Additionally, models may not account for legal and policy decisions around climate adaptation that may otherwise enable people to stay in their homes longer (e.g., permitting and constructing hard armoring devices, requiring that homes be elevated) (Hauer et al. 2020). Data collected on a regional or local scale over a statistically reasonable time period will likely have more predictive accuracy compared to population shifts examined on a cross-state or national scale presumably because, among other factors, (1) there are likely fewer variables to control for on a smaller spatial scale; and (2) people may be more inclined to stay closer to home when relocating to remain near family, friends, and jobs (see, e.g., Hauer et al. 2020). In the end, policymakers will have to determine what level of statistical risk they are comfortable with before addressing the question of affordable housing in receiving communities.

Priorities for preserving and creating affordable housing in receiving communities

To adequately prepare areas to serve as a new, permanent home for people, local governments must plan for and implement proactive investments in affordable housing to accommodate the inflow of people on the frontlines of climate change. These actions are necessary to support anticipated population increases unless particular regions or municipalities already possess sufficient but underutilized housing capacity. The growth of receiving communities will present governments with several important policy challenges and considerations. It is critical to recognize, however, that local governments will not be able to adequately identify, plan for, and build receiving communities alone. This will require work and partnerships with the federal and state governments, in addition to non-governmental entities like community- and faith-based organizations and land trusts. In addition, needs and critical services outside of affordable housing will have to be addressed concurrently. Due to the limited scope of this article, however, only local governments and affordable housing are discussed in depth.

This section briefly highlights two priority—but non-exhaustive—challenges and considerations local governments must confront to address affordable housing as a part of any comprehensive managed retreat strategy.

Planning and funding for investments in receiving communities

In short, there is largely an absence of planning activities and funding sources explicitly tailored to receiving communities,

²³ The state implemented LA SAFE through a nearly \$40 million grant in 2016 from the HUD-administered National Disaster Resilience Competition, supplemented with additional state and non-governmental funds.

let alone the preservation or creation of affordable housing in these areas. And the reverse also holds true: There is a widespread shortage of housing funding, let alone for the specific purposes of fortifying the amount of affordable housing in receiving communities (see *supra* Part II and Li 2020). This conclusion is based on a small number of domestic examples where local, or even state, governments are publicly thinking about or taking actions to build new affordable housing in response to coastal relocations.

This challenge is particularly acute in the context of funding to back the development of affordable housing (see *supra* Part II). Generally stated, the amount of federal funding for climate adaptation and managed retreat is largely insufficient to support the nation's significant needs. As a result, states and local governments frequently use other existing funding sources, particularly for disaster recovery, as a type of gap funding to partially fill this void and fund projects that make communities more resilient.²⁴ For example, eligible state and local governments often look to the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program and HUD's Community Development Block Grant–Disaster Recovery program to fund disaster recovery in jurisdictions that are damaged by disasters (see FEMA 2020, HUD 2020). However, state and local governments are likely to prioritize funding for areas that are covered by a presidential disaster declaration, which may not encompass the untouched or less impacted receiving locations where people are going to seek refuge after a storm or flood. While it is important that governments prioritize funding to meet the needs of those hit hardest, the current system does not provide governments in receiving areas outside of disaster declarations with adequate funding to support any new costs, including for housing development, that are associated with a permanent influx of new residents. Even where this funding can aid communities to increase their affordable housing stock, local governments are nonetheless limited in being able to use this funding after—and not before—disaster strikes.

In 2019 and 2020, HUD and FEMA, respectively, released two new sources of disaster-related funding through HUD's Community Development Block Grant–Mitigation program and FEMA's pre-disaster Building Resilient Infrastructure and Communities or "BRIC" program (HUD CDBG–MIT 2021, GCC FEMA BRIC 2020e). These pre-disaster grant programs mark federal progress in the right direction away from an emphasis on post-disaster spending. In addition, the two programs present possible opportunities for state and local governments to creatively design affordable housing projects that fit under newer, more flexible resiliency and

hazard mitigation—versus only recovery—criteria. Despite these promising developments, the overall federal funding regime alone will largely be incapable of supporting pre-disaster investments in receiving communities.

Non-disaster-related funding sources are similarly scant. Notably, the implementation of most managed retreat tools, including hazard mitigation buyout programs, do not usually account for helping people find or afford housing in new, safer areas.²⁵ Often, the cost of a new home or rental exceeds the price (typically fair market value) homeowners or tenants receive for a buyout. Moreover, while some types of bought-out tenants are given a certain amount of financial relocation assistance under federal and state laws,²⁶ similar financial assistance is less common and not legally mandated for homeowners participating in a voluntary buyout (compared to eminent domain).²⁷

These programs fail to address the question of how coastal residents who are not offered (or do not accept) voluntary buyouts can afford homes in receiving areas if they choose to move on their own without government assistance. Low-income residents, communities of color, and the elderly who are already disproportionately affected by the affordable housing crisis may again be unequally affected. Specifically, without public or private funding support, those without adequate financial resources and/or who are facing the continuing impacts of systemic racist housing and

²⁵ See the Georgetown Climate Center Managed Retreat Toolkit section on Voluntary Buyouts (Spidalieri and Bennett 2020) for examples of exceptions where buyout programs either provide financial assistance or incentives and/or assist buyout participants in finding a new, comparable home in a safer location like Austin, Texas (provides financial relocation assistance and case workers for buyout participants); New Jersey Blue Acres Buyout Program (assigns each buyout participant a case manager); and Staten Island, New York Oakwood Beach Buyouts (the state provided financial incentives to encourage people within a Staten Island neighborhood to volunteer for a buyout after Hurricane Sandy).

²⁶ The Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (URA) (42 U.S.C. § 4621 et seq. (2020); 49 C.F.R. pt. 24 (2020)) is a federal law enacted to provide standard and predictable real property acquisition and relocation expenses for homeowners and tenants of land acquired through eminent domain. URA ensures consistent treatment for people displaced through federal programs or with federal funding. For tenants, the URA is considered, by default, involuntary (42 U.S.C. § 4624 (2020)). Compared to homeowners, tenants who meet minimum requirements (i.e., have occupied a property for more than 90 days and move to a replacement dwelling within one year) are provided benefits and relocation assistance under the URA regardless of whether the acquisition of their place of residence is involuntary through eminent domain or voluntary (i.e., with the consent of a property's owner) through federal programs like FEMA's HMGP. Most states have their own analogs of the URA, which similarly apply to homeowners and tenants whose homes are acquired by eminent domain initiated through state programs or with state funding (e.g., roads, rights-of-way).

²⁷ Compare the examples *supra* n.24.

²⁴ For example, buyouts, natural or nature-based infrastructure, and home elevations.

land-use policies could be left with no option but to remain in harm's way on the coast. If not actively addressed, this multi-layered funding dilemma across all levels of government could present a fundamental barrier to promoting and constructing affordable housing in receiving communities.

Addressing social and cultural differences between sending and receiving communities

When preparing receiving communities, policymakers will also have the challenge of balancing the needs of existing residents with new ones coming from sending areas. Governments will have to ensure that any investments in or decisions affecting receiving areas are compatible with a community's unique character, needs, and priorities and—importantly—do not displace current residents from their homes or businesses. For example, Black communities and other low-income communities of color are being forced out of their neighborhoods in Miami due to “climate gentrification” (Raim 2020).²⁸ As sea levels rise, developers and homeowners are looking to higher ground areas in the Liberty City, Little Haiti, and West Coconut Grove neighborhoods to shift development away from the coast (Raim 2020). As a result, these communities are being displaced from their homes and businesses (Raim 2020). In response, the Mayor of Miami passed a resolution in 2018 directing city staff to research the effects of climate gentrification on these and other low-income communities to explore ways to stabilize property taxes to reduce displacement (GCC Miami Resolution 2020d). This work, however, is ongoing, and the city has yet to release results and potential strategies to minimize displacement.

In another instance, the State of Louisiana and Louisiana Land Trust are supporting the voluntary resettlement of an entire neighborhood of 40 homes from a repeatedly flooded neighborhood in Pointe Coupee Parish called Pecan Acres (GCC Louisiana Land Trust 2020g). The project has faced many obstacles along the way, including challenges in finding a community that will take in the predominantly Black residents of the Pecan Acres subdivision. Initial relocation sites faced opposition from residents that many felt were driven by racial bias (GCC Louisiana Land Trust 2020g).

The challenges of reconciling the differences between receiving areas and new residents will manifest themselves in different ways. Miami and other local governments must increasingly develop responses to better understand the threats of displacement to protect current residents. In

protecting current residents from displacement, however, receiving communities should not exclude people moving away from the coast due to reasons like racial bias, as the Pecan Acres example shows. Instead, receiving communities should, at a minimum, include options for people to find an affordable home in a safer location. Achieving a balance between these two groups may be extremely difficult where the interests and housing needs of the two significantly diverge from one another.

Recommendations

The development of effective, community-led, and community-supported housing policies and investments will require significant work across all levels of government. The ability to accommodate residents that have relocated from elsewhere will differ across localities and depend on varying levels of local government authority and resources, both administrative and financial.

Regions and municipalities experiencing population growth due to climate change will not always have a choice per se to become a receiving community. However, local governments that take population projections from climate into account and plan ahead will be better prepared to adapt to demographic changes than localities that ignore this important data set. Likewise, the federal government and/or states can consider how to design incentives (e.g., through state financing, new regional governance structures, and shared tax revenue structures) for local governments to proactively plan for and make investments in receiving communities. This article provides four priority recommendations to inform emerging discussions on this topic and help local policymakers and communities begin to navigate the combined affordable housing and receiving community challenges presented above.

Plan to become a receiving community

Where receiving communities can be reasonably identified, different types of plans can help state and local governments prioritize affordable housing considerations. Plans should precede policymaking decisions because plans can inform legal and investment decisions in areas that are likely to receive people leaving the coast and help policymakers phase and distribute anticipated costs over a longer time period to minimize present economic impacts. Among other things, different types of plans can be used to identify prime areas for housing options in safer areas. Policymakers can even think creatively about setting up receiving locations to simultaneously reinvest in urban renewal areas or blighted, city-owned properties (see, e.g., Spidaleri and Smith, Resilient Edgemere 2020b). Where needed, plans can also guide

²⁸ In many places, “climate gentrification” is an emerging trend whereby traditionally low-income and communities of color are being displaced from inland or higher elevation neighborhoods that are generally less vulnerable to climate impacts including sea-level rise and flooding (Keenan et al. 2018).

municipal or county decisions to annex higher ground and incorporate it into city boundaries (see, e.g., GCC Princeville 2020a).

To achieve these ends, two different types of plans are worthy of particular note.²⁹ First, local comprehensive plans (also referred to as general or master plans) could play a key role given their purpose in guiding future land use and zoning at the local level (Spidalieri and Bennett 2020). Municipalities are generally required to have a long-term comprehensive plan that provides the legal basis and support for land-use regulations. These plans can be used as tools to help local policymakers proactively identify parts of a municipality that may have to be upzoned to increase density to construct new housing developments. Governments should anticipate these types of potential legal changes and seek to make them in advance of when policies or projects will be implemented to avoid social and economic costs associated with delays. For example, amending zoning ordinances can be time-consuming. When zoning changes are not planned and sequenced to precede the construction of new housing, this can cause permitting and approval delays and financial losses for developers. This can also exacerbate affordable housing shortages and keep people out of their new homes for a longer period of time.

Other types of non-legally mandated, long-term community-based or long-term visioning plans can also be used to reflect a community's priorities for its neighborhood in light of changing populations and physical environments due to climate change (see, e.g., Li and Love, LA SAFE 2020, Spidalieri & Bennett 2020, Spidalieri and Smith, Resilient Edgemere 2020b). Through LA SAFE (see Part III), the state is funding 10 adaptation projects in six coastal parishes that build on each parish's "adaptation strategy" or plan. One parish, Lafourche Parish, contains receiving areas with low flood risk that are experiencing population growth as people choose to move away from higher risk areas on the coast. To grow the capacity of these receiving areas, the state is investing in a Resilient Housing Prototype that will build density on a reduced footprint and be resilient to wind damage and flooding (LA SAFE 2018). Roughly half of the units available will be market rate, and the rest will be affordable to residents earning 20, 30, and 50 percent area median

income. As the LA SAFE example shows, all, but especially these types of community-based visioning plans, should be used as a medium to engage existing residents in receiving locations to reflect community priorities and needs in the design and implementation of potential housing projects.

Increase community participation in development processes

In receiving areas, communities should proactively engage in and facilitate conversations among residents, planners, developers, and decision-makers to help inform and prioritize community investments. For example, through LA SAFE, the state guided a year-long series of conversations across all six coastal parishes, which included both sending and receiving communities Li and Love, LA SAFE 2020). These interactive discussions helped identify economic and social priorities and community development needs. These metrics were then used to inform the present and future development of federally and state-funded projects in receiving communities, including projects that will help diversify local economies to create jobs and/or provide mental and public health resources for residents who have experienced repetitive disasters.

In receiving areas, one way to organize community residents and enhance their leverage in the face of new developments is the use of community benefits agreements (CBAs), legally binding contracts between developers and a community (Salkin and Lavine 2008). In exchange for the community's commitment to supporting a proposed development project, developers agree to provide a range of community benefits, commonly in the areas of affordable housing, environmental improvements, and workforce development.

Importantly, CBA agreements are negotiated by community representatives (often a broad coalition of residents and/or community-based organization) and a private developer. In receiving communities, community organizers could negotiate a CBA that requires a certain number of new housing units to be made affordable for low- or moderate-income households or specify community engagement requirements for new housing projects. Developers may also stipulate to hire a minimum percentage of residents or local businesses for labor and materials or offer to adopt certain design practices to improve the project's environmental impact and climate resilience. Given that the creation of community housing and climate-resilient amenities through CBAs are largely dependent on community priorities, CBAs may not be the primary driver of climate-resilient affordable housing in communities. Nevertheless, one of the strongest features of CBAs is its community-centered approach, enabling communities to directly shape development in their neighborhoods rather than rely on local regulatory processes alone.

²⁹ Hazard mitigation plans are another example. FEMA requires eligible state and local grantees to have a FEMA-approved hazard mitigation plan in place before they can receive any grant funding (e.g., FEMA Hazard Mitigation and BRIC grants). If developed with sufficient foresight, these plans help guide how funding is allocated, including for affordable housing priorities in higher ground areas. See Spidalieri and Bennett 2020. There are still, however, challenges associated with funding projects in receiving communities with federal disaster-related monies that should be considered due to the availability and amount of and legal restrictions around these grants. See Part IV.

Adopt innovative funding sources

Governments can leverage existing funding sources, in addition to creating new sources of funding for affordable housing investments in receiving communities. In the absence of governments reallocating existing appropriations, new sources of funding will be needed. While there may be opportunities to pursue the former path, a more realistic likelihood is that new sources of funding will be required to (1) support the scale of affordable housing developments; and (2) offer local governments' greater capacity to tackle these challenging issues to maximize benefits for existing and future community residents. This will also require reforms at the federal and state levels to increase the amount and availability of funding for these purposes because, as previously stated, local governments cannot adequately prepare receiving communities on their own. Practical application supports this assertion. With LA SAFE and the Edgemere neighborhood of Queens, the State of Louisiana and City of New York, respectively, leveraged Community Development Block Grants–Disaster Recovery (CDBG–DR) funding to support community-level planning and the construction of housing projects (Li and Love, LA SAFE 2020, Spidalieri and Smith, Resilient Edgemere 2020b); however, these are one-off examples. To more sustainably mainstream the use of CDBG–DR funding for these types of purposes, the federal government would have to increasingly educate state and local grantees. The federal government would also have to remove the legal and policy barriers to funding affordable housing in receiving communities more broadly, as discussed in Part IV.

Comparatively, Washington State and Miami, Florida, provide innovative funding examples for receiving communities. In Washington, King County operates a regional TDR Program to achieve long-term planning goals for conservation and create incentives for densifying development in strategic growth areas.³⁰ The State of Washington created the Landscape Conservation and Local Infrastructure Program (LCLIP) (Spidalieri and Smith, King County 2020a). LCLIP can support TDR Programs like King County's by financing infrastructure development and other improvements in receiving communities to ensure that these areas can keep pace with population growth. By adopting a TDR Program and agreeing to accept a specified amount of regional (as opposed to only municipal) development rights, municipalities within three counties in the state are eligible to receive a bonus portion of their county's property tax revenues to finance infrastructure improvements in receiving areas.³¹

Miami also provides several innovative examples of funding. Home to one of the most vulnerable cities in the USA to sea-level rise, Miami has also experienced growing

social inequities and a lack of affordable housing. In 2017, the city of Miami, Florida, passed the \$400 million “Miami Forever Bond” authorizing the city government to borrow money through a general obligation bond to address sea-level rise and Miami's affordable housing crisis (GCC Miami Forever Bond 2017). An estimated \$100 million—paid for by a three-percent property tax—will be used to address affordable housing specifically, which could be used in higher ground receiving areas.³² In 2021, the city also partnered with Enterprise Community Partners to launch “Keep Safe Miami,” a program that provides support for affordable housing owners to protect their buildings from climate change impacts (City of Miami 2021). The program will also offer a total of \$500,000 in deferred loans to assist owners with making climate-resilient property upgrades (City of Miami 2021).

While both examples are somewhat distinct from the specific discussion of affordable housing in receiving communities, they provide noteworthy frameworks that can encourage local governments to consider how they may fulfill their own housing needs around managed retreat.

Develop public–private partnerships to engage communities

Equitable and effective solutions for affordable housing in receiving communities will require the collaboration of public and private institutions and stakeholders, including members of frontline communities. An increasingly popular model for community-centered partnerships is community land trusts. Community land trusts (CLTs) are community-led, nonprofit organizations that maintain permanent ownership of land acquired through a donation or purchase, and which sell or rent housing on that land to low-income residents (Davis and Jacobus 2008, Grannis 2020). By retaining title to the land, CLTs are able to build community amenities and make other improvements to properties on the land while also ensuring permanent affordability for residents, holding the land in trust for current and future generations. Importantly, CLTs can promote community control of the land through a governance structure composed of public and private stakeholders—including residents, local businesses,

³¹ LCLIP only reallocates a portion of the incremental property taxes that result from new development and does not impose any new tax burden on residents or businesses. LCLIP is a novel, but rare funding example for receiving communities, although it has not yet gained a lot of traction: As of 2019, Seattle is the only city that has created a “Local Infrastructure Project Area” tax financing district (Spidalieri and Smith, King County 2020a).

³² For updates on Miami's plans to spend this bond funding, see [Miami Forever Bond](#). Note that funding is being awarded in different phases over time.

³⁰ For an introduction to TDR Programs, see *supra* n.22.

and government agencies—who can collectively and holistically inform community priorities and needs (Grannis 2020).

As with the other resources and tools discussed in this article, CLTs are not a silver bullet to ensuring access to adequate, resilient, and affordable housing and are not a solution for extremely low-income households. However, through supporting long-term housing affordability and enabling greater community control over the land they occupy, CLTs can help bolster both individual and community resilience. CLTs can allow low-income residents to devote financial resources to essentials like transportation and food. Further, under some shared-equity CLT models, homeowners have a share in any increase in the property's value, enabling the homeowner to accumulate wealth over time. At the community level, CLTs can alleviate gentrification and displacement by taking land off the speculative market, in turn promoting stronger community ties and social support networks (Grannis 2020; Semuels 2015).

Critically, many CLTs are also incorporating design features that can increase the resilience of homes to climate change hazards. For example, the Florida Keys Community Land Trust has acquired property damaged after Hurricane Irma in 2017 (NLIHC 2018). The land trust is in the process of building new cost-effective, energy efficient, and storm-resilient workforce housing for middle- and lower-income renters. The homes, which are raised on stilts and exceed FEMA height requirements, will be offered to households earning 80 percent AMI (GCC Florida Keys CLT 2020b). Similarly, in King County, Washington, the Homestead Community Land Trust is building over 200 homes for middle- and lower-income homeowners. In addition to incorporating green design features in homes, the CLT also created a program to provide technical and financing assistance to homeowners interested in installing renewable energy (GCC Homestead CLT 2020c).

Conclusion

Climate change is only one compounding factor in the affordable housing crisis facing residents across the USA. However, as seas rise and coastal residents are increasingly confronted with questions about where to call home, the need for a dialogue on affordable housing options in safer, higher ground locations is likely to similarly increase as part of the broader identification and preparation of receiving communities. Through proactive planning and community engagement, policymakers and affected residents can design receiving communities by building bridges between sending and receiving areas. Moreover, municipalities and neighborhoods that expect to become receiving communities can take steps now to use existing planning and funding tools to support these discussions. Over the long term, however,

innovation through public–private partnerships, new funding priorities, and anti-displacement policies can increase critical housing supplies now and avoid displacement later.

This article explores the challenge of receiving communities from the perspective of local governments and affordable housing. However, as stated throughout, adequate and equitable preparations for receiving communities will require cross-government and community collaboration, in addition to a comprehensive and concurrent look at additional services and critical needs in municipalities. A safe, resilient, and affordable home is only one part of the equation.

These problems exist in some places and will slowly emerge in others. Importantly, the path forward must be a constructive one focused on solutions. The authors hope that this article will spark a new dialogue among federal, state, and local policymakers and communities about what can be done in the short term to avoid waiting until after climate-induced population shifts negatively impact people and governments in more unforeseen, and undesired, ways.

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