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## **Shared equity, shared strength: Community land trusts and resilience in hurricane-prone regions of the United States**

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## Summary

The community land trust model – in which residents own their homes but share ownership of the land beneath them as part of a non-profit entity run by trust residents, stakeholders, and residents of the larger community in part to ensure affordability in perpetuity – is not a new one in the United States. But it is still a relatively infrequently used instrument for offering long-term housing affordability and a number of other potential benefits such as homeownership education, community networking, and personal economic growth.

As cities, especially those prone to natural disasters such as hurricanes, seek to build social and economic resilience, they will need to use all of the tools available to them. The community land trust is one such tool, but its usefulness in the context of disasters is somewhat understudied at this moment. Closing this gap in knowledge could help cities better understand the ways in which and the extent to which land trust functionality impacts resilience.

Using a case study strategy based on qualitative research and analysis of primary source interviews and a variety of secondary source documents, this thesis seeks to assess links between the functionality of community land trusts and social and economic resilience in the context of hurricane recovery in the southeastern United States.

The cases – the Florida Keys Community Land Trust, Houston Community Land Trust, and North Gulfport Community Land Trust – were chosen for their geographic location, vulnerability to hurricanes, comparable ages, sizes and demographic makeups and other factors both in common and unique that would make a comparison logical and of research value.

Functionality of each trust was assessed based on their capacity to offer allocation of land and housing, control of governance, flexibility of use and property rights, exchange of ownership and use, and continuity both of the trust itself and of the affordability and stability of its homes and community. Social resilience was measured as community engagement, while economic resilience was analyzed as affordability and access to housing.

While a conclusive assessment of the direct links between community land trust functionality and community social and economic resilience in hurricane-prone communities is beyond the scope of this research, several useful conclusions can be drawn that have relevance to the academic and public policy realms.

Based on the cases assessed, there appear to be substantial links between land trust functionality components such as allocation of housing and resilience components such as engagement, affordability and access. This suggests that the land trust model may indeed support social and economic resilience when successfully implemented, although the specifics of these effects inevitably vary depending on the context of the larger community. As such, community land trusts merit further study as resilience-building tools, particularly in the context of disaster recovery.

## Keywords

Community land trusts, housing, social resilience, economic resilience, disaster recovery

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## Abbreviations

IHS	Institute for Housing and Urban Development Studies
CLT	Community Land Trust
FKCLT	Florida Keys Community Land Trust
HCLT	Houston Community Land Trust
NGCLT	North Gulfport Community Land Trust

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# Chapter 1: Introduction

Hurricanes do not discriminate. They devastate people who rent their homes and people who own them, people who possess a clear title to their property and people who live with less formal security. But in the recovery process, opportunities and challenges are not equitably distributed and some communities struggle more than others.

“As lives, wild spaces and property are destroyed by disaster,” explains Fu (2016, p. 370), “capitalists profit from new construction, new insurance policies, and the sales of new disaster resistant (but not disaster proof) technologies. Yet this does little to prevent the next crisis due to the ... lack of real resilience.”

There is considerable debate about how to foster community resilience, but there is broad agreement that it should entail “adaptive capacities” with economic and social components (Norris et al., 2008, p. 135, Reale and Handmer, 2011, Magis, 2010, Berkes and Ross, 2013). One factor that encompasses both economic and social aspects – land tenure – appears to be a particularly important way to “anticipate an individual or group’s vulnerability to hazard” (Reale and Handmer, 2011, p. 160).

But if secure land and housing tenure contribute to community resilience, affordability represents an obvious hurdle to overcome. And while there are many tools for managing land and housing affordability – inclusionary zoning, public housing, deed restrictions etc. – community land trusts offer an opportunity to go beyond purely economic issues and address the social components of resilience as well (Choi et al., 2018, Davis, 2010, Lowe and Thaden, 2016).

As Davis (2010) explains, a community land trust (CLT) is formed when land is acquired and held by an independent nonprofit entity while homes and other improvements on the land are sold to private owners via long-term ground leases or rented at permanently affordable rates. Restrictions allow CLT residents to sell, gift or inherit their homes at a profit, but generally at a lower rate of return than would be attainable on the open market. A tripartite governance structure balances the interests of CLT residents, members of the larger community, and public officials.

The land trust model has grown steadily in the United States since the second half of the last century, but still represents only a small fraction of the country’s larger land and housing market, particularly in the Southeast, which is also the region most vulnerable to hurricanes (Miller, 2015, Sungu-Eryilmaz and Greenstein, 2007, Meko, 2019). Given the potential for hurricanes to cause widespread disruption to housing and land tenure – among other negative impacts – it is well worth exploring how community land trusts function in the context of post-hurricane recovery as tools for building and strengthening social and economic resilience.

## 1.1 Problem statement

There are a number of possible explanations as to why a community land trust (CLT) might help its residents – both as individuals and as part of a larger population – to be more resilient to natural disasters such as hurricanes. Ideally, CLTs provide formal and informal support networks, community-building tools, stronger tenure security, and buffers against gentrification and displacement, among other purported benefits (Gray, 2008, Lowe and Thaden, 2016, Choi et al., 2018).

These benefits are often cited as advantages of the CLT model over public or individual ownership, which are the dominant forms of land and housing ownership in the United States



(Miller, 2015). They also tend to coincide with commonly utilized indicators of urban resilience, particularly of social and economic systems (Berkes and Ross, 2013, Magis, 2010, Reale and Handmer, 2011, Zellner et al., 2011, Norris et al., 2008).

So, it logically follows that, properly chartered and operated, CLTs ought to boost urban social and economic resilience compared to freehold land ownership or other forms of tenure.

The relatively well-documented example of the Caño Martín Peña community land trust in Puerto Rico following the catastrophic 2017 Hurricane Maria appears to validate some of these assumptions in speeding recovery for trust residents compared to the larger region (Algoed and Hernández, 2019). But there is still little empirical research assessing CLTs elsewhere in the United States in the context of natural disasters (Moore and McKee, 2012).

Criticisms of the CLT model suggest that it is less politically and socially transformative than sometimes assumed (DeFillippis et al., 2019), or that its ability to produce affordability may not be sufficiently equitable (Moore and McKee, 2012) and advantageous to low-income residents (Voith and Wachter, 2012, Skobba and Carswell, 2014, Bourassa, 2006).

These are all especially of concern for the southeastern United States, which as a region tends to have comparably high rates of poverty and an increasing vulnerability to large-scale natural disasters generally and hurricanes in particular (Cutter et al., 2007, U.S. Census Bureau, 2020, Meko, 2019). The Southeast also has traditionally been home to the lowest proportion of CLTs by region in the United States (Sungu-Eryilmaz and Greenstein, 2007).

Therefore, a more detailed exploration of the ways in which community land trusts enable social and economic resilience is needed in order to assess their functionality and impacts in urban areas with populations vulnerable to hurricanes, which in turn would point to their usefulness in the context of other natural disasters and major shocks.

## **1.2 Relevance**

Data suggest that disasters such as hurricanes may become more common as climate change continues to alter natural systems, so it is important that communities take meaningful steps to prepare for these kinds of events and for the recovery processes that follow them (Geophysical Fluid Dynamics Laboratory, 2020). But “despite recent periods of intense tropical storms and hurricanes,” explain Cutter et al. (2007, p. 13), “the escalating costs of coastal disasters are a function of human choices, not necessarily increases in the forces of nature.”

Urban social and economic resilience offer a means of weathering both fast, violent shocks such as extreme weather events and slow moving but nevertheless enormously disruptive changes (Ernstson et al., 2010, Martin and Sunley, 2014).

Communities with strong and diverse social networks, affordable housing, tenure security, and citizen engagement and participation tend to be better suited to withstand these kinds of disruptions (Berkes and Ross, 2013, Magis 2010, Reale and Handmer, 2011).

And the CLT model, which attempts not just to “acquire land, do development, and organize communities” but also to “preserve affordability, promote repairs and prevent foreclosures,” ought to help achieve some of these commonly cited indicators of resilience (Davis, 2010, p. 49).

It is therefore useful for academic purposes to understand the reasons why CLTs are formed, particularly when they are initiated or modified as a direct response to natural disasters, and the extent to which they meet the functional expectations under which they were formed.

As a matter of public policy, CLTs may offer a useful tool for addressing multiple public concerns – housing affordability, public engagement, access to decision-making processes etc. – that build stronger and more resilient communities. It is important for local governments to better understand the ways in which CLT functionality affects social and economic resilience in order to better assess the extent to which the land trust model has relevance as a policy instrument for these purposes.

### **1.3 Objectives**

This research seeks to explore the contexts and motivations in which CLTs were formed in the southeastern United States following destructive hurricanes, as well as to understand how natural disasters change or shape the perceptions and missions of existing land trusts. Then, it attempts to understand the extent to which CLTs are successful in fulfilling the purposes for which they were formed and the larger missions that define the CLT model in general.

Specifically, the Florida Keys Community Land Trust and Houston Community Land Trust are studied as representative examples of CLTs that were formed at least partially in response to Hurricanes Irma and Harvey, respectively (Houston Community Land Trust, 2018, Florida Keys Community Land Trust, 2020). The North Gulfport Community Land Trust took on new significance in the wake of Hurricane Katrina, which devastated the Mississippi coast less than a year after the CLT's formation (North Gulfport Community Land Trust, n.d., Miller, 2005).

Though the primary goal is exploration given the relative lack of empirical research about land trusts before and after natural disasters generally and after hurricanes specifically, some explanations for the usefulness of CLTs in this context have emerged in the course of the investigation as well.

Because the functionality of CLTs overlaps strongly with indicators of social and economic resilience, it can be presumed that their successful implementation would allow communities to better “bounce back,” “bounce forward,” or continuously adapt following natural disasters. The following questions seek to address this presumption in an empirical manner.

### **1.4 Main question**

To what extent are community land trusts in hurricane-prone regions of the United States functioning as a way to facilitate social and economic resilience after natural disasters?

### **1.5 Sub-questions**

Are CLTs in hurricane-prone regions of the United States functioning in the ways they were intended to?

Justification: The functions and roles of CLTs help explain their usefulness generally and as a resilience-building tool in the context of natural disasters specifically. This research assumes that fully functional CLTs will also build capacity for social and economic resilience, so it is important to understand if they are functioning as intended.

How do hurricanes affect the formation and missions of CLTs in the United States?

Justification: This question addresses the connection between natural disasters and CLTs while also exploring other potential reasons that lead to the implementation of the land trust model. It also touches on the resilience component of the main question.

In what ways does the functionality of CLTs affect the perceptions of land trust stakeholders?

Justification: Perceptions are important to the success and sustainability of land trusts or any other form of land governance, so this question addresses the perceived advantages and disadvantages of the CLT model and the connections between those perceptions and the functionality of the specific CLT under study.

## Chapter 2: Theory Review

When major hurricanes strike, they often do more than physical damage, as resulting displacement of vulnerable populations and the exacerbation of existing disparities and vulnerabilities can disrupt communities for many months or even years (Gladstone and Préau, 2008, Fu, 2016, Cox and Perry, 2011, Cutter et al., 2006).

The community land trust model, at least in its most idealized form, may help build or strengthen the ability to better absorb, bounce back from and ideally bounce forward after these shocks.

### 2.1 Origins and intentions of the community land trust

The notion that the values of land and the improvements upon it should be separated – the fundamental principle underlying the CLT model – is often traced back to Henry George, who advocated for the implementation of a single tax on land value that “would be sufficient to cover all of a government’s costs of providing infrastructure, schools, and other public services” and eliminate the need for other kinds of taxes (Davis, 2010, p. 7, Meehan, 2013).

This tax proposal was in turn based on John Stuart Mill’s notion of the “social increment” or the idea that land value arises from growth and development rather than individual owners’ investments (Davis, 2010). At a fundamental level, “CLTs assume that land is a public asset and not a private good” (Choi et al., 2018).

The “splitting of property into its two constituent parts: land, and the improvements upon it” is the “defining characteristic of CLTs” (Midheme and Moulaert, 2013, p. 78). However, the ideological basis for that bifurcation dates to long before the current framework of a CLT, which was formalized in 1972 by researchers studying an ambitious but ultimately failed intentional community that emerged in the state of Georgia in response to the pressures of racial discrimination and the gradual erosion of small-scale agricultural lifestyles (Davis, 2010, Meehan, 2013).

But if the underlying concepts that eventually enabled community land trusts were primarily economic, the motivations that led to many of their predecessors were often social as well. The New Communities effort that helped formalize the modern understanding of the CLT was in large part a response to racial discrimination, for example, and other early experiments in collective land ownership in the United States embraced adult education, alternatives to modern city life, or opportunities to form tight social bonds (Davis, 2010, Meehan, 2013).

Community land trusts “were created with the explicit intention of transforming the understandings and practices of property ownership in society,” and in the United States, where individual land and home ownership are the predominant form of tenure, the community land trust model is often perceived as “subversive” of the private land market (DeFilippis et al., 2019, p. 797, Lowe and Thaden, 2016, Miller, 2015, U.S. Census Bureau, 2020).

It “represents collective ownership of land, but does not seek collective ownership of the improvements, such as housing (in contrast to public housing)” (Meehan, 2013, p. 116). Collective ownership of land can be interpreted as outside of the United States mainstream and therefore potentially transformative. But DeFilippis et al. (2019) suggest that fulfilling this potential depends on more than just changing organizational structures. It requires social, economic and political transformations as well.

CLTs increasingly represent a response to pressure from gentrification and broader issues of housing affordability, with about 79% of land trusts in the United States saying that housing affordability “played a major role in the early formation of their CLTs” according to a national survey conducted in 2006 of 106 different trusts (Sungu-Eryilmaz and Greenstein, 2007, p. 9). And this is of notable relevance following hurricanes and other disasters that can serve as a “critical juncture” for those “seeking development in otherwise inaccessible spaces” via the displacement of vulnerable residents (Fu, 2016).

Natural disasters also reveal and exacerbate other underlying vulnerabilities in communities.

“Very often, the social geography interacts with the physical geography to expose vulnerable populations to greater risk. Lower-income populations often live in low-lying areas and in lower-quality homes,” explain Van Zandt et al. (2012, p. 30). “In other words, storms ... are not ‘equal opportunity’ events – they affect different groups in different ways ... As a result, in the aftermath, recovery can be highly uneven, with some parts of a community recovering quickly while others lag behind. The uneven nature of recovery can jeopardize the overall vitality and resiliency of a community and bring into question its future.”

Perkins et al. echo these concerns, tying adversity related to the physical environment to the overall vulnerability of a community and its capacity to recover from shocks. “Communities that are decimated by a disaster ... may be disempowered by the government response to it. Emergency or recovery policies and agencies often take a top-down, rather than bottom-up, approach and concentrate on rebuilding without necessarily restoring the community fabric” (Perkins et al., 2004, p. 324-325).

On the other hand, social and economic factors can strengthen resilience, according to a study of coastal counties in Florida. “Economic conditions and social capital within a community prior to sudden disruptions dictate the ability of community residents and local decision makers to garner necessary intergovernmental resources and foster leadership to coordinate effective rapid response,” argue Kim and Marcouiller (2016, p. 981), who also found that counties with “higher rates of unemployment and poverty and lower household income” lost more residents during natural disasters (p. 993).

This suggests an opening for the CLT model to help support rebuilding and the provision of affordable housing while involving the community in decision-making and working to prevent post-disaster displacement and other adverse long-term effects.

Post-Hurricane Katrina recovery appears to have reinforced tourism-related gentrification on the Gulf Coast of the United States, for example, and providing affordable workforce housing was a primary goal behind the formation of the Florida Keys Community Land Trust (Gladstone and Préau, 2008, Cutter et al., 2006, Florida Keys Community Land Trust, 2019).

Gentrification concerns were also the main driver that led to the formation of the Caño Martín Peña Community Land Trust in San Juan, Puerto Rico, which was formalized in 2004 and remains one of the few CLTs to have been empirically studied in the context of post-hurricane recovery (Algoed and Hernández, 2019).

## **2.2 Defining resilience**

A full assessment of the many definitions of resilience in an urban context is beyond the scope of this research – but resilience can briefly be summed up via a meta-definition such as the ability “to maintain or rapidly return to desired functions in the face of a disturbance, to adapt to change, and to quickly transform systems that limit current or future capacity” (Meerow et al., 2016, p. 45). This definition succinctly touches on the three predominant concepts of urban

resilience as a return to previous equilibrium, a move to a new state of equilibrium, or a continuous adaptive process (Simmie and Martin, 2010).

With regards to the latter, Norris et al. (2008) emphasize that resilience should be treated as a process rather than a static trait because adaptation is more valuable than stability. In other words, bouncing forward (continuously) should be the goal rather than simply bouncing back, since the latter can perpetuate or reinforce existing problems rather than moving beyond them.

This aligns closely with the adaptive or evolutionary model that Simmie and Martin (2010) espouse as ideal for economic contexts in which resilience is “an ongoing process rather than a recovery to a (pre-existing or new) stable equilibrium state” (p. 31).

It is also difficult to briefly define community or urban resilience because, “focusing on a single or small number of contributing factors ultimately results in partial or inaccurate conclusions and misrepresentation of the multiple causes of the phenomenon” (Jabareen, 2012, p. 221).

This suggests that the ability to link CLTs and social and economic resilience may be limited by the complexity of the larger environments in which those trusts operate.

Nevertheless, Zellner et al. note that resilience is not just about “the characteristics of its actors” but about “the interactions of those individuals through social, professional, and institution-based relationships” (2011, p. 45). These interactions, along with the importance of “place” and avoiding displacement in disaster recovery (Cox and Perry, 2011) point to the potential for community land trusts as a social resilience building and strengthening tool.

Social connections can “provide financial (e.g. loans and gifts for property repair) and nonfinancial resources (e.g. search and rescue, debris removal, child care during recovery, emotional support, sheltering, and information)” (Aldrich and Meyer, 2015, p. 259). However, social networks can also have a negative impact following disasters if they are used to “resist various disaster recovery needs” such as blocking access to new housing for minority or lower-income groups, for example (Aldrich and Meyer, 2015, p. 262).

The overall influence of CLTs on resilience depends on land trusts’ capacity to create or strengthen positive trends in social connections, tenure security, neighborhood stability, and other commonly cited goals (Choi et al., 2018). And that capacity is dependent on the resources, goals and motivations of the CLT and its residents, staff and board members (DeFilippis et al., 2019).

### **2.3 Connecting CLTs and resilience**

Hurricanes Irma (which later impacted the Florida Keys) and María left at least 75 families in the Caño Martín Peña trust homeless in the fall of 2017, with more than 1,000 trust homes severely damaged and much of the land flooded, but the CLT’s years of community organization translated into a vigorous and quickly mobilized local recovery effort (Algoed and Hernández, 2019).

The situation following the 2017 hurricanes in Puerto Rico was somewhat unique due to the scales of both the destruction and the land trust itself, which with more than 2,000 residents is among the largest CLTs by population in the United States or its territories (Zonta, 2016, Sungu-Eryilmaz and Greenstein, 2007, Algoed and Hernández, 2019). But it offers a useful framework for assessing smaller, newer CLTs in the mainland United States that have survived natural disasters or were formed in response to them.

To understand the focus and potential benefits of the community land trust model, it helps to break it into the components of its name. The term “community” refers to “an entity that has

geographic boundaries and a shared fate” and is “composed of built, natural, social, and economic environments that influence each other in complex ways” (Norris et al., 2008).

Community “lies at the heart of the CLT” (Engelsman et al., 2016, p. 106). The “land” component involves “locking in the initial investment into the land” to protect “permanent affordability,” and the “trust” element involves “what is referred to by CLT activists as stewardship,” which can be active education and protection programs or simply the passive act of “holding the land over a long period of time” (Engelsman et al., 2016, p. 106).

Stewardship efforts such as “homebuyer education, review and approval of home purchase and refinance loans ... support with home repairs and financial counseling or loss mitigation counseling” have been found to provide CLT residents with “residential security and gains in human and economic capital, which countered the outcomes and experiences that residents would likely have in the private market” (Lowe and Thaden, 2016, p. 620-621). This *engagement* with and among residents can be viewed as a component of social resilience (Choi et al., 2018, Perkins et al. 2004).

Lending credence to that assertion, Thaden found in an earlier study that CLT residents were “substantially less likely to be seriously delinquent or to be in the midst of foreclosure proceedings than homeowners across all income levels with conventional mortgages” two years after the 2008 economic crisis and housing crash in the United States (2011, p. 21). By creating more stable communities, these CLTs appear to be fulfilling part of their intended functionality to build *continuity*<sup>1</sup>.

Another study of community land trust homes in Minneapolis, Minn., found that “clustering multiple CLT properties in an area is positively associated with nearby sales prices” (Nelson et al., 2020, p. 824). The authors also observed that nearby CLT home clusters helped mitigate the impact of the foreclosure crisis during the Great Recession for homeowners who lived within 500 feet (about 150 meters) of land trust homes. The clustering component is important, since the observed impacts on home values were only significant in the presence of multiple nearby CLT homes (Nelson et al., 2020).

This suggests that certain thresholds of CLT *allocation*<sup>2</sup> in terms of the quantity of homes and their location in the larger community may be important in helping them realize their full economic benefits.

More broadly, models that enable *access* to homeownership may help to build community stability, and thus social *engagement*<sup>3</sup> and economic resilience, “because renters – especially low-income ones – are difficult to organize. By contrast, homeowners participate more in their communities and are more empowered than renters, even among lower-income residents” (Perkins et al., 2004, p. 323).

The ability of CLTs to offer *control*<sup>4</sup>, both for residents and for their own financial and structural sustainability must be taken into consideration when determining the housing mix (Miller, 2015, Engelsman et al. 2016). Similarly, the type of tenure offered – rental or ownership – may have significant impacts on the rights of *exchange*<sup>5</sup> and *flexibility*<sup>6</sup> for land trust residents (Midheme and Moulaert, 2013). Ability to *access*<sup>7</sup> housing in general, including rental housing, seems to have direct effects on social resilience, however (Perkins et al., 2004, Nelson et al., 2020).

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<sup>1,2,3,4,5,6,7</sup> Terms emphasized in italics here highlight sub-variables and indicators as discussed in the conceptual framework section of this chapter and in Chapter 3.

“Housing becomes an important part of daily life, not only because of its cost, but also because of the access that housing can afford to other attributes of viable urban life. Specifically, housing can help residents address the struggle to maintain economic livelihood, the threats of a changing climate, the challenges of urban violence, and the inequities of governance. In this way, the affordability of housing is inextricably connected to the resilience of cities,” write Vale et al. (2014, p. 22).

They suggest that affordability<sup>8</sup> specifically “can contribute to resilient cities by (1) supporting the community social structure and economic livelihoods of residents, (2) reducing the vulnerability of residents to environmental risks and stresses, (3) enhancing the personal security of residents in the face of violence or threats of displacement, and (4) empowering communities through enhanced capacities to share in their own governance” (Vale et al., p. 46).

These benefits of affordable housing complement many of the most common goals of the CLT model. Gray, in assessing multiple studies of community land trusts, finds 11 frequently cited advantages of the CLT model including that it “expands access to homeownership, especially for low and moderate income people,” “preserves access to homeownership by maintaining affordability over time,” “enhances security of tenure,” “stabilizes neighborhoods,” “builds social capital,” “acts as a springboard to expand civic engagement,” and “promotes community development and diversity” (2008, p. 73).

Gray’s (2008) characteristics closely align with those often used to define social and economic resilience, such as “people-place connections,” “values and beliefs,” “knowledge,” “skills and learning,” “social networks,” “engaged/collaborative governance,” “community infrastructure” and “positive outlook” or “readiness to accept change” (Berkes and Ross, 2013, p. 13-14). More broadly, “communities can develop resilience strategically via planning, collective action, innovation, and learning” (Magis, 2010, p. 406).

## **2.4 Challenges and opportunities in CLT functionality**

However, as Gray and Galande (2011) note, these benefits – particularly those related to social networks and community engagement – may require that CLTs maintain dedicated staff or programs to facilitate community interaction, which is not always feasible. They point out that without a dedicated community organizer, “a CLT can easily become an organization focused solely on affordable housing” (Gray and Galande, 2011, p. 247).

Affordability alone can, of course, still contribute to social and economic resilience. But even the usefulness of CLTs in perpetuating housing affordability depends on larger real estate market conditions, the formulas upon which resale conditions are based and the willingness of existing and future residents to balance personal investment with limited return (Voith and Wachter, 2012).

An analysis of a unique collaboration between a CLT and a conservation (non-residential) land trust in Madison, Wisconsin, found that “the advantages of land trusts ... are their focus, flexibility, and ability to provide long-term conservation and affordability,” but noted concerns about access, the speed of decision-making and implementation, and conflicting goals (Caton Campbell and Salus, 2002, p. 170).

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<sup>8</sup> Terms emphasized in italics here highlight sub-variables and indicators as discussed in the conceptual framework section of this chapter and in Chapter 3.



Even given these apparent benefits and “despite the exponential growth in the number of CLTs, it is estimated that less than 2 percent of the [United States] housing stock is in any type of shared-equity ownership” and the proportion of residents living in CLTs is likely significantly lower (Miller, 2015, p. 354). This suggests that significant real and perceived barriers to CLT implementation and expansion – such as community skepticism and economic limitations – exist (Bourassa, 2006).

“Lack of land ownership” and concerns about the ease of reselling a land trust home were common negative themes found in multiple interviews as part of a case study of two land trusts in Athens, Georgia and Chapel Hill, North Carolina, for instance (Skobba and Carswell, 2014). Minority and low-income residents may be particularly distrustful of CLTs as a good investment based on historical injustices and a “context where numerous other programs support access to homeownership with little or no restrictions on owners’ equity interests” (Bourassa, 2006, p. 405).

And yet these groups of people are often also the most vulnerable to natural disasters and other shocks. Race, ethnic, and gender disparities can exacerbate “the differential resiliency of social groups – as well as the communities they inhabit” (Cutter et al., 2006, p. 10-11). When disasters occur, “people who are resource poor are likely to find it more difficult to recover” and the high cost of land and housing can contribute to increased vulnerability (Reale and Handmer, 2011, p.164). On the other hand, “if investment in land reduces poverty, it is in turn a vulnerability-reducing strategy” (Reale and Handmer, 2011, p. 164).

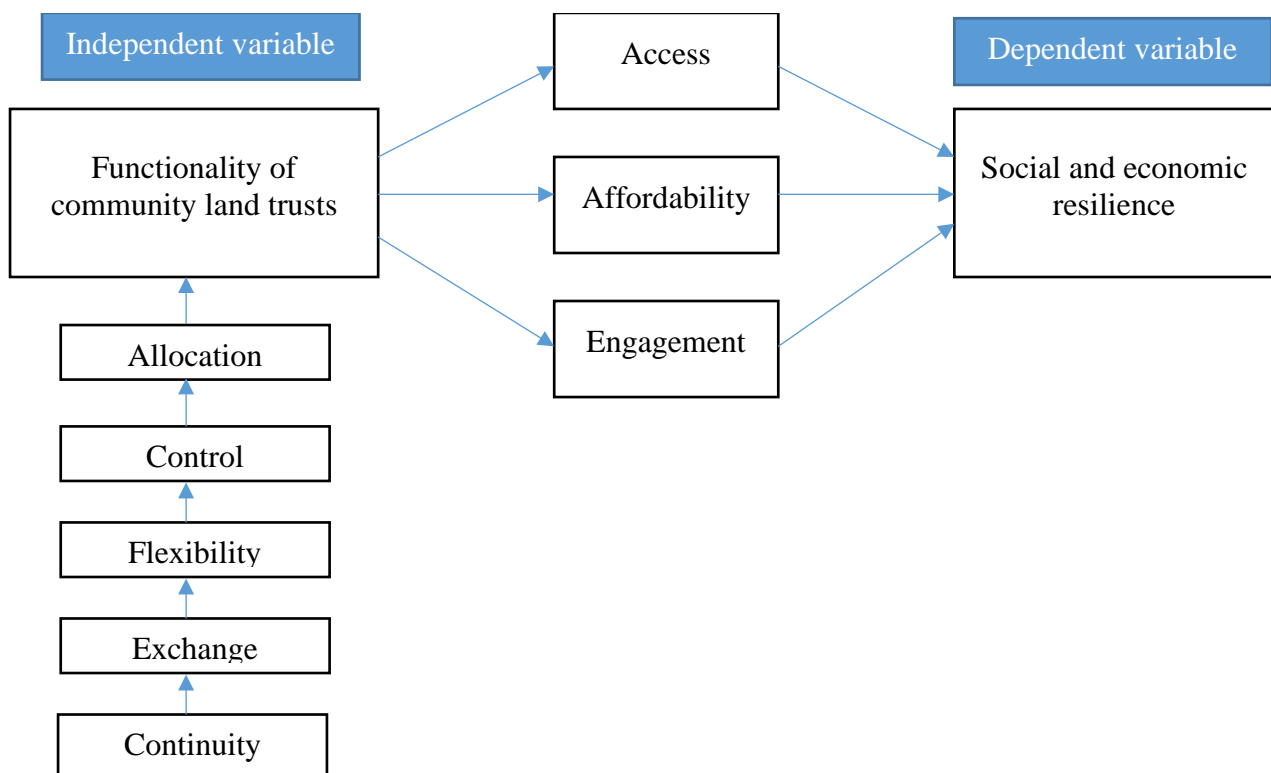
This sets up the importance of research into why CLTs form, particularly as a response to disasters, and their ability to meet the goals they were formed to fulfill, because there are few “empirical studies to support the claims of the benefits of CLTs, in spite of the abundant anecdotal literature available” (Gray, 2008, p. 75, Moore and McKee, 2012).

If indeed CLTs – via their capacity to affect allocation of housing, control of governance and tenure, flexibility of property rights, exchange of ownership and use, and long-term continuity – successfully offer affordability, access, and community engagement as markers of resilient communities, embracing them in the United States and elsewhere may prove significantly favorable.

## 2.5 Conceptual framework

The conceptual framework posits a causal relationship between the independent variable – the functionality of community land trusts – and the dependent variable – social and economic resilience via the sub-variables access, affordability, and engagement. The indicators of allocation, control, flexibility, exchange, and continuity determine the functionality of a community land trust. This is based on overlaps between literature on CLTs and on resilient communities. The larger context for this relationship, in the case of this research, is post-disaster recovery, specifically following major hurricanes.

Figure 1: Visual model of conceptual framework



## Chapter 3: Research Design and Methods

The primary research method used to assess the relationship outlined in the conceptual framework was the case study, which involved a significant desk research component as well as multiple interviews.

The case study allowed for “a holistic approach” involving a “large body of – mainly qualitative – data” with the aim of achieving “depth instead of breadth” (Van Thiel, 2014, p. 86-87). Semi-structured interviews provided opportunities to compare responses while allowing flexibility when needed, and desk research incorporating secondary sources helped to fill in gaps and provide needed context (Van Thiel, 2014).

### 3.1 Description of design and methods

Three CLTs were selected for case studies on the basis of their locations, backgrounds, stated goals, demographic makeup and other characteristics. Each is in the southeastern United States – which is the region of that country most prone to hurricanes – and each has a roughly comparable population size, year of formation and legal context. The land trusts in question formed in response to major hurricanes or altered their initial missions as a result of the disaster recovery process.

The North Gulfport Community Land Trust, located in Gulfport, Mississippi was founded in 2004, just one year before Hurricane Katrina devastated coastal Mississippi (Miller, 2005, North Gulfport Community Land Trust, n.d.). The Houston Community Land Trust was formally established in 2018, a year after Hurricane Harvey flooded much of the city (Houston Community Land Trust, 2018). And the Florida Keys Community Land Trust emerged in 2017 as a response to the devastation of Hurricane Irma (Florida Keys Community Land Trust, 2020).

All are in coastal, southern communities that regularly face tropical weather, flooding and other natural disasters (Meko, 2019). The land trusts operate primarily in neighborhoods with minority or lower-income populations facing gentrification pressure that may be exacerbated by the process of recovery from natural disasters (U.S. Census Bureau, 2019, Algoed and Hernández, 2019, Cutter et al., 2007, Gladstone and Préau, 2008, Fu, 2016).

As in any attempt to analyze data across multiple case studies, there are important contextual differences that must be taken into consideration (Verschuren and Doorewaard, 2010). The sizes of the larger communities, for example, vary widely, with Houston the fourth largest city in the United States by population and Gulfport and the Florida Keys both relatively small communities. Prevailing economic conditions are different among the three case studies as well, as are local demographics and political trends.

But there are also enough similarities that a comparison of these CLTs is intended to present a reasonably representative picture of the capabilities and limitations of the land trust model as a tool to build and protect community resilience in the southeastern United States, specifically in the context of natural disasters. Further discussion of the contextual similarities and differences across cases can be found in Chapter Four.

#### 3.1.1 Data collection

In part due to the challenges of working across three separate cases, the data collected was qualitative in nature, coming from semi-structured interviews and reviews of documents such as CLT charters, municipal plans, newspaper articles, secondary source interviews and other relevant information.

Qualitative research was also preferable in part given the limitations that would have been involved in using quantitative methods for multiple case studies (Verschuren and Doorewaard, 2010, Van Thiel, 2014). A survey, for example, would have been unlikely to reach a statistically significant number of respondents across key stakeholder groups in the cases studied in the time allotted for this research both because of COVID-19 related restraints and the limited pool of potential respondents. Similarly, the lack of available quantitative data over time – two of the land trusts studied here have been operating for less than three years – would have made trend analysis difficult and largely irrelevant.

Furthermore, qualitative research opens a window not just into the functionality of CLTs and their effects on resilience but into the perceptions and experiences of those concepts. Lived experience can offer insights for public policy as valuable as, and perhaps in some cases more valuable than, observed quantitative measurements.

Key respondents to interviews are listed in the table below. Land trust residents were not reachable during the data collection period for this research in part because of privacy concerns and also due to ethical considerations and travel limitations imposed by the COVID-19 pandemic. The likely implications of this data gap are described further in the section on challenges and limitations.

Purposive sampling was the first method of selecting participants because it was important to find qualified and knowledgeable participants among a relatively small pool of potential interviewees. Participants were also asked if they could recommend additional interviewees – snowball sampling – but this did not ultimately lead to the acquisition of new participants because the recommended individuals could not be contacted or did not respond to interview requests. In general, the sample size was limited by the availability and willingness of potential interviewees to participate. The justifications for the selection of participants included in this research are explained in the following table.

**Table 1: Interview participants and purpose**

<b>Type of Interviewee</b>	<b>Name</b>	<b>Role</b>	<b>Purpose of interview</b>
Land trust staff and board members	Lindsey Anderson	Executive Director, Florida Keys Community Land Trust	To explore the intentions of the land trust, its goals and functions as well as to assess the extent to which it is meeting these objectives.
	LaDonna Parker	Board member, Houston Community Land Trust, real estate agent	
	Ashley Allen	Executive Director, Houston Community Land Trust	

	M.O. Lawrence	Treasurer, North Gulfport Community Land Trust	
Real estate agents	James Overstreet	Realtor, New Horizons Realty	To explore questions of access and affordability, as well as to better understand perceptions of land trust functionality as a home ownership/rental model.
	Linda Jones	Realtor, A Key Real Estate	
Public officials	Charles Pattison	Executive Director, Monroe County Land Authority	To explore the local political support for the land trust model as well as the legal framework in which they exist and perceptions of related community engagement.

### 3.2 Challenges and limitations

The relatively small population size of the CLTs in question meant that the pool of residents was limited. As mentioned briefly above, no residents were reachable for interviews during the data collection period due in part to the ethical and travel limitations imposed by the COVID-19 pandemic. Land trust leaders also expressed privacy concerns related to giving out contact information for residents. The lack of primary source resident perspectives leaves a significant gap of knowledge for the purposes of this research. However, secondary source interviews were able to offer some insights into the experiences of CLT homebuyers, particularly in Houston.

In addition, two of the CLTs – the North Gulfport CLT and the Florida Keys CLT – are operating with relatively few staff and board members, meaning that there were fewer potential interviewees. The North Gulfport CLT, for example, is at least partially defunct at present, which made finding contact information and willing interview participants difficult.

Initial plans for this research also involved interviews with the banking community. However, after conducting interviews with real estate agents who had only minimal knowledge of the land trusts in their communities, it was determined that the likelihood of finding a mortgage or banking expert with sufficient knowledge of CLT functionality was sufficiently unlikely to warrant other approaches such as relying on secondary data for questions about investment value and financial access.

Public officials in Houston and North Gulfport did not respond to repeated contact attempts over a period of months, so secondary source material was also used to explore local government perspectives in those cases.

Because many of the indicators expected to be involved in this research are inherently subjective or difficult to quantify and because all of the data used for this research was qualitative in nature, analysis was more about perception of CLTs than about more objective measures of them. This is not problematic, since subjective experience contributes to the empirical study of the community land trust model, and because interviews with multiple

participants helped identify objective trends from subjective data that could be crosschecked against other sources.

Nevertheless, it is important to clarify that reported perceptions may not always align with reality, especially when the people expressing those perceptions have vested personal stake in the success of the CLT being studied.

Though interviews were conducted with the aid of a predetermined interview guide, time limitations and the desire to maintain a logical flow of conversation meant that many of the questions were not explicitly asked or were somewhat rephrased. Nevertheless, each interview subject was asked sufficient questions to address all of the topics listed in the interview guide.

Along related lines, the concepts of social and economic resilience are complex, with multiple and sometimes contradictory definitions. CLTs also have a wide range of motivations, roles, histories, population characteristics, cultural backgrounds and legal contexts. Exhaustive exploration of the differing perceptions of resilience and its relationship to the land trust model is beyond the scope of this research. However, it is likely that sufficient data was collected to contribute to existing understandings of CLTs and to open doors to future research.

### **3.2.1 Validity, reliability and triangulation**

Case studies generally face issues of external validity, since they are inherently about exploring the nuances and most relevant features of specific cases, which are unlikely to be replicated in other places, at other times, or in other contexts (Van Thiel, 2014). Comparing three cases partially addresses this issue by finding commonalities amongst the cases – as well as drawing distinctions – in ways that make it somewhat possible to generalize to other communities (Verschuren and Doorewaard, 2010).

As discussed previously in the section on design and methods, the case studies were selected for their similarities in terms of vulnerability to hurricanes, the size and age of the CLTs, the target demographics of residents, and their stated goals, as well as for differences such as the population size of the larger community, political conditions, and sources of funding, among other factors.

The intention is that sufficient overlap among the cases compared with their observed differences will allow for triangulation that will both add to the internal validity of the data in the cases and offer more valid applicability elsewhere.

Similarly, interviewing multiple subjects with different professional backgrounds and degrees of personal involvement in each of the CLTs adds an element of triangulation that will bolster reliability and validity by comparing responses to the same questions from various perspectives (Van Thiel, 2014).

Crosschecking that information against secondary sources further improves reliability, since land trust leaders have an obvious incentive to speak well of their personal work in the context of an interview for this research, for instance. Comparing that data to other sources such as local journalism should provide a more balanced perspective.

## **3.3 Operationalization**

After interviews were conducted and transcribed and secondary data was collected, analysis of the data was conducted using Atlas.ti, a qualitative data analysis tool, which was used to identify and explore patterns, trends and potential causal relationships in interview responses as well as correlations among CLT documents, news articles and other data.

Coding of the documents was conducted purposively based on the indicators and variables listed below in the table on operationalization, and exploratory codes were added as other trends and useful data points emerged.

Broadly, operationalization consists of two sets of variables (the functionality of community land trusts and social and economic resilience) and multiple concepts used to measure the functionality of CLTs. The dependent and independent variables are based on Gray’s list of commonly cited benefits of CLTs (2008), on the fundamental components of the CLT model (Davis, 2010), and on research related to resilience after natural disasters (Norris et al., 2008, Berkes and Ross, 2013) alongside the other relevant literature laid out in Chapter 2.

Codes based on the variables and indicators listed below were analyzed using co-occurrence tables and query-based searches to determine areas of particular relevance to the research questions. Then, codes for each indicator were merged into clusters to help determine larger relationships between land trust functionality and resilience. Potential explanations for these relationships were then further explored in the data.

The following are brief practical definitions of the variables and concepts relevant to the conceptual framework and operationalization of this research.

**Table 2: Research definitions**

<b>Term</b>	<b>Research definition</b>
Allocation	Allocation refers to the makeup of the CLT resident population and the process by which housing and land are acquired, developed and sold. Relates to the functionality of CLTs.
Control	This term encompasses the ways in which CLTs are governed, the legal contexts involved, and the processes by which various stakeholders experience and participate in CLT activities. Relates to the functionality of CLTs.
Flexibility	The diversity of housing types, land use, tenure, and property rights found in the CLT. Relates to the functionality of CLTs.
Exchange	The various rights available to CLT homeowners and tenants in terms of selling, inheriting, gifting, or earning a profit from their investments. Relates to the functionality of CLTs.
Continuity	The sustainability of the CLT in terms of long-term affordability, support for the trust’s operation, including ongoing monitoring and evaluation. Relates to the functionality of CLTs.
Accessibility	Incorporating components of allocation, accessibility refers also to the extent to which current CLT residents can access the organization’s activities and structures, as well as how potential residents access and experience the home buying or renting process. Relates to economic resilience.

Affordability	Affordability relates to the cost of housing for individuals as well as rules protecting long-term affordability in the land trust and the ways in which the trust will financially sustain itself. Relates to economic resilience.
Engagement	This term assesses the presence and strength of social networks and diverse communities, as well as the ways in which CLT residents participate in the larger community and vice versa. Relates to social resilience.

### 3.3.1 Operationalization table

The following table lists working indicators for each of the variables and sub-variables involved in this research. Collection methods combined desk research and semi-structured interviews in the context of multiple case studies.

**Table 3: Concepts, variables, sub-variables, and indicators**

Concepts	Variables	Sub-variables	Indicators
Community land trust	Functionality of community land trusts	(See indicators)	Allocation of housing, control of land trust governance, flexibility of land use, exchange of property rights, continuity of land trust functions
Resilience	Economic resilience	Accessibility	Access to property acquisition, presence of legal framework, access to CLT governing structures and processes
		Affordability	Provisions for long-term affordability, presence of economically diverse community, avenues for funding CLT operations, impacts on personal wealth
	Social resilience	Engagement	Presence of social networks, presence of socially diverse community, participation in CLT processes, participation in local governance processes, community stability, perceptions of community

For explanations of the indicators for the functionality of community land trusts refer to Table 2 on definitions. Because this research primarily explores the relationship between functionality and resilience rather than attempting to empirically measure the degree or success of functionality, these concepts (allocation, control, flexibility, continuity, exchange) are being



treated as indicators rather than sub-variables with their own indicators in order to manage the scope and scale of investigation involved.

## Chapter 4: Research Findings

Though they are all coastal communities with challenges related to housing and affordability that have been affected by major hurricanes at least once in the past 15 years, the areas surrounding the Houston, North Gulfport and Florida Keys CLTs have sufficiently different demographics, economies, social backgrounds and physical infrastructural contexts to warrant an in-depth look at each land trust and its challenges and successes.



**Figure 2: Locations of (1) Houston CLT (2) North Gulfport CLT and (3) Florida Keys CLT in USA**

Houston, Texas, the fourth largest city in the United States, has a large, sprawling population and was long known for its famously laissez-faire approach to zoning rules and its reasonable housing prices. Homes still cost less than the U.S. average, but gentrification and flooding threaten affordable neighborhoods (U.S. Census Bureau, 2020, Allen, 2020).

“There was a time when Houston was the place to go for affordable housing. The cost of living was great,” said LaDonna Parker, a real estate agent and

board member of the Houston CLT. But, “It’s just getting more expensive to live here. And especially for housing, whether its rental or homes for purchase, it’s just not as affordable as it has traditionally been” (Parker, 2020).

North Gulfport, Mississippi, a historically black community located just north of the more affluent residents and front-beach homes of Gulfport, has been faced with development pressure, environmental degradation, a devastating hurricane in Hurricane Katrina, and longstanding prejudices (Miller, 2005, Lawrence, 2020, White, 2012).

“That part of Gulfport is essentially in what would have been described in the past as undesirable land, an undesirable location,” said M.O. Lawrence, treasurer of the North Gulfport CLT (Lawrence, 2020). But when Interstate 10 opened up land in North Gulfport and the historic Turkey Creek community to outside development opportunities, land trust founder Rose Johnson knew that a creative approach to land ownership would be needed to prevent displacement and other potential negative consequences of rapid development (Miles, 2006).

The Florida Keys, a scattered chain of islands jutting off the southern tip of Florida, were known as a vacation paradise and a haven for residents seeking a sunny, laid-back lifestyle (Filosa, 2018a, Anderson, 2020). But with a median home price more than twice as high as the national average, the service workers who make the tourism economy function struggled to find affordable housing (Anderson, 2020, Filosa, 2018a).

And Hurricane Irma, which made landfall in the central Keys in 2017, wiped out much of what affordable housing remained, forcing residents to either wait months or years to rebuild, make lengthy commutes from the mainland or move on altogether to another part of the country (Filosa, 2018a, Pattison, 2020, Anderson, 2020).

Though the details are different, each of these three land trusts offers a different window into the ways that CLTs function in coastal communities of the United States that are vulnerable to hurricanes, as well as the potential for that functionality to make those communities more socially and economically resilient.

The table below provides a comparison of relevant demographic data across the three counties that are home to the community land trusts analyzed as part of this research and the United States averages.

**Table 4: Demographic comparisons across case studies**

	Harris County, state of Texas (city of Houston)	Harrison County, state of Mississippi (city of Gulfport)	Monroe County, state of Florida (Florida Keys)	United States average
Total population (2019)	4,713,325	208,080	74,228	328,239,523
Racial demographics (2019)	White (28.7%), Hispanic/Latino (43.7%), Black (20%), Asian (7.3%)	White (63.2%), Black (25.9%), Hispanic/Latino (5.6%), Asian (2.9%)	White (65.1%), Hispanic/Latino (25.3%), Black (7.1%), Asian (1.5%)	White (60.1%), Hispanic (18.5%), Black (13.4%), Asian (5.9%)
Median owner-occupied home value (2014-2018)	\$165,300	\$144,500	\$468,200	\$204,900
Owner-occupied home percentage (2014-2018)	54.7%	56%	59.6%	63.8%
Median gross rent per month (2014-2018)	\$1,031	\$875	\$1,616	\$1,023
Median household income per year (2018)	\$60,146	\$45,566	\$67,023	\$60,293
Poverty rate (2019)	16.5%	20%	12%	10.5%

Source: U.S. Census Bureau (U.S. Census Bureau, 2020b)

## 4.1 Case: The Florida Keys Community Land Trust

In September 2017, Hurricane Irma destroyed more than 1,170 homes – including 473 on Big Pine Key, the worst affected of the islands in the chain and now home to the Florida Keys Community Land Trust – and rendered another nearly 3,000 homes temporarily unlivable (Monroe County, 2020).

The working-class residents of Big Pine Key, many of whom lived in recreational vehicles or manufactured housing, otherwise known as trailers or mobile homes, were particularly hard hit (Gomez, 2017, Pattison, 2020).

“We had a 4- to 6-foot storm surge on top of 180 mph sustained winds for I think total it was about four hours. So, you can imagine what would happen to a trailer park that’s not elevated and is facing that,” said Charles Pattison, executive director of the Monroe County Land Authority, which oversees land policy throughout the Keys. (Pattison, 2020)

“It was basically just a pile of sticks,” remembered Lindsey Anderson, executive director of the Florida Keys CLT, of the aftermath of Irma. “The water rose up. It just almost looked like a nuclear bomb went off.” (Anderson, 2020)

As the winds died down and the waters receded, part-time Keys resident Maggie Whitcomb, who has personal roots in the Mississippi Gulf Coast and had worked on relief efforts following Hurricane Katrina in 2005, realized that something more than temporary relief would be needed to help the Florida Keys rebuild.

*“I was like, ‘there’s got to be something more.’ We can’t keep doing bottled water. You can’t rebuild homes with that ... So within about three days of my learning about the community land trust and that it is a tool for solving at least part of the affordable housing problem in different parts of the country I was forming one” (Whitcomb, 2020b).*

Using more than \$1 million in Whitcomb’s personal funds and additional funds from grants, nonprofit partners and donors, the Florida Keys Community Land Trust has built four two-bedroom rental cottages on Big Pine Key. Monthly rents are capped based on income requirements based on a formula established by Monroe County, and potential residents should earn at least 70% of their income in the county (Monroe County Planning and Environmental Resources Department, 2020, Florida Keys Community Land Trust, 2019).

The trust has also purchased the Sea Horse RV Park and expects to build 26 units there as a planned community, with another five units planned for other sites on the island (Anderson, 2020, Woelfle, 2020).

### 4.1.1 Functionality and resilience

Perhaps the most fascinating aspect of the Florida Keys Community Land Trust in terms of its functionality is that, unlike most CLTs, it only offers rental housing.

“Ours is not an ownership model, it’s a rental model, so that’s a little bit different,” explained the trust’s executive director (Anderson, 2020). “We are doing rental housing because of the community. There are just not the resources for people to purchase their homes.”

This makes its functionality as a land trust inherently different from more traditional homeownership-focused models, with particular impacts on issues of control, flexibility and exchange. Renters are not able to directly build equity, for example, although below-market rates may help them save income (Mayrunk, 2019). And there is no opportunity to pass down a rental home to children or for property rights flexible enough to allow commercial uses.

A rental model also affects access and affordability, since tenants must meet land trusts income requirements – earn 80% or less of area median income, earn 70% of income in Monroe County – and still be able to afford a relatively high rental rate of \$1,500 per month for a two-bedroom apartment. Single, non-cohabiting tenants are also effectively excluded (Anderson, 2020, Monroe County Planning and Environmental Resources Department, 2020).

*“We were first doing rents based on income and then we thought, well that’s kind of counterproductive because that encourages people to start hiding their income and we don’t want to do that. So for 2020, we went to a flat rate ... And we’re allowed to charge up to, and I know this is crazy because it’s affordable housing, but we’re allowed to charge up to \$1,800” (Anderson, 2020, Monroe County Planning and Environmental Resources Department, 2020).*

Among the main challenges facing the Florida Keys Community Land Trust are policies designed to restrict population growth in an attractive island chain with low-lying topography, vulnerable animal populations such as the threatened key deer, and limited capacity to evacuate residents when threatened by hurricanes (Monroe County, 2020).

*“The Keys are a designated area of critical state concern, which means that the state is directly involved in development decisions down here because it’s such a unique environmental place. And as you might imagine, a lot of people would like to live here. If you accommodated all the people who would like to live in the Keys, this place would have been destroyed” (Pattison, 2020).*

The cost of rebuilding is also high in a relatively remote island location with a limited number of reliable contractors (Anderson, 2020). And building codes mean that many of the homes that were destroyed cannot be rebuilt the same way.

“When you rebuild, you’re having to rebuild up to code,” explained Keys real estate agent Linda Jones. “I know shingle roofs are no longer allowed. You have to put in I believe it’s 180 mph wind resistant windows and doors and that kind of thing. So it’s been rather challenging” (Jones, 2020).

But government collaboration has also benefited the Florida Keys CLT. Monroe County bought the four lots that house the trust’s initial four affordable homes for \$400,000 and leased the land back to the trust for 99 years with deed restrictions guaranteeing affordability over that span. State and federal grants have contributed further millions, which have been supplemented by private and non-profit donations (Filosa, 2018a, Pattison, 2020, Whitcomb, 2020b, Woelfle, 2020).

A combination of private startup funding and significant government assistance helped “put more cash into their system so that they could actually rebuild things quicker,” explained Charles Pattison (Pattison, 2020). This support appears to have been central in allowing the trust to set an ambitious target of adding 31 new homes to its portfolio by the summer of 2021 (Woelfle, 2020).

That kind of growth would allow it to build a larger CLT community and improve social networks and avenues for CLT resident participation, which as of now are strictly informal but growing (Florida Keys Community Land Trust, 2019, Anderson, 2020, Whitcomb, 2020a). Nevertheless, the social resilience element of the trust is likely to remain limited by the decreased community stability likely to result from a rental-only model (Mayrink, 2019).

### 4.1.2 Summary of key findings and data

The following are a brief summary of the relevant findings in this case study and a summarized compilation of the collected data on the Florida Keys Community Land Trust based on primary source interviews and available secondary material.

1. The FKCLT operates a rental-only model, which is unusual among CLTs in the United States and would seem to undermine functionality in terms of continuity, flexibility, exchange, and even affordability. Renters face yearly contract renewals that may decrease the likelihood that they stay in the community. They have little or no flexibility to modify the homes or to make use of property rights associated with ownership. They cannot build equity in their home or to pass on their homes to their children, for example. And the true affordability of fixed rental rates will vary from household to household.
2. Direct government involvement and significant private investment allowed the FKCLT to quickly build its capacities for control and allocation in ways that may not be feasible for other land trusts.
3. Local policy partially restricts the rate at which the FKCLT can build new homes via a rate of growth ordinance that applies to new residential construction although there are some exemptions – including for affordable housing – that may apply to the land trust moving forward.
4. The effectiveness of CLT-led engagement for social resilience is likely to be comparably low if a rental-only model cannot sufficiently contribute to community stability over time.

**Table 5: Data summary for Florida Keys Community Land Trust**

Indicator	Sub-indicator	Data	Source(s)
Allocation	Type of housing recipient	Income-restricted (up to 80% of area median income), and 70% of income must be earned in Monroe County, priority for “workforce” residents	Anderson, 2020, Grannis, 2020, Pattison, 2020
	Amount of housing available	Four rental homes with plans to build up to 31 additional units	Grannis, 2020, Woelfle, 2020, Anderson, 2020, Whitcomb, 2020b
	Rate of CLT land acquisition	35 lots acquired over a roughly two-year period	Woelfle, 2020, Anderson, 2020
Control	Governing board composition	Six-member board of directors (can include up to 10 members)	Florida Keys Community Land Trust, 2020, Articles of Incorporation (Florida Keys Community Land Trust, 2019)
	Governance framework	Based on formal bylaws and state non-profit law	Articles of Incorporation (Florida

			Keys Community Land Trust, 2019)
	Legal framework	Based on formal bylaws and state non-profit law	Articles of Incorporation (Florida Keys Community Land Trust, 2019)
	Stakeholder involvement in CLT decisions	County government is closely involved, local and state non-profit organizations provide funding and other forms of partnership, little or no CLT resident involvement	Pattison, 2020, Anderson, 2020
Flexibility	Diversity of housing mix	Four single-family “Keys Cottages” are two-bedroom units with similar floor plans and built using modular technology	Javorsky, 2018, Anderson, 2020
	Diversity of tenure	Only tenure option is rental contract	Anderson, 2020, Mayrink, 2019
	Land-use flexibility	Little or no land-use flexibility for tenants	Articles of Incorporation (Florida Keys Community Land Trust, 2019)
	Property rights	Based on renter rights in Florida state law, restricted compared to homeowners	Articles of Incorporation (Florida Keys Community Land Trust, 2019)
Exchange	Right to sell, inherit, gift, or earn profit	Residents of the CLT do not have any of these rights	Articles of Incorporation (Florida Keys Community Land Trust, 2019)
	Restrictions on resale	Resale is not possible	Articles of Incorporation (Florida Keys Community Land Trust, 2019)
	Perceptions of investment value	Investment value is limited to the money renters can save compared to renting a market-rate unit	Anderson, 2020, Whitcomb, 2020b
Continuity	Provisions for long-term affordability	Deed restrictions on land leased to CLT by Monroe County for 99 years, affordability requirements part of bylaws	Articles of Incorporation (Florida Keys Community Land Trust, 2019), Pattison, 2020, Anderson, 2020

	Provisions for sustainability of the trust	Process for dismantling included in bylaws	Articles of Incorporation (Florida Keys Community Land Trust, 2019)
	Monitoring and evaluation	Monroe County and the agencies overseeing the grant programs with which FKCLT is involved provide financial and regulatory oversight, CLT subject to standard 501c(3) non-profit reporting and monitoring by state government	Pattison, 2020, Articles of Incorporation (Florida Keys Community Land Trust, 2019)
	Community stability	Goal is to prevent displacement by replacing affordable housing stock	Anderson, 2020, Whitcomb, 2020b, Florida Keys Community Land Trust, 2020
Accessibility	Access to property acquisition	Residents must meet income requirements and be a multi-person household, screening handled by local county government	Anderson, 2020, Pattison, 2020, Monroe County Planning and Environmental Resources Department, 2020, Articles of Incorporation (Florida Keys Community Land Trust, 2019)
	Presence of legal framework for buying/renting	Residents must meet income requirements and be a multi-person household, screening handled by local county government	Anderson, 2020, Pattison, 2020, Monroe County Planning and Environmental Resources Department, 2020, Articles of Incorporation (Florida Keys Community Land Trust, 2019)
	Access to CLT governing structures and processes	Residents have limited or no access to CLT governing structures and processes and do not currently have representation on the board	Articles of Incorporation (Florida Keys Community Land Trust, 2019)
Affordability	Provisions for long-term housing affordability	Property in the trust is deed-restricted for affordability for 99 years	Anderson, 2020, Pattison, 2020
	Presence of economically	FKCLT rents are substantially below market rate and	Anderson, 2020, Monroe County



	diverse community	therefore have the potential to enhance the economic diversity of Big Pine Key	Planning and Environmental Resources Department, 2020, Gomez, 2017, Filosa, 2018a
	Avenues for funding CLT operations	Rental revenue, federal, state and local grants, private and non-profit donations	Anderson, 2020, Woelfle, 2020, Pattison, 2020
	Impacts on personal wealth	Below-market rents are likely to have some positive impact on the personal wealth of renters compared to market-rate alternatives	Whitcomb, 2020b
Engagement	Presence of social networks	CLT activities appear to have contributed to new or strengthened social networks	Whitcomb, 2020b, Anderson, 2020
	Presence of socially diverse community	Insufficient data	N/A
	Participation in CLT processes	Formal participation currently limited to appointed board members	Articles of Incorporation (Florida Keys Community Land Trust, 2019)
	Participation in local governance processes	CLT activities have encouraged participation in local governance	Whitcomb, 2020a, Anderson, 2020
	Community perceptions	Suspensions of “land grab” and skepticism from real estate community, new homes generally perceived as attractive, affordability mission well-received	Leon, 2019, Anderson, 2020, Jones 2020, Mayrink, 2019

## 4.2 Case: The North Gulfport Community Land Trust

The North Gulfport Community Land Trust was not formed in the aftermath of a devastating hurricane, but rather before one. The CLT started as a response to rapid development that threatened environmental degradation and displacement of longstanding minority communities in 2004 – one year before Hurricane Katrina destroyed much of the Mississippi Gulf Coast, including Gulfport.

A planned new interchange on Interstate 10, which passes north of the center of Gulfport, promised to open up economic development opportunities in a predominantly minority community. But this development was also poised to disrupt a flood-prone watershed known as Turkey Creek, exacerbating water management problems for nearby residents and otherwise disrupting life in the area.

“Established in 1866 by recently emancipated African Americans, the 320 acres that originally formed the Turkey Creek community were home to a vast assortment of plants and wildlife ... Over time, the settlers of the Turkey Creek area developed sustainable agricultural practices and furnished their own water supply from deeply drilled water wells, contributing to their success as a community fully independent of the prosperous neighboring town of Gulfport” (Killcreas, 2012, p. 782).

The divisions were more than just geographic. Black residents were not even allowed to swim at the beaches in Gulfport until a 1969 protest broke that longstanding ban (Miller, 2005). Nevertheless, “African-American neighborhoods remained isolated from the mostly white city. While city services extended to other outlying communities, North Gulfport and Turkey Creek residents were left to fend for themselves. The neighborhoods suffered from a lack of basic infrastructure, contaminated drinking water and chronic flooding” (Miller, 2005).

As such, environmental justice emerged as a key theme, as well as combating gentrification and racial injustices (North Gulfport Community Land Trust, n.d., Lawyers Committee for Civil Rights Under Law, 2010).

CLT founder Rose Johnson explained her goal as a “fight for our God-given right to have clean water, clean air, good schools, good homes. ... To make [our neighborhood] a healthier and cleaner place to live ... Not just for my community, but for all minorities and poor people” (Killcreas, 2012, p. 770).

Hurricane Katrina made those goals even more urgent. “After the storm, the community has faced additional challenges of homelessness and loss of basic infrastructure and necessities such as food, water and jobs” (North Gulfport Community Land Trust, n.d.).

At its height, the NGCLT was influential in opening a community education center, a community garden and playground and establishing the North Gulfport Community Youth Council, among other projects (North Gulfport Community Land Trust, n.d.).

But as North Gulfport communities continue to fight for improved quality of life, threats remain, especially from developers eyeing cheap land near major roads.

“We move from a situation where this community was overlooked by the power structure to the point now where the power structure wants to acquire by hook or crook, by any means available, these desirable properties so that they can develop them and make money off them,” explained board member M.O. Lawrence (Lawrence, 2020).

### 4.2.1 Functionality and resilience

Though the NGCLT managed to acquire roughly 15 small plots of land and two homes – at least one of which remains occupied – since its formation, it appears to have failed to develop a sufficiently robust infrastructure to withstand the death of founder Rose Johnson in 2020 after a long fight with Lou Gehrig’s Disease or ALS (Lawrence, 2020). This untimely loss has left the trust in something of a state of suspended animation and affecting almost all aspects of its functionality.

At the moment, the NGCLT does not seem to be in the process of acquiring more land or homes, although this could change in the future if board members decide to revive the trust from its current state of inactivity. At least one community leader, Howard Page, has expressed interest in carrying on the trust’s work (Duncan, 2019, Fitzhugh, 2019). Other community organizations that had close ties to the trust remain active.

Though the trust never acquired enough homes to make a significant impact on housing affordability in the area, it retains control of a substantial amount of land – as many as 60 parcels in the Turkey Creek area (Turkey Creek Community Initiatives and North Gulfport Community Land Trust, 2011, Lawrence, 2020). This control will give the CLT further leverage to stand against inappropriate development and build community stability, as well as a base for a new housing effort if it should choose to pursue that goal once again.

However, given the already low median home price in the Gulfport area, attainable housing may be less of a need than environmental protections and community preservation, giving the CLT a somewhat unique role compared to others that focus primarily on housing for low- and middle-income residents.

### 4.2.2 Summary of key findings and data

The following are a brief summary of the relevant findings in this case study and a summarized compilation of the collected data on the North Gulfport Community Land Trust based on primary source interviews and available secondary material.

1. Control of land for environmental and anti-gentrification purposes was more central to the NGCLT mission than the other cases studied.
2. The present state of the NGCLT illustrates the importance of building a robust board and, to a lesser extent, a sustainable staff in order to weather internal shocks such as the passing of a CLT leader. Reliable, long-term cash flow is also critical for functional continuity.
3. The NGCLT case offers insight into the difficulties faced by CLTs that cannot obtain local government support, which placed limits on its ability to acquire properties, exert control and expand access compared to the other cases studied.
4. However, it is likely that the engagement-building work of the NGCLT is strong and sustainable since it was based almost entirely on a bottom-up approach of social network construction and reinforcement. This bodes well for social resilience.

**Table 6: Data summary for North Gulfport Community Land Trust**

Indicator	Sub-indicator	Data	Source(s)
Allocation	Type of housing recipient	At least one house “occupied by a low-income family”	Lawyers Committee for Civil Rights Under Law, 2010, Lawrence, 2020

	Amount of housing available	Three homes, at least one currently occupied. Between 15 and 60 lots	Lawrence, 2020, Turkey Creek Community Initiatives and North Gulfport Community Land Trust, 2011
	Rate of CLT land acquisition	Up to 60 lots purchased over a roughly seven-year period	Lawrence, 2020, Turkey Creek Community Initiatives and North Gulfport Community Land Trust, 2011
Control	Governing board composition	Board of directors, number and status unclear	Lawyers Committee for Civil Rights Under Law, 2010
	Governance framework	Based on formal bylaws	Lawrence, 2020, Lawyers Committee for Civil Rights Under Law, 2010
	Legal framework	Based on formal bylaws	Lawrence, 2020, Lawyers Committee for Civil Rights Under Law, 2010
	Stakeholder involvement in CLT decisions	Land trust was closely involved with Sierra Club on environmental issues and other community organizations, insufficient data on CLT resident involvement, local government was often antagonistic	Lawrence, 2020, Lawyers Committee for Civil Rights Under Law, 2010, North Gulfport Community Land Trust, n.d.
Flexibility	Diversity of housing mix	Between two and three single-family homes	Lawrence, 2020, Turkey Creek Community Initiatives and North Gulfport Community Land Trust, 2011, Thaden, 2008
	Diversity of tenure	At least one home is owner-occupied. No rentals	Lawrence, 2020, Lawyers Committee for Civil Rights Under Law, 2010
	Land-use flexibility	Properties include at least one owner-occupied home, an education center and an office	Turkey Creek Community Initiatives and North Gulfport Community Land

			Trust, 2011, North Gulfport Community Land Trust, n.d.
	Property rights	Insufficient data	N/A
Exchange	Right to sell, inherit, gift, or earn profit	Right to sell or inherit, subject to resale restrictions	Lawrence, 2020, North Gulfport Community Land Trust, n.d., Turkey Creek Community Initiatives and North Gulfport Community Land Trust, 2011
	Restrictions on resale	Based on income requirements, although unclear if currently enforceable	North Gulfport Community Land Trust, n.d.,
	Perceptions of investment value	Perceived not just as an individual investment but as an investment in community preservation	Turkey Creek Community Initiatives and North Gulfport Community Land Trust, 2011, Lawrence, 2020, Killcreas, 2012
Continuity	Provisions for long-term affordability	Yes, 99-year ground lease	Lawrence, 2020, Gulf Coast Community Design Studio, 2012, North Gulfport Community Land Trust, n.d., Thaden, 2008, Lawyers Committee for Civil Rights Under Law, 2010
	Provisions for sustainability of the trust	No, over-reliance on founder's leadership has left CLT in a challenging and temporarily stagnant situation	Lawrence, 2020
	Monitoring and evaluation	Subject to standard 501c(3) non-profit monitoring and reporting procedures by state government	Lawrence, 2020, Mississippi Secretary of State, 2018
	Community stability	Community preservation is a stated goal of the CLT, which is particularly relevant given the historic nature of the	Lawyers Committee for Civil Rights Under Law, 2010, Gulf Coast Community Design Studio, 2012, Turkey Creek Community

		predominantly black Turkey Creek community	Initiatives and North Gulfport Community Land Trust, 2011, Killcreas, 2012, Crowley and Johnson, 2005
Accessibility	Access to property acquisition	Insufficient data	N/A
	Presence of legal framework for buying/renting	Yes, based on bylaws established with support from national CLT network	Lawrence, 2020, Lawyers Committee for Civil Rights Under Law, 2010
	Access to CLT governing structures and processes	Land trust was closely involved with Sierra Club on environmental issues and other community organizations, insufficient data on CLT resident involvement, local government was often antagonistic	Lawrence, 2020, Lawyers Committee for Civil Rights Under Law, 2010, North Gulfport Community Land Trust, n.d.
Affordability	Provisions for long-term housing affordability	Yes, 99-year ground lease	Lawrence, 2020, Gulf Coast Community Design Studio, 2012, North Gulfport Community Land Trust, n.d., Thaden, 2008, Lawyers Committee for Civil Rights Under Law, 2010
	Presence of economically diverse community	Yes, although outside development and influx of money perceived as threat	Lawrence, 2020, Killcreas, 2012
	Avenues for funding CLT operations	Reported revenue of \$7,500 and expenses of \$4,271 for fiscal year 2018. Post-Katrina relief programs brought temporary investment; long-term funding difficult to obtain	Mississippi Secretary of State, 2018, Lawrence, 2020, White, 2012, Crowley and Johnson, 2005
	Impacts on personal wealth	Insufficient data	N/A
Engagement	Presence of social networks	Yes, strong interconnectivity among community members and organizations,	Turkey Creek Community Initiatives and North Gulfport

		demonstrated ability to self-organize	Community Land Trust, 2011, Killcreas, 2012, Lawrence, 2020, Lawyers Committee for Civil Rights Under Law, 2010
	Presence of socially diverse community	Longstanding self-sufficient community of predominantly black residents	Killcreas, 2012, Lawrence, 2020, Miller, 2005, Crowley and Johnson, 2005
	Participation in local governance processes	CLT founder and board members were/are highly engaged in local governance processes, including fighting against government-backed development plans and leading community-focused planning efforts	Lawrence, 2020, Turkey Creek Community Initiatives and North Gulfport Community Land Trust, 2011, Lawyers Committee for Civil Rights Under Law, 2010
	Community perceptions	Various, but positively viewed in Turkey Creek/North Gulfport community, negatively viewed by Gulfport government, developers, skepticism from real estate community	Lawrence, 2020, Killcreas, 2012, Overstreet, 2020

### **4.3 Case: The Houston Community Land Trust**

Of the three CLTs studied for this research, the Houston Community Land Trust is the largest and most ambitious, with an entirely ownership-based tenure model, a current portfolio of more than two-dozen homes – plus a goal to add as many as 1,100 in five years – a well-organized corporate structure and significant financial and institutional support from the Houston city government.

City officials took the initial steps to set up the trust in 2016, but it did not finalize its first home sale until 2019, about two years after Hurricane Harvey caused as much as \$180 billion in damage and affected or destroyed as much as one-third of the city’s housing units with a particularly severe impact on affordable homes, which tended to be in flood-prone areas (Dickerson, 2018).

Housing prices were on an upward trend before Harvey despite Houston’s reputation for affordability, but the storm exacerbated the situation.

“Affordability has long been one of the Bayou City’s prime selling points,” explains journalist John Nova Lomax. “Houston may have been polluted, mosquito-infested, traffic-choked, swelteringly humid, subject to frequent biblical deluges, and overrun by gigantic flying cockroaches, but the houses were cheap. On paper at least, there were few better places to achieve the American Dream. Not so much anymore” (Lomax, 2019).

Started with the benefit of \$16 million in city-provided startup funding – \$1 million for CLT operations, \$5 million for land acquisition through the Houston Land Bank, and \$10 million for construction costs – the Houston CLT has quickly expanded in the Acres Homes neighborhood, a historically black community “named for the acre of land you got with your house” (Morris, 2019, Kimble, 2020).

The next steps, according to executive director Ashley Allen, are to expand stewardship programs, albeit remotely for the time being due to the COVID-19 pandemic, and to introduce a homebuyer choice program that would allow potential homebuyers to opt into the trust rather than waiting on the CLT to expand its portfolio to meet demand (Allen, 2020).

#### **4.3.1 Functionality and resilience**

The top-down approach implemented by the Houston CLT thus far has allowed it to grow rapidly and establish a high level of functionality, but it may also leave the trust somewhat fragile given its reliance on politically dependent funding and structural support and a considerable amount of community skepticism.

“Don’t push that product to them unless you properly educate: ‘Understand you’re getting a \$70,000 house – you’re getting the house, you’ll never own the land,’” said Angeanette Thibodeaux, president of the Acres Homes Super Neighborhood Council in an interview with the Houston Chronicle newspaper. “I’d never do that” (Morris, 2019).

Nevertheless, the rate of land acquisition and number of homes in the CLT portfolio appear likely to have a strong impact on affordability and access to property acquisition in Houston, which should boost community stability against gentrification and provide an extra layer of tenure security against future hurricanes and flooding disasters (Allen, 2020, Parker, 2020).

A 1.25% cap on annual property value appreciation within the CLT is also a significant advantage for residents who struggle to pay Houston’s property taxes, especially if storm-related repairs and renovations lead to higher home value appraisals.



*“Unfortunately, what we’ve seen is that those who do get help in repairs are in jeopardy of losing their homes, because once that home is new and repaired it gets appraised for a higher amount. And that higher amount now – the taxes on that new property may be more than what that person may be able to afford ... So, the land trust model is a way to make sure that homeowners who do end up getting that needed repair have the option to put their home in a trust and stabilize that tax that they’re going to get the next year once that house is appraised again and it’s all brand spanking new and shiny, which could cause them to lose their property eventually. And we don’t want that. We don’t want displacement of people” (Allen, 2020).*

### 4.3.2 Summary of key findings and data

The following are a brief summary of the relevant findings in this case study and a summarized compilation of the collected data on the Houston Community Land Trust based on primary source interviews and available secondary material.

1. With direct local government involvement from the start and a significant, ongoing inflow of government financial support, the HCLT has been able to grow quickly and is easily the most ambitious of the three trusts studied in terms of housing and land acquisition (a component of allocation) and control.
2. This top-down approach has generated a considerable amount of community skepticism, however, which may affect engagement long-term. It is also possible that any future political changes could threaten the sustainability of government support.
3. Property taxes are a concern for housing affordability on the larger market, which makes the CLT model attractive since it caps annual home value appreciation – and thereby limits property tax increases.
4. In a city that is both hurricane- and flood-prone, engineering resilience capacity by raising homes higher off the ground or adding water management features on land trust property does not appear to be a priority for the HCLT at the moment. This could be a missed opportunity in the long run.

**Table 7: Data summary for Houston Community Land Trust**

Indicator	Sub-indicator	Data	Source(s)
Allocation	Type of housing recipient	Earn less than 80% area median income, meet pre-qualifications, can be approved for mortgage	Allen, 2020, Morris, 2019, City of Houston, 2019, Grounded Solutions Network, 2016
	Amount of housing available	25 homeowners as of June, expect up to 60 homeowners by mid-2021, goal of 1,100 homes within five years	Allen, 2020, Kimble, 2020, Morris, 2019, Grounded Solutions Network, 2016
	Rate of CLT land acquisition	Acquisition expected to dramatically increase with Homebuyer Choice program that lets more homebuyers join	Allen, 2020, Kimble, 2020

		the trust in exchange for subsidies to buy housing already on market	
Control	Governing board composition	Tripartite board, may not be fully implemented yet	Allen, 2020, Parker, 2020
	Governance framework	Based on bylaws written in consultation with Grounded Solutions Network with oversight city of Houston and state of Texas	City of Houston, 2019, Grounded Solutions Network, 2016, Bylaws (Houston Community Land Trust, 2018)
	Legal framework	Based on bylaws written in consultation with Grounded Solutions Network	Bylaws (Houston Community Land Trust, 2018), Parker, 2020
	Stakeholder involvement in CLT decisions	Close ties to city government, plans to expand resident involvement, community outreach efforts	Parker, 2020, Allen, 2020, Morris, 2019
Flexibility	Diversity of housing mix	All single-family homes so far	Parker 2020, Lomax, 2019
	Diversity of tenure	Residents own the home but not the land, no rentals	Parker, 2020, Houston Community Land Trust, 2020, Bylaws (Houston Community Land Trust, 2018)
	Land-use flexibility	Flexibility with board approval	Bylaws (Houston Community Land Trust, 2018)
	Property rights	Standard home property rights, additional rights pending board approval	Bylaws (Houston Community Land Trust, 2018)
Exchange	Right to sell, inherit, gift, or earn profit	Right to sell or inherit, gifting or earning profit would be subject to income qualifications and board approval	Parker, 2020, Allen, 2020, Bylaws (Houston Community Land Trust, 2018), Morris, 2019, Kimble, 2020, Kinder Institute for Urban Research, 2019
	Restrictions on resale	Appreciation value capped at 1.25% per year, new buyers subject to income requirements	Grounded Solutions Network, 2016, Parker, 2020, Allen, 2020, Morris, 2019
	Perceptions of investment value	Various, but homeownership model allows limited equity	Parker, 2020, Allen, 2020, Morris, 2019

Continuity	Provisions for long-term affordability	Ground leases last 99 years and are renewable, appreciation value capped at 1.25% per year	Parker, 2020, Allen, 2020, Morris, 2019, Kinder Institute for Urban Research, 2019
	Provisions for sustainability of the trust	Unclear if city subsidies can continue indefinitely, process of dissolution of trust based on bylaws	Kimble, 2020, Grounded Solutions Network, 2016, Bylaws (Houston Community Land Trust, 2018)
	Monitoring and evaluation	Oversight provided by city of Houston and state of Texas	Bylaws (Houston Community Land Trust, 2018)
	Community stability	Goals are to provide workforce housing, preserve neighborhood diversity, avoid displacement from gentrification	Parker, 2020, Allen, 2020, Lomax, 2019, Kimble, 2020, Morris, 2019
Accessibility	Access to property acquisition	Open to qualified, income restricted buyers, currently a waitlist	Houston Community Land Trust, 2020, Kinder Institute for Urban Research, 2019, City of Houston, 2019
	Presence of legal framework for buying/renting	Based on bylaws and model created in consultation with Grounded Solutions Network	Bylaws (Houston Community Land Trust, 2018), Grounded Solutions Network, 2016
	Access to CLT governing structures and processes	Residents, community members will eventually form part of tripartite board, workshops provide additional stewardship functions	Bylaws (Houston Community Land Trust, 2018), Allen, 2020
Affordability	Presence of economically diverse community	Goals are to provide workforce housing, preserve neighborhood diversity, avoid displacement from gentrification	Parker, 2020, Allen, 2020, Lomax, 2019, Kimble, 2020, Morris, 2019
	Avenues for funding CLT operations	Most funding (\$16 million) from city of Houston government, some from homeowner fees (\$50 per month)	Kimble, 2020, Morris, 2019, Kinder Institute for Urban Research, 2019
	Impacts on personal wealth	Shared equity model allows 1.25% annual appreciation on home values, homes sold with	Parker, 2020, Allen, 2020, Morris, 2019,

		\$100,000 in combined subsidies	Kinder Institute for Urban Research, 2019
Engagement	Presence of social networks	Limited data available, but outreach and stewardship efforts may grow existing networks or create new ones	Allen, 2020
	Presence of socially diverse community	Diversity in neighborhoods is a stated goal of the CLT and the Houston government	Parker, 2020, Grounded Solutions Network, 2016, Lomax, 2019
	Participation in CLT processes	Tripartite board, stewardship programs	Morris, 2019, Bylaws (Houston Community Land Trust, 2018), Allen, 2020
	Participation in local governance processes	Efforts to connect residents with local government and community service organizations	Parker, 2020
	Community perceptions	Various, skepticism from real estate community and some homeowners and community leaders, support for affordability programs, outreach appears to be successful in building favorable opinion	Allen, 2020, Parker, 2020, Morris, 2019, Lomax, 2019, Kimble, 2020, Kinder Institute for Urban Research, 2019

#### 4.4 Comparisons across the three cases

The largest number of thematic overlaps occurred between discussions of CLT funding and the rate at which the CLT was able to acquire new land and housing, which seems entirely logical on its face. But the sources of funding and, perhaps more interestingly, the involvement and support of local governments dramatically shaped the ways in which the CLTs expanded their operations and the rate at which they were able to do so.

The Houston and Florida Keys CLTs received significant and ongoing government support, particularly at the local level. Houston’s city government spends up to \$100,000 per house to subsidize affordability for buyers of Houston CLT homes, for example (Miller, 2019). And Monroe County partially subsidized the cost of Florida Keys CLT homes by purchasing the land from the trust (Pattison, 2020, Anderson, 2020).

The North Gulfport CLT, on the other hand, faced substantial government opposition at certain points, in large part due to longstanding antagonism between city and county officials and members of the Turkey Creek community in which the land trust operated (Killcreas, 2012, Lawrence, 2020).

*“I’ve seen a previous mayor of Gulfport call the community leaders when they were fighting some of the development a bunch of dumb bastards. So,*

*when the mayor of your community considers part of the community a bunch of dumb bastards that tells you kind of all you need to know about the relationship” (Lawrence, 2020).*

In other words, functional governance networks seem to have impacted the rates of growth for all three CLTs. Given their inherent dependence on municipal policy and political will, CLTs likely need some degree of government support in order to grow effectively and sustainably.

Another significant co-occurrence appears to link economically diverse communities and community stability. This stands to reason considering that communities rely on services performed by workers across income levels.

This is of particular concern in the Florida Keys, for example, where high housing prices and the relatively low-wage tourism economy present a challenge for low- and middle-income residents.

*“I think there is an understanding of that and an allowance that if you’re building affordable homes that these are going to be year-round residents, and these are really the people that make the Keys work. It’s amazing that more isn’t done for the workers who really make it a great place to visit” (Anderson, 2020).*

Similarly, the perceived investment value of a CLT home seems to relate to community perceptions of the trust in general, which can be an important factor in the trust’s success and ability to foster engagement. Education seems to be the most straightforward way to address this issue.

*“In addition to the information sessions for the community, we held some for the realtors so that they could understand the process from the buyer’s perspective ... and getting them to understand the shared equity model and explain that to their homebuyer. Most people, honestly, their top priority is affordability and space for their families. So, them having to share the ownership of the land did not bother them” (Allen, 2020)*

In each case, the rate of land acquisition logically corresponded with the amount of housing available in the trusts – one or two occupied homes in North Gulfport, four homes in the Florida Keys and about 25 homes in Houston. But the ways in which these indicators correlate nevertheless provide some interesting insights.

The North Gulfport CLT acquired significantly more land than housing over the last 15 years, for example, valuing the control that land ownership offered as a check against speculation and gentrification (Lawrence, 2020). The Houston CLT expects to begin a program that would allow homeowners to opt into the trust when purchasing qualifying homes rather than having to acquire the land or the homes directly (Allen, 2020). In Florida, the process of designing, permitting, and building entirely new units consumed a significant amount of time even as the trust was able to continue acquiring land for future projects (Anderson, 2020).

The challenges of land acquisition and housing growth had impacts on access to housing and to some extent on CLT governance, since both the Florida Keys and Houston CLTs mentioned having significant waiting lists and elaborate qualification processes (Anderson, 2020, Allen, 2020).

But each approach ultimately represents a rational response to local needs: storm-resistant housing for the geographically vulnerable Keys, large quantities of affordable units for Houston’s growing population, and the clout of land tenure defending a minority community

against development pressure in Gulfport. This suggests that the flexibility of CLT functionality allows it to adapt well to specific contexts.

#### **4.4.1 Connecting functionality, social and economic resilience across cases**

For the purposes of this analysis, community land trusts were determined to function based on five broad components – exchange, flexibility, allocation, control, and continuity – which could in turn be broken down into several smaller sub-components.

Qualitative analysis of the three case studies observed in this research suggests that these components are indeed integral to high-functioning CLTs, and that a breakdown in any of them can negatively impact the CLT’s performance since many of the components are interwoven. Further, the level of CLT functionality does appear to be related to indicators of social and economic resilience, defined as affordability, accessibility and engagement.

##### **a. Allocation and affordability**

Allocation and affordability were the most tightly linked indicators, suggesting that the provision of housing as a function of CLTs – specifically the number of homes in the trust and the rate of land acquisition – has a significant relationship to overall affordability, and therefore to economic resilience.

The innovative program the Houston CLT plans to explore is likely to help the trust to quickly and dramatically expand its portfolio of homes by allowing homeowners throughout the city who meet certain requirements to place their homes under the trust and get certain long-term affordability benefits such as a stable and reduced property tax burden in exchange for ceding control of their land to the trust (Kimble, 2020).

Such an effort would even more directly link allocation and affordability while also allowing CLTs to meet affordable housing needs more quickly and flexibly than building them or acquiring them via other methods.

##### **b. Affordability and continuity**

Affordability and continuity were also closely linked, which likely has to do with the fact that residents able to comfortably afford their homes are less likely to move away or be displaced.

*“A lot of people left the Keys because they didn’t have a place to live ... Some of the hurricane recovery funds coming from the federal government came so late that there was no option for a lot of people. They just had to leave. I think we got a 10-15% reduction in population because that amount of affordable housing just no longer existed” (Pattison, 2020).*

LaDonna Parker, a real estate agent and Houston CLT board member, directly tied the land trust model and its capacity to provide lower-income people with homeownership to community stability, saying that homeownership is positively associated with a number of benefits that extend beyond the individual (Parker, 2020).

But affordability and continuity are not only linked for residents. At the CLT level, funding for operations (analyzed as a component of affordability) is directly tied to the sustainability of the trust (a component of continuity).

“We’re active – well I won’t say active, but we’re in existence – in that I’m filing the annual report to the Mississippi Secretary of State as a non-profit charitable organization,” said M.O. Lawrence, a former treasurer of the North Gulfport Community Land Trust. “We file a tax return even though we don’t have enough income” (Lawrence, 2020). Further operation of the North Gulfport CLT likely depends on finding a sustainable source of income.

### **c. Engagement, affordability and flexibility**

Social resilience, defined largely as community engagement, was linked most closely to affordability and flexibility. There are a number of potential explanations for these relationships. Among the most likely is that attainably priced housing and an attractive housing mix – components of affordability and flexibility respectively – are likely to positively influence community perceptions.

*“With the land trust model there is ownership. There is the stability quotient. We know that people who own their homes are more likely to not be moving. Their children are more likely to graduate from high school and go on to college. They’re less likely to be incarcerated and more likely to vote. Those things that I would say typify a good normal life. Those are the intangible benefits of homeownership that we really don’t hear about. And those flow with the land trust model” (Parker, 2020).*

Affordable and flexible communities are also likely to feature higher social and economic diversity, which can foster or sustain social networks and facilitate participation or engagement in both CLT governance and processes and local government activities. Among the likely outcomes of these attributes is a more stable community, which was a commonly cited goal for the CLTs in this study and a key indicator of social resilience.

### **d. Accessibility and control**

Accessibility, the other main component of economic resilience, was most closely associated with the CLT function of control. Elements of control, such as the presence of a legal framework, a well-established board, and robust stakeholder (i.e., local public officials, community members, other nonprofits) involvement seem likely to improve access to CLT property acquisition – for example, by creating a clear process for applying and purchasing or renting a home – and access to CLT processes by making clear the ways in which residents and community can participate in CLT activities and decision-making.

Control also allows for affordability when utilizing a legal framework and governing documents to ensure that provisions are in place to lock in subsidies and attainable pricing over the long-term, for instance.

### **e. Exchange and affordability**

Exchange and affordability share a number of links, which is ideal considering that the CLT model seeks to lock in affordable pricing over the long term across any number of times a property might change hands.

*“They’re embracing the reality that it’s better to own most of the structure – I mean it’s true you don’t own the land but technically you do because you’ve got a 99-year lease, right? So once people really understand, they’re better with it. They understand it’s a limited wealth model, but it does transfer. I think that what I truly, truly appreciate in terms of the perpetuity model is that you are limited. You can’t just sell the house to anybody. It has to be someone that qualifies within that range of affordability. And my sincere prayer is that that never changes” (Parker, 2020).*

Even in a rental model such as the Florida Keys CLT, rental rates are capped at comparably affordable prices long-term by local government policy, although the lack of ability for renters to directly build equity in their homes may somewhat reduce that trust’s impact on local economic resilience.

In short, the functionality of a CLT does appear to relate closely to economic and social resilience. But these associations do not depend simply on the presence of a checklist of components, but rather on how those components connect and interact with one another.

A highly functional CLT therefore seems more likely to have a stronger positive effect on resilience at a larger scale. Conversely, breakdowns in aspects of CLT functionality may make the CLT itself more fragile, as appears to have been the case in North Gulfport, although impacts on resilience may still occur at some level.

#### **4.4.2 How are CLTs different in hurricane-prone regions of the United States?**

Hurricanes were most closely associated in the data with descriptions of economic diversity and community stability, with overwhelmingly negative associations for both. Loss of economic diversity was of particular concern in the Florida Keys, where high housing costs had already put pressure on low- and middle-income residents long before Hurricane Irma.

*“A lot of the mobile homes that have been here for decades are gone. A lot of houses are completely gone. There are still a lot of people waiting on roofs or waiting on insurance settlements to build things back” (Jones, 2020).*

In Houston, CLT director Ashley Allen blamed post-Harvey rental assistance programs with driving up rent prices, a trend that continued after the assistance programs dried up.

*“So, something that [landlords] used to charge \$900 for they said, ‘Oh, now you’re getting these disaster recovery funds. Fantastic. Now this place is \$1,100.’... [But that] doesn’t go back down when the money from the federal fund stops. So, then you have a bunch of people being evicted because they can no longer afford the increased rent on that place that people upped just because they knew people were getting assistance” (Allen, 2020).*

Across all three cases, significant links were found between community stability as a functional component of community land trusts and elements of social resilience (perceptions of the larger community and the presence of social diversity, for example).

Similarly, elements of economic resilience (access to CLT homeownership or renting and the presence of an economically diverse community) related to stability. This suggests that well-functioning CLTs can help create more stable communities, which foster economic and social resilience and vice versa – an ideal trait for weathering a major natural disaster.

It is not entirely conclusive, given the scope of the data collected for this research, if hurricanes cause CLTs to function significantly differently than they do in other parts of the country that do not face tropical weather. But as discussed in Section 4.4, hurricanes seem to lend an urgency to the affordability and access components of resilience-building that CLTs seek to address.

Vulnerability to hurricanes also leads CLTs to take on a preventive role, such as the Florida Keys CLT building storm-resistant housing or the North Gulfport CLT seeking to block development in wetlands that serve a flood mitigation purpose.

This is not necessarily to suggest that CLT functionality would be sufficient to overcome unwise development patterns in the face of climate change and worsening storms, however.



*“The hurricane is not a natural disaster; it occurs all the time. The disaster is a manmade disaster. We decided as human beings that we can outsmart nature. So that’s neither here nor there, but I can’t get off of it. Sometimes people talk about Katrina as a natural disaster, but no it wasn’t a natural disaster. It was a manmade disaster” (Lawrence, 2020).*

#### **4.4.3 Current impact of COVID-19 – a different kind of natural disaster**

Nearly all of the interviewees mentioned the global COVID-19 pandemic as an additional strain on the operations and ambitions of their respective CLTs, which is hardly surprising given the virus’s reach into virtually every sector of the global economy and across socio-economic, political and geographic boundaries.

Already, the pandemic has affected nearly every aspect of CLTs’ day-to-day functioning, from acquiring new land and housing (Whitcomb, 2020a), to organizing communities (Allen, 2020), to keeping housing costs down in expensive real estate markets as global supply chain disruptions increase the cost of materials and safety concerns impact the cost and availability of labor (Anderson, 2020).

Specifically, COVID-19 dealt a fresh blow to seasonal workers in the Florida Keys, many of whom were still struggling to recover from Hurricane Irma.

*“The fact that the pandemic hit just as the [tourism] season was kicking in really hit the workers extra hard because they go through the lean times of off-season to make it up and make extra money during season, and that kind of carries them through the year. But that was just another natural disaster that they didn’t need, for sure ... It’s just a different kind of natural disaster. I don’t know why people aren’t looking at it as such” (Anderson, 2020).*

It is unclear what long-term impacts on CLT operations, if any, may result from COVID-19 or the extent to which CLTs might contribute to resilience through and beyond the pandemic. But given the potential that the global struggle with pandemic viruses is likely to extend well into the future, it seems an area well worth future study.

#### **4.4.4 Education, quality and perception**

Community perception and pushback were commonly cited challenges for community land trusts in their early stages and as they continued to grow. But education and outreach programs seem to have been effective in changing people’s minds.

Houston CLT board member LaDonna Parker, who is also a working real estate agent, explained her experience from the CLT and real estate perspective.

*“I’d just say that educating the masses about this model is very important. In fact, there are a couple of people who are now realtors representing our program who before didn’t believe in it ... We had a couple of brokers that I just went toe-to-toe with about the viability of the model and now that they have embraced it, they realize that this is actually not so bad after all” (Parker, 2020).*

Asked what she believes changed their mind, Parker (2020) said, “The fact that it’s better to own something than nothing.”

The CLT model remains a somewhat foreign one in the United States, where land tenure is overwhelmingly limited to traditional freehold ownership, public housing, or renting (Miller, 2015). So, it is not surprising that some residents may resist a system of tenure that lies somewhere in between those two poles, despite the fact that it may meet the needs of many would-be homeowners or renters more effectively than either more common model.

Outreach by CLTs is therefore essential to building support. It is also important in building social networks, which can aid in CLT functionality and bolster social resilience, and in fostering stakeholder involvement, which were connected in the data to stronger land trusts and better-integrated communities.

The housing mix matters in the eyes of the community too. Despite initial suspicions about funding and control by relative outsiders, Florida Keys residents appear to have become more enthusiastic about the CLT model based on the perceived quality of its homes, according to CLT director Anderson.

*“Every time I would go visit – we had one house that was vacant, and I was sort of getting ready for someone to move in – and people would see me outside and they would stop and talk to me about it. They would say, ‘Hey are you going to build more of these?’ A lot of the residents are like, ‘I want to rebuild my home. How can I do this?’” (Anderson, 2020).*

## Chapter 5: Conclusions and recommendations

The data gathered in the course of this research offer several insights into the ways CLTs operate in coastal communities in the United States, particularly in the post-disaster context. The analysis in the previous chapter, combined with data from existing literature, bring this research back to the questions that prompted it.

### **5.1 Are CLTs in hurricane-prone regions of the United States functioning in the ways they were intended to?**

The Houston CLT appears to be quite effective in several areas of functionality – allocation, control, flexibility, and exchange. Given its relatively recent founding, it remains to be seen if continuity is achieved, but sufficient provisions are in place to suggest that this will be the case.

The Florida Keys CLT is also modestly successful in allocation and control in terms of acquiring and operating homes under the trust model, although flexibility, exchange, and continuity are limited somewhat by the fact that the CLT is a rental-only organization for now.

The North Gulfport CLT has achieved a measure of allocation, and it offers flexibility, control, and exchange to the extent that it can provide these things without a clear staff or board structure at the moment – something that most directly threatens continuity. But there is evidence that the trust has served as an engagement-building tool, which may help revive functionality if community members step in and take over operations.

Each of the cases studied here exists in a unique context serving a specific population for specific purposes, so it is beyond the scope of this research to extrapolate too far beyond the functionality of the three CLTs described previously. It is also not clear that CLTs function substantially differently in hurricane-prone regions apart from the direct effects that storms have on operations or missions.

Nevertheless, despite variations in the levels of functionality across the three cases, they all appear to add value to their surrounding communities in ways that are adapted to local context and needs. This suggests a potential advantage of CLTs in that their benefits may extend far beyond the provision of affordable housing. By the same token, their success is limited by their ability to function organizationally in the short and long-terms against obstacles both natural and manmade.

### **5.2 How do hurricanes affect the formation and missions of CLTs in the United States?**

Among those obstacles, hurricanes appear to act as an instigator for CLT formation during the recovery process or as a pivotal moment in shaping the mission of the CLT in meeting the needs of the surrounding community. The primary reason for this appears to be the negative effects hurricanes have on the housing stock, with affordable housing particularly vulnerable for geographic, social and economic reasons (Fu, 2016, Van Zandt et al., 2012).

Hurricanes can also drive up rebuilding costs (Anderson, 2020), lead to land speculation (Allen, 2020, White, 2012), threaten economic and social diversity (Pattison, 2020, Lawrence, 2020), bring in outside money with unintended consequences (Lawrence, 2020), exacerbate racial and other social tensions (Crowley and Johnson, 2005, Perkins et al., 2004) and otherwise strain community resilience.

CLTs cannot single-handedly resolve these issues, but they offer some advantages over other models – perpetual affordability, community-building capacity – that appear to make them an ideal tool for bouncing back after disasters, creating or enhancing adaptive capacities, and building back better (Nelson et al., 2020, Cutter et al., 2010, Norris et al., 2008).

### **5.3 In what ways does the functionality of CLTs affect the perceptions of land trust stakeholders?**

Broadly, community perceptions of CLTs seem to depend on the education and outreach efforts of the trusts themselves, as well as on factors such as the housing mix, the rate of land acquisition and the access community members and stakeholders have to land trust processes (Anderson, 2020, Allen, 2020, Miller, 2019).

Much of the perception of CLTs also appears to be connected to the perceived value of purchasing or renting a CLT home, which is not surprising considering that the concept of private homeownership in a collective land ownership context with remains a relatively abstract one for many United States residents (Miller, 2015).

Perceptions, in turn, had strong links in the data to the ability of land trusts to grow and sustain themselves (Lawrence, 2020, Jones, 2020, Parker, 2020). Because community perceptions and resulting political considerations can be such a potentially powerful determinant of CLT functionality and success, it is likely that land trust leaders should emphasize outreach and education among other community-focused strategies.

### **5.4 To what extent are CLTs in hurricane-prone regions of the United States functioning as a way to facilitate social and economic resilience after natural disasters?**

Simply put, there are too many factors and too much unpredictability involved to conclusively suggest that CLTs significantly add to social and economic resilience. And the limited scope of even the largest community land trust studied for this research makes it likely that any impact on the larger community – at least for now – remains small.

However, it is entirely likely that CLTs have major impacts on the daily lives and future livelihoods of their residents, who benefit from affordable homeownership, a path to building personal wealth and other advantages that might not be available to them on the open housing market.

One Houston CLT homebuyer described her experience, for example:

*“It’s changing everything. It’s changing my life. It’s changing my children’s life. It’s something that we’ll be able to keep in our family. It’s showing that my hard work will still be there. I love being able to go home and say, ‘It’s mine’” (Houston Community Land Trust, 2020).*

Similarly, functional CLTs almost certainly offer some contribution to improving their immediate surroundings by facilitating stable communities and building a sense of pride in place (Parker, 2020, White, 2012, Gray, 2008, Meehan, 2013, Thaden, 2011).

An analysis of the three case studies detailed above found some evidence of potentially causal relationships between CLT functionality – allocation, control, flexibility, exchange, and continuity – and indicators of social and economic resilience – access, affordability, and engagement.

Thus, it is reasonable to conclude that CLTs may indeed facilitate more economically and socially resilient communities, especially when they are fully functional under the traditional land trust model. Still, the scope of this enhanced resilience seems to be limited by economic, political and social realities that make the growth and broader embrace of CLTs in the United States a significant long-term challenge.

### **5.5 Applicability, recommendations, and final thoughts**

The wide variability of community land trusts in the United States and the even broader diversity of local contexts makes the direct application of case study research on community land trusts difficult even despite efforts to improve internal and external validity via triangulation, multiple sources, and multi-faceted analysis. Still, the insights provided by this data are likely to prove useful to other community land trusts, particularly those formed or undergoing formation in areas prone to hurricanes or in the process of disaster recovery.

There are advantages and disadvantages to top-down or bottom-up approaches to CLT formation and operation, for example, with the Houston CLT demonstrating that a top-down method can facilitate quick growth but stronger community skepticism and pushback. A bottom-up approach such as in North Gulfport can build resilient social networks but face strong headwinds from a resistant government.

Along similar lines, robust and sustainable funding is important not just to day-to-day operations but to the quality of the housing mix – which relates to community perceptions and stability – the rate of land acquisition and the long-term viability of the trust itself. There are ways to grow CLTs and reap many of their benefits without large amounts of funding, something the North Gulfport trust demonstrates. But financial solvency is critical in achieving a high level of functionality over time.

And ultimately, communities across the United States – especially those in disaster-prone areas – must address housing affordability in one way or another or face destabilizing consequences that will likely hamper resilience. The CLT model offers some apparent advantages for meeting housing needs sustainably, but it is not the only option, and it is likely to perform best in tandem with other programs.

Housing affordability appears to have strong links to community stability and economic and social diversity, which in turn are strongly linked to social and economic resilience. As North Gulfport CLT founder Rose Johnson described it, “Home is for spiritual things to happen, for storytelling about who did what back in the day, a place to be secure. After Katrina, people were not secure, people were lost in so many ways. I saw how important home is” (White, 2012).

And that is what can set CLTs apart. They offer “home” as more than just shelter. They offer shared equity and shared strength.

## Bibliography

- Ahern, J., 2011. From fail-safe to safe-to-fail: Sustainability and resilience in the new urban world. doi: <https://doi.org/10.1016/j.landurbplan.2011.02.021> Available at: <http://www.sciencedirect.com/science/article/pii/S016920461100079X> .
- Aldrich, D.P. and Meyer, M.A., 2015. Social Capital and Community Resilience. *American Behavioral Scientist*, 59 (2), pp. 254-269 Available at: <https://doi.org/10.1177/0002764214550299> .
- Algoed, L. and Hernández Torrales, M., 2019. The Land is Ours. Vulnerabilization and resistance in informal settlements in Puerto Rico: Lessons from the Caño Martín Peña Community Land Trust. *Radical Housing Journal*, pp. 29-47 Available at: [https://cris.vub.be/files/45312459/02\\_Long\\_Read\\_Algoed\\_et\\_al\\_29\\_47.pdf](https://cris.vub.be/files/45312459/02_Long_Read_Algoed_et_al_29_47.pdf) .
- Allen, A., 2020. Interview with Ashley Allen of the Houston Community Land Trust, and Edward Buckley.
- Anderson, L., 2020. Interview with Lindsey Anderson of the Florida Keys Community Land Trust, and Edward Buckley.
- Basile, P. and Ehlenz, M.M., 2020. Examining responses to informality in the Global South: A framework for community land trusts and informal settlements. *Habitat International*, Available at: <https://doi.org/10.1016/j.habitatint.2019.102108> .
- Berkes, F. and Ross, H., 2013. Community Resilience: Toward an Integrated Approach. *Society & Natural Resources*, 26 (1), pp. 5-20 Available at: <https://doi.org/10.1080/08941920.2012.736605> .
- Bourassa, S.C., 2006. The community land trust as a highway environmental impact mitigation tool. *Journal of Urban Affairs*, 28 (4), pp. 399-418 Available at: <https://eur.on.worldcat.org/oclc/441600636> .
- Bryman, A., 2007. The Research Question in Social Research: What is its Role? *International Journal of Social Research Methodology*, 10 pp. 5-20 doi: 10.1080/13645570600655282 .
- Campanella, T.J., 2006. Urban Resilience and the Recovery of New Orleans. *Journal of the American Planning Association*, 72 (2), pp. 141-146 doi: 10.1080/01944360608976734 Available at: <https://doi.org/10.1080/01944360608976734> .
- Caton Campbell, M. and Salus, D.A., 2003. Community and conservation land trusts as unlikely partners? The case of Troy Gardens, Madison, Wisconsin. *Land use Policy*, 20 (2), pp. 169-180 Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0264837703000024> .
- Chelleri, L., Waters, J.J., Olazabal, M. and Minucci, G., 2015. Resilience trade-offs: addressing multiple scales and temporal aspects of urban resilience. *Environment and Urbanization*, 27 (1), pp. 181-198 doi: 10.1177/0956247814550780 Available at: <https://doi.org/10.1177/0956247814550780> .
- Choi, M., Van Zandt, S. and Matarrita-Cascante, D., 2018. Can community land trusts slow gentrification? *Journal of Urban Affairs*, 40 (3), pp. 394-411 .

City of Houston, 2019. City of Houston Closes First Land Trust Home in New Development Program. Press Release, June 7,. Available at: <https://cityofhouston.news/news-release-city-of-houston-closes-first-land-trust-home-in-new-home-development-program/> .

Collier, M.J., Nedovic-Budic, Z., Aerts, J., Connop, S. et al., 2013. Transitioning to resilience and sustainability in urban communities. doi: <https://doi-org.eur.idm.oclc.org/10.1016/j.cities.2013.03.010> Available at: <http://www.sciencedirect.com.eur.idm.oclc.org/science/article/pii/S026427511300036X> .

Cox, R.S. and Perry, K.E., 2011. Like a Fish Out of Water: Reconsidering Disaster Recovery and the Role of Place and Social Capital in Community Disaster Resilience. *American Journal of Community Psychology*, 48 (3-4), pp. 395-411 Available at: <https://doi.org/10.1007/s10464-011-9427-0> .

Crowley, C. and Johnson, S., 2005. Turkey Creek feels abandoned. Cnn, Sep. 23,. Available at: <http://edition.cnn.com/2005/US/09/22/turkey.creek/index.html> .

Cutter, S.L., Barnes, L., Berry, M., Burton, C. et al., 2008. A place-based model for understanding community resilience to natural disasters. doi: <https://doi-org.eur.idm.oclc.org/10.1016/j.gloenvcha.2008.07.013> Available at: <http://www.sciencedirect.com.eur.idm.oclc.org/science/article/pii/S0959378008000666> .

Cutter, S.L., Emrich, C.T., Mitchell, J.T., Boruff, B.J. et al. , 2006. The Long Road Home: Race, Class, and Recovery from Hurricane Katrina. *Environment: Science and Policy for Sustainable Development*, 48 (2), pp. 8-20 Available at: <https://doi.org/10.3200/ENVT.48.2.8-20> .

Cutter, S.L., Johnson, L.A., Finch, C. and Berry, M., 2007. The U.S. Hurricane Coasts: Increasingly Vulnerable? *Environment: Science and Policy for Sustainable Development*, 49 (7), pp. 8-21 Available at: <https://doi.org/10.3200/ENVT.49.7.8-21> .

Davis, J.E., 2010a. Origins and evolution of the community land trust in the United States. *The Community Land Trust Reader*, 1 (4), Available at: <http://berkshirecommunitylandtrust.org/wp-content/uploads/2015/02/Origins-Evolution-CLT-byJohnDavis.pdf> .

Davis, J.E., 2010b. Origins and evolution of the community land trust in the United States. *The Community Land Trust Reader*, 1 (4), .

DeFilippis, J., Williams, O.R., Pierce, J., Martin, D.G. et al. , 2019. On the Transformative Potential of Community Land Trusts in the United States. *Antipode*, 51 (3), pp. 795-817 Available at: <https://doi.org/10.1111/anti.12509> .

Dickerson, A.M., 2018. Hurricane Harvey and the Houston Housing Market. *Texas Law Review*, 96 pp. 102-113 Available at: <https://texaslawreview.org/wp-content/uploads/2018/07/Dickerson-V96-TLRO.pdf> .

Duncan, D., 2019. Port of Gulfport's construction plans on hold after opponents file appeal. WLOX News, Oct. 25,. Available at: <https://www.wlox.com/2019/10/24/port-gulfports-construction-plans-hold-after-opponents-file-appeal/> .

Durst, N.J. and Wegmann, J., 2017. Informal Housing in the United States. *International Journal of Urban and Regional Research*, 41 (2), pp. 282-297 Available at: <https://doi.org/10.1111/1468-2427.12444> .

Engelsman, U., Rowe, M. and Southern, A., 2016. Community Land Trusts, affordable housing and community organising in low-income neighbourhoods. *International Journal of*

*Housing Policy*, 18 (1), pp. 103-123 Available  
at: <https://doi.org/10.1080/14616718.2016.1198082> .

Engelsman, U., Rowe, M. and Southern, A., 2018. Community Land Trusts, affordable housing and community organising in low-income neighbourhoods. *International Journal of Housing Policy*, 18 (1), pp. 103-123 doi: 10.1080/14616718.2016.1198082 Available  
at: <https://doi-org.eur.idm.oclc.org/10.1080/14616718.2016.1198082> .

Filosa, G., 2018a. 'I'm not going anywhere.' Irma took their homes, but these Florida Keys people have plans. Miami Herald, Sep. 7,. Available  
at: <https://www.miamiherald.com/news/local/community/florida-keys/article217788170.html> .

Filosa, G., 2018b. 'Keys cottages' are arriving in a working-class neighborhood hit hard by Irma. Florida Keys News, July 3,. Available  
at: <https://www.flkeysnews.com/news/local/article213997464.html> .

Filosa, G., 2020. Hurricane Irma wrecked a Keys neighborhood. New affordable housing just got a big boost. Miami Herald, April 20,. Available  
at: <https://www.miamiherald.com/news/local/community/florida-keys/article242145381.html> .

Fitzhugh, J., 2019. North Gulfport groups gear up for wetlands appeal. WLOX News, Oct. 29,. Available at: <https://www.wlox.com/2019/10/30/north-gulfport-groups-gear-up-wetlands-appeal/> .

Florida Keys Community Land Trust, 2019a. First Amended and Restated Articles of Incorporation of Florida Keys Community Land Trust, Inc. . Available  
at: [https://www.floridahousing.org/FH-ImageWebDocs/Developers/MultiFamilyPrograms/2020-302SubmittedApps/2020-448D\\_App.pdf](https://www.floridahousing.org/FH-ImageWebDocs/Developers/MultiFamilyPrograms/2020-302SubmittedApps/2020-448D_App.pdf) .

Florida Keys Community Land Trust, 2019b. Florida Keys Community Land Trust. Available at: <https://www.affordablekeys.org/> .

Fu, A.S., 2016. Connecting urban and environmental catastrophe: linking natural disaster, the built environment, and capitalism. *Environmental Sociology*, 2 (4), pp. 365-374 Available  
at: <https://doi.org/10.1080/23251042.2016.1220891> .

Geophysical Fluid Dynamics Laboratory, 2020. Global Warming and Hurricanes: An Overview of Current Research Results. Available at: <https://www.gfdl.noaa.gov/global-warming-and-hurricanes/> .

Gladstone, D. and Préau, J., 2008. Gentrification in tourist cities: Evidence from New Orleans before and after Hurricane Katrina. *Housing Policy Debate*, 19 (1), pp. 137-175 Available at: <https://doi.org/10.1080/10511482.2008.9521629> .

Gomez, A., 2017. Hurricane Irma shuts the door on Keys' most affordable housing - RVs and trailer parks. USA Today, Sep. 25,. Available  
at: <https://eu.usatoday.com/story/news/nation/2017/09/25/hurricane-irma-shuts-door-keys-most-affordable-housing-rvs-and-trailer-parks/697097001/> .

Grannis, J., 2020. Community-Driven Climate Solutions: How Public-Private Partnerships with Land Trusts Can Advance Climate Action. *William & Mary Environmental Law and Policy Review*, 44 (3), pp. 701-744 Available  
at: <https://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1763&context=wmelpr> .



- Gray, K.A., 2008. Community land trusts in the United States. *Journal of Community Practice*, 16 (1), pp. 65-78 Available at: <https://doi.org/10.1080/10705420801977999> .
- Gray, K.A. and Galande, M., 2011. Keeping “community” in a community land trust. Oxford University Press. Available at: <https://doi-org.eur.idm.oclc.org/10.1093/swr/35.4.241> .
- Grounded Solutions Network, 2016. Community Land Trust Business Plan: Houston. Available at: <https://www.houstontx.gov/council/committees/housing/20170201/community-land-trust.pdf> .
- Gulf Coast Community Design Studio, 2012. Mississippi Gulf Coast Regional Housing Assessment. Available at: [http://www.grpc.com/wp-content/uploads/2018/04/COMPLETE-HOUSING-ASSESSMENT\\_20130603.pdf](http://www.grpc.com/wp-content/uploads/2018/04/COMPLETE-HOUSING-ASSESSMENT_20130603.pdf) .
- Hinojosa, J. and Meléndez, E., 2018. The Housing Crisis in Puerto Rico and the Impact of Hurricane Maria. City University of New York. Available at: [https://centopr.hunter.cuny.edu/sites/default/files/data\\_briefs/HousingPuertoRico.pdf](https://centopr.hunter.cuny.edu/sites/default/files/data_briefs/HousingPuertoRico.pdf) .
- Houston Community Land Trust, 2018. By-Laws of Houston Community Land Trust.
- Houston Community Land Trust, 2020. Houston Community Land Trust. Available at: <http://houstonclt.org/about-us/> .
- Jabareen, Y., 2013. Planning the resilient city: Concepts and strategies for coping with climate change and environmental risk. *Cities*, 31 pp. 220-229 Available at: <http://www.sciencedirect.com/science/article/pii/S0264275112000832> .
- Javorsky, N., 2018. New Florida Keys Cottages Are Storm-Proof Affordable Housing. CityLab, Aug. 27,. Available at: <https://www.bloomberg.com/news/articles/2018-08-27/new-florida-keys-cottages-are-storm-proof-affordable-housing> .
- Jones, L., 2020. Interview with Linda Jones, agent with A Key Real Estate, and Edward Buckley.
- Killcreas, A.H., 2012. The Power of Community Action: Environmental Injustice and Participatory Democracy in Mississippi . *Mississippi Law Journal*, 81 (4), pp. 769-812 Available at: <https://heinonline.org/HOL/P?h=hein.journals/mislj81&i=777> <https://heinonline.org/HOL/PrintRequest?handle=hein.journals/mislj81&collection=journals&div=31&id=777&print=section&section=31> .
- Kim, H. and Marcouiller, D.W., 2016. Natural Disaster Response, Community Resilience, and Economic Capacity: A Case Study of Coastal Florida. *Society & Natural Resources*, 29 (8), pp. 981-997 Available at: <https://doi.org/10.1080/08941920.2015.1080336> .
- Kim, Y., Eisenberg, D.A., Bondank, E.N., Chester, M.V. et al. , 2017. Fail-safe and safe-to-fail adaptation: decision-making for urban flooding under climate change. *Climatic Change*, 145 (3), pp. 397-412 doi: 10.1007/s10584-017-2090-1 Available at: <https://doi-org.eur.idm.oclc.org/10.1007/s10584-017-2090-1> .
- Kimble, M., 2020. Building Trust: As Texans face the skyrocketing cost of housing, community land trusts offer the promise of permanent affordability. You just have to give up ownership of your land. *Texas Observer*, Available at: <https://www.texasobserver.org/community-land-trust-texas/> .
- Kinder Institute for Urban Research, 2019. At one year, Houston's Community Land Trust charts progress, confronts questions. Rice University, June 18,. Available

at: <https://kinder.rice.edu/urbanedge/2019/06/18/one-year-houstons-community-land-trust-charts-progress-confronts-questions> .

Lawrence, M.O., 2020. Interview with MO Lawrence of the North Gulfport Community Land Trust, and Edward Buckley.

Lawyers Committee for Civil Rights Under Law, 2010. Five Years of Commitment: Providing Legal Assistance in the Gulf Post Hurricane Katrina. Washington, D.C.: Available at: <https://lawyerscommittee.org/wp-content/uploads/2015/08/Five-Years-of-Commitment-Providing-Legal-Assistance-in-the-Gulf-Post-Hurricane-Katrina.pdf> .

Leichenko, R., 2011. Climate change and urban resilience. doi: <https://doi-org.eur.idm.oclc.org/10.1016/j.cosust.2010.12.014> Available at: <http://www.sciencedirect.com.eur.idm.oclc.org/science/article/pii/S1877343510001533> .

Leon, H., 2019. Community land trusts in the age of climate change. Shelterforce, Feb. 28,. Available at: <https://shelterforce.org/2019/02/28/community-land-trusts-in-the-age-of-climate-change/> .

Lomax, J.N., 2019. Houston Has an Aggressive, Radical Plan to Sell Affordable Housing. Texas Monthly, May 14,. Available at: <https://www.texasmonthly.com/news/houston-aggressive-radical-plan-sell-affordable-housing/> .

Lowe, J.S., 2012. Policy versus politics: post-Hurricane Katrina lower-income housing restoration in Mississippi. *Housing Policy Debate*, 22 (1), pp. 57-73 Available at: <https://doi.org/10.1080/10511482.2011.624529> .

Lowe, J.S. and Thaden, E., 2016. Deepening stewardship: resident engagement in community land trusts. *Urban Geography*, 37 (4), pp. 611-628 Available at: <https://doi-org.eur.idm.oclc.org/10.1080/02723638.2015.1101250> .

Magis, K., 2010. Community Resilience: An Indicator of Social Sustainability. *Society & Natural Resources*, 23 (5), pp. 401-416 Available at: <https://doi.org/10.1080/08941920903305674> .

Meehan, J., 2013. Reinventing real estate: The community land trust as a social invention in affordable housing. *Journal of Applied Social Science*, 8 (2), pp. 113-133 Available at: <https://journals.sagepub.com/doi/pdf/10.1177/1936724413497480> .

Meerow, S. and Newell, J.P., 2019. Urban resilience for whom, what, when, where, and why? *Urban Geography*, 40 (3), pp. 309-329 doi: 10.1080/02723638.2016.1206395 Available at: <https://doi.org/10.1080/02723638.2016.1206395> .

Meerow, S., Newell, J.P. and Stults, M., 2016. Defining urban resilience: A review. doi: <https://doi-org.eur.idm.oclc.org/10.1016/j.landurbplan.2015.11.011> Available at: <http://www.sciencedirect.com.eur.idm.oclc.org/science/article/pii/S0169204615002418> .

Meko, T., 2019. Mapping America's wicked weather and deadly disasters. The Washington Post, April 25,. Available at: <https://www.washingtonpost.com/graphics/2019/national/mapping-disasters/> .

Midheme, E. and Moulaert, F., 2013. Pushing back the frontiers of property: Community land trusts and low-income housing in urban Kenya. *Land use Policy*, 35 pp. 73-84 .

Miles, T., 2006. North Gulfport Community Land Trust Gaining Ground. WLOX News, Dec. 17,. Available at: <https://www.wlox.com/story/5824736/north-gulfport-community-land-trust-gaining-ground/> .

Miller, S.R., 2015. Community Land Trusts; Why Now Is the Time to Integrate This Housing Activists' Tool into Local Government Affordable Housing Policies. *Journal of Affordable Housing & Community Development Law*, 23 (3-4), pp. 349-372 Available at: <https://www-jstor-org.eur.idm.oclc.org/stable/26408145> .

Miller, T., 2005. Crossing Muddy Waters: Community Land Trust for Affordable Housing in Gulfport, MS. Shelterforce, July 1,. Available at: <https://shelterforce.org/2005/07/01/crossing-muddy-waters/> .

Mississippi Secretary of State, 2018. North Gulfport Community Land Conservancy, Inc. Charity Filing. Available at: <https://charities.sos.ms.gov/online/portal/ch/page/charities-search/Portal.aspx#> .

Monroe County, 2020. Monroe County Post-Disaster Recovery Strategy. Available at: <https://www.monroecounty-fl.gov/DocumentCenter/View/22929/Monroe-County-PDRS-Final-03-02-20?bidId=> .

Monroe County Planning and Environmental Resources Department, 2020. Rental Affordable Housing Units: Monroe County 2020 Qualifying Income Limits. Available at: <https://www.monroecounty-fl.gov/DocumentCenter/View/17697/2020-Rental-Limits> .

Moore, T. and McKee, K., 2012. Empowering local communities? An international review of community land trusts. *Housing Studies*, 27 (2), pp. 280-290 Available at: <https://doi.org/10.1080/02673037.2012.647306> .

Morris, M., 2019. City plan to expand affordable housing will rely on land trust, subsidies. Houston Chronicle, March 1,. Available at: <https://www.houstonchronicle.com/news/houston-texas/houston/article/City-plan-to-expand-affordable-housing-will-rely-13656027.php> .

Nelson, K., DeFilippis, J., Kruger, R., Williams, O. et al. , 2020. The Commodity Effects of Decommodification: Community Land Trusts and Neighborhood Property Values. 30 (5), pp. 823-842 Available at: <https://doi.org/10.1080/10511482.2020.1768573> .

Nonko, E., 2018. Florida Community Land Trust Makes Affordable Housing Part of Hurricane Recovery. Next City, Sep. 5,. Available at: <https://nextcity.org/daily/entry/hurricane-florida-affordable-housing-solution-land-trust> .

Norris, F., Stevens, S., Pfefferbaum, B., Wyche, K. et al. , 2008. Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness. *American Journal of Community Psychology*, 41 pp. 127-50 doi: 10.1007/s10464-007-9156-6 .

North Gulfport Community Land Trust, The North Gulfport Community Land Trust: Preserving, Protecting and Revitalizing the Historic North Gulfport Community. Available at: <https://northgulfportclt.webs.com/> .

Overstreet, J., 2020. Interview with James Overstreet, agent with New Horizons Realty, and Edward Buckley.

Parker, L., 2020. Interview regarding the Houston Community Land Trust.

Pattison, C., 2020. Interview with Charles Pattison, executive director of the Monroe County Land Authority, and Edward Buckley.

Perkins, D.D., Crim, B., Silberman, P. and Brown, B.B., 2004. Community development as a response to community-level adversity: Ecological theory and research and strengths-based policy. *KI Maton, CJ Schellenbach, BJ Leadbeater, BJ and AL Solarz, AL (Eds.). Investing in Children, Youth, Families, and Communities: Strengths-Based Research and*

*Policy*. Washington, DC: American Psychological Association, Available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.462.2100&rep=rep1&type=pdf>

Reale, A. and Handmer, J., 2011. Land tenure, disasters and vulnerability. *Disasters*, 35 (1), pp. 160-182 Available at: <https://doi-org.eur.idm.oclc.org/10.1111/j.1467-7717.2010.01198.x> .

Simmie, J. and Martin, R., 2010. The economic resilience of regions: towards an evolutionary approach. *Cambridge Journal of Regions, Economy and Society*, 3 (1), pp. 27-43 Available at: <https://doi.org/10.1093/cjres/rsp029> .

Skerratt, S., 2013. Enhancing the analysis of rural community resilience: Evidence from community land ownership. doi: <https://doi-org.eur.idm.oclc.org/10.1016/j.jrurstud.2013.02.003> Available at: <http://www.sciencedirect.com.eur.idm.oclc.org/science/article/pii/S0743016713000120> .

Skobba, K. and Carswell, A.T., 2014. Community Land Trust Homeowners: Past and Present Housing Experiences. *Family and Consumer Sciences Research Journal*, 43 (1), pp. 4-17 doi: 10.1111/fcsr.12077 Available at: <https://eur.on.worldcat.org/oclc/5624928051> .

Sungu-Eryilmaz, Y. and Greenstein, R., 2007. National Study of Community Land Trusts. Lincoln Institute of Land Policy. Available at: <https://community-wealth.org/sites/clone.community-wealth.org/files/downloads/paper-sungu-eryilmaz-%20greenstein.pdf> .

Thaden, E., 2008. Shared Equity Homeownership: Sharing the Costs and Benefits. Available at: <https://peabody.vanderbilt.edu/docs/pdf/ccs/Shared%20equity%20primer.pdf> .

Thaden, E., 2011. Stable home ownership in a turbulent economy: Delinquencies and foreclosures remain low in community land trusts. Lincoln Institute of Land Policy.

Turkey Creek Community Initiatives and North Gulfport Community Land Trust, 2011. The Community's Plan for the Turkey Creek and North Gulfport Neighborhoods. Available at: [http://www.leahmahan.com/comehellorhighwater/wp-content/uploads/docs/F11\\_08-26\\_CommunityPlan.pdf](http://www.leahmahan.com/comehellorhighwater/wp-content/uploads/docs/F11_08-26_CommunityPlan.pdf) .

U.S. Census Bureau, 2020a. Homeownership Rate for the United States. Federal Reserve Bank of St. Louis. Available at: <https://fred.stlouisfed.org/series/RHORUSQ156N> .

U.S. Census Bureau, 2020b. Quick Facts: United States; Harris County, Texas; Harrison County, Mississippi; Monroe County, Florida. U.S. Department of Commerce. Available at: <https://www.census.gov/quickfacts/fact/table/US,harriscountytexas,harrisoncountymississippi,monroecountyflorida/PST045219> .

Vale, L.J., Shamsuddin, S., Gray, A. and Bertumen, K., 2014. What affordable housing should afford: Housing for resilient cities. *Cityscape*, 16 (2), pp. 21-50 Available at: <https://www-jstor-org.eur.idm.oclc.org/stable/26326882> .

van Thiel, S., 2014. Research methods in public administration and public management: An introduction. Routledge.

Van Zandt, S., Peacock, W.G., Henry, D.W., Grover, H. et al. , 2012. Mapping social vulnerability to enhance housing and neighborhood resilience. 22 (1), pp. 29-55 Available at: <https://doi.org/10.1080/10511482.2011.624528> .

Verschuren, P., Doorewaard, H., 2010. Designing a Research Project. Eleven Int. Publishing.

Voith, R. and Wachter, S.M., 2012. The Affordability Challenge: Inclusionary Housing and Community Land Trusts in a Federal System. *Value Capture and Land Policies*, Available at: <https://ssrn.com/abstract=2182127> .

Wernstedt, K. and Hanson, J., 2009. Community Revitalization Through Areawide Brownfield Regeneration, Community Land Trusts, and Progressive Finance. *Environmental Practice*, 11 (3), pp. 134-143 doi: 10.1017/S1466046609990135 Available at: <https://www-cambridge-org.eur.idm.oclc.org/core/article/research-article-community-revitalization-through-areawide-brownfield-regeneration-community-land-trusts-and-progressive-finance/9F135EF6149A29DFC101CEB2C91BFAFC> .

Whitcomb, M., 2020a. Interview with Maggie Whitcomb of the Florida Keys Community Land Trust and Erica Perkins. Available at: <https://soundcloud.com/user-742256275/ee-20200521> .

Whitcomb, M., 2020b. Interview with Maggie Whitcomb of the Florida Keys Community Land Trust and Gwen Filosa. Available at: [https://gwenfilosa.com/2020/09/11/maggie-whitcomb-of-the-florida-keys-community-land-trust/?fbclid=IwAR0PgCvFo4GBwFK8u\\_zN4bbk2sE92VEEhO9exJIVJ2DI76XSFYqCzn4Zq3g](https://gwenfilosa.com/2020/09/11/maggie-whitcomb-of-the-florida-keys-community-land-trust/?fbclid=IwAR0PgCvFo4GBwFK8u_zN4bbk2sE92VEEhO9exJIVJ2DI76XSFYqCzn4Zq3g) .

White, M., 2012. Black Herstory: Ms. Rose Johnson of Turkey Creek Mississippi. *Ms. Magazine*, Feb. 17,. Available at: <https://msmagazine.com/2012/02/17/black-herstory-ms-rose-johnson-of-turkey-creek-mississippi/> .

Woelfle, I., 2020. Florida Keys Community Land Trust awarded \$5.2 million in community development block grant disaster recovery financing. April 20,. Available at: [https://storage.snappages.site/p51935yycg/assets/files/FLORIDA-KEYS-CLT\\_PRESS-RELEASE\\_042020-96.pdf](https://storage.snappages.site/p51935yycg/assets/files/FLORIDA-KEYS-CLT_PRESS-RELEASE_042020-96.pdf) .

Yilmaz, A., Cagdas, V. and Demir, H., 2015. An evaluation framework for land readjustment practices. doi: <https://doi-org.eur.idm.oclc.org/10.1016/j.landusepol.2014.12.004> Available at: <http://www.sciencedirect.com.eur.idm.oclc.org/science/article/pii/S0264837714002750> .

Zellner, M.L., Hoch, C.J. and Welch, E.W., 2011. Leaping Forward: Building Resilience by Communicating Vulnerability. In: Goldstein, B.E. ed., *Collaborative Resilience: Moving Through Crisis to Opportunity*. The MIT Press. pp. 39-59. Available at: <https://doi.org/10.7551/mitpress/8752.003.0006>.

Zonta, M., 2016. Community Land Trusts: A Promising Tool for Expanding and Protecting Affordable Housing. Available at: <https://cdn.americanprogress.org/wp-content/uploads/2016/06/14141430/CommunityLandTrusts-report.pdf> .

# Annex 1: Research Instruments

## Interview guide

**Introduction** - explain the purpose of the research, who I am, why I'm reaching out and the type of questions that will be asked etc.

**Initial conversation** - get some basic background information and demographic data about the respondent (sensitive data such as household income may be collected after the main interview or in a follow up communication), chat about their larger experiences with the community etc.

### For land trust leaders:

Talk to me about the land trust (How many homes? Plans for growth?)

If not addressed already, why was it formed?

Is its mission today the same as when it was formed?

Has it been successful in achieving that mission? (Ask to elaborate or give examples if necessary)

What is the process for determining who purchases a land trust house?

Do members of the larger community get to play a participatory role in the land trust?

Do residents frequently participate in the decision-making process as part of the CLT?

How is the land trust handling affordability compared to the larger community?

How did a hurricane impact the land trust mission?

Are there plans in place for dealing with future disasters?

Is there something about the land trust model that makes it better suited to help communities recover from natural disasters?

Can you please send me any founding documents or guidelines you have available?

Who else should I speak with?

### For public officials:

What has been your experience with CLTs?

What would you say are the advantages or disadvantages of the CLT model for this city/town?

Do you feel that CLT residents are more engaged with their community and this city/town as a whole?

Do you have feel that [the CLT in question] has a fair and equitable buyer process?

Have CLTs been a successful way to provide affordable housing here?

How did [the relevant hurricane] impact the city/town as a whole?

How did that inspire or change the role of CLTs here?

Do you feel that CLTs help make this city/town/county better prepared to handle future disasters?

Who else should I speak with in a public position about this project?

**For real estate professionals:**

How do you feel that community land trusts affect the larger real estate market in your community?

Is housing affordability a concern in your community?

In what ways is the process of purchasing a community land trust home different from the private real estate market?

How do natural disasters impact the real estate market in this community?

Is a community land trust home a good investment compared to other real estate options?

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