

Post-Disaster Recovery of

Public Housing in Galveston,

Texas: An Opportunity for

Whom?



TOPICS

Disaster Recovery, Social Vulnerability Factors, Post-Disaster Planning, Public Housing Replacement Strategies

TIMEFRAME

2008-2014

LEARNING GOALS

- Understand the concept of social vulnerability and the role of its factors in shaping post-disaster recovery outcomes
- Analyze examples to identify post-disaster recovery goals and to explain disparities in recovery outcomes among both public housing residents and units
- Develop criteria for evaluating post-disaster recovery planning strategies to ensure fairness and inclusiveness
- Analyze the goals and strategies for replacing affordable housing after disasters from different stakeholders' perspectives

PRIMARY AUDIENCE

Planning students and housing officials

PREREQUISITE KNOWLEDGE

This case study assumes that readers have a foundational understanding of the concept of social vulnerability, which provides a framework for evaluating a community's resilience and for understanding the ability of particular groups to anticipate, withstand, and recover from shocks such as natural disasters. This concept acknowledges that disaster risk is not distributed evenly across a population or a place. Because poor neighborhoods overall have fewer resources and more limited social and political capital than their more affluent counterparts, they face greater challenges in post-disaster recovery. Damage due to natural disasters is modulated by social factors such as income, race, ethnicity, religion, age, health, and disability status. Because poor people are more likely to live in low-quality housing, they are at greater risk for damage from high winds, waves, flooding, or tremors (Peacock et al. 2014; Van Zandt et al. 2012). Racial minorities, low-income residents, elderly households, and other socially vulnerable populations have more limited access to resources than other groups and thus face greater challenges in responding to and recovering from disaster losses. Secondary characteristics—such as the level of poverty, housing type and tenure, and neighborhood quality—then affect a community's ability to respond to and recover from the disaster and its ability to participate in post-disaster discourse (Hamideh and Rongerude 2018).

SUMMARY

In September 2008, Hurricane Ike caused massive damage to residential structures on Galveston Island, Texas, including four public housing developments. Four months later, the Galveston Housing Authority demolished the damaged developments, resulting in a loss of 569 units. Housing advocates called for replacing the units as quickly as possible post-disaster, while opponents of reconstruction expressed concerns with re-concentrating poverty. Another group wanted to see the demolished developments replaced with mixed-income housing, claiming it would help to revitalize the island's urban core neighborhoods. All parties claimed to speak for the poor. This case study highlights post-disaster challenges and opportunities, encouraging readers to ask who benefits from recovery efforts and who bears the costs.



Homes in Galveston, Texas damaged by Hurricane Ike, which came ashore on Sept. 13, 2008 and pounded the city with waves, wind and debris for at least 12 hours. Source: Aneese/iStock/Getty Images Plus

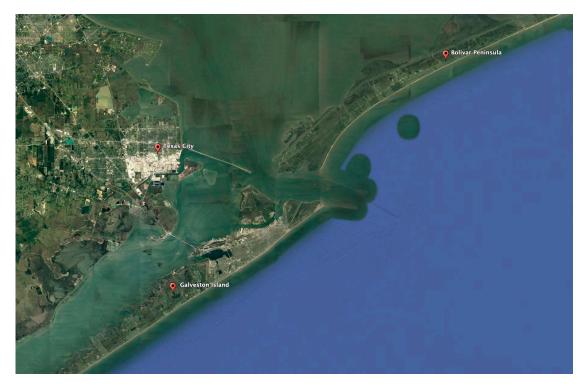
INTRODUCTION

On September 13, 2008, Hurricane Ike crossed over Texas's Galveston Island and Bolivar Peninsula as a Category 2 storm with sustained 110 mile-an-hour winds. It caused \$29.5 billion in damage to the Houston-Galveston area, making the storm one of the United States' most costly disasters (Berg 2009; FEMA 2008). Galveston Island had been protected by a seawall, due to its long history with hurricanes and tropical storms, but it was nevertheless inundated from the bay side with 10- to 15-foot destructive waves. Even before the storm was over, it had damaged more than 75 percent of the island's residential structures, ranging from affluent vacation homes to public housing.

Prior to the storm, the population of Galveston was approximately 57,000 people (U.S. Census Bureau); however, its population and the average income of families living in the island's urban core had been declining for decades. By 2000, as middle-class families moved to the mainland and the island's economy stagnated, nearly a quarter of the Island's permanent residents were living in poverty, and 69.2 percent of all renters could be classified as very low-, low-, or moderate-income households (GHA 2008). Despite the then-recent housing boom, housing affordability remained a challenge. During the three-year period before the storm, almost 46 percent of Galveston renters paid more than 30 percent of their household income for housing (GHA 2008). Prior to Hurricane lke, 90 percent of low-income renters and 76 percent of low-income homeowners in Galveston were rent-burdened (US Census Bureau 2007). The Galveston Housing Authority (GHA) had a waiting list of more than 1,600 households seeking subsidized rental housing (GHA 2008).

In 2008, GHA oversaw 990 public housing units and 1,213 Housing Choice Vouchers.² Public

¹ Percentage of income spent on housing is a threshold used by the U.S. Department of Housing and Urban Development (HUD) to indicate rent hurden



General Location of Galveston Island and Bolivar Peninsula. Source: Google Earth

housing was dispersed across six developments, four of which were affected by the storm, resulting in the immediate displacement of more than 900 people. Although displaced public housing residents were eligible for temporary vouchers from the Disaster Housing Assistance Program (DHAP), many families were not able to find an affordable home on the island where they could use the DHAP subsidy and were thus forced to find public housing off-island or to leave public housing altogether (Vinogradsky 2009; Wilder 2008). Because the displaced population disproportionately represented minority groups, many households also faced additional burdens created by unfair housing practices and enduring racial discrimination in the local housing market.

There were several longer-term options for responding to the devastation of public housing in Galveston: The damaged complexes could be rebuilt as affordable housing units, or the sites could become mixed-income developments that would replace some affordable units, leaving the remaining lost units of affordable housing to be replaced with housing choice vouchers or scattered site housing.

The Housing Choice Voucher program (sometimes called Section 8) is a federally funded housing subsidy program wherein voucher holders find their own unit on the private market. All units must meet health and safety standards and rents must be at or below the Fair Market Rent, as established by HUD each year. Once a unit has been secured, the tenant pays at least 30 percent of their household income toward the rent. The housing authority then pays the difference between the tenants' portion and the actual rent directly to the landlord. For more information about the Housing Voucher program, see HUD's "Housing Choice Voucher Fact Sheet" at https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/about/fact_sheet.

Table 1Galveston Housing Authority Public Housing Communities before Hurricane Ike.

Development	Housing Type	Number of Units
Cedar Terrace	Families	139
Palm Terrace	Families	104
Magnolia Homes	Families	133
Oleander Homes	Families	193
Gulf Breeze	Seniors and persons with disabilities	199
Holland House	Seniors and persons with disabilities	157

BACKGROUND

Galveston Island, Texas, is a 27-mile-long barrier island on the Gulf of Mexico, about 50 miles southeast of Houston. The Island's abundant ecology and strategic maritime location have long made it desirable for human habitation; the Karankawa people and the Akokisa tribe of the Ishak people both lived on Galveston Island until the 1840s, when a combination of state and federal policies and local violence resulted in their permanent displacement. Europeans reportedly set foot on the island in 1528; however, a European colony was not established until 1817, and Galveston was formally incorporated as a town in 1839. Today, the city touts itself as the home of many Texas firsts—the state's first post office, first fire station, and first opera house—but it was also the first Texas town to be devastated by a hurricane. In 1900, the entire island of Galveston was inundated by a hurricane known simply as the Great Storm. Approximately 8,000 lives were lost, and the storm remains the single deadliest natural disaster in U.S. history.

After the Great Storm, most surviving residents stayed on the island, so engineers constructed a 3.3-mile-long seawall along its Gulf of Mexico coast that was 17 feet high and 16 feet deep at its base. From 1904 to 1963, the seawall was repeatedly extended, until it was more than 10 miles long, and the city itself was raised eight to sixteen feet in different places (Hansen 2007). As the heart of the city grew, the seawall provided much-needed protection from more than 80 hurricanes and tropical storms that came into the area during the twentieth century. The seawall also shaped development, separating year-round and working-class neighborhoods from seasonal and more affluent neighborhoods. The vast majority of Galveston's year-round

residential housing is located behind the seawall in the city's urban core, where housing is more affordable. This includes four family-oriented public housing communities and the city's two developments for people who are senior or disabled. Much of the city's economic base is located behind the seawall as well, including the University of Texas Medical Branch at Galveston, the historic downtown, and various popular tourist destinations.

The city's long-term residents often refer to themselves as "BOI," or Born on the Island, and speak fondly of its grand old days of pirates and buccaneers, when Galveston was the country's second-richest city and home to a prosperous port and influential leaders who actively shaped public policy in the state. Like many of its contemporary port cities, Galveston was characterized by racial and ethnic diversity that included people of European, Mexican, Latin American, and African descent. Because of the port's active role in the country's slave trade, few free African American people lived on the island; however, because enslaved African American people in Galveston were often permitted to find their own housing and to take on additional work for pay, they did live and work in close proximity to poor white laborers. The result was a high level of social interaction between blacks and poor whites that was unusual in the South (Shelton 2007).

After the Civil War, Galveston's growing status as an entertainment and gambling venue earned the city a reputation as "Sin City of the South," until Texas Attorney General Will Wilson cracked down on the gambling and prostitution on the island in 1957, destroying gambling equipment and shutting down bars including the famous Balinese Room (McComb 2016). A steady population decline ensued as many households left the Island, either for work or more affordable housing options. A growing number of people, especially those from middle class families, began commuting to Galveston Island for work while living on the mainland.

Tourism remained Galveston's largest industry into the twenty-first century, even with the Port of Galveston and the growing presence of the University of Texas Medical Branch (UTMB) (Angelou Economics 2008; Gulf and South Atlantic Fisheries Foundation 2010). Visitors came for the beaches, historic homes, and the business district, known as the Strand. In the decade preceding Hurricane Ike, demand for high-end vacation homes grew, and the island experienced increasing pressure to build. Development expanded outside the seawall toward what was termed the East and West Ends of the island, and, despite the higher risks of storm damage and threats of erosion, the city maintained a favorable environment for builders and developers and encouraged development through tax increment reinvestment zones (TIRZ). City Council Member Elizabeth Beeton, a vocal critic of these practices, summarized the city's development push in this way, "The city government has been subsidizing resort developers through tax-increment reinvestment zones, known as TIRZ... The city has also asked its middle-class residents behind the seawall to subsidize very expensive sewer systems on the west



Aerial view of the west end of Galveston Island where new higher end vacation home developments are located. Source: Jupiterimages/Getty Images

end of the city (Curtis 2008)."³ See the figure below for an overview of the potential benefits and challenges associated with the use of Tax Increment Financing (TIF) as a local economic development tool.

Tax Increment Financing Reinvestment Zones

What is Tax Increment Financing and what is a Tax Increment Financing Reinvestment Zone?

Tax Increment Financing (TIF) is a tool used by local governments to raise revenues for projects and encourage economic development within a designated area. TIF is a debt tool. It anticipates that the TIF investment will generate new development and real estate appreciation which will in turn generate property tax revenue increases—the increment. Those dollars are separated out from other tax revenues and earmarked for the identified projects and/or the defined TIF area. In Texas, a tax increment reinvestment zone (TIRZ) is an area that has been formally designated as eligible for tax increment financing (City of Galveston 2018).

Opportunities and Challenges

TIF usage is widespread and has successfully facilitated economic development in many communities. However, the effectiveness of the practice varies. Critics of the tool argue that the local economic benefits generated by TIF often fall short of expectation and exacerbate socio-economic inequality by removing the increment from the municipality's revenue stream. In a 2018 report for the Lincoln Land Institute, titled Improving Tax Increment Financing (TIF) for Economic Development, David Merriman identified the following opportunities and challenges presented by using TIF.

Opportunities

- Promotes and facilitates credible commitment between government and private entities
- Generates political support for targeted public investments
- Generates projects with potential for local benefits

Challenges

- May capture revenues that would otherwise go to overlaying governments (e.g. school districts)
- Can decrease transparency related to local governments' financial transactions
- Has been used to facilitate improper use of public funds for private purposes
- Can generate unproductive fiscal competition between neighboring jurisdictions

³ A Tax Increment Reinvestment Zone (TIRZ) is a bounded political unit created to implement tax increment financing. In the state of Texas, TIRZ can be a subdivision of either a municipality or a county. For more information about the TIRZ program, see Hegar (2018).

Before the hurricane, the median value of owner-occupied housing in the urban core of the city was \$122,000; by contrast, the median price for single-family homes in the island vacation areas was \$178,000 (US Census Bureau 2009). In both the East and West End areas, dominated by new vacation homes, 55 percent of the housing was vacant and more than 72 percent of that vacant housing was for seasonal or vacation use. In the urban core, on the other hand, just 24.9 percent of the units were vacant and only 16.8 percent of those vacancies were due to seasonal or vacation use (Hamideh, Peacock, and Van Zandt 2018). The urban core neighborhoods remained a stable and affordable option for the city's low-income residents, despite continued disinvestment.

Even with the island's substantial affordable housing needs, local leaders viewed the communities as a barrier to revitalization of the city and had been attempting to demolish existing public housing since the 1980s (Lord 2011). In 2005, GHA finally razed Old Palm Terrace, a 228-unit public housing development, and replaced it with the Oaks, a new subdivision with 28 subsidized single-family homes and 10 duplexes. Prior to the storm, GHA's 2008 five-year plan set a goal to increase rental vouchers, while decreasing the agency's portfolio of public housing units, and the agency planned to apply for Replacement Housing Factor funding from the U.S. Department of Housing and Urban Development (HUD) to replace the remaining Old Palm Terrace units. Once HUD funding became available, GHA intended to submit HOPE VI applications for both Oleander Homes and Palm Terrace Annex to redevelop those sites as mixed-income developments (GHA 2008).⁵ These projects would have further reduced the city's stock of public housing units.

Of the 850 households living in GHA's public housing units pre-lke in 2008, 82 percent were extremely low-income, 42 percent included an individual with a disability, 86 percent had children, 39 percent were elderly, and 67 percent were African-American (GHA 2008). These demographics differed significantly from the general population of the Island where only 20 percent of the residents were African-American and 13 percent were elderly (US Census Bureau 2007). GHA had a waiting list almost equal to its total number of existing units and vouchers. The year before lke, a total of 852 families were on the waiting list for public housing, 93 percent of which were extremely low-income and 57 percent of whom were African American. An additional 824 families were on the Section 8 waiting list; 73 percent of them identified as "extremely low income" and 76 percent as African American (GHA 2008).

Without adequate affordable housing in Galveston, public housing residents were forced to move out of the city and away from their established roots. Even after the storm, DHAP assistance would not provide permanent housing for displaced families, and demolition of public housing complexes created a major obstacle against the return and post-disaster recovery of former residents and other low-income renters.

If a house is vacant for seasonal use, the US Census Bureau considers it vacant. The US Census Bureau has several different categories of vacancies including: vacant that is abandoned, vacant for sale, vacant for rent, vacant that is sold but not occupied yet, vacant that is rented but not occupied yet, and vacant for seasonal-vacation-occasional use.

The HOPE VI program was administered by the U.S. Department of Housing and Urban Development (HUD) from 1993 to 2009 and was best known for providing grants to local public housing authorities to deconcentrate poverty by redeveloping homogenously poor public housing communities into mixed income developments. For more information about the HOPE VI program, see HUD's "About HOPE VI" webpage at https://www.hud.gov/program_offices/public_indian_housing/programs/ph/hope6/about.



The sea wall on the East Coast of Galveston Island stands as a buffer between the mighty forces if the Gulf and the city of Galveston. Eight months after Hurricane Ike hit Galveston in September 2008, the sea wall and beach remained in the upheaveled condition left by Ike. Source: fstop123/iStock/Getty Images Plus

POST-DISASTER RECOVERY

On January 28, 2009, four months after Hurricane Ike, the GHA board declared Oleander Homes, Palm Terrace, Cedar Terrace, and Magnolia Homes uninhabitable. The agency decided to tear down Oleander Homes and Palm Terrace immediately and initially decided to renovate Cedar Terrace and Magnolia Homes as temporary housing until the first two sites were redeveloped (Meyers 2009; Vinogradsky 2009).

One month later, GHA notified HUD that it intended to move forward with the demolition. Completing the work by March 23 would allow the agency to take advantage of FEMA debris removal funding, saving them upward of \$1 million. On March 2, 2009, Lone Star Legal Aid (LSLA), representing displaced residents, filed a complaint with HUD in an effort to stop the proposed demolition. On March 13, 2009, LSLA and GHA entered into a settlement agreement: GHA was ordered to provide one-for-one replacement of public housing units, which also had to be rebuilt in the same configuration of one-, two-, and three-bedroom units. The housing authority further agreed to provide all displaced public housing tenants with "protection vouchers" that would pay for living accommodations until they could return to public housing, where they would receive first preference for the new units. GHA attorney Robert Bastien explained,

I don't like the idea of Lone Star Legal Aid setting themselves up as a permanent monitor of what we do. But if the idea here is that we don't want to tie all this stuff up with HUD for months and this addresses their concerns and gets the ball rolling this is what we want to do. And it's not terribly burdensome. It does place some burdens on us but not terrible burdens (Meyers 2009).

In May 2009, GHA approved a \$1.5 million contract with a Houston contractor to begin remodeling the remaining two developments, Cedar Terrace and Magnolia Homes. The city promptly ordered GHA to halt the remodeling work, however, citing a floodplain ordinance requiring properties to be elevated if storm damage equaled at least half the value of the property. GHA could have appealed the decision, but instead the agency condemned and demolished all four family public housing developments, removing 569 units of permanently affordable housing from the city's housing stock and intensifying the pre-storm shortage of affordable low-income rental housing in Galveston (Oakley and Ruel 2010). GHA committed to completing the redevelopment in 18 months, but even that delay was too much for the community's public housing advocates. "Housing delayed is housing denied," argued City Councilman Tarris Woods who represented District 1 at the time, the poorest Council District in Galveston and the location of the demolished public housing communities (Jones 2009a).

Despite the great need and GHA's legal commitment to rebuilding affordable units on the island, the years following the demolition of the public housing units saw little real progress—although they did see several different rebuilding plans, legal complaints, and lawsuits, as well as a swell of public debate. Each plan pursued one of the three replacement options: excluding government funded affordable housing from the island altogether, replacing public housing with mixed-income developments, and replacing all demolished units with public housing units on the island to provide a full right of return to all displaced residents.

Those who wanted to see public housing rebuilt on the previous sites argued for the right of displaced residents to return to their community and questioned the intentions of those who were trying to stop redevelopment. One former Cedar Terrance resident explained, "They want the people who've lived here the majority of their lives to stay out. They want the tourists to come back. Move the weak out and let the strong move in (Wilder 2008)." The reverend from a church near the demolished public housing communities added,

If a percentage of people who are actually for [rebuilding public housing] are not here, who else is going to be back?...Because everybody else is against it. So, if you have more against, and they are the ones who are present...[they] are the majority...and in a democratic [system] who's going to win that? The majority. Because you've got the voting power, you've got everything (Interview 2012).

Some in Galveston challenged the idea of rebuilding public housing at all, arguing that public housing creates barriers to neighborhood revitalization and that life on the island restricted low-income people from finding a way out of poverty. Comments along these lines also often explicitly associated public housing and poverty with violence, crime, dependency, and immorality. While local housing advocates challenged these perspectives, few public housing residents remained on the island to speak on their own behalf. As one advocate noted, "It

seemed to me that right after the storm, some people thought that 'this is great, we got rid of all these blighted ugly places. Let's just don't bring it back.' And that has degenerated into a racist classist conversation that is very unpleasant (Interview 2012)."

On October 20, 2009, GHA held a public meeting to discuss a proposal for rebuilding public housing—and it ended in a shouting match. As the *Galveston Daily News* recounted, the meeting was largely divided along racial lines (Jones 2009b). Opponents of the plan who were mostly white argued, "Encouraging poor people to live in Galveston is a bad idea," The plan's supporters, who were mostly African-American, saw the housing as an essential option for the city's working class, arguing, "But without public housing, the island's nurses, teacher's aids, and service industry workers will have nowhere to live"

As it became clear that GHA would not be able to garner sufficient public support to restore the public housing developments to their pre-hurricane location and form, the debate shifted from when to start reconstruction to whether new developments should be built as mixed-income housing. Then-Mayor Joe Jaworski stated:

[Hurricane Ike] gave the city a rare opportunity to start fresh by bulldozing projects that, in my opinion, shouldn't have been around as long as they were. We do have an obligation to our low-income workers and our low-income population to provide some amount of public housing. We don't ever want to do that in projects. Cities don't do that, anymore. The proposed mixed-income developments are expected to be well-designed and well-managed (Pittman 2012).

But others did not share the mayor's optimistic outlook; David Stanowski of the Galveston Open Government Project countered:

It is completely dishonest to claim that mixed-income development at Cedar Terrace or in other high-poverty census tracts can change the demographics of the census tract enough to make them acceptable locations for public housing. Nothing could be further from the truth (Stanowski 2012).

Soon, other questions began to emerge, such as whether the sites were appropriate places to rebuild housing for anyone. If the developments flooded with lke, wouldn't they flood again?

Building Public Housing on a barrier island puts Public Housing residents, and their personal property, at much greater risk from hurricane winds than if it was built only a few miles inland. (Galveston Open Government Project 2013)

Another set of challenges focused on the market-rate units in the proposed mixed-income developments. Hurricane lke's widespread damages to structures and the city's businesses (FEMA, 2008a), led to displacement of a large group of residents and accelerated population loss (between 3 to 8 percent each decade since 1960s) to more than 15% between 2000 and 2010 (US census Bureau, 2014). As a result, Galveston had lost nearly 10,000 residents between 2000 and 2010, and the rental market overall remained soft even as the number of affordable, high-quality units was quite low—so local landlords became concerned about the potentially damaging effects of competition from hundreds of new rental units (Oakley and Ruel 2010). Indeed, the Galveston County Apartment Association released an August 2011 report finding that Galveston had about 1096 vacant units (Casanova 2011b).

In a guest column published in the *Galveston County Daily News* on July 27, titled, "New Mixed Income Housing Not Good for Island," the district's new council person, Rusty Legg issued a strong warning about the possible dangers that new development could have on the local housing market.

In my opinion the concept of mixed income housing would have a devastating effect on the rental industry in Galveston... [The owners of] the small mom-and-pop duplex and fourplex apartment units... rely on rental income to raise their families and put their children through college... I will not vote for the release of any funds that would put those small businesses in jeopardy nor do I believe government should be in direct competition with private business. (Rusty Legg, Galveston City Council, District 1, 2011)

The Galveston Alliance of Island Neighborhoods (GAIN), which had supported the idea of mixed-income developments in theory, withdrew its support once proposals were released where the size of the developments was made clear; its president, Ralph McMorris, explained, "We're concerned about the size of it. GAIN was for bringing the houses back, but it looks like it's going to be about 1000 units at other income levels and increase the housing to another level" (Casanova, 2011a).

On Nov 7, 2011, the GHA board unanimously voted to approve developer McCormack Baron Salazar's plan to develop a mix of housing, including 282 public units within four different mixed-income communities: 64 at Magnolia Homes, 50 at Cedar Terrace, 128 at Oleander Homes and a proposed 40 units in a building with universal design that GHA would acquire (Casanova 2011a).

In 2012, Lewis Rosen was elected as mayor after running on an anti-public housing platform and promising to replace public housing units with tenant-based rental-assistance vouchers (Smith 2008). Rosen appointed Buddy Herz to the GHA board and tried to designate him chairman over current Chairwoman Betty Massey, who refused to step down. Herz alleged that

tenant-based housing choice vouchers are a more effective way to reduce the concentration of poverty in a city like Galveston (White 2013).

On July 1, 2012, three assistant secretaries of HUD sent GHA a letter warning Rosen that a voucher-only program would satisfy neither the federal law nor the agreement struck between the state of Texas and housing advocates. The letter warned that action or inaction impeding the replacement of those 569 units with new units would jeopardize Galveston's claim to \$586 million in HUD disaster recovery money (Smith 2012). At a special meeting called on July 6, 2012, GHA commissioners responded by (1) approving a temporary moratorium on any work related to developing a mixed-income housing program and (2) requesting that the City Council of Galveston also postpone any action or approvals related to the GHA Mixed income plan (Galveston Housing Authority 2012).

In response, HUD issued a statement that the city and housing authority had until September 28, 2012 to develop and approve a plan that satisfied it requirements as well as those of the Texas General Land Office and Austin-based advocacy groups. If it failed to comply, the city would lose its claim to more than \$500 million in federal disaster-recovery money and might be required to repay the more than \$30 million already spent.

WHAT WOULD YOU DO IF YOU WERE A CITY COUNCIL PERSON?

In 2012, the Galveston City Council was asked to vote to accept the conditions established by the General Land Office—specifically, to approve the construction of two mixed-income housing developments on the sites previously occupied by two of the demolished public housing communities. As part of this plan, remaining units would be replaced through the development of scattered sites located on the island, rather than vouchers. Members of the city council had to make up their minds quickly and vote for or against the plan.

REFERENCES

- Angelou Economics. 2008. "Galveston Island: tourism economic impact analysis." https://repositories. tdl.org/tamugir/bitstream/handle/1969.3/28488/Tourism_Economic_ImpactAnalysis-_ Angelou_-_2008.pdf?sequence=1&isAllowed=y.
- Berg, Robbie. 2009. Tropical cyclone report: Hurricane Ike (AL092008) 1–14 September 2008. Miami, FL.
- Casanova, Amanda. 2011a. "Controversial mixed-income plan approved," Galveston County Daily News. Retrieved from https://www.galvnews.com/news/article_83236a58-ce9b-5d1d-8686-e53bdf55c7ad.html.
- Casanova, Amanda. 2011b. "Second group against mixed-income housing." Galveston County Daily News. September 20. https://www.galvnews.com/news/article_c8207bd3-b9cb-55b7-acf4-f336353e43da.html
- City of Galveston. 2018. Tax Increment Reinvestment Zones: Numbers 11 14 Annual Summary Report.

 Retrieved from https://www.galvestontx.gov/AgendaCenter/ViewFile/Item/7828?fileID=24055
- Curtis, Tom. 2008. "Ike's Lessons: Galveston's land-use decisions exposed by storm's wrath," The Austin Chronicle. December 26. https://www.austinchronicle.com/news/2008-12-26/718955/.
- Galveston Housing Authority (2012) Meeting Minutes from GHA Special Board Meeting. July 6 https://www.google.com/
- Galveston Housing Authority. 2008. 5 Year Plan for Federal Fiscal Years 2008 2012 (GHA FY 2009 2013) Annual and Capital Fund Plan for FFY 2008 (GHA FY 2009)
- Galveston Open Government Project. 2013. "Galveston Initiative II, L.P. aka the rebuilding of Public

 Housing at the Cedar Terrace site." Supplement to the Board of Directors Meeting OF September

 12, 2013. Texas Department of Housing and Community Affairs, August 16.
- Hamideh, Sara, and Jane Rongerude. 2018 "Social vulnerability and participation in disaster recovery decisions: public housing in Galveston after Hurricane Ike." Natural Hazards 93(3): 1629–1648.
- Hamideh, Sara, Peacock, Walter Gillis, and Shannon Van Zandt. 2018. Housing Recovery after
 Disasters: Primary versus Seasonal/Vacation Housing Markets in Coastal Communities. Natural
 Hazards Review. Vol. 19, Issue 2. DOI: 10.1061/(ASCE)NH.1527-6996.0000287
- Hansen, Brett. 2007. "Weathering the Storm: the Galveston Seawall and Grade Raising." Civil Engineering 77(4): 32–33.
- Hegar, Glen. 2018. "Tax Increment Financing." Office of the Texas Comptroller. https://comptroller.texas. gov/economy/docs/96-1806.pdf.
- Jones, Leigh. 2009a. "Public housing to be torn down." Galveston County Daily News. May 15. https://www.galvnews.com/news/article_64e2efea-47c7-552e-ac2a-939853a8cf12.html.
- Jones, Leigh. 2009b. "Meeting on housing plan ends in shouting match." Galveston County Daily News.

 October 20. https://www.galvnews.com/news/article_e438383b-96da-57ee-a66e-1979283aa5c1.

 html.
- Legg, Rusty. 2011. "New mixed income housing not good for island." Galveston County Daily News.

 July 27. https://www.galvnews.com/opinion/guest_columns/article_71042e30-e5bc-5428-bfb2-8df8e789d300.html.
- Lord, J.J. 2011. "The charging of the flood: a cultural analysis of the impact and recovery from Hurricane lke in Galveston, Texas." Ph.D. dissertation. University of Texas.

- McComb, David G. 2016. Handbook of Texas Online. Galveston, TX. https://tshaonline.org/handbook/online/articles/hdg01 Merriman, D. (2018). Improving tax increment financing (TIF) for economic development. Lincoln Land Institute. Retrieved from, https://www.lincolninst.edu/publications/policy-focus-reports/improving-tax-increment-financing-tif-economic-development.
- Meyers, Rhiannon. 2009. "GHA to Move Forward with Demolition." Galveston County Daily News. March 16. https://www.galvnews.com/news/article_73cc6877-27f2-5bb5-83b7-692867a46006.html
- Oakley, Deirdre, and Erin Ruel. 2010. "Housing Galveston's future: an assessment of trends and Post-lke Plans." Galveston Housing Authority. www.ghatx.org/ORR_Documents/Interim%20Report_One_updated.pdf. (September).
- Peacock, Walter G., Shannon Van Zandt, Yang Zhang, and Wesley Highfield. 2014. "Inequities in long-term housing recovery after disasters." Journal of the American Planning Association 80(4): 356–371.
- Pittman, David. 2012. "Public housing takes center stage as Galveston's mayoral race heads to a runoff." Houston Public Media. May 14. https://www.houstonpublicmedia.org/articles/news/2012/05/14/35270/public-housing-takes-center-stage-as-galvestons-mayoral-race-heads-to-a-runoff/.
- Smith, Michael. 2012. "GHA to discuss moratorium on mixed-income plan." Galveston County Daily News. July 6. https://www.galvnews.com/news/article_b5095fb7-283b-590e-a7b4-a496df19573e.html.
- Stanowski, David. 2012. "Mixed-income public housing is not the answer." Galveston County Daily News. September 26. https://www.galvnews.com/opinion/guest_columns/article_5769a6fe-fe88-5e17-bb03-01d404732d95.html.
- Taylor, Heber. 2008. "People trailing in wake of poor image." Galveston County Daily News. November 25. https://www.galvnews.com/opinion/editorials/article_934aee67-e523-5a8d-9f0a-6e1cafd67453.html.
- U.S. Census Bureau; American Community Survey, 2007. American Community Survey 3-Year Estimates, http://factfinder.census.gov.
- U.S. Census Bureau; American Community Survey, 2009. American Community Survey 5-Year Estimates, http://factfinder.census.gov.
- U.S. Department of Housing and Urban Services. "About HOPE VI." HUD.gov. https://www.hud.gov/program_offices/public_indian_housing/programs/ph/hope6/about. (accessed September 4, 2019).
- U.S. Department of Housing and Urban Services. "Housing Choice Voucher Fact Sheet." HUD.gov. https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/about/fact_sheet (accessed September 4, 2019).
- Van Zandt, Shannon, Walter Peacock, Dustin Henry, Himanshu Grover, Wesley Highfield, and Samuel Brody. 2012. "Mapping social vulnerability to enhance housing and neighborhood resilience." Housing Policy Debate 22(1): 29–55.
- Vinogradsky, Julieanna. 2009. "Public housing demolition in Galveston, Texas is subject to one-for-one replacement." Housing Law Bulletin 39: 144–146.
- White, Audrey. 2013. "Galveston Public Housing Plan Moves Forward." The Texas Tribune. April 17. https://www.texastribune.org/2013/04/17/galveston-draws-closer-rebuilding-public-housing/.
- Wilder, Forrest. 2008. "The Castaways: Can Galveston's black community survive the island's comeback?" The Texas Observer. December 12. https://www.texasobserver.org/2918-the-castaways-can-galvestons-black-community-survive-the-islands-comeback/.

ABOUT THE AUTHORS

Jane Rongerude is an Associate Professor in the Department of Community and Regional Planning at Iowa State University, where she teaches courses in planning theory, housing policy, and social justice. Her research interests include the potential of planning as a tool to interrupt local system of poverty management and pedagogical innovations related to Team Based Learning, specifically how to integrate diverse voices within communities and classrooms. She earned her MCP and PhD in city and regional planning from the University of California at Berkeley.

Sara Hamideh is an Assistant Professor of Coastal Resilience at Stony Brook University in the School of Marine and Atmospheric Sciences. Her specializations are disaster recovery and community resilience. She conducts interdisciplinary research on housing recovery, dynamics of social vulnerability in recovery, and recovery policy to provide actionable knowledge for reducing disparities in recovery. Her teaching specializations include disaster resilience, environmental planning and policy, planning analytical methods, and urban sustainability. She earned her MA in urban and regional planning from the University of Tehran and her PhD in urban and regional sciences from Texas A & M University.

ABOUT THE LINCOLN INSTITUTE OF LAND POLICY

www.lincolninst.edu

The Lincoln Institute of Land Policy seeks to improve quality of life through the effective use, taxation, and stewardship of land. A nonprofit private operating foundation whose origins date to 1946, the Lincoln Institute researches and recommends creative approaches to land as a solution to economic, social, and environmental challenges. Through education, training, publications, and events, we integrate theory and practice to inform public policy decisions worldwide. With locations in Cambridge, Washington, Phoenix, and Beijing, our work is organized in seven major areas: Planning and Urban Form, Valuation and Taxation, International and Institute-Wide Initiatives. Latin America and the Caribbean, People's Republic of China, the Babbitt Center for Land and Water Policy, and the Center for Community Investment.

PHOTO CREDITS

cover: JodiJacobson / iStock / Getty Images Plus

AUTHORS

Jane Rongerude

Sara Hamideh

KEY ISSUES

Disaster Recovery

Social Vulnerability

Post-Disaster Planning

Public Housing Replacement

Lincoln Institute of Land Policy 113 Brattle St, Cambridge, MA 02138

T (617) 661-3016 or (800) 526-3873

F (617) 661-7235 or (800) 526-3944

EMAIL FOR INFORMATION SERVICES
heln@lincolninst.edu

www.lincolninst.edu

