

August 2018

One Year After the Storm: Texas Gulf Coast Residents' Views and Experiences with Hurricane Harvey Recovery

The Kaiser Family Foundation/Episcopal Health Foundation Harvey Anniversary Survey

Prepared by:

Liz Hamel, Bryan Wu, Mollyann Brodie
Kaiser Family Foundation

and

Shao-Chee Sim, Elena Marks
Episcopal Health Foundation



Executive Summary

On August 25, 2017, Hurricane Harvey made landfall as a Category 4 hurricane near Rockport, Texas. Hovering over the region for days, the storm dropped record amounts of rainfall, and flooded over 300,000 structures, 500,000 cars, and caused damage in excess of \$125 billion.¹ In order to understand the needs and circumstances of vulnerable Texans affected by the hurricane, the Kaiser Family Foundation and the Episcopal Health Foundation partnered to conduct two surveys of adults living in 24 counties along the Texas coast that were particularly hard-hit. The first survey, conducted between two and three months after Harvey, was an initial look at how residents were faring in the immediate aftermath of the hurricane. As the one-year anniversary approaches, the current survey seeks to shed light on the longer-term recovery needs of those who are still struggling to put their homes and their lives together nearly one year later. Both surveys allow for examination of the views and experiences of residents in these counties overall, as well as in four distinct geographic regions: Harris County (the county where Houston is located and the largest in terms of population); the counties surrounding Harris that are part of the same Regional Council of Governments (“Outside Harris”); the three counties (Orange, Jefferson, and Hardin) that make up the “Golden Triangle” area east of Houston where the cities of Beaumont, Orange, and Port Arthur are located; and several counties to the southwest of Houston that make up the coastal area including Corpus Christi and Rockport (“Coastal”). In addition to the survey, the partners conducted six focus groups in July 2018 (two each in Houston, Port Arthur, and Dickinson) with low- and middle-income residents who were affected by the storm and who said their lives were still disrupted 11 months later.

Key findings from the survey include:

Nearly one year after Hurricane Harvey, many Texas Gulf Coast residents feel their lives are getting back on track. **Seven in ten affected residents now say their lives are largely or almost back to normal**, up from 56 percent three months after the storm.

Despite this progress, many residents are still struggling to recover. Among those who experienced property damage or income loss, **nearly a quarter say their personal financial situation is worse as a result of Harvey and one in six say their overall quality of life is worse.**

While many feel their lives are returning to normal, **four in ten affected residents say they are not getting the help they need to recover** from the storm, a share that has not declined since the 3-month mark. The biggest areas of need continue to be **housing, financial assistance, and help with navigating the different systems for receiving aid.**

Affected residents who are **Black, have lower incomes, or live in the Golden Triangle area are more likely to say their lives are still disrupted and less likely to say they are getting the help they need with recovery.**

One in five residents in the 24-county area **experienced severe damage to their home** and eight percent **remain displaced** from their pre-Harvey home. **Both of these groups report high rates of ongoing life disruptions along a number of dimensions.**

While some affected residents report receiving financial help from FEMA, charities, and other sources, **most say they have not received assistance, or that any financial help they have received will cover very little or none of their financial losses.** In the wake of Harvey, many affected residents, particularly those who are Black, Hispanic, or have lower incomes, report financial problems such as **falling behind in their rent or mortgage, having problems paying for food, taking on extra work, or borrowing money from friends and relatives to make ends meet.**

Access to health and mental health services may be an area of unmet needs. While about three in ten affected residents report declines in their own mental health as a result of Harvey, **just 8 percent say they or someone in their household has received counseling or mental health services since the storm.** In addition, one in six say someone in their household has a health condition that is new or worse as a result of Harvey, and **16 percent say they need help getting health care for themselves or their family.**

Along with housing and financial help for those in need, residents of the 24-county area overall (including those who were affected by Harvey and those who weren't) **prioritize preparation for future storms** when asked about areas where more resources need to be devoted. While most feel that they themselves, along with local, state, and federal officials are at least somewhat prepared to deal with hurricanes in the future, **about half say they have not personally taken any specific steps to prepare for future hurricanes.**

The vast majority of **the 24-county area residents are not aware that the federal government has provided funding** to help Texas with long-term recovery and rebuilding.

Introduction

Hurricane Harvey hit the Texas Gulf Coast on August 25, 2017. In the nearly one year since the storm, daily life for many Texans in the affected areas has returned to normal, while others continue to struggle to rebuild their homes, their lives, and their communities.

The widespread and devastating effects of Hurricane Harvey on the Texas Gulf Coast have been well documented. A total of 41 counties in Southeast Texas were designated as federal disaster areas. As of July 25, 2018, the Federal Emergency Management Agency (FEMA) received 887,557 individual housing assistance applications and approved 372,626 applications with a total of \$1.6 billion.² Including the housing assistance program, National Flood Insurance Program settlement, public assistance (infrastructure) projects, SBA low interest disaster loans and other grant programs, FEMA reported that 13.84 billion in federal assistance had been provided to affected Texans.³ In some of the hardest hit communities, many residents remain displaced from their homes, and finding permanent housing for these individuals is a major public policy concern.

Three months after Harvey, the Kaiser Family Foundation and the Episcopal Health Foundation partnered to conduct a representative survey of residents in 24 heavily-impacted Texas counties, in order to provide those working on the recovery effort with reliable information about how residents were affected by the hurricane and what their needs and priorities were for recovery. As a follow-up, the partners jointly conducted the current survey nearly one year after the storm, to shed light on the progress being made, as well as residents' views on the greatest areas of need as recovery moves from the short-term into the long-term.

Both partners worked together to design the survey and analyze the results. The 24 counties were chosen based on a mapping analysis of Harvey property damage developed by FEMA (see Appendix A Figure 1), in an effort to examine a contiguous area of counties that suffered the largest share of property damage. The region surveyed divides into four groupings of counties: Harris County (the county where Houston is located and the largest in terms of population); the counties surrounding Harris that are part of the same Regional Council of Governments ("Outside Harris"); the three counties that make up the "Golden Triangle" area east of Houston where the cities of Beaumont, Orange, and Port Arthur are located; and several counties to the southwest of Houston that make up the coastal area including Corpus Christi and Rockport ("Coastal").⁴

These 24 counties are home to approximately 7.95 million people, which represents 94 percent of the total population in the 41 counties that were declared as federal disaster areas. This region is incredibly diverse in terms of race and ethnicity (40 percent White, 36 percent Hispanic, 16 percent Black, 6 percent Asian, and 2 percent others). On average about 15 percent of the people in the affected region are officially designated as living in poverty, with wide variations in poverty across the counties.⁵ These counties are also diverse in their population density; eight of the counties we surveyed were designated as rural counties and 16 as urban counties.

The survey was designed to represent the views of residents living in the region overall, and also to be able to describe the views and experiences of those living in each of the four regions. In order to represent some of the most vulnerable groups affected by the storm, the survey also included oversamples of lower-income residents, Black and Hispanic residents, and those living in the areas that had the largest amount of property damage as reported by FEMA. Results for the region overall have been weighted to reflect the demographics of the overall population. The survey was fielded from late June through late July, roughly 10 to 11 months after Harvey made landfall.

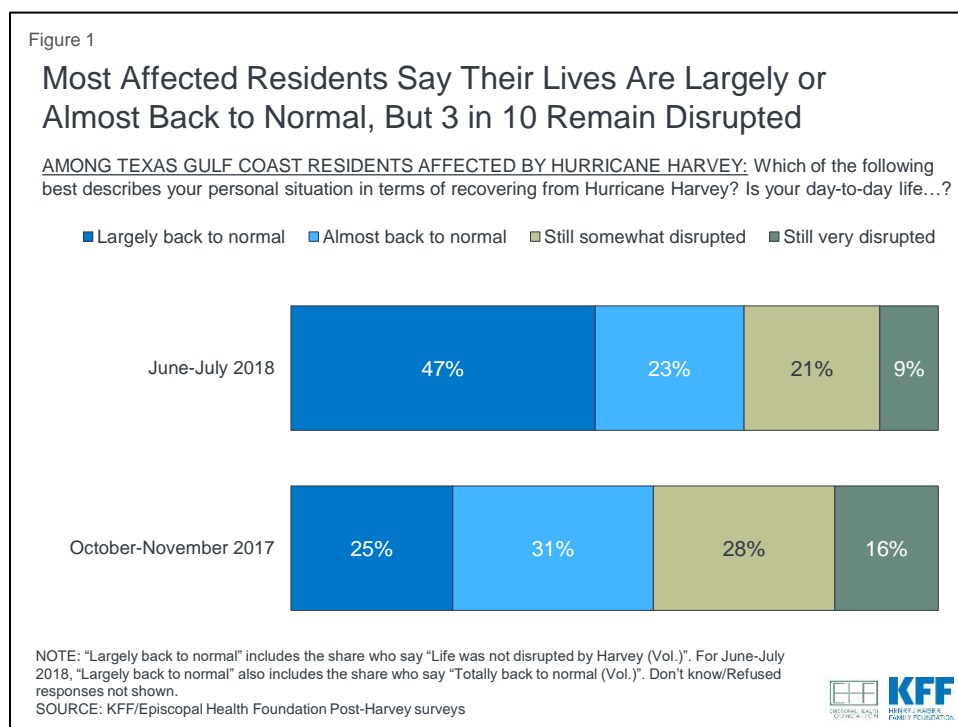
In addition to the survey, the partners conducted six focus groups (two each in Houston, Port Arthur, and Dickinson) on July 24 and 25 with lower- and middle-income residents who experienced damage to their homes and/or a loss of income as a result of Hurricane Harvey, and who said their lives were still very or somewhat disrupted from the storm nearly one year later. The focus group locations were chosen to represent three of the four different county groupings included in the survey, as well as three areas that differ in racial/ethnic makeup, industry, and metropolitan area size. Focus group findings highlighted in this report help provide context and add the human story behind some of the quantitative findings from the survey.

Section One: Recovery Experiences Among Residents Affected by Harvey

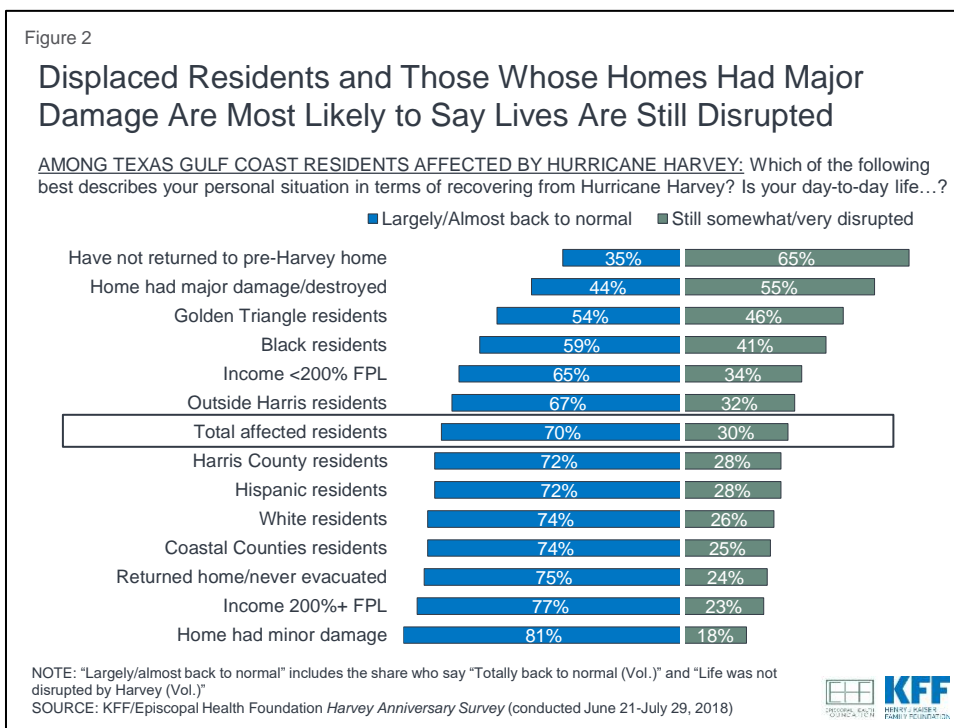
The Big Picture: How Are Those Affected by Harvey Faring Nearly One Year After the Storm?

For purposes of this report, residents who were “affected by Hurricane Harvey” are defined as those who say they incurred damage to their home or vehicle, or that they or someone in their household lost a job, had hours cut back at work, or experienced some other loss of income as a result of Harvey. Overall, six in ten (58 percent) residents of the 24 counties surveyed say they experienced one of these things, a share that is slightly lower than the share who reported these experiences in the first survey three months after the storm, mostly due to a lower share reporting employment disruptions. Consistent with the results of the earlier survey, Black and Hispanic residents, those with lower incomes, and those living in the Golden Triangle and Coastal Counties are more likely to report being affected by the hurricane (see Appendix B for more information).

Among those who were affected by the storm, many report significant progress in getting their lives back on track. Overall, 70 percent of affected residents say their lives are “largely” or “almost” back to normal, a share that is up from 56 percent eight months ago. Still, three in ten affected residents say their lives are still “very” or “somewhat” disrupted from the storm.



The share reporting that their lives are still disrupted nearly one year after Harvey is highest among two groups: 1) those who evacuated their homes and are still living somewhere different today, a group that represents 8 percent of the total area population and among whom 65 percent say their lives are still disrupted; and 2) those who say their home sustained major damage or was destroyed, representing 19 percent of the total population, with 55 percent saying their lives are still disrupted. These groups, which overlap somewhat but not completely, report higher levels of disruption along a number of dimensions measured in the survey, and key findings for each group are highlighted in a special section below. In addition to these two groups, affected residents who are Black, living in the Golden Triangle area, or have lower incomes are more likely than their counterparts to report that their lives are still disrupted due to the effects of Harvey.

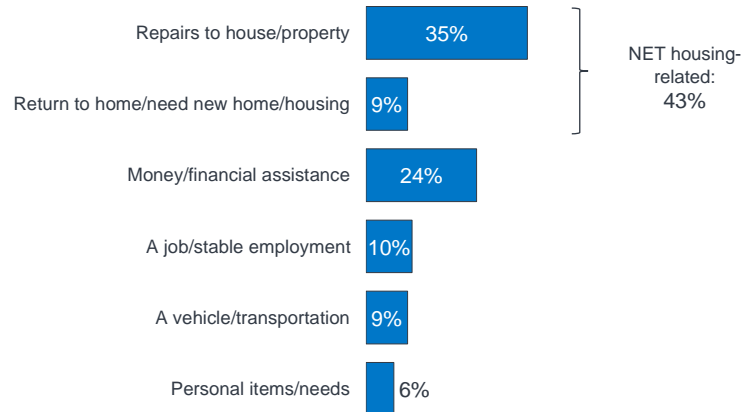


When the 30 percent of Harvey-affected residents who say their lives are still disrupted are asked to name in their own words the main thing they need for their day-to-day life to return to normal, responses focus on basic needs like home repairs, financial assistance, employment, and transportation. Four in ten (43 percent) mention housing-related issues, including 35 percent who say the main thing they need is for their home to be repaired and 9 percent who say they need to be able to return to their home or find new housing. One-quarter (24 percent) say their biggest need is money or financial assistance, and about one in ten each say they need a job or stable employment (10 percent), or a vehicle or other form of transportation (9 percent).

Figure 3

To Get Back to Normal, Affected Residents Focus on Housing and Financial Assistance

AMONG THE 30% OF RESIDENTS AFFECTED BY HURRICANE HARVEY WHO SAY THEIR DAY-TO-DAY LIFE IS STILL DISRUPTED: What is the main thing you need for your day-to-day life to get back to normal? (open-end)



NOTE: Only responses named by at least 5 percent shown.
SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



Focus group highlight: Ongoing areas of need

Focus group participants were asked about the problems they currently face and potential solutions in three specific areas: housing, employment, and physical and mental health. Counts of mentions during related group exercises are detailed in Appendix C. Consistent with the survey results, focus group participants stressed the need to make repairs to their home or find a new place to live, and the importance of financial help to make these things happen. For many focus group participants, loss of a vehicle due to Harvey was linked to their ability to work, which in turn is linked to their ability to restore their homes to a livable condition, illustrating how multiple impacts on an individual can contribute to a cycle that makes recovery very difficult.

“We lost both cars. My husband lost his tools. We’re still living with another family. They are 3, we’re 4. It’s 2 rooms. We’re sleeping in the living room. But my husband, he still has not been able to recover his tools. He’s still doing odd jobs here and there. We don’t have enough to go back to an apartment.” – 32-year-old undocumented Hispanic female, Houston

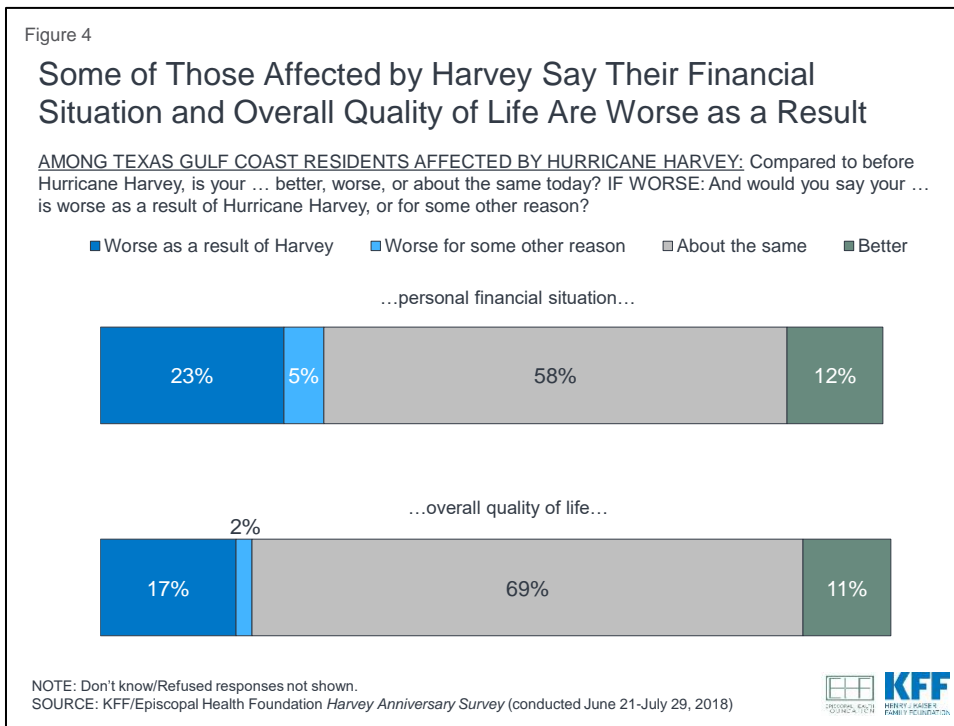
“I lost a vehicle. I lost my way to work. They weren’t too big on coming and picking me up. I’ve been trying to find work. Right now it’s slow. I’m getting way behind on my child support and everything. It’s been bad.” – 29-year-old white male, Dickinson

“I didn’t have a rig truck [so] I couldn’t go to work. Then I did try to file for unemployment and they said that I quit. The company said that I quit because I didn’t have a truck to come to work no more.” – 34-year-old white male, Dickinson

“We just need people to help us, period. Because you’ll call these organizations and nobody still not gonna return no calls until a month or two later. Still no answer.” – 27-year-old Black female, Port Arthur

“Once this left the front page, we became yesterday’s news. As long as it’s on the front page, you had everybody coming down wanting to help poor little old Port Arthur. But once it left the front page, then you’re expected to be back to normal at that point. And it’s not so.” – 59-year-old Black male, Port Arthur

In another sign that many families are well on their way to recovery, most residents who were affected by Harvey report that their personal financial situation and their overall quality of life are about the same as they were before the storm. However, about three in ten affected residents say their current financial situation is worse than it was before the storm, including 23 percent who attribute the decline directly to Hurricane Harvey. Similarly, 17 percent of those who were affected say their overall quality of life is worse now as a result of the storm.



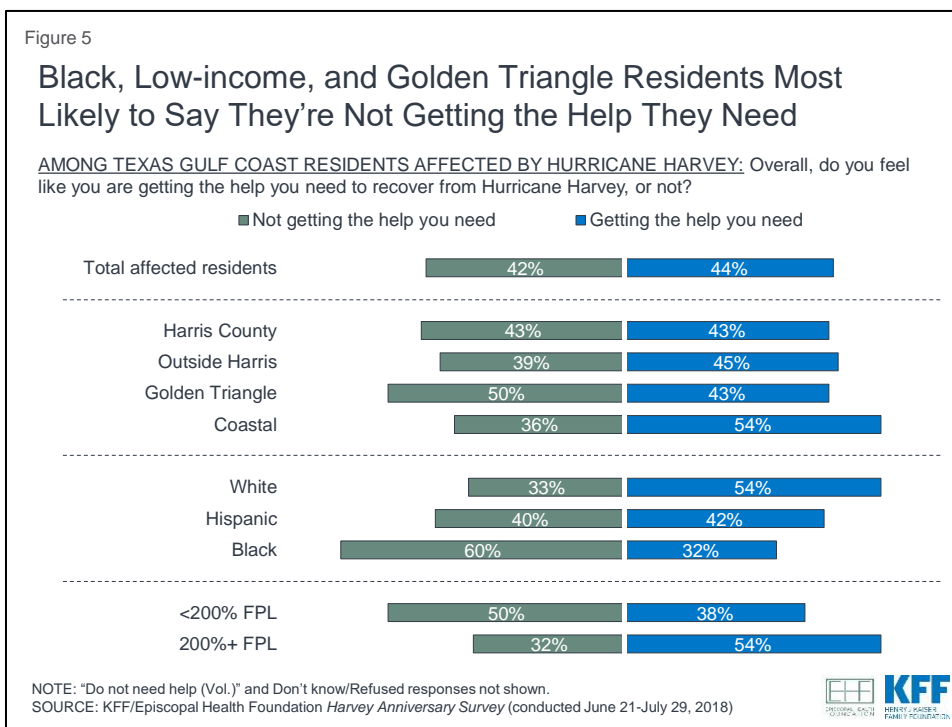
Black residents and those living in the hard-hit Golden Triangle area are more likely than others to report declines in their financial situation and quality of life due to Harvey. About a third of each of these groups say things are worse on each of these dimensions.

Table 1: Affected Residents' Financial Situation and Overall Quality of Life After Hurricane Harvey

AMONG TEXAS GULF COAST RESIDENTS AFFECTED BY HURRICANE HARVEY: Percent who say their _____ is worse today as a result of Hurricane Harvey:	Total	Geographic Region				Race/Ethnicity			Self-reported Income (% of FPL)	
		Harris County	Outside Harris	Golden Triangle	Coastal	White	Hispanic	Black	<200%	200%+
Personal financial situation	23%	22%	23%	34%	22%	25%	17%	31%	24%	22%
Overall quality of life	17	17	17	32	13	18	11	31	20	14

Do Affected Residents Feel They Are Getting the Help They Need?

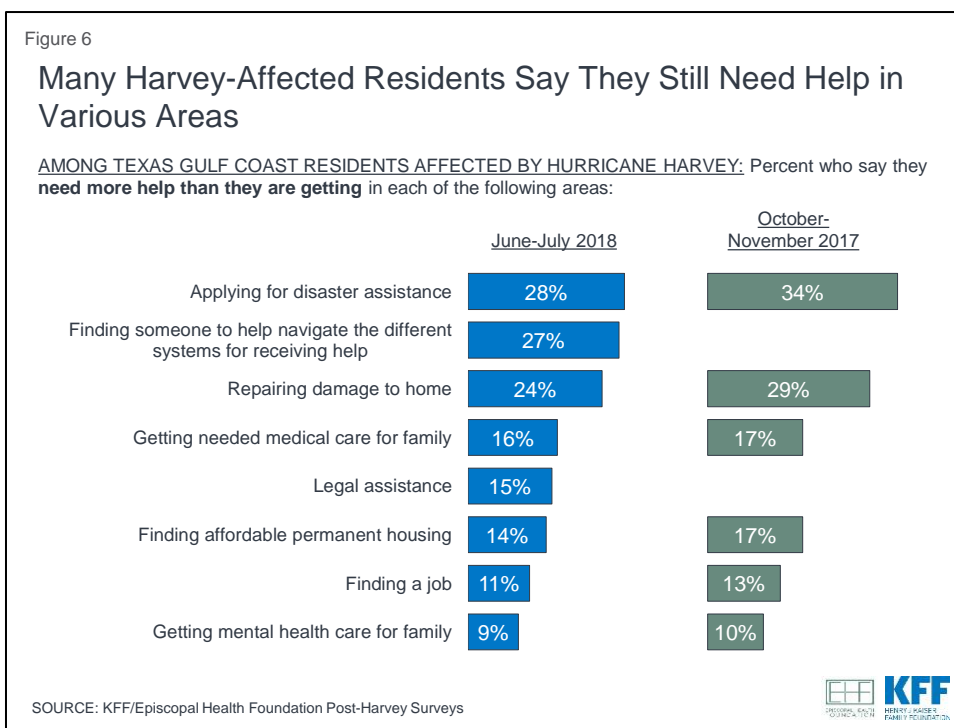
Ten months after Hurricane Harvey hit, four in ten affected residents (42 percent) say they are not getting the help they need to recover from the storm, roughly the same share who said so in the previous survey conducted three months after Harvey (45 percent). Notably, among those affected by the storm, six in ten Black residents, half of those living in the Golden Triangle, and half of those with self-reported incomes below 200 percent of the Federal Poverty Level (FPL) say they are not getting the help they need.



When it comes to the specific areas in which people affected by Harvey say they need more help, navigating the systems for receiving aid remains a big area of need. About three in ten affected residents (28 percent) say they need more help applying for disaster assistance, a share that has declined only slightly from the three-month mark (34 percent). A similar share (27 percent) say they need help

navigating the different systems for receiving aid, and 15 percent say they need help with legal assistance.

The shares of affected residents who say they need more help repairing damage to their homes (24 percent), finding affordable housing (14 percent), finding a job (11 percent), and getting medical care (16 percent) and mental health care (9 percent) have remained at similar levels since the first survey, suggesting that help has been slow to come to those most in need.



Focus group highlight: Confusion over how to get financial help

The themes of confusion and a need for help with applying for disaster assistance were commonly raised in the focus groups.

“Maybe openly have some people to kind of coach them through where to go. I see some households ... they didn’t know where to go or what to do. What’s next? They have no idea, especially older people, single people, they just gave up. ... Go to them and say hey, ‘We’re not asking to work against FEMA,’ but say, ‘This is how their system works. This is what you have to do to get to where you got to do.’ I don’t know. Help people take the next step.” – 34-year-old white male, Dickinson

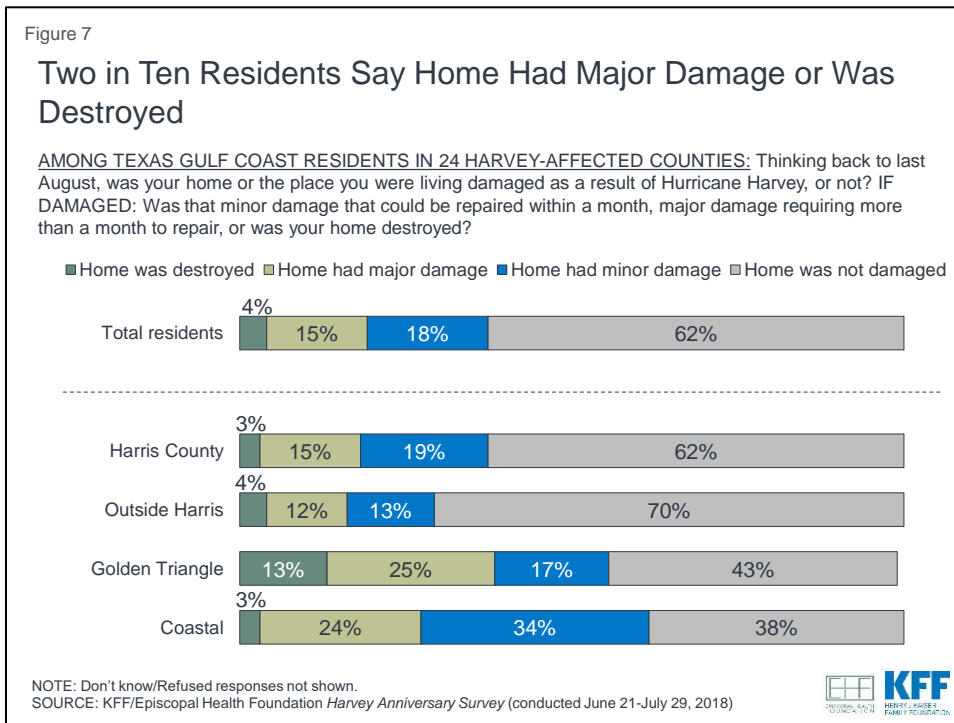
“I immediately did the application for help for the house. I had house insurance but not flood insurance. I didn’t know there were two separate insurances that you had to buy.” – 55-year-old Hispanic female, Houston

“Any time I heard about any help, it had already elapsed. It was over. I didn’t hear about this.” – white female, Dickinson

“FEMA was like just a lot of unnecessary hoops that they make you jump through, right after an emergency ... Like you have to have so much paperwork for anything. And a lot of it I didn’t have ... The whole entire place flooded. I don’t have any copies of anything because they were destroyed.” – 26-year-old Black female, Dickinson

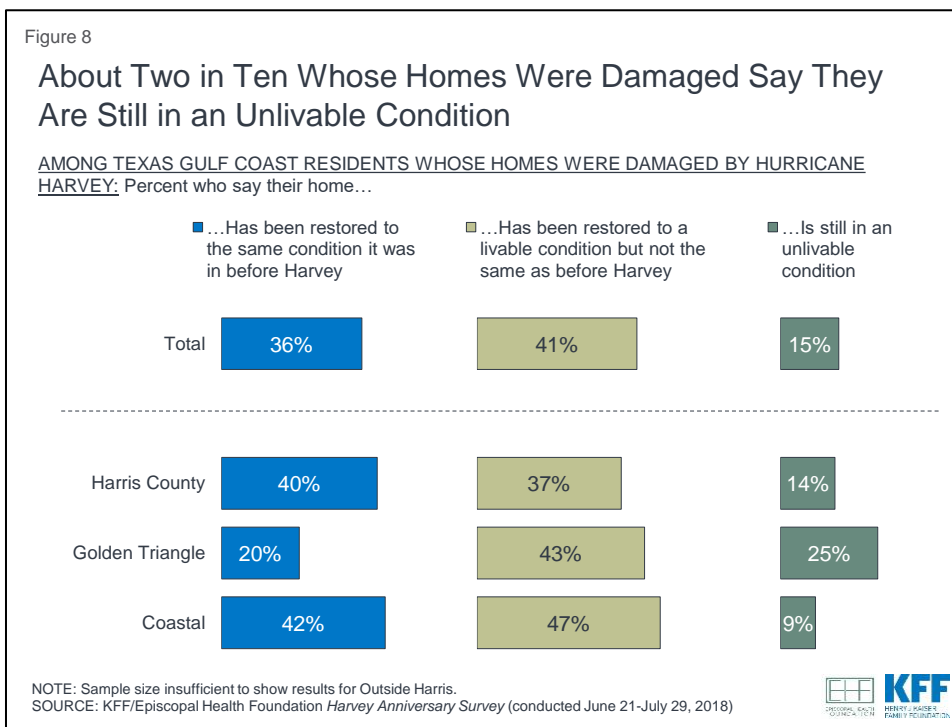
Serious Housing Issues Remain a Problem for Some Residents

While many Texas Gulf Coast residents report being well on the road to recovery from Harvey, serious housing issues remain a problem for others. As noted above, 19 percent of all 24-county area residents say that their home sustained major damage or was destroyed as a result of Harvey, a share that rises to 27 percent in the Coastal area and 38 percent in the Golden Triangle.



Among those who sustained any damage to their home as a result of Harvey, about a third (36 percent) say their home has been restored to the same condition it was in before the storm, while four in ten (41 percent) say it has been restored to a livable condition but not the same as it was before Harvey. One in six (15 percent) of those residents who experienced home damage say their home is still in an unlivable condition 10 months later, a share that rises to 25 percent among Golden Triangle residents whose homes were damaged.

Among those whose homes have not been restored to the same or better condition they were in before Harvey, the largest share (51 percent) say the reason is that they could not afford the cost of the repairs, while 11 percent say they are waiting for insurance money or other financial help to come through, 10 percent are renters who say their landlord has not completed work, and 6 percent say they've been unable to find someone to help them do the necessary work on their home.



Focus group highlight: Challenges related to home repairs

For focus group participants who are still struggling to repair damage to their homes, most mentioned lack of money as a major barrier to being able to complete the work, while others mentioned difficulty finding contractors. Several participants said that the easy part of the work (demolition, basic sheetrock installation) had been done with volunteers, but that the remainder of the work (roofing, floors) required professional help that they couldn't afford.

“Contractors have been like at a premium. You find a contractor and he says, ‘I can get to you in 3 months.’” – 59-year-old Black male, Port Arthur

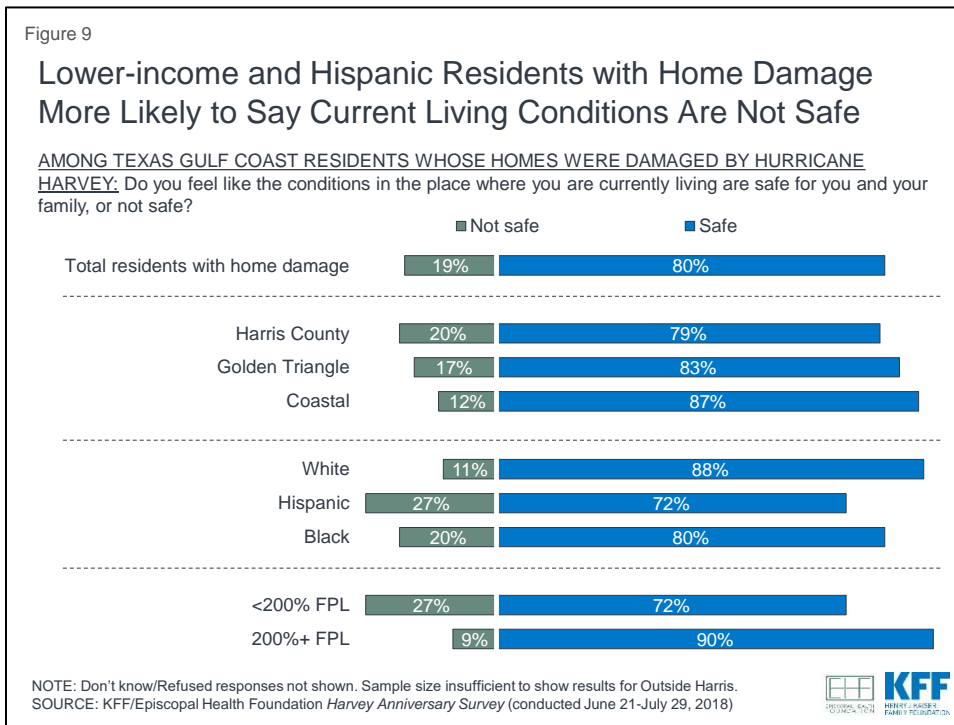
“I even found a contractor I liked but I didn’t have the funds to make use of him, you know?” – 47-year-old white male, Dickinson

“We can fix this and fix that. It’s hard to get people to help. That’s the way we fixed the walls. Between my children, my son-in-laws, we [knocked] down walls and we use that money. My issue ... is the foundation and the roof. The roof and the foundation has to be a professional.” – 55-year-old Hispanic female, Houston

“The roof guy is gonna put the tiles and with the materials [for \$4000]? That’s a good price.” – 34-year-old Hispanic male, Houston

“[Responding to above comment] But I don’t have the \$4000. That’s the issue. The thing is there’s no money.” – 55-year-old Hispanic female, Houston

In addition, about one in five (19 percent) of those whose homes were damaged by Harvey (representing 7 percent of all residents in the 24-county area) say that the conditions in the place where they are currently living are not safe for them and their families. Notably, lower-income and Hispanic residents with home damage are more likely than others to say their current living conditions are not safe.

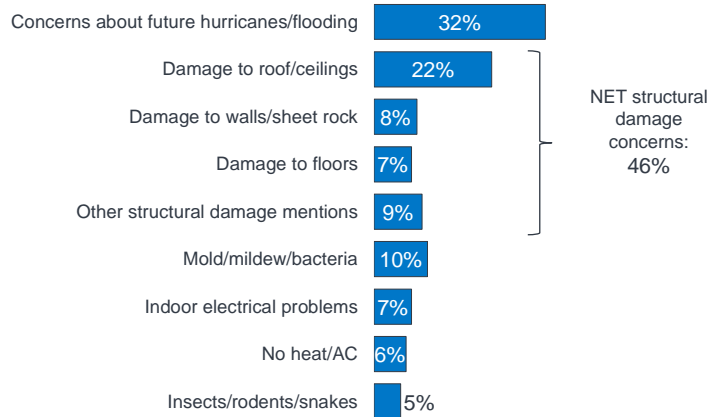


Among those who feel their living conditions are not safe, about a third (32 percent) say their concern is related to the potential of their home to withstand future storms or flooding, while nearly half (46 percent) mention structural concern such as damage to their roof or ceilings (22 percent), walls or sheetrock (8 percent), floors (7 percent) or other structural damage (9 percent). One in ten (10 percent) of those who feel unsafe say their concern is related to the presence of mold, mildew, or bacteria, while 6 percent say they are living without heat or air conditioning (a potentially major concern in the hot Texas summer), and 5 percent are worried about the presence of insects, snakes, or rodents in their home.

Figure 10

Those Who Feel Homes Are Unsafe Cite Structural Concerns and Worries About Future Flooding

AMONG TEXAS GULF COAST RESIDENTS WHOSE HOMES WERE DAMAGED BY HURRICANE HARVEY AND WHO SAY THEIR LIVING CONDITIONS ARE CURRENTLY UNSAFE: In what way would you say your home is unsafe? (open-end)



NOTE: Only responses named by at least 5 percent shown.
SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



Focus group highlight: Safety of living conditions

Focus group participants who felt unsafe in their homes mostly reported that they didn't have anywhere else to go. Others said they weren't necessarily comfortable living in an unfinished house or apartment, but that they were getting used to it and accepting their situation.

"[Moderator: Is the house you're renting safe?] No, but I ain't got nowhere else to go." – 47-year-old Black male, Port Arthur

"I had to stay in my home because I had nowhere to go. I had nowhere to go until it burned down while I was in it. [A fire] burned my house down. It was an electrical fire ... I was living in mold. I was living with my floors falling through. I was living with my ceiling falling through." – white female, Dickinson

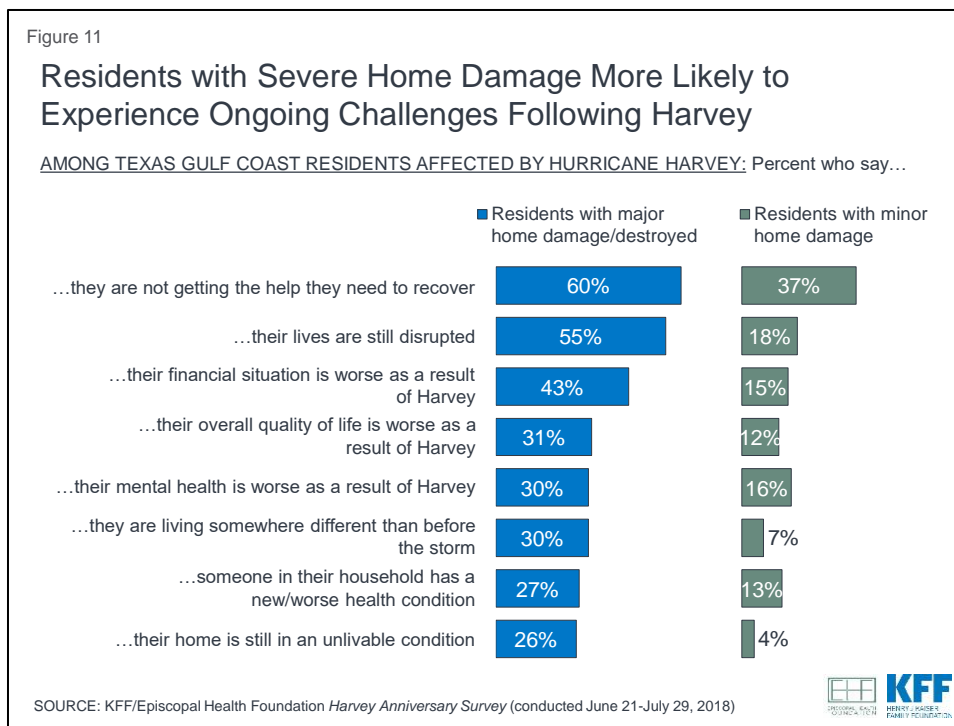
"[Still don't feel safe] because we're in hurricane season again. I have no sheetrock. I have no insulation in my house and creepy crawly bugs and things like that and I hear stuff at night ... I'm not happy. Let me put it like this: I'm not comfortable, but it is what it is. I want it to get better. I'm doing what I can." – 65-year-old Black female, Port Arthur

"It's not complete so it's not up to standard, but like [other participant] said you get used to it, you know, until you can do better." – 60-year-old Black female, Dickinson

Spotlight on Those with Severe Home Damage

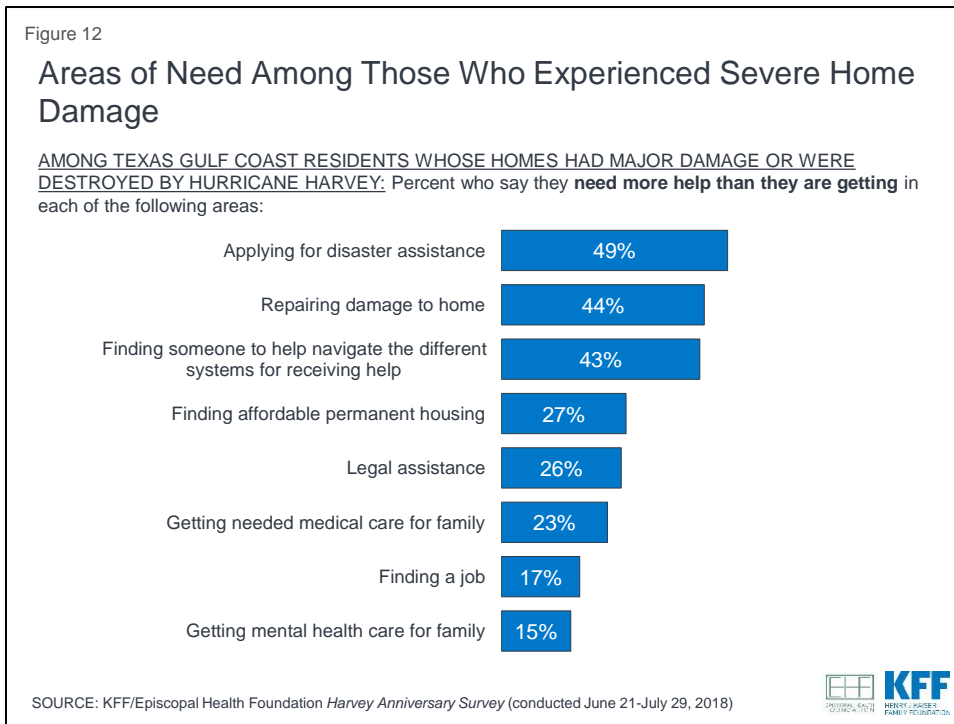
The 19 percent of Texas Gulf Coast residents who experienced major damage or destruction of their home are one of the groups most likely to report continued disruptions to their lives nearly one year after the storm. Similar to other groups, six in ten of these individuals (59 percent) were homeowners and four in ten (39 percent) were renters at the time Harvey hit. Just a quarter (25 percent) say they had flood insurance and about half (53 percent) had homeowners' or renters' insurance at the time of the storm.

Those who experienced major home damage have had a much tougher road to recovery in the nearly one year since the storm. They are three times as likely as those who had only minor home damage to say their lives are still disrupted (55 percent versus 18 percent). Fully six in ten say they are not getting the help they need to recover from the storm, compared to 37 percent of those with minor home damage. They are also much more likely than their counterparts to report disruptions to their finances, physical and mental health, and well-being. Four in ten (43 percent) say their personal financial situation is worse as a result of Harvey, and 31 percent say the same about their overall quality of life. Three in ten say their own mental health is worse as a result of the storm, and nearly as many (27 percent) say that someone in their household has a health condition that is new or worse because of Harvey. Thirty percent are living somewhere different than before the storm, and one quarter (26 percent) report that their home remains in an unlivable condition.



Those who report major damage or destruction to their homes are also more likely than others to report needing help in a variety of areas. About half (49 percent) say they need help applying for disaster assistance and more than four in ten need help repairing damage to their homes (44 percent) or navigating the different systems for receiving aid (43 percent). About a quarter also say they need help

finding affordable housing (27 percent) and getting legal assistance (26 percent), and many also say they need more help getting medical care (23 percent), finding a job (17 percent), or getting mental health care (15 percent) for themselves or a family member.



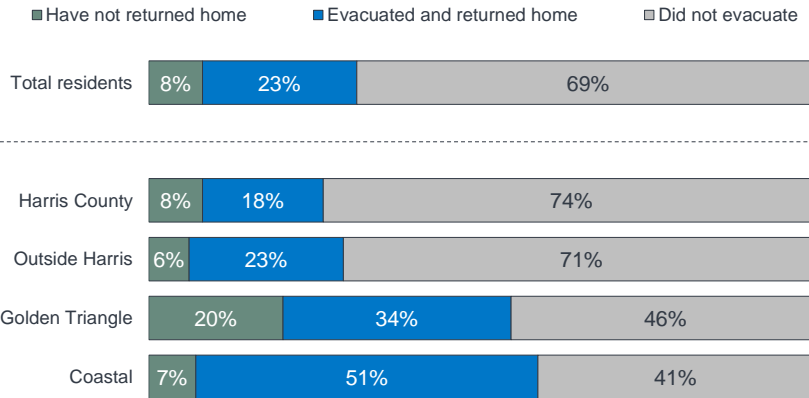
Spotlight on Those Who Evacuated and Have Not Returned to Pre-Harvey Home

While most residents who evacuated during Harvey have been able to return to their homes, 8 percent of all residents in the 24-county area say they evacuated and have not returned to the same place they were living before the storm, rising to 20 percent in the Golden Triangle area. Seven in ten (69 percent) of affected residents who have not returned to their original home say they were renting the place they lived in before Harvey, and four in ten (38 percent) report having incomes below the poverty level. The large majority (75 percent) of this group say their home sustained major damage or was destroyed, but 23 percent say they had only minor or no damage, suggesting that issues beyond just structural damage – such as financial issues and problems with landlords – may have prevented some of these individuals from returning to their pre-Harvey homes.

Figure 13

One in Ten Residents Have Not Returned to the Home They Were Living in Before Harvey

AMONG TEXAS GULF COAST RESIDENTS IN 24 HARVEY-AFFECTED COUNTIES: Did you evacuate or leave your home for any amount of time as a result of Hurricane Harvey, or not? IF EVACUATED: Have you returned to the same home where you were living before the hurricane, or are you living somewhere different?



NOTE: Don't know/Refused responses not shown.
 SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)

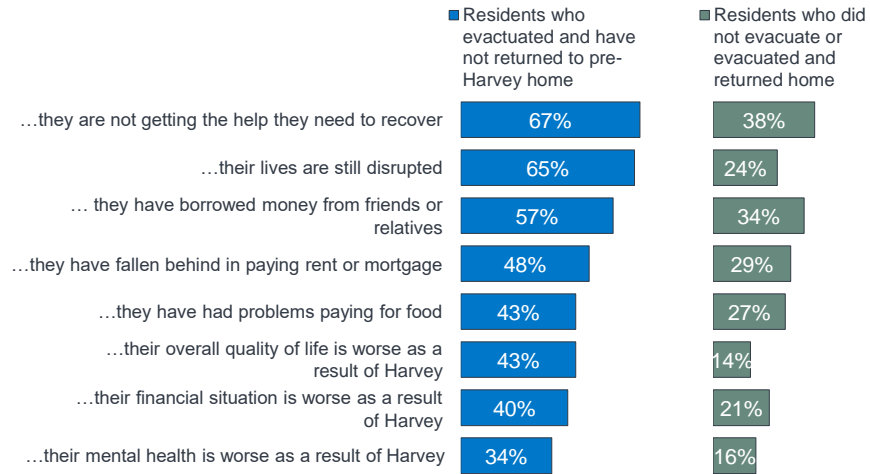


Like the group who experienced major home damage, affected residents who were displaced from their homes by Harvey report experiencing more severe disruptions than others who were affected by the storm. Two-thirds (65 percent) say their lives are still disrupted by Harvey nearly one year later, and a similar share (67 percent) say they're not getting the help they need to recover. This group also reports a variety of financial problems in the wake of the storm. Nearly six in ten (57 percent) say that since Harvey they've had to borrow money from friends or relatives to make ends meet, about half (48 percent) say they've fallen behind in paying their rent or mortgage, and four in ten (43 percent) report problems paying for food. Four in ten say both their overall quality of life (43 percent) and their personal financial situation (40 percent) are worse as a result of Harvey, while about a third (34 percent) say their mental health is worse.

Figure 14

Gulf Coast Residents Still Displaced by Harvey More Likely to Experience Many Challenges Following the Storm

AMONG TEXAS GULF COAST RESIDENTS AFFECTED BY HURRICANE HARVEY: Percent who say...



SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)

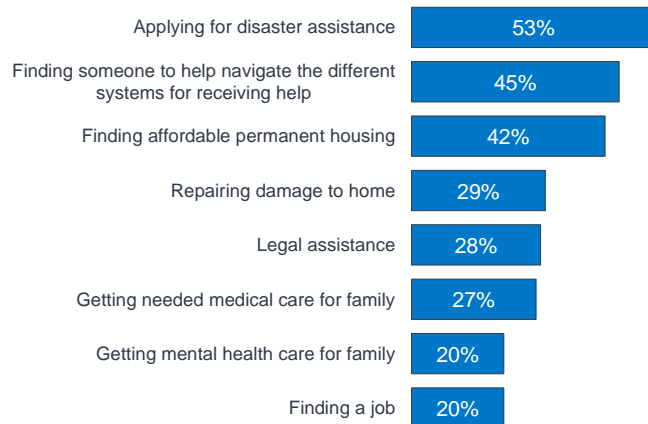


For affected residents who have not been able to return to their pre-Harvey home, the biggest areas of need are applying for disaster assistance (53 percent say they need more help), finding someone to help navigate the different systems for receiving aid (45 percent), and finding affordable permanent housing (42 percent).

Figure 15

Areas of Need Among Those Still Displaced from Pre-Harvey Home

AMONG TEXAS GULF COAST RESIDENTS AFFECTED BY HURRICANE HARVEY WHO EVACUATED AND ARE LIVING SOMEWHERE DIFFERENT THAN BEFORE THE STORM: Percent who say they **need more help than they are getting** in each of the following areas:

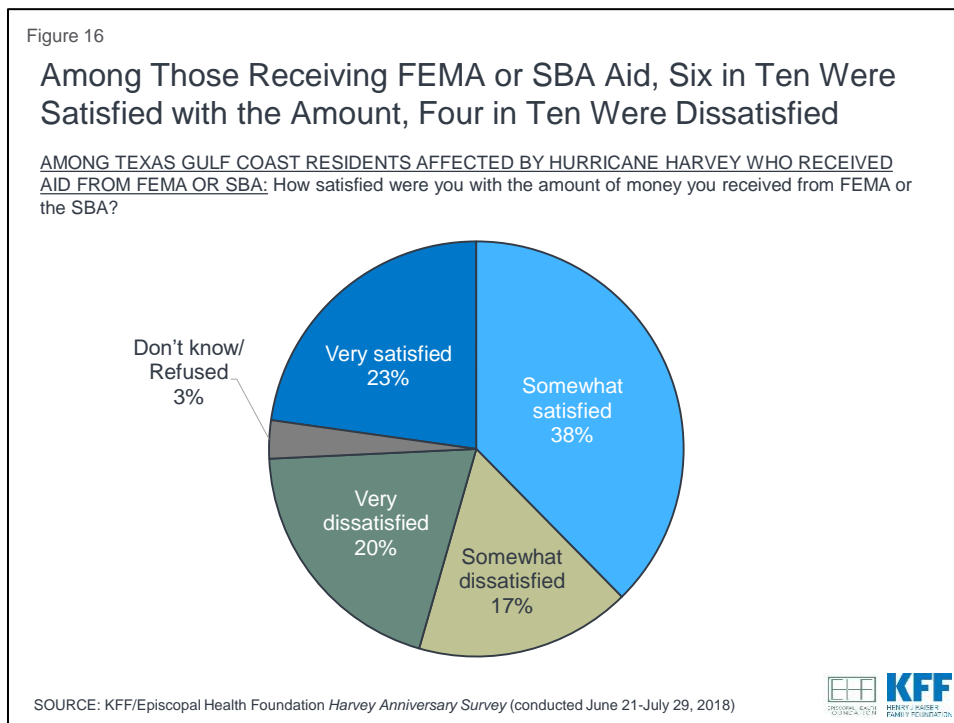


SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



Financial Help and Financial Problems Among Those Affected by Harvey

Among Texas Gulf Coast residents who were affected by Hurricane Harvey, four in ten (41 percent) say they applied for disaster assistance from FEMA or the SBA. Of these, four in ten (39 percent) say their application was approved and a similar share (42 percent) say it was denied. While the overall share receiving aid from FEMA or the SBA is small (16 percent of all affected residents), most (60 percent) of those who received this aid say they were satisfied with the amount of money they received, though almost four in ten (37 percent) say they were dissatisfied.

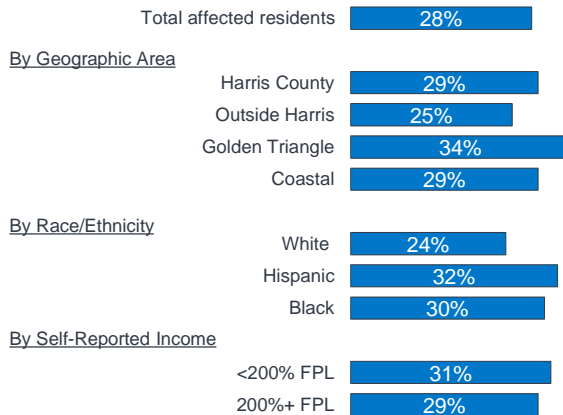


In addition to federal disaster assistance, about three in ten (28 percent) of affected residents say they have received help paying for food, housing, or health care, or some other type of financial help from a local or national charity since Hurricane Harvey. Hispanic residents are somewhat more likely than white residents to report receiving such help (32 percent versus 24 percent), but otherwise the share who received help doesn't differ substantially by race, income, or geography.

Figure 17

Almost Three in Ten Affected Residents Report Receiving Financial Help From a Charity or Non-Profit

AMONG TEXAS GULF COAST RESIDENTS AFFECTED BY HURRICANE HARVEY: Percent who say they or another family member received help paying for food, housing, or health care, or other financial help from a local or national charity, such as a church or non-profit organization since Hurricane Harvey:



SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



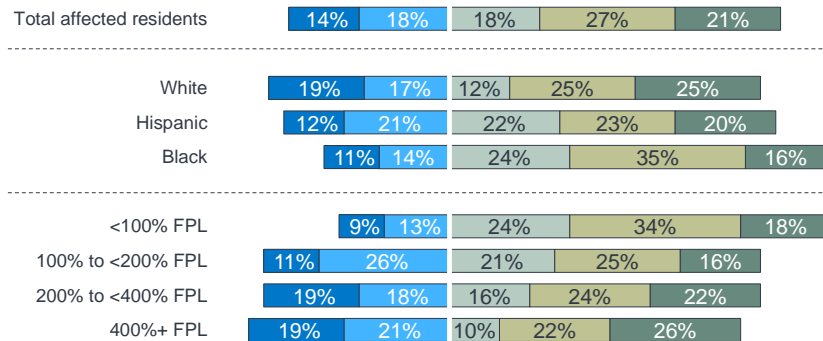
Despite receiving aid from various sources, most residents who were affected by Harvey do not feel this help will be enough to cover the majority of their financial losses from the storm. Taking into account all sources of financial help including insurance payments, disaster aid, and help from charities, most affected residents (66 percent) say this assistance will cover very little (18 percent) or none (27 percent) of the financial losses they experienced as a result of the storm, or that they haven't received any type of financial help or payments (21 percent). Just 14 percent say such payments will cover most of their financial losses and another 18 percent say they will cover "just some." Black residents and those with the lowest incomes are the least likely to say that most or some of their losses will be covered by insurance payments and financial aid.

Figure 18

Lower-income and Black Residents Affected by Harvey Least Likely to Say Financial Assistance Covered Their Losses

AMONG TEXAS GULF COAST RESIDENTS AFFECTED BY HURRICANE HARVEY: Thinking about any financial assistance you have received from insurance payments, FEMA, charities, or other sources, would you say this assistance has been enough to cover most, just some, very little, or none of the financial losses you experienced as a result of the storm?

■ Most ■ Just some ■ Very little ■ None ■ Have not received any financial assistance (Vol.)



NOTE: Don't know/Refused responses not shown.
SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



Focus group highlight: Financial help and financial problems

Quotes from focus group participants highlight the multiple financial problems residents faced in the wake of the hurricane, and the fact that any aid they received was inadequate to cover the costs they were facing.

“I had 2 jobs when I was pregnant and I was looking for homes to clean. I was cleaning night and day. We had our things. I had a car and everything, and all of a sudden you don't even have clothes to put on. Living in an apartment, I started thinking, ‘I work so much and I don't have anything.’” – 32-year-old undocumented Hispanic female, Houston

“Even with the assistance ... In my case we were driving back and forth from Winnie. It was the gas, the food. I mean you're exhausted. You're on the road trying to survive.” – 53-year-old Black female, Port Arthur

“Well I had to fight them because I lost everything. I had to send them pictures and everything I had because they felt that what I owned was only worth \$2000, and I worked all my life for those things. Although they were material, but they were mine. So I had to fight them in order to get what I got from them.” – 53-year-old Black female, Port Arthur

“So the people they sent from FEMA ... They would inspect and say, ‘Oh you can fix this with \$4,000.’ But they didn't go to Home Depot to see how much they were charging for sheetrock. They didn't know the cost of materials.” – 49-year-old undocumented Hispanic female, Houston

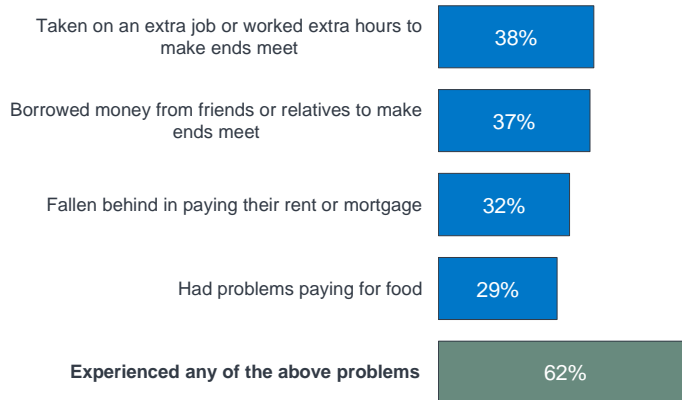
“I did get several [bids from contractors], anywhere from \$60,000 to \$80,000 or more. And the amount that I got from FEMA was not even close. So I stretched it out as far as I could, to take care of home repairs, as well as trying to replace a vehicle, because my vehicle was flooded. And I’ve charged up credit cards as well and pulled money from savings accounts which I’ll probably be taxed on, and my house is still not finished.” – 60-year-old Black female, Dickinson

Affected residents report a variety of financial problems since Harvey. About four in ten (38 percent) say they or someone else in their household has taken on an extra job or worked extra hours since the storm in order to make ends meet, and a similar share (27 percent) say they have borrowed money from friends or relatives. One-third (32 percent) say they have fallen behind in paying their rent or mortgage and three in ten (29 percent) report having problems paying for food. Six in ten (62 percent) of affected residents report at least one of these problems. As Table 2 shows, reported financial problems in the wake of Hurricane Harvey are much more common among affected residents with lower self-reported incomes, as well as among Black and Hispanic residents.

Figure 19

Six in Ten Harvey-Affected Residents Report Experiencing Financial Problems Since the Storm

AMONG TEXAS GULF COAST RESIDENTS AFFECTED BY HURRICANE HARVEY: Percent who say they or any other adult in their household experienced each of the following since Hurricane Harvey hit:



SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



Table 2: Reported Financial Challenges of Residents Affected by Hurricane Harvey

AMONG TEXAS GULF COAST RESIDENTS AFFECTED BY HURRICANE HARVEY: Percent who say they or any other adult in their household have _____ since Hurricane Harvey hit:	Total	Self-reported Income (% of FPL)				Race/Ethnicity		
		<100%	100% to <200%	200% to <400%	400%+	White	Hispanic	Black
Borrowed money from friends or relatives to make ends meet	37%	47%	45%	35%	10%	28%	38%	49%
Taken on an extra job or worked extra hours to make ends meet	38	41	46	36	24	36	35	43
Fallen behind in paying their rent or mortgage	32	44	38	25	10	20	40	39
Had problems paying for food	29	43	35	21	5	22	30	39
Experienced any of the above problems	62	74	70	59	32	51	64	75

Health, Mental Health, and Resilience

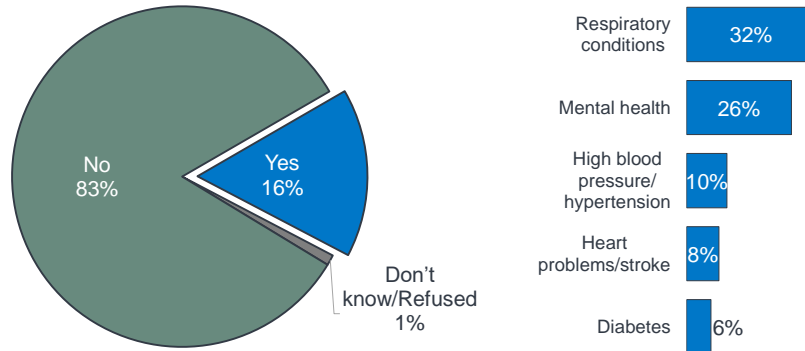
Beyond impacts on their housing, employment, and financial situations, some residents report problems with their physical and/or mental health as a result of Hurricane Harvey. Overall, 16 percent of affected residents say they or someone in their household has a health condition that is new or has gotten worse since Harvey. This is similar to the share of affected residents who reported a new or worse health condition in the first survey (17 percent), suggesting that most health effects from the storm began in the early months and many have persisted since then. The most commonly reported health conditions are respiratory problems such as asthma, coughing, or other breathing problems (32 percent of those reporting a health condition), followed by mental health issues like depression and anxiety (26 percent), high blood pressure (10 percent), cardiovascular problems (8 percent), and diabetes (6 percent).

Figure 20

One in Six Say They or a Family Member Have a Health Condition that Is New or Has Gotten Worse Due to Harvey

AMONG TEXAS GULF COAST RESIDENTS AFFECTED BY HURRICANE HARVEY: Do you or another family member living in your household have any health conditions that are new or have gotten worse as a result of Hurricane Harvey, or not?

AMONG THE 16% WITH A HOUSEHOLD MEMBER WHO HAS NEW/WORSENERED HEALTH CONDITIONS: Can you describe what that health condition is? (*open-end*)



NOTE: Only top five responses shown for the second question.
SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)

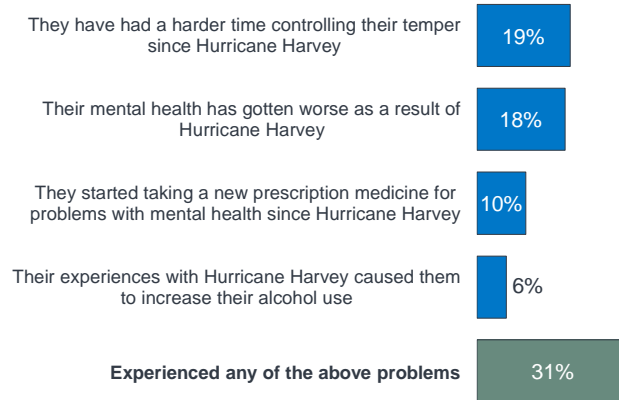


Residents who were affected by Harvey also report a variety of mental health consequences from the hurricane. About three in ten (31 percent) of affected residents report some negative effect on their mental health, including having a harder time controlling temper (19 percent), feeling their mental health has gotten worse (18 percent), taking a new prescription for a mental health issue (10 percent), or increasing their alcohol use because of Harvey (6 percent). Again, these shares are similar to those reported by affected residents in the first survey (32 percent reported at least one of these problems), suggesting that on balance, there has not been a marked improvement or a further decline in mental health issues among residents who began to feel these effects in the immediate aftermath of the storm.

Figure 21

Three in Ten Report Some Effect on Mental Health Due to Harvey

AMONG TEXAS GULF COAST RESIDENTS AFFECTED BY HURRICANE HARVEY: Percent who say they experienced each of the following issues related to mental health following Hurricane Harvey:



SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



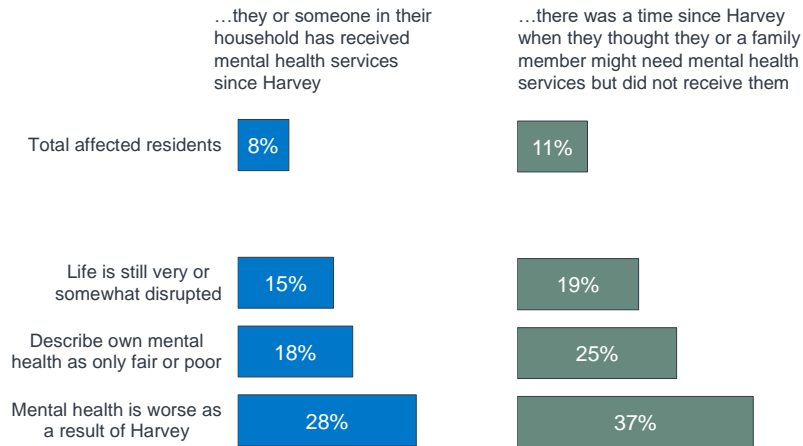
Despite the relative prevalence of self-reported mental health problems among residents affected by Harvey, few (8 percent) say that they or someone in their household has received any mental health services since the storm, including just 5 percent who say someone received these services related to their experience with Harvey. A similarly small share (11 percent) say there was a time since the hurricane when they thought they or a family member might need mental health services but did not receive them. While these shares are small among affected residents overall, they are somewhat higher among those who say their lives are still disrupted from the storm, those who describe their own mental health as only fair or poor, and those who feel that their mental health has gotten worse as a result of Harvey.

Among those who say there was a time since Harvey when they or a family member did not receive mental health services they thought they might need, half say the main reason was that they could not afford the cost (47 percent), while nearly as many say they did not seek out the services (39 percent).

Figure 22

Few Affected Residents Report Receiving Mental Health Services Since Harvey

AMONG TEXAS GULF COAST RESIDENTS AFFECTED BY HURRICANE HARVEY: Percent who say...



SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



Residents of the Golden Triangle area are more likely than those living in other areas to report negative mental health consequences as a result of Hurricane Harvey, particularly due to the fact that a larger share of these residents say they have had a harder time controlling their temper since the storm. However, Golden Triangle residents are not more likely than others to report that someone in their household has received any mental health services since the storm. Notably, Hispanic residents are less likely than both white and Black residents to report declines in their mental health due to Harvey, and less likely to say that someone in their household has received counseling or other mental health services.

Table 3: Affected Residents' Mental Health After Hurricane Harvey

AMONG TEXAS GULF COAST RESIDENTS AFFECTED BY HURRICANE HARVEY: Percent who say they experienced each of the following since Hurricane Harvey:	Total	Geographic Region				Race/Ethnicity			Self-reported Income (% of FPL)	
		Harris County	Outside Harris	Golden Triangle	Coastal	White	Hispanic	Black	<200%	200%+
Have had a harder time controlling temper	19%	21%	16%	27%	16%	20%	14%	28%	22%	17%
Mental health has gotten worse as a result of Harvey	18	20	15	23	16	20	14	25	22	15
Started taking a new prescription medicine for problems with mental health	10	11	8	7	11	11	7	14	12	8
Increased alcohol use because of Harvey	6	6	5	5	7	5	4	11	7	3
Experienced any of the above problems	31	32	26	42	31	34	24	37	34	29
Percent who say they or another family member in their household received mental health services since Harvey	8	8	7	11	10	10	4	13	10	7

Focus group highlight: Mental health challenges and services

Focus group participants were chosen to represent one of the hardest-hit groups: those who say their lives are still disrupted nearly one year after the hurricane. The emotions expressed in the groups were often intense, with issues of stress, anxiety, anger, and depression being raised in each group. For some, this stress was a reaction to the physical and financial challenges associated with recovery, while for others, stress was triggered by the difficulty of navigating the processes for receiving financial help. Several participants mentioned the need for better support systems to connect those who are still struggling to piece their lives together.

“Depression ... the everyday life after Harvey – like it stopped, for a lot of us. We pick ourselves back up. It’s hard, it’s frustrating, and it’s also depressing.” – 29-year-old Hispanic female, Houston

“Material damages? [Those can be fixed in] two or three years. But emotional? It’s something that you could have to live with for your whole life.” – 37-year-old undocumented Hispanic male, Houston

“I was angry as all hell [about the process for receiving assistance]. I’m not going to lie to you. I’m not going to act out on anybody, but when I see these agencies email you back saying, ‘Come over here and sign up again for Red Cross.’ They’re now doing a \$2,000 payment. They did it again, nothing.” – white male, Dickinson

“I think support systems are good. I’m not talking about family. I’m talking about being able to go and talk with people that may be able to help - with not everything, but some things. Sometimes all you’ve got to do is go in to talk to somebody that’s willing to listen. ” – 65-year-old Black female, Port Arthur

“I’m a pretty functional individual, but you know what? This has pulled the rug from under me. I watched them do this to other people. I said this lady is totally exhausted. We really need some prepared people for mental health. I think we’re starting to see it in many avenues. But there are a lot of exhausted people that are still not home.” – 55-year-old Black female, Dickinson

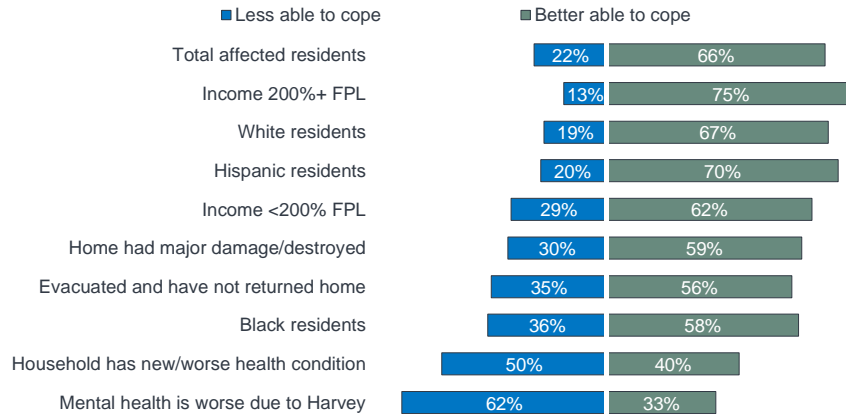
Living through a disaster can have varying effects on the resilience of individuals and communities. While much research on disaster resilience is conducted at the community level, measuring individuals’ self-reported sense of resilience can also be illuminating. For example, ten years after Hurricane Katrina hit New Orleans, most city residents who had lived through the storm felt that the experience had made them better able to cope with future stresses rather than less able to cope.⁶ The current survey finds a similar situation among Texas Gulf Coast residents affected by Hurricane Harvey – 66 percent say their experiences with the storm have made them better able to cope, while 22 percent say these experiences have made them less able to cope.

However, self-reported resilience differs among affected groups, with lower-income residents, Black residents, and those who experienced at least major damage or who remain displaced from their homes more likely than others to say their Harvey experiences have had a negative effect on their resilience (though majorities of all these groups say the experience has made them better able to cope). However, two other groups stand out as reporting more negative than positive impacts on their ability to cope. Among those who say someone in their household has a health condition that is new or worse since Harvey, about half feel their experiences have made them less able to cope with future stresses, while four in ten say they are better able to cope. The difference is even more dramatic among those who say their own mental health is worse as a result of Harvey, with about twice as many saying they feel less able to cope (62 percent) as saying they feel better able to cope (33 percent).

Figure 23

Most Affected Groups Say Harvey Made Them Better Able to Cope, Except Those Reporting Health or Mental Health Effects

AMONG TEXAS GULF COAST RESIDENTS AFFECTED BY HURRICANE HARVEY: Disasters have different effects on different people. Some people are better able to cope with future stresses, while other people become less able to cope with future stresses. Which of these effects do you think your experiences with Hurricane Harvey have had on you?



NOTE: "No difference (Vol.*)" and Don't know/Refused responses not shown.
 SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



Immigration Issues and Harvey Recovery

Immigrants, particularly those who do not have legal resident status in the U.S., may be more vulnerable than others to the effects of natural disasters, and may find it more difficult to seek or obtain the help they need in the aftermath of an event like Hurricane Harvey. The survey finds that immigrants living in the Texas Gulf Coast area who are likely to be undocumented are more likely than either immigrants with legal resident status or native-born residents to report being affected by Hurricane Harvey.⁷ Specifically, potentially undocumented immigrants are more likely to report that their home was damaged and that someone in their household lost a job, had hours cut back at work, or lost some other form of income as a result of the storm. However, among those who were affected by the storm, there is not a significant difference by immigration status in the share who say their lives are still disrupted or that they are not getting the help they need.

Table 4: Effects of Hurricane Harvey by Immigration Status

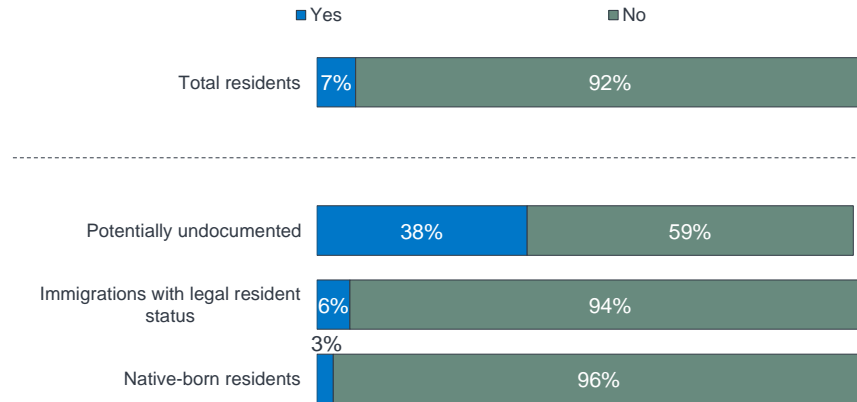
	Potentially Undocumented Immigrants	Immigrants with Legal Resident Status	Native-born Residents
Percent affected by Hurricane Harvey (NET)	78%	57%	56%
home was damaged	49	36	37
any household member had job/income loss	69	44	35
vehicle was damaged	27	19	18
<u>AMONG THOSE AFFECTED BY HURRICANE HARVEY: Percent who say...</u>			
...their lives are still disrupted	30%	28%	30%
...they are not getting the help they need	50	51	39

The first survey in this series, conducted three months after Harvey, found that over half of residents who are likely to be undocumented immigrants were worried that if they tried to get help in recovering from the hurricane, they might draw attention to their own immigration status or that of a family member. The current survey took a more direct approach to find out how often these worries are actually preventing people from seeking services they need. Among those who are likely to be undocumented immigrants, nearly four in ten (38 percent) say there was a time since Hurricane Harvey when they thought they needed help but avoided seeking help or accessing services because they were afraid of drawing attention to their own or a family member's immigration status.

Figure 24

Four in Ten Potentially Undocumented Residents Avoided Seeking Help for Fear of Revealing Immigration Status

AMONG TEXAS GULF COAST RESIDENTS IN 24 HARVEY-AFFECTED COUNTIES: Was there a time since Hurricane Harvey when you thought you needed help but you avoided seeking help or accessing services because you were afraid of drawing attention to your or a family member's immigration status?



NOTE: Don't know/Refused responses not shown.
SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



Focus group highlight: Immigration issues

The two focus groups held in Houston were conducted in Spanish with individuals who were born outside the United States: one with people who report having legal resident status and one with people who are likely to be undocumented. In both groups, people raised concerns about applying for aid without legal status or a social security number. Several participants also raised concerns about potential employers and others taking advantage of people who are undocumented in a post-disaster situation where people are desperate for work.

"I heard that if you applied without papers or documents, they were registering you or recording you. So I was afraid of that. We were afraid it was like a trap. That they were getting that information to locate you." – 32-year-old undocumented Hispanic female, Houston

"There are people who offer you work, and then after you finish the job you don't find them anymore. They don't pay you. [You need] some kind of protection because they don't want to pay you. You can't call the police." – 56-year-old undocumented Hispanic male, Houston

“They were saying there was gonna be a lot of work after the hurricane, but there were many that didn’t pay. There’s a lot of fraud, lot of jobs that were not paid. [Moderator: A lot of exploitation?] Yea. People were needing work and they saw the opportunity” – 49-year-old undocumented Hispanic female, Houston

“Those car companies are abusing people. Especially with people that don’t have legal documents. You have to be very careful. Since we really need cars, and there are a lot of people who are really abusive. They buy cars that are not in good condition.” – 46-year-old Hispanic female, Houston

Section Two: Views on Priorities and Preparedness Among Residents Overall

Preparedness for Future Storms, Housing and Financial Assistance Are Main Focus of Residents’ Priorities

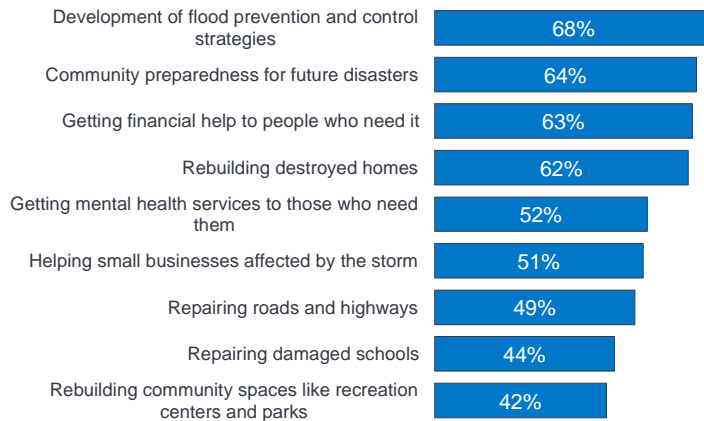
When asked about their priorities for rebuilding and recovery in their area, Texas Gulf Coast residents – including those affected by the hurricane and those who were not – identify many areas where more resources are needed, with the largest focus being on preparedness for future storms and providing financial and housing help to those in need.

The highest-ranking priority for residents overall is development of flood prevention and control strategies; about two-thirds (68 percent) say more resources are necessary in this area. In another forward-looking priority, nearly as many (64 percent) say more resources are necessary for community preparedness for future disasters. Just below these priorities are two items related to basic needs for those recovering from Harvey: getting financial help to people who need it (63 percent) and rebuilding destroyed homes (62 percent). About half say more resources are needed in getting mental health services to those who need them (52 percent, an increase from 42 percent in the first post-Harvey survey), helping small businesses affected by the storm (51 percent), and repairing roads and highways (49 percent, up from 40 percent in the first survey). Four in ten say more resources are needed for repairing damaged schools (44 percent) and rebuilding community spaces like recreation centers and parks (42 percent).

Figure 25

Preparation for Future Storms, Financial and Housing Help Top Residents' Priority List

AMONG TEXAS GULF COAST RESIDENTS IN 24 HARVEY-AFFECTED COUNTIES: Percent who say **more resources are necessary** for each of the following in their area:



SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



Many Residents Are Not Confident that Relief Funding Is Benefiting Those Most in Need

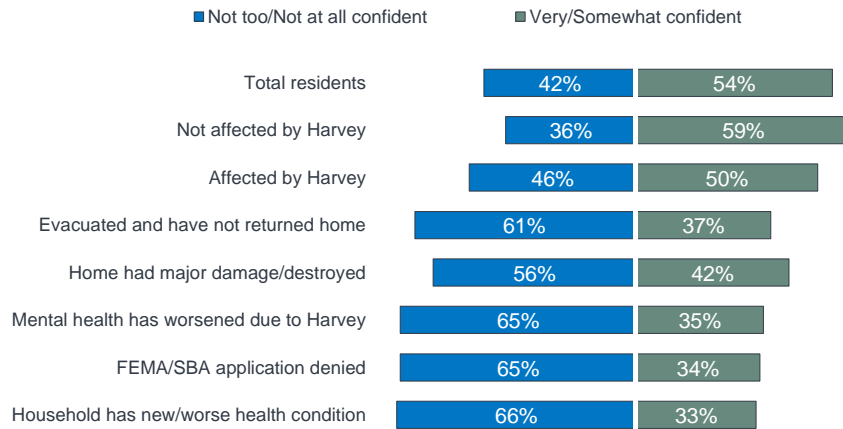
Overall, a slim majority (54 percent) of Texas Gulf Coast residents say they are “very” or “somewhat” confident that the money being spent on hurricane relief in Texas is benefiting the people who need it most. On the other hand, about four in ten (42 percent) say they are either “not too confident” or “not at all confident.”

Among those who personally felt more severe impacts from the storm, however, fewer say they are confident that relief money is benefiting those most in need. For example, while six in ten residents who were not affected by Harvey are confident that funds are going to those who need them most, those who personally experienced property damage or income loss are more evenly split (50 percent confident, 46 percent not confident). Among some of the most heavily impacted groups, including those who say their mental health has worsened as a result of Harvey, that their application for federal assistance was denied, or that someone in their household has a new or worsened health condition due to the storm, roughly two-thirds say they are not confident that the money being spent on hurricane relief in Texas is benefiting the people who need it most.

Figure 26

Some Groups Who Were More Heavily Impacted Are Less Likely to Be Confident Funding is Benefiting Those Most in Need

AMONG TEXAS GULF COAST RESIDENTS IN 24 HARVEY-AFFECTED COUNTIES: How confident are you that the money being spent on Hurricane relief in Texas is benefiting the people who need it most?



NOTE: Don't know/Refused responses not shown.
 SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)

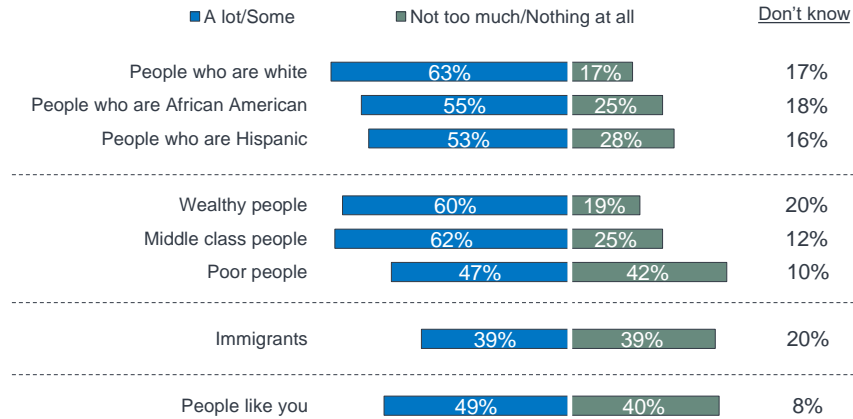


While Texans in the 24-county area recognize many different groups who have been helped by the relief efforts, some groups are perceived to have been helped more than others. About six in ten think efforts to rebuild the Texas gulf coast area after Hurricane Harvey have done either “a lot” or “some” to help wealthy and middle class people, but four in ten (42 percent) say efforts have done either “not too much” or “nothing at all” to help poor people. Along the same lines, residents are somewhat more likely to say relief efforts have helped people who are white (63 percent) than say the same about people who are African American (55 percent) or Hispanic (53 percent). About half of residents say efforts have done at least some to help people like them, whereas fewer (39 percent) say the same about immigrants. It’s worth noting that roughly one in five residents say they are not sure how much relief efforts have done to help some of these groups.

Figure 27

Residents More Likely to Say Relief Efforts are Benefiting Wealthy/Middle Class and White Residents than Other Groups

AMONG TEXAS GULF COAST RESIDENTS IN 24 HARVEY-AFFECTED COUNTIES: How much do you think the efforts to rebuild the Texas gulf coast area after Hurricane Harvey have done to help each of the following?



NOTE: Refused responses not shown.

SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



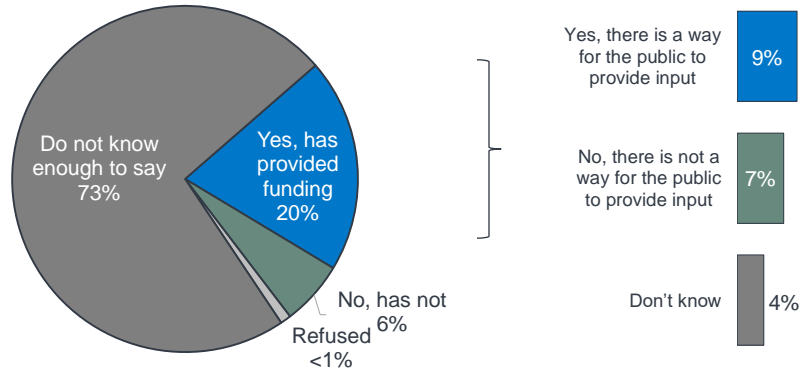
In June 2018, the federal government approved a \$5 billion federal block grant plan for Hurricane Harvey relief in Texas.⁸ This plan will allow the public to provide input into how long-term federal funds are spent. One in five residents in the 24 Texas counties surveyed say they are aware that the federal government has provided funding to help Texas with long-term recovery and rebuilding, while 6 percent say it has not provided any funding, and a large majority (73 percent) do not know enough to say. Of the share who are aware of long-term federal funding, roughly half (9 percent of all Texans in the 24-county area) say there is a way for the public to provide input and about a third (7 percent of all residents) say there is no way for the public to provide input.

Figure 28

Most Are Not Aware of Federal Government Funding to Help Texas with Long-Term Recovery

AMONG TEXAS GULF COAST RESIDENTS IN 24 HARVEY-AFFECTED COUNTIES: As far as you know, has the federal government provided funding to help Texas with long-term recovery and rebuilding, has the federal government not provided such funding, or do you not know enough to say?

ASKED OF THE 20% WHO ARE AWARE OF GOVERNMENT FUNDING: And as far as you know, is there a way for the public to provide input into how those federal funds are being spent, or not?



NOTE: Percentages for the second question based on total. Refused responses also not shown.
SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



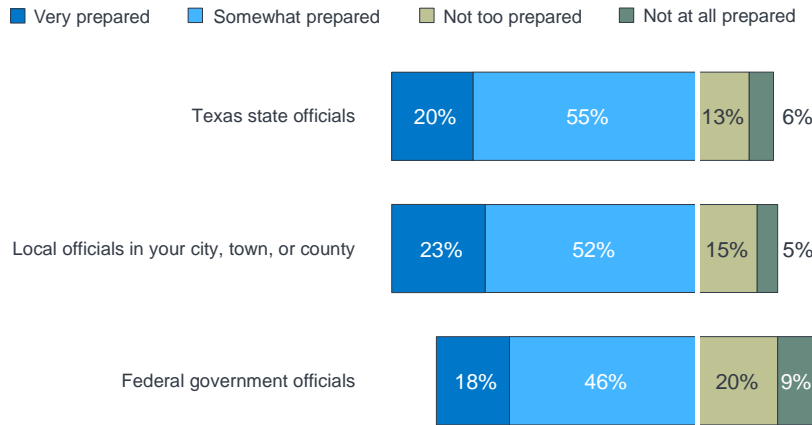
Looking to The Future: Preparedness for Future Storms

With hurricane season once again underway, the survey examined residents' views on their own preparedness and the preparedness of government officials to deal with future storms. Overall, majorities of residents see officials at each level of government as at least somewhat prepared to deal with future hurricanes. Three-quarters (75 percent) say that both Texas state officials and local officials in their city, town, or county are either "very prepared" or "somewhat prepared" to deal with hurricanes in the future, while about two-thirds (64 percent) say the same about federal government officials.

Figure 29

Most See Government Officials as at Least Somewhat Prepared to Deal with Future Hurricanes

AMONG TEXAS GULF COAST RESIDENTS IN 24 HARVEY-AFFECTED COUNTIES: Overall, how prepared do you think each of the following are to deal with hurricanes in the future?



NOTE: Don't know/Refused responses not shown.
SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)

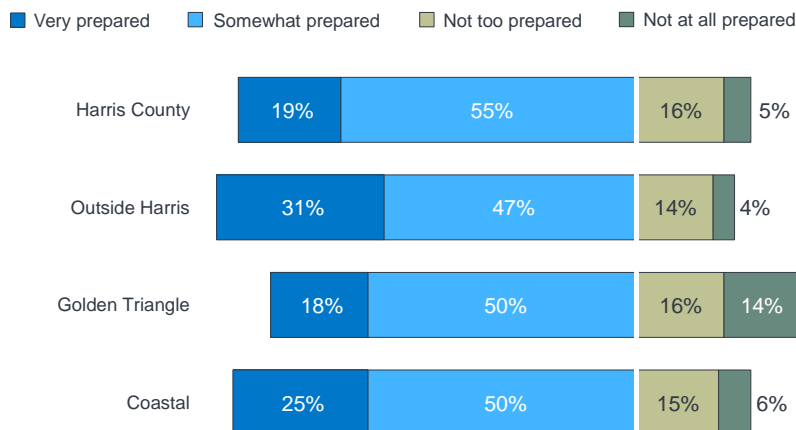


While majorities of residents in each of the four regions surveyed say that local officials are at least somewhat prepared to deal with future hurricanes, those living in the Golden Triangle are somewhat more likely than those in other regions to say officials are “not too” or “not at all” prepared (30 percent versus between 18 and 21 percent in other areas).

Figure 30

Golden Triangle Residents Somewhat Less Likely to Say Local Officials Are Prepared to Deal with Future Hurricanes

AMONG TEXAS GULF COAST RESIDENTS IN 24 HARVEY-AFFECTED COUNTIES: Overall, how prepared do you think **local officials in your city, town, or county** are to deal with hurricanes in the future?



NOTE: Don't know/Refused responses not shown.
SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



On a more personal level, roughly three-quarters of residents also say that they themselves are either “very prepared” (32 percent) or “somewhat prepared” (45 percent) to deal with future hurricanes. However, there are differences by self-reported income and race/ethnicity in how prepared people feel. Residents with lower household incomes below 200 percent of the Federal Poverty Level are almost three times as likely as those with higher incomes to say they are not prepared to deal with hurricanes in the future. Similarly, a larger share of Black and Hispanic residents say the same compared to their white counterparts.

Table 5: Personal Preparedness for Future Hurricanes

Overall, how prepared do you think you, yourself are to deal with hurricanes in the future?	Total	Geographic Region				Race/Ethnicity			Self-reported Income (% of FPL)	
		Harris County	Outside Harris	Golden Triangle	Coastal	White	Hispanic	Black	<200%	200%+
Prepared (NET)	77%	75%	81%	78%	80%	89%	63%	73%	65%	88%
Very prepared	32	31	36	29	30	40	24	27	24	39
Somewhat prepared	45	44	46	49	49	49	39	46	42	49
Not too prepared (NET)	21%	24%	17%	21%	20%	11%	35%	26%	33%	12%
Not too prepared	12	12	11	10	10	7	19	12	17	8
Not at all prepared	10	12	6	12	9	4	17	14	16	4

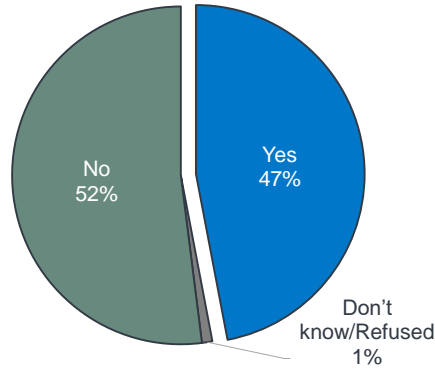
NOTE: Don't know/Refused responses not shown.

Although a large majority of Texas Gulf Coast residents say they feel prepared to deal with future hurricanes, about half (52 percent) say they and their family have not actually taken any steps to do so since last year. The other half (47 percent) say they have taken steps to prepare for future hurricanes, including at least three in ten who say they have prepared a disaster supply kit with emergency supplies (36 percent) or disaster communications plan for their family (30 percent). Fewer say they have made physical changes to their home (16 percent) or purchased additional homeowners' or renters' insurance (9 percent).

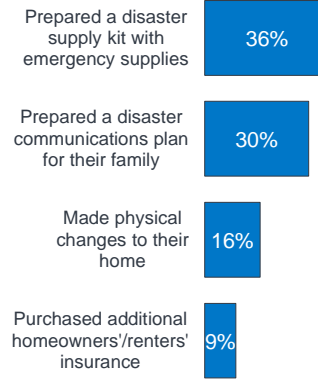
Figure 31

Half Say They Have Personally Taken Steps to Prepare for Future Hurricanes

AMONG TEXAS GULF COAST RESIDENTS IN 24 HARVEY-AFFECTED COUNTIES: Since Hurricane Harvey, have you and your family taken any steps to prepare for future hurricanes in your area, or not?



ASKED OF THE 47% WHO HAVE TAKEN STEPS TO PREPARE: Percent who say they have done each of the following to prepare for future hurricanes:



NOTE: Percentages for the second question based on total.
SOURCE: KFF/Episcopal Health Foundation *Harvey Anniversary Survey* (conducted June 21-July 29, 2018)



The share who say they've taken steps to prepare for future hurricanes does not differ by race/ethnicity or income, but residents of the Golden Triangle are somewhat more likely than those in other regions to report taking such steps (see Table 6).

Table 6: Actions Taken to Prepare for Future Hurricanes

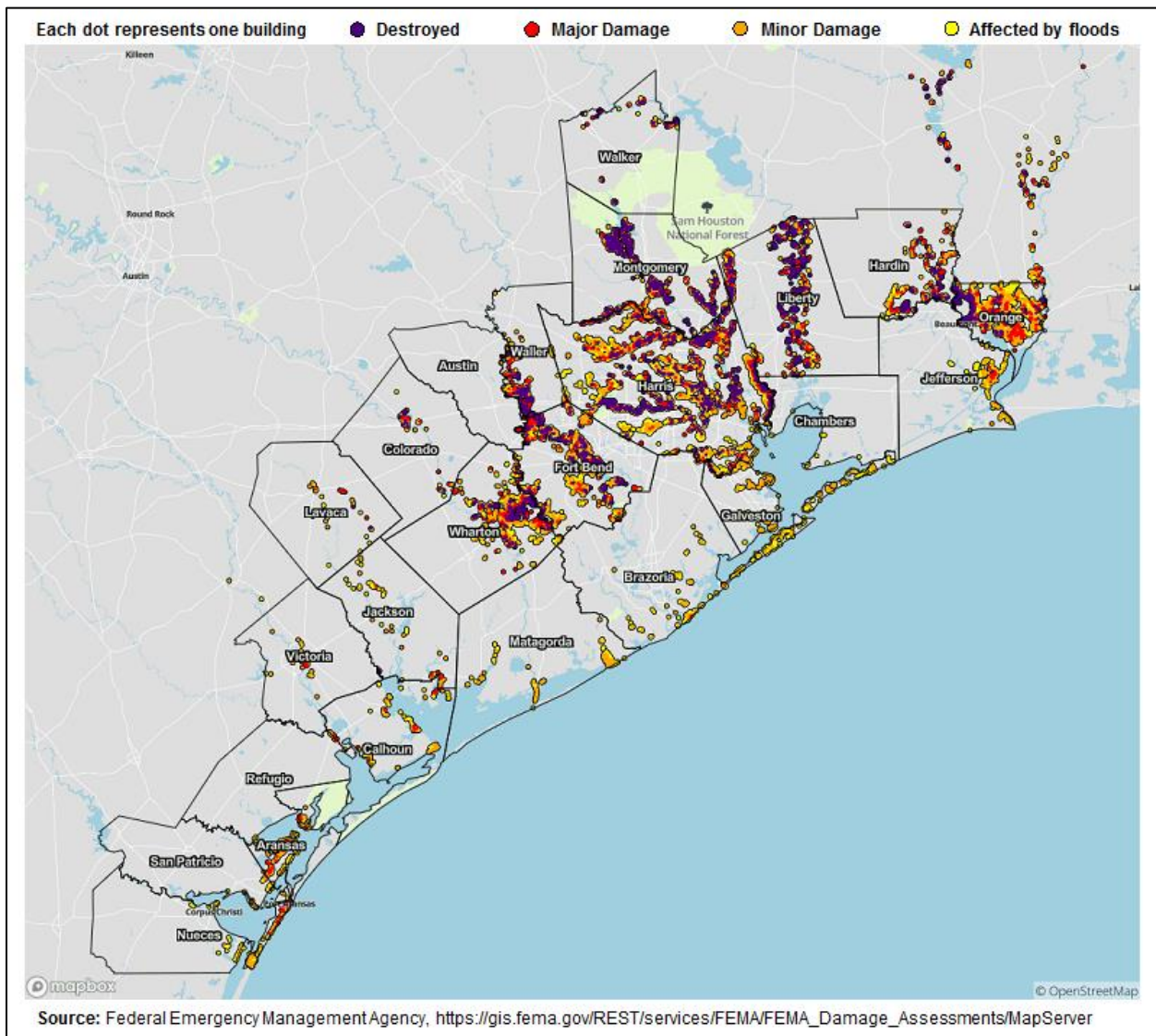
	Total	Geographic Region				Race/Ethnicity			Self-reported Income (% of FPL)	
		Harris County	Outside Harris	Golden Triangle	Coastal	White	Hispanic	Black	<200%	200%+
Percent who say they have taken any steps to prepare for future hurricanes in their area:	47%	46%	45%	57%	52%	47%	46%	46%	47%	48%

Appendix A: Survey and Focus Group Methodology

Survey Methodology

The Kaiser Family Foundation/Episcopal Health Foundation *Harvey Anniversary Survey* was conducted by telephone June 21 – July 29, 2018 among a random representative sample of 1,651 adults ages 18 and older living in 24 counties along the Texas gulf coast. The counties were chosen based on a mapping analysis of Harvey property damage developed by FEMA, in an effort to examine a contiguous area of counties that suffered the largest share of property damage in 2017. The region was further divided into four groupings of counties: 1) Harris County; 2) Counties surrounding Harris (Liberty, Chambers, Galveston, Brazoria, Matagorda, Wharton, Colorado, Austin, Waller, Fort Bend, Montgomery, and Walker counties); 3) Golden Triangle (Jefferson, Hardin, and Orange counties); and 4) Coastal counties (Nueces, San Patricio, Refugio, Aransas, Calhoun, Victoria, Jackson, and Lavaca counties).

Figure 1. Counties included in survey sample based on FEMA damage assessments



Interviews were administered in English and Spanish, combining random samples of both cellular and landline telephones (note: persons without a telephone could not be included in the random selection process). Sampling, data collection, weighting and tabulation were managed by SSRS in close collaboration with Kaiser Family Foundation and Episcopal Health Foundation researchers. Episcopal Health Foundation paid for the costs of the survey fieldwork, and Kaiser Family Foundation contributed the time of its research staff. Both partners worked together to design the survey and analyze the results.

The sampling procedures were designed to reach set numbers of respondents in each of the four county-groups and to oversample particular vulnerable subpopulations who were likely to require assistance in the aftermath of the hurricane, namely: people who experienced property damage as a result of the hurricane, specifically those with household incomes near or under poverty level, Hispanic residents (in particular, non-native Hispanics), and Black residents. Some respondents were reached by oversampling cellular and landline numbers matching directory-listings in areas where data from the Federal Emergency Management Agency (FEMA) indicated large amounts of property damage due to Harvey. The sampling and screening procedures included an oversample component designed to increase the number of low-income respondents, specifically low-income Hispanic and Black respondents. This included 80 respondents who were reached by calling back respondents in the affected areas who had previously completed an interview on the SSRS Omnibus poll and indicated they fit one of the oversample criteria (based on income and race). In addition, cell phone numbers identified as pre-paid or pay-as-you go were oversampled to reach low-income, Spanish-speaking respondents in areas with a high-density of Hispanic populations.

The dual frame cellular and landline phone sample was generated by Survey Sampling International (SSI) using random digit dial (RDD) procedures. All respondents were screened to verify that they resided in one of the 24 counties covered by this study at the time Harvey hit Texas. For the landline sample, respondents were selected by asking for the youngest adult male or female currently at home based on a random rotation. If no one of that gender was available, interviewers asked to speak with the youngest adult of the opposite gender. For the cell phone sample, interviews were conducted with the adult who answered the phone.

A multi-stage weighting design was applied to ensure an accurate representation of the population of each county-group. The first stage of weighting involved corrections for sample design, including accounting for oversampling of the most-affected areas and the prepaid oversample, as well as non-response for the callback sample. In the second weighting stage, demographic adjustments were applied to account for systematic non-response along known population parameters, within each county-group. Population parameters included gender, age, race, Hispanicity (broken down by nativity), educational attainment, and phone status (cell phone only or reachable by landline). This stage excluded the oversample components. Based on this second stage of weighting, estimates were derived for the share of low-income respondents (Black, Hispanic and other) in the population. The third stage of weighting included all respondents in each county-group and included income-status (low or high) by race/ethnicity based on the previous stage's outcomes. In the last stage each county-group was weighted to accurately represent its adult-population share within the Affected Area. Weighting parameters were provided by SSI based on recent estimates from the U.S. Census Bureau's 2016 American Community Sample (ACS) for

Harris County and 5-year (2011-2015) cumulative data from the ACS for other county groups. Phone status was derived from the first wave's sample of respondents for each county-group on the SSRS Omnibus poll.

The margin of sampling error including the design effect for the full sample is plus or minus 3 percentage points. Numbers of respondents and margins of sampling error for key subgroups are shown in the table below. For results based on other subgroups, the margin of sampling error may be higher. Sample sizes and margins of sampling error for other subgroups are available by request. Note that sampling error is only one of many potential sources of error in this or any other public opinion poll. Kaiser Family Foundation public opinion and survey research is a charter member of the [Transparency Initiative of the American Association for Public Opinion Research](#).

Group	N (unweighted)	M.O.S.E.
Total	1,651	+/- 3 percentage points
Harris	716	+/- 4 percentage points
Outside Harris	320	+/- 6 percentage points
Golden Triangle	303	+/- 7 percentage points
Coastal	312	+/- 6 percentage points
Affected by Harvey	1,001	+/- 4 percentage points
Harris	422	+/- 5 percentage points
Outside Harris	150	+/- 9 percentage points
Golden Triangle	214	+/- 8 percentage points
Coastal	215	+/- 8 percentage points

Focus Group Methodology

As part of this project, the Kaiser Family Foundation and the Episcopal Health Foundation conducted focus groups to gather qualitative data from vulnerable populations affected by Hurricane Harvey. Topics covered in the focus groups were similar to those covered in the survey. Two groups each were held in Houston (July 24 and July 25), Port Arthur (July 24), and Dickinson (July 25, 2018). In total, six two-hour groups were conducted with eight participants each.

To qualify for each group, individuals must have said: 1) that their home or the place they were living had major damage or was destroyed as a result of Hurricane Harvey, and 2) that their day-to-day life was still very or somewhat disrupted at the time of the focus group screening. An effort was made to mainly include participants with incomes below 200% of the federal poverty level. However in order to fill the Port Arthur and Dickinson groups, a few participants with somewhat higher incomes were included. Recruitment aimed to target a mix of men and women, and a mix of owners and renters.

The two Houston groups were conducted with Hispanics in Spanish – one of which consisted of participants who self-identified as undocumented immigrants and one with people born outside the U.S. who reported having legal resident status. Participants of all races/ethnicities were recruited for the Port Arthur and Dickinson groups and were interviewed in English. However, reflecting the demographics of Harvey-affected residents in the area, nearly all of the participants in Port Arthur were African American. Participants in Port Arthur and Dickinson were given an incentive of \$100, and participants in Houston were given \$125 since the groups were conducted in the morning, a more difficult time to recruit for.

ConneXion Research recruited and provided moderator services for each group. The Houston groups were held at ConneXion's research facility, and the Port Arthur and Dickinson groups were held in meeting rooms at local churches. The screener questionnaire and discussion guide were developed by researchers at the Kaiser Family Foundation and the Episcopal Health Foundation, and translated into Spanish by ConneXion Research. Groups were audio and video recorded with participants' permission. Focus group costs were paid for by the Episcopal Health Foundation.

Appendix B: Share of Residents Affected by Hurricane Harvey by Geography, Race/Ethnicity, and Income

Appendix B Table 1: Share of Residents Affected by Hurricane Harvey

Percent who report the following as a result of Hurricane Harvey:	Total	Geographic Region				Race/Ethnicity			Self-reported Income (% of FPL)	
		Harris County	Outside Harris	Golden Triangle	Coastal	White	Hispanic	Black	<200%	200%+
Home was damaged (NET)	38%	38%	29%	57%	62%	34%	43%	43%	45%	35%
Major damage/destroyed	19	18	16	38	27	19	21	20	23	18
Minor damage	18	19	13	17	34	15	21	22	21	16
Vehicle was damaged	19	21	12	37	10	15	19	30	25	14
Someone in household experienced income/job loss	40	44	32	42	35	27	54	49	53	31
NET affected in any of the above ways	58	61	48	72	71	50	69	69	71	51

Appendix C: Focus Group Written Exercise Results

One part of the focus group included an exercise where the moderator asked the following questions and recorded participants' responses on an easel. The number of groups in which each type of response was mentioned is reported in the tables below.

Appendix C Table 1: In terms of housing, <i>what are the issues or problems you're having?</i>	
Category	Number of Groups that Mentioned
Walls/Sheetrock	6
Floors	6
Furniture	4
Foundation	4
Kitchen	3
Roof	3
Doors	3
Electricity/Appliances/Light/AC	3
Mold	2
Apartment/Rental	2
Fences	2
Ceilings	2
Cars	1
Fireplace	1
Windows	1
Gutted houses	1
Repairs not getting done	1
Gutters	1
Bathroom	1
Insulation	1
Clothes/Linen	1
Fixtures	1

Appendix C Table 2: In terms of housing, *what are the resources or solutions you need for long-term recovery?*

Category	Number of Groups that Mentioned
Better/reliable/qualified contractors/workers	5
Materials/tools/supplies	3
Financial help/funding (general)	3
Easier access to financial assistance	3
Help with insurance	3
Drainage/debris removal	2
Help with mold	2
Debt/mortgage relief/help with credit	2
Better training for FEMA inspectors/adjustors	2
More help from federal government	1
Tax breaks	1
Support groups	1
Make housing for the homeless available	1
Allow individuals to receive aid from multiple groups	1
Lower prices	1

Appendix C Table 3: In terms of employment, *what are the issues or problems you're having?*

Category	Number of Groups that Mentioned
Lost employment/lack of employment	5
Lack of vehicle/transportation	3
Hours cut back	2
Slow-down in business	2
Forced retirement	1
Lost equipment/tools	1
Childcare issues	1
Lack of resources	1
No access to unemployment benefits	1
Poor quality jobs	1
Employers don't want to hire people impacted by Harvey	1
Anger/mental health	1
Living arrangements make job search difficult	1

Appendix C Table 4: In terms of employment, *what are the resources or solutions* you need for long-term recovery?

Category	Number of Groups that Mentioned
Vehicle/transportation	3
More legal protection for workers	2
Provide tools for those who lost them	2
Access to credit/capital for small businesses	2
Job bank/centralized location for assistance	2
Assistance with job search	2
Employers be more understanding/allow flexibility	2
Assistance from churches	1
Better communication	1
More help from city/government	1
More help from the community	1
Hire locally	1
Provide more jobs	1
Financial help for small businesses	1
Simplify process for receiving help	1
Help for veterans and disabled	1
Access to credit/capital (in general)	1
Help with childcare	1

Appendix C Table 5: In terms of health, <i>what are the issues or problems you're having?</i>	
Category	Number of Groups that Mentioned
Stress	5
Asthma/respiratory problems	5
Insomnia/sleeping problems	4
Depression	4
Rashes/infections/skin problems	3
Allergies	3
Anxiety	3
Anger	2
Appetite/weight changes	2
Headaches	2
Mold-related illness	1
Exhaustion	1
Arthritis	1
General mental health	1
Heart attack	1
Panic attacks	1
High blood pressure	1
Soreness	1
Confusion	1
Urinary infection	1
Kidney failure	1
Less excitement about activities	1

Appendix C Table 6: In terms of health, *what are the resources or solutions you need for long-term recovery?*

Category	Number of Groups that Mentioned
Better access to therapy/counseling	2
More concern/empathy/listening	2
Mobile clinics	2
Assistance with process for receiving aid	2
Support groups/systems	2
Better access to health insurance	2
Evaluation of funding/help provided	2
Better training for mental health help	1
Legal help	1
Honesty from local officials	1
Better communication/dissemination of information	1
Massage/relaxation/spa	1
Access to affordable health care	1
Hobbies/distractions	1
Positive attitude	1
Funding to fix houses	1
Vote different people into office	1
Help for uninsured	1
Help with medicine	1

Endnotes

¹ National Hurricane Center, Tropical Cyclone Report, May 2018. https://www.nhc.noaa.gov/data/tcr/AL092017_Harvey.pdf

² FEMA, Housing Assistance Data, accessed July 2018. <https://www.fema.gov/media-library/assets/documents/34758>

³ Rebuild Texas, Recovery Tracker, accessed July 2018. <https://www.rebuildtexas.today/recovery-tracker/>

⁴ The counties included in each cluster are: Cluster One: Harris County; Cluster Two (Surrounding Harris): Liberty, Chambers, Galveston, Brazoria, Matagorda, Wharton, Colorado, Austin, Waller, Fort Bend, Montgomery, and Walker counties; Cluster Three (Golden Triangle): Orange, Jefferson and Hardin; and Cluster Four (Coastal): Nueces, San Patricio, Refugio, Aransas, Calhoun, Victoria, Jackson, and Lavaca counties.

⁵ Analysis of U.S. Census Bureau [American Community Survey](#) data.

⁶ L Hamel, J Firth, M Brodie, New Orleans Ten Years After The Storm: The Kaiser Family Foundation Katrina Survey Project. <https://www.kff.org/report-section/new-orleans-ten-years-after-the-storm-section-4/>

⁷ The survey used questions to determine the likely immigration status of respondents by asking those who were born outside the U.S. whether they were a permanent resident (i.e. had a green card) when they came to the U.S. or if their status had been changed to permanent resident since arriving. In the current survey, 9 percent of residents in the 24-county area, including 23 percent of Hispanics, said they have not been granted permanent resident status, indicating that they are likely to be undocumented immigrants.

⁸ The Texas Tribune, Federal government approves Texas plan for long-term Harvey recovery funds, June 2018. <https://www.texastribune.org/2018/06/25/hurricane-harvey-long-term-recovery-funds-approved-federal-government/>

THE HENRY J. KAISER FAMILY FOUNDATION

Headquarters

185 Berry Street Suite 2000
San Francisco CA 94107
650 854 9400

Washington Offices and Conference Center

1330 G Street NW
Washington DC 20005
202 347 5270

This publication (#9225) is available on the Kaiser Family Foundation's website at kff.org.

The Kaiser Family Foundation is a nonprofit organization based in San Francisco, California.

Filling the need for trusted information on national health issues.

EPISCOPAL HEALTH FOUNDATION

500 Fannin, Suite 300
Houston, TX 77002
Phone: 713-225-0900

www.episcopalhealth.org

By providing millions of dollars in grants, working with congregations and community partners, and providing important research, the Episcopal Health Foundation supports solutions that address the underlying causes of poor health in Texas.