

HURRICANE KATRINA: PERCEPTIONS OF THE AFFECTED

Fritz
Institute

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EXECUTIVE SUMMARY

The storm surge from Hurricane Katrina, which made landfall on August 29, 2005, caused catastrophic damage along the coastlines of Louisiana, Mississippi, and Alabama. Levees separating Lake Pontchartrain from New Orleans were breached, ultimately flooding about 80% of the city. Additionally, major wind damage was reported as far as 200 miles inland. Katrina is now considered the deadliest and costliest hurricane in the U.S. in over 80 years. In all, more than 1,400 people were killed and damages are estimated to have exceeded more than \$75 billion.

Images of despair and suffering haunted the American public as news reports from New Orleans were beamed into living rooms all over the country and internationally. Media reports and subsequent inquiries of the rescue and relief efforts in the aftermath of Hurricane Katrina have been critical of the failures of the official infrastructure, and identified gaps that need to be addressed before the onset of the next hurricane season. Yet relatively little systematic attention has been focused on the perceptions of those who were affected by Hurricane Katrina, probing the range of services that were actually delivered and noting specific needs that remained unmet.

In an ongoing series of studies aiming to systematically gauge relief effectiveness by assessing the perceptions and needs of those affected by natural disasters, Fritz Institute commissioned Harris Interactive to conduct a rigorous assessment of people affected by Hurricane Katrina. We were particularly interested in the perceptions of people about the help that they received in the first 48 hours and the first 30 days after the storm hit, as the intent of this study was to identify the performance of the system of relief delivery in order to better prepare for the disasters of the future. The questions used were adapted from a broader database of questions developed by Fritz Institute in 2005 to study the perceptions of those affected by the Asian Tsunami 48 hours, sixty days and nine months after the disaster. The lessons learned from the hurricane-affected are critical in creating the strategic infrastructure for the future, incorporating valuable insight from the ground that is rarely leveraged in preparing for disasters.

METHODOLOGY

This report presents a summary of findings from research conducted among a total of 1,089 adults affected by Hurricane Katrina who were living in Louisiana, Alabama or Mississippi before the storm hit. Given the difficulties in locating people affected by Hurricane Katrina several months after the disaster, Harris Interactive used a combination of online, telephone and in-person methodologies.

First, an online survey was conducted, which resulted in a total of 685 completed interviews, conducted between November 3 and 14, 2005. To locate people who were directly affected by Hurricane Katrina, and who might not have been living in their own dwelling, we identified geographies hit by the storm using zip codes provided by the United States Postal Service. These zip codes were then matched up to those within Harris Interactive's online panel member database and email invitations were sent to a sample of people in the corresponding locales. In order to participate in this study, respondents had to confirm that, at the time Hurricane Katrina struck, they did in fact live in the affected area. These people affected by Katrina were spread across 25 states throughout the country.

After reviewing the online survey results and the demographic profile of survey participants, an additional survey was conducted using telephone and in-person methodologies. In this wave, a total of 404 interviews were conducted by telephone (297) or in-person (107) between January 13 and 26, 2006. For the second stage, the American Red Cross and the Salvation Army provided lists of service recipients with current phone numbers and addresses for the recipients. Furthermore, a series of hotels and shelters housing hurricane survivors receiving help were identified from a number of relief agencies in the region. In-person interviews were conducted in Alabama, Louisiana and Mississippi. The survey asked those impacted by Katrina to recall details about their own experience during and after Hurricane Katrina, which had occurred several months earlier. The questions covered a range of issues from attitudes, perceptions and decisions they made about storm evacuation to relief operations and rescue, and storm aftermath.

Figures for the online results were weighted for age, sex, race/ethnicity, education, region and household income where necessary, to bring them into line with their actual proportions in the population. Propensity score weighting was also used to adjust for respondents' propensity to be online.

All surveys are subject to several sources of error.¹ These include: sampling error (because only a sample of a population is interviewed); measurement error due to question wording and/or question order, deliberately or unintentionally inaccurate responses, nonresponse (including refusals), interviewer effects (when live interviewers are used) and weighting.

¹With one exception (sampling error) the magnitude of the errors that result cannot be estimated. There is, therefore, no way to calculate a finite "margin of error" for any survey and the use of these words should be avoided.

KEY FINDINGS

1. A Significant Minority of Those Affected by Katrina Indicate that They Did Not Evacuate, with Roughly Equal Proportions Citing this was Due to Choice and Means.

EVACUATION VERSUS NON-EVACUATION

While the majority of those affected by Katrina evacuated before the storm made landfall (58%), a significant minority did not leave their homes (42%) (see Table 1). This non-evacuee population represents just over 1 million (1,071,420) adults living in Katrina-affected areas. Of the non-evacuee population in this sample, just over half (53%) resided in Mississippi, about one-fifth resided in Alabama (17%), 3% resided in New Orleans and about one-quarter (26%) resided in other parts of Louisiana. Interestingly, the demographic composition of the evacuee and non-evacuee populations was quite similar. Differences based on the following subgroups were minimal: employment, marital status, number of children in the household, type of residence, race and income and gender.

Those who did not evacuate had vivid memories of the frightening power and devastation of the storm, recalling strong winds (51%), heavy rains (39%), uprooted trees (21%) and damaged buildings (17%). "I recall the wind and the glass breaking. I recall the rain. It made me scared to death. I was terrified", remembered a Katrina survivor.

"The aftermath left us without power, it was quiet. It was a shock you see things like this on television, but you never think it will happen to you. The debris was everywhere there were destroyed cars and trees, all the wires from the light poles were broken. I saw our city destroyed, and we responded as best we could, there was no power or water for miles."

"I recall seeing the height of the water. People were stranded on their roofs. We were not prepared. It was amazing to see how many people did not leave. They could send the Navy anywhere in the world and they did not send them to help with these people stranded. It made me feel angry because they should have been more prepared. They knew New Orleans is below sea level, they should have been more prepared."

"Everyone just wanted to find friends and relatives."

A CLOSER LOOK AT THE NON-EVACUEE POPULATION

While the profile of evacuees and non-evacuees is similar, non-evacuees clearly fall into two camps - those who chose not to evacuate and those who could not evacuate because of limited means. Of those who did not evacuate, about one-third (32%) indicate that this was mainly by choice – reporting that they did not want to leave their homes (82%), their pets (44%) and their family (18%) (see Table 2).

Non-evacuees who chose to stay are primarily men (62%), white (75%), have attended at least some college (61%), are married (62%), do not have kids (74%) and have no disabilities (83%). This group of non-evacuees also appears to be better off financially. Non-evacuees by choice report that they are employed (67%) with household incomes of more than \$50,000 (36%). Of those who chose not to evacuate, 56% were from Mississippi, 26% were from Louisiana and 18% were from Alabama.

The other group of non-evacuees - those who could not evacuate because of limited means - represents nearly three-in-ten (28%) of non-evacuees or at least 289,283 adults living in Katrina-affected

areas. Of those who reported evacuation was not feasible because of "limited means", seven-in-ten (71%) cite having nowhere else to go, and nearly four-in-ten (37%) did not have a car and reported they were not able to leave their houses without assistance (36%) (see Table 2).

The non-evacuee population who reported that they did not have the means to evacuate tended to be poorer (84%) with incomes less than \$50,000, African American (58%), women (66%), and over half (57%) indicated that their highest degree was a high school education or less. This group of people was also more likely to report that they have a physical disability (32%), are not married (56%), have children (60%) and are not employed (53%). Of those who could not evacuate because of means, 41% were from Louisiana, 39% were from Mississippi and 20% were from Alabama (see Table 3).

2. A Significant Minority of Non-Evacuees Had to Wait More Than a Week Before They Received Aid.

FIRST SIGNS OF HELP

While local organizations, government agencies and national non-profit organizations provided relief post-Katrina, there were significant differences in the amount of time that passed between the hurricane and the arrival of relief across the region. As was reported in the media, it took significantly more time to get to some groups of people. Of non-evacuees in this sample, 40% said they received some form of outside assistance in the first 48 hours after Katrina struck, which means that 60% did not. Non-evacuees who resided in Alabama (50%) and Mississippi (42%) were more likely to receive aid in the first 48 hours than were residents of Louisiana (32%). Focusing on assistance delivered in the first 48 hours, those who had greater financial means were more likely to be the recipients of immediate aid. The following groups of people were most likely to receive aid in the first 48 hours: those with a college education or more (43%), those with a household income of \$50,000 or more (52%), those who chose not to evacuate (40%) and those without disabilities (44%). Other groups of people who were more likely to receive aid in the first 48 hours were men (44%), non-evacuees without children (44%), non-evacuees living in single-family homes (43%) and white non-evacuees (47%).

About 26% of non-evacuees in this sample (at least 278,569 adults from Katrina affected areas) said that the first forms of outside assistance did not arrive for at least one week after Katrina made land-fall. Those who were more likely to say that they had to wait at least one week include African Americans (33%) and other ethnic minorities (35%), non-evacuees with disabilities (43%), those between the ages of 35-54 (30%), those with household incomes of less than \$35,000 (33%) and those who did not evacuate because of means (30%). As has been reported widely in the press, residents of Louisiana (40%) were more likely to have to wait longer to receive aid. This delayed response may be attributed to the extent of damage Louisiana sustained during Katrina.

A CLOSER LOOK AT THE FIRST 48 HOURS

Of non-evacuees who reported receiving assistance in the first 48 hours, about one-third (32%) say that non-governmental organizations came to help, followed by the local police (30%) and religious and church groups (26%). Only one-in-five of those impacted by Katrina recalled receiving assistance from FEMA (18%) or the military or Coast Guard (17%) (see Table 4).

This information is relevant because those who received more immediate assistance (within the first 48 hours) find the road to recovery more bearable, with 51% of non-evacuees receiving aid in the first 48 hours reporting that they feel a sense of improved personal security compared to 44% of those who had to wait longer to receive aid. While those who received aid in the first 48 hours were more likely to feel a sense of personal security than those who had to wait longer to receive aid, it is important to keep in mind that nearly half of those who received immediate aid (in the first 48 hours) did not feel this sense of personal security.

3. One Month After Katrina, Food, Water and Financial Support Were Provided to the Majority of People Affected by the Storm. However, Respondents Report that Other Essential Forms of Relief, Such as Counseling, Job Placement and Assistance Locating Family and Friends, Were not Available to As Many People Affected by Katrina.

BASIC RELIEF AND EVALUATION OF DELIVERY - FIRST MONTH AFTER KATRINA

While there is room for improvement in the speed and distribution of relief services, the majority of those affected by Katrina did receive some form of aid within the first month after the hurricane and were complimentary of those who attended to their needs. Focusing on the first month after the hurricane, about two-thirds of those affected by Katrina reported receiving relief in the form of food and water (67%) (see Table 5). Over 49% identified the delivery of food and water as most efficient, followed by financial support (24%) (see Table 6). The majority of those receiving food and water also reported that this assistance was on-time (81%), adequate (88%) and delivered in a caring manner (91%). However, this means that between 10 and 20 percent (or approximately 255,100 - 510,200 adults living in Katrina affected areas), reported that food and water relief services were not on-time (19%), adequate (12%) and delivered in a caring manner (9%).

Financial support was the second most widely distributed relief service; approximately two-thirds (63%) reported receiving this form of assistance within the first month after Katrina. However, nearly four-in-ten (39%) felt that the distribution of financial assistance could use the most improvement in terms of efficient service delivery, followed by food and water (16%) and temporary shelter (9%) (see Table 6).

Beyond this basic relief of food, water and financial support, access to additional relief services was more limited. More than three-quarters of those who were affected by Katrina did not receive shelter or relocation services or clothes. Only about one-in-ten (13%) reported receiving assistance locating missing family and friends (see Table 5). Likewise, only 6% reported receiving counseling services and only 2% reported receiving assistance with job placement. However, the vast majority of those who received each of these services reported that they were timely, accessible and delivered in a caring manner. In other words, where the capacity to provide these services existed, the services were executed to the satisfaction of the recipients.

However, one must not discount the significant minorities that thought these services were not timely, accessible and delivered in a caring manner. Louisiana residents affected by Katrina seemed to be most critical of the delivery of relief services. Louisiana residents were least likely to think that financial support was adequate (65%) and easily accessible (60%). They were also least likely to think that counseling services were delivered in a caring manner (66%) that maintained the dignity of the recipi-

ent (62%). This means that between 34% and 40% of Louisiana residents affected by Katrina were not satisfied with the delivery of relief services.

DISTRIBUTION OF RELIEF SERVICES – FIRST MONTH AFTER KATRINA

In some cases, receipt of these relief services varied by group. While immediate relief (in the first 48 hours) was more likely to be directed to those who were better off, relief efforts in the first 30-days were more likely to be directed at groups in need. Looking more closely at the non-evacuee population, relief seems to have been directed to those with more limited resources during this time period. Those who did not evacuate because of limited means were more likely to receive relief than those who did not evacuate based on choice. This holds true for the following relief services: food and water (80% vs. 53%), temporary shelter (27% vs. 10%), clothes (29% vs. 10%), assistance locating family and friends (19% vs. 8%), transportation to and from shelters (17% vs. 1%), job placement (7% vs. 1%) and other necessities, such as bedding and toiletries (37% vs. 12%).

Other groups of people who were more likely to receive relief services in the first 30-days after the hurricane hit include those with an income less than \$35,000 and those with children. Those with household incomes of \$50,000 or more and those without children were less likely to be the recipients of basic relief after Katrina.

4. One Month After the Disaster, People Were Most Likely to Look to the American Red Cross and FEMA for Additional Assistance.

RETURNING FOR ADDITIONAL ASSISTANCE

Of those impacted by Hurricane Katrina, just over one-fifth (22%) returned to agencies for additional assistance over the initial 30 day period. Louisiana residents (28%) were more likely than residents of Mississippi (18%) and Alabama (11%) to return to agencies for additional services. Other groups who were more likely to return for additional services are evacuees (27%), people living in multi-family homes (36%), those with disabilities (31%) and those who were not employed (27%).

Of those who returned to agencies for additional aid, approximately two-thirds (63%) looked to FEMA for support and nearly half (49%) went to the American Red Cross. The Salvation Army (13%), churches and faith-based organizations (11%) and the Small Business Administration (6%) were other sources upon which people relied for additional assistance. The services desired by those affected by the storm were financial and monetary assistance (48%), supplies for living such as food, water and toiletries (29%) and housing or shelter (23%).

EVALUATION OF RELIEF ORGANIZATIONS

Interestingly, when asked to identify the one agency that provided the best overall relief, four-in-ten (44%) named the American Red Cross, followed by FEMA (12%) and the United States military (11%) (see Table 7). African Americans (64%), ethnic minorities (52%), and those with children (50%) tended to be most satisfied with the services of the American Red Cross. "They were everywhere you went", said one Katrina survivor. "They are the only ones that helped when we needed it," said another.

While 44% of those affected by Katrina identified the American Red Cross as the one agency that provided the best overall relief, this means that 56%, or approximately 1,428,560 adults affected by Katrina, selected another organization as the one which provided the best overall relief.

"In spite of everything on the news most caring people were really concerned about your welfare."

"When we called and asked for assistance from the Red Cross they helped you out and spoke to you with courtesy, and took the time out to make sure our needs were taken care of. If it was food, medicine or anything we needed they were able to direct charity of church or some organization which could help."

"They were the only ones that did not deny people and turn them away."

"The Red Cross were the only ones that were really able to help us. They gave us a motel."

In response to the question of which single agency could use the most improvement in providing relief, 61% named FEMA and 14% identified the American Red Cross. Being disorganized (35%), taking too long (31%), lack of efficiency (18%), and inept/inadequate assistance (8%) were the most frequently mentioned reasons for viewing an organization as needing the most improvement. In referring to the assistance received from one of the dominant aid providers, one Katrina survivor said "For a group that is supposed to be prepared to handle emergencies, they were the most poorly organized I have ever seen." Another Katrina survivor observed, "They needed to be more organized, more efficient, with less lines and waits, which was hard on the elderly."

5. Those Affected by Katrina Have Mixed Feelings About Their Road to Recovery.

PROGRESS TOWARD RECOVERY

When asked whether they were making good progress toward their recovery from this disaster, at the time they were interviewed, nearly half (48%) of all those affected by Katrina strongly agreed that they were. This number is slightly higher for men (52%), those living in Alabama (54%), those who did not seek additional aid (53%), those with incomes of \$100,000 or more (60%), and those who are employed (54%). There was little difference based on evacuee status, state of residence, level of education or race.

Few respondents (7%) disagreed strongly that they were making good progress. However, 7% of those affected by Katrina still represents approximately 153,060 adults. This number was slightly higher for those who are divorced (12%), those who have a household income less than \$35,000 (9%), those with disabilities (13%), those who returned to agencies for additional services (14%) and those who are unemployed (9%).

"We had a bad flood here. We had about a 13 foot surge and we were lucky because it came to the floor boards. Some of my friends lost their homes on the beach. I am keeping stuff for my neighbors until they get their homes repaired. Our neighbors have pulled together. I was depressed for about 60 days but you cannot just lay down and so I got back up."

About three-quarters (73%) of those affected by Katrina strongly agree that they have a strong and supportive network of family and friends. Those who are married (77%), those with household incomes of \$100,000 or more (82%) and those who are employed (75%) are more likely to strongly agree that they have strong support networks (see Table 8). Residents of Louisiana (76%) and Alabama (78%) were also more likely than residents of Mississippi (65%) to strongly agree that they have a strong and supportive network of family and friends.

Those who were more likely to receive aid in the first month after Katrina were more likely to strongly agree that people were doing all they could to help their families. Non-evacuees because of limited means (51%), those who were single (41%), adults between the ages of 35-54 (42%), those with children (46%), and African American (52%) and other ethnic minorities (43%) were more likely to strongly agree that people were doing all they could to help their families. Agreement with this statement did not vary significantly by state of residence.

RECOMMENDATIONS

Hurricane Katrina provided an inflection point in building awareness for the importance of disaster preparedness in the United States. The aftermath of the devastation of Hurricane Katrina, and the investigations into what did not work, provides an opportunity for American disaster relief institutions to step back and better understand how to improve the relief system and direct resources more effectively. New models of collaboration and cooperation must be created to ensure that communities vulnerable to natural disasters are adequately prepared for the inevitable. The lack of coordination between the Federal, State and Local governments, the private sector and community-based organizations must be addressed in every hazard-vulnerable community. Particular attention must be paid to the most vulnerable, those who are poor and do not have the means to help themselves, the elderly, the sick and those with disabilities. Standards for effective preparedness must be created and thresholds for effectiveness determined. Roles and responsibilities must be clearly defined and communicated to all stakeholders. Only then can accountability be determined, and appropriate skill and competence levels systemically imbued into a response operation.

In many ways, the core lessons of Hurricane Katrina are no different than other major natural disasters such as the Tsunami. Some of these include:

1. Local Organizations, the Lifeline of Disaster Survivors, Must Prepare for Natural Disasters So They Can Better Assist Their Communities.

Both evacuees and non-evacuees affected by Katrina stated that they were not personally prepared for this hurricane. As our report indicates, this includes heeding the call to evacuate rather than choosing to stay behind, and having the means to evacuate. It also implies non-evacuees having a plan to cope with the destruction by being prepared with the appropriate supplies, and everyone having access to the right identification and documents to claim assistance after an event. Thus, in areas vulnerable to natural disasters, whether hurricanes, tornadoes or earthquakes, it is imperative that an effective disaster preparedness and information dissemination system be in place that is able to reach even the least prepared and most disadvantaged. Further, a system is needed that regularly assesses the readiness of communities, and appropriately addresses gaps when they exist. People should also be made aware of the agencies from which they are likely to receive assistance, how long the assistance is likely to take and the type of documentation they would need to make sure that the process can be smoothly executed.

After a disaster, whether it is a sudden-onset tsunami or earthquake, or an anticipated hurricane such as Katrina, the affected are most likely to receive immediate help from neighbors, community-based organizations and local first responders.

After Katrina, it was the local police, religious and church groups and local non-governmental organizations that provided the most immediate assistance. Less than one-in-five people reported receiving assistance from FEMA or the military or Coast Guard. Local people have full knowledge of the community, where the most vulnerable reside, and where to find those who are likely to need assistance. It is imperative therefore that appropriate measures be taken by local actors to ensure that there is a system for coordination and communication with clearly defined roles and protocols to minimize the chaos and confusion that is typical in a catastrophic disaster.

After the initial 48 or 72 hours in a major disaster, it is likely that there will be a great deal of aid flowing into the affected area from around the country and around the world. Yet often the lack of clear processes and responsibilities translates to delays in the assistance reaching those who need it most. National assistance organizations must have local partners to work with to distribute aid in the communities most affected and to the people with the greatest need. In addition, creating supply chains to manage and distribute this assistance, finding warehouses for excess supplies, enlisting the help of the private sector and anticipating some of the legal and jurisdictional issues are some of the preparedness steps that must be taken to ensure that appropriate assistance is delivered in a timely, efficient and effective manner.

The survey also highlights that many in the affected regions were pet owners (58%). The care and well-being of pets is crucial to the people who own them and could factor into decisions about evacuation. Therefore additional study and planning should be considered concerning the care and treatment of family pets and animals in the aftermath of natural disasters. Animal assistance agencies should be taken into account in the preparedness planning for major disasters in the United States.

2. The Immediacy of the Aid, the Type of Aid and the Manner In Which the Aid is Delivered Are All Critical Elements to Effective Relief.

This study indicated that those who received more immediate assistance in the first 48 hours find the road to recovery more bearable and were therefore more likely to feel a sense of personal security than those who had to wait longer to receive aid. Thus, as discussed earlier, disaster preparedness initiatives must cater to the first 48-72 hours after the disaster.

Our study also indicates that in the first month after the hurricane, two-thirds of those affected by Katrina reported receiving relief services in the form of food, water and financial assistance. However, a significant minority (between 10% and 20%), particularly those in Louisiana, felt that the services were not delivered in a timely or caring manner. After a major disaster when people's lives have been so severely disrupted, the caring and concern of relief workers is often cited as a lifeline of hope. Disaster assistance organizations must make sure that the processes of delivery are well orchestrated so that the right people receive the right assistance at the right time by properly trained volunteers or staff who are respectful of their beneficiaries or 'customers'. One way to ensure that quality is consistent over time is to deploy 'satisfaction' assessments by third parties and to share these with the agencies so that feedback can be incorporated into after-action reviews and the issues identified and systematically addressed.

Agencies should also have a plan to provide longer-term services, including psychosocial services such as counseling. Only one-in-ten of the people affected by Katrina reported receiving assistance locating missing family and friends, only 6 percent reported receiving counseling services, and only 2 percent reported assistance with job placement in the first month after the disaster. Our research indicates that emotional and longer-term support is cited over and over again by the disaster affected as critical to their long-term well-being and recovery.

Finally, a consistent lesson that emerges in studies of people affected by disasters is their desire to be consulted in the type of services that are necessary for their recovery. Governments and other organi-

zations preparing for the provision of relief must create mechanisms through which the opinions and preferences of those affected can be factored into the type of help that is received.

3. Standards for Disaster Preparedness and Relief Provision Must Be Created

This study tracked a large number of relief recipients (1089 adults) affected by Hurricane Katrina and including both evacuees and non-evacuees. One consistent finding is the confusion with expectations of the roles and responsibilities of the government, relief providers and other actors. Despite intense coverage in the media, there is still little clarity among the general public about who does what and when. Related research about the role of the private sector, and the linkage between the private sector, the international humanitarian community, federal agencies, local agencies and community-based organizations reveal a murky ecosystem of relief with poorly communicated responsibilities, resources, authority and points of coordination and collaboration.

Who should provide what service? How quickly should the service be provided? What is the minimum proportion of affected areas that must receive assistance in the first 48 hours? The first week? The first month? What is the role of the private sector? Who should anticipate legal and jurisdictional impediments? What kind of coordination should exist between the federal and local government infrastructures? With community-based organizations? Who determines how assistance is prioritized? How? These are some questions which need to be anticipated and addressed in disaster preparedness efforts at local, state and national levels.

Today, nascent standards for disaster preparedness are emerging in the United States. However, knowledge and application of these standards does not seem to be widespread. We believe that there should be a significant emphasis on developing a common standard for disaster preparedness, so that people in the disaster relief ecosystem can begin to evolve a common vocabulary. Further, the practice of audits and certification to this standard, seen in other sectors such as the corporate and medical sectors, is also recommended. At the community and city levels, for instance, it is important to have agreements between the government and nonprofit community-based organizations such as the Red Cross, the Salvation Army, and church and other religious organizations that can be effective partners in the delivery of disaster relief services. The role of the private sector – often the source of vast resources in a community – should also be anticipated.

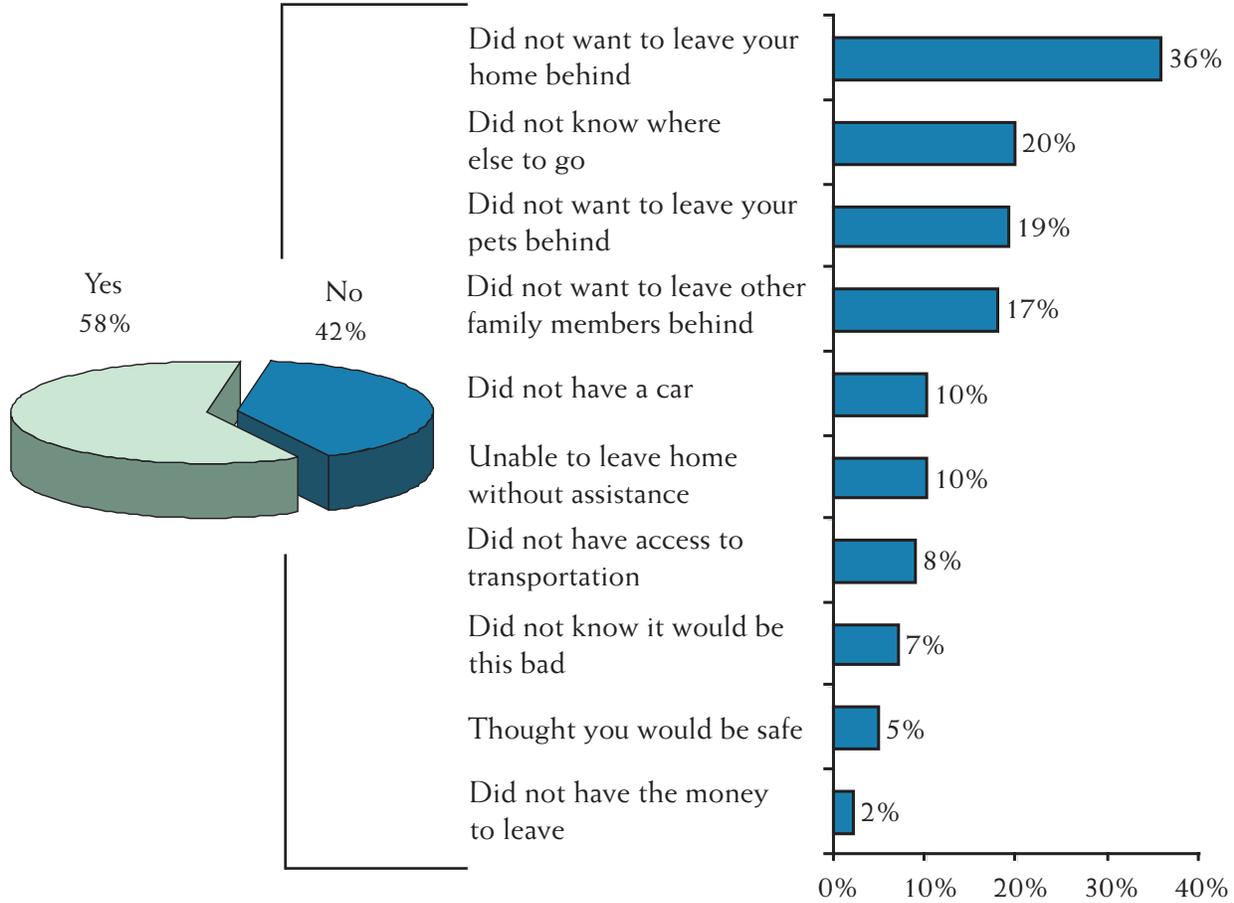
In conclusion, disaster relief is often a reactive response. Consequently, large numbers of those made vulnerable by disasters suffer needlessly. We posit that a strategic approach to disaster preparedness can largely mitigate the impact of disasters. However, in order for such an approach to be feasible, communities in disaster-prone areas must proactively demand that disaster preparedness plans be developed, funded, and implemented.

APPENDIX A: TABLES AND GRAPHS

TABLE 1: REASONS WHY THOSE AFFECTED BY KATRINA DID NOT EVACUATE

Q500: Did you evacuate your home before Hurricane Katrina hit?

Q505: Why did you not evacuate your home before Hurricane Katrina made landfall?



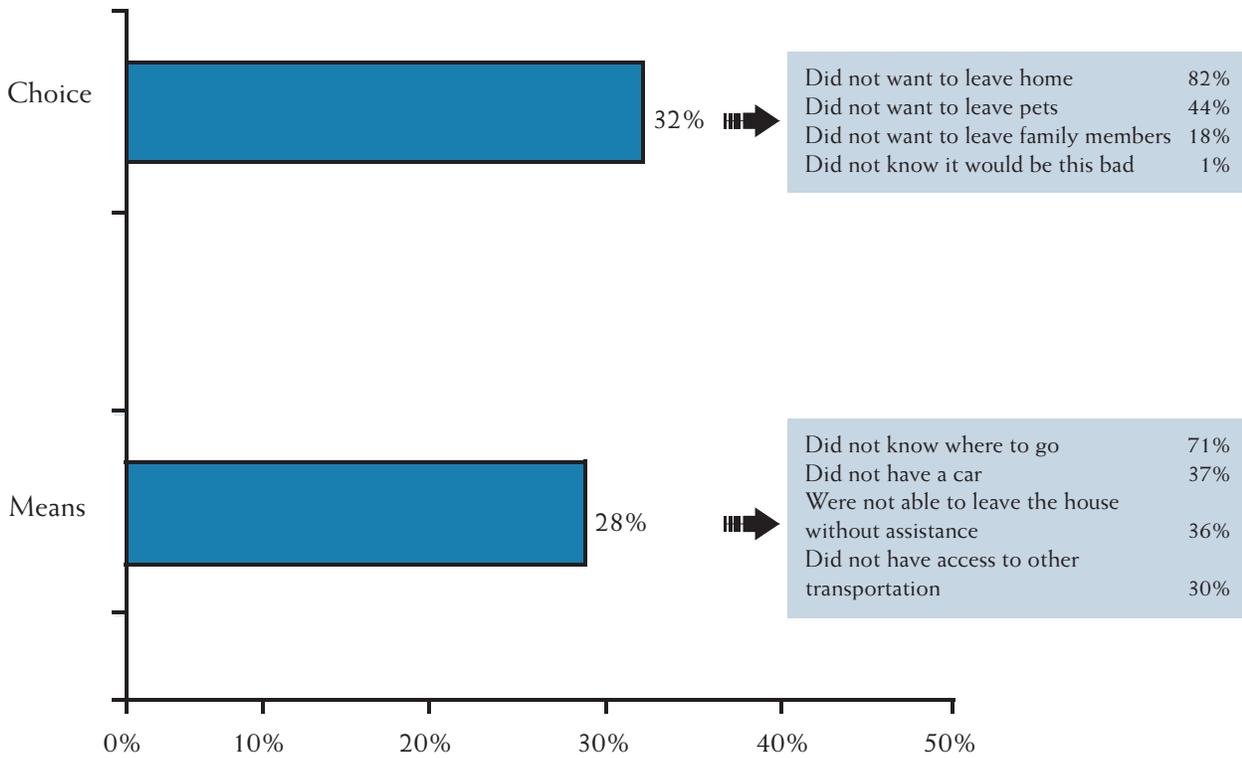
BASE: Hurricane victims (n=1,089)

BASE: People who did not evacuate (n=430)



TABLE 2: REASONS FOR NON-EVACUATION - CHOICE VS. MEANS

Q505: Why did you not evacuate your home before Hurrican Katrina made landfall?

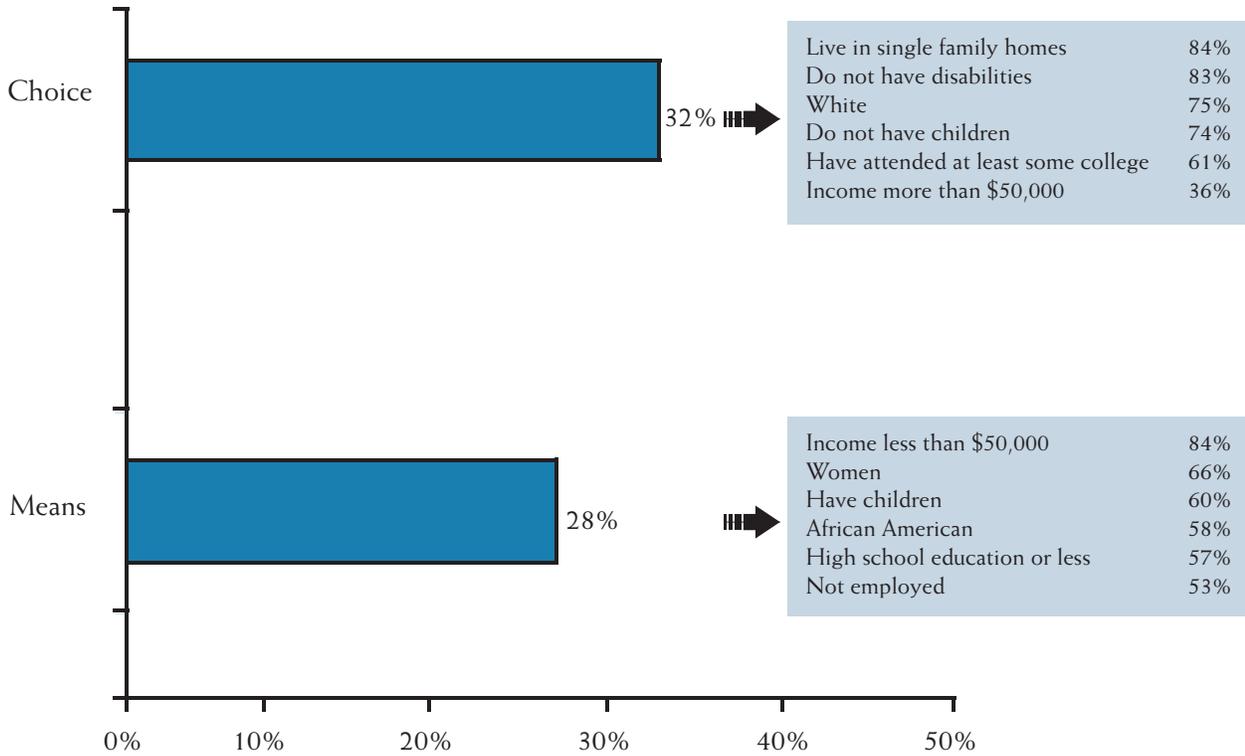


BASE: People who did not evacuate (n=430)



TABLE 3: NON-EVACUEES - CHOICE VS. MEANS

Q505: Why did you not evacuate your home before Hurrigan Katrina made landfall?

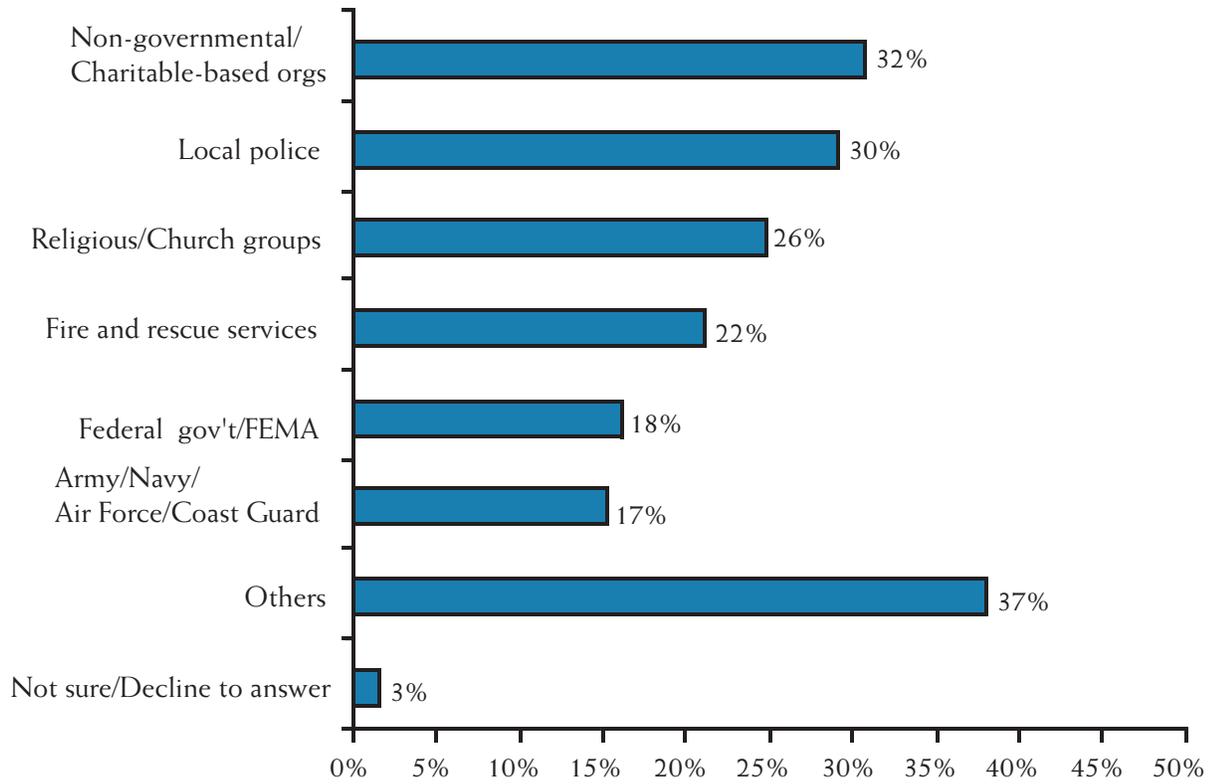


BASE: People who did not evacuate (n=430)



TABLE 4: PROVIDING IMMEDIATE ASSISTANCE

Q705: In the first 48 hours, who came to help?

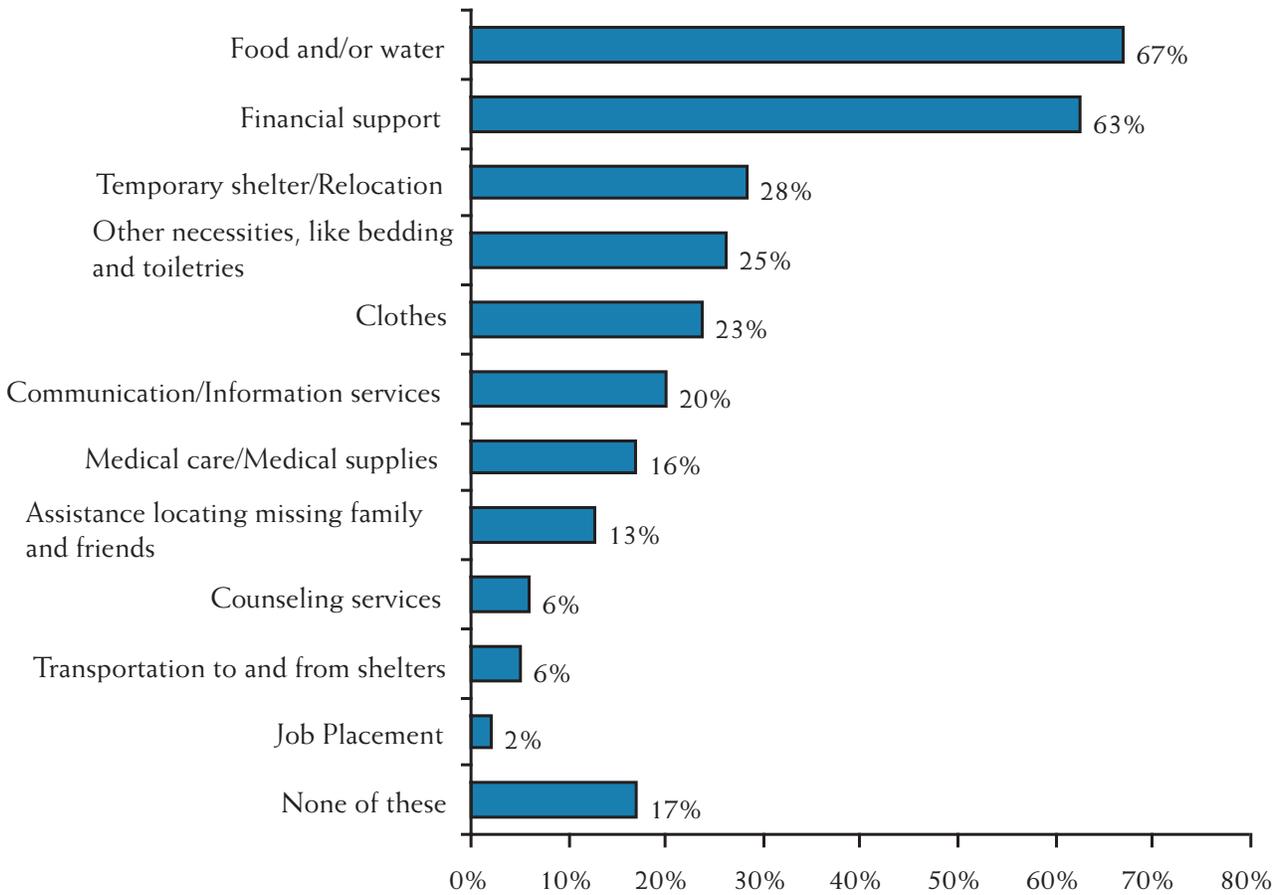


BASE: People who did not evacuate (n=430)



TABLE 5: POST-KATRINA RELIEF SERVICES

Q795: Within the first month, which of the following relief services have you received?

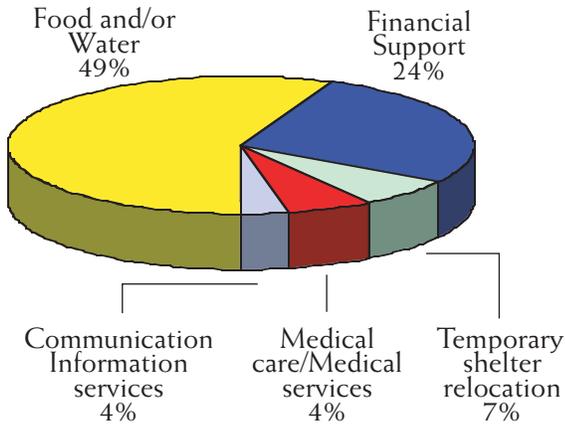


BASE: Hurricane victims (n=1,089)

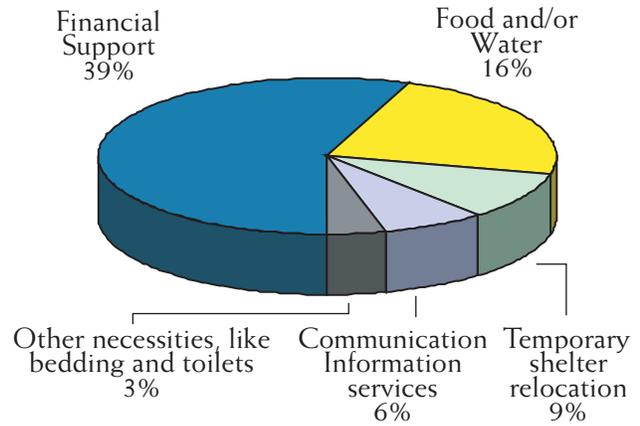


TABLE 6: POST-KATRINA RELIEF SERVICES

Most Efficient Service



Service Needing Most Improvement



Q805: Of those you used, which service do you feel was delivered most efficiently?

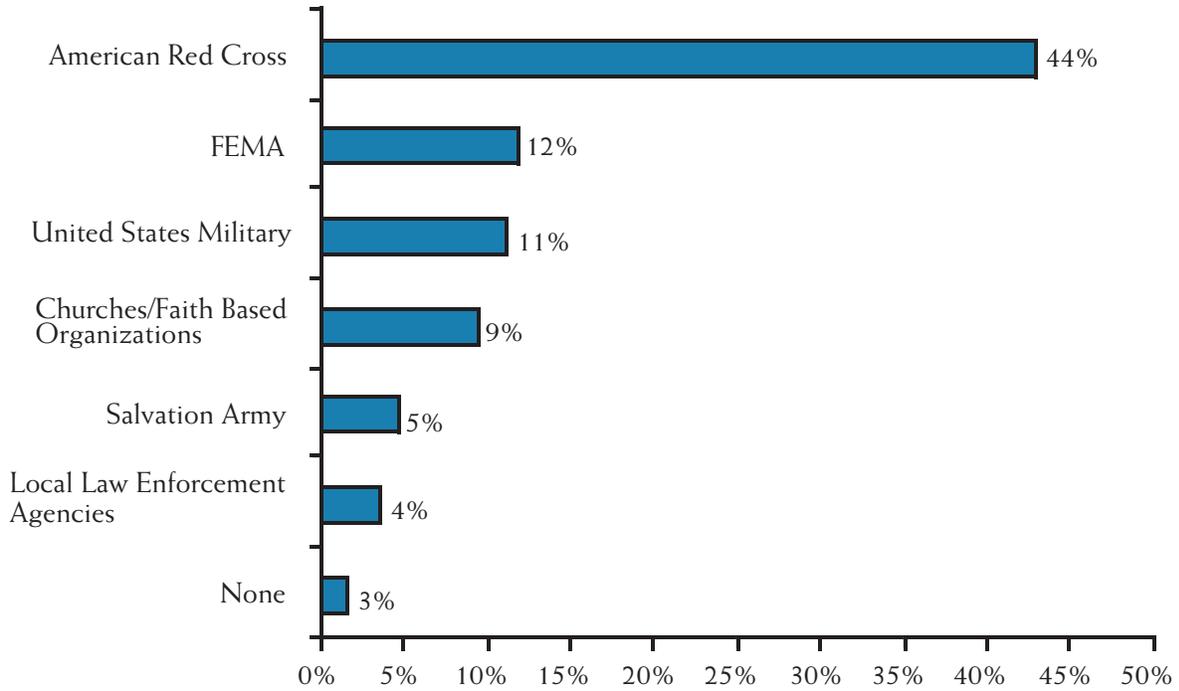
Q810: Which service do you feel could use the most improvement in terms of efficient service delivery?

BASE: Hurricane victims (n=1,089)
 Note: Only top five mentions included.



TABLE 7: ORGANIZATION PROVIDING BEST OVERALL RELIEF

Q830: If you could single out one agency that provided the best relief, which one would it be?

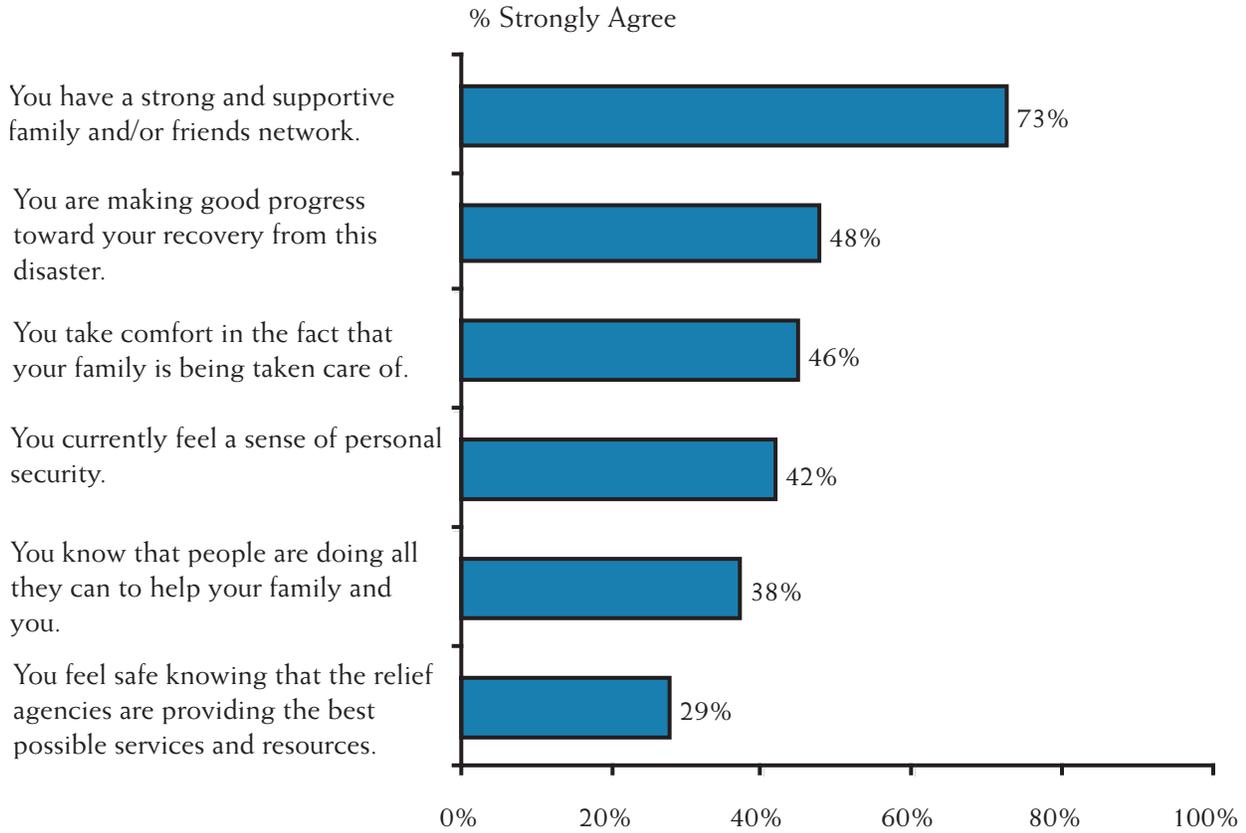


BASE: All respondents (n=1,089)



TABLE 8: ROAD TO RECOVERY

Q850: How strongly do you agree or disagree with the following statements?



BASE: All respondents (n=1,089)



APPENDIX B: PROFILE OF SURVEY PARTICIPANTS

State of Residence Before Hurricane

Louisiana	51%
Mississippi	35%
Alabama	14%

Type of Residence Before Katrina

Single Family Home	79%
Multi-Family Home	20%

Current Marital Status of Survey Participants

Married	54%
Living with Partner	4%
Single, Never Married	23%
Divorced	11%
Separated	3%
Widowed	5%

Number of Children In Home at Time of Interview

None	57%
Have Children	43%
1	14%
2	13%
3	10%
4	4%
5+	2%

Employment Status at Time of Interview

Employed Full Time	40%
Employed Part Time	9%
Self-Employed	8%
Not Employed, but Looking for Work	14%
Not Employed and Not Looking for Work	6%
Retired	16%
Student	9%
Homemaker	11%

Education Level of Survey Participants

Less than High School	1%
Some High School	6%
High School or Equivalent	33%
Some college, but No Degree	30%
Associate's Degree	7%
College Degree	10%
Some Graduate School, but No Degree	4%
Graduate School	7%

Household Income Before Hurricane

Less than \$15K	19%
\$15K-\$24,999	14%
\$25K-\$34,999	15%
\$35K-\$49,999	14%
\$50K-\$74,999	14%
\$75K-\$99,999	6%
\$100K-\$124,999	4%
\$125K-\$149,999	2%
\$150K-\$199,999	-%
\$200K-\$249,999	1%
\$250K+	1%
Decline to answer	10%

Race/Ethnicity

White	59%
Black	33%
Hispanic	3%
Native American or Alaskan Native	1%
Mixed Racial Background	1%
Decline to Answer	1%

Disability

Yes	21%
No	78%
Decline to answer	1%

Pet Ownership

Yes	58%
No	42%