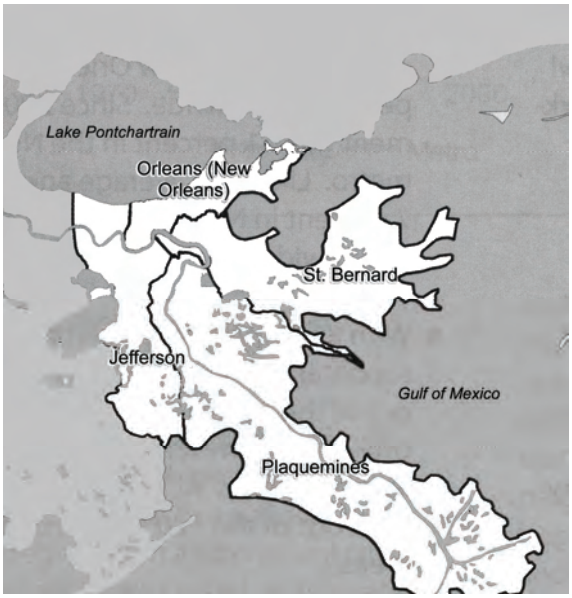
APPENDIX D: SURVEY METHODOLOGY

The *Kaiser Post-Katrina Baseline Survey of the New Orleans Area* was designed and analyzed by researchers at the Kaiser Family Foundation. This in-person survey was conducted door-to-door from September 12 to November 13, 2006. Interviews were completed in English and Spanish among 1,504 randomly selected adults ages 18 and older residing in Orleans, Jefferson, Plaquemines, and St. Bernard parishes. These four neighboring parishes make up Region 1 as defined by Louisiana's Department of Health and Hospitals, an administrative region used for recovery planning, and are referred to as the Greater New Orleans area throughout this report.



The sample design was a stratified area probability sample, with 456 sampling points distributed proportionate to expected population size in each of the 4 parishes, and in each of 14 Census tract defined neighborhoods in Orleans Parish (New Orleans proper). An oversample was drawn in Orleans to allow for more reliable estimates at the neighborhood level in that parish. The final results have been weighted so that Orleans Parish reflects its estimated share of the population in the four-parish area.

The table below shows the number of respondents and margin of sampling error for the total sample and for key subgroups (note that the number of respondents in Plaquemines and St. Bernard are too small to allow for separate reporting; responses for those parishes are included in the total). For results based on other subsets of respondents the margin of sampling error may be higher.

	Number of respondents	Margin of sampling error (accounting for design effect)
Total New Orleans Area	1504	±4
Orleans Parish	901	±5
Jefferson Parish	569	±5
African Americans in Orleans	478	±6
Whites in Orleans	354	±6

ICR/International Communications Research collaborated with Kaiser researchers on sample design and weighting, and supervised the fieldwork using a team of 41 trained interviewers. Dr. Karen DeSalvo and her colleagues at the Tulane University School of Medicine provided helpful guidance and feedback throughout this project. In addition, the questionnaire was reviewed by Tulane's Committee on the Use of Human Subjects. Dr. Ben Springgate of the University of California, Los Angeles also provided helpful guidance throughout the project. Interviewers carried a letter of introduction to the study from Dr. Fred Cerise, Secretary of the Louisiana Department of Health and Hospitals.

SAMPLE SELECTION AND FIELDWORK

We employed a two-stage, stratified area probability sample to account for the physical devastation of the New Orleans area, the displacement of a large share of the population, and the desire to represent the current residents of the area regardless of whether they were living in traditional housing situations or more temporary situations (e.g. FEMA trailer parks or trailers placed on business properties). This design incorporates entire area segments, so that all geographic points within the four parish area were eligible for inclusion in the sample, whether or not they were designated as housing locations prior to Hurricane Katrina.

The first stage of geographic stratification was comprised of 17 distinct, Census-defined areas, called major strata. These included Jefferson, St. Bernard and Plaquemines parishes[22], as well as 14 Census tract-defined neighborhoods within Orleans Parish[23]. The second stage of stratification divided the seventeen major strata into Census block-defined substrata (minor strata), which were approximately equal in size, with small variations due to the desire to maintain Census block boundaries. Within each minor stratum, we randomly selected segments or "sampling points" (areas consisting of about 50 households), which were distributed proportionately by neighborhood and parish by expected population.[24] Fieldworkers visited a total of 456 segments (including 34 "zero blocks," or areas that Census files indicated contained no housing units prior to Hurricane Katrina).

In each randomly selected segment, interviewers were given address listings for households from the Postal Service Delivery Sequence File (DSF)[25], and were instructed to visit each address and document its condition (occupied, vacant, destroyed, etc.).[26] New households, buildings or any other changes from the listed addresses of the block were also documented during this phase.

After documenting the status of every address (old or new) for the segment, fieldworkers attempted interviews with a group of randomly selected households, with the expectation of achieving about 5 completed interviews per segment (with some variation due to varying levels of neighborhood devastation). Interviewers were instructed to attempt up to 6 callbacks at different times of the day and different days of the week at each randomly selected household until an interview or a hard refusal was obtained. These field methods were put in place to ensure a representative sample of people who were home at different times, rather than just including the people who were easiest to find at home.

When an interviewer made contact with a randomly selected household, an eligible adult within the household was randomly selected to complete the interview using the "most recent birthday" method. Household residents[27] aged 18 and older were eligible to participate in the survey. There was no substitution of selected households, or of respondents within or across households.

[22] Given the relatively vast geographic area of Plaquemines Parish and its relatively sparse population, particularly south of Point Sulphur, Census blocks south of that point in Plaquemines were not eligible for inclusion in this study.
[23] The 14 Orleans Parish neighborhoods were: Algiers, Audubon, BW Cooper, English Turn, French Quarter, Garden District, Gentilly, Lakeview, Lower 9th Ward, Marigny, MidCity, New Orleans East, 7th Ward, and Uptown.
[24] Estimates of expected population were made using pre-Katrina population counts combined with rough estimates of the percent of housing stock destroyed from the Census Bureau's interim surveys and from FEMA. These estimates were then adjusted throughout the fieldwork stage as interviewers documented the state of housing (destruction, vacancy, and occupancy) in each neighborhood.
[25] DSF it is a comprehensive database from the United States Postal Service, at the ZIP+4 level. This database relates the delivery status of every postal deliverable address in the US and whether each individual address is active, vacant, seasonal, etc. This source has become a standard for defining and enumerating non-telephone sample frames, from face-to-face designs to multi-mode (e.g., mail-telephone-personal) and strictly mail.
[26] See "Appendix B: Profile of Housing Devastation" for more information about recorded housing conditions.
[27] Residents were defined as those who answered yes to the question: "Is this your primary residence, that is, is this where you stay most, if not all of the time?"

SAMPLE WEIGHTING

Weighting was done in two distinct, successive phases. The first and most intensive was the computation of a household weight corresponding to each interview in a segment (described in detail below). In the second phase, a population weight was computed to adjust for the probability of selection given the number of adults in the household. No post-stratification weighting was performed, due to the lack of reliable post-Katrina demographic estimates for the area.

Computing household weights: In normal area probability sampling situations we would have a reasonable expectation that the measures of size employed to select the sample are reasonably accurate. In developing this sample, given the fluidity of the population and the housing devastation resulting from Hurricane Katrina, we had no such expectation. In order to get a better estimated count of the number of households in each sampling point and minor stratum for computing household weights, we used a combination approach that incorporated:

1. An external data source for post-Katrina counts of occupied housing units at the Census block level (the October 2006 update of the Postal Service DSF file); combined with
2. The results of the field operation (observations of housing characteristics and occupancy).

By incorporating an external data source (DSF), we had an externally verifiable count of the number of housing units, and didn't have to rely on our estimates from a small number of segments in a neighborhood to estimate occupancy rates for the entire neighborhood. The main disadvantage is that DSF tends to over-state the actual number of occupied housing units. While we would expect this over-statement to be relatively small in a typical survey project, there was a concern that the over-statement may be bigger in a place like New Orleans, where a large number of people may be receiving mail at an address but not residing there (i.e. people who are living somewhere else while re-building their home in New Orleans, or while waiting to sell their property), and also that the DSF over-statement might not be uniform across neighborhoods and parishes in the New Orleans area.

The combined three-step process for estimating the occupied household count was as follows:

1. In each minor stratum, we started with the number of occupied households according to the October 2006 DSF.
2. In each minor stratum, for Census blocks that were included in the survey sample, we compared the count of occupied households actually observed in the field to the DSF counts for the same Census blocks. This ratio was aggregated to the major stratum level, and used to estimate the DSF overstatement (or understatement) in each neighborhood.
3. We then applied this adjustment for each neighborhood to the original DSF counts in each minor stratum.

While the final adjustments made to DSF counts varied somewhat by neighborhood, they were relatively small overall, with an adjustment factor of .91 for the total four-parish area.