

**Understanding the Consequences of Hurricane Katrina for ACF Service Populations:
A Feasibility Assessment of Study Approaches**

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I. INTRODUCTION

This report is a feasibility assessment—an analysis of alternative datasets and analytic approaches that might be used to assess the effects of Hurricane Katrina on populations served by the Administration for Children and Families (ACF) of the U.S. Department of Health and Human Services (HHS). Understanding these effects would help ACF serve two purposes: to address the needs of Hurricane victims who will continue to need help from a range of programs that ACF administers; and to identify lessons for delivering services in future disasters—including how to build data systems to track clients, and how to create relationships across programs and jurisdictions that would connect people to needed services in the context of a disaster.

The assessment identifies ways of answering four overarching research questions of practical and policy importance to ACF: where did populations of interest go when Hurricane Katrina struck in August 2005 (migration and housing); how are they doing (income and employment); what are their needs for ACF programs and services; and how did the disaster affect the ACF programs themselves? In each of the four, the review further asks, implicitly or explicitly, how changes resulting from Katrina affect child and family well-being. The analysis is concerned with assessing changes over time and across geographic areas and, importantly, how to track families as they relocate or return, and as their needs change over time.

The assessment emphasizes using existing datasets to their greatest effect, and innovative uses of administrative data as they are currently collected. In a small number of instances, the utility of new data collection is noted, as well as opportunities for adding new markers into existing datasets, which might, for example, be used to identify program participants affected by a disaster and follow them over time and across jurisdictions to ensure they get the services they need.

Hurricane Katrina made landfall on August 29, 2005. Levees broke in New Orleans in the following week. The effects of Hurricane Katrina in a very real sense have not ended. Thus, while research can produce lessons about improving disaster preparedness and response, it must also help ACF anticipate and identify the continuing needs of those affected in the areas of immediate impact and in the larger diaspora. Also, residual effects continue to produce an outpouring of help from individuals, governments, and charitable institutions, including faith- and community-based organizations (FCBOs); how these responses interact with government and the need for publicly-funded assistance needs to be understood.

Interest in the disaster continues to generate a large body of scholarly analysis of what happened to different populations during evacuation and resettlement, and how their social, economic, physical and emotional well-being has been affected. Planning future research, and developing appropriate priorities for public funding, should be conducted with the understanding that our knowledge about these events continues to expand.

The context in which ACF programs have operated since the storm has also changed. The federal response to Katrina included \$2 billion in additional Medicaid spending, an estimated \$1.2 billion in additional food stamps (Hanson and Oliveira 2007), new workforce initiatives sponsored by the Department of Labor, and TANF contingency and loan funds to provide temporary financial assistance and other benefits to needy families.

This assessment focuses on the policies and programs over which ACF has jurisdiction, and therefore might exercise direct leverage in a disaster to ensure continuity of services. It also considers policies and programs that most affect the populations of interest to ACF, even if not directly administered by it. The sense of urgency felt by ACF in August and September 2005 persists—to exercise its policy and program responsibilities to address the continuing needs of populations affected by the storm, and toward that end, to exploit the capabilities of the considerable data collected from a multitude of sources within ACF and outside.

Throughout the report, we refer to five groups: stayers, evacuees, resettlers, returners, and in-migrants. We classify the population living in the areas of impact at the time of the storm as either stayers, who never left, or evacuees, who did leave their pre-storm residences. We divide further divide evacuees between resettlers, who relocated to other areas, and returners, who went back to their pre-storm addresses. In-migrants, finally, are those individuals who did not live in the storm areas before Katrina, but moved into these areas afterwards.

Research Questions

The objective of the report is to examine the availability of data and the feasibility of conducting empirical analysis to address the following set of research questions posed by ACF.

1. HOUSING AND MIGRATION: Where have evacuees lived since the storm, and how is that likely to change?

- Where did they go (by city, by neighborhood), in how many moves, and for how long?
- How were they housed (by type, with whom; initial evacuation, forward)?
- Who and how many stayed, left, and returned (by income, race and ethnicity, age, immigration status, other), and why (e.g., employment, housing, housing assistance, insurance, family support, schooling)?
- How many intend to/are likely to return, and what factors are influencing that decision?
- Who and how many (by income, race and ethnicity, age, immigration status, other) in-migrated after the storm, and why?
- How did migration and housing affect family composition, and thus implicitly or explicitly, child and family well-being?

2. INCOME AND EMPLOYMENT: How have the income and employment status of individuals and families changed since the storm?

- What were the pre-Katrina income profiles (e.g. total disposable income, employment status, industry, occupation) of stayers and evacuees? What were their sources of income immediately after?
- How many jobs, in what sectors, were created or destroyed in the areas of impact, in the host communities? How permanent are the shifts likely to be?
- How were employment and wages of evacuees, stayers, returners, resettlers, and in-migrants (by income, race and ethnicity, age, immigration status, etc.), affected, in the areas of impact and in the host communities?
- How were the employment status and work requirements of TANF recipients affected?

3. PROGRAM NEEDS: How are the needs for ACF services changing as a result of the storm?

Government Supports

- Who received what services before the storm (by program, income, race and ethnicity, age, immigration status)?
- How did migration and employment shifts affect the need for TANF, child support, child welfare services or other services to address domestic violence, Head Start, child care subsidies, CSBG-funded and other relevant ACF-funded services, in the areas of impact and in host communities?
- How did these shifts affect the need for other assistance (including food stamps, unemployment insurance, Medicaid, SSI, housing assistance, legal assistance, workforce investment services), in the areas of impact and in host communities?
- What were migration, employment, and other storm-related effects on marriage, parenting, health and behavioral health (clinically diagnosed or self-reported) of parents and children?
- How well could current recipients and new applicants access assistance (in the areas of impact and in host communities)? How well are needed services linked (e.g., housing, social services, schooling, child care, health care)? To what extent do program access and linkages differ by state?
- What hardships have gone unaddressed?

Nongovernmental Supports

- What services (disaster relief, social services, informal support) did ACF service populations seek or receive from faith-based, community-based, and national service organizations during and after Hurricane Katrina? What services are they getting now?
- What help did ACF service populations seek or receive from family, friends, and other community members? What help are they getting now?

- How did patterns of nongovernmental service use compare before and after the storm?
- Did Hurricane Katrina enhance or inhibit the ability of faith-based, community-based, and national service organizations, or family and friends, to provide services and other support?

4. PROGRAM EFFECTS: How did the storm affect ACF programs themselves?

- What were administrative costs and service levels prior to the storm?
- How were caseloads, benefit amounts, program operations (in TANF, child support, child welfare services, Head Start, child care subsidies, and CSBG-funded services) affected?
- How were interrelationships between ACF programs and FSP, WIA, unemployment insurance, Medicaid, SSI, housing assistance programs, and others affected?
- What were the effects of the storm on facilities, on staffing and on recordkeeping at the service delivery level?
- How did relationships between nongovernmental and governmental systems facilitate or hinder support?
- How did nongovernmental supports affect participation in TANF, other ACF programs, or employment?

Organization of the Report

Chapter II of the report summarizes the major datasets available to study these questions, including national household surveys and special surveys, a variety of regularly reported datasets used for developing local economic indicators, and administrative data related to the low-income populations and programs of interest to ACF. Characteristics of the datasets are presented to enable readers to refer back to as they consider the study options presented in the chapters that follow.

Each of the four chapters that follow covers one of the four substantive domains and presents an array of study options. We consider those that are most practical for ACF to undertake, are central to the overall mission of ACF, and, in most instances, are unlikely to be undertaken by other agencies or other researchers.

The final chapter reviews the overarching issues in the four domains and presents our recommendations for the studies addressing these issues that would best inform ACF, and that generally can be approached with existing data sources.

Methodology

Organization of the Project

A project of this breadth demands knowledge about the needs of low-income populations across many substantive areas, about ACF programs specifically, and about the challenges of

responding within the context of a complex federal system. It also demands multi-disciplinary methodological expertise, and seasoned judgment about what is researchable and will best serve the policy and program concerns of ACF. The study therefore utilized a multi-method, collaborative approach in order to bring the broadest knowledge base toward consideration of the complex policies that affect program design and service delivery, the structure and content of administrative data collected at the federal and state levels, important research already undertaken or ongoing, and significant gaps that might be filled by new research.

We used a three-tiered structure: a core body of very senior researchers who have each been involved in UI's assessment of Katrina; subcommittees organized around the four domains described above and comprised of methodological and substantive specialists within the Urban Institute, many of whom have worked directly on research on Katrina; and project staff to prepare materials and analyze the product of the deliberations. The specialists met as a group, contributed individually through in-depth discussions about research or datasets with which they were intimately familiar, and in some instances drafted sections of the report.

Subcommittee chairs were: Margery Turner, director of the Center on Metropolitan Studies and Housing and a principal researcher on the effects of Hurricane Katrina and its aftermath; Harry Holzer, senior fellow at the Urban Institute and professor of economics and public policy at Georgetown University; Ajay Chaudry, director of the Center on Labor, Human Services and Population; and project co-principal investigators Fredrica Kramer and Kenneth Finegold. Olivia Golden played a central role in the initial formulation of the study, and then in serving as principal independent reviewer of the final report, lending her broad wisdom and perspective of ACF services, as both a researcher and former government administrator of programs for children and families.

The subcommittee on housing and migration included Margery Turner, chair; Randolph Capps, an expert on immigration research; Jane Hannaway, an organizational sociologist and director of UI's Education Policy Center and the new, federally-funded Center for Analysis of Longitudinal Data in Education Research; Susan Popkin, who studies the effects of public and other assisted housing strategies on children and families, and is currently engaging in research to trace families uprooted as a result of Hurricane Katrina; Peter Tatian, an expert on housing policy and neighborhood data and co-director of the Neighborhood Change Database project, which combined neighborhood-level indicators from the 1970 to 2000 decennial censuses.

Members of the group that addressed income and employment were Harry Holzer, chair; Robert Lerman, an expert in the role of the workforce development system in improving the status of low-wage workers; Austin Nichols, a specialist in modeling the behavior of low-income populations using national data on the labor market, labor supply, and program participation; Demetra Nightingale, an expert in welfare, social services, and employment policies and programs for low-income individuals and families, who has conducted studies of TANF, child support enforcement, food stamps, child welfare, refugee and immigrant services, youth development, services for the elderly, and a Department of Labor Katrina jobs initiative grants; and Douglas Wissoker, an expert on survey methodology and sampling design. Daniel Kuehn, in the Center on Labor, Human Services and Population, prepared sections of the report related to income and employment research.

The subcommittee on program needs included Ajay Chaudry, chair; Martha Burt, an expert on homelessness and other issues confronting hard-to-serve populations in housing, employment and other social service systems; Bradford Gray, a leader in research on the performance of nonprofit and for-profit health care organizations; Linda Giannarelli, an expert in the use of survey and administrative data to analyze participation in welfare, child care, and other programs, project director for the Welfare Rules Database, and principal investigator for the TRIM3 microsimulation model; Pamela Holcomb, an expert on programs for low-income families including service integration and healthy marriage initiatives; Jennifer Macomber, an expert on child welfare and on survey data related to child welfare and child well-being; and Pamela Winston, an expert on state and local welfare policies.

Members of the subcommittee on program effects included Fredrica Kramer and Kenneth Finegold, chairs; Gina Adams, manager of UI's child care research team; Harry Hatry, internationally known for his work on performance measurement and outcome management procedures; Elaine Sorensen, an expert on fatherhood and child support programs; and Linda Giannarelli.

Major Tasks

The first major task of the project was to create an annotated bibliography from an extensive search of scholarly research on Katrina, publications in the popular press, and other sources that would provide a broad view of completed and emerging work on the storm, and on issues of interest. Bounding the bibliography proved challenging. For instance, there is a large literature on the effects of disasters, including research in the social sciences and public health, clinical studies of individuals, and analyses of public policies that impact the ability to respond quickly and effectively. It was important to be aware of that literature, but disciplined in its review, so that these contributions served but did not overwhelm the task at hand. In addition, the magnitude of the event, its perceived importance to the national culture, and its continuing effects on the Gulf Region, have created a continuing stream of research. The more than 300 entries that appear in the bibliography, appended to this report, include works only through January 2007, in order to ensure that the project could make a timely transition to the feasibility assessment phase of the project. This January 2007 closing date means that a first step towards any of the recommended studies would be to review more recent literature in the specific field under study.

The second key activity was to identify major data sources that might be used to address the research questions above. These data included the national surveys and databases most often used to study the low-wage job market and participation in means-tested social programs, special surveys designed to study Katrina's effects, and administrative data collected by ACF, and other agencies that might address the research questions posed.

Our criteria for selecting relevant datasets included the subjects and geographic areas covered, sample sizes, and the availability of pre- and post-Katrina information that can be distinguished and compared. In many cases, longitudinal data would permit tracking individuals, families, businesses, and neighborhoods before and after the storm. Cross-sectional data would permit identification of residents of the areas of direct impact (principally in Louisiana and Mississippi),

and residents of the areas (including other parts of the same states) that hosted the largest number of Katrina evacuees. Some surveys have been conducted to study Katrina's impacts specifically. These and other university and locally-based surveys may have relevant findings for this effort.

The third task was to provide the experts serving on each subcommittee with the research questions, research and publications from the annotated bibliography, and the data sources that pertained to their substantive area, in order to provide a baseline for their deliberations concerning important gaps and potential candidates for research in the context of existing data. The subcommittee discussions were followed by further in-depth discussion between selected experts and principal staff, to develop researchable study options.

The effects of the storm are continuing and changing over time, in some cases creating new problems with which ACF programs must contend. The feasibility assessment recognizes that the consequences of the hurricane must be understood across time, space, programs, governmental jurisdictions, the public, private and nonprofit sectors, and demographic groups. Immediate disaster relief requires different interventions than longer-term assistance in the context of recovery, and different responses at the site of the disaster than those needed for resettlement in new locations. The assessment considers how to study both the effects on people and the effects on place. Analyses of the circumstances of the people affected by the storm includes those who have returned, and those in diaspora; many in either circumstance remain unsettled, marginally employed, and have enduring health and mental health challenges. The massive displacement created by Hurricane Katrina has created new demographic profiles in affected areas, comprising stayers, evacuees, resettlers, returners, and new migrants moving in to participate in rebuilding, or for other reasons. Our proposals and recommendations for research take this complexity into account.

Finally, while the focus of this assessment is on ACF programs, ACF policies and programs are interdependent with many programs and policies outside the direct purview of ACF, which jointly affect the well-being of low-income children and families. Loss of housing or disruptions in employment, school, or child care may lead some families to initiate use of TANF and other supports, or create mental health and substance abuse problems that reduce the ability to work, and compromise the ability of those already receiving TANF benefits to comply with work requirements without additional services. A substantial number of children have symptoms of depression or post-traumatic stress disorder, which may affect their use of child care or Head Start, and also require other health and mental health interventions, which would be supported by HHS programs.¹ The research focuses on what can be learned about service needs; understanding the connections between services and programs inside and outside of ACF's direct purview is important and reflected in some of the research.

¹ Deborah Goodman, "Post -Disaster Response: Learning from Research," *SAMSHA News* (July/August 2006): 12-14.

II. PRINCIPAL DATA SOURCES

In this chapter we describe principal data sources that can be used to study the consequences of Katrina on vulnerable populations, principally low-income children and families. The datasets discussed, listed in Table 1, include national household surveys, special surveys on populations of interest, and administrative data maintained at the federal, state and local levels, which offer explicit or potential access to researchers. They include continuing surveys, such as those conducted by the US Bureau of the Census and the Bureau of Labor Statistics (BLS), which can be used to track income and employment of the national population; longitudinal or panel surveys such as the Panel Study of Income Dynamics (PSID) or the Survey of Income and Program Participation (SIPP); and surveys that have been undertaken in response to Hurricane Katrina. The chapter describes administrative data maintained by federal agencies to exercise mandated oversight and the data that state and local governments collect to monitor caseloads, services, and expenditures, both to comply with federal requirements and for their own management purposes.

As Table I indicates, about a dozen of these data sources are recommended for use in the high priority studies suggested in chapters III through VI (one, the CPS, is recommended for use in three of the four focus areas, and several others are suggested for two). Others are not recommended for high-priority studies, but we have included them either because they provide alternative approaches or because it is important to explain their strengths and limitations as ACF research priorities and interests evolve over time. For each data source, we provide a brief general account of its characteristics; for several, we provide additional information on strengths, limitations, and special features that may be important for Katrina-related use.

The data sources included are not exhaustive. We have tried to identify those most likely to serve the desired analyses and those that may be accessible to ACF or its contract researchers. We have included some whose accessibility is uncertain but worthy of pursuit. And, as just noted, we have provided descriptions of a few whose capabilities should be understood but are unlikely venues for analysis in the near term.

Table 2.1. Data Sources by Research Issue

	Issue Area: Housing/Migration (H/M); Income/Employment (I/E); Program Needs (PN); Program Effects (PE)
Population Data	
Current Population Survey (CPS)	H/M, I/E, PN
American Community Survey (ACS)	I/E, PN
Survey of Income and Program Participation (SIPP)	I/E, PN
Panel Study of Income Dynamics (PSID)	H/M, PN
Hurricane Katrina Community Advisory Group	PN
Louisiana Health and Population Survey	H/M
Employment Data	
Quarterly Census of Earnings and Wages (QCEW)	I/E
Longitudinal Employer-Household Dynamics (LEHD)	I/E
Quarterly Workforce Indicators (QWI)	I/E
Mass Layoff Statistics (MLS)	I/E
Local Area Unemployment Statistics (LAUS)	I/E
Unemployment Insurance Payroll Data	I/E
Unemployment Insurance Benefit Data	I/E
National Directory of New Hires Database	I/E
Employer Data	
County Business Patterns	I/E
Business Employment Dynamics	I/E
U.S. Census Bureau Port Reports	I/E
Housing Data	
Public and Indian Housing Information Center (PIC)	H/M
Tenant Rental Assistance Certification System (TRACS)	H/M
FEMA Assistance	H/M
FEMA Trailers	H/M
Louisiana Road Home Program	H/M
Home Mortgage Disclosure Act	H/M
Homeless Populations	
Point-in-Time Surveys	PN, H/M
Administrative Data	
Temporary Assistance for Needy Families (TANF)	PN
Child Care and Development Fund (CCDF)	H/M, PE
Child Welfare Services	PN
Child Support Enforcement	PN
Head Start	H/M, PE, PN
Runaway and Homeless Youth Program	PN
Mentoring Children of Prisoners Program	PN
Domestic Violence Prevention Program	PN
Social Services Block Grant (SSBG)	PN, PE

Population Data

Current Population Survey

- **Monthly, nationally representative household survey (about 50,000), with emphasis on labor force participation, employment characteristics of all adults in household; same household is interviewed over 16 month period**
- **March sample is larger, and has detailed questions on demographic characteristics, income and benefits, health care, housing, and prior residence**
- **Katrina-related questions added from November 2005 to October 2006**
- **Estimates can be made at the national and state level**

Overview of Characteristics. The monthly Current Population Survey (CPS) is a household survey and the principal source of detail used to establish income and employment status of the civilian non-institutionalized population of the U.S. It is the principal source of data for employment statistics used by the BLS to track unemployment, and therefore emphasizes questions that establish employment and income profiles of all adults in the household at the time of the interview. The survey interviews households at sampled addresses over a 16-month period. A household is interviewed for 4 consecutive months, then is out of the sample for 8 months, then is interviewed for another 4 consecutive months. New households are brought into the sample continuously; each month, approximately one-eighth of the households are in their first month in the sample and approximately one-eighth are in their last month-in-sample. The sample of about 50,000 households does not include individuals in institutions (prisons, schools, universities, and nursing homes) and does not include either homeless shelters or emergency shelters; other data would be needed to study the effects of Katrina on those populations.

The monthly survey includes detailed data on labor force participation for the week prior to the interview. Data elements include details on hours of work and reasons for patterns of work or lack of work, industry, place, and type of work, earnings, union or employee association, and date of last employment. The monthly survey also includes data on household composition, citizenship and parental nativity, and an estimate of combined family income. Since the monthly survey is principally concerned with employment patterns, reported income does not include the level of detail about income sources that is available from the March supplement, described below.

The Annual Social and Economic Supplement (CPS-ASEC, also known as the “March CPS,” or “March supplement”), has the largest sample (approximately 76,000 households in the March 2006 data), and includes a full range of demographic, household, work, and social characteristics, including a more detailed set of questions around income. Unlike the monthly survey, the March supplement contains detailed information for the respondent and other adult (15 and over) members of the household on receipt of unemployment insurance (UI), Worker’s Compensation, Social Security, Supplemental Security Income (SSI), Temporary Assistance for Needy Families (TANF) and other welfare payments, veterans’ benefits, pensions, income from interest, dividends, and rent, and other sources of income such as child support, alimony, and other regular financial assistance. At the household level, questions are asked about the use of food stamps, free or reduced-price school meals, and energy assistance.

In addition to the complex profile of individual and household income, the March supplement contains information on health care coverage including private insurance, Medicaid and Medicare coverage, current health status, and whether an individual did not work or worked less than the full year due to health reasons. The March survey also contains information on housing type, residence in public or subsidized housing, where the respondent resided one year ago (including zip code) and household composition at that time (that is, who of the current household was not part of the previous household). This last set of questions, which provides a comparison between two points in time, rather than a month-by-month history, would be useful in capturing specific changes since the hurricane. Specifically, the responses on these questions in the March 2006 and 2007 supplements could be compared to those in the March 2005 supplement.

Limits for Katrina Use. Because the CPS sample is address-based, households are not tracked if they are not present at the sampled address at the time of the next interview. Many sampled units were empty in the affected areas after Katrina. (Households living in temporary shelters on their own property, however, would have been reinterviewed.) But the survey would allow a longitudinal analysis on sampled households who were in the areas of impact before the storm and who either stayed or returned to the same home before the end of the 16-month interview period. Further, although the survey samples housing units, not individuals, individuals in the household can be matched across survey months or years, so that one can identify which individuals remain in the household over the course of the 16 month span, and therefore what changes in household and family composition have occurred.

Strengths for Katrina Use. The CPS data sample is designed to produce reliable estimates at the national and state levels, and all states are identified. Below the state level, the central cities of New Orleans, Gulfport, Baton Rouge, and Houston are identified with and without the rest of their metropolitan areas. The Census Bureau, however, recommends using three-year averages to compare states, and two-year moving averages to analyze change within a state.

Katrina Questions. The March 2005 (retrospective income, employment, and program participation information on 2004) and March 2007 (retrospective on 2006) supplements would contain the best pre- and post-storm assessment for several reasons. Because the March survey is a 12-month retrospective, March 2005 would provide a profile of income and earnings in 2004, uninterrupted by the storm or the many problems encountered in locating respondents in its aftermath, which made 2005 estimates problematic. By 2006, the labor market would have stabilized somewhat, and the March 2007 supplement would portray the richest detail on income and demographic variables in a context of stability.

To study the effects of Katrina more directly, Katrina-related questions were added to the CPS in each month from November 2005 through October 2006. A screener question asked whether anyone in the household had to evacuate in August 2005 because of the hurricane. Respondents were asked where each person so identified was living before Katrina, whether he or she had returned to the pre-Katrina residence, and when the evacuee had returned to that address. Pre-Katrina county/parish and city were also collected for people who had been living in Louisiana, Mississippi, Florida or Alabama. Additional questions administered from June to October 2006

asked whether people who were *not* living at their pre-Katrina residence had ever returned, and if so for how long and why they left.

The variables identifying evacuees, their state of residence before Katrina, and whether they had returned have been publicly released, but the responses to the questions added in June 2006 are not in the public-use microdata, so access to restricted data would be necessary to use these variables. Access to restricted data that identifies individuals would also be necessary to link CPS data with data from other sources, such as administrative records.²

A portion of the data from the March 2006 CPS can be matched to records from the January 2006 CPS Displaced Worker, Employee Tenure, and Occupational Mobility supplement. This supplement collects information about anyone in the labor force, screened into two overlapping groups. People 20 and older who lost a job in the previous three years (or their proxies) are asked about the characteristics of that job, subsequent employment, and receipt of Unemployment Insurance. Employed people age 15 and older are asked about the characteristics of the current job, how long it has been held, and the characteristics of the job held one year before, if the worker had changed jobs since then. Two Katrina questions, added to those on the monthly CPS for the January 2006 supplement, asked whether anyone in the household had lost a job due to Hurricane Katrina, and if so whether that job was the job about which the respondent had previously provided information. These data provide a more direct indication of Katrina's employment effects, and more information about the employment history of evacuees, than the March CPS.

American Community Survey

- **Annual, nationally representative household survey; much larger sample size than the CPS (about 3 million households)**
- **Contains very detailed demographic and social information**
- **Reports annually for large counties, less frequently for smaller counties; estimates can be made at the county/parish level for large counties**
- **One time estimates of housing and population data for January-August 2005 and September-December 2005 were produced for Gulf Coast communities**
- **2004 and 2006 estimates can be used for pre-post comparisons of Orleans and East Baton Rouge parishes**

Overview of Characteristics. The American Community Survey (ACS) replaced the long form of the Decennial Census. Like the CPS, the ACS is a household-based national sample. Since 2005, it has produced annual estimates for all counties with a population of 65,000 or more.³ The annual sample is 3,000,000 households, considerably larger than the CPS, and includes detailed

² Linking to other datasets would require access to SSN or other identifiers of individuals or addressee. See Davern, Klerman, and Ziegenfuss (2007) for an example of a matching project that used CPS identifiers that are not in the public-use data.

³ For areas of 20,000 to 65,000 the ACS will produce three-year averages, beginning in 2008 for the 2005-2007 period. For areas with less than 20,000 population, it will produce five-year averages, beginning in 2010 for the 2005-2009 period. Thus in these later years it will be possible to assess long-term damage to the storm impacted areas at a more micro level.

demographic and social information (e.g., education, marital status, kinship care), and economic characteristics (e.g., industry and occupation, income and benefits, and poverty status) of household occupants, and housing (e.g., occupancy, age and size of structure, value, mortgage status) characteristics for the household. The sample also includes populations in institutions and group quarters not covered by the CPS (hospitals, nursing homes, and so on). However, data for group quarters were introduced only in 2006, after Katrina.

The regular ACS survey is rolled out on a monthly basis; the monthly surveys are combined for the year to create the large annual aggregate sample. Different employment items have reference periods of one week, four weeks, and one year, whereas the reference period for income items is the previous year. Data are released in the summer for the previous calendar year.

Special Notes on Use for the Study of Katrina. A subset of the 2005 ACS data, the Public Use Microdata Sample (PUMS), was released in the summer of 2006 (1,259,653 housing units and 2,913,796 individuals). The specific month the survey was administered is not available in the PUMS, so it is not possible to distinguish pre- and post-Katrina interviews in the 2005 data. In 2004 the survey was still being rolled out, and had collected data in fewer places below the state level than in subsequent years. The parishes sampled in 2004 did include Orleans, Jefferson, and East Baton Rouge, so the 2004 data for these communities can be compared with the data for 2006 (released in 2007) to assess the impact of Katrina.⁴

In addition to the annual estimates, the ACS released special estimates for the Gulf States that compare housing and population data before (January-August 2005) and after (September-December 2005) Katrina. These one-time estimates provide demographic, employment, income and poverty measures, and details on housing occupancy. Data for some counties and parishes are presented at the county/parish level; data on other areas are presented for larger areas. The special estimates for example, were not released for New Orleans (Orleans Parish) alone, but were released for the New Orleans-Metairie-Kenner Metropolitan Statistical Area. The microdata related to the special estimates were not released and therefore do not permit reanalysis.

Survey of Income and Program Participation

- **Nationally representative, longitudinal household survey, but follows individuals when they move, with interviews conducted every four months for 2 ½ years**
- **Designed to collect detailed information on income, assets, and program participation**
- **Not designed for substate analysis or cross-state comparison**
- **Katrina questions, on psychological and other experiences in the storm, were added in June 2006 through January 2007 interviews of the 2004 panel**

The principal purposes of the Survey of Income and Program Participation (SIPP), begun in 1984, are to measure income and program participation in a range of federal, state, and local programs, and to estimate program needs. Multiple SIPP panels, of varying durations, have been

⁴ The ACS began with four test sites in 1996. Geographic coverage was expanded over time; full national implementation began in 2005.

conducted since the inception of the survey. The most recent SIPP panel, fielded from February 2004 to January 2008, covers the period of the hurricanes and their aftermath. The sample consists of 46,500 households nationally, who are interviewed eight times over a 2 ½ year period. Waves 8-9 of the 2004 panel, with interviews conducted from June 2006 through January 2007, included questions similar to the original CPS Katrina questions. By the current schedule, the full data from these waves will be released by August 2008.

The SIPP is designed to support longitudinal analysis. Unlike the CPS, it follows individuals when they move. Further, the SIPP requires only four-month recall for income questions, rather than recall for the whole year as in the March CPS and the ACS. The SIPP also includes a detailed inventory of real and financial assets. All states are identified in the data from the 2004 panel, but unlike the ACS or CPS, the SIPP is not designed to produce state-level estimates, and the Census Bureau warns against using the SIPP in this way.

Panel Study of Income Dynamics

- **Nationally representative, longitudinal survey with biennial interviews after 1997**
- **The 2005 wave was largely completed for Gulf Coast residents before August, 2005**
- **The 2007 wave will have a detailed set of Katrina questions, including where and with whom respondents lived during the storm, and what respondents' psychological experiences were related to the storm**
- **Sample size is too small for cross-state comparison**

The Panel Study of Income Dynamics (PSID) is a longitudinal survey administered every year from 1968-1997 and every two years thereafter. The most recent publicly available data are from the 2005 survey. The survey includes extensive data on income, employment, program participation, assets, family structure, and religion. A major limitation of the PSID is that sample sizes for the areas of impact are relatively small. The 2005 survey included information on 16,620 individuals nationally (286 in Louisiana and 688 in Mississippi) in 8,002 families (Louisiana: 123, Mississippi: 298). About 97% of the Louisiana interviews for 2005, and 93% of the Mississippi interviews, were completed before the end of August 2005.

The 2007 wave of the PSID includes a detailed set of questions on Katrina and Rita that will be administered to all members of the sample who lived in Alabama, Louisiana, or Mississippi in the 2005 wave. The questions concern health-related issues, in particular mental health problems that may be associated with experiences in the storms, including whether the respondent was displaced because of the storm, and if so, whether to family or friends, and for how long; plans for moves in the “next couple of years,” the certainty of the move, and reasons for it; level of fear, injury or death (of other family members or acquaintances), witness of death or injury; property damage or loss; conditions in first month after the storm (for example, food insecurity, loss of services, crime); about 40 measures of continued trauma; questions about social (not service) support for emotional needs resulting from the storm; a series of questions about prior experiences with natural disasters or other physical or emotional threats; mental and physical state in past month; and a series of questions about alcohol consumption.

The Katrina questions establish whether the respondent was displaced because of the storm, and if displaced whether he or she lived with family or friends and for how long; these questions may be helpful in assessing migration within the areas of impact. These questions can also be used to identify the relevant population when using data from other sections of the PSID. The questions concerning emotional trauma may be helpful to assess potential need for services as result of Katrina. The 2007 data, with the Katrina questions, are likely to be unavailable before 2009.

Hurricane Katrina Community Advisory Group

- **Approximate sample of 3,000 previous residents of storm-impacted areas**
- **Panel design, with baseline in 2006 and at least two follow-ups planned**
- **Extensive questions on mental and physical health of storm victims and use of some ACF funded services**

Several special surveys focusing on the impact of Katrina have been conducted among residents of the most damaged areas or evacuees. The Hurricane Katrina Community Advisory Group (CAG) surveys, associated with Harvard Medical School, are particularly promising as a data source for research on ACF programs and service populations. The sample for the baseline survey, composed of approximately 3,000 adults, included a random-digit-dial frame, drawn from pre-Katrina phone numbers in the affected areas; a frame drawn from phone numbers throughout the country that were used to request assistance from the American Red Cross; and a supplemental sample of people living in hotels paid for by the Federal Emergency Management Agency (FEMA). Pre-Katrina residents of the New Orleans metro area are oversampled.

The surveys have a panel design that will make it possible to track the Katrina population over time. The baseline survey was conducted in January-March 2006; the first follow-up was conducted in January-April 2007. Subsequent follow-ups are planned, but have not been fielded to date. Findings from the baseline survey have been released. Data from both rounds will be made available for public use.

The baseline survey focused on respondents' experiences during the storm and its immediate aftermath and on their psychological well-being. One question about applications for assistance includes food stamps, unemployment insurance, and welfare as possible sources of help along with FEMA and the Red Cross. As a result of ACF involvement and support, the follow-up survey provides more information about use of ACF-funded services, with specific before and after questions about child care, Head Start, Early Head Start, TANF, and child support enforcement. Evacuees have been asked about plans to return to the New Orleans metropolitan area in both rounds.

Louisiana Health and Population Survey

- **Survey of 15,003 residents of eighteen of the most affected Louisiana parishes**
- **Available for parish-level comparisons**
- **Detailed income and demographic data plus a mental health scale**

From June to December 2006, the Louisiana Health and Population Survey collected data from eighteen parishes that were hit particularly hard by Hurricane Katrina or Hurricane Rita, including Orleans, Jefferson, and East Baton Rouge. The combined sample size is 15,003, with at least 379 in every parish covered. The public use microdata, in which respondents are identified by parish, would be particularly useful for parish-level comparisons, or for analyses focused on smaller parishes that are not identified, or have very small sample sizes, in other data sources.

The survey content includes employment status, pre-Katrina residence by zip code, reason for moving (with lost jobs or job opportunities among the choices), receipt of Workers Compensation, and a six-item Serious Mental Illness scale. Income information was collected, but is missing for most respondent households.

Employment Data

Quarterly Census of Earnings and Wages

- Quarterly data on employment and wages, by industry
- Available at the county, MSA, state, and national level
- Special imputation procedures in response to Katrina

The BLS, in cooperation with State Employment Security Agencies (SESAs), publishes quarterly data on employment and wages, by industry, at the county, metropolitan statistical area (MSA), state, and national level. The Quarterly Census of Earnings and Wages (QCEW) (formerly the ES-202 Report) covers 98 percent of U.S. jobs, and QCEW data provides inputs for many other BLS surveys. Employment data are generated monthly, while wage data are generated quarterly. While the QCEW reports very specific industry classifications (six-digit North American Industry Classification System (NAICS)), for the states, data at the county level are primarily available for two-digit NAICS industries, which are large industrial sectors (e.g., Manufacturing, Utilities, Finance). Number of establishments, number of employees, and total wages are available at the two-digit NAICS at the county level, so that the impact of the storm on number of firms, average firm size, and average wage can all be calculated.

The BLS and the SESAs took special precautions in generating statistics after the storm, particularly employment statistics for September, 2005. The usual imputation procedure is to assign non-responsive businesses their previous year's employment and wage change. Obviously, in the aftermath of Katrina such a procedure would have severely over-counted employment levels. While these agencies normally impute 11 percent of reports from Louisiana as a result of non-response, in the third quarter of 2005 they had to impute 19 percent. Therefore, non-responsive business were tracked and investigated by BLS and the SESAs. Unsuccessfully tracked non-responsive businesses in the most heavily impacted disaster areas were not counted as missing; they were assumed to have no employment.

Longitudinal Employer-Household Dynamics and the Quarterly Workforce Indicators

- **Longitudinal data on individual employment and wages, linked with business establishment data, and demographic data**
- **Geocoded address list of business establishments**
- **A series of Quarterly Work Indicators are available at the county/parish level**

The Longitudinal Employer-Household Dynamics (LEHD) is a voluntary federal/state data partnership that combines federal and state data from multiple sources on employers and employees. As of April 2008, all states except Massachusetts and the District of Columbia are LEHD partners; five of the states are still in the data development stage. Each partner state submits to the Census Bureau's Center for Economic Studies initial data from 1990 to the present that consists of quarterly earnings from the state's Unemployment Insurance (UI) program and quarterly reports from business establishments submitted for the QCEW described above. Thereafter, states submit quarterly earnings and QCEW data. LEHD analysts at the Census Bureau combine the quarterly data from the states with federal data from Census and the Social Security Administration (SSA). Demographic data (age and sex) are obtained from SSA and place of residence information is obtained from Census files. LEHD maintains the longitudinally-linked micro-data set with high-security confidential data infrastructure at the Census Bureau.

Thus, the core LEHD dataset is linked longitudinal information on employees and on employers and provides demographic characteristics on employees and business and geographic characteristics of employers. This includes the LEHD Business Register Bridge, the LEHD Employer Characteristics File, and the LEHD Geocoded Address List (this file identifies the Census Block, longitude, and latitude of an employer). The LEHD Geocoded Address List, in particular, could be helpful in identifying the performance of businesses in neighborhoods that were the most affected by the storm. The most recent LEHD Geocoded Address List currently available is for 2005.

Approved researchers can make arrangements for secure access to the core LEHD data system at the CES or at one of the eight Census Research Data Centers (RDCs). Local address geo-coding allows analysis of small areas; examination of pre-Katrina employment and businesses in the affected localities, which could be compared over time in the post-Katrina years.

One portion of the LEHD is the Local Employment Dynamics (LED), which is specifically designed to provide states with standard labor market information in the form of Quarterly Work Indicators (QWI). LEHD/LED programmers process the quarterly data files (employees and employers) and provide each partnering state with Quarterly Work Indicators (QWI) for each quarter with comparisons to prior quarters and the previous 3-4 years. (e.g., employment, new hires, turnover, average monthly earnings, new hire earnings, net job flows by two-digit industry code, demographic characteristics of the workforce (age, sex), comparison to previous quarters, substate local labor market geographic area). There are 29 QWI's in total, eight of which are accessible online for most states (total employment, net job flow, job creation, number of new hires, separations, turnover and average monthly earnings for all workers and new hires), by industry (two-digit codes) and for major demographic categories (e.g., sex, age). Thus, at a

minimum, the eight standard QWI's could be tracked over time for the local workforce investment areas in storm-affected localities.

Since a major concern in post-Katrina New Orleans is not just the total employment level, but the composition of workers in and out of employment and quality of jobs pre- and post-storm, these facets of the QWI would be particularly informative. Louisiana QWI data are available from 1995 to 2006. Alabama's data are available from 2001 to 2006. These data would provide ample coverage of the period after the storm. Mississippi data are currently available from 2003 to the third quarter of 2005; data to cover the storm period may be posted by the time that any proposed analysis would begin.

Web-based access to employment and workforce data from the LED/QWI system is available through the LEHD OnTheMap application, which provides mapping tools that can be used to map and profile at an aggregate level where workers live and where jobs are located by state and local area for the states participating in the LED/QWI. Currently, data for 2002 through 2004 are available through OnTheMap, and subsequent years are being added; post-2005 data would eventually allow analysis of changes in employment and workforce patterns in areas affected by Katrina.

Mass Layoff Statistics

- **Monthly separations, UI claims and layoff events are available at the state level**
- **Extended layoffs are available quarterly**
- **Demographic information on workers who are laid off and reasons for layoff, including "natural disaster," are available at the state level**

The BLS's Mass Layoff Statistics (MLS) are a source of information on the impact of the storm on large employers. The MLS program collects data on the number of separations, unemployment insurance claims, and layoff events at the state level. Layoff events and initial unemployment insurance claims are produced monthly, while the number of separations is produced quarterly. The data are only produced at the state level, and only for firms that have at least fifty initial claims for unemployment insurance. This means that it will only capture large employers.

Nevertheless, the MLS program provides useful information on the demographic composition of workers who are laid off and the reasons for the layoff; "natural disaster" is one reason for layoff tracked by BLS. Predictably, layoffs for natural disasters in Louisiana spike in the third quarter of 2005.

Local Area Unemployment Statistics

- **BLS monthly labor force status at the county level**
- **Based on the CPS, CES, state UI administrative data systems, and the 2000 Census**

The BLS's Local Area Unemployment Statistics (LAUS) program produces monthly data on employment, unemployment, and labor force participation at the county level. Estimates are

based on data from the CPS, the Current Employment Statistics (CES) program (a monthly survey of firms conducted by the Bureau of Labor Statistics), state unemployment insurance systems, and the 2000 Census. The LAUS can be used to track change in monthly or quarterly employment levels over time by local labor market area, which will allow one to observe patterns of recovery after the disaster.

Unemployment Insurance Payroll Data

- **Quarterly earnings for UI-covered workers**
- **Records tracked by social security number, and could therefore be merged across states**

Unemployment Insurance (UI) administrative data, maintained by states, are often used to track the earnings and employment trajectories of workers. The data provide quarterly earnings at each job for UI-covered workers. Thus the files will not capture individuals whose employment or unemployment is not covered by the UI program, including those who work in the underground economy. However, since nearly 90 percent of the civilian labor force is in covered employment (U.S. House 2004), it provides a much more complete universe of reemployed workers than other data sources can be expected to provide.

Records are tracked by Social Security Numbers. If the administrative data of multiple states are collected (e.g., through the National Directory of New Hires discussed below or by requesting matches from particular states), reemployment of Katrina evacuees could be tracked from one state to another. This method would essentially amount to developing a regional payroll dataset by appending the UI administrative records of multiple states. This regional dataset would capture reemployment in states that evacuees may relocate to, in addition to reemployment in the affected areas.

The number of reemployed evacuees, in combination with a CPS-based estimate of the share of evacuees who are reemployed, could give an alternative estimate of total evacuees and relocators. Thus, data collected on Louisiana, Alabama, Mississippi, Texas, and the surrounding states, would theoretically identify the universe of workers who left New Orleans at the time of the storm and found covered employment in neighboring states. These data could also provide estimates of the share of evacuees who returned to work in storm impacted areas, and the timing of that return.

Obtaining UI administrative records for just one state can be very difficult and time consuming; obtaining data from multiple states is that much more difficult. Therefore, this research strategy may be best limited to focusing on a single relocation pattern, such as the population that relocated from Louisiana to Houston, for example, so that records from only two states would be required. Analyses using QCEW, QWI, or Office of Child Support Enforcement's (OCSE) National Directory of New Hires, below, would provide a similar view of relocation employment patterns nationwide.

Unemployment Insurance Benefit Data

- **UI benefit data are difficult to obtain**

Data on UI benefit reciprocity are difficult to obtain because of confidentiality protections. Claimant information would have to be requested separately for each state involved, and most require prior consent to release individual data. It is therefore unlikely that unemployment insurance recipients from storm-impacted communities can be tracked using this source of administrative data. Even if unemployment recipients could be tracked, this would only represent a subset of the total unemployed as a result of the storm. It might be possible to consider requesting that state UI staff conduct special data tabulations that could link earnings files with UI reciprocity.

Office of Child Support Enforcement's National Directory of New Hires Database

- **Quarterly wage data maintained by the Office of Child Support Enforcement**
- **Constructed from state UI data**
- **Restricted availability to researchers**

As part of the National Directory of New Hires (NDNH), the Office of Child Support Enforcement (OCSE) in ACF, receives quarterly wage data to aid in the administration of child support enforcement, and tracking non-custodial parents. These data are constructed from state unemployment insurance data, as well as from military and civilian payroll data from the federal government. While state Child Support and TANF agencies have access to the NDNH data for purposes of administering their programs, what is available to researchers is more restricted. For example, personal identifiers could not be included in a research data set. This potentially limits the usefulness of the NDNH data for tracking individuals across states or over time.

Employer Data

County Business Patterns

- **Number of establishments, industry, firm size, number employed, and payroll available annually at the county, MSA, and state level**
- **Zip code level data on the number of establishments (but not payroll) is available**
- **Currently available through 2005**

Census Bureau data published annually in County Business Patterns (CBP) for every county in the United States report the number of establishments, by major industry and firm size, the number employed, and total payroll. The data come from the Business Register, a Census Bureau database of establishments that draws upon administrative records, surveys of companies, and the Economic Census that is conducted every five years. Similar data are available by metropolitan area. The data on number of establishments, but not the employment or payroll statistics, are also produced at the zip code level. The most recent data currently available are for the week ending March 12, 2005; data for 2006 are thus needed to assess post-storm impacts.

Business Employment Dynamics

- **Data on business expansions, openings, contractions, and closings by industry and firm size**
- **Available at the state level**

The Bureau of Labor Statistics also produces data on business expansions, openings, contractions, and closures by industry and firm size. These data are based on the QCEW. While the Business Employment Dynamics (BED) data are only available at the state level, they are a good source for documenting gross contractions and expansions along the Gulf Coast.

US Census Bureau Port Reports

- **Monthly import and export data by industry for fifty major Gulf Coast ports**
- **Available for September 2005 – February 2006**

The Census Bureau uses documentation from the US Customs and Border Protection Service to produce monthly statistics on imports, and exports. From September 2005 to February 2006, a special series of monthly port reports provided import and export data at the six-digit NAICS level for New Orleans and fifty other ports on the Gulf of Mexico. New Orleans's status as a hub of international trade is central to its economic vitality, so analysis of Gulf Coast port activity pre- and post-storm would be a useful indicator of the degree to which the area has rebounded.

Housing Data

HUD Public and Indian Housing Information Center and Tenant Rental Assistance Certification System Databases

- **Annual reports of all public housing and voucher recipients**
- **Includes social security number, employment status, disability status, and income sources**
- **Disaster Voucher Program, which served 15,000 residents displaced by Katrina, should be available in the data**

Local Public Housing Authorities (PHAs) report to HUD annually all public housing and voucher recipients. The data are contained in HUD's Public and Indian Housing Information Center (PIC) system for public housing residents and voucher recipients, and HUD's Tenant Rental Assistance Certification System (TRACS) database for residents of project-based Section 8 buildings and for Section 202 and 811 housing for primarily elderly and disabled. The information comes from the 50058 and 50059 forms that PHAs use to determine eligibility, and includes the household address; names and Social Security Numbers of all household members; and the employment status, disability status, and income sources for all household members. Theoretically these data could include multiple moves within a year, though multiple moves are typically rare and reporting perhaps unreliable. They should reflect only continued eligibility since residents are expected to be recertified if income changes.

The Disaster Voucher Program (DVP), formerly known as the Katrina Disaster Housing Assistance Program (KDHAP), served approximately 15,000 public housing residents who were displaced by the hurricane. These vouchers have been converted to regular Housing Choice Vouchers and PHAs use the same eligibility forms and include them in their reports to HUD's PIC system. As a result, it should be possible to track these households in the same way as other housing assistance recipients.

FEMA Assistance

- **Household composition and address data for all recipients of FEMA assistance**
- **A comparison of local areas is possible with PHA reports and the PIC database**

The largest rental housing assistance program for households displaced by Hurricanes Katrina and Rita is FEMA's Individuals and Households Assistance Program. This rental assistance program was supposed to terminate 18 months after Katrina, but has been continued indefinitely. As of December 1, 2007, this program is being converted to the Disaster Housing Assistance Program, to be administered by HUD. Recipients will undergo income screening and their rent will gradually be increased over an 18 month period to move them off assistance. HUD and FEMA are still negotiating over whether eligible participants will then transition into the regular voucher program. Recipients will receive case management during this transition period. Currently, FEMA has all the information on recipients, including household composition and address. Presumably, if the program transfers to HUD, recipients will receive the same eligibility screening as other voucher recipients and their information will appear in PHA reports to the PIC database and be useful for tracking at the local level.

FEMA trailers

- **Current address of FEMA trailers and social security numbers of all residents are maintained by FEMA**
- **FEMA trailer data are being transitioned into the Disaster Housing Voucher Program, mentioned above**

In addition to rental assistance, there are approximately 80,000 households in Louisiana and 14,000 in Mississippi currently living in FEMA trailers either on their own property or in trailer parks created to house Katrina evacuees. These trailers are administered by FEMA and the individual households pay no rent. FEMA maintains a database that includes current addresses for all trailers, and Social Security numbers for all household members. However, there is no incentive for them to report to FEMA when they leave. Tracking their movement would thus depend on linking SSNs to other databases.

At this writing, trailer parks are being closed and residents moved into their former or other permanent housing and it will be important to document the fate of those who are now losing their trailers. Some of these households are being transitioned into the Disaster Housing Voucher Program (see above); others may move into housing provided through the *Alternative Housing Pilot Program* (AHPP). The AHPP is an initiative to provide a long-term temporary housing alternative to the FEMA trailers. Four Gulf states (MS, LA, TX, and AL) have AHPP programs

of varying sizes. Once implemented, the programs will offer eligible FEMA assisted households the opportunity to move into cottages; tenants will pay rent and these cottages may ultimately become homeownership units. Those who receive services through AHPP or the DHVP will continue to receive case management through FEMA, HUD, or their contractors. In any case, the availability of the FEMA database to HHS or outside researchers is unclear.

All data on assistance is housed in FEMA's National Emergency Management Information System (NEMIS), which contains information on both applicants and recipients. The database includes applicants by housing type (group sites, commercial, industrial and private housing), special needs (children, elderly), pre-disaster parish of residence, and type of FEMA assistance. It is not clear whether the database, which is derived from the extensive paper application, is accessible to researchers and in what form.⁵

Louisiana Road Home Program

- **Program reports for the Louisiana Road Home program contain application and closing dates, zip codes of the damaged residence, and use of the money**

The Louisiana Road Home Program is providing assistance to former homeowners throughout the state. There are likely many low-income homeowners in this group. Although the program had trouble distributing funds early on, it had disbursed \$6.1 billion as of March 17, 2008.⁶ Program reports indicate that data are collected on application and closing dates, zip code of damaged residence, and whether the money will be used to repair the residence, move elsewhere in Louisiana, or move out of state.

Loan Application Register

- **Annual data on home purchase and home improvement loan applications and originations**
- **Includes data on applicant and co-applicant characteristics**
- **Available at the census tract, county, MSA, and state level**
- **Data on the financial institution available in the Transmittal Sheet dataset, which can be linked to application data with a loan code**

The Home Mortgage Disclosure Act (HMDA) was enacted in 1975 and implemented by the Federal Reserve Board. It requires certain commercial and savings and loans banks, credit unions, and mortgage companies to report annually in a Loan Application Register (LAR) data on home purchase and home improvement loan applications and originations.

Each record in the LAR contains applicant and co-applicant characteristics such as race, gender, and gross annual income, and loan/application information such as type, purpose, amount, and action taken, and census tract, county, metropolitan statistical area (MSA), and state. A complementary data file called the Transmittal Sheet (TS) contains information about the

⁵ The study team has requested detailed descriptors and access rules from FEMA and has not received a reply to date.

⁶ http://www.road21a.org/media/stats/RH_Program_Update_031908.pdf.

financial institution, including the name, address, parent company name and address, and tax identification number. The LAR and TS data can be linked using a loan code and agency code found on both files.

LAR and TS data are reported by the financial institutions to the Federal Financial Institutions Examination Council without names or social security numbers (which remain at the reporting institution) and thus cannot be used to link individual HMDA data with individual data from other sources. Further, reporting regulations for lending institutions state that “Institutions are strongly encouraged not to use the applicant's or borrower's name or social security number, for privacy reasons.”⁷

Even without data on individual loan applicants and recipients, the potential for using HMDA data for small area estimates is great. Geographic identifiers allow for analyses of loan applications as small as the census block level. Identifiers represent the location of the property being purchased, refinanced, or improved. At the neighborhood level or higher, the total numbers of loans applied for, approved, denied, or withdrawn can be ascertained, as well as the reason for denial. One can decipher the purpose of the loan/application in terms of purchase, refinance, or home improvement, as well as the type of loan/application in terms of conventional, FHA, VA, or FMHA. Information about the applicants and co-applicants, including race, gender, and income can be examined as well. Data are currently available and comparable between 1997 and 2006.

Homeless Populations

Point-in-Time Surveys

- **Data on individuals in temporary or transitional housing is difficult to obtain and use for research purposes**
- **Point-in-Time surveys conducted every two years by organizations receiving funding from programs under the McKinney-Vento Homeless Assistance Act**
- **New Orleans Point-in-Time survey conducted in January 2005 and January 2007, but only summary information is available**

Data to assess the effects of Katrina on individuals in temporary or transitional housing or who are otherwise homeless are difficult to obtain and more difficult to use for research purposes. As noted earlier, only the HKCAG surveys and the ACS (since 2006) provide data on people living in institutions or other kinds of group quarters.

Organizations who receive funding for one of three Continuum of Care (Supportive Housing, Shelter Plus Care, or Single Room Occupancy) programs under the McKinney-Vento Homeless Assistance Act, are mandated by HUD to conduct a Point-in-Time Survey once every two years to attempt to generate a complete count of individuals experiencing homelessness in the area in which the local Continuum of Care (CoC) organizations operate. Since Continuums of Care involve many organizations, generally the convener of the CoC system is responsible for

⁷ Regulation C – Home Mortgage Disclosure, Federal Financial Institutions Examination Council website, <http://www.ffiec.gov/hmda/pdf/regulationc2004.pdf> (p.34), accessed August 16, 2007.

conducting the survey and webposting the results. Unity of Greater New Orleans is the lead organization for New Orleans and conducted the January 2005 (which has been published) and January 2007 surveys. The only information that is available is summary data with no identifiers that could permit linking to other data sources. In Houston, the convener is Coalition for the Homeless, and in the Gulf Coast it is the Back Bay Mission in Biloxi.

The required data elements include the location or facility in which the population is living at the time of the survey (e.g., street, emergency shelter, transitional housing or treatment facility, permanent supportive housing, imminent eviction or recent institutional discharge), age and family status, self-reported illness or disability, length of homeless and number of chronically homeless, military service and VA medical enrollment, self-reported unmet needs, and basic demographic information (e.g., income, employment, health insurance, education, domestic violence issues, place of origin).

Administrative Data

Temporary Assistance for Needy Families (TANF)

- **States submit monthly summary TANF Data Reports containing aggregate counts of TANF caseloads and costs**
- **Summary data includes information on active cases, applications, non-cash assistance, total families receiving assistance, family types, and total number of adults and children receiving assistance**
- **States maintain microdata consisting of samples of current TANF recipients and recently closed cases**
- **A sample of microdata totaled across states is available for each fiscal year. State-specific microdata are available to internal researchers at HHS**

States maintain various data systems to track families and expenditures, some portion of which is sent to the federal government to satisfy data requirements of the TANF block grant. The federal government requires states to submit TANF Data Reports (TDR) containing aggregate counts on TANF caseloads and costs as well as micro-level data consisting of samples of current TANF recipients and recently closed cases. States may maintain Separate State Programs (SSPs) for particular subsets of families (for example, two-parent families or certain immigrant families) and use the programs towards their Maintenance of Effort (MOE) requirements; they must submit data to the federal government both for their TANF and SSP-MOE programs.

States report quarterly to ACF both aggregated monthly totals (state totals for program components) and disaggregated data (microdata on individual cases or persons receiving cash and non-cash assistance under the TANF program). The data elements are the same for TANF and SSP-MOE.

Caseload Reporting

Aggregate data. Monthly aggregate totals contained in the quarterly reports include applications (total number, number approved, number denied); active cases (total dollar amount of cash and

non-cash assistance, total number of families receiving assistance, number of two-parent, one-parent, no-parent families, total number and number of adults and child recipients, and other details, such as total number of births; total number of closed cases. The federal government uses this information to prepare tabulations that are provided in the TANF Report to Congress, on the ACF website, and in other publications.

Microdata. States are required to collect micro-level data on a monthly basis and report those data to the Secretary of the Department of Health and Human Services on a quarterly basis.⁸ The data are obtained from the case records; different states may maintain their records in different ways, but for purposes of these reports they must provide the data in the format specified by HHS, with each piece of information “coded” in a specified manner. One dataset is provided with case record information for families receiving assistance with TANF funds, and another “closed case” dataset is provided with data on families no longer receiving assistance. Each record is a “snapshot” of that family in a particular month. Families are not followed longitudinally. States that maintain SSPs for certain subsets of families (for example, two-parent families or certain immigrant families) and who use those programs towards their MOE must submit the same micro-level datasets for open cases and closed cases in their SSP-MOE cases.

Table 2 lists the types of information collected in the micro-level data. It includes basic information on both adults and children, the amount of cash assistance provided, and detailed information on the work participation activities of adults, among other information. For cases no longer receiving assistance, similar demographic and basic family information is reported, along with information on the reason for case closure—employment, sanction, time limit, marriage, youngest child became too old for TANF, and so on. Some of the information in the micro-data—including county-level identifiers and Social Security numbers—is not available on the files that ACF generally makes available to researchers, but would be available to internal government researchers.

The federal government combines all the data submitted by the states over a fiscal year (October of one year through September of the following year) into a fiscal year file that is used for tabulations and released for public use. Within a particular fiscal year’s microdata, approximately one-twelfth of the records are from each month in the fiscal year. When tabulated, the data show the characteristics of the caseload in the “average month” of the fiscal year.

⁸ Office of Family Assistance, Memorandum No. TANF-ACF-PI-99-3, October 27, 1999. <http://www.acf.hhs.gov/programs/ofa/tanfrpts/pitanf.htm>

TABLE 2.2 Micro-level data on TANF families

Family Information:

- Identifying information: reporting month, state, county (suppressed in public use data), sampling stratum (if applicable; may be suppressed in public use data), funding stream
- Basic family information: number of people in the family, whether the family is considered a two-parent family or a child-only family for purposes of the work participation rate, whether the family is subject to policies under an approved waiver, if the family is a new child-only family, if the family is a new applicant
- Receipt of other benefits: whether the household lives in public/subsidized housing, whether any member is enrolled in Medicaid or SCHIP, amount of food stamp benefit received in the month, receipt of subsidized child care
- Other financial resources: amount of child support income, amount of other cash resources
- TANF assistance: for various types of assistance, the amount of assistance received and the number of months that assistance has been received; the types of assistance are: cash assistance, TANF child care, transportation, transitional assistance, other supportive services. (All of the terms, including “assistance,” have specific meanings described in instructions to the states.)
- Reductions in benefits: Reasons for reductions in assistance (work requirement sanctions, other types of sanctions, recouping prior overpayment, etc.) and amounts of reductions
- Time limits: Whether the family is subject to the state’s time limit and if not, why not

Person-level data for adults and children:

- Family affiliation (receives assistance, parent of child who receives assistance, etc.)
- Basic information: relationship to head of household, date of birth, SSN (not on the public use data), race/ethnicity, gender, marital status, education, citizenship status
- Receipt of different types of disability benefits

Person-level data only for adults and minor-child heads of household:

- If has cooperated with child support enforcement (if applicable)
- Time limit: number of months countable toward federal time limit, number of countable months remaining under state's time limit, if current month is exempt from the state's time limit
- Employment status
- Work participation status (participating, various reasons for being disregarded or exempt)
- Work participation activities: For many different types of activities, the average number of hours per week of participation
- Earned income of this person in this month
- Unearned income of this person in this month—detail for EITC, Social Security, SSI, worker’s compensation, other unearned income

Financial Management

For each state and each fiscal year, information is reported on the amount of funds spent on different types of TANF assistance: basic assistance, child care, transportation, “assistance under prior law,” and “non-assistance.” By definition, “non-assistance” may include work-related activities, certain types of child care or transportation help that do not qualify as “assistance,” state earned income tax credits in some states, Individual Development Accounts, and short-term non-recurring assistance. Separate information is available on expenditures of federal funds and state funds. TANF block grant reports include both expenditures for cash and non-cash assistance and for transfers to CCDF and SSBG. This aggregate information is reported at the state level, not the county level or office level.

A state may choose to submit case record information for its entire caseload or for a “scientifically acceptable” sample of the caseload. The required samples are mandated by the federal government. Louisiana, Mississippi and Texas all use sampling to report caseload data to HHS. In the fiscal year 2005 data, the TANF active-case files included 3300 records for Louisiana, 3500 for Mississippi, and 3100 for Texas, with an additional 3000 active cases for Texas in the SSP-MOE data file. Each state has micro-data on its entire caseload and maintains information on the same family across time, rather than only in a “snapshot” of time. Depending on the state interest in outside research on its caseload and the ease with which it can create masked data extracts, state administrative data could be a source for longitudinal study of families receiving assistance. These data might be particularly informative in understanding the status of families affected by Katrina in the areas of impact and new families who relocated to major host communities, such as Houston.

Child Care Administrative Data

States provide child care assistance through multiple funding sources. One major source is the Child Care and Development Fund (CCDF), which provides federal funds that states may use to provide subsidized child care to employed families. States may also fund child care subsidies using TANF funds and state funds. As with other programs, states maintain their own data systems. Some of the state data are sent to the federal government to satisfy data requirements of the CCDF and TANF block grants.

Aggregate financial and caseload data

All states provide two types of aggregate data: the “ACF 800” Annual Aggregate Child Care Data Report and the “ACF 696” Financial Report. In both cases, the data are reported at the state level, not the county level or office level.

The ACF 800 report provides unduplicated annual counts of children and families served through the CCDF. For children served, the form asks for counts by type of child care (day care center, family day care home, and so on). States also report numbers of children in each setting served by different types of payment methods (grants or contracts, certificates or cash). For states that pool various funding sources (Title XX funds, state-only child care funds, Food Stamp

Program child care funds, certain TANF funds, and so on) to pay for child care subsidies from that one pool of money, the report asks for the percentage of funds from CCDF.

The ACF 696 Financial Report requires states to report quarterly their spending of CCDF funds by type of expenditure—direct services, administration, quality activities, and many others—and by various subcategories of CCDF funding (mandatory, discretionary, matching, and MOE).

Micro-level data

States are required to collect micro-level data on the families and children served by child care subsidies, and to submit those data to the federal government using ACF form 801. States have the option of submitting a sample or all cases. When states submit the universe data, a sample is drawn for public use.

Each ACF-801 data record provides information on one family receiving child care subsidies and their characteristics in a particular month, including demographic data, family income, and the type, cost, and hours of child care being provided. Families are not followed longitudinally. ACF combines the data into a fiscal year file; analysis of the entire file provides information on the size and characteristics of families and children served by CCDF-funded subsidies in the “average month” of the fiscal year. For states that pool their child care funds, the pooling factor is applied to the ACF 801 data counts to estimate numbers of children or families served by CCDF funds.

Starting in October 2006, the data will capture whether one reason for a child needing care is a federal declared emergency. This data element would have been very useful for Katrina research, but was not in place at the time of the hurricane.

Child Welfare Services

Since 1993 the federal government has provided support to states to develop and enhance statewide automated child welfare information systems (SACWISs). By law, a SACWIS is required to support the reporting of data to the federal Adoption and Foster Care Analysis Reporting System (AFCARS) and the National Child Abuse and Neglect Data System (NCANDS). SACWIS are also expected to interface with a state’s Title IV-A and IV-D systems. SACWIS systems (or other state systems if not SACWIS) provide data for federal reporting requirements that become AFCARS data. States are required to report data twice yearly (Oct 1-Mar 31, Apr 1-Sep 30) on the following variables for children in foster care and children adopted from foster care during the preceding time period: age, gender, race, length of stay, placement setting, case goals, age at entry/exit, exit outcomes.

Many states have integrated child protection and supportive services into SACWIS so the system becomes a tool for all child welfare services. States have the option of incorporating other programs into SACWIS such as TANF emergency assistance, juvenile justice, and child care. States are not required to compile data on children who are not removed from their homes, but for whom an investigated report of maltreatment exists.

The National Child Abuse and Neglect Data System (NCANDS) Child File dataset is a repository for the voluntary state submission of data on child abuse and neglect. The NCANDS is a federally-sponsored national data collection effort created for the purpose of tracking the volume and nature of child maltreatment reporting each year within the United States. A case-level component of the NCANDS collects annual data through voluntary participation of states. Participating States submit their data after going through a process in which the State's administrative system is mapped to the NCANDS data structure. Submitted data consist of all investigations or assessments of alleged child maltreatment that received a disposition in the reporting year. Records are provided at the level of each child on a report, also known as the report-child pair. Data elements include the demographics of children and their perpetrators, types of maltreatment, investigation or assessment dispositions, risk factors, and services provided as a result of the investigation or assessment.

NCANDS data are available from 1999 to 2005. More discussion with the Child Welfare Data Archive at Cornell University would be needed to obtain state-specific data. Regardless of the extent of state-specific data, information on addresses and locations of families is not a key focus of this dataset. Trend data on abuse/neglect allegations (e.g., did allegations of abuse/neglect go up after Katrina) could be obtained from this dataset though individual states would also be able to provide this information.

Unfortunately, Louisiana's data management system was (at the time of Katrina) barely operational in terms of the front-end (intake) component. Mississippi's system, while more developed than Louisiana's, was still not deemed a SACWIS. Neither Louisiana nor Mississippi would have been able to utilize automated data to identify children and families affected by Katrina; caseworkers might nonetheless have been able to locate cases using manual records. Texas has a fully operational SACWIS which would have been able to identify children though data integrity may still have been a problem.

The Louisiana and Mississippi statewide automated systems would not be useful to track services to children and families served by the agencies. While the ability to track housing/placements of children served by child welfare agencies is mandatory in SACWIS, tracking and authorization of services (both referrals and payment for services provided by private agencies) is not a mandatory component of SACWIS. Texas's SACWIS would be more useful for identifying increases in services provided as a result of Katrina. Even the Texas system, however, cannot currently be used to track children and families across states.

Access to Administrative Data for Research

ACF has often funded contracts for research involving use of states' administrative data. States can be asked to participate but do so on a voluntary basis. Some state incentives may be available. Though the preference of states is always to use non-identifying data, many studies have obtained state administrative data containing identifiers. Approval by both state institutional review boards (IRBs) as well as internal contractor IRBs should be built into federal contracts. The process can be quite time consuming but generally state child welfare agencies have been supportive of participating in federal research studies.

Surveys of service providers within affected communities may prove useful to an assessment. Immediately following Katrina a private organization, Southern Christian Services for Children, conducted a survey of 1,000 service providers, foster parents, juvenile court judges, and other stakeholders to determine the service needs of affected families. It was a web-based survey and asked respondents to rate certain services pre- and post-Katrina.

Other Resources for Tracking Children

The National Emergency Child Locator Center (NECLC), created by Congress and President Bush in October 2006, is intended to improve the capacity to track children in future emergencies. NECLC will be operated by NCMEC when a national disaster is declared by the President, to assist in the location of children and the reunification of families resulting from the disaster or subsequent evacuations. In the event of a natural disaster, the National Emergency Child Locator Center will:

- Establish a toll-free hotline to receive reports of displaced children;
- Create a website to provide information about displaced children;
- Deploy staff to the location of a declared disaster area to gather information about displaced children;
- Provide information to the public about additional resources;
- Partner with federal, state, and local law enforcement agencies; and
- Refer reports of displaced adults to the Attorney General's designated authority and the National Emergency Family Registry and Locator System.

Child Support Enforcement

The principal tool for enforcing child support orders since the enactment of welfare reform in 1996 has been the requirement that employers report all new hires to the state, and those data are in turn reported to the Office of Child Support Enforcement (OCSE) in ACF. State child support records are matched to the National Directory of New Hires (NDNH) and states receive notification when non-custodial parents in their caseload appear in the directory. OCSE is now able to locate 90 percent of fathers for whom support orders have been issued; about three-quarters of those located have quarterly earnings, and 20 percent owe arrears. Orders are established based on a non-custodial parent's ability to pay and many states have laws that impute so-called minimum wage orders to facilitate the collection of some payment. In addition to parental child support, OCSE maintains kinship cases, in which child support is paid to a third party caretaker or directly to a grown child (states have different rules governing age of majority). About 20 percent of cases are "arrears only cases" to children over 18, but few of these orders are successfully collected.

All states report all IV-D cases and non-IV-D orders to the Federal Case Registry (FCR). The FCR includes standardized data elements for custodial and non-custodial parents with IV-D cases or non-IV-D orders, such as names, dates of births, and social security numbers. The FCR also includes the names, dates of birth, and social security numbers for all children who have support orders established on their behalf. Additionally, for established orders, information on monthly order amounts owed, collected, and distributed are included in the FCR.

OCSE maintains this roster of cases, which it can match to data in each state and to the NDNH, the Federal Parent Locator Service (FPLS), and social security administration data. States are notified if a client in their state is receiving services from a IV-D agency in another state and if a match is found between the FCR, the NDNH, or the FPLS. State collection systems are explicitly set up to permit interstate linking—either between two states, an initiating and responding state, or from a state directly to an employer in another state. Every state has an interstate unit with so-called “long arm” jurisdiction, in order to facilitate collection across state lines. At the federal level the FCR is updated continuously rather than maintained as an archive; that is, case data are overlaid and it is not clear that the database would be useful for research purposes.

There is no public use data generated from state IV-D data systems; access is dependent on an individual state’s interest in the use of the data for analytic purposes, in which case the state would mask identifiers. Case numbers may or may not be SSNs. There were no Katrina markers in state IV-D data systems or in the FCR. Because access to state micro-data, the FCR, New Hire data, and the FPLS is severely restricted, these data are not an easy source for data linking irrespective of the presence or absence of a SSN.

State IV-D programs have data systems that contain information on the following: caseload size, including both intake and collections cases; number of interstate cases; monthly current support and arrears collections (in dollars); and number of paternities established for children born out of wedlock. States can provide aggregate monthly data on these measures for research purposes. Studies exploring the impact of Katrina on IV-D programs could examine these outcomes at the state level before and after the storm. In fact, Louisiana administrative data show that paternity establishment rates declined 62% state-wide following the storm. Similarly, current support collections declined by 10%, the number of cases with arrears collections declined by 35%, the number of newly established cases declined 31%, and the amount of collections on arrears declined 15% state-wide.⁹ Administrative data show even more staggering declines in these performance outcomes in New Orleans and Jefferson Parishes, the areas hit hardest by the storm.

Additionally, in the aftermath of Katrina, the Louisiana state IV-D program worked with the Center for Law and Social Policy (CLASP), Louisiana State University (LSU), and the US Postal Service to obtain address change information on IV-D clients who relocated within a six to eight month period after the storm. Nearly all of the state’s IV-D clients living in New Orleans and Jefferson Parishes were displaced, which is about twenty-five percent of the state’s total caseload. Access to this address change data is at the discretion of the state.

ACF issued a special directive on February 13, 2006, that any FEMA disaster relief payments made to a non-custodial parent may not be offset to collect a child support debt.¹⁰

Head Start

The Head Start Program collects data through an annual Program Information Report (PIR) that is submitted by Head Start and Early Head Start grantees annually. The reports cover 12 month

⁹ These data compare state administrative performance outcomes from June, July, and August of 2005 to September, October, and November of 2005.

¹⁰ <http://www.acf.hhs.gov/programs/cse/pol/PIQ/2006/piq-06-01.htm>.

periods beginning between August 1st and September 15th, based on the time period the grantee defines as the enrollment year. In addition to submitting the annual PIR, grantees are required to report grant-wide end of month enrollment totals 3 times during the year (October, January, and March), which allows ACF to determine how well a grantee is able to maintain a funded enrollment level through its federal grant award.

The PIR collects comprehensive microdata that can be sorted by zip code on nearly 900,000 program participants in 2,900 facilities nationally. The data includes detailed information on the demographic characteristics of enrollees and their families and the services for which the program provides, including health, disability, and education services. Additionally, the PIR provides descriptive information on the grantee itself including the number and qualifications of its staff.

Hurricane Katrina damaged more than 200 Head Start facilities, nearly 100 of which remained closed as of October of 2005 due to the severity of the damage incurred. As a result of this damage, 13 grantees were excused from reporting for the 2004-2005 program year.

In September of 2005, ACF made fifteen million dollars available to Head Start grantees to provide services to evacuee children and families during the 30 day period following the storm. In order to receive this additional funding, states had to contact ACF to submit a formal request. At this time ACF also asked each regional office to collect the following information from grantees in their region:

- 1) The number of evacuee children served by each Head Start program;
- 2) The number of these children who were enrolled in a Head Start program in their home community; and
- 3) The number of these children that were new to Head Start.

Runaway and Homeless Youth Program

The Runaway and Homeless Youth Program is funded through the Family and Youth Services Bureau (FYSB) within ACF, which selects runaway/homeless youth organizations or youth-serving professionals as grantees. The Runaway and Homeless Youth Act mandated that certain basic information be collected on those serviced through this program. Thus, the Runaway and Homeless Youth Management Information System (RHYMIS) was developed and system software distributed to grantees. RHYMIS includes entrance, exit, and turnaway reports, thus covering both youth who receive services through the program and youth whose requests for services are rejected.

The entrance report includes detailed demographic information on participants, including name, date of birth, gender, sexual orientation, race, and ethnicity, in addition to information on the participant's living situation at program entry and information on how the participant was referred to the program. A unique identifier is automatically generated for participants at the time the entrance report is completed. The exit report provides detailed information on the services received by each participant and the participant's living situation upon exit from the program. The turnaway report enables grantees to report the number of youth turned away due to lack of

bed space and helps the FYSB identify underserved communities, program capacity, and resource issues. These reports also include dates indicating when the participant entered, exited, or was turned away from the program. RHYMIS does not collect detailed information on individuals who receive less than six hours of services and/or do not stay overnight at a program facility.

Standard and custom reports can be generated by public users via the extranet website: <http://extranet.acf.hhs.gov/rhymis>. These reports display data by region, state, or agency ID. Access to more detailed data is provided to federal staff and grantees, and to others doing research upon request.

Mentoring Children of Prisoners Program

The Mentoring Children of Prisoners Program provides funding to community and faith based organizations, tribal organizations, and some state and local entities to match mentors with children of incarcerated parents. At the time of Hurricane Katrina, children were being served through this program in all states except Utah, West Virginia, and Vermont. In response to the storm, additional funds were allocated to areas that were predicted to have an influx of youth needing these services. Efforts were made to match displaced youth with mentors in the areas in which they relocated.

The program began in 2003 and collects quarterly data on the total number of youth that are served by each grantee. Last year, approximately 28,000 youth were matched to mentors through this program nationwide. Grantees are also required to report basic demographic information on the clients they serve. However, due to the nature of the program, the aforementioned data are highly secure and whether access would be given to researchers is not known.

Domestic Violence Prevention Program

In fiscal year 2006, ACF provided \$700,000 in supplemental funds to state domestic violence coalitions to assist with the safety, support, and advocacy needs of domestic violence victims on the Gulf Coast in the aftermath of Hurricanes Katrina and Rita. The money was divided among domestic violence coalitions in Mississippi, Louisiana, Alabama, Alaska, Florida, and Texas. The funds in Mississippi and Louisiana were primarily aimed at assisting with recovery and outreach efforts, while those in Alabama, Alaska, Florida, and Texas, dealt more with displaced individuals relocating within these states.

ACF required that grantees submit reports describing how these supplemental funds were allocated, including the amount of funds used to improve shelters compared with those used to provide direct services and assistance. Grantees were also required to report the number of shelters that were assisted; number of women in each of these shelters; number of safe houses and shelter alternatives in the state; average length of stay in these shelters; number referred to other shelters due to lack of space; and a description of how funds were used to address the needs of underserved populations. Grantees were also required to submit financial status reports to provide details on award expenditures. However, the data that ACF received in response to these

reporting requirements was somewhat inconsistent between states, making the usefulness of these data unknown.

Non-ACF Administrative Data

Medicaid

The Medicaid Statistical Information System (MSIS) contains data on every person covered by Medicaid and every claim on their behalf. These data are submitted by the states to the Centers for Medicare and Medicaid Services, which cleans them and eventually makes them available to researchers. Medicaid enrollment in the MSIS data could be treated as a proxy for membership in the ACF service population: like TANF, child care subsidies, and many other ACF programs, Medicaid serves a broad low-income population, with particular focus on children. Certain types of Medicaid claims, such as spending related to mental illness, may be also be relevant to ACF's interests. With access to restricted identifiers, and some effort, the MSIS data could be matched across states to track migration of low-income families after Katrina, or with data from ACF programs, to understand Katrina's impact on patterns of multi-program participation.

Nonprofit Data

Louisiana Family Recovery Corps (LFRC)

Louisiana used the \$32 million it received from the TANF Loan Fund (with no obligation to repay) to contract with the Louisiana Family Recovery Corps (LFRC). LFRC has constructed a completely automated system with real-time data entry for every family who received services with the \$32 million in Loan Funds. The system contains data on demographics, pre-storm residence, post-storm location of displacement, needs assessment components, and type and time of service. Data are by case number unique to the LFRC and accessible for research purposes without masking on all 80,000 cases. The data are useful for a variety of analyses about who was served, with what services, and university researchers have already been granted access.

National Center on Charitable Statistics (NCCS)

The National Center for Charitable Statistics (NCCS) database, maintained by the National Center for Charitable Statistics (NCCS), contains data on all nonprofit organizations that have assets of \$25,000 or more and that file IRS 990 forms. These data can be sorted by zip code and by the National Taxonomy of Exempt Entities (NTEE) codes, which indicate type of organization. One limitation is that the 990 forms are filed by the administrative arm of the organization and therefore are not totally consistent with numbers or locations of direct service providers. The fit is closer for small, independent organizations.

III. STUDYING HOUSING AND MIGRATION EFFECTS

RESEARCH QUESTIONS: WHERE HAVE EVACUEES LIVED SINCE THE STORM AND HOW IS THAT LIKELY TO CHANGE?

1. Where did they go (by city, by neighborhood), in how many moves, and for how long?
2. How were they housed (by type, with whom; initial evacuation, forward)?
3. Who and how many stayed, left, and returned (by income, race and ethnicity, age, immigration status, other), and why (e.g., employment, housing, housing assistance, insurance, family support, schooling)?
4. How many intend to/are likely to return, and what factors are influencing that decision?
5. Who and how many (by income, race and ethnicity, age, immigration status, other) in-migrated after the storm, and why?
6. How did migration and housing affect family composition, and thus implicitly or explicitly, child and family well-being?

We have consolidated the questions into three major study areas: basic migration (questions 1, 2, and 3); resettlement (in a new location) or return (questions 4 and 5); and effects of each on family and child well-being (question 6). Analysis of the social and economic costs of dislocation must include both understanding the basic patterns of migration—who stayed and who moved (within the areas of impact or to other locations altogether)—and who has or will likely return to their pre-storm locations. The well-being question is complex, and links to other domains of the research: how those moves will affect child and family well-being depends on the ability of families to access employment or other needed services, and to connect or reconnect with important social supports, in old or new homes and communities. Some of these connections are addressed in the chapters that follow.

No single dataset permits tracking of all or a representative sample of residents in the storm impacted areas over time, that is, as they decided to stay, evacuate, or return, before or in the wake of the storm, and as the details of their circumstances (e.g., household composition, income, employment) changed, perhaps through multiple moves within short periods of time. The Current Population Survey (CPS) and the annual American Community Survey (ACS) can be used, as described below, for analysis of basic migration patterns of Gulf Coast residents before and after the storm, but small sample sizes limit substate analyses and analyses of some subgroups. Special surveys, such as the Hurricane Katrina Community Advisory Group (CAG) longitudinal survey being conducted by Harvard Medical School, can provide valuable profiles of the physical and emotional health of hurricane victims as a result of Katrina; these data are applied to several study options below.

In addition to the household and special surveys, administrative data could in theory be used to track individuals who participated in some publicly administered programs (for example, public housing, housing vouchers, FEMA trailers, income assistance, or unemployment insurance) before and after the storm. Administrative databases that capture all recipients of housing assistance, or all recipients of home purchase or home improvement loans, would comprise a very wide range of populations (e.g., public housing residents compared to home purchase borrowers) and a large percentage of individuals affected by the hurricane. We discuss below the

significant challenges to obtaining several of these data, compounded by obtaining data from multiple states in order to track individuals.

Finally, secondary analysis of published information based on data that are not publicly accessible, and primary analysis of data that might be made available specially to ACF or their designates, are included in the discussion below. The discussion also includes the potential for linking one dataset to another, in order to amplify information on individual and family circumstances at the time of the storm, and locations and circumstances since.

Table 3.1 Study Options: Housing and Migration Effects

Basic Migration Patterns

- **Analysis of moves (CPS, ACS, HUD and FEMA databases** for those in publicly-assisted housing, **Medicaid data**, Point-in-Time surveys of homeless)
- Analysis of community change (ACS, Louisiana Health and Population Survey, Loan Application Register)

Resettlement Patterns

- **Analysis of intention to return (CAG, PSID)**
- Demographics of rebuilding (Loan Application Register)
- Analysis of in-migration (CPS, ACS)

Effects of migration on well-being

- **Analysis of relationship of family displacement to measures of well-being (CPS, PSID, SIPP)**
- **Study of residential instability (CPS, ACS, PSID, SIPP, CAG)**
- Study of residents of FEMA-assisted housing (FEMA data)
- **Study of neighborhood change and the effects on children and families (Head Start and child care data)**

Options in **bold** are recommended priorities discussed in chapter VII.

STUDY OPTIONS

Basic Migration Patterns: How many left, where did they go, how were they housed, how many have returned?

These questions are of practical and policy importance to ACF for a number of reasons. Knowing where individuals went is a means to anticipate potential needs of individuals and families, and to anticipate the burden on services for communities that became principal hosts, may continue to house large numbers of evacuees, or may receive returning residents. Because some communities received fewer evacuees, it is important to consider ways to identify outliers—for example, those individuals and families who make little dent in overall caseload of public programs, but may require markers to prevent them from being in effect lost in the system and missing needed services. Such individuals are more difficult to identify in the data sources discussed below; other strategies are discussed in chapter VI.

In addition, answers to these questions provide lessons for future disasters—how to plan for concentrations of evacuees, and how to be responsive to those who are more scattered, may need special help, but go unnoticed as they get absorbed into the general client population.

General Migration Patterns: Analysis of Moves

The Katrina questions added to the CPS from November 2005 through October 2006 can be used to analyze general migration patterns—who left the Gulf Region and for how long between the initial move and the time of the survey.¹¹ The March 2006 sample would contain the greatest detail on demographic characteristics. Questions added to the June through October 2006 surveys indicate whether the evacuee ever returned to their pre-Katrina address between the primary evacuation and the present. Data from responses to the additional questions have not been released, and would not capture multiple moves that did not include the pre-Katrina residence.

The CPS Katrina questions can be used to map the gross patterns of migration. However, although these questions are asked of every household in the national sample, Katrina evacuees that appear in areas other than the areas of immediate impact or primary host communities may be so few as to preclude state-level analysis. Qualitative research, including new case studies of families and neighborhoods whose residents had fewer resources, would be especially informative.

The CPS and ACS both ask whether the current residence is different from that of a year ago. Data from the March 2006 CPS and the 2006 ACS can therefore be used to determine the number of residents of host states who are likely to be evacuees. Respondents who stated that they lived in storm-impacted areas in the previous year have a high likelihood of being members of the evacuee population. The same questions could be used to identify the number of residents of the damaged areas who have moved into the area since Katrina.

¹¹ The Katrina questions were included in the monthly survey as it was administered in October 2005, but the Census Bureau has not released the data from this month (Cahoon et al. 2006).

Medicaid receipt, as measured in the MSIS data discussed in chapter II, could be used to track low-income individuals across jurisdictions. Individuals in different states who match on Social Security numbers (SSNs) or other identifiers, as well as on basic characteristics such as age and gender are likely to be genuine matches. The absence of matches, however, would not necessarily mean that people on Medicaid before the storm left the program, or that those on it after the storm had not participated earlier, because about 10 percent of the MSIS records do not have valid Social Security numbers, and are therefore unmatchable (Research Project to Understand the Medicaid Undercount 2007). As of April 2008, MSIS data for FY 2006 was not yet available.

Housing Changes

Studies of housing require multiple data sources, because families lived in so many different kinds of housing both before and after Katrina, each of which is best looked at through a different data source. Low-income families were displaced from federally-assisted housing, market rentals, and homes they owned. Some have moved into other assisted housing, some are still in FEMA trailers, and others have dispersed. Because the loss of housing for low income populations was so severe and ongoing, it is important to understand the mix of circumstances of those displaced in order to anticipate housing and service needs that will persist in new locations.

For those families who resided in federally-assisted housing before the storm, one can use the HUD PIC and TRACS databases to determine whether they are still receiving housing assistance, and whether that housing is in the same unit or the same community as before the storm, or in selected host communities. In principle, it is possible to use Social Security numbers to track individuals from the impacted areas to any PHA in the country. However, detailed tracking by SSN would require special access from HUD or creation of a unique research data extract, and detailed analysis of individuals in places other than areas of immediate impact and major host communities may not be worth the effort and cost.

A study of individuals in federally-assisted housing pre- and post-storm would not determine the magnitude of loss of public and project-based Section 8 housing units in the storm-impacted areas, but it would indicate households that were able to receive assistance (public, Section 8 or Disaster Voucher Program vouchers) in new locations. In theory, every individual who was receiving rental assistance prior to the storm and whose income has not risen substantially (which is likely to be the case for most of them) should still be receiving that assistance. It is important to know if households receiving assistance before the storm continued to receive assistance after.

Such a study would identify only a portion of low-income families. Only one-third of eligible families are assisted in public housing in any community, since federal housing is not an entitlement. Hence, a study of families in federally-assisted permanent housing would have to be companioned with data from the March CPS or ACS, described in chapter II, to create a more complete picture of housing change, and loss, for low-income populations. The Louisiana parish surveys, described below, also contain estimates of homeownership and numbers of households living in the same house as pre-storm.

Those families that received temporary housing assistance, such as receipt of FEMA trailers, will be moving again as trailer parks are closed and trailers are reclaimed. Although it not clear at this writing what access will be granted ACF or its researchers to FEMA data, the National Emergency Management Information System (NEMIS) database might potentially be used to track individuals who received FEMA trailers or other emergency assistance through FEMA. NEMIS contains demographic and economic information (e.g., income, household size), address of origin and location of assisted residence (trailer, voucher-assisted rental housing), and length of assistance. If FEMA vouchers are converted to Housing Choice Vouchers administered by HUD, FEMA voucher recipients would be part of the same HUD database described above.

Most of those who received trailers in Louisiana were homeowners. Those who are not in trailers at their pre-Katrina address (that is, trailers on their home lots rather than in trailer camps) will be relocating in the near future. Large numbers of trailer households, particularly those who are longstayers, may be in need of services. How similar or different trailer recipients are to other displaced households is also important to know.

Homeless Populations

Neither the CPS nor the ACS provides a good means to assess movement of homeless individuals. However, the ACS data on shelter housing pre- and post-Katrina combined with the January 2005 and January 2007 Continuum of Care Point-in-Time surveys of the homeless population, which were conducted by lead organizations in New Orleans and Biloxi, would provide comparative profiles of the numbers of homeless pre- and post-Katrina. The Point-in-Time surveys do not permit reanalysis. Whether these individuals are the same pre- and post-storm is of course unknowable through these data. One could pick ten heavily impacted cities that developed additional data on the circumstances of the homeless post-storm (e.g., Houston and Atlanta conducted several surveys within their homeless and housing structures with Katrina evacuees) to compare to the Point-in-Time surveys. Several of the states that were most affected by Katrina were using the same data system and were considering merging data system to track evacuees. Data could be matched through probabilistic matching of birth date and name. However, without unique identifiers, such as Social Security numbers, matching might not be very productive.

Analysis of Community Change

A comparison of the ACS for 2004 and 2006 can be used to assess the impact of Katrina on selected communities in the Gulf Coast. ACS special estimates compare housing and population data for areas of impact before (January-August 2005) and after (September-December 2005) Katrina. Those estimates provide demographic, employment, income and poverty measures, and details on housing occupancy, and include estimates of individuals in group housing (e.g., university facilities, assisted living, transitional housing). New Orleans residents are not identified as such in the data, but are included in the data for the New Orleans-Metairie-Kenner Metropolitan Area. Data indicating the month of interview in the microdata were used to produce these special estimates, but are not publicly available for reanalysis.

Published reports from the Louisiana Health and Population Survey, conducted in 18 parishes between June and October 2006, show migration patterns and changes in total population, racial and ethnic composition, household size, employment, and poverty level. These were compared with data from the 2004 ACS (or the 2000 Census where parish data were not released or collected in the 2004 ACS). The microdata are available and allow more specific analyses of individual parishes or cross-parish comparisons. Data from the Loan Application Register, discussed below, provide another tool to assess community change.

We consider the studies of community change as described to be important but they will likely be undertaken by demographers and others tracking the effects of the storm overtime. The findings will be important to ACF, whoever undertakes them, as they continue to reveal the extent of displacement for low-income children and families.

Resettlement Patterns: Who is likely to return or to in-migrate and why?

A major concern around repopulation and rebuilding is that the most storm-impacted populations (for example, through loss of homes or family disruptions) may also be the least able by economic circumstance to return to either their homes or their neighborhoods. They face not only permanent dislocation with fewer resources to reestablish their lives in new locations, but the permanent loss of deep-rooted and longstanding family and social support networks that were unique to the Gulf Coast, and may have compensated for less material wealth or more compromised personal circumstances. If the areas to which they choose to return are also inadequately serviced, by social services and other infrastructure, the challenge is even greater. We identify options below to assess current repopulation patterns, and impute future migration decisions. The effects of these resettlement decisions on family and child well-being are discussed in the next section.

Analyses of Intentions to Return

Data on intentions to return are found in the longitudinal sample of the Harvard Hurricane Katrina Community Advisory Group (CAG) survey. The representative sample of 3,000 individuals from Louisiana, Alabama, and Mississippi affected by the storm will be followed for several years. Pre-Katrina residents of New Orleans are oversampled. The baseline survey contains several questions that refer to the likelihood and reasons for moving back to New Orleans for those who left as a result of the storm.¹² The data contain pre- and post-Katrina income, employment, education, marital status, housing, and disability status, as well as detailed questions on mental and physical health and access to treatment, which would be of interest to ACF. Within the CAG data, one can examine the relationship between the intent to return and a number of other variables, including employment, education, marital status, housing, health status, and access to treatment. One can use CAG to develop an imputation for intent to return to apply to other datasets that do not ask about intentions (such the CPS).

¹² Harvard Medical School, Department of Healthcare Policy. "IF [respondent] lived in New Orleans metro area prior to storm but not now, would you say that you will DEFINITELY move back to the New Orleans area, PROBABLY will move back, probably will NOT move back, or DEFINITELY will not move back? What will be the most important deciding factors in whether or not you move back? If you do end up moving back, how long do you think it will be until you move back in terms of weeks, months or years?"

The PSID Katrina Supplement, administered in 2007, includes questions about plans for moves in the “next couple of years,” the certainty of the move, and reasons for it. Answers to these questions from the respondents identified as Katrina evacuees would provide information about possible future moves. These data could be used to determine the extent to which evacuees expect to remain in the communities to which they relocated. Both the CAG and the PSID are potentially rich sources of data for studying the status of ACF service populations in their current and future locations, although the sample size of Katrina evacuees is substantially smaller in the PSID.

Special surveys that explore residents’ evacuation experiences may also provide information about decisions to relocate or return. For example, Frederick Weil at Louisiana State University has conducted a survey of Katrina evacuees (including a subsample in FEMA trailer parks) that asked respondents about the likelihood that they will return to New Orleans and the importance of various factors in their decision (Weil and Shihadeh 2006). Another special survey interviewed construction workers in New Orleans and Kenner; the authors found that nearly half of these workers were Latinos, and more than half of Latino workers were undocumented (Fletcher et al. 2006).

The Demographics of Rebuilding

Analysis of the Loan Application Register (LAR), maintained by the Federal Financial Institutions Examination Council, could be used to develop a profile of the magnitude of rebuilding, and who was doing it, at the census tract level. Data on loans for purchasing or rebuilding contained in the LAR include the demographics of loan recipients (in particular, race, ethnicity, income and household size at the tract level). The number of housing units, population and demographic characteristics by tract from the 2000 Census, and the ACS or CPS prior to the hurricane can be compared with the number of units being purchased, refinanced or improved after the hurricane, to assess the magnitude of resettlement and the change in demographics of selected neighborhoods and tracts. LAR data through 2006 are currently available.

A study based on the LAR is limited by several factors. These data are specifically limited to mortgage loans, and therefore cover only a partial universe of occupied and unoccupied units, which may or may not warrant rebuilding. The data also do not indicate whether those receiving loans were Katrina evacuees or, importantly, whether the units will be occupied or re-occupied by Katrina evacuees. However, because the data indicate the purpose of the loan (for purchase, refinance, or home improvement), as well as the race and income of the borrower, they give some indication of whether neighborhoods are being repopulated by populations similar or dissimilar to those who lived there before the storm. Another limitation is that because of confidentiality restrictions, the individual loan applicants and recipients cannot be linked with any other datasets to expand the information about these individuals.

Analysis of In-Migration

As stated above, the CPS and ACS both ask whether the current residence of the respondent is different from that of a year ago. Analysis of the March 2006 CPS and the 2006 ACS can therefore be used to determine the number of in-migrants to the areas of storm impact, the origin of those individuals, and their socioeconomic status as compared to pre-storm populations and to returning evacuees. As suggested above, this is an opportunity to assess the degree to which in-migration spurred by rebuilding could create competition between, for example, new Hispanic construction workers and prior African-American populations. Because both surveys are household-based, geocoding residences of in-migrants (which would require access to restricted data) would also provide a basis for assessing the displacement of former residents by higher SES in-migrants. Further analysis of the March 2007 CPS would suggest whether the trends in in-migration are continuing. A similar analysis can be conducted on principal host communities, such as Houston.

The economic and social contexts to which evacuees return (or relocate) are themselves dynamic. The New Orleans to which evacuees return has experienced in-migration as a direct result of the storm, which has dramatically altered the socio-economic profile of the community. Some in-migrants may be low-skilled workers following the rebuilding after having been displaced from the sagging construction industry in other parts of the country; returning evacuees must now compete with them for jobs in the low-wage labor market as the pace of rebuilding attracts a new workforce. Other in-migrants may be the more monied beneficiaries of rebuilding, who might be displacing evacuees in their former neighborhoods, driving up rents, and further reducing the stock of low-income housing to which evacuees might otherwise have returned. Competing in new labor markets may be difficult for low-income and low-skilled evacuees who lost jobs and homes; the process may be made even more difficult by the loss of social networks that provided family and emotional support to assist in negotiating unfamiliar terrain. Some of these issues are explored further in chapter IV.

Effects of Migration on Well-Being: How have migration patterns affected family composition, and family and child well-being?

The psychological effects of losing a home, living with others, or living in a trailer, and the disruption of social supports that accrue to each, are critical components of housing loss and migration. Dramatically increased housing costs in the impact areas compound the challenges to reclaiming some sense of stability.

How well families can connect to new social support systems, how well they can access assistance for housing, social services, physical and mental health services, and employment, whether they relocate within the region or elsewhere, or return to cope with the stress and burdens of rebuilding their housing and their lives, are critical to understanding how ACF-funded programs might be needed to assist. We have identified five approaches, laid out below, to connect family dislocation, changes in family composition, housing instability, and neighborhood change to a range of measures of child and family well-being.

Relating Family Displacement to Measures of Well-Being

The CPS, PSID and the SIPP permit analyses of the relationship between family displacement and family well-being. The CPS has the benefit of sample size. The PSID has the extensive questions on experiences related to the storm but only for the small subset of families in the sample who lived in the Gulf region during Katrina. The SIPP provides detailed measures of reliance on public programs pre- and post-storm but cannot be used below state level. We consider each in turn.

Stayers, who never left their residences in storm-damaged areas, and returnees, who came back to their pre-Katrina homes, may have been interviewed for the CPS in both March 2005 and March 2006. If these households can be matched between the two years, changes in family composition and measures of economic well-being (e.g., receipt of various income supports, food assistance, ratio of housing costs to family income, employment, health care coverage) can be measured, and differences in the changes between stayers and returnees can be identified.¹³ For example, the data would show the extent to which family disruptions (e.g., loss of principal wage-earner, loss of employment, loss of health care coverage, loss or increased receipt of income assistance) or reduction in household income occurred for either group. A similar exercise can be conducted for people identified as Katrina evacuees in the March 2006 survey who also appear in the March 2007 sample, which did not include the Katrina questions; this would provide another year of information on the well-being of evacuees. One can also follow the employment status of individuals by matching across consecutive monthly CPS surveys.¹⁴

The Katrina questions in the PSID, administered to all in the sample who lived in Alabama, Louisiana, or Mississippi in 2005, can be used to assess the number of people in the storm-impacted areas who were displaced, with whom they lived, and the duration of displacement. That displacement can then be correlated with physical and emotional status measured in the survey (e.g., shortage of food, feelings of isolation, fear of crime, witnessing death, various measures of continuing emotional trauma), as remembered from the storm or experienced in the present. Analysis of the 2007 wave would be useful to understand continuing needs for services in the Gulf region, both in the areas of immediate impact and in host communities with large numbers of in-migrants from the storm, such as Baton Rouge and Houston.

A related method of assessing well-being for those affected by Katrina is to use data on program utilization by low-income households from the most recent SIPP panel, which was fielded from February 2004 through January 2008. Waves 8 and 9, with interviews between June 2006 and January 2007, included specific questions about respondents' experiences related to Katrina. Variables of interest would include income, employment, and receipt of TANF, child care subsidies, SSI, Medicaid, food stamps, Head Start, and child support.

¹³ Half of the March 2006 sampled addresses were also in the sample in March 2005. A March 2006 household at an address that was also in the March 2005 sample might be the same household, or a different household.

¹⁴ Approximately one quarter of the individuals in any March CPS dataset could be found in the March through June monthly samples, one quarter in the February through May samples, one quarter in the January through April samples, and one quarter in the samples from the preceding December through March.

Study of Residential Instability

Residential instability is linked to family and economic instability and the potential need for a variety of public supports (both income supports and other human services). Rent to income ratios are likely to be increasing dramatically for many evacuees. Other costs of moving, including loss of employment and interruptions in income supports (e.g., child care subsidies, child support), even for short periods of time because of moving, are important measures of hardship created by the storm.

We discussed above the use of the CPS and ACS samples for Louisiana, Mississippi, and Texas at the state level, and for the New Orleans, Baton Rouge and Houston metropolitan areas pre- and post- Katrina to determine who moved, to where, and who returned. Those moves can be linked to other measures of family and child well-being. Because the CPS and ACS ask about residence one year earlier, however, they might miss additional moves during that period. As panel studies, the SIPP, PSID, and the Community Advisory Group (CAG) surveys would collect data on multiple moves, a finer measure of residential instability that can be associated with other measures of family and child well-being. The PSID, which asks about all places lived since the previous survey (two years earlier), may be more complete than the SIPP, which measures no more than one move in a four-month wave, or the CAG, which would capture one move in each interval between surveys, for as many rounds as the study continues. Sample sizes for the storm impact areas, however, are larger in the SIPP and CAG than in the PSID, and each of the three surveys may have the best data on particular variables. Analyses of multiple moves would not speak directly to causality, but they could provide important measures of potential need for services pre- and post-storm.

New Studies of Residents of FEMA-Assisted Housing

FEMA's announced intention to close its remaining trailer camps makes it particularly important to understand the characteristics and conditions of these residents, who will have to be absorbed into their original or new communities. FEMA trailer housing, particularly in the large trailer camps, such as Renaissance Village outside of Baton Rouge, has persisted longer than anticipated and many are now coming to realize the emotional toll it has taken on families and especially children. New initiatives are emerging to address these problems and data on indicators of well-being and service receipt of these populations may become available as a result of increased attention and response.

It will be important to follow the progress of any special surveys of FEMA trailer residents (such as the subsample of residents of FEMA trailer parks in the LSU survey of Katrina evacuees) that emerge in the coming year. The families who have remained in trailer parks the longest are probably those with the least ability to find housing, jobs, and other supports, and the extended stay will likely have created an additional set of problems, including physical and mental health problems. Trailer housing may, nonetheless, remain a first line of response in future disasters. For these reasons, and the paucity of information about these families, this may be an important place for new research that can document the effects of trailer housing for disaster victims.

Study of Neighborhood Change and the Effects on Children and Families

Combining multiple datasets at the neighborhood level for those neighborhoods that either experienced the greatest damage or for those that have received the greatest number of evacuees provides a profile of the social and economic cost of the storm to the most victimized, and the social and economic opportunity of relocation—or lack thereof.

As noted above, an analysis of mortgage loans by census tract and neighborhood geographic identifiers in home mortgage data contained in the LAR database would allow for analyses of loan applications at the census block level, including property purchased, refinanced, or improved. The database contains information on the total number of loans applied for; whether the applications were approved, denied, or withdrawn; reasons for denial; the purposes of the loans (purchase, refinance, or home improvement); and whether the loans are conventional, FHA, VA, or FMHA. These variables and demographic data on the borrower (including race, gender, and income) can be compared for 2004 and 2006, and with 2000 Census data by tract to ascertain the dynamics of change and rebuilding in the areas where the storm's impact was greatest.

For those neighborhoods in which substantial numbers of low-income children and families are relocating (returning or settling), spatial analyses of the location of child care facilities, Head Start and Early Head Start programs, for example, would begin to describe the level of services available to those families. In the same fashion, researchers have overlaid transportation routes, building permits for commercial establishments, health care facilities, city or county plans for new or reconstruction of recreation facilities, schools, and so on.

A related exercise would be to map the location of low-income children and families in the diaspora, or the communities receiving the largest influx of low-income Katrina evacuees, to assess the degree to which they have access to the services on which they might depend.

IV. STUDYING INCOME AND EMPLOYMENT EFFECTS

RESEARCH QUESTIONS: HOW HAVE THE INCOME AND EMPLOYMENT STATUS OF INDIVIDUALS AND FAMILIES CHANGED SINCE THE STORM?

1. What was evacuees' income profile (e.g. total disposable income, employment status, industry, occupation) prior to the storm? What were their sources of income immediately after?
2. How many jobs, in what sector, were created or destroyed in the areas of impact, in the host communities? How permanent are the shifts likely to be?
3. How were employment and wages of evacuees, resettlers, returners, and in-migrants (by income, race and ethnicity, age, immigration status, etc.), affected, in the areas of impact and in the host communities?
4. How were the employment status and work requirements of TANF recipients affected?

As we did in the previous chapter, we have reorganized the analysis around four study areas: impacts on evacuees, resettlers, returners, and in-migrants (questions 1 and 3); structural changes in the labor market (question 2 and 3); labor force participation by sector and population (question 2 and 3); and effects of TANF work requirements and other federal policies on ACF populations (question 4). We have broadened the last question to include other federal policy and program initiatives that could have important income and employment effects. The questions and study approaches in the four categories are interrelated, in particular because of the magnitude of change and flux in the post-Katrina labor market.

Several important issues have arisen in the post-Katrina labor market. First, local labor markets have changed. In the hurricane-affected areas, the local labor market itself has been affected by the storm, meaning that both employment opportunities and the structure of the workforce (those actually in the labor market and potentially in the labor market at any point in time), have changed dramatically. Many evacuees returning home did not find the same type of labor market or employment opportunities as had existed before the storm. Some businesses that were damaged eventually reopened, but many did not. Some relocated to other places in the region. Some of the businesses that started up had very different employment needs than those that had existed before. Whether the rebuilding effort offers expanded employment opportunities or not to those who had difficulties finding or keeping a job before the storm is an empirical question that warrants scrutiny.

Second, the composition of the workforce has changed. The local labor force is composed of some who had been working in the Gulf Coast communities before the hurricane, but also includes workers who have migrated in to meet emerging demand, who may or may not stay. Some evacuees who return have families with them; others commute between jobs in the affected area and their families who are living elsewhere. And some evacuees have not returned, and income and employment opportunities in their new locations may be better or worse than in the affected areas before Katrina.

Third, the federal government has increased its role in the lives of vulnerable workers. The federal government has initiated several programs to help meet workforce needs as a result of the

storm (e.g., the Department of Labor's High Growth Job Training Initiative, which granted several million dollars to Texas, Louisiana, and Mississippi to address special workforce needs for retraining or employment, and the National Emergency Grants authority, which allowed DOL to release new funds to affected states for dislocated workers). Analysis of income and employment in the post-Katrina environment requires understanding the role of these special federal resources as well as the structural changes to the labor market that were themselves motivated by the storm and the recovery/rebuilding phases.

Finally, recovery occurs in distinct stages. Some of the increasing sectoral demand for labor observed in the early recovery period (for example, for workers in construction and health care) is likely to slow as the region moves into new recovery phases. The workforce and potential workforce also changes over time as evacuees return (and some subsequently leave again), and new workers migrate in (some temporarily). The dynamic nature of the labor market must be considered in any analysis of employment and income trends of workers and their families, including in particular any analysis of the groups of workers that are, have been, or might in the future be part of ACF's caseloads: individuals receiving public assistance; low-income individuals and families at risk of hardship or poverty; those with unstable housing, physical or mental health limitations; and those with low-skills.

Figure 4.1 Study Options: Employment and Income Effects

Income and Employment Impacts

- **Study of the impact on income and employment of evacuees, resettlers, and in-migrants using survey data (CPS, ACS, SIPP)**
- Study of the impact on income and employment of evacuees, resettlers, and in-migrants using Unemployment Insurance (UI) administrative data linked across multiple states
- State and sub-state estimates of income and employment changes without regard to evacuee or in-migrant status (QWI, LEHD, Mass Layoff Statistics)
- Study of employment and earnings in areas of impact, before and immediately after the storm (QCEW, QWI, LAUS, CBP)

Structural Changes After the Storm

- Study of immediate and long term impacts on sectoral employment (ACS)
- **Study of immediate and long term impacts on employment and earnings (QCEW and QWI)**
- **Study of sectoral employment by geography and in-migrant status (ACS)**
- Study of the quality of employment available to returning evacuees (QWI, CPS)

Changes in Income Due to Family Structure, Work Requirements, and other Major Policy Changes

- Study of implementation of TANF work requirements (administrative data)
- Study of the income effects of key federal policies (LEHD, Mass Layoff Statistics)

Recommended options in **bold**.

STUDY OPTIONS

A range of studies could be conducted to analyze the effects of the storm on income and employment, which recognize changing labor market conditions for workers, businesses and communities, and in particular their effects on low-income workers and their families.

Impact on Evacuees, Resettlers, Returners, and In-Migrants

Studying the Impact of Katrina on Income and Employment of Evacuees, Resettlers, and In-Migrants Using the CPS and ACS

One can use the CPS to identify evacuees, in-migrants, and residents of storm-impacted areas, and analyze their demographic characteristics, employment status, and income. Evacuees and residents of storm-impacted areas can be compared to residents of those same areas before the storm.

A more detailed analysis of the status of storm victims can be conducted using data on residents who appear in both the March 2005 and March 2006 supplements to the CPS, and lived in the same household each time. These respondents can be used to assess the impact of the storm on those who chose to stay and on those who evacuated but returned within this time period. Selection effects contributing to the decision to evacuate can be determined by comparing the characteristics of those who stayed to those who evacuated. Adjustments to the data may be necessary to avoid attributing the normal level of employment and demographic pattern of year-to-year attrition in the March CPS to Katrina.

Vigdor (2007) uses this approach to estimate the impact of the storm on the earnings of evacuees from New Orleans. He makes additional assumptions in identifying evacuees, such as assigning evacuee status to households in storm affected areas who appear in the August 2005 survey but in no subsequent survey. The analysis is a useful starting point for continuing studies of employment and income effects in the entire Gulf Coast region using the CPS. It will, of course, not be possible to identify Katrina victims explicitly in the extended March survey after March 2006, since the Katrina questions ended in the October 2006 monthly survey.¹⁵

The ACS PUMS also provides income data for residents of the storm-impacted areas, including in-migrants and continuing residents. Because the ACS has a larger sample than the CPS, it can be used to provide detailed information on individuals in New Orleans, Baton Rouge and Houston metropolitan areas. The best pre- and post-storm comparison would be to use the data for 2006 compared to 2004.¹⁶

Study of Income and Employment of Evacuees, Resettlers, and In-Migrants using Unemployment Insurance (UI) Data

UI administrative data, rather than survey data, can be used to identify evacuees and in-migrants and assess their earnings. UI administrative data from payroll records of workers in UI-covered employment are reported by employers to the state UI system quarterly, and identify workers by their Social Security number. Since all states use this common identifier, workers can be matched across multiple states' UI administrative data, so that a worker in Louisiana in spring 2005 could be identified in Texas administrative data, if that worker moved to Houston after the storm and found employment there in winter 2006. This method would require the collection of UI administrative data from multiple states of interest, and merging them into a single file, by SSN.

Assumptions about workers' employment patterns using these data are limited. Workers with long gaps between employment spells in one state (say, Louisiana) might not have worked at all, or might be evacuees who worked in a state not under study before returning home. For similar reasons, the method is not reliable as a source of information on migration flows. Workers who appear to have regular or steady employment in the area of impact post-storm, but do not appear

¹⁵ While this methodology for identifying evacuees in the CPS would not be original, it would provide the opportunity to measure the performance of evacuees on new outcomes that Vigdor (2007) did not investigate.

¹⁶ The absence of a survey month variable in the PUMS data means that individuals who moved to the affected areas in 2005 before Katrina cannot be distinguished from those who came after the storm.

in the pre-storm UI records, might have been unemployed, working in uncovered employment, or working in covered employment in another state before Katrina.

A limitation that applies to any analysis of UI data is that UI data are only able to capture workers employed with firms that report payroll data to the state UI system. For many low-income families, a significant portion of income comes from the informal economy, which is unlikely to be reflected in UI data, and which, in the context of the general dislocation brought on by the storm, may have expanded. This may be particularly true for in-migrants and temporary workers engaged in reconstruction activities.

A major limitation of UI earnings data relates to confidentiality concerns. The data are confidential, so data agreements are needed, and some states require further review and approval by a state board. Several states have very strict privacy laws that totally preclude the data from being used for research. Thus, even when states allow the data sharing for research purposes, the process can be long and complicated, and may necessitate restricting the study to a small number of storm-impacted and evacuee destination states. The process of collecting UI data from multiple states is likely to be daunting. Other options for obtaining earnings records are becoming more possible for research and involve accessing federally-maintained or federally-sponsored cross-state administrative data sharing arrangements. As discussed below, the National Directory of New Hires and the Longitudinal Employer-Household Dynamics are two options that could be considered for tracking cross-state employment patterns.

Community Level Changes: State and Sub-state Estimates of Income and Employment Changes

This approach would focus on general geographic impacts on employment and income in storm impacted areas. Both the community-level perspective and the individual perspective are useful for describing the impact on employment and earnings. Small sample sizes at the parish level would most likely require aggregation to the metropolitan area or state level. One can estimate average earnings for residents of Orleans Parish (New Orleans) using the March 2005, 2006 or 2007 CPS to compare community-level changes in employment and income.

The QWI would provide data on the county-level movement of workers in and out of employment, before and after the storm. QWI data are public-use and easily accessible online, but a more involved analysis using the QWI's underlying LEHD Geocoded Address list data can be used to estimate pre- and post-storm employment by businesses at the neighborhood level, and thus the effects of the storm and the pace of post-storm recovery. To the extent that large employers are also localized (e.g., port/fishing employers and casinos, which operate only in discrete areas), state data from the BLS Mass Layoff Statistics could also be used to provide a picture of job destruction at the state or metropolitan area level.

Study of Employment and Earnings in Storm-Impacted Areas using BLS and Census Surveys

Analyses using the Quarterly Census of Earnings and Wages (QCEW), Quarterly Workforce Indicators (QWI), Local Area Unemployment Statistics (LAUS), and County Business Patterns (CBP) could provide an assessment of change in storm-impacted areas, at the county or zip-code

level, and for two years before and after Hurricane Katrina. Each of the employment survey datasets produces information at the county level and at least quarterly (CBP is also produced at the zip code level but not quarterly). While these data sources provide greater resolution on time and geography than the CPS and SIPP, they provide a less detailed picture of employment and income variables themselves. Industry-level employment is reported in all but the LAUS; labor force participation is reported in the LAUS, and the number of establishments and total payroll at the industry-level is provided quarterly by the QCEW, and annually by the CBP. As noted earlier, the QWI is unique in that it distinguishes between average quarterly earnings for all employees and for new hires, which may be important for comparing the earnings of in-migrants (who are presumably new hires) with the earnings of those who stayed through the storm.

Clayton and Spletzer (2006) matched unemployment insurance earnings records to QCEW microdata to create “QCEW enhanced” earnings records that include the industry and location of the employer, in order to look at worker mobility before and after Katrina.

Structural Changes after the Storm

Short- and long-term changes in the local economy may generate immediate and long-term need for government response. Many labor market effects will adjust into new or old patterns over time; understanding the permanence of changes is critical to assessing public policy responses.

Whether and what types of jobs are being created and destroyed after the storm is an important research inquiry. For ACF policy purposes, it will also be important to assess who is employed in these new jobs, and who lost the jobs that were destroyed. Some of the studies in this section characterize a variety of worker characteristics, including whether workers are returned evacuees, Gulf Coast natives, or in-migrants. Other potential studies characterize who is working in what sectors of the local economy as it rebuilds.

An example of a particular sector which should be studied for its change over time is the construction industry. We do not know whether housing starts and construction in the Gulf Coast, which were slow right after the storm, have remained slow (consistent with the national slowdown) or have since accelerated with rebuilding. If they have accelerated, they could pose a continuing opportunity for in-migrants from declining local economies in other parts of the country. They could provide a particular opportunity for immigrant workers in the housing and construction trades, who have been severely hurt by the employment slowdown. If the families of some immigrant workers remain in their home countries, those workers would be more able to follow the jobs without barriers that face workers with families, such as the need for schools or other services. The example underscores the need for a longitudinal perspective on sectoral shifts that create or remove employment opportunities.

Study of Immediate and Long-Term Impacts on Sectoral Employment Using the ACS

The ACS Gulf Coast Area Data Profiles provide a breakdown of sectoral and occupational employment for January to August 2005, and September to December 2005 and capture short term shocks to various employment sectors in the months immediately following the storms. These are one-time special products and no microdata are available for further analysis. A long

term perspective on county level sectoral employment can be gained from analysis of later ACS samples.

Study of Immediate and Long-Term Impacts on Employment and Earnings Using the QCEW and QWI

The QCEW provides monthly county-level employment data for major industrial sectors, and quarterly county-level data on the number of establishments, firm size, and wages. Since QCEW data are updated regularly, a continuous picture of employment in the impacted counties and parishes by major industry can be constructed. Dolfman, Wasser, and Bergman (2007) use the QCEW to track employment and wage changes by sector from September 2005 to June 2006.

QWI data use the LEHD to produce average earnings and employment levels by major industry, plus average new hire earnings, job separations, and job creations on a quarterly basis. This is especially useful for disaster-impacted areas, where net changes in employment may mask large numbers of job separations in combination with a large number of job creations. The QWI can separate job destruction and job creation from net employment change.

Study of Sectoral Employment by Geography and In-Migrant Status Using the ACS

We noted the use of the 2004 and 2006 ACS data earlier, to study the income of residents in storm-impacted areas. The 2004 ACS did not sample in all areas, but it did cover Orleans, Jefferson, and East Baton Rouge parishes, so the 2004 ACS PUMS data can be compared with data for 2006 to assess the impact of Katrina on these selected areas. The PUMA-level estimates could be used to compare the penetration of in-migrants into the construction in the post-Katrina Gulf region with national patterns over the same period. Sectoral workforce analysis could also compare the characteristics of workers in growth sectors, particularly differences in the demographic composition by sector (e.g., racial and ethnic distribution, educational level, and nativity), which would be of particular interest in understanding the impact of job opportunities and potential competition between local African-Americans and new in-migrant workers.

Study of the Quality of Employment Available to Returning Evacuees Using the QWI

The QWI, which provides both new hire and average wages, by industry and county, could provide a valuable picture of relative loss or gain in job quality for evacuees who return or who resettle in new locations. Data on new hire wages, as well as on new hires, can provide a picture of where and in which industries labor demand was the strongest after the storm. It may also be useful to analyze new hire wages by age group, since older workers displaced by the storm may face additional challenges relocating in a competitive labor market with substantial numbers of prime age workers. Whether in-migrant workers are younger, and whether their wages are higher or lower than the pre-storm labor force are empirical questions important to answer.

After identifying which sectors witnessed the strongest growth in labor demand, estimates from the CPS can be used to determine whether these jobs were primarily filled by in-migrants, returning evacuees, or residents who stayed through the storm.

Changes in Income Due to TANF Work Requirements, and other Major Policy Changes

Income and employment potentially affect the use of UI, TANF and food stamps. Changes in employment affect the ability to meet TANF and FSP work requirements. Dislocations created by the storm may have affected marital separation and divorce, and access to child support. Other changes in family structure may affect available income and family responsibilities. Data from the Office of Child Support, which contains UI administrative data on employment, could be easier for ACF to access for cross-state analysis than state UI records.

Study of Implementation of TANF Work Requirements in Louisiana, Mississippi, and Texas

TANF benefits issued on an emergency basis after Katrina were not considered “assistance,” and recipients of these benefits were not subject to the states’ normal TANF work requirements. Louisiana, Mississippi, Texas, and other states may have also relaxed work requirements for families that were already receiving TANF benefits when Katrina hit. A limited inquiry into implementation of directives issued by these states to their local offices would be useful to learn how states implemented those rules changes. The monthly samples of TANF microdata that are reported by the states to ACF would reveal changes in caseload size, employment and income by family size, and perhaps other variables of interest (e.g., age of children, receipt of other public benefits such as food stamps) pre- and post-storm.

This analysis presents several challenges. First, abrupt swings in caseload size and benefit amounts from two or three years prior to the storm to one to six months following the storm could be attributable to the storm alone or to changes in program rules around work in response to the storm. Distinguishing the two effects would require estimations of income and employment patterns of recipients before the storm, and since the caseload increases in host communities such as Houston would comprise many new in-migrants from the storm, comparisons of pre-storm caseload characteristics and post-storm characteristics would be of vastly different populations. Without longitudinal data the analysis is quite compromised.

Second, assessing the effects of the storm in large states, such as Texas, requires focused analysis of areas of impact, such as Houston. The TANF microdata samples are not necessarily designed to be representative at the substate level, even for large communities as big as Houston or New Orleans. If states are willing to make complete state caseload data available, substate analysis would be possible.

Third, the utility of such analysis would depend on identification of families affected by Katrina (which may be possible in some states) and tracking the same families over time, or as they moved from one state to another—in particular if they returned home. Cross-state tracking would only be possible with the willingness and involvement of agency staff to perform record matching using identifying information unavailable to researchers, and the advantages to the states of such an effort is difficult to foresee. Considering these difficulties, analysis of employment, income, and program receipt, from other sources discussed above, appears to be the more practical approach.

Study of the Income Effects of Key Federal Policies

Federal policy proposals aimed at Gulf Coast recovery may have profound impacts on the income and employment prospects of TANF recipients or other low-income families, in the areas of direct impact or in the communities to which they relocate. Recent discussions, for example, of a major buyout by the Army Corps of Engineers of Mississippi Gulf Coast properties as an efficient means to rebuild could result in job creation benefiting current TANF recipients; alternatively it could result in major displacement of low-income families who either are currently receiving TANF or are forced onto TANF by the displacement. Further, Gulf Coast populations, particularly minority and low-income families, have strong multiple intergenerational ties that have been maintained historically and account for extended families remaining in close proximity and returning to family and homesteads even after extended breaks. A federal buyout could break those ties for the second time—that is, families that been displaced by the hurricanes but had begun to rebuild would be displaced again by a buyout, destroying the system of family and neighborhood supports that have kept many out of the public welfare system.

ACF could undertake the equivalent of environmental impact studies, assessing the specific effects on low-income families of new policy proposals for Gulf Coast recovery. In this case they would be studies of the impact of selected proposals on the social ecology of communities, including employment and unemployment, housing dislocation, and disruption of social supports of low-income families. Such studies would model the effects of these policies on the income and employment of these populations using the post-storm income and employment estimates detailed above as baseline and simulating changes in housing, employment by sector and use of TANF and other social welfare supports that would ensue from specific policy changes.

The LEHD geocoded address list can be used to identify businesses at the neighborhood level and estimate post-storm performance and the effects of further disruption from new policies. To the extent that large employers are also localized (e.g., port/fishing employers and casinos, which operate only in discrete areas), state data from the BLS Mass Layoff Statistics can also be used to provide a picture of employment shifts at the local or county level. These data, however, do not capture employment in the informal economy.

V. STUDYING PROGRAM NEEDS FOR GOVERNMENTAL AND NONGOVERNMENTAL SUPPORT

RESEARCH QUESTIONS: HOW ARE THE NEEDS FOR ACF SERVICES CHANGING AS A RESULT OF THE STORM?

Government Supports

1. Who received what ACF services before the storm (by program, income, race and ethnicity, age, immigration status, other)?
2. How did migration and employment shifts affect the need for TANF, child support, child welfare or other services to address domestic violence, Head Start, child care subsidies, and other relevant block grant-funded services, in the areas of impact and in host communities?
3. How did these shifts affect the need for other assistance (including food stamps, unemployment insurance, Medicaid, SSI, housing assistance, legal assistance, workforce investment services), in the areas of impact and in host communities?
4. What were migration, employment, and other storm-related effects on marriage, parenting, health and behavioral health of parents and children?
5. How well could current recipients, and new applicants, access assistance (in the areas of impact and in host communities)? How well are needed services linked (e.g., housing, social services, schooling, child care, health care)?
6. What hardships go unaddressed?

Nongovernmental Supports

7. What services (disaster relief, social services, informal support) did ACF service populations seek or receive from faith-based, community-based, and national service organizations during and after Hurricane Katrina? What services are they getting now?
8. What help did ACF service populations seek or receive from family, friends, and other community members? What help are they getting now?
9. How did patterns of use compare before and after the storm?
10. Did Hurricane Katrina enhance or inhibit the ability of faith-based, community-based, and national service organizations, or family and friends, to provide services and other support?

The research questions above revolve around measures of need for and access to assistance. As in earlier chapters, we consolidate the questions into three broad categories: need for ACF, other governmental, and nongovernmental services before and after the storm; eligibility for services and service penetration to those potentially eligible (questions 1, 2, 3 and 5); and access to services). Access has many dimensions, some of which are addressed here and some in greater detail in the next chapter. The distinction between governmental and nongovernmental supports is less clean than would be suggested by the questions. Data that measure service receipt of governmental supports reflect both those provided by the government directly and others

provided by nongovernmental organizations with public funds. As discussed below, more detailed information about nongovernmental supports, reflected in questions 7 through 10, is generally not available from existing datasets.

Research projects to address the match between needs and assistance require data that: identify the population affected by Katrina; measure need and eligibility within that population; and assess whether the population received assistance or had access to it, wherever they were living after the storm.

The large national surveys typically have good economic and demographic information, but receipt of means-tested benefits is typically underreported. More limited data collection efforts designed to study Katrina's effects identify the relevant populations and their needs well, but information on income and program participation is often spotty. Administrative data tell us who received benefits and how much, with some information about characteristics, but less than the national surveys provide. Some administrative data, such as those data collected to describe how CSBG or SSBG funds are spent, contains very limited information on client characteristics, and no microdata on actual clients. Even where detailed data are collected on clients and facilities, it is not always possible to identify Katrina evacuees in administrative data, although before and after comparisons can usually be done at the state or parish/county level. In view of these limitations, and others that apply to specific data sets, a research strategy using multiple measures and data sources seems best.

Table 5.1 Study Options: Program Needs

Measures of Need

- **Study of Post-Katrina Economic Needs (CPS, SIPP, PSID, ACS, Hurricane Katrina Community Advisory Group surveys)**
- Study of Post-Katrina Social and Psychological Needs (PSID, Hurricane Katrina Community Advisory Group)
- Study of Impact on Child Welfare (administrative data)

Estimating Potential Eligibility for ACF Services

- **Microsimulation of Program Eligibility (TRIM3/CPS, SIPP, PSID, ACS)**

Assessing Access to Program Supports

- Study of Impact of Katrina on Patterns of TANF Receipt (federal administrative data)
- Studies of Impact of Katrina on Families Receiving TANF (state administrative data)
- Analyses of Child Care Availability (child care market surveys, SSBG administrative data)
- Services Provided by Faith- and Community-Based Nonprofits (Urban Institute)

Recommended options in **bold**.

STUDY OPTIONS

Measures of Need

Low-income populations affected by Katrina had needs before the storm, and benefits and services that could help were not always available (Zedlewski 2006). The storm both broadened and deepened those needs by temporarily or permanently taking away homes and jobs, and disrupting existing arrangements for services for those who already relied on some form of assistance. Katrina also created wholly new populations of need because of the devastation.

The storm may have also reduced the need for services among evacuees who settled in new locations with better labor markets and better benefit and service systems. At least one analysis, however, suggests that hopes that evacuees would actually be better off in better labor markets to which they had relocated, where they could work more or earn higher wages, have not been fulfilled (Vigdor 2007).

Study of Post-Katrina Economic Needs

Using the Katrina questions from the monthly CPS samples to identify individuals who returned within the first year, one can estimate how many of New Orleans's pre-Katrina poor have returned but are unable to compete for jobs in the new labor market, and how many are now outside the city or the state. Using data from subsequent samples, described below, one can assess whether relocation of low-wage workers from New Orleans to Houston, Atlanta, or other metropolitan host communities had a discernible downward effect on native wages and employment in those areas; whether the distribution of low-income families with working parents and young children changed in host communities since August 2005; and whether there have been changes in marriage and divorce rates, resulting in reduced household income and need for child support.

Data from the March supplement of the CPS provide annual snapshots, with detailed information on income and employment. Comparisons of data from the March 2004 and 2005 surveys with data from the March 2006 and 2007 surveys, would bracket the pre-Katrina and post-Katrina years, and provide detailed profiles of population changes for the New Orleans and Houston metropolitan areas, for example, to assess the storm's impact on economic needs.

A portion of the March 2006 data can be matched with data from the January 2006 CPS, which included both a displaced worker supplement and Katrina questions. The displaced worker supplement offers the opportunity to assess employment service needs in storm impacted areas, as well as individuals affected by Katrina. The portion of the March 2006 data that are identified as Katrina evacuees can also be matched with data from the March 2007 survey, which included new variables that identify all parent-child relationships and domestic partnerships within multifamily or multigenerational households. These variables can illuminate our understanding of economic needs by more accurately connecting children with the parents responsible for their well-being.

The ACS is cross-sectional, with a new sample drawn each month. Individual cases cannot be followed, but before and after comparisons can be drawn for particular areas. The Census Bureau itself compared data for January-August 2005 with data for September-December 2005.¹⁷ Frey, Singer, and Park (2007) used ACS migration data to compare residence in 2006 with residence one year earlier. The absence of a “month interviewed” variable in the public use ACS microdata limits the usefulness of these data for studying Katrina-related needs, as it is not possible to tell whether 2005 current residence information, or 2006 prior residence information refers to conditions before or after Katrina. ACF, however, might be able to obtain access to the restricted ACS data on interview month. Cleaner before and after comparisons would then be possible, and population changes could be tracked month-by-month, on a larger scale and with more geographic detail than would be possible with other data sources.

The SIPP provides some of the same variables as the March CPS, plus better information on assets, on a month-by-month basis. However, sample sizes are smaller in the SIPP than in the CPS, and the SIPP cannot be used below the state level. Using the national sample to study the subset of individuals who were affected by Katrina, identified through the Katrina questions, would probably be a good way to study needs created by the storm. The PSID, which is also longitudinal, can provide a longer-term picture of family structure, employment, income, and assets. Small sample sizes will place even greater limitations than those in the SIPP on the possibilities for analysis of subgroups within the population affected by Katrina.

Study of Post-Katrina Social and Psychological Needs

A study of the social and psychological needs of populations in the areas of impact and host communities is equally important, but must await data that is not yet available. Data from the PSID and the Hurricane Katrina Community Advisory Group (CAG) follow-up will make it possible to study the social and psychological needs that child welfare or youth programs administered by ACF or other HHS agencies address. The CAG data will provide particularly good information about the physical and mental health of children displaced by Katrina. Responses to a catch-all question about other unmet needs in the CAG follow-up may also have policy implications. In addition, the CAG collected oral histories from Katrina evacuees; content analysis of these could be used to understand how the evacuees themselves have perceived their needs.

In addition to behavioral health effects of the storm, the research questions include effects of the storm on marriage (for example, couple relationships, communication, and stability) and effects on parenting (for example, parent-child relationships, parental concerns about children, coping behaviors, and disciplinary actions). Neither the PSID nor the CAG include reported effects of separation, or stress on marriages and parenting, although ACF should be alert to new qualitative data that may be obtained in special surveys by universities or other researchers.

¹⁷ The resulting tables may be downloaded from http://www.census.gov/acs/www/Products/Profiles/gulf_coast/about.htm.

Study of Impact of Katrina on Patterns of TANF Receipt

Understanding how and when to use TANF and SSP-MOE data reports to their best advantage in this and future disasters should be of primary importance to ACF. Aggregate administrative data would provide counts of TANF or SSP-MOE families and case closures in each state (as well as some breakdowns, such as single-parent and two-parent families); the micro-level data would provide detailed recipient characteristics. The TANF and SSP-MOE reports also include counts of receipt of other services funded with TANF dollars.

The TANF and SSP-MOE microdata could be used to analyze: the characteristics of the TANF caseload before and after Hurricane Katrina in Louisiana, Mississippi, and Texas, and in selected counties of those states; whether participants received the same TANF services before and after Katrina; and whether the reasons for leaving TANF changed after the hurricane.

State TANF administrative data include: dates of entry and exit; work history; interruptions or terminations due to sanctions or time limits; and receipt of child care, child support, food stamps, and Medicaid. The fields that are included can be used to track cases that came onto the rolls after Katrina and compare their characteristics with those of the pre-Katrina caseload. Efforts could be made to match cases known to have moved out of the state, or who were unreachable at redetermination, with new applications in Texas and other major recipient states. Louisiana collects extensive aggregate data, by location and month, on receipt and processing of TANF, food stamps, and child care. Comparisons over time, between locations (those devastated, hosting, and relatively unaffected), and between programs, can be used to isolate the impact of Katrina on Louisiana's social service systems, as discussed in chapter VI. Louisiana, it should be noted, does not collect family-level information on TANF benefits other than cash assistance, such as employment services or short-term disaster aid.

Administrative data from Louisiana and Mississippi can also potentially provide a longitudinal record for each TANF family. This is especially useful for those states because their TANF programs had become sufficiently small before Katrina hit that the national surveys are unlikely to provide an adequate sample of cases for analysis of participating families at the time of the storm.

Study of Impact on Child Welfare

Another question of primary importance to ACF is whether family disruptions and dislocations resulting from the storm have created new child welfare issues. There are three areas of concern for possible future inquiry. One, there has been considerable anecdotal comment but little rigorous research on the status of children in the child welfare system before the storm who may be experiencing new problems as a result of the storm. Two, there is speculation as to whether there were increases in reports of abuse or neglect and changes in the types of maltreatment reported in areas affected by the storm—both in those areas directly affected and those communities that housed large numbers of dislocated families. Third, as at-risk youth reportedly flocked to New Orleans after the storm, many of these youth may have become involved in the child welfare system if they had not been prior to the storm.

One population of significant concern is children who were in the child welfare system prior to the storm—either those receiving in-home services with their biological parents or those in foster care—who were dislocated as a result of the storm. News reports after the storm indicated that Louisiana lost track of its foster children and foster parents, which required a major tracking effort to attempt to locate all the parents and children. While the Louisiana and Mississippi data systems may not be optimal, researchers could use the lists of the children involved in the child welfare system prior to the storm in affected counties: if first names, last names, and birth dates are available, as is likely, these cases could be matched against the caseloads of nearby states, such as Texas, Alabama, and Florida. Depending on the accessibility of microdata in those states, researchers could request for matched cases, reasons the child came into care, current placement status, and the types of services the child is receiving. As noted in chapter II, with approval from state and contractor IRBs, researchers have obtained confidential state administrative data for other studies, suggesting that this type of analysis would be feasible. Data from the Southern Christian Services for Children survey of service providers, foster parents, juvenile court judges, and other Mississippi stakeholders may also be useful for analysis of child welfare in that state.

To understand overall changes in child welfare caseloads after the storm, administrative data could be assessed over time for different parishes/counties/regions affected by the storm, especially areas that housed significant numbers of dislocated families. Researchers might examine whether there were significant changes in the number of children reported for abuse or neglect, whether there were shifts in the types of maltreatment reported, and whether the numbers of children entering foster care increased. For example, types of maltreatment reported might reflect higher levels of parental stress or more neglect as a result of less structured environments or a lack of resources. New data collection, through interviews or focus groups with caseworkers in areas that housed dislocated families, could provide more detailed insights into the types of new cases they were seen as a result of the storm. Without additional qualitative data, there would be no way of attributing changes expressed in the administrative data to the storm.

Another population of concern, for New Orleans in particular, is the apparent increase in disconnected youth who are old enough to rebel effectively against the conditions of relocation and who may, because of parental absence or for other reasons, have no supervision. Anecdotal reports and news coverage suggest that many young people returned to the city without parents or older relatives, some winding up in the juvenile justice system, and others in the child welfare system. Case reviews of child welfare records in New Orleans after the storm would reveal the types of youth that were served by the child welfare system during this time and the services they were being offered. Because the agency was not fully operational for some time after the storm, the numbers of new cases one to two years after Katrina might be amenable for a case review process. It would also be important to know to what extent these youth were in the child welfare system prior to the storm, for example, living in independent living programs or group facilities where their connections to a caregiver were severed. Using the sample of children identified in the child welfare system prior to the storm, as described above, a sample of youth could be extracted using dates of birth, to assess whether these cases were active after the storm or had re-entered the system as new cases. Individual case record reviews of such cases could shed important light on the experiences of these youth during and after the storm and the services needed to support them.

Estimating Eligibility and Service Penetration, for ACF Services

Eligibility plays a crucial intervening role between need and receipt of services. Eligibility criteria differ by program and state; those differences become particularly important in the context of a disaster and large-scale moves across state boundaries. One common eligibility criterion is income, with eligibility limits often defined in terms of the federal poverty guidelines. Citizenship status is also relevant; undocumented immigrants are barred from means-tested programs such as TANF, Food Stamps, and Medicaid, and recent legal immigrants are also subject to restrictions. Rules about age, assets, disability status, family composition, and employment status may also differ by state.

Eligibility is often also dependent on showing the proper documentation of need, and that documentation can become inaccessible in an emergency. Some states relaxed their usual eligibility criteria for certain programs or accepted less documentation of need than would be required under normal circumstances, in order to serve the people affected by Katrina. Others did not, but we know little about how states adapted to the needs of evacuees who sought help in their jurisdictions.

Estimating the gap between eligibility and service receipt is one way to measure unmet need. Some portion of the pre-Katrina population was already eligible for, and possibly receiving, benefits from ACF programs such as TANF, CCDF, or child support enforcement, as well as non-ACF supports such as food stamps, Medicaid, and SSI. The estimated share of the population of interest that is eligible and not receiving services, as measured by program participation studies such as for TANF discussed above, is an indication of unmet need among that population.

Microsimulation of Program Eligibility for Katrina Evacuees and Returnees

Eligibility for ACF-funded services and other assistance can be simulated using the CPS, ACS, SIPP or PSID, all of which contain sufficient information on household income and composition to estimate the extent to which the people displaced by Katrina were eligible under general criteria for specific benefits and services before the storm and afterwards, from September 2005 to today. Normal prerequisites for program eligibility and required documentation that were waived after the storm would have to be established to make sense of measured effects. The study would provide guidance about the extent to which normal program criteria will be adequate in the aftermath of future disasters, as well as the extent to which the population affected by Katrina is eligible now. Eligibility estimates from the household data can be combined with enrollment figures from administrative data to estimate takeup rates, which indicate how much of the officially recognized need programs are meeting.

The TRIM3 microsimulation model, maintained by the Urban Institute with primary support from the HHS Office of the Assistant Secretary for Planning and Evaluation, applies state and national eligibility criteria to data from the March CPS. The model covers TANF, child care, and child support, as well as housing subsidies, SSI, the Food Stamp Program, Medicaid, and SCHIP. Federal and state income taxes, including EITCs, are also modeled. A study using TRIM3 could

thus give ACF information about eligibility for a broad range of programs addressing the needs of its service populations. Data from the March 2006 Supplement includes the Katrina variables, so Katrina evacuees can be identified for study, and an identifiable portion of those identified as Katrina evacuees will also be in the March 2007 data. The purpose of these simulations would be to understand the extent to which the continuing needs of the Katrina cohort are being addressed by these programs, and the extent to which emergency assistance led to long-term receipt of means-tested benefits. The simulations would also speak to the match between needs and supports in future disasters.

Relatively simple models of program eligibility could also be constructed using data from the SIPP, PSID, or ACS, each of which has its advantages and disadvantages compared with the CPS data used by TRIM3. Most of the Katrina-specific datasets have much less detailed income information than the national surveys, so it would be more difficult to use data from these sources to study eligibility.

Assessing Access to Program Supports

Access to services in the context of disaster is affected by many factors: the ability to address eligibility, outreach, and transfer across jurisdictions; the perceptions of availability by potential clients, who may be poorly informed about programs and services in new locations, or disinclined to seek needed help because they expect that they will be found ineligible or will be living somewhere else soon; the perceptions and inclinations of service providers or line workers to respond to new or extraordinary demands on already stressed systems; and the adequacy of facilities and staff, which may be severely disrupted in a disaster.

We addressed the first—factors that affect eligibility—in discussions above. With respect to the last, within the areas that received the brunt of the storm, many of the welfare offices, child care centers, schools, and hospitals were damaged or closed, some with little chance of reopening in the foreseeable future. Outside of the areas of immediate impact, communities receiving large numbers of evacuees were not often equipped to handle the influx, or to reach people living in temporary housing, or without good means of transportation. Assessing the impact of Katrina on program resources, including facilities and staff, is addressed in chapter VI.

Understanding perceptions of clients or line workers and their behaviors, with for example to outreach and case management to effect referrals and transfers to ensure service receipt, would require new, qualitative research. We include one study, below, to illustrate an approach to assessing the match between need and service availability of. We choose the example in child care because child care is key to low-income families' employment, and to young children's need for structured environments and peer interaction as a component of trauma recovery. Also, because of the available of data it would permit several analyses of the extent and impact of service regeneration.

Match between Child Care Availability and Evacuees' Needs

As noted, this study addresses data that could be used to analyze the match between child care need and capacity. The damage to or destruction of sites where child care was provided, and the out-migration of child care workers, reduced the supply of child care in New Orleans and other directly affected areas. Communities receiving large numbers of evacuees, such as Baton Rouge and Houston, may have faced increased demand, with no increase in service supply. Children living in transitional housing and large trailer FEMA parks, whose parents are now unemployed and no longer using child care, may have particular need for structured peer interaction, and professional child care and other children's services have become especially important and often lacking. Yet Katrina could have also reduced the demand for child care in the areas of heaviest impact, as families left these areas and relocated their child care needs.

Understanding the chicken-and-egg relationship of inadequate supply and displaced demand requires an integration of service availability with population studies in order to understand the magnitude of resettlement of families with children over time, and the relationship between intent to return and availability of services. An analysis of the effect of child care availability on the employment status of evacuees could be conducted using the data on location and employment of evacuees (as used in the studies discussed in chapters III and IV) and data on the cost and location of child care facilities for comparable time frames post-Katrina.

Child care is provided through a large number of facilities that are geographically dispersed, and there are data available on number, type and capacity of these facilities over time; analyses of loss and regeneration of services using these data are discussed in chapter VI. In addition, child care market surveys for Louisiana, Mississippi, and Texas provide detailed information about the changes in costs and other characteristics resulting from Katrina.

Several analyses are possible to establish the quality, type (center or family provider), and location of child care for purposes of the analysis proposed here. Pre- and post-Katrina information on child care services is available in the child care market surveys for the damaged areas, host areas, and areas within these states that were relatively unaffected by the storm and the migration it produced. The 2007 Louisiana child care market survey includes some of these comparisons. For example, the number of centers eligible for subsidies statewide decreased by 11.6 percent between spring of 2005 and the spring of 2007 (Care Solutions Inc. 2007). Many more detailed comparisons can be drawn, summarizing indicators of service provision by center type and age group served.

Analysis of SSBG funds using that program's administrative data can show where child care capacity was rebuilt. Louisiana spent \$14 million of its \$205 million SSBG grant on child care. These funds, unlike those from CCDF, could be used for the construction of child care facilities. A comparison of the utilization of SSBG money for new construction with the loss of facilities reported in the CCDF would give some indication of the extent to which Louisiana addressed the deficit in child care facilities by parish or smaller areas. Mapping the location of child care, transportation, and other services would be a good way to explore the extent to which access to these work supports was destroyed in the storm and how much has been restored, to date.

Services Provided by Faith- and Community-Based Nonprofits

The last research question addresses what sorts of services were sought and received from nongovernmental sources. Assessing the extent to which Katrina evacuees were helped by nongovernmental supports is considerably more problematic than for public providers. The CAG includes many questions about perceptions of need, amount and type of help received, and the behavioral health issues of parents and children. The baseline survey results released so far, however, do not identify service providers or distinguish between governmental and nongovernmental sources. The SIPP measures help from public programs, which would include nongovernmental providers that deliver services under those programs, but that distinction would not be evident in the survey. Our earlier literature review, suggest that there has been little systematic research on the use of nongovernmental supports since the storm. We mention one study that is underway concerning the help provided in the immediate aftermath of Katrina by faith-based and community nonprofit organizations, and suggest that this research might be continued, though with new data collection.

The Urban Institute is currently conducting a study for HHS/ASPE of faith- and community-based organizations (FBCOs) in Louisiana, Mississippi and the Houston metropolitan area that provided disaster relief services during and immediately after Hurricanes Katrina and Rita. That study, to be completed by fall 2008, will provide some measure of how many and what types of FBCOs provided services and of what sort, in the weeks and months following the storms. The telephone survey provides a broad measure of what services were provided and whether those services were new to the organization. In-depth field-based case studies will provide detailed profiles of how FBCOs interacted with each other and with public agencies to provide services. Analysis of these data will also provide some indication of the extent to which the storm hindered the ability of FBCOs to provide or continue to provide services, or facilitated the ability to respond through the development of new alliances, new networks, and new types of services.

Many FBCOs have continued their Katrina relief efforts in the recovery phase that is still underway. It may be useful to replicate the Urban Institute study to assess the efforts of FBCOs over time, in order to integrate information about their activities with information about the activities of publicly-funded programs and the needs of the people using either type of help.

VI. STUDYING THE EFFECTS OF KATRINA ON ACF PROGRAMS

RESEARCH QUESTIONS: HOW DID THE STORM AFFECT ACF PROGRAMS THEMSELVES?

1. What were administrative costs and service levels prior to the storm?
2. How were caseloads, benefit amounts, program operations (in TANF, child support, child welfare services, Head Start, child care subsidies, CSBG-funded services) affected?
3. How were program inter-relationships between ACF programs and FSP, WIA, unemployment insurance, Medicaid, SSI, housing assistance programs, and others affected?
4. What were the effects of the storm on facilities, staffing and recordkeeping at the service delivery level?
5. How did relationships between nongovernmental and governmental systems facilitate or hinder support?
6. How did nongovernmental supports affect participation in TANF, other ACF programs, or employment?

Katrina affected ACF programs and what they could do to deliver services. As in earlier chapters, we group the questions above into two broad categories: effects on caseloads, benefits, and service levels; and effects on facilities, basic recordkeeping, data and management. It is important to note that Katrina's effects could have been both negative and positive—on the one hand, disrupting or destroying program operations, and on the other, providing a catalyst for new federal funding, new guidelines, and new relationships and networks within state and local human service systems.

ACF and many of its constituent programs issued specific guidelines in response to Katrina to help impacted and receiving states sustain their programs and assist children and families affected by the storm. Some instructions reminded states of the flexibility available in law or regulation that would facilitate streamlined application procedures and expedited delivery of services. States were also offered guidance about ways to fund services for evacuees, through regular allocations or special disaster relief appropriations. How states responded to those administrative guidelines or emergency appropriations, and therefore how federal agencies might be expected to influence state and local behavior, is important to know for future disasters.

A particular note on program data:

Administrative data on total caseload and expenditures for ACF programs are the foundation of program monitoring by federal agencies and the Congress, and generally readily publicly accessible, by state and over time. The availability of basic caseload and expenditure data below state level, which is most important in studying the effects of Katrina, is more problematic. In the context of Hurricane Katrina, the chaos and physical destruction of records compound the problem. Further, while communities such as Houston received large numbers of evacuees, it

might be harder to distinguish the Katrina effect from the usual noise in administrative data from other states or counties that received relatively few evacuees.

Micro-level data on individual participants is available for some programs but may present different challenges. How cases are defined, whether they are surrogates for individuals, whether those cases or individuals can be tracked over time, and whether they are accessible for research purposes, varies from program to program. Also, data published on some ACF programs is considered final and usable for research purposes only after substantial time lags.

A broader issue is that when it comes to tracking the changes that Katrina may have caused in day-to-day operations, for example, disruption of services or new approaches to collaboration, only some of these changes are likely to be observable in caseload and expenditure data that are reported to the federal funding agency or the Congress. Some may be observable in administrative data collected by states or counties that illuminate changes in service delivery, budgeting, cost allocations, staffing and other administrative arrangements. How much data are readily accessible in state data systems is extremely variable.

In addition to administrative data, there are several other options for studying change, for example, inventorying the numbers of providers and types of services rendered over time. We have reviewed a variety of ways to use administrative data and other publicly accessible inventories of services and providers to describe the human service system pre- and post-storm.

Unlike the questions in prior sections in this report, however, many of the research questions about program effects cannot be answered with existing data and would require the development of new data sources. For example, changes in line worker procedures to respond to emergency demand, reorganization, and staffing rearrangements caused by the storm, new relationships forged as a result of the storm, and new procedures for management and service delivery, can be known only through new research. Much of that research would be qualitative, exploring program operations from service delivery on the ground, to budgeting and policy approaches, and relationships across program boundaries and governmental jurisdictions. New data collection would be important to learn how effectively states can adapt to emergency situations, use the flexibility granted them by Congress or the executive branch, work across state and program boundaries to hand off or receive program participants, and recoup their expenses.

We consider data available in programs administered by ACF, and data from other sources. As with earlier sections, the emphasis is on research that can be accomplished with existing datasets. But because of the limitations in those data and the rationale for new research noted above, we offer some ideas for new data collection in our recommendations in the final chapter.

Table 6.1. Study Options: Program Effects

Impact on caseloads, benefits, and service levels

- Study of use of Contingency Funds (administrative data)
- **Study of use of Loan Funds** (administrative data, **Louisiana Family Recovery Corps** data)
- Study of responses to federal guidance (administrative data)
- Changes in services for runaway and homeless youth (administrative data)

Effects on facilities, basic recordkeeping, and larger data and management systems

- **Study of impact on facilities (CCDF, SSBG, and Head Start data, NCCS database)**
- Study of impact on infrastructure (licensing data, Gulf Gov Reports)

STUDY OPTIONS

Effects on caseloads, benefits and service levels

There are at least three levels of analysis necessary to understand the effects of the storm on ACF programs. First, the storm created new demand for services from individuals and families who had not previously looked for support. Second, it altered the geographic distribution of needs, as some stayed, evacuated, relocated, or returned. Third, it affected the supply of services by destroying many of the physical facilities, records, and management systems that allow programs to process applications, track clients and caseloads, and deliver services. Programs also lost staff members, initially or permanently, as they were affected by the storm just as their customers were. The loss of facilities and infrastructure no doubt affected the ability of individuals to access services, which in turn confounds the analysis of program changes, as measured by changes in caseload, service levels and administrative costs.

Several ACF programs received additional funding to address the needs of evacuees from the disaster. Alabama, Florida, Louisiana and Mississippi were authorized \$27.25 million by ACF for emergency energy assistance, which could be used for repair or reconnection of heating and cooling, transportation to shelters, and other purposes related to energy assistance. ACF made available \$15 million to Head Start and Early Head Start grantees to enable them to provide services to evacuees for 30 days. Waivers to relax limitations on assistance, such as those that lifted time limitations to certain kinds of refugee assistance, might have changed the way funds were dispersed.

Under the TANF Emergency Response and Recovery Act of 2005, any state could request contingency funding for short-term, non-recurrent cash benefits to families who evacuated from Alabama, Florida, Louisiana or Mississippi as a result of Hurricane Katrina. Reimbursement was limited to 20 percent of the state's annual block grant, to be spent by August 21, 2006.¹⁸

¹⁸ States could be reimbursed one month at a time—1/12th of the total or shift spending across months as long as the total claimed as of August 21, 2006, was within the overall cap.

Payments under the Contingency Fund were not subject to matching requirements and families assisted by these funds were exempt from work requirements and time limits, and were not counted against the state's work participation rate. The Contingency Fund gave states more flexibility in determining the need for benefits and services, for example by relaxing rules for documentation of eligibility, and allowing states to continue assistance to units when children or caretaker relatives were absent from the unit.

Under the same 2005 Act, Alabama, Louisiana, and Mississippi received loans equivalent to a flat 20 percent increase in their TANF block grant funds for FY 2006, with no penalties for failure to repay and no specific requirements for reimbursement. Mississippi and Alabama used the funds principally for one-time cash payments, whereas Louisiana used the funds for contractor services, such as mental health services, and for other assistance to evacuees who moved from the areas of immediate impact but remained in the state (GAO 2007). The \$32 million that the state received in TANF emergency loan funds was administered through the Louisiana Family Recovery Corps (LFRF), a nonprofit partnership between the state and a long list of nonprofit organizations who might deliver a wide range of human services to aid in recovery. LFRF is also administering \$18 million in SSBG funds. Services delivered through the emergency funds have been subcontracted to Catholic Charities, Volunteers of America, and Knowledge Works. Because Louisiana chose to spend the loan funds on services rather than cash assistance, the state was given until FY 2007 to spend them, though the funds had to be obligated in FY 2006.

Use of Contingency Funds

An analysis of the effects of increased short-term funding and the conditions under which it was provided would address three important issues related to disaster response: did more or different individuals (who would not have been served under regular TANF rules) get benefits and services; did relaxed rules get them to the right people; and, were the effects of increased funding and relaxed rules offset by lack of access to services (e.g., child care, transportation, job search assistance, other social services)?

Twenty states requested reimbursement under the Contingency Fund. Those states were largely in the Gulf Region but also in other parts of the country.¹⁹ Because the contingency funds were only to serve evacuees from the Gulf states, Louisiana chose not to use them. Reporting requirements to ACF for each of the 20 states included, as with other non-recurring funds, the description of the benefits provided (e.g., amount, eligibility criteria). Several analyses would be appropriate to understand states' uses of the additional funding and rules changes.

To assess the increase in Katrina-related cases that a state served because of the availability of new funds, monthly payments made for nonrecurring benefits prior to Katrina (FY 2003, 2004 and the first eleven months of 2005) would provide a baseline to compare with those made in FY 2006—the total of regular nonrecurring “non-assistance” plus the additional requested reimbursement. Reporting requirements would indicate changes in both levels and types of

¹⁹ The states requesting reimbursement were Alabama, Arizona, Arkansas, Colorado, Florida, Georgia, Indiana, Maryland, Michigan, Minnesota, Mississippi, Nebraska, Nevada, New Jersey, New York, Rhode Island, Texas, Utah, Virginia, and Wisconsin.

services. If the numbers decreased in regular nonrecurring “non-assistance” for FY 2006, it could also indicate a substitution effect because states took advantage of the more relaxed funds available under the Contingency Fund compared to regular block grant funds.

It would also be useful to know what the emergency funds were used for. Under TANF, “non-recurring assistance” or so-called diversion payments, are used to help families address short-term needs in order to avoid coming on to TANF. Those payments can be direct cash or they can pay for services. States may retain details in their microdata that would suggest whether these funds created access to housing, jobs, or services. Similarly, it would be useful to know the types of families served by the Contingency Fund, to understand whether the flexibility extended assistance to dislocated families who would otherwise not have been assisted (for example, families with absent children, or an absent caretaker relative), and the number of families who self-declared income eligibility. The numbers of families with short-term absence of children or caretakers might also provide some indication of family separation created by the storm. The distribution of families that received assistance by age, race, and ethnicity should also be assessed and compared with pre-Katrina patterns. Although the range of differences will be narrower than for other programs that received additional emergency funding, it will be useful to learn whether relaxed rules and emergency conditions bring more working poor or newly poor into the system, for example and whether other demographic differences are apparent.

Use of Loan Funds

It would be important to compare cash and non-cash assistance pre- and post- Katrina for the three states that received the special increase in block grant funds and, importantly, to compare spending for other services, including contributions to CCDF, SSBG block grants, and for direct services (e.g., transportation, other employment-related services, mental health services).²⁰ One question is whether the Loan Fund made services accessible where they would not otherwise have been available. For example, did the Loan Fund make services more available to evacuees relocated to the FEMA trailer parks and rural areas? (One challenge in these settings was that children and families in greater need for human services had, at least initially, limited to no services on site and were largely isolated from existing systems that could provide health and mental health services, family counseling, supervised recreation, job search services, and transportation to jobs.) A similar research question is whether the Loan Fund has made services more accessible to families who have resettled or returned to new or rebuilt housing in areas severely affected by Katrina (such as the Lower Ninth Ward in New Orleans), which might be as isolated as the trailer parks from retail services, public services, and social service infrastructure.

As discussed in chapter II and referenced above, each state would have financial and caseload information at the county level, office level, or at both, as well as at the state level. Each state has

²⁰ We note that Alabama and Mississippi received both Contingency and Loan Funds. For these two states, the analysis of changes in benefits and services pre- and post-storm might attempt to distinguish expenditures for short-term non-recurring funds using Contingency Funds and changes for the same benefits and services made under the TANF block grant.

microdata on its entire caseload, even if only a sample of the case records are made available to the federal government—and maintains information on the same family across time, rather than only in a “snapshot” of time. Depending on the state’s interest in outside research on its caseload and the ease with which it can create masked data extracts, state administrative data are a source for longitudinal study of families receiving assistance, which might be particularly useful for understanding the status of families affected by Katrina in the areas of impact and of those who relocated to major host communities, such as Houston.

The Louisiana Family Recovery Corps (LFRC) has constructed a completely automated system with real-time data entry for every family who received services with the \$32 million in Loan Funds. The system contains data on demographics, pre-storm residence, post-storm location of displacement, needs assessment components, and type and time of service. Data are by case number unique to the LFRC and accessible for research purposes without masking on all 80,000 cases. The data are useful for a variety of analyses about who was served, with what services; university researchers have already been granted access. Substate analysis, including micro-level analysis of TANF case addresses and of recipients of non-TANF services, particularly if combined with facilities or service mapping, would suggest spatial disparities in the ability to access services.

Another important question is how emergency services and emergency response systems coexist and interact with regular programming. The Loan Fund services administered by the LFRC were delivered on an emergency basis, separate from the regular TANF program, to any family requesting assistance from the 26 parishes declared by FEMA to be directly impacted areas. All families were presumed to be jobless and therefore eligible for services. Not all parts of all 26 parishes were devastated. How the two systems interacted in areas in which both were operating, whether families may have moved from TANF to LFRC emergency services because of more relaxed eligibility and documentation requirements, and whether services were more easily accessible under the emergency rubric than the regular system are important questions. An analysis of the types of families served with the loan funds compared with pre-storm state data or sub-state data would address these questions.

In addition to aggregate data and microdata at the substate level, longitudinal state-level TANF microdata including SSNs could in theory be combined across states to follow TANF families from storm-affected areas to other areas or to identify Katrina-affected families who appear in other states’ data systems who did not previously receive TANF. The effort required, and the number of data systems involved, could be reduced to manageable levels by matching families from Alabama, Louisiana, and Mississippi to Texas and a few other states that received large numbers of evacuees.

Responses to Federal Guidance

ACF issued guidance to help states respond to the disaster through regular TANF and other program authorities. Many states responded explicitly, creating separate programs or altering their processing requirements to handle evacuees. Some of these responses may be detectable in state or county data systems for those areas that would have received substantial numbers of evacuees.

Ohio, for example, created three new programs including one-time cash payments for family evacuees and for individuals without children (including married couples), and a non-cash support services program for families and individuals to help with relocation. Cash assistance did not count against TANF benefits if the individual or family proceeded to also apply for regular benefits and all other disaster-related assistance (e.g., Red Cross, FEMA) were excluded from determination of benefits. Cash benefits were considered outside regular county allocations and would be reimbursed by the state separately. Hurricane evacuees in regular programs, such as TANF, Medicaid and FSP, were identified (“red flagged”) in administrative records. In addition, children who were temporarily absent from a family unit (e.g., a family disconnected because of the hurricane and before reunification) could still qualify for assistance. Administrative expenses related to these programs were not identified by separate coding, although agencies were instructed to add appropriate notations in a comment section in state reporting.

States that made special arrangements on their own to assist Katrina evacuees present good opportunities to study the effects on state programs, either through the explicitly identified evacuees who received cash payments or through county requests for reimbursement. Questions concerning changes in the beneficiary population and services received raised above would also be relevant. It would be particularly useful to study the effects in the states that received many evacuees and a few others that received a smaller influx. Quick checks with state officials could indicate what steps the state took to address evacuees, including whether identifiers were created in their state administrative data for Katrina evacuees.

Changes in Services for Runaway and Homeless Youth

There have been anecdotal reports that young people, not legally independent, who evacuated with their families later became so frustrated with their new circumstances that they have, in effect, self-emancipated and returned to New Orleans on their own. How they are surviving, whether they are in school or working, whether they are supervised informally (by kin or other adults) or not, how they are doing in terms of well-being and development, and whether they are engaged in behavior that is risky for themselves or others is important to know.

Grantees that provide services under the Runaway and Homeless Youth program are required to collect data and report to ACF semiannually on the number and demographics of runaway and homeless youths served by the Basic Center Program (BCP), which provides emergency shelter, food, clothing, outreach and crisis intervention, and the Transitional Living Program for Older Homeless Youth (TLP), which provides longer-term residential services for youths aged 16-21. Seven of the eight grantees in Louisiana are in the New Orleans or Baton Rouge areas. There are three grantees in Jackson MS, and one in Houston. Basic Center Program funds are allocated to states using a formula based on the percentage of the state’s population of youth under age 18, according to the latest Census data. Although the BCP and TLP grantees would have served only a portion of those potentially needing services prior to the storm, pre- and post-storm changes would be useful to follow.

How were facilities, basic recordkeeping, and larger data and management systems affected?

Impact on Facilities

There are several ways to assess loss of facilities. Inventories of licensed facilities, such as for child care and Head Start, are maintained at the local and state level and reported to ACF. Basic changes in numbers of children and families served through the Child Care Development Fund (CCDF) and other pooled resources (e.g., SSBG, FSP, state-only funds) are available by state, and a comparison between FY 2004 (or even 11/12ths of FY 2005) and FY 2006 would provide an approximate depiction of the effects of Katrina on state child care slots. These data might be meaningful for Louisiana, since New Orleans and environs would have a great influence on the total state profile. It is not clear that the state-level data would be as meaningful for the other directly impacted states where the damage and disruption were more localized and represented a smaller percentage of the state's federally-funded child care profile. In addition to the number of children and families served, the ACF-696 quarterly financial expenditures of CCDF funds by type of expenditure would provide a similar but finer measure, since one can isolate the time of the storm from the other three quarters reported.

Microdata on children and families served through CCDF (ACF-801) include the type of child care subsidized for each family (e.g., day care center, family day care home) and hours of care. ACF combines monthly data into a fiscal year total to create an average month of funded subsidies. Whether the monthly data or the annual fiscal year data are used, the data for FY 2004 compared to FY 2006 for the directly impacted states would provide a surrogate measure of change in services caused by the storm. The monthly data would of course provide a finer measure pre- and post-storm within FY 2005. Such a measure does not indicate whether the facility itself was destroyed or the demand for services declined because families had moved from the area because of the storm.

As noted in the previous chapter, Louisiana spent \$14 million of its \$205 million SSBG funds on child care. These funds, unlike those from CCDF, could be used for construction. It would be useful to determine whether the utilization of SSBG grant monies in Louisiana addressed the deficit in child care facilities by parish or smaller areas. If the location of child care, transportation, and other services could be mapped, using data collected from university and other sources, this would also be a good opportunity to explore the relative importance of these attributes on the ability to become employed.

Similarly, Head Start's annual PIR reports submitted between August 1st and September 15th could be used to establish pre- and post-storm Head Start facilities (2004 and 2006 might be the best annual figures to use, depending on when the 2005 report was submitted for the state under study). The PIR micro-data can be sorted by zip code and contain detailed demographic information, which would provide characteristics of enrollees and their families, and the services for which the program provides, including health, disability, and education services.

In addition to these datasets, the Child Care Resource and Referral (CCRR) services in each state and many locales, funded in part by the state's CCDF grant and other sources, monitor the

inventory of licensed providers and capacity of those providers. The CCRRs in the areas of impact tend to have real-time information, though they may be able to provide inventories pre- and post-storm that would show any shift in types of providers that has resulted from the storm. The nature and quality of their data vary, and one would need to check with multiple CCRRs to identify those that have historical data that would show shifts in geographic coverage, numbers of providers and capacity pre- and post-storm.

Another way to identify changes in capacity for a range of human services is to use the database maintained by the National Center for Charitable Statistics (NCCS) at the Urban Institute. The NCCS contains data on all nonprofit organizations that have assets of \$25,000 or more and that file IRS 990 forms. These data can be sorted by zip code and by the National Taxonomy of Exempt Entities (NTEE) codes, which indicate type of organization, and therefore permit detailed analysis of service providers who filed taxes in 2004 and 2005, and those that have filed since the storm. The NCCS has limitations, one of which is that the 990 forms are filed by the administrative arm of the organization and therefore are not totally consistent with numbers or locations of direct service providers. For small, independent organizations the fit would be closer. Data for 2006 will be available in 2008.

Other potential inventories of human service providers are contained in state and local 211 directories, which all states in the areas of impact maintain, and pre- and post-telephone directories. However, past versions of those directories, particularly the online ones, may be difficult to obtain.

Impact on Infrastructure

Impact on staffing, recordkeeping, data systems and other management capability is more difficult to assess without new data collection. One approach to assessing changes in professional infrastructure is to look at licensing data on, for example, medical personnel (doctors and nurses) and social workers in impact and host communities. These data would be available historically so that one could see not only new licensing that may be apparent in host communities (e.g., social workers who have come in to provide the extensive case management that is part of recovery) but also in New Orleans as new professionals come in to help in rebuilding the devastated medical infrastructure.

The Rockefeller Institute's *Gulf Gov Reports* represent a three-year effort to assess how governments, nonprofit organizations, businesses and others are responding to rebuilding the Gulf area. These reports will undoubtedly provide some insights into the extent of destruction and strategies for recovery. Other qualitative research to understand how organizations have lost or rebuilt staff, data systems and other management infrastructure would be necessary to fully explore the impact on infrastructure of the human service delivery system.

Other important issues are difficult to address with existing datasets. Child support collections are an important and interesting example. A study of pre- and post-storm collections would be of interest to understand whether the storm disrupted payment of existing cases, particularly because of loss of court and other legal records. Before Katrina, Louisiana was a poorly performing state for child support enforcement, under investigation by state auditors. It would be

good to know if collection became more successful because a mother moved to a state with a more aggressive enforcement record, where she would be free to attempt collection. ACF might obtain the roster of Louisiana and Mississippi cases pre-Katrina and those for September 2005 or thereafter, and match them with the New Hire data in any state. The status of child welfare cases in the impact area is similarly important. We discussed research possibilities and challenges in the preceding chapter. After Katrina, the system in the Gulf states was in utter collapse. The system in Orleans parish was effectively shut down and received no reports about child maltreatment for several months after Katrina (Gelles 2006).

VII. CONCLUSIONS AND RECOMMENDATIONS

The discussion in the preceding chapters explores multiple approaches to addressing the research questions posed by ACF. The chapters provide a guide to help researchers and potential funders understand what is researchable and with what level of effort. Studies in one chapter sometimes overlap with those in another; for example, answering questions about the economic or social well-being of families in the context of migration patterns, addressed in chapter III, will answer in part some questions about income and employment addressed in chapter IV. In this chapter, we identify a subset of studies of greatest importance to ACF, distilling some of the overlap within overarching issues important for research, and maintaining the emphasis on the use of existing data.

We applied the following criteria to select the studies (although not every recommended study meets every one of the criteria):

- The proposed research connects to a basic ACF responsibility with regard to policy or oversight.
- The proposed research fills an important gap in current knowledge. Research should be driven by the clear need to know as it relates to ACF responsibilities, or driven by hypotheses that could guide program responses.
- Lessons from the proposed research go beyond Katrina and will apply to delivering services in future disasters.
- The proposed research is immediately practicable using existing datasets.

We anticipate that ACF will develop its own priorities, as it attempts to integrate research on Katrina with other efforts to assess the continuing needs of low-income children and families. The study options discussed in preceding chapters should help ACF evaluate research alternatives as its needs and priorities evolve. In addition, the specific lens on Katrina will change over time; some Katrina victims should remain a discrete focus of continuing research while others cannot or need not be identified as Katrina victims as they mix with other populations receiving ACF services.

Finding the right role for ACF research is also colored by what is likely to be undertaken by others. At this writing, well into the third year after Hurricane Katrina, some questions have been answered, at least preliminarily, and other research will inevitably continue or be newly undertaken by the many researchers studying the consequences of the hurricanes of 2005. A wide number of analysts using a variety of data sources continue to track changes in the overall profile of the areas of impact. Demographers will study migration and resettlement patterns in the Gulf Coast, and what they may mean to the overall economic health of the region and the fiscal position of the Gulf States. The Bureau of Labor Statistics and other labor economists follow the changing dynamics of the local and regional labor markets in the Gulf States, both routinely and through special studies. These lines of research are vital to the needs of public officials and others engaged in various forms of economic development.

We know, for example, from Census data and other analyses discussed earlier, that repopulation is slow and rebuilding is still spotty in New Orleans and in other areas of the Gulf Coast that

were in the direct path of the storms or bore the brunt of the flooding. We also know that the population in the areas of impact is now less poor, and has fewer children. Special surveys conducted a year after the storms indicated that African-Americans are still the largest racial group in New Orleans, but only barely (47 percent, down from 66 percent pre-storm). We know that the rebuilding to date has been of little benefit to the low-income minority, primarily black, populations that dominated New Orleans prior to the storm. Many low-income blacks who depended on rental or subsidized housing have not been able to return. Little subsidized housing that was destroyed has been replaced, and scarcity of housing has driven up rental prices to well beyond what many who lost their homes can now afford.

We know less about how other aspects of rebuilding will affect the prospects for low-income children and families to return or to relocate successfully in other places. Some population shifts no doubt indicate that low-income workers are being replaced by higher income in-migrants. Some of the change may indicate that immigrants are competing with or displacing low-skilled workers indigenous to the Gulf Coast who might otherwise share in the rebuilding. Some of the change is likely linked to the slow recovery of services, including retail services, schools, child care, and the range of social services that make family life possible and may be more critical to low-income evacuee families than to workers who do not rely on publicly-funded services or have not in-migrated with children.

Other issues of particular interest to ACF have received even less attention. For example, we know from our literature review that there was poor documentation of mental health and trauma associated with the storms, which researchers believe to have affected both children and adults, and there is a need for rigorous research on services received to address these problems. Over time, the Hurricane Katrina Community Advisory Group surveys and Medicaid data will provide researchers with data to analyze these issues. The Katrina questions added to the most recent wave of the PSID may also provide detail, if sample sizes are sufficient, about the effects of trauma on the larger picture of income and self-sufficiency.

Questions about the impact of Katrina on family and household composition and on informal supports have not yet been answered. Few of the studies we found looked at connections across domains of families' lives. For example, how well families fare who relocate or return to their homes depends on housing, employment, and a set of services and supports. Understanding the connections is crucial to ACF families and programs, since low-income families may have less capacity to fill a missing piece (an affordable apartment, a job, child care) than others. Fixing other problems, such as children's behavioral issues, or the need for substance abuse or mental health treatment, which emerge or are exacerbated because of the disaster, may be more challenging. Some of the datasets we explored, which will be accessible in the near future (e.g., PSID, CAG), can be used to address these questions. Much will require qualitative research.

With respect to eligibility for services and service penetration for those in need, there remain major gaps. For example, there was a particular dearth of information in the literature that we reviewed on children in the child welfare system. Populations that are less connected to public assistance systems, such as many of the homeless, the non-working poor, those not receiving TANF or other employment assistance, and those not in UI-covered employment, are also

difficult to track, though their needs and those of their families may fall within the purview of ACF-funded programs.

For other populations that were receiving services before the storm but may remain in the diaspora, and still need publicly-funded assistance because of the continuing effects of trauma, family disruption, and challenges to resettlement and reemployment, cross-state analyses of eligibility and service receipt have yet to be done. As individuals and families remain dispersed, identifying them and their progress over time will be increasingly difficult, both because of their fewer numbers relative to the larger whole, and because their identity as Katrina evacuees will fade over time. Data available from panel studies, such as the PSID and SIPP, that will have Katrina-related information, will be particularly useful.

Where issues are broadly important but not integral to ACF's responsibilities, or competing priorities for limited funding and data access issues intervene, there may be a role for partnerships in which agencies other than ACF might take the lead. ACF might, for example, suggest that HUD investigate potential analyses of the PIC and TRAC databases to identify those families forced to evacuate from Gulf Coast public or publicly-subsidized housing and follow their progress and use of services over time. Similarly, ACF might urge FEMA to consider uses of its NEMIS database to assess the needs of families evacuated to FEMA trailer parks, now facing eviction and likely to face the greatest challenges reestablishing housing, employment and support structures, as evidenced by their longevity in the parks. ACF could play an important role in seeing that appropriate studies are undertaken, and joint sponsorship is an option, so we mention some of these possibilities below.

Applying the criteria noted above, we recommend the following areas of focus for new research.

Housing and Migration Effects

Basic Migration Patterns

We suggest two approaches to understanding migration over time: the first is using the CPS, and HUD and FEMA databases if practicable, to track the movement of different populations over time; the second is to analyze the likelihood of return, using data from the Hurricane Katrina Community Advisory Group (CAG) and the PSID.

Mapping dispersion and return of hurricane victims would help ACF programs anticipate the need for services for those who remained in, or returned to, the areas of impact, and the tens of thousands who will likely not be able to return but may have continuing adjustment problems in new locations. This is a core role for ACF, and while the broad characteristics of returners have been tracked, the bigger questions of interest to ACF—the circumstances of low-income families who have dispersed, whether they have returned or not—have not been rigorously researched. So the objective of tracking migration over time is twofold: to identify children and families who relied on income and social supports before Katrina and are likely to need support over time, particularly as they move or move again; and to anticipate the burden on services as communities in the path of the storm are reconfigured as they rebuild, and as new communities receive victims of the storm.

We suggest using the Katrina questions in the November 2005 through October 2006 monthly CPS samples to identify evacuees and returnees in the New Orleans metropolitan area, and at the state level for all other states. Evacuees who show up in states other than Louisiana, Mississippi or Texas may indicate sufficient influx to justify continued tracking through state administrative data systems. ACF could encourage such states to add markers in their TANF and Medicaid administrative records to identify participants from the impact areas and to assess their need for special case management or referral services to address trauma and other psychological issues, loss of employment, family separation issues or reunification needs, school and child care disruption, and housing loss. Understanding when and how to create such markers would be useful for future emergencies.

For similar reasons, we suggest encouraging HUD to investigate the potential of its PIC and TRACS databases to track individuals who lost their housing in the storm and show up in public or subsidized housing in other PHAs. These data are both a measure of loss of housing assistance and can be used to identify and track changes in household composition, income and earnings associated with dislocation as a result of the storm. Of particular interest is whether those families are in special need of services to address the range of social and emotional issues resulting from loss of housing, loss of employment, family dislocations, disruptions of school and child care, and psychological trauma associated with the initial disaster or continuing disruptions of domestic life.

Predicting families' return or their resettlement over time is important to ACF and state service providers, as is a sense of how well families fare who resettle in new locations or return to their homes. Whether returning or resettling in new locations, family well-being depends heavily on the availability of services and other supports. As noted earlier, information about those families who have not returned as well as study methods that look at the connection across domains of family life represent a gap in the research. Therefore, we recommend a study that identifies relationships between intent to return and other characteristics as measured in the CAG survey (e.g., employment, education, marital status, housing, disability, use of transfer payments and social services) to impute the likelihood of return. This could be one way of anticipating the types of families who may relocate or return and who may need ACF services. PSID data on moves by families affected by Katrina, and those families' expectations about future moves, can be used to estimate the permanent increase in needs in host communities.

The Effects of Migration on Family and Child Well-Being

We suggest taking two approaches to assessing the effects of migration. The first is to analyze the well-being of those who moved using population data from the CPS data, and data from the PSID, SIPP, and CAG when they become available. The longitudinal data may be able to reveal multiple moves within a year. The second is to assess the availability of services in neighborhoods to which families may return or relocate.

The March 2006 CPS should be used both to identify families who moved in response to Katrina and to establish a baseline on measures of economic and psychological well-being, and compared, if sample sizes permit, with data on those households that appear in the March 2007 CPS to assess how changes in family composition are correlated with changes in economic and

social well-being (e.g., loss of principal wage-earner, health care coverage, onset of foster care, receipt of income and food assistance, employment, ratio of housing costs to family income). A similar analysis can be conducted comparing the families identified as having moved due to Katrina in the March 2006 sample with those who appear in the March 2005 sample. Some households, who were compromised prior to Katrina (e.g., teetering relationships, marginal employment, mental health issues), may have been further disrupted by the storm.

The PSID Katrina questions in the 2007 wave can be used to correlate detailed physical and emotional status with the characteristics and duration of displacement, and by extension, continuing needs for services in New Orleans, Baton Rouge and Houston. At the national level, the SIPP data on Katrina, in Wave 8, may also be used to correlate income, employment, and use of program supports, such as TANF and SSI pre- and post-Katrina for those respondents who report Katrina-related moves. In addition, all three longitudinal data sets (PSID, SIPP, and CAG) have the potential for revealing multiple moves within a year or other dimensions of housing problems, to put a much finer point on residential instability and its effect on family and child well-being. Whether sample sizes would permit detailed analysis of this subset of families remains to be seen.

Studies of Neighborhood Change

The second approach would be to assess neighborhood change, in order to understand how well Katrina evacuees will have access to needed services in new locations or if they return home. The study we recommend is a spatial analysis of the location of human services (e.g., child care facilities, Head Start and Early Head Start programs) to assess the adequacy of services in areas to which evacuees intend to return or in which they have resettled, using administrative data discussed in chapter II that are readily available (e.g., licensed child care facility reports from the CCDF). Researchers also have overlaid transportation routes, health care facilities, city or county plans or building permits for new or reconstruction of recreation facilities, schools, and commercial establishments, to address these issues.

Income and Employment Effects

Whether the BLS and other labor economists will continue to study the effects of Katrina on low-income populations in ways that are specifically relevant to ACF is difficult to know. We note two areas for research below that would help ACF anticipate the use of TANF and other employment supports.

Income and Employment Status of Evacuees, Resettlers, and In-Migrants

The individual-level data available from the CPS, ACS, and SIPP make it possible to cross-tabulate information on past and present places of residence with information on employment status, earnings, occupation, and industry. The large number of records in the ACS makes it more likely that sample sizes for the cross-tabulation cells of interest will be adequate, but access to the month the survey was administered (not in the PUMS data) would allow more precise identification of people who moved in response to Katrina. The SIPP's detailed monthly data on

income, employment, and program participation may make it possible to track workers affected by Katrina as they moved from place to place and job to job. Because the SIPP data with Katrina variables have not yet been released, we do not know how much Katrina added to the usual rate of attrition in the longitudinal sample.

The Quarterly Workforce Indicators (QWI) do not provide individual-level data. They do, however, provide a number of monthly employment indicators that can be disaggregated by industry as well as by state, county, and workforce investment areas. A particular strength of the QWI is that it provides separate estimates for job creation and job loss, which are valuable because small net effects measured in other data can hide large, offsetting changes. Use of QWI local data on a sector-by-sector basis, over time, can disentangle earnings and employment trends in the most heavily damaged counties. These data may also suggest the extent to which earnings and employment rates in host communities such as Houston and Baton Rouge were depressed as Katrina evacuees entered their job markets.

Dynamics of Labor Force Competition in Gulf Coast Rebuilding

An important consequence of the storm is the potential replacement of low-wage workers in the areas of impact with in-migrants, including immigrants, who are participating in the rebuilding effort. Many of these individuals reportedly have come without their families and therefore do not require other infrastructure, importantly schools, which evacuees with children require to return. Whether immigrant or other in-migrant workers have or will permanently displace evacuees in the labor force is not clear. The ACS provides data on employment by industry, occupation and wages at the local level (county or multi-county PUMA), and citizenship status and residence, including whether or not the individual was a resident of the county in the previous year. The 2007 ACS would permit estimates of the local penetration of in-migrants, including non-citizens, into various industrial and occupational sectors. Analysis could differentiate the demand for workers in construction and building trades nationally, and the initial and sustained increases in demand in this sector in Louisiana and Mississippi. Sectoral workforce analysis could also compare the characteristics of workers in growth sectors, particularly differences in the demographic composition by sector.

Program Needs and Program Effects

Measuring Post-Katrina Economic Needs

Three forthcoming datasets—the SIPP and PSID data with Katrina questions, and the Community Advisory Group’s first follow-up survey—are particularly promising resources for analyses of Katrina’s impact on social and economic needs, and participation in programs that would address those needs. Because each of these datasets is longitudinal, each can provide dynamic information that shows how needs have evolved over time. Because the PSID and the SIPP were already in the field when Katrina hit, they can provide better information about the lives people were living before the storm than the retrospective questions in the CPS or ACS. Although the CAG surveys began after the storm, they have the largest sample of Katrina evacuees, and the associated oral histories can add depth to the data.

Estimating Program Eligibility

The best tool for analysis of program eligibility among evacuees is the TRIM3 microsimulation model, which covers TANF and child care along with other programs (e.g., Medicaid, FSP, SSI, and housing subsidies). TRIM3 builds on the strengths of the March CPS, including extensive data on income and program participation and, in the March 2006 survey, questions that identify Katrina evacuees and distinguish those who had returned from those who had not. These data can also be linked with the monthly CPS, for a year's worth of month-by-month analysis of progress among the evacuees, and with the January 2006 supplement on displaced workers.

Tracking TANF and Child Care Use over Time

We discussed possible research on TANF and Child Care in chapter IV and in chapter V; and these same studies promise to improve our understanding of Katrina's impact on program needs and program effects. We recommended using federal microdata and state administrative data to trace changes in communities' TANF receipt, and perhaps tracing Katrina's effects on families who were participating in cash assistance before the storm. A key limitation to these data is that they have less information on people who received only TANF services or disaster assistance than on people who received regular TANF cash assistance, before or after the storm.

A study of Katrina's effects on child care needs and programs (including CCDF, SSBG and Head Start) might combine data about costs from the 2005 and 2007 market surveys, administrative data on subsidies, and household survey data from which demand can be estimated as a function of population, income, employment, and family structure. To carry out their normal functions of regulation and referral, moreover, state or local governments maintain extensive data on the location and capacity of child care facilities. To the extent that these data survived Katrina, they can be used to map the intersection of child care supply and demand before and after the storm.

Use of Emergency Loan Funds

It would be important to draw lessons from federal emergency responses to Katrina to know what would be effective in future disasters. We discussed the opportunities for using the Louisiana Family Recovery Corps data to analyze Louisiana's use of the \$32 million it received in Loan Funds. Such an analysis would not only reveal what the emergency funds bought in services and who was served, but how the availability of these funds interacted with the regular TANF program, whether families moved from TANF to LFRC emergency services because of more relaxed eligibility and documentation requirements, and whether services were more easily accessible under the emergency rubric than the regular system. An analysis of the types of families served with the loan funds compared with pre-storm state data or sub-state data would address these questions.

We also suggested that quick checks with officials in states that received large numbers of Katrina evacuees might identify other state responses that could provide lessons for future disasters. States may have created separate programs to provide one-time cash payments or other

services, or created screening and case management tools that would get help fast to needy families evacuating from other areas or just new to their programs.

New Data Collection

Throughout this report, we have focused on research projects that can be completed with data sources that either are already available or will be released soon. Crucial aspects of program effects, however, can be known only through new data collection. Such data could attempt to capture changes in procedures for front-line workers to respond to emergency demand, or reorganization and staffing rearrangements caused by the storm, and new collaborations forged with other agencies as a result of the storm. Much of the research on these topics would be qualitative, exploring program operations from service delivery on the ground, to budgeting and policy approaches, and relationships across program boundaries and governmental jurisdictions. Some new collection of retrospective data would be important to learn how effectively states can adapt to emergency situations, use the flexibility granted them by Congress or the executive branch, work across state and program boundaries to hand off or receive program participants, and recoup their expenses for so doing.

New data collection can also be thought of in prospective terms—the lessons of Hurricane Katrina include the things that we should be doing now, to be ready for the next disaster of similar proportion. Better identification in administrative data systems of evacuees and others affected by a large-scale emergency would facilitate future research, but more importantly, make it easier to provide help to the people who need it. In the aftermath of Katrina, data collection and reporting requirements were understandably relaxed to ease the burden on the people who were most affected as well as on state and local governments. One role that federal agencies such as ACF can play, in preparation for future disasters, would be to offer leadership for improving the collection and sharing of information across state and program boundaries. ACF can also help individual states and localities craft their own data collection systems to serve new needs of program participants and new populations who seek assistance as a result of a disaster.

This feasibility study has reviewed a wide range of data sources across many policy fields, seeking to do justice to an extremely complex set of issues and to ACF's wide-ranging responsibilities. We have identified many important and doable studies that could potentially assist ACF in responding to remaining effects of Katrina and in preparing effectively for future emergencies. Our selections of priority studies should not deter ACF from considering others discussed, as new research shifts the balance between what is known and what needs to be known. Nor should it deter ACF from considering new data collection, including some important qualitative studies, which are necessary to fully understand several of the questions posed but were in general beyond the scope of this assessment and beyond the capacity of existing data sources.

References

- Cahoon, Lawrence S., et al. 2006. "The Current Population Survey Response to Hurricane Katrina." *Monthly Labor Review* 129, no. 8 (August): 40–51.
<http://www.bls.gov/opub/mlr/2006/08/art4full.pdf>
- Care Solutions, Inc. 2007. *Louisiana Child Care Market Rate Survey 2007*. Atlanta, GA: Child Care Solutions, Inc.
<http://www.dss.state.la.us/Documents/OFS/2007MarketRateSurvey.pdf>
- Clayton, Richard L., and James R. Spletzer. 2006. "Worker Mobility Before and After Hurricane Katrina." *Monthly Labor Review* 129, no. 8 (August): 11–21.
<http://www.bls.gov/opub/mlr/2006/08/art2full.pdf>
- Davern, Michael, Jacob Alex Klerman, and Jeanette Ziegenfuss. 2007. *Medicaid Under-reporting in the Current Population Survey and One Approach for a Partial Correction*. Minneapolis, MN: State Health Access Data Assistance Center.
http://www.shadac.umn.edu/img/assets/18528/CPSMedicaid_Adj_Oct2007.pdf
- Dolfman, Michael L., Solidelle Fortier Wasser, and Bruce Bergman. 2007. "The effects of Hurricane Katrina on the New Orleans Economy." *Monthly Labor Review* 130, no. 6 (June 2007): 3-18. <http://www.bls.gov/opub/mlr/2007/06/art1full.pdf>
- Fletcher, Laurel E., Phuong Pham, Eric Stover, and Patrick Vinck. 2006. *Rebuilding after Katrina: A Population-Based Study of Labor and Human Rights in New Orleans*. University of California–Berkeley and Tulane University. June 2006.
http://www.hrcberkeley.org/pdfs/report_katrina.pdf
- Gelles, Richard J. 2006. "Responding to the Needs of the Lost and Forgotten: Foster Children and Battered Women Before and After Hurricane Katrina." *The Field Center for Children's Policy Newsletter*. Spring.
<http://www.sp2.upenn.edu/fieldctr/newsletters/spring2006/responding.html>
- Hanson, Kenneth, and Victor Oliveira. 2007. *The 2005 Gulf Coast Hurricanes' Effect on Food Stamp Program Caseloads and Benefits Issued*. Washington, DC: U.S. Department of Agriculture. February.
<http://www.ers.usda.gov/publications/err37/err37.pdf>
- Research Project to Understand the Medicaid Undercount. 2007. *Phase I Research Results: Overview of National Medicare and Medicaid Files*. Suitland, MD: U.S. Census Bureau.
http://www.census.gov/did/www/shadac/SNACC_Phase_1_report.pdf
- U.S. Government Accountability Office. 2007. *Hurricanes Katrina and Rita: Federal Actions Could Enhance Preparedness of Certain State-Administered Federal Support Programs*. Washington, DC: Government Accountability Office, February 2007.
<http://www.gao.gov/new.items/d07219.pdf>

Vigdor, Jacob L. “*The Katrina Effect: Was There a Bright Side to the Evacuation of Greater New Orleans?*” Working Paper 13022. National Bureau of Economic Research Working Paper Series. Cambridge, MA: National Bureau of Economic Research, April 2007. <http://www.nber.org/papers/w13022.pdf>

Weil, Frederick, and Edward Shihadeh. 2006. “The Burdens of Social Capital: How Socially-Involved People Dealt with Stress after Hurricane Katrina.” Presented at the Annual Meetings of the American Sociological Society. Montreal, Canada. January 17. http://www.allacademic.com/meta/p103858_index.html

Zedlewski, Sheila R. *Building a Better Safety Net for the New New Orleans*. Washington, DC: The Urban Institute, February 2006. <http://www.urban.org/url.cfm?ID=900922>