

PD&R WORKS BEHIND THE SCENES IN RESPONSE TO DISASTERS

Disasters (hurricanes, floods, tornadoes, wildfires, earthquakes, radiological contamination, and so on) may result in a scale of destruction of housing units and displacement of households sufficient to disrupt affected and nearby housing markets, complicating public policy response. To inform federal, state, and local officials of the efforts necessary to remedy the effects of disaster, the U.S. Department of Housing and Urban Development's (HUD's) Office of Policy Development and Research (PD&R) undertakes an array of analyses of the local economies, housing markets, and households affected by disasters. This article describes, in general terms, PD&R's efforts following disasters.

PD&R's disaster response analyses can be broadly characterized according to the PD&R staff that engage in the analyses. PD&R analysts at HUD's headquarters (HQ) undertake one effort, and PD&R's Economic and Market Analysis Division (EMAD) field economists, who are located in various HUD regional and state offices across the nation, undertake the other effort.

HQ PD&R Analyses

After a disaster strikes, the availability of data determines a three-phase approach to the HQ PD&R assessment of housing damage and needs. As soon as a disaster occurs, the Federal Emergency Management Agency (FEMA) issues a Presidential disaster declaration, and PD&R obtains data of counties that were declared eligible for public disaster assistance, individual disaster assistance, or both. Public assistance addresses damage in state, local, tribal, and some private nonprofit community facilities. Individual assistance is available when damage to homes is particularly severe and includes temporary housing assistance and repair, replacement, or construction of permanent housing units, recovery grants, emergency housing vouchers, and so on, from FEMA, as well as low-interest loans from the Small Business Administration (SBA). Census and American Community Survey (ACS) data are used to create a summary of the demographic and housing characteristics of these communities. As more counties are included in the disaster declaration, this information is updated. This is the first phase of the analysis and is carried out during the first days following a disaster. HUD staff typically use this information to highlight the communities that may have the greatest recovery challenges. Additional deeper insights into the local housing market may be gleaned if a recent American Housing Survey (AHS) for a metropolitan area is available, as

was the case for the New Orleans metropolitan area, which had been surveyed in 2004, prior to the occurrence of Hurricane Katrina in 2005.

The second and sometimes parallel phase—depending on data availability—consists of conducting a spatial analysis of potential HUD interests affected by a disaster using damage-area shape files for computer-generated maps provided by the National Geospatial-Intelligence Agency (NGA) and the National Oceanic and Atmospheric Administration. The shape files are created with a satellite image of affected areas; they are polygons (shapes made up of connected sets of line segments) showing damage areas by four categories of damage (catastrophic, extensive, moderate, and limited). The overlap of these polygons with geographic representations of HUD-assisted housing and of ACS data provides more precise information about potentially affected HUD-assisted units, vulnerable populations, and affected housing in general. PD&R identifies vulnerable populations as those whose recovery tends to lag behind the rest of the affected community, such as those needing affordable rental units or those without home hazard insurance. This analysis is also key for HUD's leadership, because it complements the information that field offices are gathering about HUD-assisted units that have been affected and vacant units that could be used to house people displaced by the disaster.

The map in figure 1 shows how NGA damage-area shape files were used after the tornadoes in Tuscaloosa, Alabama, in April 2011 to identify the impact of damage areas on HUD programs (table 1a), vulnerable populations (table 1b), and the housing stock (table 1c). NGA shape files become available over a longer period of time, and the conclusions of this analysis depend on how long it takes to get the complete set of shape files for areas that were damaged. Preliminary damage levels are broadly defined and, at this point in the process, may be subject to subsequent revision. Experience has shown, however, that the initial shape files have been a good indicator of overall damage assessments and that subsequent updates often confirm the accuracy of the initial data.

The third and final phase of HQ PD&R's assessment of housing damage after a disaster is estimating unmet needs, which are the gap between the total disaster damage that a community sustains and the post-disaster resources that the community receives from private insurance companies and the federal assistance it receives from FEMA and SBA. Understanding the unmet needs is key for long-term disaster recovery and for identifying resources that communities would need to recover from the disaster. The assessment includes three components: (1) housing, (2) infrastructure, and (3) unmet business needs. PD&R calculates unmet housing need as the costs to repair seriously damaged housing units beyond the funds that private insurance coverage, FEMA grants, and SBA loans provide. PD&R

calculates unmet infrastructure needs as the restoration costs that exceed the allocation of funding from the FEMA public assistance program. PD&R calculates unmet business needs based on losses (real property and contents) of small businesses not receiving an SBA disaster loan. PD&R uses this information to inform the Congress and other federal, state, and local government agencies and to determine the equitable distribution of any potential Community Development Block Grant (CDBG) supplemental funding (because such supplemental CDBG funds are often appropriated for multiple disasters in multiple states). PD&R can carry out this analysis only after the FEMA and SBA registration process for individual and public assistance has been closed. As a result, this analysis is not available until several months after the disaster.

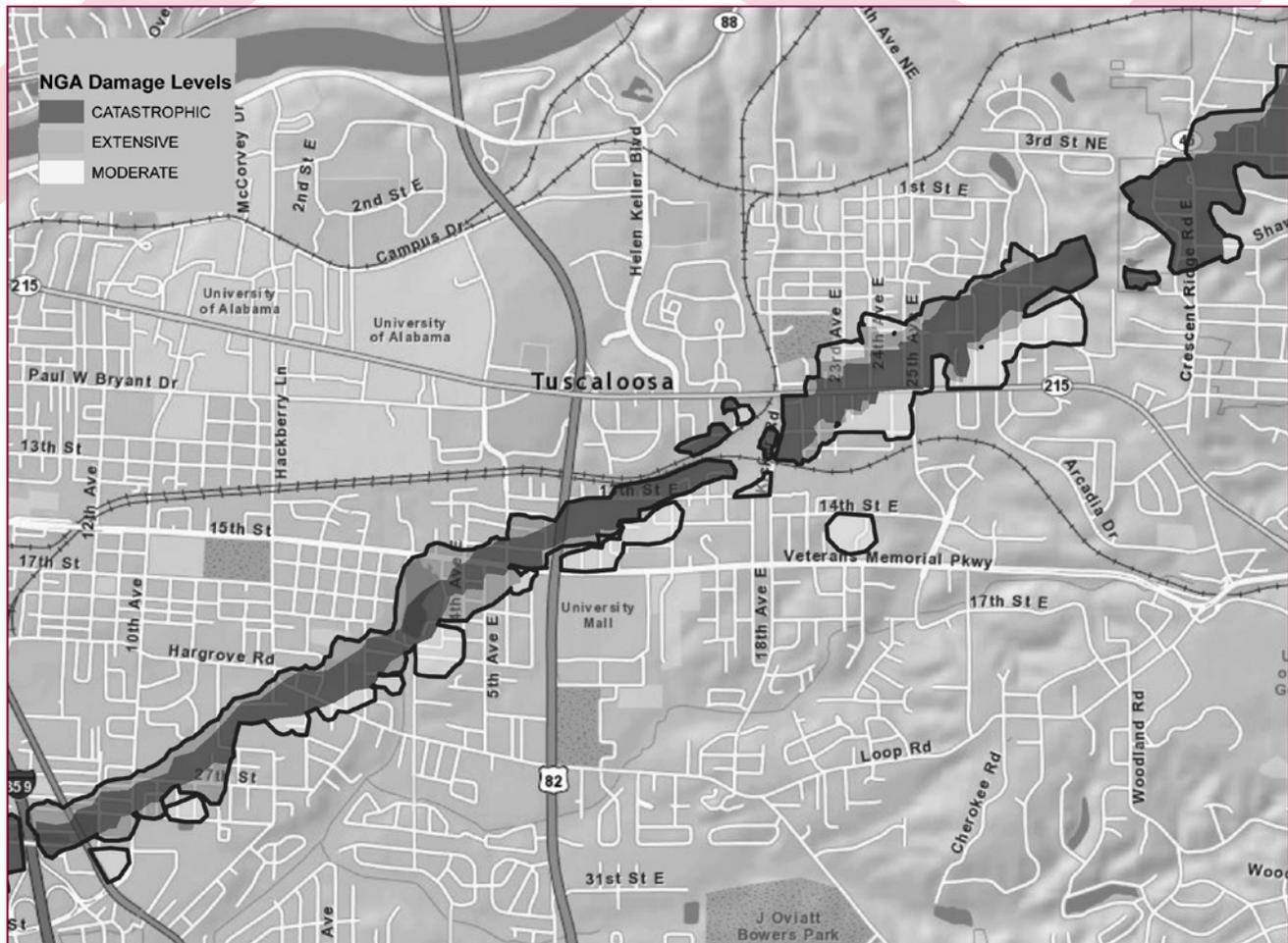
In an effort to complement the unmet needs analysis and provide more detailed information about local conditions, PD&R economists may also conduct studies to gain knowledge of the current housing market

conditions in the disaster-affected communities. Their studies help leaders, planners, and investors make decisions regarding future housing development.

Throughout the effort, HQ PD&R economists, social scientists, and engineers provide input based on their analyses, which helps facilitate the process. In some cases, this information could help inform local leaders about recovery issues that might involve significant land use changes or investment in public infrastructure. In some communities, the continued disaster risk of certain tracts of land may be unacceptable for rebuilding and, in the immediate post-disaster environment, communities might decide not to allow rebuilding in those areas.

These types of assessments contribute to an increased understanding of the impacts of the disaster and the places where communities might focus their attention to help speed recovery at the individual, neighborhood, and community level.

Figure 1. Tornado Damage Areas in Tuscaloosa, Alabama, April 2011



Source: Damage Areas of Tornadoes, National Geospatial-Intelligence Agency (NGA) Base Map, ArcGIS Map Services

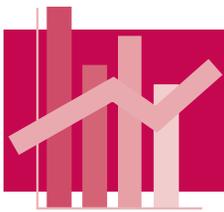


Table 1a. Potentially Affected HUD Programs by Damage Level in Alabama Because of 2011 Tornadoes

	Catastrophic	Extensive	Moderate	Limited
Vouchers	62	< 10	16	0
Multifamily units	0	0	0	0
Public housing units	0	188	0	0
LIHTC units	< 10	0	0	0
Single-family REOs	0	< 10	0	0

LIHTC = low-income housing tax credits. REO = Real Estate Owned.

Source: Office of Policy Development and Research overlay and tabulation of the National Geospatial Intelligence Agency damage shape files and U.S. Department of Housing and Urban Development administrative data

Table 1b. Potentially Affected People by Damage Level in Alabama Because of 2011 Tornadoes

	Catastrophic	Extensive	Moderate	Limited
Population	2,236	914	843	0
Households	906	412	342	0
People in poverty	302	154	104	0
People under 18	633	215	240	0
People over 62	196	81	73	0
Non-English speakers	70	24	35	0
People with no high school	245	92	93	0
Households receiving public assistance	39	15	17	0

Source: Office of Policy Development and Research overlay and tabulation of the National Geospatial Intelligence Agency damage shape files and the 2005–2009 American Community Survey

Table 1c. Potentially Affected Housing by Damage Level in Alabama Because of 2011 Tornadoes

	Catastrophic	Extensive	Moderate	Limited
Housing units	1,115	506	424	0
Vacant units	209	95	82	0
Owner-occupied units	321	117	119	0
Renter-occupied units	585	294	223	0
Housing stock, pre-1950	374	163	133	0
Rent burdened households	223	125	81	0
Gross rent < \$500	190	89	71	0
Gross rent \$500–\$1,000	335	171	130	0
Gross rent > \$1,000	60	34	23	0

Source: Office of Policy Development and Research overlay and tabulation of the National Geospatial Intelligence Agency damage shape files and the 2005–2009 American Community Survey

EMAD Field Analyses

Field economists undertake a separate effort at the same time that HQ PD&R is conducting its analysis. EMAD field and HQ PD&R staff participate in the same meetings and communicate regularly to ensure a coordinated approach. Recently, HUD formalized and standardized the EMAD field disaster analysis process and work products (see discussion at the end of this article). The new formal process evolved from field economists' participation in disaster recovery support efforts over many years. That evolution is chronicled in the following paragraphs.

EMAD largely uses its standard analysis techniques in analyzing markets where disasters have occurred. These techniques readily adapt to disaster situations. The theoretical foundation for EMAD's housing market analysis techniques dates back to the days of the Federal Housing Administration (FHA) market analysts and has been well documented in the *FHA Techniques of Housing Market Analysis* text. The techniques the economists use to conduct their analyses are grounded in a reconciliation-based framework. The FHA techniques text sums it up best with the following passage from the foreword:

The analysis of a housing market is not a precise process utilizing formulas to develop an unqualified and certain answer. It is limited by the accuracy of statistical data and derivations, the reliability of the estimates developed, the competency of the judgments, which must be incorporated into the analytical process at every step, and the uncertainties of projections of future economic developments (*FHA Techniques of Housing Market Analysis*, Foreword, Revised August 1970).

A more complete discussion of EMAD's comprehensive market analysis techniques is in the fourth quarter 2008 issue of *U.S. Housing Market Conditions* at <http://www.huduser.org/portal/periodicals/ushmc/winter08/ch1.pdf>.

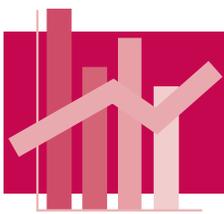
The work that field economists completed in disaster areas has evolved over the years. It began as early as 1970 when two economists conducted a *Comprehensive Housing Market Analysis* of the Gulf Coast of Mississippi and Alabama following Hurricane Camille, which occurred in August 1969. HUD and FHA had loaned mobile homes to displaced households after Hurricane Camille occurred, and top FHA staff requested a market analysis be done to determine what housing needs remained a year later. In addition, staff wanted a data picture and assessment of the area for any discussion about the need in the area for the mobile homes. Because one strength of the EMAD methodology is the fieldwork, in which field economists establish communication, collect data, and make contacts, the economists were able to provide the needed data and assessment.

Between 1970 and 1973, when EMAD was expanded and HUD developed area offices, economist positions were filled in every HUD area and regional office. EMAD disaster analysis was conducted at the field level with the economist participating as part of the field office team, typically directed by regional and field office staff.

The most recent developments in EMAD's support for disaster recovery came in the wake of Hurricane Katrina, which made its second landfall (it had hit Florida earlier) on August 29, 2005. Nearly all of HUD HQ staff were mobilized to respond to the unprecedented loss of housing units and to assist families displaced by the hurricane. Many HUD staff members throughout Regions IV (Southeast/Caribbean) and VI (Southwest) participated in various ways; other regions sent staff into the area to manage and carry out disaster assistance functions. Field economists along with the other HUD staff participated in these duties. Regarding EMAD functions, field economists produced baseline data and special reports, and they served the Regional Management Team as data specialists and reviewers of draft

documents. Baseline data include economic data on employment, workers, and unemployment; population data on people and households, including elderly people; and housing data on the number of occupied and vacant units, including subsector and subcategory data across the spectrum. The historical trend data, which were critical early in the process, made HUD leadership aware of trends in the affected areas since 1990 and leading up to the event. Throughout the first several years after Hurricane Katrina occurred, economists in Regions IV and VI participated in the Regional Disaster oversight efforts. Field economists set up databases to track changes in the baseline data so that factual information was provided for ongoing program and policy discussions. In addition to the usual EMAD data collected, HUD-assisted unit information and FEMA damage information were maintained. Two field economists conducted baseline comprehensive analyses of the New Orleans Area (2006) and the Mississippi Gulf Coast area (Gulfport-Biloxi-Pascagoula, 2007). Followup comprehensive analyses were done for the New Orleans area (2007, 2008), and another comprehensive analysis was published in October 2011 and is available at http://www.huduser.org/portal/publications/PDF/NewOrleans_comp.pdf. A second comprehensive analysis of the Mississippi Gulf Coast was published in 2011 and is available at http://www.huduser.org/portal/publications/PDF/Gulfport_Biloxi_Pascagoula_comp_2011.pdf. Region IV and VI economists helped to evaluate the need for supplemental funds provided by Congress for recovery from the 2005 hurricanes (Hurricane Rita in addition to Hurricane Katrina) and will continue to participate in ongoing activities related to the supplemental funding that Congress provided.

In addition to directing efforts specifically at the areas hit by Hurricane Katrina, a number of field economists conducted special research on the areas to which the evacuees moved. The first research effort occurred soon after Hurricane Katrina, when economists checked vacancy and rental rates in metropolitan areas throughout Louisiana and Texas and also in Atlanta, Georgia. A couple of years later, field economists from across the country conducted another research effort. This effort involved completing housing market analyses of four metropolitan and two nonmetropolitan counties in Mississippi that are located outside the Gulf Coast area to ascertain the number of vacant available rental units that could be used for potential relocation resources for displaced residents. Due in part to the extensive damage and permanent relocation resulting from Hurricane Katrina, two comprehensive housing market analyses have been conducted on the nine-parish Baton Rouge metropolitan area since the hurricane occurred, most recently in 2010 (visit http://www.huduser.org/portal/publications/PDF/CMAR_BatonRougeLA_10.pdf).



Comprehensive housing market analyses have also been completed on the Shreveport-Bossier and Lafayette, Louisiana metropolitan areas. The reports are available at http://www.huduser.org/portal/publications/PDF/CMAR_ShreveBossLA.pdf and http://www.huduser.org/portal/publications/PDF/CMAR_Lafayette_comp_11.pdf.

The broad area and the varied extent of damage required a careful and extensive tracking of activities and change. Local officials have broad knowledge about conditions in their areas, but field economists were able to provide precise data about changes that were occurring. The unique reconciliation-based framework of EMAD's analytical approach enables economists to work with disparate data from multiple sources and reach reasonable conclusions concerning market area changes. EMAD data were instrumental in identifying needs based on actual returning household trends, as reported in U.S. Census data. An important lesson learned from Hurricane Katrina was the tremendous emotion felt by residents along with the significant physical impact the area experienced. Critical need existed for a calm, considerate approach toward recovery plans and confronting dire realities; EMAD data were, and continue to be, important to the continuing process of recovery.

In 2009, HUD commissioned a special American Housing Survey (AHS) of the New Orleans metropolitan area with additional questions specific to measuring the effects Hurricane Katrina had on New Orleans' population level and available housing stock. The AHS estimated that the New Orleans housing stock in 2009 consisted of 512,500 housing units, down 8.6 percent from the 561,000 units estimated for New Orleans in the 2004 AHS. The rental housing vacancy rate increased from 10.5 percent in 2004 to 14 percent in 2009. In the aftermath of Hurricane Katrina, monthly housing costs increased significantly for both owners and renters. Real median monthly housing costs for occupied units in 2009 increased by 31.6 percent from costs reported for New Orleans in the 2004 AHS. In 2009, for all housing units, the median monthly housing cost was \$846 per month, with owners having a median cost of \$816 and renters having a median cost of \$870. In 2004, the median monthly housing cost was \$643 (in 2009 dollars), with a median cost of \$556 for owners and \$688 for renters.

Hurricane Katrina caused significant population upheaval and damage to housing units, inducing nearly one-half of the households to move more than twice after the hurricane occurred; more than 10 percent of the households had to move more than five times by 2009. Many households permanently resettled in St. Charles and St. Tammany Parishes. In 2011, the AHS will reassess the same housing units as in the 2009 survey to measure the continuing recovery and to estimate changes in the housing stock, population, and housing conditions

in the New Orleans metropolitan area since 2009. HQ PD&R staff and EMAD field economists in Regions IV and VI will continue to monitor and report on Gulf Coast areas affected by natural disasters.

Hurricane Rita made landfall early on September 24, 2005, less than 1 month after Hurricane Katrina came ashore. Whereas Hurricane Katrina hit the New Orleans and Mississippi Gulf Coast areas, Hurricane Rita made landfall over the Louisiana-Texas border, about 100 miles east of Houston and 250 miles west of New Orleans. Field economists immediately started providing baseline data on the metropolitan areas of Beaumont-Port Arthur in Texas and Lake Charles and Shreveport in Louisiana, as well as on several nonmetropolitan parishes in Louisiana. Field economists conducted analyses in the months and years after Hurricane Rita, when rebuilding occurred. Although no comprehensive housing market analyses were published following Hurricane Rita, field economists conducted baseline analyses and monitored employment, population, and building trends in affected areas. This process enabled field economists to provide data and complete market reviews for new housing developments with confidence in the accuracy of the forecasting that was required. A *Comprehensive Housing Market Analysis* of the Beaumont-Port Arthur metropolitan area was published in 2009 and is available at http://www.huduser.org/portal/publications/PDF/CMAR_BeaumontTX.pdf.

Hurricane Ike, which made landfall near Galveston, Texas, on September 13, 2008, resulted in the largest evacuation ever to take place in advance of a hurricane. Builder interest immediately following Ike resulted in EMAD field analysis, with both baseline and followup analysis occurring regularly since then. A *Comprehensive Housing Market Analysis* of the Houston-Sugarland-Baytown metropolitan area was completed in 2010. Galveston County, which is part of that area, is one of three submarkets analyzed and described in that report, available at http://www.huduser.org/portal/publications/PDF/CMAR_HoustonTX_10.pdf.

In May, 2010, extensive flooding in the Nashville, Tennessee area resulted in a request for EMAD analysis and baseline data. A *Comprehensive Housing Market Analysis* for the Nashville-Davidson-Murfreesboro-Franklin metropolitan area was already under way for the area, and the analysis was immediately revised to provide a baseline report, which was published in early 2011 and is available at http://www.huduser.org/portal/publications/PDF/Nashville_comp_2011.pdf. This baseline report, as with all baseline reports, provides all interested parties with a snapshot of data and an analysis that predates the disaster event. Followup analyses, both in house and in published work, track and report changes from the baseline date. These subsequent analyses provide an anchor for all parties in terms of the myriad policy and legislative discussions

that will occur during the months and years that follow. In addition, the baseline and subsequent analyses enable the field economists to make sound and accurate point-in-time and forecast recommendations to aid in the protection of the FHA Insurance Fund.

In the first 9 months of 2011, FEMA had 87 Declared Disasters, more than in any previous calendar year and well above the average of 35 annually since 1953 (see figure 2 and http://www.fema.gov/news/disaster_totals_annual.fema).

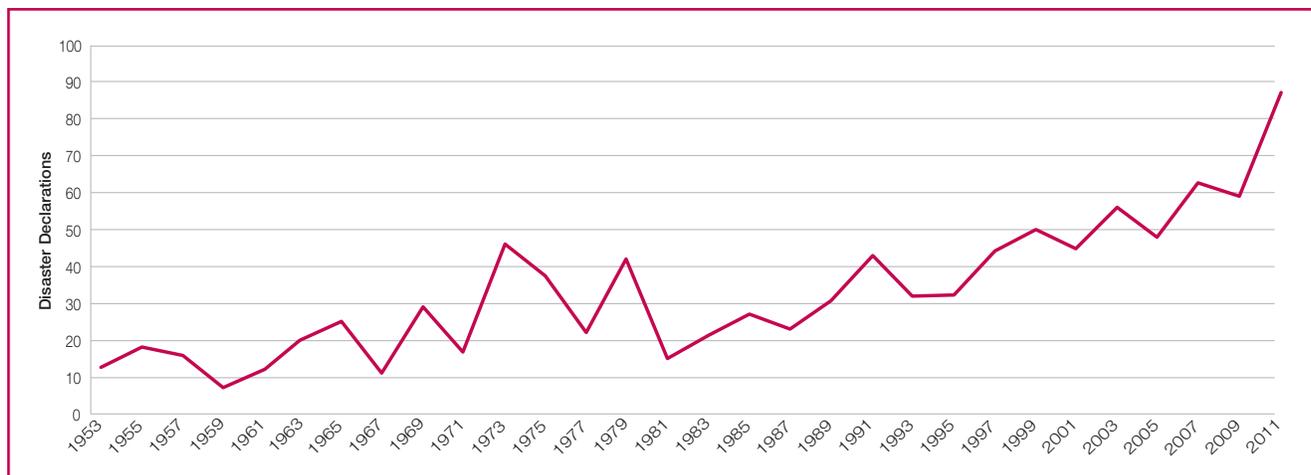
Field economists became involved in disaster work this year after tornadoes hit Alabama on April 27, 2011. They prepared brief pretornado condition reports for HUD HQ staff immediately following the tornadoes for the Birmingham and Tuscaloosa metropolitan areas and conducted preliminary research to ascertain what baseline data might be available for the nonmetropolitan counties that suffered damage. Data are very limited for counties with populations of less than 25,000.

Local officials and volunteers are, of course, the first responders to disasters. The data these people collect and record are invaluable to the field economists. An important part of the fieldwork is to establish and maintain contact with local officials and representatives of local organizations, including REALTORS®, builders, apartment associations, and housing authorities. Note that the Alabama tornadoes were the first major event in which HQ PD&R and EMAD field economists were jointly and separately involved to such a fully coordinated extent. The process and products that evolved were the result of close collaboration among all parties: the HUD HQ and field disaster staff, the Joint Field Office (JFO) staff, EMAD HQ and field staff, state and local officials, and others. This collaboration continued through the completion of the Alabama

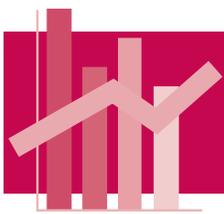
Housing Needs Assessment document delivered to FEMA as part of the Department’s Housing Recovery Support Function (RSF) responsibilities under the formal Mission Assignment from FEMA.

Field economists provided Housing RSF activities through and with the support of HUD’s Regional Disaster Recovery Coordinator. Regional economists participated in weekly conference calls with the coordinator, along with HUD Headquarters officials, the Birmingham HUD Field Office Director and staff, and HUD officials staffing the FEMA JFO in Birmingham. In these conference calls, disaster recovery team members planned field research and established target dates for delivery of work products for the preparation of pre-disaster baseline estimates and quarterly updates. In consultation with the team members and with Alabama state and local officials, the first areas for field research—Tuscaloosa and Birmingham—were selected based on data that HQ PD&R developed and that reflected large numbers of people and housing units affected by the storms in those areas. Before beginning their research in Tuscaloosa and Birmingham, field economists visited HUD and FEMA staff in the Birmingham JFO to discuss their component of HUD’s overall Housing RSF response, along with the anticipated work products. In the field, economists met with local officials and other industry sources, collecting data and information relevant to a baseline assessment, current conditions, and the future recovery. They made on-the-ground observations on all tornado-affected geography in support of the effort to provide a realistic and credible analysis. Summary results were provided through the Disaster Recovery Coordinator to the disaster recovery team members and were posted in *Market at a Glance* reports on PD&R’s HUDUSER website. As requested by FEMA officials, the economists also prepared

Figure 2. FEMA Declared Disasters: The First 9 Months of 2011 Compared With 1953 Through 2010



Source: Federal Emergency Management Agency



baseline estimates and quarterly updates for Franklin and Marion Counties, two nonmetropolitan counties in northwest Alabama that sustained significant damage. Anyone can view the *Market at a Glance (AAG)* reports and save a PDF file from a database at <http://www.huduser.org/portal/MCCharts/marketReports.html>. They are available for all metropolitan areas and counties. EMAD field economists regularly add narratives to these documents when workload permits. AAG reports are updated automatically each month with new employment and building permit data. For areas hit by disasters, field economists complete a *Baseline AAG*, which is an AAG with an added narrative representing data through the month before the disaster. HUD provides the *Baseline AAGs* for disaster areas to FEMA and completes quarterly updated narratives as new data become available.

A mockup of the Franklin County, Alabama *Market at a Glance* report appears at the end of this article.

A multiple vortex EF5 tornado struck the Joplin, Missouri area on the afternoon of May 22, 2011. An image captured about 1 month later by Google Earth satellite photography shows the approximate extent of the damage (see figure 3).

Early Monday morning, May 23, 2011, EMAD economists were using new technology to identify the areas damaged. Researching early reports and blogs provided information about places that had sustained damage. Then, it was a matter of finding the location and addresses of damaged areas (Home Depot, churches, and so on) that could be verified. The tornado swath generated from those reports came surprisingly close to the final report from FEMA.

Coincidentally, a field economist had already completed an in-house analysis of the Joplin area earlier in 2011. Baseline data were made available to HUD HQ and field personnel that day. Followup work similar to that completed for the Alabama areas has been completed. Two HUD economists conducted research in the area in early September 2011 and a baseline *Comprehensive Housing Market Analysis* is under way. The first quarterly updated *Baseline AAG* is expected to be completed and posted on the AAG website by the time this publication has also been posted.

Field economists working on the ground of the disaster area were able to get outstanding levels of data and information from local and state government. The Joplin area formed the Citizens Advisory Recovery Team (CART) that leads the collecting and storing of local data and guides the rebuilding efforts in Joplin. The data repository of the CART team enabled field economists to expand the scope of their analysis and to assemble more quickly the needed reports. CART provides EMAD with detailed building permit data updated

monthly, a working number of homes damaged or destroyed, and information on post-tornado relocation.

At about the same time that the Joplin tornado brought destruction to Missouri, seven Oklahoma counties suffered damage from straight-line winds, tornadoes, and flooding. Following a request for a federal disaster declaration by the governor of Oklahoma for those seven counties, a field economist, through the Field Office Director and the Region VI Disaster Coordinator, provided housing- and demographic-related statistics and maps on towns and cities consisting of 1,000 or more people located within a 40-mile radius of damaged areas within each of the affected counties. The field economist also provided project-specific vacancy rates for portions of the Oklahoma City and Tulsa metropolitan areas. The economist provided this assistance to enhance the use of the National Housing Locator System to identify potential temporary housing resources within commuting distance of people displaced by the storms. In this particular case, HUD provided EMAD assistance before the federal disaster declaration in an effort to expedite assistance after the federal disaster was actually declared on June 6, 2011.

In 2011, flooding in the upper Midwest hit the Minot, North Dakota area particularly hard in late May and early June. Field economists prepared the *Baseline AAG* for the area and are awaiting further instructions as FEMA develops the FEMA Mission Assignment.

During the week before Hurricane Irene made landfall on the east coast in late August 2011, the Department, led by the disaster recovery team, held daily conference calls with HUD staff, FEMA, and other federal responders. The team established staging areas at strategic locations and moved and stockpiled needed supplies. During the few days just before the hurricane made landfall, the Secretary's office asked PD&R to provide some housing and vacancy data that could be used as a resource in plans for recovery. EMAD offices in Regions I (New England), II (New York/New Jersey), III (Mid-Atlantic), and IV responded by forwarding to HQ the data they had collected on housing units, owner and renter households, and housing vacancies. They had gathered data from the most recent sources for all counties, from North Carolina to New England, that were anticipated to be in the general path of the storm. This information was then distributed to the appropriate HUD personnel and responders for use in field planning and recovery.

As the process has evolved, field economists have become prepared to provide the following information for all disaster areas, as requested by HUD HQ and field office management and in close coordination with FEMA, state and local officials, and residents:

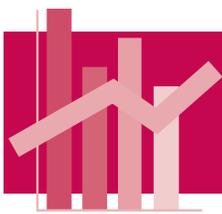
Figure 3. Approximate Extent of Maximum Damage: 2011 Joplin, Missouri Tornado



Source: Google Earth satellite photography

- The *Baseline AAG* report, which includes narratives for an affected area, as of the beginning of the month in which the disaster occurred.
- A set of detailed tables (the extracted graph files for a *Comprehensive Housing Market Analysis*), completed to the beginning of the month during which the disaster occurred.
- A list of bullets summarizing conditions in the affected area as of the beginning of the month during which the disaster occurred, with trend data for the previous 12 to 24 months.
- A baseline *Comprehensive Housing Market Analysis*, which requires fieldwork in the affected area and then 4 to 6 months of analysis writing and editing before publication.
- Quarterly *AAG Reports* with narratives and graph updates following the disaster until the post-recovery *Comprehensive Housing Market Analysis*.
- An updated (post-recovery) *Comprehensive Housing Market Analysis*, with the as-of date to be determined by recovery progress, and to be done after all parties—FEMA and HUD—agree that sufficient recovery has been accomplished for such a study to be completed.
- Other special analyses as needed.

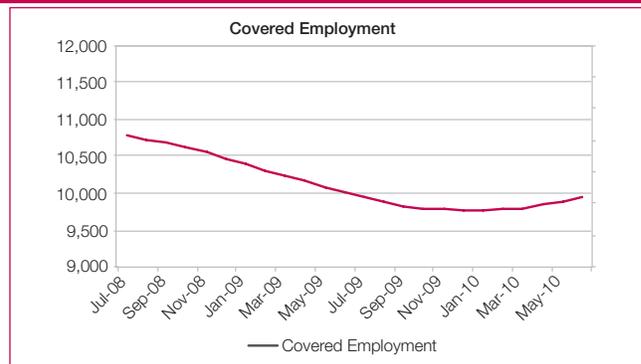
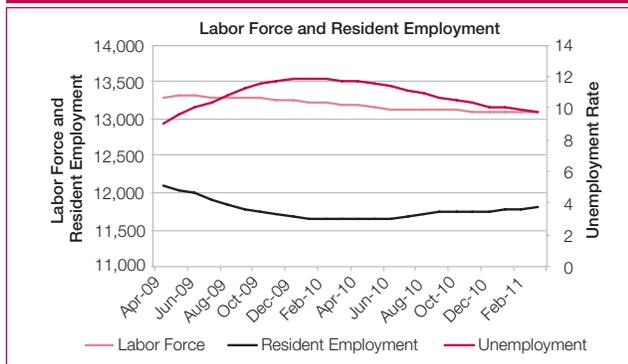
All EMAD Comprehensive Housing Market Analysis reports are available at http://www.huduser.org/portal/publications/econdev/mkt_analysis.html.



Market at a Glance Franklin County, Alabama

Prepared by PD&R / Economic & Market Analysis Division (EMAD)
Southeast/Caribbean Regional Office

Economic Conditions



Note: 12-month average.

Source: U.S. Bureau of Labor Statistics

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Source: U.S. Bureau of Labor Statistics

	12-Month Average			Average Annual Change			
	2000	Previous 12 Months	Current 12 Months	2000 to Previous		Previous to Current	
				Number	Percent	Number	Percent
Labor force ¹	14,741	13,187	13,087	- 168	- 1.1	- 100	- 0.8
Resident employment ¹	13,886	11,634	11,804	- 243	- 1.8	170	1.5
Unemployment rate (%) ¹	5.8	11.8	9.8	NA	NA	NA	NA
Covered employment ²	NA	10,014	9,923	NA	NA	- 91	- 0.9

NA = data not available.

¹ Previous is 12 months ending March 2010. Current is 12 months ending March 2011.

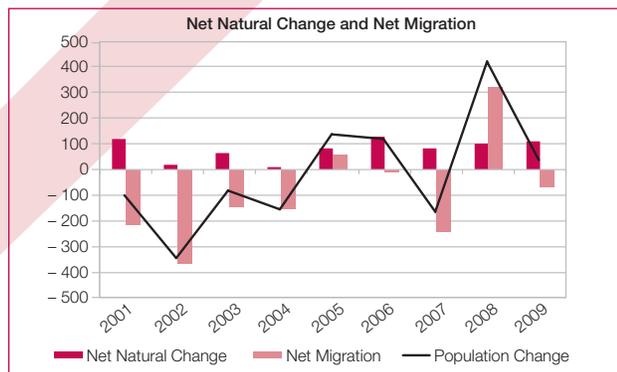
² Previous is 12 months ending June 2009. Current is 12 months ending June 2010.

Source: U.S. Bureau of Labor Statistics

Population and Households

					Average Annual Change					
	April 2000	July 2007	July 2008	July 2009	2000 to 2007		2007 to 2008		2008 to 2009	
					Number	Percent	Number	Percent	Number	Percent
Population	31,223	30,627	31,051	31,091	- 82	- 0.3	424	1.4	40	0.1
Households	12,259	12,192	12,061	12,421	- 9	- 0.1	- 131	- 1.1	360	3.0

Sources: For population, 2000 Census and U.S. Census Bureau Population Estimates; for households, 2000 Census and 2007, 2008, and 2009 American Community Surveys (3 Year)



Notes: Values in chart reflect July year-to-year changes. Net Migration includes residual population change.

Source: U.S. Census Bureau Population Estimates

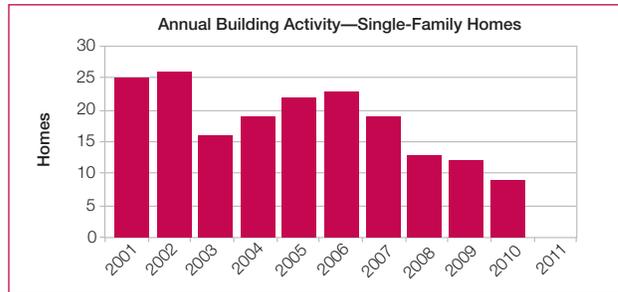
Economic Trends and Population and Household Trends

Precedes tornado, April 27, 2011: Economic conditions in Franklin County have improved slightly since the first quarter of 2010. Resident employment increased by 1.6 percent to 11,800 during the 12 months ending (TME) March 2011, an improvement compared with the loss of 460 workers, or 3.8 percent, during the previous 12 months. The unemployment rate fell from 11.8 percent during the TME March 2010 to 9.8 percent during the TME March 2011, due primarily to labor force participation declining while resident employment had slight increases. The population as of April 1, 2011, was 31,750, a gain of less than 1 percent from the April 2010 Census. As of April 2010, the total number of households increased to 12,286, or by less than 1 percent annually, from April 2000. In Franklin County, as of April 2010, for the city of Phil Campbell, the population was 5,896, relatively unchanged since April 2000.

Housing Market Conditions



Sources: 2000 Census; 2007, 2008, and 2009 American Community Surveys (3 Year)



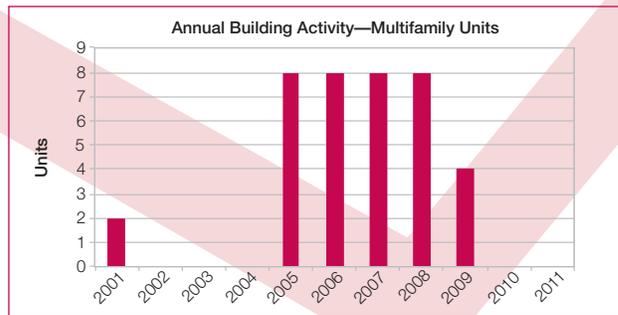
Note: Data for 2010 and 2011 are preliminary, through September 2011.

Sources: U.S. Census Bureau, Building Permits Survey; adjustments by analyst

Housing Inventory by Tenure

	April 2000	2007	2008	2009
Total housing units	13,749	14,030	14,035	14,138
Occupied	12,259	12,192	12,061	12,421
Owners	9,104	8,258	8,331	8,397
% Owners	74.3	67.7	69.1	67.6
Renters	3,155	3,934	3,730	4,024
% Renters	25.7	32.3	30.9	32.4
Total vacant	1,490	1,838	1,974	1,717
Available for sale	174	173	215	136
Available for rent	488	454	278	183
Other vacant	828	1,211	1,481	1,398

Sources: 2000 Census; 2007, 2008, and 2009 American Community Surveys (3 Year)



Note: Data for 2010 and 2011 are preliminary, through September 2011.

Sources: U.S. Census Bureau, Building Permits Survey; adjustments by analyst

Housing Market Conditions Summary

Precedes tornado, April 27, 2011: The Franklin County sales housing market was soft in April 2010, based on the 2010 Census, the most recent data available. The owner vacancy rate is estimated at 2.2 percent, up from 1.9 percent in 2000. Single-family building activity, as measured by the number of single-family building permits issued, averaged 21 a year from 2004 through 2007 but fell to 9 in 2010. The rental housing market was soft in April 2010, reporting an overall rental vacancy rate of 10.8 percent as of the 2010 Census, down from 13.4 percent in the 2000 Census. The total number of housing units in Franklin County was 14,022 as of the 2010 Census, up 0.2 percent annually from the 2000 Census. Multifamily housing units make up 11 percent of the housing stock in Franklin County compared with mobile homes, which account for 17 percent. Multifamily building activity, as measured by the number of multifamily building permits issued, averaged 8 a year from 2005 through 2008 but fell to 3 by 2010. According to LPS Applied Analytics, as of April 2011, approximately 5.1 percent of total home loans were 90 or more days delinquent, in foreclosure, or Real Estate Owned (REO), down from 5.9 percent the previous year.

Rental Housing Supply

Under construction	NA
In planning	NA

NA = data not available.

Note: Units in planning have not been permitted but are expected to be completed within 3 years.

Source: Estimates by analyst