**GAO** 

Report to the Committee on Homeland Security and Governmental Affairs, U.S. Senate

December 2008

DISASTER RECOVERY

FEMA's Public Assistance Grant Program Experienced Challenges with Gulf Coast Rebuilding





Highlights of GAO-09-129, a report to the Committee on Homeland Security and Governmental Affairs, U.S. Senate

### Why GAO Did This Study

The devastation caused by the 2005 Gulf Coast hurricanes presented the nation with unprecedented rebuilding challenges. The Federal Emergency Management Agency's (FEMA) Public Assistance (PA) grant program is a key tool for providing funds to support recovery, including rebuilding public schools, roads, and utilities.

GAO was asked to examine the amount of PA grants FEMA has provided for rebuilding the Gulf Coast; challenges in the day-to-day operation of the PA program; and human capital challenges; as well as actions taken to address them. Toward this end, GAO reviewed relevant laws, PA regulations and procedures, and analyzed data from FEMA's National Emergency Management Information System. GAO also interviewed federal officials from FEMA and the Department of Homeland Security's (DHS) Office of the Federal Coordinator for Gulf Coast Rebuilding as well as more than 60 officials from state government and eight localities in Louisiana and Mississippi.

### **What GAO Recommends**

GAO makes several recommendations to the Secretary of Homeland Security including to direct FEMA to improve information sharing within the PA process and to further enhance continuity and communication when staff rotate on and off PA projects. In commenting on a draft of this report DHS generally agreed with our recommendations.

To view the full product, including the scope and methodology, click on GAO-09-129. For more information, contact Stanley J. Czerwinski at (202) 512-6806 or czerwinskis@gao.gov.

### DISASTER RECOVERY

# FEMA's Public Assistance Grant Program Experienced Challenges with Gulf Coast Rebuilding

#### What GAO Found

Funding for PA grants related to the 2005 Gulf Coast hurricanes is already more than \$11 billion, surpassing that of any previous disaster, and will likely be higher than FEMA's total cost estimate of \$13.2 billion. About 90 percent of these funds have gone to the states of Louisiana and Mississippi, about half of which have passed from the states to grant applicants to date. GAO identified challenges in the following broad areas, many of which contributed to slowing down rebuilding projects.

- **Project Development.** Challenges in the development of PA projects included difficulties (1) determining the amount of damage that was disaster-related, (2) using PA program flexibilities to rebuild in a way that meets postdisaster needs, (3) assessing project scope including whether to repair or replace damaged structures, (4) estimating project costs, and (5) having sufficient resources to initiate projects. For example, assessing the damage to New Orleans's water and sewer system was complicated by the difficulty distinguishing disaster-related from preexisting damage. Estimating the cost of PA projects presented special challenges because of unusual market conditions for labor and materials in the postdisaster economy.
- Information Sharing and Tracking. GAO identified challenges in sharing information among federal, state, and local participants in the PA process as well as in tracking the status of projects. For example, in Louisiana, information sharing was made more difficult in the absence of an effective document-sharing system and because key FEMA and state officials who review PA applications are located in different cities.
- **Project Approvals and Appeals.** FEMA's approval decisions on some projects were reversed after applicants had already moved ahead with construction. In addition, decisions on appeals were often not made within required time frames due to the large number of rebuilding projects.
- Human Capital. Human capital challenges at all levels of government
  underlie many of the above challenges and also slowed rebuilding
  projects. Shortages of experienced and knowledgeable staff were
  particularly problematic during the initial stages of rebuilding. FEMA's
  early reliance on temporary rotating staff did not provide the level of
  continuity needed for the complex demands of Gulf Coast rebuilding.

Among the actions DHS has taken to address these challenges are the finalization of a PA catastrophic disaster recovery concept plan that recognizes the need to more easily tailor projects to meet postdisaster conditions; the development of new management information systems to better track and manage projects and increase the transparency of PA funding; and the creation of a credentialing program for employees.

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#### **Abbreviations**

EMMIE	Emergency I	Management Mission	Integrated Environment

FEMA Federal Emergency Management Agency

GOHSEP Governor's Office of Homeland Security and Emergency

**Preparedness** 

MEMA Mississippi Emergency Management Agency

NEMIS National Emergency Management Information System

PA Public Assistance

PKEMRA Post-Katrina Emergency Management Reform Act of 2006

Stafford Act Robert T. Stafford Disaster Relief and Emergency

Assistance Act

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# United States Government Accountability Office Washington, DC 20548

December 18, 2008

The Honorable Joseph I. Lieberman Chairman The Honorable Susan M. Collins Ranking Member Committee on Homeland Security and Governmental Affairs United States Senate

The size and scope of the devastation caused by the 2005 Gulf Coast hurricanes presented the nation with unprecedented rebuilding challenges, and an example of how catastrophic events can overwhelm the capacity of federal, state, and local resources in both response and recovery. More than 3 years after the disaster and as the Gulf Coast again undertakes recovery efforts in the wake of Hurricanes Ike and Gustav, critical aspects of recovery, such as rebuilding the infrastructure of state and local schools, roads, and utilities, continue to require federal, state, and local government involvement.

You asked us to examine the federal government's support of state and local efforts to restore Gulf Coast public infrastructure and facilities through the Federal Emergency Management Agency's (FEMA) Public Assistance (PA) grant program. The PA program funds both emergency work projects, such as debris removal, and permanent work projects, such as the restoration of damaged buildings, roads, and public utilities. In response to your request, we report on: (1) the amount of PA grants FEMA has provided, or plans to provide, for rebuilding the Gulf Coast; (2) challenges federal, state, and local governments experienced in the day-to-day operation of the PA program, especially in developing projects, sharing and tracking project information, and making key project decisions, and the actions that have been taken to address these challenges; and (3) the human capital challenges and successes federal, state, and local governments experienced with the program during Gulf Coast rebuilding and the actions taken to address them.

To conduct our review we obtained and reviewed PA regulations and procedures and interviewed federal officials from FEMA, the Department of Homeland Security's (DHS) Office of the Inspector General, and Office of the Federal Coordinator for Gulf Coast Rebuilding. We also obtained and analyzed PA data from FEMA's National Emergency Management Information System (NEMIS) providing information on projects including cost estimates, status of projects, and project location. Further, to obtain

information on the experiences of state and local officials involved in the implementation of the PA program, we interviewed more than 60 state and local officials from eight localities in Louisiana and Mississippi. These two states were most affected by the 2005 Gulf Coast hurricanes and were the focus of our review. We interviewed and obtained information from key state grantees and local applicants who had knowledge of, experience with, or a leadership role in the PA program in these two states. For more information on our scope and methodology see appendix I. We conducted this performance audit from August 2007 through November 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Results in Brief

Due to the massive size and unprecedented scope of the devastation caused by the 2005 Gulf Coast hurricanes, federal funding for PA grants is already more than \$11 billion, surpassing that of any previous disaster. The final cost will likely exceed FEMA's estimate of \$13.2 billion because this figure does not reflect additional projects that have yet to be approved, and the final cost for projects already approved may be higher than the agency's initial estimates. Moreover, the true cost of the PA program in the Gulf Coast is unknown since FEMA does not track its administrative expenses by program, and these costs are likely to be significant. The vast majority of PA funding made available to the Gulf Coast states has gone to Louisiana and Mississippi, and most of this has been dedicated to large rebuilding projects. To date, about half of all funds provided to these two states have been passed along to local entities. One reason for this is that the state often reimburses local entities for large rebuilding projects after work is performed, which can take many years to complete. Another is that, at times, the funding process has been slowed because of challenges in developing projects, sharing information, and making decisions regarding project approvals and appeals discussed below. Finally, as is the case with overall cost, the number of PA projects in the Gulf Coast is also very large. However, we found the way FEMA reports on this specific

<sup>&</sup>lt;sup>1</sup>For purposes of this report, "the 2005 Gulf Coast hurricanes" refers to Hurricanes Katrina and Rita. Additionally, in this report, "Gulf Coast" refers to the states of Alabama, Louisiana, Mississippi, and Texas, but does not include Florida.

metric to Congress and the public is potentially misleading. Specifically, the figure provided in PA data reports regularly issued by the agency does not represent the number of unique PA projects, but also includes revisions that have been made to these projects, which roughly doubles the number reported.

Federal, state, and local officials told us that they experienced a wide range of challenges in the day-to-day operation of the PA program, many of which were magnified because of the sheer number of rebuilding projects following the 2005 Gulf Coast hurricanes. These challenges related to three broad areas: developing projects, sharing information, and making key project decisions. In addition, human capital challenges at the federal, state, and local level underlie many of these day-to-day operational difficulties.

First, we identified several challenges involving the process of developing PA projects which, at times, contributed to delays and increased costs particularly for many large permanent work projects. These included difficulties in: (1) determining the amount of damage that was actually disaster-related, (2) using PA program flexibilities to rebuild to the postdisaster needs of PA grant applicants, (3) assessing project scope and deciding whether to repair or rebuild, (4) estimating project costs, and (5) obtaining resources to initiate projects. For example, estimating the cost of rebuilding projects was made particularly difficult because of the unusual labor and material costs of the postdisaster economy. Low cost estimates required the reassessment of damage later in the project development process, resulting in delays. Also, many cash-strapped localities lost their revenue base following the disaster and faced challenges in initiating rebuilding projects, resulting in project delays, particularly since the PA program is geared toward reimbursement after construction. For each of these challenges, the scope of the damage and the magnitude of the rebuilding that followed the 2005 Gulf Coast hurricanes considerably worsened the effect.

Second, because the PA process is complex and requires collaboration among federal, state, and local officials, effective sharing of project information is especially important. We identified challenges to sharing project information among intergovernmental participants during project development, and limitations in how the status of projects is tracked. For example, PA applicants in Louisiana told us of the need to repeatedly resubmit estimates, receipts, and invoices due to the lack of an effective system for sharing such documentation. In contrast, in Mississippi, participants used a secure online accounting system to manage and share

supporting documentation. Also, information sharing was made more challenging in Louisiana because key officials from FEMA and the state agency responsible for reviewing and approving PA applications were not located in the same city. In Mississippi, state and local officials administered the program from the same facilities, which they said had multiple benefits for information sharing including facilitating regular meetings on project development issues. In addition, FEMA does not routinely track project status after funds are made available to the state and before project closeout, nor does it obtain information by specific building site. While we recognize that this approach toward tracking PA projects may be appropriate for most disasters, in this case such information is important due to the high level of interest from Congress and the public in following the progress of Gulf Coast rebuilding.

Third, FEMA's approach to making decisions regarding project approvals and appeals also presented challenges to moving forward with rebuilding. For example, in some cases after applicants received approval for their projects from FEMA and had already moved ahead with construction, the agency decided to reconsider and ultimately reverse its decision. As a result of these reversals, some applicants told us that they were hesitant to move forward on other projects. Further, decisions on project appeals were sometimes not made within the time frames required under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act).

Human capital challenges at the federal, state, and local level underlie many of the difficulties we identified in the day-to-day operation of the PA program after the 2005 Gulf Coast hurricanes. Given the magnitude of these hurricanes, it is not surprising that all of the federal, state, and local officials with whom we spoke reported challenges associated with inadequate human capital capacity, especially early on in the recovery. As a result, FEMA and the states relied upon inexperienced staff to implement the PA program in Mississippi and Louisiana. Many of these inexperienced staff received abbreviated, or in some cases no, training on important PA processes, which affected their ability to effectively implement the program. For example, many FEMA staff responsible for developing projects were not trained on the cost-estimating method that FEMA preferred. In addition, limitations in local human capital capacity especially early on in the recovery—hindered staff ability to actively participate in key aspects of the PA process including conducting damage assessments and preparing the significant documentation required during project development. Federal, state, and local human capital challenges at times slowed project development due to the lack of staff to conduct

damage assessments and scope projects. The lack of continuity in FEMA staffing during project development also hindered rebuilding progress. FEMA's reliance on temporary rotating staff did not provide the level of continuity needed for the complex, long-term demands of Gulf Coast rebuilding. For example, in the absence of reliable electronic access to the case management files, rotating staff did not always document information and decisions about specific projects, which delayed project development because applicants then had to repeat discussions with their new FEMA representatives or provide duplicate documentation. Applicants also reported that there was often no notice of when a new FEMA representative was assigned to their projects and no "hand off" meeting with all parties to share project information. While several applicants told us that staff continuity has improved, challenges in this area early in the recovery process slowed the progress of rebuilding projects.

In response to challenges in the day-to-day operation of the PA program on the Gulf Coast and to the human capital issues underlying many of these, FEMA is taking several actions. FEMA's Public Assistance Catastrophic Disaster Recovery Concept Plan, finalized in May 2008, recognizes the need for PA regulations to allow applicants to more easily tailor projects to meet postdisaster needs. In addition, the plan recognizes the need for FEMA, the state, and the applicant to develop more comprehensive damage descriptions in order to reduce conflicts regarding project cost estimates later in the process. FEMA officials told us that both of these efforts, along with a range of other initiatives related to the plan, are in development or underway and are expected to be complete by March 2009. FEMA managers in Transitional Recovery Offices in Mississippi and Louisiana have taken steps to more effectively gather and report on the status of PA projects. In addition, FEMA, working with the Office of the Federal Coordinator for Gulf Coast Rebuilding, established a transparency initiative in February of 2008 to make detailed information available on a publicly accessible Web site regarding selected buildings and projects in the Gulf Coast receiving PA funds. Furthermore, FEMA officials are also taking steps to improve national data collection through a new information-management system, called the Emergency Management Mission Integrated Environment (EMMIE), which, according to agency officials, will provide better tracking and management of PA projects for future disasters.

FEMA has responded to challenges associated with project approval decisions by improving the timeliness of appeal decisions after creating a special appeals team in March 2006 dedicated to helping resolve a backlog of appeals. The agency also made changes to the appeals process within

Louisiana so that an applicant's appeal is not reviewed by the same office that made the project decision in the first place, but rather by an appeals team outside of FEMA's Louisiana office. In response to human capital challenges, according to FEMA officials, the agency is using a cadre of more experienced staff to administer the PA program. Further, FEMA officials reported that they have implemented changes during recovery from the 2005 Gulf Coast hurricanes, which they recently institutionalized during the recovery of Hurricanes Gustav and Ike. These changes included recruiting and hiring more long-term staff to function as a single point of contact for these disasters. State and local officials in the Gulf Coast report that staff support from FEMA has improved. Finally, to help address concerns about the lack of continuity among staff, FEMA's Transitional Recovery Office in Louisiana has begun to use a team approach to sharing project information so that no one staff person is solely responsible for retaining knowledge about a specific project.

To help DHS improve the operation of the Public Assistance grant program and build on some of the actions it has taken to date, we recommend that the Secretary of Homeland Security direct the Administrator of FEMA to take several actions to incorporate lessons learned from FEMA's experiences on the Gulf Coast by: (1) improving reporting on PA grants by better defining information presented in FEMA's regular reports to Congress and the public and by providing the number of unique PA projects in addition to the data currently reported by the agency; (2) improving collaboration and information sharing within the PA process by identifying and disseminating practices that facilitate more effective communication among federal, state, and local entities communicating and tracking PA project information; (3) developing protocols to improve information and document sharing among FEMA staff who rotate on and off projects; and (4) communicating the timing of expected FEMA staff rotations to applicants directly affected by those staffing changes.

We provided a draft of this report to the Secretary of Homeland Security for comment and DHS generally agreed with our recommendations. The department also provided technical comments, which we incorporated where appropriate. DHS's written response is provided in appendix II. We also provided drafts of relevant sections of this report to state and local officials involved in the specific PA examples cited in this report. We incorporated their comments as appropriate.

# Background

The Stafford Act defines FEMA's role during response and recovery after a major disaster. One of the principal programs that FEMA operates to fulfill its role is the PA program. Under the program, FEMA provides grants to state and local government agencies, Indian tribes, authorized tribal organizations, and specific types of nonprofit organizations. In this process, one of FEMA's key objectives is to maintain proper management controls, thereby creating a climate of stewardship and accountability in the use of federal funds.

As in the case of many federal grant programs, FEMA provides funds to a state government, which, in turn, passes these funds along to a local grant applicant. Unlike a typical federal grant program, there are no caps on the amount of funding an applicant can receive under the PA program as long as the project meets eligibility requirements. The PA program categorizes funds into broad groups: emergency work (such as debris removal or emergency protective measures to preserve life and property) and permanent work (such as repairing and replacing damaged buildings, utilities, roads and bridges, recreational facilities, and water-control facilities).

PA is a complex and multistep grant program administered through a partnership between FEMA and the state grantee. In Gulf Coast recovery, the role of Louisiana's state grantee was initially carried out by the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP). In January 2008, Louisiana's Governor assigned the Louisiana Recovery Authority as the lead state agency working with FEMA on recovery operations. In Mississippi, this role is carried out by the Mississippi Emergency Management Agency (MEMA). The program is structured to provide financial assistance while ensuring a high level of accountability and control over spending. Thus, it entails an extensive paperwork and review process based upon a number of specific eligibility rules that outline the types of damage that can be reimbursed by the

<sup>&</sup>lt;sup>2</sup>42 U.S.C. § 5121–5207. Under the Stafford Act, the governor of a state may request a declaration of a major disaster when effective response and recovery are beyond the capabilities of the state and affected local governments. See 43 U.S.C. § 5170.

<sup>&</sup>lt;sup>3</sup>The amount of PA funding is reduced by, among other considerations, insurance proceeds and, for some projects, the salvage value. Also, in most disasters, certain matching requirements must be met in order for applicants to receive PA funding; however, matching requirements were waived for the 2005 Gulf Coast hurricanes. Finally, funds must be available in FEMA's Disaster Relief Fund through congressional appropriations.

federal government and steps that federal, state, and local governments must take in order to document eligibility.

After a disaster, FEMA typically works with the affected state government to set up a field office at or near the disaster site to administer PA grants. FEMA staffing usually consists of (1) permanent full or part-time employees, (2) nonpermanent reserve staff,<sup>4</sup> and (3) technical-assistance contractors. In addition, the field office is staffed by the affected state's emergency management personnel. In general, the majority of FEMA staff assigned to the field office consists of nonpermanent reserve staff and can be used in any capacity, depending upon their skills, and are typically deployed for shorter-term assignments (i.e., 90 to 120 days). Technical-assistance contractors typically provide assistance in specialized areas such as structural, mechanical, and civil engineering.

Federal, state, and local officials each play a significant role in carrying out many of the steps of the PA funding process (see fig. 1). In this process, the state is the official "grantee," while the local government or equivalent entity is the "subgrantee" or "applicant" that ultimately receives the funding. After a disaster is declared, FEMA and state representatives brief applicants on the program, and FEMA assigns a Public Assistance Coordinator as well as Project Officers and technical specialists to assist the applicant through the PA funding process. After determining that the applicant and type of facility are eligible for funding, FEMA, the state, and the applicant work together to develop a project worksheet describing the scope of work and estimated cost. As part of FEMA's approval process, the agency also conducts historical and environmental reviews.

FEMA generally defines a project in its 2007 Public Assistance Guide as a logical grouping of work that will be funded as a unit. Under this definition, a project may cover work for one damage site (e.g., all of the damage to a single school) or for similar types of damage that one contractor may repair at various locations (e.g., all sewer pump stations in

<sup>&</sup>lt;sup>4</sup>Nonpermanent staff, known as the Cadre of On-call Response/Recovery Employees perform functions similar to those performed by permanent full-time employees but on an intermittent basis. These staff work alongside permanent full-time employees in headquarters and the regions.

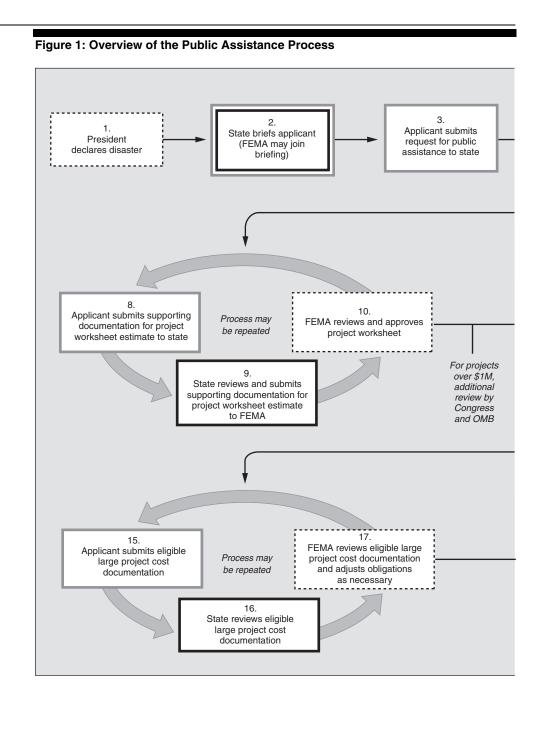
a city). The Stafford Act provides a simplified procedure for smaller projects whose cost estimate is under a certain dollar threshold.<sup>5</sup>

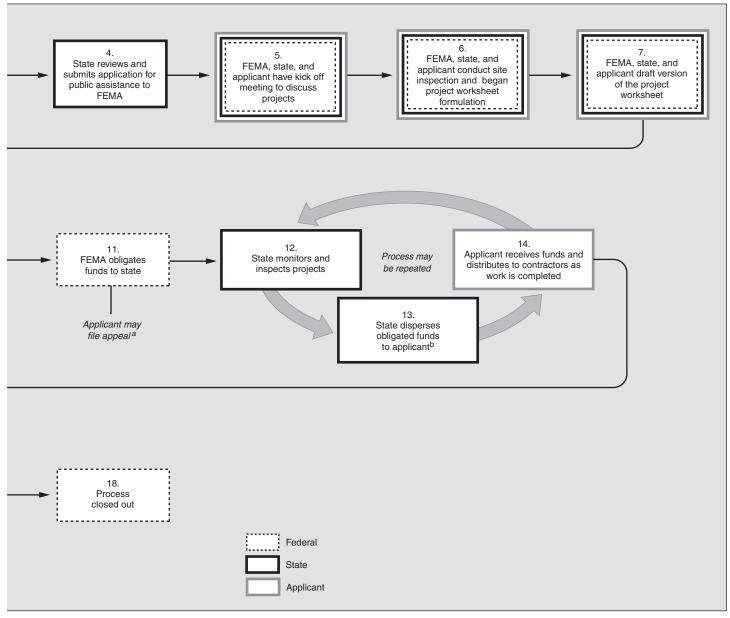
After FEMA approves a project, funds are obligated—that is, they are made available—to the state grantee, which, in turn, passes the funds along to applicants. For large projects, funds are generally distributed to applicants on a reimbursable basis after project work is completed, although PA program rules allow applicants to receive PA funds from states earlier under certain conditions. For small projects, funds are provided up front to the applicant based on FEMA's approval of the project's cost estimate.

The cost estimate or scope of work may change after project approval when new information comes to light. For example, if an applicant discovers that the actual costs for a project are higher than FEMA's estimate, the applicant may apply to FEMA for additional funds. However, if the actual cost is lower than FEMA's estimate, the applicant will receive only the actual costs incurred. In another example, FEMA may approve the scope of work for repairing damage to part of a wall or ceiling, but when an applicant seeks bids to repair the damage a contractor might conclude the entire wall or ceiling must be replaced in order to maintain the integrity of the building. Under these circumstances, a scope of work and cost adjustment might be approved by FEMA.

 $<sup>^5\</sup>mathrm{See}\ 42$  U.S.C.  $\S$  5189. In 2005, any project over  $\$55{,}500$  was considered to be a large project.

<sup>&</sup>lt;sup>6</sup>While the term "obligated" has a specific meaning in appropriations law, FEMA uses this term to mean that federal funds are available for the state grantee to draw down prior to passing them along to an applicant. Throughout this report, we refer to obligated funds as funds that are "made available to the states."





Source: GAO analysis of FEMA information.

<sup>&</sup>lt;sup>a</sup>See fig. 5 for PA appeals process description.

<sup>&</sup>lt;sup>b</sup>Partial payments may be made to the applicant during the execution of the projects. For small projects (equal to or under \$55,500), the state may disburse the federal share at this step.

In October 2006 Congress passed the Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA) which, among other changes, reorganized FEMA, elevated FEMA's position within DHS, and increased FEMA's independence. 7 PKEMRA gave FEMA new human capital authorities and responsibilities, including requiring FEMA to develop a strategic plan on human capital, authorizing recruitment and retention bonuses for difficult-to-fill positions, and providing for the professional development of FEMA employees through rotations within DHS. Further, FEMA was to establish a Surge Capacity Force of trained individuals prepared to respond to disasters. PKEMRA also made specific changes to the Public Assistance program such as authorizing incentives for the timely closing of PA projects and making educational nonprofit facilities eligible for PA funds. PKEMRA also authorizes FEMA to conduct a PA pilot program intended to reduce the cost, increase the flexibility, and expedite the provision of assistance. FEMA established new procedures under the pilot program and waived certain Stafford Act provisions and PA regulations for the purposes of the program.

To respond to the 2005 Gulf Coast hurricanes the federal government has already committed a historically high level of resources—more than \$126 billion as of August 2008. More than half of this assistance was directed to emergency assistance and meeting shorter-term needs arising from the hurricanes, such as relocation assistance, emergency housing, immediate levee repair, and debris removal efforts. FEMA's PA grant program is a significant federal tool to support longer-term recovery efforts. One year after the disaster, the Brookings Institution estimated that approximately \$35 billion of the federal resources had been provided to support longerterm rebuilding efforts. In addition to the PA program, other examples of federal longer-term rebuilding assistance include the U.S. Department of Housing and Urban Development's Community Development Block Grant program primarily to help rebuild homes and apartments; the U.S. Department of Transportation's funding for roads, bridges, and aviation facilities; U.S. Small Business Administration's low-cost disaster loan program; and tax incentives and relief for hurricane victims and small businesses through the Gulf Opportunity Zone Act.<sup>8</sup>

<sup>&</sup>lt;sup>7</sup>Department of Homeland Security Appropriations Act, 2007, Pub. L. No. 109-295, Post-Katrina Emergency Management Reform Act of 2006, title VI, 120 Stat. 1355, 1394 (Oct. 4, 2006).

<sup>&</sup>lt;sup>8</sup> Pub.L.No.109-135,119 stat.2577 (Dec.21,2005).

Cost and Scope of PA for Gulf Coast Rebuilding Is Very Large and Will Likely Increase Federal funding for the PA program in the Gulf Coast has already surpassed that of any previous disaster, and the total cost will likely be higher than FEMA's estimate. Costs are likely to increase because the agency's estimate of the total PA cost does not reflect additional projects that have yet to be approved or the final costs for already-approved projects, which may be higher than FEMA's original estimates. In addition, FEMA's estimates do not include its own administrative costs for the PA program. As in the case of costs, the number of PA projects in the Gulf Coast is unprecedented but FEMA's reporting to Congress and the public on the number of total projects may have been misleading. As of September 2008, about 90 percent of PA funding made available to the Gulf Coast states has gone to Louisiana and Mississippi primarily for large permanent rebuilding projects. Within these two states, about half of this funding has been provided to local PA applicants to date. This is because many large projects take several years to complete and PA generally reimburses applicants after work is complete, as well as the challenges that will be discussed later in this report.

Cost for the PA Program in the Gulf Coast Has Surpassed Any Previous Disaster, and Is Likely to Increase Further

As of September 2008, FEMA had made \$11.1 billion available to PA applicants in the Gulf Coast. FEMA estimates that PA funding in the Gulf Coast will reach approximately \$13.2 billion, surpassing all previous disasters, but final costs will likely be even higher. The PA program accounts for a substantial amount of the federal assistance committed to longer-term rebuilding efforts in the Gulf Coast region. Already, FEMA's estimate for the PA program in the Gulf Coast has greatly surpassed PA funding for any prior disaster, including the \$4.8 billion of federal PA funds spent for the 9/11 terrorist attacks on the World Trade Center (see fig. 2). Furthermore, total PA funding will likely be higher than FEMA's estimate because: (1) some projects, not yet approved, are not reflected in FEMA's total; and (2) the cost of some projects already reflected in FEMA's recent estimate may turn out to be higher once FEMA has refined the scope and costs of these projects. For example, FEMA has already significantly increased its estimate of total cost from its projections of July 2007, when it estimated total spending of \$10.3 billion. The gap between this estimate and FEMA's September 2008 estimate of \$13.2 billion indicates that anticipated PA funding increased by \$2.9 billion in the intervening 14 months.

Figure 2: Comparison of Total PA Funds for Selected Large Disasters

Source: FEMA data

Note: This graphic is in nominal dollars and is not adjusted for inflation. All above data are as of April 30, 2008, except for the figure for the 2005 Gulf Coast hurricanes, which is current up to September 11, 2008. The "Florida hurricanes" refers to Hurricanes Charley, Frances, Ivan, and Jeanne, as well as Tropical Storm Bonnie.

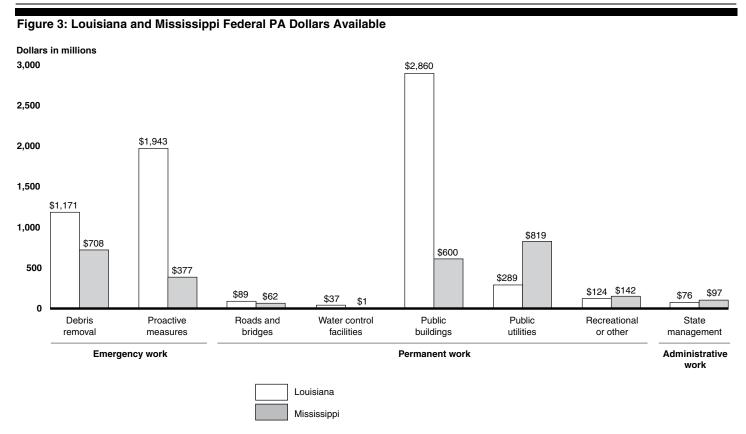
In order to understand the entire cost of the PA program to the federal government, it is necessary to account for administrative costs as well. FEMA's estimate captures some of the administrative costs incurred by applicants and states. However, for a full accounting, it is also necessary to consider the cost to FEMA for its administration of the program. Given the large number of contract staff and FEMA employees involved in administering the program, these expenses are likely extensive. For

<sup>&</sup>lt;sup>9</sup>The Stafford Act provides an allowance for PA applicants to cover administrative activities such as requesting, obtaining, and administering PA. This allowance is calculated as a percentage of the total amount of PA program funds, based on a sliding scale. Some state administrative activities such as field inspections, damage assessments, and cost estimates are covered on the basis of a sliding scale related to the total amount of PA program funds being awarded. In addition, because of the size of the 2005 Gulf Coast hurricanes, FEMA created a separate category of funding for state administration including costs associated with hiring technical assistance contractors.

example, during 2006, staffing for field locations in Louisiana and Mississippi exceeded 3,500 staff. FEMA provided us with the cost for contractors supporting the administration of the PA program in the Gulf Coast as \$1.7 billion through April 2008. However, other administrative expenses such as FEMA salaries, travel allowances, and overhead are unknown because the agency estimates such costs centrally, rather than by program.

Large Rebuilding Projects in Louisiana and Mississippi Account for the Vast Majority of PA Funds Made Available to Gulf Coast States

As of September 2008, the states of Louisiana and Mississippi have received about 90 percent of all PA funds distributed to the four Gulf Coast states. Specifically, Louisiana and Mississippi have received \$7.2 billion and \$2.9 billion respectively, while Texas has received \$919 million and Alabama has received \$116 million. (See fig. 3 for dollars made available to Louisiana and Mississippi for each PA category of damage.) The vast majority of the funding in Louisiana and Mississippi has gone toward large projects, even though small projects greatly outnumber larger projects. For instance, there were 23,886 projects in Louisiana and Mississippi funded for less than \$55,600 whose total value equaled \$222 million. On the other hand, 321 projects funded for \$5 million or more had a total value of \$5.2 billion.

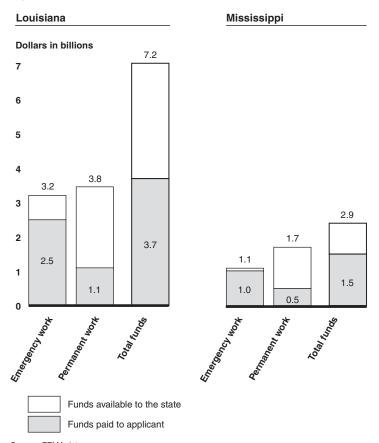


Source: GAO analysis of FEMA data as of July 2008

Of the four states affected by the 2005 Gulf Coast hurricanes, Louisiana and Mississippi have disbursed relatively the least amount of funding for projects (51 percent and 53 percent respectively). However, they are also the states with the largest amount of funding going toward permanent rebuilding projects, which can take several years to complete, and thus reimburse. For example, in Louisiana, PA applicants have received 77 percent of the \$3.2 billion made available to the state for emergency work, while they have only received 29 percent of the \$3.8 billion made available to the state for permanent rebuilding. Mississippi has a similar distribution of funds (see fig. 4). While there has been some concern about why more of these funds have not been distributed to applicants, there are at least two key reasons for this distribution of funds. Since the bulk of PA program dollars are distributed as reimbursements to the applicant, the applicant typically does not receive full funding for projects until costs have been incurred—even though FEMA has already made these funds

available to the state. Most funds for emergency projects have already been passed along to applicants. However, permanent rebuilding projects can take several years to complete, so a significant portion of funds for these projects have not been passed on to applicants. Additional factors contributing to this gap include some of the operational challenges that we identify later in this report.

Figure 4: Public Assistance Funds Paid to Applicants in Louisiana and Mississippi



Source: FEMA data.

Note: Data are from FEMA's September 2008 Global Report on Public Assistance in the Gulf Coast.

Number of PA Projects in the Gulf Coast Is Very Large, but FEMA's Reporting of This May Be Misleading As in the case of overall costs, the number of PA projects in the Gulf Coast is very large. The number of projects in the Gulf Coast, as reported by FEMA, is projected to be more than 81,000, with Louisiana alone accounting for more than 44,000. According to FEMA, the average number of projects for major disasters occurring between October 1998 and January 2007 was just over 700.

Although there is no question that the number of Gulf Coast rebuilding projects is very large, the figure reported by FEMA in its status report to Congress and the public may be misleading. This is because the figure does not represent the number of unique PA projects, but rather, includes the number of changes (or "versions") that have been made to project worksheets. Our analysis of the number of projects in Mississippi and Louisiana—the two states with the vast majority of projects—showed that in arriving at its total number of projects, FEMA often counted projects 2 or 3 times and in some cases project were counted as many as 11 times. Overall, FEMA's decision to include multiple versions in its external reports roughly doubled the total number of projects (see table 1).

FEMA officials acknowledged that reporting on the total number of project changes might be misleading but noted that this can be a useful measure of FEMA workload because it captures the effort involved in preparing multiple versions. In addition, FEMA officials noted that they were reluctant to change reporting metrics because they believed such a change might confuse users of the reports. We agree with FEMA that continued reporting of the total number of project changes can be useful—both as a measure of the projects being processed by the agency and to provide continuity with previous data reports. However, it is not clear why it is necessary to continue reporting this figure under the potentially misleading label of "number of projects," nor why information on the actual number of unique projects is not also provided in the agency's regular PA data reports. As of November 2008, these reports only included the total number of project versions and not the number of unique projects.

Table 1: FEMA-Reported Number of Projects (Which Include Versions) Compared to Numbers of Unique Project Worksheets

	Number of Project Worksheets as reported by FEMA (includes all versions)	Number of unique PWs	Difference
Louisiana	44,476	21,462	23,014
Mississippi	22,303	10,895	11,408

Source: GAO analysis of FEMA National Emergency Management Information System data as of July 2008.

# Challenges in the Dayto-Day Operation of the PA Program Slowed Rebuilding

Federal, state, and local officials experienced a variety of challenges in the day-to-day operation of the PA program in rebuilding the Gulf Coast. These included challenges in developing projects, sharing and communicating project information, and making and appealing project decisions. These challenges resulted in slowing rebuilding progress. These difficulties were exacerbated by the amount of damage from the 2005 Gulf Coast hurricanes and the sheer number of rebuilding projects initiated in their wake.

Challenges with Developing Projects Slowed Rebuilding and, at Times, Increased Costs

Rebuilding projects faced significant challenges during project development and start up, which slowed down rebuilding projects and, at times, increased costs. A critical step in the PA process is the completion of a project worksheet, which documents eligible work and estimated cost. Large rebuilding projects typically involve some modifications in finalizing the scope of eligible work and determining related costs through the creation of subsequent "versions" of the original project worksheet.<sup>10</sup> For example, modifications resulting in a new version may occur when, after initial building repairs begin, additional damage is discovered. In the Gulf Coast large PA projects faced several challenges during the project development and start up process including difficulties in: (1) determining how much of the damage was disaster related, (2) assessing project scope including the decision to repair or replace structures, (3) estimating project costs in the postdisaster environment, (4) using program flexibilities to rebuild to post disaster needs, and (5) obtaining resources to initiate projects. Sometimes several of these challenges were encountered in a single project, thereby magnifying their effect. In response to some of these challenges, FEMA, the Office of the Federal Coordinator for Gulf Coast Rebuilding and the states of Louisiana and Mississippi have taken a variety of actions and plan to do more.

Difficulties Determining Disaster-Related Damage For many rebuilding projects on the Gulf Coast, it took time to make determinations regarding the amount of damage structures received as a direct result of the 2005 Gulf Coast hurricanes and distinguishing this from nondisaster related damage. This task has been complicated by a number of factors including the overall scope of the damage caused by the hurricanes, the large number of rebuilding projects, and the fact that some applicants lacked records to document the predisaster condition of

 $<sup>^{10}</sup>$ Under FEMA's new management information system, changes to project worksheets will be called "amendments."

buildings and infrastructure. The PA program will not reimburse applicants for damage to buildings or infrastructure that was the responsibility of the applicant to repair prior to a disaster (such as deferred maintenance) or protect against after a disaster (such as the failure to patch a damaged roof to prevent further damage to a building's interior).

Identifying the amount of damage that already existed before the hurricanes has been especially difficult, particularly for large infrastructure projects such as roads and water lines. FEMA officials noted that water lines were particularly difficult to assess because much of the damage was underground. FEMA conducted extensive inspections in order to make eligibility determinations for many of these projects, and these determinations took time to work through. In addition, disagreements between applicants and FEMA, as well as changes to project scope decisions contributed to slowing down project development. For example, although much of the New Orleans water and sewer system sustained damage as a result of the disaster, FEMA and city officials had difficulty agreeing on the amount of damage due to the storm as opposed to that due to deferred maintenance. New Orleans officials stated they had valid records on the condition of the city's water and sewer lines up to January 2005—approximately 9 months before the Hurricane Katrina. Given this gap in records, FEMA began a review of the entire system for disaster-related damage and inspected roughly 46,000 leaks by July 2007. The agency funded the installation of flow meters and data-logging devices to assist in determining the location of leaks. FEMA concluded that in about 80 percent of the cases, it could not determine whether a leak had existed prior to the 2005 Gulf Coast hurricanes or whether it was caused by the hurricanes. In an effort to resolve this issue, FEMA, the state, and the New Orleans Sewer and Water Board entered into a memorandum of understanding agreeing to engage a third-party contractor to perform a damage assessment and propose restoration alternatives. According to FEMA officials, the agency has since reimbursed the applicant for those leaks that were identified as being caused by the hurricanes.

Postdisaster damage also complicated project development. Under the PA program, in order for postdisaster damage to be covered it must be directly related to the disaster, such as damage to roads from heavy trucks

hauling away debris, or certain cases of mold in buildings. In addition, reasonable protective measures by the applicant could not have prevented this damage from occurring. Therefore, decisions on project eligibility took additional time to sort out poststorm-related damage. For example, PA inspectors sought to determine whether applicants protected their buildings well enough to secure them from poststorm damage such as rain or from thieves who stole copper pipes for their salvage value.

In St. Bernard Parish, roughly 2 years passed before FEMA and parish field inspection teams completed identification of PA-eligible damage to approximately 2,500 blocks of local streets. The parish had no records to document the condition of its streets prior to the 2005 Gulf Coast hurricanes, so according to state officials, FEMA inspections were performed on each parish street in an attempt to distinguish predisaster damage from that caused directly as a result of the hurricanes. In addition, FEMA and St. Bernard Parish officials disagreed over the standards FEMA used to determine eligibility, which further prolonged the projectdevelopment process. In contrast, Jefferson Parish did not encounter similar challenges with distinguishing predisaster damage from damage directly related to the hurricanes. This is because the parish maintained a road repair-management information system (including a roadmaintenance plan) prior to the disaster that enabled the parish to identify preexisting road conditions to FEMA officials, thereby helping to expedite their road-repair projects.

Difficulties Using Program Flexibilities to Rebuild in a Way That Meets Postdisaster Needs The PA program typically provides funds to restore buildings, equipment, or infrastructure back to their condition, location, and function before the disaster. The program does permit changes from how things were prior to the disaster—through alternate and improved projects—but these

<sup>&</sup>lt;sup>11</sup>Postdisaster damage due to mold had been recognized by FEMA as a challenge prior to the 2005 Gulf Coast hurricanes. FEMA issued guidance on mold remediation in 2006 to ensure consistency throughout recovery efforts.

approaches typically come with restrictions in funding.<sup>12</sup> Since many PA applicants in the Gulf Coast found that the population of their neighborhoods changed significantly from pre-Katrina levels, it was important for their rebuilding projects take into account the new conditions. In order to do this, localities often needed time to develop and obtain agreement on broader recovery plans, which provide a coordinated approach to rebuilding their communities. According to FEMA officials, the Stafford Act was not designed for the level of project reconfiguration necessary for post-Katrina rebuilding.

For example, given postdisaster population changes and educational needs, Louisiana's Recovery School District officials sought flexibility in rebuilding schools as well as the number of students attending each school. Typically, the approval for an alternate or improved project designation is done on a site-by-site basis. Accordingly, FEMA officials initially sought rebuilding decisions from the school district on a campusby-campus basis to move ahead with project development. However, it took time for school district officials to devise a plan for rebuilding its large school system given the changing demographic pattern of returning school age children and the need to consider community input. These officials also wanted to consider how much money FEMA would allow for damages when making its final planning decisions. However, FEMA could not determine how much PA money would be available until they were informed of the school district's project development decisions. Recovery School District officials devised an interim short-term plan to help ensure that school campuses opened as quickly as possible. These challenges, coupled with pressures to open schools in time for the school year, led to FEMA funding approximately \$70 million in temporary modular facilities. FEMA and school district officials ultimately are working together to

<sup>&</sup>lt;sup>12</sup>If an applicant determines that the public welfare would not be best served by restoring a damaged facility or its function to its predisaster design, the applicant may apply to FEMA to use the eligible funds for an "alternate project." 42 U.S.C. § 5172(c); 44 C.F.R. § 206.203(d)(2). Funding of alternate projects may be used for repair or expansion of other public facilities, to construct new public facilities, or hazard mitigation measures. Federal funding for alternative projects is limited to 90 percent (75 percent in the case of private nonprofit organizations) of the federal share of the estimated cost of repairing the original damaged facility. FEMA guidance states that if the actual cost of the alternate project is less than the 90 percent, then funding will only be up to the actual cost. Similarly, an "improved project" is any project where the applicant chooses to make additional improvements to the facility while making disaster repairs to the predisaster design. 44 C.F.R. § 206.203(d)(1). Federal funding for improved projects is limited to the federal share of the estimated costs for repairing the damaged facility to its predisaster design. The additional costs are the responsibility of the applicant.

resolve differences in developing the project by moving towards a systemwide approach to rebuilding schools to address Louisiana's postdisaster needs rather than developing projects on a campus-by-campus basis.

St. Bernard Parish government also faced challenges with replacing equipment to address postdisaster needs. The parish lost almost all of its vehicles and equipment as a result of the disaster, but local officials reported that state PA officials only allowed one-for-one and in-kind replacements. For example, St. Bernard Parish officials claimed that the state required them to replace one of their damaged 1988 Ford Crown Victoria police cruisers with the same make, model, and year. Instead, the officials wanted to use the total value of the damaged equipment to purchase a smaller number of vehicles appropriate for their current and future needs. It took many months to work through the applicable rules in order to address the parish's concerns. FEMA officials told us that they ultimately utilized the PA program's improved-project option to provide funds from the replacement value of older vehicles toward the purchase of new vehicles. As part of this process, the Office of the Federal Coordinator for Gulf Coast Rebuilding entered into a correspondence with St. Bernard Parish officials in fall 2007 with the intent of expediting project development offering a dedicated team to provide specialized assistance to resolve this issue. This effort was part of a broader initiative by the Federal Coordinator, along with FEMA, to reach out to local officials in selected hard-hit areas to identify their top five priority PA projects.

FEMA plans to incorporate some project development flexibilities into its regular practices. For instance, FEMA's Public Assistance Catastrophic Disaster Recovery Concept Plan, finalized in May 2008, recognizes the need for PA regulations to allow applicants to more easily tailor projects to meet postdisaster needs. In September 2008, FEMA officials informed us that policies to address this issue as well as a range of other initiatives related to the plan are in development and are expected to be complete by March 2009.

Difficulties Assessing Project Scope, Including Whether to Repair or Replace Damaged Structures Under PA rules, if a facility is 50 percent or more damaged, the program will fund its replacement value. This "50 percent rule" is important because the applicant stands to receive significantly more money when this damage threshold is crossed. Because of the size and complexity of the damage caused by the 2008 Gulf Coast hurricanes, making the determination to repair or replace could be particularly difficult. This challenge was more evident in Louisiana as FEMA and state officials noted that the damage generally involved flooding and wind damage so that most

buildings were not completely destroyed, as was the case with much of the damage in Mississippi.

In St. Bernard Parish local officials had plans to consolidate its seven separate wastewater (and sewer) treatment plants prior to the 2005 Gulf Coast hurricanes in order to meet EPA compliance rules, among other things. When parish officials developed project worksheets for the wastewater treatment plants, they wanted to structure the projects so that PA funds could be used to accomplish this goal, rather than rebuilding a system that they planned to decommission. Although the parish plan to consolidate its wastewater treatment plants was not contingent upon whether the individual plants qualified for replacement rather than repair, these decisions affected whether the parish would receive enough funding to build the consolidated wastewater treatment facility. Initial assessments led FEMA to determine that the facilities were not sufficiently damaged to qualify for funds to pay for the replacement of the plants, but just for their repair. According to parish officials, the parish sought a reassessment of the damage and after FEMA recalculated costs, they determined that two out of the seven water treatment sites were, in fact, eligible for full replacement, while the other five qualified for the cost of repairs. As project issues were being discussed, heavy trucks were used to pump and haul sewage as an interim measure until the system was repaired. These trucks were needed to operate for a much longer-than-expected period of time resulting in a considerable cost as well as damage to the parish's roads. These temporary measures have already cost the federal government more than \$60 million. St. Bernard Parish officials estimate that, had they been able to move ahead with their original plans, it would have taken about 1½ years for the new consolidated facility to become operational. More than 2 years have passed since the project was proposed and rebuilding has not yet begun.

Another example of the challenges related to difficulties in determining whether to repair or replace damaged structures involves New Orleans's public schools. Over 3 years after the disaster, damaged school buildings under Louisiana's Recovery School District agency are still being assessed to determine whether they qualify for replacement funding. According to Recovery School District officials, in some cases, this determination was reached after the school district already paid for architectural plans to renovate rather than replace the school facility, thereby incurring extra

expenses and further slowing rebuilding.<sup>13</sup> School district officials told us that working through repair versus replacement eligibility for the 122 school campuses under their control will be a very long process if delays in assessment continue. For example, the Fannie C. Williams Elementary School in New Orleans was initially assessed by FEMA as being less than 50 percent damaged, therefore not qualifying it for replacement. After the Recovery School District hired an architectural and engineering firm to reassess the damage, FEMA agreed to change its original determination and the school qualified for replacement funding.

### Difficulties Estimating Project Costs

During Gulf Coast recovery, state and local officials reported that FEMA's cost-estimating methods often undervalued the cost of rebuilding, and, in many cases project estimates were conducted very early in the project-development process before knowing the full extent of the damage. Developing accurate cost estimates is particularly important for alternate and improved projects. This is because these projects rebuild the structure to be different from its predisaster condition, but project payouts are capped at an amount estimated to restore the structure to its predisaster condition. In contrast, in projects that ultimately restore structures to predisaster conditions there is no funding cap because the actual costs of rebuilding will be funded, if reasonable.

According to federal and state officials, it was difficult to develop rebuilding estimates because of uncertain labor and material costs after the storms. To better address these types of situations FEMA developed a methodology called Cost Estimating Format. This methodology provides a uniform method of estimating costs for permanent large projects and includes consideration of both direct costs (i.e., materials) and indirect costs (i.e., safety and security measures, storage and staging, insurance, and other overhead). However, according to senior FEMA officials, many agency staff had not been trained to use this methodology in the aftermath of the 2005 Gulf Coast hurricanes. A study contracted by FEMA of major disasters occurring between April and October 2007 found that about 70 percent of FEMA staff and 50 percent of technical assistance contractors were not trained on the Cost Estimating Format that FEMA recommended for use in developing estimates for projects.

<sup>&</sup>lt;sup>13</sup>In these cases, the Recovery School District had determined that replacing the school would be advantageous to the community but had not moved forward on these projects because of cost concerns.

In addition, FEMA, state, and local officials reported that cost estimates were often made very early in the project-development process before knowing the full extent of the damage. FEMA officials noted that the earlier in the process that a cost estimate is developed, the greater the likelihood that the estimate will be inaccurate since these early estimates may not factor in all of the damage that exists. These officials told us that early estimates typically cover only obvious damage since conducting detailed investigations of damage shortly after a major disaster can be difficult. For example, upon further investigation of a roof, damage to the underlying flashing and underpinnings may be discovered that was not recognized during FEMA's initial inspection. FEMA officials stated that project officers were focused on developing as many project worksheet estimates as they could to facilitate the project development process. There were trade-offs, however, in developing early estimates.

Applicants reported that low cost estimates, resulting from challenges cited above, contributed to delays in project development until these estimates were revised. According to testimony by the former Acting Director of the Louisiana GOHSEP before the Subcommittee on Disaster Recovery in July 2007, many PA rebuilding projects were underestimated by millions of dollars. For example, out of the 23 cases he cited, the estimated amount was less than the lowest bid that the applicant received for the work by a factor of 1.5 to 10 times.

Because of low cost estimates, applicants were sometimes hesitant to move forward on projects for fear that they may owe more than FEMA would ultimately reimburse them for, despite the fact that PA rules allow for reimbursements for large projects to be above the original estimates if costs are reasonable. When FEMA agrees that actual repair or rebuilding costs would significantly vary from their original estimate, the agency updates the project scope or estimated cost by creating a new version of the project worksheet. However, state and local officials reported that it sometimes took several months for FEMA to make agreed-upon changes to project worksheets—including revised cost estimates—and applicants were responsible for covering these costs in the meantime.

Louisiana applicants faced an additional challenge with moving forward on projects because they reported that state law requires that applicants identify 100 percent of their funding for projects before they can enter into contracts to rebuild. These applicants reported that gaps between PA estimates and contractor bids delayed rebuilding projects since they were not able to identify 100 percent the project's funding. FEMA officials in

Mississippi noted that they increased project worksheet cost estimates by about 20 percent to compensate for low project cost estimates.

FEMA's PA Catastrophic Disaster Recovery Concept Plan proposes that the agency, the state, and the applicant take steps to more effectively develop comprehensive damage descriptions in order to reduce conflicts regarding project cost estimates later in the process. Toward this end, the plan acknowledges the importance of deploying sufficient resources to promote rapid completion of damage assessments including funding for technical assistance to applicants. According to FEMA officials, some steps related to improving damage assessments, such as developing a catalog of assessment methodologies, have been completed. However, an additional task relating to this issue is still underway, and other follow-on activities relating to the plan have yet to start.

Insufficient Resources to Initiate Projects

State and local officials in Louisiana and Mississippi told us that factors such as insufficient resources for up-front project costs and contractors delaying work until they were paid also led to project delays. Some of these challenges have been addressed during the course of recovery.

Applicants reported challenges in covering substantial up-front costs for project development such as the costs of hiring architectural and engineering firms and associated human capital costs to prepare documentation for PA requirements. Local officials told us that they often needed to hire an architectural and engineering firm to document the scope of damage and subsequent work to fully justify funding of projects. However, in some cases, applicants did not have the resources to hire an architectural and engineering firm without first obtaining initial PA funding for the project. Also, some applicants reported that they lacked funds to pay for staff to prepare PA documents needed to request PA funding. Local officials noted that provisions in the PA program that provide up-front funding can be quite burdensome to applicants. According to FEMA officials, FEMA designed an initiative to fund professional technical resources to support local recovery efforts.

Initiating projects was a special challenge in Louisiana. For example, New Orleans city officials reported that their economy was stagnant for weeks after the storm, which led to reduced city revenues. Furthermore, their ability to raise money was limited due to low credit ratings, and they were unable to borrow funds to cover the costs of maintaining the city's staff or paying for expenses such as architecture and engineering activities as cited above. As a result, many critical rebuilding projects were not started for several months. In another example, a senior St. Bernard Parish official

reported facing delays until the parish identified funding provided from other recovery funding sources to cover architecture and engineering costs for PA projects. Specifically, the officials reported using \$8.9 million that they received from insurance refunds to pay for some of the architecture and engineering work necessary to initiate critical PA projects, such as the sewer system.

In addition, officials in Louisiana reported that applicants were concerned about their ability to afford PA cost-share requirements when this requirement was still in place, contributing to project delays. The PA program typically requires a 75 percent federal and 25 percent state cost share. Shortly after the storms the federal government adjusted this match for the Gulf Coast states to 90 percent federal and 10 percent state for Gulf Coast recovery, and this matching requirement was removed in 2007—15 months after the disaster was declared. Having enough resources to cover PA cost-share requirements was less of a challenge in Mississippi as officials in that state reported that state legislation allowed the state to bond up to \$200 million for three coastal counties. As a result, applicants were better able to move forward with rebuilding without hesitations associated with their inability to meet PA cost-share obligations.

Further, officials from several parishes reported that due to their reliance on state reimbursements—which some claimed were slow—they did not have the resources to pay contractors, some of whom threatened to sue for nonpayment. FEMA officials stated that PA rules are flexible enough to provide some funding up front, if the state chooses to do so, and states can make arrangements to pay for phases of projects, as they are completed, rather than being reimbursed for the completed project at the end. Further, in February 2008, Louisiana initiated a program to streamline

<sup>&</sup>lt;sup>14</sup>42 U.S.C. § 5172(b)(1)

 $<sup>^{15}\</sup>mathrm{See}$  70 Fed. Reg. 65,927 (Nov. 1, 2005) (Louisiana—Katrina); 70 Fed. Reg. 65,928 (Nov. 1, 2005) (Mississippi—Katrina); 70 Fed. Reg. 70,086 (Nov. 21, 2005) (Louisiana—Rita); 71 Fed. Reg. 50,440 (Aug. 25, 2006) (Texas—Rita); 72 Fed. Reg. 5453 (Feb. 6, 2007) (Alabama—Katrina).

<sup>&</sup>lt;sup>16</sup>U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability
Appropriations Act, 2007, Pub. L. No. 110-28, § 4501, 121 Stat. 112, 156 (May 25, 2007); 72
Fed. Reg. 34,700 (June 25, 2007) (Alabama-Katrina); 72 Fed. Reg. 34,703 (June 25, 2007)
(Louisiana-Katrina); 72 Fed. Reg. 34,703 (June 25, 2007) (Louisiana-Rita); 72 Fed. Reg. 34,704 (June 25, 2007) (Mississippi-Katrina); 72 Fed. Reg. 34,705 (June 25, 2007) (Texas-Rita).

payments to applicants to provide more rapid disbursement of PA funds. Louisiana's "Express Pay System" allows an applicant to submit a reimbursement request with the required supporting documentation and receive payment within 10 to 14 business days, rather than 45 to 60 business days as was the case for the previous process.

We found that applicants from Mississippi used some of PA's funding flexibilities, which state and local officials said were critical to their ability to move ahead on projects without delay. Senior officials from MEMA and the Governor's Office of Recovery and Renewal said that the state's approach to providing up-front funding was possible because state laws allow them to advance up to 75 percent of PA project funds to applicants, and FEMA worked with the state to advance funding. In addition, according to a state official, Mississippi law does not prevent local governments from bidding out projects before they have identified or received 100 percent of their funding. As a result of the funding flexibility that Mississippi had, MEMA and FEMA established an agreement for the state to provide funding for initiating projects and reimbursement throughout the phases of rebuilding work. As an example, MEMA paid applicants 90 days before their next contractor payment was due for phases of rebuilding. Using this method, MEMA funded up to the first 85 percent of the project's cost, while applicants were responsible for funding the remaining 15 percent until they received full FEMA reimbursement.

More recently, in 2008, Louisiana began to implement similar PA funding flexibilities. Specifically, the state initiated a revolving fund for the City of New Orleans that can be used by applicants to fund initial PA project costs. While applicants reported that this initiative has improved their ability to move projects along, this initiative began  $2\frac{1}{2}$  years after recovery started, and the revolving fund only provides assistance to New Orleans.

Finally, in June 2007 FEMA began implementation of a pilot program, required by PKEMRA, which provides participants with funding up front rather than through the reimbursement of actual costs. This program is not available for recovery projects relating to the 2005 Gulf Coast hurricanes. Applicants participating in the pilot receive payment for the entire estimated cost of the project, up to \$500,000, for either emergency or permanent work projects. If the actual cost of the project is lower than this amount, the applicant may keep the extra funds for other projects or approved uses. If the actual cost is higher, the applicant must pay the difference.

After being in operation for over a year, FEMA officials told us that participants have been reluctant to use the program for permanent work projects. Out of 2,725 projects in the pilot as of September 2008 only 140, or less than 1 percent, were coded as being for permanent work. These officials attributed this to reluctance on the part of participants to having to make up the difference if their project comes in higher than originally estimated, and to giving up their right to appeal, which they are required to do under the terms of the pilot. While these terms also apply to emergency work projects participating in the pilot, this was thought to be less of a concern because such projects were generally more straight-forward and presented fewer uncertainties than large permanent work projects. PKEMRA requires FEMA to submit a report to Congress on the results of the pilot by March 31, 2009.

## Challenges in Sharing and Tracking Project Information

Because the PA process is complex and requires collaboration among federal, state, and local officials, effective sharing of project information is particularly important. We identified challenges to sharing project information between federal, state, and local officials during project development, and limitations in tracking the status of projects. Challenges in the first area were more prevalent in Louisiana than in Mississippi because of the information-sharing strategies used. Taken together, limitations in these areas slowed PA project development and contributed to additional human capital burdens for local governments. In response, FEMA has taken several steps to improve sharing information and project tracking.

Barriers to Sharing Project Information among Federal, State, and Local Officials In Louisiana, federal, state, and local officials involved in the PA program reported facing challenges in effectively sharing critical operational information about projects including documents used to support scope and cost estimates, such as receipts, invoices, and facility assessments. This situation was made worse because key federal and state officials responsible for reviewing and approving documentation were not primarily located in the same place. Typically, FEMA colocates with state grantees in order to facilitate information sharing. In Louisiana, FEMA had some staff located in important areas throughout the state. However, we

<sup>&</sup>lt;sup>17</sup>A FEMA official told us that some of the data on the pilot program as of September 2008 may have been miscoded. Accordingly, it is likely that fewer than 140 permanent work projects had actually taken place during the reported time frame. The vast majority of pilot projects were for "force labor accounts," that is, funds that covered the base wages of state or local government employees involved in emergency work projects such as clearing debris.

found that the state grantee conducted its work primarily from Baton Rouge while FEMA's Transitional Recovery Office was based in New Orleans—approximately 80 miles away. Given that key staff from FEMA and the state were located in different cities, it was particularly important for them to ensure effective sharing of project information. Although Louisiana and FEMA employed the use of a Web-based system to track the status of PA project funding, it did not facilitate the day-to-day exchange of documents related to project development.

Due to this lack of effective information-sharing, some local officials told us that they had to frequently submit the same documentation to the state of Louisiana and FEMA because it was not shared between the agencies. In some cases, this slowed project development because applicants needed to reproduce critical project documents. Federal and state officials acknowledged that they faced difficulties in sharing project information and that documents were sometimes lost during the exchange between their agencies.

In Mississippi, federal, state, and local officials adopted strategies that helped to facilitate the sharing of PA project information. For example, following the disaster, FEMA's Mississippi Transitional Recovery Office and the state grantee were located in the same office complex in Biloxi, Mississippi, and officials from these agencies were are also positioned throughout the state. They reported that this colocation had multiple benefits for information sharing and exchange, including the timely sharing of critical documents and facilitation of daily meetings on projectdevelopment issues. In addition to colocating, FEMA and Mississippi state officials used PA funding to secure an on-line accounting system that made operational documents associated with projects readily available to all parties. According to state and local officials, the state contracted with an accounting firm that worked hand-in-hand with applicants to regularly scan and transmit documentation on architecture and engineering estimates, contractor receipts, and related materials from this Web-based system. As a result, FEMA and the state had immediate access to key documents that helped them to make project approval decisions. Further, local officials reported that this information-sharing tool, along with contractor staff from an accounting firm, helped to relieve the documentation and resulting human capital burdens that applicants faced during project development.

Limitations in Tracking of Project Status

Typically, FEMA only tracks the status for rebuilding projects up to when the agency makes funds available to the state and at the end of the process, when FEMA reconciles approved cost estimates with an actual project's cost. <sup>18</sup> While we recognize that this approach toward tracking PA projects may be appropriate for most disasters, the high level of interest from Congress and the public regarding the status of Gulf Coast rebuilding—including information on the construction of specific projects—highlights the need for this type of information.

Providing such information on project status presented FEMA with two challenges. First, information on rebuilding status between the point when funds are made available to the state and cost reconciliation is not tracked by FEMA's NEMIS database. NEMIS data are derived from information collected in project worksheets, which capture the estimates for individual rebuilding projects. Second, FEMA does not track information by specific rebuilding site, but rather, by project worksheet, which may encompass multiple buildings or partial rebuilding sites. Because of this there was no easy way to provide updates on specific PA projects, such as a school or police station, to interested parties.

To address the first challenge, FEMA and state officials in Mississippi and Louisiana have made efforts to more effectively gather and report on the status of PA projects. They developed databases to maintain more complete information on the status of PA projects. Although this effort has been labor-intensive because of the need to use multiple information sources, these officials said that they have been able to generate reports on whether applicants have received PA funds that were made available to the state as well as on the status of construction for PA projects. The latter involves tracking construction bids, groundbreaking, and other stages of rebuilding. As a result, PA managers reported that they have been able to respond to stakeholder and applicant requests for information on project status. For example, FEMA reported that it developed a separate database, which provided FEMA and state officials with visibility on flexible funding PA grant options used by applicants—such as alternate or improved projects—in order to keep applicants informed of FEMA and GOHSEP activities and decisions related to these types of projects. According to FEMA officials, these types of tools may not be necessary in smaller disasters, but have proved to be useful in tracking long-term rebuilding efforts in the Gulf Coast.

<sup>&</sup>lt;sup>18</sup>Reconciliation of costs does not apply to improved or alternate projects. As mentioned previously, funding for improved or alternate projects is based upon the federal share of eligible costs that would have been associated with repairing or replacing the damaged facility to its predisaster design.

To address the second challenge, the Office of the Federal Coordinator for Gulf Coast Rebuilding, working with FEMA, established a transparency initiative in February 2008. This Web-based information sharing effort provides detailed information about selected buildings and types of projects in the Gulf Coast receiving PA funds and makes this information available to the public by sector. For example, the Web site provides information on whether specific New Orleans schools are open or closed and how much federal funding is available for each school site. To do this, FEMA and the Office of the Federal Coordinator worked with the state and local applicants as well as spreadsheets maintained by PA project officers in the field to obtain the necessary data. Although labor-intensive, these officials said it has been very useful to a wide range of stakeholders including the general public.

FEMA officials told us they are taking steps that will improve national data collection. For example, FEMA has piloted a new information management system, called the Emergency Management Mission Integrated Environment (EMMIE), which, according to agency officials, will provide better tracking and management of PA projects. According to these officials, the agency has incorporated stakeholder feedback into system development to respond to some of the data-collection challenges faced in Gulf Coast rebuilding. EMMIE will allow FEMA staff, state grantees, and applicants to perform PA grant-management activities online, including allowing applicants to apply for, view the status of, and manage their grants. Although EMMIE promises considerable additional functionality, its use by state and local governments is optional. FEMA plans to convert NEMIS information on the 2005 Gulf Coast hurricanes into EMMIE once the system is fully deployed in 2009.

Challenges Involving Key Project Decisions Contributed to Delays in Moving Projects Forward PA applicants rely on FEMA project-approval decisions to make key repair or rebuilding decisions of their own; however, both applicants and FEMA officials told us that the agency's decisions were occasionally reversed. This led to hesitancy on the part of some applicants in moving forward on other projects. In addition, some applicants expressed concerns about the timeliness of FEMA's appeal process and that it was not perceived as being independent.

Project Approval Decisions Were Sometimes Reversed On some occasions, FEMA changed project-approval decisions after applicants moved ahead on their projects based on these decisions, resulting in additional expenses for the applicant. According to a senior FEMA official, both program staff and auditors from the Office of Inspector General may change project approval decisions if they

determine that an earlier decision was incorrect, that is, if the project funding decision was legally ineligible. A senior FEMA official told us that, in these cases, the agency has no choice but to change its funding decision. In other situations, decisions were changed because a FEMA official later disagreed with an earlier interpretation of a PA program rule by another FEMA representative. These decisions were in areas that FEMA had some discretion, that is, when FEMA rules allowed for more than one rule interpretation. The official noted that this happened more during the recovery from the 2005 Gulf Coast hurricanes than in other disasters. According to the official there were cases when FEMA staff made incorrect project-scope or cost-estimating decisions for which applicants were ultimately held responsible. In these cases FEMA may deobligate funding even after construction had started. For example, there were cases when FEMA changed its decision on whether a building qualified for replacement funding rather than repair funding, to the detriment of the applicant. FEMA and local officials reported that as a result of occasional reversals of FEMA decisions and guidance, applicants were sometimes hesitant to move forward on other projects.

Lack of Timeliness and Perceived Independence of Appeals Process

State and local officials in Louisiana and Mississippi expressed concern about the timeliness and perceived independence of the project appeals process. Applicants may appeal project decisions if they disagree with FEMA's decisions on project eligibility, scope of damage, or cost estimates. FEMA regulations outline the time frame for applicants to file an appeal and for the state and FEMA to respond to applicant appeals (see fig. 5). However, applicants reported that project appeal decisions were often not made within the time frames required under the Stafford Act. FEMA officials told us that the extraordinary large numbers of PA projects led to a large number of applicant appeals. Also, some applicants said that they were not provided with information on the status of their appeal from either the state or FEMA. Finally, applicants also expressed concerns about the independence of FEMA officials making appeals determinations since in Louisiana appeals were reviewed by the same office that made the decision being appealed in the first place—which some applicants perceived to be a conflict of interest.

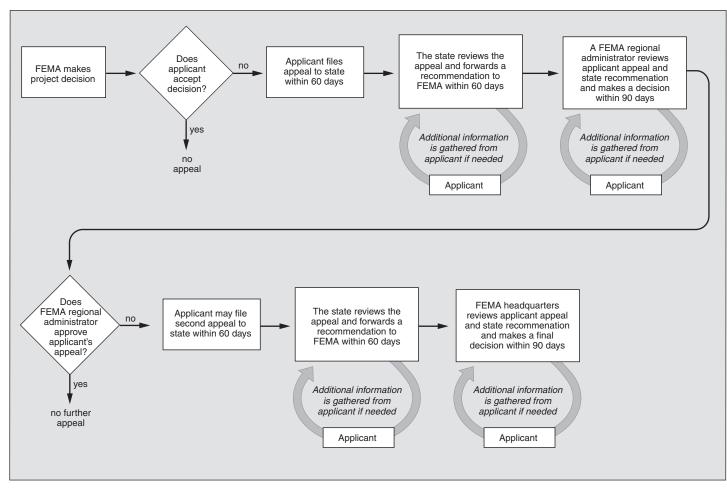


Figure 5: FEMA's Public Assistance Appeal Process

Source: GAO analysis of FEMA information.

FEMA has taken steps to improve the timeliness of appeal decisions as well as perceptions about the lack of independence in FEMA's appeal process. Specifically, in March 2006 the FEMA region responsible for settling appeals from Louisiana designated a special team of dedicated staff to help address the backlog of appeals. In addition, FEMA has made changes to the appeals process within Louisiana so that an applicant's appeal is not reviewed by the same office that made the project decision in the first place, but rather by an independent appeals team outside of the agency's Louisiana office. According to FEMA officials, appeals following most disasters are not reviewed by the same office that made the decision

about the project in the first place, but rather by the FEMA regional office responsible for the disaster. These officials told us that because of the size of the Louisiana Transitional Recovery Office and the number of projects it handled, the agency had initially tasked this office with the appeals review function rather than the regional official located in Texas.

## Human Capital Challenges Contributed to Delays

Human capital challenges at the federal, state, and local level underlie many of the operational difficulties faced during Gulf Coast rebuilding. During the initial phases of rebuilding, shortages of staff with the right skills and abilities, as well as the lack of continuity among rotating staff, contributed to delays in developing PA projects in Louisiana and Mississippi.

## Federal Human Capital Challenges

It is not surprising that a disaster with the effect of the 2005 Gulf Coast hurricanes would strain the PA program's human capital capacity. We have previously reported that FEMA did not have the human capital capacity it needed to implement PA in the wake of the 1989 Loma Prieta earthquake, which was considerably smaller in size and scope than the 2005 hurricanes. In the Gulf Coast, FEMA's human capital challenges included not initially having enough staff to effectively implement the PA program and, then, when the programs was staffed up, not having staff with the right experience, knowledge, and abilities. The agency has taken some steps to address these challenges, which state and local officials told us have resulted in improvements.

It took time for FEMA to provide sufficient numbers of PA staff to meet the large need in the wake of the 2005 Gulf Coast hurricanes. According to FEMA officials, their staffing approach is generally adequate for most disasters, which typically require 75-100 staff. However, given the unprecedented size and scope of the damage caused by the 2005 storms, FEMA needed to deploy a far larger number of people to administer the PA program than it typically used. For example, during 2006, the year with

<sup>&</sup>lt;sup>19</sup>In 1992, we reported that FEMA's standard approach for staffing a disaster recovery effort—reliance on a small number of permanent staff and large number of rotating temporary staff—did not meet the requirements of a major disaster, such as the Loma Prieta earthquake. See GAO, *Earthquake Recovery: Staffing and Other Improvements Made Following Loma Prieta Earthquake*, GAO/RCED-92-141 (Washington, D.C.: July 30 1992). More recently, the DHS Office of the Inspector General reported comparable findings in its 2008 report, *FEMA's Preparedness for the Next Catastrophic Disaster* (OIG-08-34).

largest number of PA staff assigned to Louisiana and Mississippi, the agency deployed more than 3,500 people. FEMA had not previously staffed its transitional recovery offices at such high levels.

According to senior FEMA officials, even when FEMA's staff levels were sufficient, their inexperience and limited training presented significant challenges to their ability to effectively administer the program in Gulf Coast. Many of the more-experienced FEMA staff were still actively working on recovery efforts related to the 2004 Florida hurricanes, or needed time off after recently working on other disasters. Senior FEMA officials told us that at least 50 percent of FEMA staff working in the Gulf Coast, especially technical assistance contractors, did not have any PA program experience or adequate training prior to being assigned to the Gulf Coast. These officials stated that, as a cost-benefit decision, FEMA does not require its contractors to take PA training prior to a disaster, but the agency typically provides some training on the PA program to staff right before they are deployed to a specific disaster.<sup>20</sup> In addition, the agency lacked sufficient numbers of experienced PA employees to fully review all of the project decisions made by less-experienced staff, especially early in the recovery. Senior FEMA officials involved in the administration of the program noted that closer supervision of these inexperienced staff might have reduced the number of problems encountered later on, but conditions after the 2005 Gulf Coast hurricanes made such supervision difficult.

We have previously identified insufficient training of PA staff as a challenge and have reported on the importance of having FEMA employees appropriately trained in the application of relevant PA policies and information systems. We recommended that FEMA implement a credentialing program to help ensure that staff who make program and

<sup>&</sup>lt;sup>20</sup>FEMA officials said that requiring contractor staff at the firms providing technical assistance services to take PA training prior to a disaster would increase the total costs of the existing contracts by about \$1.5 million and these Technical Assistance Contractors would not be able to guarantee that staff who participated in the training would actually be deployed when a disaster struck.

cost eligibility decisions meet minimum standards.<sup>21</sup> Recently, FEMA adopted an agencywide credentialing program that would identify the skills and abilities needed for key positions as well as the amount of training, mentoring, and experience necessary to obtain proof of these skills. In December 2008, FEMA officials reported that they completed development of this program and expect to conduct field testing in early fiscal year 2009.

Federal, state, and local officials reported that FEMA's use of inexperienced staff resulted in changing or inaccurate decisions that slowed down the project development process, especially during early recovery efforts. For example, FEMA officials reported that inexperienced staff sometimes misinterpreted PA program rules, such as promising that the agency would fund the replacement of a fleet of vehicles under conditions not allowed under the Stafford Act. Further, some staff also lacked experience and training in technical subjects that were important during project development, including how to assess certain types of damage requiring specialized skills such as road and water system damage. Officials from almost all of the localities included in our review reported that advice provided by FEMA staff was, at times, changed or incorrect, and that this not only contributed to slower project development, but sometimes resulted in applicants spending funds on projects that FEMA later determined would not be reimbursed.

According to federal, state, and local officials many of the human capital challenges experienced in the earlier days after the 2005 Gulf Coast hurricanes have improved. However, lessons learned in the aftermath of these storms provide an opportunity for a discussion of the appropriate resource level and staff capacity in the event of a future catastrophic disaster. In this regard, FEMA's Strategic Human Capital Plan, issued in May 2008, sets a goal to determine the proper number and type of employees required to staff FEMA's various organizations, including the directorate in charge of the PA program.

<sup>&</sup>lt;sup>21</sup>We have previously reported that FEMA lacked sufficient permanent staff to adequately train and supervise the large number of temporary staff used for Loma Prieta. See (RCED-92-141). In 2001, we reported that FEMA had developed, but not implemented, a credentialing program for PA staff. FEMA cited budgetary constraints as the reason for not implementing the program; we recommended that the agency assign a higher priority to implementing the initiative. See *Improvement Needed in Disaster Declaration Criteria and Eligibility Assurance Procedures*, GAO-01-837 (Washington, D.C.: Aug. 31, 2001).

### State and Local Human Capital Challenges

Given the intergovernmental nature of the PA program, FEMA relies on state and local efforts for its successful implementation. As such, having adequate human capital capacity at the state and local level also plays a key role in successfully developing rebuilding projects. However, as was the case with the federal government, Louisiana and Mississippi initially lacked the human capital capacity to administer the PA program during recovery from the 2005 Gulf Coast hurricanes. In addition, local applicants initially lacked the staff to fully participate as partners in the program. As with FEMA's challenges, it is understandable that state and local entities would not have the human capital capacity to address this disaster given the sheer number of rebuilding projects. Early on, Louisiana and Mississippi state offices administering the PA program had insufficient staff to carry out their respective roles; however, later the states obtained the assistance that they needed from various sources. As with the federal experience, staff had to be quickly trained, resulting in some staff not having the expertise to effectively assist applicants. Further, local governments in Louisiana and Mississippi reported that their own human capital resources were limited because of the disaster, thus, further constraining their ability to fully participate in the PA process.

In Louisiana, officials from GOHSEP reported that they only had four staff to administer the program when Hurricane Katrina occurred. As a result, they hired contractors to process grants and obtained support from Louisiana's Office of the Legislative Auditor to assist in conducting upfront document and eligibility reviews. Although the Office of Legislative Auditor established a dedicated team to assist the state with PA project reviews, the office only consisted of a small number of staff to review thousands of project worksheets.

Similarly, Mississippi officials reported facing staff shortages until they received contractor assistance using PA funds. A senior official from MEMA reported that they only had eight state employees dedicated to their initial response to the 2005 Gulf Coast hurricanes. According to the official, the state received federal PA funding in order to hire qualified PA contract staff and an accounting firm to assistant applicants through the complex PA process since state staff alone could not effectively administer the program. Officials from MEMA and the Mississippi Transitional Recovery Office reported that state contractors were knowledgeable about disaster recovery, but inexperienced with PA program rules. Therefore, they had to be trained quickly before going into the field.

Local officials reported that their own human capital resources were also limited because of the disaster, contributing to challenges in moving through the PA funding process. Local governments in Mississippi and Louisiana reported that they laid off many of their staff immediately after the hurricanes, which made it difficult to provide enough staff to assist FEMA in surveying all of the damage sites as well as respond to the significant documentation requirements during project development. For example, according to New Orleans officials, because the city was severely cash-strapped after the disaster, many employees, including capitalprojects staff, were laid off. This compromised the ability of the city to provide staff to effectively survey the damage to all city buildings, including the architectural and engineering staff needed to assess damage and oversee projects. Other local governments in Louisiana and Mississippi described similar challenges with addressing extensive projectmanagement duties that applicants are required to fulfill under PA program rules. Federal officials agreed that limitations in applicants' human capital capacity were a major challenge during the PA funding process. They highlighted that when any level of government can not adequately fulfill its role within the PA process, the associated projects almost always have difficulties.

### Lack of Continuity during Project Development

The lack of staff continuity during project development also contributed to rebuilding delays. According to several federal, state, and local officials, a succession of FEMA staff were involved in the preparation of many of these projects and faced difficulties with sharing project information as they rotated on and off a project, resulting in a lack of continuity. Officials from all of the localities with whom we spoke noted that FEMA staff assigned to assist them rotated frequently (e.g., every 60 or 90 days) often without providing advance notice that they were leaving. 22 GAO analysis of NEMIS data supports the idea that a succession of staff were often involved in the development of large PA projects (see table 2). This situation, especially early-on in the recovery effort, resulted in a loss of knowledge of project-specific information because of a lack of effective strategies to share this information. For example, because rotating staff did not always document FEMA's decisions or advice or share projectspecific information with staff taking their place, applicants often had to restart negotiations about project eligibility and cost determinations with

<sup>&</sup>lt;sup>22</sup>FEMA officials could not provide information on the length of staff rotations because they do not directly track these data.

their new FEMA representative. In many cases, applicants reported that replacement staff changed agreements that previous staff had made with them or requested information that had previously been provided. However, many applicants noted that this issue has improved recently and that staff were working with them for longer periods of time. In addition, FEMA officials told us that have developed ways to share project information among rotating staff.

Table 2: Number of Preparers Working on Large Permanent Work PA Projects

	Louisiana		Mississippi	
Number of project preparers per large permanent project	Number of projects	Percent	Number of projects	Percent
One preparer	2,178	53	726	50
Two preparers	1,260	31	508	35
Three preparers	505	12	168	12
Four or more preparers	163	4	45	3

Source: GAO analysis of FEMA NEMIS data as of July 2008.

Note: The phrase "one preparer" indicates only one staff member prepared the project worksheet. Categories showing that two or more preparers worked on a project indicates that one staff started on a project but then was replaced by a succession of one or more different staff.

State and local officials reported that the lack of continuity in FEMA staffing resulted in delays and changing project decisions. This was due to two reasons: (1) applicants had to spend additional time familiarizing the new FEMA staff with the project, and (2) FEMA staff rotating onto the project sometimes provided different interpretations of program rules. For example, according to a senior Plaquemines Parish official, parish staff spent a significant amount of time familiarizing 10 different FEMA PA representatives with project details—7 during the first several months of recovery—and replacement staff differed in their interpretations of PA processes and procedures.

The lack of continuity was further complicated by challenges with information and document sharing among FEMA staff rotating on and off projects. Federal, state, and local officials reported that there was a lack of documentation of the rationale behind project decisions, further contributing to continuity problems. One FEMA official told us that part of the challenge with maintaining continuity was due to difficulties staff encountered when trying to access the case-management files used to track information about projects from a remote location. In the absence of reliable electronic access to the case management files, this official

suggested that staff could maintain notebooks on applicant projects and pass them on to replacement staff.

Several local officials also reported that there was often no notice of when a new FEMA PA representative was assigned to their projects and no "hand off" meeting with all parties present to share project information. These officials said that such a meeting could have saved time and effort that federal, state, and local officials spent on readdressing issues, and may have reduced the number of times previously agreed-upon decisions were changed. Difficulties ensuring continuity during disaster recovery efforts are not new. We have previously reported that the lack of continuity presented challenges to the effectiveness of the PA program during recovery efforts following the Loma Prieta earthquake of 1989.<sup>23</sup>

FEMA officials acknowledged that lack of continuity, especially in the first year after the disaster, caused some project disruptions but these were unavoidable given the magnitude of the event. According to these officials, insufficient numbers of experienced staff necessitated the rotation of FEMA personnel. In addition, FEMA transferred staff who were otherwise willing to continue working with the same communities on the Gulf Coast in order to avoid subjecting them to possible income tax increases that would affect personnel deployed for a year or more under the federal tax code. FEMA officials told us that, in Louisiana, they are taking steps toward providing additional continuity in PA staffing. For example, FEMA's Transitional Recovery Office has started to employ a team approach to help address this issue so that no individual staff person is the only one responsible for retaining knowledge about a specific project. Further, the officials reported that they have implemented changes during recovery from the 2005 Gulf Coast hurricanes, which they recently institutionalized during the recovery of Hurricanes Gustav and Ike. These changes included recruiting and hiring more long-term staff to function as a single point of contact for these disasters, resulting in what they believe is greater accountability for staff, reductions in rotations and roll-offs, and sustained institutional knowledge among resident policy and decision makers. While increasing the stability of staff is a very important step in

<sup>&</sup>lt;sup>23</sup> We have previously reported that the use of rotating staff was not effective when rebuilding after the Loma Prieta earthquake because much of the damage was hidden, complex issues involving building codes often arose, and months or even years could be required to resolve a case (GAO/RCED-92-141). Applicants reported that new staff rotating onto the job would start over examining the damage, reviewing the documentation, and learning the complexities of the case.

addressing limitations in project continuity, it is also important for FEMA to develop methods to more effectively share important project information between staff whenever staff rotation is necessary and to communicate expectations about staff rotations with applicants.

#### Conclusions

The huge size and unprecedented scope of the devastation caused by Hurricanes Katrina and Rita created very difficult conditions for all involved in the recovery of the Gulf Coast, and the challenges described in this report must be understood in this context. Since the storms, FEMA has approved tens of thousands of PA grants making available more than \$11 billion for the rebuilding and repair of public buildings and physical infrastructure—a scale of assistance unmatched by any previous U.S. disaster. Given this level of assistance, FEMA plays an important role in helping to ensure fiscal accountability to the American taxpayer.

FEMA has faced a wide range of challenges in administering PA grants including difficulties related to developing projects, barriers to sharing information, and shortcomings in some of its project decision processes. For example, we found cases where PA information was not effectively shared among federal, state, and local entities directly involved in the process as well as others including Congress and the public. Furthermore, when FEMA reverses a key decision it has previously made, such as the approval to rebuild instead of repair a structure, it can have a negative effect on an applicant who may have already moved forward on the project. Human capital limitations at the federal, state, and local level underlie many of these operational difficulties as well as present challenges of their own. For example, while it may have been impossible to avoid rotation of FEMA staff given the magnitude of the 2005 Gulf Coast hurricanes, the agency did not take sufficient steps to ensure that continuity of knowledge about projects was maintained as staff came and went.

Some of these challenges were familiar to FEMA, having been identified by us and others in the past, but often the magnitude of the 2005 Gulf Coast hurricanes considerably worsened their effect. In addition, FEMA has encountered a whole set of new challenges related to applying the PA program to a catastrophic disaster and the unique needs associated with rebuilding entire communities in the wake of such an event. For example, the agency has wrestled with how to adapt a program traditionally focused on restoring buildings and infrastructure back to predisaster conditions, to circumstances on the Gulf Coast where the reality of significant

demographic change may have fundamentally changed the need for such structures in those locations.

In order to operate, the PA program relies on a partnership involving FEMA, state governments, and local entities. Therefore, it is critical for the agency to look for ways to foster constructive and collaborative relationships with other key participants. We found that some of FEMA's policies and practices—particularly reversal of project decisions and the lack of transparency in FEMA's decisions—may work against efforts to achieve effective collaboration. Because of the active role that state and local governments must play in the PA process, it is also important for states and locals to have the capacity needed to carry out their role in the process. Similar to the federal experience, state and local governments in both Louisiana and Mississippi initially lacked the necessary human capital capacity to administer the program. Given the significant human capital challenges involved in rebuilding after a major disaster, it would benefit state and local governments to now consider approaches to help ensure that they have, or have plans to develop or access, staff with the right mix of skills needed to carry out their role in the PA process.

Some of the rebuilding challenges encountered following the 2005 Gulf Coast hurricanes may be faced again as Texas, Louisiana, and Alabama recover from the recent devastation caused by Hurricanes Ike and Gustav. Accordingly, opportunities exist now to take steps to further refine the PA program to better address these challenges as the current recovery continues on the Gulf Coast and in advance of future disasters. FEMA has already taken steps toward this end, which state and local officials report are improving the implementation of the program in the Gulf Coast. It is important that FEMA continues to institutionalize these lessons by taking action to ensure that changes are made to program polices and procedures, and then appropriately disseminated. The challenges faced by the PA program in the Gulf Coast also highlight some broader issues regarding the way the federal government approaches rebuilding. At your request, we are beginning a review of these issues including whether there may be a need for more fundamental changes to the Stafford Act when providing funds to help communities rebuild after catastrophes. This is among the many issues that face Congress as the nation works to strengthen the United States' ability to recover from the next catastrophic event.

## Recommendations for Executive Action

To help DHS improve the operation of the PA grant program and build on some of the actions taken to date, we recommend that the Secretary of Homeland Security direct the Administrator of FEMA to take the following four actions:

- Improve PA reporting by better defining information presented in FEMA's
  periodic reports to Congress and the public; specifically provide the
  number of unique PA projects in addition to figures that include changes
  to projects.
- Improve information sharing within the PA process by identifying and
  disseminating practices that facilitate more effective communication
  among federal, state, and local entities, including the development of tools
  that promote document sharing such as Mississippi's online accounting
  system.
- Strengthen continuity among staff involved in administering the PA program by
  - developing protocols to improve information and document sharing among FEMA staff, such as requiring that staff maintain a record of project decisions to share with rotating staff, or by more broadly adopting a team approach so that more than one individual is aware of the details of specific projects, and
  - communicating the timing of expected FEMA staff rotations to applicants directly affected by those staffing changes.

## **Agency Comments**

On October 29, 2008, we provided a draft of this report to the Secretary of Homeland Security for comment. We received written comments on December 11, 2008. In its written comments, which appear in appendix II, DHS generally agreed with our recommendations. In addition, the department provided technical clarifications that we incorporated where appropriate. We also provided drafts of relevant sections of this report to state and local officials involved in the specific PA examples cited in this report. We incorporated their comments as appropriate.

We will provide copies of this report to other interested congressional committees, the Secretary of Homeland Security, the FEMA Administrator, and state and local officials we contacted for this review. In addition, this report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you have any questions about this report, please contact me on (202) 512-6806 or at czerwinskis@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix III.

Stanley J. Czerwinski
Director, Strategic Issues

## Appendix I: Objectives, Scope, and Methodology

We focused our review on Louisiana and Mississippi because these two states accounted for 90 percent of all Public Assistance (PA) funding made available to Gulf Coast states. We selected localities within these two states based upon (1) the amount of PA funding they were expected to receive, (2) whether local officials reported experiencing challenges or successes during PA program implementation, or (3) whether the locality had been identified by others as experiencing significant challenges or successes during PA program implementation. Accordingly, we included the following localities from Louisiana in our review: the City of New Orleans, St. Bernard Parish, Plaquemines Parish, and Jefferson Parish. Similarly, we included the following localities from Mississippi in our review: Waveland, Bay St. Louis, Gulfport, and D'Iberville.

To address our first objective, we obtained and analyzed funding data from September 2005 though September 2008 from the Federal Emergency Management Agency's (FEMA) Global Reports on Public Assistance in the Gulf Coast, and for September 2005 though July 2008 from FEMA's National Emergency Management Information System (NEMIS). NEMIS data included project information on project cost, the status of project development, and project type and location. We assessed the reliability of the data by performing standard electronic testing of the data, comparing published funding reports to raw data from the NEMIS database, as well as interviewing FEMA officials with responsibility for both data sources. Where we identified discrepancies in the sources of data, we note this in our report. However, we found that the data sources were comparable and sufficiently reliable for our purposes. We did not independently verify the validity of these data.

To address objectives two and three, we relied primarily on interviews with key officials and corroborated this evidence with NEMIS data, documents provided by PA applicants, the states of Louisiana and Mississippi, and FEMA. Further, we obtained and reviewed FEMA documents such as FEMA guidance for applicants and staff, the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), regulations, policies, and procedures and observed damaged sites in several locations in Louisiana and Mississippi. We also reviewed past GAO and Department of Homeland Security Inspector General reports on the PA program or Gulf Coast recovery. As our primary source of evidence, we interviewed and obtained information from a variety of sources in the Gulf Coast and Washington, D.C. At the federal level, we interviewed officials and obtained information from FEMA, the Department of Homeland Security's Office of the Inspector General, and the Office of the Federal Coordinator for Gulf Coast Rebuilding. We also interviewed and

obtained documentation from state and local officials in Louisiana and Mississippi. We did not choose a representative sample of officials to interview, but rather, chose individuals based upon their knowledge, experience, or leadership role in the PA program in these two states. We did not observe the PA funding processes in operation.

- In Louisiana, at the state level, we interviewed and obtained documentation from officials in the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), which was the official PA grantee for the state, with responsibility for partnering with FEMA to administer the grant to local entities. We also interviewed and obtained information from the Louisiana Recovery Authority, which was the policy advisor for Gulf Coast rebuilding and, as of January 2008, became the state's lead agency working with FEMA on recovery operations, including PA; the Office of the Legislative Auditor, which assisted in the reviewing of PA grant applications; and the State Department of Education, which was a major applicant in the PA process. At the local level, we interviewed and obtained documentation from PA applicants from the City of New Orleans and from St. Bernard, Plaquemines, and Jefferson Parishes.<sup>1</sup>
- In Mississippi, at the state level, we spoke with the Mississippi Emergency Management Agency (MEMA), which was the official PA grantee for the state, with responsibility for partnering with FEMA to administer the grant to local entities; the Governor's Office of Recovery and Renewal, which acted as a policy advisor on Gulf Coast rebuilding; and the Joint Committee on Performance and Evaluation and Expenditure Review, which is an audit organization of the Mississippi state legislature that has previously assessed implementation of the PA program. At the local level, we spoke with city officials who were PA applicants in the cities of Bay St. Louis, Gulfport, Waveland, and D'Iberville.

We conducted this performance audit from August 2007 through November 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We requested comments on a draft of this report from the Department of Homeland

<sup>&</sup>lt;sup>1</sup>Although St. Tammany Parish met the selection requirement, we did not interview officials from this parish because the parish was under litigation with FEMA concerning some of the issues that we discuss in our report.

Security, which are reprinted in appendix II. We also provided drafts of relevant sections of this report to state and local officials involved in the specific PA examples cited in this report, and incorporated their comments as appropriate.

## Appendix II: Comments from the Department of Homeland Security

U.S. Department of Homeland Security Washington, DC 20528



December 11, 2008

Stanley J. Czerwinski Director, Strategic Issues U.S. Government Accountability Office 441 G Street, N.W. Washington, D.C. 20548

Dear Mr. Czerwinski:

SUBJECT: Department of Homeland Security response for GAO Draft Report 09-129, "DISASTER RECOVERY: FEMA's Public Assistance Grant Program Experienced Challenges with Gulf Coast Rebuilding"

The Department of Homeland Security (DHS) thanks you for the opportunity to comment on the Government Accountability Office's (GAO) Report 09-129, DISASTER RECOVERY: FEMA's Public Assistance Grant Program Experienced Challenges with Gulf Coast Rebuilding. Hurricanes Katrina and Rita presented challenges to FEMA's Public Assistance (PA) program that had not been encountered during any other disaster in history. FEMA has used lessons learned during the response and initial recovery of these disasters to enhance long-term recovery efforts. In addition, FEMA has applied resulting programmatic and operational improvements that have benefited not only our response to a disaster but also the short-term recovery as well, namely, Hurricanes Gustav and Ike. While FEMA generally concurs with GAO's report recommendations, we have already made tremendous strides in overcoming many of the issues raised. Our responses to GAO's recommendations focus on the importance of introduction and consistent and continuing development, implementation, and enhancement of data and reporting resources as a means to success in the administration of the PA program in the Gulf and in future disasters wherever in the United States they may occur.

GAO's report identifies challenges related to developing projects, sharing information, and making key project decisions. It makes specific recommendations only regarding sharing information. This letter addresses these four report areas.

As noted in your report, FEMA was faced with managing unprecedented numbers of staff. The Gulf Coast response was more than double the cost of any prior PA disaster. In addition, a total of 3,500 personnel were deployed as opposed to the average of 75-100. These individuals needed training and periodic rotation home, situations which led to delays in providing Public Assistance grants.

Some of FEMA's major criticisms come as a result of slow payments to sub-grantees. Often delays are the result of the State's unwillingness to pass on FEMA funds provided to the state via Smartlink. In such cases, States are often concerned about future audits which may question their local funding decisions.

Inexperienced staff and resulting errors are the results of our overwhelming challenges caused by the catastrophic incident. It is not economically feasible or reasonable to fully staff, train and test to meet catastrophic situations on a regular basis (when such occurrences are infrequent). We can, however, prepare remedial plans (expedite hiring, training, establish quality control, expedite financial support, provide technical assistance) (e.g. local contractor support), and activate direct Federal assistance.

Technical comments are included as a separate attachment.

**Recommendation:** Improve PA reporting by better defining information presented in FEMA's periodic reports to Congress and the public; specifically provide the number of unique PA projects in addition to figures that include changes to projects.

**Response:** FEMA generally concurs with this recommendation. FEMA PA has taken a number of productive actions to improve reporting on PA grants. The single largest of these was to create an integrated Internal/External Support group (INEXS) within PA. The group is specifically dedicated to reporting, communications, training, and information management initiatives.

To augment information presented in FEMA's regular reports, INEXS developed, maintains and makes available regularly scheduled database output reports as well as answering requests for specific, time-sensitive data that provide the status of individual, unique projects. FEMA databases track detailed infrastructure project-, facility-, or site-level progress on design completion, bid and award, construction phase, and status of temporary facilities and permanent repair or replacement initiatives. Examples of FEMA reporting and database tools and products include:

- The PA Global Report, which shows detailed staffing, organization, projections, productivity, and grant awards data disaster-wide and by Parish. It is available to the public, FEMA staff, and Congress.
- The Interactive Public Website/Global Transparency Initiative, which tracks projects by neighborhood across the entire Gulf Coast region, including Louisiana. This Gulf Coast Recovery Office (GCRO)/Office of Federal Coordinator (OFC)-jointly developed website provides the number of projects and grant funding by sector. The five sectors include Education, Health & Hospitals, Public Works, Historic and Cultural, Public Safety and Criminal Justice. FEMA provides public access to the transparency website through the FEMA.gov website. Users can access the website map, click on a community, and view project information. The transparency website is updated weekly by direct interface with FEMA PA's Project Phase Tool Database that tracks the status of every project.
- The Project Phase Tool Database (PPT), which provides the functionality to translate from grant-specific NEMIS¹ data to unique PA project-specific information. The PPT lists a detailed description, funding, status and tracking information for every PA project entered into National Emergency Management

Information System (NEMIS). Project staff can easily sort the PPT by their assigned Applicants and projects and immediately access a wealth of background information on their project workload. This is particularly valuable for new staff as they assimilate into the PA operation and begin service to their Applicants. The database is updated weekly and is the data repository for the majority of management and progress reports used by PA staff and management.

The PA Expedited Information Response (PAXIR) team, which establishes protocol for and manages PA's response to information requests from external sources, including Public and Media Affairs, Intergovernmental Affairs, GCRO, OFC, FEMA Headquarters, LA Transitional Recovery Office, Congress and the White House. The team ensures consistent and quality deliverables in short turnaround times. Its responses provide on-demand technical and project-specific information in an accessible format, such as executive summaries and issue papers. Since its inception in April 2007, PAXIR has responded to over 1,600 inquiries.

In addition to these INEXS reporting and database initiatives, FEMA PA Operations has narrative and reports specialists assigned to Operations Groups. By leveraging the tools noted above and applying in-depth knowledge regarding their Applicant groups, these trained specialists respond to INEXS requests with specific, timely and accurate information appropriate for dissemination to the requesting audiences.

As the Katrina/Rita operation progressed, teams of subject matter experts were created to facilitate the development of certain projects with particular technical or programmatic concerns. Such teams include the Cost Estimating Center, Alternate/Improved Projects, 406 Hazard Mitigation, and Insurance. The Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) have counterparts working with these FEMA teams.

**Recommendation:** Improve information sharing within the PA process by identifying and disseminating practices that facilitate more effective communication among federal, state, and local entities, including the development of tools that promote document sharing such as Mississippi's online accounting system.

Response: FEMA generally concurs with this recommendation. We agree that collaboration with the States and local governments and their participation and active involvement are crucial to the success of the PA program. The State needs buy-in and to feel as though they are an integral part of the decision making team. FEMA must be prepared to compromise, and both parties must be committed to establish goals in order to successfully meet milestones. In August 2007, the Mississippi TRO Director initiated the development of a Project Worksheet (PW) Tracker on-line tool which was shared with GAO in May 2008. The tracker is a cooperative effort between the State and FEMA to provide the interim project construction status of projects between funds obligation and construction completion. While this type tool may not be necessary in smaller disasters, it is proving extremely useful in the tracking of long term rebuilding efforts.

FEMA is making concerted efforts to improve collaboration and information sharing within the PA process by developing and maintaining project-specific tracking tools and practices, generating reports that enhance communications with federal, GOHSEP and local entities. FEMA has created joint FEMA-GOHSEP databases, protocols, and an interactive website, all

three of which significantly enhances collaboration and information sharing, as well as provides detailed tracking of project progress. Examples of these initiatives include:

- The Alternate/Improved (A/I) Database, which provides FEMA and GOHSEP visibility on flexible funding PA grant options exercised by Applicants. Developed by INEXS and used interactively both by FEMA and by GOHSEP, the database tracks all A/I requests from the time of receipt from the Applicant by GOHSEP to the issuance date of a final decision letter from FEMA. It includes detailed description, funding, status and tracking information for every A/I project and stores information that forms the basis of status reports used by FEMA and GOHSEP to track the progress of each A/I project and to, in turn, help keep Applicants informed of FEMA and GOHSEP activities and decisions relevant to their A/I projects. The A/I Database is supported by the A/I Guidebook which includes all relevant A/I policies and procedures.
- The PW Versioning Database, which provides detailed, project-specific information on where an Applicant's version request and related PW version is in the development process. This INEXS-developed database was designed to enable joint FEMA-GOHSEP tracking of version request progress and to help keep Applicants informed of FEMA and GOHSEP activities and decisions relevant to their PW version requests. The PW Versioning Database tracks versions requested by GOHSEP/Applicants up to the point in time when a version is entered into NEMIS and assigned a NEMIS tracking number. INEXS is currently modifying the database to divide data entry responsibilities between GOHSEP and FEMA.
- INEXS Training, which develops, administers and delivers joint, on-site training
  opportunities for FEMA and GOHSEP Operations. As the disaster operation
  evolved, INEXS Training expanded its focus to include general courses such as
  PA Operations as well as more specialized types of training, such as A/I, PW
  versioning, Grants Management, and 406 Hazard Mitigation.

**Recommendation:** Strengthen continuity among staff involved in administering the PA program by developing protocols to improve information and document sharing among FEMA staff, such as requiring that staff maintain a record of project decisions to share with rotating staff, or by more broadly adopting a team approach so that more than one individual is aware of the details of specific projects.

Response: FEMA generally concurs with this recommendation. FEMA has continued its concerted effort to hire and train CORE staff for key leadership and management positions. The CORE staff is full time positions hired for four years or more to provide long-term continuity in the operation. This staffing approach generates accountability, reduces rotations and roll-offs, and maintains institutional knowledge among resident policy and decision makers.

To address continuity issues, FEMA PA regularly offers training courses (as noted above in the response to Recommendation 2) that are tailored to the needs of new staff mobilizing to the disaster, on-site staff transitioning into new assignments, and experienced staff rejoining the operation following a significant period away from the disaster.

In addition to their primary objectives noted previously in this letter, INEXS-developed databases and protocols facilitate smooth transitions among FEMA staff as they assimilate into PA Operations and as they transition to new project assignments. This is particularly

important because NEMIS Case Management File information is organized by Applicant rather than by project. Newly assigned staff must have immediate access to complete and accurate information concerning project history, issues and backlog. Information housed in the databases, and the project-based accessibility enabled by the databases' structures and query capabilities, augments staff access to information and enhances staff understanding of Applicants and their projects.

The A/I Database and PW Versioning Database each support aspects of PA project management as described in the response above to Recommendation 2. In addition, the INXES-developed Meeting Tracker Database (MTD) provides a record of FEMA interaction with GOHSEP and with Applicants. This tool is the source of the FEMA/GOHSEP meeting calendar that is located on the PAKatrinaRita.com intranet site. As well as supporting meeting and communication management, the MTD supports smooth staff transitions with its record of key applicant issues, actions and schedules.

The PAKatrinaRita.com website, created by the Louisiana Transitional Recovery Office, provides real time information on various aspects of the disaster including Disaster Specific Guidance, PA Policy and Guidance, Fact Sheets, Information Sheets, appeals, and time extensions. This website is available to all FEMA staff and GOHSEP.

**Recommendation**: Strengthen continuity among staff involved in administering the PA program by communicating the timing of expected FEMA staff rotations to applicants directly affected by those staffing changes.

**Response:** FEMA generally concurs with this recommendation. FEMA PA is taking an increasingly deliberate approach to staffing and organizing in an efficient manner to administer the PA program. The approach has led to a more stable organizational structure over the past two years, reducing the need for reorganization and shifting of resources.

The disaster was primarily staffed with Technical Assistance Contractors (TAC) after the disaster struck. Although there was a high turnover of this initial staff, most of the TACs now staffing the disaster have been here an average of over two years.

Placing and training CORE staff in key PA leadership and management positions represents a significant investment in human capital. In addition to reducing the need for staff rotations and enhancing staff continuity, CORE staff effectively manages the message and impact of rotations with Applicants directly affected by staff changes. CORE staff turnover has been minimal and, where possible, transition time has been built in to minimize the potential impact.

PA Management has made tremendous strides in recruiting and hiring CORE staff to replace TAC staff as they demobilize from the operation. While day-to-day PA operations for Hurricanes Katrina and Rita are still handled primarily by TACs, FEMA has deliberately sought and hired COREs for the Gustav/Ike operation. The table below demonstrates the increase in CORE staffing for Gustav/Ike.

PA Management is also filling senior management positions with CORE staff. On both disasters, the highest level of PA management is CORE. The next level of PA management,

including Group Leads, is 100% CORE in the Gustav/Ike operation and 33% CORE in the Katrina/Rita operation.

	Katina/Rita	Gustav/Ike
CORE	47	49
DAE	0	11
TAC	159	82

PAO/DPAO Level-CORE	100%	100%
Senior Management-	2227	
CORE*	33%	100%

<sup>\*</sup>Includes Group Supervisors and Task Force Leaders

The Department of Homeland Security appreciates the opportunity to review and provide comments on this draft report. We look forward to working with you on future homeland security issues.

Sincerely,

Jerald E. Levin

Director

Departmental Audit Liaison Office

# Appendix III: GAO Contact and Staff Acknowledgments

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Staff Acknowledgments	Major contributors to this report were Peter Del Toro, Assistant Director; Latesha Love; and Robert Yetvin. Tyler Duffy, Cynthia Grant, Adam Shifriss, A.J. Stephens, and Kate Wulff also made key contributions.

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