



# Department of Homeland Security Office of Inspector General

## Management Advisory Report:

## FEMA's Housing Strategy for Future Disasters






Homeland  
Security

September 25, 2009

MEMORANDUM FOR: The Honorable W. Craig Fugate  
Administrator  
Federal Emergency Management Agency

FROM:   
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Inspector General

SUBJECT: *Management Advisory Report: FEMA's Housing Strategy for Future Disasters (OIG-09-111)*

This memorandum presents our findings and recommendations based on our review of the Federal Emergency Management Agency's (FEMA) housing strategy for future disasters. Our objective was to determine the efficacy of FEMA's strategic plans for providing emergency housing to future disaster survivors.

We based our findings and recommendations on discussions with FEMA staff and reviews of the National Disaster Housing Strategy, FEMA's 2009 Disaster Housing Plan, and other FEMA and congressional reports. We also reviewed FEMA's disaster housing response activities following Hurricane Ike in 2008 and other housing-related requirements of the *Post-Katrina Emergency Management Reform Act of 2006 (Post-Katrina Reform Act)*.<sup>1</sup>

We conducted our review under the authority of the *Inspector General Act of 1978*, as amended, and according to Quality Standards for Inspections issued by the President's Council on Integrity and Efficiency.<sup>2</sup>

## Background

On August 29, 2005, Hurricane Katrina made landfall and devastated far more residential property than any recent hurricane, displacing more than a million people and destroying more than 300,000 homes—nearly 10 times the number of homes destroyed by hurricanes Camille and Andrew combined. Hurricane Rita caused further devastation, making landfall on the Gulf Coast in September 2005. Hurricanes Katrina and Rita severely tested FEMA's ability to find housing solutions for disaster survivors. Compounding the difficulty, these hurricanes affected large

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<sup>1</sup> Public Law 109-295, Title VI – National Emergency Management, of the *Department of Homeland Security Appropriations Act of 2007*.

<sup>2</sup> On October 14, 2008, the *Inspector General Reform Act of 2008* (Public Law 110-409) replaced the President's Council on Integrity and Efficiency with the Council of the Inspectors General on Integrity and Efficiency.

numbers of renters, the poor, and the elderly—groups that have difficulty dealing with the challenges of a catastrophic disaster.

In the aftermath of these hurricanes, Congress enacted the *Post-Katrina Reform Act*, which directed FEMA to develop an overall strategy for disaster housing. This law also created a National Advisory Council to advise FEMA on all aspects of emergency management, allowed FEMA to fund case management services for disaster survivors, and gave FEMA's Individuals and Households Program more flexibility to meet housing needs. The law also gave FEMA authority to conduct a pilot rental repair program to explore ways to provide timely and cost-effective repairs to rental units.

### **FEMA Is Better Prepared to Help Disaster Survivors**

FEMA has made strides in a number of areas since hurricanes Katrina and Rita struck the Gulf Coast, but there remains room for improvement, including in the critical area of disaster housing. FEMA is addressing weaknesses identified in a range of post-Katrina reports and is in various stages of implementing the requirements of the *Post-Katrina Reform Act*. FEMA also continues to perform well when responding to noncatastrophic disasters.

For example, in our report on FEMA's response to Hurricane Ike, we stated:

FEMA's response to Hurricane Ike was well organized and effective, and FEMA and its federal and state partners implemented their incident objectives aggressively. By the end of October 2008, only 7 weeks after landfall, FEMA had registered more than 715,000 hurricane victims, completed 359,000 housing inspections, installed manufactured housing for 339 families, and disbursed \$326 million for housing and other needs. FEMA also assisted more than 100,000 disaster victims at its Disaster Recovery Centers.<sup>3</sup>

However, FEMA still has much to do to become a cohesive, efficient, and effective organization to prepare for and respond to the next catastrophic event.

This report focuses on six key housing areas: (1) the high cost of FEMA's current housing options, (2) the critical element of housing stocks, (3) the importance of communications in the aftermath of a disaster, (4) the National Disaster Housing Strategy and the Joint Housing Solutions Group, (5) the importance of state and local government officials' involvement and leadership, and (6) the need for innovation in addressing the intractable disaster housing issue.

### **High Cost of FEMA's Current Housing Options**

Developing better alternative housing solutions, particularly options to be used in catastrophic disasters, is important for a number of reasons. One key reason is the high cost of the current housing approach. FEMA's traditional direct housing programs are not always the most cost-

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<sup>3</sup> *Management Advisory Report: FEMA's Response to Hurricane Ike* (OIG-09-78), U.S. Department of Homeland Security Office of Inspector General, June 2009.

effective way to deal with the massive destruction of housing stocks.<sup>4</sup> For example, following Hurricane Katrina, FEMA built expensive community sites and placed disaster survivors in travel trailers, sometimes spending more than \$100,000 to house a family for 18 months. Further, FEMA paid rent to tens of thousands of hurricane survivors under various housing programs for up to 44 months, 26 months longer than the 18 months generally allowed under the Stafford Act.

FEMA has estimated that the average lifespan of temporary housing units occupied by disaster assistance applicants post-Katrina/Rita is 3 years. FEMA's estimate assumes it will deploy a temporary housing unit in the field for up to 2 years and store it at a FEMA housing storage site for 1 year. When a unit is returned after use, the unit is designated for either disposal or redeployment depending on its condition. FEMA estimates that the lifespan cost of a travel trailer, park model, and mobile home is \$26,379, \$37,379, and \$52,634, respectively

These cost estimates are consistent with those determined by the U.S. Government Accountability Office (GAO) in a 2007 report based on Hurricane Katrina and Rita occupants, which indicated that FEMA would spend an average of \$30,000 for each 280 square foot trailer at a private site.<sup>5</sup> It is important to note, however, that at some sites the average costs were significantly higher, estimated to be as high as \$229,000, which is approximately the equivalent cost of a five-bedroom, 2,000-square-foot home in Jackson, Mississippi.

FEMA also estimates spending about \$100 million per year to store more than 100,000 trailers and manufactured housing units that FEMA plans to dispose of eventually. While the use of manufactured housing might be a reasonable approach in a "garden variety" disaster, FEMA needs better cost-effective housing solutions to apply in the wake of a catastrophic event.

### **The Critical Element of Housing Stocks**

It is critical to understand the impact that post-disaster housing stock levels have on disaster housing operations. The repair and restoration of housing stocks is one of the most important challenges FEMA and its response and recovery partners face following a catastrophic housing disaster. All other housing decisions and programs hinge on this single variable.

After hurricanes Katrina and Rita, there was simply not enough affordable housing left to allow many disaster survivors to remain near their communities. The Brookings Institution reported that in the months following Hurricane Katrina, the population of New Orleans might have fallen by as much as half.<sup>6</sup> It is not that people wanted to relocate outside the area; there just was not enough housing left to support the population. Three and a half years after the storm, the Brookings report estimates that the New Orleans metropolitan area has returned to about 88% of its pre-storm population, but rents have also risen approximately 46% above pre-Katrina rates. The increase in rental rates can largely be attributed to the low supply of and high demand for rental units.

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<sup>4</sup> FEMA traditionally provides direct housing units (temporary housing units) only when sufficient rental resources are not available.

<sup>5</sup> *Hurricane Katrina: Ineffective FEMA Oversight of Housing Maintenance Contracts in Mississippi Resulted in Millions of Dollars of Waste and Potential Fraud* (GAO-08-106), U.S. GAO, November 2007.

<sup>6</sup> *The New Orleans Index: Tracking the Recovery of New Orleans and the Metro Area*, The Brookings Institution Metropolitan Policy Program & Greater New Orleans Community Data Center, January 2009.

FEMA does not have sufficient tools, operational procedures, and legislative authorities to aggressively promote the cost-effective repair of housing stocks, which would increase the amount of housing available and likely limit increases in the cost of housing, particularly rental rates. For example, FEMA does not have a flexible and efficient rental repair program for use in catastrophic disasters to quickly increase the availability of low-income rental housing. In circumstances where FEMA determines that additional funding is cost effective, FEMA may need to have the flexibility to provide more repair money to homeowners beyond the \$30,300 currently available under its Individuals and Households Program.

In the *Post-Katrina Reform Act*, Congress required FEMA to develop the National Disaster Housing Strategy and describe any additional authorities necessary to carry out any portion of the strategy. However, when FEMA issued the strategy, it did not identify additional authorities to strengthen its ability to repair existing housing stocks.

### **Importance of Communications in the Aftermath of a Disaster**

Regardless of whether there is enough housing stock remaining after a disaster or whether disaster survivors must consider relocation to other communities, clear communication is key. Following the 2005 hurricanes, disaster survivors, the media, members of Congress, and state and local officials severely criticized FEMA for its response to the housing crisis. Many of these criticisms occurred because of a misunderstanding of disaster housing roles, responsibilities, and limitations.

To better manage expectations following a catastrophic event and speed the recovery process, FEMA should work closely with state and local officials to set achievable housing goals. FEMA should also clearly state in its policies, operating procedures, and public messaging what constitutes success when housing stocks cannot be repaired. In extreme cases, officials should clearly communicate that some disaster survivors may need to relocate their households, possibly far from their original communities.

Stakeholders generally understand that quickly assisting affected individuals to secure housing near their pre-disaster communities is FEMA's primary goal. When housing stocks are available, FEMA and its partners have the tools to help disaster survivors locate permanent housing in their pre-disaster communities. Homeowners can make home repairs with insurance proceeds, with small grants provided by FEMA's Individuals and Households Program, or with disaster loans from the U.S. Small Business Administration. When the storm destroys some rental properties, housing officials can help renters find new units from surviving stocks. If available rental resources are insufficient to meet the need, FEMA can also provide temporary manufactured housing units while disaster survivors repair or replace their homes.

However, when housing stocks are destroyed and have little prospect for quick repair, FEMA, state, and local officials should clearly communicate to stakeholders that there is not enough housing stock for everyone and that some will need to relocate to other communities. This will help individuals and families begin to rebuild their lives. The sooner FEMA, its federal partners, state and local government leaders, and other stakeholders make this determination, the quicker households can be assisted in finding permanent and cost-effective housing solutions. Officials at every level should

also communicate to affected individuals their roles and responsibilities in finding permanent housing. This communication is key and should occur early and often.

### **The National Disaster Housing Strategy and the Joint Housing Solutions Group**

On January 16, 2009, FEMA released the National Disaster Housing Strategy required by the *Post-Katrina Reform Act*. The strategy summarizes the sheltering and housing capabilities, principles, and policies that will guide the disaster housing process. The strategy promotes engagement of all levels of government, along with nonprofits, the private sector, and individuals, to collectively address the housing needs of disaster survivors. The goal is to enable individuals, households, and communities to rebuild and restore their way of life as soon after a disaster as possible.

The strategy is a positive step forward, but it is only an interim step. It outlines a number of potential programs and federal agencies that can help disaster survivors find housing solutions, but it does not include an action plan designed to achieve specific goals. It also does not describe what would be a favorable outcome or goal in a particular disaster scenario and what steps FEMA would take to achieve that goal. To be complete, FEMA's action plan must specify what constitutes success under increasingly severe disaster scenarios, especially catastrophic disasters.

### **Importance of State and Local Government Involvement and Leadership**

Both the National Disaster Housing Strategy and FEMA's 2009 Disaster Housing Plan, which is based on key concepts in the strategy and describes FEMA's approach to meeting disaster housing needs during 2009, emphasize the role of state and local governments in assuming greater housing leadership through the state-led Joint Housing Task Force. Although state and local government officials are in the position to know the best housing solutions for their communities, officials may be reluctant to lead this effort. Without this leadership, FEMA's ability to help disaster survivors is restricted and decisions about disaster housing are often delayed.

In a 2008 audit, we reported that after Hurricane Katrina, a number of local communities were very reluctant, or even directly refused, to accept FEMA mobile home and travel trailer group sites in their communities. In some cases, state or local governments agreed to temporary housing sites, but then reversed their decision after housing installation had begun. Each time this happened, FEMA was further delayed in housing disaster survivors and incurred additional costs.<sup>7</sup> FEMA has spent millions of dollars in the past preparing group sites that were later rejected for one reason or another.<sup>8</sup>

According to the National Disaster Housing Strategy, when it becomes necessary to build housing sites, state and local governments are responsible for identifying public land that is suitable for a community site. When publicly owned land is unavailable, the state and local governments are responsible for identifying sites for FEMA to lease. FEMA must continue to emphasize to state and local government officials their responsibility to develop and implement housing solutions.

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<sup>7</sup> *FEMA's Preparedness for the Next Catastrophic Disaster* (OIG-08-34), U.S. Department of Homeland Security Office of Inspector General, March 2008.

<sup>8</sup> *Costs Incurred for Rejected Temporary Housing Sites* (OIG-08-86), U.S. Department of Homeland Security Office of Inspector General, August 2008.

## Need for Innovative Approaches

FEMA needs more flexibility to explore innovative and cost-effective solutions to disaster housing challenges. In our report, *FEMA's Sheltering and Transitional Housing Activities After Hurricane Katrina*, issued in September 2008, we encouraged FEMA to explore alternatives to its traditional housing programs, including providing lump sum payments to disaster survivors.<sup>9</sup> This could be a more cost-effective and expeditious way of returning disaster survivors to a more normal way of life.

Both FEMA's National Disaster Housing Strategy and a recent U.S. Senate report on disaster housing recognize the challenges and the importance of developing greater flexibility in providing housing solutions.<sup>10</sup> Some promising ideas include:

- **Implementing a rental repair program.** Although FEMA's efforts implementing the Individuals and Households Pilot Program show promise, it is uncertain whether the pilot program, as currently designed, is sufficiently scalable and flexible to be effective following a catastrophic disaster, or whether FEMA is the appropriate federal agency to implement a rental repair program.
- **Expanding the Individuals and Households Program for catastrophic events.** In disasters that result in the massive loss of housing stocks, the \$30,300 housing repair limit may not be sufficient to provide FEMA the flexibility to choose cost-effective solutions, especially when compared to the cost of building community sites, providing manufactured housing, or paying rental assistance over extended periods. Any increase in the repair limit should be based on an assessment of the unique circumstances of each disaster.
- **Finding low-cost and low-formaldehyde alternatives to travel trailers.** All FEMA manufactured housing units must now meet strict low-formaldehyde contract specifications. FEMA, through its Joint Housing Solutions Group, has recently developed temporary disaster housing alternatives that meet these stringent emission standards. However, these alternatives are expensive, ranging from \$45,000 to \$75,000 before installation, monthly maintenance, and deactivation costs and, when required, the cost of developing community sites. Additionally, contractors may not be able to quickly produce the many thousands of units that FEMA could need following a catastrophic disaster. Based on current contracts, FEMA has the capacity to purchase approximately 38,000 travel trailers, mobile homes, and park models in a relatively short period. However, following hurricanes Katrina and Rita, FEMA eventually purchased approximately 145,000 units.
- **Maintaining comprehensive cost data on all housing options.** FEMA has not systematically compiled and summarized historical housing cost data for each housing alternative. FEMA should collect and maintain comprehensive historical cost data so that FEMA can better choose among cost-effective housing solutions.

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<sup>9</sup> *FEMA's Sheltering and Transitional Housing Activities After Hurricane Katrina* (OIG-08-93), U.S. Department of Homeland Security Office of Inspector General, September 2008.

<sup>10</sup> *Far From Home: Deficiencies in Federal Disaster Housing Assistance After Hurricanes Katrina and Rita and Recommendations for Improvement*, Ad Hoc Subcommittee on Disaster Recovery of the Committee on Homeland Security and Governmental Affairs, United States Senate, February 2009.

In accordance with the *Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006* (Public Law 109-234), FEMA undertook the Alternative Housing Pilot Program (AHPP), which funded five projects in four states using \$400 million appropriated for this purpose. The goal of the AHPP is to identify and evaluate better alternatives for housing disaster survivors. FEMA and HUD plan to write a final report on the AHPP by December 31, 2011.

## **Conclusion**

Catastrophic disasters are high-consequence, low-probability events, and preparing for these events is extremely complex and difficult. FEMA's greatest housing challenge is helping disaster survivors remain in their communities following catastrophic disasters. To meet this challenge, FEMA needs flexible, innovative, and cost-effective ways to help repair housing stocks. But when restoration of housing stocks is not possible and temporary housing is not available, FEMA, state, and local officials need to effectively communicate the need for individuals to consider relocation.

As demonstrated following Hurricane Ike, FEMA is far better prepared for the next housing disaster. Also, FEMA's National Disaster Housing Strategy was a significant step toward improving FEMA's overall disaster housing response. The strategy catalogues the Nation's housing options and provides common principles to assist stakeholders in creating housing implementation plans. However, FEMA's housing program continues to face challenges.

FEMA should act quickly to develop the tools and operational procedures and, if needed, seek additional legislative authorities to respond effectively to the next catastrophic disaster. After the next catastrophic disaster strikes, it will be too late to develop and implement effective solutions. In addition, to better manage expectations, FEMA should define achievable housing goals for catastrophic disasters. Finally, it is critically important that all disaster stakeholders at the federal, state, and local levels maintain momentum and continue to implement needed changes over time.

We recommend that the Administrator, Federal Emergency Management Agency:

**Recommendation #1:** Compile and maintain comprehensive historical cost data on each housing alternative so that FEMA can better decide which housing options to implement in a particular disaster.

**Recommendation #2:** Continue exploring innovative, flexible, and cost-effective catastrophic housing capabilities and, if warranted, seek additional legislative authorities to repair housing stocks following catastrophic disasters.

**Recommendation #3:** Develop operational plans for FEMA's disaster housing program that include measurable and achievable outcomes, including appropriate outcomes for catastrophic disasters.



**Recommendation #4:** Develop a post-disaster communications strategy that will lead to a clear understanding of housing options, help manage expectations, and reinforce disaster victim responsibilities.

Please advise us within 30 days of this memorandum of actions taken to implement our recommendations. If you have any questions, please call me, or your staff may contact Matt Jadacki, Deputy Inspector General for Emergency Management Oversight, at (202) 254-4100.

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