

Chapter Two: The Temporary Housing Story

This section describes MEMA's approach to organizing the program and implementing the temporary installations, including the barriers faced and how they were overcome during the first 17 months of program implementation.

MAHP's Vision and Approach

Because the State quickly undertook a planning process and began implementing recovery efforts, the MAHP program did not start with a blank slate. By the time AHPP funds were awarded to Mississippi, considerable analysis of housing needs had been done, and design of a disaster housing unit that would fit in with Gulf Coast architecture was underway. MAHP's first Cottage was occupied 81 days after operations officially began in April 2007. By August 2008, over 2,800 Cottages had been delivered, installed and occupied. ("Cottage" will be used to describe all of the MAHP units except where distinction among the models is important.)

The Vision

FEMA's pilot program challenged AHPP implementers to seek new housing types that would be feasible to deploy in future disasters, in addition to addressing the current needs of coastal residents still living in FEMA trailers and mobile homes. This concept was embraced by Mississippi, and as MAHP took shape, the program policies and schedules reflected a desire to simulate immediate post-disaster conditions. The intent was to test the ability of manufacturers to mobilize quickly, as well as the organization's capacity to identify eligible households and to receive, install and occupy units in large numbers. Key managers were committed to this emergency mindset and instilled a sense of urgency throughout the organization.

MEMA also took seriously the pilot aspect of the project by designating a project historian to record key milestones and to help with project documentation. MAHP intends to spend year three of the grant conducting its own analysis of the program.

The Plan

MAHP adopted a management approach that is familiar in the disaster response community. The Incident Command System (ICS) provides a structure for establishing an organization and protocols for setting goals, assigning responsibility and tracking progress.⁸ ICS was developed in the 1970s to address common weaknesses in emergency response situations such as lack of systematic planning and accountability, difficulty in interagency coordination and poor communications. It is used at all levels of government and by some private sector organizations and has been incorporated into FEMA's National Incident Management System (NIMS). ICS usually is organized around five major functional areas: command, operations, planning, logistics and finance and administration.

The ICS approach appears to have served the project well. Within the first quarter, MEMA had created a new organization focused solely on the MAHP program (including organizational charts, job descriptions and an initial training program), conducted outreach to over 14,000 families, negotiated MOUs with 14 local governments, and installed nine units and occupied two. The management approach was also reflective of—and well-suited to—the military backgrounds of key

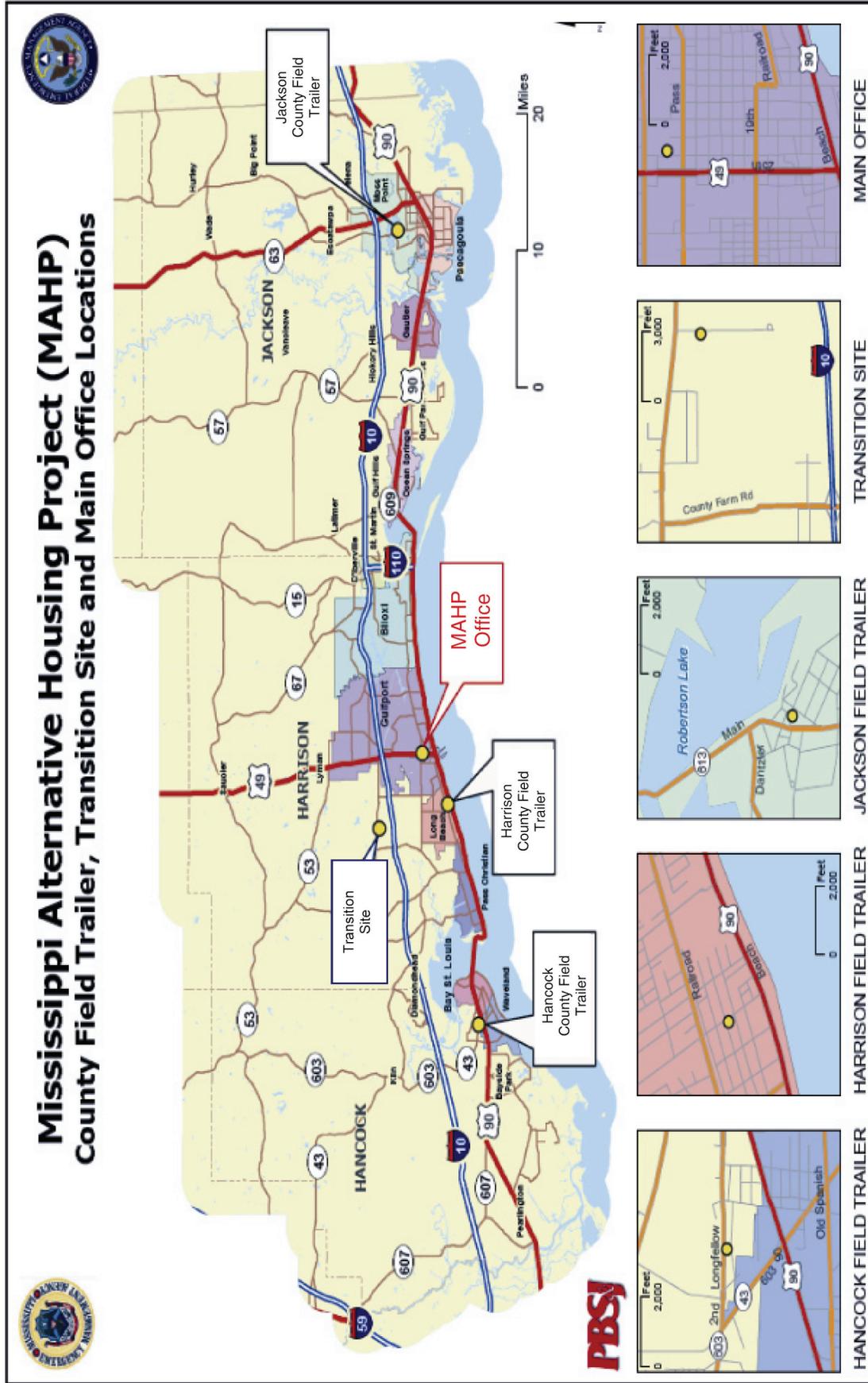
leaders, including the MAHP program director and MEMA's executive director, both of whom had served in the military.

As called for under ICS, MAHP immediately established detailed goals and performance standards to support the program's vision and codified them in a Performance Management Plan (PMP). The plan established specific targets for executing key tasks and developing policies and procedures, including: development of the management team, procurement of units, public and local government outreach, and design and implementation of a custom-built, automated workload tracking system. Attachment 2 summarizes the project's goals, which from the beginning called for the implementation portion of the program (i.e., construction, installation, occupancy, demobilization and disposition) to end in March 2009.

The organization measures progress toward the goals daily. It also publishes comprehensive quarterly reports that track progress against goals and contain policies, procedures and other key program documents that were created or modified during the quarter. This organized approach, combined with committed leadership and staff, played a significant role in the speed of MAHP implementation.

A headquarters office was established in Gulfport, and a transition site for receipt of Cottages was set up nearby. In addition, MAHP established small offices in each county, primarily for the use of site inspectors. See Exhibit 2-1 for a map showing the locations of the MAHP operational sites.

Exhibit 2-1: MAHP's Operational Sites



The Team

The State contracted with Post, Buckley, Schuh & Jernigan, Inc. (PBS&J), a national engineering consulting firm, to provide management and technical support to the project. PBS&J had been involved in the AHPP application process, and was at work on the project before the MEMA management team was fully assembled. In order to move quickly, the management contract initially was not competitively bid. According to MEMA's Director, Mike Womack, the decision to use a contractor to manage significant portions of the program was based upon the positive experience the State had using contractors for the administration of approximately \$2.5 billion in FEMA assistance funds after Katrina. Although MEMA's staff was increased after the storm, it is a small agency and Womack believes that engaging contractors to complete the time-limited, day-to-day work while using State staff for high level oversight of the contracts is an effective model.

In addition to being responsible for program management, the PBS&J team included several subcontractors who were tasked with specific operational duties. Exhibit 2-2 shows the MAHP organizational chart as of the first quarter of operations, with State personnel, PBS&J staff and subcontractors separately identified.

Significant operational support was also provided by MEMA staff not directly assigned to MAHP, as well as the State Department of Finance and Administration (DFA). MEMA staff were available as needed and a few members were loaned to MAHP in the early

days of the program. MEMA enlisted DFA to provide finance and administrative support for the duration of the program. The department has played a key role in providing guidance and support for procurements.

MAHP also coordinated closely with the Governor's Office of Recovery and Renewal. The Office had a staff person assigned to the Gulf Coast who assisted MAHP work with the local jurisdictions. The Governor's office has been involved in key program policy decisions and later made a direct request for the participation of a handful of non-profit groups to assist with permanent Cottage developments. MAHP staff reported that support and coordination with the Office has been helpful, aside from a brief period of confusion about Governor's staff communicating directly with jurisdictions about MAHP.

Relationships with Local Communities

Although each of the jurisdictions had signed a letter in support of the program when the MAHP grant application was submitted, MEMA committed to entering into a memorandum of understanding (MOU) with each local jurisdiction to specify how the Cottages would be used in that jurisdiction and where they could be placed. This turned out to be a more difficult and time consuming process than MAHP staff initially expected. Local government responses were driven by several forces, including the enormity of the recovery effort, concerns (and misconceptions) about the Cottages themselves and perceptions of the circumstances of households that

remained in FEMA units. These three factors are discussed in the sections below.

Challenges and Opportunities

The challenges continue to be enormous for the local jurisdictions affected by Katrina. As the MAHP program began, local leaders—many of whom had been personally affected by the storm—were intensely engaged in applying for and managing funding from multiple federal and state agencies. They were also overseeing major public construction projects, as well as planning for the short- and long-term restoration of the region’s economy and tax base. The overwhelming demands of recovery were compounded by the fact that most

communities lost local government facilities and were operating out of temporary offices in mobile homes. Many continue to do so three years after the hurricane (see Exhibit 2-3).

The storm is behind us and we are now dealing with the reality that post-Katrina decisions and solutions are very complicated...we are traveling uncharted waters. No American community has had to face rebuilding after a catastrophe the scale of Hurricane Katrina. We are seeking solutions that have never been necessary.

---- Gulfport Mayor
State of the Union address 2007



Exhibit 2-3: Many local governments are still operating out of temporary trailers.

Left: Temporary government offices in Waveland, July 2008.

Below: Temporary government office in Pass Christian, July 2008.



Ironically, in some areas damage was so complete that it presented the opportunity to consider approaches to development that might not have been feasible before Katrina changed the landscape of communities. The priority list was long, and housing was not necessarily at the top of that list. When first contacted for this evaluation in November 2007, one local government official characterized the situation this way: "I don't have time right now to think about housing." His priority was restoring the basic infrastructure and economy of the town. Eight months later during a second interview in July 2008, it was clear that affordable, rental housing and the needs of owners who had not been able to rebuild had moved closer to the top of the list.

Perceptions of the Cottages

Some community resistance was related to perceptions and misperceptions about the MAHP units. Both MAHP staff and local government representatives said that if the Cottages had been available shortly after the storm, local communities would have welcomed them with open arms. The localities would have been less stringent about permitting requirements and they would have allowed the Cottages to be placed in any available location.

"They say it's temporary but once they're here... we all know what's going to happen..."
---- Local Official, November 2007

However, an entirely different set of circumstances existed 18 months after the storm. Local communities were focused on recovery, not emergency response, and the landscape in which the MAHP program operated was in some ways much more complex. Some local government reactions to MAHP reflected the attitudes of vocal segments of the community who were experiencing what some locals called "Katrina fatigue." They wanted the FEMA trailers removed as a sign that things were returning to normal. To these individuals, the idea of bringing yet more "temporary," disaster housing to the area seemed contradictory, and perhaps detrimental, to encouraging people to rebuild permanent housing.

By this time it was difficult for communities to think about the Cottages for temporary housing without also thinking about the likelihood that some would remain in the communities as permanent housing. These concerns were exacerbated by the multiple extensions FEMA gave for travel trailer occupancy. Even though MEMA was publicly committed to demobilizing MAHP by March 2009, local leaders feared that a similar extension process for the Cottages was inevitable.

Owners who had rebuilt or were in the process of rebuilding were articulate and vocal in their concerns about how property values would be negatively affected by the Cottages. They argued that the size and style of the Cottages did not fit with many neighborhoods. There were notable exceptions, including one beachfront owner who said: "It's not my

business what people put on their own land. I think my neighbor's \$300,000 house is ugly, but it's his decision."

Local officials also made the argument that the small Cottages (if retained for permanent

housing) would do less to restore the tax base than larger, more expensive homes that existed before Katrina or new, high-rise condo or apartment buildings that could now be built.



Exhibit 2-4: Housing Characteristics Along the Gulf Coast

The quality and size of housing stock varies throughout the Mississippi Coast.

1. A Park Model next to a large home which is under construction near the waterfront.
2. More modest housing in Pascagoula, typical of older neighborhoods, where Cottages might be suitable.
3. A non-MAHP house in Bay St. Louis that typifies cottages in the neighborhood.
4. One of a handful of substandard mobile homes in a Gautier commercial park that may propagate negative community perceptions of mobile units, and, by extension, the Cottages.
5. A series of brightly-colored, non-MAHP cottages in Bay St. Louis.



The appropriateness of these arguments seemed more compelling in some locations than others. While a Cottage may look out of place next to a large, beach-front home, each jurisdiction appears to have older neighborhoods in which a Cottage could blend in with the neighborhood. Exhibit 2-4 illustrates this diversity.

MAHP's proposal to develop group sites met the most resistance of all. Concerns about recreating some of the visual and social problems experienced in FEMA trailer parks made the idea of creating new MAHP group sites unpalatable to local communities. As a result, MAHP staff worked with the jurisdictions to make maximum use of spaces available in commercial mobile home parks in order to accommodate renters who needed a site for a Cottage. Fourteen jurisdictions ultimately approved using Cottages in existing commercial parks.

Perceptions of Need

Another contributor to the resistance that MAHP encountered stemmed from perceptions of fairness and about whether the units were actually needed. Individual citizens and local officials generally had great compassion for the friends and neighbors they knew who were still not settled. However, a perception that "others" were abusing the system was widely discussed. At city council and county supervisor meetings, as well as in everyday conversations, anecdotes abounded about families who "weren't even trying to recover," "weren't even living in the FEMA units" (and perhaps were renting them out)

or were just "hanging on for the free rent." Although these discussions were omnipresent, when MAHP staff requested specific information about cases of abuse the response was often that someone "had heard" about a case. Housing advisors, who were the direct intermediaries between families and MAHP, were asked to pursue any specific complaints that were made. It is possible that some families stayed in FEMA trailers as a matter of convenience, but others faced a different reality. The remaining FEMA trailer occupants included homeowners who were still having problems with insurance settlements, elevation requirements, financing or access to reliable contractors, as well as former renters who reported they were unable to find affordable rental housing. Several MAHP and local officials explained that the substandard rentals that low-income households rented before the storm for as little as \$300 a month were destroyed.

"We lost everything too and got back on our feet with the same help they got, and now they'll get more."

---- Hancock County Resident

Some households were just "stuck," without a plan for rebuilding. These included elderly owners without the emotional and financial strength to rebuild and individuals who could neither rebuild on nor sell the site of their pre-storm residence. Still other individuals were in a state that MAHP housing advisors called "paralysis"—those who were still traumatized into inaction.

Negotiating the MOUs

All of these concerns were brought to the table when MAHP staff began to negotiate MOUs with each jurisdiction. A sample agreement is provided in Attachment 3. The standard language found in most agreements authorized participants to stay for a minimum of 6 and a maximum of 24 months and included an acknowledgement that some units might be placed temporarily below the jurisdiction's Advisory Base Flood Elevations (ABFEs; see Exhibit 2-5). Cottages were placed below the ABFEs only when a Cottage was replacing a FEMA travel trailer on the same site.

Ultimately MOUs were tailored to meet the needs of each jurisdiction. The modifications focused on specific concerns the jurisdictions had about the quality of units and unit installations, and the use of units for permanent housing. For example:

- ◆ The City of Moss Point permitted units only on private residential lots (no group sites or commercial lots) and initially restricted occupancy to one year.
- ◆ The City of Pascagoula gave blanket approval to place Park Model units wherever a travel trailer existed, but individual approval was required for

placement of the larger Cottages. The agreement also defined MEMA's responsibility for the cost of installation maintenance, demobilization and reasonable site restoration.

- ◆ Several jurisdictions (Gulfport, Bay St. Louis, Pascagoula, Gautier) required applicants to provide specific evidence that they were rebuilding a permanent unit in order to obtain a permit for placement of the Cottages.
- ◆ Harrison County and Pass Christian authorized the placement of Cottages only where local zoning allowed modular and manufactured homes, and required applicants to follow the normal process for obtaining a zoning variance if they wished to place a unit elsewhere in the jurisdiction. Pass Christian's agreement further specified that "no person will be allowed to purchase the units from the State of Mississippi" at the end of their occupancy and reminded the State that "time is of the essence" in the removal of units.

The MOU process proved to be time consuming, confusing and sometimes frustrating for all concerned. Having to understand the nuances of requirements across the jurisdictions was challenging for MAHP staff and contractors. Some

Exhibit 2-5: Advisory Base Flood Elevations and the National Flood Insurance Program

After the 2005 Hurricanes, FEMA adjusted the existing Base Flood Elevation (BFEs) maps to account for storms over the past 25 years. The result of this process was the Advisory Base Flood Elevations (ABFEs). The ABFEs are much higher than previous BFEs, due largely to the scope and scale of Katrina. ABFEs are used to help communities manage vulnerability in floodplains and to determine elevation and other requirements for participation in the National Flood Insurance Program (NFIP). The National Flood Insurance Program (NFIP) was established in 1968 to help communities minimize flood damage and provide flood insurance to property owners.

jurisdictions modified the requirements multiple times—and not always through the MOU process. Sometimes MAHP staff would discover the process had unexpectedly changed as they presented what they thought was a site ready for permitting. MEMA overcame these problems by minimizing staff turnover and transfers between jurisdictions. This allowed assigned staff to build relationships with the local office and stay more informed about changes.

On the other hand, local jurisdictions were sometimes frustrated by MAHP's lack of knowledge about jurisdictional boundaries and the occasional resulting mistakes when MAHP staff applied criteria from the wrong jurisdiction to a site. One local government complained that MAHP staff frequently submitted incomplete site plans for unit installations.

Manufacturing, Installing and Occupying the Cottages

This section discusses the overarching implementation issues related to the manufacture, installation and occupancy of the units. A more detailed description of unit components and characteristics and a discussion of the technical challenges MAHP encountered in designing and manufacturing units is included in Chapter Four.

Once the Park Model and Mississippi Cottage designs were complete, MAHP issued a series of Requests for Proposals (RFPs) and held pre-bid conferences with interested manufacturers with support from the State Department of Finance and

Administration. Failure to correctly handle the public advertisement for the initial order of Park Models caused a small delay. MAHP procured units from 6 different vendors operating in 10 separate locations.

The original RFP called for manufacturers to both manufacture and install the units, but MAHP determined that a separate haul and install contract was more appropriate. The original plan had been to transport the Cottages directly to the sites where they would be installed. However, it quickly became clear that a transition site would be needed where the units could be accepted, repaired if necessary and held until sites were ready. Directly contracting with local haul and install contractors also allowed MAHP to have more control over the timing and ensure that the installation was coordinated with the permitting and applicant preparation processes. MAHP also avoided creating competition for local installation contractors between manufacturers, which might have potentially inflated costs.

Quality Management

Cottages were received, inspected, accepted and deployed to sites from the transition site in Gulfport. Exhibit 2-6 is an aerial view of the transition site. When they arrived, the Cottages were logged into the inventory (units were barcoded). Each unit received a close visual inspection to check construction features such as exterior siding, roofing, drywall installation, interior and exterior paint, kitchen and bathroom fixtures and functionality of windows and doors. Utilities and appliances were tested. Any

problems identified were photographed for the record.

Despite the initial design work, changes to specifications were made numerous times as actual units came off the line and problems were identified. Each issue required program staff to determine whether the problem was with the unit design, materials or manufacturer workmanship. When changes were made, decision making was documented using a formal issues management process that recorded the problem, the solution and the final decision.

Exhibit 2-6: Aerial view of MAHP transition site near Gulfport., MS. Photo courtesy of MEMA, September 2007.



While all manufacturers were required to use materials of equal quality, the quality of the finished product varied considerably. Especially in the beginning, numerous discussions among MAHP staff and manufacturer representatives were needed to develop a common vision of what an acceptable unit should look like. Attention to detail was a mandate from the very top of the MAHP organization. In the early days of implementation the MAHP program director personally inspected units to ensure that the units met aesthetic as well as technical

Perspectives on the Cottages November 2007

“We knew from the beginning the quality of the units was the key.”

--- Becky Baum, MAHP Program Director

“Initially I didn’t understand the balance between speed and quality. I would have gone more slowly in the beginning.”

--- Manufacturer

standards. She believed that the success of the MAHP program depended on the ability to produce a sound and attractive unit that would unquestionably enhance the quality of life for occupants and could gain acceptance in the community.

Managing the transition area was also a challenge. MAHP staff attempted to pace deliveries and deployments in such a way that fewer than 300 cottages would be on site at any given time. During a visit to the site, the Governor made the statement that he did not want the transition site become “another Purvis,” referring to an overcrowded FEMA travel trailer storage site located just outside of Purvis, Mississippi, where thousands of units were stored inches apart.

In December 2007 an inspection of units by FEMA and HUD experts determined that MAHP accessible units did not fully meet the Uniform Federal Accessibility Standards (UFAS). MAHP’s response was two-fold. First, changes were made to the specifications for future units. Second, occupants living in accessible units were surveyed to determine whether they had any problems with the accessibility of their existing units and whether they wished to swap them for UFAS-

approved units. No problems were reported by the occupants and retrofitting of units or unit exchanges were determined to be unnecessary. MAHP program administrators expressed frustration about the lack of initial guidance on UFAS requirements that led to the finding. However, the finding did not cause significant delays for the program.

Linking Cottages and Families

Outreach and Selection

Eligibility for the program was initially limited to households that were permanent residents of Hancock, Harrison and Jackson counties on August 29, 2005. Applicants must have also been living in a FEMA-provided travel trailer or mobile home on April 1, 2007 and still in need of housing assistance for at least six months at the time of application. Eligible applicants had to be listed as an applicant or co-applicant in FEMA's database. Once selected, applicants were responsible for providing an acceptable site, either on private land that they owned, borrowed or leased, or in a commercial mobile home park. For renters or other applicants without suitable land, MAHP provided a list of commercial parks that were willing to work with the program and had available pads.

Because FEMA's list of approximately 14,000 households suggested that the need would be far greater than the number of units available, MAHP decided to use a random selection process to determine who would receive a Cottage. To ensure objectivity and fairness, applicants were selected randomly

Eligibility for MAHP

- ◆ Permanent resident of designated counties on August 29, 2005
- ◆ Listed in FEMA's database and living in a FEMA-provided travel trailer or mobile home on April 1, 2007
- ◆ Must have a need for alternative housing for at least 6 months
- ◆ Must have a site acceptable to MEMA and the local jurisdiction

from a pool that provided proportional representation for each of the three participating counties. MAHP decided to both call and mail the selected households.

A call center was established and MAHP began to contact the selected families. Households that expressed interest were sent additional information about program requirements. Demand turned out to be much smaller than was initially assumed. The call center had difficulty reaching applicants using the contact information from FEMA's database, and many letters were returned as undeliverable. Some families who were contacted reported that they no longer needed temporary housing. Others had multiple questions and concerns about how the program would work, including the applicant's responsibility for utilities, the size of the unit they would be offered, whether the units would be available for sale and the effect acceptance of the MAHP unit would have on eligibility for FEMA assistance. (To be eligible, households had to agree that if they were accepted into the MAHP program they would be ineligible

for further assistance from FEMA for Hurricanes Katrina, Rita and Wilma.)

The Governor's office requested that every effort be taken to reach eligible residents, and the program went to great lengths to try to contact them. A second call center was opened in Jackson to take questions about the program and enable the call center staff in Gulfport to make outgoing calls. It was decided that an attempt would be made to hand deliver the approximately 2,000 returned letters, and staff from MEMA's central office were borrowed for this activity. MEMA also embarked on a publicity campaign and community outreach efforts. As part of this effort, the project hosted two open house events in Gulfport and Waveland. For each of these events, a one-bedroom Park Model was temporarily installed, and MAHP housing advisors and manufacturer representatives were available to answer questions.

MAHP had always planned to expand the program inland to Pearl River, George and Stone Counties if demand was not sufficient in Hancock, Harrison and Jackson Counties. Because demand in the three coastal counties was smaller than expected, early in 2008 the program was expanded. Units were eventually placed in Pearl River and George Counties, but not in Stone County.

Site Approval and Installation

By far, the biggest constraint on program participation was the availability of an eligible site. Once an eligible applicant proposed a site, an inspection was

scheduled. PBS&J inspectors determined if a unit could be placed on the site, located utilities and identified any apparent connection issues, marked utility line locations, performed soil density tests to ensure a unit could be anchored properly and checked for environmental and historic preservation issues. FEMA representatives had to give environmental clearance for each site.

MEMA housing advisors worked with applicants to explain program requirements, obtain needed signatures and assist them to obtain permits from local jurisdictions. This was not a simple process and included the following forms:

- ◆ The Applicant Site Responsibility Form specified applicant responsibilities for preparing utilities on the site;
- ◆ The Applicant Transition Understanding Form explained that applicants might need to find a place to stay for the period between the removal of the FEMA trailer and Cottage installation;
- ◆ The Waiver Agreement acknowledged that acceptance of a Cottage would result in the applicant being ineligible for any further FEMA aid for Hurricanes Katrina, Rita or Wilma; and
- ◆ When applicable, a Request for Reasonable Accommodation Form was used to request a UFAS Cottage.

The site approval process challenged MAHP organizationally as well as technically. Initially lack of coordination was a problem. Independent site visits were made by inspectors and housing advisors, and

communication about which sites and applicants had completed the necessary steps was difficult. Neither group fully understood the whole process. As one housing advisor put it: “I do my part and then it goes into some “round about” in the office, I’m not sure what that is.” The result was a backlog of cases where housing advisor tasks were completed and inspector tasks were not and vice versa.

“It’s like we are putting on a ballet and a bunch of the dancers have not been coming to practice.”

----- MAHP Director, November 2007; Referring to coordination difficulties within the MAHP team

In November 2007, the MAHP program director took steps to remedy the situation. She declared a “one-organization” focus and established joint teams composed of MEMA housing advisors and PBS&J inspectors by county. In addition, MAHP adopted a process of having PBS&J inspectors and MAHP housing advisors schedule a single appointment with the applicants whenever possible. To emphasize the need for coordination, office space was rearranged to seat the PBS&J and MAHP county teams together, and MAHP managers made clear that success depended upon the two parts of the organization communicating and coordinating more effectively.

Unit Installation

A similar set of coordination issues arose after the sites were approved. The haul and install contractor, inspectors, housing advisors,

applicants, building officials and the utility company all had to work in tandem to make a unit ready for occupancy. The haul and install contractor was responsible for transporting the unit to the site, setting and tying down the unit and hooking up utilities in accordance with local codes. The contractor also inspected unit interiors and repaired any obvious problems or damage that may have occurred during transport from the transition site. The final electrical connection often caused a delay, sometimes because of utility company scheduling and other times because applicants had difficulty raising the required utility deposits. When necessary, housing advisors helped the applicants find utility deposit assistance from local nonprofit organizations.

MAHP modified installation procedures multiple times as experience identified problems or better approaches. Sometimes manufacturer installation instructions were unclear or had to be modified. Other adjustments were made in protocols when the proposed approach did not work out as well in practice as in theory. One example was the decision to install air conditioners for the Park Models once the unit reached the final site, rather than at the transition site. Another example was developing the right anchoring techniques for different types of soil. MAHP went through several modifications on anchoring the units.

Occupancy Standards and Move-In Procedures

One of the significant challenges for the housing advisors during this process was helping to determine the unit size a family needed. Initially MAHP established occupancy standards that were intended to simulate disaster conditions. This meant that a four-person household could be assigned the one-bedroom Park Model, assuming that a couple would sleep in the bedroom and two people would sleep on the full-size sleep sofa in the living room. See Exhibit 2-7 for details on MAHP's initial "right-sizing" standards. Two people sleeping in the unit's living room proved difficult for both young children or teenagers. MAHP received numerous requests for exceptions to would allow households to receive larger units.

One unintended consequence of the "right-sizing" policy was an increased demand for UFAS compliant units. MAHP staff reported that as applicants came to realize that all of the

UFAS- compliant units were two- and three-bedroom units, declarations of the need for an accessible unit increased. Some of those requesting the units were disappointed to hear that documentation of a household member's mobility limitations was required.

In fall 2007, MAHP determined that the immediate post-disaster occupancy standards did not work well for a pilot program implemented two years later and liberalized the standards. Housing advisors reported that this switch caused some frustration among participant households that received units in the first months of the program. It was difficult for them to understand why a neighbor or friend with the same family size received a bigger unit.

When a unit was ready for occupancy, housing advisors scheduled a move-in session with the applicants. During the move-in, the occupants and housing advisors walked through the unit, the occupants received keys and completed any outstanding paperwork. The move-in

Exhibit 2-7

Initial "Right-Sizing" Criteria

Participants were assigned to a Park Model (one bedroom: one full-size bed, one full-size pull-out couch) if they were:

- ◆ A single person or a couple
- ◆ A single parent or couple with up to two children of the same sex regardless of age or two children of the opposite sex under the age of six (6)

Participants were assigned a two-bedroom Mississippi Cottage (two bedrooms: one full-size bed, one twin bed, one full-size pull-out couch) if they were:

- ◆ A single parent or couple with two (2) children of the opposite sex over the age of six (6) or three (3) children regardless of age

Participants were assigned a three-bedroom Mississippi Cottage (three bedrooms: one full-size bed, two twin beds, one full-size pull-out couch) if they were:

- ◆ A single parent or a couple with four (4) or more children regardless of age

process involved explaining and obtaining applicant signatures on another set of key documents, including:

- ◆ The Lease Agreement between MAHP and the occupant (if it was not previously signed);
- ◆ The Pet Addendum, to clarify the occupant's responsibility for damage done to the unit by pets;
- ◆ The Maintenance Agreement, to clarify the occupant's maintenance responsibilities; and
- ◆ The Right of Entry/Ingress-Egress Agreement, stating that MAHP has the right to enter the unit and that the occupant will not place the unit on the lot in a way that prohibits entry and exit from the property.

The evolution of these documents, as well as the previous list related to site approval, illustrated the changing nature of MAHP's policies and procedures. As new issues arose, MAHP created new forms, policies and procedures. MAHP's organized approach and attention to detail were a plus in these situations.

MAHP Occupants

This section describes the demographic characteristics of MAHP households as captured by the evaluation baseline survey. It was voluntarily completed by participants. Prior to the procurement of an evaluator for AHPP, the baseline evaluation survey was distributed by mail by the U.S. Department of Housing and Urban Development to over 14,000 households who, based on FEMA data,

were eligible for MAHP. The baseline survey response rate in Mississippi was very low—only 1,175 households returned a survey. Further, only 447 households that completed a baseline survey actually received a MAHP unit. This is only 16 percent of the 2,806 households that received a MAHP unit by the end of August 2008. There is no way of knowing how this data may be biased. A fall 2008 survey will collect representative demographic information on MAHP participants, and these data will be reported in the Mississippi Interim Report in early 2009.

The following section outlines key demographic characteristics of MAHP participants based on the 447 baseline survey responses from households that received a unit. It further compares baseline survey information with pre-Katrina demographic data (Census 2000) for the six counties where the program operates.

Household Size

MAHP households tend to be smaller than the pre-Katrina population overall. A majority of MAHP households consist of one or two people. Exhibit 2-8 shows the proportion of household sizes among MAHP participants. Single-person households composed 23 percent of pre-Katrina households, nine percentage points lower than among MAHP households.

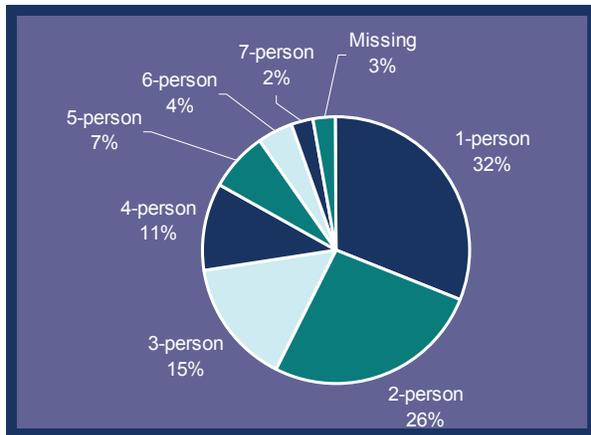


Exhibit 2-8: Distribution of MAHP Household Sizes

Race and Ethnicity

Similar to the pre-Katrina population, most of the MAHP participants are white. Eighty percent of the responding heads of household identified their race as white and 18 percent identified as black. In the pre-Katrina population as a whole, 78 percent of people were white, 18 percent were black and the remaining 4 percent identified themselves as belonging to another race.

Education Level

MAHP participants are slightly less educated than the pre-Katrina population overall. While most MAHP respondents have a high school education or higher, 24 percent of heads of MAHP households never received a high school diploma compared with 21 percent of the pre-Katrina population overall. Eighteen percent of MAHP households have an associates degree or higher, six percentage points lower than pre-Katrina households overall (24%).

Households with Disabilities

MAHP households have a high rate of physical disabilities. Nearly 43 percent of households reported a member with a physical disability or a condition that limits one or more basic activities. Of households with a physically disabled member, 30 percent contained someone in a wheelchair or someone who could not climb stairs at all. Nine percent of households have a member who is blind or deaf.

Employment

Slightly fewer MAHP heads of household participate in the workforce than the working-age, pre-Katrina population overall. About half (49%) of MAHP heads of households were employed full-time, part-time or self-employed at the time they completed the survey; six percent were unemployed and looking for work. In comparison, 55 percent of the pre-Katrina population aged 16 and over were employed.

Pre-Katrina Housing Tenure

Most MAHP households, 71 percent, were homeowners prior to Hurricane Katrina; 24 percent were renters. (The remaining 5 percent did not answer the question or had other housing arrangements.) The homeownership rate is consistent with the housing tenure of all households prior to Katrina, when 71 percent of households were homeowners and 29 percent were renters. Fifty-four percent of MAHP households were living in a single-family detached home, and 31 percent were living in a mobile home on their own or leased land prior to the storm. Pre-Katrina

housing units were destroyed or severely damaged for nearly 80 percent of households. Nevertheless, 42 percent of MAHP households intended to rebuild or repair their damaged home.

Ongoing Management

Within a few months of startup MAHP was a landlord on a large scale. Occupied cottages were spread across the three-county area, and plans were being made to extend the program to the three additional counties. Although MAHP did not charge rent for the units, they had to address other normal aspects of the tenant/landlord relationship. Emergency and routine maintenance issues had to be addressed; residents moved out and units had to be demobilized; occupants who did not take care of their units had to be counseled and a few were ultimately evicted. One unit was significantly damaged by fire because the occupant was operating a "meth lab" in the unit.

The role of the housing advisor changed from one of site facilitator to a more traditional counseling role. With caseloads of 50 to 150, housing advisors reached out to occupants monthly (mostly in person) to ensure that the units were being well maintained, to inquire about the progress occupants were making toward their permanent housing plans and, when needed, to make referrals to needed resources and services. Because most of the attention of MAHP leadership was still focused on installing and occupying units as this transition occurred, housing advisors operated fairly independently. They consulted with their

supervisors only when they could not solve problems for themselves.

Housing advisors reported that they had difficulty meeting with some occupants because the families had resumed their normal lives and were too busy. Other occupants had multiple challenges, and the advisors did their best to connect them with appropriate resources. This appeared to result in some frustration on the part of housing advisors and some "reinventing of the wheel," as each advisor attempted to develop his or her own approach to assisting residents and list of available community resources.

The advisors completed a survey form with each visit. The survey collected information about the household's progress with permanent housing planning, surveyed the condition of the unit and provided utility cost information. One apparent gap in the MAHP system was that these documents were completed but the data was not entered into the automated management database or summarized in any way. The lack of accessible information from these surveys ultimately hindered the development of MAHP's permanent housing policies.

Many housing advisors developed close relationships with "their families," and it appeared they often went well above and beyond the normal job description. For example, one advisor noted that if a client seemed uncertain or confused during the move-in process, his last action was to program his telephone number in the resident's phone.

Maintenance

The primary purpose of AHPP is to test the usability and durability of alternative disaster housing types. A full assessment of the Mississippi Cottages by the building sciences evaluation contractor is underway and the forthcoming quality of life participant survey will ask people living in the units about usability and maintenance. The discussion of maintenance in this chapter focuses on process and provides preliminary anecdotal information about maintenance issues from the perspective of MAHP staff and Cottage residents.

Maintenance issues were identified in one of several ways. First, MEMA or contractor staff sometimes identified problems with units during installation. After the Cottages were occupied, maintenance problems could be reported by the residents and also by housing advisors as a result of their monthly visits. Finally, MAHP staff sometimes found problems when they made inspections for specific issues. For example, before the 2008 hurricane season PBS&J inspectors conducted "Adverse Weather Inspections" of each occupied unit to ensure that the units were stable, straps were tight and covers for windows were available.

Each unit includes a two-year manufacturer's warranty. When warranty items are identified for repair they are referred to the manufacturer's representative for correction. For non-warranty repairs MAHP selected a Mississippi-based contractor to perform maintenance in all counties. It was sometimes difficult to determine whether a

particular problem was a warranty or non-warranty item. Discussions similar to those at the transition site were necessary to determine the cause and responsibility for a problem. For example, a faulty part was generally a warranty item, while parts incorrectly installed or damaged after installation were non-warranty items.

The program expects residents to take some responsibility for maintenance. Occupants are responsible for reporting maintenance issues promptly and keeping the unit in reasonably clean condition, in addition to addressing routine, minor maintenance needs, such as replacing a light bulb or air conditioning filter. This level of responsibility reportedly was new to some former travel trailer occupants, because FEMA provided all maintenance, including something as simple as light bulb changes.

Prior to establishing a contract with a maintenance contractor in fall 2007, program participants called the MAHP call center with maintenance concerns. Once the maintenance contract was in place, maintenance calls were routed directly to the maintenance contractor's call center. This step reportedly improved responsiveness because the contractor's customer service representatives were better trained to ask probing questions that clarified the nature of the problem. For example, if a tenant calls in to report a "leaking" toilet an experienced customer service representative can clarify whether the toilet is actually "leaking" (an emergency) or "running" (a non-emergency).

The MAHP standards for response times are within two hours for emergency repairs and within three days for more routine maintenance. Independent contractors hired by MEMA confirm that work has been completed. Some confirmations are made by phone, but MAHP staff reported that most are confirmed through visual inspections.

Quality of Life

A formal survey of families that have occupied Cottages for at least six months will be conducted in the fall of 2008. The findings from the survey will provide a more in-depth assessment of quality of life issues, which will be included in the interim report scheduled for delivery early in 2009. Until that time, information from discussions with key stakeholders—including participants themselves, MEMA staff and contractors, local government representatives and non-profit organizations—can provide a preview of participant perceptions.

There appears to be a clear consensus that the Cottages are a far better solution for long-term temporary housing than trailers. The additional living space, full-size kitchens and bathrooms, higher ceilings, more light from windows and the outside space on the porch were reported to contribute substantially to the occupants' sense of well being.

Housing advisors reported that bathroom and kitchen features were particularly valued, as was the additional storage space. Improvements to mental health were mentioned by occupants more frequently than physical health; living in a unit that

"feels more like a home" was important. Being able to resume valued pre-storm activities created a sense of normality that was not available in the trailers. Simple activities, such as hosting a family occasion or a bridge club meeting or taking a bath, were mentioned. Having an accessible unit meant a great deal to occupants with mobility issues. For example, one applicant had not been able to leave the trailer under her own power for two years. Being able to sit on the porch of her Cottage and watch her grandchildren play was a thrill, despite the fact that her limitations remained significant. Another elderly couple praised the accessible bathroom and shower that were much more accommodating to the husband's mobility impairments than the FEMA travel trailer.

Participant Perceptions of Cottage Life November 2007

"This is the first time since the storm that I've been able to invite my family to my place."

"I'm a Vietnam veteran. In the FEMA trailer I started having nightmares again. It was so claustrophobic. But in the Cottage I feel like I can breathe."

"I don't understand how they expect me and my (grown) daughter to live in a one-bedroom unit."

"It's has an actual, full size stove. A turkey fits in the oven!"

"I can turn around in the bathroom."

"I feel a little more normal—it feels more like a home."

"I have a bathtub! I can take a bath again!"

Not everyone was happy, especially two-, three-, and four-person households that received the one-bedroom Park Models under the early, more stringent policies that

mimicked a disaster response scenario. These families did not have the same expectations for living space that they might have immediately after the disaster. In addition, Park Model units also had some chronic problems with air conditioners that affected occupant satisfaction and housing advisors reported some dissatisfaction with the responsiveness on repairs to manufacturer warranty items on all unit types.

Receiving a Cottage and knowing that it was available through March 2009 reduced stress for some participants, especially as FEMA increased its emphasis on removing trailers. However, anxiety has increased for some households without permanent housing plans because the family is unable to feel secure and settled in the unit. Many of these families express frustration about the lack of information about whether and at what price the Cottages will be available for sale. Empathizing with occupants, housing advisors share the frustration of repeatedly being unable to answer questions about permanency. These issues are discussed further in Chapter Three.

By the end of August 2008, MAHP had occupied 2,806 Park Models and Mississippi Cottages, and temporary placements were winding down. Chapter Three reviews MAHP's transition to permanent housing, which officially got underway in April 2008.