

Alternative Housing Pilot Program

Following Hurricane Katrina, there was a great deal of discussion regarding the efficacy of the standard approach to the provision of temporary housing. FEMA had deployed over 100,000 travel trailers, HUD-code manufactured housing units and park model units (manufactured housing units smaller than the threshold for HUD regulation).

FEMA typically addresses disaster-related housing requirements with a combination of travel trailers, HUD-code manufactured homes, and park model units. Travel trailers have been used principally for shorter-term housing needs and are placed on private sites while a homeowner's permanent residence is being repaired, or in group configurations to primarily support displaced renters. HUD-code manufactured homes (and park models) have been used to meet both short and longer-term disaster housing needs, and are typically placed on commercial pads or in group sites developed expressly for this purpose.

Although FEMA's traditional temporary housing options are sufficient to address the unmet housing needs of residents in most disasters, the catastrophic dimensions of Hurricane Katrina challenged these traditional methods, which are based on the plan (based in statute) that such assistance will last only 18 months. Following the effects of Hurricanes Katrina and Wilma in 2005, it became apparent that reliance on the traditional temporary housing units would not be adequate to satisfy the needs of the residents of the Gulf Region. As a result, the Congress authorized the FEMA to create and Alternative Housing Pilot Program (AHPP) to examine other strategies which may have regional and national value in the provision of housing following disasters.

The Senate Committee on Appropriations noted that the \$400 million was to fund a pilot study to determine "alternative sources of emergency housing" that would be evaluated for providing a "better, safer and more cost effective housing solution than the exclusive use of travel trailers." FEMA officials developed and implemented a grant competition to "identify, develop, and evaluate alternatives to and alternative forms of disaster housing." The competition was limited to the state-designated agencies of the Gulf Coast states, Alabama, Florida, Louisiana, Mississippi, and Texas. By awarding competitive grants, FEMA officials sought to identify the best alternatives for housing disaster victims.

FEMA asked the Office of Policy Development and Research at HUD to develop and conduct an evaluation of the AHPP to assess both building science as well as social science aspects of the program. To do this, PD&R was recognized as having the most in-house housing research experts of any agency or department in the federal government.

FEMA also intended to use the agreement to strengthen the partnership of the two agencies, encouraging collaboration on the Joint Housing Solutions Group (JHSG) which will contribute to the work HUD will perform.

Applications were evaluated to determine how well those applications addressed:

- The manner and extent to which the alternative housing solution improves upon the conditions characteristic of existing temporary housing and improves long term recovery;
- The extent to which the option can provide ready for occupancy (RFO) housing (obtained, transported, installed, repaired, constructed, etc.) within time frames and in quantities sufficient to meet disaster related needs under a range of scenarios, including sudden onset catastrophic disasters;
- Life cycle cost, including the cost to acquire, transport, install/construct/repair, and maintain during the period it is occupied by disaster victims;
- The capacity of the proposed alternative approach to be utilized in and adapt to a variety of site conditions and locations; and
- The extent to which local officials, local neighborhood associations, and other community organizations are part of or support the pilot program in the community in which it will occur.

Following review, FEMA selected five projects for funding: Mississippi's "Green Mobile" project was selected for \$5.9 million where housing units will be constructed of structural insulated panels. Mississippi's "Park Model and Mississippi Cottage" project will be funded for \$275 million. Up to 7,000 park model trailer units, similar to FEMA's park model travel trailers but with more amenities and enhancements and capable of meeting many local building codes, and almost 2,000 modular cottages will be constructed. Louisiana's Katrina Cottages and Carpet Cottages (a multi-family unit) was selected for \$74.5 million. Both single-family cottages and multi-family "carpet cottages" will be constructed. In Texas, the Heston Group project will be funded for \$16.4 million to build pre-fabricated, panelized housing. In Alabama, the City of Bayou La Batre project will receive \$15.7 million for modular homes constructed of fiber-cement materials. The specific numbers of units to be produced is being finalized.

The PD&R AHPP evaluation will include:

- Design of the units
- Method of constructing the units.
- Code and regulatory compliance.
- Cost of the units.
- Speed of delivery to the site.
- Site work required.
- Speed of installation (including special installation requirements).
- Cost of installation and necessary infrastructure.
- Initial performance of the units at installation (building systems).
- Ability of the units to support the needs of a wide variety of residents (accessibility and related issues).
- Initial acceptance of the units by individual residents.
- Initial acceptance of the units by the community.

HUD is beginning this evaluation effort which will extend over several years as a multidisciplinary effort within PD&R's Office of Research, Evaluation, and Monitoring. This

will involve the social scientists in the Program Evaluation Division and the building scientists in the Affordable Housing Research and Technology Division.