



RAPID DISASTER RECOVERY HOUSING PROGRAM

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INTRODUCTION

The Disaster Recovery Housing (DRH) Program resources include three related documents—the Policy Recommendations, the Technical Guide, and the Program Comparison Report. Each of these documents serves a different purpose and may be used and read by different audiences.

POLICY RECOMMENDATIONS. The Policy Recommendations give an overarching view of the lessons learned from both the RAPIDO Demonstration Project as well as findings from a comparison of other reports completed after similar disasters across the Gulf and Atlantic Coasts. It includes general recommendations for improving disaster housing recovery processes for homeowners, primarily at the state and local level, as well as more specific recommendations in each of the major areas of work (education, navigation, and design and construction). The intended audience is federal, state, and local policy makers.

TECHNICAL GUIDE. The Technical Guide supports the Policy Recommendations, offering greater detail on a proposed administrative structure, but more importantly, the Technical Guide serves as a step-by-step guide to adopting and administering the Disaster Recovery Housing program. The intent of the Technical Guide is to allow other users to replicate the program. It is structured so that professionals involved in the execution of such a program can both discover the steps they need to take, but also understand how their parts fit into the whole of the program.

PROGRAM COMPARISON REPORT. The Program Comparison Report serves as a compilation of case studies and includes materials that underlie the actions recommended in the Policy Recommendations and undertaken in the Technical Guide. The Program Comparison Report was generated by identifying post-disaster reports for every hurricane that has struck the Gulf and Atlantic Coasts since 2005 (including Katrina and Rita). This yielded forty (40) reports and articles, most of which covered only pieces of the recovery effort (case management, design, construction, etc.) These documents were systematically compared to one another to develop an understanding of issues and obstacles that have arisen repeatedly across comparable disasters as well as issues that may be more context-dependent.

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1.0 PROGRAM GOALS

The DRH program is designed to

- Expedite the housing recovery process through pre-disaster planning and coordination.
 - Develop a plan to re-house owner-occupied households within 120 days of the family's application¹.
 - Complete outreach and homeowner intake within 20-30 days of a disaster.
- Elevate the homeowner in the recovery housing process.
 - Streamline the disaster recovery process for all applicants to ensure that each family's experience is paramount.
 - Promote choice: choice to stay, choice to go.
- Strengthen local control in implementing a DRH Program.
- Execute a temporary-to-permanent rehousing solutions.
 - Incorporate the value of design and choice into housing recovery.
 - Reduce the cost and waste associated with current temporary housing solution.
- Maximize the benefits of pre-disaster planning to both reduce risk of damage and achieve faster and more equitable rehousing.
 - Integrate disaster mitigation and prevention efforts into all areas of work: Outreach, Eligibility, Design and Construction
 - Incorporate disaster recovery housing, mitigation and preparedness into other local planning efforts.



1. The re-housing timeline will begin once disaster response efforts have been completed. The duration of a disaster response effort will vary based on the nature and scale of the disaster

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2.0 KEY CONCEPTS AND INNOVATIONS

2.1 PRE-DISASTER PREPAREDNESS

- Data collection and mapping (both formal and community-informed data sources).
- Yearly broad environmental review.
- Identifying social vulnerability and disaster risk.
- Pre-procurement of disaster recovery teams and materials

2.2 PRE-PROCUREMENT

The goal of pre-procurement is to put in place, prior to a disaster, all of the necessary partners, MOUs, communications, payments, supplies, policies and procedures. Pre-procurement allows housing recovery work to commence at the earliest possible moment after a disaster event occurs.

2.3 LOCAL FOCUS

Broadly representative, locally-driven recovery reduces the timeline of receiving aid and emphasizes a grassroots-guided approach. Involving local stakeholders in decision-making has been shown to increase satisfaction and efficiency within the recovery process [refer to Comparison Report Sections 3.4, 4.2.2, 4.3.2, 4.4.2, 4.6.2]. The DRH Program intends to create a bottom-up, culturally-appropriate approach. The Local Disaster Planning Board's main goal is to create a framework for developing, managing, and implementing the DRH Program to their determined scale, geography, and cultural context. The plan should be context appropriate and adapt to local jurisdiction operational structure.

2.4 SUPPORTIVE CASE NAVIGATION

The DRH Program provides a supportive outreach and case management team to assist families through the rehousing process. By assigning a dedicated "Navigator" to each family, the DRH Program assures that families have the support they need—communication, transportation, document collection assistance, or translation services—to complete what can often seem like a daunting process.

2.5 COMMUNITY EMPOWERMENT

Community empowerment can come at multiple levels, the individual, organizational, and governmental. The DRH program seeks to address all three. Offering homeowners a choice in the style and type of home that will replace the one they have just lost restores a feeling of ownership and pride. For many low-income communities, the simple act of asking

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“what would you like in a home” can be a powerful experience. The DRH program asks quite a lot from local jurisdiction, particularly related to pre-disaster planning and partnership building. Building the capacity to respond to a disaster is not easy for many smaller communities, but in building those partnerships and relationships those communities will have the tools to respond to the variety of challenges that may come in the future. Lastly, emphasizing pre-disaster recovery planning provides a community the ability to shape practices and response efforts to their priorities and sense of place. Ensuring that your voice is present in a time when key decisions are being made and the ability to make collective decisions is constrained.

“Having a collaborative design process was critically important to my colleagues at the City and I, because we want to make sure that with the scarce resources that we have, we help the families that are the focus of this whole effort, to have their homes that reflect their values, their aesthetic ideas, and that are consistent with their neighborhoods.”
- Neal Rackleff, Director, City of Houston Housing and Community Development Outreach.

2.6 TEMP-TO-PERM

The DRH Program’s design and construction methodology is centered around a temporary-to-permanent housing strategy [temp-to-perm] to bridge the relief phase of a disaster with the recovery phase. The rapid response is achieved through the placement of a temporary, modular, and incremental unit called the CORE. DRH’s CORE is a 12’x36’ prefabricated panelized temporary unit (conditioned), comprised of a living area, kitchenette, ADA-compliant bathroom, and sleeping area. The CORE unit is designed as a component of a larger home design. Through building the predesigned additions on the CORE, the temporary one bedroom space is transformed into permanent housing.

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2.7 DESIGN

The DRH program provides a participatory design process prior and post-disaster.

The CORE design meets the following requirements:

- An informed design incorporating the essential home activities after a disaster [refer to focus groups data on CORE Design].
- *Cost Effectiveness*: Unlike historically used temporary units, the CORE is reused as part of the permanent housing solution, reducing waste in funds and materials. The CORE is intended to be deployed in the family's property reducing the investment that is placed in group sites for infrastructure.
- *Size*: At 480 sq.ft., the CORE is compact enough to be placed in diverse homeowner sites but including enough space for everyday activities. [refer to size comparison graphic]
- *Ease of Construction and Assembly*: CORE panels are easy to construct making them ideal for disaster recovery. Each panel is built from lumber, which can be managed by local labor. The assembly system is similar to assembling furniture making it familiar to residents in case they want to engage with the assembly process. [refer to construction criteria graphic] [refer to CORE Prefab and Assembly set]
- Panels are designed to be installed by hand, without the need of heavy machinery. [refer to CORE panels handling photos].
- *Ease of Deployment*: The flat-pack design of the CORE allows Contractors to deploy the CORE easily in a standard flatbed trailer [refer to transportation requirements][refer to CORE deployment photos].
- *Quality of Space*: Within the DRH program's timeline, families will be living in the CORE for at least 4 months. The outdoor design of the CORE eases the interior crowdedness of temporary unit and also provide a space for the family to gather.
- *Accessibility*: COREs will exceed visitability standards.
- *Expandability*: The CORE facilitates expansion, accommodating the families' long term spatial needs and aesthetic preferences. [refer to CORE expansion layouts]

CORE expansions will be result of a local community participatory process, described in the Technical Guide.

2.8 BUILDING

The construction system of the CORE and the diverse additions are designed to give local builders the ability to use their skills and support their families.



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3.0 MAJOR POLICY RECOMMENDATIONS

The assessment of findings, from experiences in other states and from the Lower Rio Grande Valley through the RAPIDO Demonstration Project, have paved the way for the creation of a Disaster Recovery Housing program.

FEDERAL LEVEL

1. Improved data collection is needed at the federal level regarding program administration and outcomes from federally-funded relief efforts after natural disasters to assist states in targeting aid to areas of greatest need and to reinforce efficiency and effectiveness.
2. Community Development Block Grant awards should be a permanent feature of the federal disaster response, with the U.S. Department of Housing and Urban Development providing close oversight, technical assistance, and enforcement of fair housing, labor, and environmental quality standards to states receiving disaster recovery funds.

STATE LEVEL

1. The state should establish a State Disaster Recovery Coordinator to provide oversight for local boards charged with coordinating on-the-ground long-term recovery activities.
2. The state should contract with a qualified state university unit to provide training, technical assistance, and certification of plans for communities undertaking pre-disaster recovery planning that explicitly incorporates hazard risk assessments, the identification of a Local Disaster Planning Board, and an assessment of the capacity of the appointed board.
3. The state should identify a vendor who can provide an integrated computer system for disaster case management that streamlines enrollment and eligibility throughout the recovery process while protecting the privacy of clients.
4. The state should support the development and maintenance of data that supports fact-based planning, information sharing, and consistent metrics for tracking pre-disaster needs and post-disaster recovery.
5. Existing state funding mechanisms for infrastructure investments should be amended to include criteria that assess the extent to which the project will reduce vulnerability and increase

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resilience. should be amended to include criteria that assess the extent to which the project will reduce vulnerability and increase resilience.

6. Housing recovery programs should increase housing choice for vulnerable populations, permitting relocation to less exposed locations and/or structural improvements to homes that will withstand future disasters.
7. Procurement programs should be assessed to overcome existing obstacles to pre-procurement.
8. The state should convene a panel of experts to assess practices and metrics for damage assessment that produce consistent, defensible, and accurate assessments of losses and permit geographical targeting of recovery funds to areas of highest need.

LOCAL LEVEL

1. Local governments should undertake pre-disaster recovery planning that is consistent and integrated with the existing network of plans (Comprehensive Plan, Consolidated Housing Plan, Hazard Mitigation Plan, etc.).
2. Counties should seek and accept more control over land use and building codes in high hazard areas to reduce exposure and vulnerability and losses to life and property.
3. Local governments should identify a local housing recovery board that provides guidance and oversight for recovery activities.

When done properly, the disaster recovery process emphasizes the needs of populations most affected by the disaster, resulting in recovery and enhanced resilience for the whole community. When done poorly, it shortchanges actual recovery needs and results in delay, waste of funds, inequities, a lack of accountability, and protracted displacement and hardship for families whose lives have been disrupted by natural disasters.

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4.0 TECHNICAL GUIDE

The Disaster Recovery Housing [DRH] Technical Guide is designed as a support document for municipalities, counties, or councils of government that have adopted the Disaster Recovery Housing (DRH) Program. The Technical Guide seeks to provide a roadmap and technical insight for those administering the DRH program, while assuming there will be variations across the state and its jurisdictions.

The DRH program does not seek to alter the post-disaster response process or response planning process. Instead, it offers instructions on developing and implementing a local disaster recovery housing plan. As seen in prior disasters, the strategy for rehousing residents post disaster has often not been undertaken until the disaster has hit, functionally reinventing the wheel each time. There are a handful of examples of local Emergency Management Plans developing long-term recovery plans that include housing, but unfortunately, those are rare.

Based on what has been learned through reviewing past disaster recovery housing efforts and recovery housing pilot programs, the lack of planning for recovery is at the root of why it takes extended periods of time to move a family from temporary into permanent housing. Delays occur because state and local jurisdictions must ensure that contractors go through the procurement process, develop a recovery action plan, and obtain broad environmental reviews [see Program Comparison Report, Sections 3.2, 3.4 & 4.6.1]. The DRH program gives state and local jurisdictions the power and tools necessary to plan ahead for a successful disaster rehousing effort.

The Technical Guide is primarily for local disaster recovery administrators in the State of Texas [municipalities, counties, or councils of government] that have the capacity to effectively and efficiently execute the DRH Program. The Technical Guide also outlines the roles and responsibilities of other agencies that contribute to disaster recovery housing such as FEMA, HUD, Texas General Land Office, Texas Division of Emergency Management, and Texas Department Housing and Community Affairs.

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END OF INTRODUCTION
DOCUMENT