

# RAPID DISASTER RECOVERY HOUSING PROGRAM

Hazard Reduction and Recovery Center, Texas A&M University [HRRC] | Community Development Corporation of Brownsville [CDCB] buildingcommunity WORKSHOP [bc] | La Unión Del Pueblo Entero [LUPE] | A Resource in Serving Equality [ARISE] | Texas Low Income Housing Information Services [TXLIHIS]

Hazard Reduction and Recovery Center would like to thank Dr. Shannon Van Zandt for her able guidance and contribution in this project.

Rapido is a new balanced and wholesome approach that enables communities to recover from disasters within months instead of years. The Disaster Recovery Housing program offers instructions on developing and implementing a local disaster recovery housing plan. As we have seen in prior disasters, the strategy for rehousing residents post-disaster has often not been considered until the disaster has happened, meaning communities reinvent the recovery wheel with each disaster. Rapido helps the communities determine the scale, geography & culturally-appropriate approach. The program gives state and local jurisdictions the power and tools necessary to plan ahead for a successful disaster rehousing effort.

The Rapido program is designed to:



**Expedite** the housing recovery process through pre-disaster planning and coordination.



**Elevate** the homeowner in the recovery housing process.



Strengthen local control in implementing a DRH Program.



**Execute** a temporary-to-permanent rehousing solution.



**Maximize** the benefits of pre-disaster planning.

The Program's design and construction methodology is focused around a temporary-to-permanent housing strategy [temp-to-perm] to bridge the relief phase of a disaster with the recovery phase. DRH's CORE is a prefabricated temporary unit which is then transformed into permanent housing.

The DRH program also highlights some key concepts about Disaster Housing which include everything from pre-disaster preparedness to building the houses. Pre-disaster preparedness includes data collection & mapping, yearly environmental review and procurement of disaster recovery teams & materials. The DRH Program calls for a supportive outreach and case management team to assist families through the rehousing process which helps in providing a culturally appropriate solution. The DRH program believes in community empowerment and seeks to address issues at the individual, community & organizational levels.

## The Disaster Recovery Housing Program resources contain three basic document that explain the program.



#### POLICY RECOMMENDATION

Policy recommendation includes appropriate suggestions 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). This policy report addresses recovery programs for the subset of homeowners that do not have the resources to recover on their own. It captures learning from both experiences in other states and from experiences in the Lower Rio Grande Valley through the RAPIDO rapid rehousing pilot program.



#### TECHNICAL GUIDE

The Technical Guide bolsters the Policy Recommendations, offering more detail to a proposed regulatory structure. More critically, the Technical Guide fills in as a bit-by-bit manual for embracing and managing the Disaster Recovery Housing 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 Technical Guide also outlines the roles and responsibilities of other agencies that contribute to disaster recovery housing, such as The Federal Emergency Management Agency, The Department of Housing and Urban Development, The Texas General Land Office, The Texas Division of Emergency Management, and The Texas Department Housing and Community Affairs.



#### PROGRAM COMPARISON

The Program Comparison Report fills in as an accumulation of contextual analyses and incorporates materials that underlie the activities suggested in the Policy Recommendations and the Technical Guide. This yielded 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.

RAPIDO ensures equitable and effective delivery of assistance to communities that are vulnerable to natural disasters and helps redesign the communities to navigate through complex system of policy, economics, local, culture & ecology to form the foundation of a resilient neighborhood.



### **KNOWLEDGE TO ACTION**

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Texas Low Income Housing Information Services [TxLIHIS]

#### INTRODUCTION

Rapido is a new balanced and wholesome approach that enables communities to recover from disasters within months instead of years. The Disaster Recovery Housing program offers instructions on developing and implementing a local disaster recovery housing plan.



Expedite the housing recovery process through pre-disaster planning and co-ordination. Develop a plan to re-house owner occupied households within 120 days of the family's application. 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 temporary-to-permanent rehousing solutions. Incorporate the value of design and choice into housing recovery. Reduce the cost and waste associated with temporary solutions.



Maximize the benefits of pre-disaster planning to 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.

The DRH program also highlights key concepts about Disaster Housing, including everything from pre-disaster preparedness to building the houses. Pre-disaster preparedness include data collection & mapping, yearly environmental review & procurement of disaster recovery teams & materials. The DRH Program provides a supportive outreach and case management team to assist families through the rehousing process which helps in providing a cultural appropriate solution. The DRH program believes in community empowerment and seeks to address issues at individual, community & organizational level.

In order to ensure equitable and effective delivery of assistance to communities that are vulnerable to natural disasters, Rapido understands, redesigns and helps the communities navigate through complex system of policy, economics, local, culture & ecology. Thus, the Rapido program not only examines the architectural issue but establishes a comprehensive approach to form the foundation of a resilient neighborhood in the face of future events.

#### **KEY CONCEPTS**

#### PRE-DISASTER PREPAREDNESS

To map & collect community data and to broadly perform an environmental review and identify social vulnerability and disaster risk.



#### PRE-PROCUREMENT

To put in place, prior to a disaster, all of the necessary partners, memorandum of understanding, communications, payments, supplies, policies and procedures.



#### LOCAL FOCUS

To create a framework for developing, managing, and implementing the program to their determined scale, geography, and cultural context.



#### SUPPORTIVE CASE NAVIGATION

By assigning a dedicated "Navigator" to each family, the DRH Program assures that families have the support they need.



#### **COMMUNITY EMPOWERMENT**

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.



#### TEMP-TO-PERM

Rapid response is achieved through the placement of a temporary, modular, and incremental unit called the CORE which is transformed into permanent housing.



#### **DESIGN**

An informed design incorporating the essential home activities after a disaster. CORE is reused as permanent housing reducing waste in funds and materials.



#### **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.





nomic activities.

## **KNOWLEDGE TO ACTION**

#### **PREPAREDNESS** MITIGATION The actions that are taken to Pre-impact actions that provide reduce and eliminate long humans with material resourcterm risk to people & property es needed to support active refrom natural disasters. sponse at time of hazard. **RECOVERY RESPONSE** The actions that are taken to The activation of preparedrestore disrupted communiness plans that are conducted ties, their social life and ecoduring specific time period of a

Disaster Management Cycle

disaster.

#### **CURRENT CHALLENGES:**

The nature of disasters leads to specific challenges that all communities face when dealing with them.

#### · Rapid, fact-based decision-making

The pace of decision-making defies typical rational planning methods that require the collection of data and consideration of many alternatives, forcing communities to make hasty decisions that may turn out to be ill-advised, but yet are now long-lasting if not permanent.

#### Participatory decision-making

After a disaster, there simply isn't time to engage community members in a process that helps solicit their input for deliberative democracy.

#### Building and using local capacity

Excluding local stakeholders can marginalize local influence, resulting in community recovery that is uneven and culturally insensitive. Local stakeholder involvement can result in the enhancement of local capacity, leaving the community more resilient than it was prior to the disaster.

#### Navigating resources and assistance

The pace of recovery and amount of assistance needed varies greatly from household to household or business to business. There is not just one agency or organization that works with individuals, households, businesses, and local organizations to navigate the whole process.

#### Restoration vs. resilience

Restoration suggests a return to the previous state, while resilience suggests "building back better." Most forms of insurance or loans are only willing to fund restoration to original (pre-disaster) conditions.

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#### **POLICY RECOMMENDATIONS**

#### 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 provide aid to areas of greatest need.
- 2. Community Development Block Grant awards should be a permanent and integrated feature of the federal disaster response, with the U.S. Department of Housing and Urban Development providing technical assistance to states receiving disaster recovery funds.

#### State Level

- 1. The state should establish a State Disaster Recovery Coordinator to oversea local boards charged with coordinating recovery activities.
- 2. The state should contract with a qualified state university to provide training, technical assistance, and certification of plans for communities undertaking pre-disaster recovery planning.
- 3. The state should identify a vendor who can provide an integrated computer system for disaster case management that streamlines enrollment and eligibility.
- 4. The state should support the development and maintenance of data that supports fact-based planning for tracking pre and post disaster needs.
- 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 resilience.
- 6. Housing recovery programs should increase housing choice for vulnerable populations.
- 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.

#### Local Level

- 1. Local governments should undertake pre-disaster recovery planning that is consistent and integrated with the existing network of plans.
- 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.



### **KNOWLEDGE TO ACTION**

To identify the issues and obstacles in the temporary to permanent housing recovery process a content analysis of housing recovery reports, articles, and policies was conducted. A qualitative evaluation of 40 articles and reports were assessed focusing on disasters from 2005 to present in the United States. Five overall categories were identified as broad phases where gaps occur in the temp-to-perm housing recovery process:

Damage Assessment, Outreach, Case Management, Design Decision & Construction Decision. Each category is evaluated based on the issues and obstacles that emerge and the best practices that have been identified in the literature.

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#### PROGRAM COMPARISON

#### **ISSUES**



#### **BEST PRACTICES**

#### DAMAGE **ASSESSMENT**

How is it conducted?

Damage assessment is the appraisal that is performed after the disaster in order to determine the amount of damage that an area has received. The damage assessment identifies 'substantial damage', or structures or properties where damage is greater than its actual value.

**OUTREACH** 

Identifying vulnerability

Outreach is the activity of identifying populations that will need funding assistance to rebuild homes following the disaster and is the practice of conducting local public awareness activities through targeted community interaction. The point of outreach is to identify eligible aid recipients and enroll them in the program to receive housing recovery assistance.

#### **CASE MANAGEMENT**

Communication

Navigating through the complex bureaucracy of obtaining funding assistance for housing is a challenge for individuals and families. The role of the case manager is to walk disaster victims through an eligibility process to determine and funnel funding assistance and resources to victims. The relationship between the disaster victim and their case manager revolves around resource availabil-

**DESIGN** DECISION

Community acceptance

ity and knowledge. The design of the home is a critical component

to a housing recovery program. Reconstruction efforts should take into consideration short-term and long-term needs of residents. A sustainable design solution must not only work to provide for a rapid transition from temporary housing to permanent housing, but should also be adaptable to the future needs of households.

#### CONSTRUCTION **DECISION**

Building & zoning codes

The construction process includes permitting and inspections, the procurement of materials, and the construction of homes. Solutions like the one proposed in this program, which are intended to transition from a temporary to permanent housing solution, must comply with zoning and building code regulations.



Use of GIS mapping



Use of non profit Org.



Long term outreach



Collaborations



Stream lined process





Fitting with locals



**Grow home Approach** 



Local contractors



Sustainability



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#### **TECHNICAL GUIDE**

The recovery plan will set in place an administrative structure for the management of the recovery process, which should be closely coordinated with the local emergency management organization and community organizations that broadly represent community stakeholders. It will also specify methods by which the local government can take cooperative action and pre-procure the necessary professional expertise, materials, and financial resources for recovery. Finally, the recovery plan should specify a means for consulting with and assisting citizens throughout the recovery process.

The recovery plan assesses the exposure of risks to the community, as well as the likelihood of their impact. Further, a strong recovery plan will identify possible risks to the community, such as neighborhood scale —recognizing that a community and its population is not homogeneous, and will face different degrees of exposure as well as have different capacities to recover.

#### **Disaster Declaration**

- > Implement the DRH Program.
- > Recovery and Response Briefing.
- Perform damage assessment with support from the Local Disaster Planning Board.
- Incorporate outside groups and agencies into the DRH program and Action Team activities.

#### Design

- Evaluate the pre-disaster construction work and the material available.
- > Gather the Design Action Team.
- > Prepare for the home design selection process.
- > Designer and Navigator inform the family of the move-out time frame.

#### Follow up

- > Review disaster recovery and develop recommendations.
- > Construction follow-up.
- > Review the DRH program and develop recommendations.
- > Update the local jurisdiction's DRH plan.

