

TECHNICAL GUIDE

RAPID DISASTER RECOVERY HOUSING PROGRAM
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INTRODUCTION

1.0 INTRODUCTION

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.

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2.0 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.

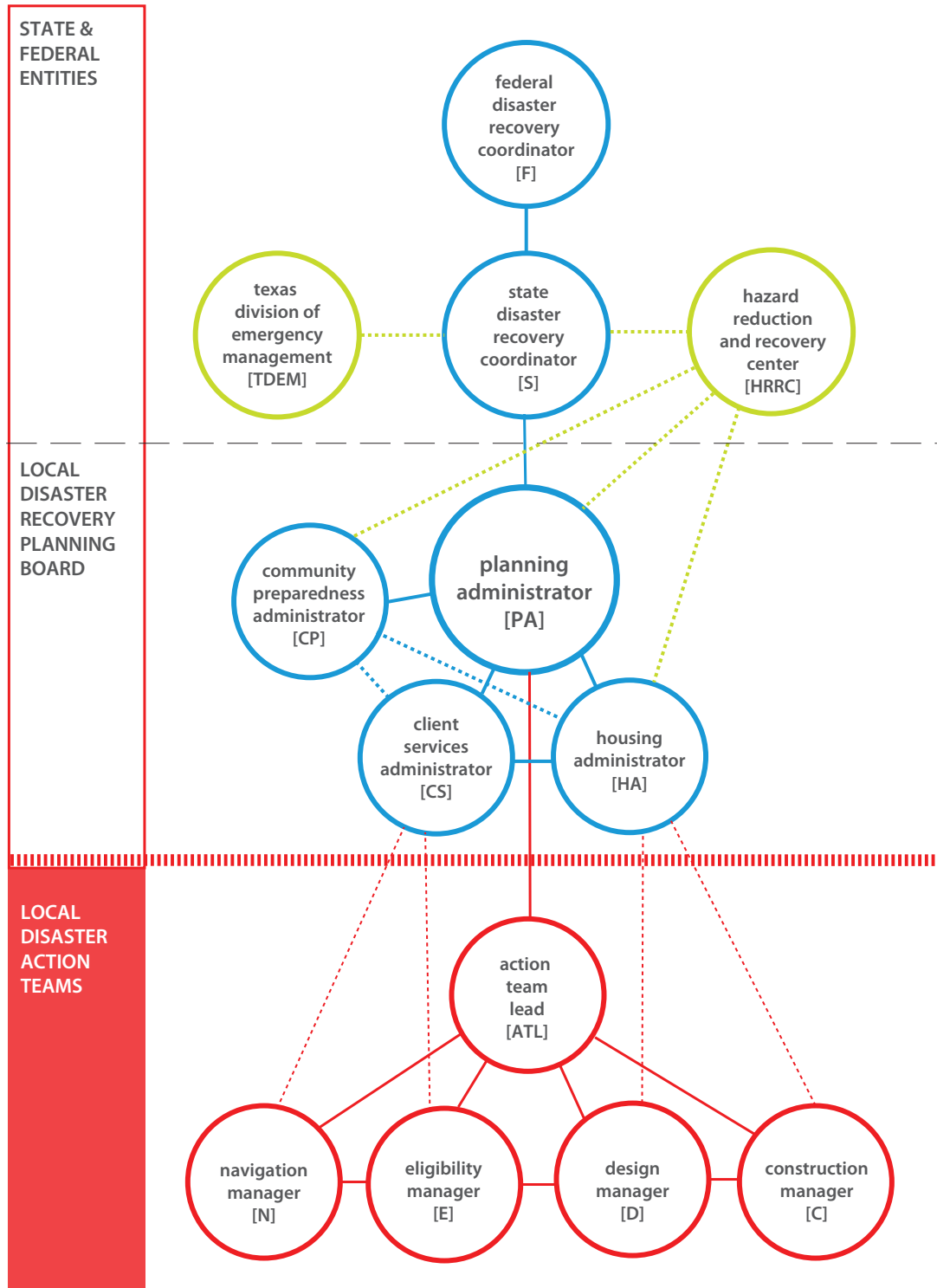
The DRH program does not seek to alter the post-disaster response process or response planning process. Instead, it offers instructions on developing and implementing a local disaster recovery housing plan. As we have seen in prior disasters, the strategy for rehousing residents post disaster has often 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 we have 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 secure 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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2.1 DISASTER HOUSING RECOVERY STRUCTURE



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2.2 STREAMS OF WORK²

2.2.1 PROGRAM SET UP & ADMINISTRATION

Goals

The primary goal of identifying federal and state points-of-contact for disaster recovery is to facilitate both pre-disaster planning and speedier rehousing post disaster through bridging the gap between relief and recovery funding. Through providing planning and mitigation resources, establishing recovery guidelines, and research and technical capacity, the Federal and State Disaster Recovery Coordinators create a structure to support local administration of the DRH program.

Roles & Responsibilities

2.2.1.1 FEDERAL DISASTER RECOVERY COORDINATOR [F]

The Federal Disaster Recovery Coordinator (FDRC) is currently a role within the Federal Emergency Management Agency (FEMA). Within DRH, the FDRC is a joint office of FEMA and the Department of Housing and Urban Development (HUD), and is tasked with bridging the gaps in Disaster Recovery Housing in funding, mitigation, and preparedness planning. The FDRC provides coordination across federal departments related to disaster housing recovery and mitigation. In the event of a catastrophic disaster, where federal assistance is triggered, the FDRC serves to support the State Disaster Recovery Coordinator and Local Disaster Planning Board and their Disaster Recovery Housing plans through facilitating coordination and collaboration between the federal, tribal, state, and local governments; the private sector; volunteers; and faith-based and community organizations (VOADs, Voluntary Organizations Active in Disaster). If a jurisdiction does not have a local DRH program, then the FDRC will serve to support the State's recovery effort by facilitating the incorporation of recovery and mitigation strategies, monitoring recovery and mitigation outcomes and impacts, and periodically assessing if additional resources or assistance is needed.

Responsibilities

- Implement the National Disaster Recovery Framework
- Assist state and tribal jurisdictions in pre-disaster recovery preparedness efforts through technical guidance, pre-disaster planning, and administering preparedness activities.
 - Developing and distributing rehousing best practices.
 - Provide training on pre-disaster planning

2. The roles identified in the DHR Program can be scaled up or down depending on jurisdictional need and capacity, and scale of the recovery housing effort.

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administration, post-disaster outreach, rehousing eligibility, and wrap-around support services.

- Administer financial and technical assistance to state and local agencies conducting pre-disaster planning.
- Develop guidance for effective and equitable damage assessment process.
- Serve as a point of contact and support for state and local agencies administering disaster recovery funds:
 - Communicate information about Federal grants and loans that relate to housing recovery, particularly as it relates to low-income, immigrant, and vulnerable communities.
 - Maximize federal funds available by preventing delays in funding, resolve rule and regulatory conflicts.
 - Ensure all information and decisions related to housing recovery are timely, transparent, accurate, and accessible to all.
- Monitor disaster recovery to ensure that recovery efforts are administered in a timely, equitable manner.
 - Provide oversight for fair housing and community inclusion in the recovery process.
 - Review local disaster recovery housing efforts and develop policy and practice recommendations for the local, state, and federal level housing recovery administrators to improve the process.

2.2.1.2 STATE DISASTER RECOVERY COORDINATOR [S]

The State Disaster Recovery Coordinator, within the General Land Office [GLO], provides coordination between federal, state, and local agencies regarding rapid disaster recovery housing planning, implementation, and mitigation. It supports local jurisdictions by providing training (through state universities), technical assistance, and the sharing of best practices from the federal and state levels. It acts as a partner to the Texas Division of Emergency Management [TDEM] Recovery Coordinator by strengthening the coordination of state level departments involved in disaster planning, mitigation, preparedness, response, and recovery.

Responsibilities

- Coordinate with a state university research center such as the Hazard Reduction and Recovery Center at Texas A&M University to provide:

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- technical assistance to the local jurisdictions
- mapping tools to facilitate assessments
- Perform capacity assessments to determine if local jurisdictions that want to adopt the DRH program have the capacity to administer the program.
- Perform needs and damage assessment in order to prioritize the recovery efforts.
- Oversee local disaster recovery and rehousing efforts to ensure a timely and equitable response.
- Manage an online database of all case management resources available to provide the most complete and consistent information to households trying to access the myriad of state and federal resources available. Such a database should be widely available, well-designed, and easy to access and navigate with minimal training necessary to use it. This will improve coordination and information sharing, streamline paperwork, improve efficiency, save time, save money, and improve consistency among services and forms of assistance.

2.2.1.3 HAZARD REDUCTION & RECOVERY CENTER [HRRC]

The Hazard Reduction & Recovery Center at Texas A&M University is a multi-disciplinary research center that develops knowledge, training, and outreach on disaster mitigation and recovery. The Center's faculty and staff work through three main mechanisms: 1) on-the-ground, face-to-face working with communities to develop pre-disaster mitigation and recovery plans, 2) training of local officials and staff in best practices and techniques for plan development and administration, and 3) public access tools such as the Coastal Atlas that allow communities to develop their own fact-bases for assessing risk. Further, faculty and staff develop and execute plan evaluation protocols that permit the assessment of mitigation and recovery plan quality.

Responsibilities

- Provide technical assistance to communities in plan development and assemblage of team.
- Provide mapping tools to permit risk assessments.
- Provide training to local disaster recovery planning board members to assist with pre-disaster planning.
- Certify pre-disaster recovery plans produced by local disaster recovery boards.

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2.2.1.4 TEXAS DIVISION OF EMERGENCY MANAGEMENT [TDEM]

The Texas Division of Emergency Management (TDEM) coordinates the State of Texas' emergency management program, which seeks to ensure disaster response and recovery planning in all jurisdictions across the State. In the field, TDEM has Regional, State and District Coordinators to provide support to local governments in responding and recovering from emergencies and disasters. Additionally, Emergency Managers offer valuable tools to local jurisdictions that help prevent or reduce damage incurred in an emergency or disaster.

2.2.2 LOCAL DISASTER PLANNING BOARD [L]

The Local Disaster Planning Board and the geographic scale of its coverage is determined by the State Disaster Recovery Coordinator following the recommendations of the capacity assessment. The Local Disaster Planning Board members' primary responsibility is pre-disaster planning, and they are fully available to direct and manage outside agencies to fulfill the DRH program.

Goals

Locally-driven recovery reduces the timeline of receiving aid, and emphasizes a grassroots-guided approach. This is proven to increase satisfaction and efficiency within the recovery process [refer to the Program Comparison Report, Sections 3.4, 4.2.2, 4.3.2, 4.4.2, 4.6.2]. DRH program intends to create a bottom-up, context-based approach. The Local Disaster Planning Board serves to create a framework for developing, managing, and implementing the DRH program to their determined scale, geography and cultural context.

Roles & Responsibilities

2.2.2.1 PLANNING ADMINISTRATOR (LEAD) [PA]

The Planning Administrator will be the bridge between the federal and state assistance and the local Action Teams. The Planning Administrator will work in collaboration with the State Disaster Recovery Coordinator and Federal Disaster Recovery Coordinator regarding planning, preparedness, funding and regulatory barriers. At the local level, they will facilitate ongoing preparedness and semi-regular planning efforts around disaster housing recovery. They will be responsible for understanding the life-cycle of the DRH program, and ensuring that the multiple players have the training and resources they need to be successful. During the post-disaster phase, the Planning Administrator will oversee the work of the Action Teams to implement the DRH

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program and then to evaluate success and adapt the local DRH plan to reflect recommended changes to the system to ensure increased performance.

2.2.2.2 COMMUNITY PREPAREDNESS ADMINISTRATOR (EDUCATION) [CP]

The Community Preparedness Administrator coordinates community preparedness and local disaster education efforts. Through building partnerships, both locally and regionally, the Community Preparedness Administrator works to inform residents, social service organizations, schools, and other local business on the importance of disaster preparedness and mitigation in preventing damage and loss. They will build community capacity through connecting local organizations/nonprofits/volunteer groups/faith communities to promote community engagement and disaster preparedness.

2.2.2.3 CLIENT SERVICES ADMINISTRATOR (NAVIGATION & ELIGIBILITY) [CS]

The Client Services Administrator is responsible for planning and establishing the outreach, case management and eligibility services of the local DRH program. They should have experience managing and administering client-based, social service programs with a strong understanding of the importance of supportive engagement. In preparation for disaster, the Client Services Administrator will coordinate procurement and training of the outreach, case management and eligibility service providers for the local Action Team. After the disaster, the Client Services Administrator will support implementation of the housing recovery program as a specialized resource to the Navigation and Eligibility Managers.

2.2.2.4 HOUSING ADMINISTRATOR [HA]

The Housing Administrator is responsible for planning and establishing a design and construction plan for the DRH program. They should have experience in large scale project management within the local jurisdiction. They will coordinate with municipalities to enforce current building codes and advocate for adopting the most recent building codes. Also he/she will manage the Design and Construction Action Teams procurement and administration and direct Action Team deployment and work in the event of a disaster.

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2.2.3 LOCAL DISASTER ACTION TEAMS

Goals

The Local Disaster Action Teams (aka Action Teams) are the workforce of the DRH program. Procured by the Local Disaster Planning Board, the Action Teams can be comprised of a singular organization, or a collection of smaller organizations. This structure allows for the procurement of local non-profits, community groups and private organizations to work together with the government in the recovery process. Hiring local groups promotes a disaster recovery workforce that cares deeply about the quality of the response effort and has experience with the communities they are working in.

Roles & Responsibilities

2.2.3.1 ACTION TEAM LEAD [ATL]

The Action Team Lead manages the progress, efficiency, and quality of the Action Teams³. They will report to the Local Disaster Planning Board, particularly the Planning Administrator. The Lead is responsible for understanding the housing recovery timeline and DRH program, while also addressing on-the-ground challenges. When problems arise the Action Team Lead will support the Action Team Managers by connecting them to members of the Local Disaster Planning Board or the State Disaster Recovery Coordinator.

Responsibilities

- Understand the full scope of the DRH program; the timeline, deliverables, coordinating parties, and expected homeowner outcomes
- Ensure Action Teams are coordinating throughout the recovery process to prevent the creation of gaps or delays in the timeline and home construction.
- Monitor Action Team progress, deliverables, and timelines;
- Maintain homeowner tracking data on each case to ensure the level of care that the DRH is aiming to achieve.
- Report to the Local Disaster Planning Board weekly

2.2.3.2 NAVIGATION [N]

The goal of the Navigation team is to provide the initial outreach and intake, as well as on-going case management services that engage and guide families through each step of the DRH program. Taking a “navigation” approach means that each family

3. When creating an Action Team, the Local Disaster Planning Board can choose to contract a single organization or a combination of organizations. Additionally, one organization can be selected to perform more than one role in the housing recovery process.

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is paired with a single “Navigator” who accompanies them as they wind their way through the housing recovery process. As the sole case manager from start-to-finish, the Navigator has a holistic view of a family’s case, is a knowledgeable advocate throughout the rehousing process, and a valuable troubleshooter when problems arise. Navigators help families as needed with transportation, document collection, translation, appointments and meetings with DRH staff and Action Team members.

Navigators offer a trusted and reliable relationship in a time of crisis and into recovery. They conduct activities in trusted and convenient locations, as close as possible to impacted neighborhoods. Hiring experienced community members such as health advocates, community organizers, outreach workers, or church members to work as Navigators helps to assure the provision of culturally and linguistically appropriate services to survivors. The Navigators are especially effective at supporting families with special needs or multiple barriers to housing recovery such as large family size or lack of documentation.

Roles & Responsibilities

2.2.3.2.1 NAVIGATION MANAGER

The Navigation Manager supervises the Navigator Action Team as they engage, inform, enroll and navigate families through the disaster recovery housing process.

Responsibilities

- Reporting directly to the Action Team Lead, they assure seamless case management and coordination, supervises case progress and are responsible for managing the performance of the Navigator Team across all steps of the housing recovery process.
- The Navigation Manager maintains a family status reporting system that includes tracking, reporting and assessment of instances where people “drop out” of the process and an explanation of remedies or actions to keep families in the program.
- The Navigation Manager is in direct communication with Local Disaster Planning Board.

2.2.3.2.2 NAVIGATOR [N]

Navigators engage, inform, enroll and guide families through the disaster recovery housing process. They offer a trusted

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and reliable relationship in a time of crisis and into recovery. Hiring experienced community members such as health advocates, community organizers, outreach workers, or church members to work as Navigators helps to assure the provision of culturally and linguistically appropriate services to survivors.

Responsibilities

- Navigators conduct outreach and enrollment activities for DRH program.
- Manage up to 25 cases, accompanying families through the DRH program.
- Work in trusted and convenient locations, as close as possible to impacted neighborhoods.
- Support families with special needs or multiple barriers to housing recovery such as large family size or lack of documentation.
- Act as family's advocate, helping the family understand program requirements and activities, and to troubleshoot any problems or barriers that might prevent successful and rapid rehousing.
- Partner to the other professional team members—Eligibility Specialists, Architects, Construction Managers—as they work together to help families complete each step of the DRH program.

2.2.3.3 ELIGIBILITY [E]

The goal of the Eligibility team is to determine if a family qualifies for federal disaster recovery housing assistance and to prepare and submit applications for assistance to the State. Unlike other housing recovery eligibility processes, the DRH Eligibility coordinates closely with Design and Construction Action Teams to implement an innovative two-step approval process which allows for the accelerated placement of temporary recovery housing on a homeowner's property. This responsive, low-barrier, and coordinated eligibility process helps prevent families from being displaced from their properties for an extended period of time. Eligibility also works closely with the family's Navigator to assure that any barriers to eligibility such as lost documentation, literacy, language, or transportation to appointments, are addressed so that the family can be approved for federal housing recovery assistance as quickly as possible.

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Roles & Responsibilities

2.2.3.2.1 ELIGIBILITY MANAGER

The Eligibility Manager oversees the Eligibility Team and acts as a liaison to the Local Disaster Planning Board. The Eligibility Manager has a strong familiarity with federal, state, and local program requirements and policies for determining eligibility for recovery assistance, as well as potential barriers to eligibility for impacted families.

Responsibilities:

- Oversees team of Eligibility Specialists who work with families to gather documentation, determine eligibility, and prepare and submit an application for housing recovery grant assistance.
- The Eligibility Manager is responsible for reporting the status of all applications and approval to the Action Team Lead, and has direct communication with the Local Disaster Planning Board regarding the implementation of program eligibility requirements.

2.2.3.4 DESIGN AND CONSTRUCTION [D] [C]

The Design and Construction Action Teams are procured by the Local Disaster Planning Board and are led by the Housing Administrator. They are in charge of all temp-to-perm activities and milestones of the DRH plan, from coordination and planning to the built product.

Goals

The main goal of the Design and Construction Action Teams is to enable family's rapid return to the homeowner's property. The design and construction system is phased in two parts to ease the transition between housing relief and recovery and to eradicate the traditional inadequacies associated with housing relief solutions [refer to the Program Comparison Report Sections 3, 4.5.2, 4.6.2]. The DRH establishes a design and construction system that:

- Captures funds being utilized for housing relief solutions and redirects them to a temp-to-perm solution.
- Supports the development of a context-appropriate, catalogue of home designs.
- Contributes to the long-term development of community and place.

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- Increase the availability of affordable housing and improve the quality of housing built after a disaster.
- Fosters the development of home designs which:
 - Improves the sustainability and desirability of housing rebuilt in the event of natural disasters.
 - Responds to community needs and desires to enhance neighborhood vitality.
 - Improves the perceptions and practices of disaster reconstruction housing.
- Reduces the amount of time that residents are displaced, keeping social networks intact and reducing the negative economic impacts of disasters on the affected households.

Roles & Responsibilities

2.2.3.4.1 DESIGN MANAGER [DM]

The Local Disaster Planning Board [HA] selects one firm (from the pre-procured design firms) to be the team lead in the design planning process and the post-disaster activities. The firm assigns a person from their staff with experience in design and project management to become the Design Manager. Pre-disaster, the Design Manager coordinates with the Housing Administrator on the design planning process, and familiarizes the pre-procured Design Action Team with the plan goals, milestones and tasks. Post-disaster, the Design Manager supervises all Action Team members' progress, ensures Technical Guide recommendations are being followed, and that deliverables are in alignment with the project goals, cost and schedule.

Responsibilities

- Communicate weekly with the other Action Team Managers [Navigation, Eligibility, and Construction] about overall project management activities and updates from outreach to housing completion.
- Report directly to the Action Team Lead on milestones, issues and project status.
- The Design Manager is in direct communication with the Housing Administrator.
- After project completion, deliver a program report to the Local Disaster Planning Board to determine post-program actions.

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2.2.3.4.2 DESIGNERS - PRE-DISASTER [D]

Local architecture firms (engaged by the Local Disaster Planning Board) will participate in design charrettes and community focus groups held in targeted neighborhoods.

Responsibilities

- Attending DRH training provided by the Texas Board of Architectural Examiners.
- Working closely with the Community Preparedness and Client Services Administrators, local community organizations, faith communities, and other stakeholders, during the design process, to engage residents in representative neighborhoods.
- Following Technical Guide steps.
- Following resident input on home design.
- Following program design and construction requirements: CORE design, design and construction timeline and program budget.



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2.2.3.4.3 DESIGNERS - POST-DISASTER [D]

Designers (drafters, architects, or architects in training) working for the firm(s) procured by the Local Disaster Planning Board are responsible for guiding the families through the home design selection process.

Responsibilities

- Hold two design meetings with the families (home design selection and pre-construction meeting)
- Adapt the pre-permitted construction document sets to each individual case.
- When the project has been assigned to a specific Contractor, the Designer is responsible for three site visits, checking Contractors' progress and milestone goals.
- Report project issues and status to the Design Manager.

2.2.3.4.4 CONSTRUCTION MANAGER [CM]

The Construction Manager will work at the Action Team Lead organization or is a housing developer contracted to manage the construction stream of work. The Construction Manager has experience in construction and project management. Pre-disaster, the Construction Manager will familiarize the construction team with the plan goals, milestones and tasks. Post-disaster, the Construction Manager, will supervise all team members' work progress, ensure that the Technical Guide recommendations are followed and will ensure deliverables are in alignment with the project goals, cost and schedule.

Responsibilities

- Communicate weekly with the other Action Team Managers [Navigation, Eligibility, Design and Construction] about overall project management activities and updates from outreach to housing completion
- Report directly to the Action Team Lead on milestones, issues and project status.
- The Construction Manager is in direct communication with the Local Disaster Planning Board.
- After project completion, deliver a program report to the Action Team Lead to determine post-program actions.

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2.2.3.4.5 CONTRACTORS

To apply as a builder for the program, Contractors attend a required briefing on the DRH program. The Local Disaster Planning Board provides information about DRH goals, the program's scope and program requirements. If procured, Contractors attend appropriate training on the design and construction specifics of the DRH program and their role within the Design and Construction Action Teams. The Local Disaster Planning Board provides Contractors with training on OSHA safety and health standards. Contractors are assigned by the Local Disaster Planning Board to a particular zone/area based on the determined geography of work (region, county, city). Depending on the scale, Contractors are required to build a certain amount of CORE units prior to the disaster. [refer to CORE description in the Introduction, Section 4.0 "Key Concepts and Innovations"]

Based on the scale and geography of the disaster, Contractors will be deployed by the Local Disaster Planning Board in the order of their ranking, which was determined during the procurement process. Depending on the amount of affected families, each Contractor receives a specific number of families within their pre-assigned region.

Responsibilities

- Following OSHA safety and health standards.
- Informing the Designer of any issues that arise during construction period.
- Request approval for any change to the contract documents, even if the homeowner requests the change.
- Communicate with the Construction Manager weekly during the construction period.
- If the Contractor doesn't have the capacity to supervise the work in progress, they shall procure a foreman for each project.
- Reporting directly to the Construction Manager on project status and obstacles encountered.

SUB-CONTRACTORS

Local sub-contractors are contracted by pre-procured (and approved) Contractors. Hiring local labor promotes community involvement and ensures tax dollars are invested back into the local economy.

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All local builders (Sub-Contractors) procured under DRH Contractors shall receive training on the design and construction specifications of the program and OSHA safety and health standards.

Responsibilities

- Attending training on off-site panelized construction of the CORE and the process of expanding the CORE into a permanent home.
- Following construction standards and local building codes

2.2.3.4.6 MATERIAL SUPPLIERS [MS]

Engaged by the Housing Administrator, local Material Suppliers work closely with Designers and Contractors in obtaining the materials, fixtures and appliances specified in the pre-permitted sets (in stock). Contracts with Material Suppliers are updated annually to account for construction material price fluctuations.

Responsibilities

- Guaranteeing local material supply during the wake of a natural disaster.
- Pre-disaster, each Material Supplier will establish a supply agreement with adjacent regions Material Suppliers as back-up supply in case they are impacted by the disaster and the planned supply chain is affected.
- Following Technical Guide recommendations on storage and material handling.

2.2.3.4.7 ENVIRONMENTAL SPECIALISTS [ES]

The Action Team Lead or the Construction Manager should have an Environmental Specialist on their staff. The Environmental Specialist should be familiarized with the DRH design and construction strategy, which involves two phases of environmental clearance: [CM]

Responsibilities

- Annual broad environmental review is done before the disaster in order to identify which target areas have environmental clearance and which ones will need to be relocated.

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- Site-specific environmental review for the CORE assembly and Additions construction. [refer to [ES]1.0]
- [refer to the appendix “Steps to ensure Broad Environmental Review and Site Specific will be cleared”]

PROGRAM ACTIVITIES

WHAT MAKES A DISASTER RECOVERY HOUSING PLAN?

A recovery plan is a document created and adopted by a governing agency (usually city or county) prior to a disaster. It may be done in conjunction with hazard mitigation plans, or with comprehensive plans created by communities. The recovery plan assesses the exposure risks to the community, as well as the likelihood of impact. Further, a strong recovery plan will identify possible risks 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. 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 thought the recovery process.

ADDITIONAL RESOURCES ON RECOVERY PLANNING:

The American Planning Association: <https://www.planning.org/research/postdisaster/>

Texas A&M University, Planning for Community Resilience: A Handbook for Reducing Vulnerability to Disasters.

3.1 PRE-DISASTER

DRH Program Work-Stream Tasks

[F] FEDERAL DISASTER RECOVERY COORDINATOR

[F]1.0 Remove financial and administrative barriers to a temporary-to-permanent DRH program.

[F]1.1 Establish the Federal Disaster Recovery Coordinator (FDRC) as a joint FEMA and HUD coordinator position, to create more direct coordination between FEMA and HUD funding and resources.

[F]1.2 Eliminate the span of time between FEMA temporary housing funds and HUD permanent housing recovery funds.

[F]2.0 Facilitate an annual broad environmental review process

Remove the project specific requirements related to broad environmental review. Allow a local jurisdiction to conduct annual broad environmental review for any and all projects receiving federal funding.

PROGRAM ACTIVITIES

[F]3.0 Activate working relationships with State Disaster Recovery Coordinator and Local Disaster Recovery Administrators to facilitate mitigation and disaster recovery planning efforts.

[F]3.1 Assist local jurisdictions in developing disaster recovery and mitigation plans, through technical guidance and expertise⁴.

[F]3.2 Investigate promising strategies for incorporating local knowledge when determining areas of increased flood hazard exposure and risk⁵.

[F]3.3 Document past disasters and develop a repository of information that can support the enhancement state, local and/or tribal capacity through increased sharing of lessons learned from past disasters and national best practices for local, state and tribal disaster recovery, mitigation, and planning efforts.

[F]3.4 Specify and establish common standards and guidelines for damage assessments that are proportional and equitable.

[F]4.0 Incentivize the incorporation of disaster recovery planning and mitigation planning into current activities and the current network of planning, such as the coordination of Emergency Management Plans, Local Comprehensive Land Use Plans, Consolidated Plans, or NFIP's Community Rating System⁶.

[F]5.0 Develop an online database for all resources available for Navigators in disaster recovery.

[F]5.1 Develop standard language, vocabulary, and guidelines.

[F]5.2 Train state agencies on tools available.

[S] STATE DISASTER RECOVERY COORDINATOR

[S]1.0 Adopt the DRH Program

[S]2.0 Establish a person or department (State Disaster Recovery Coordinator) within the GLO to support local and regional jurisdictions.

[S]3.0 Partner or contract with research and academic units, such as the Hazard Reduction and Recovery Center at Texas A&M, to support local disaster recovery planning, mapping, risk assessment, and determination of social vulnerability.

4. Hazard Mitigation: Integrating Best Practices into Planning, July 2010, FEMA

5. Charlotte-Mecklenburg County Community Floodplain Mapping Program

6. Local Mitigation Planning Handbook, March 2013, FEMA

PROGRAM ACTIVITIES

[S]3.1 Utilize the HRRC to conduct reviews and certification of local Disaster Recovery Housing plans, and modification recommendations.

[S]3.2 Support local jurisdictions in Disaster Recovery Housing plan development, understanding social vulnerability assessments, and incorporating disaster recovery planning and mitigation into other local processes

[S]3.3 Provide (with support from the HRRC) training to Action Teams.

[S]4.0 Support Local Disaster Planning Boards and Action Teams through training and technical assistance. [S3.0]

[S]4.1 Develop state and regional disaster housing recovery best practices.

[S]4.2 Support local disaster recovery planning by providing resources to conduct mapping, risk assessment, and determination of social vulnerability.

[S]4.2.1 Provide training to Local Disaster Planning Boards on social vulnerability.

[S]5.0 Create guidelines for procurement of the Local Disaster Planning Board and provide MOU templates for the creation of the Action Teams.

[S]5.1 Identify roles, responsibilities, and expectations for each Action Team

[S]5.2 Communicate the scope of the project and evaluation criteria

[S]5.3 Create a ranking system in order to qualify applicants and establish a deployment order. This should be done particularly with Contractors. For example, the State Disaster Recovery Coordinator should evaluate compliance and performance, bonding capacity, project management, customer satisfaction, re-inspection rates, and product quality.

[S]6.0 Review and approve local DRH plans

[S]6.1 Perform a capacity assessment of the local jurisdictions to determine if the area jurisdictions have the skill and financial capacity to implement the local DRH program between COGs, counties or cities⁷.

[S]6.2 Review local DRH plan [L]3.0

[S]6.2.1 Ensure that the local DRH plan is workable and meets the objectives of rapid disaster housing recovery, if not provide actionable feedback to the Local Disaster

7. <http://www.usaid.gov/sites/default/files/documents/1864/OCA%20Tool%20for%20USAID-Funded%20Organizations%20Facilitators%20Copy.pdf>

<http://www.usaid.gov/sites/default/files/documents/1864/OCA%20Tool%20for%20Community%20Based%20Organizations.pdf>

PROGRAM ACTIVITIES

Planning Board.

[S]6.2.2 Offer technical assistance to jurisdictions that need help in adapting the DRH program to their location.

[S]6.3 Approve local DRH plan and offer oversight to local jurisdictions.

[S]6.4 Conduct a yearly review of each local jurisdiction's DRH program to ensure that their contracts, certifications, broad environmental reviews, and other pre-disaster housing recovery tasks have been kept up to date. This may become critical in jurisdictions that go years without a disaster.

[S]7.0 Develop and communicate requirements and general practices related to disaster housing and funding standards.

[S]7.1 Provide briefings for local jurisdictions on an annual basis regarding new programs and updates to existing programs. Briefings include program goals, requirements, application process and reporting requirements.

[S]7.2 Ensure that state and federal funding, reporting, or procedural requirements are clearly outlined at all levels in full at the beginning.

[S]7.3 Maintain oversight to ensure the achievement of performance standards.

[S]8.0 Coordinate with federal agencies.

[S]8.1 Conduct an audit of state or regional mitigation strategies with FEMA.

[S]8.2 Develop a strategy to support local adoption and enforcement of building standards with HUD.

[S]9.0 Provide damage assessment guidelines.

[S]9.1 Create consistent and detailed guidelines for conducting damage assessments.

[S]9.2 Provide annual training on what to look for and common biases (location bias, discrimination, length of time, etc).

[S]10.0 Create triage protocol for local geography⁸.

[S]10.1 Provide clear triage protocol to be applied consistently across all service providers.

[S]10.2 Provide training or certify Navigators on triage protocol and techniques for identifying populations in the greatest need.

8. <http://nlihc.org/sites/default/files/Testimony-of-Sheila-Crowley-March-18-2009.pdf>

PROGRAM ACTIVITIES

[L] LOCAL DISASTER PLANNING BOARD

[L]1.0 Adopt the Disaster Recovery Housing Program

[L]2.0 Create a Local Disaster Planning Board

The appropriate authority, such as a mayor, city manager, or director identifies qualified, senior level professionals to form the Local Disaster Planning Board, comprised of individuals most likely working for the jurisdiction that adopts the DRH program. Board members have experience in the areas of Planning & Administration, Case Management & Program Eligibility, Community Outreach & Education, and Design & Construction.

[L]3.0 Organize a social vulnerability assessment

In coordination with standard planning and engagement activities in the predetermined geography. [refer to Program Comparison Report, Section 4.2.2]

[L]3.1 Coordinate with the State Disaster Recovery Coordinator and the HRRC to partner in the assessment process.

[L]3.2 Understand what areas, neighborhoods, and community members are most vulnerable. Utilize infrastructure and housing surveys completed by the community in targeted areas, and cross reference them with the state data.

[L]3.3 Reduce or modify development in areas that are prone to natural disasters to reduce impact on structures, life and safety.

[L]4.0 Create an Implementation Framework (aka "DRH plan")

The Planning Administrator will lead the local DRH planning effort, supported by the Community Preparedness, Client Services, and Housing Administrators.

[L]4.1 Create a framework for developing, managing, and implementing the DRH program to their determined scale, geography and cultural context.

[L]4.2 Report program modifications to the State Disaster Recovery Coordinator for approval.

[L]5.0 Develop a Relocation Plan

[L]5.1 Use the yearly broad environmental review to assess the local jurisdiction's need for a housing relocation plan. If the broad environmental review identifies areas that are not approved for redevelopment in the event of a disaster, then the local jurisdiction must begin identifying areas and strategies for resident relocation.



Community meeting with residents of Country View around community priorities and infrastructure needs.



Community meeting with residents of Curry Estates exploring issues of flooding and drainage.

PROGRAM ACTIVITIES

[L]6.0 Incorporate disaster housing planning and mitigation into planning practices and all comprehensive planning efforts.

[L]6.1 Work at the local level to promote, develop, and enforce disaster mitigation strategies that contribute to reduced housing damage in the event of a future disaster.

[L]7.0 Manage YEARLY approvals and contracts

The Planning Administrator oversees overall completion, but the Community Preparedness, Client Services, and Housing Administrators manage the completion of approvals and contracts that relate to their area of recovery effort.

[L]7.1 Yearly Action Team training and certification. Yearly training and certifications are used to train new members of the Action Team or provide a refresher for previously certified participants. Additionally, yearly trainings serve to provide updates on any changes made to local, state, or federal housing assistance eligibility standards, reporting requirements, response and recovery practices, or other information that would alter how the Action Teams would conduct their housing recovery tasks. This also includes any changes to the local DRH plan.

[PA] PLANNING ADMINISTRATOR

[PA]1.0 Develop and release RFPs

Develop and release RFPs for procurement of the Action Teams⁹ [Action Team Lead, Navigation, Eligibility, Design and Construction]. RFP releases are lead by the Planning Administrator, but are supported by the Community Preparedness, Client Services, and Housing Administrators.

[PA]1.1 Communicate selection criteria, skills needed and project guidelines for each Action Team.

[PA]1.2 Provides oversight for the work of the Action Team. An Action Team Lead is contracted to manage the success of the overall program¹⁰.

[PA]1.3 Preference is given to local organizations when selecting the Action Teams. In the event a large non-local firm is hired to manage the details of the housing recovery effort, the Local Disaster Planning Board requires the use of pre-approved local organizations to handle the on-the-ground recovery effort. Selecting an organization(s) that has strong connections to the community, particularly to those who are the most vulnerable to displacement in the event of a disaster, strengthens the ability of the Navigator to support

9. Developing and releasing RFPs will depending on jurisdictional requirements

10. When creating an Action Team, the Local Disaster Planning Board can choose to contract a single organization or a combination of organizations. Additionally, one organization can be selected to perform more than one role in the housing recovery process.

PROGRAM ACTIVITIES

families through the rehousing process.

[PA]1.4 Refer to roles and responsibilities in each Action Team Section regarding qualities the Local Disaster Planning Board looks for in the procurement process.

[PA]1.4.1 Outline Contractor bid procedures and cost control guidelines. Rank local Contractors following qualification requirements.

[PA]1.4.2 Contractors will be awarding contracts in units of five houses.

[PA]1.4.3 Enforce Section 3 requirements for the procurement of sub-contractors.

[PA]2.0 Make Action Team selections and finalize the necessary MOUs.

During the selection of the local Action Teams for the roles of Navigation, Eligibility, Design and Construction.

[PA]3.0 Manage YEARLY approvals and contracts.

The Planning Administrator will oversee overall completion.

[PA]3.1 Yearly MOUs of Action Teams and Action Team Lead

[PA]3.2 Yearly broad environmental review [C] [HA]

[PA]3.2 Yearly updates to the DRH plan

[L]3.2.1 State Disaster Recovery Coordinator will receive reports and feedback from each Action Team Manager after the recovery work.

[PA]4.0 Incorporate disaster housing planning and mitigation into planning practices and all comprehensive planning efforts.

[PA]4.1 Assess local hazard exposures and disaster risk by combining local knowledge, FEMA risk mapping, FEMA flood maps, and other data. Particularly when it comes to flooding, engage local residents to identify areas that are prone to floods that may not be identified on FEMA flood maps¹¹.

[CP] COMMUNITY PREPAREDNESS ADMINISTRATOR

[CP]1.0 Conduct broad-based community education and engagement efforts around disaster mitigation and preparedness.

[CP]1.1 Identify and work closely with organizations or nonprofits working vulnerable communities to ensure the communities have access to education, training, resources, and information from trusted sources.

[CP] 1.0 Disaster Preparedness Program for Low-Income Homeowners

An example of this would be: LUPE hosts an event where we present information regarding the documents needed pre disaster such as:

- *property title*
- *valid ID's (examples of it)*
- *SSN or ETIN verification*
- *last statement of utility (water, electric) that shows you were living there during the hurricane*
- *income verification*

11. Charlotte-Mecklenburg County Community Floodplain Mapping Program

PROGRAM ACTIVITIES

[CP]2.0 Promote community wide programs or activities that increase housing resiliency.

[CP]2.1 Expand current local weatherization programs to include housing mitigation repairs.

[CP]2.2 Partner with local, grassroots organizations to incorporate housing resiliency¹², displacement prevention, and disaster preparedness into their yearly calendar including:

- Girl/Cub/Boy Scouts
- National Guard
- PTA or schools
- Fraternal Orders
- Professional Organizations
- Neighborhood Associations
- Political or Organizing Organization
- Religious organizations or Faith Communities

[CP]3.0 Coordinate with Action Team Managers in pre-disaster response and recovery planning and community preparedness.

[CP]3.1 Partner is conducting community preparedness and education activities

[CP]3.1.1 Utilize other organizations such as the boy/girl scouts or fire department to support community preparedness programs.

[CS] CLIENT SERVICES ADMINISTRATOR

In preparation for a disaster event, the Client Services Administrator oversees set-up for all activities of the DRH program related to outreach, case management, and eligibility. The Client Services Administrator will establish program policies and procedures, procure Contractors, and coordinate training for the Action Teams. The Client Services Administrator will also build partnerships with local social services organizations, faith communities, VOAD groups, and other support organizations prior to a disaster, to assure responsive and effective community outreach during disaster recovery.

[CS]1.0 Establish outreach and referral partnerships and MOUs with local groups.

Outreach to and inform local social services, faith communities, VOAD groups, and other support organizations about the DRH program. Identify opportunities for collaboration with local groups, such as local groups referring impacted families to the



Texas RioGrande Legal Aid educating community residents of home titles and the importance of will in transferring ownership. The meeting was organized and host by LUPE.

¹². Christmas in Action [<http://christmasinaction.org/mission>]

PROGRAM ACTIVITIES

DRH program, conducting post-disaster outreach and intake at their site, or hosting pre-disaster preparedness activities. Establish formalized partnership MOU's between community organizations and the DRH program.

[CS]2.0 Select and procure DRH Neighborhood Intake Centers.

[CS]2.1 Identify DRH Neighborhood Intake Centers. Neighborhood Intake Centers are pre-determined, centralized location that serve affected communities in the immediate aftermath of a disaster. These locations should be welcoming, comfortable and familiar to community members, perhaps suggested by community members. DRH Neighborhood Intake Centers could also be co-located with other disaster relief and response services such as shelters, food pantries, and supply distribution sites.

[CS]2.2 Draft an MOU between the jurisdiction (city, county, COG) and the owner of the selected site; this will establish an agreement for the use of the facility after a natural disaster.

[CS]3.0 Create coordinated outreach, case management, and eligibility policies and procedures for the Action Team.

[CS]3.1 Establish outreach and referral procedures with partnering community groups.

[CS]3.2 Create an easy-to-use intake process to enroll families in the DRH program. An easy-to-use intake process has various access points such as online, intake centers, and person-to-person outreach. A basic template for an intake form can be created pre-disaster and adjusted for disaster recovery based on specific administrative program requirements. [see intake form sidebar].

[CS]4.0 Work with federal and state agencies to create a streamlined eligibility process.

[CS] 3.2 INTAKE FORM

The intake should be a simple pre-screening application that does not require expertise or in-depth knowledge of specific eligibility requirements. It's best to keep the intake simple, yet effective at preparing the family for their first eligibility meeting. Suggested fields and attachments for the intake include:

- *Name*
- *Date of birth*
- *Social security number*
- *Number of dependents*
- *Names of residents living in the house*
- *Who is over 18?*
- *Do you own your property?*
- *Do you have your taxes current*
- *Attach most recent taxes*

PROGRAM ACTIVITIES

TRAINING GUIDE FOR NAVIGATORS

In the DRH program, Navigators are an essential support system for families. The primary role of the Navigator is to be a family's trusted advocate throughout the entire process, to help the family understand program requirements and activities, and to troubleshoot any problems or barriers that might prevent successful and rapid re-housing. The Navigator must also be a trusted member of the team and a partner to the other professional team members—Eligibility Specialists, Architects/Designers, Construction Managers—as they work together to help families complete each step of the DRH program.

While all Action Team members should be familiar with the DRH program, it is most important that Navigators understand the process in its entirety: Who are the professional experts on the team? What are the major activities and requirements of each step of the process? And who do I turn to in case a problem arises in the process? Navigators are not expected to become experts in each step of the DRH program. Rather, their role is to work together with both the family and the professional experts to move the case forward. With that in mind, Navigator training should include the following topics:

- Training on the DRH Intake Form
- Understanding the DRH model: pre and post disaster steps. Familiarize navigators with all aspects of the rehousing process: outreach, eligibility, application, design, closing, construction, relocation, move-in. Navigators will not need to be experts themselves on any one part of the process but will guide or navigate families through the process of meeting with various experts.
- Introductions to all members, roles and responsibilities of the Action team.
- Any specialized language or concepts important to understand in each phase: What's the role of the Eligibility Specialist? Why does an Eligibility Specialist need certain kinds of documentation? What's a Contractor? What does a bid mean? What to expect from construction timelines?
- Outreach training
- Understanding vulnerable communities and potential barriers to housing recovery
- Scenarios and example homeowner cases.
- What to expect in a disaster situation/crisis management.
- Social service or disaster response referral list.

Establish clear guidelines for program eligibility with the state and federal level and clarity with Action Teams for implementation.

[CS]5.0 Train Action Teams and partnering community groups.
After the Action Team partners are procured, the Client Services Administrator will conduct trainings for the Navigation and Eligibility Action Teams. This training will be required each year after MOUs are finalized.

[CS]6.0 Integrate community engagement practices.
Encourage the integration of community engagement practices

PROGRAM ACTIVITIES

into all municipal, county or regional departments that work directly in neighborhoods. This effort is led by the Community Preparedness and Client Services Administrators.

[CS]6.1 Support departments that work in local neighborhoods but do not incorporate community engagement into their planning or decision making. This could be departments such as Animal Control, Code Enforcement, Environmental Quality, Utilities, or Public Works.

[CS]7.0 Coordinate with Action Team Managers in pre-disaster response and recovery planning and community preparedness.

[CS] 7.1 Develop outreach contingency strategies for the Navigators, particularly if residents have been moved to shelters, or if the Neighborhood Intake Centers are not available post storm.

HOUSING ADMINISTRATOR [D + C]

Housing Administrator will manage all design and construction planning pre-disaster.

[HA]1.0 Coordinate with Action Team Managers in pre-disaster response and recovery planning and community preparedness.

[HA]1.1 Compile an active list of available rental stock and hotels that could serve as temporary housing immediately after the disaster during the response phase if warranted by the scale of the disaster. [PA]

[HA]1.2 Develop contingency plans, based on the scale of the disaster, for temporary housing if the response phase delays the housing recovery process. Determine a threshold for seeking HUD vouchers, and consider the possible budget implications for building COREs in the temporary-to-permanent system [PA] [CP] [HA] [N] [E]

[HA]2.0 Incorporate additional mitigation strategies into the recovery process.

Increase the standard of construction during the reconstruction process to lessen the risk of future disaster related home damage.

[HA]3.0 Manage YEARLY approvals and contracts

[HA]3.1 Pre-procurement of materials with suppliers. [refer to Technical Guide, Section 2.2.3.4] [C]

[HA]3.2 Manage master permitting for Home designs. [D]

PROGRAM ACTIVITIES

[HA] DESIGN PLANNING

Housing Administrator will manage the pre-disaster Design Team and activities [D]

[D]1.0 Build a force of trained local and regional Designers

[D]1.1 Engage the Texas Board of Architectural Examiners to require 4 Continuing Education Program Hours in disaster preparedness and the DRH plan¹³. The course will provide information on how the system works and what the role of local architects is.

[D]1.2 Engage AIA local chapters to establish a register of potential volunteers. Local chapters would provide training on building evaluation, and provide volunteers with the supplies needed to work with in the event of a disaster.



[D]2.0 Create a catalog of home designs.

The Local Disaster Planning Board [L], procured pre-disaster Design Action Teams, managed by the Housing Administrator [HA], to create a catalog of home designs [refer to Technical Guide Appendix - DR2 Houston Home Design Catalog], based on community engagement and neighborhood context. Neighborhoods will be able to choose between the County Home Designs Catalog or create their own local home designs catalog¹⁴.

[D]2.1 Organize neighborhood design meetings. Designers and the Local Disaster Planning Board will coordinate with local community organizations, local jurisdiction departments, faith communities and other community stakeholders to ensure an extensive engagement process. [L]

13. *Housing Recovery is a matter of health, safety and welfare, and it should be part of an architect's preparation requirements.*

14. *A Home Design Catalog could be used for non-disaster housing programs, by local developers, and local residents building their own home. Ideally it would be used as a resource for quality, context appropriate, pre-permitted single family home designs.*

PROGRAM ACTIVITIES

[D]2.1.1 Identify target neighborhoods that are highly vulnerable and/or within existing housing programs.

[D]2.1.2 Engage community leaders, project partners, and government officials. By engaging a diverse set of stakeholders, the design process will produce a wider variety of well-considered home designs than typically available in disaster recovery efforts.

[D]2.1.3 Select location. Designers, with the support of the Local Planning Board should identify an accessible and centralized place known by the residents. Pre-determined Neighborhood Intake Centers are good locations to start the design workshops. [L]

[D]2.2 Prepare a local design guide book before the workshop. Document the neighborhood context through quantitative and qualitative research. Determine design parameters for each neighborhood. Designs will differ across regions and will be historically and contextually developed. [refer to Technical Guide Appendix - DR2 City of Houston Design Guidebook]

[D]2.3 Hold design workshops. Set up a system of proposals and feedback where design professionals, residents and civic members can share their perspectives. The information gathered in the focus groups workshop will be key for the design team to generate a set of design development level catalog that can be shared back with the community. [refer to Design Workshop Step by Step on the following page] [refer to Technical Guide DR2 Appendix - Design Workshop Process]

[D]2.4 Develop a community-led home design selection process.

[D]2.4.1 Display the schematic home designs in a publicly publicized Design Gallery Workshop.

[D]2.4.2 Receive community feedback. Stakeholder groups will explore, review, comment and vote on the displayed home designs.

[D]2.4.3 Design Action Team will revisit their designs to include design selection input and produce master permitted construction sets. [refer to Technical Guide Appendix - DR2 Design Workshop Process]

[D]2.5 Housing Administrator coordinates check-ins with stakeholder groups at regular intervals (2-3 years) to evaluate the home designs catalog and ensure level of community buy-in and appropriateness.

[D] 2.2 Study the context:

- *Review existing studies of the targeted neighborhoods.*
- *Evaluate successful previous interventions in those areas or natural best practices that could apply for the specific geographic area.*
- *Document the existing conditions and typologies of the housing stock in the targeted neighborhoods.*
- *Document targeted neighborhood layouts.*

[D] 2.3 In flood zones or areas where water table is less than 3 meters down the top of the ground, the RAPIDO pilot used pre-cast piers as a solution. If this is the case, pre-disaster the concrete plant can prepare the piers, stored them and ship them to the site with Core flat-pack.

PROGRAM ACTIVITIES

DESIGN WORKSHOP STEP-BY-STEP

Listen (PD): Set up a process of listening where stakeholder groups share:

- Contextual preferences
- Programmatic preferences
- Aesthetic preferences

Envision (SD): With the stakeholders, envision a set of attractive, well-functioning and livable homes that engender pride not just to the homeowner but to the whole community.

Prepare (DD): The pre-procured design firm or multiple design firms will prepare schematic home designs. All designs should follow the program design requirements:

- Utilize the information gathered in the design workshops.
- Comply with HUD, GLO, and other guidelines. [jurisdiction to establish their guidelines]
- Include the CORE in the floorplan layout. Homes will achieve the most recent Energy Star compliance and will achieve substantial reduction in water use based on current code.
- Incorporate design alternatives for bedroom number, handicap, exterior/elevation option, and foundation requirements based on location. [refer to RAPIDO pilot case side note]
- Exceed local code requirements and ensure home is durable enough to withstand future natural disasters with minimal damage.

[D]2.6 Windstorm design and certification: All COREs and design catalog options shall be designed and certified under the applicable wind zone requirements.

[HA] CONSTRUCTION PLANNING

Housing Administrator will manage all construction planning pre-disaster.

[C]1.0 Create a pre-disaster Construction Plan.

Housing Administrator develops a series of construction protocols and tasks to must be put in place to prepare for construction mobilization planning and CORE components construction.

[HA]

[C]1.1 Review constructability of the home designs.

Housing Administrator (and/or agent thereof) reviews the selected home designs for feasibility, estimated cost and code compliance. The Housing Administrator then coordinates with the pre-disaster Design Action Team to eliminate or alter home designs to align them with program requirements. [HA]

PROGRAM ACTIVITIES

[C]1.2 Coordinate the pre-permitting of the Home Design Catalog.

The Housing Administrator coordinates with local permitting officials to establish a familiarity with the designs. [refer to Technical Guide, Section C5.2 for Temporary Certificate of Occupancy request] [HA]

[C]1.3 Procure pre-disaster and post-disaster construction.

The Housing Administrator sets up contracts and procures local builders for post storm construction mobilization and storage facilities to hold the COREs prior to a disaster. [HA]

[C]1.4 Establish contracts with local Material Suppliers.

In the event the CORE builder is not be the same entity as the Material Supplier, ensure that a Material Supplier has materials for 200 COREs reserved on site in a location out of the elements. [HA]

[C]1.5 Establish contracts with building evaluators to perform the homeowner damage assessment inspection.

[C]2.0 Begin Off-Site CORE Construction.

[C]2.1 Begin off-Site CORE Construction.

Activate local builders, Material Suppliers and/or manufactures to start CORE off-site construction. Build Core components in local lumber yards, warehouse, or factory¹⁵. [reference in [C] [HA]]

[C]2.1.1 A foreman should be assigned by each CORE manufacturer to supervise the storage quality and handling of CORE components.

[C]2.1.2 Protect CORE panels and components from exposure to water and weather elements. Store panels above ground.

[C]2.1.3 Organize panels for assembly efficiency: start with floor panels, follow with wall panels and finally ceiling panels. Stack the panels in a way that makes it easy to read the identification labels for easy deployment.

[C]2.2 Set up CORE construction and assembly trainings. Work within pools of local, established builders to set up trainings in core construction and assembly. Document process to glean any additional feedback on CORE constructability or construction process.

[C] 1.3 Selection criteria for core builders / facilities include:

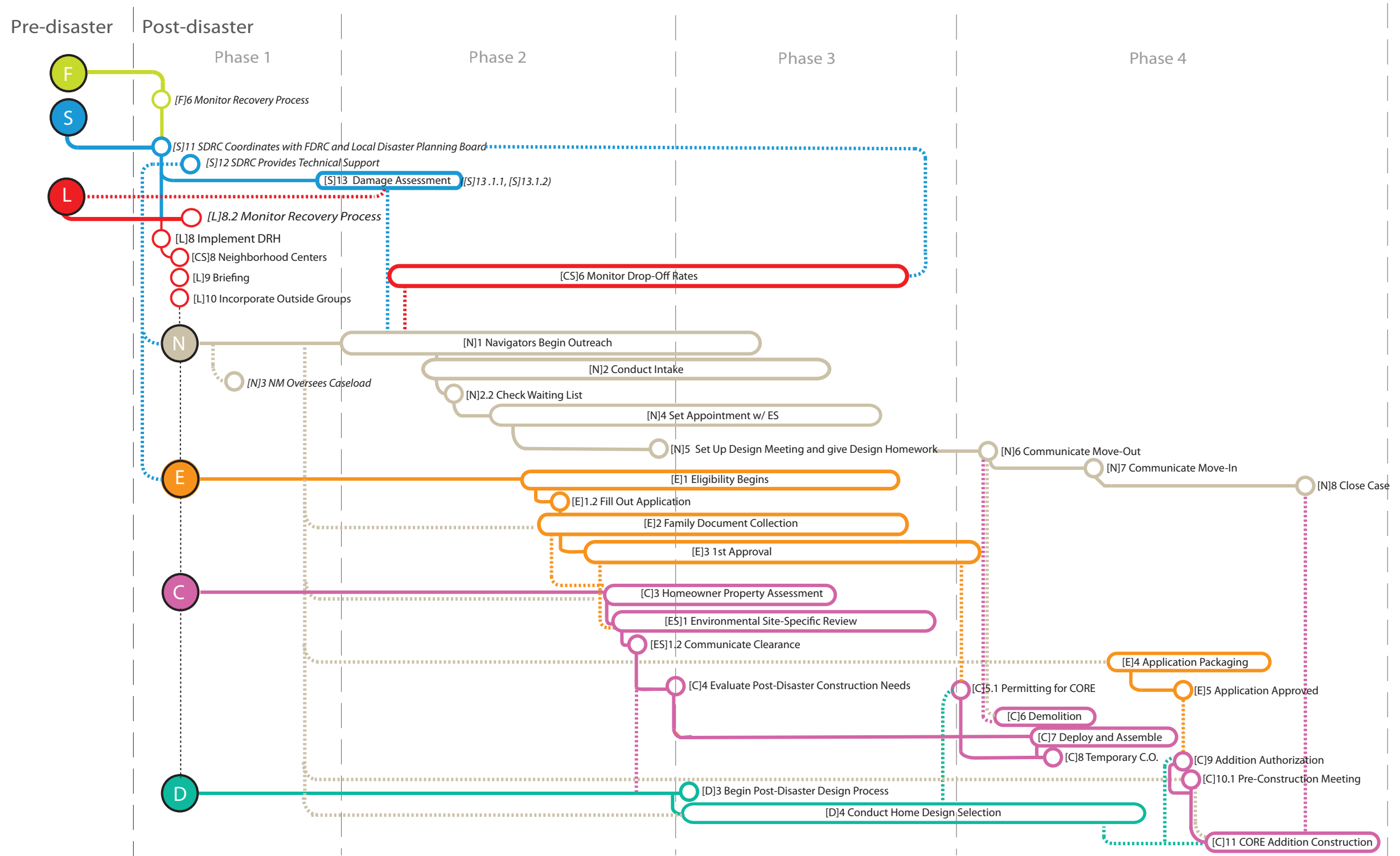
- *Storage: Ability to store panels after construction in a location protected from the elements.*
- *Access to materials: The use of local lumber yards, material warehouses, or home manufacturing facilities is encouraged.*
- *Location close to high risk disaster site: Builders and materials suppliers should be located such that they are able to quickly respond to disaster events without the need for long material and core transportation times.*



15. Each CORE consists of 24 exterior wall panels, 3 interior wall panels including the wet wall, 6 floor panels and 9 ceiling panels [refer to CORE Pre-fab and assembly set]. The CORE can be built in 4 days by 2 framers, 1 electrician and 1 plumber.

PROGRAM ACTIVITIES

3.2 POST-DISASTER



PROGRAM ACTIVITIES

3.2.1 PHASE 1

Disaster Declaration

After the disaster has been declared, based on the disaster scale, the Federal and State Disaster Recovery Coordinators and the Local Disaster Planning Board establish points of regular communication in the housing recovery process. In the event of a non-declared disaster, the State Disaster Recovery Coordinator and Local Disaster Planning Board will still activate. Consistent avenues for communication ensure that local jurisdictions are receiving the support they need, regular progress reports are submitted to the State and Federal Recovery Coordinators, and that Federal and State Recovery Coordinators are maintaining production and schedule oversight. [L] [S]10.0 [FDRC]

Team Mobilization

[L]8.0 Implement the DRH Program.

Once the response phase is completed activate the DRH Action Teams.

[L]8.1 Conduct an informing sessions with the Action Teams, collaborating government agencies, faith-based volunteers, and VOAD groups regarding the specifics of the disaster, areas and communities affected, response efforts, and support available.

[L]8.2 Oversee the progress of the Action Teams through a weekly meeting with the Action Team Lead.

[CS]8.0 Activate the Neighborhood Intake Centers.

Neighborhood Intake Centers serve as the base of operations for the Navigators, Eligibility Specialist, Designers and Local Disaster Planning Board during the period of housing recovery.

[L]9.0 Recovery and Response Briefing.

The Action Teams receive a recovery and response briefing from the Local Disaster Planning Board and collaborating government agencies regarding areas and communities impacted by the disaster event, available assistance, program partners and program eligibility.

[F]6.0 Monitor recovery progress and performance.

Using weekly reports from the State Disaster Recovery Coordinator, the FDRC make adjustments to the level of support and resources being provided to the local recovery effort. [S] [L]

PROGRAM ACTIVITIES

[S]11.0 State Disaster Recovery Coordinator acts as the point person for FDRC and the Local Disaster Planning Board.

[S]11.1 Direct resources and assistance to the Local Disaster Planning Board related to housing recovery. Coordinate all recovery funds and/or grant program allocation from the FDRC to the Local Disaster Planning Board.

[S]12.0 Provide technical support to providers using online family tracking (like CAN or TAAG).

Target Areas Determined

[S]13.0 Perform damage assessment with support of Local Disaster Planning Board.

[S]13.1 Local Disaster Planning Board activates local expertise to support State and FEMA's Preliminary Damage Assessment (PDA)¹⁶.

[S]13.1.1 Conduct a detailed Windshield Assessment residential property to assess the scope and severity of damage. Complete the Residential Windshield Assessment Form, identify type of residence, relative income of the residents, and estimated insurance coverage.

[S]13.1.2 Site Assessment (Door to door inspection). After receiving the disaster summary outline (DSO which includes PDA and windshield assessment report) and checking with Local Disaster Planning Board on Navigators report on affected neighborhoods; Local Emergency Managers, building evaluators and volunteer architects with training in building evaluation will visit preliminary targeted areas to gather more specific damage assessment information, confirm reported damage and ensure vulnerable neighborhoods have been targeted. [N]

[L]10.0 Incorporate outside groups and agencies into the DRH program and Action Team activities.

[L]10.1 Direct the efforts of volunteer groups toward CORE assembly or the fabrication of CORE components.

[L]10.2 Planning Administrator connects state level teams with members of the Local Disaster Planning Board to coordinate post-disaster tasks to ensure all efforts are working in concert with the local DRH plan. [PA]

[S]13.1 Damage Assessment cooperation/support participants:

- *City/County Engineers, and public works personnel for evaluating debris clearance, and road and street system damage.*
- *Building Inspectors or lending institutions for evaluating damage to buildings, homes and business.*
- *Departments managing levees, drainage systems, electric cooperatives and non-profit service facilities.*
- *Local AIA volunteer architects to participate in the damage assessment process.*

16. <https://www.fema.gov/public-assistance-preliminary-damage-assessment>

PROGRAM ACTIVITIES

3.2.2 PHASE 2

Outreach

[N]1.0 Begin outreach to homeowners in the designated target areas.

Navigators conduct extensive outreach in the target communities impacted by the disaster to inform families of and enroll them into the DRH program. Navigators work to identify families in need of housing recovery assistance through a combination of door-to-door outreach, town hall meetings information sessions, and referrals from disaster responders, social services and community organizations. Navigators work closely with the grassroots network of local churches, community centers, storm shelters, and service organizations to connect families in need with the DRH program.

[CS]9.0 Monitor family drop off rates.

Ensure proper levels of outreach and family support are being provided through the process.

[CS]9.1 In the event of recurring delays or barriers, the Client Services and Planning Administrator will coordinate with the State or Federal Disaster Recovery Coordinators to identify a solution. [PA] [S] [F]

Intake

[N]2.0 Navigator conducts intake and is assigned to families to help navigate them through the DRH process.

[N]2.1 Navigators begin enrolling families in the DRH program by completing an initial intake form with the family.

[N]2.2 Once identified as needing assistance, the Navigator meets with the family, cross-checks existing housing assistance waiting lists to see if the family is already registered or pre-qualified, conducts intake, gathers basic documentation, and refers the family to a Eligibility Specialists. [E]

[N]3.0 Navigation Manager oversees Navigator caseload.

As Navigators are assigned families the Navigation Manager ensures they maintain a manageable caseload. It is recommended that Navigators carry no more than 25 families on their case portfolio at one time, this number can be adjusted based on the difficult of the families being served, or the scale of the disaster.

[N]4.0 Set appointment with Eligibility Specialist.

[N]4.1 The Navigator gives intake and preliminary documentation to the Eligibility Specialist.

PROGRAM ACTIVITIES

[N]4.2 The Navigator sets an appointment with the family and the Eligibility Specialist to begin the process of completing a full application for grant assistance. Eligibility appointments can take place in the Neighborhood Intake Center, at the family's home or temporary place of residence, or at the Eligibility Specialist's office. [E]

[N]4.3 Navigator should determine if the family is able to access the office or if field appointments are necessary. [E]

[E]1.0 Family meets with the Eligibility Specialist.

[E]1.1 Prior to the appointment, the Eligibility Specialist double checks if the family is already on a housing assistance waitlist and reviews the intake and pre-screening paperwork.

[E]1.2 During the appointment, the Eligibility Specialist will begin to assist the family in completing an application for housing assistance.

[E]2.0 Documentation collection.

[E]2.1 The Eligibility Specialist determines the documentation that will need to be collected from the family.

[E]2.2 The Eligibility Specialist discusses the documentation with the family and the Navigator. If the family needs special assistance to gather documentation, the Eligibility Specialist and the Navigator determine what kind of support is necessary, i.e., recovering lost documentation, transportation, translation services, or accompaniment. Appropriate support is provided by the Navigator, the Eligibility Specialist, or by both in a coordinated effort. The family, the Navigator, and the Eligibility Specialist work together at follow-up appointments to collect all necessary paperwork. [N]

[C]3.0 Homeowner property damage assessment.

An inspector (building evaluator) conducts an assessment of the damage to the family's home, completes a verification of hurricane damage and provides a price for demolition. Navigator attends meeting to support family. [N]

Environmental Site Review

[ES]1.0 Issue environmental site specific review.

[ES]1.1 Submit an environmental site specific review to receive clearance on historic preservation zones, floodplain management, noise control, airport runways, toxic locations and aboveground storage containers on family's property.

PROGRAM ACTIVITIES

[ES]1.2 Communicate clearance (2 weeks timeframe) to Construction Manager and Eligibility Manager.

Family Approval - 1st Step

[E]3.0 1st approval granted.

Once the Eligibility Specialist has determined the family's income, verified that they live in the target area, received the damage assessment conducted by the inspector and the environmental clearance has been issued, the Eligibility Specialist will submit documentation to the state for the first step in a two step approval process. [CM] [EM]

[E]3.1 After the 1st approval is uploaded, the Eligibility Specialist will communicate to the Navigator, the Construction Manager, the Design Manager, and the family that they can prepare and move forward demolition and placement of the temporary housing CORE on the family's property. [N] [C] [D]

3.2.3 PHASE 3

Design

[C]4.0 Begin the post-disaster recovery housing construction. Evaluate the pre-disaster construction work and the material available in order to coordinate the necessary activities for the recovery phase.

[C]4.1 Gather Construction Action Team.

[C]4.1.1 Outline CORE distribution and deployment. The Action Team Lead and the Construction Manager will gather the pre-procured Contractors, [see [C]1.3 and [C]2.1] Material Suppliers, local permitting officials, and disaster assessment personnel immediately after the disaster.

[C]4.1.2 Assess construction material availability. Coordinate with CORE Manufacturers and Material Suppliers on the number of COREs available locally post-disaster. [MS]

[C]4.1.3 Mobilize construction on additional CORE units. The need for additional CORE units depends on need and location of disaster affected areas (coordinate with disaster assessment personnel).

[C]4.1.4 Steward CORE construction and additions through the permitting process. Coordinate with local permitting officials of predetermined geography.

[D]3.0 Begin post-disaster design process. Establish an implementation plan for the design process depending on the



An example of a design activity, conducted with local residents, that informed the design and layout of the Demonstration Project CORE unit.

PROGRAM ACTIVITIES

disaster scale, and prepare for all necessary post disaster design activities.

[D]3.1 Gather Design Action Team

[D]3.1.1 Determine an implementation plan for home selection and site design process. The Action Team Lead, Design Manager, architects, Navigation Manager will meet immediately after the event and gather volunteers or paid staff to support this process. [ATL] [N]

[D]3.1.2 Design Manager coordinates with the Design Team and distributes families to Designers depending on the scale of disaster.

[D]3.2 Prepare for home design selection process.

The Designer will meet with the family twice: during the home design selection meeting and the pre-construction meeting. The meetings will be held at the Design Manager offices or an Neighborhood Intake Center [refer to Section [CS]2.1 - Neighborhood Intake Centers].

[D]3.2.1 Coordinate with Navigator to set up appointment. Navigator shall set up the meeting with the family and Design Team. [N]

[D]3.2.2 Discuss design process with Navigator prior to the meeting. Navigator will go through the entire design and construction process to ensure that families are aware of the process prior to beginning design process. [N] [refer to Technical Guide Home Design Appendix, Page 4 - Design and Construction Process Diagram]

[D]3.2.3 Designer will gather all necessary documents.

[N]5.0 Navigator sets up the family's Home Design Selection Meeting, and hands-out Design Homework to the family. [D]

[D]4.0 Conduct Home Design Selection Meetings with family. [refer to Technical Guide Home Design Appendix]

Between Navigator, Architect/Designer and family.

[D]4.1 Present and discuss the process timeline with the family, explain the steps and milestones of the design process and the temp-to-perm strategy. Give a copy of the [refer to Technical Guide Home Design Appendix, Page 4 - Design and Construction Process Diagram] to the family.

[D]4.2 Discuss the Design Homework [refer to Technical Guide Home Design Appendix] answers with the family. If homework is not complete, guide the family through the activities and questions.



[D]3.2.3. Before the home design selection meeting the designer should gather or prepare:

- *Plat and/or Site Survey provided by city officials*
- *Site Specific Environmental Review Approval or Denial-*
- *Site Plan Design Tool [refer to site plan design tool appendix]*
- *Design Catalog [refer to D2.0] specific for each geography, the number of options shown to the family will depend on their design homework answers*
- *Design Homework [given out by navigator upon setting up meeting with family]*
- *Disaster Recovery Process Timeline*

PROGRAM ACTIVITIES

[D]4.3 Discuss the Local Home Designs Catalog with the family. Based on homework, show the options that better fit their needs.

[D]4.4 Discuss the design layout and aesthetic details of the selected option.

[D]4.5 Use the [refer to Technical Guide Home Design Appendix - Site Plan Design Tool] to place the selected home design on the family's site.

[D]4.6 Identify the area where the CORE will be placed.

[D]4.7 Select finishes. Document all choices in the [refer to Technical Guide Home Design Appendix - Finishes Selection Sheet].

[D]4.8 Designer and Navigator inform the family of the move out timeframe. [N]

3.2.4 PHASE 4

Temp Construction

[C]5.0 Coordinate CORE deployment and assembly.

After completion of the first step approval and the home design selection meeting.

[C]5.1 Permitting: Submit all required documentation to the building permit department or assigned jurisdiction department to obtain home design building permit and CORE assembly permit. [refer to the General Permit Requirements]

[N]6.0 Communicate the Move-Out and construction timeline. [C]

[N]6.1 The Construction Manager and Design Manager will provide the Navigator the timeline for demolition and CORE placement for the family. [CM] [DM]

[N]6.2 Navigator will coordinate with the Construction Manager on option for storing the family's personal items prior to demolition. Ideally the storage will be on the homeowner's property. [C]

[C]6.0 Conduct Demolition.

Demolish existing home and any other substandard structure on homeowner's property.

[C]7.0 Deploy and assemble COREs.

Coordinate with pre-procured Contractors, storehouses/Material Suppliers for CORE assembly as well as the construction of additional cores. [MS]

[C]5.1 General Permit Requirements:

1. Building permit application
2. Registered deed of property
3. Pre-permitted construction documents of selected home design with:
 - Structural drawings for foundation design
 - Site plan, indicating selected home design location and CORE placement
 - CORE pre-fab & assembly set
 - Windstorm Certificate and drawings provided by Windstorm State Certified Engineer [certified in pre-disaster design planning]
 - Initial Site Inspection
 - Elevation Certificate
 - Any other requirement jurisdiction needed to allow temporary unit assembly

[C]6.0 Homeowners shall be able to request that the contractor keep some infrastructure on their property like storage or existing driveway. The designer shall provide this recommendation to the contractor in the Site Plan drawings and pre-construction meeting, but the family should understand that if the structure or flatwork has sustained too much damage, then it will be demolished. If the conditions after the disaster don't allow for machinery to demolish existing structure, CORE will be placed on temporary footings in the family's lot. [D]

PROGRAM ACTIVITIES

[C]7.1 Transport and package COREs: Flatpacked and transport CORE in a standard flatbed trailer. [refer to Technical Guide CORE Appendix - Transportation Requirements]

[C]7.2 Construct foundation: determine foundation design layout depending on geography. Build entire home foundation to avoid concrete truck to deliver material twice. This will reduce total construction costs.

[C]7.3 Assemble the CORE: in 3-to-4 days. [refer to Technical Guide CORE Appendix - Prefab and Assembly]

[C]8.0 Obtain temporary Certificate of Occupancy (C.O.) for temporary unit after assembly. Contractor will submit all jurisdictional requirements to the building permit department or assigned department. [refer to C.O. general requirements]

Move - In

[N]7.0 Navigator communicates CORE Move-In to the family. [C]
[D]

Family Approval - 2nd Step

[E]4.0 Family Application Packaging.

Once the Eligibility Specialist receives final home costs from the Design & Construction Action Teams, they may proceed with the closing package required for the Pre-Construction/Closing [see [C]7.0]. [D] [C]

[E]4.1 The Eligibility Specialist will meet with the family and Navigator to complete the application/closing package. [N]

[E]4.2 The Eligibility Specialist will then send the package to the state for 2nd Step for Approval. The Eligibility Specialist will communicate with the agency until a final determination is made and to assure that any incomplete files or missing documentation is provided in order to get applications approved. [S]

[E]5.0 Application is approved¹⁷.

Eligibility Specialist notifies family and Navigator of approval. The Navigator informs the family about the next steps in the DRH process and makes arrangements to meet with Design and Construction Action Teams. [N] [D] [C]

[C]9.0 CORE addition authorization.

[C]8.0 Certificate of Occupancy General Requirements:

- 1. Certificate of Occupancy application*
- 2. Building permit number*
- 3. Name and address of homeowner*
- 4. Description of work*
- 5. Inspection reports*
- 6. License and contact information of contractor*
- 7. Any other special requirement jurisdiction needs for the temporary unit C.O.*



¹⁷. Application approval timeline is heavily dependent on the response time of the State

PROGRAM ACTIVITIES

[C]9.1 Eligibility Manager will report to the Design and Construction Manager when funds have been approved and the case is ready to close. [EM] [DM] [CM]

[C]9.2 Construction Manager will communicate with the Designer, Contractor and Navigator to start addition construction preparation. [N] [D]

Permanent Construction

[C]10.0 Prepare for addition construction.

[C]10.1 Pre-construction meeting (Designer, Construction Manager, Contractor, Navigator & family). [D] [N]

[C]10.1.1 Discuss design selection with Contractor at pre-bid pricing.

[C]10.1.2 Discuss construction timeline and additions construction logistics with the family.

[C]10.1.3 Discuss warranty and insurance details with the family. For example, the family shall not interfere in the construction process, unless a self-help agreement is in place. The family shall not request changes to approved drawings and agreements made during pre-construction meeting.

[C]11.0 Addition construction.

Grant notice-to-proceed to pre-procured Contractor when funding has been approved and the Eligibility Action Team is ready to close and submit to the State the family's case. [E]

[C]11.1 Conduct all required construction visits and jurisdiction inspections.

[C]11.1.1 The Construction Manager will visit the projects every 2 weeks.

[C]11.1.2 The Jurisdiction (COG, county, city) will inspect projects at: foundation, framing +MEP, nailing and insulation, and finishes. If the jurisdiction does not provide inspections, the Housing Administrator will contact a pre-procured third party inspector to inspect the projects. [HA]

[C]11.1.3 The Designer will visit projects at: framing, MEP, and finishes as minimum. [D]

[C]11.1.4 Submit WPI-1 to Construction Manager and the Texas Department of Insurance.

[C]11.2 Build CORE addition within a 2 month period after notice-to-proceed.

[C]11.2.1 Local Disaster Planning Board should establish



PROGRAM ACTIVITIES

the penalties that the Contractor will incur if construction is not complete after 60 days of starting the expansion construction. Examples of common penalties are fees on re-inspections or a deduction of 100 dollars from the construction contract final payment for each day construction is delayed. The construction Contractor will reimburse any costs incurred by the family as a result of construction delays. [L]

[C]11.3 Complete all construction requirements and handing any home key copy Contractor have to the Construction Manager or resident. [CM]

[N]8.0 Close navigation case with family.

3.2.5 PHASE 5

[L]11.0 Program follow up.

Once the housing recovery process is complete, the Planning Administrator will lead a review of the DRH program with the support and input of other Local Disaster Planning Board members, Action Team Managers, families of the DRH program, outside groups and faith organizations, and the State and Federal Disaster Recovery Coordinators. The results of the review will be used to update the local jurisdiction's DRH plan.

[S]14.0 Review disaster recovery and develop recommendations.

[S]14.1 Identify gaps and weak links as a community and/or household transitions from the disaster response to the recovery.

[S]14.2 Identify opportunities for improved coordination between the Local Disaster Planning Board, Action Teams, VOAD groups, faith based organization, and federal and state agencies.

[S]14.3 Audit legal or procedural barriers that prevent a timely recovery.

[C]12.0 Construction Follow up

Establish a home performance follow-up plan after all units are complete and Case Management is closed.

[C]12.1 Engage the assisted families post-occupancy at 1, 6, and 12 month intervals to solicit feedback. Feedback will focus on overall satisfaction, home performance, home repairs and utility expenses with particular attention on power and water usage.

PROGRAM ACTIVITIES

[C]12.2 The follow-up plan will include methodology to track energy consumption, analyze data, and provide feedback that will inform future occupant behavior and will help incrementally improve efficiencies in the design book home designs.

[F]7.0 Review DRH program and develop recommendations.

[F]7.1 Develop a set of recommendations targeted toward the federal response and management of the local disaster recovery housing effort. Identify changes to policies, practices, and opportunities for innovation and increased coordination prior to the disaster.

[L]12.0 Update local jurisdiction's DRH plan.

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