

## Construction and Repair Process Overview

This section provides a general overview of the recovery process related to construction repair needs and rebuilding single-family households impacted by the 2019 Memorial Day tornadoes. Individuals received repair/rebuilding assistance because they were under-resourced, uninsured, underinsured, or had unmet needs after initial self-recovery attempts.

The guiding construction principles for repair and rebuilding was limited to making these storm damaged homes *safe, sanitary, secure, and functional* respectively.

### Best Practices:

- 1) Establish criteria of eligibility as early as possible once the LTRG begins to form; this will most likely be done in case management but it will greatly impact the level of effort required for the construction process. (See *Resource Table Process Summary* document)
  - Primary property owner, not renting or a landlord property
  - Financial resources/documentation
  - Urgency factors captured at intake: level of damage, displacement, family size, senior citizen, a disability or health circumstances present, contractor fraud, etc.
  - Property tax history
- 2) Along with criteria of eligibility, establish exactly what is eligible for repair/rebuild funds at a homeowner's property. This will provide clear expectations to survivors.
  - e.g. Main dwelling rebuild/repairs only (must have been occupied at the time of the storm)
  - Within the main dwelling, only essential living space should be included (unfinished basements were not included unless mold/broken windows etc. are impacting the essential living space of the structure)
  - No outbuildings or detached garages
  - No fences, replacement or removal of trees, or landscaping improvements; exceptions were for removal of dangerous trees affecting the main dwelling or safety
- 3) The geographical area of assistance after a disaster will also need to be established. It is up to the funders of the LTRG Resource Table to decide what will be used to determine if a potential beneficiary of construction repairs/rebuild is eligible.
  - e.g. A client further than one mile from a FEMA damage assessment or jurisdictional disaster inventory list of impacted properties will not be considered for construction assistance.
  - Utilize data from FEMA damage reports, aerial and street view on Google Maps, as well as county verified damage assessments.
- 4) Acknowledge that all manners of assistance including *money, muscle, or material* will be offered in the recovery phase. All three resources will come with their own costs, however.
  - Money will need to be carefully and appropriately spent, with adequate documentation of costs
  - Muscle will be plentiful but may require extra effort for the coordination/organization to have appropriate work lined up and ready when volunteers arrive.
    - The Miami Valley LTRG partnered with a handful of different skilled VOAD groups: Brethren Disaster Ministries, Mennonite Disaster Service, Lutheran

Disaster Response Services, and United Methodist Church; Presbyterian Disaster Assistance was not active nationally due to COVID-19 disruptions.

- Materials will need to be stored, vetted, inventoried, and delivered – do not underestimate these requirements or logistics
- 5) Properties must be visited and damages thoroughly assessed after intake paperwork is established through disaster case management.
- 6) Having established eligibility criteria for construction repairs guides decisions from the onset of a survivor reaching out for assistance all the way through recovery work. It solidifies the standards and expectations of construction needs which makes repair estimates and survivor engagement much smoother.
- 7) The Construction Coordinator works very closely with VOAD leadership to determine types of appropriate volunteer work, materials pick-up/drop-off, site readiness, and deciding scope of work change orders.
- 8) Regular construction meetings were necessary to introduce new repair/rebuild requests, track progress, and trouble-shoot.
- 9) Utilizing a construction punch out list is a great way to double-check the approved scope of work against progress of the actual work completed.
- 10) Depending upon the funding stream mechanism that an LTRG executive committee establishes, getting materials purchased quickly and as needed can be expedited through home improvement store gift cards. These cards were a vital way to get skilled build teams the items needed to complete the repair; using it as petty cash kept rebuild jobs progressing.

#### **Lessons Learned:**

- 1) Smaller, established independent contractors turned out to be the most reliable for completion of repair work, especially those of high-urgency or jobs not appropriate for skilled volunteers; larger or national contractors will be too busy after the storm and may not be responsive; newer contractors to the region will most likely be frauds or scams and should be avoided or heavily vetted
- 2) Site visits for assessing property damage must be conducted by at least two individuals experienced in recognizing storm-related damages. This visit is integral to verifying the eligibility and level of need.
  - Almost every disaster survivor will have a detailed story of where they were during the event and this establishes verification of occupancy at the premises. Other details of storm damages and repair needs come up during this conversation that may not have been captured during intake.
  - It is best to notify the survivor of the scheduled visit the day before and have a soft handoff from case management to the Construction Coordinator to build trust. This survivor should be knowledgeable enough to show home damages to the assessors. Otherwise, miscommunication can cause delays or the need to reschedule a thorough site visit.
  - The presence of deferred maintenance (old roof shingles, crumbling concrete, etc.) will be difficult to determine initially. Relying on first-hand pictures for documentation is very helpful to determine eligibility of a repair.

- 3) The average group of local, skilled volunteers will likely not have the required leadership to show up and manage their own projects without LTRG management on the ground with them.
- 4) Estimates of the number of project houses will be difficult to discern at the start of recovery work. Accept FEMA or jurisdictional estimates as a starting point but realize that regional factors could greatly affect the number of homeowners needing repair or rebuild; e.g. impacted rental population in Dayton was much higher than original estimates and skewed the estimate.
- 5) It is a phrase that is occasionally heard in disaster case management but keep in mind that “Presence is a Promise”; a disaster survivor in need must always be respected and kept at the center of recovery. Clear expectations of what can or will be done in regard to unmet needs and construction repairs should be well established and communicated from the beginning.
- 6) Have creative construction alternatives and material sourcing solutions. The high demand for home construction materials could not have been anticipated during an unprecedented time of national home remodeling and renovations during the COVID-19 pandemic and therefore caused shortages and acquisition delays that slowed down jobs to help survivors move forward in recovery.
- 7) Outline a clear scope of work and ensure all parties have signed off to acknowledge the breadth and limits of the scope of work prior to any work starting. Otherwise, scope creep may come up unexpectedly if something was overlooked or other repairs were promised.
  - Sign off should include the construction team leads, the disaster case manager that presented for resource table, LTRG leadership, and possibly additional parties such as Federal Home Loan Bank (FHLB).
- 8) Timing is everything when climate and weather are factors in construction needs. Plan accordingly to address exterior work when the weather is amicable for both the muscle and the materials (shingles won’t lay flat and mortar won’t cure in colder weather; interior work is great for skilled volunteers on rainy days).
  - Contractors has high demand at various times throughout the year, depending on the type of work.
  - VOADs typically work in the Midwest spring through fall and then head south in winter.
- 9) Construction delays may tremendously impact a survivor or family, especially one that’s been displaced. Clear communication on a timeline with case management and vice versa are vital.
  - Storage pod payments may need extensions
  - Rental contracts may expire or need renewed
- 10) Depending upon the level of main dwelling damages and necessary repairs, jurisdictional or county permits may need pulled, architectural blueprints may need drawn, utility services may need re-established, or home mechanicals inspected prior to and post construction.
  - Have trusted skilled trade companies identified, an architect to volunteer services, and an understanding of exactly what permits need pulled.
  - Be familiar with building codes
- 11) To build trust with disaster survivors that are approved for repairs, a solid hand-off to whomever is doing the construction needs to take place after the site visit. A short secondary visit to the property with construction leads, VOAD leadership, or site leaders is a recommended approach; especially with the case manager acting as the survivor advocate.

- Some survivors may become skeptical if no communication or hand-off happens, especially if unannounced workers show up. Many survivors were targets of contractor fraud or agreed to subpar repairs through unaffiliated volunteers.
  - Many of the survivors that went through the process of LTRG construction repairs would help spread the word about the assistance and become huge advocates to other survivors to reach out for assistance.
- 12) Safety standards must be in place for staff and volunteers prior to the start of construction projects. Additional safety concerns must be addressed and anticipated according to each worksite.**
- Best practices in construction safety (eye, ear, head, hand, and foot protection) need to be adhered to by each worker. Providing personal protective equipment onsite is a must.
  - Do not assume a VOAD skilled group will keep safety top of mind since the work is very survivor-centric. Continual reminders on the work site about tool and ladder safety may need to be mentioned.
  - Any construction site-related injuries should be documented.
  - Other circumstances of safety may be present on the property and should be handled accordingly to ensure repairs can continue: mold, asbestos, down utility lines, loose dogs, etc.

**Resources:**

- 1) *National Voluntary Organizations Active in Disaster Points of Consensus: Repair and Rebuild*  
[https://www.nvoad.org/wp-content/uploads/poc\\_rebuildandrepair\\_final.pdf](https://www.nvoad.org/wp-content/uploads/poc_rebuildandrepair_final.pdf)

**Included Form Templates:**

- 1) Estimate Request WUFOO Form
- 2) Construction Scope of Work and Estimate Packet
- 3) BDM Work Completion Agreement
- 4) BDM Scope of Work Change Order
- 5) Major Repair Agreement
- 6) MVLTRG Repair Assessment/Estimate Request Form
- 7) Homeowner Repair Agreement