

RURAL VOICES

HOPE AFTER DISASTER



RURAL RESILIENCE AND RECOVERY

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Dear Friends,

Wildfires, hurricanes, tornadoes and other disasters leave serious damage in their wake and can cause housing crises. No community is immune, but rural areas can experience greater challenges due to a lack of existing disaster recovery infrastructure and fewer local organizations with capacity. Low-income renters, the elderly or those with disabilities and many owners of manufactured homes are disproportionately affected because they lack the financial resources to recover.

This issue of *Rural Voices* magazine provides perspectives on disaster recovery contributed by entities ranging from local housing organizations to national lenders. They offer resources for affected families, lessons learned and policy solutions. Several of the articles agree that successful disaster recovery requires dedicated financial resources for the affected families and a coordinated effort between the local and federal governments, housing organizations and service providers.

Rural communities cannot control natural disasters, but they can prepare for them. Data can be used to calculate risk, insurance needs and even where structures should be built. With a plan in place, more easily accessible federal funds, and a community that works together, disaster recovery is possible.

HAC is able to share these stories and provide resources for recovery to affected rural communities with support from the Wells Fargo Foundation.

A stylized, handwritten signature in black ink, appearing to be 'Peter Carey'.

Peter Carey
Chair

A handwritten signature in black ink, reading 'Maria Luisa Mercado'.

Maria Luisa Mercado
President

A handwritten signature in black ink, reading 'David Lipsetz'.

David Lipsetz
Executive Director

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Iowa Flooding Shows Links between Disaster Recovery and Rural Housing



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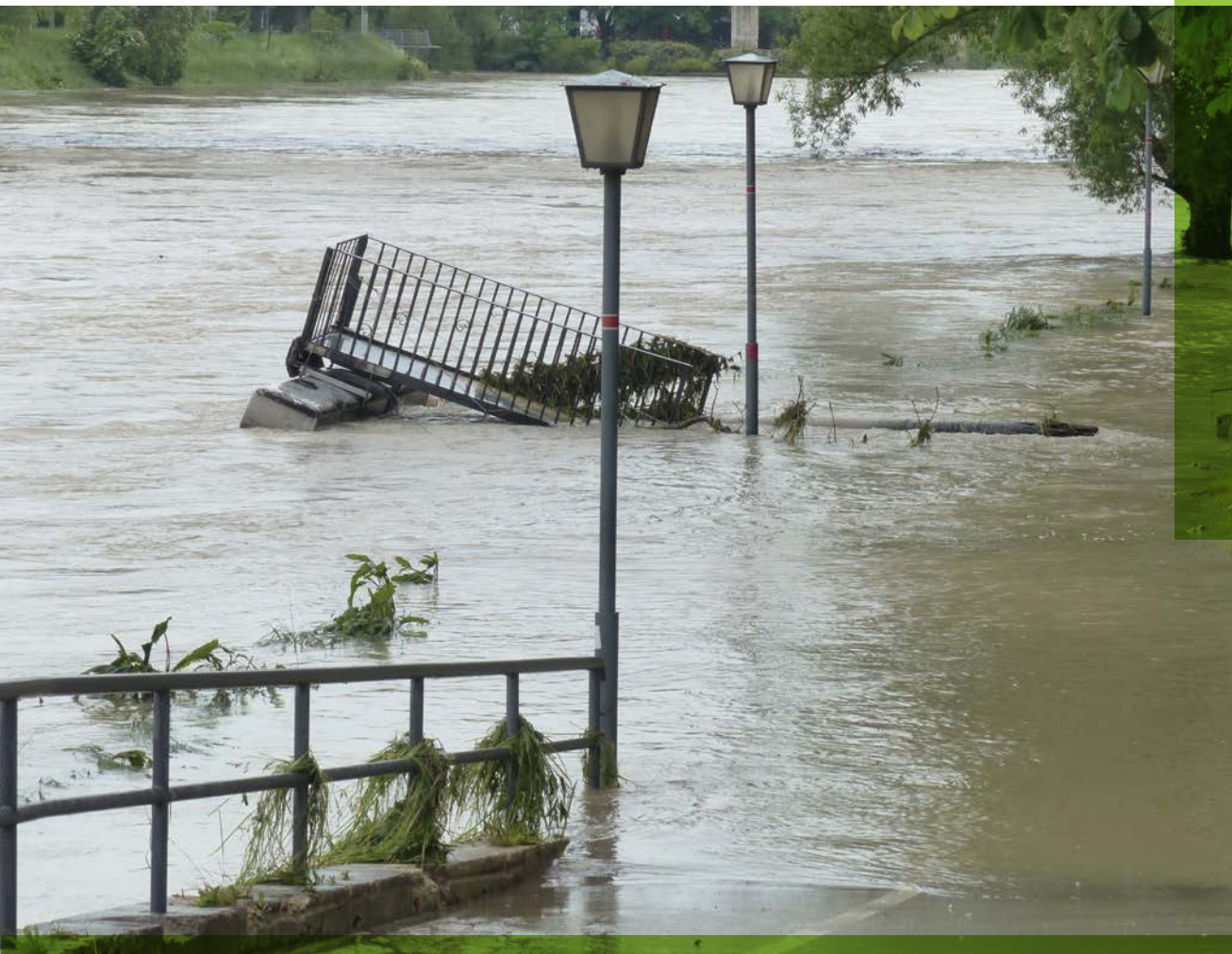
A View From Washington

Iowa Flooding Shows Links between Disaster Recovery and Rural Housing

Increased capacity and investment can help make disaster recovery successful.

By Representative Cindy Axne





This past March in Iowa and the Great Plains, record snowfall and freezing temperatures clogged waterways with ice. Rapid warming from March 12 to 14, along with rain from a “bomb cyclone” that swept across the Midwest, led to massive flooding and devastation along the Missouri River, including southwest Iowa. Towns like Hamburg and Pacific Junction were entirely underwater.

When I first toured the flood-damaged communities, the devastation was

heartbreaking. I worried about how these towns would rebuild. The flooding resulted in likely hundreds of millions, if not billions, of dollars in agricultural losses; destroyed homes, schools, small businesses and medical centers; and caused significant damage to public infrastructure that is vital to these communities. Rebuilding these communities will require ongoing support and resources. I’d like to share what I’ve seen in the six months since these floods.

Getting a federal disaster declared was merely the first step of many. That step authorized individual assistance from the Federal Emergency Management Agency (FEMA), allowing it to make direct payments to individuals who may need housing and other services. While that assistance was needed, it was not enough. The average payment is only \$8,500, which won’t cover the cost of rebuilding for families like the constituents in Pacific Junction whose house I helped muck out.



To make matters worse, over the last decade, FEMA has made it harder for residents of rural and smaller communities to receive individual assistance. From 1999 to 2008, more than half of disasters qualified for it. But, over the following decade, less than 30 percent met the requirements. This is emblematic of a larger shift in how America has handled disaster recovery. The process for distributing aid has become increasingly bureaucratic. Smaller communities are often unable to navigate the burdensome and complicated process necessary to access vital resources.

The lack of investment in rural housing over the last 25 years has made the recovery process even more difficult. After a natural disaster, FEMA utilizes local rental housing that has been unaffected. A dwindling supply of rental housing, due to a lack of investment, makes it difficult for FEMA to assist effectively with the recovery process. From 1974 to 1994 the U.S. Department of Agriculture financed more than 10,000 units of new Section 515 housing each year, reaching its peak in 1979 with 38,000 units. The number of new construction units funded has shrunk dramatically

The process for distributing aid has become increasingly bureaucratic. Smaller communities are often unable to navigate the burdensome and complicated process necessary to access vital resources.



since then and has remained at zero since 2012. An aging housing stock will only exacerbate this problem.

Additionally, local housing organizations have limited capacity and infrastructure to respond to a disaster. As Housing Assistance Council CEO David Lipsetz told me at a House Financial Services Committee hearing this April, “if you don’t take the time to build the capacity of local organizations to address disasters or the rural rental housing crisis or any of those things, then you’re not going to have boots on the ground to be able to respond in a time of need.”

Building that knowledge and capacity won’t happen overnight, but I’ve personally seen the need for it. I’ve heard from numerous constituents who say they’ve had difficulty accessing the resources that are available, whether because there is too much paperwork or simply not knowing

what’s out there. In addition, much of the funding can’t be distributed until levees have been rebuilt, for fear that the land would simply flood again. We’ve seen the difficulties that process can create firsthand with new flooding in September of this year.

For those reasons, many residents are faced with the impossible choice between relocating or rebuilding in their own community. Making this choice even more difficult, FEMA buyout assistance can cause a significant burden for rebuilding. Properties that FEMA buys out cannot be redeveloped, leaving towns like Pacific Junction with numerous vacant properties. Those empty lots put a town struggling to recover from devastating flooding at risk of never truly coming back.

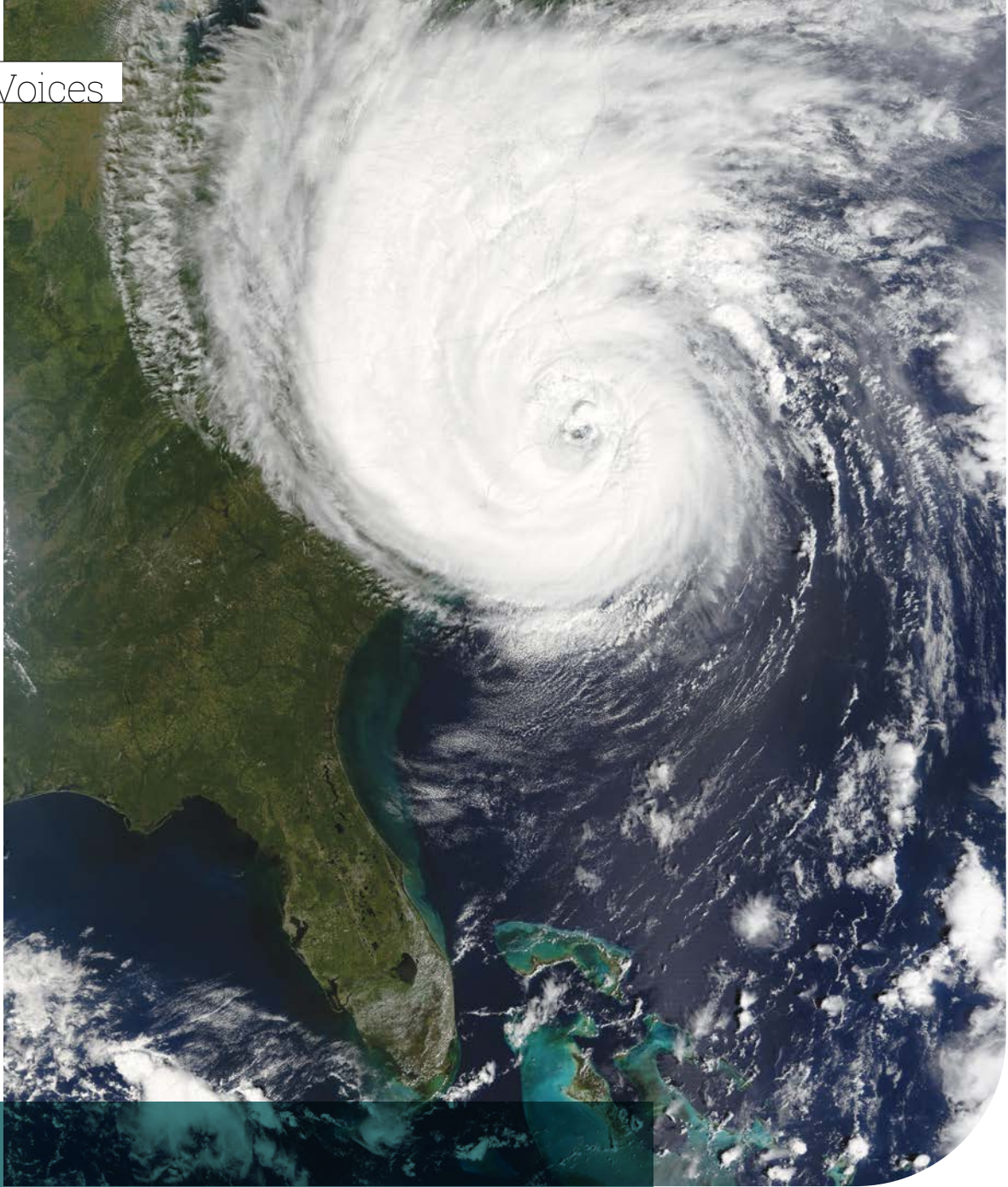
Congress and the executive branch need to ensure effective and efficient coordination with state and local officials, so resources actually reach those

who need it after a disaster. Building capacity with local groups in southwest Iowa is one of the key steps in that process, and HAC and other national groups serve a critical role in connecting those groups with those who have experienced similar disasters.

I will continue my work in Washington on ensuring that we don’t forget about the people who need our help. Distributing aid efficiently is only a part of that focus, but it’s one that I will continue to work on as southwest Iowa rebuilds.



Cindy Axne is the U.S. Representative for Iowa’s 3rd congressional district.



Rural Disasters: Preparedness, Response, Recovery

By Ilene J. Jacobs and Christina Davila

An equitable recovery is possible.

Rural communities often confront disasters with limited resources and capacity. They may have little ability to prepare formally for natural disasters and lack sufficient affordable housing inventory or the basic infrastructure or local capacity to recover. Many rural areas are resilient in spirit and local effort, but focusing on this resilience can overlook the needs and the challenges they face. Communities, especially those in poverty, often have the hardest path to recovery.

Rural challenges

Smaller communities are less likely to have disaster recovery expertise on staff or in the local area, so they have more difficulties finding their way through the bureaucracy that comes with disaster resources. Low-income residents' claims for disaster assistance are more likely to be denied by the Federal Emergency Management Agency (FEMA).

Rural areas face further disadvantage after a disaster because residents can be displaced far from home, have fewer transportation options to disaster recovery centers, and might not have internet or cellular service. There also is limited housing available for affected families to retreat to after a disaster because the affordable housing stock has diminished over the past 40 years.

Manufactured homes, whether sited in RV parks or located in other areas, are important sources of affordable homeownership for rural residents. They often are damaged or destroyed by natural disasters and face slow, if any recovery. Manufactured home parks lose not only homes, but also their supporting infrastructure, including water, waste disposal, electricity and roads.

Rural areas also tend to lack sufficient infrastructure and critical personnel, making their residents more vulnerable to the effects of natural disasters. Owners of manufactured homes, low-income renters, the elderly, those with

disabilities, and migrant farmworkers are often ill-equipped to deal with a natural disaster and are especially susceptible to a delayed recovery. Farmworkers, recent immigrants or families with mixed immigrant status can be confused about eligibility or discouraged from applying or fearful of backlash.

Excessive documentation requirements for assistance also disproportionately hurt these vulnerable groups. Low-income owners of manufactured homes, for example, might not have access to their titles or registration. Someone who is experiencing homelessness or is informally renting a garage or other unconventional housing might not readily be able to prove residence in a disaster-declared area.

Farmworkers and other low wage workers might work through a disaster without housing or in clean-up jobs without masks or other protective gear. They also might lose their employment and be displaced from their communities. Alternatives often are not available when their housing is destroyed. Temporary housing, if it is provided, trickles in very slowly and faces local siting barriers. Sometimes these units do not remain until recovery is complete. Community members can be displaced more than once.

Preparedness

The best way to avoid loss of life or property is being prepared before a disaster hits.

Important players like local governments and nonprofits must develop clear plans to respond and recover from a disaster. Disaster response can be rapid only if the local government already has reviewed and considered what it will do in terms of permitting, zoning, and demolition in the aftermath of a natural disaster.

The relatively low populations in rural communities make it even more important to build out their network. Developing and maintaining relationships with the local Voluntary Organizations Active in Disaster (VOAD) network and other local and statewide coalitions that respond to disasters is critical to avoid being left behind.

Another method of preparation is likely to be instituting stricter building codes that protect structures and reduce insurance and long-term costs. It can help to elevate buildings away from bodies of water to gird them against flooding, construct buildings with impact resistant windows to avoid damage from hurricane-force winds and keep defensible space around buildings to stop wildfires from spreading. Inclusionary zoning requirements are important as well, so that affordable residences are not concentrated in disaster-prone areas.

These extra requirements

and the additional upfront expenses will, however, make housing costs out of reach for low-income homeowners, renters and farmworkers in rural areas, where new modest housing already does not appraise out to the construction cost. It is essential to find or create dedicated, easily accessible funding sources to fill this gap for all parts of the affordable housing spectrum including homeownership units, affordable rental housing, infrastructure, mobile home parks, housing for vulnerable populations, shelters and temporary units. The goals, post-disaster, are immediate and long-term restoration of existing communities, rather than displacement and gentrification.

Response

Disaster response revolves around the strategic, tactical and operational objectives that define the decisions and actions needed promptly after a disaster. Urgent actions include evacuating people from immediate danger or ensuring they remain in safe reliable shelter with enough food and clean water. Temporary units for all segments of the community must be brought in quickly. People who were experiencing homelessness before the disaster must not be refused shelter and assistance.

Price gouging, rent gouging, evictions and foreclosures happen quickly. Protections and moratoria sometimes go into effect, but for only short periods of time, and only in disaster declared areas, not the surrounding communities where survivors must relocate. Legal protections should be instituted permanently, in all affected communities. They also should be easy to enforce.

The documentation requirements that affect vulnerable residents also should be addressed. Alternative systems and declarative statements should be developed, adopted and used to assist survivors in these and similar circumstances.

Recovery

Recovery from a disaster refers to the long-term adaptation a community makes. Preparedness for future disasters should be included in the recovery process, and the principles that apply to preparedness are important for long-term recovery. Recovering communities should provide a range of affordable housing options, both restoring pre-disaster units like manufactured home parks whenever possible and developing new, disaster-resistant affordable housing.

An important part of recovery is developing an inventory





of permanently affordable housing available and affordable to affected families. Mortgage assistance, disaster unemployment benefits, assistance with food and other expenses as well as crisis counseling are essential.

The federal Community Development Block Grant Disaster Recovery (CDBG-DR) program is important for recovery. Funds might not be available until well after the disaster, but once funding is released, nonprofits filling out CDBG-DR applications must be aware of the requirements, know where to locate data and documentation needed to catalogue damage and community impacts, and then have the capacity to do so. A required component of the CDBG-DR application is to make a clear link between the storm, damaged housing

units and a proposal to replace housing units. It is important to know where to find such data; these are a few resources:

- [National Climatic Data Center Storm Events Database](#)
- [National Weather Service Disaster Statistics](#)
- [FEMA Disaster Declarations](#)

The goal is for rural communities to be resilient, with the ability to withstand future disasters and adapt to or recover from hazards and come back stronger. We cannot control a natural disaster;

however, we can control how we prepare and respond. Data and analytics can help. Well-intended policies and practices sometimes have unintended consequences, but we want to limit these adverse effects. It is important to ensure that short-term and long-term disaster assistance and recovery are equitably distributed to all segments of the community regardless of income, race, ethnicity, immigration status or homelessness and that the elderly and people with disabilities are not omitted from the equation.

Ilene J. Jacobs is Director of Litigation, Advocacy and Training with California Rural Legal Assistance, Inc. and a member of HAC's board of directors and Christina Davila is a Research Associate with HAC.



The RAPIDO Model: Disaster Preparation to Improve Disaster Recovery

By Nick Mitchell-Bennett and Omar Hakeem

Texas nonprofit partnership develops innovative disaster recovery model.

We here in Brownsville, TX are residents of both the Gulf Coast of Texas and the poorest city in the United States. And we are tired of cleaning up after hurricanes. Storms and flooding happen so often, and with such great consequence, it sometimes feels like we are in constant recovery mode. Beyond being a persistent poverty region, the Rio Grande Valley is located in a low-lying, flood-prone area of communities with lax building codes and standards. The Rio Grande Valley is also home to over 1,500 colonias, where the median income is just \$28,928. In these unincorporated communities, 42 percent of the

population lives in poverty and 19.4 percent is near poverty. Natural disasters like hurricanes can and do destroy lives, making recovery almost impossible for many families.

Obstacles

After years of working to improve the disaster recovery system, we know firsthand that the current model needs a complete redesign. It is slow and inadequate in meeting the long-term housing needs of affected low-income residents across the country.



Here's why.

First, the transition from disaster response to housing recovery simply takes too long. Even once FEMA disaster response funds have been approved, they can only be used for 18 months — though many families require assistance for far longer than that. The lack of coordination between FEMA response funds and HUD housing recovery funds can delay getting the recovery funds to the families. The process is also frustratingly inefficient, as procurement and bidding for recovery projects can only begin *after* HUD recovery funds are released, adding months to the process.

Another hitch is that FEMA can only provide temporary housing, and what they do provide costs too much and is low quality. The resources allocated for FEMA to provide emergency and temporary housing are not leveraged to rehouse residents affected by a disaster. The

ineffective use of funding results in increasing costs associated with disasters and a reduction in the number of people that can be helped after a disaster. It can actually cost less to build a permanent home in the Rio Grande Valley (less than \$100,000) than it does to deliver and then dispose of a temporary FEMA trailer, which can cost up to \$115,000. That means that if these inefficient policies and regulations were changed, we could actually save money and set low-income families up with a new permanent home.

Our response and redesign

Families who experienced storms like Hurricane Dolly in 2008 know firsthand how broken the system is. Mismanagement of government contracts and underprepared disaster recovery management systems left many already at-risk families in the Rio Grande Valley struggling to recover years after the storm made landfall.

In response to the lagging recovery, in 2014, Community Development Corporation of Brownsville and buildingcommunityWORKSHOP worked in partnership with Texas Low Income Housing Information Service, Texas A&M University and two community organizing groups, LUPE and ARISE, to create and launch the RAPIDO disaster project. RAPIDO is a holistic housing recovery approach that allows Texas residents to return to their communities in days, not months, after federally declared disasters. RAPIDO creates a bottom-up, community-based approach that is centered on the families. The design process examines not only architectural issues but every level of the process, specifically the social, economic and political contexts that make up a disaster scenario.

The RAPIDO model sets out to rethink the current situation of disaster recovery housing with certain goals in mind:

1. Expedite the housing recovery process through “precovery,” or pre-disaster planning and coordination.
2. Streamline the process for all applicants to ensure families go back home as soon as possible.
3. Promote choice, whether to stay or go.
4. Strengthen local control in implementing the program.
5. Execute a comprehensive temporary-to-permanent rehousing solution.
6. Reduce the cost and waste associated with current temporary housing solutions.
7. Maximize the benefits of pre-disaster planning to both reduce risk of damage and achieve faster and more equitable rehousing.



RAPIDO integrated several key systems, including community outreach, case management, housing design and construction, labor recruitment and policy when developing its approach to disaster housing recovery. By approaching recovery with a temporary-to-permanent solution, RAPIDO can provide housing immediately after a disaster hits. A temporary CORE accessory dwelling unit is deployed to a family's property within weeks of the disaster. This unit can be expanded into a permanent home through a system of custom designed additions, resulting in a permanent home within months, not years. The RAPIDO model of rebuilding speeds up construction time, reduces

the duration of displacement, lowers recovery costs and delivers higher quality housing.

Outcomes

While piloting the program, we got to see how RAPIDO might work firsthand and work out some kinks, too. As an example, imagine Esmerelda and her family are residents of the Rio Grande Valley who live in a small house in a colonia. They built their modest home themselves, gradually adding onto it as time and finances allowed. Because they live in a floodplain, they regularly experience standing water and related issues after even minor rains — so when disaster hits, their home is almost completely devastated.

If RAPIDO were in place, Esmerelda and her husband would meet with a *Navigator*, whose role is to connect the family to appropriate disaster recovery social services in the days after the storm. They would describe their housing needs, which could range from temporary shelter on their land while small repairs are made, to a complete reconstruction of the house. Then a CORE unit would be delivered to them based on their needs. If Esmerelda's home were completely destroyed, they would choose from a catalog of pre-designed home expansions, which would allow them to add onto their permanent home at a pace that makes sense for them.



All this would be possible because their community would have already had a recovery plan in place that included housing designs and a list of pre-approved contractors that could get to work quickly after the storm. Then, once the community began to recover, instead of FEMA trailers being removed and disposed of, families would begin to expand their (now permanent) homes.

Throughout the entire recovery process, Esmerelda and her family would continue to meet with their *Navigator* until the family and community have completely recovered.

Conclusion

The current disaster recovery mode needs a total overhaul in order to work for everyone. RAPIDO imagines a system that not only fixes the current system but also leaves low-income communities better off and more resilient for the next disaster. The RAPIDO team learned that merging temporary and permanent funds saves money and houses

more people, and utilizing a precovery model builds the local economy and empowers people in the community.

You can read more about RAPIDO, watch our video, and read our manual for designing your own local RAPIDO precovery system at <http://www.rapidorecovery.org/>

Nick Mitchell-Bennett is Executive Director of Community Development Corporation of Brownsville and Omar Hakeem is Design Director at buildingcommunityWORKSHOP.

Providing Resources and Stability for Disaster Recovery

By Connie Wright

Wells Fargo accelerates recovery for customers with Mobile Response Unit.

April, Neal and Arianna Williams with Wells Fargo team members Cathy Yann, Liz Ruiz, Bailee Schultz and Steve Porter at the Mobile Response Unit in Wilmington, NC. Wells Fargo helped the family claim insurance checks and pay off their mortgage after the hurricane.





Hunkered down in a small brick church being battered by Hurricane Florence's 100 mph-plus winds and rain, [Neal and April Williams](#) looked with dread at the images on their cellphones of the home they had evacuated. Their daughter, Arianna, age three, played nearby, unaware of the havoc the storm was causing.

Neal Williams's dad had captured photos of the Lockwood Folly River swelling as it threateningly seeped toward their home a few miles

away in Bolivia, NC, population 152. Not long after the rising waters reached the home's windows, the pictures stopped coming as Williams's dad was forced to evacuate his own home.

"We realized then we were losing everything, and our house was probably going to be a total loss," Williams said. "When we were able to go back about a week and a half later, it turned out it was."



Disaster council making a difference

With several natural disasters striking each year, including Hurricane Dorian and Tropical Depression Imelda this summer, stories like this are becoming all too common. We at Wells Fargo have seen the impact these storms have on communities, where people can end up living in FEMA housing after a disaster for several weeks or even years because they cannot fund home repairs. As disaster response, recovery

and resiliency all continued rising to the top of many conversations between Wells Fargo and our nonprofit partners, we identified disaster relief as a critical need. As a result, in 2018 we established a disaster council in collaboration with a dozen organizations — including HAC — that supports both rural and urban disaster response and recovery efforts. To address communication strategies, we have provided funding to the National Low Income Housing Coalition to support its *Disaster Housing*

Recovery Coalition initiative and to HAC to support its resource guide, *Picking Up the Pieces*. We have financially supported the nonprofit Operation Tiny Home, so it can provide down payment assistance to veterans. We have also worked with Rebuilding Together to establish a disaster capacity fund for its members. All of these efforts have partially, if not exclusively, benefitted rural communities. While we contribute funding each year to some of the best-known leaders in the disaster space, including the American

Red Cross, Habitat for Humanity and Team Rubicon, Wells Fargo looks to be more strategic and responsive to address disasters. By leveraging key stakeholders' external partnerships, we are better positioned to be proactive instead of reactive. We focus on supporting innovative resilient housing and important policy work to eliminate barriers that might otherwise prohibit disaster victims from accessing federal and local resources in a timely manner. Collectively, the council brings to bear support for urban and rural areas, a sense of scale, thought leadership in the policy and advocacy space, and affordable housing development on the finance and construction front.

Building nonprofits' capacity for disaster assistance

Wells Fargo is fully committed to exploring and investing in all assistance options that will help customers and communities expedite the repair and recovery process after a disaster.

Since 2014, Wells Fargo has donated \$22.5 million to the American Red Cross and local nonprofits in support of disaster assistance. Since 2007, Wells Fargo customers have made ATM donations totaling more than \$9.1 million to help the American Red Cross and local nonprofits provide food,

clothing and other assistance. We also place disaster-trained specialists in bank locations to assist impacted customers. To date, Wells Fargo has deployed over 700 team members to assist disaster-impacted customers with recovery relief efforts in response to 25 disasters.

We offer a unique disaster recovery service called the Wells Fargo Mobile Response Unit (MRU). The MRU is a 75-foot commercial "office on wheels" designed to help with the recovery process. Aboard the MRU, Wells Fargo team members offer many services: endorsing insurance checks for Wells Fargo mortgages; explaining next steps in the property damage process; waiving certain fees on auto loans, credit cards, personal loans, lines of credit and other disaster relief services; and discussing options for longer-term assistance. To date, the MRU has been deployed to 23 disasters, traveled more than 27,000 miles, and helped over 10,000 customers.

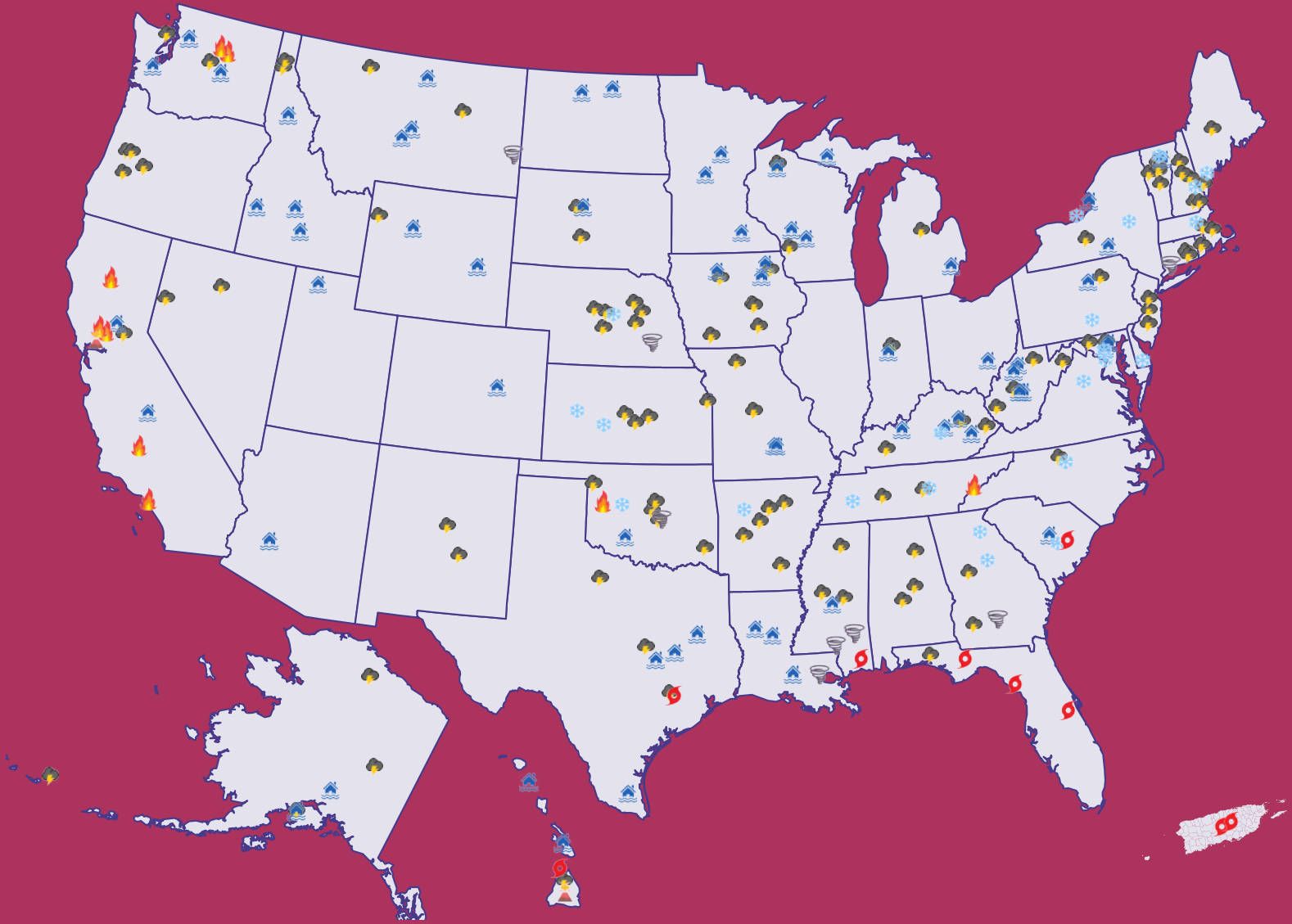
Shortly after Hurricane Florence made landfall, and about the time Neal Williams realized his home was gone, he also thought about his pending mortgage payment. As if on cue, he noticed a Wells Fargo CARE team email on his phone that told him not to worry. Help was on the way, including a 90-day moratorium on the mortgage payment now due on his flooded house. Ultimately, Wells Fargo helped the family get \$52,000 in insurance checks endorsed, which was enough to pay off their mortgage and give the family a fresh start.

While disasters present challenges, we believe that we will only be as successful as the communities we serve. We will continue working together with community stakeholders to accelerate the ability of families and communities to recover from disasters.

Connie Wright is Senior Vice President of Housing Philanthropy at Wells Fargo Foundation and a member of HAC's Board of Directors.

IMPACTS OF NATURAL DISASTERS

MAJOR DISASTER DECLARATIONS (2014-2018)



Major Disaster Declarations



Flooding



Severe Storm



Snow/Ice Storm



Hurricane



Tornado



Fire



Volcano-Earthquake

Source: HAC tabulation of FEMA disaster declaration data.

FELT FAR AND WIDE

372 rural counties declared disaster areas in **2018**, home to more than **9 million people**.

Source: HAC tabulation of FEMA disaster declaration data.

BILLION DOLLAR DISASTERS

13

OCCUR NATIONWIDE ANNUALLY

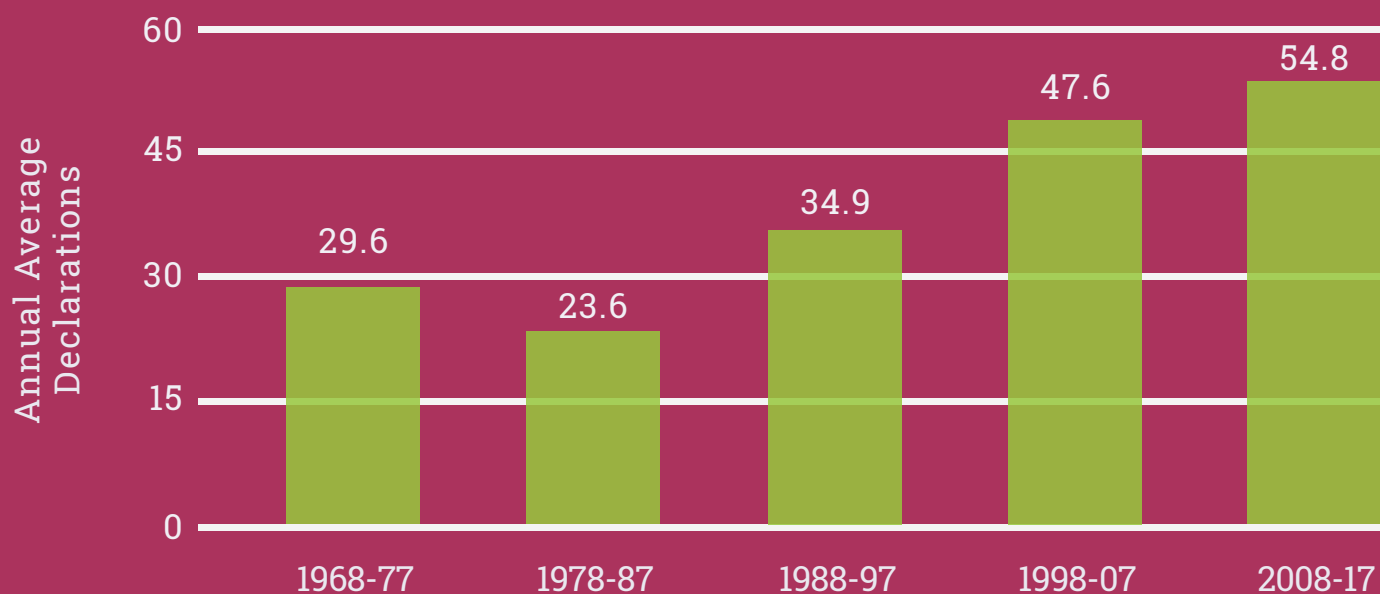
Annual average 2014-2018

54% of losses ARE DUE TO HURRICANES

1980-2018

Source: <https://www.globalchange.gov/browse/indicators/billion-dollar-disasters>

DISASTERS ARE HAPPENING MORE OFTEN



Source: HAC tabulation of FEMA disaster declaration data.

Risk Models can Improve Rural Disaster Preparation

By Howard A. Kunst

Wildfire and flooding impacts can be minimized using risk models.

Most areas across the country are subject to one or more natural catastrophe perils and rural areas are no exception. Flood, wildfire, hail and wind can and do affect these communities and result in devastating property damage and tragic loss of life, especially if a community and its residents are unprepared.

Only some high-risk areas of the country require insurance, but natural catastrophes can strike anywhere (p. 20). Hurricane Harvey (2017) and Hurricane Florence (2018) both demonstrated how low risk areas can be affected. Hurricane Harvey, a Category 4 storm, made landfall off the coast of San Jose Island, TX, then traversed the state and stalled over Houston, dumping

torrential rain and causing major flooding. CoreLogic analysis showed that approximately 70 percent of the homes with flood damage were uninsured.

Hurricane Florence was much the same. The storm made landfall just south of Wrightsville Beach, NC, as a powerful Category 1 hurricane. Days of rain caused widespread flooding, and CoreLogic analysis showed that approximately 85 percent of the homes with flood damage were uninsured.

Most of the uninsured areas impacted by these hurricane-induced floods were classified as low risk. Flood events are not the only ones affecting low-risk areas. The catastrophic 2017 wildfires





in northern California, especially the Tubbs Fire near Santa Rosa, affected many homes at low risk of wildfire.

Just as property insurers use natural catastrophe models to assess both the frequency and potential severity of events, community officials should be able to determine expected damages in advance. Risk models can help identify those events that could result in the greatest damage and cause the highest frequency of damage. For instance, flood risk models can be used to help understand the varying levels and types of flood risk, how they differ across an area, and how flooding may impact evacuation routes. Evacuation routes for all hazards must be developed with a thorough

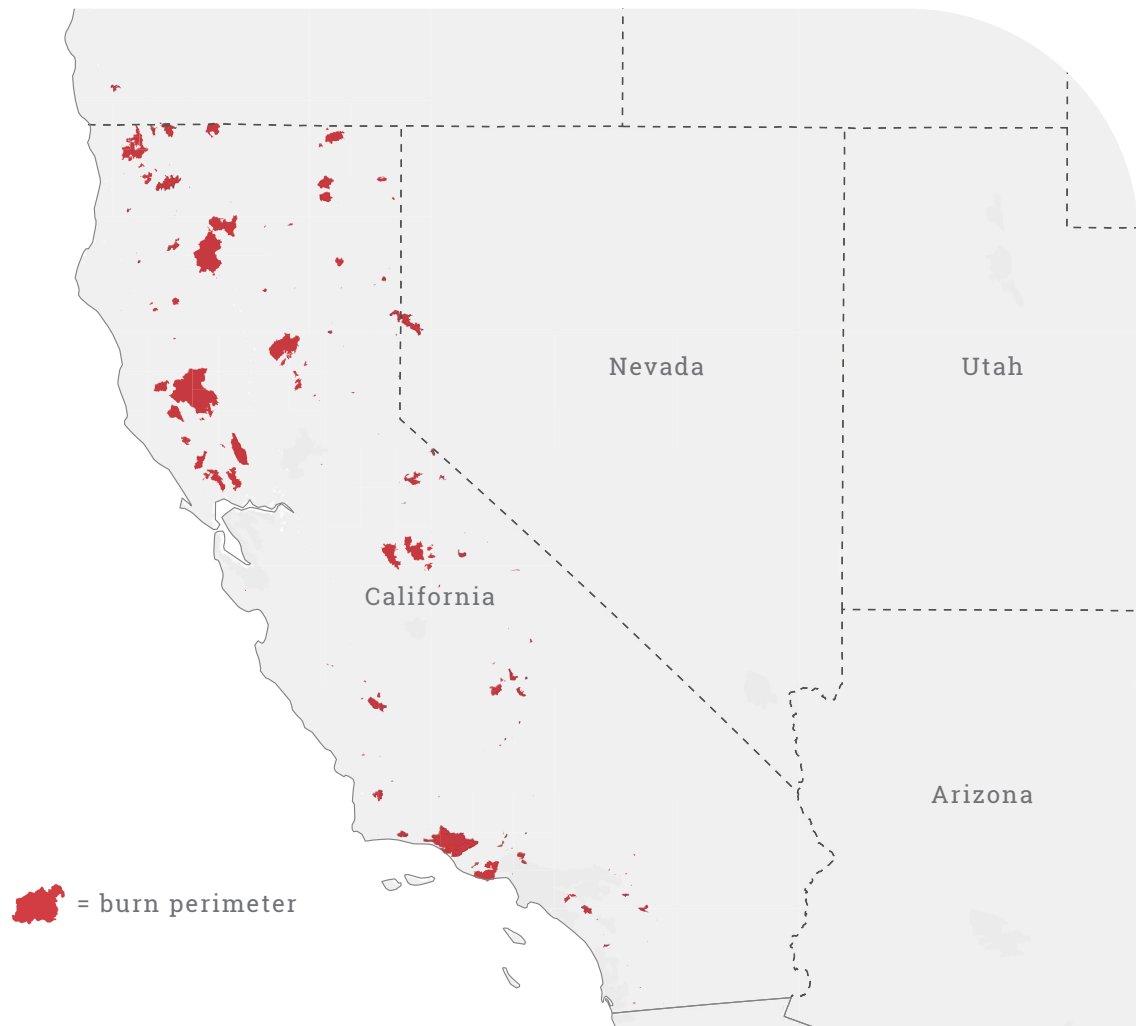
understanding of the areas that have the highest frequency of damage so that those areas can be avoided if possible.

In short, locations outside of the traditional high-risk areas are still susceptible to natural catastrophes, so understanding the risk is imperative to accelerating recovery.

Wildfires

In 2018 alone, nearly nine million acres burned across the United States, an area roughly equivalent to the land mass of 74 of the largest cities combined. Wildfire is unique in that the level of damage is often binary – homes

CALIFORNIA WILDFIRES, 2017 & 2018



either emerge unscathed or are destroyed. Therefore, understanding wildfire risk is valuable in preparing for this frequent and costly hazard.

Wildfire mitigation and preparedness best practices do not differ much between urban and rural communities. The most important thing that property owners can do to help decrease their risk of structural damage from wildfires is creating defensible space. This buffer area surrounding

a structure should go beyond fences and decks and be free of combustible material like vegetation, which could cause fire to more quickly spread to homes or other larger structures. Since rural communities tend to be closer to high-risk vegetation than their urban counterparts, maintaining defensible space is often more important in rural areas. Lot size also needs to be considered as smaller lots have different risk

considerations than larger lots. Smaller lots are limited in their ability to move the risk farther away from the home, whereas homeowners with larger lots are often able to create defensible space of 100 feet or more from the structure.

Structural mitigation can also significantly reduce the level of damage to homes. Building or remodeling structures (roofs, siding, decks and fences) with non-combustible materials, keeping eaves free of leaves, and putting mesh screens on vents to protect embers from entering are a few examples of worthwhile efforts that have been proven to significantly reduce the amount of structural damage from wildfire.

While individual homeowners can help reduce damage to their property from wildfires, it is even better when the entire community creates effective defensible space and uses structural mitigation measures. When neighboring lots do not create their own defensible space, this can diminish the impact of adjacent or nearby mitigation efforts.

Flooding

Another common and frequent natural catastrophe that affects rural communities is flooding. Flooding is the most common natural disaster in the United States, costing billions of dollars.

Many cities and rural communities are developed near water, as rivers have

been a major source of transportation for goods and services historically. Quite often, the flatlands where these towns were built exist because the erosion from floods over millions of years have evened the terrain, making it easy to build. As a result, it is not surprising that many rural communities have significant exposure to flooding. Most of these communities are aware to a certain extent of their flood risk, but many can significantly improve their preparedness and mitigation efforts.

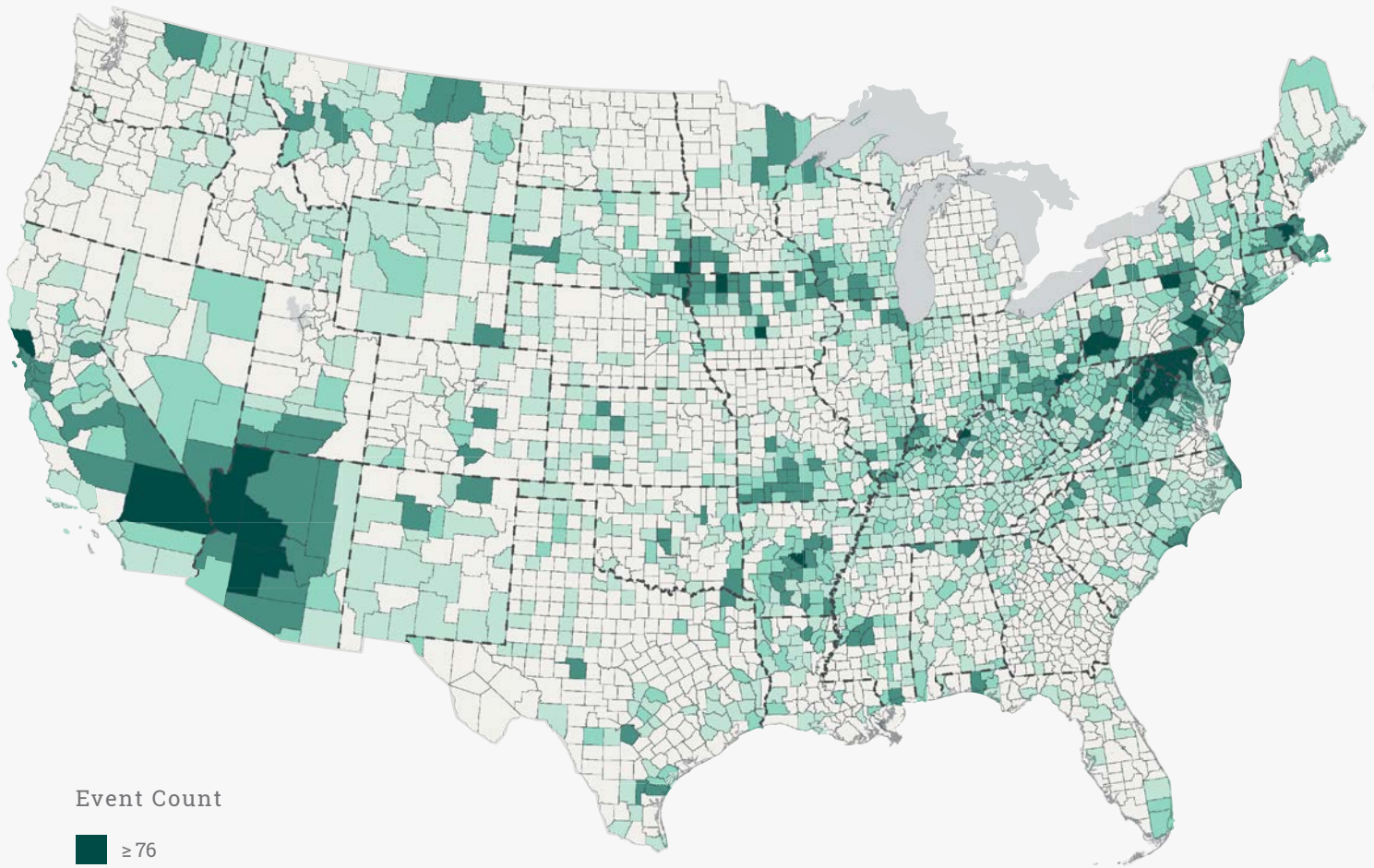
CoreLogic analysis of Federal Emergency Management Agency (FEMA) and National Flood Insurance Program (NFIP) loss statistics* found that rural residents have more flood claims, proportionally, compared to urban residents. For the purposes of this breakdown, CoreLogic defined a county as rural if it had a population of 100,000 or fewer. While the analysis found that 19.5 percent of the U.S. population lives in rural counties, these same areas account for 23.5 percent of all NFIP claims. Rural homeowners are also 24 percent more likely to file a claim than urban homeowners.

What can rural communities do to minimize the impact of flood damage? After excessive rainfall, water overflowing from rivers and streams can be controlled with flood walls and a catchment area in which it can flow. Dams can regulate the flow of water by controlled

For homeowners, the best preventative measures to minimize the frequency and severity of flooding's effects would be increasing the distance and elevation of the home from the water.

*Data is limited to people who have purchased NFIP flood insurance.

NATIONAL FLOOD EVENT DISTRIBUTION BY COUNTY, 2018



Event Count

- ≥ 76
- ≥ 20
- ≥ 5
- ≥ 2
- 0

Source: CoreLogic

releasing of excessive water to areas downstream. Localized flood events, mostly flash floods, can be much harder to control and mitigate due to the more variable nature of rainfall.

For homeowners, the best preventative measures to minimize the frequency and severity of flooding's effects would be increasing the distance and elevation of the home from the water. This would include building structures outside high-risk areas— especially those within a 100-year FEMA Special Flood Hazard Area (SFHA).

Officials in rural communities must encourage homeowners to purchase flood insurance and fight for the limited resources that can be used to mitigate flood risk.

How risk models can help

Rural communities are exposed to more than just wildfire and floods; other natural catastrophes include hail and windstorms, hurricanes and earthquakes. Regardless of the catastrophe, mitigation and preparedness is essential

to offset the impact of the hazards. Building codes have been developed across the entire U.S. to help make up for the risk from these perils. These building codes have been informed by extensive research on the methods and materials that most reduce risk and help quantify the reduction of loss. Natural catastrophe models are available for all hazards. They can be used to help communities assess their risk and provide guidance on the impact of mitigation, at both an individual and a community level.

The models combine the science underlying the various hazards (how often an event occurs and the varying severities) with the vulnerability of homes and businesses in the face of a catastrophe. CoreLogic models perform 300,000 simulations of what could happen in the next year, and this provides an understanding of the wide variation of outcomes that could occur. With these insights in hand, model users are better able to prepare for the scenarios that have the largest potential damage.

Resident safety depends on following predetermined evacuation routes that are designed to efficiently move people away from those areas most likely to be affected. Natural catastrophe models do a great job of providing insights that help to develop the best evacuation routes. Regardless of the hazard, it is imperative to be prepared, know where the risk is and mitigate appropriately to minimize property loss and keep families as safe as possible.

Once you understand that there is actual risk in an area, the next step is for individuals and communities to do everything possible to be prepared. Again, the best preparation depends on having completed proper risk management reviews and catastrophe models are a great starting point to know your risk and accelerate your recovery.

Howard A. Kunst, FCAS, MAAA, CCRMP is Chief Actuary of Science and Analytics at CoreLogic.

Paradise Lost: Impacts Extend Beyond the Disaster Area

By Karl Ory

A northern California wildfire offers lessons learned.

Last November 8, sparks from a utility line were fanned into a firestorm that engulfed 153,000 acres and burned 13,000 houses in the communities of Paradise, Concow, Magalia and Butte Creek Canyon in Butte County, CA. It was the state's largest disaster since the 1906 San Francisco earthquake. Residents fled, but 85 didn't make it. As the smoke covered northern California for weeks, residents of Sacramento and San Francisco donned masks and breathed Paradise smoke.

This is a story of Paradise and environs, but it is also a story of cities like Chico and Oroville, some 20 miles away. The Camp Fire (named after Camp Road) has spawned new organizations and expanded missions for existing groups. It

has spurred an examination of state and federal preparedness, including funding to deal with this disaster and the likelihood of future disasters.

From early shelter to temporary homes

The immediate response to the Camp Fire was chaotic. As 52,000 people evacuated throughout the day on November 8, the Red Cross and others set up shelters in churches and at fairgrounds. Parking lots at Walmart and a closed Toys“R”Us store housed hundreds of tents, recreational vehicles (RVs) and pop-up distribution canopies. These facilities took in about 1,500 people. Thousands more went to the homes of family and friends, and to all the motels within 60 miles.





Many residents of Chico and Oroville hosted evacuees, often strangers. Food, clothing and other assistance poured in from all over the state, creating a logistical nightmare.

The Federal Emergency Management Agency (FEMA) and other government agencies established a disaster recovery center in a vacant Sears building in Chico. Eventually 22,000 people registered for temporary financial help; \$82 million was given out in housing and other assistance. About 600 motel vouchers were issued. The Small Business

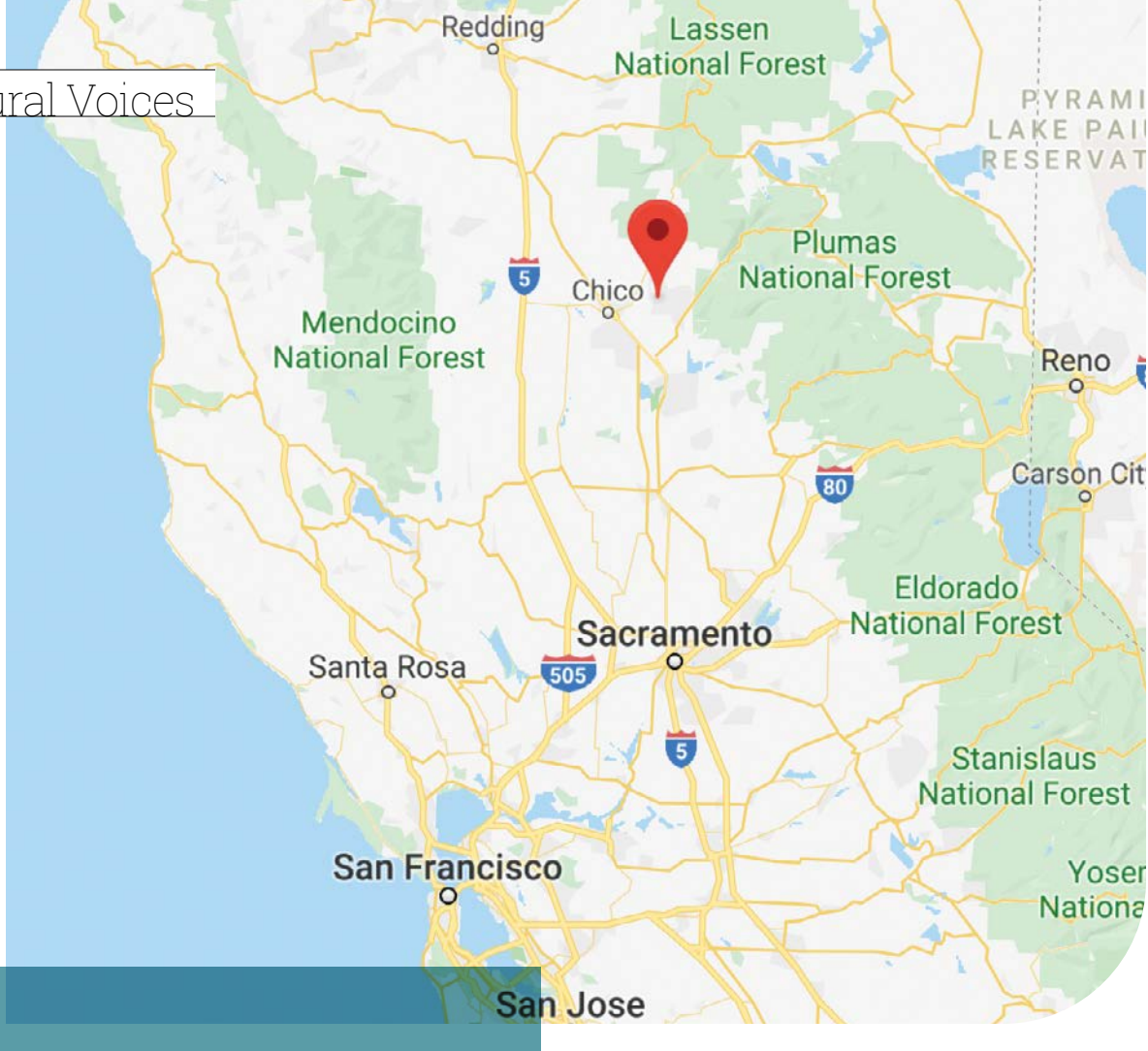
Administration has made 3,400 home loans. Private insurance companies are handling innumerable claims.

FEMA tried to negotiate with local property owners in Chico to provide sites for Mobile Housing Units (MHUs) but had to settle for 400 MHUs at the fairgrounds in Gridley (45 miles away), and an 83-unit site in Chico. FEMA has also leased 358 pads in commercial parks for travel trailers.

Nine months after the disaster, some 19,000 evacuees live in Chico, a significant increase

to the pre-fire population of 95,000. Thousands more have relocated, perhaps temporarily, to the nearby city of Oroville and the smaller communities of Orland, Gridley and Corning. Additional thousands have dispersed across the United States, giving up any hope of returning home.

Paradise and other communities in the “burn area” are striving to rebuild. An estimated 3.4 million tons of debris have been removed. The town of Paradise expects 500 building permits to be issued this year. Melted water lines,



jacked-up insurance and a shortage of labor and materials are daily obstacles, however. Paradise's town manager states that it may never be the affordable enclave that it once was, but it promises to be the "most resilient" city in America.

Impacts beyond the burn area

State and federal assistance is often limited to burn areas and not available to nearby impacted communities. In Chico the secondary impact includes displaced renters,

skyrocketing home prices and increased traffic and crime. Among its efforts to mitigate the effects, the city adopted an emergency ordinance against price gouging, including rents, holding all increases to 10 percent. Another emergency law allows "temporary dwelling units" such as RVs.

Around the time of the disaster, the state adopted new mandates to allow accessory dwelling units (ADUs) – smaller, secondary units on existing lots – without requirements for sewer and water fees or infrastructure

improvements. In response to the disaster, Chico also reduced impact fees and eliminated its requirement that one of the units on a lot with an ADU be owner occupied. At least 80 new ADUs are expected this year in Chico.

Throughout the period since the fire, the mix of pre-disaster homeless residents of the area and evacuees has caused tension. Prior to the fire, Chico had about 800 homeless people, and a housing vacancy rate of about 1 percent. As the shelters emptied, many of those remaining were not those

who had been displaced by the Camp Fire, but those who had been homeless and were now in more dire situations than before the disaster because affordable housing had become even more scarce.

Challenges to rebuilding

Paradise was once primarily a retirement destination but had evolved, as Chico's housing supply tightened, to become an affordable bedroom community. A few years before the fire, the local nonprofit housing organization, Community Housing Improvement Program (CHIP), built a 36-unit rental project in Paradise called Paradise Community Village, partly with funds from the federal Low Income Housing Tax Credit program. It was destroyed in the fire. CHIP Executive Director Seana O'Shaughnessy

faces multiple issues to rebuild.

"We struggle with insurance, determining a realistic cost to rebuild, assessing infrastructure issues such as water, the timing of debris removal, and being able to secure subcontractors in a timely manner," O'Shaughnessy notes. "The bureaucracy of FEMA's programs may cause delays, confusion, and more questions."

The loss of a tax credit property and the entire surrounding community is unprecedented, O'Shaughnessy says. She explains the federal regulations that require a destroyed property to be rebuilt and leased up within 24 months are impossible to meet. CHIP has requested an extension from the Treasury Department, which runs the program, to allow 48 months from the time

of the disaster for rebuilding, but is still waiting for a decision. "These unknowns are the greatest challenge we are facing," O'Shaughnessy says.

In the meantime, CHIP is helping meet the area's housing needs in other ways. It operates a mutual self-help housing program – USDA's Section 523 funds CHIP to organize and assist low-income homebuyers who help build their own homes and those of their neighbors, reducing costs to affordable levels by contributing "sweat equity" – that is building dozens of houses in outlying communities. CHIP also has plans for a new senior apartment complex in Chico.

The availability of additional funds for rebuilding in Paradise itself was complicated by the town's size. Before the fire, the town's population was about 26,000 so it was not eligible for





assistance from USDA's Rural Development (RD) programs. After the fire, the population was in the hundreds and it may never fully recover. A provision in federal legislation authorized California Governor Gavin Newsom to determine the area's RD eligibility, and in July he certified Paradise and adjacent unincorporated areas as eligible for RD programs including community facilities grants and loans, and direct and guaranteed mortgages.

Planning for recovery and future disasters

California's strong state housing coalitions, such as the California Coalition for Rural

Housing (CCRH), encouraged state agencies to provide dedicated funds for recovery from the Camp Fire and to prioritize existing funds for disaster-impacted areas. CCRH urged the California legislature to approve funds for a disaster housing relief and recovery block grant to enable local governments and nonprofit organizations to respond quickly and nimbly to meet a variety of housing needs. While these funds were not appropriated for 2019-20, \$50 million was approved for statewide emergency preparedness and local grants. An additional \$31 million will backfill property tax losses to local government.

The Community Development Block Grant Disaster Relief program is a major source of federal housing assistance after disasters, but funds often are not appropriated and allocated until years after the disaster. California advocates will continue to push for ways to prefund similar assistance in advance of federal allocations.

Some entities that want to provide post-disaster aid "often offer it on their own terms and it may not be what the locals need or want or at the time it is needed and wanted," says David Ferrier, who was CHIP's Executive Director for decades and is now Housing Director for

Rural Community Assistance Corporation, an intermediary that helps rural communities throughout the western United States. Organizations offering technical assistance need to be “respectful of the locals’ time and energy,” Ferrier says, and should try to help in the least obtrusive manner possible. One successful effort after the Camp Fire was a community meeting hosted by the San Francisco Federal Reserve and Morgan Stanley, which included representatives from community development financial institutions, banks, insurance companies, federal and state agencies, as well as representatives from surrounding local government, to plan how to meet the financial needs of those impacted.

Coalitions can be very useful, as those in the Paradise area have learned. Early in the recovery efforts nonprofits, volunteers, churches and the private sector met to

coordinate their responses to shelter, food, clothing and medical needs. Out of this grew a formal organization, the Long Term Recovery Group, Inc. (LTRG). With funding from Chico’s North Valley Community Foundation and the Red Cross, LTRG is focusing on “recovering from physical and emotional trauma” and “rebuilding a healthy and thriving community,” including housing assistance and counseling. CHIP is one of the many LTRG participants.

Based on their experience, responders around Paradise recommend that to prepare for disasters, rural community-based organizations should network with emergency response groups such as the Red Cross and county agencies. The Red Cross has regional advisory groups in many areas. It also has “blue sky” programs that encourage emergency planning in schools, and neighborhood drives to install fire alarms in homes.

Amanda Ree, Executive Director of the Northeast California Red Cross at the time of the Camp Fire, notes that “beyond the numerous shelters the Red Cross operated and supported, we also provided meals, comfort and emotional and spiritual support to thousands of affected families and individuals.” Now, in the recovery, she says the Red Cross is distributing millions of dollars in individual financial assistance and is working to deploy grants to local organizations active in supporting community recovery.

It is clear that disasters are occurring more often and with greater severity. As essential as evacuation plans are, readiness must include more vigilant and robust state and federal responses. Lessons learned in Paradise help show what those responses could include.

Some entities that want to provide post-disaster aid “often offer it on their own terms and it may not be what the locals need or want or at the time it is needed and wanted.”

Karl Ory is a member of the Chico City Council and former director of HAC’s Western Regional Office.

Driving Change in Disaster Recovery

By Timothy Carpenter

GSE improves program to serve disaster-affected families.

According to a recent poll conducted by [The Harris Poll](#) on behalf of Project Porchlight, nearly 60 percent of American adults have experienced a natural disaster and over 70 percent of those experienced a financial burden as a result. While there are numerous studies to cite about the impacts of disaster, I don't think numbers tell the whole story. The real impact is also personal and emotional — and measured in the way people and communities respond, adapt and rebuild. Our work at Fannie Mae is focused on these broader effects of disaster.

Working together is key

We've all seen headlines that warn of stronger hurricanes and wildfires than ever before, but we hear very few stories of disaster-impacted communities coming together to rebuild. I know first-hand that when folks who are impacted by a natural disaster decide to stay in the community and come together, plan together, and work together, they can rebuild a more resilient community than before.





My family lost our home to Hurricane Camille back in 1969. We lived in a small city with a population of around 5,000 who all came together to rebuild the community they loved. Much later in life, while living in a rural town just outside of New Orleans, I again saw neighbors and strangers step up to help my family and others in the community after Hurricane Katrina.

While it's inspiring to see impacted people come together, disaster recovery and rebuilding is far from perfect in this country, or anywhere else for that matter. Maneuvering insurance and government programs created to help with rebuilding is often cumbersome, slow and very confusing to the people who need help the most. And many communities are not equipped with the resources or

infrastructure to help them get back on their feet quickly. That is why it is so important for everyone to know that there are new resources for individuals impacted by disaster.

Resources for affected families

In 2017 after Hurricanes Harvey, Irma and Maria and before the California wildfires, Fannie Mae decided that in order to help individuals

and communities rebuild, we needed to change our approach. Our decision wasn't just driven by the loans we owned in a given market — it was about taking a holistic approach to recovery that benefits everyone, informed by a better understanding of local challenges. As a result, Fannie Mae created a dedicated team to work in disaster-impacted communities. Our Disaster Response & Rebuild team has taken a nationwide approach, working with affected communities from Houston, TX to Santa Rosa, CA and from San Juan, PR to Jayuya, PR.

During our initial work, we learned that mortgage guidelines and products designed to help people in crisis did not always work well — especially if 90 percent of the town was destroyed. We knew we had to think outside the box, so we launched Fannie Mae's Disaster Response Network™, a nationwide source of free support for eligible homeowners. HUD-approved housing counselors help these homeowners develop personalized recovery plans, file claims and work

with mortgage servicers on relief options, and then provide ongoing assistance, check-ins and online resources.

We found that payment forbearance, which allows a homeowner to reduce or forgo their mortgage payments for a fixed amount of time, is a great option, but that catching up on payments is not always easy. We made it easier by offering loan modifications that extend the loan term to keep monthly payments similar to the pre-disaster amount. The concept is so simple, yet it gives homeowners an easier path to repairing and rebuilding. In fact, 97 percent of our loans in Hurricane Harvey-impacted areas that were modified in this way are still keeping up with their payments.

In Paradise, CA, the cost of the average home before the devastating wildfires was approximately \$272,000 according to data published by Redfin. Yet the estimates to replace a destroyed home can be as high as twice the pre-wildfire sales price. Even with insurance proceeds, impacted homeowners are finding

gaps in the amount needed to replace their homes of around 40 percent of their total construction cost. According to United Policyholders, a nonprofit focused on providing consumers information on insurance, two out of every three homes in the U.S. do not have enough insurance to rebuild in the event of a total loss. Fannie Mae wanted to make a difference and started working with the community to create the Paradise Home Plan Library with pre-approved and locally created home plans that residents can use to save thousands of dollars per home. Group builds, where one builder





constructs several homes to save time and construction costs, are now underway.

These are just some of the examples that are working, and they succeed because the people who plan to rebuild and live in communities impacted by a natural disaster are talking and working together. When that happens, Fannie Mae wants to be there to help.

Communities big and small do not recover from a natural disaster overnight — it takes years of hard work and individuals pulling together. If you or anyone you know in your community has been impacted by a natural disaster, please visit <https://www.knowyouroptions.com/relief> to access information about the Disaster Response Network.

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Timothy Carpenter is Director of Disaster Response and Rebuild at Fannie Mae.



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HAC FACTS

HAC SPEARHEADS RURAL DESIGN INITIATIVE

The National Endowment for the Arts has selected the Housing Assistance Council (HAC), along with buildingcommunityWORKSHOP [bc], as its partner for the Citizens' Institute on Rural Design (CIRD), one of the Arts Endowment's leadership initiatives. CIRD's goal is to enhance the quality of life and economic viability of rural America through planning, design, and creative placemaking. It offers communities access to the resources they need to convert their own good ideas into reality.

CIRD has identified 23 communities as recipients of its 2019 awards to participate in peer learning cohorts and 3 communities that will host community design workshops. The first of these workshops was held in Thomas and Elkins, WV on October 9 – 11.

▼
For more information, visit :
www.rural-design.org

FUNDING FOR RURAL VETERAN HOUSING PROGRAMS AWARDED

Veterans and their families in 10 rural communities will have better lives, thanks to The Home Depot Foundation and the Housing Assistance Council. The Foundation awarded grants totaling \$300,000 to 10 local nonprofit housing associations around the country to build or preserve housing for veterans in rural America. The funds are part of The Home Depot Foundation's Veteran Housing Grants Program, which was created to support the development and repair of housing for veterans.

▼
For more information, visit :
www.ruralhome.org/veterans



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