

# Rural Voices

THE MAGAZINE OF THE HOUSING ASSISTANCE COUNCIL

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## REHABILITATING AFFORDABLE RURAL HOUSING



Dear Friends,

In the affordable housing world, home rehabilitation is typically not a front and center issue. Rehabilitation efforts are sometimes eschewed in favor of more popular strategies. Housing rehabilitation is often considered more complicated and time-consuming than new housing development. As one rehab coordinator quips, “you never know what you’re going to find when you start ripping boards off of a house.” In some rural communities, it is difficult to even locate contractors who are willing undertake home rehab projects. But home rehabilitation not only improves housing conditions, it also helps stabilize communities and the lives of residents.

The physical condition of our nation’s housing, combined with changing demographics, provide additional reasons to take rehabilitation seriously. Roughly one quarter of all homes were built before 1950. As America’s housing stock ages, so too does our population. In the coming decades, the burgeoning baby boom generation will swell the ranks of older Americans. Seniors, who are more likely than younger people to live in older homes, are also less able to conduct physical repairs and provide economic resources for the upkeep of their homes.

At the same time, over 6 million homes in the U.S. are considered either moderately or severely substandard, and roughly 30 percent of households are paying too much for housing. These “cost burdened” households are likely unable to commit adequate resources towards proper maintenance of their homes.

Despite a challenging landscape, individuals and organizations are stepping up to address housing rehabilitation needs nationwide and in their communities. In this edition of *Rural Voices*, we hear several housing professionals’ experiences and perspectives on rehabilitation and repair. Their topics range from the potential pitfalls of coordinating a rehab project, to opportunities for multifamily restoration, to innovations in implementing environmentally “green” aspects of rehab. We hope this issue of the magazine will provide valuable insights and information for rehabilitation and repair efforts in your communities.

Sincerely,



Lauriette West-Hoff, Chair



Debra Singletary, President



Moises Loza, Executive Director

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**Cover photo taken by HAC staff of a farmworker self-help rehab project sponsored by Centro Campesino in South Bay, Florida.**

## Rehab Project Goes Green

With the support of the Housing Assistance Council and other sources, Willamette Neighborhood Housing Services will rehab 25 apartments in the town of Sweet Home in Linn County, Oregon.

WNHS is one of 15 local organizations that received Green Fund Grants from the Housing Assistance Council this fall. With generous support from the Home Depot Foundation, HAC awarded a total of \$175,000 in grant funds to 15 organizations to use green building/healthy homes practices in projects specifically intended for low-income buyers and renters.

For more information about Willamette NHS, see page 13. For more information about HAC's Green Building/Healthy Homes Initiative, including a complete list of the 2007 award recipients, visit [www.ruralhome.org/services/TechAsst\\_GreenBuilding.php](http://www.ruralhome.org/services/TechAsst_GreenBuilding.php).

## Homeownership Dream Comes True for Some Rural Families

Over 400 low-income families in 17 states will help construct their own first homes in rural places around the country over the next three years, thanks to local community development organizations that will receive financing from the Housing Assistance Council.

Most of the \$7.4 million in loan and grant commitments by HAC comes from the Self-Help Homeownership Opportunity Program – which is known as SHOP and administered by the Department of Housing and Urban Development.

HAC's SHOP awards will cover the recipients' costs of pre-construction site preparation such as buying land, adding

utilities, and conducting environmental reviews. For more information, visit [www.ruralhome.org/pressreleasesview.php?id=216](http://www.ruralhome.org/pressreleasesview.php?id=216).

## HAC Publishes Environmental Review Guide

*Environmental Review: A Guide for Applicants Seeking HUD or USDA Rural Development Financial Assistance*, a new manual published by HAC, is intended to help housing groups navigate through the environmental reviews required for funding from federal agencies.

This guide will help local organizations examine a housing development's potential impact on the environment, which is an important part of applying for financing. The guide includes step-by-step explanations of the HUD and USDA RD processes with the housing developer's responsibilities clearly noted, along with definitions of important terms and tips for success. Contact information for HUD, RD, and state offices is also provided.

The guide is free on HAC's website, [www.ruralhome.org](http://www.ruralhome.org). Printed copies are available for \$5.00 each from Luz Rosas at HAC, 202-842-8600 ext. 137, [luz@ruralhome.org](mailto:luz@ruralhome.org).

## HAC Loan Fund Gets Infusion From Bank of America

The new year brings new resources to improve living conditions for rural Americans, thanks to a partnership between Bank of America and the Housing Assistance Council. A \$10 million loan from Bank of America, the largest private contribution ever made to HAC, will be used to help local organizations improve housing conditions for rural residents.

The low-interest loan from Bank of America will become part of HAC's Rural Housing Loan Fund, which makes short-term loans at below market interest rates to local nonprofit organizations, for-profit companies, and government entities developing affordable housing for low-income rural residents. HAC's loans enable borrowers to acquire land, pay architectural and environmental fees, and cover other costs that arise before construction loans are available. Bank of America's funds will be targeted to rural communities in California, Florida, Kansas, Maryland, New Mexico, North Carolina, Tennessee, Texas, Virginia, and Washington.

Photo by Danny Klimetz, Photographer



The average homebuying family in HAC's SHOP program contributes 1,093 hours of construction labor.

The blue Rehab Resources pages in this issue of Rural Voices highlight topics including two of the many federal programs that can be used to finance rural housing rehabilitation. It should be noted that, while the U.S. Department of Housing and Urban Development's HOME program and the U.S. Department of Agriculture's Section 504 program are important, they are by no means the only options available.

## USING HOME FUNDS FOR HOMEOWNER REHABILITATION

HOME funds can be used to assist low-income homeowners in the rehabilitation of their homes. Such HOME assistance can meet a critical need for homeowners who lack the funds to make necessary physical improvements to their homes.

Rehabilitation assistance can be used to make essential improvements, bring houses up to physical codes, as well as improve energy efficiency and handicapped accessibility. Activities of this type serve to improve the living conditions of individual households and help avoid neighborhood blight.

The HOME Program does not require affordability periods with rehabilitation assistance to homeowners. However, participating jurisdictions (PJs) may choose to impose such requirements at their discretion.

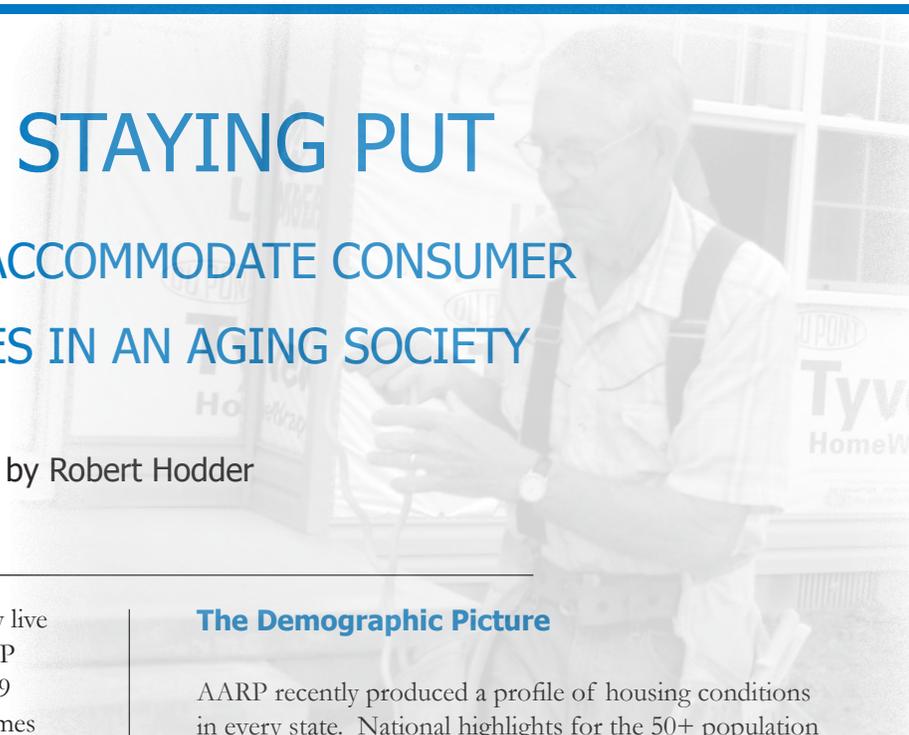
When administering a HOME-funded homeowner rehabilitation program, HOME Program rules require that specific requirements be met in the following areas:

- ▶ **Eligible activities.** For homeowner rehabilitation programs using HOME funds, eligible activities include the rehabilitation or reconstruction of homes in order to meet property standards.
- ▶ **Eligible forms of assistance.** PJs may structure HOME assistance for homeowner rehabilitation programs using any of the forms of HOME assistance listed in the discussion of Subsidies.
- ▶ **Eligible costs.** The HOME Program allows hard and soft costs as well as refinancing for homeowner rehabilitation activities.

- ▶ **Eligible property types.** The following property types may be assisted through a homeowner rehabilitation program: single family housing, condominium housing, a cooperative unit, or manufactured home.
- ▶ **Property values.** The value of the HOME-assisted property after rehabilitation must not exceed 95 percent of the median purchase price for the area.
- ▶ **Property standards.** Properties that are rehabilitated with HOME funds must meet certain standards.
- ▶ **Eligible applicants and beneficiaries.** To be eligible for homeowner rehabilitation under the HOME Program, a homeowner must be low income, must own the home, and the property to be rehabilitated must serve as the owner's principal residence.
- ▶ **Other federal requirements.** Chapter 4 of HUD's HOME training manual *Building HOME: A HOME Program Primer* provides detailed information about each of the requirements described in this table.

*~Reprinted with permission of the U.S. Department of Housing and Urban Development. This page and additional details are located on HUD's Homes and Communities Web site at <http://www.hud.gov/offices/cpd/affordablehousing/training/web/abc/activities/ownerprograms.cfm>.*

*Continued on Page 8*



# WE'RE STAYING PUT

## HOUSING TO ACCOMMODATE CONSUMER PREFERENCES IN AN AGING SOCIETY

by Robert Hodder

Americans overwhelmingly want to stay where they live as they age. That is the consistent result of AARP survey research. Our most recent studies reveal that 89 percent of people desire to remain in their current homes and 85 percent express a preference for remaining within their existing communities. Our research also shows that over half of the population who are age 50 and older say they live in a small town or rural setting.

These preferences mean that rural counties and towns need to prepare for their current residents to age in place. Ensuring that the existing and new housing stock is modified and designed to help people stay safe, comfortable, and secure in their homes is an excellent place to start.

Policymakers and consumers can make progress toward this goal by rehabilitating homes using simple universal design features such as hand rails on both sides of all steps and lever door and faucet handles, as well as eliminating throw rugs to prevent falls. More expensive rehabilitation strategies to keep people safe and comfortable include adding grab bars in bathrooms, constructing zero step entrances, and widening door jambs to at least 32 inches.

It is particularly important that community leaders adopt building codes that enhance accessibility and establish visitability codes for all single-family and multifamily residential construction, because it is very clear that many universal design features are far less expensive when included in the initial design of homes. Rehabilitation to improve homes' accessibility can be much more costly.

### The Demographic Picture

AARP recently produced a profile of housing conditions in every state. National highlights for the 50+ population include:

- ▶ 1/3 of households are headed by a person with a disability;
- ▶ 49 million households are headed by someone 50 or older, up 25 percent since 1990;
- ▶ 79 percent own their own home;
- ▶ 1/3 of households live in housing built before 1960; and
- ▶ about 7 percent of 50+ households moved in the last year, compared to 25 percent of households 50 or younger.

These statistics, coupled with the fact that most 50+ adults live outside urban areas (i.e., in suburbs, small towns, and rural areas), paint a picture of an aging population living dispersed throughout places where services and facilities are not as readily available as in urban centers.

### Rehabilitation is Key

All across America, housing rehabilitation is occurring every day. The growth of corporate giants such as Lowe's and Home Depot demonstrate that consumers' involvement in maintaining and updating their homes has grown and remains strong. And a broad array of entities, from nationally recognized funders to the hundreds of small community development corporations that have significant local impacts, make possible major improvements to thousands of housing units annually.

Homes are being rehabilitated for accessibility (ramps and grab bars in bathrooms), safety (updated electrical, plumbing, and HVAC systems), and energy efficiency (a variety of weatherization techniques). These improvements enhance safety and improve the financial security of home investments. For those who own their homes, equity is solidified by these modifications. For both owners and renters, operating costs are reduced as more energy efficient features are added.

As the parents of many Baby Boomers are reaching an age when an additional measure of caregiving is needed, it is important to make the connection between well-designed home rehabilitation and the ability to continue to live independently. A relatively small investment to rehabilitate an existing home can make it possible for older household members to stay where they want to be. This pales in comparison to the ongoing expense of nursing home care. The average cost of a nursing home stay in the U.S. is approximately \$76,000 annually. These costs can quickly drain family nest eggs and put a strain on extended family resources as well.

At the same time, just as it is important for Boomers to consider the addition of universal design features in their parents' homes, they need to extend that thinking to their own circumstances. When they renovate, they should consider using universal design products, and when they move, their new homes' features should be examined carefully to ascertain whether or not they will provide a safe and comfortable environment to age in place. These aspects of home rehabilitation and new construction are often overlooked.

### Specialists and Awards Raise Awareness

In 2002, AARP and the National Association of Home Builders established a Certified Aging in Place Specialist, or CAPS, program to assist individuals, home remodelers, builders, and community developers to include universal design features in their projects. The CAPS program teaches builders and contractors about the aging process, home modifications, and marketing to older consumers. Certified Aging in Place Specialists are trained to use universal design home features in their remodeling work.

In 2007, AARP and NAHB together established an annual Livable Communities Design Award. The venture is designed to acknowledge



excellence in design for the categories of remodeler, builder, and developer. Winners of the 2007 awards were announced in Washington in December.

By acknowledging design excellence, we hope to raise industry and consumer awareness on the importance of preparing for an aging population. Many Baby Boomers who are taking on major renovations or constructing new homes do not consider the importance of adding these features. They regularly associate such features with an "institutional look" and necessary only for "old people." It is the role of consumer advocacy groups such as AARP and remodelers, builders, and developers to urge consumers to incorporate these features and consider them wise financial investments.

Contrary to many people's thinking, these features can be incorporated in ways that are decidedly non-institutional. A whole range of stylish finishes and designs are currently on the market and the results can be bold and beautiful. In the new James Bond movie, *Casino Royale*, a no-step shower is prominently featured in one scene. If universal design can make it into a Bond film, it has proven its fashion sense!

### Government Can Help

Building development codes establish templates for housing and community development activities. Through the International Code Council, standards are established for rehabilitation and new construction. Community leaders need to look closely at their local building codes to ensure that they require the type of universal design features described in this article.

On the national level, a number of groups are lobbying Congress to address the programmatic bias in Medicare and Medicaid funding toward institutions rather than home- and community-based services. Some HCBS Medicaid funds

*By acknowledging design excellence, we hope to raise industry and consumer awareness on the importance of preparing for an aging population.*

already cover the cost of home modifications. If these efforts see additional progress, more individuals will be choosing to live in their community and receive the services they need there. Having accessible homes will prove a critical piece in making this service delivery model work well.

## The Housing Imperative

Housing quality is a leading indicator of successful aging. AARP's research shows that people who feel safe and comfortable in their homes are much more likely to be satisfied with their communities. And when they feel satisfied they are more likely to engage in civic life and remain vital and active. Community leaders need to do everything they can to ensure that their residents can age successfully.

Housing is generally a private commodity and it is frequently difficult to get individuals to focus on their consumer choices regarding accessibility features. Progress is being made, however. According to a recent AARP survey, nearly half of the 50+ population now recognize the need for home modifications and their benefits. This progress is the product of considerable efforts by many in the aging, planning, real estate, and development communities, and it is crucial that public education continue around this issue.

Accessibility is easier to deliver when it comes to publicly subsidized housing but, in many instances, even more can be done. Focusing on codes that incorporate universal design features and visitability standards will play a key role in advancing the goal of helping Americans age successfully, according to their preferences.

Together, with consumer education, industry involvement, regulatory control, and political support, we can build momentum that will ultimately improve the quality of life for everyone and allow individuals to age with independence, choice, and control. 

*~Robert Hodder, Ph.D., works in Integrated Communications for AARP. More information on universal design is available at [www.design.ncsu.edu/cud/](http://www.design.ncsu.edu/cud/) or [www.aarp.org/families/home\\_design/](http://www.aarp.org/families/home_design/).*



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# THE PROMISE AND PITFALLS OF HOUSING REHABILITATION

By Mike Rudloff

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I am proud to say that, as a housing rehabilitation program manager, I help families improve their living conditions by providing safe, decent, and affordable housing. A good rehab program has many obvious benefits. It poses major challenges as well. In the end, fortunately, the positive aspects are the ones that last.

## Rehab's Many Benefits

Over the years since I began running a single-family rehab program in 1992, I have discovered numerous benefits of housing rehabilitation. The main accomplishment is being able to take a family out of harm's way by transforming a hazardous living situation to a safer one. I have seen many dwellings with old, bare deteriorated electrical wiring, leaking gas pipes, broken or crushed sewer lines, and lead based paint issues. These problems and many others are remedied through housing rehabilitation.

Not only do residents live in better conditions, but also their self-esteem grows. When people see the vast improvements accomplished in their homes, their senses of worth and gratification escalate significantly.

Neighborhood enhancement is also noticeable. In many instances, when a housing rehab project is completed, it

doesn't take long for a neighbor or two to spruce up their own homes with a new paint job or a new roof.

Finally, rehab markets itself. When a local government or community organization has a well established, reputable housing rehabilitation program with contractors that take pride in their work, the majority of its advertising is by word of mouth amongst friends, neighbors, relatives, and individuals who pass by the home.

## Problems and Pitfalls

Like most good things, rehabilitation has drawbacks as well. First, in New Mexico where I work, and undoubtedly in other states as well, the available funds are not adequate to meet the immense need for housing rehabilitation. Many of my organization's clients are senior citizens, single parents, or minimum wage families who cannot afford to make repairs on their own.

In addition, managing a housing rehabilitation program has become more complex and demanding. When I started my housing rehab career in 1992, documents were seldom more than an inch thick and could be stored in simple manila folders. Now, individual project files are kept in eight-part folders and have ballooned to four or five inches, not counting the substantial environmental package required. Each file includes property/home inspection reports, work write-ups and specifications, cost estimates, bid documents, a client application, income verifications, mortgage/award covenants documents, contracts, a notice to proceed, invoices, change orders, lien releases, progress reports, a final statement of completion, a certification of final inspection, warranty documents, photos before, during, and after rehabilitation, and more.

The most significant challenge I have confronted in housing rehab is the length of time it takes to complete a project. What used to take six months can now span a year or more due to additional program obligations, lead based paint issues, and the transformation of environmental review/clearance requirements. Once the only clearances involved historic property and endangered species. Today's environmental issues include not only these, but also noise concerns (airport, major roadway, railway), manmade hazards/toxic sites, airport clear zones, air quality, ground



Photos courtesy of Tierra del Sol Housing Corporation

This home in Deming, New Mexico got a new roof, siding, windows, and a door with rehab resources from Tierra del Sol.

water quality, surface water quality, coastal barrier zones, farmland protection, wild and scenic rivers, solid waste disposal, fish and wildlife, environmental justice, and state and local statutes. Obtaining clearance or guidance documentation and obtaining current traffic counts for a specific roadway and/or railway can further delay a rehab project.

I have always believed clients should be kept informed of the progress of the work on their homes. To stay true to this concept, I ask homeowners to sign off on documents before, during, and after their actual rehabilitation. This helps them feel involved in the progress of their projects and gives them a sense that they have some control. Many of the documents would be prepared anyway, and I have also created a new one providing permission to take and publish photos before, during, and after rehab, because some homeowners do not want pictures of their homes published in articles or advertising. Others include the work write-up, permission to go out to formal bid, homeowner's acceptance of contractor, contractor progress payments, contractor final payment, change orders, punch list, and owner's acceptance of final inspection.

### Life as a Rehab Coordinator

The daily life of a housing rehab coordinator can be highly stressful. The challenges include dealing with contractor/

homeowner differences, addressing project delays, juggling lengthy waiting lists, qualifying clients, lining up the next round of projects, developing tactics to increase production, speeding up timelines, reporting to current funding sources, locating potential new funding sources, and tackling the ever popular "other duties as assigned." We can't perform miracles to expedite policy and procedure requirements, so we must keep up our determination to achieve the high-quality service our clients, projects, and programs deserve.

Although the workload gets hectic, the rehab coordinator's role has special rewards, too. For instance, we get to see the huge smiles on faces of homeowners when projects are completed. I prefer to think they are delighted by the finished work than just happy that we are finally out of their homes.

Seriously, the moments I cherish are establishing trust with the client and contractor, gaining new friends, strengthening program partnerships, and realizing that we were able to make a favorable difference in a family's life. These rewards make all the challenges worthwhile. 🙏

*~Mike Rudloff is Housing Rehabilitation Program Manager at Tierra del Sol Housing Corporation in Anthony, New Mexico.*

## BASIC GUIDE TO RADON MITIGATION IN EXISTING BUILDINGS

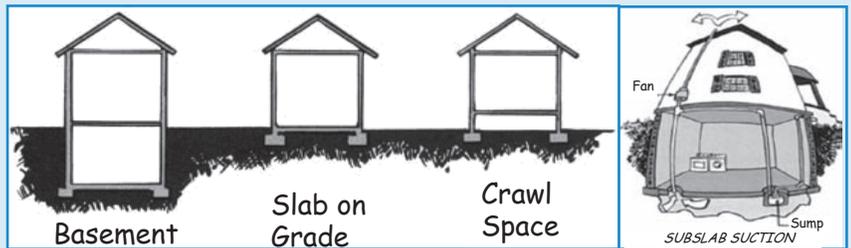
Identifying and mitigating radon risks can be a critical rehabilitation project. The following Rehab Resource provides some basic information on remodeling homes to create radon-safe environments.

### *What can be done if high radon levels are found in an existing home?*

Radon mitigation can lower the levels of radon, and the risk of lung cancer, by drawing radon gas out from under the concrete floor, crawlspace, or foundation before it can enter the home. Installing a radon reduction system in an existing home costs \$800 - \$2,500, and requires special knowledge and skills (usually installed by a licensed contractor). Radon mitigation is recognized as a standard practice for green building and is consistent with energy-efficiency weatherization.

### *How does radon mitigation work?*

The techniques vary by site and foundation style. For structures with a basement or slab-on-grade foundations, the most common method is sub-slab suction or “depressurization” – pipes are inserted through the basement floor or slab into the soil or crushed rock underneath, and a fan connected to the pipe pulls up the radon and releases it to the outside. Other methods for basement and slab construction apply suction on existing building components such as perforated drain pipes surrounding a foundation, sump pumps, and concrete block walls.



An effective method to reduce radon levels in crawl space houses involves covering the earth floor with a high-density plastic sheet and using a vent pipe and fan to draw the radon from under the sheet and vent it outdoors. This form of mitigation is called submembrane suction.

### *Is there a standard for radon mitigation?*

“Standard Practice for Installing Radon Mitigation Systems in Existing Low-Rise Residential Buildings,” ASTM E-2121, is the consensus-based standard for radon mitigation. One free printed copy can be ordered at <http://yosemite.epa.gov/ncepihom/nsCatalog.nsf/SearchPubs?OpenForm> (ask for EPA document number 402-K-03-007).

### *Who can mitigate radon?*

EPA recommends that property owners use a qualified radon mitigation contractor trained to fix radon problems. Many states require radon professionals to be licensed, certified, or registered, and to install radon mitigation systems that meet state requirements; radon programs in these states can provide a list of qualified providers. Private proficiency programs may have lists of certified radon professionals in states without licensing requirements. All contractors should follow standards such as ASTM E-2121 and ensure that a radon test is performed to confirm the effectiveness of the mitigation.

*~To obtain more information about how to improve access to radon-safe homes through remodeling and financing, contact Jane Malone at the Alliance for Healthy Homes, [jmalone@afhh.org](mailto:jmalone@afhh.org). To contact your state’s radon program or find a contractor or learn more, call 800-SOS-RADON or visit <http://www.epa.gov/iaq/whereyoulive.html>.*

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# WEATHERIZATION WORKS IN ALABAMA

by Tracy Rhodes

Alabama ranks among the best states in the country for providing free energy efficiency services to low-income and elderly households. The Alabama Department of Economic and Community Affairs, Energy, Weatherization and Technology Division administers the U.S. Department of Energy's Weatherization Assistance Program. ADECA-EWT contracts with 15 community action agencies and one county commission to serve the state's 67 counties.

The weatherization program's mission is to reduce energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety. More than 800 Alabama homes will be weatherized this year. On average, these homes should see energy savings of \$300 per year. That \$300 may not sound like much, but to an elderly person who has prescription medication costs of up to \$100 a month, it is.

## Eligibility

The weatherization program serves households with incomes at or below 150 percent of the federal poverty rate and gives priority to elderly people, those with disabilities, families with children, and households that are high energy users. To qualify for the program, applicants must first complete an application at the local administering agency. Once eligibility is determined, a professionally trained energy auditor visits the home and determines which energy-reducing measures will be most effective for that home.

## Assessments

The assessment is the most important stage of the weatherization process. The energy auditor spends an average of four hours assessing every aspect of a home to

pinpoint areas of energy waste as well as health and safety concerns. The health and safety of the residents is the highest priority. If any potential hazards are found, they are addressed before the home can be weatherized.

Outside air infiltration is a major cause of high energy consumption. Holes and gaps in the envelope of the home around windows, doors, ceilings, and plumbing chases are the leading causes of air infiltration. Conditioned air easily escapes through these gaps and holes.

Energy is also wasted because of poor thermal barriers, usually caused by missing or poorly installed insulation. Surprisingly few homeowners know that heat radiates more quickly through ceilings and walls that have little or no thermal barriers. A poorly insulated home has heating and cooling costs approximately twice as high as a home that is correctly insulated. Insulation is the most cost effective way to improve home energy efficiency and consumption.

The heating, ventilation, and air conditioning system is another area inspected during the assessment. A poorly maintained system – one that has not been regularly serviced and cleaned – causes the HVAC unit to consume more energy than normal. Dirty air filters force the unit to operate inefficiently because of the restricted airflow.

The HVAC duct system is another area of potentially significant energy waste. Leaky ducts lose 20 to 40 percent of conditioned air due to poor installation, holes in the system, and disconnected supply lines. Homes that have ducts in a



*Weatherization  
Works*

Photo courtesy of the Weatherization Assistance Program  
Technical Assistance Center



A digital manometer is used to identify duct leakage.

protected area, such as a conditioned basement, may lose less heated or cooled air than homes that have ducts in the attic, though the latter are most commonly seen in Alabama. Leaky ducts located in unconditioned crawlspaces can also be a health hazard because of potential sewer gases, mold, and/or moisture.

The appliance that uses the most electrical energy in a home is the refrigerator. When applicable, the auditor will use a power meter to calculate how much energy the refrigerator consumes. If it has a high energy reading, it is replaced with an Energy Star rated refrigerator, which uses considerably less energy.

## Diagnostic Tools and Equipment

Alabama energy auditors use an array of high-tech tools and equipment to aid the assessment process. Some energy

problems are unseen by the human eye, but are easily detected with these tools. A “blower door,” assisted by computer software, detects air leaks by depressurizing the home. The software also estimates how much money is lost due to unnecessary energy consumption. Automated air tightness tests are performed before and after weatherization measures are installed.

An infrared camera, which detects heat, is another tool used to detect air infiltration into the home. The results of the “blower door” and the infrared camera are compared by the computer software and the effectiveness of the weatherization tools is registered.

A combustion gas analyzer is used to test all gas appliances for gas and carbon monoxide leaks. If the auditor encounters gas leaks or high carbon monoxide readings in the home, these problems are mitigated before any further weatherization work is performed. Again, the health and safety of the residents is the number one priority.

Other tools, like the “pressure pan” and the “duct blaster,” are used to detect air leaks within HVAC systems. These tools create pressure readings of each duct line within the system. A properly installed duct system is completely sealed. Over time, however, gaps or leaks may form within the system. The pressure pan, placed over the duct register while the blower door is operating, gives a pressure reading

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### RURAL VOICES

ruralvoices@ruralhome.org

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The Housing Assistance Council (HAC) is a national nonprofit corporation founded in 1971 and dedicated to increasing the availability of decent housing for low-income people in rural areas. HAC strives to accomplish its goals through providing loans, technical assistance, training, research and information to local producers of affordable rural housing. HAC maintains a revolving fund providing vital loans at below-market interest rates to rural housing developers. Developers can use these funds for site acquisition, development, rehabilitation or new construction of rural, low- and very low-income housing. HAC has a highly qualified staff of housing specialists who provide valuable technical assistance and training, and research and information associates who provide program and policy analysis and evaluation plus research and information services to public, nonprofit, and private organizations. HAC is an equal opportunity lender.

EDITORS: Lance George & Leslie R. Strauss DESIGNER Janice Clark ISSN 1903-8044

### HOUSING ASSISTANCE COUNCIL

#### NATIONAL OFFICE

1025 Vermont Avenue, NW, Suite 606  
Washington, DC 20005  
TEL 202-842-8600  
FAX 202-347-3441  
E-MAIL hac@ruralhome.org

#### MIDWEST OFFICE

10920 Ambassador Drive, Suite 220  
Kansas City, MO 64153  
TEL 816-880-0400  
FAX 816-880-0500  
E-MAIL midwest@ruralhome.org

#### SOUTHEAST OFFICE

600 West Peachtree St., NW, Suite 1500  
Atlanta, GA 30308  
TEL 404-892-4824  
FAX 404-892-1204  
E-MAIL southeast@ruralhome.org

#### SOUTHWEST OFFICE

3939 San Pedro, NE, Suite 7-C  
Albuquerque, NM 87110  
TEL 505-883-1003  
FAX 505-883-1005  
E-MAIL southwest@ruralhome.org

www.ruralhome.org

# RURAL RENTAL REHABILITATION HELPS COMMUNITIES

by Ryan Hudspeth

Rehabilitation of rental properties in rural places can be an essential part of preserving much-needed affordable housing. In doing this work since 2003, the Belmont Companies have learned some important lessons.

## Rental Rehab Success in Kansas

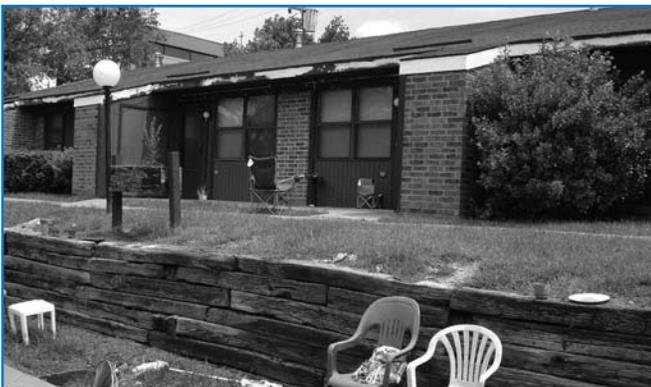
The Belmont Companies recently successfully completed a \$5.2 million rehabilitation project in six communities in Kansas, working with a local nonprofit organization. Financed by the U.S. Department of Agriculture's Section 515 program and placed in service approximately 20 years ago, the six properties involved ranged from 10 to 16 units each and had very low occupancy rates. They had experienced many years of deferred maintenance and were unable to maintain capital reserve accounts capable of meeting their long-term needs.

Belmont determined that consolidating the six properties under one owner would help raise private equity and lower future operating expenses by achieving economies of scale, eliminating the need for six separate audits and tax

returns, which can range from \$2,000 to \$5,000 annually per property. This consolidation also gave Belmont the ability to transfer USDA Section 521 Rental Assistance between the rental communities, an essential factor in making the rehab economically feasible.

To finance its acquisition and rehabilitation of the six properties, Belmont secured an additional \$504,000 Section 515 loan from USDA, borrowed almost \$306,000 from the Housing Assistance Council's Preservation Revolving Loan Fund, and generated \$2.3 million in equity through Low Income Housing Tax Credits awarded by the Kansas Housing Resource Corporation, the state's housing finance agency. These resources, and the presence of 60 units of Section 521 Rental Assistance, allowed Belmont to complete a substantial rehabilitation of all 76 units with only a moderate rent increase.

The rehabilitation, completed in January 2007, included new carpets, energy efficient appliances, new kitchens and bathrooms, energy efficient windows, and increased insulation. Vinyl siding was applied to the exterior of the



Costs for rehabilitation of the Beloit Center Apartments in Kansas totaled \$900,000. The rehab included updating building exteriors and installing new appliances and flooring of this 34-unit complex.

Photos courtesy of Rural Housing and Development

buildings and new roofs and gutters were installed. By the end of 2007, the properties were over 90 occupied.

## Preservation Involves Communities

Like the properties involved in Belmont's Kansas project, many rural rental housing projects in the Midwest are struggling due to the declining populations in their communities. Most of them, however, are viable and simply need funding, support, and attention from their owners, developers, management companies, and communities.

Many rural Midwestern communities lack local basics such as a grocery store or pharmacy. Residents may need to travel hundreds of miles to seek medical treatment or even buy a loaf of bread. The younger generation is drawn to metropolitan areas where work and resources are more readily available. In these situations, it is important for owners of rural housing to work with local business leaders and economic development leaders to attract new businesses and help preserve rural America for both current and future generations.

By preserving affordable homes in rural America, we can help attract residents. Preservation includes conducting adequate rehabilitation, setting rents at affordable levels, and allowing enough cash flow to fully fund capital reserve accounts adequate to satisfy 20-year capital needs assessments, as required by USDA. Partnering with local businesses, and including them in the total development, is extremely important. For example, often it is beneficial to use local talent in construction, thereby helping the local economy.

Special attention should also be given to cost-reducing improvements such as energy efficiency. Energy efficiency is a significant step toward high performance housing. It lowers operating costs, reduces utility bills, provides opportunities for rebates and tax deductions, lowers maintenance and personnel costs, and provides more durability for the rental property.

## Challenges to Multifamily Preservation

Preserving rural multifamily communities means addressing many challenges. For example, it can be complicated to combine two or more government programs, such as

Low Income Housing Tax Credits, USDA Section 515, or U.S. Department of Housing and Urban Development financing, while also satisfying investors. Many program requirements are strict and not all are consistent with one another. Each one can entail hundreds of pages of paperwork and due diligence, possibly increasing the total development cost and lengthening the time needed.

Another challenge is to maintain affordable rents, especially when Section 521 Rental Assistance is not available. It is very difficult to structure a project to accommodate additional debt, allow enough annual cash flow to meet capital reserve requirements to accommodate a 20-year capital needs assessment, and invest enough money to achieve a like-new condition with cost-reducing energy efficiency. If an owner cannot continuously fund a reserve account to meet the capital needs assessment, it is providing a Band-Aid rather than a solution.

In order to maintain affordable rents, one must seek creative low-cost debt products. Sources include USDA's Section 538 guaranteed loan program, HAC's Preservation Revolving Loan Fund, Affordable Housing Program grants and loans from Federal Home Loan Banks, and HOME funds.

Using tax credits can be difficult in rural areas, where projects may not be significant in size or may not be awarded annual credits. Many syndicators have a minimum size requirement because, due to their overhead, it costs them as much to undertake a small project as a large one. By consolidating several properties that are close together, a rural owner can establish economies of scale, creating the larger qualified basis that most tax credit investors seek, thus making the credits awarded more competitive and often leading to better pricing and more funds invested into the project and the community.

The Belmont Companies believe the key to success in preserving rural housing is creating partnerships with state USDA Rural Development professionals, state housing finance agencies, local community leaders, architects, engineers, and other contractors. Working together, these partners can find creative ways to maintain and preserve existing decent, affordable rental housing properties and the communities they serve. 

*~Ryan Hudspeth is the principal of the Belmont Companies, [www.belmontmgt.net](http://www.belmontmgt.net).*

# RURAL OREGON REHABILITATION USES GREEN BUILDING STRATEGIES

by Garrick Harmel

**G**reen building strategies are often discussed in connection with the development of new affordable housing, and organizations including Willamette Neighborhood Housing Services in Oregon are now applying them to rehabilitation as well. WNHS hopes to develop environmentally friendly practices that are attainable for all its low-income housing projects.

## Green Building for Rehab

Green construction attempts to develop standards and practices that minimize negative environmental impacts during a building's lifespan. What makes a building 'green'? As with most evolving practices, green building methodologies and implementation strategies vary widely.

With the creation of the United States Green Building Council in 1993, a rating system for sustainable buildings was born, the Leadership in Energy and Environmental Design system, or LEED. LEED for New Construction, or LEED-NC, has transformed the commercial green building industry, and LEED for Homes (LEED-H) has just completed a pilot stage and is now certifying residential construction.

According to the USGBC's LEED Accredited Professional Handbook, "green building design strives to balance environmental responsibility, resource efficiency, occupant comfort, well being and community sensitivity." Applicants for LEED certification must adhere to energy efficiency and indoor air quality requirements, reduce construction waste and water usage, and consider site layout as well as proximity to necessary community services.

A number of barriers impede the implementation of green strategies:

- ▶ The participating players do not always understand the importance of implementing development strategies that minimize negative environmental impacts.
- ▶ As technologies and methods change, it is sometimes hard to find contractors who are familiar with different construction techniques or the installation of new materials.
- ▶ One of the biggest barriers is the shortage of available funding. Even the strategies that are relatively easy to implement, such as improving energy efficiency and indoor air quality, have higher upfront costs than conventional strategies. Tight budgets may have difficulty allowing for those higher initial costs.

Why attempt green building when no regulatory agency mandates the necessary changes, no appraiser can put value on the changes, there is no money for improvements, and residents do not request them? Because increasing the energy efficiency of a building, as well as making it a healthier place to reside, matters to its inhabitants.

## WNHS Rehabilitation Programs

Working in Linn and Benton counties in western Oregon, Willamette Neighborhood Housing Services addresses green building in all its activities. The organization develops new affordable housing – including two "green" developments – educates homebuyers, and helps families purchase their first homes. WNHS also operates a Community Development Block Grant funded Rehabilitation Loan Program for

low-income homeowners living in eight participating municipalities in rural Linn County.

Like many rural communities around the country, Linn County faces declines in the manufacturing industry that replaced the once prominent timber and wood products industry here. The trade, transportation, and utilities industries continue to expand, but wages in those areas are considerably lower. Compounding the problem of falling incomes, Linn County has historically had one of the highest unemployment rates in Oregon: currently 7.3 percent, compared to 4.6 percent in neighboring Benton County and 5.3 percent in Oregon.

WNHS's rehabilitation program addresses residents' housing costs as well as housing quality. Upgrading energy efficiency and indoor air quality are some of the most dramatic improvements possible in a rehab project. They improve the physical and financial health of the residents most directly and can be achieved through less technical tools than many other green changes. For example, much of WNHS's rehab work involves upgrading heating systems, installing more efficient windows, upgrading insulation and installing it properly, dealing with dry rot, and properly venting areas that produce a lot of moisture.

### Overcoming Barriers with Strong Partnerships

WNHS has found that partnerships can help fill the financial gaps when it is trying to incorporate green elements in projects. One such partner is the Community Services Consortium, which provides a multitude of successful programs to people in Linn, Benton, and Lincoln counties, including a weatherization program.

For more than 20 years the weatherization program has helped low-income residents increase energy savings and home comfort level overall by reducing winter heating costs. There is no charge to the recipient households for the labor or materials.

Though every home has unique weatherization needs, CSC's typical weatherization services include window replacement, cellulose insulation, duct work (sealing joints), checking furnaces and combustible appliances for energy efficiency and the presence of carbon monoxide, furnace tune ups or replacements, replacing lighting fixtures with energy

efficient compact fluorescents, and replacing refrigerators with Energy Star models.

CSC also provides energy education to many households, empowering them with knowledge to make their own decisions on savings and reducing their energy needs. In a U.S. Department of Energy study of 2005 data, households that participated in the federal weatherization program had an annual energy savings of \$274 per year.

CSC's weatherization work, which can exceed building codes, complements the more standard renovations WNHS can provide through its CDBG-funded loan program. Thanks to this partnership, rural Linn County residents can obtain more energy efficient results without significant funding increases.

### Linnhaven Rehabilitation Plans

Tackling a new challenge, WNHS is beginning rehabilitation of the 27-unit Linnhaven apartment complex in the town of Sweet Home in Linn County. The property needs extensive work, particularly related to energy efficiency. Most of the rehab financing will come from Oregon Housing and Community Services, the state's housing finance agency, using a combination of funding sources. The complex will continue to serve residents with incomes at or below 50 percent of area median income.

The plans for Linnhaven take into account not only environmental sustainability, but also the stress put on buildings by western Oregon's heavy rain. Environmentally friendly "low VOC" paint, humidistats, and ventilation fans with timers will address moisture issues.

Green criteria and techniques include the high density of the complex, sustainable landscaping using native plants, erosion control measures, low flow toilets and appliances, Energy Star appliances, local materials, environmentally sensitive materials, homeowner training, and development of written materials for homeowners. WNHS is also investigating the feasibility of additional measures including rainwater collectors and grey water reuse, passive solar features, and low E windows.

The finished buildings will exceed Oregon energy code standards, which are 15 percent stronger than national code. WNHS's project goals include reducing utility usage for each apartment by 30 percent and cutting annual water

consumption for the entire Linnhaven complex by 25 percent. WNHS also intends to demonstrate through its renovations that high density living is desirable.

## Implementing Green Building Thresholds

Improving energy efficiency and indoor air quality in rural housing is an important step in implementing green building strategies. By constructing buildings that minimize negative environmental impacts through improved energy efficiency, organizations are incrementally implementing green building strategies. In order to gain momentum and implement practices that will result in a transition to more sustainable activities, everyone has a role.

One of government's very important roles, for example, is to support actions that minimize negative environmental

impacts. Even if there is no money available, simply supporting agencies that are implementing change will go a long way.

The building industry's role is to define which criteria support this momentum and evaluate how to implement them. Businesses have a role in helping supply the needed materials, locally.

Lastly, people have some of the most important roles. Individuals must push for more funding, open up conversations about implementation, and highlight agencies that are trying to implement green building strategies, however incrementally. 

*~Garrick Harmel is a Housing Development Specialist at Willamette Neighborhood Housing Services.*

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## Weatherization Works Continued from page 10

at that register. High pressure readings indicate leaks in the duct system and must be repaired.

This test does not indicate the exact location of the air leakage, however. That is the job of the duct blaster, which is a smaller version of the blower door. It not only gives the auditor an air leakage reading, it also reveals the exact location of the air leaks when all the supply registers are sealed with tape and smoke is introduced into the system.

## Weatherization Measures

Low-income families typically spend 16 percent of their total annual income on energy costs, compared to 5 percent for other families. This burden has been compounded the last five or so years by soaring energy prices. Low-income families often cut back on other necessities to pay their energy bills. The weatherization program provides energy saving measures, which typically include:

- ▶ installing attic and wall insulation,
- ▶ repairing leaky or broken windows and doors,
- ▶ sealing air leaks into the home,
- ▶ testing home appliances for energy usage,
- ▶ tuning up the heating and cooling system,
- ▶ repairing leaky duct systems, and
- ▶ replacing incandescent light bulbs with highly efficient compact fluorescent light bulbs.

A weatherized home is a more comfortable home and uses considerably less energy to heat and cool.

Contractors or agency crews perform the needed work. A final inspection is conducted to ensure that every measure is installed according to state and federal guidelines. During the final inspection, weatherization coordinators or other agency staff educate the residents about energy saving tips and ideas. They also provide literature on the dangers of lead based paint, mold, and carbon monoxide. Every effort is made to ensure that no home is left with potential health and safety hazards.

Ultimately, the Weatherization Assistance Program helps and encourages low-income and elderly families to enhance the energy efficiency of their homes. The program's clients no longer have to worry whether they will stay warm this winter or stay cool this summer. They gain increased disposable income, eliminating the need to choose between family necessities and utility bills. The bottom line is that, after weatherization, the client has a better quality of life. That is how weatherization works in Alabama. 

*~Tracy Rhodes is the Weatherization Coordinator for the Community Action Partnership of North Alabama and the Etowah County Community Services Program. He received a U.S. Department of Energy Service Award in 2006.*

## USDA SECTION 504 HOME REHABILITATION GRANTS AND LOANS

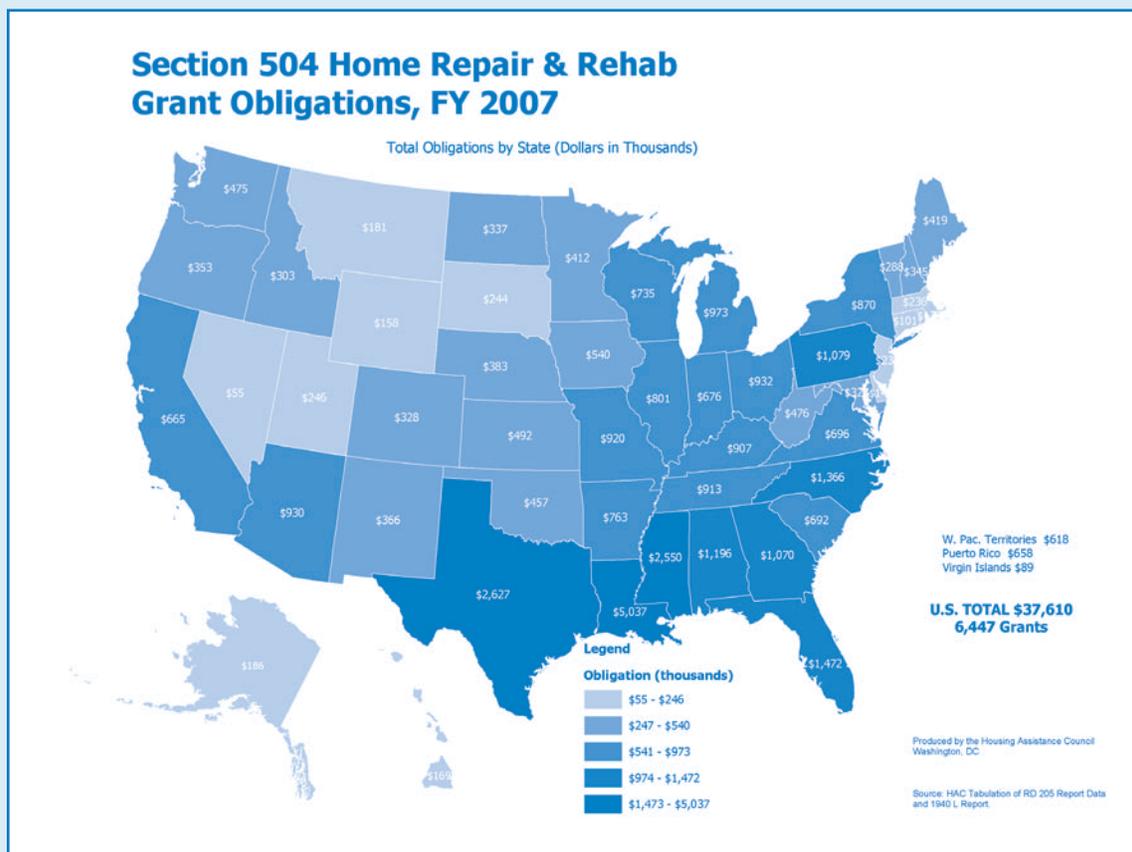
The U.S. Department of Agriculture administers several housing rehabilitation programs among its Rural Development Housing and Community Facilities Programs. One of its more prolific rehab efforts is the Section 504 Very Low-Income Housing Repair program. Section 504 provides loans and grants to very low-income homeowners to repair, improve, or modernize their dwellings or to remove health and safety hazards. Since the program's inception in 1950, Section 504 funds have been used to rehabilitate approximately 320,000 substandard homes in rural America.

General parameters and requirements for Section 504 rehab loans and grants include the following.

### Eligibility

**SECTION 504 LOAN:** A homeowner-occupant must have a very low income, defined as below 50 percent of the area median income, and must be unable to obtain affordable credit elsewhere. The home must be in need of repairs and improvements to make the dwelling more safe and sanitary or to remove health and safety hazards.

**SECTION 504 GRANT:** Grants are available only to homeowners who are 62 years old or older and who cannot repay a Section 504 loan. Grant funds may be used only to pay for repairs and improvements to remove health or safety hazards.



## Terms

Loans of up to \$20,000 and grants of up to \$7,500 are available for rehabilitation efforts under the Section 504 program. Loans are for up to 20 years at 1 percent interest. A real estate mortgage is required for a loan of \$2,500 or more. A grant/loan combination is made if the applicant can repay part of the cost. A loan and a grant can be combined for up to \$27,500 in assistance.

## Standards

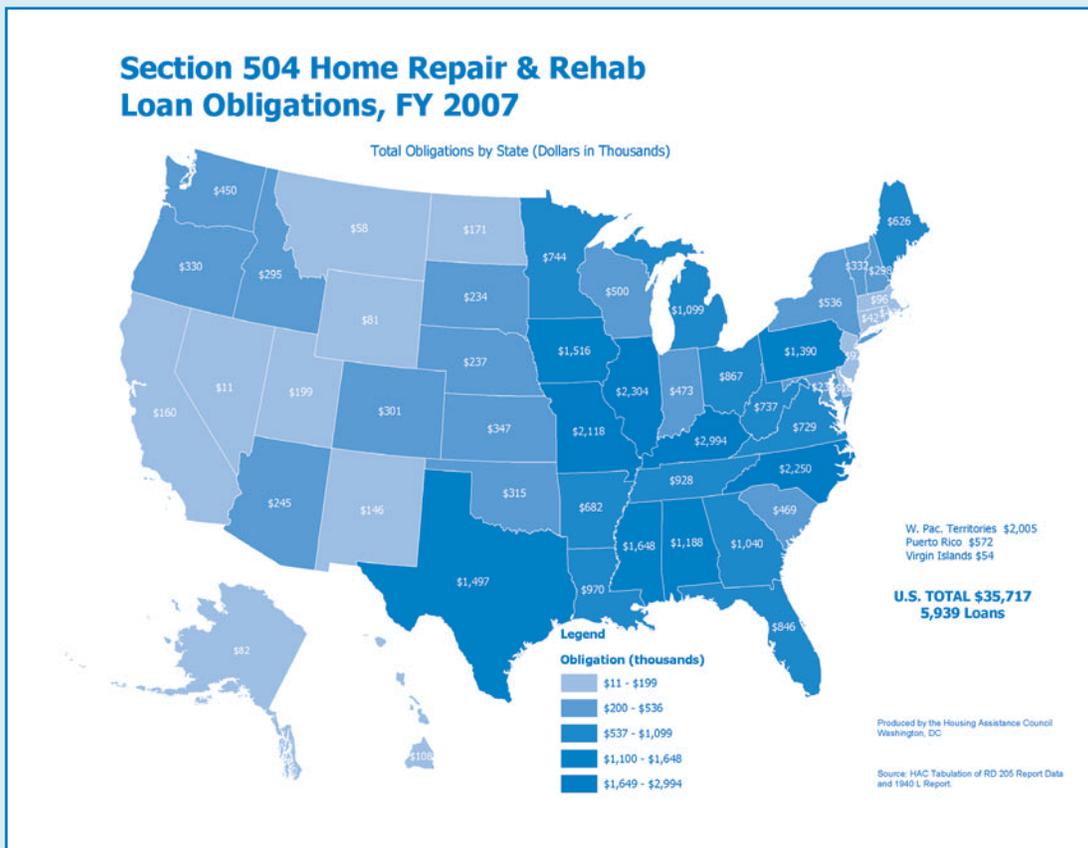
Repaired properties do not need to meet other RD code requirements, but the installation of water and waste systems and related fixtures must meet local health department requirements. Not all the health and safety hazards in a home must be removed with Section 504 funds, provided that major health and safety hazards are removed. All work must meet other applicable local codes and standards.

## Approval

Rural Development should make a decision on an application within 30 to 60 days of receiving it if no backlog exists.

## Additional Information

For additional information on Section 504 and RD, contact the Housing and Community Facilities Programs National Office, 1400 Independence Avenue, S.W., Washington, D.C. 20250, 202-690-1533, or your Rural Development State Office, which can be identified at [http://www.rurdev.usda.gov/recd\\_map.html](http://www.rurdev.usda.gov/recd_map.html). Copies of RD regulations and handbooks are available online at <http://rurdev.usda.gov/reg>. The regulation at 7 CFR part 3550, which governs the Section 504 program, is included in each single-family housing handbook as Appendix 1.



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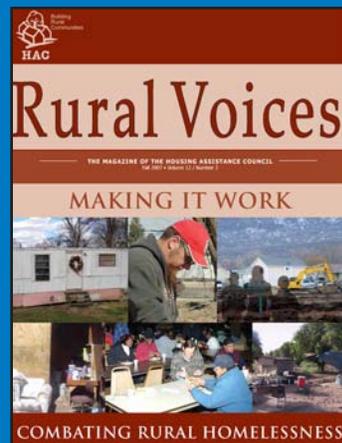
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