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Successes from Rebuild America's Housing Partnerships

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ABSTRACT

The U.S. Department of Energy's Rebuild America is partnering with public and private housing organizations throughout the nation to make building improvements and provide solutions to housing needs while saving energy and reducing utility costs. This paper describes the partnership development, technical assistance, and other types of support Rebuild America offers that excites housing organizations to form Rebuild America partnerships. Successful partnerships are highlighted that demonstrate the wide-range of projects Rebuild America partners are performing, with a detailed description of four notable case studies.

Introduction

The U.S. Department of Energy's (DOE's) Rebuild America is a voluntary program that helps community partnerships make profitable investments in existing buildings through energy-efficient technologies. When communities, businesses, and housing agencies form Rebuild America partnerships with each other and DOE, they tailor their programs to local needs, choosing which buildings to renovate, how much energy to save, and the best technologies to use. Rebuild America lets partnerships choose the best ways to improve their communities, and supports them with a national network of their peers and technical and business experts, resource materials, and access to innovative solutions.

In addition to saving energy and money, Rebuild America projects create jobs, promote growth, and protect the environment. Making buildings more energy efficient can create new private sector jobs in local economies. Dollars spent on energy efficiency usually stay in the community and roll over several times, which creates more jobs. Partnerships have also discovered that energy efficiency goes hand-in-hand with economic efficiency. Producing the energy that runs buildings is a significant source of pollution, so using less of it makes our air and water cleaner.

Rebuild America focuses on six different market sectors: colleges and universities, K-12 schools, state governments, local governments, commercial buildings, and housing. Each of these sectors represent a particular customer group that has similar or related characteristics, has common needs, and responds to the same motivation. This paper examines the activities and successes that Rebuild America has achieved in housing since the inception of the program in 1996.

Residential Market Sector

Seventy-five Rebuild America partnerships are active in efforts to make energy and other improvements in housing (see Table 1). The diversity of these partnerships is great — from state partnerships like Rebuild Ohio that are drawing together housing authorities within the state with local banks, utilities, and local governments to small, local affordable housing organizations like Knox

Housing Partnership that is renovating 140 houses of dilapidated rental housing into quality housing for home ownership by partnering with over 15 organizations.

Public housing represents a primary type of housing being addressed by Rebuild America partnerships. Twenty-six partnerships are working with 35 public housing authorities to address the needs within public housing (see Table 2). Partnership activities have ranged from performing energy audits on buildings, as done under the Rebuild Nebraska and Rebuild Texas partnerships, to implementing performance contracts as done by the Boston Housing Authority under the Rebuild Boston Partnership and the Chicago Housing Authority. Increasingly, Rebuild America is assisting Indian Tribes with their housing and other needs.

As has been found in other market sectors within Rebuild America, energy efficiency and reduced utility costs by themselves does not motivate building owners to action. Issues that are important in housing that can include an energy component in the solution include:

- Where can I get funds to make capital improvements?
- How can I decrease time spent on emergency and other maintenance?
- How can I reduce occupant complaints?

In the public housing sector, additional issues that provide motivation for action include:

- Can I provide development opportunities for residents?
- How do I get energy audits done to meet mandated requirements?
- What should I do with audit findings?
- Can I benefit from utility restructuring?
- How do I use my utility information to set utility allowances and plan capital improvement projects?

Types of Rebuild America Assistance

Rebuild America helps housing partnerships meet their individual needs and improve energy efficiency in the process in a number of ways. First and foremost, Rebuild America representatives and the Rebuild America supporting infrastructure of DOE Regional Offices and national laboratories helps partnerships establish working relations with not just DOE but also with local, state, and even national organizations. Usually, solutions to a partner's problems can be found locally within a community. For example, Rebuild America energy inspections of housing units at the Atlanta Housing Authority identified maintenance deficiencies as a primary source of high energy bills and poor indoor comfort in resident housing. As a result, the Atlanta Housing Authority teamed with its local electric utility to obtain not only training on electrical systems, but also maintenance of gas appliances as well.

Rebuild America offers technical information to its housing partnerships through Rebuild America's Business Partners and its network of representatives and national laboratories. Information and training is provided to individual partnerships, as was done in training chief engineers at the Chicago Housing Authority on energy-efficient boiler plant operations. Trainings are provided, as well, to national audiences as was done in two workshops provided to public housing authorities on implementing performance contracts following U.S. Department of Housing and Urban Development (HUD) public housing regulations. Rebuild America has also supported the development of specific information pieces, such as the Energy-Efficient Ventilation for Apartment Buildings guide (Diamond, Feustel, and Matson) and Your Energy Savings: A Resident's Handbook (Knight 1998), that are applicable to residential buildings and made available to partners and others.

At times, Rebuild America provides direct technical assistance to partnerships on a case-by-

case basis. Four such cases exemplify the breadth of assistance provided:

- Energy audits were performed for the Renaissance Condominium Association to identify energy measures to include in future renovations and the Havasupai Native American Tribe to plan future energy projects..
- Building plans were reviewed and energy improvements were recommended for new affordable housing being built by the Richmond Better Housing Coalition.
- Investigations were performed for Rebuild Wisconsin in Milwaukee to verify that blower door testing does not create an indoor health hazard by disturbing lead dust and making it airborne.
- Assistance was provided to the Boston Housing Authority under the Rebuild Boston partnership to implement a multi-million dollar performance contract to improve their heating systems while reducing energy costs.

Rebuild America organizes meetings to allow information exchanges to occur at both the national and regional level. Rebuild America's National Forum draws hundreds of people from partnerships across the nation to exchange ideas and discuss different approaches to partnership development and organization. Regional peer exchange meetings allow partnerships to help one another on selected issues partners are having and to learn new ideas in the process.

Finally, Rebuild America creates successful case studies to guide partnerships yet to be developed. The Baltimore Housing Authority learned of a successful resident training program developed by the Chicago Housing Authority and felt that a variant of it would provide a solution to their training needs before new utility allowances could be implemented. From this successful Chicago experience, a new Rebuild America partnership was formed.

Examples of Successful Partnerships

Several highlights of successful Rebuild America partnerships among housing groups have already been discussed in previous sections of this paper. A more detailed discussion of several of these partnerships is provided in this section to exemplify the power of community partnerships and to more clearly show the workings of a Rebuild America partnership. Because the residential sector is diverse, different residential partnerships have achieved success in different ways.

Chicago Housing Authority

The Chicago Housing Authority (CHA) is the nation's second largest public housing authority. It provides 40,000 units of housing for 110,000 residents, a population that could make it the fourth largest city in Illinois. The priorities that CHA identified for its Rebuild America partnership include reducing wasteful energy use, creating resident employment opportunities, improving resident comfort and health, and reducing opportunities for vandalism of housing authority property. Through a Rebuild America partnership, it found novel ways to leverage the talent of college students, the greater Chicago low-income community, and the housing authorities own responsibilities as a municipal provider of power and water services to provide solutions.

Much of CHA's energy savings has been accomplished through the use of an energy performance contract. The housing authority signed a \$15 million contract with EUA Citizens, an energy service company located in Boston, Massachusetts. The annual utility cost savings from the agreement is expected to be over \$2 million. The savings will come from the installation of 11,000

energy efficient refrigerators and 24,000 high-efficient lighting fixtures along with a major retrofit of the boiler and water systems of five housing developments. Under the performance contracting rules of HUD, CHA and EUA will share the savings for 12 years; after that time the continuing savings will go to the federal budget.

The savings from the installation of the energy efficient refrigerators has been greater than expected. With the assistance of the DOE national laboratories, researchers found that CHA's old refrigerators were using an average of 976 kWh per year. These refrigerators were replaced with energy efficient refrigerators that used an average of 480 kWh per year. The savings of 496 kWh per year per refrigerator totaled up to a cost savings of \$570,000 in electricity bills. In addition to the energy savings, CHA was able to take advantage of a bulk purchase program for appliances that DOE sponsored. The bulk purchase price for the energy efficient refrigerators reduced the cost to slightly under the price that CHA would have paid if it had purchased less efficient models.

The savings that CHA will be realizing on its boiler and water system retrofit is augmented by operation savings that the housing authority is currently capturing as a result of training that was given to its engineering staff by experts at the DOE national laboratories. Immediately following the winter heating season of 1997, the CHA Rebuild partnership organized a workshop on preventive maintenance, operations efficiencies, and boiler water treatments. The engineers from CHA's central heating plants attended presentations and took tours of model heating plants during a two-day workshop. During the next heating season, an estimated 5 to 6 percent energy savings was reported as a result of operations improvements.

CHA's goals extend beyond saving energy. In an innovative program, CHA and Rebuild America have explored ways to create resident training programs that capture conservation opportunities in the tenant's apartments. DOE and CHA worked with the Renacer Westside Community Network to offer a training workshop for residents to learn how to weatherize the units in the Cabrini and Dearborn Homes developments. The residents learned about basic building science and received training on air sealing, installing water heater jackets, repairing dripping faucets and constantly running toilets, cleaning furnace air filters and air ducts, and motivating other residents to reduce wasteful practices, like leaving lights on in empty rooms. The team of residents that passed the workshop was then mentored for the first few weeks as they began installing the conservation measures in about 300 townhouses within their development. It is estimated that the savings from these measures was between 3 and 4 percent of average energy use, and the measures have improved the comfort and healthfulness of the housing units. Moreover, the resident team organized a non-profit corporation called the Home Energy Savings Corporation following the mentorship period and has found weatherization projects outside of the public housing sector, particularly the State of Illinois low-income weatherization assistance program.

In still another aspect of the CHA Rebuild America partnership, the housing authority has teamed up with Auburn University's Industrial Design Department and challenged students to develop an innovative, vandal-resistant lighting fixture. The competition led to several interesting designs. One of several concepts was chosen and produced for commercial application. The lighting fixture uses two compact fluorescent bulbs that cut energy use to less than one-quarter the electricity used in the old fixtures. Even more important to CHA, the new fixtures are difficult to break and are expected to reduce maintenance on common area lighting enormously while keeping the lights on in corridors that would otherwise be unsafe after nightfall.

Rebuild Ohio

Rebuild Ohio is a state partnership that has allied itself with several public housing authorities and institutions from the other five market sectors within Rebuild America. Stark Metropolitan Housing Authority (SMHA) is one of the public housing authorities that is part of the Rebuild Ohio partnership. SMHA is a progressive housing authority that has implemented several energy conservation projects using private sector financing under HUD's energy incentives program and has a history of bringing sound, technical management to its utility programs. Rather than using a performance contract, SMHA elected to perform the work in-house and use HUD's add-on subsidy method to repay the debt.

One project Rebuild Ohio has assisted SMHA on is the conversion of 89 efficiency apartments to one-bedroom units. SMHA has brought together six funding sources to finance the \$6.4 million renovation, including the local utility, state funds allocated to improving outdoor air quality, and HUD modernization funds. The project will improve the marketability of the apartment units while reducing energy costs at the same time. Rebuild Ohio helped perform the energy audits and helped SMHA secure the state funding for this project.

Because of SMHA's interest in energy, they began to talk with other housing authorities in the state about energy issues and coordinated two meetings of public housing energy managers. This activity culminated in a two-day, statewide workshop on Energy Opportunities in Public Housing sponsored by SMHA, Rebuild Ohio, and First Energy, the local utility. Performance contracting and utility deregulation were two of the technical topics discussed, as was how to build partnerships that benefit the entire community. This workshop and Rebuild Ohio's role in it exemplifies the type and expansion of partnerships that Rebuild America can foster.

Knox Housing Partnership, Inc.

Knox Housing Partnership, Inc. (KHP) is a private, charitable corporation facilitating affordable housing for low-income residents of Knoxville and Knox County, Tennessee. KHP teamed with Knoxville's Housing Development Corporation (KHDC) to undertake a joint housing revitalization project involving 146 single-family detached homes that will revitalize two inner-city neighborhoods. The goal of the \$6.8 million project is to bring renters into home ownership by providing a pool of quality, affordable housing and assisting families in obtaining below-market rate financing. More than two-thirds of the revitalized homes will be sold to the existing renters or other low-income buyers. The remainder of the houses will be available for continued rental to current clients to avoid displacing those who cannot afford to or do not wish to move into home ownership.

The redevelopment project became a possibility in April 1998 when the estate of Florence Monday offered to sell the houses to KHDC, a subsidiary of Knoxville's Community Development Corporation (KCDC), for \$2,920,000 (\$20,000 each). KCDC and KHP estimated that construction financing for rehabilitating the 1945-vintage, 800 square-foot, two-bedroom houses would average \$20,000 to \$25,000 for each house.

The homes were purchased and construction is being financed through a low-interest (7%) acquisition/construction loan made available by eight local banks that was written-down to 5% by the Affordable Housing Trust Fund. The City of Knoxville provided a grant of \$303,000 through their HOME program to subsidize the acquisition and construction costs and provided additional financial assistance through its Rental Rehab Program. A construction manager was funded using a \$25,000

grant from the Affordable Housing Demonstration Fund.

Additional partnerships were brought together to help prospective homeowners obtain affordable financing and qualify for home loans. The same consortium of eight banks are providing loan monies using their Community Reinvestment Act financing. Purchase assistance up to \$25,000 per low-income home buyer is being provided by over \$1 million in grants from HOPE 3, HOME, and HOUSE programs and a \$50,000 grant from the Neighborhood Reinvestment Corporation. With these partnerships established, almost every renter interested in buying a renovated housing unit should be able to qualify for a loan.

Other partnerships providing necessary contributions to this cooperative effort include:

- A \$75,000 grant from the Monday family for neighborhood beautification
- Landscaping and design assistance from the East Tennessee Design Center
- Home ownership education, housing counseling, and assistance in obtaining mortgages provided by KHP
- Assistance in developing neighborhood organizations from the Center for Neighborhood Development
- Support for community meetings and communication among residents from the Morningside Homeowners Association

Rebuild America, through one of the DOE national laboratories, contributed to the partnership by assisting KHP keep total housing costs (rent or mortgage plus utilities) the same after rehabilitation through energy efficiency improvements. Reductions in the energy bills from their current average value of \$1176 per year were needed to help offset an anticipated increase in house payment. The average rent is currently \$260-325 per month, and mortgage payments are expected to be about \$270-430 per month for the renovated houses depending on the financing packages and subsidies received, a significant difference for low-income families (see Table 3). With lower energy costs and only a small increase in total housing payments, it is more likely that a low-income family can secure financing to purchase one of the houses.

Improvements being made during the rehabilitation include new roofs, vinyl siding, electrical wiring, plumbing, carpeting, flooring, kitchen cabinetry, kitchen and bathroom fixtures, interior wallboard repair or replacement, and interior painting. The energy-efficiency improvements that are expected to dramatically reduce utility costs, as well as make homes more comfortable and durable, include installing all new windows to replace leaky and broken single-pane models; insulating the walls and floors and adding insulation to the ceiling; replacing existing electric baseboard and wall-mounted units with central gas-pack heating systems; and reducing infiltration from average present values of 2000-3000 cfm₅₀ by closing off unused fireplace chimneys, repairing major holes, and sealing off major attic bypasses.

Rebuild America encouraged KHP to purchase energy-efficient windows. KHP was able to purchase energy-efficient, double-pane, low-E, argon-filled, vinyl windows with an overall whole-window U-value of 0.32 for the same cost as conventional double-pane windows by standardizing size, buying in large quantities, and negotiating with competing manufacturers. Rebuild America was also instrumental in convincing KHP to include exterior wall insulation as part of its insulation package. Other Rebuild America assistance included performing sizing calculations for the new heating and cooling equipment and emphasizing the importance of tight ducts, additional air sealing work, and complete insulation coverage.

Rebuild America estimated a potential average energy savings of about \$400 per year from the package of energy-efficiency measures described. This savings occurs with the additional benefit

of central air conditioning being provided to every home, whereas before most homes had no air conditioning. As seen in Table 3, this savings reduces total housing costs in some homes after rehabilitation and is almost sufficient to offset the increase in mortgage payment in others.

Table 3. Monthly total housing costs

	Before rehabilitation	After rehabilitation
Rent/mortgage	\$260 - 325	\$270 - 430
Energy costs	\$100	\$66
Total housing costs	\$360 - 425	\$336 - 496

One partnership that was explored for this project was to obtain installation of attic and floor insulation by the Knoxville-Knox County Community Action Committee through the Weatherization Assistance Program. Although not possible for this project, such participation in the future would free limited construction funds to be spent on other energy-efficiency measures such as improved house and duct sealing.

This partnership exemplifies a small non-public housing agency bringing together a multitude of community partners to make a much needed revitalization project viable. Energy efficiency, although important, is just one driver within this partnership. This project demonstrates that

- Incorporating energy-efficiency measures into overall rehabilitation program costs for low-income housing increases the potential pool of low-income buyers while promoting energy efficiency.
- The success of special home buying programs that include energy-efficiency enhancements depends on the ability to establish effective public-private partnerships. Without the involvement of private lenders, federal agencies, foundations, and housing coalitions, the “comprehensive funding packages” necessary to support both home ownership and greater energy efficiency will not be achieved.

Superintendent’s Club of New York

Another interesting example of a non-public housing Rebuild America partnership is the Superintendent’s Club of New York (Super’s Club). This partnership brings together maintenance personnel of multifamily buildings from all five boroughs of New York City. The goals of the Super’s Club are to provide its members with a chance to exchange ideas, share technical information, and act as a networking association, and offer an opportunity for the club members to professionalize their services. The original idea of the Super’s Club came from Richard Koral, a faculty member of the New York City Technical College and director of the College’s Apartment Housing Institute. Professor Koral has been a guru of energy efficiency in multifamily buildings for many years. At monthly meetings, the club hears presentations on such issues as boiler maintenance, locksmithing, and lighting, many of which have little to do with energy.

Recently the Super’s Club provided an important service to all of New York. During the first two months of 2000, the price of fuel oil rocketed up to more than twice last summer’s price. The

Super's Club, Rebuild America, and the state of New York organized a workshop on conservation strategies that would help building owners and managers cope with the high cost of fuel oil. The workshop brought together experts on boiler systems with state officials knowledgeable about sources of financing for retrofits. Greg Davoren of the DOE Boston Regional Office spoke at the workshop as did staff from two DOE national labs.

Richard Koral and the Super's Club now wants to help others recreate what they have started in New York. Contacts have been made with the Atlanta Chapter of the Building Owners Managers Association (BOMA), another Rebuild America Partner. Interestingly, BOMA has just started to organize an "Engineers Club" for the building engineers and maintenance professionals of their membership to provide training and networking opportunities for them and have developed an energy training course to meet this need. This demonstrates how two Rebuild America partners are now sharing ideas and working together to reach a common goal.

Future Directions

Rebuild America will first and foremost continue to support its existing residential partnerships, making sure they are on track to implementing action plans and achieving measurable energy savings. Rebuild America will continue to support the use of performance contracting and alternative financing options not only in public housing, but also in non-public housing as has been done by Rebuild America's Illinois Housing Development Authority Energy Efficiency Partnership (Burger and Jensen 1998). Rebuild America will also continue to work closely with the National Association of Housing and Redevelopment Officials (NAHRO), an important Rebuild America strategic partner for the public and assisted housing sector. Rebuild America will work with NAHRO to publish articles on energy approaches and success stories in their monthly journal, and provide training on energy measures at their summer and annual meetings.

In a new initiative, Rebuild America and DOE will once again collaborate with HUD to promote energy efficiency in public housing, building upon the successful DOE-HUD partnership that occurred between 1990 and 1995 (Brinch, Ternes, and Myers 1996). One goal of this second collaboration will be to form 20 to 30 new Rebuild America partnerships with public housing authorities over the next two years that can utilize Rebuild America's assistance to improve energy efficiency and address community needs. Emphasis will be placed on forming partnerships that can work more closely with local agencies of the DOE Weatherization Assistance Program, serve as a demonstration site for new DOE technologies, and implement energy projects using HUD's energy incentives. A second goal will be for Rebuild America to support HUD in conducting a series of joint energy workshops by providing speakers and case study examples.

Conclusions

Rebuild America has been active in forming a diverse set of partnerships within the residential sector. Although the greatest number of partnerships are involved with public housing, Rebuild America has been successful in working with non-public housing groups as well. Significant energy savings and building improvements have been achieved in a number of the Rebuild America partnerships, which now serve as case studies for others. Rebuild America and its partners have also been successful in disseminating information to housing organizations on a variety of topics, which is likely leading to energy savings that are more difficult to quantify.

References

- Brinch, Jeannette, Mark Ternes, and Michael Myers. 1996. "DOE-HUD Initiative on Energy Efficiency in Housing: A Federal Partnership." *In Proceedings of the ACEEE 1996 Summer Study on Energy Efficiency in Buildings*, 2:25-33. Washington, D.C.: American Council for an Energy-Efficient Economy.
- Burger, Mark and Val Jensen. 1998. "Performance Contracting: For Small Fry — Including Individually Owned Multifamily Buildings in a Public/Private Sector Partnership." *In Proceedings of the ACEEE 1998 Summer Study on Energy Efficiency in Buildings*, 2:13-20. Washington, D.C.: American Council for an Energy-Efficient Economy.
- Diamond, Rick, Helmut Feustel, and Nance Matson. *Energy-Efficient Ventilation for Apartment Buildings*. Washington, D.C.: U.S. Department of Energy Rebuild America Guide Series.
- Knight, Paul. *Your Energy Savings: A Resident's Handbook*. 1998. Oak Park, Illinois: Domus PLUS.

Table 1. Rebuild America Residential Market Sector Partnerships

Affiliated Tribes of Northwest Indians	Rebuild Des Moines
Atlanta Housing Authority	Rebuild Hawaii
Baltimore Housing Authority	Rebuild Iowa
BOMA Atlanta	Rebuild Kentucky
Chicago Housing Authority	Rebuild Kewanee (NC)
Christmas in April	Rebuild Little Rock
City of Cuyahoga Falls	Rebuild Nash & Edgecombe Counties (NC)
City of Davis (CA)	Rebuild Nebraska
City of Richland (WA)	Rebuild New York's Communities
City of Los Angeles	Rebuild Niagara Frontier
City of Santa Monica	Rebuild Ohio
City of Saint Paul/Minneapolis	Rebuild Roanoke-Chowan
City of Waterloo	Rebuild Salisbury (NC)
City of Westhaven	Rebuild Santa Fe
Energy Outreach Center	Rebuild Texas
E-Three	Rebuild Toledo Energy Collaborative (OH)
Fallon Paiute - Shoshone Tribes	Rebuild Wisconsin
Harbor Energy Initiative	ReEnergize East Bay
Havasupai Native American Tribe	Renaissance Station Condo Association
Harmony Project	Richmond Better Housing Coalition
Illinois Housing Development Authority (IHDA) Energy Efficiency Partnership	Rockford Housing Authority (IL)
Knox Housing Partnership	Rosebud Sioux Tribe
Knoxville's Community Development Corporation	Sacramento Municipal Utility District
Laurinburg Housing Authority (NC)	Seattle City Light
Lower Brule Sioux Tribe	Sierra Assisted Living Foundation
MidEast Regional Housing Authority (NC)	Southwestern Comm. Services/Energy & Housing Collaborative
NC Dept of Commerce – Energy Division	State of Nevada
Nevada Power	State of Vermont
P2E2 Portland	State of Wisconsin
Pittsburgh Housing Authority	Superintendents Club of NY
Rebuild Arizona	Territory of Guam
Rebuild Arkansas	Town of Cheshire (CT)
Rebuild Asheville	Town of Fairfield
Rebuild Austin	Town of Westbrook
Rebuild Boston Energy Initiative	Washington DC Housing Authority
Rebuild California	Wisconsin Energy Initiative-2 (WEI-2)
Rebuild Cedar Falls	Yavapai-Apache Nation
Rebuild Colorado	Yes, Inc.

Table 2. Rebuild America Public and Indian Housing Authority Partners

PUBLIC HOUSING AUTHORITIES

Atlanta Housing Authority
Baltimore Housing Authority
Chicago Housing Authority
City of Los Angeles — The Housing Authority of the City of Los Angeles
City of Westhaven — West Haven Housing Authority
Knoxville’s Community Development Corporation
Laurinburg Housing Authority (NC)
MidEast Regional Housing Authority (NC)
Pittsburgh Housing Authority
Rebuild Asheville — Asheville Housing Authority
Rebuild Boston Energy Initiative — Boston Housing Authority
Rebuild California — Housing Authority of the City of Los Angeles
Rebuild Hawaii — Housing and Community Development Corporation of Hawaii
Rebuild Kentucky — Mountain Association for Community Economic Development
Rebuild Kewanee — Henry County Housing Authority (IL)
Rebuild Little Rock — Little Rock Housing Authority
Rebuild Nash & Edgecombe Counties — Rocky Mountain Public Housing Authority (NC)
Rebuild Nebraska — Chadron Housing Authority, Stromsburg Housing Authority, Tilden Housing Authority, Hooper Housing Authority, Lincoln Housing Authority, Albion Housing Authority, and Omaha Housing Authority
Rebuild Ohio — Stark Metropolitan Housing Authority
Rebuild Salisbury — Salisbury Public Housing Authority (NC)
Rebuild Texas — Housing Authority of the City of Houston, Dallas Housing Authority, Cross Plains Housing Authority, and Denison Housing Authority
Rebuild Toledo Energy Collaborative — Toledo Housing Authority (OH), Lucas Metropolitan Housing Authority (OH)
Rebuild Wisconsin — Shawano County Housing Authority
Rockford Housing Authority (IL)
Town of Cheshire — Cheshire Housing Authority (CT)
Washington DC Housing Authority

INDIAN TRIBES

Affiliated Tribes of Northwest Indians
Fallon Paiute - Shoshone Tribes
Havasupai Native American Tribe
Lower Brule Sioux Tribe
Rosebud Sioux Tribe
Yavapai-Apache Nation