AHFC Low Income Weatherization | **FY2000 Request: $2,400,000**
Reference No: 6332

AP/AL: Appropriation
Project Type: Renovation and Remodeling
Category: Housing/Social Services
Location: Statewide
Contact: Les Campbell
House District: Statewide (HD 1-40)
Contact Phone: (907)330-8356
Estimated Project Dates: 07/01/2005 - 06/30/2010

Brief Summary and Statement of Need:

Federal U. S. Department of Energy (DOE) and corporation (AHFC) funds to assist low- and moderate-income families attain decent, safe and affordable housing through the weatherization and rehabilitation of existing homes. Weatherization provides for fire safety through furnance and electrical repairs, education, chimney and woodstove repairs, and egress windows (installed during bedroom window replacements).

Funding:	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	Total
AHFC Div		$2,000,000	$3,000,000	$3,000,000	$3,000,000	$2,231,500	$13,231,500
AHFC Rcpts	$1,000,000						$1,000,000
Fed Rcpts	$1,400,000	$1,400,000	$1,400,000	$1,800,000	$1,800,000	$1,800,000	$9,600,000
Fed Unrstr						$37,500	$37,500
Total:	$2,400,000	$3,400,000	$4,400,000	$4,800,000	$4,800,000	$4,069,000	$23,869,000

☐ State Match Required ☐ One-Time Project ☐ Phased - new ☐ Phased - underway ☑ On-Going
0% = Minimum State Match % Required ☐ Amendment ☐ Mental Health Bill

Operating & Maintenance Costs:

	Amount	Staff
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
Totals:	0	0

Additional Information / Prior Funding History:

FY2005 - $1,837,500 Federal and $2,231,500 Corporate; FY2004 - $1,800,000 Federal and $3,000,000 Corporate; FY2003 - $1,800,000 Federal and $3,000,000 Corporate; FY2002 - $1,400,000 Federal and $3,000,000 Corporate; FY2001 - $1,400,000 Federal and $2,000,000 Corporate; FY2000 - $1,400,000 Federal and $1,000,000 Corporate; FY1999 - $4,200,000 Federal/Stripper and $1,000,000 Corporate; FY1998 - $1,200,000 Federal and $4,000,000 Corporate.

Project Description/Justification:

The purpose of the program is to provide cost-effective energy improvements to homes of low-income families.

The projected outcomes are:

- Improved resident health and safety;
- Improved durability and longevity of housing stock;
- Replacement of over 500 unsafe heating systems;
- Install smoke detectors in homes;
- Install Carbon monoxide detectors in homes;
- Serve 2600 Alaskans while retrofitting approximately 900 homes.

The Low Income Weatherization Program utilizes US DOE and Corporation funds to assist low- and moderate-income

families to attain decent, safe and affordable housing through the weatherization and rehabilitation of existing homes. Much of the older housing stock cannot maintain a minimally comfortable indoor temperature. The Weatherization program annually serves approximately 560 households and approximately 1500 individuals. Program clients are mainly: elderly, disabled, and families with small children. Most of the families receiving services are the working poor and are not receiving Public Assistance. At the current funding levels, the program is unable to serve all of the high priority households that are on extensive waiting lists.

Weatherization improves occupant health and safety through the replacement of unsafe heating systems and installation of Carbon Monoxide detectors. Carbon monoxide problems are resolved, fire safety threats alleviated, egress windows installed, handrails and steps repaired and moisture and mold problems abated. Client health improves as toxins and asthma triggers are removed and ventilation issues are addressed. Technology has developed concurrently with the program and provides the foundation for improved approaches to new construction for arctic conditions.

Benefits of Weatherization:

- Helps keep people in their existing homes, reducing the need for public housing;
- Improves existing housing stock reducing the need for more public housing;
- Reduces overall fuel use;
- Materials purchased from local Alaskan vendors;
- Contractors and crew are hired locally and receive training (wages spent locally);
- Savings from Fuel costs reinvested in local economy;
- Extensive client education on long term O&M required to maintain houses;
- Weatherization techniques improve building stock by addressing critical durability issues;
- Health and safety of residents dramatically improved in many cases due to mitigation of problems in the home, i.e. rot, mildew; and helps in eliminating ice dams; and
- Egress windows, smoke alarms and CO detectors are installed to protect families from fire and carbon monoxide poisoning

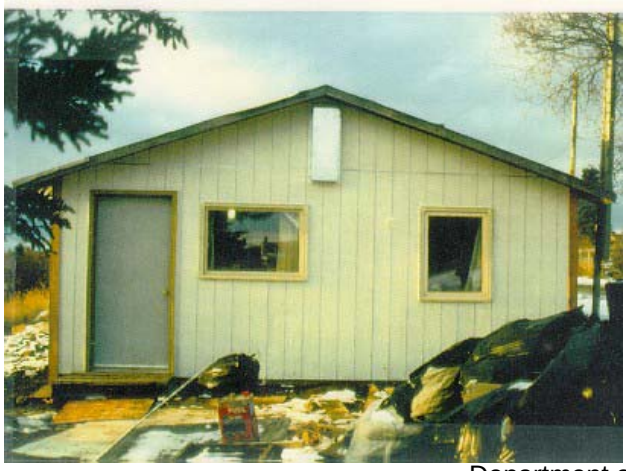
Our ability to properly diagnose and correct problems in existing housing stock through the weatherization program helps provide a safe, clean environment to clients improving the overall quality of life to pursue a better life for their families

Regional Funding Allocation

Northern	10.55%
Western	10.57%
Southwestern	7.29%
Interior	6.59%
Fairbanks	14.40%
Southcentral (not Anchorage)	13.09%
Anchorage	26.47%
Southeast (not Juneau)	6.26%
Juneau City and Borough	4.78%

Before

After



In a national study conducted by the United States Department of Energy's Oak Ridge National Laboratory, the weatherization programs was proven effective in saving both costs and energy on a national and local level. In 1989 this study showed that the weatherization program's annual average energy savings for all fuels was 18.2%; in the updated 1996 study improvements in the program had increased average energy savings to over 23%.
The study also surveyed the occupants of the weatherized dwellings to allow them report on draft reduction, comfort level, safety, and their own health based incidents of illness due to temperature and air quality within the home. On every rating scale, the occupants reported significant and positive change between the before and after periods, while the control group reported no change.

For every dollar invested, the weatherization program returns $1.39 in energy related benefits. In overall benefits (including health and safety and other non-energy benefits), the weatherization program's cost effectiveness was found to return $2.40 for every dollar invested in the program. Because of this, the Bush administration has been a strong supporter of the weatherization program.

Determining Savings and Diagnostics
In 1996, Alaska weatherization crews began training for and using a computerized energy audit called AkWarm, which requires all conservation measures to have a savings to investment ration of at least one. Extensive diagnostic procedures are also used to determine what measures will provide the greatest savings at the lowest possible costs. Heating systems are diagnosed and system efficiencies are increased an average of 5 to 10%. Blower doors are used to find and reduce air leakage which is one of the largest causes of heat loss in a building. Although no formal study has been funded for the weatherization program, reports from rural communities often place energy savings at 40 to 60 % per household.

Increased Cost of Doing Business/Rise in Fuel Costs
This year, both the price of materials and freight have risen sharply in all areas of Alaska. In rural Alaska the cost to provide services is approximately 30% higher than last year (AVCP Housing Authority estimates this figure to be as high as 37%). At the same time, many of these remote communities report heating fuels to be between three to five dollars a gallon and rising. The Department of Health and Social Services is currently updating a survey of ten select communities (including both urban and rural) to determine the overall increase in fuel costs over the last year and are finding that the average increase is 30 percent.

Waiting List
The active waiting list (priority clients approved for service with completed applications) numbers over four hundred in the urban and road connected areas of the state. In the Western and Northern areas alone there are over one thousand households in the villages that have yet to be served. There are also many communities not yet served in the Interior, Bristol Bay and Southeast which have also been waitlisted for weatherization. With the over thirty percent rise in the cost of service, the number of homes that we can serve, and the measures that can be applied to those homes is becoming significantly reduced.

Homelessness and Affordability
Other benefits to Alaska include the fact that weatherization is helping many low income clients to stay in their homes, reducing homelessness and providing affordable housing opportunities. Over 80% of weatherized units are owner occupied. The median cost of a home today in the Anchorage area is $252,000 which is outside the reach of any low-income person. It is estimated that the average family pays approximately 3.5% of their income in energy related costs, while the low-income family spends 14%. With the cost of heating fuel continuing to skyrocket, the energy burden on low-income families will continue to threaten their ability to stay in these homes. The director of weatherization in the Fairbanks area estimated that weatherization has prevented at least 20 families from losing their homes each year. A heating system breakdown at -20 degrees F, occurring to a family living from paycheck to paycheck, has the potential impact to force that family to move out of the house. Weatherization is the only program available in Alaska that repairs and replaces heating systems for low income families. It is the last resort for many families.

Health and Safety
In addition, weatherization works hand in hand with local fire officials to reduce significant safety hazards. Carbon monoxide and smoke detectors are placed in houses where appropriate. Mold and moisture reduced or eliminated. Long term durability improvements are made, reducing the new for new housing units and saving current housing stock. The intensive client education that accompanies weatherization helps the client to more fully understand the operation and maintenance of their own home for years to come.

Jobs and Skills
Weatherization hires and trains locally in every community where work is being done. The advanced level of retrofit training that is given to each employee stays in these communities and often carries into other building projects ensuring overall energy efficiency in community buildings as well as other housing projects. The building sciences have been advanced significantly by the technology developed and used in the weatherization program, ensuring more efficient, durable and safer buildings overall. Professional skills spread into the private sector improving new housing stock. *More than **140** Alaskans are employed in the program this year.*

Individual and Community Benefits
Weatherization works very well in Alaska and has proven community as well as individual benefits. For the individual, serious risks to health are reduced and eliminated, including carbon monoxide, mold, rot, frozen pipes, and heating system failure. Much needed household funds are diverted from making payments on critical heating fuel to food, medical, and other household needs. Almost all weatherization households contain a priority one client; 27% elderly, 36% disabled, and 39% with children under the age of six.

For the community, long term durability improvements on the housing stock are made, reducing the need for new housing units and providing affordable shelter to low income clients. Job creation provides important cash flow and skills development. Professional skills extend into the private sector improving new housing stock. Local suppliers provide materials for the program. The dollars stay in the state and in the communities where weatherization is being implemented.