TESTIMONY OF KANSAS HOUSING RESOURCES CORPORATION
TO THE SENATE UTILITIES COMMITTEE

PRESENTED BY LARRY BENTLEY, WEATHERIZATION ASSISTANCE PROGRAM
REGARDING WEATHERIZATION ASSISTANCE
JANUARY 17, 2007

Mr. Chairman and Honorable Members of the Committee, my name is Larry Bentley and I am the manager for training and technical assistance in the Kansas Weatherization Assistance Program. I appreciate the opportunity to testify before you about the benefits of weatherization to the citizens of Kansas.

The first weatherization grant was awarded in Kansas 33 years ago for a total of $15,000. Those funds were limited to what we now call "winterization": materials to weatherstrip doors, caulk cracks, and install plastic over windows. All work to install these materials had to be voluntary. Since the 1970's, weatherization has grown substantially in scope, yet funding the program has been up and down. In the 1990's, weatherization experienced severe funding cuts of 50 percent or more. Then in 2000, program funding started increasing slowly once again to an average of about $4 million a year. In 2006, weatherization received a supplemental allocation of $1.5 million from the federal government. We also received $2 million from the State of Kansas. With these additional allocations, our 2007 program year funding increased to approximately $7.2 million, which allows KHRC and our non-profit partners to continue building program capacity and deliver much needed weatherization services to deserving Kansas families.

Today's weatherization program is vastly different from 1974. With increased funding and over thirty years' experience on weatherizing homes and evaluating its effectiveness, it has evolved into a highly technical program. In 1994 we developed a training and certification program for Kansas weatherization inspectors that gained Kansas a good deal of attention in the 12-state region. Certified inspectors now look at the home as a total "system," recognizing that a home which is tighter and more energy efficient may be less healthy for occupants due to poorer indoor air quality. Because of that, inspectors make sure the combustion appliances (primarily the furnace) are safe before weatherization is started. Inspectors evaluate carbon monoxide, moisture, mold, lead levels, and they consider the life style habits of residents, such as smoking and having lots of plants or pets, which also affect indoor air quality.

Using high-tech home auditing tools as well as experience, weatherization staff determines the repairs needed, assuring they are cost-effective. Among the most common repairs are attic and sidewall insulation, along with sealing cracks where air infiltrates. Before any repairs are made to the building, the inspectors assure the furnaces are operating safely and efficiently, and unsafe furnaces may be replaced. Other energy-efficiency measures include basement or floor insulation, installation of ceiling fans, installation of compact fluorescent light bulbs, and minor repairs that protect the materials installed during weatherization. Weatherization reduces energy use in the average home by about 21 percent each year for 10 years; using average cost figures, this amounts to a saving of about $350.00 annually per family for 10 years.

Weatherization services are distributed through a network of nine nonprofit organizations that provide energy efficiency information to Kansas homeowners across the state. These organizations recruit and process applications and they employ the certified inspectors/auditors who assess each home for needed repairs. Our partners completed weatherization on 1,282 homes in 2005, representing 2,131 Kansas residents. The 2006 weatherization program year is not completed yet, but we expect to finish 1,705 homes, serving 4,592 residents by the end of the program year. With the added funds from the State, we expect to weatherize approximately 2,000 homes, benefiting 4,800 low-income Kansas residents in 2007.

In addition to our non-profit affiliates, KHRC's partnership also includes utilities, such as Westar Energy, Kansas Gas Service and Midwest Energy. These utility companies provide valuable energy usage data which helps KHRC to evaluate the effectiveness of weatherization improvements made to Kansas homes.

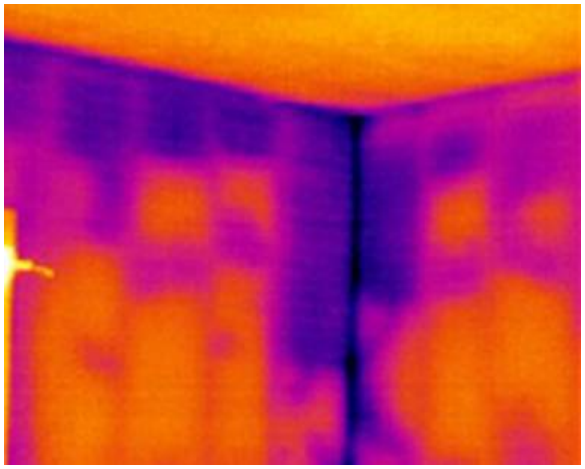
I've attached some materials for your review, including the local weatherization agencies and areas served, and some pictures of work being done, with explanations.

We appreciate your support for the Weatherization Assistance Program. I'd be glad to answer questions at this time.

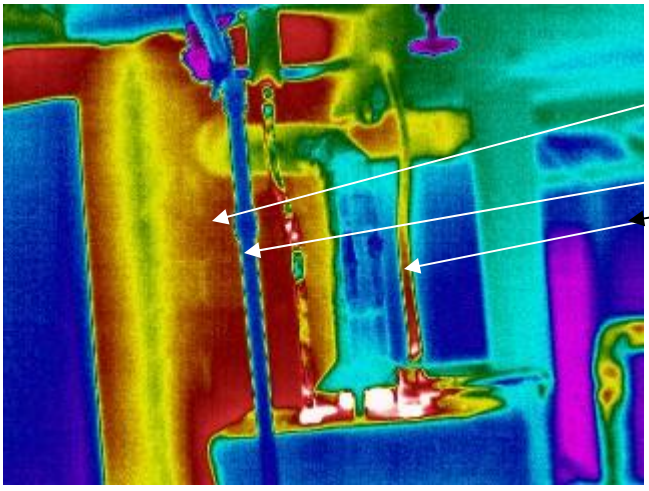
AGENCY	COUNTIES SERVED
East Central Kansas Economic Opportunity Corporation Contact: Don Hobbs, Weatherization Director 1320 S. Ash Street, Suite 205 - PO Box 40 Ottawa, KS 66067-0040 Phone: 785-242-6413 FAX: 785-242-1081 Toll Free: 1-888-833-0832	Anderson, Butler, Chase, Coffey, Douglas, Franklin, Greenwood, Harvey, Lyon, Marion, Miami, Osage, Northern Wyandotte
Harvest America/Wyandotte County Contact: Nancy Esquivel-Gomez, Housing Coordinator 14th and Metropolitan, Kansas City, KS 66103 Phone: 913-342-2121 FAX: 913-342-2861	Southern Wyandotte
Northeast Kansas Community Action Program Contact: Jack Shaefer, Weatherization Director PO Box 380, 1260 220th Street, Hiawatha, KS 66434-0380 Phone: 785-742-2222 (Ext. 143) FAX: 785-742-2164 Toll Free: 1-888-904-8159	Atchison, Brown, Doniphan, Jefferson, Jackson, Leavenworth, Marshall, Nemaha, Pottawatomie
Southeast Kansas Community Action Program Contact: Hoyt Johnson, Weatherization Coordinator PO Box 128, 401 N. Sinnet, Girard, KS 66743-0128 Phone: 620-724-8204 (Ext. 148) FAX: 620-724-4471	Allen, Bourbon, Cherokee, Crawford, Labette, Linn, Montgomery, Neosho, Wilson, Woodson
Community Action, Incorporation Contact: Aaron Brucker, Housing Director 1000 SE Hancock, Topeka, KS 66607 Phone: 785-235-9296 FAX: 785-290-3200	Shawnee
Harvest America/Southwest Kansas Contact: Nancy Esquivel-Gomez, Housing Coordinator 116 E. Chestnut, Garden City, KS 67846-5441 Phone: 620-275-1619 FAX: 620-275-1762 Toll Free: 1-877-505-5150	Barton, Clark, Comanche, Edwards, Finney, Ford, Grant, Gray, Greeley, Hamilton, Haskell, Hodgeman, Kearny, Kiowa, Lane, Meade, Morton, Ness, Pawnee, Rush, Scott, Seward, Stanton, Stevens, Wichita
North Central Regional Planning Commission Contact: Margaret Cathey, Housing Director PO Box 565, 109 N. Mill, Beloit, KS 67420 Phone: 785-738-2218 FAX: 785-738-2185 Toll Free: 1-800-432-0303	Cheyenne, Clay, Cloud, Decatur, Dickinson, Ellis, Ellsworth, Geary, Gove, Graham, Jewell, Lincoln, Logan, Mitchell, Morris, Norton, Osborne, Ottawa, Phillips, Rawlins, Republic, Riley, Rooks, Russell, Saline, Sheridan, Sherman, Smith, Thomas, Trego, Wabaunsee, Wallace, Washington
South Central Kansas Economic Development District Contact: Mike West, Weatherization Director 209 E. Williams, Suite 300, Wichita, KS 67214 Phone: 316-262-7035 FAX: 316-262-7062 Toll Free: 1-800-658-1742	Barber, Chautauqua, Cowley, Elk, Harper, Kingman, McPherson, Pratt, Reno, Rice, Sedgwick, Stafford, Sumner
Johnson County Human Services & Aging Contact: **Len Paulie, Weatherization Director** 12425 W. 87th Street Parkway, Lenexa, KS 66215-4524 Phone: **913-715-6617** FAX: **913-715-6630**	Johnson

Kansas has 20 certified weatherization inspectors, with five pending successful completion of all training.

This inspector is demonstrating skills learned in building science and combustion appliance training. He is testing a furnace for carbon monoxide and for an appropriate draft for the furnace.



An infrared camera shows “hot” and “cold” areas in the home. The above pictures show a normal outer wall and then, through the infrared camera, the places in the wall that are not insulated (the blue areas). Using the infrared camera, the inspector can determine what areas need added insulation.



The infrared camera can also be used inside the house. This picture shows a chimney flu—notice the red color denoting heat. It also shows a cold water and a hot water line from the water heater.

This inspector is conducting a blower door test, to identify air leakage from the house. The artificial door is fit into the door frame, and a fan and gauges are attached which identify the amount of air leakage.

Using other tools, such as liquid smoke and manometers, as well as experience, the inspector can tell where cracks and holes need to be sealed.

Using a manometer, the inspector also tests duct pressure throughout the house, detecting duct leakage.

This worker is installing attic insulation in a kneewall section of the attic.

Installation of attic insulation requires covering electric wiring and blowing up to 12 inches of insulation.

This installer is blowing dense-pack insulation into a sidewall. After the insulation is installed, the siding is re-installed.