

# 'Superinsulation' may slash heat bills

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JUNEAU — In most rural Alaskan communities energy costs are placing a serious strain on the local economy.

This burden is illustrated by research showing that rural Alaskans spend between 16 percent and 37 percent of their family incomes on energy bills. In Anchorage, energy costs take only 2 to 3 percent of a typical person's paycheck.

## OPINION

Local governments are feeling the pinch, too, as the result of the downturn in the state's economy, combined with cuts in federal funding. Many rural communities have facilities that they can no longer afford to heat or maintain.

Alaska is one of only three states in the union without an energy standard for home construction, and all too often homes built here simply don't measure up to the state's climate and energy costs.

A Department of Community and Regional Affairs rural housing needs assessment found that 28 percent of homes in rural Alaska could not maintain a healthy indoor air temperature of 70 degrees Fahrenheit during the long winter months, regardless of how well the furnace or woodstove is burning.

The wretched condition of rural housing was underscored in the Federal Housing and Urban Development's recent audit of its rural housing program. HUD auditors determined that rural housing projects "are

being developed which are infeasible, improperly designed and inadequately constructed."

This can be seen in the Northwest Alaska community of Golovin, where a low-income family living in a 400-square foot home uses a barrel of heating oil a week and still cannot achieve a comfortable temperature.

An obvious solution would be to build homes that can withstand the rigors of an Alaskan winter and have affordable heating bills. It's now possible to construct homes that are comfortable and healthy and can be heated for less than \$300 a year.

The Department of Community and Regional Affairs recently announced the award of a grant to build 13 such "superinsulated" homes in Golovin next summer.

The Alaska Craftsman Home Program, also sponsored by the Department of Community and Regional Affairs, encourages the construction of such homes by offering training and technical assistance to contractors, lending institutions and home builders. More than 50 homes across the state are now being constructed to the program's voluntary standard. But voluntary standards are not enough.

In addition, the state needs to implement an energy standard for homes that have been purchased with state financial assistance. The department has developed a standard geared to the different regions of the state to reflect Alaska's diverse climate, energy expenses and construction costs. Implementation of the standard is being delayed, however, by a legal challenge from a small group of urban contractors.

Rep. Kay Brown, D-Anchorage, has introduced legislation (House Bill



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358) which addresses the legal issues raised by the suit, to clear the way to implement the standard. Alaskans deserve homes that are comfortable, healthy and affordable to heat.

Another solution would be to retrofit community facilities so they could

have healthy temperatures and be less expensive to maintain. For example, it is possible to reduce a building's heating costs an average of 60 percent through remodeling it to so-called "superinsulation" values. New energy-efficient light bulbs can provide the same amount of light while using 35 percent less electricity and lasting four times longer than standard light bulbs.

These are not pie-in-the-sky dreams. Down to earth examples can be found in Tununak where the village clinic was superinsulated, reducing the annual \$4,000 heating bill to \$1,100. A Mat-Su Valley home will be heated by its water heater after it is retrofitted through the Alaska Craftsman Home Program. A lighting retrofit in Nikolai cost \$2,246 and is expected to net a \$1,151 savings in the first year.

The Low Income Weatherization Program assists those Alaskans who are least able to afford high energy bills. The heating expenses for needy Alaskans participating in the program have been cut by an average of 25 percent after receiving home improvements such as additional insulation, repairs to cracked walls and installation of efficient heating systems. This program makes particular sense for rural Alaska with its high energy costs, severe weather and high incidence of substandard housing.

Energy programs strengthen local communities by reducing the operating costs of homes and community facilities, ensuring long-term financial savings. And because the labor skills needed to make the improvements are easily attainable in each community, sorely needed jobs are created. It's a combination that makes sense for rural Alaska.