

Agency: Commerce, Community and Economic Development**Grants to Named Recipients (AS 37.05.316)****Grant Recipient: Cold Climate Housing Research Center****Federal Tax ID: 92-0169929****Project Title:****Project Type: Planning and Research**

Cold Climate Housing Research Center - Research Center Project Funding

State Funding Requested: \$750,000**House District: Statewide (1-40)**

Future Funding May Be Requested

Brief Project Description:

The Cold Climate Housing Research Center is requesting \$750,000 from the Alaska State Legislature to further position CCHRC to effectively address the cold climate building challenges that burden all Alaskans with high energy bills, costly construction practices, and expensive building failures.

Funding Plan:

Total Project Cost:	\$2,470,000
Funding Already Secured:	(\$1,720,000)
FY2013 State Funding Request:	<u>(\$750,000)</u>
Project Deficit:	\$0

*Funding Details:**Currently Booked Research and Contracts Funding:**AHFC - \$500,000**Stimulus Funding - \$500,000**DCCED - \$60,000**NREL - \$50,000**Denali Commission - \$70,000**Wallace Research Foundation - \$50,000**Permafrost Technology Foundation - \$90,000**Contracts - \$400,000**Total: \$1,720,000***Detailed Project Description and Justification:**

Please see attached.

Project Timeline:

CCHRC will use the funding to activate research projects between the 3rd quarter of 2012 through the 4th quarter of 2013.

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

N/A

Grant Recipient Contact Information:

Name:	Jack Hebert
Title:	President/CEO
Address:	1000 Fairbanks Street Fairbanks, Alaska 99709
Phone Number:	(907)459-3454
Email:	jack@cchrc.org

Has this project been through a public review process at the local level and is it a community priority? Yes No

For use by Co-chair Staff Only:



Cold Climate Housing Research Center

Promoting and advancing the development of healthy, durable, and sustainable shelter for Alaskans and other circumpolar people.



Funding Request Overview

The Cold Climate Housing Research Center (CCHRC) is requesting \$750,000 from the Alaska State Legislature to further position CCHRC to effectively address the cold climate building challenges that burden all Alaskans with high energy bills, costly construction practices, and expensive building failures.

CCHRC is currently engaged in over 50 projects statewide, including policy recommendations for the state of Alaska, housing design for communities facing natural disasters, applied research with the industry, and consulting with owners and builders on best practices. CCHRC also works with homeowners to answer common questions and provides consulting services to Alaska's building professionals.

CCHRC's work involves many public and private partners and is funded through diverse sources, including federal, state, local and private. Funding from the Legislature will play a key role in activating projects that aim to improve the affordability, durability, and health of housing for Alaskans.

CCHRC Overview

- Independent 501c3 nonprofit
- Formed in 1999 by members of the Alaska home building industry
- Approximately \$3,000,000 of activity a year
- More than two dozen funding partners in 2011, mix of public and private
- 50 active projects in all regions of Alaska
- Approximately 150 members, ranging from major international corporations to local Alaska businesses

Following are several project highlights that CCHRC and its partners completed recently.

Crooked Creek Flood Response:

CCHRC partnered with the Alaska Division of Homeland Security and Emergency Management, as well as housing authorities and volunteer organizations, to develop replacement homes for Crooked Creek when a quarter of the residents were displaced from their homes by flooding in May 2011. Design to move in for nine homes was accomplished in less than 4 months. This emergency response model will be applied to other parts of the state. Successful elements of the design are being incorporated elsewhere Alaska due to fast build time, low cost, and very high energy efficiency.



Flooding in Crooked Creek, May 2011.



Finished house in Crooked Creek, September 2011.

Improved Energy Efficiency Retrofit Techniques:

CCHRC evaluates and innovates strategies for improving the energy efficiency of homes in the varied, harsh climate of Alaska. Researchers analyze the energy performance, durability, and health impacts of retrofit strategies and work with stakeholders around the state to incorporate findings into practice through homeowner education, building codes, the energy rating process, and consultations with professionals.

Quinhagak Prototype Home:

CCHRC worked with the community of Quinhagak to design an energy efficient, affordable prototype



Spray foaming the exterior of the Mobile Test Lab to begin a retrofit research project.



The Quinhagak prototype house, constructed in 2010, consumes 87% less fuel than the average home in rural Alaska.

“Housing is much more than just a roof over a family’s head; it is an integral part of a community’s economic, environmental, physical, and psychological health. Poor housing affects not only the neighborhood but also puts a burden on statewide resources, thus impacting all residents. Investment in energy efficiency research and sustainable housing will pay back in energy savings, health and safety, economic stability, improved air quality, job growth, and a healthy future for Alaska.”

–Jack Hébert
President/CEO of CCHRC

that reflects the climate and tastes of the people. The home consumes approximately 171 gallons of heating oil a year, substantially less than the 880 gallons the average rural house uses. The prototype was constructed using materials and ventilation strategies that create a healthy indoor environment. Using local labor helped build a workforce in Quinhagak and kept construction costs down. The village will be building four more homes this year based on the prototype.

Request:

CCHRC is requesting \$750,000 to initiate projects through partnerships in rural Alaska, the homebuilding industry, professional communities, and the public sector.

Contact Jack Hebert at 907-450-1752 or jack@cchrc.org