

**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: Other**

# Cold Climate Housing Research Center - Cold Climate Housing Research Center Project Funding

**State Funding Requested: \$2,000,000****House District: Statewide (1-40)**

Future Funding May Be Requested

**Brief Project Description:**

The Cold Climate Housing Research Center (CCHRC) is requesting a total of \$2 million 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:	\$3,000,000
Funding Already Secured:	(\$1,000,000)
FY2014 State Funding Request:	<u>(\$2,000,000)</u>
Project Deficit:	\$0

*Funding Details:*

Please see attached, especially page 3 of 3.

The funding request comprises a portion of CCHRC's overall funding mix, which includes federal, state, local, and private funding.

**Detailed Project Description and Justification:**

Please see attached.

**Project Timeline:**

The majority of the expenses will occur between July 1st of 2013 and June 30 of 2014, with minor expenses occurring after this period for projects that are still active.

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

N/A

**Grant Recipient Contact Information:**

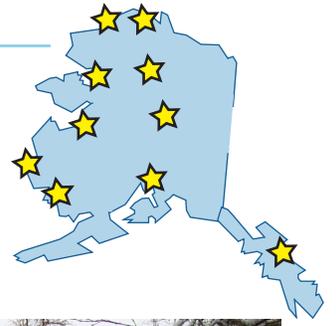
Name:	Jack Hebert
Title:	President/CEO
Address:	1000 Fairbanks Street Fairbanks, Alaska 99709
Phone Number:	(907)388-3585
Email:	jack@cchrc.org

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



# 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 a total of \$2 million 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, affordable 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.



Each home at the Sustainable Village is projected to use fewer than 200 gallons of heating oil a year.

## Sustainable Village at UAF:

In 2012 CCHRC built the first phase of a super low-energy student housing development at the University of Alaska Fairbanks. The cluster of four 4-bedroom homes use the latest cold climate technology and sustainable infrastructure. Houses have unique combinations of foundation, wall assembly, and mechanical system, and will serve as a testbed for advancing construction techniques. UAF students helped design and build the homes and are now live-in researchers who monitor, analyze, and help refine the Village’s design. Visit [makinghouseswork.cchrc.org](http://makinghouseswork.cchrc.org) for more information and videos on the Sustainable Village.

## Improved Energy Efficiency Retrofits:

CCHRC researches energy efficiency retrofit techniques and communicates best practices to builders and homeowners. This research also informs programs and policies in Alaska to ensure that retrofits are safe and effective. Future work will include combustion safety and ventilation research to ensure that homes remain safe as efficiency gains are realized. The average homeowner who participated in the state’s rebate program saved 33% each year on energy.

More information can be found at [cchrc.org/docs/snapshots/HERP\\_snapshot.pdf](http://cchrc.org/docs/snapshots/HERP_snapshot.pdf)

## CCHRC at a Glance

- 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 2012, mix of public and private
- Approximately 150 members, ranging from major international corporations to local Alaska businesses
- + 60,000 visits per year to website & blog
- + 90,000 Youtube views
- + 2,000 tour attendees; + 2,000 homeowner consultations

## Sustainable Housing Prototypes:

CCHRC is working with partners in Alaska communities large and small to develop energy efficient, affordable housing prototypes that can serve as a catalyst for change. This ranges from single-family prototype homes in remote villages like Atmautluak to teacher housing in Fort Yukon and Venetie to student housing at UAF in Fairbanks. These homes consume up to 80% less energy for space heating while creating local jobs and capacity. In villages like Quinhagak, local teams are reproducing the prototypes to solve housing needs. More than 12 communities are partnering with CCHRC on sustainable housing designs.

## Legislative Request:

CCHRC is requesting a total of \$2 million to initiate projects through partnerships across Alaska, the homebuilding industry, professional communities, and the public sector.



Ten prototypes, from studios to 4-bedrooms, were constructed in Crooked Creek after spring flooding wiped out 14 homes in 2011. The average home was built for \$78,000, and design to build took just 42 days.



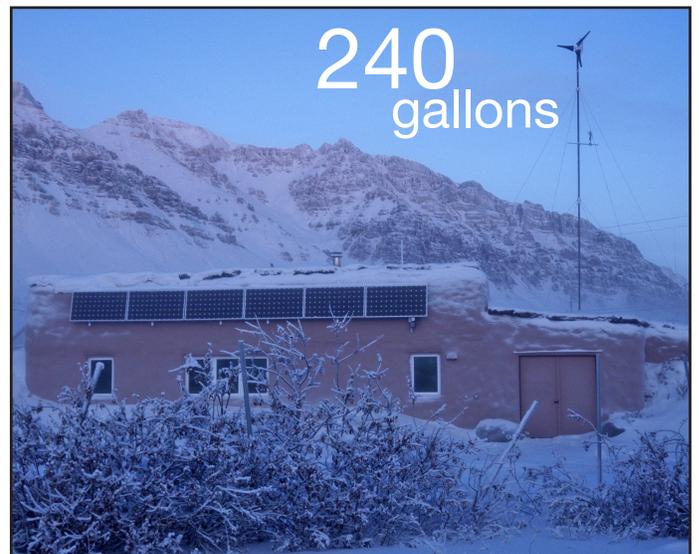
In Quinhagak, one of three new homes built by the community (left) sits next to the prototype house built in 2010. The prototype consumes 171 gallons of heating oil a year, 80% less than the average home in rural Alaska, and was less expensive to build.

*“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. 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

Contact Jack Hébert at 907-450-1752 or [jack@cchrc.org](mailto:jack@cchrc.org)

Below are a few examples of the reduced construction cost and annual fuel use of prototype projects.



The Anaktuvuk Pass prototype, constructed in 2009, uses 240 gallons of heating oil a year, nearly 80% less than the average rural home, and was built for 1/3 the cost.

## Budget Request:

Incremental increase of \$1,000,000 to Capital Budget for a total appropriation of \$2,000,000.

## CCHRC Funding History:

The Alaska Legislature has regularly appropriated funding to the Cold Climate Housing Research Center since FY05 (see Table below). This funding has originated in the Governor's budget and is highly supported by the Alaska Housing Finance Corporation.

In FY12, CCHRC requested an additional \$180,000 capital appropriation to outfit the soon to be completed Sustainable Northern Communities Center. In FY13, CCHRC received an additional \$547,500 as a named recipient through the capital budget.

This year, CCHRC is requesting an incremental increase in the longstanding capital appropriation administered through AHFC, instead of seeking two separate capital appropriations. This has the support of AHFC.

Fiscal Year	AHFC Capital Appropriations	Other Capital <sup>1</sup>	Total Capital Appropriation
FY05	\$500,000		\$500,000
FY06	\$500,000		\$500,000
FY07	\$500,000		\$500,000
FY08	\$1,000,000	\$1,000,000	\$1,100,000
FY09	\$1,000,000		\$1,000,000
FY10	\$1,000,000		\$1,000,000
FY11	\$1,000,000		\$1,000,000
FY12	\$1,000,000		\$1,180,000
FY13	\$1,000,000		\$1,547,500
FY14	\$1,000,000 in SB18 Budget + \$1,000,000 in CSSB18		\$2,000,000

1 - Named Recipient through DCCED

## CCHRC Connections

- **2,000 homeowner** consultations from across Alaska.
- **90,000+ video views** including how-to, sharing results, and advice for homeowners.
- **60,000** per year **website visits** and increasing.
- **Request by Southeast Alaska and Southcentral Alaska** websites based on our successful "Your Northern Home" model developed for Interior Alaska.
- **Request by Southeast Alaska and Southcentral Alaska** for regionally specific videos to help homeowners and builders.
- **Scores of presentations by invitation** throughout Alaska to communicate the best information available about how to address the challenges of building in Alaska, emerging and improved building techniques, and practical perspectives on changing policy and code.
- **2,000 visitors** during tours including the general public, State and Federal agency officials, Alaska Legislators, U.S. Senators and Congress, the building community, students and more.
- CCHRC feeds new and updated information into **classrooms throughout Alaska** including homeowner and professional focused learning.
- The **CCHRC Building Addition** will enable diverse groups in Alaska's energy and building sector to meet and collaborate on some of the biggest challenges facing Alaskans today.