

## Trust Fund 2009 Work Program

**Date of Report:** June 17, 2009  
**Date of Next Progress Report:** January 31, 2010  
**Date of Work Program Approval:**  
**Project Completion Date:** June 30, 2011

### I. PROJECT TITLE: Energy Efficient Cities

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**Location:** Minneapolis, St. Paul, Apple Valley, Owatonna, Austin, Rochester, Duluth, Park Rapids.

<b>Total Trust Fund Project Budget:</b>	<b>Trust Fund Appropriation</b>	<b>\$ 2,000,000</b>
	<b>Minus Amount Spent:</b>	<b>\$ 0</b>
	<b>Equal Balance:</b>	<b>\$ 2,000,000</b>

**Legal Citation: ML 2009, Chap. 143, Sec. 2, Subd.7c**

#### **Appropriation Language:**

\$2,000,000 is from the trust fund to the commissioner of commerce for an agreement with the Center for Energy and Environment for demonstration of innovative residential energy efficiency delivery and financing strategies, training, installation, evaluation, and recommendations for a utility residential energy conservation program.

### II. PROJECT SUMMARY AND RESULTS:

The Energy Efficiency Cities project will demonstrate innovative residential energy efficiency program delivery, with associated job training and financing components, to significantly reduce energy use and environmental impact in at least 6,000 homes through a community-wide partnership approach. This project is intended to demonstrate and jump start innovative efficiency programs throughout Minnesota.

City-specific programs will be developed in at least 8 cities, including Minneapolis, St. Paul, Apple Valley, Owatonna, Austin, Rochester, Duluth and Park Rapids.

Although these programs will be customized, they are expected to have some or all of the following components:

- Community-based marketing strategies to recruit participants to educational events, primarily workshops, for training participants to take low-cost energy actions and serve as an entry into the program
- Energy consumption feedback program to provide to encourage individual energy-saving actions, with interactive media and website resources to support these actions
- Analysis of electric and natural gas consumption data to identify and focus on high-energy usage homes
- Installation of low-cost energy efficiency materials
- In-home visits to verify and complete installation of low-cost materials, identify other energy-saving opportunities, and provide a customized energy action plan
- Assistance, including providing cost-share, for completion of major efficiency upgrades including insulation, air sealing and major mechanicals replacement
- Training for insulation and air sealing contractors

Combined, these program components are expected to provide a “one-stop shop” comprehensive and integrated approach to make taking energy efficiency actions as easy as possible for the homeowner. Lessons learned from this project would be leveraged by including successful elements of these strategies in large scale utility energy efficiency programs.

### **III. PROGRESS SUMMARY AS OF**

### **IV. OUTLINE OF PROJECT RESULTS:**

#### **Result 1: Design and develop 8 or more city-specific residential energy-efficiency programs.**

##### **Description:**

City-specific residential energy-efficiency programs will be designed in the following cities: Minneapolis, St. Paul, Apple Valley, Rochester, Owatonna, Rochester, Duluth and Park Rapids. Other cities may be added later as resources allow. The programs will be designed to be comprehensive, emphasize ease of use for participants, and be oriented towards achieving cost-effective energy savings. Program design will be informed by successful past programs (such as Operation Insulation) as well as emerging research and new technology opportunities.

These programs will be designed in consultation with local cities and utilities. It is expected that utilities will provide significant cost-share in implementing these programs, in order to help them achieve their state-required energy conservation

goals. Although the program would be tailored to each city, we expect that the program design would have the following components:

**1) *Recruitment of participants through workshops or other events.***

Homeowners would be recruited for the program through community energy workshops, or other community-based recruitment techniques to encourage efficiency actions as “keeping up with the neighbors” and a healthy sense of competition for improving energy efficiency. These recruitment techniques would involve significant partnerships with local community organizations. A variety of studies have shown that through the use of this “foot-in-the-door” technique individuals who agree to small requests are much more likely to agree to larger requests later. Combined with a public commitment by residents and long-term feedback, this will set the foundation for lasting and effective behavior change, as well as increasing the likelihood of households making larger investments in efficiency retrofits that are a later part of the program. At the workshop, some low-cost energy-efficiency measures would be distributed, while others would be distributed at an in-home visit.

**2) *In-home visit.***

Based on an analysis of energy usage, participants would be pre-screened using a “triage” approach and sorted into large energy users and small energy users; more time would be concentrated on households with high energy usage. With this information, an in-home visit would be scheduled with an energy specialist, where the low-cost measures would be installed and/or verified and additional homeowner education provided. This education would include no-cost recommendations such as lowering the hot water heater setback temperature if appropriate. If the home is a medium or high energy user, building diagnostics would be performed.

Low-cost gas saving measures could include: setback thermostats (if needed), pipe insulation, gasket seals, recessed light inserts, attic door weather-stripping, door sweeps and other weather-stripping items, faucet aerators, low-flow showerheads and window insulation film. Low-cost electric-saving measures could include: CFLs (assortment of types), LED holiday lights (if participants traded in for old incandescent type) and outlet strips.

If the home energy visit determined that either air sealing or insulation was required, the energy technician would write out the specifications for the necessary work, and provide the homeowner with an estimate of the work to be done by a third-party contractor. The program would work with qualified contractors to develop a standardized bidding system to ensure the bids would be as low-cost as possible to the homeowner, while ensuring they provided sufficient revenue to the contractors to keep them in the program. It is anticipated that participating contractors would be able to offer competitive pricing, as they would not need to invest in marketing their companies for work

received through this program. Homes with medium or high energy usage may be provided with a blower door test that would be used as diagnostics for air sealing and insulation work.

**3) Contractor work**

Contractor work recommended by the in-home visit is expected to include air sealing, insulation and major mechanical (furnace, air conditioner, hot water heater) upgrades. Quality-control protocols would also be established for the program. After work was completed by the contractor, an energy technician would verify the work was completed according to specifications through infrared camera or other means. Contractors would be required to do call-backs for work not meeting quality standards. After a certain number of jobs are completed for a given contractor, not every job would be inspected, but random audits would still be performed.

**4) On-going home energy feedback and action messages to encourage energy savings through behavior change**

Research has demonstrated homeowners can reduce their energy bills if they are provided context for their energy use (how does it compare with their peers), given sustained feedback on how to reduce their energy use, and provided a clear benchmark for their progress in achieving energy savings. Further, this type of feedback can help create and reinforce social norms that energy efficiency is “the right thing to do.” Simple behavioral changes resulting from this type of feedback program can result in up to a 10 percent reduction in energy use, at zero cost to the homeowner, depending on the intensity of the feedback program. This project will develop such a feedback program by collecting energy data for those in the program, tracking their improvements over time, and developing a platform for processing and delivering feedback to users over time.

**5) Cost-share incentives and other resources for implementing.**

In order to encourage participants to implement contractor work, information on financing and incentives would be provided to homeowners.

The extent to which all of these components as described above are integrated into an individual city’s program will depend on interest and the extent to which it can be merged with utility objectives. It is anticipated that local utilities will want to tailor the in-home visit to their needs and specific programs. For example, Dakota Electric (in Apple Valley) has an air conditioner tune-up program for residents that could be promoted through the LCCMR program. In addition to CEE staff time, Neighborhood Energy Connection (NEC) would also dedicate staff time to assist with developing these programs, particularly with St. Paul.

**Summary Budget Information for Result 1:**

<b>Trust Fund Budget:</b>	<b>\$64,100</b>
<b>Amount Spent:</b>	<b>\$ 0</b>
<b>Balance:</b>	<b>\$ 64,100</b>

<b>Deliverable</b>	<b>Completion Date</b>	<b>Budget</b>
1. Design residential energy-efficiency programs for 8 cities	3/30/2010	\$64,100

**Result Completion Date:** 3/30/10

**Result Status as of Dec 2009:**

**Result Status as of Jun 2010:**

**Result Status as of Dec 2011:**

**Final Report Summary:**

**Result 2: Coordinate, track and provide feedback on household energy usage.**

**Description:**

Program participants will be provided information and feedback on their home energy consumption in order to encourage them to take actions to reduce their energy usage.

Specifically, we would prepare home energy reports on a bi-monthly basis (or other interval depending on how often we receive the data from utility companies) containing the following information:

- Homeowner’s energy usage in a standardized index, which we call the “flame index” for natural gas (Btus per square foot per heating degree day) and the “spark index” for electric (kilowatt-hours per square foot)
- Energy usage of similar homes in the neighborhood or state
- Benchmark energy use of an efficient home
- Customized energy actions giving recommendations for how the homeowner can reduce energy usage through individual actions
- Feedback on electricity and natural gas usage

For cities that are already planning on regular delivery of feedback messages through their local utility (Owatonna, Austin and perhaps others), we will not provide separate mailings, but coordinate our efforts with theirs.

A website will be created for this project using interactive media approaches to reach a wide audience, effectively communicate an energy efficiency message and turn this information into action and energy savings. Interactive media approaches will include such tools such as instructional videos and step by step do-it-yourself instructions to allow residents to assess their needs and determine and implement energy savings actions. Users will be able to input their energy use data to track the savings that they have achieved and get direct feedback on their usage with tips for

improvement. Since the project will be delivered over the Internet, it will reach and serve a statewide audience. The site will be a comprehensive one-stop informational resource on home energy efficiency and resources (such as stimulus dollars) to achieve energy efficiency. Resource links to utility residential audit and rebate programs as well as financing options and a supported online community to promote Minnesota home energy efficiency will be included. The website will allow users the ability to interact with others and experts in order to get feedback and advice and provide reviews and ratings on products, tips and actions. The website will be produced by the Builders Association of Minnesota (BAM), anticipated to be as an enhancement to their existing successful website, home-smart.org. The other major costs are mailing costs and CEE staff time.

As CEE will maintain a database of people enrolled in the program, and their actions, this will be provided to LCCMR in summary form (with personal information removed) as we report on our results.

**Summary Budget Information for Result 2:** Trust Fund Budget: \$ 161,200  
Amount Spent: \$ 0  
Balance: \$ 161,200

<b>Deliverable</b>	<b>Completion Date</b>	<b>Budget</b>
1. Enter data, track, produce and send feedback assessments to 6,000 participants	6/30/2011	\$ 111,200
2. Develop educational information, instructional videos and other web resources	12/31/2009	\$ 50,000

**Result Completion Date:** 6/30/11

**Result Status as of Dec 2009:**

**Result Status as of Jun 2010:**

**Result Status as of Dec 2011:**

**Final Report Summary:**

**Result 3: Train insulation and air sealing contractors.**

**Description:**

Currently there are only a handful of qualified insulation and air sealing contractors in Minnesota. In order to ramp up residential energy efficiency work, new contractors will need to be trained. Contractor training will be provided by highly experienced contractors (Conservations Services Group, Shelter Supply and others) in

coordination with local technical schools. These consultants will develop curriculum that incorporates comprehensive best practices for insulation and air sealing, and can be used as the basis for further training. We will recruit contractors to attend the training, anticipated to be existing remodeling contractors looking for expanded business opportunities.

We will coordinate our efforts closely with the Office of Energy Security, and anticipate that there may be stimulus dollars that would also be available for this training. If this turns out to be the case, we would request an amendment to reallocate a portion of the budget for training to other activities.

**Summary Budget Information for Result 3:** Trust Fund Budget: \$60,000  
Amount Spent: \$ 0  
Balance: \$ 60,000

Deliverable	Completion Date	Budget
1. Train 10 contractors	12/1/2009	\$30,000
2. Train an additional 15 contractors	10/1/2010	\$30,000

**Result Completion Date:** 10/1/2010

**Result Status as of Dec 2009:**

**Result Status as of Jun 2010:**

**Result Status as of Dec 2011:**

**Final Report Summary:**

**Result 4: Implementation of energy efficiency programs.**

**Description:**

Although program design will vary by city, we will work to achieve the following overall results in implementing the residential energy efficiency programs in each of the eight cities.

Generate at least 6,000 participants in workshops and other community events  
We expect to organize between 50 and 100 workshops during the project period, depending on the turnout per workshop. That will be an average of one workshop every week to two weeks throughout the project period once we start organizing them. Community-based marketing efforts will be used to recruit people to workshops. Generally we will try to work with schools and other community centers for hosting the workshops. One important strategy is working with local

neighborhood and community organizations and volunteers to organize the workshops. A volunteer training program will be developed for the volunteers working on the workshops.

Tactics used to increase awareness of the program and get people to attend the workshops will vary according to the community, but are expected include the following:

- Utilization of block leaders and other community leaders to recruit their neighbors
- Presentations at community events
- Door-to-door knocking
- Postcard mailings
- Door hangers
- Neighborhood and community newsletters

Volunteers will also be utilized in the production of the workshop as well, including providing food, signing people in, and setting up the room.

In Minneapolis, St. Paul and Apple Valley, CEE will work with Metro CERTs (coordinated by The Green Institute) for recruiting participants for workshops. CERTs and CEE will split primary responsibility for organizing these workshops; for example, CERTs might organize turn-out for all the workshops in St. Paul, and assist with turn-out in other cities. For some of the Greater Minnesota cities, one or more contractor will be hired to assist with the workshop production.

The Great Plains Institute (GPI) will work exclusively with program design and implementation in Apple Valley. Apple Valley is one of four communities in the upper Midwest participating in a pilot to develop strategies for community-wide energy efficiency initiatives. In order to leverage this opportunity to maximum advantage for this project, GPI will help develop and integrate these efforts (which focus on all sectors of energy use, including business and institutional) with this LCCMR project, which focuses just on the residential sector. Activities include facilitating a community-wide planning process, stakeholder recruitment and facilitation, and development and implementation of a community energy efficiency plan. LCCMR-funded activities will focus on the residential component of this community-wide plan. It is anticipated that these efforts will help deepen community engagement on energy-efficiency issues in general, and result in a more concentrated turn-out of Apple Valley residents to workshop events.

Assist 6,000 participants in the direct installation of low-cost measures through in-home visits

At the workshop, participants receive free energy-efficiency materials to install in their home, such as CFLs, set-back thermostats, LED night lights, power strips and pipe wrap. CEE has learned from past experience that providing education and free materials does not automatically insure that the materials will be used and energy savings will be achieved. Providing a home visit to the participants in their home is a critical component to a successful workshop centered program. This follow-up home

visit (funded with matching utility funding) allows the homeowner to ask specific questions about their home, identifies insulation and other needs, provides additional hands on education on how to use the materials and gives the energy technician the opportunity to reenergize the homeowner’s interest in energy conservation. Low cost insulation and air sealing work would be referred to a specially trained contractor. Participants in need of high efficiency furnaces would be referred for financing. The in-home visits would be coordinated with, or incorporated into, existing and planned utility programs. For example, Xcel Energy and CenterPoint Energy both plan on implementing an in-home visit program called “Quick-Fix” starting in January, 2010.

In St. Paul, NEC would implement the in-home visits, utilizing their existing energy auditor staff. In Minneapolis and Apple Valley, CEE would implement the in-home visits. In other cities, local contractors, with utility cost-share funding, would implement the in-home visits.

Ensure 1,600 homes receive insulation, air sealing and other major energy improvements

If major weatherization work is needed, the homeowners will receive a blower door test, analysis and bid with a referral to a qualified insulation contractor. This diagnostic work would be provided by NEC in St. Paul, CEE in Minneapolis and Apple Valley, and existing auditor contractors in other cities. We estimate contractor work would be recommended in about half of the homes that receive in-home visits, and of these, 1,600 would act on the recommendations to conduct major insulation, air sealing, or furnace or hot water heater installations.

In addition to the initial cities, if budget and resources allow, CEE may also extend the program into other cities.

**Summary Budget Information for Result 4:** Trust Fund Budget: \$ 1,253,700  
Amount Spent: \$ 0  
Balance: \$ 1,253,700

Deliverable	Completion Date	Budget
1. Recruit, educate and enroll at least 6,000 participants in workshops and other community events	6/30/2011	\$ 563,850
2. Conduct 6,000 in-home visits including installation of low cost measures	6/30/2011	\$ 689,850
3. Ensure that 1600 homes receive insulation, air sealing and other major energy improvements	6/30/2011	(included in #2 above)

**Result Completion Date:** 6/30/11

**Result Status as of Dec 2009:**

**Result Status as of Jun 2010:**

**Result Status as of Dec 2011:**

**Final Report Summary:**

**Result 5: Provide cost-share for installing energy-efficiency measures.**

**Description:**

Trust Fund dollars would be used to provide cost-share for homeowners to act on the in-home visit recommendations requiring contractor work (result 4). This contractor work will include air sealing, insulation and major mechanical replacement.

In conjunction with loans provided by other sources such as the Minnesota Housing Finance Agency, these cost-share incentives would be tailored to each city to cover project costs. We would also work with local utilities to complement and enhance existing rebate programs. In general, we would strive to have LCCMR cost-share, combined with other incentives, pay for 30-50 percent of the costs to the homeowner for air sealing (total cost of around \$800) and 20-25 percent of the cost of insulation (total cost of around \$4,000). In total, this would require funding of about \$900,000 in cost-share. We assume half would be provided by utilities and stimulus dollars, and half by this program.

Specifically, stimulus funding to the MHFA is expected to be able to supplement cost-share incentives to homeowners provided by this LCCMR project. The stimulus funding will include loans, and may include cost-share incentives as well, although this has not yet been determined. As more details about this program are made available, CEE will work with LCCMR staff to further refine our budget for cost-share.

**Summary Budget Information for Result 5:** Trust Fund Budget: \$ 450,000  
Amount Spent: \$ 0  
Balance: \$ 450,000

<b>Deliverable</b>	<b>Completion Date</b>	<b>Budget</b>
1. Provide cost-share for installing energy-efficiency measures in 1,600 households	6/30/2011	\$450,000

**Result Completion Date:** 6/30/09

**Result Status as of Dec 2009:**

**Result Status as of Jun 2010:**

**Result Status as of Dec 2011:**

**Final Report Summary:**

**Result 6: Conduct project evaluation and make recommendations for ongoing utility programs.**

**Description:**

A major objective of this proposal is to transform the delivery of residential energy efficiency programs, so that they can be massively scaled up to reach significantly more (an order of magnitude more) homes than will be served by this project. Thus we would evaluate the success of the program in achieving cost-effective energy efficiency services, and recommend enhancements and improvements for ongoing utility programs.

**Summary Budget Information for Result 6:** Trust Fund Budget: \$11,000  
Amount Spent: \$  
Balance: \$ 11,000

<b>Deliverable</b>	<b>Completion Date</b>	<b>Budget</b>
1. Evaluation of program including number of participants, measures installed, cost and savings, and recommendations for future programs	6/30/2011	\$11,000

**Result Completion Date:** 6/30/11

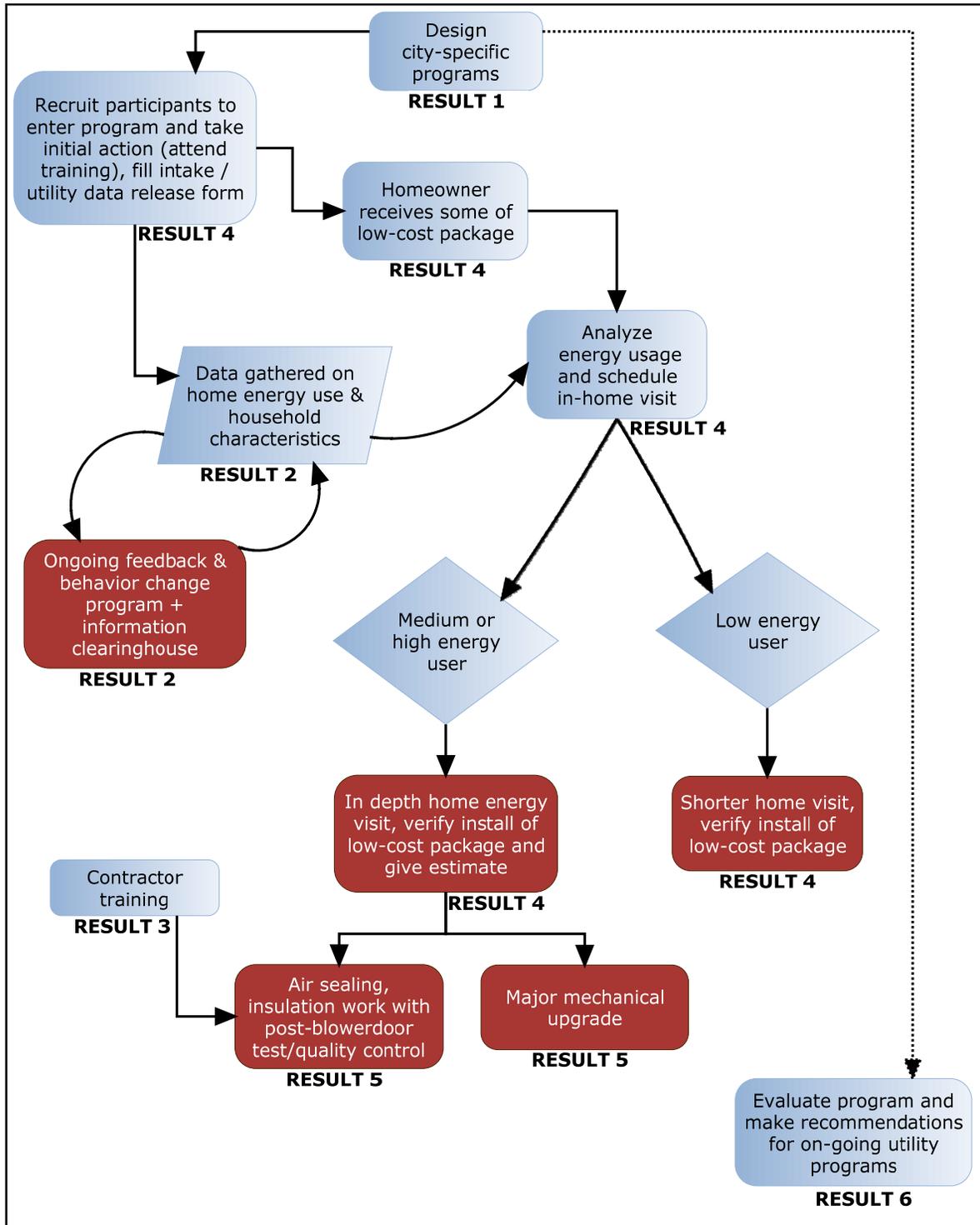
**Result Status as of Dec 2009:**

**Result Status as of Jun 2010:**

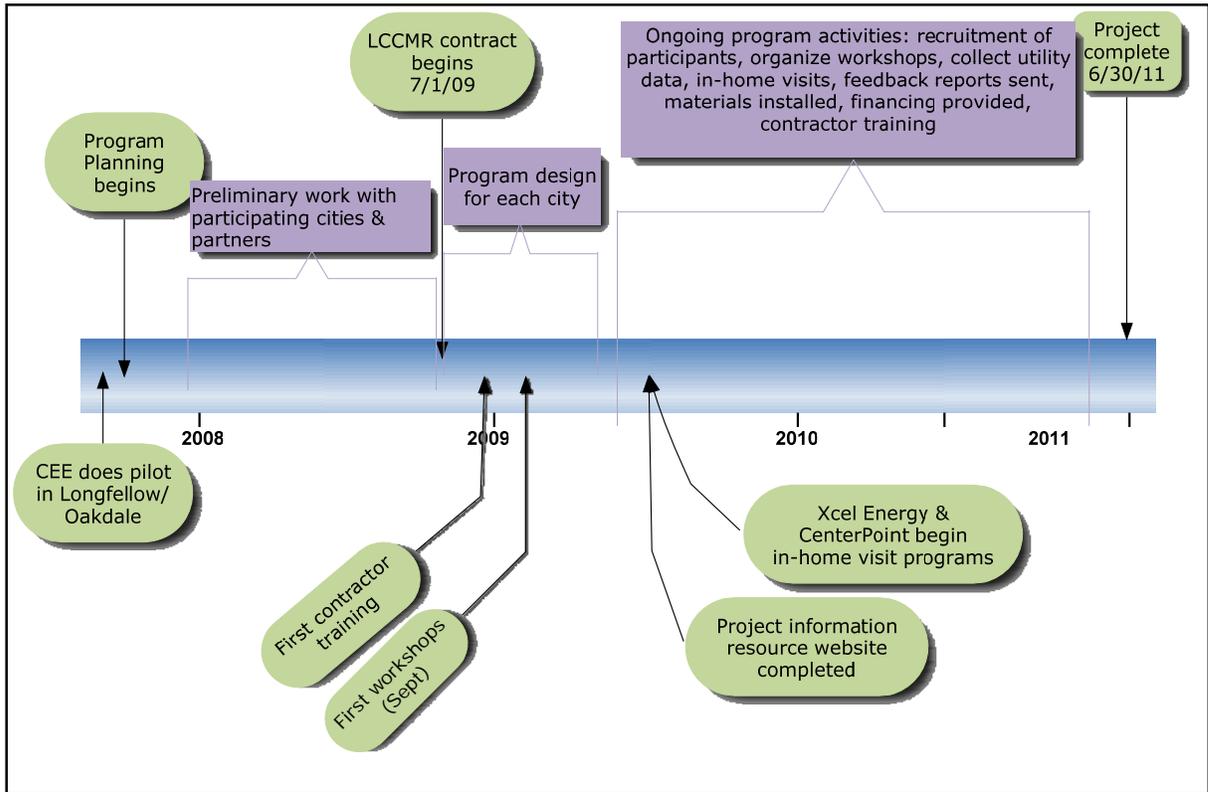
**Result Status as of Dec 2011:**

**Final Report Summary:**

**Figure 1: Anticipated program delivery workflow and relationship to project results**



**Figure 2: Anticipated project timeline**



**Figure 3: Summary of anticipated participation / funding commitments of partners**

	Minneapolis	St. Paul	Apple Valley	Austin, Owatonna, Rochester	Duluth	Other Cities
<b>Participation / Tracking</b>	LCCMR	LCCMR	LCCMR	LCCMR	LCCMR	LCCMR
<b>Data Analysis and Feedback</b>	LCCMR	CenterPoint, LCCMR	LCCMR	Triad (utilities of Austin, Owatonna & Rochester), LCCMR	LCCMR	LCCMR
<b>Home visit/ Materials</b>	CenterPoint Energy, LCCMR	Xcel Energy, LCCMR	CenterPoint Energy, Dakota Electric, LCCMR	Triad, LCCMR	Minnesota Power, Comfort Systems, stimulus	local utilities, LCCMR
<b>Cost-share for insulation / air sealing / mechanical upgrades</b>	Xcel, stimulus, LCCMR	CenterPoint, stimulus, LCCMR	CenterPoint, stimulus, LCCMR	Triad, stimulus, LCCMR	MN Power, Comfort Systems, stimulus	Local utility, LCCMR, stimulus

## **V. TOTAL TRUST FUND PROJECT BUDGET:**

### **Personnel: \$ 681,000**

CEE has about 60 staff, of which about 1/6<sup>th</sup> will be assigned for some portion of time to this project. In implementing the majority of project activities for the LCCMR project, these staff will utilize expertise in project management, program design, recruitment and organizing of workshops, data input and tracking, field experience with home visits and technical analysis.

### **Contracts: \$ 500,000**

\$100,000 to CERTs for assistance recruiting and organizing workshops  
\$85,000 to other Greater Minnesota contractors for assistance recruiting and organizing workshops  
\$150,000 to NEC and others for insulation diagnostics, post-Installation inspection and home visits  
\$25,000 to Great Plains Institute for assistance with Apple Valley implementation  
\$30,000 to NEC for program design in implementation assistance  
\$50,000 to BAM for website development  
\$60,000 to Conservation Services Group, Shelter Supply, and other contractors for developing and producing air sealing and insulation contractor trainings

### **Other direct project costs: \$ 80,000**

\$50,000 for workshop production costs including promotion and direct costs of producing the workshops (food, venue rental, etc.)  
\$30,000 for production and delivery of the feedback forms

### **Travel (within Minnesota): \$ 39,000**

Estimated based on an average of about two visits/month to each participating city.

### **Low-cost energy-efficiency materials: \$ 250,000**

Low-cost energy-efficiency materials for 6,000 homeowners will include items such as compact florescent light bulbs, weather stripping, outlet gasket seals, recessed lighting inserts, low-flow showerheads, facet aerators, hot water pipe insulation, outlet strips, and programmable thermostats.

### **Cost-share for energy-efficiency: \$ 450,000**

Cost-share to be provided for homeowners who pay for contractor work for air sealing, insulation and major mechanical replacement.

## **TOTAL TRUST FUND PROJECT BUDGET: \$ 2,000,000**

**Explanation of Capital Expenditures Greater Than \$3,500:** None.

## **VI. PROJECT STRATEGY:**

### **A. Project Partners:**

**Cities:** Saint Paul, Minneapolis, Apple Valley, Rochester, Owatonna, Austin, Duluth, Park Rapids

**Utilities:** Rochester Public Utilities, Owatonna Public Utilities, Austin Public Utilities, Minnesota Energy Resources (Rochester's gas utility), Comfort Systems (Duluth gas utility), Xcel Energy, Great River Energy, Dakota Electric, Minnesota Power

**State agencies:** Minnesota Office of Energy Security, Minnesota Pollution Control Agency

### **Contractors:**

Builders Association of Minnesota (BAM)

BAM has extensive knowledge of building energy efficiency, and has developed the successful home-smart.org website.

Neighborhood Energy Connection (NEC)

The NEC is a St. Paul-based non-profit with extensive experience in residential energy efficiency. They will assist with developing the program design, and will implement in St. Paul.

Clean Energy Resource Teams (CERTs)

In the Metro CERTs, efforts for this project will be coordinated by Diana McKeown through The Green Institute.

Great Plains Institute (GPI)

The Great Plains Institute is a 501(c)(3) nonprofit organization that brings together key public and private leaders from across the northern plains to accelerate the transition to a renewable and low-carbon energy system by mid-century. GPI's core competency is facilitation and collaboration with a diverse group of creative, intelligent individuals to achieve consensus on policy and technology recommendations for businesses and government.

Conservation Services Group (CSG), Shelter Supply and other contractors

CSG and Shelter Supply have decades of experience in training energy efficiency contractors, in Minnesota as well as other states.

### **B. Project Impact and Long-term Strategy:**

Direct impacts include the following:

- serve 6,000 households
- reduce energy costs \$1,000,000/year in those homes
- reduce CO2 26,000,000 lbs.
- create 30 new full-time jobs

In addition, it is our intent to transform how residential energy services are delivered, so that after we complete this project, these benefits would continue and increase by approximately an order of magnitude. After initial funding by LCCMR, we would anticipate that these programs will be funded by utilities in the long term.

This pilot project will demonstrate strategies that can be incorporated into utility residential Conservation Improvement (CIP) programs for the next decade. In order

to meet the legislatively mandated 1.5 percent per year savings goal within the residential sector, over the next decade hundreds of thousands of homes will need to enter in a program such as we will be implementing. Thus we would anticipate that this LCCMR project could catalyze the implementation of much larger utility programs that would enroll 50,000 or more homes per year over a 10 year span, creating hundreds of jobs and significantly reducing CO2 emissions in the residential sector.

### **C. Other Funds Proposed to be Spent during the Project Period:**

The following lists estimated funding that may be leveraged by this project:

CEE in-kind	\$330,000
Other utilities:	\$2,000,000
Stimulus funding (Duluth):	\$1,500,000
<u>Stimulus loan financing:</u>	<u>\$1,600,000</u>
TOTAL:	\$5,430,000

### **D. Spending History:**

CEE has spent over \$100,000 of its own funding planning for this project prior to June 30, 2009. Activities conducted with this funding include:

- Conducting program pilot in fall of 2008 in select neighborhoods in Minneapolis and Oakdale;
- Providing in-home visits and free materials for the pilot;
- Discussions and planning with project partners;
- Developing a training curriculum and conducting a “train the trainer” session so training can be conducted during the project period.

### **VII. DISSEMINATION:**

Our program will involve significant outreach efforts inherent in the program design, including a website developed for the project. Outreach efforts will include presentations at workshops and working through community partners to turn out people to the workshops. Program results will be captured through the final report which will be sent to key stakeholders.

### **VIII. REPORTING REQUIREMENTS:**

Periodic work program progress reports will be submitted on the following dates: January 31, 2010; July 31, 2010; and January 31, 2011.

A final work program report and associated products will be submitted between June 30 and August 1, 2011 as requested by the LCCMR.

### **IX. RESEARCH PROJECTS:**

Attachment A: Budget Detail for 2009 Projects																				
Project Title: <i>Energy Efficient Cities</i>																				
Project Manager Name: Carl Nelson																				
Trust Fund Appropriation: \$ 2,000,000																				
2009 Trust Fund Budget	Result 1 Budget:	Amount Spent (date)	Balance (date)	Result 2 Budget:	Amount Spent (date)	Balance (date)	Result 3 Budget:	Amount Spent (date)	Balance (date)	Result 4 Budget:	Amount Spent (date)	Balance (date)	Result 5 Budget:	Amount Spent (date)	Balance (date)	Result 6 Budget:	Amount Spent (date)	Balance (date)	TOTAL BUDGET	TOTAL BALANCE
	<b>RESULT 1: Design and develop 8 city-specific programs</b>			<b>RESULT 2: Coordinate, track and provide feedback on energy use</b>			<b>RESULT 3: Train insulation and air sealing contractors</b>			<b>RESULT 4: Implement energy efficiency programs</b>			<b>RESULT 5: Provide cost-share for installing EE measures</b>			<b>RESULT 6: Recommendations for ongoing utility programs.</b>				
<b>PERSONNEL: wages and benefits (1)</b>																				
Project Manager (Carl Nelson - 60% FTE)	22,000									77,100						11,000			110,100	
Participation Coordinator (Erica Graber-Mitchell - 60% FTE)										87,500									87,500	
Community Organizer (100% FTE)										99,900									99,900	
Logistics Coordinator (Judy Thommes - 30% FTE)										54,300									54,300	
Project Assistant (John Kracum - 100% FTE)				62,600						15,700									78,300	
Project Assistant (Beth Bennett - 90% FTE)										75,300									75,300	
In-home Visit Coordinator (Bob Mello - 20% FTE)										31,900									31,900	
Administrative support (10% FTE)										8,100									8,100	
Workshop Coordinator (Neely Crane-Smith - 70% FTE)										73,700									73,700	
Project Engineer (Lester Shen - 25% FTE)	37,100			18,600						6,200									61,900	
<b>SUBTOTAL PERSONNEL:</b>	<b>59,100</b>	<b>0</b>	<b>59,100</b>	<b>81,200</b>	<b>0</b>	<b>81,200</b>				<b>529,700</b>	<b>0</b>	<b>529,700</b>				<b>11,000</b>	<b>0</b>	<b>11,000</b>	<b>681,000</b>	<b>681,000</b>
<b>CONTRACTS</b>																				
Organizing Assistance - CERTs										100,000		100,000							100,000	100,000
Insulation diagnostics, post installation inspection, home visits (NEC & other contractors)										150,000		150,000							150,000	150,000
Organizing Assistance - Additional local contractors										85,000		85,000							85,000	85,000
Apple Valley assistance (Great Plains Institute)										25,000		25,000							25,000	25,000
Program design & implementation assistance (NEC)	5,000		5,000							25,000		25,000							30,000	30,000
Insulation and air sealing contractor training (Conservation Services Group, Shelter Supply and others)							60,000		60,000										60,000	60,000
Website development (Builders Association of MN)				50,000		50,000													50,000	50,000
<b>SUBTOTAL CONTRACTS:</b>	<b>5,000</b>		<b>5,000</b>	<b>50,000</b>		<b>50,000</b>	<b>60,000</b>		<b>60,000</b>	<b>385,000</b>		<b>385,000</b>							<b>500,000</b>	<b>500,000</b>
<b>TRAVEL IN MINNESOTA</b>																				
										39,000		39,000							39,000	39,000
<b>OTHER DIRECT PROJECT COSTS</b>																				
Workshop production costs (materials & promotion)										50,000		50,000							50,000	50,000
Production and delivery of feedback materials				30,000		30,000													30,000	30,000
<b>SUBTOTAL OTHER DIRECT COSTS:</b>				<b>30,000</b>		<b>30,000</b>				<b>50,000</b>		<b>50,000</b>							<b>80,000</b>	<b>80,000</b>
<b>SUPPLIES (low-cost energy-efficiency materials for homeowners)</b>																				
										250,000		250,000							250,000	250,000
<b>COST-SHARE FOR EFFICIENCY INVESTMENTS</b>																				
													450,000		450,000				450,000	450,000
<b>COLUMN TOTAL</b>	<b>\$64,100</b>	<b>\$0</b>	<b>\$64,100</b>	<b>\$161,200</b>	<b>\$0</b>	<b>\$161,200</b>	<b>\$60,000</b>	<b>\$0</b>	<b>\$60,000</b>	<b>\$1,253,700</b>	<b>\$0</b>	<b>\$1,253,700</b>	<b>\$450,000</b>	<b>\$0</b>	<b>\$450,000</b>	<b>\$11,000</b>	<b>\$0</b>	<b>\$11,000</b>	<b>\$2,000,000</b>	<b>\$2,000,000</b>
<b>NOTES:</b>																				
(1) Fringe rate is calculated at 35% of direct wages (medical/dental/life/long-term disability insurance, health reimbursement arrangement, retirement).																				