

# Evaluation of a Low-Income Weatherization Loan Pilot Program

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## ABSTRACT

This paper describes the evaluation of a low-income weatherization loan pilot program implemented by a community action agency in Waushara County, Wisconsin, USA. Through the pilot low-income households in this rural county were offered a zero interest loan, due upon property transfer, for comprehensive weatherization services. In the past these services had been provided through a grant program.

The evaluation was designed to explore the feasibility of offering loans, instead of grants, to these households, and to assess any differences between households accepting a loan and those participating in the grant program.

CAP Services, the implementation agency, has weatherized (or committed funding for) 64 households. The pilot demonstrated that some low-income households can and will obtain loans for weatherization services. Two-thirds of the participating households also obtained four-percent interest deferred loans to install rehabilitation measures. Participating households are demographically similar to previous participants in the federal Weatherization Assistance Program (grants). Because of some flexibility in the weatherization loan pilot (compared to WAP grants), loan pilot participants were more likely to replace furnaces, water heaters, windows and doors, if the auditor deemed this appropriate. As a result, the average cost for pilot program weatherization was approximately \$1,000 more than for comparison households.

The evaluation results, while not definitive, show that a low-income weatherization program is a promising alternative to grants for some low-income households. A broader based pilot is needed to determine how well these findings can be generalized to a broader geographic area and a larger, more diverse low-income population.

## Introduction

### Background

In 1996 the State of Wisconsin, Department of Administration, Division of Energy and Intergovernmental Relations (WEB) issued a Request for Grants (RFG) for pilot programs to address the energy related problems of Wisconsin low-income households. The RFG asked for respondents to design pilot programs to test:

“ alternatives aimed at achieving a more sustainable low income funding strategy that will continue to meet the needs of Wisconsin as federal funding declines.”

The pilot programs, funded through oil overcharge funds, would test approaches that would be both sustainable (require less federal or other funding in the future) and be transferable to other parts of Wisconsin, and perhaps the nation.

## The Weatherization Loan Pilot Program

One of five pilots funded through this process was the Weatherization Loan Pilot Program. This pilot program, designed and implemented by CAP Services Incorporated (CAP Services), was set up to provide zero interest loans to qualifying households. Loans are due upon transfer (sale) of the property – no payments are required prior to property transfer. Households qualified based on eligibility for the Department of Energy Weatherization Assistance Program (WAP). In Wisconsin WAP requires that households be at or below 150 percent of federal poverty level (FPL) living in structures that have not been weatherized in the past 10 years. For the pilot, total debt on the pilot property was limited to 110 percent of the property value.

From February 1997 through February 1999 CAP Services implemented the pilot weatherization loan program in Waushara County, Wisconsin. The pilot program was set up to test the feasibility of offering loans to low-income households for weatherization services. While the agency had been successful in offering housing rehabilitation loans to this population, it had not offered weatherization loans due to federal rules prohibiting it. The pilot program was offered in lieu of federal WAP grants in the pilot county during the pilot period. Households requesting a grant instead of a loan were put on a waiting list to be used in future WAP program years – only one household is on that list.

The original pilot plan was designed to offer the loan program so that it mimicked the WAP grant program. Therefore, the pilot could test the effect of a loan compared to a grant. Since CAP Services implements the WAP program in a 5 county area, including the pilot county, it was relatively easy to use the same procedures. Participants in the pilot program were provided the WAP energy audit, which outlines the energy efficiency measures to be included in the weatherization package. Participants were required to accept the entire weatherization package or they could not participate in the program. In other words, participants could not choose among energy efficiency measures, but had to receive comprehensive weatherization services. This is consistent with WAP implementation. Energy efficiency services and measures were installed by CAP Services (except space and water heating systems), which is also consistent with WAP.

The pilot program, however, did take some noteworthy implementation departures from WAP.

- *Expanded Services.* The criteria for replacement of water heaters, furnaces, windows and doors were relaxed. WAP requires that the heating system be either broken, or meet a five-year payback criterion. CAP Services personnel felt that this was too restrictive and resulted in heating systems being replaced in crisis situations with LIHEAP funds. To avoid future crises the loan program auditor was allowed to use his judgement in determining whether or not to replace furnaces, water heaters, windows and doors. For windows and doors, he was instructed to include them under the weatherization program if he felt that they were so leaky that they would result in significant energy savings.
- *Increased Marketing of the Rehabilitation Loans.* The program was offered in conjunction with a 4 percent deferred interest housing rehabilitation loan for low-income households, due upon property transfer. For work financed through the rehabilitation loan program owners selected their own contractor. While this program was available in the years prior to the pilot program, it was marketed more heavily in conjunction with the loan pilot program. The greater emphasis on the rehabilitation loan in the pilot county introduces a confounding factor for the evaluation, but a complementary service for the pilot participants.
- *Broader marketing.* All households receiving Low-Income Home Energy Assistance Program (LIHEAP) payments in Waushara County were informed about the program via a letter. In addition, CAP Services placed articles in some local publications and other CAP Services programs made referrals to the loan program. The WAP grant program relied

primarily upon referrals from LIHEAP staff and brochures available at the LIHEAP intake site. Program staff, however, felt it was important to increase marketing for the pilot program because it was new and somewhat different.

- *Landlord Offering.* The pilot program offered a 4 percent loan to rental property owners due upon sale of the property. The WAP program required a 25 percent co-pay of the weatherization costs — the other 75 percent be given as a grant. Apparently this offer did not overcome the barriers for landlords — only three rental properties participated in the pilot program.

## **Evaluation**

### **Purpose of the Evaluation**

The evaluation had multiple objectives. Of critical importance was determining whether low-income customers would accept a loan for weatherization services. Given that some households accepted loans, the evaluation sought to answer other key questions.

1. *If and how do participants in the loan program differ from participants in the weatherization grant program?* How loan participants differ from grant participants is important for future program design. If a loan program appeals to and is appropriate for a subset of the eligible, population this must be taken into account when designing future programs and identifying populations that will be under-served using this approach.
2. *What characteristics of the loan program make it attractive or unattractive to the targeted eligible population?* Target population perceptions of the program features are critical for future program design.
3. *Is the loan program sustainable?* The loan program was set up so that loans repaid would be placed into a revolving fund for weatherization loans available to other low-income households in the pilot area. In theory over time the revolving fund would sustain some level of financing for low-income weatherization. Program designers recognize that this approach is not 100 percent sustainable, given inflation and that not all program costs are covered by the loan.
4. *Is the program transferable to other parts of Wisconsin?* If the program proved successful in Waushara County could it be transferred to other parts of Wisconsin with similar or different demographic and program characteristics?

The evaluation did not seek to determine energy savings as a result of the loan program. The limited evaluation budget forced a prioritization of issues. Since the weatherization approach and measures in the pilot program are virtually identical to those installed throughout Wisconsin through WAP, determining energy savings was deemed a low priority. Other studies have shown average savings of 21-26 percent in natural gas heating as a result of low-income weatherization.

### **Evaluation Methodology**

For the evaluation we used a combination of qualitative and quantitative techniques. On the qualitative side we interviewed a sample of participants (12) and nonparticipants (7) regarding their understanding of the program, reasons for participating (or not) in the program, and their experience with participating in the program. Participants were selected to capture a range of demographic

characteristics and those at different stages in the program — not to be representative of the entire population. Non-participants were selected to represent a range of those who could have participated - from those who never responded to program offerings to those who completed applications but dropped out at some point in the program. The number of non-participants interviewed was limited because few households that started the process did not complete it, and those that did not start it were similar in their reasons for not participating. Very little (if any) new information would have been gained by additional interviews. We also interviewed the two key staff members responsible for program implementation - the program manager and the program auditor.

On the quantitative side, we conducted a pre/post, comparison/pilot county analysis. To assess potential differences between pilot program participants and weatherization grant participants we compared the pilot participants to WAP participants from Waushara County for two years prior to the pilot and to WAP participants in Marquette County, both before and during the pilot period. We felt both comparison groups would be needed to account for other changes that might be occurring among the low-income population or the service provider. Given the relatively few households weatherized within a given year we would expect to find some differences across time and space. The comparison groups provide a metric to assess whether any observed differences in the pilot participants are due to the program, other factors, or are simply within the normal range of variation. In the final analysis the comparison county (Marquette) served mainly to reflect the high degree of variability among the items being measured.

## **Results**

### **Program Participation - the Numbers**

CAP Services sent 1,464 initial contact letters announcing the Weatherization Loan Pilot Program to Waushara County Low Income Home Energy Assistance Program (LIHEAP) recipients. Program staff estimates that between 600 and 700 households received one or more letters about the program – multiple letters could have been sent to a household if they applied for LIHEAP in both program years. The letter and other marketing activities (newsletter articles, referrals, and word of mouth) resulted in 146 requests for and 116 completed program applications.

Table 1 shows the disposition of the 116 applications. Of those completing an application over 55 percent participated by receiving a weatherization loan. Currently, funds are committed for 67 households, 64 funded through the state pilot funds, and three additional funded through another CAP Services revolving loan fund (these three are not included in Table 1). Pilot funds were exhausted. Another 27 applications are pending, which may result in a waiting list. Two-thirds (39) of the 64 pilot participants received rehabilitation loans in conjunction with the weatherization loan. One-third of these secured the rehabilitation loan to conduct work required to complete the weatherization.

Eight potential participants (seven percent) refused participation in the program after completing much of the process. Four of these refused because they either did not want to take out the weatherization loan or in one case did not want the four percent interest rehabilitation loan necessary for completion of weatherization. CAP Services denied nine percent (11) of the applications. Six houses did not need enough weatherization to justify taking out the loan. Five of the households needed work (weatherization and rehabilitation) that exceeded the value of the home. Several homeowners completed the application process but had income that exceeded the eligibility criterion. In one case the paperwork was in process when a re-verification of income eliminated them from eligibility. As with all programs containing income eligibility criterion, some households are on the

culp of eligibility and although they may be unable to afford weatherization services in the market, cannot obtain them through low-income programs.

**Table 1: Pilot Program Participation**

	<b>Number in Sub-group</b>	<b>Number</b>	<b>Percent of Applications Received</b>
<b>Applications Received</b>		<b>116</b>	<b>100%</b>
<b>Pending</b>		<b>27</b>	<b>23%</b>
<b>Client refused program</b>		<b>8</b>	<b>7</b>
Didn't want loan	3		
Needed rehab – didn't want 4% loan	1		
Refused required work	2		
Misc. non-program reasons	2		
<b>CAP Services Denied</b>		<b>11</b>	<b>9</b>
Not enough weatherization needed to justify	6		
Work exceeded value of home	5		
<b>Other - non participation</b>		<b>6</b>	<b>5</b>
Couldn't get required homeowner insurance	1		
Low-income renter moving from property	1		
Income exceeds eligibility	4		
<b>Successful Program Completion</b>		<b>64</b>	<b>55</b>
Weatherization and <b>required</b> rehab. loans	13		
Weatherization and <b>optional</b> rehab. loans	26		
Weatherization loan only	25		

The demographic characteristics of those participating in the program do not appear to differ substantially from WAP participants in prior years (see Table 2). The great majority of participants in all four groups are homeowners. One-quarter of Waushara County weatherized households contained a senior citizen, both prior and during the pilot program. Marquette County showed a decrease in the percentage of senior citizens in the weatherized population, but given how few households were weatherized in the program period it is difficult to determine if this is a trend. The mean (but NOT the median) income level of pilot participants is somewhat higher than WAP participants in Waushara County in previous years. Still, it is well within the range of variability we see in the comparison county.

**Table 2: Demographic Characteristics - Pilot Program and Comparisons**

county	Marquette		Waushara (pilot county)	
	prior (36)	program (13)	prior (28)	program (66)
owners	92%	92%	97%	95%
elderly person in household	53	8	28	24
< 50 % FPL	17%	39%	15%	16
50 - 99 % FPL	39	39	54	42
100 – 124 % FPL	28	15	27	22
125 – 150 % FPL	17	7	4	19
average FPL	88%	63%	80%	88%
median FPL	90%	56%	88%	90%

**Program Participation - the Perceptions**

Overall, interviewed pilot participants report a high level of satisfaction with the program. The motivation for participating in the program was to get needed work done on their homes and most felt that the 0 percent weatherization loan and the 4 percent rehabilitation loan were a good deal. They felt that without these programs it is unlikely that they could have completed the work.

Interviewed participants and aware non-participants report hearing about the program through a variety of means, but rarely as a result of the letter mailed. Energy assistance (LIHEAP) staff was the most commonly mentioned source of information, but word of mouth from friends, relatives and organizations, and local newspapers and special interest magazines were other sources of information.

Approximately one-half of interviewed participants had participated in another program offered by CAP Services. All interviewed participants were drawn to the program in order to get necessary work done on their homes. Several mentioned the 0% interest loan as a major selling feature, others expressed a confidence and trust in CAP Services and their staff. While the participants were happy with the 0% interest loan, most interviewed said they would have preferred the grant program. On the flip side, program staff reports that some of the non-interviewed participants preferred the loan because of the expanded measures, and to avoid being put on a waiting list. In fact, three households obtained weatherization loans after the grant program was made available again. Some of the participants and non-participants were concerned about the fairness of the program. They were aware that grants were available in other areas, or prior to the loan program, and did not feel that it was fair to have different rules for different households. They felt that program offerings should be the same for all.

Three non-participants interviewed who had completed applications would have participated if a grant had been available. Program records show that several seniors did refuse the program because they did not want to incur the debt. However, given the small number of households that explicitly

refused the program because it was a loan, and the fact that these households differed in their characteristics, it is difficult to determine any specific observable characteristics of debt adverse households. Anecdotal evidence suggests that this group would be more likely to contain seniors, but our results are inconclusive.

Some program participants were confused about the program specifics. No interviewed participants were able to recall the amount of their weatherization or rehabilitation loans. Two of the seven who had both weatherization and home rehabilitation loans were confused about what measures were included under each of the loans. Others were confused about when the loans were due or simply said it was difficult to understand how the program worked. Several of those interviewed mentioned either the lack of up-front information on the program or the lack of written materials explaining the program. This confusion is important for several reasons. First, it shows the need for program staff to either better explain or provide in writing program specifics. Second, it implies a certain level of trust among the participants, who are obtaining in some cases large loans without complete information. Third, it points to the vulnerability of participants who are willing to obtain these loans without complete information.

### **Program Activities - the Numbers**

Pilot participants received measures offered through both the pilot loan and WAP program in roughly the same proportion as the comparison groups, with the exception of furnaces (see Table 3). Pilot participants were more likely to replace furnaces (54 percent as compared to 21 percent) than the comparison groups, which makes sense given the relaxed criteria for replacement. Water heater, window and door replacements were also offered through the loan program and were installed in households. 16 percent received water heaters, and roughly one-third to one-half received windows or doors. (Exact figures are currently unavailable.) These changes to the WAP program caused the average weatherization cost per household in the loan program to be about \$1,000 higher, resulting in fewer than planned households being weatherized through the program.

The consistency in the most measures installed across the pilot participants and the three comparison groups suggests that there is not much difference in the actual housing stock of those participating in the pilot program from the general WAP population. These homes were in no less or greater need of weatherization services. A separate analysis comparing weatherization only to rehabilitation participants did not reveal any substantial differences across these two populations.

**Table 3: Percent of Households Installing Measures - Pilot Program and Comparisons**

	Marquette		Waushara (pilot county)	
	prior	program*	prior	program*
infiltration	94%	100%	97%	96%
furnace replacement	6	31	21	54
attic	61	46	76	54
vent	47	39	64	52
other attic	44	46	49	48
other	69	92	76	46
other safety	56	69	42	45
pipe wrap	50	54	33	38
foundation	25	31	18	29
other water	3	23	9	29
storm windows	19	46	18	25
storm door	11	69	30	21
water heater wrap	22	23	49	18
sill box	14	15	27	14
furnace repair	28	31	15	16
water heater replace	0	0	0	16
side wall insulation	28	54	9	13
# included in analysis	(36)	(13)	(33)	(56)
Average Weatherization Cost	\$1,690 (38)	\$3,919 (13)	\$1,651 (44)	\$2,594 (67)

\* Measures installed were available only for households for which weatherization was completed. Cost estimates were available for all households.

Most of the pilot participants (61 percent) also obtained rehabilitation loans. One-third of these homes (or 20 percent of the participating population) needed the rehabilitation work in order to get the weatherization completed. For example, a house with a leaking roof could not obtain attic insulation without repairing or replacing the roof – a house with knob and tube wiring could not obtain attic or wall insulation without a complete rewiring of the home. Those homes requiring rehabilitation work prior to weatherization would not have been completely weatherized through WAP without the rehabilitation or some other loan program. Once a house obtained a rehabilitation loan they were required to bring the house up to HUD Quality Standards, resulting in some additional expenditure.

Table 4 shows the measures installed through the rehabilitation loan program by pilot participants. One-quarter needed roofing and 13 percent needed rewiring in order for complete weatherization measure installation. Thirteen or one-third of the households needed one or both of these measures in order to complete weatherization. The other two-thirds of the participants chose



rehabilitation loans in addition to weatherization loans to make additional improvements on their property.

**Table 4: Rehabilitation Measures Installed by Pilot Participants**

	<b>Percent installing</b>	<b>Average cost</b>
electric rewiring required*	13 %	\$ 947
roofing*	26	5,294
siding	26	6,194
other roofing	26	5,488
other electrical	46	1,052
plumbing	28	1,233
other**	97	5,761
Average Total Rehabilitation Cost	(39)	\$10,921 (39)

\* Indicates measures required to obtain weatherization services.

\*\* Includes any other type of work conducted on home through the rehabilitation loan program.

### **Program Activities – the Perceptions**

We asked the loan pilot participants how they felt about the weatherization measures required through the program. Most of the interviewed participants (and the non-participants who had an audit) were satisfied with the list of recommended measures. About half anticipated the audit results, the other half had no idea what needed to be done or were primarily interested in one or two energy efficiency measures. Several participants (only one that was interviewed) were somewhat resistant to the blower door test/infiltration measures portion of the weatherization. They were concerned about the cost of this and unclear about the benefits. Blower door tests and infiltration reduction measures were required of almost all participants and no one refused the program because of this requirement.

Interviewed participants who had completed the work were very satisfied with the installation staff and with the weatherization measures. Several did have issues with the rehabilitation contractors with whom they dealt, even though they selected the contractor. In several cases CAP Services staff intervened on behalf of the pilot participants to remedy poor quality work. Some participants suggested having more contractors from which to choose, but CAP Services included all licensed and insured contractors in the program. Given the rural nature of Waushara County, there are few contractors.

### **Some Answers**

The evaluation set out to answer four basic questions. Based on the analysis discussed above we attempt to answer those questions.

***If and how do participants in the loan program differ from participants in the weatherization grant program?*** Pilot program participants do not appear to differ in any substantial, observable ways from

WAP program participants. While there was some anecdotal evidence, and certainly some fear at the onset, that senior citizens would be resistant to the idea of a loan, we have not found this to be true based on demographic data.

***What characteristics of the loan program make it attractive or unattractive to the targeted eligible population?*** Participants in the program were happy to find a way to make needed improvements to their home. A 0 percent interest loan, which does not affect monthly expenses, was a critical feature to program acceptance. Interviewed participants also cited CAP Services reputation, previous experience with the agency, and interactions with staff regarding the pilot program as factors that affected their decision to participate. Basically, they trust CAP Services.

Some participants and nonparticipants were concerned about the debt incurred to participate in the loan program. The size of the loan, particularly for those that needed housing rehabilitation work in order to participate, raised some concerns. Some nonparticipants did not participate because they were concerned about the size of the rehabilitation loan. Other participants reportedly preferred the loan program because through it they could get additional measures, and more quickly. Three households chose a loan even when the grant was available and a waiting list for loans is developing.

The program had difficulty attracting rental property, but that problem is not unique to loan programs. The weatherization grant program has experienced the same reticence (and low participation) from rental property owners. Three landlords did fully participate.

***Is the loan program sustainable?*** The loan program was set up so that loans repaid would be placed into a fund that would be used for weatherization loans for other low-income households in the pilot area. In theory, over time the revolving fund would sustain some level of financing for low-income weatherization. The time period for the evaluation – it must be completed 90 days after the end of the program – does not allow for a full exploration of this issue. One house that participated in the loan program – a rental property – was sold and the loan repaid. CAP Services has had 10 years experience with the rehabilitation loan in other counties and found that most loans were repaid upon transfer of the property. This has allowed them to provide rehabilitation loans for other households without obtaining much additional funding.

The loan program did have some administrative costs that were not covered through the loan program. Since the loans do not fully cover the costs of the program, nor account for inflation, an infusion of some minimal amount of funding would be necessary to sustain a loan program.

***Is the program transferable to other parts of Wisconsin?*** The initial success of the pilot weatherization program (as measured by full enrollment and expenditure of funds) is partly due to the agency providing it. CAP Services maintains high quality staff, has an excellent reputation in the community, already provides weatherization in the pilot area, is resourceful in obtaining funding from multiple sources to create more comprehensive services, and has a record keeping system that could easily incorporate the pilot loan program. These characteristics contributed to the success of the program and facilitated its implementation. The program was able to begin immediately upon being funded, with relatively minor development time or costs. CAP Services was already experienced with obtaining second mortgages on homes and did not need to develop new expertise in this area.

Part of the pilot's success must be attributed to the combination of the weatherization and rehabilitation loans. Still, 25 households did participate by obtaining just a weatherization loan, indicating that a weatherization loan program could have some success. Historically, CAP Services has targeted weatherization grants to those areas in which rehabilitation is available – so this does not represent a radical departure from past practices.

## Discussion

The loan pilot results, though not definitive, are promising. Given that it was a small pilot in a very small geographic area we feel we must be cautious when generalizing the results to other parts of Wisconsin or the nation. The results of this small-scale pilot program support future efforts to pilot weatherization loans to a broader population. Future pilots may be able to address some key issues not fully addressed through this pilot. Some key points emerge from the pilot program.

- There is a population of low-income households who can and will obtain a loan for weatherization.
- There are also some low-income households who will NOT obtain even a 0 percent interest loan. How substantial this population is, or how they differ from those who will obtain a loan is still unclear. If loan programs were to become more widely available this issue takes on greater importance. A broader based pilot might help assess this issue.
- There are some households on the cusp of program eligibility (150 percent or less than federal poverty level) who could benefit from this program.
- Some households require rehabilitation beyond what is available through WAP (20 percent in the pilot) in order to obtain complete weatherization. This suggests the continued need for rehabilitation programs offered in conjunction with weatherization programs (regardless of how the weatherization services are provided). The rehabilitation program may also serve as an enticement into weatherization programs.
- The weatherization loan program did not appear to be more or less attractive to rental property owners than the WAP grant covering 75 percent of weatherization costs. More work is necessary to develop programs that will address the energy problems of low-income renters.
- The agency providing the weatherization loans is essential to the program. Several features of the pilot agency, CAP Services, enhanced the pilot program. These are:
  - an established reputation and trust among low-income households
  - experience conducting weatherization
  - experience providing loans (2<sup>nd</sup> mortgages)
  - integrity

Given the demonstrated vulnerability of the population participating in the loan program we feel it is essential that agencies offering these types of programs have demonstrated the characteristics discussed above, and be subject to sufficient oversight designed to protect the low-income consumers. A broader based program introduces the potential for less scrupulous agents to become involved.

- Federal WAP dollars can not be used for a loan program. Changes to this rule would require congressional action, which is highly unlikely. It is likely, however, that other money may become available for weatherization loan programs through public benefits' process. Should additional funding become available, agencies or policy makers must address the issue of how to fairly distribute loans versus grants to low-income households.

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