

## **Case Study:**

### **Wisconsin: Pioneer of Rapid Weatherization Expansions, 2000 & 2005**

Lina Karoglanova & Meg Power, PhD\*

The Wisconsin Weatherization Assistance Program (W.A.P.) experienced two significant periods of rapid growth on a scale similar to the Recovery and Reinvestment Act (ARRA) expansion in 2009. This report describes the new management practices and operational changes that allowed the Wisconsin program to meet the five major challenges of a dramatically expanded program.

Wisconsin's experiences and successes may suggest effective approaches other programs may adapt as they face the challenges of expanding to deliver the ARRA resources. This report examines the biggest challenges faced and outlines more than a dozen solutions the WI W.A.P. network developed and seven lessons its network learned.

**Wisconsin identified four top challenges and found solutions which are listed here and described further below:**

- 1. Recruiting the appropriate workforce.** Solutions, discussed below, included:
  - Offer good pay and the promise of sustained work to attract and keep experienced contractors and staff;
  - Plan for and accommodate longer training periods for applicants with little experience in home remodeling or homebuilding in spite of the apparent time pressure.
  
- 2. Upgrading the Training Structure.** Solutions, discussed below, included:
  - Boot Camp Program:<sup>1</sup> Rapid (Training) Response Program:
  - Local Training Officer Network:
  - Manage a continuous 3-year planning and testing process.<sup>2</sup>
  
- 3. Managing More Contractors Effectively.** Solutions, discussed below, included:
  - Put technical help at the job site.
  - Provide useful and portable technical reference material.
  - Share the cost of lost billable time for training.
  
- 4. Expanding the Pool of Qualified Applicants** Solutions, discussed below, included:

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<sup>1</sup> "WECC Boot Camp Fact Sheet"

<sup>2</sup> "WECC LTO Fact Sheet"

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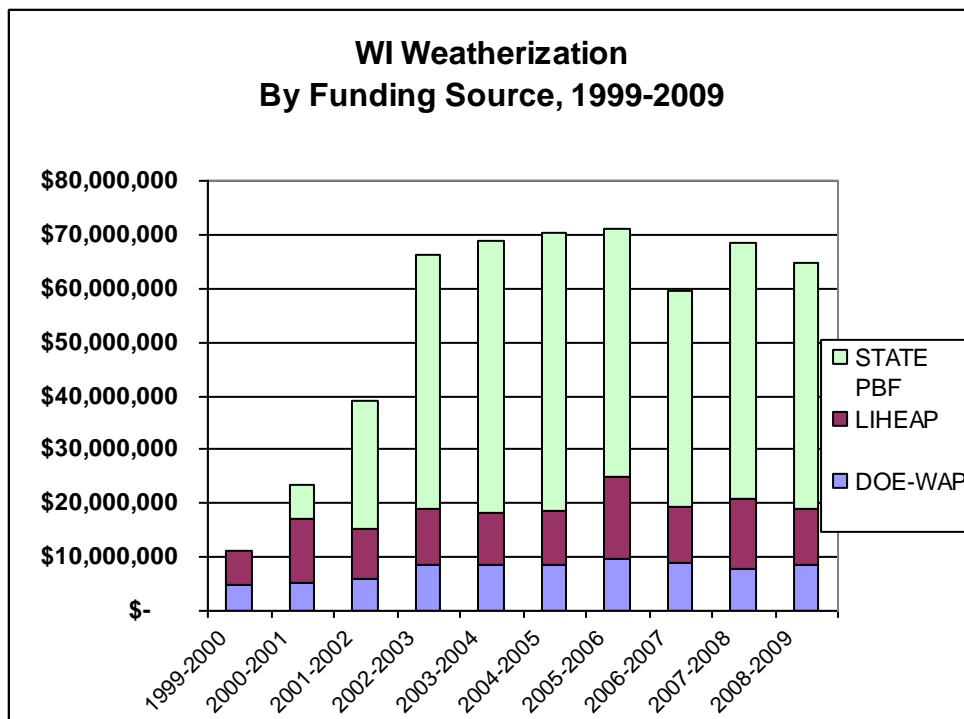
- ☑ Step up data exchanges with other programs for the same population, but plan for significant delays if information systems are not already integrated.
- ☑ Designate higher levels of funding to conventional communications media and tactics
- ☑ Expect increased public Inquiries and establish a state [contractor-run] 800-line.

### Background

History: In response to the utility deregulation proposals of the 1990's, the Public Service Commission of Wisconsin formed a taskforce to identify ways to protect energy efficiency and other public benefits programs that regulators believed would be threatened by deregulation.

From 2000 through 2003, the federal W.A.P. program was dramatically expanded by the addition of new 'public benefit' ratepayer funds to be delivered in coordination with W.A.P. services. The program was increased again in 2005 when the Wisconsin Legislature passed Act 14, which required every energy utility in the state to spend more, 1.2 percent of annual operating revenues, on energy efficiency and renewable programs. That statute builds growth into the funding, so funding levels rise in years when utility revenues grow.

As result, ARRA W.A.P. resources will approximately double the annual size of the combined programs delivered by the Weatherization local network.



### **Similarities to ARRA W.A.P.?**

The Wisconsin state ramp-up plan allowed for more expansion time than is the case with the 2009-2012 ARRA; over four years were available to ramp-up to the full funding level. Growth was slower in the first year than in the last three. Some of the steps the program took before production expanded would, in the ARRA period, need to occur at the same time as production continues to grow. Some of the growth strategies used may not be feasible for the ARRA program.

One example of a good practice that might not pay off in near-term ARRA settings: before new hiring began, Wisconsin implemented a comprehensive technical evaluation<sup>3</sup> of W.A.P. techniques and operations to identify the most efficient and cost-effective methods. The findings led to many program refinements that were incorporated into the program's training manuals and technical guidelines as production began to rise.

Two major changes in the measures and practices used were:

1. The use of 2-part foam for sealing bypasses in attics; this reduced total labor costs; and
2. Using 2-part foam to seal box sills prior to insulating, instead of caulking them, proved far more cost-effective.

In the ARRA period elsewhere, such a review could coincide with expanded production and could be in place for the later stages of the expanded program or for the future base W.A.P.

## **Wisconsin's Experience: Four Challenges & Seven Solutions**

### **1. Recruiting the appropriate workforce**

One of the first challenges that the Wisconsin W.A.P. faced was recruitment. Even though the program it built up its workforce more slowly in the first year than later, local providers had a difficult time recruiting individuals qualified to work productively after training in Weatherization-specific skills. In spite of the economic downturn in the early years of the decade, the majority of applicants and new hires were day laborers.

#### Lessons learned:

Local agencies recognized the program was moving from a social welfare/ job-training program to a production-oriented program. As a result, they increased

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<sup>3</sup> Many of the conclusions will be useful to programs in other states.  
[<http://homeenergyplus.wi.gov/category.asp?linkcatid=494&linkid=122&locid=25> ]

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wages and expectations and considered their employees as long-term workers whom they need to help advance on a “career path”.

Solutions:

- ☑ Offer good pay and the promise of sustained work to attract and keep experienced contractors and staff;
- ☑ The program must plan for and accommodate longer training periods for applicants with little experience in home remodeling or homebuilding contracting in both classroom and on-the-job settings in spite of the apparent time pressure.

## 2. Upgrading the Training Structure

Before the state ramp-up in 2000, the state’s training system delivered training courses and on-site instruction arranged on an as-needed basis. The Wisconsin state-local-utility team focused on expanded long-run training capacity. The extra time available allowed the Wisconsin program to use a more comprehensive training strategy for all workers in the expanded program.

Post 2000, program leaders created a bifurcated training system that includes a) state-wide training, which is administered by Wisconsin Energy Conservation Corporation (WECC, <http://www.weccusa.org/>) and (b) Additional CAA-level training that is customized to agency needs and paid for with state funding, which is administered by the CAA Weatherization staff and includes hands-on, on-site instruction.

The solutions to both scale and quality challenges provided by the reinvented training system include:

Training Delivery Solutions:

- ☑ **Boot Camp Program:**<sup>4</sup> quickly moves students through the training process; it takes 3 weeks, with 1 week in Boot Camp classes and two weeks of orientation, paperwork and hands-on training within a working crew.
- ☑ **Rapid (Training) Response Program:** teams from WECC, the training organization, that travel to individual CAAs to provide customized emergency training when there is an immediate demand.

To run this program, funding was set aside for 10-12 sessions per year, but WECC has generally had to perform only about 5-6 sessions a year.

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<sup>4</sup> “WECC Boot Camp Fact Sheet”

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- ☑ **Local Training Officer Network:**<sup>5</sup> After years of planning, this program was launched in 2008. Its aim is to train 1-2 local agency staff members to be the in-house equivalent of the WECC trainers. The Local Training Officer streamlines the training processes within agencies and tackles any training 'emergencies'. These "LTO's" are trained to detect skill deficits needs within their workforce and to coordinate with WECC on delivering the appropriate training resources.

Under ARRA, other states with similar housing stock and climate may benefit by simply adopting Wisconsin's models and customizing them as circumstances demand.

Training Strategy Solutions:

- ☑ **Continue a training development and multi-year planning process** throughout the program delivery period. Because the development of materials and of skilled trainers is not a rapid process, Wisconsin has learned that quality assurance should include continual planning for training delivery and upgrades on a three-year basis. This has allowed WECC to develop the longer-term projects that make significant improvements such as those above [Link to current plan].

Training materials:

Wisconsin now has its own training curriculum that WECC has developed over the last six years. Suzanne Harmelink at WECC notes that developing a new training curriculum is time-consuming and labor intensive.

- ☑ Lesson Learned: It is probably not wise for states to try developing largely new training material. It is best to use their own or other states' existing materials to prepare for the ARRA ramp-up.

**Good Idea / Less Success:**

A technical "help desk" line was set up at the state's Weatherization agency headquarters to answer Weatherizers' inquires, including programmatic technical questions. It was designed to be handled by state technical staff who are also program technical monitors. Due to persistent state understaffing, it failed to provide responses in the time frames they were needed, and it became less and less used.<sup>6</sup>

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<sup>5</sup> "WECC LTO Fact Sheet"

<sup>6</sup> Interview with Bob Jones, WISCAP (4/23/09)

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- ☑ Lesson Learned: WI Weatherizers now advise other states to try this solution only if skilled technical staff can be made available on short notice as questions arise. They believe it could fill an important 'gap' in support for local Weatherizers as they face unusual challenges.

### **3. Managing Contractors Effectively**

#### **Improving Contractor Results**

Contractor supervision. Since the initial ramp-up in 2000, there has been a marked, but gradual, decline in problems with the quality of contractors' work and the skills of their workers. Robert Jones of WISCAP notes that this is the kind of problem that works itself out over the years as contractors become familiar with the work product they are expected to deliver. However, this takes several years for most contractors and programs should plan to provide significant oversight and technical support.

#### Solutions:

- ☑ Put technical help at the job site. In many areas, subgrantee or State staff spent considerable time with the contractors in the field guiding them through installation expectations of the program during the work. Alaska also recommends this strategy, which was adopted in its massive 2008 ramp-up  
[\[http://www.opportunitystudies.org/repository/File/arra/Alaska\\_Ramp-Up\\_Case\\_Study.pdf\]](http://www.opportunitystudies.org/repository/File/arra/Alaska_Ramp-Up_Case_Study.pdf)  
Lesson learned: Placing skilled supervisors on active job sites with the contractors is seen as helpful, as they know they are required to correct poor work at their own expense,
- ☑ Provide useful and portable technical reference material. The State network developed a Field Guide that describes installation procedures and operational expectations in detail.  
[ftp://doaftp04.doa.state.wi.us/homeenergy/fieldguide\\_0607\\_web.pdf](ftp://doaftp04.doa.state.wi.us/homeenergy/fieldguide_0607_web.pdf)

#### **Training for contractors' workers.**

#### Lesson Learned:

Contractors resist training without proper incentives. While contractors in Wisconsin were trained free of charge by WECC if they were working on a W.A.P. or utility project, they resisted attending free training and losing billable hours.

#### Solutions:

- ☑ **Share the cost of lost billable time for training.**  
New 'incentives': the training requirements are now part of the bid specs. A minimum of two training days will be required of the winning bidder....

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Program managers recommend that a \$50 stipend will be paid per day for each contractor employee attending. If there is an overnight, stay the program should cover the costs. [If a contract without these provisions is signed, it is very difficult to get cooperation.]

- ☑ **Program additional time into training for conventional builders** and contractors new to W.A.P. to confront their traditional practices that are in conflict with the requirements for Weatherization specialists and to persuade the workers to adopt new tools and methods. See more in Section 3.

### **4. Expanding the Population of Qualified Applicants**

Wisconsin's list of applicants qualified and waiting for service was not large enough in 2002 to absorb the newly expanded-resources.

The problem to solve: how to minimize the amount of time and effort that is needed to get an appropriate number of applicants. [Unquestionably, there are more eligible households than even the expanded resources could serve.]

#### Solution:

#### **Interacting with other programs for the same population.**

While many Weatherization delivery agencies also implement other low-income programs, and recruited more intensely than before from those programs' participants, LIHEAP in Wisconsin is implemented by county social service offices, and W.A.P. is not. [This is the case in many larger states.] LIHEAP is the most productive program for generating a W.A.P. candidate list because the eligibility is the same in most states and because energy and housing tenure data is collected and reviewed for LIHEAP eligibility and benefit level.

To create a larger client base, the program coordinators developed a new electronic information-sharing mechanism and changed the county LIHEAP application so it serves as the application for W.A.P., too. Individuals that were applying for LIHEAP are now automatically applying for W.A.P. Wisconsin was fortunate to have in place prior to the ramp up a very good data system for the LIHEAP program. While there were snafus in moving data from LIHEAP to W.A.P. the basics were in place, which reduced the amount of time needed to effectively implement.

The system now functions smoothly and appears to be a major reason that there has been significant increase in annual completed W.A.P. applications. The amount of time spent on outreach and intake has probably been cut in half, allowing more time for actual production.

#### Lesson Learned:

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In states where LIHEAP and Weatherization are not well-integrated, any state-wide electronic data-sharing project is unlikely to be implemented quickly.

Solutions:

- ☑ States and local delivery agencies should factor the delay into their plans and find interim strategies for database integration.
- ☑ They should designate higher levels of funding to conventional communications and not only to recruitment into W.A.P. through the intake interviews and databases managed by other local programs.

### **Coping with Increased Public Inquiries**

#### Solution:

In 2003, when the network had developed capacity for expanded production, the state set up an 800 line staffed and managed by WECC to respond to public inquiries; it remains in operation. Call volume grew from 11,000 calls in 2003 to 50,280 in 2008; since word of the Recovery Act has spread since 2009, calls have again increased to by about 6 percent monthly.<sup>7</sup> The service has been successful in answering many inquiries and directing potential clients.

#### Lessons Learned:

- ☑ This experience demonstrates that there is such great public interest in the program that a state communications response is warranted. Also,
- ☑ Thousands of potential clients use a phone line, if offered, even in a state where substantial on-line information is readily available.
- ☑ The independent impact of the phone line on widening the participant pool is unknown; however, the value of transparent and accessible public outreach and information is positive and assists support for the program.

The authors assembled wise counsel from key sources in Wisconsin for presentation, but we acknowledge we were conduits for important ideas that we have tried to summarize correctly. This paper would not have been possible without the generous help offered by the interviewees, Bob Jones (WISCAP) and Suzanne Harmelink (WECC). Further, it was greatly enriched by the contributions of Susan Brown, Deputy Administrator, Division of Energy Services, and many members of her staff. Any errors are our own.

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<sup>7</sup> Interview with Suzanne Harmelink, WECC (5/1/09)

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