Weatherization Site Demonstration Toolkit

The National Association for State Community Services Programs

NASCSP

NASCSP Site Demonstration Toolkit

Created in March 2006; revised in August 2013, revised in August 2017, revised in August 2021, revised July 2022, revised 2024.

The updated manual can be found under the Public Information/Communications Toolkits tab at www.nascsp.org/wap/advocacy

IF YOU HAVE ANY QUESTIONS OR NEED ASSISTANCE, WEATHERIZATION COLLEAGUES ACROSS THE COUNTRY ARE READY TO HELP WITH:

- Contacting public officials
- Drafting fact sheets
- Editing materials
- Brainstorming ideas
- Social Media
- And more!

Contact bpomush@nascsp.org and we will connect you to the help you need.

PHOTO CREDIT (L-R):

Row 1 - Dennis Schroeder, NREL 28718; Dennis Schroeder, NREL 28766; Euegene Brady, NREL 19926
Row 2 - Dennis Schroeder, NREL 17952; Dennis Schroeder, NREL 18018; Dennis Schroeder, NREL 28709
Row 3 - Dennis Schroeder, NREL 28598; Joe Konrade, NREL 09664; Werner Slocum, NREL 72252

Contents

Hosting a Site Demonstration

On-site technical demonstrations provide a great opportunity to showcase the benefits of the Weatherization Assistance Program to national, state, and local community leaders. Seeing a home being weatherized is very powerful for demonstrating program successes to public officials and members of the media. In an hour or less, on-site technical demonstrations tell the best story of how Weatherization Works! These events also allow a weatherization agency to highlight the impact on jobs, training, and energy efficiency.

Many States have hosted dozens of site demonstrations with significant success and contributed lessons to this guide. Site demonstrations are often coordinated as part of the agency's public information campaign/Weatherization Day activities and as a leveraging tool. Members of Congress, Congressional staff, State elected officials, county commissioners, utility officials, and other potential stakeholders have attended these events. Demonstration guests are impressed with the diagnostic approach, attention to health and safety, and proven cost-effectiveness of the taxpayers' investment. Invitees experience the client's circumstances, observe the energy-efficiency diagnostics used in the program, and learn how weatherization services help the family residing in the home.

Highlighting jobs and new hires can be a powerful tool to drive home your message that Weatherization Works! These events also strengthen the agency's press and media contacts and provide State and local agencies with positive news coverage. The demonstrations have been highlighted in newspapers, television, and public radio. These demonstrations improve communication with public officials, media, clients, and even among program staff.

Laying the Groundwork

Introduction

Successful site demonstrations require planning to ensure an engaging visit for your audience. Use the following points to map out your site demonstration event.

First, it is important to think through why you are having a site demonstration. By clearly articulating your goal, you will be able to keep your demonstration on target. Possible goals include:

- Highlighting your program's accomplishments.
- Achieving greater support from policy makers.
- Attracting other organizations to leverage dollars.
- Strengthening community presence, partnerships and press connections.
- Increasing number of weatherization applications through publicity.

Early in the planning stage, organize a "pre-demo meeting" or conference call with all the involved parties. Discuss your vision for the demonstration, allow everyone to ask questions, and identify the people to contact as planning progresses.

Roles

It is important to designate a point person for this event. This person will coordinate and delegate the many components that are part of a successful demonstration.

Site demonstrations should be hosted by local agencies in collaboration with their Grantee Office. Local events allow community leaders to interact with their consitituents. Several small agencies that lack staffing resources may choose to coordinate together to implement a site demonstration. Keep the focus of the event on the technical aspects of weatherization diagnostics and keep the demonstration agenda to under an hour. Local agency staff should be limited to only those necessary.

Press

Consider invitations to the press carefully. No press conference should be held during the demonstration hour itself. The press can be disruptive if they are trying to get good camera angles or usable sound bites. It may be best to invite only one television station since cameras can be particularly distracting. Newspaper coverage typically has the best, most lasting effect. This media outlet usually provides more space for a full explanation of the program.

Do you even want the press at your event? If an agency has a very long waiting list and is overwhelmed by applications, it might be advantageous not to have the press attend. However, the policymaker you are trying to educate may want press coverage. Consider what you want the press's role in the event to be.

Technical Content

The agenda for the demonstration begins with the executive director or another official (State or local weatherization director) introducing the guests to the homeowner. Provide a brief overview of the program from the national, state, and local perspectives. Then show guests blower door and duct diagnostics, furnace efficiency testing, carbon monoxide testing, ductwork repair, and air sealing. Newer innovative practices can be substituted in for those listed above depending on what is available and applicable to your local housing stock.

Timing

Morning demonstrations seem to work the best and are most convenient for homeowners, crews, and guests. Will your event be in the summer, when you can demonstrate cooling measures, or the fall in preparation for the heating season? The site demonstration itself should be less than an hour and include no more than 10 guests. Persistence is key when scheduling these guests, especially with public officials.

Preparation

The day before the demonstration, the agency crews should prepare all aspects of the field work, organizing each "station" and wrapping up last-minute details with the client. It's important to do a dry run to ensure that all the presenters are prepared, and everything can be completed in an hour. On the day of the demonstration, all weatherization staff should be in place 45 – 60 minutes before the scheduled start time. Therefore, they should begin setting up three hours before the event to make sure they are ready 45 minutes before guests arrive. One staff person should be designated to greet the media and distribute press packets and nametags.

Always have a bad weather plan. Be prepared to do a demonstration from the porch or under a tarp or tent. The weatherization crew should also be stocked with relevant gear (e.g., snow shovels if there is a chance of snow, umbrellas if there is a chance of rain, and water bottles if it is scorching hot).

Criteria for Site Selection

Site Selection

Selecting the best demonstration house can be very time consuming for the local agency. Files will need to be reviewed, and typically more than one job site is visited in the selection process. Be patient and know what you are looking for. The following criteria are recommended for selecting a home where you can conduct a site demonstration. These criteria were developed to ensure the most positive public perception of the Weatherization Assistance Program and the citizens it serves.

- The house should be easily accessible to make travel as quick and easy as possible for public officials and other guests. Ensure there will be adequate parking.
- Approximately 10 people (no more) should be able to comfortably view the various demonstrations at the job site. The home should be relatively clean and neat. Clients must be willing to have about 10 people visit for an hour to look at the work and not be upset by the distraction.
- The personal stories of the clients are important. Try to select a home owned by a person from a vulnerable or targeted background, including the elderly, disabled people, and people representative of the communities served by the agency. High fuel bills (or high energy burden) should also be highlighted.
- If possible, select a home that needs attic and sidewall insulation, has a combustion forced air heating system, and accessible ductwork in the basement. This will allow guests to move through the living space to see the blower door and duct diagnostics, and then to the basement to see furnace efficiency testing, carbon monoxide testing, and how duct work will be repaired and/or sealed and insulated.

To increase the focus on workforce development, guests may want to talk to crew members not only about the work they are doing on the home, but also about how weatherization programs have affected their livelihood. Talk with site managers and crew members to find possible candidates who would be open to discussing their story with visitors.

Have any of the crew members at the site recently been trained at a WAP center? Would some crew members be willing to discuss the work opportunities available through the center or what WAP programs have meant to their livelihood? Are they willing to be photographed with guests?

It is very helpful to have a front porch, carport, or tent for gathering guests, making introductions, and providing an overview, especially in the event of bad weather. The home must have adequate parking for guests in the yard or on the street.

Tips on Inviting Guests

When preparing your invitation list and identifying public officials, remember that crowd control is crucial for a successful site demonstration. A group of 8-10 guests is ideal. Invitees may include:

- Agency board president or designee
- U.S. Congressional Representative
- U.S. Senators
- State Senator for the jurisdiction where the site demonstration is being held.
- State House Representative(s) for the jurisdiction where the site demonstration is being held.
- President of the county commissioners where the site demonstration is being held.
- Key gas and/or electric utility representatives from companies serving the area.

When serving multiple counties and holding only one site demonstration, focus your efforts on one of the following:

- The State legislative representatives and county commission president from the site demonstration county only, and maybe one or two key politicians from other counties (i.e., Senate or House leadership); or
- Key legislative members and county commission representatives from the multiple county area.

Obviously, not all people invited will be able to attend. All invitees (or their appointment secretaries) will need to be reminded two or three times. However, invite only as many guests as the demonstration area can easily accommodate.

If your event is built around a Member of Congress, then contacting an appointment secretary early and explaining the event is critical to getting their involvement.

It is very important for your office to call your guests the Friday or Monday before the event, and again the day before the event. Remind them of the date and time, verify that they have the directions and know where the site is, answer any questions, and reassure staff that the demonstration will NOT run over one hour. Busy people have lots of commitments and short memories and may forget otherwise!

Important: Experience has shown that legislators typically do not show up for site demonstrations outside their constituency areas unless an important public official is attending (i.e., U.S. Senator, U.S. Representative, Governor, Department Secretary, etc.).

Press Kit Materials

While organizing the site demonstration, give thought to how you do or do not want the press to be involved. If your agency does not need additional weatherization applications, you may not want the press there. Alternatively, you may need to make it very clear in your press packets that the agency has a waiting list and describe the prioritization of applications.

Newspaper reporters typically are not as intrusive as television reporters with camera crews. With television, the camera operator on site is always going to be angling for the best shots and may get in the way of the policymaker viewing the diagnostics. Also, the client may not want the camera inside the home for privacy reasons.

Why Prepare Press Kits?

Press kits are designed to give the reporter all the supporting information needed to build a story. A reporter typically writes the story within four hours of leaving the site. By giving reporters hard copies of your materials, you will help ensure that your story is accurately conveyed.

Here is a list of suggested items and resources to provide the press at the event. Be sure to update, compile, or download current information just before your event. The numbers on these fact sheets change frequently and it is important to give the press the most up-to-date information.

Site Demo Agenda

This agenda should denote who the speakers are, what diagnostics are going to be showcased during the demonstration, etc.

Agency & Weatherization Fact Sheets or Brochures

Include agency and weatherization fact sheets or brochures in the press kit. Agency fact sheets and brochures should list programs and services offered, denote the agency service area and weatherization poverty guideline eligibility criteria, describe what weatherization measures may be provided, recognize any local or utility partnerships, and provide contact information.

An agency weatherization fact sheet could denote local agency weatherization funding, annual completion goals, the name and number of the local weatherization director, length of waiting list, etc. It is also important to include agency data, such as the number of new jobs, trainings, homes weatherized, households still on the waiting list, etc.

Agency Contact Information

Include names of key staff involved in the demonstration (executive director, weatherization director, etc.), and addresses and phone numbers where reporters can reach you if they have questions.

Historical Funding Levels and State Fact Sheets

Provide reporters with the State's weatherization funding history (and the LIHEAP funding history if the agency receives LIHEAP funds). The State fact sheet could list the sources for funding and the dollar amount. It could also provide a breakdown of the numbers of units weatherized by occupant (the elderly, children, the disabled), people assisted, income ranges, and housing types (single-family homes, mobile homes, apartments). The fact sheet could also recognize any local utility or partnerships.

National Weatherization Program Fact Sheets

www.nascsp.org/wap/waptac/wap-resources/reports-and-fact-sheets/

Visit the WAP Program Guidance section of the website for an overview of the program and for updates on specific national goals and facts. The fact sheets shown below are examples of the type of advocacy materials available at the website listed above.

Virtual Events

Choosing a Platform

Location is just as important for hosting a virtual event as it is for an in-person one. Picking the platform hosting the event may be one of the first decisions you make, and it can greatly shape what the event experience will be like for participants. Below we list broad categories that your event may fall into:

- Meeting: A gathering where everyone can have their camera/microphone on and engage in discussion relatively freely. Better for small groups (fewer than 20 people.)
- Webinar: Speakers and panels hold the floor while most participants are muted. Questions can be submitted via chat or during a dedicated Q&A time. Better for larger groups.
- Demonstration: Similar to a webinar but contains crucial visual components beyond a simple slideshow. These can include technical demonstrations but can also cover monitoring, auditing, and other weatherization activities.
- Breakout sessions & networking: Attendees are split off into small groups to work on a specific task or to socialize. In either instance it helps to have a facilitator in each group in case any questions or issues arise.
- Other: There are many virtual meeting platforms available that offer a multitude of options for meetings, from the standard Zoom-style meeting room to niche options like virtual reality. Research beforehand to see what options might work best for your event.

Optimize for Online

Holding an event virtually is not the same as holding one in-person and should not be treated as such. Each method has its strengths and weaknesses, and content must be tailored accordingly.

Attendees, especially those who have been working remotely, may be fatigued by traditional virtual meetings. Be sure to schedule in time for breaks and to consider how long attendees will be able to focus during a virtual meeting. The final 15 minutes of a 45-minute meeting will be livelier than the final 15 minutes of a 2 hour one.

Prepare for Technical Difficulties

It is impossible to predict what glitches and issues may arise during your event. There are two main strategies of preparation that will mitigate problems if not outright avoid them.

1. Always do a dry run with your presenters, preferably the day of the event.
2. Designate a staff member to be technical support, to monitor the chat, and to be able to take over screen-sharing if necessary, including having any presentations downloaded beforehand.

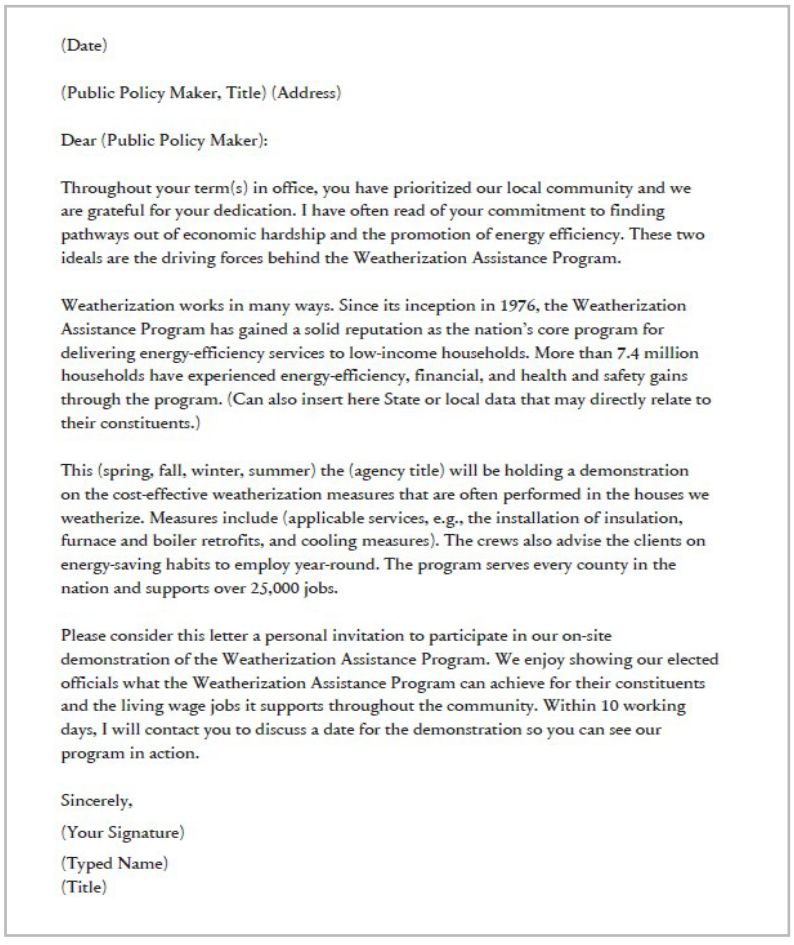
APPENDIX

Sample Forms and Processes

Sample Invitation Letters

SAMPLE LETTER FOR INVITING PUBLIC POLICY MAKERS

The following letter will give you an idea of the length and type of information that an invitation letter should include. Typically, a phone call to explain the on-site



(Date)

(Public Policy Maker, Title) (Address)

Dear (Public Policy Maker):

Throughout your term(s) in office, you have prioritized our local community and we are grateful for your dedication. I have often read of your commitment to finding pathways out of economic hardship and the promotion of energy efficiency. These two ideals are the driving forces behind the Weatherization Assistance Program.

Weatherization works in many ways. Since its inception in 1976, the Weatherization Assistance Program has gained a solid reputation as the nation's core program for delivering energy-efficiency services to low-income households. More than 7.4 million households have experienced energy-efficiency, financial, and health and safety gains through the program. (Can also insert here State or local data that may directly relate to their constituents.)

This (spring, fall, winter, summer) the (agency title) will be holding a demonstration on the cost-effective weatherization measures that are often performed in the houses we weatherize. Measures include (applicable services, e.g., the installation of insulation, furnace and boiler retrofits, and cooling measures). The crews also advise the clients on energy-saving habits to employ year-round. The program serves every county in the nation and supports over 25,000 jobs.

Please consider this letter a personal invitation to participate in our on-site demonstration of the Weatherization Assistance Program. We enjoy showing our elected officials what the Weatherization Assistance Program can achieve for their constituents and the living wage jobs it supports throughout the community. Within 10 working days, I will contact you to discuss a date for the demonstration so you can see our program in action.

Sincerely,

(Your Signature)

(Typed Name)
(Title)

demonstration proposal is made first, followed by a formal letter with a copy to the appointment secretary or staffer that you contacted on the phone. About 10 days after you send the letter, follow up with a phone call and propose some suggested dates for the demonstration. (Crucial: If you have a short timeline, have your demonstration house selected before the call so that you are prepared.)

SAMPLE LETTER FOR INVITING POTENTIAL LEVERAGING PARTNERS

The following letter will give you an idea of the length and type of information that an invitation letter should include. Typically, a phone call to explain the on-site demonstration proposal is made first, followed by a formal letter. About 10 days after you send the letter, follow up with a phone call and propose some suggested dates for the demonstration. (Crucial: If you have a short timeline, have your demonstration house selected before the call so that you are prepared.)

(Date) (Name, Title)

(Potential Leveraging Partner)(Address)

Dear (Title Name):

I am writing to invite you to an event that I believe will be beneficial to (Potential Leveraging Partner) and that you will find personally satisfying as well. Many times, over the years, I have read of your company's commitment to our local community and to energy efficiency. These two ideals are the driving force behind the Weatherization Assistance Program.

Weatherization works in many ways. Since its inception in 1976, the Weatherization Assistance Program has gained a solid reputation as the nation's core program for delivering energy-efficiency services to low-income households. More than 7.4 million households have experienced energy-efficiency, financial, and health and safety gains through the program. (Can also insert here State or local data that may directly relate to their service area/territory.)

On (date), the (agency title) will be demonstrating the cost-effective weatherization measures that are often performed in the houses we weatherize. Measures include (applicable services, e.g., the installation of insulation, furnace and boiler retrofits, and cooling measures). The crews also advise the clients on energy-saving habits.

The Weatherization Assistance Program makes a significant impact on our local community and will continue to do so for years to come. The possibilities are limitless for the program and (Potential Leveraging Partner) to establish a unique relationship in which both organizations can more effectively serve our local community.

Included in this package are materials for your review. Within 10 working days, I will contact you to discuss your availability to participate in this event to benefit (county, town, State) low-income communities. We hope you can join us!

Sincerely,

(Your Signature)
(Name)
(Title)

Site Demonstration Scripts

The fillowing scripts were Developed by TEAM Michigan

(Please note, your State Policies may differ)

Once you determine what technical diagnostics and measures you are going to demonstrate, it is important that the staff members you have selected spend some time practicing their presentations for their individual demonstration stations. Presentations can be simple explanations of how the technician is using diagnostic equipment in a specific situation, what the technician is looking for, and how the equipment works. The following scripts are from demonstrations performed by TEAM Michigan and can be revised to meet your specific needs.

Blower Door

I am very pleased to be here today to demonstrate how the Weatherization Assistance Program uses the blower door in (number of agencies) agencies throughout the State of (your State).

First, what is a blower door?

The blower door fits into a door opening and helps us locate air leaks in the client's home and measure how leaky the home is.

The blower door fan draws air out of the building creating a difference in air pressure between the inside and outside of the building. The air moving through the fan is replaced by air rushing through cracks and holes in the building's shell. These exaggerated air leaks are easy to locate by feeling with your hand or using a smoke pencil. Most blower door testing is done using depressurization.

We conduct three blower door tests on each home we weatherize: a pre-test, mid-test, and post-test.

During the pre-test, we gather all the information on the house and the client's lifestyle. The inspector puts the house in winter mode by shutting all exterior windows and doors and opening all interior doors.

The mid-test is done after all the insulation measures have been completed, including attic, wall, and floor or foundation insulation. This test provides the basis for any adjustments (quality control).

The post-test is done when the job is complete (quality assurance).

Then demonstrate the blower door and let them feel a leak.

Other areas that should be discussed include:

- The post-test and air changes per hour
- The Blower Door Test Data Sheet
- The health and safety aspects of the blower door test (especially given COVID-19)
- How it saves time and money (for us and the client)

INFRARED CAMERA

The infrared camera can locate missing or insufficient insulation in exterior walls and identify energy-robbing air leaks.

- Discuss how infrared cameras show leaks and structural issues in a home very vividly. These can be displayed using photos or demonstrating camera use during the demonstration.

  The infrared survey can be used to highlight areas of heat loss that cause unusually high fuel bills. The camera is also used for quality control purposes and can be used on homes that have irregular wall framing.

- Demonstrate the camera by placing your hand on the wall (for less than 1 second) and show the heat signature of your hand with the infrared camera.

ATTIC INSULATION

- Discuss general health and safety issues (e.g., roof leaks, improper insulation clearance from flues, and wiring problems), and address them as appropriate throughout the home.
- Point out health and safety concerns specific to the attic station (e.g., knob and tube wiring or examples of different flue types and their code required clearance from combustibles).

- Explain how weatherization will establish a thermal/pressure boundary appropriate to the client's use of the home (to separate heated from unheated areas).
- Point out major bypasses/infiltration problems specific to the attic station that has been or will be addressed to establish a pressure boundary. Stress the importance of air sealing prior to installing insulation as it relates to building durability and effectiveness of the insulation.
- Use a video (possibly a before-and-after tape) of the attic areas. Point out areas to be insulated. Note that these areas are insulated to establish a thermal boundary.
- Review necessary precautionary measures taken (e.g., barriers around heat sources, such as chimneys and knob and tube wiring).
- Discuss the need for venting attic areas. Point out venting that has been completed or will be addressed in each attic area.
- Allow a few minutes at the end of the presentation for questions.

COMBUSTION APPLIANCE TESTING

- Explain what a combustion appliance is.
- Identify the type of furnace (gravity flow, forced air, boiler, etc.).
- Identify other combustion appliances (water heater, dryer, cook stove, etc.).
- Identify parts of the furnace (combustion chamber, return air, distribution trunk, filter slot).
- Explain that further demonstration will be completed outside at the end of the tour.
- Show combustion analyzer and identify where we test for efficiency on the furnace and the water heater.
- Explain draft using a digital monometer.
- Identify gas lines and valves.

- Show an ambient carbon monoxide detector or 4-gas monitor and demonstrate it in the combustion appliance zone.
- Explain health and safety violations related to weatherization (e.g., flue clearance and pitch).
- Allow a few minutes at the end of the presentation for questions.

PERIMETER/FLOOR/WALL/BAND JOIST INSULATION

- Explain what the band joist (box sill) area is and its importance in an energy retrofit.
- Explain separation measures taken between heated and non-heated areas.
- Discuss a 6-mil. poly vapor barrier.
- Discuss floor insulation as it compares to stem wall insulation and the decision-making process for defining the thermal boundary.

DENSE PACK WALL INSULATION

Why is dense pack wall insulation important?

1. It eliminates air movement in the wall cavities, greatly reducing air infiltration (cold air coming into the house) and exfiltration (warm air leaving the house).
2. It reduces energy loss. Some studies have shown as much as 27% of the heat in a house goes out through the walls.
3. It reduces moisture problems since air and moisture movement is nearly eliminated in the wall cavities.

Now that we have determined wall insulation is important, we must decide which insulation material we are going to use. There are many types of insulation. Two of the most common are cellulose and fiberglass. Roll or batt fiberglass is primarily used to insulate the walls of new homes. Cellulose, which we are using today, is used most frequently to dense pack insulate the walls of older, existing homes, as well as new homes. Cellulose is made from ground up, recycled newspapers and is treated with a fire retardant.

How are the walls of a house insulated? There are basically six steps that must be taken to insulate the walls of a house:

1. The walls must be carefully inspected before insulating them. The inspector is looking for items such as:
    - Holes in the walls
    - Duct work in the walls
    - Moisture in the walls
    - Condition of wiring in the walls
2. All pre-insulation work must be completed before insulating the walls. This may include patching walls, repairing wiring, or installing special fuses.
3. After the pre-insulation work is done, the siding of the house may need to be removed.
4. Next, the walls are drilled.
5. Once all the holes have been drilled, the contractor will begin blowing insulation into the walls. Machine settings need to be correctly adjusted to ensure proper pressures so that a dense pack is achieved.
6. When the walls are filled with insulation, a cap is installed in the holes that were drilled.

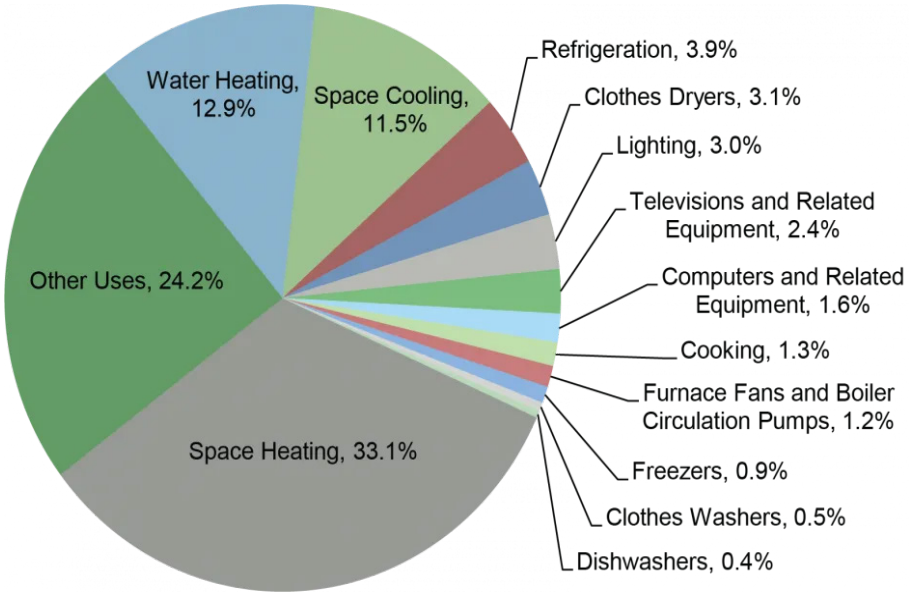
ELECTRIC BASELOAD MEASURES

Baseload energy refers to the energy used in a home for everything except space heating and space cooling. This includes refrigeration, water heating, lights and other appliances. On average, baseload energy comprises 55% of residential energy use in the United States. https://tinyurl.com/y9f37jys

Addressing baseload energy has different challenges than what are commonly referred to as 'shell measures' which are meant to insulate and air-seal the shell of the building; once shell measures are installed, they do their work without any further interaction.

However, there are many human factors that contribute to baseload energy waste. For instance, the decision to get out of the shower after 5 minutes, compared to taking a 15-minute shower. As you can see in the table below, decisions like this make the water heater the third largest energy user in the average home!

Lighting and refrigeration are other common sources of baseload energy use. Light Emitting Diodes, or LEDs as they are commonly called, use at least 2/3 less energy than



standard incandescent light bulbs and can last up to ten times longer. This can mean over seven years before changing a bulb!

Light output, or lumens, is usually listed on the product package and is the best way to compare CFLs to standard incandescent light bulbs:

LED (Watts)	CFL (WATTS)	INCANDESCENT EQUIVALENT
10	15	60
13	20	75
18	25	100

Pie Chart: https://css.umich.edu/publications/factsheets/built-evnvironment/residential-buildings-factsheet#:~:text=A%20University%20of%20Michigan%20study,kWh%2F%20m2%20annually%20in%202015.&text=Electricity%20consumption%20increased%2014%2Dfold,of%20U.S.%20total%20electricity%20use

Refrigerator replacement is determined, as with all other WAP measures, by calculating the Savings-to-Investment ratio (SIR). An SIR of 1.0 or higher means that the energy savings of the new unit will be equal to or greater than the cost of installation, including labor and materials.

Allow time for questions about lighting upgrades and refrigerator replacements.

LEAD SAFE WEATHERIZATION

Consider having a lead safe weatherization area at your site demonstration where attendees can see the requirements for working lead safe. The demonstration could include using personal safety equipment and lining areas with sheets of plastic to contain and dispose of any disturbed materials.

- Any home built before 1978 may contain lead paint.
- After 1940, paint manufacturers voluntarily began to reduce the amount of lead they added to their consumer paints. As a result, painted surfaces in homes built before 1940 are likely to have higher levels of lead than homes built between 1940 and 1978.
- Lead is a poison, but most dangerous in the form of dust and fumes, which can be produced by disturbing lead paint during weatherization.
- The primary concern for weatherization workers and clients is the use of lead in paints and varnishes.
- Lead paint can be found on many painted surfaces inside or outside the home.

CLIENT ENERGY EDUCATION

Providing materials for clients to show how energy efficiency can be influenced by behavior can be very effective. After a home has received energy-efficient improvements, it is imperative that the homeowner understands how these modifications work so that maximum energy savings can be achieved. Energy education can take many forms, such as one-on-one discussions, checklists, and free calendars encouraging energy-efficient behavior. Think about providing fact sheets, brochures, and additional information to attendees about how their behavior influences energy use in their homes.

Sample Site Demonstration Agenda

WEATHERIZATION ASSISTANCE PROGRAM SITE DEMONSTRATION

Sponsored by ABC Community Action Association, Inc. and State Weatherization Office

Friday, October 11, 202_ | 10:30 a.m. – noon CDT

Mrs. Jane Doe's residence, 123 Main Street, Anywhere, USA

AGENDA

10:30 a.m. **Welcome/Introductions** - Taylor Smith, Executive Director, ABC Community Action Association

Program Overview - Yara Devi, State WAP Director, State Office Name

Diagnostic and Technical Demonstrations - Mary Zhang, WAP Coordinator, ABC Community Action Association

- Blower door and digital duct pressure diagnostics
- Carbon monoxide detection
- Heating system combustion analysis
  - » Draft testing
  - » Flue gas analysis
  - » CO detection
  - » Gas leak detection
- Duct sealing techniques
- Water heater diagnostics and insulation
- Thermal envelope work
  - » Attic insulation
  - » Sidewall dense pack insulation

11:00 a.m. **Questions & Answers**

11:30 a.m. **Adjourn**

For additional information, contact:
Taylor Smith, Executive Director – ABC Community Action Association, Inc.
TEL: 999-555-0001 | EMAIL: taylorsmith@abc.org
Yara Devi, State WAP Director, State Office Department of Something
TEL: 999-555-0002 | EMAIL: YaraDevi@abc.org

Sample Media Release Form

During a site demonstration, it is very helpful if the agency has a Media Release Form (example below) on file for the homeowner. This provides permission not only for television stations and print media to use the homeowner's image in their stories, but also allows the agency to use these images for other informational and instructional purposes.

MEDIA RELEASE FORM

Without expectation of compensation or other remuneration, now or in the future, I hereby give my consent to _____ [legal entity/organization], its affiliates, and agents, to use and share my image and likeness and/or any interview statements from me in its publications, advertising or other media activities (including the Internet). This consent includes but is not limited to: (Initial where applicable)

_____ (a) Permission to interview, film, photograph, tape, or otherwise make a video reproduction of me and/or record my voice, and/or the interior and exterior of my home showing the work of weatherization.

_____ (b) Permission to use my name; and

_____ (c) Permission to use quotes from the interview(s) (or excerpts of such quotes), the film, photograph(s), tape(s) or reproduction(s) of me, and/or recording of my voice, in part or in whole, in its publications, in newspapers, magazines, and other print media, on television, radio and electronic media (including the Internet), in theatrical media and/or in mailings for educational and awareness.

This consent is given in perpetuity and does not require prior approval by me.

Name: _____

Signature: _____

Address: _____

Date: _____

The below-signed parent or legal guardian of the above-named minor child hereby consents to and gives permission to the above on behalf of such minor child.

Signature of Parent
or Legal Guardian: _____ Print Name: _____

The following is required if the consent form must be read to the parent/legal guardian:
I certify that I have read this consent form to the parent/legal guardian whose signature appears above.

_____ _____
Date **Signature** of Organizational Representative or Community Leader

Page 1 of 1
Media Consent & Release Form

Michigan's Site Demonstration Process Checklist

STEP	ACTION ITEM	BY WHEN?	COMPLETED BY
1	Read the Site Demonstration information on the NASCSP website.		
2	Identify an event coordinator— VERY IMPORTANT!		
3	Establish the date of the event.		
4	Choose a suitable home for the event with back ups (2) as necessary.		
5	Obtain the family's permission and have them sign a Release Form.		
6	Develop the message for the event, to be included in all invitations.		
7	Develop a list of invitees.		
8	Prepare an agenda for the event.		
9	Create an invitation letter and fact sheet about your program.		
10	Send invitation letters to your State WAP office, members of Congress, State Senator, State legislator, county commissioners and executives, mayor, and municipal officers.		
11	Identify local and State media outlets (TV, radio, newspapers) and determine who to contact in each media office.		
12	Initiate contact with media representatives to inform them about the event.		
13	Inform all staff in your agency about the event —VERY IMPORTANT!		
14	Send follow-up correspondence to all media representatives with event details and WAP overview.		

STEP	ACTION ITEM	BY WHEN?	COMPLETED BY
15	Obtain an agency sign for the day of the demonstration. If one does not exist, have one made.		
16	Visit the house to decide which workstations are needed (e.g., sidewall insulation, furnace service, attic insulation, etc.), determine the order of the stations, the staff needed, and the equipment required.		
17	Identify agency staff for the hands-on portion of the event. Identify agency staff who will serve as host(s) for the event. Use a ratio of 5 guests to 1 staff member as a guideline.		
18	Develop scripts/talking points for each workstation. Provide information to the executive director and have him/her develop a script for introductory remarks.		
19	Determine what information will be handed out or displayed.		
20	Conduct a mock run-through of the event.		
21	Send a reminder to the elected officials, media representatives, and other special guests by phone and email.		
22	Create a display board to be posted on site.		
23	Prepare handouts for each workstation and photocopy them.		
24	Print banners and signs. Allow extra time if an outside vendor is involved.		
25	Determine what refreshments will be provided and arrange for delivery.		
26	Review assignments and talking points. Brief staff on their responsibilities.		
27	Visit the client and review all details of the event.		
28	Rehearse the event activities the day before the actual demonstration. Modify your plans as needed. Determine if all equipment is working and if any additional equipment is required.		

Find this checklist HERE

STEP	ACTION ITEM	BY WHEN?	COMPLETED BY
29	Have photo releases ready to hand out at the event.		
30	Prepare the house and the site for the event (i.e., yard and house clean-up). Either purchase protective booties or plan to lay down plastic throughout the house to ensure that visitors do not leave tracks/debris.		
31	Send a reminder to the elected officials, media representatives, and other special guests by phone and email.		
32	Make nametags for each invited guest and for all staff who will be present on the date of the demonstration.		
33	EVENT DAY - Go over the process to be followed and the rules for the media.		
34	ENJOY THE EVENT!		
35	Ask staff/agency to critique the event, including what worked well and lessons learned.		
36	Send out a press release about the event and who attended. Use pictures!		
37	Prepare a thank you note to the family where the event was held. Purchase a small gift and deliver the note and gift.		
38	Send thank you notes to all attendees.		
39	Send hand-written thank you notes to appointment secretaries of public officials and media editors.		
40	Collect all media coverage and file for use in future public information efforts.		
41	Send a thank you note to each of the WAP and agency staff who helped make the event a success.		
42	Record all event information for use next year.		

Michigan's Site Demonstration Equipment List

Following is the list used by TEAM Michigan. Each State will have a slightly different list based on the demonstrations planned, the location, and the diagnostics that State/ agency uses. As part of the planning process, the organizing point person should assure who or what agency/ organization will be responsible for procuring items on the list.

- INFRARED CAMERA
- BLOWER DOOR
- VIDEO CAMERA (MAYBE SEVERAL)
- INSULATION HOPPER AND BAG OF CELLULOSE
- FURNACE TESTING EQUIPMENT (COMBUSTION ANALYZER, GAS LEAK DETECTOR, DRAFT GAUGE, ETC.)
- DUCT DIAGNOSTIC EQUIPMENT (DUCT TESTER OR PRESSURE PAN, DIGITAL MANOMETER)
- TENT TO GATHER UNDER
- TABLES FOR DISPLAYING ITEMS
- WEATHERIZATION WORKS! HATS AND BADGES
- TV/DVD PLAYER – ATTIC INSULATION
- COMPUTER FOR SHOWING INFRARED SCAN RESULTS
- TRIPOD FOR INFRARED CAMERA
- EXTENSION CORDS
- LIGHTS FOR ATTICS, CRAWL SPACES, ETC.
- WEATHERIZATION WORKS! BANNER
- LOCAL WEATHERIZATION BANNER OR SIGN
- MATERIALS BOX DISPLAY, VENTS, CELLULOSE, BATT (R-11/R-19), SUPPORT WIRES
- POSTERS FOR STATIONS
- CLIENT PHOTO DISPLAY

West Virginia's Site Demonstration Process

1. Agency executive director is contacted by the State Weatherization Assistance Program office. The executive director agrees to host a site demonstration and assigns a point person to lead the organization and follow through. The agency and State staff determine mutually agreed-upon goals for the event.
2. The point person works with the agency's WAP coordinator and crew to locate a suitable house for the demonstration using an applicant list from the State. State staff and the point person doublecheck the criteria at the site. This can be a very time-consuming step for a local agency. Finding the right house and a client willing to participate takes focus and commitment.
3. A few mutually agreeable dates are identified for the possible demonstration. Legislators are contacted and told who is on the invite list. If the goal is to have a key legislator, a date is confirmed with that policymaker before others are contacted. Guests are given the day, time, and location of the event. Often, the date is first set to accommodate a key Federal, State, or local legislator's personal schedule.
4. Morning demonstration times have worked best for busy policymakers and the press. Their agendas change rapidly, so the earlier the event is in the day, the better. The demonstration should take less than one hour and start no later than 10:30 a.m.
5. After the initial contact and at least three weeks or more before the event, the local agency executive director, executive secretary, or administrative assistant should again contact the guests to remind them of the invitation date and confirm their attendance. This is also an opportunity to ensure that the invitation was received and reiterate details about the event.
6. Always follow up on your initial phone call. Do not wait too long to hear back from invited guests or their staff. Be assertive! Agency executive directors and executive assistants sometimes must call the public official's secretary or appointment secretary three or four times to remind them of the event and finalize details.
7. The State WAP office and the local agency arrange news coverage for the event, develop press packets, prepare photo releases, coordinate with assignment editors, etc. Use any of the tools provided in the manual or found on the NASCSP website to create the press information.

8. A week or the Monday before the event, the local agency again calls each of the invited guests to remind them of the event. This step has been recommended by members of the State legislature.

9. The State WAP office and the local agency staff develop information packets for the guests. Packets include an agency brochure or summary sheet of programs. The agency will need to prepare these ahead of time.

10. The local agency may generate a press release on the event if that fits into the overall strategy. Such a pre-event press release needs to be targeted to a small and specific audience; otherwise, additional members of the public may show up. Such a pre-event release allows the local agency to assure that specific information is provided to the public. Reporters attending the demonstration may not include all the details.

11. The afternoon before the event, State weatherization staff should meet with the host agency executive director, executive assistant, and WAP coordinator to review the agenda and guest list and do any last-minute troubleshooting. A State staff member should visit the site with the crew.

12. The morning of the event (7:00 a.m.), the crew and State staff representative should arrive on-site to set up and prepare for bad weather if necessary.

13. The State and local agency staff should gather at the demonstration site about 45-60 minutes before the guests and press are scheduled to arrive. Staff should meet with the homeowner and organize to greet the guests and media. One staff person should be assigned to work with the media. Nametags are typically provided for everyone.

14. The demonstration should begin promptly at the designated start time (if the key guest has arrived). Follow the agenda. While not participating in the presentation, the local agency crew should be working in the background insulating the attic or sidewalls and performing diagnostics. So that legislators from all parts of the State hear the same message, State staff members should provide a running commentary on the standard use of diagnostic equipment in the State program, even if specific technologies and techniques are not employed by the local agency hosting the event.

15. The demonstration should end on time. It is very important to keep the demonstration to under an hour. Plan for a staff person to take a picture of legislators and officials with the weatherization crew. This is good for crew morale and for future public information distribution. The client may also like to have a picture taken with guests.

16. On the day of the event or shortly thereafter, State and local agency staff should meet to evaluate the site demonstration outcome and make recommendations for improvement.

17. Before leaving, the local agency should be sure that the demonstration site is completely cleaned up, the homeowner has been thanked, and all questions were answered.

18. The host agency executive director should follow up with letters to the guests thanking them for attending. A letter of thanks should be sent to the clients for allowing the demonstration to take place in their home. Include a picture if one was taken. Copies of pictures of crews with guests should also be sent to each crew member, along with a letter of thanks from the executive director for a job well done.

DOE Weatherization Fact Sheet

U.S. DEPARTMENT OF ENERGY

Office of ENERGY EFFICIENCY & RENEWABLE ENERGY

Weatherization Assistance Program

Overview

The U.S. Department of Energy's (DOE's) **Weatherization Assistance Program (WAP)**, within the **Office of Energy Efficiency and Renewable Energy**, reduces energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring health and safety. WAP is part of the Weatherization and Intergovernmental Programs Office and supports DOE's objectives to lower energy bills while expanding cost-effective energy choices for all American communities. The program supports 8,500 jobs and provides weatherization services to approximately 35,000 homes every year using DOE funds. Through weatherization improvements and upgrades, these households save an average of $372 every year *(National Evaluation, expressed in 2022 dollars)*.

Weatherization in Action

Locally-based and professionally-trained weatherization crews use computerized energy assessments and advanced diagnostic equipment, such as blower doors, manometers, and infrared cameras, to create a comprehensive analysis of the home. This analysis helps determine the most appropriate cost-effective measures and identifies any health and safety concerns. Crews also inspect households to ensure the occupants' safety, checking indoor air quality, combustion safety, carbon monoxide, and identifying mold infestations—which are all indications of energy waste.

The auditor creates a customized work order and trained crews install the identified energy efficiency and health and safety measures. A certified quality control inspector ensures all work is completed correctly and that the home is safe for the occupants.

Impact on Low-Income Americans

Low-income households carry a larger burden for energy costs, typically spending **13.9%** of total annual income versus **3.0%** for other households *(ORNL/TM-2020/1566)*. Often, they must cut back on health care, medicine, groceries, and childcare to pay energy bills.

Weatherization helps alleviate this heavy energy burden through cost-effective building shell improvements such as insulation and air sealing; heating, ventilation, and air conditioning systems; lighting; and appliances.

Weatherizing a home has multiple benefits. In addition to the main goal of creating a more energy-efficient dwelling, an investment in weatherization also has a positive impact on local employment and energy costs and generates energy and nonenergy benefits for the community.

The program improves health and safety by addressing any energy-related hazards. Once installed, energy-efficient weatherization measures continue to save money and energy year after year so funds can go toward other key living expenses.

Funding and Leveraging

DOE provides program funding to all 50 states, the District of Columbia, Native American tribes, and five U.S. territories–American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the Virgin Islands–through formula grants.

With DOE grants, states contract with nearly 800 local agencies nationwide. Community action agencies, other nonprofits, and local governments use in-house employees and private contractors to deliver services to low-income families.

In 2019, utilities and states supplemented DOE funding by providing an additional **$844 million or $3.04 for every dollar invested by DOE** *(NASCSP Funding Survey 2019)*.

Impact on Communities

Weatherization not only helps households, it also helps revitalize communities by spurring economic growth and reducing environmental impact. Weatherization returns **$2.78** in nonenergy benefits for every $1.00 invested in the Program (*National Evaluation*).

Nonenergy benefits represent tremendous value for families whose homes receive weatherization services. After weatherization, families have homes that are more livable, resulting in fewer missed days of work (e.g., sick days, doctor visits), and decreased out-of-pocket medical expenses by an average of **$514**. The total health and household-related benefits for each unit averages **$14,148** (*National Evaluation*).

Leading the Industry

Weatherization has an essential role in introducing and deploying technology and facilitating greater industry adoption. An entire industry–the home performance industry–is based on the skills perfected by weatherization. Over the past 5 years, the weatherization network and the private sector have established the **Guidelines for Home Energy Professionals,** including **Standard Work Specifications for Home Energy Upgrades (SWS)**, and **Home Energy Professional certifications,** along with accreditation of energy-efficiency training programs.

Weatherization agencies also create a market for American manufacturing, using products and equipment from local sources, benefiting the business community in the regions they serve.

The Weatherization Assistance Program has created an industry–producing new jobs and technologies–all while helping the most vulnerable families in America. ■

Typical Weatherization Measures

MECHANICAL MEASURES

- Clean, tune, repair, or replace heating and/or cooling systems
- Install duct and heating pipe insulation
- Repair leaks in heating/cooling ducts
- Install programmable thermostats
- Repair/replace water heaters
- Install water heater tank insulation
- Insulate water heating pipes
- Install solar hot water heating systems.

BUILDING SHELL MEASURES

- Install insulation where needed
- Perform air sealing
- Repair/replace windows and doors
- Install window film, awnings, and solar screens
- Repair minor roof and wall leaks prior to attic or wall insulation.

ELECTRIC and WATER MEASURES

- Install efficient light sources
- Install low-flow showerheads
- Replace inefficient refrigerators with energy-efficient models.

CLIENT EDUCATION ACTIVITIES

- Educate on potential household hazards such as carbon monoxide, mold and moisture, fire, indoor air pollutants, lead paint, and radon
- Demonstrate the key functions of any new mechanical equipment or appliances
- Discuss the benefits of using energy-efficient products.

HEALTH and SAFETY MEASURES

- Perform heating system safety testing
- Perform combustion appliance safety testing
- Repair/replace vent systems to ensure combustion gas drafts safely outside
- Install mechanical ventilation to ensure adequate indoor air quality
- Install smoke and carbon monoxide alarms when needed
- Evaluate mold/moisture hazards
- Perform incidental safety repairs when needed.

U.S. DEPARTMENT OF ENERGY | Office of ENERGY EFFICIENCY & RENEWABLE ENERGY

For more information, visit: energy.gov/eere/wap

DOE/EE-2124 · June 2022

NASCSP

The National Association for State
Community Services Programs
111 K Street NE Suite 300
Washington, DC 20002
Phone: (202) 370-3657
www.nascsp.org