



# Mastering Workforce Outreach and Engagement

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# Agenda

- 1 The Workforce Challenge**

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- 2 Green Workforce Connect**

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- 3 Building a Workforce Pipeline**

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- 4 Workforce Outreach and Engagement Tools**

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- 5 Career Pages and Job Posts**

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- 6 More Workforce Resources**

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- 7 What Are You Going to Do Next?**

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## The Workforce Challenge



**HELP  
WANTED**

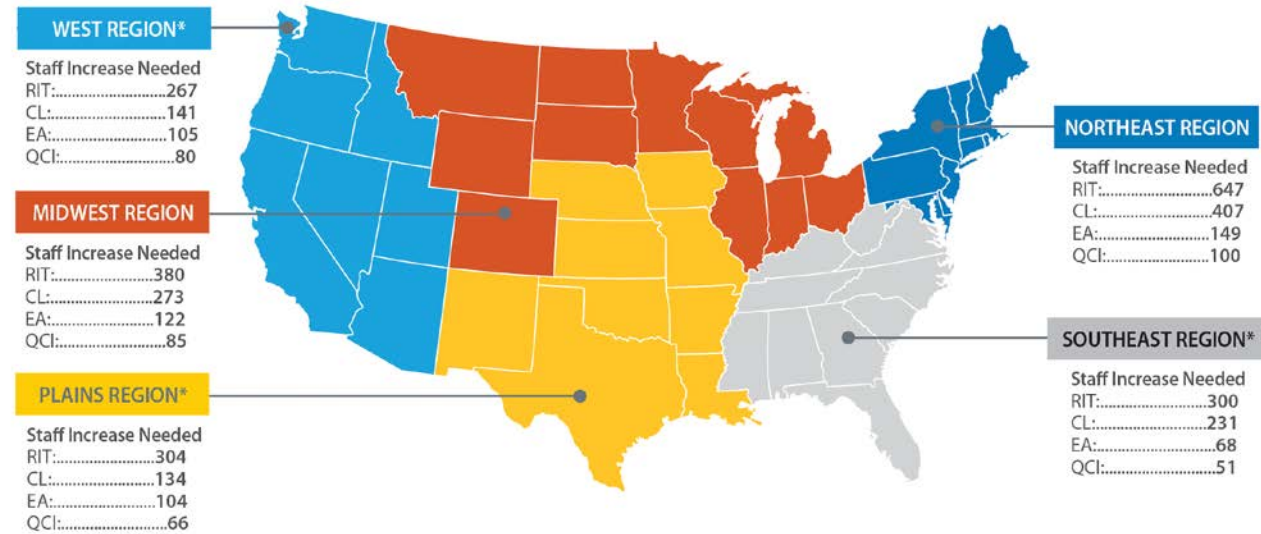
- In a survey for the [2023 U.S. Energy and Employment Report](#), **92% of U.S. energy efficiency employers reported difficulty in finding qualified workers**
- In a 2022 [national survey](#) of workers on residential construction job sites, **25% were thinking of leaving their job.**



# The Workforce Challenge

## Weatherization Snapshot

### Regional Subgrantee Job Gap to Meet Production Associated with BIL Funding



\*Results may not be fully representative of the region due to small sample size.

[Image Source: NREL Presentation at 2023 NASCSP Winter Training Conference](#)

- According to an [NREL questionnaire from 2022](#), the Weatherization Assistance Program (WAP) Subgrantee labor needs related to the influx of Bipartisan Infrastructure Law funds **may grow by around 4,000 positions nationwide**.
  - Around 1,900 Retrofit Installers
  - Around 1,200 Crew Leaders
  - Around 600 Energy Auditors
  - Around 450 Quality Control Inspectors.
- Challenges relate to recruitment and retention of staff and contractors.

# The Opportunity



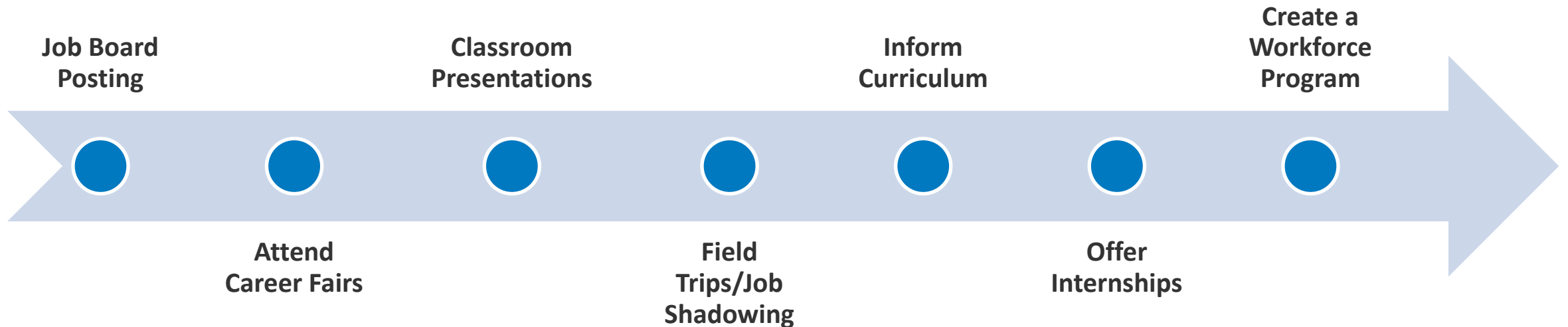
*PowerPoint Stock Image*

- New federal and state funding opportunities to support clean energy workforce development efforts (including WAP training and technical assistance).
- New WAP-specific workforce development resources and efforts.
- Many organizations are looking to align and partner with clean energy and weatherization efforts for the first time.
- Many young people in the United States are looking for work that offers purpose, community benefits, and environmental benefits.

# Building a Workforce Pipeline

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# Many Ways to Get Involved



Your level of engagement will depend on:  
(1) your availability, (2) school offerings, and (3) instructor interest.

# WAP Workforce Case Studies

## Learn about weatherization workforce success stories:

- [WAP Successes & Solutions Center](#) (New!)
- [Workforce Development Toolkit](#).

### Successes & Solutions Center of the Weatherization Assistance Program

Weatherization Assistance Program » Successes & Solutions Center of the Weatherization Assistance Program

The Weatherization Assistance Program (WAP) is implemented by a network of almost 800 state and local agencies across the United States, Washington, D.C., and five U.S. territories. Collectively, these agencies have found creative solutions to challenges that are common to many WAP agencies.

The WAP Successes & Solutions Center provides a centralized and searchable hub for successful solutions (big and small) that are helping WAP organizations improve processes or outcomes for staff and clients.

You can search for solutions by location (state), by keyword, or by category.

Archived item will not be accessible

Showing 1 to 20 of 23 entries

Category -

- Client Success
- Program Administration
- Technical/Field Solutions
- Workforce Development

State -

- Alaska
- Colorado
- Connecticut
- Georgia

Search:

CATEGORY	DESCRIPTION	STATE
Program Administration	Special Projects Team Grows State Agency Capacity in Indiana	Indiana
Program Administration	Expanding Weatherization Services Equitably in Minnesota	Minnesota
Workforce Development	Staff Onboarding Efforts Support Inclusivity and Retention in Colorado	Colorado
Workforce Development	Leveraging Technology to Expand Training in New Mexico	New Mexico
Program Administration	Addressing Health and Safety Deferrals in Connecticut	Connecticut
Workforce Development	Embedding Weatherization Training and Education in High Schools in Illinois	Illinois



# New Resource: WAP Careers Slide Deck

## Editable slide deck includes:

- Introduction to weatherization and WAP.
- Overview of careers and career pathways.
- Optional activities.
- Instructions and speaker notes.

<https://nascsp.org/workforce-resources-and-tools/>



Exploring Careers as a  
Home Energy Professional

Presenter Name  
Venue or Organization  
Date

### What is Weatherization?



<https://www.enr.gov/sca/wap/whole-house-weatherization>



Building Shell  
Projects



Mechanical  
Projects



Electric Baseload  
Projects



Health and  
Safety Projects



### Retrofit Installer Technician

Retrofit installer technicians perform home energy-saving upgrades.

Experience with tools

Basic building science & math

Computer and phone skills

Customer service skills

Positive attitude



Photo by Dennis Schroeder / NREL 28786

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Image from the National Association for State Community Services Programs

# Thermal Imaging Demonstrations

This document describes low-cost and simple activities that can be used by home energy and weatherization professionals and educators to help illustrate basic building science principles in an engaging way for students who are new to these concepts.

## Introduction:

Thermal imaging, more commonly referred to as infrared scanning, is widely used in the weatherization and home performance industry to evaluate a variety of scenarios, including, but not limited to:

- Verifying insulation coverage
- Finding air or duct leaks
- Locating water leaks.

Infrared cameras are not X-ray vision; however, infrared cameras can allow us to “see” building anomalies when surface temperature differences are present within the camera’s field of view. These temperature differences within the pixels of the infrared detector are converted



## Use to:

- Teach students basic building science principles using thermography.

## Materials:

- Plastic garbage bag
- Water spritzer
- Scrap piece of insulation

# Additional NREL WAP Workforce Resources

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# NREL Workforce Resources: Outreach and Recruitment

- Workforce development toolkit.
- Contractor recruitment template.
- Upcoming:
  - Supporting NASCSP in updating the WAP wage survey analysis.
  - Developing a wage sensitivity calculator.
  - More contractor recruitment resources.

# WAP Contractor Recruitment Template Slides

## Recommended for:

- Presenting to local contractor and business associations.
- Orientation for onboarding new contractors to your program.

The screenshot shows a presentation interface with a dark background. At the top left, it displays '0:00:11' and a pause icon. At the top right, it shows '3:39 PM'. The main content area is divided into two slides. The first slide, titled 'WAP Contractor Qualifications', lists several requirements for contractors, such as being registered, having insurance, and meeting performance guidelines. It includes a photo of a man in a blue shirt looking at a document. The second slide, titled 'Invoicing & Payment', discusses pricing and payment timelines. Below the slides is a 'Speaker Notes' section with text about what contractors need to get up and running. At the bottom, there are navigation icons and a 'Slide 27 of 30' indicator.

0:00:11 || 3:39 PM

### WAP Contractor Qualifications

- Registered Contractor in your jurisdiction
- Must meet minimum insurance requirements (Liability, Workman's Comp, ...)
- Payment and/or Performance Bonds
- Required Certifications, dependent on your trade (OSHA, BPI, ...)
- Lead-Safe Certified Firm (and individual Lead Renovator Certificates for installers and crew leaders)
- Able to meet work performance guidelines
- Able to supply all tools and equipment necessary to perform the work
- Able to work with low-income and minority households in a professional manner

*Add local agency requirements here (if additional or different from described above)*

Photo from NREL image gallery 20111

### Invoicing & Payment

- Many WAP programs use an average price per measure (updated annually) for commonly installed measures.
- Agency: Include timeline for payment (ex: payment within 30 days of invoice receipt and satisfactory QCI)

Speaker Notes:  
What you'll need may include references and testimonials; proof that you have a registered business; the right licenses, insurance, and certifications; a brief company description; and evidence that you have the necessary equipment and tools. You'll also need to fill out an application form, or a bid package, and complete required program or contract documentation. Being well-prepared and keeping everything organized during this phase will help you get up and running quickly as a weatherization contractor.

All WAP contractors must be registered and licensed

Slide 27 of 30

- Customizable slide decks with speaker notes for contractor outreach, recruitment, and onboarding.
- Aligns with IREC's Contractor Guide to Success.
  - <https://greenworkforceconnect.org/a-guide-to-success-for-contractors-new-to-the-weatherization-assistance-program/>.
- Available for download in March.



# NREL Workforce Resources: Onboarding and Retention

- [Installer Badges Toolkit](#) and job aids.
- Visualization resources ([3D house tools](#), [weatherization image gallery](#)).
- Free online administrative trainings.
- Upcoming:
  - Subgrantee Employee Onboarding Toolkit.

## Contención, sellado y aislamiento de escalera de ático abatible

Guía de trabajo para insignia de tratamiento de escotilla de ático

Cumple con las especificaciones normalizadas de trabajo 3.0103.1



Las escaleras desplegadas pueden ser un punto débil en las barreras térmicas/de presión, y también pueden permitir que el aislamiento caiga dentro de la casa si no se repasan apropiadamente.



Construya una cubierta por encima y alrededor de la escalera desplegable, más alta que la altura final del aislamiento.



Aísle la parte superior y los lados de la cubierta de la represa, de acuerdo con el valor R correspondiente. Utilice materiales que cumplan con los requisitos del código de seguridad contra incendios aplicable (p. ej., barreras térmicas o de ignición).



Selle contra fugas de aire los espacios en el armazón y los bordes de la moldura según sea necesario.



Selle contra fugas de aire con cinta de espuma de celda cerrada o burletes. Instale los pestillos necesarios para garantizar que la puerta de acceso se cierre herméticamente contra el burlete.



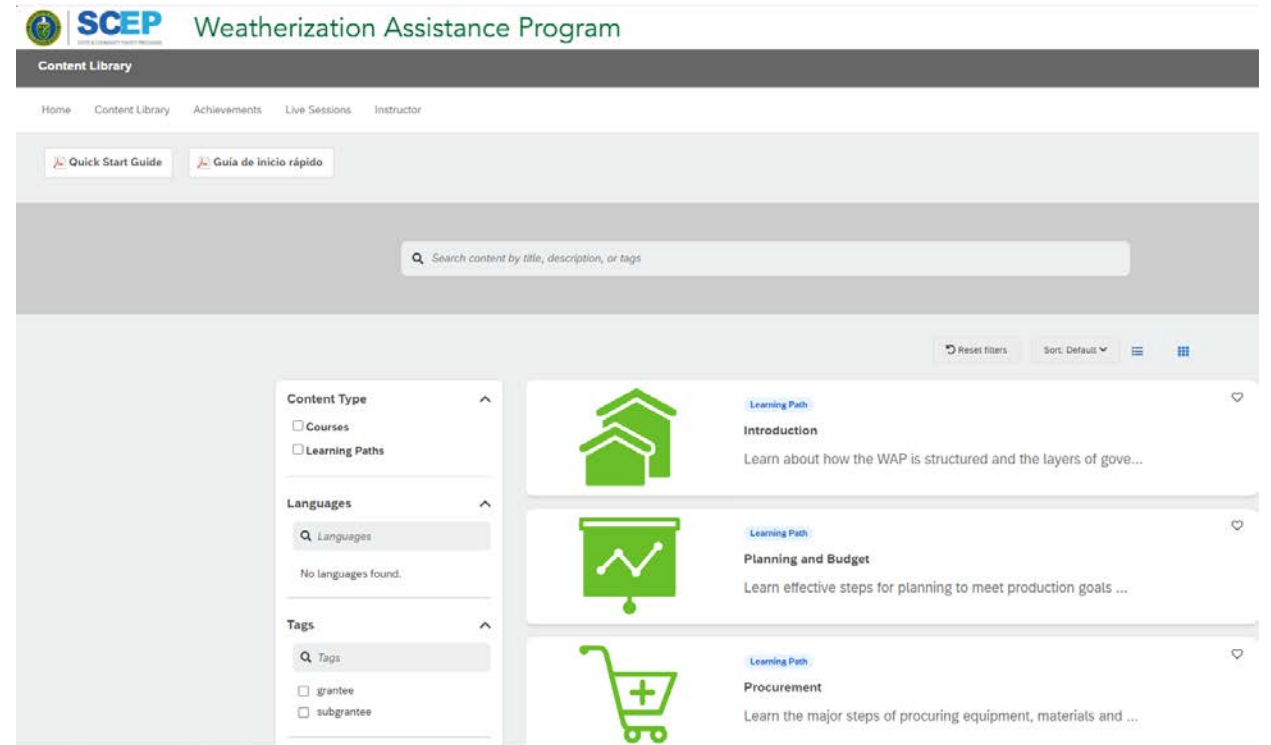
Las escaleras desplegadas del ático deben estar selladas y aisladas de forma segura y duradera para evitar el movimiento del aire y reducir la transferencia de calor.

# Installer Badges Platform

Due to network demand, NREL is building out the Retrofit Installer Badges in the WAP Learning Management System:

<https://wap.litmos.com>.

This will be available publicly in the spring of 2024.







Activity: What are you going to do next?

# Questions?

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[www.nrel.gov](http://www.nrel.gov)

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