

U.S. DEPARTMENT OF
ENERGY | Energy Efficiency &
Renewable Energy

The Department of Energy's Weatherization Assistance Program

Credentialing Update October 2016

Weatherization Assistance Program



The U.S. Department of Energy's (DOE) Weatherization Assistance Program (WAP) is the nation's largest whole-house energy efficiency program with a unique mission.

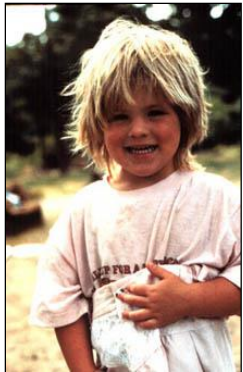
It reduces energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety.

- **40,000** homes weatherized on average annually with Congressional appropriated funds
- Average annual energy cost reduction of **\$264 or more** per household.
- Over **7 million** households have received Weatherization services.
- Support over **8,500** direct and indirect jobs.

Clients



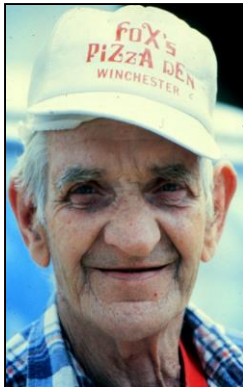
“Forty-four percent of WAP households are headed by a single female, middle-aged parent with health issues who is also likely to be unemployed.”



Over **39.5 million households** are currently eligible for Weatherization.

Any household **at or below 200% of poverty** is considered eligible.

Low-income households typically spend **16.3%** of their total annual income on energy, compared to **3.5%** for other households.



The average expenditure per low-income household for the current year is estimated at **\$1,851**.

Low-income families must often cut back on other necessities, such as groceries or medicine, to pay their energy bills.

Enabling Legislation and Regulation

*“...to increase the **energy efficiency** of dwellings owned or operated by low-income persons, reduce their total residential energy expenditures, and improve their **health and safety**, especially low-income persons who are particularly vulnerable such as the elderly, the handicapped, and children.”*

**Energy Conservation in Existing Buildings Act of 1976
(Title IV of the Energy Conservation and Production Act),
Public Law 94-385, August 14, 1976.**

- The WAP was created as a categorical Formula Grant which is governed by the regulations outlined in **10 CFR 440**.
- The Department of Energy administers the program and creates policies to interpret the regulations and assist the Grantees in administering the funds in accordance with the Congressional intent.

Distribution of Funds: The WAP Network



US Department of Energy
Energy Efficiency and Renewable Energy
Office of Weatherization and Intergovernmental Programs
Weatherization Assistance Program



Grantees:
50 State Offices,
The District of Columbia,
Native American Tribal Organizations,
U.S. Territories



Subgrantees - Approximately 900 Local Agencies:
Community Action Programs
Local Governments
Agency-Based Crews or Private Sub-Contractors



Low-Income Clients

Workforce

- DOE's WAP and its additional investments support **8,500** direct and indirect jobs.
 - Generated **\$476** million in incomes
 - Increased national economic output by **\$1.2 billion**, using a national economic multiplier of **2.93**.
- On average, approximately 40 percent of WAP work is performed by in-house crews and 60 percent is provided by independent contractors such as HVAC and insulation companies.



WAP Service Delivery Process

Step 1: Energy Audit

- A comprehensive analysis of the home, including a client interview.
- Identify opportunities for energy savings.
- Identify Health and Safety concerns.
- Create a customized work order.

Step 2: Measure Installation

- Energy Efficiency and Health and Safety measures are installed by trained crews.
- The national Standard Work Specifications for Home Energy Upgrades instruct workers on the expected installation quality.

Step 3: Quality Control

- A certified Quality Control Inspector ensures that all work is installed correctly and that the home is safe for the occupants.
- 100 percent of WAP homes receive a Quality Control Inspection.

Guidelines for Home Energy Professionals: Project Overview

- Guidelines for Home Energy Professionals Project
 - Combines 30 years of U.S. Department of Energy (DOE) Weatherization Assistance Program (WAP) experience with input from 2,000 home performance industry members.
- Consists of three components:
 - Guidelines for Quality Work
 - Guidelines for Effective Training
 - Guidelines for Professional Certifications



Project Components, Benefits, and Outcomes

Guidelines for Home Energy Professionals

The Components

Guidelines for Quality Work

Defines high-quality work and the outcomes it should achieve

Guidelines for Effective Training

Outlines what workers should know and be capable of after training

Guidelines for Professional Certifications

Delivers a framework for certifying bodies to verify worker certifications

The Deliverables

Standard work specifications, produced for public use

Accreditation process for training centers and curriculum

Certifications for home energy professionals

The Benefits

Industry credibility is enhanced through quality work that delivers durable upgrades with consistent energy savings

Workers, consumers, and employers benefit from strong training that produces highly skilled professionals

Skilled professionals receive credentials that differentiate them in the market and assure consumers and employers

The Outcome

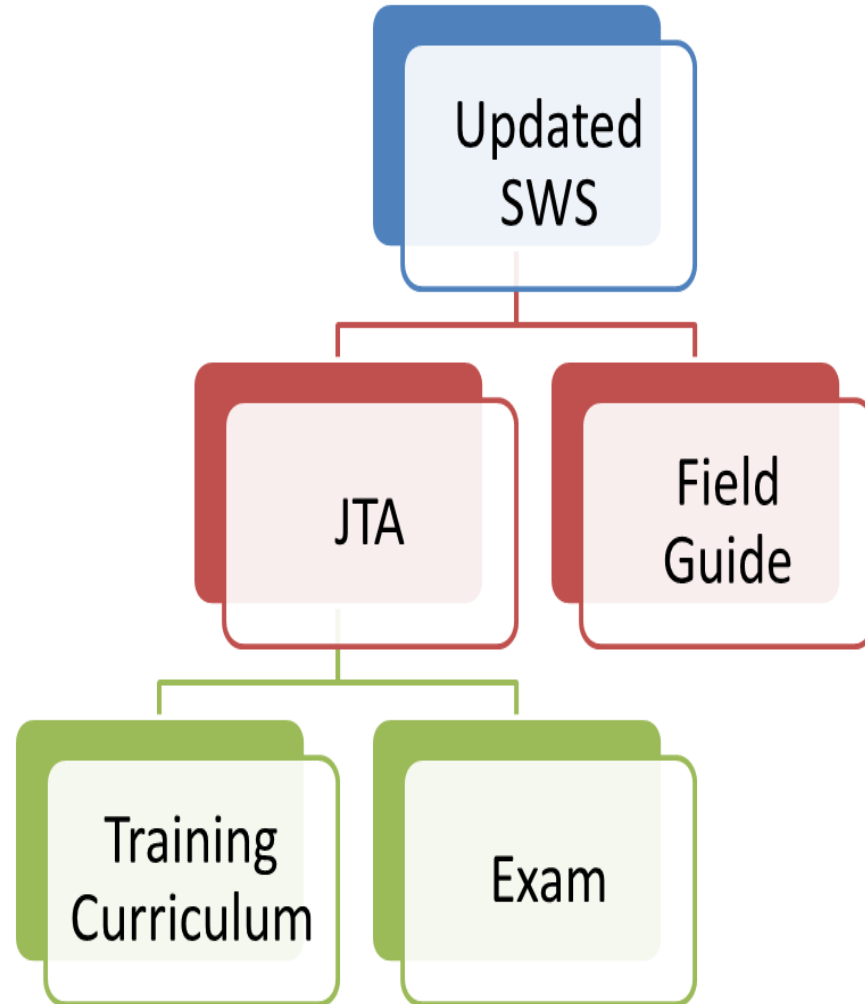
A highly skilled workforce servicing a growing home energy market

Roles and Responsibility

- Resource Relevancy
 - NREL
 - SWS and Schemes
 - Engage home performance industry in keeping resources relevant
 - SWS
 - Field Guide
 - Schemes/JTA
 - IREC
 - Maintain Training Center Accreditation & Trainers' Certifications
 - BPI
 - Certification Program

Resource Dependencies

- SWS
 - JTA
 - Training
 - Exam



WAP: Quality Work Plan

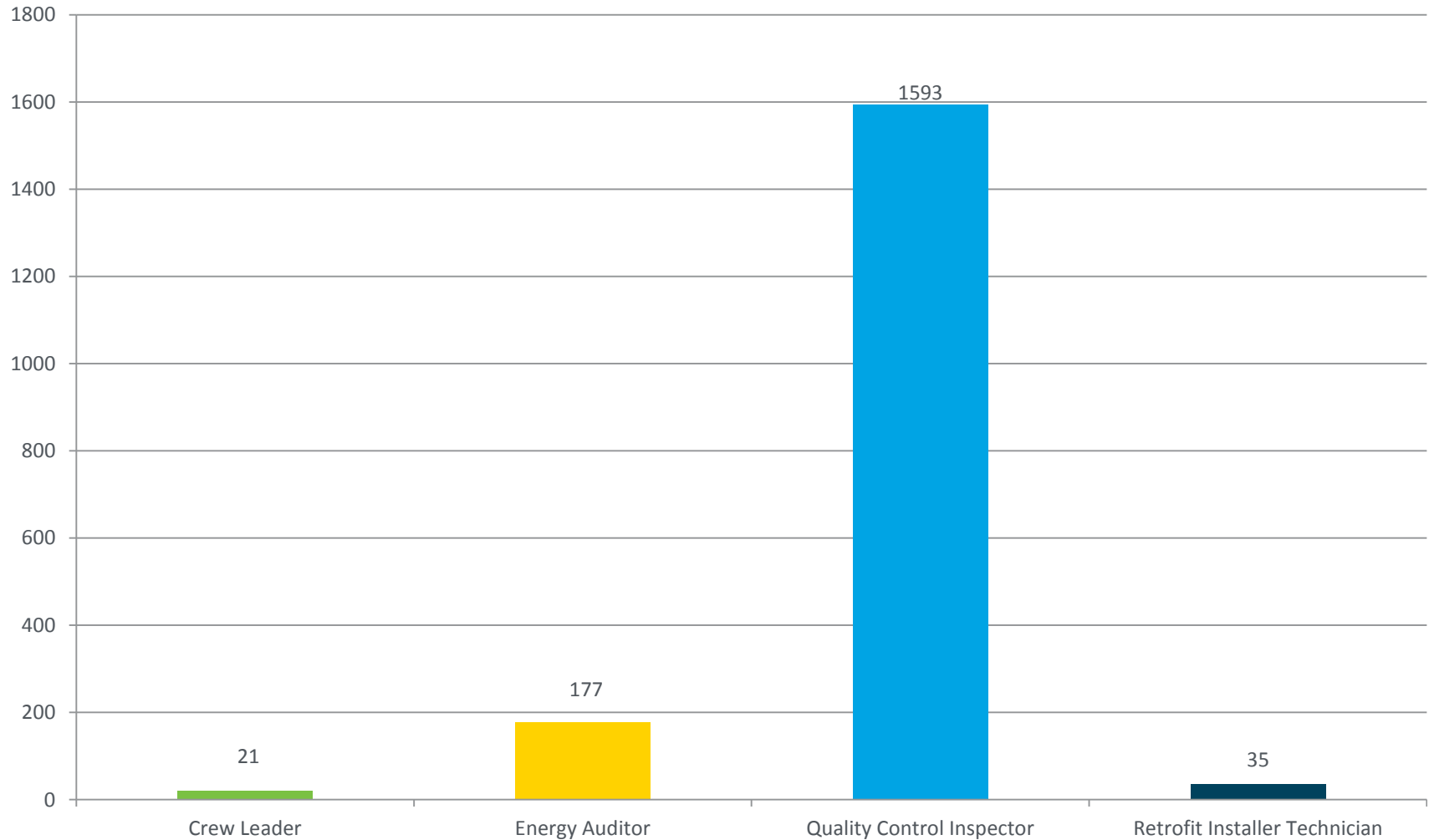
- A strategy for integrating the Guidelines resources into the WAP
- Streamlines and creates consistency in defining and validating quality work
- **Requires Certification of certain workers**
- **Requires use of national work quality standards**
- Phased in over multiple Program Years
- Provides resources to assist Grantees with compliance
- Demonstrates the WAP's dedication to work quality
- Establishes the WAP as the national leader in energy retrofit process and technology

It works

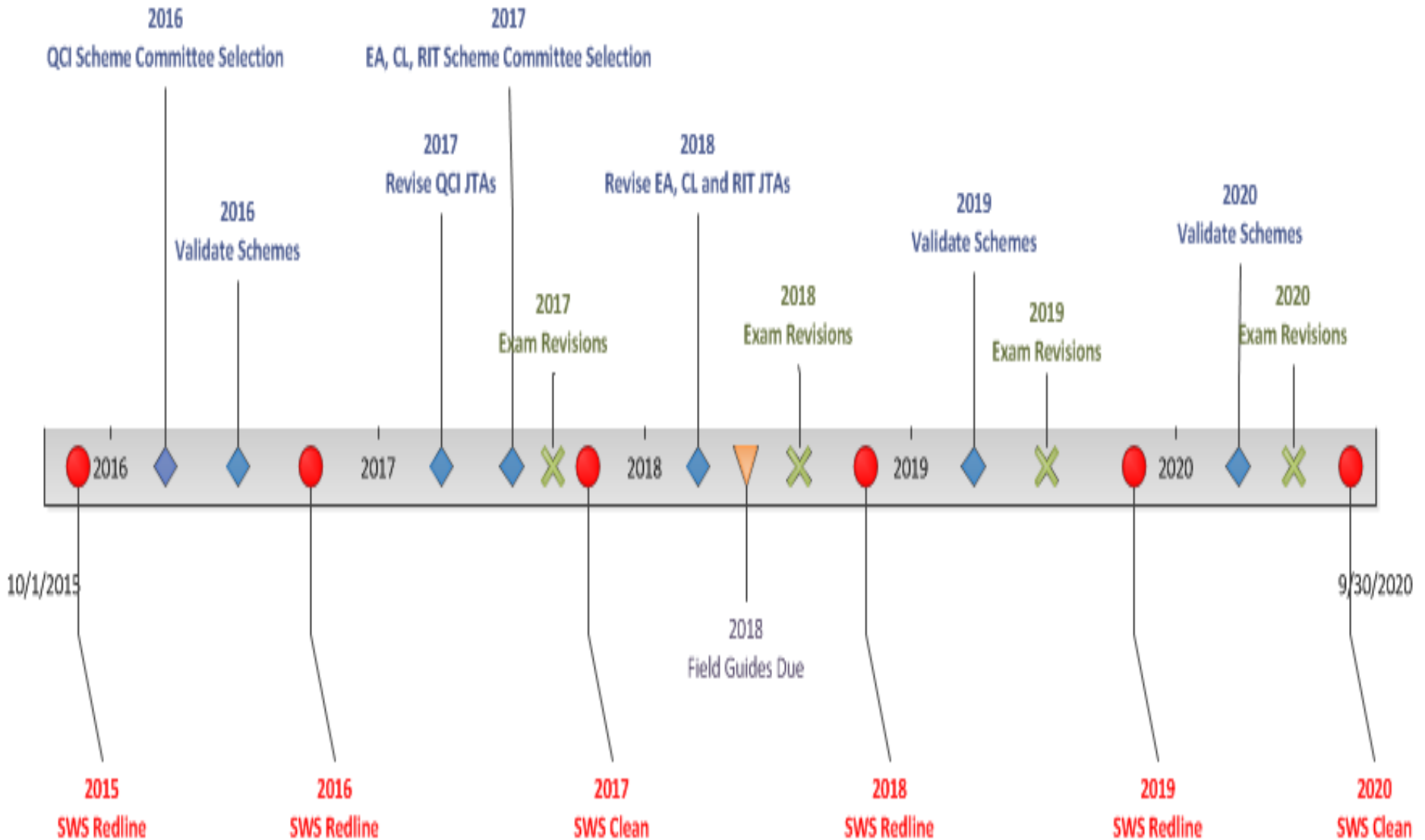
“We do 4,000 jobs a year in Arizona and the work we are seeing now is nearly flawless. The only issues we ever see are contractors who have been doing this work for years and who assume they are doing it correctly...until they start failing inspections. Then we put these tools in their hands, and they don't fail inspections anymore”

- Chris Baker, Energy Training and Technical Assistance Coordinator for the Foundation for Senior Living's Southwest Building Science Training Center

HEP Certifications Status



5 Year Maintenance Cycle



Barriers

- Costs
 - ISO and/or ANSI
 - NREL
 - BPI
 - IREC
- Demand
 - Certifications (NREL/BPI)
 - Training Accreditation (IREC)
- Certification Issues
 - Soft Skills test questions
 - Overly- Complicated JTAs

Cost Saving Alternatives

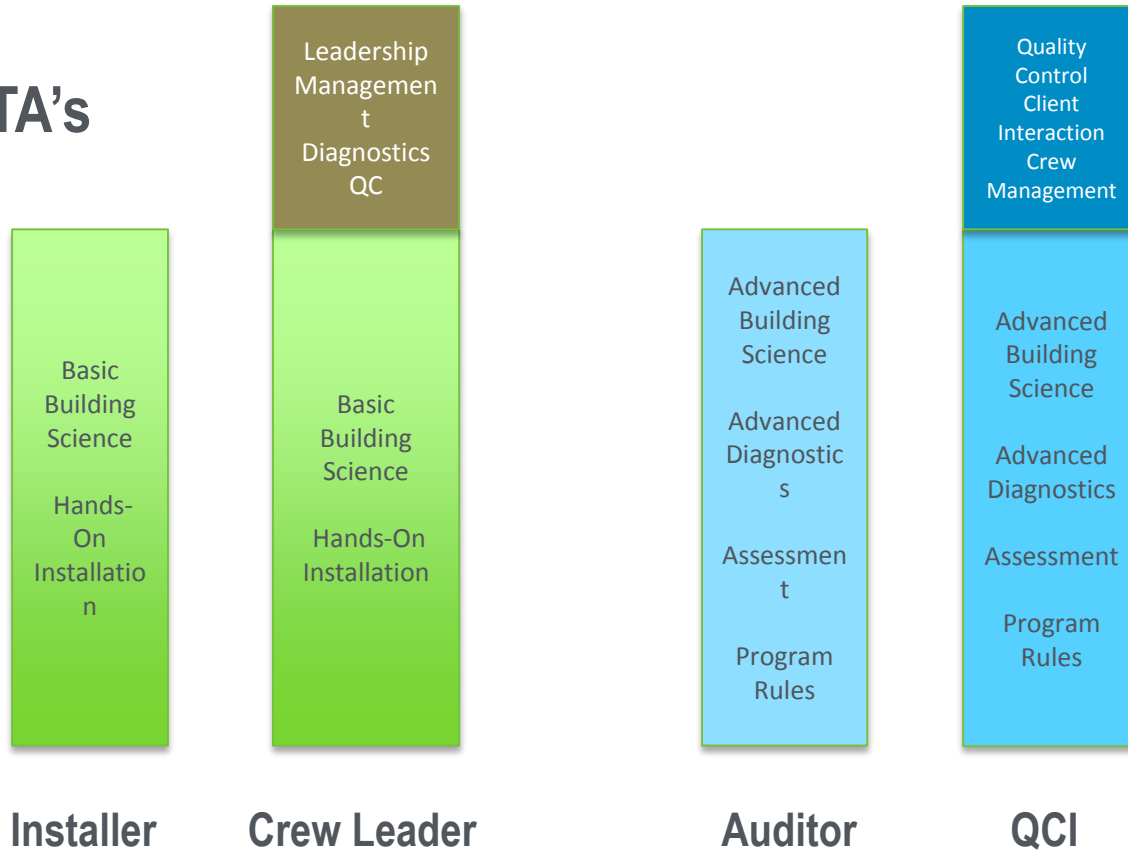
- NREL
 - ISO Certifications
 - Maintain all 4 ISO status?
 - Stakeholder's cost impact
 - NREL
 - IREC
 - BPI
 - No Certification

Alternative - Two JTAs Alternative

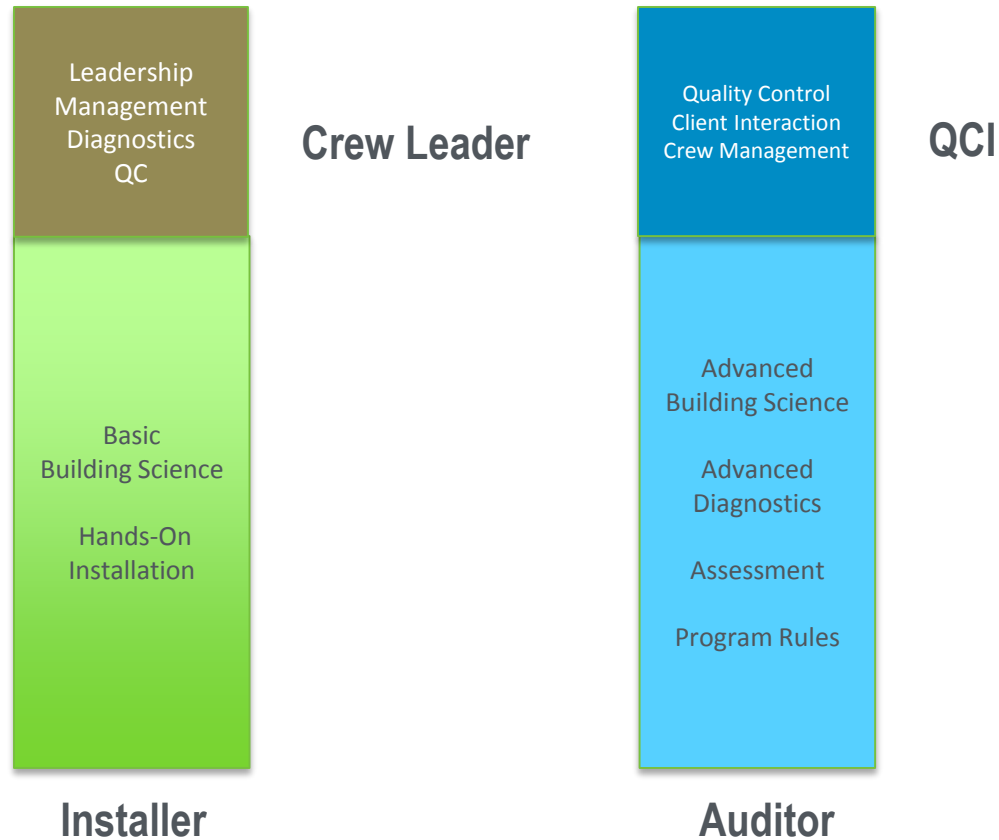
- Develop and maintain only 2 JTAs
 - EA major certification
 - QCI mini-credential ?
 - RIT major certification
 - CL mini-credential?
- Downstream Effects
 - Scheme Maintenance - NREL
 - Only 2 scheme committees
 - Only 2 JTAs would need to be revised
- Training (IREC)
- Certification Program (BPI)

Streamlining the Resources- Existing Structure

JTA's



Streamlining the Resources- Proposed Structure



Conclusions

- The ANSI/ISO structure adds value and validity to the credentialing process
- There is a significant need for ongoing maintenance- the budgeting and organizational staffing needs for this should be considered up front
- It is important to make sure that ANSI/ISO structure is fit into your needs as an organization, rather than the other way around

Thank You for Your Time



*Weatherization
Works*