Weatherization Assistance Program:
Training, Certification, Accreditation
and Capacity Building Efforts

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Clean Energy Workforce Education Conference

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Josh Olsen is a Training and Technical Assistance Liaison with the Weatherization Assistance Program, DOE Headquarters. Josh has a background in residential design and construction with a focus on energy efficiency and sustainability. He has worked as an energy auditor at the commercial and residential level and has been an instructor for energy auditor certification courses. Josh's certifications include: BPI Building Analyst, Envelope Professional, BPI proctor, and LEED AP.
Overview: Workforce Guidelines for Home Energy Upgrades
The WAP National T&TA Plan encompasses a wide range of activities to:

• **Rapidly expand, leverage training resources and share best practices to assist the Weatherization Network during Recovery Act Ramp-Up**

• **Reduce Energy Costs for Low-Income Families while Improving Health & Comfort**

• **Lay the foundation for a sustainable national retrofit industry with ready access to a well-trained workforce and opportunities for worker mobility and career pathways**
Task 6 of the WAP National T&TA Plan:

- Develop national Weatherization certification and accreditation standards
- Develop a national weatherization worker certification framework
- Develop a national weatherization training accreditation program and trainer certification program
May 2009:

Vice President Biden called on the Council of Environmental Quality to develop a plan for Federal action to lay the architecture for a self-sustaining home energy efficiency retrofit industry.
RTR Six Recommendations:

Develop a National Home Energy Performance Measure and Audit Tool

Develop Energy Performance Scale & Label for Homes

Support Municipal Energy Finance Programs

Improve Energy Efficiency Mortgages

Expand State Energy Revolving Loan Funds

Establish Voluntary National Standards for Workforce Certification and Training Program Accreditation
What Are the Workforce Guidelines?

Workforce Guidelines for Home Energy Upgrades:

Voluntary national guidelines to support quality work and a skilled workforce in the Weatherization Assistance Program and private residential energy efficiency retrofit industry

• Developed by industry, facilitated by NREL and EERE OWIP
• Delivered to EERE for the Weatherization Assistance Program and the Vice Presidential Recovery through Retrofit program
• Published in Spring 2011
Richard ‘Doc’ Knaub

Standard Work Specifications
Presentation Outline

1. Overview: Workforce Guidelines for Home Energy Upgrades
2. WAP Standardized Training Curriculum
3. Weatherization Training Centers & Accreditation
4. Worker Certification
5. WAP Multifamily Efforts
WAP Standardized Training Curriculum
Goals

WAP Standardized Training Curriculum

• Compile institutional knowledge
• Create baseline
  – Core Competencies
• Flexibility
  – Sections
  – Editable
• Useful to instructors of all experience levels
• Free to all
Process

- Builds on the WAP Core Competencies
- Input from Trainers and the field
- Review module outlines
- Create module
- Technical and training review and field testing
- Revisions
- Roll-out
- Feedback
- Revisions
Example: Installer Fundamentals

- Presentation
- Speaker’s Notes
- Lesson Plans
- Sample Course Schedule
- Hands On Props
- Additional Resources
- Glossary
10 Modules: 8 Completed

- Weatherization Installer/Technician Fundamentals
- Weatherization Installer/Technician Intermediate
- Weatherization Installer – Mobile Homes
- Crew Chief
- Energy Auditor – Single Family
- Energy Auditor – Multifamily
- Technical Monitor/ Inspector
- Heating Systems for Energy Auditors – Single Family
- Mechanical Systems - Multifamily
- Train the Trainer

Available for Download at:
www.waptac.org/Training-Tools
Training: Key Challenges

Proliferation of training and certificate programs for WAP and the Home Performance workforce
– industry, labor, government, educational institutions, NGOs

1. Major infusion of Federal and State training dollars with no standards

2. No objective measure (3rd party assessment) of training program effectiveness

3. No uniform way for workers seeking training to assess the quality of the program or provider
Solution: Training Program Accreditation

• Voluntary, third-party assessment of training provider quality

• Interstate Renewable Energy Council (IREC)
  – Currently accredits solar training programs

• ISPQ International Standard 01022

• IREC will use the DOE Job Task Analysis and Knowledge, Skills, and Abilities as the foundational document for accreditation

• IREC start accepting applications late March/ early April 2011
Common Terms and Definitions

- **Accreditation**
  - Is given to the *Training Program* (Weatherization Training Center or other qualified program)
  - Verifies that the WTC meets a standard in both its operations as well as facilities to provide Weatherization training

- **Certification**
  - Is given to individuals (*worker*)
  - Certifies that an individual has the knowledge, skills, and abilities to perform a certain job.
  - Is issued by an independent third party

- **Credential (generic term)**
  - Careful! - Can be a “Certificate for Completion” or License, or degree, or full Certificate
Credentialing: Key Challenges

1. Lots of different credentials
   - Certifications and certificates galore
   - Credentials are not always transferable across programs and geographies (impedes mobility)
   - What’s a worker or a consumer to do?

2. Competencies (Job Tasks and KSAs) upon which certifications are built are all different and in need of strengthening

3. Certification exams need to better assess field capabilities

4. Many credentials are too expensive and are not always available in all locations
Solution: Stronger, Better Certifications

• Build a stronger, more coherent retrofit workforce certification architecture

• Certifications should be based on national, industry-recognized workforce competencies (Job Task Analyses and Knowledge, Skills, and Abilities)

• Support a life after Recovery Act for the retrofit workforce

• More info Spring of 2011
Steps to Residential Retrofit Workforce Credentialing

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<th>EERE Progress</th>
<th>Steps to Achieving National Residential Retrofit Workforce Credentialing</th>
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<td>1. Define the work, referencing industry Standards</td>
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<td>• Technical Standards</td>
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<td>• Standard Work Specifications (SWS)</td>
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<td>2. Define the occupations involved in the work</td>
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<td>• Job Classifications</td>
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<td>• Job Tasks Analyses (JTAs) for each occupation</td>
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<td>• Knowledge, Skills and Abilities (KSAs) for each occupation</td>
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<td>Start - Spring 2011</td>
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<td>3. Accredit training programs based on JTA’s</td>
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<td>4. Develop third-party, industry-approved testing and certification</td>
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<td>processes for each occupation, based on SWS</td>
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Developing the Standard Work Specifications
Multi-Family
Developing Single Family SWS: 2010 Industry Involvement

- **June–July 2010**
  - Drafting SWS
    - 60 Technical Experts
  - Technical Reviews
    - 80 Experts
- Drafting JTA/KSAs
  - 50 Technicians
- Webinar Series
  - Industry Feedback
- **July–December**
  - Technical Review
    - 100 + reviewers
  - JTA/KSA Review
    - 50+ Workforce Experts
- Public Comment Period
  - Federal Register Notice
- Implementation
  - Implementation Strategies
Collaboration between labor, industry and the DOE WAP

Will follow a process similar to the Single Family SWS development

Multifamily is unique in that individual trade workers often play a larger role

The WAP, Building Trades, and HUD are a critical voices in the process
Four Components

- Workforce
  - Job Task Analyses
  - Essential Knowledge, Skills, and Abilities

- Work
  - Technical Standards Reference Guide
  - Standard Work Specifications

Workforce Guidelines for Home Energy Upgrades
Developing set of standards against which to measure quality work

- Allows workers to compete based on quality
- Allows the WAP, Home Performance Community, trade organizations, etc. to have a voice in defining the standard for quality work
- Allows the WAP, Home Performance Community, trade organizations, etc. to develop training programs and Best Practice guidelines based on a set of uniform criteria
The Workforce Guidelines will benefit:

• **U.S. Workers**, by establishing a clear skill set upon which to base worker credentials and support workforce mobility up career ladders and across career lattices

• **American Homeowners**, by increasing confidence among consumers and the energy-efficiency finance community that retrofit work will produce the expected energy savings

• **State, local or Utility Retrofit Program Administrators** by providing a clear definition and baseline for quality assurance

• **Training Providers**, by assisting them in developing and upgrading course content and training curriculum, leading to better and more consistent training programs and a skilled workforce that can produce high-quality retrofit work
Multi-Family Audit Tool
Develop Small Multi-Family and Large Multi-Family Audit Tool and Programmatic Elements for the WAP

Add Multifamily HES Consumer (Home Owners) & HES Pro
The Multi-Family Audit Tool will:

- Help improve retrofit work quality and provide a foundation for quality assurance
- Assist training providers in developing better training materials
- Increase workforce mobility up career ladders and across career lattices
- Build confidence amongst consumers and the energy efficiency finance community
Conclusions

1. Government and industry *cannot* keep putting money into retrofit programs and workforce training without:
   - Work quality guidelines (Standard Work Specifications)
   - Workforce competency guidelines (JTA/KSAs)
   - Targeted Audit Tools

2. This won’t happen without government-industry-labor partnership.

3. This is a legacy opportunity.
WAP Multifamily Asks

• Recommendations for *Standard Work Specifications for Multifamily Energy Upgrades*

• Multi-Family Audit Experts to participate in Technical Advisory Group
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