Weatherization Assistance Program

Robert C. Adams
DOE Weatherization Assistance Program

State Energy Advisory Board Meeting
Washington, DC
Weatherization Assistance Program

Background

- The WAP leads the nation in advancing technology, research and work practices related to *making residential energy upgrades cost effective, safe and comprehensive*
- Over **7.3 million** low-income dwelling units have been weatherized under the Program*

Program Focus is Deployment of EE Technologies

- Residential Energy Retrofits for Low-Income Households
- Formula grants support the largest and most technically advanced network:
  - 59 Formula Grantees (States, Tribes, Territories) and
  - 1,004 subgrantees of residential energy retrofit providers

* Represents the number of homes weatherized with Recovery Act and base funds since the program’s inception through December 31, 2011
**Production**

731,000 homes weatherized

Total ARRA production goals are at 115%\(^1\)

Providing over 70% of EERE’s total production goals\(^2\)

198,000 multi-family units completed
  - 27% of total production

\(^1\)730,906 units completed through March 2012 compared to 634,956 units planned.

\(^2\)EERE production goal for Weatherization, Better Buildings, HUD and EECBG to retrofit 1,000,000 homes – 1,020,000 reported to date

**Jobs Supported**

Between 2\(^{nd}\) and 8\(^{th}\) largest job creator in Recovery Act portfolio

- 15,600 jobs supported in Q1 2011 – 7th
- 10,500 jobs supported in Q4 of 2011 – 2nd
Leveraging and Expanding Partnerships:

• In 2011 WAP leveraged $1 in from private sources and $2.35 in federal sources for every $1 invested in by DOE
• Nearly 60% of grantees leverage utility funds each year (ratepayer funded EE)
• $150 million - $210 million leveraged annually since 2005 from private sources (ratepayer)
• $350 million - $600 million leveraged annually from federal and non-federal sources since 2005 (e.g. LIHEAP funds from HHS)

Future Funding Challenges:

• Returning WAP to pre-Recovery Act funding levels.
• Tighter Appropriation levels from Congress
• Shift of priorities within markets
Weatherization Plus Health

National effort to coordinate resources to improve the energy efficiency, health, and safety of low-income homes.

Ensure energy efficient and healthy indoor environments by facilitating the establishment of strong, effective partnerships between WAP and healthy homes providers.

NASCSP and other healthy homes advocates are helping implement the project on behalf of DOE.

KEY DELIVERABLES:
- Regional Conferences
- WeatherizationPlusHealth.org
- WAP and HH Reports for each Grantee
- Grantee Implementation of WAP Plus Health
- Best Practices Referral Systems
- Training and Technical Assistance
Building a Model Program

Establish Quality Standards

Professionalize the Worker

Utilize Nationally Recognized Tools

The Standard Work Specifications
- Give the program a verifiable definition of the work and quality expected

National Home Energy Professional Certification
- Define staff as professionals
- Verification of skills and the ability to do the job
- Sets the individual apart, giving them valuable assets to build their career

IREC Training Program Accreditation

WAP Standardized Training Curriculum
DOE Audit Tools: NEAT, MHEA, and MulTEA

Energy Savings
Asset Improvement
Worker Mobility

Quality = Sustainability
Key Areas Critical to the Future of the Program

- Communications and Messaging
- Leveraging
- Consistent Delivery of Quality Services
- New Markets and Existing Potential
- Energy Planning for Low-Income Communities
Committees charged with:

• Working with the network.
• Determining current practices.
• Identifying best practices, by various climatic and other considerations.
• Providing various analyses.
• Developing a state-of-the-program report.
WEATHERIZATION PLUS 2015
Progress Report

Presentation to
DAS Kathleen Hogan
June 19, 2012

Anna Garcia, Program Manager
Robert Adams, WAP Supervisor
Office of Weatherization and Intergovernmental Programs
Brief History

• Long Range Planning Process for the Weatherization Assistance Program.
• Two previous efforts:
  – Millennium Committee in 1999
• Each effort resulted in 5-year planning strategies for WAP
• More than 60 professionals within the WAP network involved in the process
Accomplishments to Date

- Whole House, Whole Community
- Hot Climate Initiative
- Public Information Campaign + Weatherization Day
- Trainers Consortium
- Regular National Training Conferences
- Electric Industry Restructuring
- Refrigerator Replacement Tool

- Hot Climate Initiative
- New Training Centers
- Lead Safe Curriculum
- Core Competencies
- Standard Work Practices
- National Evaluation
- Upgraded Audit Tools
- Health and Safety Protocols

More work to be done……
Outcomes of Efforts

- Increased Flexibility
- Advanced Technologies
- Expanded Resources
- Public Information
New Challenges for WAP

- Extremely difficult political and budgetary environment
- Battered public image from IG and GAO reports
- Uneven quality performance
- Uneven leveraging impacts
- Loss of developed capacity through Recovery Act
- Possible decrease in rate of return for investments
  (Preliminary findings of the National Evaluation)
WAP Plus 2015 Timeline

- WAP Plus 2015 Launched Dec 2011
- Committee Meeting in Baltimore, MD Feb 2012
- Create Strawman March 2012
- Finalize Subcommittee goals, objectives, action steps. April 2012
- WAP Plus 2015 Subcommittee Conference calls held May 2012
- Create WAP Plus Report June 2012
- WAP Plus Committee Review of Strawman by Super Committee July 2012
- Aug 2012
- Sept 2012
5 Committees Formed

- Communications
- Leveraging
- New Markets
- Quality of Services
- Community Efficiency
**Goal**
Regain positive control of Weatherization's identity and messaging

**Strategies**
- Develop strong messaging platform
- National Weatherization Communications Group
- Collaborate with other DOE initiatives (Home Energy Scorecard)

**Targeted Outcomes**
- Consistent messaging
- Trained communicators
- Increase in positive Weatherization stories
- Improved national coordination
- Improved client education
- Increased brand awareness
Leveraging

Goal

Increased Weatherization leveraging efforts within the next three years.

Strategies

- Leveraging Plan Requirement
- Minimum resource allocation (3%) for leveraging efforts
- Expand the allowable uses for DOE leveraging dollars

Targeted Outcomes

- 100% Grantee participation
- New leveraged resources added, particularly in new locations
- Support for Low-Income Infrastructure and Training
New Markets

Goal

Strengthen the Weatherization network with new non-WAP activities.

Strategies

- Create and expand federal partnerships.
- Create and support local and state opportunities to integrate and braid resources.
- Design programs that will meet the market need.

Targeted Outcomes

- FEMP
- DOD
- DOE
- Legislation Initiatives
- Lending Programs
- Building Codes
- Fee for Service/Residential Building
- Renewables
- Water Conservation
Quality of Service

Goal

100% right, 100% of the time.

Strategies

- Establish a Quality of Services Plan for Grantees and Subgrantees
- Implement national job training, certifications and proficiency testing.
- Implement a more robust assessment process.

Targeted Outcomes

- Consistent work quality
  - Work meets desired outcomes of SWS
  - Improved overall service delivery system
- Expand worker competency levels
  - Maintain highly skilled workforce
  - Create experts
- Increased accountability at all program levels.
  - Formal evaluation process for Grantees and Subgrantees.
Community Efficiency

Goal

Position Weatherization as a leader in energy efficient community planning.

Strategies

- Provide quality energy efficiency + renewable work to community
- Strategic Partnerships
- Innovative financing

Targeted Outcomes

- Cumulative energy savings
- More client types served
- New technology introductions
- Expanded coordination with other DOE/efficiency programs
- Secured Public + Private funding
- Potential revenue streams
Challenges

• Can we accomplish objectives with fewer federal WAP dollars?
• Can we be more flexible (communities) while being more disciplined (quality)?
• Can we be expansive (new markets) without losing mission focus (quality and low-income service)?
• Can we succeed at leveraging and new markets with limited resources?
• Can we recapture our narrative – it is our story to tell?
What is WIPP?

- Weatherization Innovation Pilot Program (WIPP) - $30M Congressional set-aside from FY 2010 Appropriations

- Competitive FOA Issue Date – April 2010; 16 Awards made – September 2010

- Intent: Provide grants for innovative ways to weatherize homes of low income families with a focus on the following objectives:
  1. Non-traditional providers and new partnerships
  2. Leverage non-federal financial resources with a goal of at least 3:1
  3. Field test new materials, technologies, behavior-change models, and/or processes
Details about WIPP

- 16 entities received WIPP Funds
  - 10 non-profit organizations
  - 2 State Government Offices
  - 1 Local Government Office
  - 1 utility company
  - 1 Institution of Higher Education
  - 1 private (for-profit) company

- Awards range from $600,000 to $3,000,000
- Performance Period: 9/30/2010-9/30/2012
- Proposed extension - 9/30/2013
- Performance reported as of 3/31/2012:

<table>
<thead>
<tr>
<th></th>
<th>Total Planned</th>
<th>Actual to Date</th>
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</thead>
<tbody>
<tr>
<td>Federal Funds</td>
<td>$29,104,175</td>
<td>$5,150,261</td>
</tr>
<tr>
<td>Leveraged Funds</td>
<td>$82,124,892</td>
<td>$4,820,862</td>
</tr>
<tr>
<td>Units Weatherized</td>
<td>18,519</td>
<td>1,753</td>
</tr>
</tbody>
</table>

- 4 focus areas beyond providing high-quality work and benefits to eligible low-income clients:
  - **Financial tools (6 grantees)** – understand how financing mechanisms can expand the impact of the federal grant dollars
  - **Green and healthy homes (2 grantees)** – incorporate a comprehensive green and healthy homes approach to protect client health and safety
  - **New technologies and techniques (5 grantees)** – utilize new and better technologies and techniques to improve the quality of work
  - **Workforce development and volunteers (3 grantees)** – create a self-sustaining weatherization model that will require less future federal investment
<table>
<thead>
<tr>
<th>Grantee</th>
<th>State</th>
<th>Innovation Being Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Danville</td>
<td>VA</td>
<td>Single/Multi-Family approach using a municipal loan to provide affordable financing for rental property owners (RPOs)</td>
</tr>
<tr>
<td>Energy Pioneer Solutions</td>
<td>NE</td>
<td>Single-Family approach using on-bill financing to repay homeowner loans</td>
</tr>
<tr>
<td>Local Energy Alliance Program, Inc.</td>
<td>VA</td>
<td>Multi-Family approach using an Energy Saving Performance Contracting model and sale of carbon credits</td>
</tr>
<tr>
<td>State of Utah</td>
<td>UT</td>
<td>Single-Family approach using a revolving loan and performance based contracting for home owners</td>
</tr>
<tr>
<td>State of Washington - Department of Commerce</td>
<td>WA</td>
<td>Multi-family approach using revolving loans managed by Community Development Financial Institutions (CDFIs) and carbon based incentives for housing owners or developers</td>
</tr>
<tr>
<td>Stewards of Affordable Housing for the Future</td>
<td>DC</td>
<td>Multi-Family approach using an Energy Saving Performance Contracting model</td>
</tr>
<tr>
<td>Coalition to End Childhood Lead Poisoning, Inc.</td>
<td>MD</td>
<td>Single-Family approach using Green and Healthy Homes Initiatives with Weatherization by non-profit</td>
</tr>
<tr>
<td>The United Illuminating Company</td>
<td>CT</td>
<td>Single-Family approach using Green and Healthy Homes Initiatives with Weatherization by utility</td>
</tr>
<tr>
<td>Commission on Economic Opportunity</td>
<td>PA</td>
<td>Single-Family approach using in-home energy display devices, consumer education and carbon credits</td>
</tr>
<tr>
<td>Community Environmental Center, Inc.</td>
<td>NY</td>
<td>Multi-Family (low rise) approach using renewable energy generation, ´cool´ roof coatings, fiberglass windows, and energy management systems</td>
</tr>
<tr>
<td>New Hampshire Community Loan Fund, Inc.</td>
<td>NH</td>
<td>Manufactured/Mobile Housing approach using economic efficiencies gained by working in Resident Owned Communities and social marketing</td>
</tr>
<tr>
<td>The University of North Carolina at Charlotte</td>
<td>NC</td>
<td>Single-Family approach in rural and semi-urban areas using real-time monitoring devices, ductless heat pumps, and whole house fans</td>
</tr>
<tr>
<td>Vermont Energy Investment Corporation</td>
<td>VT</td>
<td>Single-Family approach using smart-grid technology, energy display devices and consumer education</td>
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<tr>
<td>Habitat for Humanity International, Inc.</td>
<td>AL, CA, DC, FL, IA, IL, ME, MI, MN, MS, NC, PA, TN, TX</td>
<td>Single-Family/Geographically diverse approach using volunteer labor and work force development, with a focus on homeowners</td>
</tr>
<tr>
<td>People Working Cooperaively, Inc.</td>
<td>OH, IN</td>
<td>Single-Family/Geographically diverse approach using volunteer labor and work force development, with a focus on homeowners</td>
</tr>
<tr>
<td>YouthBuild USA, Inc.</td>
<td>CT, NY, MN, MD, WV, VA</td>
<td>Single-Family/Geographically diverse approach using youth volunteer labor and work force development, with a focus on homeowners</td>
</tr>
</tbody>
</table>
## Activity - Planned vs. Actual

<table>
<thead>
<tr>
<th>Grantee</th>
<th>State</th>
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<th>Leverage Funds</th>
<th>Units Weatherized</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Danville</td>
<td>VA</td>
<td>$1,015,746</td>
<td>$1,290,000</td>
<td>300</td>
</tr>
<tr>
<td>Energy Pioneer Solutions</td>
<td>NE</td>
<td>$812,418</td>
<td>$2,675,268</td>
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<tr>
<td>Local Energy Alliance Program, Inc.</td>
<td>VA</td>
<td>$1,898,938</td>
<td>$5,950,000</td>
<td>1,700</td>
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<tr>
<td>State of Utah</td>
<td>UT</td>
<td>$850,000</td>
<td>$2,550,000</td>
<td>450</td>
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<tr>
<td>State of Washington - Department of Commerce</td>
<td>WA</td>
<td>$3,000,000</td>
<td>$9,000,000</td>
<td>2,240</td>
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<tr>
<td>Stewards of Affordable Housing for the Future</td>
<td>DC</td>
<td>$2,590,523</td>
<td>$7,800,000</td>
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<tr>
<td>Coalition to End Childhood Lead Poisoning, Inc.</td>
<td>MD</td>
<td>$1,287,598</td>
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<td>The United Illuminating Company</td>
<td>CT</td>
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<tr>
<td>Commission on Economic Opportunity</td>
<td>PA</td>
<td>$2,449,607</td>
<td>$4,500,000</td>
<td>2,500</td>
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<tr>
<td>Community Environmental Center, Inc.</td>
<td>NY</td>
<td>$3,000,000</td>
<td>$9,000,000</td>
<td>1,200</td>
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<td>New Hampshire Community Loan Fund, Inc.</td>
<td>NH</td>
<td>$600,000</td>
<td>$2,478,880</td>
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<td>The University of North Carolina at Charlotte</td>
<td>NC</td>
<td>$2,005,945</td>
<td>$6,214,000</td>
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<td>Vermont Energy Investment Corporation</td>
<td>VT</td>
<td>$719,380</td>
<td>$200,000</td>
<td>550</td>
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<tr>
<td>Habitat for Humanity International, Inc. (HQ in GA)</td>
<td>AL, CA, DC, FL, IA, IL, ME, MI, MN, MS, NC, PA, TN, TX</td>
<td>$3,000,000</td>
<td>$9,000,000</td>
<td>1,770</td>
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<td>People Working Cooperatively, Inc.</td>
<td>OH, IN</td>
<td>$1,500,000</td>
<td>$4,299,918</td>
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<tr>
<td>YouthBuild USA, Inc. (HQ in MA)</td>
<td>CT, NY, MN, MD, WV, VA</td>
<td>$1,374,020</td>
<td>$3,103,902</td>
<td>998</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>$29,104,175</td>
<td>$82,124,492</td>
<td>18,519</td>
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Planned Leveraged Fund Ratio (as of 3/31/12) 2.42

Actual Leveraged Fund Ratio (as of 3/31/12) 0.94
Technical Assistance Provided

- **Dec 2010** - Kick-off meeting attended by each grantee in Washington, D.C.
- **Nov 2011** - First round of status update and technical assistance conference calls with WIPP grantees
- **Dec 2011** - WIPP meeting at National Weatherization Training Conference
- **Apr 2012** – Second round of status update and technical assistance conference calls with WIPP grantees
- **May 2012** – Effective Energy Behavior Change for Low-Income Weatherization Clients
- **Ongoing:**
  - DOE Program staff, contractors, and Project Officers answering questions from emails and phone calls as required
  - NREL provided technical assistance to 10 grantees on topics including community outreach, analysis of products and tools, and assistance with audit software
  - 3 Webinars provided to grantees on topics including the Oak Ridge Evaluation Process and proper quarterly performance and financial reporting
Grantees of Concern

Based on the recent status update conference and DOE’s analysis of each grantee’s progress, the grantees were divided into HIGH, SPECIAL, MEDIUM, and LOW concern.

<table>
<thead>
<tr>
<th>Grantee (Innovation)</th>
<th>State</th>
<th>Program Structure*</th>
<th>Federal Dollars Budgeted</th>
<th>Units to be Weatherized Planned</th>
<th>Units to be Weatherized Projected</th>
<th>Difference</th>
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</thead>
<tbody>
<tr>
<td>State of Utah</td>
<td>UT</td>
<td>SF Financial</td>
<td>$850,000</td>
<td>450</td>
<td>200</td>
<td>-250</td>
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<td>UNC Charlotte</td>
<td>NC</td>
<td>SF New Technologies</td>
<td>$2,005,945</td>
<td>800</td>
<td>600</td>
<td>-200</td>
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<td>City of Danville</td>
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<td>$1,898,938</td>
<td>1,700</td>
<td>850</td>
<td>-850</td>
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<tr>
<td>State of Washington</td>
<td>VA</td>
<td>MF Financial</td>
<td>$3,000,000</td>
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<tr>
<td>Commission on Economic Opportunity</td>
<td>PA</td>
<td>SF New Technologies</td>
<td>$2,449,607</td>
<td>2,500</td>
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<td>2,000</td>
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<tr>
<td>The United Illuminating Company</td>
<td>CT</td>
<td>SF Green /Healthy</td>
<td>$3,000,000</td>
<td>2,585</td>
<td>2,585</td>
<td>0</td>
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<td>NY</td>
<td>MF New Technologies</td>
<td>$3,000,000</td>
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<td>1,770</td>
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<td>New Hampshire Community Loan Fund</td>
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<td>MH New Technologies</td>
<td>$600,000</td>
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<td><strong>16,674</strong></td>
<td><strong>-2,145</strong></td>
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* SF = Single Family; MF = Multi-Family; S/MF = Both Single & Multi-family; MH = Modular/Mobile Home

Based on the recent status update conference and DOE’s analysis of each grantee’s progress, the grantees were divided into HIGH, SPECIAL, MEDIUM, and LOW concern.

* SF = Single Family; MF = Multi-Family; S/MF = Both Single & Multi-family; MH = Modular/Mobile Home
Reasons for Concern

• Per the April 2012 call and with a 12 month extension, six grantees will need to reduce production targets and leverage
• Grantees over-predicted market demand for proposed products
• Grantees reported a lack of incentives for homeowner participation (no rebates or tax credits, Home Star legislation failed)
• Grantees must still meet their terms and conditions for approved energy audit tools, field protocols, and health and safety plans
• Two grantees (WA, Danville) must have their change of Key Personnel approved by the CO
• Grantees reported greater administrative burden and cost
• Three grantees (WA, LEAP, Danville) are concerned that multi-family projects will take much longer than anticipated
• One grantee (CEO) has a scope of work that is not necessary to expand beyond current delivery
• It is still too early to tell whether the WIPP demonstrations will successfully meet their objectives.
• Nine grantees have reported no units completed to date. DOE funds have been spent in all but one grantee.
• There is some success in the volunteer efforts for two of the three projects. Field monitoring scheduled for next month.
• Installation of smart meters easily accomplished. Evaluation of control and market group will define cost effectiveness.
• Demand for innovative WAP services tepid in both low and moderate income market (why pay when you can get it free).
• Federal dollars being used to complete work (EPS); leveraging of private funds far less than anticipated – less than $1 to $1.
• Supply/Demand carbon credit market still in development phase.
• Financial projects appear far less active and less successful than new technology implementation.