

Presentation By: Russell W. Tarry

Marshall University – May 2013 Energy Efficiency in West Virginia: Projects & Prospects

### WV OFFICE OF ECONOMIC OPPORTUNITY



- Who Are We?
  - State Agency under the WV Department of Commerce
- What Do We Do?
  - Administer federal grants to Sub-grantees throughout WV for programs that assist low-income individuals and families

West Virginia



### Weatherization Assistance Program

• Weatherization Assistance Program (WAP) was created in 1976 to assist low-income families who lacked resources to invest in energy efficiency



• Funds are used to improve the energy efficiency of low-income homes using the most advanced technologies and testing protocols available in the housing industry



### Weatherization Assistance Program

#### Mission Statement

"To reduce energy costs for low-income families, particularly for the elderly, people with disabilities, and children, by improving the energy efficiency of their homes while ensuring their health and safety."

# WEATHERIZATION ASSISTANCE PROGRAM QUICK FACTS:

- Since the inception of the WAP, over 7 million homes have been weatherized with DOE funds
- Energy savings average 35% of consumption for the typical low-income home
- Occupants of weatherized homes experience in the range of \$400 in annual savings on their energy bills, at current energy prices
- For every \$1 invested in the Program, Weatherization returns \$2.51 to the household and society



CHANGE, Inc.

Coalfield Community Action Partnership

Community Action of South Eastern West Virginia

Community Resources, Inc.

Council of the Southern Mountains

Eastern WV Community Action Agency, Inc.

Mountain CAP of West Virginia, Inc.

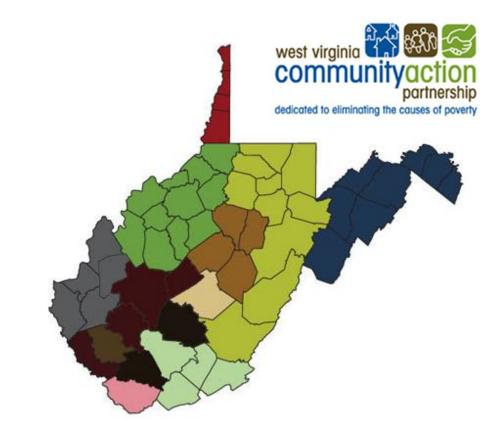
MountainHeart Community Services, Inc.

Nicholas Community Action Partnership, Inc.

North Central WV Community Action Association, Inc.

PRIDE Community Services, Inc.

Southwestern Community Action Council, Inc.





West Virginia
Office of Economic Opportunity

- Eligibility: Annual gross income from all income sources at 200% (or below) of the OMB Poverty guidelines for specific family size
- **Priority:** Elderly, persons with disabilities, families with children, households with high energy burden
- Additional Factor: Time on wait list
- Future Factor: High residential energy user



### **STRUCTURES**









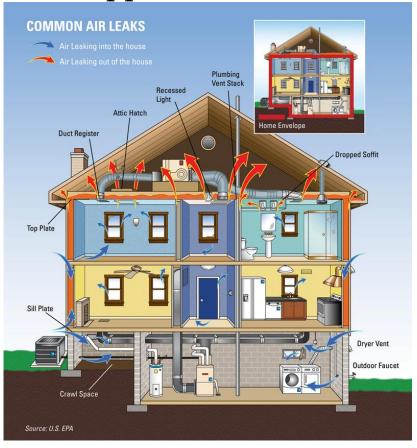






#### **ENERGY EFFICIENCY MEASURES**

• Weatherization Approach: "House as a system..."





#### ENERY EFFICENCY MEASURES

- Weatherization measures broken down into a few main categories:
  - Air Sealing
  - Insulation
  - HVAC
  - Health and Safety
  - Base-load Reduction
  - Client Education



### **ENERGY EFFICIENCY MEASURES**

• Weatherization Measure Determination: Energy Audit

#### • WV WAP Audit Tool:

Weatherization Assistant

- NEAT
- MHEA
- Savings-to-Investment Ratio (SIR)





### **ENERY AUDIT TOOLS**

- Diagnostic Tools:
  - Blower Door
  - Duct Leakage Diagnostic Tools
  - Electricity Consumption Meter
  - Combustion Analyzer
  - Gas Leak Detector/"Gas Sniffer"

Thermal Camera



West Virginia
Office of Economic Opportunity

## WEST VIRGINIA WAP - CURRENT PARTNERSHIPS - FEDERAL









## WEST VIRGINIA WAP - CURRENT PARTNERS - UTILITY PARTNERS















# WEST VIRGINIA WAP - CURRENT PARTNERSHIPS - COMMUNITY AND TECHNICAL COLLEGES











West Virginia
Office of Economic Opportunity

### WEST VIRGINIA WAP - CURRENT PARTNERSHIPS - NATIONAL PARTNERS







NATIONAL ASSOCIATION FOR STATE COMMUNITY SERVICES PROGRAMS



NASCSP





### WEST VIRGINIA WAP - CURRENT PARTNERSHIPS - INDUSTRY PARTNERS







# WEST VIRGINIA WEATHERIZATION ASSISTANCE PROGRAM: NEW INITIATIVES

"Fee - For - Service"

- Expansion Opportunity
- Energy Audits
- Energy Efficiency Measures
- General Contracting Services



# WEST VIRGINIA WEATHERIZATION ASSISTANCE PROGRAM: NEW INITIATIVES

### **Healthy Homes / Weatherization Plus Health**



• National effort to enable the comprehensive, strategic coordination of resources for energy, health, and safety in low-income homes









#### **NEW INITIATIVES**

### **Healthy Homes / Weatherization Plus Health**

- Healthy Homes 8 Principles:
  - Keep It Contaminant-Free
  - Keep It Pest Free
  - Keep It Clean
  - Keep It Dry
  - Keep It Well-Ventilated
  - Keep It Safe
  - Keep It Well-Maintained
  - Thermally Controlled (Energy Efficient)



#### **NEW INITIATIVES**

### Healthy Homes / Weatherization Plus Health

- Major Issues Addressed:
  - Lead-Based Paint Issues
  - Radon
  - Asbestos
  - Mold/Moisture Issues
  - Volatile organic compounds (emitted as gases from certain solids or liquids)
  - Pests
  - Ventilation Issues
  - Asthma Triggers
  - Structural Issues & Electrical Issues





# WEST VIRGINIA WEATHERIZATION ASSISTANCE PROGRAM: NEW INITIATIVES

### **Healthy Homes / Weatherization Plus Health**

• Federal Partners:















• National Partners:







West Virginia
Office of Economic Opportunity

# WEST VIRGINIA WEATHERIZATION ASSISTANCE PROGRAM: NEW INITIATIVES

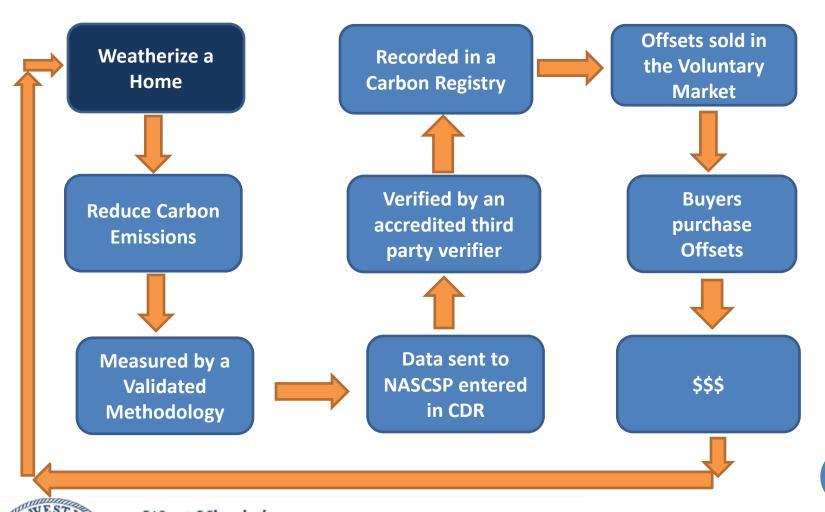
### **Carbon Trading Initiative**:

- Started as a project in Maine (Not cost effective)
- NASCSP creating National Carbon Trading Program
- Carbon Offsets sold on "Voluntary Market" in batches or "vintages" from many states together





#### **CARBON TRADING INITIATIVE**





# WEST VIRGINIA WEATHERIZATION ASSISTANCE PROGRAM: THE FUTURE

- Continue / expand current partnerships
- Seek additional opportunities, partners, and funding to enhance the current program
- Continue to expand Weatherization moving into the future

### QUESTIONS?

### **Contact Information**:

Russell Tarry

russell.w.tarry@wv.gov

304 558 8860 ext. 233

THANK YOU!

