Economics of Supply Chain

Weatherization Assistance Program

Dr. John Joseph, CEO
JAI Software, Inc.
WAP is Essential to Nation Energy Goals

• Created in 1976 to improve residential efficiency

• For Homes that would not be otherwise weatherized

• Maine Carbon “additionality study’
  – Savings rate of .38% for single family
  – Savings rate of 43% for multifamily

• Saving rate over 29% with Weatherization
WAP Funding is Wise Investment

• Wx is an investment not an expense
• Long lasting returns in the home, 20 years
• Training centers are long-term assets
• Trained staff are human capital
• SIR > 1 Saving Investment Ratio
• Positive & growing cash flow, can be validated
• WAP not a cost center but investment opportunity addressing major national issues: energy and health
The Supply Chain
Energy Efficiency Service Sector

• EESS is a combination of existing companies and new professions
• Wx network is a subset of the EEES
• Wx program creates 8.9 efficiency jobs for each $1m investment

“Energy Efficiency Services Sector: Workforce Size and Expectations for Growth,” Ernest Orlando from Lawrence Berkeley National Laboratory, September 2010
WAP is the Market Foundation for the EESS

• WAP is a National Program, the Network includes states, territories, tribal organizations, community based agencies, and private companies across the entire country
• WAP program has provided the market foundation to launch the residential energy efficiency service sector
• WAP has provided the training and developed the standards for quality and safety
• WAP has been the catalyst for innovation the Residential EESS.
WAP is historically the Catalyst for Innovation in the Supply Chain

- Residential Energy modeling and automated energy audit tools
- The blower door test to measure air infiltration
- Infrared cameras to detect heat flows
- Health and Safety Standards and Procedures
- Professional Training and Certification
WAP is continues as the Catalyst for Innovation

• Advances in Information Technology
  – Monitoring and Quality Assurance
  – Management Reporting
  – Energy Audit improved accuracy

• NASCSP Voluntary Carbon Trading Methodology
  – Wx Leveraging
  – Quality Improvements
  – Information management
WAP is Expanding the Scope of the Supply Chain

• Weatherization Plus Health & Safety
  – Asthma triggers
  – CO emissions
  – Unsafe structures
  – Fire prevention

Reducing health care costs
Protecting Property values
Examples of other Public Catalysts Creating Private Markets

• US Navy and the computer
• NASA and satellite communications
• Defense Radar research and television
• US Air force and the wide body Jet
WAP continues as laying the groundwork for EESS

Small business contractors
Local manufactures of insulation
Equipment manufactures
Materials Distributors
Materials manufactures
Major home improvement retailers
Just to name a few
HOME DEPOT EXHIBIT
Wx Supply Chain

- WAP is the market foundation for EESS
- WAP is a catalyst for innovation
- WAP is filling the Low Income gap
- WAP is generating leveraged funds
- WAP is expanding the Supply Chain
- WAP is a Wise investment not an expense