

**S3: SUBSET OF AGENCIES DETAILED PROGRAM INFORMATION SURVEY**

This data is being collected to conduct a detailed process evaluation of the Weatherization Assistance Program at the local level. The data you supply will be used to characterize local agency weatherization activities in Program Year 2008.

Public reporting burden for this collection of information is estimated to average sixteen hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of the Chief Information Officer, Records Management Division, IM-11, Paperwork Reduction Project (1910-5151), U.S. Department of Energy, 1000 Independence Ave SW, Washington, DC, 20585-1290; and to the Office of Management and Budget (OMB), OIRA, Paperwork Reduction Project (1910-5151), Washington, DC 20503.

All of the information obtained from this survey will be protected and will remain confidential. The data will be analyzed in such a way that the information provided cannot be associated back to your state, your agencies, or the housing units and clients that your state served. Again, please note that the questions refer to PY 2008 unless otherwise noted.

**PROGRAM CHARACTERIZATION**

- 1. Please identify your state. \_\_\_\_\_
- 2. Please identify your local agency. \_\_\_\_\_
- 3. Which of the following best characterizes your agency? (Please check the one answer that best applies):

- \_\_\_\_\_ Local Non-Profit Organization
- \_\_\_\_\_ Local Government Agency
- \_\_\_\_\_ County Government Agency
- \_\_\_\_\_ Indian Tribe
- \_\_\_\_\_ Other entity not eligible for CSBG funding
- \_\_\_\_\_ Other (please specify) \_\_\_\_\_

4. Please indicate other energy-related, housing, and other programs that cooperated with your agency's weatherization program, by source of funding in PY 2008. Please check all that apply.

<b>Type of Program</b>	<b>Federal Funding</b>	<b>State Funding</b>	<b>Utility Funding</b>	<b>Other Funding</b>
<b>Energy bill paying assistance</b>				
<b>Housing re-habilitation</b>				
<b>Home emergency repairs</b>				
<b>Hardship funds (other than for energy bill paying)</b>				
<b>Fuel delivery in crisis</b>				
<b>Fair housing</b>				
<b>Health and safety</b>				
<b>Energy education (other than client education delivered by weatherization program)</b>				
<b>Home buying education</b>				
<b>Rehabilitation loan</b>				
<b>Mortgage loan</b>				
<b>Emergency food</b>				
<b>Emergency safety</b>				
<b>Other (please specify)</b>				
<b>Other (please specify)</b>				
<b>Other (please specify)</b>				
<b>Other (please specify)</b>				
<b>Other (please specify)</b>				
<b>Other (please specify)</b>				

5. How important were leveraged funds (i.e., funds that support the weatherization program that are not provided by DOE) for your agency's weatherization program in PY 2008? (Check best answer)

- Very important
- Important
- Not very important
- Not important at all

6. Did your agency set aside funding to advocate for leveraged resources in PY 2008?

- Yes (Go to Question 7)
- No (Go to Question 8)

7. What organizations worked to acquire leveraged resources in PY 2008?

- Your state office
- Your state's agencies
- Non-profit organizations funded by your state

\_\_\_\_\_ Other

8. How successful would you rate your agency's efforts to acquire leveraged funds in PY 2008?

- Very successful
- Successful
- Not very successful
- Not successful at all
- State does not seek leveraged funds

9. What factors limited the success of your agency's efforts to acquire leveraged funding in PY 2008? \_\_\_\_\_

10. Have you modified your agency's weatherization program practices or regulations in the three years prior to PY 2008 to facilitate spending and reporting on leveraged resources?

- Yes
- No

11. Did your agency experience delays or other difficulties in spending any of these types of non-DOE funds in PY 2008?

<b>Source of Non-DOE Funding</b>	<b>Yes, No, or N/A</b>	<b>Please Provide a Short Description of and the Reasons for the Delays or Other Difficulties</b>
<b>LIHEAP</b>		
<b>Petroleum Violation Escrow (PVE)</b>		
<b>Other Federal Programs</b>		
<b>State Public Benefit Funds</b>		
<b>Other State Programs</b>		
<b>Utilities</b>		
<b>Program Income</b>		
<b>In-Kind</b>		
<b>Non-profit Organizations</b>		
<b>Other (please specify)</b>		
<b>Other (please specify)</b>		
<b>Other (please specify)</b>		
<b>Other (please specify)</b>		

12. Did your agency encounter any of the following problems in spending non-DOE funds in general in PY 2008? (Check all that apply)

- Our agency could not easily increase the number of homes weatherized during the year in order to better spend non-DOE funds
- Our agency required the expenditure of DOE weatherization funds before non-DOE funds were expended
- We had insufficient staff to manage the receipt and expenditure of non-DOE funds
- We had inadequate accounting systems to manage the receipt and expenditure of non-DOE funds
- Guidance received from DOE and/or our state made it difficult to expend non-DOE funds in a timely manner
- Other \_\_\_\_\_

13. When selecting DOE units to weatherize from the pool of eligible applicants, did your agency give higher priority to specific households based on any of the following characteristics in Program Year 2008? (Check all that apply)

- Dwelling unit characteristics \_\_\_\_\_
- Type of heating system \_\_\_\_\_
- Fuel type \_\_\_\_\_
- Geographic location \_\_\_\_\_
- Presence of children \_\_\_\_\_
- Presence of elderly occupants \_\_\_\_\_
- Presence of disabled occupants \_\_\_\_\_
- High energy expenditures \_\_\_\_\_
- High energy burden \_\_\_\_\_
- Energy consumption \_\_\_\_\_
- Anticipated cost of weatherization \_\_\_\_\_
- Anticipated savings \_\_\_\_\_
- Occupant being a renter \_\_\_\_\_
- Landlord or other contributions \_\_\_\_\_
- Amount of time on waiting list \_\_\_\_\_
- Referral from, or participation in, another program \_\_\_\_\_
- Other (please specify) \_\_\_\_\_

14. In Program Year 2008, did your agency set targets and actively solicit participation by dwelling units of the types shown below? (Check all that apply)

Type of dwelling unit	Set targets for number of dwelling units of this type to weatherize	Actively sought participation by households residing in this type of dwelling unit
Single Family Attached and Detached		
Small Multi-family (2-4 units)		
Multifamily (5 or More Units per Building)		
Mobile Home		
Shelter		

15. Did your state require your agency to provide aggregated data for these four types of data in PY 2008? (check all that apply)

	Household Data	Audit Data	Weatherization Measures Data	Energy Use Data
<b>No</b>				
<b>Yes, annually</b>				
<b>Yes, quarterly</b>				
<b>Yes, monthly</b>				
<b>Yes, other</b>				

16. Did your state impose any specific requirements on how your agency collected, stored, and used household energy use, weatherization, and/or household data in PY 2008?

Yes  
 No

16a. If Yes, What were the requirements? \_\_\_\_\_

17. Did your state provide any training to help your agency collect, store and use household energy use, weatherization, and/or household data in PY 2008?

Yes  
 No

17a. If Yes, What training was provided by your state? \_\_\_\_\_

18. How were eligibility and prioritization data about households that applied for weatherization services collected in PY 2008? (Check all that apply)

- Households filled out forms when they apply for weatherization services
- Data were provided by LIHEAP
- The state provided the household data
- Auditors collected the data at the time the home is audited
- Other \_\_\_\_\_

19. How were data needed for audits collected in PY 2008? (Check all that apply)

- Auditors/weatherization crews filled out paper forms in the field and/or in the office
- Auditors/weatherization crews had laptop computers to enter data in the field
- Auditors/weatherization crews kept notes in the field and then entered the data into computers back at the office
- Other \_\_\_\_\_

20. How were data about weatherization measures installed in homes collected in PY 2008? (Check all that apply)

- Weatherization crews filed out paper forms and turned them in
- Weatherization crews had laptop computers to enter data in the field
- Weatherization crews kept notes in the field and then entered data into computers at the office
- Other \_\_\_\_\_

21. How were energy use records collected for weatherized houses in PY 2008? (Check all that apply)

- The records were provided by the local utility or utilities
- The records were provided by the state
- We asked the households for their energy bills
- Did not collect
- Other \_\_\_\_\_

22. Did your agency computerize the following types of data in PY 2008? If no, please indicate why not (Check all that apply)

	<b>Household Data</b>	<b>Audit Data</b>	<b>Weatherization Measures Data</b>	<b>Energy Use Data</b>
<b>Yes</b>				
<b>No, no need</b>				
<b>No, could not afford</b>				
<b>No, insufficient staff time to set up computer</b>				
<b>No, insufficient staff time enter data</b>				
<b>Other</b>				

23. Did your agency analyze the following types of data for any of the following reasons in PY 2008? (Check all that apply)

Types of Data/Reasons for Use	Household Data	Audit Data	Weatherization Measures Data	Energy Use Data
No				
Yes, generated descriptive statistics (e.g., counts, percentages)				
Yes, looked for trends				
Yes, supported agency strategic planning				
Yes, supported agency program performance review				
Other				

24. What percentage of households whose homes were weatherized by your agency in Program Year 2008 registered a complaint regarding the quality or nature of the weatherization job performed on their dwelling unit? \_\_\_\_\_

25. Of those households that filed complaints, what percentage of these required some additional work? \_\_\_\_\_

26. Of all the homes weatherized by your agency in Program Year 2008, how many did you refer to non-energy programs for additional services (e.g., nutrition; family counseling)? \_\_\_\_\_

27. How many income-qualified dwelling units were on your agency's waiting list:  
at the start of Program Year 2008 \_\_\_\_\_  
at the end of Program Year 2008 \_\_\_\_\_

28. Please list the number of dwelling units that your agency could not weatherize in Program Year 2008 due to housing conditions (i.e., the number you had to "walk away from").  
\_\_\_\_\_

29. Please list the number of dwellings that your agency could not weatherize in Program Year 2008 because they had previously been weatherized? (enter -99 if this information is not tracked)  
\_\_\_\_\_



30. Please indicate the number of staff that supported your agency's weatherization program and their work effort in Program Year 2008. In considering the number of staff, please include everyone who worked full- or part-time or who worked with the weatherization program as well as other agency programs.

Type of Administrative Function	Number of Agency Staff (# persons)	Agency Staff Work Effort (FTE)
Management/administration		
Auditing/inspection		
Home weatherization		
Other (specify)		

31. For the agency staff working on your agency's weatherization in each of the following functional areas in Program Year 2008, please indicate their level of experience with the weatherization program:

	Very High	High	Average	Low	Very Low
Management/administration					
Auditing/inspection					
Home weatherization					
Other (specify)					

32. For the agency staff working on your agency's weatherization program in each of the following functional area, please indicate the amount of turnover in staff over a **three year period ending with PY 2008**. Turnover is defined as the number of new staff in a functional area in the past three years divided by the total number of staff working in that functional area. If a particular position has had more than one new person during the past three years (e.g., Person 1 leaves, Person 2 is hired to take Person 1's position, then Person 2 leaves and a third person is hired), just count that as one new staff person. (Please check appropriate boxes)

	No Turnover	1 to 10%	11 to 25%	26 to 50%	51 to 75%	76 to 100%
Management/administration						
Auditing/inspection						
Home weatherization						
Other (specify)						

33. For which of the following functional areas were there certification or licensing requirements in Program Year 2008 for the in-house or contractor staff serving your state’s weatherization program? (Check all that apply)

	<b>Certification or Licensing Requirement for In-house Staff</b>	<b>Certification or Licensing Requirement for Contractor Staff</b>
Management/ administration		
Auditing/inspection		
Home weatherization		
Other (specify)		

34. Which of the following approaches did your agency use in Program Year 2008 to market your weatherization services to low-income households? (Check all that apply)

- Targeted mailings to potential clients \_\_\_\_\_
- Targeted mailings to landlords of potential clients \_\_\_\_\_
- Visits to potential clients \_\_\_\_\_
- Visits to landlords of potential clients \_\_\_\_\_
- Advertising with other social service agencies \_\_\_\_\_
- Advertising in local newspapers or magazines \_\_\_\_\_
- Radio advertising \_\_\_\_\_
- Television advertising \_\_\_\_\_
- Posting information on website \_\_\_\_\_
- Other (please specify) \_\_\_\_\_

35. Who was responsible for leading the marketing/outreach efforts described above? (Check all that apply)

- Agency management \_\_\_\_\_
- In-house outreach coordinator \_\_\_\_\_
- Contractor outreach coordinator \_\_\_\_\_
- In-house communications staff \_\_\_\_\_
- Contractor communications staff \_\_\_\_\_
- Other in-house staff (please specify) \_\_\_\_\_
- Other contractor staff (please specify) \_\_\_\_\_

## PROGRAM OPERATIONS AND IMPLEMENTATION

1. Using the following scale, how adequate was the Program Year 2008 funding received by your agency from ALL funding sources for weatherizing the stock of eligible low-income dwelling units in your local jurisdiction in a timely fashion? (Check best answer)

Very adequate  
 Adequate  
 Inadequate  
 Very inadequate

2. What was the quality of the administrative support and assistance that your agency received from the state and its contractors in Program Year 2008? (Check best answer)

very high quality  
 high quality  
 moderate quality  
 low quality  
 very low quality  
 not applicable

2a. If appropriate, why did you rate the quality very low or low? \_\_\_\_\_

3. What was the quality of the training that your agency received from the state and its contractors in Program Year 2008? (Check best answer)

very high quality  
 high quality  
 moderate quality  
 low quality  
 very low quality  
 not applicable

3a. If appropriate, why did you rate the quality very low or low? \_\_\_\_\_

4. What was the quality of the support and assistance on client education that your agency received from the state and its contractors in Program Year 2008? (Check best answer)

very high quality  
 high quality  
 moderate quality  
 low quality  
 very low quality  
 not applicable

4a. If appropriate, why did you rate the quality very low or low? \_\_\_\_\_

5. What was the quality of the support and assistance on leveraging the Weatherization Assistance Program with other funding sources and related programs that your agency received from the state and its contractors in Program Year 2008? (Check best answer)

- very high quality
- high quality
- moderate quality
- low quality
- very low quality
- not applicable

5a. If appropriate, why did you rate the quality very low or low? \_\_\_\_\_

6. What was the quality of the *technical* support that your agency received from the state and its contractors in Program Year 2008? (Check best answer)

- very high quality
- high quality
- moderate quality
- low quality
- very low quality
- not applicable

6a. If appropriate, why did you rate the quality very low or low? \_\_\_\_\_

7. How flexible did you find the DOE program rules that governed the weatherization program in Program Year 2008? In other words, did the program rules allow your state to tailor your program to your needs (very flexible) or proscribe your program to only one way of operation (very inflexible) (Check best answer)

- Very Flexible
- Flexible
- Inflexible
- Very Inflexible

7a. Using PY 2008 as the reference point, how should the program rules change?

- Become much more flexible
- Become more flexible
- Stay about the same
- Become more inflexible
- Become much more inflexible

7b. In what areas should the program rules become more flexible? \_\_\_\_\_

7c. In what areas should the program rules become less flexible? \_\_\_\_\_

8. Please describe any important political issues faced by your agency's weatherization program in Program Year 2008.

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9. Using PY 2008 as a reference point, how important was improving administrative support and assistance from the state and its contractors in improving your agency's ability to deliver low-income weatherization services? (Check best answer)

- Very Important  
 Important  
 Unimportant  
 Very Unimportant  
 Not applicable

10. Using PY 2008 as a reference point, how important was improving training from DOE, the state, and their contractors in improving your agency's ability to deliver low-income weatherization services? (Check best answer)

- Very Important  
 Important  
 Unimportant  
 Very Unimportant  
 Not applicable

11. Using PY 2008 as a reference point, how important was improving assistance on client education from the state and its contractors in improving your agency's ability to deliver low-income weatherization services? (Check best answer)

- Very Important  
 Important  
 Unimportant  
 Very Unimportant  
 Not applicable

12. Using PY 2008 as a reference point, how important was improving assistance from the state and its contractors on leveraging the Weatherization Assistance Program with other funding sources and related programs in improving your agency's ability to deliver low-income weatherization services? (Check best answer)

- Very Important  
 Important  
 Unimportant  
 Very Unimportant  
 Not applicable

13. Using PY 2008 as a reference point, how important was improving *technical* support from the state and its contractors in improving your agency's ability to deliver low-income weatherization services? (Check best answer)
- Very Important
  - Important
  - Unimportant
  - Very Unimportant
  - Not applicable
14. Using PY 2008 as a reference point, how important was increased weatherization funding in improving your agency's ability to deliver low-income weatherization services? (Check best answer)
- Very Important
  - Important
  - Unimportant
  - Very Unimportant
  - Not applicable
15. Using PY 2008 as a reference point, how important was improving data and information systems for managing the delivery of weatherization services? (Check best answer)
- Very Important
  - Important
  - Unimportant
  - Very Unimportant
  - Not applicable
16. In general, how satisfied were you with the length of time between the client's request to have their home weatherized and when it was actually weatherized in PY 2008? (Check best answer)
- Very satisfied
  - Satisfied
  - Not satisfied or dissatisfied
  - Dissatisfied
  - Very dissatisfied
17. In general, how easy was it to schedule your visits to client homes to perform audits, weatherization, and inspections in PY 2008? (Check best answer)
- Very easy
  - Easy
  - Not easy or difficult
  - Difficult
  - Very difficult

**AUDIT**

1. What was the primary method that your agency used in Program Year 2008 to select weatherization measures for clients' dwelling units (excluding health, safety, and repair measures and general heat waste measures)? (Check best answer)
  - Priority list used for all dwelling units \_\_\_\_\_
  - Calculation procedure (e.g., spreadsheet, computerized audit) used for all dwelling units \_\_\_\_\_
  - Priority list applied to dwelling units meeting specified guidelines and calculation procedure used for remaining units \_\_\_\_\_
  - Other (specify) \_\_\_\_\_
  
2. Including PY 2008, for how many years had your agency used the weatherization measure selection method indicated above? \_\_\_\_\_
  
3. What types of credentials or experience were required of your staff or contractors who were engaged in measure selection in Program Year 2008? *Check all that apply.*
  - Technical certification \_\_\_\_\_
  - Extensive weatherization work experience \_\_\_\_\_
  - Extensive weatherization supervision experience \_\_\_\_\_
  - Construction experience \_\_\_\_\_
  - Other (specify) \_\_\_\_\_

4. Please indicate the level of experience for the agency staff engaged in measure selection in Program Year 2008 in each of the following functional areas:

	<b>Very High</b>	<b>High</b>	<b>Average</b>	<b>Low</b>	<b>Very Low</b>
Performing weatherization work					
Supervising weatherization work					
Working in construction					
Performing pre-weatherization audits					

5. On average, approximately how many hours did it take to select weatherization measures for a typical dwelling unit served by your agency in Program Year 2008, by the major components listed below?
  - Preparation/scheduling \_\_\_\_\_
  - Travel \_\_\_\_\_
  - On-site auditing \_\_\_\_\_
  - Post-audit analysis and write-up \_\_\_\_\_
  - Other \_\_\_\_\_
  - TOTAL of all components \_\_\_\_\_

6. If your agency used a priority list for at least some dwelling units in Program Year 2008, how difficult was it for your staff to use that priority list? (Check best answer)

- Very Difficult
- Difficult
- Easy
- Very Easy

7. If your agency used a priority list in Program Year 2008, how effective was that list? (Check best answer)

- Very Ineffective
- Ineffective
- Effective
- Very Effective

8. If your agency used a calculation procedure for at least some dwelling units in Program Year 2008, what was the name of the procedure or procedures employed? *Check all that apply.*

- AK Warm
- EA-3
- EASY
- EA-QUIP
- HomeCheck
- Meadows
- REES
- REM/Rate
- SMOC-ERS
- TIPS
- TREAT
- Weatherization Assistant (NEAT/MHEA)
- WXEOR
- Other (specify) \_\_\_\_\_



9. If your agency used a calculation procedure in Program Year 2008, use the following scale to describe how difficult it was for your staff to use the applicable procedure(s). Circle best answer). 1= Very Difficult; 2=Difficult; 3= Easy; 4=Very Easy; 5 =N/A

- AK Warm 1 2 3 4 5
- EA-3 1 2 3 4 5
- EASY 1 2 3 4 5
- EA-QUIP 1 2 3 4 5
- HomeCheck 1 2 3 4 5
- Meadows 1 2 3 4 5
- REES 1 2 3 4 5
- REM/Rate 1 2 3 4 5
- SMOC-ERS 1 2 3 4 5
- TIPS 1 2 3 4 5
- TREAT 1 2 3 4 5
- Weatherization Assistant (NEAT/MHEA) 1 2 3 4 5
- WXEOR 1 2 3 4 5
- Other (specify) \_\_\_\_\_ 1 2 3 4 5

10. If your agency used a calculation procedure in Program Year 2008, use the following scale to describe how effective you found the applicable procedure(s). 1= Very Ineffective;

2=Ineffective; 3= Effective; 4=Very Effective; 5=N/A

- a. AK Warm 1 2 3 4 5
- b. EA-3 1 2 3 4 5
- c. EASY 1 2 3 4 5
- d. EA-QUIP 1 2 3 4 5
- e. HomeCheck 1 2 3 4 5

f. Meadows	1	2	3	4	5
g. REES	1	2	3	4	5
h. REM/Rate	1	2	3	4	5
i. SMOC-ERS	1	2	3	4	5
j. TIPS	1	2	3	4	5
k. TREAT	1	2	3	4	5
l. Weatherization Assistant (NEAT/MHEA)	1	2	3	4	5
m. WXEOR	1	2	3	4	5
n. Other (specify) _____	1	2	3	4	5

11. If your agency used a calculation procedure for at least some dwelling units in Program Year 2008, did your state allow under DOE rules the installation of general heat waste measures (low-cost/no-cost weatherization activities) in those units without the need for an energy justification?

- Yes  
 No (go to Question 13)

12. Please indicate which of the following general heat waste measures your agency was allowed to install in Program Year 2008. *Check all that apply.*

- Weatherstripping \_\_\_\_\_
- Caulking \_\_\_\_\_
- Insulation for plugging air leaks \_\_\_\_\_
- Low-flow shower heads \_\_\_\_\_
- Low-flow faucet aerators \_\_\_\_\_
- Air filters \_\_\_\_\_
- Glass patching \_\_\_\_\_
- Lighting \_\_\_\_\_
- Hot water tank insulation (water heater wrap) \_\_\_\_\_
- Water pipe insulation \_\_\_\_\_
- Other (specify) \_\_\_\_\_

13. What was the *primary* justification used by your agency in Program Year 2008 for performing work specifically targeted at reducing air infiltration (i.e., air sealing work)?

*Check best answer.*

- Work should be performed where the air leakage rate as measured by a blower door test is greater than a minimum number (e.g., minimum ventilation guideline) calculated for the dwelling unit in question \_\_\_\_\_
- Work should be performed to address occupant complaints \_\_\_\_\_
- All *significant* air leakage sites should be sealed \_\_\_\_\_
- Air sealing work should be performed on all dwelling units \_\_\_\_\_
- Other (specify) \_\_\_\_\_

14. What *other* justifications were used by your agency in Program Year 2008 for performing work specifically targeted at reducing air infiltration (i.e., air sealing work)? *Check all that apply.*

- Work should be performed where the air leakage rate as measured by a blower door test is greater than a minimum number (e.g., minimum ventilation guideline) calculated for the dwelling unit in question \_\_\_\_\_
- Work should be performed to address occupant complaints \_\_\_\_\_
- All *significant* air leakage sites should be sealed \_\_\_\_\_
- Air sealing work should be performed on all dwelling units \_\_\_\_\_
- Other (specify) \_\_\_\_\_

15. What was the *primary* method used by your agency in Program Year 2008 to identify air leakage sites to seal? *Check only one.*

- Auditor identified air leakage sites visually and communicated relevant information to crew \_\_\_\_\_
- Auditor identified air leakage sites using a blower door and/or pressure diagnostics and communicated relevant information to crew \_\_\_\_\_
- Crew identified air leakage sites visually \_\_\_\_\_
- Crew identified air leakage sites using a blower door and/or pressure diagnostics \_\_\_\_\_
- Other (specify) \_\_\_\_\_

16. What *other* methods were used by your agency in Program Year 2008 to identify air leakage sites to seal? *Check all that apply.*

- Auditor identified air leakage sites visually and communicated relevant information to crew \_\_\_\_\_
- Auditor identified air leakage sites using a blower door and/or pressure diagnostics and communicated relevant information to crew \_\_\_\_\_
- Crew identified air leakage sites visually \_\_\_\_\_
- Crew identified air leakage sites using a blower door and/or pressure diagnostics \_\_\_\_\_
- Other (specify) \_\_\_\_\_

17. In Program Year 2008, at what point did your agency stop performing air sealing work on a given dwelling unit? *Check all that apply.*

- When all identified air leakage sites were sealed \_\_\_\_\_
- When all *significant* air leakage sites were sealed \_\_\_\_\_
- When the air leakage rate as measured by a blower door test dropped below a minimum number calculated for the dwelling unit in question \_\_\_\_\_
- When a blower door test indicated that the most recent infiltration reduction measure installed in the dwelling unit was not cost effective \_\_\_\_\_
- Other (specify) \_\_\_\_\_

18. Did your agency do duct sealing work in Program Year 2008?

- \_\_\_\_\_ Yes  
\_\_\_\_\_ No (go to Question 22)

19. How did your agency determine when duct sealing work was needed for a particular dwelling unit in PY 2008? *Check all that apply.*

- All houses with ducts received duct sealing measures \_\_\_\_\_
- All houses with return air ducts get sealed \_\_\_\_\_
- Ducts were sealed in those cases where leakage sites were visible \_\_\_\_\_
- Ducts were sealed when a blower door test indicated the presence of leaks \_\_\_\_\_
- Ducts were sealed when duct diagnostics (blower door subtraction, duct blower, or pressure pan measurements) indicated that the leakage rate was greater than a minimum number calculated for the dwelling unit in question \_\_\_\_\_

20. What methods were used by your agency in Program Year 2008 to identify duct leakage sites to seal? *Check all that apply.*

- Auditor identified duct leakage sites visually and communicated relevant information to crew \_\_\_\_\_
- Auditor identified duct leakage sites using a blower door and communicated relevant information to crew \_\_\_\_\_
- Auditor identified duct leakage sites using duct diagnostics and communicated relevant information to crew \_\_\_\_\_
- Crew identified duct leakage sites visually \_\_\_\_\_
- Crew identified duct leakage sites using a blower door \_\_\_\_\_
- Crew identified duct leakage sites using duct diagnostics \_\_\_\_\_
- Other (specify) \_\_\_\_\_

21. In Program Year 2008, at what point did your agency stop performing duct sealing work on a given dwelling unit? *Check all that apply.*

- When all identified duct leakage sites were sealed \_\_\_\_\_
- When a blower door test indicated no more flow from the ducts \_\_\_\_\_
- When the duct leakage rate as measured by duct diagnostics dropped below a minimum number calculated for the dwelling unit in question \_\_\_\_\_
- Other (specify) \_\_\_\_\_

22. How did you determine when a particular refrigerator should be replaced in PY 2008? *Check all that apply.*

- Not allowed to replace refrigerators \_\_\_\_\_
- Energy use of existing refrigerator was metered \_\_\_\_\_
- Energy use of existing refrigerator was assumed base on rated/nameplate value \_\_\_\_\_
- Non-energy criteria were used (e.g., age, color, physical appearance) \_\_\_\_\_
- Refrigerator was replaced if it was no longer running or could not maintain desired temperature \_\_\_\_\_
- Other (specify) \_\_\_\_\_

22a. How did you determine when a particular air conditioner should be replaced in PY 2008? *Check all that apply.*

- Not allowed to replace air conditioner \_\_\_\_\_
- Energy use of existing air conditioner was metered \_\_\_\_\_
- Energy use of existing air conditioner was assumed base on rated/nameplate value \_\_\_\_\_
  
- \_\_\_\_\_
- Non-energy criteria were used (e.g., age, physical appearance) \_\_\_\_\_
- Air conditioner was replaced if it was no longer running or could not maintain desired temperature \_\_\_\_\_
- Other (specify) \_\_\_\_\_
- Not applicable \_\_\_\_\_

23. Which of the following diagnostic procedures did your agency perform in Program Year 2008? *Check all that apply.*

**Pressure diagnostics:**

- Blower door (house air leakage rate) \_\_\_\_\_
- Zonal pressure measurements \_\_\_\_\_
- Room-to-room pressure measurements (distribution balancing) \_\_\_\_\_
- Duct pressure pan measurements \_\_\_\_\_
- Duct blower measurements (duct air leakage rate) \_\_\_\_\_

**Space-heating system:**

- Flue gas analysis (steady-state efficiency measurements) \_\_\_\_\_
- Heat rise measurements \_\_\_\_\_
- CO measurements in flues \_\_\_\_\_
- Draft/spillage (normal operation) \_\_\_\_\_

**Air-conditioning system:**

- Refrigerant charge (e.g., superheat, subcooling) \_\_\_\_\_

**HVAC components and cross-cutting diagnostics:**

- Air handler flow rate \_\_\_\_\_
- Thermostat anticipator current \_\_\_\_\_
- Worst case draft/spillage (CAZ) \_\_\_\_\_

**Hot-water (water-heating) system:**

- Flue gas analysis (steady-state efficiency measurements) \_\_\_\_\_
- CO measurements in flues \_\_\_\_\_
- Draft/spillage (normal operation) \_\_\_\_\_

- Water flow rates (showerheads and faucets) \_\_\_\_\_
- Other CO measurements:**
- CO measurements in equipment rooms \_\_\_\_\_
- Cooking stove \_\_\_\_\_
- CO measurements in living areas \_\_\_\_\_
- Other diagnostics and inspections:**
- Refrigerator energy use \_\_\_\_\_
- Exhaust fan air flow rate measurement \_\_\_\_\_
- Infrared scanning (camera) \_\_\_\_\_
- Radon testing \_\_\_\_\_
- Lead testing \_\_\_\_\_
- Mold and mildew testing \_\_\_\_\_
- Moisture context testing \_\_\_\_\_
- Other (please specify) \_\_\_\_\_

24. Which of the diagnostic procedures listed below were initiated by your agency in PY 2008 and the two years prior to PY 2008? If your agency did not use a particular procedure, leave that item blank.

**Pressure diagnostics:**

- Blower door (house air leakage rate) \_\_\_\_\_
- Zonal pressure measurements \_\_\_\_\_
- Room-to-room pressure measurements (distribution balancing) \_\_\_\_\_
- Duct pressure pan measurements \_\_\_\_\_
- Duct blower measurements (duct air leakage rate) \_\_\_\_\_

**Space-heating system:**

- Flue gas analysis (steady-state efficiency measurements) \_\_\_\_\_
- Heat rise measurements \_\_\_\_\_
- CO measurements in flues \_\_\_\_\_
- Draft/spillage (normal operation) \_\_\_\_\_

**Air-conditioning system:**

- Refrigerant charge (e.g., superheat, subcooling) \_\_\_\_\_

**HVAC components and cross-cutting diagnostics:**

- Air handler flow rate \_\_\_\_\_
- Thermostat anticipator current \_\_\_\_\_
- Worst case draft/spillage (CAZ) \_\_\_\_\_

**Hot-water (water-heating) system:**

- Flue gas analysis (steady-state efficiency measurements) \_\_\_\_\_
- CO measurements in flues \_\_\_\_\_
- Draft/spillage (normal operation) \_\_\_\_\_
- Water flow rates (showerheads and faucets) \_\_\_\_\_

**Other CO measurements:**

- CO measurements in equipment rooms \_\_\_\_\_
- Cooking stove \_\_\_\_\_
- CO measurements in living areas \_\_\_\_\_

**Other diagnostics and inspections:**

- Refrigerator energy use \_\_\_\_\_
- Exhaust fan air flow rate measurement \_\_\_\_\_
- Infrared scanning (camera) \_\_\_\_\_
- Radon testing \_\_\_\_\_
- Lead testing \_\_\_\_\_
- Mold and mildew testing \_\_\_\_\_
- Moisture context testing \_\_\_\_\_
- Other (please specify) \_\_\_\_\_

25. What types of credentials or experience were required of your staff who performed diagnostic procedures in Program Year 2008? *Check all that apply.*

- Technical certification \_\_\_\_\_
- Extensive weatherization work experience \_\_\_\_\_
- Extensive weatherization supervision experience \_\_\_\_\_
- Construction experience \_\_\_\_\_
- Other (specify) \_\_\_\_\_

26. Approximately how many hours did your agency spend on performing diagnostic procedures for a typical dwelling unit served by your agency in Program Year 2008? \_\_\_\_\_



27. Please indicate the cost, amount of training needed, amount of time needed and effectiveness of the following types of diagnostic procedures relative to each other for PY 2008. Please use the following scale: 1 – very low; 2 -- low; 3 – medium; 4 – high; 5 – very high.

Cost	Training Needed	Time Neede d	Effectiveness
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**Pressure diagnostics:**

Blower door (house air leakage rate)  
 Zonal pressure measurements  
 Room-to-room pressure measurements  
 (distribution balancing)  
 Duct pressure pan measurements  
 Duct blower measurements (duct air leakage  
 rate)

**Space-heating system:**

Flue gas analysis (steady-state efficiency  
 measurements)  
 Heat rise measurements  
 CO measurements in flues  
 Draft/spillage (normal operation)

**Air-conditioning system:**

Refrigerant charge (e.g., superheat, subcooling)  
 HVAC components and cross-cutting  
 diagnostics:  
 Air handler flow rate  
 Thermostat anticipator current  
 Worst case draft/spillage (CAZ)

**Hot-water (water-heating) system:**

Flue gas analysis (steady-state efficiency  
 measurements)  
 CO measurements in flues  
 Draft/spillage (normal operation)  
 Water flow rates (showerheads and faucets)

**Other CO measurements:**

CO measurements in equipment rooms  
 Cooking stove  
 CO measurements in living areas

**Other diagnostics and inspections:**

Refrigerator energy use  
 Exhaust fan air flow rate measurement  
 Infrared scanning (camera)  
 Radon testing  
 Lead testing  
 Mold and mildew testing  
 Moisture context testing

**Other (please specify**

**CLIENT EDUCATION**

1. Which of the following client education approaches did your agency use in Program Year 2008? (Check all that apply)

- Provide literature at time of client intake \_\_\_\_\_
- Provide video, CD or DVD at time of client intake \_\_\_\_\_
- Provide in-person instruction at time of client intake \_\_\_\_\_
- Provide hardware kit at time of client intake \_\_\_\_\_
- Provide literature at time of audit \_\_\_\_\_
- Provide video, CD or DVD at time of audit \_\_\_\_\_
- Provide in-person instruction at time of audit \_\_\_\_\_
- Provide hardware kit at time of audit \_\_\_\_\_
- Provide literature at time of weatherization \_\_\_\_\_
- Provide video, CD or DVD at time of weatherization \_\_\_\_\_
- Provide in-person instruction at time of weatherization \_\_\_\_\_
- Provide hardware kit at time of weatherization \_\_\_\_\_
- Provide literature at separate client education visit \_\_\_\_\_
- Provide video, CD or DVD at separate client education visit \_\_\_\_\_
- Provide in-person instruction at separate client education visit \_\_\_\_\_
- Provide hardware kit at separate client education visit \_\_\_\_\_
- Provide literature at time of inspection \_\_\_\_\_
- Provide video, CD or DVD at time of inspection \_\_\_\_\_
- Provide in-person instruction at time of inspection \_\_\_\_\_
- Provide hardware kit at time of inspection \_\_\_\_\_
- Group training class \_\_\_\_\_
- Other (please specify) \_\_\_\_\_

2. Which of the following broad topics did your agency cover with clients in Program Year 2008? (Check all that apply)

- Thermostat management \_\_\_\_\_
- HVAC system operation/maintenance \_\_\_\_\_
- Distribution system adjustment and zoning \_\_\_\_\_
- Cooling load reduction \_\_\_\_\_
- Windows \_\_\_\_\_
- Insulation \_\_\_\_\_
- Ventilation \_\_\_\_\_
  
- \_\_\_\_\_
- Mold \_\_\_\_\_
- Refrigerator \_\_\_\_\_
- Hot water use \_\_\_\_\_
- Water heating system operation/maintenance \_\_\_\_\_
- Lighting \_\_\_\_\_
- Laundry \_\_\_\_\_
- Kitchen appliance operation \_\_\_\_\_
- Other baseload electric use \_\_\_\_\_
- Energy Star \_\_\_\_\_
- Safety monitors (e.g., CO monitors, smoke alarm) \_\_\_\_\_
- Energy bills \_\_\_\_\_
- Other (please specify) \_\_\_\_\_

3. Which of the following people provided client education for your agency in Program Year 2008? *Check all that apply.*

- a. In-house manager \_\_\_\_\_
- b. In-house education specialist \_\_\_\_\_
- c. Contractor education specialist \_\_\_\_\_
- d. Intake staff person \_\_\_\_\_
- e. Auditor \_\_\_\_\_
- f. In-house weatherization crew chief \_\_\_\_\_
- g. Contractor weatherization crew chief \_\_\_\_\_
- h. In-house weatherization crew member \_\_\_\_\_
- i. Contractor weatherization crew member \_\_\_\_\_
- j. Inspector \_\_\_\_\_
- k. Other (please specify) \_\_\_\_\_

4. If in-person instruction was provided by your agency in Program Year 2008, who was your preferred target? (Check best answer)

- \_\_\_\_\_ Applicant
- \_\_\_\_\_ Other adult member of household
- \_\_\_\_\_ Child living in household
- \_\_\_\_\_ Adult not living in household
- \_\_\_\_\_ Other (please specify \_\_\_\_\_)

5. If in-person instruction was provided by your agency in Program Year 2008, was it typically provided to a single person or multiple persons? *Check best answer.*
- \_\_\_\_\_ single person  
 \_\_\_\_\_ multiple persons
6. What types of credentials or experience were required of those who provided client education for your agency in Program Year 2008? *Check all that apply.*
- College degree \_\_\_\_\_
  - Technical certification \_\_\_\_\_
  - Extensive experience in performing weatherization work \_\_\_\_\_
  - Extensive experience in supervising weatherization work \_\_\_\_\_
  - Educational background \_\_\_\_\_
  - Other (please specify) \_\_\_\_\_
7. Which of the client education approaches listed below were initiated by your agency in PY 2008 and the two years prior to PY 2008? (Check all that apply)
- Provide literature at time of client intake \_\_\_\_\_
  - Provide video, CD or DVD at time of client intake \_\_\_\_\_
  - Provide in-person instruction at time of client intake \_\_\_\_\_
  - Provide hardware kit at time of client intake \_\_\_\_\_
  - Provide literature at time of audit \_\_\_\_\_
  - Provide video, CD or DVD at time of audit \_\_\_\_\_
  - Provide in-person instruction at time of audit \_\_\_\_\_
  - Provide hardware kit at time of audit \_\_\_\_\_
  - Provide literature at time of weatherization \_\_\_\_\_
  - Provide video, CD or DVD at time of weatherization \_\_\_\_\_
  - Provide in-person instruction at time of weatherization \_\_\_\_\_
  - Provide hardware kit at time of weatherization \_\_\_\_\_
  - Provide literature at separate client education visit \_\_\_\_\_
  - Provide video, CD or DVD at separate client education visit \_\_\_\_\_
  - Provide in-person instruction at separate client education visit \_\_\_\_\_
  - Provide hardware kit at separate client education visit \_\_\_\_\_
  - Provide literature at time of inspection \_\_\_\_\_
  - Provide video, CD or DVD at time of inspection \_\_\_\_\_
  - Provide in-person instruction at time of inspection \_\_\_\_\_
  - Provide hardware kit at time of inspection \_\_\_\_\_
  - Group training class \_\_\_\_\_
  - Other (please specify) \_\_\_\_\_

8. Please indicate the cost, amount of training needed, amount of time needed and effectiveness of the following types of client education approaches relative to each other for PY 2008. Please use the following scale: 1 – very low; 2 – low; 3 – medium; 4 – high; 5 – very high.

	Cost	Training Needed	Time Needed	Effectiveness
<b>Provide literature at time of client intake</b>				
<b>Provide video, CD or DVD at time of client intake</b>				
<b>Provide in-person instruction at time of client intake</b>				
<b>Provide hardware kit at time of client intake</b>				
<b>Provide literature at time of audit</b>				
<b>Provide video, CD or DVD at time of audit</b>				
<b>Provide in-person instruction at time of audit</b>				
<b>Provide hardware kit at time of audit</b>				
<b>Provide literature at time of weatherization</b>				
<b>Provide video, CD or DVD at time of weatherization</b>				
<b>Provide in-person instruction at time of weatherization</b>				
<b>Provide hardware kit at time of weatherization</b>				
<b>Provide literature at separate client education visit</b>				
<b>Provide video, CD or DVD at separate client education visit</b>				
<b>Provide in-person instruction at separate client education visit</b>				
<b>Provide hardware kit at separate client education visit</b>				
<b>Provide literature at time of inspection</b>				
<b>Provide video, CD or DVD at time of inspection</b>				
<b>Provide in-person instruction at time of inspection</b>				
<b>Provide hardware kit at time of inspection</b>				
<b>Group training class</b>				
<b>Other (please specify)</b>				

9. On average, approximately how many minutes were spent in Program Year 2008 on client education in a typical dwelling? \_\_\_\_\_

**TRAINING**

1. On which of the following weatherization topics did agency staff working on your agency’s weatherization efforts receive training in Program Year 2008? *Check all that apply.*

- (1) Diagnostic procedures \_\_\_\_\_
- (2) Insulation \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_
- (3) Space heating, ventilation, air conditioning \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_
- (4) Infiltration measures \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_
- (5) Doors and windows \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_
- (6) Hot water heating \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_
- (7) Baseloads (e.g., lighting, refrigerators) \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_

1a. On which of the following administrative-related topics did agency staff working on your agency’s weatherization efforts receive training in Program Year 2008? *Check all that apply.*

- (1) Management \_\_\_\_\_
- (2) Client education \_\_\_\_\_
- (3) Auditing/estimating \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_
- (4) Monitoring/quality control \_\_\_\_\_
- (5) Financial topics \_\_\_\_\_
- (6) Outreach and communications \_\_\_\_\_
- (7) Other (please specify) \_\_\_\_\_

1b. On which of the following health and safety topics did agency staff working on your agency's weatherization efforts receive training in Program Year 2008? *Check all that apply.*

- Fire safety
- Indoor air quality
- Measures to increase security of housing unit
- Measures to reduce common household hazards
- Mold and mildew
- Lead
- Asbestos
- Vermiculite
- General crew safety
- Other health and safety
- Other (please specify)



2. On which of the following diagnostic procedures did agency staff working on your agency's weatherization efforts receive training in Program Year 2008? *Check all that apply.*

**Pressure diagnostics:**

- Blower door (house air leakage rate) \_\_\_\_\_
- Zonal pressure measurements \_\_\_\_\_
- Room-to-room pressure measurements (distribution balancing) \_\_\_\_\_
- Duct pressure pan measurements \_\_\_\_\_
- Duct blower measurements (duct air leakage rate) \_\_\_\_\_

**Space-heating system:**

- Flue gas analysis (steady-state efficiency measurements) \_\_\_\_\_
- Heat rise measurements \_\_\_\_\_
- CO measurements in flues \_\_\_\_\_
- Draft/spillage (normal operation) \_\_\_\_\_

**Air-conditioning system:**

- Refrigerant charge (e.g., superheat, subcooling) \_\_\_\_\_

**HVAC components and cross-cutting diagnostics:**

- Air handler flow rate \_\_\_\_\_
- Thermostat anticipator current \_\_\_\_\_
- Worst case draft/spillage (CAZ) \_\_\_\_\_

**Hot-water (water-heating) system:**

- Flue gas analysis (steady-state efficiency measurements) \_\_\_\_\_
- CO measurements in flues \_\_\_\_\_
- Draft/spillage (normal operation) \_\_\_\_\_
- Water flow rates (showerheads and faucets) \_\_\_\_\_

**Other CO measurements:**

- CO measurements in equipment rooms \_\_\_\_\_
- Cooking stove \_\_\_\_\_
- CO measurements in living areas \_\_\_\_\_

**Other diagnostics and inspections:**

- Refrigerator energy use \_\_\_\_\_
- Exhaust fan air flow rate measurement \_\_\_\_\_
- Infrared scanning (camera) \_\_\_\_\_
- Radon testing \_\_\_\_\_
- Lead testing \_\_\_\_\_
- Mold and mildew testing \_\_\_\_\_
- Moisture context testing \_\_\_\_\_
- Other (please specify) \_\_\_\_\_

3. How many of your agency's staff were trained at the following events in Program Year 2008?

- \_\_\_\_\_ National Weatherization Program Conference
- \_\_\_\_\_ Affordable Comfort Conference
- \_\_\_\_\_ Other national conference
- \_\_\_\_\_ Regional weatherization conference
- \_\_\_\_\_ Your state's weatherization conference
- \_\_\_\_\_ Some other relevant conference in your state
- \_\_\_\_\_ Weatherization conference given by another state
- \_\_\_\_\_ Some other relevant conference given by another state
- \_\_\_\_\_ Any state or regional training center class
- \_\_\_\_\_ Manufacturer's training school class
- \_\_\_\_\_ Utility training class
- \_\_\_\_\_ Training classes provided by your agency or those agencies you work for
- \_\_\_\_\_ One-time state-sponsored class
- \_\_\_\_\_ Any other class not sponsored by your state (e.g., another state, trade organization)
- \_\_\_\_\_ Visit to an agency you do not work for training
- \_\_\_\_\_ Instruction provided by your state to your individual agency or those agencies you work for
- \_\_\_\_\_ In-person expert visit just to your agency (e.g., peer exchange, consultant)
- \_\_\_\_\_ Web cast
- \_\_\_\_\_ Other (please specify)

4. Which of the following weatherization topics listed below were agency staff first trained on in PY 2008 and two years prior to PY 2008? (Check all that apply)

- (1) Diagnostic procedures \_\_\_\_\_
- (2) Insulation \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_
- (3) Space heating, ventilation, air conditioning \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_
- (4) Infiltration measures \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_
- (5) Doors and windows \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_
- (6) Hot water heating \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_
- (7) Baseloads (e.g., lighting, refrigerators) \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_

4a. Which of the following administrative-related topics listed below were agency staff first trained on in PY 2008 and in the two years prior to PY 2008? If your agency did not receive training on a particular subject, leave that item blank.

- (1) Management \_\_\_\_\_
- (2) Client education \_\_\_\_\_
- (3) Auditing/estimating \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_
- (4) Monitoring/quality control \_\_\_\_\_
- (5) Financial topics \_\_\_\_\_
- (6) Outreach and communications \_\_\_\_\_
- (7) Other (please specify) \_\_\_\_\_

4b. Which of the following health and safety topics listed below were agency staff first trained on in PY 2008 and in the two years prior to PY 2008? (Check all that apply)

- Fire safety
- Indoor air quality
- Measures to increase security of housing unit
- Measures to reduce common household hazards
- Mold and mildew
- Lead
- Asbestos
- Vermiculite
- General crew safety
- Other health and safety
- Other (please specify)

5. On which of the following weatherization topics did your agency provide training to your own in-house staff in Program Year 2008? (Check all that apply)

- (1) Diagnostic procedures
- (2) Insulation 
  - single family dwellings
  - multifamily dwellings
  - mobile homes
- (3) Space heating, ventilation, air conditioning 
  - single family dwellings
  - multifamily dwellings
  - mobile homes
- (4) Infiltration measures 
  - single family dwellings
  - multifamily dwellings
  - mobile homes
- (5) Doors and windows 
  - single family dwellings
  - multifamily dwellings
  - mobile homes
- (6) Hot water heating 
  - single family dwellings
  - multifamily dwellings
  - mobile homes
- (7) Baseloads (e.g., lighting, refrigerators) 
  - single family dwellings
  - multifamily dwellings
  - mobile homes

5a. On which of the following administrative-related topics did your agency provide training to your own in-house staff in Program Year 2008? (Check all that apply)

- (1) Management \_\_\_\_\_
- (2) Client education \_\_\_\_\_
- (3) Auditing/estimating \_\_\_\_\_
  - single family dwellings \_\_\_\_\_
  - multifamily dwellings \_\_\_\_\_
  - mobile homes \_\_\_\_\_
- (4) Monitoring/quality control \_\_\_\_\_
- (5) Financial topics \_\_\_\_\_
- (6) Outreach and communications \_\_\_\_\_
- (7) Other (please specify) \_\_\_\_\_

5b. On which of the following health and safety topics did your agency provide training to your own in-house staff in Program Year 2008? (Check all that apply)

- \_\_\_\_\_ Fire safety
- \_\_\_\_\_ Indoor air quality
- \_\_\_\_\_ Measures to increase security of housing unit
- \_\_\_\_\_ Measures to reduce common household hazards
- \_\_\_\_\_ Mold and mildew
- \_\_\_\_\_ Lead
- \_\_\_\_\_ Asbestos
- \_\_\_\_\_ Vermiculite
- \_\_\_\_\_ General crew safety
- \_\_\_\_\_ Other health and safety
- \_\_\_\_\_ Other (please specify)

6. On which of the following diagnostic procedures did your agency provide training to your staff in Program Year 2008? (Check all that apply)

**Pressure diagnostics:**

- Blower door (house air leakage rate) \_\_\_\_\_
- Zonal pressure measurements \_\_\_\_\_
- Room-to-room pressure measurements (distribution balancing) \_\_\_\_\_
- Duct pressure pan measurements \_\_\_\_\_
- Duct blower measurements (duct air leakage rate) \_\_\_\_\_

**Space-heating system:**

- Flue gas analysis (steady-state efficiency measurements) \_\_\_\_\_
- Heat rise measurements \_\_\_\_\_
- CO measurements in flues \_\_\_\_\_
- Draft/spillage (normal operation) \_\_\_\_\_

**Air-conditioning system:**

- Refrigerant charge (e.g., superheat, subcooling) \_\_\_\_\_

**HVAC components and cross-cutting diagnostics:**

- Air handler flow rate \_\_\_\_\_
- Thermostat anticipator current \_\_\_\_\_
- Worst case draft/spillage (CAZ) \_\_\_\_\_

**Hot-water (water-heating) system:**

- Flue gas analysis (steady-state efficiency measurements) \_\_\_\_\_
- CO measurements in flues \_\_\_\_\_
- Draft/spillage (normal operation) \_\_\_\_\_
- Water flow rates (showerheads and faucets) \_\_\_\_\_

**Other CO measurements:**

- CO measurements in equipment rooms \_\_\_\_\_
- Cooking stove \_\_\_\_\_
- CO measurements in living areas \_\_\_\_\_

**Other diagnostics and inspections:**

- Refrigerator energy use \_\_\_\_\_
- Exhaust fan air flow rate measurement \_\_\_\_\_
- Infrared scanning (camera) \_\_\_\_\_
- Radon testing \_\_\_\_\_
- Lead testing \_\_\_\_\_
- Mold and mildew testing \_\_\_\_\_
- Moisture context testing \_\_\_\_\_
- Other (please specify) \_\_\_\_\_

7. For each broad subject listed in the left-most column of the following table, put a check mark in the appropriate cell(s) to indicate which training method(s) you believe were most effective for imparting key skills and information in that area to your agency's in-house or contractor weatherization staff in PY 2008:

	Conferences	Primarily Field training	Primarily Classroom training	Agency visits	Web casts	Other (specify)
<b>Subject</b>						
Management						
Weatherization skills and methods						
Auditing/ Estimating						
Monitoring/ quality control						
Financial topics						
Outreach and communications						
Health and safety						
Diagnostic procedures						
Procedures for selecting weatherization measures						
Client education						
Other (specify)						

8. For each broad subject listed in the left-most column of the following table, please indicate the quality of training received in Program Year 2008 at the training venues listed in the column headings. Please leave cells blank were your agency did not receive training during this period of time. Please use the following scale: 1-very low; 2 - low; 3-medium; 4- high; 5-very high

	National Weatherization Program Conference	Affordable Comfort Conference	Regional Weatherization Conference	State Weatherization Conference	State/Regional Training Center	Training Provided by Your Own Agency
<b>Subject</b>						
Management						
Weatherization skills and methods						
Auditing/Estimating						
Monitoring/quality control						
Financial topics						
Outreach and communications						
Health and safety						
Diagnostic procedures						
Procedures for selecting weatherization measures						
Client education						
Other (specify)						



9. For those staff working in your agency who needed to have knowledge about the following list of weatherization topics in PY 2008, how well trained were they in each area in PY 2008? Please use the following scale: 1– not at all well trained; 2 – not well trained; 3 – moderately well trained; 4 –well trained; 5 – very well trained; 6 – not applicable *Circle best answer.*

(1) Diagnostic procedures	1	2	3	4	5	6
(2) Insulation						
-- single family dwellings	1	2	3	4	5	6
-- multifamily dwellings	1	2	3	4	5	6
-- mobile homes	1	2	3	4	5	6
(3) Space heating, ventilation, air conditioning						
-- single family dwellings	1	2	3	4	5	6
-- multifamily dwellings	1	2	3	4	5	6
-- mobile homes	1	2	3	4	5	6
(4) Infiltration measures						
-- single family dwellings	1	2	3	4	5	6
-- multifamily dwellings	1	2	3	4	5	6
-- mobile homes	1	2	3	4	5	6
(5) Doors and windows						
-- single family dwellings	1	2	3	4	5	6
-- multifamily dwellings	1	2	3	4	5	6
-- mobile homes	1	2	3	4	5	6
(6) Hot water heating						
-- single family dwellings	1	2	3	4	5	6
-- multifamily dwellings	1	2	3	4	5	6
-- mobile homes	1	2	3	4	5	6
(7) Baseloads (e.g., lighting, refrigerators)						
-- single family dwellings	1	2	3	4	5	6
-- multifamily dwellings	1	2	3	4	5	6
-- mobile homes	1	2	3	4	5	6

9a. For those staff working in your agency who needed to have knowledge about the following list of administrative-related topics, how well trained were they in each area in PY 2008? Please use the following scale: 1– not at all well trained; 2 – not well trained; 3 – moderately well trained; 4 –well trained; 5 – very well trained; 6 – not applicable *Circle best answer.*

(1) Management	1	2	3	4	5	6
(2) Client education	1	2	3	4	5	6
(3) Auditing/estimating						
-- single family dwellings	1	2	3	4	5	6
-- multifamily dwellings	1	2	3	4	5	6
-- mobile homes	1	2	3	4	5	6
(4) Monitoring/quality control	1	2	3	4	5	6
(5) Financial topics	1	2	3	4	5	6
(6) Outreach and communications	1	2	3	4	5	6
(7) Other (please specify)	1	2	3	4	5	6

9b. For those staff working in your agency who needed to have knowledge about the following list of health and safety topics, how well trained were they in each area in PY 2008? Please use the following scale: 1– not at all well trained; 2 – not well trained; 3 – moderately well trained; 4 –well trained; 5 – very well trained; 6 – not applicable *Circle best answer.*

(1) Fire safety	1	2	3	4	5	6
(2) Indoor air quality	1	2	3	4	5	6
(3) Measures to increase security of housing unit	1	2	3	4	5	6
(4) Measures to reduce common household hazards	1	2	3	4	5	6
(5) Mold and mildew	1	2	3	4	5	6
(6) Lead	1	2	3	4	5	6
(7) Asbestos	1	2	3	4	5	6
(8) Vermiculite	1	2	3	4	5	6
(9) General crew safety	1	2	3	4	5	6
(10) Other health and safety	1	2	3	4	5	6
(11) Other (please specify	1	2	3	4	5	6

10. For those staff working in your agency who needed to have knowledge about the following list of diagnostic topics, how well trained were they in each area in PY 2008? Please use the following scale: 1– not at all well trained; 2 – not well trained; 3 – moderately well trained; 4 – well trained; 5 – very well trained; 6 – not applicable *Circle best answer.*

**Pressure diagnostics:**

- Blower door (house air leakage rate) 1 2 3 4 5 6
- Zonal pressure measurements 1 2 3 4 5 6
- Room-to-room pressure measurements 1 2 3 4 5 6
- Duct pressure pan measurements 1 2 3 4 5 6
- Duct blower measurements (duct air leakage rate) 1 2 3 4 5 6

**Space-heating system:**

- Flue gas analysis (steady-state efficiency measurements) 1 2 3 4 5 6
- Heat rise measurements 1 2 3 4 5 6
- CO measurements in flues 1 2 3 4 5 6
- Draft/spillage (normal operation) 1 2 3 4 5 6

**Air-conditioning system:**

- Refrigerant charge (e.g., superheat, subcooling) 1 2 3 4 5 6

**HVAC components and cross-cutting diagnostics:**

- Air handler flow rate 1 2 3 4 5 6
- Thermostat anticipator current 1 2 3 4 5 6
- Worst case draft/spillage (CAZ) 1 2 3 4 5 6

**Hot-water (water-heating) system:**

- Flue gas analysis (steady-state efficiency measurements) 1 2 3 4 5 6
- CO measurements in flues 1 2 3 4 5 6
- Draft/spillage (normal operation) 1 2 3 4 5 6
- Water flow rates (showerheads and faucets) 1 2 3 4 5 6

**Other CO measurements:**

- CO measurements in equipment rooms 1 2 3 4 5 6
- Cooking stove 1 2 3 4 5 6
- CO measurements in living areas 1 2 3 4 5 6

**Other diagnostics and inspections:**

- Refrigerator energy use 1 2 3 4 5 6
- Exhaust fan air flow rate measurement 1 2 3 4 5 6
- Infrared scanning (camera) 1 2 3 4 5 6
- Radon testing 1 2 3 4 5 6
- Lead testing 1 2 3 4 5 6
- Mold and mildew testing 1 2 3 4 5 6
- Moisture context testing 1 2 3 4 5 6
- Other (please specify) \_\_\_\_\_ 1 2 3 4 5 6

11. Overall, how well trained were your agency's weatherization crews in PY 2008? (Check best answer)

- Very well trained
- Well trained
- Neither well nor poorly trained
- Poorly trained
- Very poorly trained

12. What were the barriers that prevented your crews from receiving all the training they need? (Check all that apply)

- Lack of training funds
- Cannot take crews out of the field long enough for training
- Training not available at the right times
- Training not available at the right places
- Available training is poor in quality

### INSPECTION

1. Which of the following types of post-weatherization quality control inspection did your agency perform on your weatherized dwelling units in Program Year 2008? *Check all that apply.*

- Visual inspection of installed measures
- Verification of insulation depths/quantities
- Verification of operation of measures installed
- Assessment of quality of measures installed
- Identification of needed measures that were not installed
- Blower door test
- Heating system efficiency test (flue gas analysis)
- Draft/spillage tests of heating systems
- Carbon monoxide (CO) monitoring
- Infrared scanning
- Identification of unresolved health and safety issues
- Discussion with occupants
- Other (specify) \_\_\_\_\_

2. Which of the following post-weatherization quality and control inspection topics listed below were agency staff first trained on in PY 2008 and in the two years prior to PY 2008? If your agency does not use a particular approach, leave that item blank. Check all that apply.

- Visual inspection of installed measures \_\_\_\_\_
- Verification of insulation depths/quantities \_\_\_\_\_
- Verification of operation of measures installed \_\_\_\_\_
- Assessment of quality of measures installed \_\_\_\_\_
- Identification of needed measures that were not installed \_\_\_\_\_
- Blower door test \_\_\_\_\_
- Other diagnostic tests \_\_\_\_\_
- Identification of unresolved health and safety issues \_\_\_\_\_
- Discussion with occupants \_\_\_\_\_
- Other (specify) \_\_\_\_\_

3. Please indicate the cost, amount of training needed, amount of time needed and effectiveness of the following types of post-weatherization quality control inspection procedures relative to each other for PY 2008. Please use the following scale: 1 – very low; 2 – low; 3 – medium; 4 – high; 5 – very high.

	Cost	Training Needed	Time Neede d	Effectivenes s
<b>Visual inspection of installed measures</b>				
<b>Verification of insulation depths/quantities</b>				
<b>Verification of operation of measures installed</b>				
<b>Assessment of quality of measures installed</b>				
<b>Identification of needed measures that were not installed</b>				
<b>Blower door test</b>				
<b>Other diagnostic tests</b>				
<b>Identification of unresolved health and safety issues</b>				
<b>Discussion with occupants</b>				
<b>Other (please specify)</b>				

4. Approximately how many hours did it take to perform a typical post-weatherization quality control inspection in Program Year 2008, by the major components listed below?

- Scheduling \_\_\_\_\_
- Travel \_\_\_\_\_
- On-site work \_\_\_\_\_
- Post-inspection analysis and write-up \_\_\_\_\_
- Other \_\_\_\_\_
- TOTAL of all components \_\_\_\_\_

5. Which of the following parties were involved in performing your agency's post-weatherization quality control inspections in Program Year 2008? *Check all that apply.*
- In-house manager \_\_\_\_\_
  - In-house inspection specialist \_\_\_\_\_
  - Contractor inspection specialist \_\_\_\_\_
  - In-house weatherization crew chief \_\_\_\_\_
  - Contractor weatherization crew chief \_\_\_\_\_
  - In-house weatherization crew member \_\_\_\_\_
  - Contractor weatherization crew member \_\_\_\_\_
  - Other (please specify) \_\_\_\_\_

5a. Which party was primarily responsible for post-weatherization quality control inspections? Check best answer.

- In-house manager \_\_\_\_\_
- In-house inspection specialist \_\_\_\_\_
- Contractor inspection specialist \_\_\_\_\_
- In-house weatherization crew chief \_\_\_\_\_
- Contractor weatherization crew chief \_\_\_\_\_
- In-house weatherization crew member \_\_\_\_\_
- Contractor weatherization crew member \_\_\_\_\_
- Other (please specify) \_\_\_\_\_

6. What types of credentials or experience did your agency's post-weatherization quality control inspectors have in Program Year 2008? *Check all that apply.*
- Technical certification \_\_\_\_\_
  - Extensive experience performing pre-weatherization audits \_\_\_\_\_
  - Extensive experience performing weatherization work \_\_\_\_\_
  - Extensive experience supervising weatherization work \_\_\_\_\_
  - Construction experience \_\_\_\_\_
  - Other (please specify) \_\_\_\_\_

7. Please indicate the level of experience for the agency staff engaged post-weatherization quality control inspections in Program Year 2008 in each of the following functional areas:

	<b>Very High</b>	<b>High</b>	<b>Average</b>	<b>Low</b>	<b>Very Low</b>
Performing weatherization work					
Supervising weatherization work					
Working in construction					
Performing pre-weatherization audits					

8. For those dwelling units for which post-weatherization quality control inspections were performed by your agency in Program Year 2008, typically how many days after weatherization completion did the initial inspection take place? \_\_\_\_\_
9. In those cases where a Program Year 2008 post-weatherization quality control inspection revealed a problem with the job performed, what action was most commonly taken in response to that finding? *Check one.*
- Sent original crew or contractor back to correct problem \_\_\_\_\_
  - Sent different crew or contractor to correct problem \_\_\_\_\_
  - Sent crew supervisor to correct problem \_\_\_\_\_
  - Sent someone from state office to correct problem \_\_\_\_\_
  - No action taken \_\_\_\_\_
  - Other (please specify) \_\_\_\_\_
10. What *other* actions were taken in Program Year 2008 in response to the discovery of a problem with the weatherization job performed? *Check all that apply.*
- Sent original crew or contractor back to correct problem \_\_\_\_\_
  - Sent different crew or contractor to correct problem \_\_\_\_\_
  - Sent crew supervisor to correct problem \_\_\_\_\_
  - Sent someone from state office to correct problem \_\_\_\_\_
  - No action taken \_\_\_\_\_
  - Other (please specify) \_\_\_\_\_
11. In Program Year 2008, how many of the dwelling units weatherized by your agency required some additional work as a result of the findings of your post-weatherization quality control inspections? \_\_\_\_\_
- 11a. Of those requiring some additional work, how many had work done that probably resulted in more energy savings? \_\_\_\_\_
12. What were the three most common problems found in the dwelling units inspected by your agency in Program Year 2008?
- 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
13. In Program Year 2008, did your agency use findings from your post-weatherization quality control inspections to provide feedback to your in-house or contractor crews on workmanship or related issues? \_\_\_\_\_

14. To what extent does post-weatherization quality control inspection affect the quality of future weatherization work?

- (1) No extent
- (2) Little extent
- (3) Moderate extent
- (4) Substantial extent
- (5) Very substantial extent

15. Did the observation of problems with the quality of weatherization work lead to changes in weatherization training for your staff?

- (1) Yes
- (2) No

15a. If Yes, what changes were made? \_\_\_\_\_

16. Did your agency observe weatherization training sessions to help identify potential problem areas for inspecting in the field (e.g., with respect to installation of measures that trainees seem to have trouble understanding)?

- (1) Yes
- (2) No

16a. If Yes, briefly describe how your in-field inspection activities were affected by your training session observations.

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