OMB Control Number: **XXXX-XXXX**
Expiration Date: MM/DD/YYYY

DF3a: SHORT FORM BUILDING INFORMATION SURVEY

Thank you for your prompt response to this data request which is part of the ARRA-period evaluation of the Weatherization Assistance Program. Evaluation results will provide essential feedback to the weatherization community and inform policymakers about the program's effects on clients' energy consumption, cost savings, and non-energy benefits.

This survey collects detailed information about multifamily buildings weatherized by your agency in Program Year 2010. The information you supply will be used with billing history data to better understand energy savings attributable to the Weatherization Assistance Program under ARRA.

Please use this form (DF3) to provide information about small or large multifamily buildings in which improvements were made to the building shell, common areas, central HVAC or domestic hot water systems. The Housing Unit Information Survey (DF2) should be used to document information on weatherized single family detached and attached houses, mobile homes, or individual units within multifamily buildings. Refer to the definitions of each building type provided at the end of the survey because these definitions are slightly different than those commonly used within the Weatherization Assistance Program.

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.

Thank you in advance for completing this survey.

Form completed by: _____ Date: _____

IDENTIFICATION

[Q1-6 will be pre-completed by the evaluation team]

1. Agency name: _____

2. State: _____

3. Building ID number: _____

4. Building name: _____

5. Site address: _____

6. City: _____

WEATHERIZATION INFORMATION

Weatherization dates (not audit or inspection dates):

7a. Started: _____ _____ _____

7b. Completed:_____ _____ _____

(month) (day) (year)

The start date is the first date that weatherization improvements were made to the building. The weatherization start date is not the date the audit or home assessment was conducted UNLESS energy efficiency improvements were made at the time of the audit. Client education and low-cost measures such as light bulbs and showerheads ARE considered energy efficiency improvements, and if any of those are implemented at the time of the audit, then the start date is the audit date.

The end date is the last date that weatherization improvements were made to the building, including any rework required after agency or state-level post-weatherization inspections. The date of the post-inspection should NOT be used as the weatherization end date unless the post-inspection was conducted on the last day that improvements were made to the building and no rework was required.

BUILDING INFORMATION

11a. Building type – see definitions at end of the survey: ***(check only one)***

- ☐ Small multifamily building (2-4 units and not a single family attached house)
- ☐ Large multifamily building (5 or more units and not a single family attached house)
- ☐ Don't know

14. Number of stories above grade: ***(check only one)***

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5-9
- ☐ 10-19
- ☐ 20 or more
- ☐ Don't know

Please list the number of stories above ground-level. If there are half-stories, round up to the nearest whole number.

15. Year building originally built: ***(check only one)***

- ☐ 2000 or later
- ☐ 1990 to 1999
- ☐ 1980 to 1989
- ☐ 1970 to 1979
- ☐ 1960 to 1969
- ☐ 1950 to 1959
- ☐ 1940 to 1949
- ☐ 1930 to 1939
- ☐ 1920 to 1929
- ☐ 1910 to 1919
- ☐ 1900 to 1909
- ☐ Before 1900
- ☐ Don't know

Heated floor area at the time of weatherization:

16c. Heated floor area: _____ ft² ☐ Don't know

Include the basement or common space only if it is intentionally heated.

If you only know the total square footage of the building, please select "don't know" rather than listing the total square footage.

17. Primary fuel used to heat the building during the winter before weatherization: ***(check only one)***

- ☐ Natural gas
- ☐ Propane/LPG
- ☐ Kerosene (#1 fuel oil)
- ☐ Fuel oil #2
- ☐ Fuel oil #4
- ☐ Fuel oil #6
- ☐ Electricity
- ☐ Steam (purchased from a central distribution system)
- ☐ Hot water (purchased from a central distribution system)
- ☐ Other (specify: _____)
- ☐ Don't know

18. Primary fuel used for water heating before weatherization: ***(check only one)***

- Natural gas
- Propane/LPG
- Electricity
- Other (specify: _____)
- Don't know

19. Type of *primary* space-heating system before weatherization: ***(check only one)***

- ☐ Central (ducted) warm-air furnace (forced-air or gravity, any fuel including electricity)
- ☐ Heat pump
- ☐ Built-in electric units (e.g., electric baseboards, ceiling heat)
- ☐ Steam or hot water system (e.g., floor or baseboard radiators, convectors)
- ☐ Floor, wall, or pipeless (ductless) furnace (e.g., floor or wall furnace)
- ☐ Room/space heater (nonportable)
- ☐ Portable space heater
- ☐ Cooking stove
- ☐ None
- ☐ Don't know

Select "steam or hot water system" for buildings heated with boilers.

20. Was the primary space-heating system a central system? ***(check only one)***

- ☐ Yes, a central system that supplied heat to all or most of the units in the building
- ☐ No, each unit had its own heating system
- ☐ Don't know

21. *Supplemental* fuel(s) used to heat the building during the winter before weatherization: ***(check all that apply)***

- ☐ Natural gas
- ☐ Propane/LPG
- ☐ Kerosene (#1 fuel oil)
- ☐ Fuel oil #2
- ☐ Fuel oil #4
- ☐ Fuel oil #6
- ☐ Electricity
- ☐ Steam (purchased from a central distribution system)
- ☐ Hot water (purchased from a central distribution system)
- ☐ Other (specify: _____)
- ☐ Don't know

22. Type of *operable* air conditioning system present before weatherization: ***(check all that apply)***

- ☐ Central air conditioner/heat pump
- ☐ Window/wall units
- ☐ Evaporative cooling system ("swamp coolers")
- ☐ None
- ☐ Don't know

AUDIT

24. Primary method used to select weatherization measures for this building (excluding health, safety, and repair measures and general heat waste measures): ***(check only one)***

- ☐ Priority list
- ☐ Calculation procedure (e.g., spreadsheet, computerized audit)
- ☐ Other (specify: _____)

DIAGNOSTICS AND INSPECTIONS

Record the diagnostic measurements taken on **THIS** building: ***(fill in all that were taken)***

For diagnostics that were performed multiple times, please provide the measurements that are closest to the pre-weatherization and post-weatherization conditions of the building.

Diagnostic measurement	Pre-weatherization	Post weatherization
Building air leakage (blower door measurement):[1]		
33a. Average air leakage rate per unit based on unit-level testing	cfm	cfm
33b. Total air leakage rate of the building based on whole building test	cfm	cfm
33c. House WRT outside pressure difference[2]	Pa	Pa

MEASURES INSTALLED

Please check the appropriate boxes in the "installed" column to indicate which measures were installed in the building during the weatherization process.

If a measure was installed in ANY of the housing units in the building please check the appropriate category.

Measure	
	Installed?
Air sealing work:	
37b. House air sealing emphasizing bypasses (leaks identified by auditor and/or crew **without using a blower door**)	☐
37c. House air sealing emphasizing bypasses (leaks identified by auditor and/or crew **with aid of a blower door**)	☐
37d. Air distribution system (duct) sealing and repair[3]	☐
Insulation:	

[1] Most agencies will report results in "a" or "b," but not both.
[2] Report the pressure differential at which the blower door test was performed. A typical value is 50 Pascals. Do not report baseline pressure (typically less than 5 Pascals).
[3] Check 37d if duct sealing OR duct repair was performed. Check 41e if NEW ductwork was installed. Check 44c if new vents, grills or registers were installed.

Measure	
	Installed?
38a. Attic insulation	☐
If attic insulation was installed, please provide quantity: 38b. _____square feet 38c. _____pounds 38d. What was the R value of attic insulation prior to weatherization? _____ (Leave blank if unknown. Enter 0 if there was no existing insulation.	
38e. Wall insulation	☐
If wall insulation was installed, please provide quantity: 38f. _____square feet 38g. _____pounds	
38h. Floor insulation	☐
38i. Rim or band joist insulation (sill box)	☐
38j. Foundation wall insulation	☐
38k. Duct insulation	☐
Windows:	
39a. New window (justified because cost effective)	☐
39b. New window (justified for reason other than cost effectiveness)	☐
39h. Storm window	☐
Central space heating systems (e.g., furnaces, boilers):[4]	
41a. New heating system (justified because cost effective)	☐
41b. New heating system (justified for reason other than cost effectiveness)	☐
Air-conditioning systems:	
42a. New air conditioner (justified because cost effective)	☐
42b. New air conditioner (justified for reason other than cost effectiveness)	☐

[4] Include central heating systems installed through programs other than WAP, such as emergency heating system replacements funded by LIHEAP.

Measure	
	Installed?
HVAC accessories:	
44a. New programmable (setback) thermostat	☐
Water-heating system:	
45a. New water heater (justified because cost effective)	☐
45b. New water heater (justified for reason other than cost effectiveness)	☐
Other baseloads:	
46d. Refrigerator (justified because cost effective)	☐
46e. Refrigerator (justified for reason other than cost effectiveness)	☐

60. If a new space-heating system was installed, indicate the primary fuel used to heat the building during the winter after weatherization: ***(check only one)***

- ☐ Natural gas
- ☐ Propane/LPG
- ☐ Kerosene (#1 fuel oil)
- ☐ Fuel oil #2
- ☐ Fuel oil #4
- ☐ Fuel oil #6
- ☐ Electricity
- ☐ Steam (purchased from a central distribution system)
- ☐ Hot water (purchased from a central distribution system)
- ☐ Other (specify: _____)
- ☐ Don't know

61. If a new space-heating system was installed, indicate the type of *primary* space-heating system after weatherization: ***(check only one)***

- ☐ Central (ducted) warm-air furnace (forced-air or gravity, any fuel including electricity)
- ☐ Heat pump
- ☐ Built-in electric units (e.g., electric baseboards, ceiling heat)
- ☐ Steam or hot water system (e.g., floor or baseboard radiators, convectors)
- ☐ Floor, wall, or pipeless (ductless) furnace (e.g., floor or wall furnace)
- ☐ Room/space heater (nonportable)
- ☐ Portable space heater
- ☐ Cooking stove
- ☐ None
- ☐ Don't know
- ☐ Not applicable

Select "steam or hot water system" for buildings heated with boilers.

COSTS

67. Provide the total cost of weatherizing this multifamily building. Include **ALL** sources of funding. Do **NOT** include program management costs (e.g., intake, audits, final inspections or program administration) or installation-related overhead costs (e.g., vehicles, equipment and training).

71. Divide the total costs spent on this building (from Question 67) into the categories below.

71a. Cost effective energy-related measures (SIR > 1.0)	
71b. Health and safety and other non-cost effective measures	
71c. Incidental repairs	
71d. Enter total job cost if above categories are not known	
70e. Total (should match Q67 total)	[Auto-tally]

72. Divide the total costs spent on this housing unit (from Question 67) into these funding source categories below.

72a. DOE normal appropriation/formula WAP funds[1]	
72b. DOE Sustainable Energy Resources for Consumers (SERC) funds	
72c. DOE Weatherization Innovation Pilot Program (WIPP) funds	
72d. Non-DOE (leveraged) funds	
72e. Total (should match Q67 total)	[Auto-tally]
[1] This line includes ARRA funds for standard weatherization jobs.	

Energy Assistance Program (LI-EAP) funding should be considered Non-DOE funds if it is tracked separately.

Housing Type Definitions

Single Family Detached – House that provides living space for one family or household, is contained within walls that go from the basement (or the ground floor, if there is no basement) to the roof, and has no walls that are shared (or built in contact) with another household. A manufactured house assembled on site is a single family detached housing unit, not a mobile home.

Single Family Attached – House that provides living space for one household, is contained within walls that go from the basement (or the ground floor, if there is no basement) to the roof, has at least one wall that is shared (or built in contact) with an adjacent household, and has an independent outside entrance. An attached house does not have any other households living above or below, and does not share basement or attic space with other housing units. Also, an attached house does not share a heating or cooling system with any other housing units. Examples include row houses, townhouses, condominiums and side-by-side duplexes that do not have shared attics, basements or HVAC equipment.

Small Multifamily (2-4 units) – Building with two to four housing units (i.e., building that is divided into living quarters for two, three, or four families or households) in which one household lives above or beside another and does not meet the single family attached house definition. Includes houses originally intended for occupancy by one family (or for some other use) that have since been converted to separate dwellings for two to four families. Typical arrangements in these types of living quarters are separate apartments downstairs and upstairs or one apartment on each of three or four floors.

Large multifamily (5 or More Units per Building) – Building with five or more housing units (i.e., building that contains living quarters for five or more families or households) that does not meet the single family attached house definition.

Mobile Home – Home that is built on a movable chassis, is moved to the site, and may be placed on a permanent or temporary foundation. If rooms are added to the structure, it is considered a mobile home if the added floor area is less than the mobile home's original floor area; otherwise, it is a single family detached house. A manufactured house assembled on site is a single family detached house, not a mobile home.

Shelter - Structure whose principal purpose is to house individuals on a temporary basis who may or may not be related to one another and who are not living in nursing homes, prisons, or similar institutional care facilities.