National Safe and Healthy Housing Coalition

Provisional Steering Committee Meeting Minutes
Dec. 1, 2009 – Washington DC

See www.nchh.org/Policy/National-Safe-and-Healthy-Housing-Coalition/Coalition-Meetings.aspx for all meeting materials.

Energy Programs Consortium Presentation

Lynn Snyder represents the Consortium, made up of the Natl. Energy Assistance Directors Assn. (LIHEAP program directors), Natl. Assn. of State Energy Officials (state energy offices), Natl. Assn. of Regulatory Utility Commissioners (public utility commissioners), and the Natl. Assn. for State Community Services Programs (state weatherization directors). She presented an overview of the Low Income Home Energy Assistance Program and summarized the main health impacts of insufficient heating/cooling (e.g., CO poisoning, trade-offs with food and drug budgets), safety hazards (e.g., heating home with stove or oven) and poor weatherization (e.g., mold/mildew).

Have formed the Working Group on Home Energy and Health, with AARP, NCHH, CDC, APHA, state Medicaid directors, Children's Healthwatch, and others, and cited several projects, such as DC Reach Healthy at Home, funded by the DC Energy Office, that uses flu shot clinics to educate low-income clients on the many available energy programs. A Medical Legal Partnership Energy Clinic has M.D.'s certify the frailty of occupants to bar the utility from shutting them off in the winter.

Challenges of getting weatherization grantees to include healthy homes practices in their energy retrofits include:

- they are overwhelmed with Recovery Act funds
- regulatory limitations
- culture focused only on energy efficiency

But consortium looking to bring interested states together to create a Healthy Weatherization Program that would promote retrofit practices that don't negatively impact on occupant health, such as ensuring adequate ventilation and controlling moisture/water leaks.

Environmental Defense Fund Presentation on TSCA Reform

Richard Dennison, Ph.D., with EDF presented on planned reform of the Toxic Substances Control Act/TSCA Reform, which includes the Agency for Toxic Substances and Disease Registry housed at CDC. TSCA very limited in giving EPA means to control chemical hazards. Only 200 of 80,000 chemicals have even been tested for safety. Law makes it very hard for EPA to act. In 33 years, EPA has regulated only five chemicals under TSCA.

The Kid-Safe Chemicals Act of 2008 (S. 3040) introduced. First major TSCA reform. Puts burden on industry to show products are safe. Requires basic info be revealed on chemicals. Expands toxic chemical Right-to-Know database. Gives EPA more power to regulate dangerous chemicals.

A Safer Chemicals/Healthy Families Coalition has formed with about 100 enviro. health, patient and parent groups to advocate for bill and changes in federal TSCA to better control health hazards from all

types of chemicals (e.g., in furniture, cleaning agents, building materials). BPA, formaldehyde in FEMA trailers, Chinese drywall, and many other problems have prompted the chemical industry (American Chemistry Council) to dialogue with the coalition on these proposed changes to TSCA.

Coalition working with Senators Lautenberg (D. NJ, chair of key subcommittee) and Boxer (D., CA, chair of Senate Environment Committee) to reintroduce bill in stronger form. (Also working with Reps. Waxman and Rush, their House counterparts, on same thing.

Minutes of Previous Meeting

October 21 Steering Committee meeting minutes approved without amendment.

Federal Legislation Work Group

Lars Peterson with Rebuilding Together Legislative Work Group's progress report.

Securing Senate Republican Cosponsor of Sen. Jack Reed's Safe and Healthy Housing Bill

- **Sens. Bond, Snowe or Collins:** We have had a hard time getting responses back from Snowe, Collins and Bond's staff on whether their bosses will cosponsor the Reed vision bill. We've spoke to the LAs for all three.
- **Mike Johanns (R., Neb.):** Johanns cosponsored Reed's Healthy Housing Interagency Council bill, so we're also targeting him. The Omaha Healthy Kids Alliance has signed our sign-on letter supporting the bill. so that should give us a reason to talk to Johanns
- **Bond:** Melanie w/ Children's Health Forum and Patricia w/ Home Safety Council have colleagues in St. Louis they will contact to urge them to sign onto Reed letter to help us persuade Bond to cosponsor.
- **Snowe/Collins:** Rebecca has spoken with the Maine Indoor Air Quality Alliance (Kristy Crocker and other local groups
- **Sign-on Letter:** All 30 or so Coalition members (including 15 Steering Committee members) have reviewed the sign-on letter. About a dozen groups have now signed on.
- **New Reed Staff:** Grace, Reed's Legislative Asst., has left. Kara Stein, who used to work this issue, has now resumed working on it.
- **Next Steps:** Melanie will set up a meeting w/ Johanns' LA

Securing House Republican Cosponsor for Rep. Robert Brady's Two Companion Bills: Jane Malone with Alliance spoke w/ Brady's LA, and gave her our draft sign-on letter as a model for Brady to use for his Dear Colleague. Brady will talk w/ Maxine Waters' staff (who chairs the key House Subcomm.) about the bill, possibly a meeting with the Coalition, and arranging a hearing. Our future sign-on letter will concentrate on the three committees with jurisdiction: Energy & Commerce, Financial Services and Agriculture.

Sign on Letters to Support CDC Ctr. for Environmental Health/ASTDR HH and EPA Lead Hazard Office Appropriations Drafted, EPA Letter Sent

- Senate Approps agreed to our request to add $1 million to funding for EPA Lead Office.
- We have several signers but are holding the CDC letter until it's timely, but will be meeting with the OMB CDC Analyst.

Supporting HUD Office of HH & Lead Hazard Control's FY 11 Budget/Approps: Holding off on letter until it's timely. In meantime, Federal Regulatory Work Group is meeting with the OMB HUD Analyst Dec. 1 to advocate for HUD OHHLHC approps.

Sen. Landrieu's Local Code Administration Incentive Grants Bill, S. 970: Passed the house. Landrieu introduced it with 8 cosponsors, but only one Republican (Martinez/Fla.) who is retiring. Rebecca will circulate a memo and sign-on .

Lead Abatement/Lead Safety Tax Credit Bill (S. 1245)**:** Sheldon Whitehouse (D. RI) has introduced it with Snowe. Provides tax credits for homeowners below a set income to remediate lead paint in their homes. AFHH has been promoting it.

Livable Communities Act (S. 1916/Dodd)**:** Would authorize $4 billion for making communities more livable, healthy, walkable, transit friendly, etc. Rebecca will invite a speaker to February meeting to brief us on it.

Federal Regulatory/Administrative Work Group

Patrick MacRoy delivered the group's progress report:

Meeting with HUD Senior Mgmt.: Tried to get a meeting with the HUD Deputy Chief of Staff to explain the coalition's goals and advocate for healthy housing as a HUD priority. We weren't successful so we are changing our target to meet with Ron Sims, Deputy Secretary, who has HH as an issue in his portfolio. Council of Large Public Housing Authorities has a colleague who is an Asst. Secretary at HUD and can help.

Meetings with OMB: The working group meeting with OMB HUD analyst Dec. 1 to advocate for HUD's Office of Healthy Housing & Lead Hazard Control's fy11 budget. Still trying to get meeting with CDC Analyst re CDC Appropriations letter

National Collaboration/Partnership-Building Work Group

Melanie Hudson (Children's Health Forum) reported the following progress:

Coalition Guidelines: Finalized and on coalition website.

Prospective Member Kit: We now have a model invitation letter to be sent to prospective new members, with a response/sign-up form, summary of the Coalition's Mission and Priorities, and a one-pager on Why Focus on Safe & Healthy Housing (copies distributed). The 1-pager provides Coalition members with bullet points for a thirty-second "elevator speech" on why groups should join us and can assist in meetings with Hill and Administrative staff or explaining the goals of the Coalition to others who may have interest.

Current and Target Membership List: Done. Work Group has compiled a preliminary list of groups to target for inclusion in the coalition, starting with the May 7th Summit attendees (distributed). Can join as an individual (e.g., a federal employee) or an organization. Rebecca asked all groups to complete the form so we have a record of everyone's formal membership.

Full Coalition and Meeting: We now have 58 formal members. Full group meeting being planned for April 2010.

Steering Committee In-Person Attendees:
Alliance for Healthy Homes: Patrick MacRoy and Jane Malone
Children's Health Forum: Melanie Hudson and Olivia Morgan
Enterprise Community Partners: Lynne Snyder
Natl. Ctr. for Healthy Housing: Rebecca Morley, Tom Neltner, John Giglio, Michelle Harvey
Robert Wood Johnson Foundation: Wilhelmine Miller
Rebuilding Together: Greg Secord
U.S. Green Bldg. Council: Casius Pealer
Rebuilding Together: Lars Peterson

Other Coalition Member In-Person Attendees:
Council of Large Public Housing Authorities: Todd Jean Pierre and Patricia Lewis
Indoor Air Quality Assn: Faranza Shakir
International Code Council: Justin Wiley

Invited Guests: Lynn Snyder, Natl. Assn. of Energy Assistance Directors, and Richard Denison, Environmental Defense Fund

NATIONAL ENERGY ASSISTANCE DIRECTORS' ASSOCIATION

2008 NATIONAL ENERGY ASSISTANCE SURVEY

Final Report
April 2009

The National Energy Assistance Directors' Association

The National Energy Assistance Directors' Association (NEADA) represents the state directors of the Low Income Home Energy Assistance Program (LIHEAP). NEADA is a nonprofit educational and policy organization based in Washington, DC. Its mission is to support the delivery of LIHEAP services by state agencies and programs.

This report has been prepared by APPRISE for NEADA under Grant No. 90XP0249 through the Administration for Children and Families (ACF), U.S. Department of Health and Human Services. The statements, findings, conclusions, and recommendations do not necessarily reflect the views of ACF.

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The study would not have been possible without the participation of the directors and staff at the state LIHEAP offices in:

California	Iowa	Montana	New York
Delaware	Maine	North Carolina	Ohio
Georgia	Minnesota	New Mexico	Pennsylvania

Mark Wolfe
Executive Director
National Energy Assistance Directors' Association

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Executive Summary

The National Energy Assistance Directors' Association (NEADA), representing the state LIHEAP directors, received a grant through the Administration for Children and Families (ACF), U.S. Department of Health and Human Services to update the information about LIHEAP-recipient households that was collected in the 2003 NEA Survey and the 2005 NEA Survey. This survey documented changes in the affordability of energy bills, the need for LIHEAP, and the choices that low-income households make when faced with unaffordable energy bills.

The 2008 Survey included a subsample of 12 of the 20 states that were included in the 2003 and 2005 Surveys. Stratified samples of fiscal year 2008 LIHEAP recipients were chosen from each of the 12 state LIHEAP databases. Due to budget limitations, the full set of 20 original states from the 2003 survey could not be included in this study. However, a subsample of states was chosen to represent the geographic diversity and weather variability across the county.

This report presents the findings from the 2008 NEA Survey and provides comparisons to the 2003 NEA Survey. The survey and report were prepared for NEADA by APPRISE.

LIHEAP Recipient Households

The study confirmed that LIHEAP recipient households are likely to be vulnerable to temperature extremes.

- 43 percent had a senior in the household aged 60 or older.
- 50 percent had a disabled household member.
- 40 percent had a child 18 or younger.
- 93 percent had at least one vulnerable household member.

The study also provided information on challenges that these households faced.

- 29 percent were unemployed at some point during the previous year.
- 30 percent did not have health insurance for everyone in the household.
- 70 percent had a serious medical condition.
- 24 percent used medical equipment that requires electricity.
- 31 percent characterized their health condition as fair and 16 percent characterized their health condition as poor.
- 14 percent reported that there was an adult in the household who required help with personal care needs.

Energy Costs

LIHEAP recipients reported that they face high and increasing energy costs.

- 36 percent reported that their energy bills were more than $2,000 in the past year.
- Pre-LIHEAP energy burden averaged 16 percent and post-LIHEAP energy burden averaged 12 percent for these households, compared to 7 percent for all households in the U.S. and 4 percent for non low-income households.[1]

[1] Source: 2006 LIHEAP Notebook.

- 49 percent said that their energy bills were higher than they had been in the previous year and 43 percent said that they were more difficult to pay than in the previous year.
- 75 percent of those who said that it was more difficult to pay their energy bills reported that one of the reasons for the increased difficulty was lower income or loss of employment.

Almost all respondents said that they had taken at least one constructive action to reduce energy costs.

- 85 percent said that they turned down the heat when they went to bed.
- 73 percent said that they wash their clothes in cold water.
- 66 percent said that they use compact fluorescent light bulbs.[2]

The percentage who reported that they had taken these actions increased significantly from the 2003 survey.

Responses to High Energy Costs

Households reported that they took several actions to make ends meet.

- 44 percent closed off part of their home.
- 28 percent kept their home at a temperature that was unsafe or unhealthy.
- 23 percent left their home for part of the day.
- 33 percent used their kitchen stove or oven to provide heat.

Inability to Pay Energy Bills

Many LIHEAP recipients were unable to pay their energy bills.

- 47 percent skipped paying or paid less than their entire home energy bill.
- 37 percent received a notice or threat to disconnect or discontinue their electricity or home heating fuel.
- 12 percent had their electric or natural gas service shut off in the past year due to nonpayment.
- 28 percent were unable to use their main source of heat in the past year because their fuel was shut off, they could not pay for fuel delivery, or their heating system was broken and they could not afford to fix it.
- 17 percent were unable to use their air conditioner in the past year because their electricity was shut off or their air conditioner was broken and they could not afford to fix it.

Housing and Financial Problems

Many LIHEAP recipients had problems paying for housing in the past five years, due at least partly to their energy bills.

- 28 percent did not make their full mortgage or rent payment.
- 4 percent were evicted from their home or apartment.
- 4 percent had a foreclosure on their mortgage.

[2] This is significantly higher than Reid's 2007 national survey for all households that found 50 percent of households had at least one CFL in the home. Source: Reid, Michael. Who's Buying CFLs? Who's Not Buying Them? Findings from a Large-Scale, Nationwide Survey, 2008 ACEEE Summer Study on Energy Efficiency in Buildings Proceedings.

- 11 percent moved in with friends or family.
- 3 percent moved into a shelter or were homeless.

They faced other significant financial problems as well.

- 15 percent got a payday loan in the past five years.
- 3 percent were forced into bankruptcy in the past year.

Medical and Health Problems

Many of the LIHEAP recipients faced significant medical and health problems in the past five years, partly as a result of high energy costs. All of these problems increased significantly since the 2003 survey.

- 32 percent went without food for at least one day.
- 42 percent went without medical or dental care.
- 38 percent did not fill a prescription or took less than the full dose of a prescribed medication.
- 24 percent had someone in the home become sick because the home was too cold.

The Need for LIHEAP

Households reported enormous challenges despite the fact that they received LIHEAP. However, they reported that LIHEAP was extremely important.

- 63 percent of those who did not keep their home at unsafe or unhealthy temperatures said they would have done so if LIHEAP had not been available.
- 59 percent of those who did not have their electricity or home heating fuel discontinued said that they would have if it had not been for LIHEAP.
- 98 percent said that LIHEAP was very or somewhat important in helping them to meet their needs.

It is clear that many of these households will continue to need LIHEAP to meet their energy and other essential needs. 88 percent said that they have or plan to apply for LIHEAP in the next year.

I. Introduction

The National Energy Assistance Directors' Association (NEADA), representing the state LIHEAP directors, received a grant through the Administration for Children and Families (ACF), U.S. Department of Health and Human Services to update the information about LIHEAP-recipient households that was collected in the 2003 NEA Survey and the 2005 NEA Survey. This survey documented changes in the affordability of energy bills, the need for LIHEAP, and the choices that low-income households make when faced with unaffordable energy bills.

The 2008 NEA Survey selected a new sample of 2008 LIHEAP recipients to document changes in the need for LIHEAP and changes in the choices that low-income households make when faced with unaffordable energy bills. This report presents the findings from the 2008 NEA Survey and provides comparisons to the 2003 NEA Surveys. The survey and report were prepared for NEADA by APPRISE.

A. Low Income Home Energy Assistance Program (LIHEAP)

The Low Income Home Energy Assistance Program (LIHEAP) is administered by the U.S. Department of Health and Human Services (HHS). The purpose of LIHEAP is "to assist low-income households, particularly those with the lowest incomes, that pay a high proportion of household income for home energy, primarily in meeting their immediate home energy needs." The LIHEAP statute defines home energy as "a source of heating or cooling in residential dwellings."[3]

Federal dollars for LIHEAP are allocated by the U.S. Department of Health and Human Services to the grantees (i.e., the 50 states, District of Columbia, 128 tribes and tribal organizations, and five insular areas) as a block grant. Program funds are distributed by a formula, which is weighted towards relative cold-weather conditions.

Program funds are disbursed to LIHEAP income-eligible households under programs designed by the individual grantees. Section 2605(b)(2) allows LIHEAP grantees to use two income-related standards in determining household eligibility for LIHEAP assistance:

- Categorical eligibility for households with one or more individuals receiving Temporary Assistance for Needy Families, Supplemental Security Income payments, Food Stamps, or certain needs-tested veterans' and survivors' payments, without regard for household income.

- Income eligibility for households with incomes that do not exceed the greater of an amount equal to 150 percent of the federal poverty level[4], or an amount equal to 60 percent of the state median income. Grantees may target assistance to poorer households by setting lower income eligibility levels. Grantees are prohibited from setting income eligibility levels lower than 110

[3] The statutory intent of LIHEAP is to reduce home heating and cooling costs for low-income households. However, information on total residential energy costs is more accessible and more apparent to LIHEAP-recipient respondents. Moreover, any reduction in home heating and cooling costs leads to a direct reduction in total residential energy costs. Therefore, this report addresses total residential energy costs.

[4] Most states use the 150 percent of federal poverty level maximum as the guideline. 150 percent of federal poverty in FY2008 is $5,600 for a single person and $31,800 for a family of four.

percent of the poverty level. Eligibility priority may be given to households with high energy burden or need.[5]

B. 2008 National Energy Assistance Survey

The 2008 NEA Survey aimed to update the information about LIHEAP-recipient households that was collected in the 2003 and 2005 NEA Surveys. Stratified samples of 2008 LIHEAP recipients were selected to collect new information about the consequences of high energy bills for low-income households.

The 2008 National Energy Assistance Survey collected the following information from LIHEAP-recipient households:

- Demographic, energy expenditure, and income information
- History of LIHEAP participation
- Constructive actions taken to meet energy expenses
- Signs of unaffordable energy bills
- Health and safety consequences of unaffordable energy bills
- Effects of unaffordable energy bills on housing
- Changes in financial situation and affordability of home energy bills
- Impact and importance of LIHEAP benefits for recipient households

The 2008 Survey included a subsample of 12 of the 20 states that were included in the 2003 and 2005 Surveys. Due to budget limitations, the full set of 20 original states could not be included in this study. However, a subsample of states was chosen to represent the geographic diversity and weather variability across the county. Three of the states that were originally chosen were replaced because the state LIHEAP offices could not provide the LIHEAP recipient data within the timeframe needed.

C. Organization of the Report

This report has six sections that follow this introduction.

- *Section II: Survey Methodology*: Presents the methodology used for sample selection, survey implementation, weighting, and survey response rates.

- *Section III: LIHEAP Recipients:* Presents demographic and income information LIHEAP-recipient households that completed the 2008 NEA Survey.

- *Section IV: Problems Faced By Low-Income Households in Meeting Their Energy Needs:* Presents information about actions that LIHEAP-recipient households take to meet their energy needs, household necessities, and health and wellness in the face of significant financial constraints.

[5] Description of LIHEAP information obtained from "Low Income Home Energy Assistance Program. Report to Congress for Fiscal Year 2001." U.S. Department of Health and Human Services, Administration for Children and Families, Office of Community Services, Division of Energy Assistance. Additional information regarding the LIHEAP program can be found on the World Wide Web at: http://www.acf.hhs.gov/programs/liheap/.

- *Section V: The Need For LIHEAP:* Presents information about the impact and importance of LIHEAP on recipient households.

- *Section VI: Regional Analysis:* Presents analysis of the problems faced by low-income households in the Northeast, Midwest, West, and South.

- *Section VII: Conclusion:* Presents a summary of the key findings in this report.

II. Survey Methodology

This section describes the methodology for the 2008 NEA Survey, including procedures for sample selection, survey implementation, and weighting.

A. Survey Implementation

A survey advance letter was sent to the sample of selected LIHEAP recipients from the 12 participating states. This letter announced the survey, notified potential respondents that they might be called to participate in the survey, explained the purpose of the survey, and gave potential respondents the option to call the phone center to complete the survey at their convenience.

APPRISE retained Braun Research to conduct the telephone survey through its call center. A researcher from APPRISE trained Braun's employees on the survey instrument and monitored survey implementation. Braun's manager in charge of the survey instructed interviewers how to use the computerized version of the survey to record customer responses.

Interviewer training consisted of two hour-long sessions – one for daytime and one for evening interviewers. This training session provided interviewers with an overview of the project, purpose behind questions asked, and strategies to provide accurate clarification and elicit acceptable responses through neutral probing techniques.

Interviewer monitoring allowed APPRISE researchers to both listen to the way interviewers conducted surveys and see the answers they chose on the computerized data entry form. Braun's manager facilitated open communication between the monitors and interviewers, which allowed the monitors to instruct interviewers on how to implement the survey and accurately record customer responses.

Telephone interviews were conducted between September 30, 2008 and November 3, 2008. During this time period, 1,256 interviews were completed.

B. Sample Selection and Response Rates

LIHEAP recipients were selected from each of the twelve states chosen to participate in the survey. Table II-1 details the number of LIHEAP recipients selected to complete the survey, number of completed interviews, cooperation rates, and response rates for the national sample. The table presents the following information:

- **Number selected:** Initially, approximately 220 households were selected in each state. Due to the high number of non-interviews and unusable telephone numbers, an additional sample of 75 cases was selected for California, 24 for Delaware, 80 for North Carolina, 30 for New Mexico, and 120 for New York. These additional respondents were not sent an advance letter. The final sample consisted of 3,028 cases.

- **Unusable:** There were 963 cases deemed unusable because no one was present in the home during the survey who was able to complete the survey, or because phone numbers were unavailable, disconnected, or incorrect. These households are not included in the

denominator of the response rate or the cooperation rate. They are included in the denominator of the completed interview rate.

- **Non-Interviews:** There were 417 cases classified as non-interviews because the qualified respondent refused to complete the interview, or because the respondent asked the interviewer to call back to complete the interview at a later time, but did not complete the interview during the field period. These households are included in the denominator of the cooperation rate, the response rate, and the completed interview rate.

- **Unknown eligibility:** There were 392 cases that were determined to have unknown eligibility to complete the interview, due to answering machines, no answers, and language barriers.[6] These households are not included in the denominator of the cooperation rate. They are included in the denominator of the response rate and the completed interview rate.

- **Completed interviews**: The completed interviews are households that were reached and that answered the full set of survey questions by telephone. In total, 1,256 interviews were completed.

- **Cooperation rate**: The cooperation rate is the percent of eligible households contacted who completed the survey. This is calculated as the number of completed interviews divided by the interviews plus the number of non-interviews (refusals plus non-completed call backs[7]). Overall, this survey achieved a 75 percent cooperation rate.

- **Response rate:** The response rate is the number of completed interviews divided by the number of completed interviews plus the number of non-interviews (refusals plus non-completed call backs) plus all cases of unknown eligibility (due to answering machines and language barriers). This survey attained a 61 percent response rate.

- **Completed Interview Rate:** The completed interview rate is the percentage of households selected that completed the survey. This survey attained a 41 percent completed interview rate.

Table II-1
Sample and Response Rates

	Total Sample
Number Selected	3,028
Unusable	963
Non-Interviews	417
Unknown Eligibility	392
Completed Interviews	1,256
Cooperation Rate	75%

[6] The telephone interview center conducted interviews with respondents with a language barrier who spoke Spanish. However, there were 44 cases in which an interview could not be completed due to a language barrier for a language other than Spanish. Thirty Spanish interviews were completed.

[7] Non-completed callbacks include respondents who asked the interviewer to call back at a later time to complete the interview, but did not complete the interview by the end of the field period.

	Total Sample
Response Rate	61%
Completed Interview Rate	41%

Table II-2 displays the number of interviews completed by state. The response rate ranged from 41 percent in New York to 73 percent in Ohio.

Table II-2
Number of Completed Interviews by State

State	Total Selected	Completed Interviews	Response Rate
California	294	98	45%
Delaware	245	109	66%
Georgia[8,9]	246	113	66%
Iowa	218	100	65%
Maine	221	123	69%
Minnesota	220	104	65%
Montana[6]	222	106	68%
New Mexico[6]	250	107	62%
New York	360	86	41%
North Carolina[7]	292	102	55%
Ohio	220	94	73%
Pennsylvania	240	114	67%
TOTAL	3,028	1,256	61%

C. Weights

Two sets of weights were used to ensure that state-level data represents each state and that the overall findings are representative of the national LIHEAP population. First, weights were applied within states. The purpose of these weights was to adjust for selection and response rate variation within poverty group, vulnerable status, and type of benefit strata. A second set of weights was used so that the sum of the state weights was proportional to the strata size from which it was drawn. In the estimates presented in this report, the total weight, comprised of these two separate weights, is used. This results in a nationally representative sample of 2008 LIHEAP recipients.

[8] Due to inability to furnish the requested LIHEAP recipient data, Louisiana was replaced by Georgia, Colorado was replaced by New Mexico, and Washington was replaced by Montana.
[9] Client telephone number was not provided in the GA and NC LIHEAP datasets. Manual look-ups were conducted for these households.

III. LIHEAP Recipient Households

This section reports the findings from the 2008 National Energy Assistance (NEA) Survey on the characteristics LIHEAP-recipient households. This section describes the demographic and income characteristics for 2008 LIHEAP-recipient households. Tables presented in this section may not total to 100 percent due to rounding. Unless the number of respondents is shown, the tables include all 1,256 respondents to the survey.

Table III-1 presents the percentage of households by number of total household members. The table shows that many of the households were single person households and the majority had only one or two household members.

Table III-1
Number of Household Members

Number of Household Members	Percent of Respondents
1	41%
2	21%
3	14%
4	9%
5	8%
6 or more	7%

Table III-2 displays the percentage of households that have one or more household members particularly vulnerable to unaffordable energy bills. The table shows that 43 percent have a senior household member, 50 percent have a disabled member, 40 percent have a child 18 or younger, 18 percent have a child 5 or younger, and 17 percent were single parent households.

Table III-2
Vulnerable Groups

	Household With Senior (Age 60 or older)	Household With Disabled	Household With Child (Age 18 or under)	Household With Young Child (Age 5 or under)	Single Parent Household[1]
Yes	43%	50%	40%	18%	17%
No	57%	50%	60%	82%	83%
Don't Know/ Refused	0%	<1%	0%	0%	0%

[1] Defined as households with only one adult residing with one or more children.

Table III-3 presents the percentage of households that are single parent households or that have at least one member who is senior, disabled, or a child under age 18.[10] The table shows that over 90 percent of the LIHEAP recipients were in households that we have defined as vulnerable.

Table III-3
Households With At Least One Vulnerable Member

	Percent of Respondents
At Least One Vulnerable Member	93%
No Vulnerable Members	7%

Table III-4 displays home ownership data. The table shows that approximately half of the households own their homes and half rent.

Table III-4
Home Ownership

Home Ownership	Percent of Respondents
Own	50%
Rent	49%
Other	1%
Don't Know	<1%

Table III-5 displays annual household income. Most of these data were reported in the LIHEAP databases that were provided by the participating states. However, income data for some of the North Carolina and New York respondents are from the survey response, when income data were not available in the LIHEAP data files. The table shows that 38 percent of the households have annual income below $10,000 and 42 percent have annual income between $10,000 and $20,000. Only three percent have income above $40,000.

Table III-5
Annual Income

Annual Income	Percent of Respondents
Less than $ 10,000	38%
$ 10,001 - $ 20,000	42%
$ 20,001 - $ 30,000	11%
$ 30,001 - $ 40,000	4%
More than $ 40,000	3%
Don't Know/Refused	2%

Table III-6A displays respondents' incomes as a percentage of the 2008 Federal Poverty Level. Again, these data are from the state LIHEAP databases, with the exception of some NC and NY households. The

[10] This study uses the term "vulnerable group" more expansively than as defined by the LIHEAP statute, which does not include families with children over 6 and single parent households as vulnerable.

table shows that 17 percent have income at or below 50 percent of the poverty level, 46 percent have income between 51 and 100 percent of the poverty level, 18 percent have income between 101 and 125 percent, and 10 percent have income between 126 and 150 percent. Only 6 percent have income above 150 percent of the poverty level.

Table III-6A
Poverty Level

Poverty Level	Percent of Respondents
0%-50%	17%
51%-100%	46%
101%-125%	18%
126%-150%	10%
>150%	6%
Missing Income Data	2%

Table III-6B displays poverty level by the presence of vulnerable groups. Households can be included in more than one category. The table shows that households with children were most likely to have income below 50 percent of the federal poverty level and that the households without vulnerable members were most likely to have income above 150 percent of the poverty level.

Table III-6B
Poverty Level by Vulnerable Group

	Senior	Disabled	Child 18 or Younger	Child 5 or Younger	Single Parent Household[1]	Non-Vulnerable
Number of Respondents	542	627	503	232	208	87
0% - 50%	5%	12%	29%	36%	36%	24%
51% - 100%	47%	51%	45%	38%	40%	44%
101% - 150%	37%	29%	23%	22%	23%	17%
> 150%	8%	5%	3%	3%	1%	16%
Missing Income Data	3%	4%	1%	2%	0%	0%

[1] Defined as households with only one adult residing with one or more children.

Respondents were asked whether in the 12 months preceding the survey their household received:

- Income from employment
- Any form of retirement income including Social Security, pensions, and other funds
- Public assistance benefits from Temporary Assistance For Needy Families, Social Security Insurance, or general or public assistance
- Non-cash benefits, including food stamps and public or subsidized housing.

Table III-7 shows that 30 percent had employment income, 40 percent had retirement income, 37 percent received public assistance, and 59 percent received non-cash benefits.

Table III-7
Types of Income and Benefits Received

	Wages or Self-Employment Income	Retirement Income	Public Assistance	Non-cash benefits
Yes	30%	40%	37%	59%
No	69%	60%	61%	41%
Don't Know /Refused	1%	1%	1%	1%

Respondents were asked whether they had been unemployed during the year. Table III-8A shows that 29 percent reported that they had been unemployed.

Table III-8A
Unemployed During the Year

	Percent of Respondents
Yes	29%
No	70%
Don't Know / Refused	1%

Table III-8B displays whether respondents were unemployed during the year by vulnerable group. The table shows that almost half of the households with children and almost half of the households with non-vulnerable members were unemployed during the past year. Thirteen percent of households with seniors and 22 percent of the households with disabled members reported that they were unemployed in the past year.

Table III-8B
Unemployed During the Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	13%	22%	48%	49%
No	86%	78%	51%	51%
Don't Know / Refused	1%	<1%	1%	0%

Table III-8C displays whether respondents were unemployed during the year by poverty level. The table shows that households with income at or below 50 percent of the poverty level were much more likely to report that they had been unemployed during the year. Half of these households reported that they had been unemployed during the year.

Table III-8C
Unemployed During the Year
By Poverty Level

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	50%	27%	24%	17%
No	48%	72%	76%	83%
Don't Know / Refused	1%	1%	<1%	0%

Respondents were asked whether members of their household have health insurance. Table III-9 shows that 70 percent of the respondents reported that everyone in the household has health insurance and ten percent reported that no one in the family has health insurance.

Table III-9
Health Insurance

Household Members With Health Insurance	Percent of Respondents
Entire Household	70%
Adults Only	<1%
Children Only	6%
Some but not all family members	13%
None	10%
Don't Know	1%

Respondents were asked whether any member of their household had ever suffered from asthma, emphysema, or COPD, diabetes, blood pressure, heart disease, or stroke. Table III-10A shows that 70 percent of the respondents reported that someone in the household had one of these ailments.

Table III-10A
Medical Conditions: Someone in the Household Had Asthma, Emphysema, COPD, Diabetes, Blood Pressure, Heart Disease or Stroke

Medical Conditions: Someone in the Household Had Asthma, Emphysema, or COPD, Diabetes, Blood Pressure, Heart Disease or Stroke	Percent of Respondents
Yes	70%
No	30%
Don't Know/Refused	<1%

Table III-10B displays medical conditions by the presence of a vulnerable household member. The table shows that households that do not contain vulnerable members were less likely to report one of these conditions. However, 42 percent of these respondents did report that someone in their household has one of these medical conditions. Eighty percent of households with a senior member and 80 percent with a disabled member reported that there was one of these conditions in the household.

Table III-10B
Medical Conditions: Someone in the Household Had Asthma, Emphysema, COPD, Diabetes, Blood Pressure, Heart Disease or Stroke
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	80%	80%	63%	42%
No	20%	20%	37%	58%
Don't Know/Refused	<1%	0%	0%	0%

Table III-10C displays medical conditions by whether the household has health insurance. The table shows that households that do not have health insurance were less likely to report that someone in the household has one of these medical conditions. Sixty-one percent of respondents in homes where no one has health insurance reported that someone in the household has a medical condition, compared to 71 percent in households where the entire household had health insurance.

Table III-10C
Medical Conditions: Someone in the Household Had Asthma, Emphysema COPD, Diabetes, Blood Pressure, Heart Disease or Stroke
By Health Insurance Coverage

	Members of Household with Health Insurance		
	Entire Household	Some, but not all family members	None
Number of Respondents	878	162	130
Yes	71%	74%	61%
No	29%	26%	39%
Don't Know / Refused	<1%	0%	0%

Respondents were asked whether someone in their household utilized any necessary medical equipment that uses electricity in the 12 months prior to the survey. Table III-11A shows that 24 percent reported that someone in the household uses medical equipment that uses electricity.

Table III-11A
Someone in the Household Utilizes Necessary Medical Equipment that Uses Electricity

Someone in the Household Utilizes Necessary Medical Equipment that Uses Electricity	Percent of Respondents
Yes	24%
No	76%
Don't Know/Refused	<1%

Table III-11B shows whether there was someone in the household who uses medical equipment that requires electricity by vulnerable group. The table shows that households with disabled members and households with children were most likely to report that the used this type of equipment and households without vulnerable members were least likely to report that they used this type of equipment.

Table III-11B
Member of Household Utilizes Medical Equipment that Requires Electricity
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	20%	32%	31%	3%
No	80%	68%	69%	97%
Don't Know / Refused	<1%	<1%	1%	0%

Table III-11C shows whether there was someone in the household who uses medical equipment that requires electricity by health insurance coverage. The table shows that households where there was no one in the household with health insurance were least likely to report that they used this type of equipment.

Table III-11C
Member of Household Utilizes Medical Equipment that Requires Electricity
By Health Insurance Coverage

	Members of Household with Health Insurance		
	Entire Household	Some, but not all family members	None
Number of Respondents	878	162	130
Yes	24%	33%	11%
No	76%	67%	89%
Don't Know / Refused	<1%	0%	0%

Respondents were asked whether in general they consider their health excellent, very good, good, fair or poor. Table III-12A shows that 21 percent reported that their health was very good or excellent, 31 percent reported that their health was good, 31 percent reported that their health was fair, and 16 percent reported that their health was poor.[11]

Table III-12A
Respondent's Health Condition

Respondent's Health Condition	Percent of Respondents
Excellent	6%
Very Good	15%
Good	31%
Fair	31%
Poor	16%
Don't Know/Refused	<1%

[11] These statistics show that LIHEAP recipients are worse off than all low-income households. The National Health Interview Survey found that 27 percent of households with income below $35,000 reported that they were in excellent health and 26 percent reported that they were in very good health.

Table III-12B shows respondents' reported health condition by vulnerable group. The table shows that households with disabled members were most likely to report that their health was poor and households with no vulnerable members were least likely to report that their health was poor.

Table III-12B
Respondent's Health Condition
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Excellent	4%	2%	11%	5%
Very Good	13%	8%	20%	22%
Good	27%	23%	34%	51%
Fair	36%	40%	26%	18%
Poor	19%	27%	10%	3%
Don't Know / Refused	<1%	<1%	0%	2%

Table III-12C shows respondents' reported health condition by health insurance coverage. The table does not show significant differences in reported health condition by health insurance coverage.

Table III-12C
Respondent's Health Condition
By Health Insurance Coverage

	Entire Household	Some, but not all family members	None
Number of Respondents	878	162	130
Excellent	5%	7%	7%
Very Good	15%	17%	13%
Good	31%	25%	27%
Fair	32%	35%	34%
Poor	17%	15%	18%
Don't Know/Refused	<1%	1%	1%

Respondents were asked whether any adult in their household requires help with personal care needs because of a physical, mental, or emotional problem. These needs include bathing or showering, dressing, eating, getting in and out of bed or chairs, walking, and using the toilet. Table III-13A shows that 14 percent of respondents reported that there was an adult in the household who needed assistance with personal care needs.

Table III-13A
Adult in Household Requires Help with Personal Care Needs
Because of a Physical, Mental, or Emotional Problem

Adult in Household Requires Help with Personal Care Needs	Percent of Respondents
Yes	14%

Adult in Household Requires Help with Personal Care Needs	Percent of Respondents
No	86%
Don't Know	<1%

Table III-13B displays the presence of an adult with personal care needs by vulnerable group. Households with senior members and disabled members were most likely to report this presence.

Table III-13B
Adult in Household Requires Help with Personal Care Needs
Because of a Physical, Mental, or Emotional Problem
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	18%	24%	9%	0%
No	82%	76%	91%	100%
Don't Know	<1%	<1%	<1%	0%

Table III-13C displays the presence of an adult in the household with personal care needs by health insurance coverage. The table shows that there was not a significant difference in this presence by health insurance coverage.

Table III-13C
Adult in Household Requires Help with Personal Care Needs
Because of a Physical, Mental, or Emotional Problem
By Health Insurance Coverage

	Members of Household with Health Insurance		
	Entire Household	Some, but not all family members	None
Number of Respondents	878	162	130
Yes	15%	18%	12%
No	85%	82%	88%
Don't Know/Refused	<1%	0%	0%

Table III-14 displays responses to the survey question, "Which fuel is used most for heating your home?" The table shows that 48 percent of households use natural gas, 20 percent use electricity, 14 percent use fuel oil or kerosene, 11 percent use LPG or propane, and the rest use another fuel for home heating.

Table III-14
Primary Fuel Used for Home Heating

Primary Fuel Used for Home Heating	Percent of Respondents
Natural Gas	48%
Electricity	20%
Fuel Oil or Kerosene	14%

Primary Fuel Used for Home Heating	Percent of Respondents
Bottled Gas (LPG or Propane)	11%
Wood	1%
Coal or Coke	<1%
Solar Energy	<1%
Other Fuel	2%
No Fuel Used	<1%
Don't Know	3%

Households were asked whether they have their heat included in their rent. Table III-15 shows that six percent reported that they have their heat included in their rent.

Table III-15
Heat included in Rent

Heat included in Rent	Percent of Respondents
Yes	6%
No/ Own Home	93%
Do Not Pay Rent	1%
Don't Know	<1%

Respondents were asked to report the main way that they cool their homes on the hottest days of the summer. Table III-16 shows that approximately one third have window/wall air conditioners, 31 percent use fans, and 28 percent use central air conditioning. Five percent reported that they do not have a cooling method.

Table III-16
Primary Method of Summer Cooling

Primary Method of Summer Cooling	Percent of Respondents
Window or Wall Air Conditioning	34%
Fans	31%
Central Air Conditioning	28%
Evaporative or Swamp Cooling	2%
No Cooling Method Used	5%
Don't Know	<1%

IV. Problems Faced by Low-Income Households in Meeting Their Energy Needs

This section examines the financial challenges and difficult choices made the LIHEAP recipients to manage their total residential energy costs. Tables presented in this section may not total to 100 percent due to rounding.

A. Increased Utility Bills and Increased Need

Respondents were asked for the total annual costs of their electricity, gas, and other fuels for their home. Table IV-1 shows that about 77 percent of the respondents provided an estimate of the costs. The table shows that 36 percent reported annual home energy costs of more than $2,000.

Table IV-1
Annual Total Residential Energy Costs

Annual Total Residential Energy Costs	Percent of Respondents
Less than $ 500	3%
$ 501 - $ 1,000	10%
$ 1,001 - $ 1,500	13%
$ 1,501 - $ 2,000	15%
Over $ 2,000	36%
Don't Know/Refused	24%

Table IV-2 displays residential energy burden, based on the energy costs that respondents reported, the income that was available in the LIHEAP databases or from the survey responses, and the LIHEAP benefit that was provided in the LIHEAP database. Pre-LIHEAP total residential energy burden is calculated as the proportion of income spent on total residential energy costs. Post-LIHEAP total residential energy burden is the proportion of income spent on total residential energy costs less LIHEAP benefit dollars received. The table shows that 39 percent of respondents have a pre-LIHEAP energy burden that is greater than 15 percent and 14 percent have a pre-LIHEAP energy burden that is greater than 25 percent. LIHEAP benefits have a significant impact on energy burden. The table shows that 24 percent have a post-LIHEAP burden that is greater than 15 percent and 8 percent have a post-LIHEAP burden that is greater than 25 percent.

Table IV-2A
Total Residential Energy Burden

	Total Residential Energy Burden	
	Pre-LIHEAP	**Post-LIHEAP**
Number of Respondents	933	933
0-5%	11%	25%
6%-10%	28%	30%
11-15%	21%	21%

	Total Residential Energy Burden	
	Pre-LIHEAP	Post-LIHEAP
16-20%	16%	10%
21-25%	9%	6%
>25%	14%	8%

Table IV-2B shows the mean total pre-LIHEAP and post-LIHEAP residential energy burdens, by the presence of vulnerable household members. The table shows that there is not a significant difference in mean energy burden across the different groups of households.

Table IV-2B
Mean Total Residential Energy Burden
By Vulnerable Group

	All	Senior	Disabled	Child Under 18	Child Under 6	Single Parent	Non-Vulnerable
Number of Respondents	933	364	458	414	187	172	63
Pre-LIHEAP Burden	16%	14%	17%	16%	17%	18%	19%
Post-LIHEAP Burden	12%	11%	12%	13%	14%	14%	14%

Table IV-2C displays the distribution of residential energy burden by vulnerable group. The table shows that households with children under 18 and non-vulnerable households were more likely to have energy burden that is still over 25 percent after LIHEAP benefits are received.

Table IV-2C
Residential Energy Burden Distribution
By Vulnerable Group

	Senior		Disabled		Child Under 18		Non-Vulnerable	
	Pre-LIHEAP	Post-LIHEAP	Pre-LIHEAP	Post-LIHEAP	Pre-LIHEAP	Post-LIHEAP	Pre-LIHEAP	Post-LIHEAP
Number of Respondents	364	364	458	458	414	414	63	63
0-5%	12%	25%	10%	24%	12%	25%	7%	18%
6%-10%	26%	30%	25%	28%	32%	32%	26%	41%
11-15%	24%	24%	22%	23%	19%	20%	26%	14%
16-20%	17%	12%	18%	11%	14%	8%	16%	12%
21-25%	10%	6%	9%	8%	8%	4%	6%	1%
>25%	11%	3%	16%	6%	16%	11%	19%	14%

Table IV-3 displays responses to the survey question, "How do your energy bills this year compare to those last year?" The table shows that nearly half of the respondents reported that their energy bills were higher than last year.

Table IV-3
Change in Energy Bills

Change in Energy Bills	Percent of Respondents
Same	24%
Lower	13%
Higher	49%
Don't Know/Refused	13%

Respondents who reported that their energy bills were higher at the time of the survey than they were in the previous year were asked why they thought that their energy bills were higher. Table IV-4 shows that 78 percent reported that they thought their bills had increased because energy prices were higher. Ten percent reported that they did not know why their energy bills were higher.

Table IV-4
Why Energy Bills are Higher

Why Energy Bills are Higher	Percent of Respondents
Number of Respondents	619
Prices were Higher	78%
Increased Usage	4%
Winter was Colder	2%
Summer was Warmer	2%
Bad Economy	2%
Energy Inefficient Home	1%
Moved to Different Home	1%
Insufficient Energy Assistance	<1%
Other	3%
Don't Know	10%

Respondents were asked, "How does your financial situation this year compare to last year?" Table IV-5A shows that 35 percent reported that their financial situation had worsened.

Table IV-5A
Change in Financial Situation

Change in Financial Situation	Percent of Respondents
Same	50%
Worse	35%
Better	13%
Don't Know/Refused	2%

Table IV-5B displays the responses to this question by vulnerable group. The table shows that households with children were most likely to report that their financial situation had worsened.

Table IV-5B
Change in Financial Situation
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Same	59%	54%	39%	46%
Worse	31%	36%	41%	34%
Better	8%	8%	19%	17%
Don't Know/ Refused	3%	2%	1%	2%

Respondents were asked, "How difficult is it for you to pay your energy bills compared to last year?" Table IV-6A shows that 43 percent reported that it was more difficult to pay their energy bills than last year.

Table IV-6A
Change in Difficulty in Paying Energy Bills

Change in Difficulty in Paying Energy Bills	Percent of Respondents
Same	42%
More Difficult	43%
Less Difficult	9%
Don't Know/Refused	5%

Table IV-6B displays the reported change in the difficulty in paying energy bills by vulnerable group. The table shows that households with children, disabled households, and non-vulnerable households were most likely to report that the energy bills were more difficult to pay.

Table IV-6B
Change in Difficulty in Paying Energy Bills

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Same	48%	40%	38%	36%
More Difficult	37%	47%	49%	45%
Less Difficult	8%	8%	11%	17%
Don't Know/ Refused	7%	6%	3%	2%

Respondents who reported that it was more difficult to pay their energy bills at the time of the survey, compared to the previous year, were asked what the main reason was that it was more difficult for them to pay their energy bills. These respondents were then asked whether the following items contributed to their increased difficulty in paying their energy bills:

- Increased energy bill
- Increased property taxes

- Increased rent
- Increased medical expenses
- Increased prescription drug costs
- Lower income or unemployment

Table IV-7 displays the responses to the unprompted and prompted questions. The table shows that, when asked the open-ended question, respondents were most likely to report that the reason they had increased difficulty paying their energy bill was that the bill had increased. The next most common response was that they had lower income or had lost their job. While 87 percent agreed that their energy bills were more difficult to pay because they had increased, 75 percent agreed that they were more difficult to pay because they had lower income or had lost their job, 57 percent agreed it was due partly to increased medical bills, 54 percent agreed it was due to increased prescription drug costs, 43 percent agreed that it was due to increased property taxes, and 38 percent agreed that it was due to increased rent. While none of the respondents reported that increased gasoline costs were the main reason that their energy bills were more difficult to pay, 88 percent agreed that increased gasoline costs contributed to their difficulty in paying their energy bills.

Table IV-7
Reasons for Increased Difficulty in Paying Energy Bills

	Main Reason (Unprompted)	Reasons (Prompted)
Number of Respondents	543	543
Increased Energy Bill	50%	87%
Lower Income/Lost Job	37%	75%
Increased Other Bills	7%	
Increased Medical Expenses	2%	57%
Bad Economy	1%	
Lack of Energy Assistance	1%	
Increased Prescription Drugs	<1%	54%
Increased Property Taxes	<1%	43%
Increased Rent	<1%	38%
Higher Gasoline Costs	0%	88%
Other	1%	
Don't Know	1%	

B. Constructive Actions Taken to Meet the Need

The NEA Survey asked respondents whether they took specific actions to reduce their energy bills. These actions included efforts to reduce heating bills, cooling bills, and year-round bills.

Respondents were asked whether they put plastic on their windows or turn down the heat when they go to bed, or whether they closed off one or more rooms to reduce their heating bills in the winter. Table IV-8 shows that 48 percent reported that they put plastic on their windows, 85 percent reported that they turn down the heat when they go to bed, and 66 percent reported that they closed off one or more rooms.

Table IV-8
Actions Taken to Bring Down Heating Bills

	Put Plastic on Windows	Turn Down the Heat When You Go to Bed	Close Off One or More Rooms
Yes	48%	85%	66%
No	52%	15%	34%

Respondents were asked whether they keep shades and curtains closed in the daytime and use fans and open windows to reduce cooling bills in the summer. Table IV-9 shows that 88 percent reported that they keep their shades and curtains closed in the daytime and 80 percent reported that they use fans and open windows.

Table IV-9
Actions Taken to Bring Down Cooling Bills

	Keep Shades and Curtains Closed in Daytime	Use Fans and Open Windows
Yes	88%	80%
No	12%	19%
Don't Know/ Refused	<1%	1%

Respondents were asked whether they took other specific energy-saving actions in the past year to reduce their energy bills. Table IV-10 shows that 73 percent reported that they wash their clothes in cold water and 66 percent reported that they use compact fluorescent light bulbs.

Table IV-10
Other Energy-Saving Actions Taken

	Wash Clothes in Cold Water	Use Compact Fluorescent Light Bulbs
Yes	73%	66%
No	25%	31%
Don't Know/ Refused	2%	2%

Table IV-11 provides a comparison of survey responses to the 2003 and 2008 surveys. The 2005 survey is not included in the comparison because this survey included households that did not receive LIHEAP in the previous program year and was done at a different time of year. Both the 2003 and 2008 surveys were conducted with households selected from LIHEAP databases of recipients from the previous program year and both surveys were conducted in October and November.

The table below shows that households were more likely to report that they have taken all of the actions asked about. Changes that are statistically significant are underlined. The greatest increases are in the percentage of respondents who reported that they turn down the heat when they go to bed, wash clothes in cold water, and use compact fluorescent light bulbs. While 44 percent of LIHEAP recipients reported that they use CFLs in the 2003 survey, 66 percent of LIHEAP recipients reported

that they use CFLs in the 2008 survey. This increase is probably due in part to the large number of low-income usage reduction programs that have included CFL distribution.

Table IV-11
Constructive Actions Taken to Lower Energy Bills
Comparison of Survey Results

	2003 Survey	2008 Survey
Number of Respondents	2,161	1,256
Winter		
Put Plastic on Windows	44%	48%
Turn Down the Heat When You Go to Bed	76%	85%
Summer		
Keep Shades and Curtains Closed in the Daytime	83%	88%
Use Fans and Open Windows	78%	80%
Other Energy-Saving Actions		
Wash Clothes in Cold Water	65%	73%
Use Compact Fluorescent Light Bulbs	44%	66%

Note: statistically significant differences are underlined.

Table IV-12 shows that almost all of the respondents reported that they took at least one constructive action to lower their energy bills in the past year.[12]

Table IV-12
Constructive Actions Taken to Lower Energy Bills

Took at Least One Constructive Action	Percent of Respondents
Yes	100%
No	<1%

C. Signs of the Problem

Respondents were asked whether they worried about their ability to pay their home energy bills in the year preceding the survey, due in part to their energy expenses. Table IV-13A shows that 28 percent report that they worried almost every month, 29 percent reported some months, and 15 percent reported that they had this problem one or two months in the past year.

[12] These responses may be overestimated due to respondent compliance (i.e., desire to provide a socially desirable or positive response.)

Table IV-13A
Worried About Paying Home Energy Bill Due to Not Having Enough Money for the Energy Bill During Past Year

	Percent of Respondents
Almost Every Month	28%
Some Months	29%
1 or 2 Months	15%
Never / No	28%
Don't Know	1%

Table IV-13B displays the response to the question that asked whether they worried about paying their home energy bill by vulnerable group. The table shows that households with children were most likely to report that they were worried about paying their energy bill. Households with senior members were least likely to report that they were worried about not having enough money to pay for their home energy bill.

Table IV-13B
Worried About Paying Home Energy Bill Due to Not Having Enough Money for the Energy Bill During Past Year By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Almost Every Month	22%	30%	34%	37%
Some Months	24%	27%	38%	22%
1 or 2 Months	14%	18%	14%	11%
Never / No	39%	25%	14%	30%
Don't Know	1%	<1%	<1%	1%

Table IV-13C displays the response to the question that asked whether they worried about paying their home energy bill by poverty group. The table shows that households at lower poverty levels were more likely to report that they had worried about paying their energy bill. While 84 percent of those with income at or below 50 percent of the poverty level reported that they had worried, 72 percent of those with income between 51 and 100 percent of poverty reported this, 67 percent of those with income between 101 and 150 percent reported this, and 64 percent of those with income above 150 percent reported this.

Table IV-13C
Worried About Paying Home Energy Bill Due to Not Having Enough Money for the Energy Bill During Past Year By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Almost Every Month	35%	27%	27%	33%
Some Months	35%	29%	24%	26%
1 or 2 Months	14%	16%	16%	5%
Never / No	15%	27%	31%	36%
Don't Know	1%	<1%	1%	0%

Table IV-14A shows whether respondents reported that they reduced expenses for household necessities in the year preceding the survey due in part to their energy expenses. The table shows that 44 percent of respondents reported that they reduced expenses for household necessities almost every month.

Table IV-14A
Reduced Expenses for Household Necessities Due to Not Having Enough Money for the Energy Bill During the Past Year

	Percent of Respondents
Almost Every Month	44%
Some Months	27%
1 or 2 Months	9%
Never / No	19%
Don't Know	2%

Table IV-14B displays responses to the question about reduced expenses by vulnerable group. The table shows that a large percentage of each group reported that they reduced these expenses almost every month.

Table IV-14B
Reduced Expenses for Household Necessities Due to Not Having Enough Money for the Energy Bill During the Past Year By Vulnerable Group

	Senior	**Disabled**	**Child Under 18**	**Non-Vulnerable**
Number of Respondents	542	627	503	87
Almost Every Month	40%	47%	45%	51%
Some Months	25%	27%	32%	21%
1 or 2 Months	9%	9%	8%	12%
Never / No	22%	16%	14%	16%

	Senior	Disabled	Child Under 18	Non-Vulnerable
Don't Know	4%	2%	1%	0%

Table IV-14C displays the percent of households that reported that they reduced expenses by poverty group. The table shows that households with income at or below 50 percent of the poverty level were most likely to report that they took this action. Ninety-two percent of households with income at or below 50 percent of poverty reported that they reduced expenses for household necessities.

Table IV-14C
Reduced Expenses for Household Necessities Due to Not Having Enough Money for the Energy Bill During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Almost Every Month	48%	45%	40%	56%
Some Months	29%	28%	24%	14%
1 or 2 Months	15%	6%	10%	13%
Never / No	7%	19%	23%	13%
Don't Know / Refused	1%	2%	3%	4%

Respondents were asked whether they borrowed from a friend or relative to pay their home energy bill in the year prior to the survey. Table IV-15A shows that 43 percent reported that they borrowed to help pay their energy bill.

Table IV-15A
Borrowed from a Friend or Relative to Pay Home Energy Bill Due to Not Having Enough Money for the Energy Bill During the Past Year

	Percent of Respondents
Almost Every Month	7%
Some Months	20%
1 or 2 Months	16%
Never / No	57%
Don't Know	<1%

Table IV-15B shows the percent of respondents who reported that they borrowed from a friend or relative to pay the energy bill by vulnerable group. The table shows that respondents with children were most likely to report that they borrowed from a friend or relative to pay their home energy bill. Sixty-three percent of households with children reported that they borrowed from a friend or relative during the past year.

Table IV-15B
Borrowed from a Friend or Relative to Pay Home Energy Bill Due to Not Having Enough Money for the Energy Bill During the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Almost Every Month	3%	8%	11%	11%
Some Months	15%	20%	29%	16%
1 or 2 Months	9%	16%	23%	17%
Never / No	73%	56%	37%	57%
Don't Know	<1%	<1%	0%	0%

Table IV-15C shows the percent of respondents who reported that they borrowed from a friend or relative to pay the energy bill by poverty group. The table shows that households with income at or below 50 percent of the poverty level were most likely to report that they borrowed from a friend or relative. Sixty-nine percent of these respondents reported that they borrowed from a friend or a relative because they did not have enough money to pay the home energy bill in the past year.

Table IV-15C
Borrowed from a Friend or Relative to Pay Home Energy Bill Due to Not Having Enough Money for the Energy Bill During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Almost Every Month	12%	8%	3%	10%
Some Months	36%	19%	16%	10%
1 or 2 Months	21%	17%	13%	18%
Never / No	30%	56%	67%	62%
Don't Know / Refused	0%	<1%	<1%	0%

Table IV-16 compares responses to questions about responses to the energy affordability problem between the 2003 and 2008 surveys. The table shows that there were not statistically significant differences in the responses to these questions between the two surveys.

Table IV-16
Signs of the Problem
Comparison of Survey Results

	2003 Survey	2008 Survey
Number of Respondents	2,161	1,256
Worried About Paying Home Energy Bill	72%	72%
Reduced Expenses for Household Necessities	78%	80%

	2003 Survey	2008 Survey
Borrowed From a Friend or Relative	46%	43%

Note: statistically significant differences are underlined.

D. Responses to the Problem

Respondents were asked whether they closed off part of their home because they could not afford to heat or cool it in the year prior to the survey. Table IV-17A shows that 44 percent of the respondents reported that they took this action at some point during the past year.

Table IV-17A
Closed Off Part of Home Because Could Not Afford to Heat or Cool It
Due to Not Having Enough Money for the Energy Bill During the Past Year

	Percent of Respondents
Almost Every Month	17%
Some Months	19%
1 or 2 Months	8%
Never / No	55%
Don't Know / Refused	1%

Table IV-17B shows the responses to the question about whether the household closed off part of the home because they could not afford to heat or cool it by vulnerable group. The table shows that households with senior members, disabled members, and non-vulnerable households were most likely to report that they took this action.

Table IV-17B
Closed Off Part of Home Because Could Not Afford to Heat or Cool It
Due to Not Having Enough Money for the Energy Bill During Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Almost Every Month	18%	19%	12%	23%
Some Months	21%	21%	16%	22%
1 or 2 Months	7%	8%	9%	7%
Never / No	53%	51%	62%	47%
Don't Know/Refused	1%	1%	1%	1%

Table IV-17C shows whether households reported that they closed off part of their home because they could not afford to heat or cool it by poverty group. The table shows that there is not a large difference in the percent of respondents who reported this action by poverty group.

Table IV-17C
Closed Off Part of Home Because Could Not Afford to Heat or Cool It
Due to Not Having Enough Money for the Energy Bill During Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Almost Every Month	19%	16%	19%	10%
Some Months	20%	18%	20%	27%
1 or 2 Months	8%	9%	7%	5%
Never / No	51%	55%	54%	58%
Don't Know	1%	2%	<1%	0%

Table IV-18A displays whether respondents reported that they kept their home at an unsafe or unhealthy temperature in the year preceding the survey due in part to their energy expenses. The table shows that 28 percent of respondents reported that they took this action.

Table IV-18A
Kept Home at Temperature You Felt Was Unsafe or Unhealthy Due to Not
Having Enough Money for the Energy Bill During Past Year

	Percent of Respondents
Almost Every Month	6%
Some Months	15%
1 or 2 Months	7%
Never / No	71%
Don't Know / Refused	1%

Table IV-18B displays whether respondents reported that they kept their home at an unsafe or unhealthy temperature in the year preceding the survey by vulnerable group. The table shows that 24 percent of senior households, 34 percent of disabled households, 32 percent of households with children, and 30 percent of non-vulnerable households reported that they took this action.

Table IV-18B
Kept Home at Temperature You Felt Was Unsafe or Unhealthy Due to Not
Having Enough Money for the Energy Bill During Past Year
By Vulnerable Group

	Senior	**Disabled**	**Child Under 18**	**Non-Vulnerable**
Number of Respondents	542	627	503	87
Almost Every Month	5%	9%	6%	7%
Some Months	14%	18%	18%	9%
1 or 2 Months	5%	7%	8%	14%
Never / No	75%	66%	68%	68%

	Senior	Disabled	Child Under 18	Non-Vulnerable
Don't Know/Refused	2%	1%	<1%	2%

Table IV-18C displays whether respondents reported that they kept their home at an unsafe or unhealthy temperature in the year preceding the survey by poverty group. The table shows that there is not a significant relationship between poverty level and this action.

Table IV-18C
Kept Home at Temperature You Felt Was Unsafe or Unhealthy Due to Not Having Enough Money for the Energy Bill During Past Year By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Almost Every Month	6%	6%	6%	6%
Some Months	14%	16%	16%	16%
1 or 2 Months	9%	6%	7%	7%
Never / No	70%	70%	70%	72%
Don't Know/Refused	0%	1%	1%	0%

Table IV-19A shows the percent of respondents who said that they left their home for part of the day because it was too hot or too cold and they did not have enough money for the energy bill during the past year. The table shows that 23 percent of respondents reported that they took this action.

Table IV-19A
Left Home for Part of the Day Because it was Too Hot or Too Cold Due to Not Having Enough Money for the Energy Bill During the Past Year

	Left Home for Part of the Day Because Home was Too Hot or Too Cold
Almost Every Month	2%
Some Months	10%
1 or 2 Months	11%
Never / No	77%
Don't Know / Refused	<1%

Table IV-19B shows the percent of respondents who said that they left their home for part of the day because it was too hot or too cold by vulnerable group. The table shows that 17 percent of senior households, 24 percent of disabled households, 27 percent of households with children, and 31 percent of non-vulnerable households reported that they took this action.

Table IV-19B
Left Home for Part of the Day Because it was Too Hot or Too Cold
Due to Not Having Enough Money for the Energy Bill During the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Almost Every Month	1%	3%	2%	0%
Some Months	9%	10%	13%	10%
1 or 2 Months	7%	11%	12%	21%
Never / No	83%	76%	73%	69%
Don't Know	0%	0%	<1%	0%

Table IV-19C shows the percent of respondents who said that they left their home for part of the day because it was too hot or too cold by poverty group. Households with lower poverty levels were more likely to report that they took this action. The table shows that 28 percent of households with income at or below 50 percent of poverty, 25 percent of households with income between 51 and 100 percent, 20 percent of households with income between 101 and 150 percent, and 20 percent of households with income above 150 percent of poverty reported that they took this action.

Table IV-19C
Left Home for Part of the Day Because it was Too Hot or Too Cold
Due to Not Having Enough Money for the Energy Bill During Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Almost Every Month	1%	3%	2%	1%
Some Months	10%	11%	9%	11%
1 or 2 Months	17%	11%	9%	8%
Never / No	72%	76%	81%	80%
Don't Know	<1%	0%	<1%	0%

Respondents were asked whether they used their kitchen stove or oven to provide heat in the year preceding the survey, due in part to their energy expenses. Table IV-20A shows that one third of the respondents reported that they took this dangerous action at some point during the past year.

Table IV-20A
Used Kitchen Stove or Oven to Provide Heat Due to Not
Having Enough Money for the Energy Bill During Past Year

	Percent of Respondents
Almost Every Month	3%
Some Months	14%
1 or 2 Months	16%

	Percent of Respondents
Never / No	67%
Don't Know	<1%

Table IV-20B displays the percent of respondents who reported that they used their kitchen stove or oven to provide heat during the past year by vulnerable group. The table shows that 27 percent of households with senior members, 37 percent of households with disabled members, 40 percent of households with children, and 33 percent of non-vulnerable households reported that they used their kitchen stove or oven to provide heat.

Table IV-20B
Used Kitchen Stove or Oven to Provide Heat Due to Not Having Enough Money for the Energy Bill During the Past Year By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Almost Every Month	1%	4%	3%	1%
Some Months	13%	16%	17%	6%
1 or 2 Months	13%	17%	20%	26%
Never / No	73%	63%	60%	67%
Don't Know/Refused	0%	0%	<1%	<1%

Table IV-20C displays the percent of respondents who reported that they used their kitchen stove or oven to provide heat during the past year by poverty group. The table shows that 42 percent of households with income at or below 50 percent of the poverty level, 31 percent of household with income between 51 and 100 percent of poverty, 33 percent of households with income between 101 and 150 percent, and 25 percent of households with income above 150 percent of poverty reported that they took this action.

Table IV-20C
Used Kitchen Stove or Oven to Provide Heat Due to Not Having Enough Money for the Energy Bill During the Past Year By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Almost Every Month	6%	2%	2%	0%
Some Months	17%	13%	16%	8%
1 or 2 Months	19%	16%	15%	17%
Never / No	58%	69%	66%	75%
Don't Know	0%	<1%	0%	0%

Table IV-21 compares responses to questions about responses to the energy affordability problem between the 2003 and 2008 surveys. The table shows that while the differences were not large, the percentage of LIHEAP recipients who said that they took these actions in the past year because they could not afford their energy bill increased between the two surveys for three out of four indicators. The two differences that were statistically significant are underlined. The greatest difference was that in 2003, 39 percent of respondents said that they closed off part of their home and in 2008, 44 percent of respondents said that they closed off part of their home because they could not afford their energy bill.

Table IV-21
Responses to the Problem
Comparison of Survey Results

	2003 Survey	2008 Survey
Number of Respondents	2,161	1,256
Closed Off Part of Home	39%	44%
Kept Home at Temperature You Felt was Unsafe or Unhealthy	25%	28%
Left Home for Part of the Day	24%	23%
Used Kitchen Stove or Oven to Provide Heat	31%	33%

Note: statistically significant differences are underlined.

E. Inability to Pay Energy Bills

Respondents were asked whether they skipped paying or paid less than their entire home energy bill in the year preceding the survey. Table IV-22A shows that 47 percent of respondents reported that they took this action.

Table IV-22A
Skipped Paying or Paid Less than Entire Home Energy Bill
Due to Not Having Enough Money for the Energy Bill During Past Year

	Percent of Respondents
Almost Every Month	10%
Some Months	23%
1 or 2 Months	14%
Never / No	52%
Don't Know	1%

Table IV-22B displays whether respondents reported that they skipped paying their home energy bill by vulnerable group. The table shows that 28 percent of senior households, 45 percent of disabled households, 70 percent of households with children, and 51 percent of non-vulnerable households reported that they took this action.

Table IV-22B
Skipped Paying or Paid Less than Entire Home Energy Bill
Due to Not Having Enough Money for the Energy Bill During Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Almost Every Month	4%	10%	15%	18%
Some Months	14%	21%	36%	20%
1 or 2 Months	10%	14%	19%	13%
Never / No	71%	55%	29%	48%
Don't Know/Refused	1%	1%	<1%	1%

Table IV-22C displays whether respondents reported that they skipped paying their home energy bill by poverty group. The table shows that households with income at or below 50 percent of poverty were most likely to report that they took this action. Sixty-eight percent of households with income at or below 50 percent of poverty reported that they skipped paying their energy bill during the past year.

Table IV-22C
Skipped Paying or Paid Less than Entire Home Energy Bill
Due to Not Having Enough Money for the Energy Bill During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Almost Every Month	14%	10%	8%	7%
Some Months	39%	21%	19%	18%
1 or 2 Months	15%	13%	17%	9%
Never / No	31%	54%	55%	64%
Don't Know / Refused	0%	1%	0%	2%

Table IV-23A displays whether respondents received a notice or threat from an energy supplier to disconnect their electric or gas service, or to discontinue making fuel deliveries in the year preceding the survey. The table shows that 37 percent of respondents reported that they received a notice or threat.

Table IV-23A
Received Notice or Threat to Disconnect or Discontinue Electricity or Home
Heating Fuel Due to Not Having Enough Money for the Energy Bill During the Past Year

	Percent of Respondents
Almost Every Month	5%
Some Months	14%
1 or 2 Months	18%

	Percent of Respondents
Never / No	63%
Don't Know	<1%

Table IV-23B displays whether respondents received a notice or threat from an energy supplier by vulnerable group. The table shows that 20 percent of senior respondents, 38 percent of disabled respondents, 57 percent of respondents with children, and 41 percent of non-vulnerable respondents reported that they received a notice or threat.

Table IV-23B
Received Notice or Threat to Disconnect or Discontinue Electricity or Home Heating Fuel Due to Not Having Enough Money for the Energy Bill During Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Almost Every Month	3%	7%	8%	4%
Some Months	6%	12%	23%	19%
1 or 2 Months	11%	19%	26%	18%
Never / No	80%	63%	42%	60%
Don't Know	1%	<1%	1%	0%

Table IV-23C displays whether respondents received a notice or threat from an energy supplier by poverty group. The table shows that households with income at or below 50 percent of the poverty level were more likely to report that they received a notice or threat. Fifty-seven percent of respondents with income at or below 50 percent of the poverty level reported that they received a notice or threat.

Table IV-23C
Received Notice or Threat to Disconnect or Discontinue Electricity or Home Heating Fuel Due to Not Having Enough Money for the Energy Bill During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Almost Every Month	8%	5%	5%	1%
Some Months	28%	11%	10%	15%
1 or 2 Months	21%	19%	15%	12%
Never / No	42%	64%	70%	73%
Don't Know / Refused	<1%	1%	<1%	0%

Respondents were asked whether they needed to use a different name to continue to receive energy service in the five years prior to the survey. Table IV-24A shows that three percent of respondents reported that they took this action.

Table IV-24A
Needed to Use a Different Name to Continue Receiving Energy Service Due to Not Having Enough Money for the Energy Bill During the Past Five Years

	Percent of Respondents
Yes	3%
No	97%
Don't Know/Refused	<1%

Table IV-24B displays the responses to this question by vulnerable group. The table shows that there is not a significant difference in response by vulnerable group.

Table IV-24B
Needed to Use a Different Name to Continue Receiving Energy Service Due to Not Having Enough Money for the Energy Bill During the Past Five Years By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	2%	3%	4%	5%
No	98%	97%	96%	95%
Don't Know / Refused	<1%	1%	<1%	0%

Table IV-24C displays the responses to this question by poverty group. The table shows that households with income at or below 50 percent of poverty and households with income above 150 percent of poverty were more likely to report that they took this action.

Table IV-24C
Needed to Use a Different Name to Continue Receiving Energy Service Due to Not Having Enough Money for the Energy Bill During Past Five Years By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	7%	2%	1%	8%
No	94%	98%	99%	92%
Don't Know / Refused	0%	<1%	<1%	0%

Respondents were asked whether their electricity was shut off due to nonpayment in the year prior to the survey. Table IV-25A shows that nine percent of respondents reported that their electricity was shut off.

Table IV-25A
Electricity Was Shut Off Due to Nonpayment During the Past Year

	Percent of Respondents
Yes	9%
No	91%

Table IV-25B displays responses to whether the electricity was shut off due to nonpayment during the past year by vulnerable group. The table shows that four percent of senior households, eight percent of disabled households, 15 percent of households with children, and 14 percent of non-vulnerable households reported that the electricity was shut off due to non-payment in the past year.

Table IV-25B
Electricity Was Shut Off Due to Nonpayment During the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	4%	8%	15%	14%
No	96%	92%	85%	86%

Table IV-25C displays responses to whether the electricity was shut off due to nonpayment during the past year by poverty group. The table shows that households with lower income were more likely to report that the electricity was shut off due to non-payment in the past year. While 18 percent of respondents with income at or below 50 percent of poverty reported that their electricity was shut off, nine percent of those with income between 51 and 100 percent of poverty, five percent of those with income between 101 and 150 percent of poverty, and three percent of those with income above 150 percent of poverty reported that their electricity had been shut off.

Table IV-25C
Electricity Was Shut Off Due to Nonpayment During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	18%	9%	5%	3%
No	82%	91%	95%	97%
Don't Know	<1%	0%	<1%	0%

Respondents were asked whether their natural gas service was shut off due to nonpayment in the year prior to the survey. Table IV-26A shows that six percent of respondents reported that their gas had been shut off due to nonpayment in the past year.

Table IV-26A
Gas Service Was Shut Off Due to Nonpayment During the Past Year

	Percent of Respondents
Yes	6%
No	93%
Don't Know / Refused	<1%

Table IV-26B displays whether respondents reported that their gas had been shut off in the past year by vulnerable group. The table shows that four percent of senior households, five percent of disabled households, ten percent of households with children, and 12 percent of non-vulnerable households reported that their gas had been shut off.

Table IV-26B
Gas Service Was Shut Off Due to Nonpayment During the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	4%	5%	10%	12%
No	96%	95%	89%	88%
Don't Know / Refused	<1%	<1%	<1%	0%

Table IV-26C displays whether respondents reported that their gas had been shut off in the past year by poverty group. The table shows that households with income below 50 percent of the poverty level were more likely to report that their gas service was shut off due to nonpayment. Twelve percent of households with income at or below 50 percent of the poverty level reported that their gas service had been shut off.

Table IV-26C
Gas Service Was Shut Off Due to Nonpayment During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	12%	5%	5%	10%
No	87%	95%	95%	90%
Don't Know/Refused	<1%	<1%	<1%	0%

Table IV-27A shows whether respondents reported that their electric or natural gas service was shut off during the year preceding the survey. The table shows that twelve percent of households had one of their utilities shut off for nonpayment during the past year.

Table IV-27A
Electric or Gas Service Was Shut Off Due to Nonpayment During the Past Year

	Percent of Respondents
Yes	12%
No	88%

Table IV-27B displays whether respondents reported that their electric or gas had been shut off in the past year by vulnerable group. The table shows that six percent of senior households, nine percent of disabled households, 19 percent of households with children, and 22 percent of non-vulnerable households reported that their electric or gas had been shut off.

Table IV-27B
Electric or Gas Service Was Shut Off Due to Nonpayment During the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	6%	9%	19%	22%
No	95%	91%	81%	78%

Table IV-27C displays whether respondents reported that their electric or gas had been shut off in the past year by poverty group. The table shows that households with income at or below 50 percent of poverty were more likely to report that their electric or gas had been shut off. Twenty-three percent of households with income at or below 50 percent of poverty reported that their electric or gas service had been shut off in the past year due to nonpayment.

Table IV-27C
Electric or Gas Service Was Shut Off Due to Nonpayment During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	207	580	362	77
Yes	23%	10%	8%	12%
No	77%	90%	92%	88%

Respondents were asked whether there was a time in the year prior to the survey when they wanted to use their main source of heat, but could not because their heating system was broken and they were unable to pay to repair or replace it. Table IV-28A shows that 13 percent of respondents reported that there was a time during the past year when their heating system was broken and they were unable to pay for its repair or replacement.

Table IV-28A
Heating System Broken and Unable to Pay for Repair or Replacement During the Past Year

	Percent of Respondents
Yes	13%
No	87%
Don't Know	<1%

Table IV-28B displays whether respondents reported that their heating system was broken by vulnerable group. The table shows that ten percent of senior households, 15 percent of disabled households, 15 percent of households with children, and nine percent of non-vulnerable households reported that their heating system was broken during the past year.

Table IV-28B
Heating System Broken and Unable to Pay for Repair or Replacement During the Past Year By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	10%	15%	15%	9%
No	90%	86%	85%	91%
Don't Know	0%	0%	<1%	0%

Table IV-28C displays whether respondents reported that their heating system was broken by poverty group. The table shows that twenty percent of households with income at or below 50 percent of the poverty level reported that their heating system was broken during the past year and they could not pay for its repair or replacement.

Table IV-28C
Heating System Broken and Unable to Pay for Repair or Replacement During the Past Year By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	20%	12%	9%	15%
No	80%	88%	91%	85%
Don't Know	1%	0%	0%	0%

Respondents were asked whether there was a time in the year prior to the survey when they wanted to use their main source of heat, but could not because they ran out of a bulk fuel (including fuel oil, LPG, propane, kerosene, coal, and wood) and could not afford to pay for a delivery. Table IV-29A shows that thirteen percent of respondents reported that they were unable to use their main source of heat for this reason.

Table IV-29A
Unable to Use Main Source of Heat Because Unable
To Pay for a Fuel Delivery During the Past Year

	Percent of Respondents
Yes	13%
No	87%
Don't Know / Refused	<1%

Table IV-29B shows whether respondents could not pay for a bulk fuel delivery by vulnerable group. The table shows that seven percent of senior households, 15 percent of disabled households, 18 percent of households with children, and 18 percent of non-vulnerable households reported that they could not pay for a fuel delivery.

Table IV-29B
Unable to Use Main Source of Heat Because Unable
To Pay for a Fuel Delivery During the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	7%	15%	18%	18%
No	93%	85%	82%	82%
Don't Know / Refused	<1%	<1%	0%	0%

Table IV-29C shows whether respondents could not pay for a bulk fuel delivery by poverty group. The table shows that there is not much variability in response by poverty group.

Table IV-29C
Unable to Use Main Source of Heat Because Unable
To Pay for a Fuel Delivery During Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	14%	15%	11%	14%
No	86%	85%	89%	86%
Don't Know / Refused	0%	<1%	<1%	0%

Respondents were asked whether there was a time in the year prior to the survey when they wanted to use their main source of heat, but could not because the utility company discontinued their gas or electric service because they were unable to pay their bill. Table IV-30A shows that 11 percent of respondents reported that they faced this situation.

Table IV-30A
Unable to Use Main Source of Heat Because Utility Company Discontinued Gas or Electric Service Due to Nonpayment During the Past Year

	Percent of Respondents
Yes	11%
No	89%
Don't Know	<1%

Table IV-30B shows the percent who could not use their heat because their utility service was discontinued by vulnerable group. The table shows that five percent of senior households, ten percent of disabled households, 18 percent of households with children, and 14 percent of non-vulnerable households reported that their gas or electric service had been discontinued.

Table IV-30B
Unable to Use Main Source of Heat Because Utility Company Discontinued Gas or Electric Service Due to Nonpayment During the Past Year By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	5%	10%	18%	14%
No	95%	90%	82%	86%
Don't Know	0%	0%	<1%	0%

Table IV-30C shows the percent who could not use their heat because their utility service was discontinued by poverty group. The table shows that households with income at or below 50 percent of the poverty level were more likely to report that they faced this problem. Twenty percent of these households reported that they could not use their heat due to a utility discontinuation.

Table IV-30C
Unable to Use Main Source of Heat Because Utility Company Discontinued Gas or Electric Service Due to Nonpayment During the Past Year By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	20%	10%	7%	10%
No	80%	90%	93%	90%
Don't Know / Refused	<1%	0%	0%	0%

Table IV-31A shows whether respondents reported that there was a time in the year prior to the survey when they wanted to use their main source of heat, but could not for one of the following reasons:

- Their heating system was broken and the respondent was unable to pay for its repair or replacement,
- The respondent ran out of fuel oil, kerosene, LPG, propane, coal, or wood, because they were unable to pay for a delivery, or
- The utility company discontinued their gas or electric service because they were unable to pay their bill.

The table shows that 28 percent of respondents reported that they could not use their heat during the past year for one of the three reasons.

Table IV-31A
Unable to Use Main Source of Heat for
Any of Three Reasons During the Past Year

	Percent of Respondents
Yes	28%
No	72%
Don't Know / Refused	<1%

Table IV-31B displays the percent of respondents who reported that they could not use their main source of heat for one of the three reasons discussed by vulnerable group. The table shows that 17 percent of senior households, 29 percent of disabled households, 38 percent of households with children, and 30 percent of non-vulnerable households reported that they could not use their main source of heat.

Table IV-31B
Unable to Use Main Source of Heat for
Any of Three Reasons During the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	17%	29%	38%	30%
No	83%	71%	61%	70%
Don't Know / Refused	<1%	<1%	<1%	0%

Table IV-31C displays the percent of respondents who reported that they could not use their main source of heat for one of the three reasons discussed by poverty group. The table shows that households with income below 50 percent of the poverty level were most likely to report that they had this problem. Thirty-nine percent of households with income at or below 50 percent of the poverty level reported that they were unable to use their main source of heat during the past year.

Table IV-31C
Unable to Use Main Source of Heat for
Any of Three Reasons During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	39%	29%	21%	27%
No	60%	71%	79%	73%
Don't Know / Refused	1%	<1%	<1%	0%

Respondents were asked whether there was a time in the year prior to the survey when they wanted to use their air conditioner, but could not because their air conditioner was broken and they were unable to pay to repair or replace it. Table IV-32A shows that 12 percent of respondents reported that they were unable to use their air conditioner.

Table IV-32A
Unable to Use Air Conditioner Because it Was Broken
And Unable to Pay for Repair or Replacement During the Past Year

	Percent of Respondents
Yes	12%
No	88%
Don't Know/Refused	1%

Table IV-32B displays whether respondents reported that they were unable to use their air conditioner by vulnerable group. The table shows that 11 percent of senior households, 14 percent of disabled households, 14 percent of households with children, and 7 percent of non-vulnerable households reported that they were unable to use the air conditioner.

Table IV-32B
Unable to Use Air Conditioner Because it Was Broken
And Unable to Pay for Repair or Replacement During the Past Year
By Vulnerable Group

	Senior	**Disabled**	**Child Under 18**	**Non-Vulnerable**
Number of Respondents	542	627	503	87
Yes	11%	14%	14%	7%
No	89%	86%	86%	92%
Don't Know / Refused	1%	<1%	1%	1%

Table IV-32C displays whether respondents reported that they were unable to use their air conditioner by poverty group. The table shows that there is not much variability in this response by poverty group.

Table IV-32C
Unable to Use Air Conditioner Because it Was Broken
And Unable to Pay for Repair or Replacement During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	14%	12%	10%	14%
No	85%	87%	89%	85%
Don't Know / Refused	1%	0%	1%	1%

Respondents were asked whether there was a time in the year prior to the survey when they wanted to use their air conditioner, but could not because the utility company discontinued their electric service because they were unable to pay their bill. Table IV-33A shows that seven percent of respondents reported that they were unable to use their air conditioner because their electric service was discontinued.

Table IV-33A
Unable to Use Air Conditioner Because Utility Company
Discontinued Electric Service Due to Nonpayment During the Past Year

	Percent of Respondents
Yes	7%
No	93%

Table IV-33B displays the percent of respondents who reported that they were unable to use their air conditioner because their electricity was shut off by vulnerable group. The table shows that three percent of senior households, 11 percent of disabled households, 11 percent of households with children, and seven percent of non-vulnerable households reported that they had this problem.

Table IV-33B
Unable to Use Air Conditioner Because Utility Company
Discontinued Electric Service Due to Nonpayment During the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	503	503	87
Yes	3%	11%	11%	7%
No	97%	88%	88%	93%
Don't Know/ Refused	0%	<1%	<1%	0%

Table IV-33C displays the percent of respondents who reported that they were unable to use their air conditioner because their electricity was shut off by poverty group. The table shows that households with income at or below 50 percent of the poverty level were more likely to report this problem. Fifteen percent of households with income at or below 50 percent of the poverty level reported that they could not use their air conditioner during the past year because their electric service had been discontinued.

Table IV-33C
Unable to Use Air Conditioner Because Utility Company
Discontinued Electric Service Due to Nonpayment During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	15%	7%	3%	1%
No	85%	92%	97%	99%
Don't Know / Refused	0%	<1%	0%	0%

Table IV-34A displays whether respondents reported that they could not use their air conditioner for one or more of the following reasons:

- Their air conditioner was broken and they were unable to pay for its repair or replacement.
- The utility company discontinued their electric service because they were unable to pay their bill.

Seventeen percent of respondents reported that they could not use their air conditioner for one or more of the two specified reasons.

Table IV-34A
Unable to Use Air Conditioner For Either of
Two Specified Reasons During the Past Year

	Percent of Respondents
Yes	17%
No	83%
Don't Know / Refused	<1%

Table IV-34B displays whether respondents reported that they could not use their air conditioner during the past year by vulnerable group. The table shows that 12 percent of senior households, 19 percent of disabled households, 23 percent of households with children, and 14 percent of non-vulnerable households reported that they could not use their air conditioner during the past year.

Table IV-34B
Unable to Use Air Conditioner For Either of
Two Specified Reasons During Past Year
By Vulnerable Group

	Senior	**Disabled**	**Child Under 18**	**Non-Vulnerable**
Number of Respondents	542	627	503	87
Yes	12%	19%	23%	14%
No	87%	81%	76%	85%
Don't Know / Refused	1%	<1%	1%	1%

Table IV-34C displays whether respondents reported that they could not use their air conditioner during the past year by poverty group. The table shows that 27 percent of households with income at or below 50 percent of poverty reported that they could not use their air conditioner, 18 percent of those with income between 51 and 100 percent of poverty, 12 percent of those with income between 101 and 150 percent and 14 percent of those with income above 150 percent of the poverty level reported that they could not use their air conditioner.

Table IV-34C
Unable to Use Air Conditioner For Either of Two Specified Reasons During the Past Year By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	27%	18%	12%	14%
No	72%	82%	87%	85%
Don't Know / Refused	1%	<1%	1%	1%

Respondents who reported that they had their service discontinued or could not pay for a fuel delivery were asked whether they had to go without showers or baths due to a lack of hot water. Table IV-35A shows that ten percent of respondents reported that they had to go without showers or baths.

Table IV-35A
Had to Go Without Showers or Baths Due to Lack of Hot Water During the Past Year

	Percent of Respondents
Yes	10%
No	12%
Did not Have Service Discontinued/ Was Able to Pay for Fuel Delivery	78%

Table IV-35B shows whether respondents reported that they had to go without showers or baths by vulnerable group. The table shows that five percent of senior households, 11 percent of disabled households, 17 percent of households with children, and 13 percent of non-vulnerable households reported that they had to go without showers or baths.

Table IV-35B
Had to Go Without Showers or Baths Due to Lack of Hot Water During the Past Year By Vulnerable Group

	Senior	**Disabled**	**Child Under 18**	**Non-Vulnerable**
Number of Respondents	542	627	503	87
Yes	5%	11%	17%	13%
No	6%	11%	17%	19%
Did not Have Service Discontinued/ Was Able to Pay for Fuel Delivery	88%	78%	66%	68%

Table IV-35C shows whether respondents reported that they had to go without showers or baths by poverty group. The table shows that 15 percent of households with income at or below 50 percent of the poverty level reported that they had to go without showers or baths.

Table IV-35C
Had to Go Without Showers or Baths Due to Lack of Hot Water During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	15%	11%	6%	9%
No	19%	12%	11%	8%
Did not Have Service Discontinued/ Was Able to Pay for Fuel Delivery	66%	77%	83%	83%

Respondents were asked whether they had to go without hot meals during the past year because their utility service was discontinued or they could not afford to pay for a fuel delivery. Table IV-36A shows that seven percent of respondents reported that they faced this problem.

Table IV-36A
Had to Go Without Hot Meals Due to Lack of Cooking Fuel During the Past Year

	Percent of Respondents
Yes	7%
No	15%
Did not Have Service Discontinued/ Was Able to Pay for Fuel Delivery	78%

Table IV-36B displays whether respondents reported that they had to go without hot meals during the past year by vulnerable group. The table shows that three percent of senior households, eight percent of disabled households, 12 percent of households with children, and eight percent of non-vulnerable households reported that they had to go without hot meals.

Table IV-36B
Had to Go Without Hot Meals Due to Lack of Cooking Fuel During the Past Year
By Vulnerable Group

	Senior	**Disabled**	**Child Under 18**	**Non-Vulnerable**
Number of Respondents	542	627	503	87
Yes	3%	8%	12%	8%
No	9%	14%	22%	24%
Did not Have Service Discontinued/ Was Able to Pay for Fuel Delivery	88%	78%	66%	68%

Table IV-36C displays whether respondents reported that they had to go without hot meals during the past year by poverty group. The table shows that 11 percent of households with income at or below the poverty level reported that they had to go without hot meals.

Table IV-36C
Had to Go Without Hot Meals Due to Lack of Cooking Fuel During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	11%	8%	4%	7%
No	22%	15%	13%	10%
Did not Have Service Discontinued/ Was Able to Pay for Fuel Delivery	66%	77%	83%	83%

Respondents were asked whether they had to use candles or lanterns due to lack of lights in the past year because their utility service was discontinued or they could not afford to pay for a fuel delivery. Table IV-37A shows that seven percent of respondents reported that they faced this problem.

Table IV-37A
Had to Use Candles or Lanterns Due to Lack of Lights During the Past Year

	Percent of Respondents
Yes	7%
No	16%
Did not Have Service Discontinued/ Was Able to Pay for Fuel Delivery	78%

Table IV-37B displays the percent of households that reported they had to use candles or lanterns by vulnerable group. The table shows that four percent of senior respondents, seven percent of disabled respondents, 12 percent of respondents with children, and four percent of non-vulnerable respondents reported that they had to use candles or lanterns.

Table IV-37B
Had to Use Candles or Lanterns Due to Lack of Lights During the Past Year
By Vulnerable Group

	Senior	**Disabled**	**Child Under 18**	**Non-Vulnerable**
Number of Respondents	542	627	503	87
Yes	4%	7%	12%	4%
No	8%	16%	22%	28%
Did not Have Service Discontinued/ Was Able to Pay for Fuel Delivery	88%	78%	66%	68%

Table IV-37C displays the percent of households that reported they had to use candles or lanterns by poverty group. The table shows that households with income at or below 50 percent of the poverty level were more likely to report that they had used candles or lanterns. Fifteen percent of respondents with income at or below 50 percent of the poverty level reported that they had done so.

Table IV-37C
Had to Use Candles or Lanterns Due to Lack of Lights During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	15%	7%	4%	2%
No	19%	16%	13%	16%
Did not Have Service Discontinued/ Was Able to Pay for Fuel Delivery	66%	77%	83%	83%

Respondents were asked whether their electricity was shut off at the time of the survey. Table IV-38A shows that one percent of the respondents reported that their electricity was currently shut off.

Table IV-38A
Electricity Shut Off at Time of Survey

	Percent of Respondents
Yes	1%
No	8%
Not Shut Off in Past 12 Months	91%

Table IV-38B shows the percent who reported that their electricity was currently shut off by vulnerable group. The table shows that there was not much variability by vulnerable group.

Table IV-38B
Electricity Shut Off at Time of Survey
By Vulnerable Group

	Senior	**Disabled**	**Child Under 18**	**Non-Vulnerable**
Number of Respondents	542	627	503	87
Yes	<1%	1%	<1%	2%
No	4%	7%	14%	11%
Don't Know/Refused	0%	0%	0%	0%
Not Shut Off in Past 12 Months	96%	93%	85%	86%

Table IV-38C shows the percent who reported that their electricity was currently shut off by poverty group. The table shows that there was not much variability by poverty group.

Table IV-38C
Electricity Shut Off at Time of Survey
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	<1%	1%	<1%	0%
No	18%	8%	4%	3%
Not Shut Off in Past 12 Months	82%	91%	95%	97%

Respondents were asked whether their natural gas service was shut off at the time of the survey. Table IV-39A shows that one percent of respondents reported that their natural gas service was currently shut off.

Table IV-39A
Gas Service Shut Off at Time of Survey

	Percent of Respondents
Yes	1%
No	5%
Not Shut Off in Past 12 Months	94%

Table IV-39B shows the percent who reported that their gas was currently shut off by vulnerable group. The table shows that there was not much variability by vulnerable group.

Table IV-39B
Gas Service Shut Off at Time of Survey
By Vulnerable Group

	Senior	**Disabled**	**Child Under 18**	**Non-Vulnerable**
Number of Respondents	542	627	503	87
Yes	1%	1%	2%	1%
No	3%	4%	9%	11%
Not Shut Off in Past 12 Months	96%	95%	90%	89%

Table IV-39C shows the percent who reported that their gas was currently shut off by poverty group. The table shows that there was not much variability by poverty group.

Table IV-39C
Gas Service Shut Off at Time of Survey
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	1%	1%	1%	1%
No	11%	4%	4%	9%
Not Shut Off in Past 12 Months	88%	95%	95%	90%

Table IV-40A displays whether respondents reported that their electric or natural gas service was shut off at the time of the survey. The table shows that one percent reported that their electric or gas service was shut off.

Table IV-40A
Electric or Gas Service Shut Off at Time of Survey

	Percent of Respondents
Yes	1%
No	10%
Don't Know / Refused	0%
Not Shut Off in Past 12 Months	88%

Table IV-40B shows the percent who reported that their electric or gas was currently shut off by vulnerable group. The table shows that there was not much variability by vulnerable group.

Table IV-40B
Electric or Gas Service Shut Off at Time of Survey by Vulnerable Group

	Senior	**Disabled**	**Child Under 18**	**Non-Vulnerable**
Number of Respondents	542	627	503	87
Yes	1%	1%	2%	3%
No	5%	8%	17%	19%
Don't Know / Refused	0%	0%	0%	0%
Not Shut Off in Past 12 Months	95%	91%	81%	78%

Table IV-40C shows the percent who reported that their electric or gas was currently shut off by poverty group. The table shows that there was not much variability by poverty group.

Table IV-40C
Electric or Gas Service Shut Off at Time of Survey by Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	2%	1%	1%	1%
No	21%	9%	7%	11%
Don't Know / Refused	0%	0%	0%	0%
Not Shut Off in Past 12 Months	77%	90%	92%	88%

Table IV-41 compares responses to questions about the inability to pay energy bills between the 2003 and 2008 surveys. The table shows that the responses to these questions are fairly similar in the two surveys. There was a decline in the percentage of respondents who reported that they skipped paying or paid less than the entire home energy bill during the past year, from 52 percent to 47 percent. However, there were small increases in the percentage of respondents who said that the heating system was broken and they were unable to pay for its repair or replacement or they were unable to use the main source of heat because they were unable to pay for a fuel delivery. Both of these indicators increased from ten percent to 13 percent of respondents. The statistically significant differences are underlined.

Table IV-41
Inability to Pay Energy Bills During Past Year
Comparison of Survey Results

	2003 Survey	**2008 Survey**
Number of Respondents	2,161	1,256
Skipped Paying or Paid Less than Entire Home Energy Bill	52%	47%
Received Notice or Threat to Disconnect or Discontinue Electricity or Home Heating Fuel	38%	37%
Electricity Shut off Due to Nonpayment	8%	9%
Heating System Broken and Unable to Pay for Repair or Replacement	10%	13%
Unable to Use Main Source of Heat Because Unable to Pay for a Fuel Delivery	10%	13%
Unable to Use Main Source of Heat Because Utility Company Discontinued Gas or Electric Service Due to Nonpayment	11%	13%
Unable to Use Air Conditioner Because it was Broken and Unable to Pay for Repair or Replacement	12%	12%
Unable to Use Air Conditioner Because Utility Company Discontinued Electric Service Due to Nonpayment	6%	7%
Had to Go Without Showers or Baths Due to Lack of Hot Water	9%	10%
Had to Go Without Hot Meals Due to Lack of Cooking Fuel	5%	7%
Had to Use Candles or Lanterns Due to Lack of Lights	8%	7%

Note: statistically significant differences are underlined.

F. Housing Problems

Respondents were asked whether they made less than a full rent or mortgage payment in the five years prior to the survey, due to their energy expenses. Table IV-42A shows that 28 percent of respondents reported that they did not make their full rent or mortgage payment due to energy bills during the past five years.

Table IV-42A
Did Not Make Full Rent or Mortgage Payment
Due to Energy Bills in the Past Five Years

	Percent of Respondents
Yes	28%
No	71%
Don't Know / Refused	1%

Table IV-42B displays the percent of respondents who reported that they skipped a rent or mortgage payment by vulnerable group. The table shows that 14 percent of senior households 25 percent of disabled households, 44 percent of households with children, and 40 percent of non-vulnerable households reported that they skipped a payment.

Table IV-42B
Did Not Make Full Rent or Mortgage Payment
Due to Energy Bills in the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	14%	25%	44%	40%
No	85%	74%	55%	59%
Don't Know / Refused	2%	1%	1%	<1%

Table IV-42C displays whether the percent of respondents who reported that they skipped a rent or mortgage payment by poverty group. The table shows that 37 percent of households with income at or below 50 percent of poverty, 27 percent of households with income between 51 and 100 percent, 27 percent of households with income between 101 and 150 percent of poverty, and 20 percent of households with income above 150 percent of poverty reported that they skipped a payment.

Table IV-42C
Did Not Make Full Rent or Mortgage Payment
Due to Energy Bills in the Past Five Years
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	37%	27%	27%	20%
No	61%	72%	71%	79%
Don't Know / Refused	2%	1%	2%	1%

Table IV-42D displays whether the percent of respondents who reported that they skipped a rent or mortgage payment by home ownership. The table shows that 22 percent of households who own their home and 33 percent of households who do not own their home reported that they skipped a payment.

Table IV-42D
Did Not Make Full Rent or Mortgage Payment
Due to Energy Bills in the Past Five Years
By Home Ownership

	Own Home	**Does Not Own Home**
Number of Respondents	626	627
Yes	22%	33%
No	77%	66%
Don't Know/Refused	1%	1%

Respondents were asked whether they had been evicted from their home or apartment during the past five years due to their energy bills. Table IV-43A shows that four percent of the respondents reported that they had been evicted.

Table IV-43A
Evicted From Home or Apartment Due to Energy Bills in the Past Five Years

	Percent of Respondents
Yes	4%
No	96%

Table IV-43B displays whether respondents reported that they had been evicted by vulnerable group. The table shows that two percent of senior households, four percent of disabled households, six percent of households with children, and four percent of non-vulnerable households reported that they had been evicted.

Table IV-43B
Evicted From Home or Apartment Due to Energy Bills In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	2%	4%	6%	4%
No	98%	96%	94%	96%

Table IV-43C displays whether respondents reported that they had been evicted by poverty group. The table shows that seven percent of households with income at or below 50 percent of the poverty level reported that they had been evicted in the past five years.

Table IV-43C
Evicted From Home or Apartment Due to Energy Bills
In the Past Five Years
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	7%	3%	3%	3%
No	93%	97%	97%	97%

Respondents were asked whether they had a foreclosure on their mortgage in the past five years due to energy bills. Table IV-44A shows that four percent of respondents reported that they had.

Table IV-44A
Had a Foreclosure on Mortgage Due to Energy Bills
In the Past Five Years

	Percent of Respondents
Yes	4%
No	96%
Don't Know	<1%

Table IV-44B displays whether respondents reported that they had a foreclosure on their mortgage by vulnerable group. The table shows that three percent of senior households, five percent of disabled households, six percent of households with children, and none of the non-vulnerable households reported that they had a foreclosure.

Table IV-44B
Had a Foreclosure on Mortgage Due to Energy Bills
In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	3%	5%	6%	0%
No	97%	95%	94%	100%
Don't Know	<1%	<1%	<1%	0%

Table IV-44C displays whether respondents reported that they had a foreclosure on their mortgage by poverty group. The table shows that there is not much variability in this statistic by poverty group.

Table IV-44C
Had a Foreclosure on Mortgage Due to Energy Bills
In the Past Five Years
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	5%	4%	4%	4%
No	94%	96%	96%	96%
Don't Know	1%	<1%	0%	0%

Respondents were asked whether they moved in with friends or family in the five years prior to the survey, due in part to their energy expenses. Table IV-45A shows that 11 percent of respondents reported that they moved in with friends or family.

Table IV-45A
Moved in with Friends or Family Due to Energy Bills
In the Past Five Years

	Percent of Respondents
Yes	11%
No	89%

Table IV-45B displays whether respondents reported that they moved in with friends or family by vulnerable group. The table shows that eight percent of senior households, 12 percent of disabled households, 15 percent of households with children, and 11 percent of non-vulnerable households reported that they moved in with friends or family during the past five years due to energy bills.

Table IV-45B
Moved in with Friends or Family Due to Energy Bills
In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	8%	12%	15%	11%
No	92%	88%	85%	89%

Table IV-45C displays whether respondents reported that they moved in with friends or family by poverty group. The table shows that households with income at or below 50 percent of the poverty level were more likely to report that they moved in with friends or family. Eighteen percent of respondents with income at or below 50 percent of the poverty level reported that they moved in with friends or family.

Table IV-45C
Moved in with Friends or Family Due to Energy Bills
In the Past Five Years
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	207	580	362	77
Yes	18%	10%	7%	11%
No	82%	90%	93%	89%

Respondents were asked whether they moved into a shelter or were homeless due to energy bills in the past five years. Table IV-46A shows that three percent of respondents reported that they had moved into a shelter or been homeless.

Table IV-46A
Moved into a Shelter or Was Homeless Due to Energy Bills
In the Past Five Years

	Percent of Respondents
Yes	3%
No	97%
Don't Know	<1%

Table IV-46B shows the percent of respondents who reported that they moved into a shelter or were homeless by vulnerable group. The table shows that one percent of senior households, four percent of disabled households, five percent of households with children, and five percent of non-vulnerable households reported that they had done so.

Table IV-46B
Moved into a Shelter or Was Homeless Due to Energy Bills
In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	1%	4%	5%	5%
No	99%	96%	95%	96%
Don't Know	0%	0%	<1%	0%

Table IV-46C shows the percent of respondents who reported that they moved into a shelter or were homeless by poverty group. The table shows that households with income at or below 50 percent of the poverty level were more likely to report that they had moved into a shelter or been homeless. Nine percent of these households reported that they had done so.

Table IV-46C
Moved into a Shelter or Was Homeless Due to Energy Bills
In the Past Five Years
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	9%	3%	2%	0%
No	91%	97%	98%	100%
Don't Know	<1%	0%	0%	0%

Table IV-47 compares responses to questions about housing problems between the 2003 and 2008 surveys. The table shows that the responses to these questions are very similar in the two surveys.

Table IV-47
Housing Problems During Past Five Years
Comparison of Survey Results

	2003 Survey	2008 Survey
Number of Respondents	2,161	1,256
Did Not Make Full Rent or Mortgage Payment	28%	28%
Evicted from Home or Apartment	4%	4%
Moved in with Friends or Family	9%	11%
Moved into Shelter or Was Homeless	4%	3%

G. Financial Problems

Respondents were asked whether they had gotten a payday loan to cover their expenses in the past five years due to their energy bills. Table IV-48A shows that 15 percent of respondents reported that they had gotten a payday loan.

Table IV-48A
Got a Payday Loan to Cover Expenses Due to Energy Bills
In the Past Five Years

	Percent of Respondents
Yes	15%
No	84%
Don't Know / Refused	1%

Table IV-48B displays whether respondents reported that they got a payday loan by vulnerable group. The table shows that households with children were most likely to report that they did so. Twenty-six percent of these respondents reported that they had gotten a payday loan in the past five years.

Table IV-48B
Got a Payday Loan to Cover Expenses Due to Energy Bills
In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	8%	14%	26%	12%
No	91%	85%	74%	86%
Don't Know/Refused	1%	1%	1%	2%

Table IV-48C displays whether respondents reported that they got a payday loan by poverty group. The table shows that households at lower poverty levels were more likely to report that they had gotten a payday loan. Eighteen percent of respondents with income at or below 50 percent of the poverty level reported that they had done so, 17 percent of those with income between 51 and 10 percent, 13 percent of those with income between 101 and 150 percent, and 11 percent of those with income above 150 percent reported that they had gotten a payday loan.

Table IV-48C
Got a Payday Loan to Cover Expenses Due to Energy Bills
In the Past Five Years
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	18%	17%	13%	11%
No	80%	82%	86%	89%
Don't Know/Refused	2%	1%	1%	0%

Respondents were asked if unaffordable energy bills had forced them into bankruptcy in the year prior to the survey. Table IV-49 shows that three percent of respondents reported that they were forced into bankruptcy by unaffordable energy bills in the past year.

Table IV-49
Forced into Bankruptcy by Unaffordable Energy Bills
In the Past Year

	Percent of Respondents
Yes	3%
No	97%
Don't Know	<1%

H. Medical and Health Problems

Respondents were asked a series of questions about health risks or problems experienced as a result of their energy bills.

They were asked whether they went without food for at least one day due to their energy bills in the past five years. Table IV-50A shows that 32 percent of respondents reported that they had done so.

Table IV-50A
Went Without Food for at Least One Day Due to Energy Bills
In the Past Five Years

	Percent of Respondents
Yes	32%
No	68%

Table IV-50B displays the percentage of households that reported that they went without food by vulnerable group. The table shows that 24 percent of senior households, 39 percent of disabled households, 36 percent of households with children, and 32 percent of non-vulnerable households reported that they went without food.

Table IV-50B
Went Without Food for at Least One Day Due to Energy Bills
In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	24%	39%	36%	32%
No	75%	61%	64%	68%
Don't Know / Refused	1%	<1%	<1%	0%

Respondents were asked whether they went without medical or dental care due to their energy bills in the past five years. Table IV-51A shows that 42 percent of respondents reported that they had done so.

Table IV-51A
Went Without Medical or Dental Care Due to Energy Bills
In the Past Five Years

	Percent of Respondents
Yes	42%
No	57%
Don't Know	<1%

Table IV-51B displays whether respondents reported that they had gone without medical or dental care by vulnerable group. The table shows that 32 percent of senior households, 44 percent of disabled households, 48 percent of households with children, and 65 percent of non-vulnerable households reported that they had gone without medical or dental care in the past five years.

Table IV-51B
Went Without Medical or Dental Care Due to Energy Bills
In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	32%	44%	48%	65%
No	68%	55%	52%	35%
Don't Know / Refused	1%	1%	0%	0%

Table IV-51C displays whether respondents reported that they had gone without medical or dental care by whether they have health insurance. The table shows that while 36 percent of respondents where the entire household has health insurance reported that they had gone without medical or dental care, 55 percent of households where some family members have health care and 59 percent of respondents where none of the family members have health care reported that they had gone without medical or dental care in the past five years.

Table IV-51C
Went Without Medical or Dental Care Due to Energy Bills
In the Past Five Years
By Health Insurance Coverage

	Members of Household With Health Insurance		
	Entire Household	Some, but not all family members	None
Number of Respondents	878	162	130
Yes	36%	55%	59%
No	63%	45%	41%
Don't Know/ Refused	<1%	1%	<1%

Respondents were asked whether they skipped filling a prescription or took less than the full dose of a prescribed medicine in the five years prior to the survey, due in part to their energy expenses.

Table IV-52A shows that 38 percent of respondents reported that they had gone without a full dose of prescription medication.

Table IV-52A
Didn't Fill Prescription or Took Less Than the Full Dose of Prescribed Medicine Due to Energy Bills In the Past Five Years

	Percent of Respondents
Yes	38%
No	62%
Don't Know	1%

Table IV-52B displays whether respondents reported that they did not fill a prescription or took less than a full dose of prescribed medication by vulnerable group. The table shows that 31 percent of senior households, 42 percent of disabled households, 42 percent of households with children, and 47 percent of non-vulnerable households reported that they did not take a prescribed medication.

Table IV-52B
Didn't Fill Prescription or Took Less Than the Full Dose of Prescribed Medicine Due to Energy Bills In the Past Five Years By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	31%	42%	42%	47%
No	68%	58%	58%	52%
Don't Know / Refused	1%	1%	1%	1%

Table IV-52C displays whether respondents reported that they did not fill a prescription or took less than a full dose of prescribed medication by the presence of a serious medical condition, including asthma, emphysema, COPD, diabetes, high blood pressure, heart disease, or stroke. The table shows that 42 percent of those with a serious medical condition reported that they did not take prescribed medication and 28 percent of those without a serious medical condition reported that they did not take a prescribed medication.

Table IV-52C
Didn't Fill Prescription or Took Less Than the Full Dose of Prescribed Medicine Due to Energy Bills In the Past Five Years By Presence of Serious Medical Conditions

	Didn't Fill Prescription or Took Less Than the Full Dose of Prescribed Medicine	
	Household Member With Asthma, Emphysema, or COPD, Diabetes, Blood Pressure, Heart Disease, or Stroke	No Household Member With Asthma, Emphysema, or COPD, Diabetes, Blood Pressure, Heart Disease, or Stroke
Number of Respondents	876	378
Yes	42%	28%

	Didn't Fill Prescription or Took Less Than the Full Dose of Prescribed Medicine	
	Household Member With Asthma, Emphysema, or COPD, Diabetes, Blood Pressure, Heart Disease, or Stroke	No Household Member With Asthma, Emphysema, or COPD, Diabetes, Blood Pressure, Heart Disease, or Stroke
No	57%	72%
Don't Know/ No Answer	1%	<1%

Table IV-52D displays whether respondents reported that they did not fill a prescription or took less than a full dose of prescribed medication by the presence of necessary medical equipment that uses electricity. The table shows that 49 percent of those who use medical equipment that requires electricity reported that they did not take prescribed medication and 34 percent of those who do not use medical equipment reported that they did not take a prescribed medication.

Table IV-52D
Didn't Fill Prescription or Took Less Than the Full Dose of Prescribed Medicine due to Energy Bills In the Past Five Years By Presence of Necessary Medical Equipment the Uses Electricity

	Didn't Fill Prescription or Took Less Than the Full Dose of Prescribed Medicine	
	Necessary Medical Equipment That Uses Electricity	No Necessary Medical Equipment That Uses Electricity
Number of Respondents	297	955
Yes	49%	34%
No	50%	65%
Don't Know/ No Answer	1%	1%

Respondents were asked whether they were unable to pay their energy bills due to expenses for medical care or prescription drugs in the year prior to the survey. Table IV-53A shows that 21 percent of respondents reported that they were unable to pay their energy bills due to medical or prescription drug expenses in the past year.

Table IV-53A
Unable to Pay Energy Bills Due to Medical or Prescription Drug Expenses In the Past Year

	Percent of Respondents
Yes	21%
No	78%
Don't Know	1%

Table IV-53B displays whether households reported that they were unable to pay their energy bills due to medical or prescription drug expenses by vulnerable group. The table shows that 15 percent of senior households, 26 percent of disabled households, 28 percent of households with children, and 13 percent of non-vulnerable households reported that they were unable to pay their energy bills due to medical or prescription drug expenses.

Table IV-53B
Unable to Pay Energy Bills Due to Medical or Prescription Drug Expenses
In the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	15%	26%	28%	13%
No	85%	74%	71%	82%
Don't Know / Refused	1%	1%	<1%	5%

Respondents were asked whether someone in the household became sick because the home was too cold in the past five years. Table IV-54A shows that 24 percent of respondents reported that someone in the home became sick and 17 reported that they needed to go to the doctor or hospital because of the illness.

Table IV-54A
Someone in Household Became Sick Because Home was Too Cold
In the Past Five Years

	Became Sick	Needed to Go to the Doctor or Hospital
Yes	24%	17%
No	74%	83%
Don't Know	2%	<1%

Table IV-54B displays whether someone in the household became sick because the home was too cold by vulnerable group. The table shows that 15 percent of senior households, 28 percent of disabled households, 33 percent of households with children, and 20 percent of non-vulnerable households reported that someone in the household became sick.

Table IV-54B
Someone in Household Became Sick Because Home was Too Cold
In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	15%	28%	33%	20%
No	82%	70%	66%	75%
Don't Know / Refused	3%	2%	2%	5%

Table IV-54C displays whether someone in the household became sick because the home was too cold and needed to go to the doctor or hospital by vulnerable group. The table shows that nine percent of senior households, 20 percent of disabled households, 26 percent of households with children, and 13 percent of non-vulnerable households reported that someone in the household became sick and needed to go to the doctor or hospital.

Table IV-54C
Someone in Household Became Sick Because Home was Too Cold
And Needed to Go to The Doctor or Hospital
In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	9%	20%	26%	13%
No	91%	80%	74%	87%
Don't Know / Refused	0%	<1%	<1%	0%

Respondents were asked whether someone in the household became sick because the home was too hot in the past five years. Table IV-55 shows that six percent of respondents reported that someone in the household became sick because the home was too hot and three percent needed to go to the doctor or hospital because of the illness.

Table IV-55
Someone in Household Became Sick Because Home was Too Hot
In the Past Five Years

	Became Sick	Needed to Go to the Doctor or Hospital
Yes	6%	3%
No	93%	97%
Don't Know	<1%	0%

Table IV-56A compares responses to questions about medical and health problems between the 2003 and 2008 surveys. The table shows that there were some large increases in the percentage of LIHEAP recipients who reported that they had these problems between the 2003 and 2008 surveys. The largest difference was in the percentage of respondents who said that they went without food for at least one day due to energy bills in the past five years. While 22 percent of respondents reported that they did so in 2003, 32 percent of respondents reported that they did so in 2008. The percent of respondents who reported that they did not fill their prescription or took less than the full dose of a prescribed medication due to their energy bills in the past five years increased from 30 percent in 2003 to 38 percent in 2008.

Table IV-56A
Medical and Health Problems During the Past Five Years
Comparison of Survey Results

	2003 Survey	2008 Survey
Number of Respondents	2,161	1,256
Went Without Food for At Least One Day	22%	32%
Went Without Medical or Dental Care	38%	42%
Did Not Fill Prescription or Took Less Than Full Dose	30%	38%
Unable to Pay Energy Bill Due to Medical Expenses	20%	21%

	2003 Survey	2008 Survey
Became Sick Because Home was Too Cold	21%	24%
Became Sick Because Home was Too Hot	7%	6%

Note: statistically significant differences are underlined.

Table IV-56B displays a comparison of medical and health problems reported in the 2003 and 2008 surveys by vulnerable group. The table shows that there was a large increase in the percentage of seniors who said they went without food from the 2003 to 2008 survey and a large increase in the percentage of nonvulnerable who said they went without medical or dental care from the 2003 to the 2008 survey.

Table IV-56B
Medical and Health Problems During the Past Five Years
Comparison of Survey Results
By Vulnerable Group

	2003 Survey				2008 Survey			
	Senior	Disabled	Child Under 18	Non-Vulnerable	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	888	1,013	919	476	542	627	503	87
Went Without Food for At Least One Day	11%	25%	28%	24%	24%	39%	36%	32%
Went Without Medical or Dental Care	29%	39%	40%	49%	32%	44%	48%	65%
Did Not Fill Prescription or Took Less Than Full Dose	23%	32%	34%	38%	31%	42%	42%	47%
Unable to Pay Energy Bill Due to Medical Expenses	16%	19%	24%	18%	15%	26%	28%	13%
Became Sick Because Home was Too Cold	11%	29%	24%	21%	15%	26%	28%	13%
Became Sick Because Home was Too Hot	6%	7%	9%	4%	5%	9%	8%	3%

V. The Need For LIHEAP

This section addresses respondents' assessments of the impact that LIHEAP had on their circumstances and whether they would have faced certain problems if LIHEAP had not been available.

A. History of LIHEAP Receipt

Respondents were asked whether they had received LIHEAP benefits in the year prior to the survey. Since the survey sample was drawn from state LIHEAP databases of past year LIHEAP recipients, all respondents received LIHEAP in the past year. However, because LIHEAP is often paid directly on the household's utility bill, respondents are often not aware that they received these benefits. Table V-1A shows that only 86 percent of the respondents reported that they had received LIHEAP in the past year.

Table V-1A
Received LIHEAP During Past Year[13]

	Percent of Respondents
Yes	86%
No	11%
Don't Know	3%

Table V-1B displays whether respondents recalled receipt of LIHEAP by vulnerable group. The non-vulnerable households were more likely to say that they did not know or refuse to provide an answer for whether they had received LIHEAP.

Table V-1B
Received LIHEAP During Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	83%	87%	88%	86%
No	14%	11%	10%	5%
Don't Know / Refused	3%	2%	2%	10%

Table V-1C displays whether respondents recalled receipt of LIHEAP by poverty group. The table shows that households with income above 150 percent of the poverty level were less likely to recall benefit receipt.

[13] Interviewers used the name for the LIHEAP program particular to the state of the recipient interviewed. If the respondent was initially confused or did not recall the program based on the state-designated name, interviewers were trained to assist their memory by describing energy assistance benefits, and using the term energy assistance throughout the survey instead of the state-designated LIHEAP name.

Table V-1C
Received LIHEAP During Past Year
By Poverty Level

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	87%	86%	88%	81%
No	9%	12%	9%	17%
Don't Know / Refused	4%	2%	3%	3%

Respondents were asked in how many of the past five years they received LIHEAP. Table V-2A shows that 20 percent reported that they received LIHEAP in only one of the past five years and 26 percent reported that they received LIHEAP in each of the past five years.

Table V-2A
Number of Years Received LIHEAP In the Past Five Years

Number of Years Received LIHEAP	Percent of Respondents
1	20%
2	20%
3	16%
4	9%
5	26%
Don't Know / Refused	9%

Table V-2B displays the number of years that respondents reported they received LIHEAP in the past five years by vulnerable group. The table shows that households with children and non-vulnerable households were less likely than senior and disabled households to report that they received LIHEAP in each of the past five years.

Table V-2B
Number of Years Received LIHEAP
In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
1	18%	19%	23%	22%
2	17%	16%	24%	27%
3	14%	17%	19%	10%
4	9%	8%	7%	14%
5	29%	31%	22%	18%
Don't Know / Refused	13%	10%	6%	9%

Table V-2C displays the number of years that respondents reported they received LIHEAP in the past five years by poverty group. The table shows that households with income at or below 50 percent of the poverty level were most likely to report that they only received LIHEAP in one out of the past five years.

Table V-2C
Number of Years Received LIHEAP In the Past Five Years
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
1	31%	17%	16%	23%
2	22%	18%	21%	28%
3	17%	17%	16%	15%
4	6%	9%	9%	8%
5	18%	29%	29%	14%
Don't Know / Refused	5%	10%	10%	11%

Respondents were asked whether they had applied or planned to apply for LIHEAP benefits this year. Table V-3A shows that 88 percent of the respondents reported that they did plan to apply for LIHEAP.

Table V-3A
Applied or Plans to Apply for LIHEAP This Year

	Percent of Respondents
Yes	88%
No	7%
Don't Know	6%

Table V-3B shows the percentage of respondents who reported that they plan to apply for LIHEAP in the coming year by vulnerable group. The table shows that non-vulnerable households were less likely than the other groups to report that they plan to apply for LIHEAP.

Table V-3B
Applied or Plans to Apply for LIHEAP This Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	542	627	503	87
Yes	90%	92%	86%	74%
No	5%	5%	8%	16%
Don't Know / Refused	5%	4%	6%	9%

Table V-3C displays the percent of households who reported that they plan to apply for LIHEAP next year by poverty group. The table shows that households with income above 150 percent of the poverty level were less likely to report that they plan to apply for LIHEAP.

Table V-3C
Applied or Plans to Apply for LIHEAP In Coming Winter or Next Summer
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	207	580	362	77
Yes	85%	88%	91%	76%
No	8%	6%	6%	12%
Don't Know	6%	6%	3%	13%

Table V-4 compares responses to questions about LIHEAP receipt between the 2003 and 2008 surveys. The table shows that there were some increases in questions about the number of years respondents had received LIHEAP and whether respondents planned to apply for LIHEAP in the coming year. These results seem to indicate that LIHEAP recipients now face more continuous energy bill problems than they did in 2003.

Table V-4
LIHEAP Receipt
Comparison of Survey Results

	2003 Survey	**2008 Survey**
Number of Respondents	2,161	1,256
Recalled Receipt of LIHEAP	84%	86%
Percent That Reported They Received LIHEAP in Each of the Past Five Years	21%	26%
Plans to Apply for LIHEAP in Coming Year	83%	88%

Note: statistically significant differences are underlined.

B. Utility Payment

The 2008 survey added some additional questions about efforts to meet utility bill payment obligations. Respondents were asked whether they tried to work out a payment arrangement with their gas or electric utility company in the past year. Table V-5 shows that 54 percent of the respondents reported that they had tried to work out a payment arrangement with their utility company in the past year and that 84 percent of those who reported that they tried to work out a payment arrangement with their utility company reported that they were able to do so.

Table V-5
Payment Arrangement with Gas or Electric Company
In the Past Year

	Tried to Work Out Payment Arrangement	Was Able to Work Out a Payment Arrangement
Number of Respondents	1,256	682
Yes	54%	84%
No	45%	15%
Don't Know	1%	1%

Respondents who reported that they tried to work out a payment arrangement with their gas or electric company were asked whether they contacted a social service agency for assistance at that time. Table V-6 shows that half of the respondents reported that they did contact a fuel fund or social services agency at this time. Seventy-two percent of those who reported that they contacted a fuel fund or social services agency reported that the agency was able to help them.

Table V-6
Contacted a Fuel Fund or Social Services Agency for Assistance
When Tried to Work Out a Payment Arrangement with Gas or Electric Company

	Contacted a Fuel Fund or Social Services Agency	Fuel Fund or Social Services Agency Was Able to Help
Number of Respondents	682	340
Yes	50%	72%
No	49%	25%
Don't Know	2%	4%

Respondents who reported that they tried to work out a payment arrangement with their gas or electric company were asked whether they applied for LIHEAP assistance at this time. Table V-7 shows that 67 percent of the respondents reported that they did apply for LIHEAP at this time. Seventy-five percent of those who reported that they applied for LIHEAP reported that LIHEAP was able to help them.

Table V-7
Applied for Assistance from LIHEAP
When Tried to Work Out a Payment Arrangement with Gas or Electric Company

	Applied for Assistance from LIHEAP	Received Assistance from LIHEAP
Number of Respondents	682	458
Yes	67%	75%
No	29%	22%
Don't Know	4%	2%

Respondents who said that the social services agency was able to help them or those who said that LIHEAP was able to help them were asked whether the assistance was sufficient to prevent

termination of their gas or electric service. Table V-8 shows that 87 percent of the respondents said that the assistance was sufficient to prevent service termination

Table V-8
Assistance from LIHEAP or Social Services Was
Sufficient to Prevent Termination of Gas or Electric Service

	Percent of Respondents
Number of Respondents	431
Yes	87%
No	12%
Don't Know	1%

C. Problems that Would Have Been Faced in the Absence of LIHEAP

Respondents who reported that they did not encounter some of the problems caused by unaffordable energy bills described in the previous sections were asked whether they believe they would have faced these problems if LIHEAP assistance had not been available.

Table V-9 shows that 77 percent of respondents reported that they would have worried about paying their home energy bill, 63 percent said they would have kept their home at unsafe or unhealthy levels, and 59 percent said they would have had their electricity or home heating fuel discontinued if LIHEAP had not been available.

Table V-9
If LIHEAP Had Not Been Available, Problems that May Have Been Faced

	Worried About Paying Home Energy Bill	Kept Home at Unsafe or Unhealthy Levels	Had Electricity or Home Heating Fuel Discontinued
Number of Respondents	294	761	845
Yes	77%	63%	59%
No	21%	33%	36%
Don't Know / Refused	1%	4%	5%

Table V-10 compares the percentage of respondents that reported they would have faced problems if LIHEAP had not been available in the 2003 and 2008 surveys. The table shows that there were significant increases in the percentage of respondents that reported they would have faced these problems if LIHEAP had not been available.

Table V-10
LIHEAP Receipt
Comparison of Survey Results

	2003 Survey		2008 Survey	
	Respondents	Percent of Respondents	Respondents	Percent of Respondents
Worried About Paying Home Energy Bill	511	66%	294	77%

	2003 Survey		2008 Survey	
Kept Home at Unsafe or Unhealthy Levels	1,392	54%	761	63%
Had Electricity or Home Heating Fuel Discontinued	1,555	48%	845	59%

Note: statistically significant differences are underlined.

D. LIHEAP Restored Heat

Respondents who reported that they did not have use of their heat because their electricity or natural gas service was disconnected or that their fuel delivery was discontinued, and who reported that they received LIHEAP benefits in the year preceding the survey, were asked whether LIHEAP helped restore their main source of heat. Table V-11 shows that 12 percent of respondents said that LIHEAP helped them to restore their main source of heat. Table V-11 also shows that nine percent of respondents said that LIHEAP restored to heat that was not available due to broken heating equipment.

Table V-11
LIHEAP Helped to Restore Heat Due to Shutoff or Broken Equipment

	Restored Heat Due to Shutoff	Restored Heat Due to Broken Equipment
Yes	12%	9%
No	8%	5%
Don't Know	<1%	<1%
Did Not Experience Loss of Heat/or Did Not Receive LIHEAP	81%	86%

E. Importance of LIHEAP

Respondents who reported that they received LIHEAP benefits in the year prior to the survey were asked, "How important has LIHEAP been in helping you to meet your needs?" Table V-12A shows that 90 percent of respondents said that LIHEAP was very important and eight percent said that it was somewhat important.

Table V-12A
Importance of LIHEAP

	Percent of Respondents
Number of Respondents	1,082
Very Important	90%
Somewhat Important	8%
Of Little Importance	1%
Not At All Important	1%
Don't Know / Refused	<1%

Table V-12B displays respondents reports on the importance of LIHEAP by vulnerable group. The table shows that there is not a significant difference in the importance rating by vulnerable group.

Table V-12B
Importance of LIHEAP
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	451	545	442	74
Very Important	88%	91%	91%	91%
Somewhat Important	10%	6%	6%	9%
Of Little Importance	1%	2%	1%	0%
Not At All Important	1%	1%	1%	0%
Don't Know	1%	0%	1%	0%

Table V-12C displays respondents reports on the importance of LIHEAP by poverty group. The table shows that respondents with higher poverty levels were less likely to report that LIHEAP was very important. While 93 percent of households with income at or below 50 percent of the poverty level said that LIHEAP was very important, 92 percent of those with income between 51 and 100 percent, 86 percent of those with income between 101 and 150 percent and 81 percent of those with income above 150 percent of poverty reported that LIHEAP was very important in helping them meet their needs.

Table V-12C
Importance of LIHEAP
By Poverty Group

	Poverty Level			
	0-50%	**51-100%**	**101-150%**	**>150%**
Number of Respondents	181	497	319	62
Very Important	93%	92%	86%	81%
Somewhat Important	4%	6%	12%	13%
Of Little Importance	1%	1%	1%	3%
Not At All Important	<1%	1%	1%	3%
Don't Know	1%	<1%	<1%	0%

VI. Regional Analysis

This section of the report examines differences in household characteristics and key indicators of energy insecurity by region of residence.

Table VI-1 displays the presence of children under 18 and single parent households by region. The table shows that LIHEAP recipients in the Midwest were less likely to have children and less likely to be single parent households.

Table VI-1
Presence of Children Under 18 and Single-Parent Households
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Percent with Children	43%	33%	43%	46%
Percent in Single-Parent Households	17%	13%	19%	21%

Table VI-2 displays the household poverty level by region. The table shows that LIHEAP recipients in the Northeast were more likely to have income at or below 50 percent of the poverty level and LIHEAP recipients in the Northeast and West were less likely to have income above 150 percent of the poverty level.

Table VI-2
Poverty Level
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
0%-50%	21%	13%	17%	14%
51%-100%	44%	46%	49%	49%
101%-150%	27%	31%	24%	35%
>150%	3%	10%	6%	2%
Missing Income Data	5%	0%	5%	0%

Table VI-3 displays the types of income and benefits received by region. The table shows that LIHEAP recipients in the Midwest were most likely to have wages or self employment income, LIHEAP recipients in the Midwest and South were most likely to have retirement income, and LIHEAP recipients in the Northeast and South were most likely to receive non-cash benefits.

Table VI-3
Types of Income and Benefits Received
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Wages or Self-Employment Income	29%	34%	25%	31%
Retirement Income	34%	45%	44%	34%
Public Assistance	40%	35%	37%	38%
Non-Cash Benefits	69%	48%	63%	54%

Table VI-4 displays whether household members were unemployed during the year by region. The table shows that there is not much variability in this statistic by region.

Table VI-4
Unemployed During the Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Yes	29%	27%	29%	34%
No	70%	72%	71%	66%
Don't Know / Refused	<1%	<1%	0%	<1%

Table VI-5 displays health insurance coverage by region. The table shows that LIHEAP recipients in the West were least likely to have health insurance coverage for the entire family and were most likely to report that no one in the household has health insurance.

Table VI-5
Health Insurance Coverage
By Region

Household Members With Health Insurance:	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Entire Household	75%	71%	67%	58%
Some, but not all family members	11%	13%	15%	15%
None	6%	12%	11%	17%
Children Only	7%	3%	6%	9%
Adults Only	0%	0%	<1%	<1%
Don't Know / Refused	<1%	1%	2%	1%

Table VI-6 displays mean energy burden by region. The table shows that LIHEAP recipients in the Northeast and South have the highest pre-LIHEAP energy burdens and LIHEAP recipients in the South have the highest post-LIHEAP energy burdens.

TableVI-6
Mean Energy Burden
By Region

	Northeast	Midwest	South	West
Number of Respondents	287	344	169	133
Pre-LIHEAP	19%	13%	19%	15%
Post-LIHEAP	13%	9%	17%	11%

Table VI-7 displays whether the respondent reported that he/she worried about paying the home energy bill by region. The table shows that households in the Northeast and South were most likely to report that they worried about the energy bill every month.

Table VI-7
Worried About Paying Home Energy Bill Due to
Not Having Enough Money for the Energy Bill
During Past Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Almost Every Month	31%	26%	32%	24%
Some Months	27%	30%	28%	32%
1 or 2 Months	15%	13%	14%	20%
Never / No	27%	31%	26%	24%
Don't Know / Refused	<1%	1%	1%	0%

Table VI-8 displays respondent reports on whether they borrowed from a friend or relative to pay the home energy bill by region. The table shows that households in the Northeast, South, and West were more likely than those in the Midwest to report that they borrowed from a friend or relative to pay the home energy bill.

Table VI-8
Borrowed from a Friend or Relative to Pay Home Energy Bill Due to
Not Having Enough Money for the Energy Bill
During Past Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Almost Every Month	10%	4%	8%	7%
Some Months	21%	18%	21%	21%
1 or 2 Months	14%	15%	21%	19%
Never / No	55%	63%	49%	53%
Don't Know / Refused	0%	0%	<1%	0%

Table VI-9 displays whether respondents left the home for part of the day because it was too hot or too cold by region. The table shows that LIHEAP recipients in the West were most likely to report that they left the home because it was too hot or too cold.

Table VI-9
Left Home for Part of the Day Because it was Too Hot or Too Cold
Due to Not Having Enough Money for the Energy Bill
During Past Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Almost Every Month	2%	2%	2%	2%
Some Months	12%	8%	8%	16%
1 or 2 Months	11%	10%	9%	17%
Never / No	75%	80%	82%	65%
Don't Know / Refused	<1%	<1%	0%	0%

Table VI-10 displays whether the respondent used the kitchen stove or oven to provide heat by region. The table shows that there is not much variability in this indicator by region.

Table VI-10
Used Kitchen Stove or Oven to Provide Heat
Due to Not Having Enough Money for the Energy Bill
During Past Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Almost Every Month	3%	1%	3%	4%
Some Months	11%	17%	17%	11%
1 or 2 Months	21%	15%	12%	15%
Never / No	65%	66%	68%	70%
Don't Know / Refused	0%	0%	1%	<1%

Table VI-11 shows whether respondents reported that they skipped paying or paid less than their entire home energy bill by region. The table shows that LIHEAP recipients in the Northeast and West were most likely to report that they skipped paying their energy bill.

Table VI-11
Skipped Paying or Paid Less than Entire Home Energy Bill
Due to Not Having Enough Money for the Energy Bill
During Past Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Almost Every Month	10%	8%	12%	11%
Some Months	25%	20%	21%	28%
1 or 2 Months	16%	14%	11%	17%
Never / No	48%	57%	56%	43%
Don't Know / Refused	1%	1%	<1%	<1%

Table VI-12 displays whether respondents reported that they received a termination notice by region. The table shows that LIHEAP recipients in the Northeast were most likely to report that they received such a notice.

Table VI-12
Received Notice or Threat to Disconnect or Discontinue Electricity or Home Heating Fuel
Due to Not Having Enough Money for the Energy Bill
During Past Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Almost Every Month	5%	5%	7%	2%
Some Months	16%	12%	12%	16%
1 or 2 Months	22%	14%	16%	19%
Never / No	57%	69%	64%	63%
Don't Know / Refused	1%	<1%	<1%	<1%

Table VI-13 displays whether recipients reported that they did not make their full rent or mortgage payment in the past five years by region. The table shows that LIHEAP recipients in the Northeast and in the West were more likely to report that the missed a rent or mortgage payment.

Table VI-13
Did Not Make Full Rent or Mortgage Payment Due to Energy Bills
In the Past Five Years
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Yes	32%	25%	25%	31%
No	67%	74%	73%	69%
Don't Know /Refused	1%	1%	2%	<1%

Table VI-14 displays whether respondents reported that they went without food for at least one day due to energy bills in the past five years by region. The table shows that LIHEAP recipients in the West were most likely to report that they went without food.

Table VI-14
Went Without Food for at Least One Day Due to Energy Bills
In the Past Five Years
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Yes	29%	31%	33%	39%
No	70%	69%	67%	61%
Don't Know / Refused	<1%	<1%	<1%	1%

Table VI-15 displays whether respondents reported that they went without medical or dental care due to energy bills in the past five years by region. The table shows that LIHEAP recipients in the South and West were most likely to report that they did so.

Table VI-15
Went Without Medical or Dental Care Due to Energy Bills
In the Past Five Years
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Yes	37%	42%	48%	50%
No	62%	58%	52%	49%
Don't Know / Refused	<1%	<1%	0%	<1%

Table VI-16 displays whether respondents reported that they did not fill their prescription or took less than the full dose of a prescribed medication due to their energy bills in the past five years by region. The table shows that there is not much variation in this statistic by region.

Table VI-16
Didn't Fill Prescription or Took Less Than the Full Dose of Prescribed Medicine Due to Energy Bills
In the Past Five Years
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Yes	36%	37%	39%	41%
No	63%	62%	60%	59%
Don't Know / Refused	<1%	1%	1%	<1%

Table VI-17 displays whether someone in the household because sick because the home was too cold by region. The table shows that households in the West were most likely to report that this was a problem.

Table VI-17
Someone in Household Became Sick Because Home was Too Cold
In the Past Five Years
By Region

	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
Yes	23%	23%	22%	32%
No	74%	75%	77%	67%
Don't Know / Refused	3%	2%	1%	1%

Table VI-18 displays the number of years that respondents reported they received LIHEAP in the past five years by region. The table shows that households in the Northeast and Midwest were most likely to report that they received LIHEAP in each of the past five years.

Table VI-18
Number of Years Received LIHEAP
In the Past Five Years
By Region

	2008 Survey			
	Northeast	Midwest	South	West
Number of Respondents	421	429	241	166
1	21%	18%	21%	20%
2	20%	17%	20%	26%
3	18%	15%	15%	17%
4	7%	9%	11%	9%
5	27%	31%	16%	22%
Don't Know / Refused	6%	10%	16%	6%

VII. Conclusion

The 2008 NEADA study confirmed that LIHEAP recipient households are likely to be vulnerable to temperature extremes. They are likely to have seniors, disabled members, or children in the home. Over 90 percent of LIHEAP recipients had at least one of these vulnerable household members. The study also showed that these households face many challenges in addition to their energy bills, including unemployment, lack of health insurance, and medical issues.

Energy Costs

LIHEAP recipients reported that they faced high and increasing energy costs. Over one third of the respondents reported energy costs over $2,000 in the past year and almost half of the respondents said that their energy bills had increased over the previous year. Three quarters of those who said that their energy bills were more difficult to pay, said that the increased difficulty was partly caused by lower income or loss of employment.

Almost all respondents said that they had taken at least one constructive action to reduce energy costs, such as turning down the heat when they go to bed, washing their clothes in cold water, or using compact fluorescent light bulbs. The percentage who reported that they had taken these actions increased significantly from the 2003 survey.

Responses to High Energy Costs

Households reported that they took several actions to make ends meet, including closing off part of the home and leaving the home for part of the day. Some of the actions were unsafe and could lead to injury or illness, such as keeping the home at a temperature that was unsafe or unhealthy or using the kitchen stove or oven to provide heat.

Inability to Pay Energy Bills

Despite the assistance that they received, many LIHEAP recipients were unable to pay their energy bills. Almost half of the respondents reported that they had skipped paying or paid less than their entire home energy bill in the past year and more than one third said that they received a notice or threat to disconnect or discontinue their electricity or home heating fuel.

Households went without utility service and sacrificed heating and cooling their home. Over ten percent had their electric or natural gas service shut off in the past year due to nonpayment. More than one quarter reported that they were unable to use their main source of heat in the past year because their fuel was shut off, they could not pay for fuel delivery, or their heating system was broken and they could not afford to fix it. Almost one fifth reported that they were unable to use their air conditioner in the past year because their electricity was shut off or their air conditioner was broken and they could not afford to fix it.

Housing and Financial Problems

Many LIHEAP recipients had problems paying for housing in the past five years, due at least partly to their energy bills. Over one quarter did not make their full mortgage or rent payment. Four percent were evicted from their home or apartment and four percent had a foreclosure on their mortgage.

They faced other significant financial problems as well, including taking out payday loans and going into bankruptcy.

Medical and Health Problems

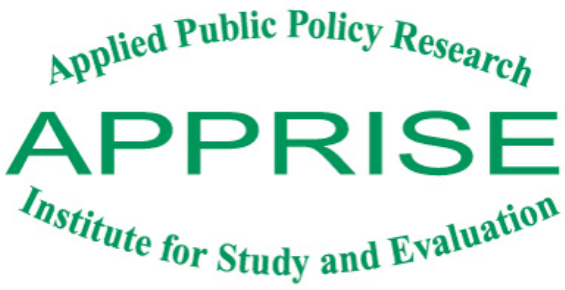
Many of the LIHEAP recipients faced significant medical and health problems in the past five years, partly as a result of high energy costs. All of these problems increased significantly since the 2003 survey. Nearly one third reported that they went without food, over 40 percent sacrificed medical care, and nearly one quarter had someone in the home become sick because the home was too cold.

The Need for LIHEAP

Households reported enormous challenges despite the fact that they received LIHEAP. However, they reported that LIHEAP was extremely important. Many reported that they would have kept their home at unsafe or unhealthy temperatures and/or had their electricity or home heating fuel discontinued if it had not been for LIHEAP. Ninety-eight percent said that LIHEAP was very or somewhat important in helping them to meet their needs.

It is clear that many of these households will continue to need LIHEAP to meet their energy and other essential needs. Almost ninety percent said that they have or plan to apply for LIHEAP in the next year.

Appendix A: Survey Instrument



NEADA 2008 National Energy Assistance SURVEY
Final INSTRUMENT

Screener

Hello. This is (INTERVIEWER) from Braun Research calling for (NAME) regarding the National Energy Assistance study.

{Interviewer Note: The goal is to conduct the survey with either (NAME) or that person's spouse/partner. If (NAME) is not home / unavailable, politely ask, "May I speak with the spouse or partner of (NAME)".}

You should have received a letter in the mail from the National Energy Assistance Directors' Association about this survey. I'm calling to ask you a few brief questions about your energy bills. In the survey, we will also talk about (**state specific LIHEAP name**). And by (**state specific LIHEAP name**), we mean the home energy assistance benefits that your household received through your Community-Based Organization. Your responses will help us better understand the need for (**state specific LIHEAP name**) energy assistance, and the problems caused by high energy bills. All your responses will be kept confidential, and will not affect your energy assistance benefits.

S1. {Interviewer: DO NOT READ, Whom are you speaking to?}

01 NAME
02 Spouse/Partner
03 Caretaker/Guardian
04 Other/Don't Know

[ASK if S1=04]
S2. When can I call back to speak with (NAME) or the spouse or partner of (NAME)? _____ WRITE DATE AND TIME FOR CALLBACK

S3. Did you receive (**STATE SPECIFIC LIHEAP NAME**) in the past 12 months?

01 YES
02 NO
07 DON'T KNOW
08 REFUSED

A. Experience with Energy Assistance

A1. In how many of the past 5 years have you received (**STATE SPECIFIC LIHEAP NAME**)?

01 ONCE
02 TWICE
03 THREE TIMES
04 FOUR TIMES
05 FIVE TIMES
07 DON'T KNOW
08 REFUSED

A2. Have you or will you apply for (**STATE SPECIFIC LIHEAP NAME**) for the coming summer or next winter?

01 YES
02 NO
07 DON'T KNOW
08 REFUSED

B. Actions taken to meet energy expenses

Which of the following actions did you take in the past year to bring down your heating bills in the winter:

		01	02	07	08
B1.	Put plastic on windows?	YES	NO	DON'T KNOW	REFUSED
B2.	Turn down the heat when you go to bed?	YES	NO	DON'T KNOW	REFUSED
B3.	Close off one or more rooms?	YES	NO	DON'T KNOW	REFUSED

Which of the following actions did you take in the past year to bring down your cooling bills in the summer?

		01	02	07	08
B4.	Keep shades and curtains closed in daytime?	YES	NO	DON'T KNOW	REFUSED
B5.	Use fans and open windows?	YES	NO	DON'T KNOW	REFUSED

Which of the following other energy-saving actions did you take in the past year?

		01	02	07	08
B6.	Wash your clothes in cold water?	YES	NO	DON'T KNOW	REFUSED
B7.	Use compact fluorescent light bulbs?	YES	NO	DON'T KNOW	REFUSED

Energy bills can take up a large part of a family's budget, and households often find it necessary to make choices about what bills they will pay or what needs they will meet. In this section of the survey, we ask some questions about actions that your household may have taken when it was difficult to meet all of your expenses.

In the past 5 years, have you or any member of your family taken any of the following actions or experienced any of the following due to your energy bills:

<u>Housing Problems</u>		01	02	07	08
B8.	Didn't make full rent or mortgage payment?	YES	NO	DON'T KNOW	REFUSED
B9.	Was evicted from home or apartment?	YES	NO	DON'T KNOW	REFUSED
B10.	Had a foreclosure on your mortgage?	YES	NO	DON'T KNOW	REFUSED
B11.	Moved in with friends or family?	YES	NO	DON'T KNOW	REFUSED
B12.	Moved into a shelter or been homeless?	YES	NO	DON'T KNOW	REFUSED

Financial	01 YES	02 NO	07 DON'T KNOW	08 REFUSED
B13. Got a payday loan to cover your expenses?				

Other Expenses	01	02	07	08
B14. Went without food for at least one day?	YES	NO	DON'T KNOW	REFUSED
B15. Went without medical or dental care?	YES	NO	DON'T KNOW	REFUSED
B16. Didn't fill a prescription or took less than the full dose of a prescribed medicine?	YES	NO	DON'T KNOW	REFUSED

Utility Service and Health	01	02	07	08
B17. Needed to use a different person's name to obtain or continue receiving energy service?	YES	NO	DON'T KNOW	REFUSED
B18. Had someone in your household get sick because your home was too cold?	YES	NO	DON'T KNOW	REFUSED
B19. (Ask if B18=1, YES) Did someone in the household need to go to the doctor or hospital because of this illness?	YES	NO	DON'T KNOW	REFUSED
B20. Had someone in your household get sick because your home was too hot?	YES	NO	DON'T KNOW	REFUSED
B21. (Ask if B20=1, YES) Did someone in the household need to go to the doctor or hospital because of this illness?	YES	NO	DON'T KNOW	REFUSED
B22. Had fire caused by unsafe heating or lighting?	YES	NO	DON'T KNOW	REFUSED
B23. Had to leave your home due to carbon monoxide?	YES	NO	DON'T KNOW	REFUSED
B24. Someone in your household had carbon monoxide poisoning?	YES	NO	DON'T KNOW	REFUSED

Utility Payment	01	02	07	08
B25. In the past year, have you tried to work out a payment arrangement with your gas or electric utility company?	YES	NO	DON'T KNOW	REFUSED
B26. (Ask if B25=1, YES) Were you able to work out a payment arrangement?	YES	NO	DON'T KNOW	REFUSED
B27. (Ask if B25=1, YES) Did you contact a fuel fund or social services agency for assistance at this time?	YES	NO	DON'T KNOW	REFUSED
B28. (Ask if B27=1, YES) Was the fuel fund or social services agency able to help you?	YES	NO	DON'T KNOW	REFUSED
B29. (Ask if B25=1, YES) Did you apply for	YES	NO	DON'T KNOW	REFUSED

	assistance from (**STATE SPECIFIC LIHEAP NAME)** at this time?				
B30.	(Ask if B29=1, YES) Did you receive assistance from (**STATE SPECIFIC LIHEAP NAME)** at this time?	YES	NO	DON'T KNOW	REFUSED
B31.	(Ask if B30=1, YES or B28=1, YES) Was the (**STATE SPECIFIC LIHEAP NAME)** or social services assistance sufficient to prevent the utility from terminating your electric or gas service?	YES	NO	DON'T KNOW	REFUSED

C. Energy Insecurity Scale

In the past 12 months, did you almost every month, some months, only in 1 or 2 months, or never do the following because there wasn't enough money for your energy bill? (INTERVIEWER NOTE: IF ASKED, ALMOST EVERY MONTH MEANS 10 OR MORE MONTHS, AND SOME MONTHS MEANS 3 TO 9 MONTHS.)

		01	02	03	04	07	08
C1.	Did you worry that you wouldn't be able to pay your home energy bill?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/ NO	DON'T KNOW	REFUSED
C2.	Did you reduce your expenses for what you consider to be basic household necessities?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/ NO	DON'T KNOW	REFUSED
C3.	Did you need to borrow from a friend or relative to pay your home energy bill?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/ NO	DON'T KNOW	REFUSED
C4.	Did you skip paying your home energy bill or pay less than your whole home energy bill?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/ NO	DON'T KNOW	REFUSED
C5.	Did you have a supplier of your electric or home heating service threaten to disconnect your electricity or home heating fuel service, or discontinue making fuel deliveries?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/ NO	DON'T KNOW	REFUSED
C6.	Did you close off part of your home because you could not afford to heat or cool it?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/ NO	DON'T KNOW	REFUSED
C7.	Did you keep your home at a temperature that you felt was unsafe or unhealthy at any time of the year?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/ NO	DON'T KNOW	REFUSED
C8.	Did you leave your home for part of the day because it was too hot or too cold?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/ NO	DON'T KNOW	REFUSED
C9.	Did you use your kitchen stove or oven to provide heat?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/ NO	DON'T KNOW	REFUSED

C10a.	In the past 12 months, was your electricity ever shut off because you were unable to pay your electric bill?	YES	NO	DON'T KNOW	REFUSED
C10b.	**ASK C10b if C10a=01, YES.** Is your electricity service shut off now?	YES	NO	DON'T KNOW	REFUSED
C10c.	In the past 12 months, was your natural gas ever shut off because you were unable to pay your gas bill?	YES	NO	DON'T KNOW	REFUSED
C10d.	**ASK C10d if C10c=01, YES.** Is your gas service shut off now?	YES	NO	DON'T KNOW	REFUSED

Was there ever a time during the past 12 months when you wanted to use your main source of heat, but could not for one or more of the following reasons?

		01	02	07	08
C11.	Your heating system was broken and you were unable to pay for its repair or replacement?	YES	NO	DON'T KNOW	REFUSED
C12.	You ran out of fuel oil, kerosene, LPG, propane, coal, or wood because you were unable to pay for a delivery?	YES	NO	DON'T KNOW	REFUSED
C13.	The utility company discontinued your gas or electric service because you were unable to pay your bill?	YES	NO	DON'T KNOW	REFUSED

(Ask C14 if C11=1, YES, C12=1, YES, OR C13=1, YES)

		01	02	07	08
C14.	Did (**STATE SPECIFIC LIHEAP NAME**) help you to restore use of your main source of heat?	YES	NO	DON'T KNOW	REFUSED

Was there ever a time during the past 12 months when you wanted to use your air conditioner, but could not for one or more of the following reasons?

		01	02	07	08
C15.	Your air conditioner was broken and you were unable to pay for its repair or replacement?	YES	NO	DON'T KNOW	REFUSED
C16.	The utility company discontinued your electric service because you were unable to pay your bill?	YES	NO	DON'T KNOW	REFUSED

(ASK C17 - C19 IF C12=1, YES OR C13=1, YES, OR C16=1, YES, OR C10A=1, YES, OR C10C=1, YES)
Was there ever a time during the past 12 months when you had to do the following because the utility company discontinued your gas or electric service or because you ran out of fuel and could not pay for a delivery?

		01	02	07	08
C17.	Did you have to go without showers or baths because you didn't have hot water?	YES	NO	DON'T KNOW	REFUSED
C18.	Did you have to go without hot meals because you didn't have cooking fuel?	YES	NO	DON'T KNOW	REFUSED
C19.	Did you have to use candles or lanterns because you didn't have lights?	YES	NO	DON'T KNOW	REFUSED

(READ IF S3=1 AND [C1=4, NEVER or C7=4, NEVER or [C12=2, N0, C13=2, NO, C16=2, NO, C10A=2, NO, AND C10C=2, NO]])
You stated that you did not face some of these problems that we asked about in the past year. In the next few questions we ask whether you think you may have had some of these problems if (**STATE SPECIFIC LIHEAP NAME**) assistance had not been available.

		01	02	07	08
C20.	(Ask if C1=4, NEVER) Would you have worried about paying your home energy bill if (**STATE SPECIFIC LIHEAP NAME**) assistance had not been available?	YES	NO	DON'T KNOW	REFUSED
C21.	(Ask if C7=4, NEVER) Would you have needed to keep your home at a temperature that you felt was unsafe or unhealthy at any time of the year if (**STATE SPECIFIC LIHEAP NAME**) assistance had not been available?	YES	NO	DON'T KNOW	REFUSED

		YES	NO	DON'T KNOW	REFUSED
C22.	(Ask if [C12=2, N0, C13=2, NO, C16=2, NO, C10A=2, NO, AND C10C=2, NO]) Would you have had your electricity or home heating fuel shut off or discontinued during a time when you needed it to heat or cool your home if (**STATE SPECIFIC LIHEAP NAME**) assistance had not been available?				

[DO NOT ASK C23 IF S3=2,7,8]

C23. How important has (**STATE SPECIFIC LIHEAP NAME**) been in helping you to meet your needs? (DO NOT READ LIST EXCEPT TO PROMPT)

01 VERY IMPORTANT (HAS MADE A VERY BIG DIFFERENCE)
02 SOMEWHAT IMPORTANT (HAS MADE A DIFFERENCE)
03 OF LITTLE IMPORTANCE (HAS MADE A SMALL DIFFERENCE)
04 NOT AT ALL IMPORTANT (NOT BIG ENOUGH BENEFIT TO HELP)
07 DON'T KNOW
08 REFUSED

D. Change in Circumstances

D1. How do your energy bills this year compare to those last year? (DO NOT READ LIST EXCEPT TO PROMPT) **VARY THE ORDER OF RESPONSES

01 SAME
02 LOWER
03 HIGHER
07 DON'T KNOW
08 REFUSED

(Ask D2 if D1=3 "Higher")

D2. Why do you think your energy bills are higher than last year? (DO NOT PROMPT. MARK ALL THAT APPLY.)

01 PRICES WERE HIGHER
02 WINTER WAS COLDER
03 SUMMER WAS WARMER
05 OTHER_____
07 DON'T KNOW
08 REFUSED

D3. How does your financial situation this year compare to last year? (DO NOT READ LIST EXCEPT TO PROMPT)
(OPTIONAL INTERVIEWER NOTE: I WOULD LIKE YOU TO THINK ABOUT HOW DIFFICULT IT IS TO PAY ALL YOUR BILLS WITH YOUR CURRENT INCOME, COMPARED TO HOW DIFFICULT IT WAS LAST YEAR.) **VARY THE ORDER OF RESPONSES

01 SAME
02 WORSE
03 BETTER
07 DON'T KNOW
08 REFUSED

D4. How difficult is it for you to pay your energy bills compared to last year? (DO NOT READ LIST EXCEPT TO PROMPT) **VARY THE ORDER OF RESPONSES

01 SAME
02 MORE DIFFICULT
03 LESS DIFFICULT
07 DON'T KNOW
08 REFUSED

(Ask D5 and D6 if D4=02, "More difficult")

D5. What do you feel is the main reason that it is more difficult to pay your energy bills this year? (DO NOT PROMPT.)

01 INCREASED ENERGY BILL
02 INCREASED OTHER BILLS
03 INCREASED PROPERTY TAXES
04 INCREASED RENT
05 INCREASED MEDICAL EXPENSES
06 INCREASED PRESCRIPTION DRUGS
07 LOWER INCOME/LOST JOB/WORSE ECONOMIC SITUATION
95 OTHER_____
97 DON'T KNOW
98 REFUSED

D6. Which of the following are reasons that you feel it is more difficult to pay your energy bills this year?

		01	02	07	08
D6a.	Increased home energy bill	YES	NO	DON'T KNOW	REFUSED
D6b.	Higher gasoline costs	YES	NO	DON'T KNOW	REFUSED
D6c.	Increased property taxes	YES	NO	DON'T KNOW	REFUSED
D6d.	Increased rent	YES	NO	DON'T KNOW	REFUSED
D6e.	Increased medical expenses	YES	NO	DON'T KNOW	REFUSED
D6f.	Increased prescription drugs	YES	NO	DON'T KNOW	REFUSED
D6g.	Lower income or worse financial situation	YES	NO	DON'T KNOW	REFUSED

D7. Have unaffordable energy bills forced you into bankruptcy in the past 12 months?

01 YES
02 NO
07 DON'T KNOW
08 REFUSED

E. Demographics

E1. Do you own or rent your home?

01 OWN
02 RENT
03 OTHER_____
07 DON'T KNOW
08 REFUSED

E2. Including yourself, how many people normally live in this household? (Interviewer instruction: if someone asks if a child who is away at college should be included, instruct them that the child should only be included if he/she is listed as a dependent on the household's tax form.) (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ OCCUPANTS

E3. How many are 60 or older? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ OCCUPANTS OVER AGE 60

E4. How many are 18 or under? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ CHILDREN 18 OR UNDER

(ASK D5 IF D4 IS NOT EQUAL TO 0)
E5. How many are 5 or under? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ CHILDREN 5 OR UNDER

E6. How many are disabled? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ DISABLED OCCUPANTS

E7. How many are veterans? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ VETERANS

E8. Has anyone in your household had one or more of the following medical conditions: asthma, emphysema, or COPD, diabetes, blood pressure, heart disease, or stroke?

01 YES
02 NO
97 DON'T KNOW
98 REFUSED

E9. Would you say that in general your health is excellent, very good, good, fair, or poor?

01 EXCELLENT
02 VERY GOOD
03 GOOD
04 FAIR
05 POOR
97 DON'T KNOW
98 REFUSED

E10. Does any adult in your household require help with personal care needs because of a physical, mental, or emotional problem? These needs include bathing or showering, dressing, eating, getting in or out of bed or chairs, walking, and using the toilet.

01 YES
02 NO
97 DON'T KNOW
98 REFUSED

E11. Which fuel is used most for heating your home? (DO NOT READ LIST EXCEPT TO PROMPT)

01 GAS; FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
02 GAS: BOTTLED, TANK OR LPG, OR PROPANE
03 ELECTRICITY
04 FUEL OIL, KEROSENE, ETC.
05 COAL OR COKE
06 WOOD
07 SOLAR ENERGY
08 OTHER FUEL
09 NO FUEL USED
97 DON'T KNOW
98 REFUSED

[ASK IF E1 ≠ 01]
E12. Is heat included in your rent?

01 YES

02 NO
99 DO NOT PAY RENT
07 DON'T KNOW
08 REFUSED

E13. What is the main way that you cool your home on the hottest days of the summer? (DO NOT READ LIST EXCEPT TO PROMPT)

01 CENTRAL AIR CONDITIONER
02 WINDOW OR WALL AIR CONDITIONER
03 EVAPORATIVE COOLING OR SWAMP COOLERS
04 FANS
05 NONE
07 DON'T KNOW
08 REFUSED

E14. In the past 12 months, what was the cost of electricity, gas, and other fuels (oil, coal, kerosene, wood, etc.) for your home? (give option to provide monthly cost) (DO NOT READ LIST EXCEPT TO PROMPT.)

01 <$500
02 $500 - $1,000
03 $1,000 - $1,500
04 $1,500 - $2,000
05 $2000 OR MORE
07 DON'T KNOW
08 REFUSED

E15. How many of the adults in your household have health insurance? (DO NOT READ LIST EXCEPT TO PROMPT.)

01 ALL
02 SOME
03 NONE
07 DON'T KNOW
08 REFUSED

[ASK IF E4 NE 0, 97, OR 98]
E16. How many of the children in your household have health insurance? (DO NOT READ LIST EXCEPT TO PROMPT.)

01 ALL
02 SOME
03 NONE
07 DON'T KNOW
08 REFUSED

E17. In the past 12 months, did you not pay your home energy bill or not pay your bill in full because of expenses for medical bills or prescription medicine?

01 YES
02 NO
07 DON'T KNOW
08 REFUSED

E18. In the past 12 months, did any member of your household have any necessary medical equipment that uses electricity?
(OPTIONAL INTERVIEWER NOTE: I WOULD LIKE YOU TO THINK ABOUT ANY NECESSARY MEDICAL EQUIPMENT THAT USES ELECTRICITY, SUCH AS AN OXYGEN MACHINE OR A NEBULIZER.)

01 YES
02 NO
07 DON'T KNOW
08 REFUSED

E19. In the past 12 months, did you or any member of your household receive employment income from wages and salaries or self-employment income from a business or farm?

01 YES
02 NO
07 DON'T KNOW
08 REFUSED

E20. In the past 12 months, was any member of your household unemployed and looking for work?

01 YES
02 NO
07 DON'T KNOW
08 REFUSED

E21. In the past 12 months, did you or any member of your household receive retirement income from Social Security or pensions and other retirement funds?

01 YES
02 NO
07 DON'T KNOW
08 REFUSED

E22. In the past 12 months, did you or any member of your household receive benefits from Temporary Assistance for Needy Families (TANF), Supplemental Security Income (SSI), or general assistance or public assistance?

01 YES
02 NO
07 DON'T KNOW
08 REFUSED

E23. In the past 12 months, did you or any member of your household receive Food Stamps or live in public or subsidized housing?

01 YES
02 NO
07 DON'T KNOW
08 REFUSED

E24. What is your household's annual income? (give option to provide monthly income) (DO NOT READ LIST EXCEPT TO PROMPT.)

01 ≤$5,000
02 $5,001 - $10,000
03 $10,001 - $15,000
04 $15,001 - $20,000
05 $20,001 - $25,000
06 $25,001 - $30,000
07 $30,001 - $35,000
08 $35,001 - $40,000
09 >$40,000
97 DON'T KNOW
98 REFUSED

That was my last question. Thank you very much for your time and cooperation. Have a pleasant day/evening.

Coordinating Energy and Rehabilitation Services for Lower-income Homeowners: Lessons Learned from the Weatherization, Rehabilitation and Asset Preservation Program

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Coordinating Energy and Rehabilitation Services for Lower-income Homeowners: Lessons Learned from the Weatherization, Rehabilitation and Asset Preservation Program

Abstract

Recently, have focused considerable attention on assisting lower-income households in buying their own homes. Much less attention has been paid to assisting them keep their homes. Rapidly escalating home energy costs are straining the budgets of many lower-income homeowners, increasing the likelihood of under maintenance and mortgage default. This article presents an evaluation of a demonstration program designed to assist lower-income households decrease energy costs, and to improve the condition and value of their homes. The experience of eleven local nonprofit organizations, funded to develop programs to coordinate weatherization and housing rehabilitation services, were studied over a five-year period. The results of the evaluation indicate that there are many obstacles to coordinating weatherization and rehabilitation programs, but it can be accomplished under the right conditions. Policy recommendations for facilitating coordination are presented in this study.

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Tables and Figures

Introduction

Homeownership has been linked to many positive outcomes. Owning a home, for example, is the primary means of wealth creation for most American families. In 2004, homeowners had a median net worth of $184,400 compared with $4,000 for renters (Bucks et al. 2006). Research also indicates that homeowners enjoy better quality housing than renters, with the cost burden for mortgage payments usually decreasing over time (McCarthy, Van Zandt, and Rohe 2001). Finally, homeownership has social benefits, including increased family stability, higher educational attainment for children, and is believed to make neighborhoods stronger and to increase civic participation (Rohe and Stewart 1996; Rohe et al. 2000).

Because of these perceived benefits, the public and nonprofit sectors have developed a variety of programs to assist lower-income families buy homes. For its part, the national government enacted legislation to promote the availability of credit to lower-income and other "nontraditional" borrowers including the Community Reinvestment Act (CRA), which requires that the regulated financial institutions lend to qualified applicants of all races and in all neighborhoods, and the Federal Housing Enterprises Financial Safety and Soundness Act (FHEFSSA) of 1992, which sets goals for the government sponsored enterprises including Fannie Mae and Freddy Mac for lending to low-income households (HUD 2002). In addition, state, and local governments have put in place programs that include down payment assistance, loans at below market interest rates, soft-second mortgages, and vouchers for home purchase. Nonprofit organizations have also developed programs to help lower-income families become homeowners, including pre-purchase counseling programs, which work with the financial assistance programs offered by both the public and private sectors (NeighborWorks® America 2005).

Complementing the initiatives of the public and nonprofit sectors to promote homeownership, the private sector has recognized that the greatest potential for growth in the rate of homeownership is in the segment of the market composed of lower-income households, including minorities and other nontraditional borrowers. The private-sector mortgage industry responded by developing increasingly innovative mortgage instruments and, at the same time,

relaxing underwriting standards and down payment requirements to make it easier for lower-income households to qualify for mortgages (Quercia 1999; Listokin et al 2001).

As a result of these initiatives, the homeownership rate reached a high of 69.1 percent in the first quarter of 2005, with much of the increase among minorities and nontraditional borrowers. Almost half of the rise in the number of homeowners from 1995 to 2005, about six million households, is attributable to new minority homeowners.[1] The homeownership rates among African-Americans rose from 42.7 percent in 1995 to 49.1 percent by 2004, with the rate for other minorities rising from 47.2 percent in 1995 to 59.9 percent in 2006 (U.S. Census Bureau, 2007). The homeownership rate for households in the second income quintile (between 25 and 50 percent of the income distribution) increased 5.6 percent from 1970 to 2003.[2]

The Plight of Many Lower-income Homeowners

While the public nonprofit and private sectors focused much of their attention on assisting lower-income and other nontraditional borrowers purchase housing, they focused much less attention on assisting them in being successful homeowners after the purchase. This is a serious omission because the most important benefits of homeownership, such as building wealth, only accrue over time.

Lower-income households face challenges on both the income and expense sides. They have lower and less stable incomes (Gosselin 2004), fewer additional resources to tap in case of emergency, and may be more prone to spells of unemployment or underemployment. They may also experience more rapidly rising housing costs because they are more likely to have adjustable rate mortgages that can lead to significantly higher monthly payments whenever the rate adjusts (Heavens 2006). Lower-income households are also more likely to own older, poorly insulated homes and have older, less energy-efficient appliances and systems, and so they are more likely to feel additional pressure on their budgets due to increases in the price of energy. Low-income families spend 16 percent of their income on energy compared with 5 percent among median-income households (U.S. Department of Energy 2006).

As expected, high cost burdens are most pronounced among owner households with extremely low incomes. A full 70 percent of homeowners with annual incomes less than $20,000, over 6.1 million households, and 57 percent of households with annual income between $20,000 and $34,999, over 4.9 million households, paid more than 30 percent of their income for housing (U. S. Census Bureau 2006).

Impacts of Rising Costs and Flat Incomes

When energy costs increase more rapidly than income, the quality of life for household members can decline. To keep energy costs from overwhelming the family's budget, they may turn down the heat in the winter and the air conditioning in the summer. They may even close off rooms entirely to reduce utility bills. The average low-income family spends about $1,673 annually for home energy (U.S. Department of Energy 2006). The more the family has to spend on energy to keep its home reasonably comfortable, the less is left for other necessities, such as food, clothing, and medical care.

Lower-income homeowners may also compensate for housing and energy costs increasing faster than income by deferring and/or not performing needed maintenance and repairs (Quercia and Stegman 1992), which can negatively affect the health, safety, and quality of life for the household members. Failure to maintain the heating system properly, for example, may contribute to respiratory problems. Safety hazards in the home, such as broken steps or rails, increase the risk of accidents if not repaired. The quality of life for household members can suffer as housing deficiencies change the way they use the property.

Deferring essential maintenance and repairs to make up for rapidly increasing housing and energy costs can, over time, contribute to a loss of equity in the home, which defeats one of the principal benefits of homeownership for lower-income families--wealth creation. Deferred maintenance has also been shown to raise the likelihood of default and foreclosure (Foster and Van Order 1985; Vandell and Thibodeau 1985; Quercia and Stegman 1992; Elul 2006).

Beyond harming individual households, lack of maintenance, loss of equity, and foreclosure negatively affect neighborhoods (Immergluck and Smith 2006). Foreclosures, for example, have

been shown to have a significant negative effect on neighborhood property values. The estimates of the impact on value range from between -0.9 and -1.136 percent on properties with an eighth of a mile of a foreclosure start (Immergluck and Smith 2006) to as much as -8.7 percent on properties near a foreclosed property, with decreasing impact out to a distance of 0.9 km (Lin et al. 2007). The negative impact was found to be even greater in lower-income neighborhoods, in weak markets, and to last for up to five years (Immergluck and Smith 2006, Lin et al. 2007).

Current Programs to Assist Lower-Income Homeowners

Policy makers have recognized the potential negative impacts of high housing cost burdens on individuals, families, and communities. As a result, they have developed a number of programs to assist lower-income homeowners with rising housing costs. These programs can be divided into four types: housing rehabilitation, weatherization, post-purchase counseling, and other social programs. Each type is described briefly below.

Housing Rehabilitation Programs

Housing rehabilitation (rehab) programs assist lower-income homeowners undertake necessary home maintenance and repair activities. These activities are seen as effective because they are believed to stabilize both the existing housing stock and the surrounding neighborhoods, thus providing decent, safe, and sanitary housing for lower-income households. As a rule, rehab assistance can be used to fund the repair, rehabilitation, or reconstruction of homes. For instance, these may include the installation of a new roof or a furnace, renovating entryways, modifying and improving bathrooms and kitchens, and making properties accessible for people with physical or sensory impairments (Council of Large Public Housing Authorities 2006). Rehab programs are typically funded by the Community Development Block Grant (CDBG) and HOME programs, with community development corporations and other nonprofit entities often participating in these efforts.

Weatherization Programs

Weatherization programs assist lower-income families reduce their energy costs. They pay for housing improvements that increase home energy efficiency and reduce energy costs. These improvements might include additional insulation; sealing of doors, windows, and cracks; replacing energy inefficient appliances; and addressing health and safety-related issues. Wolfe (2004) estimated that these activities can, on average, reduce a home's total energy consumption by about 20 percent. In general, assistance is provided to qualified households in the form of grants which do not have to be repaid.

The Weatherization Assistance Program (WAP), administered by the U.S. Department of Energy, is the main source of funding for home weatherization. WAP funds are provided to all fifty states and the District of Columbia. In 2004, $227 million was appropriated for WAP. WAP funding comes from several sources: federal appropriations; contributions from utility companies; and monies from the Low Income Home Energy Assistance Program (LIHEAP) administered by the U.S. Department of Health and Human Services. Although LIHEAP is primarily a fuel assistance program, states transferred about $213 million of LIHEAP funding to weatherization programs, almost doubling the amount directly appropriated for weatherization under WAP.[3]

Most states also provide additional weatherization assistance with funds from utility funds, public benefit funds, or combination or both. Public benefit funds are state-controlled funds generated by levying a small surcharge on consumer electricity and natural gas usage. These funds are administered by independent state energy entities, nonprofit corporations (such as community action programs), or the utilities under the oversight of the state's public utilities commission. Public funds designated for lower-income households are combined with general funds and made available through a network of providers of energy services for lower-income households, composed mostly of community action agencies. In general, depending on the sources of funding, states have more flexibility in determining how these funds are used to assist lower-income households than they do under the federal programs.

Post-purchase Counseling Programs

Post-purchase education and counseling programs assist homeowners once they are in their home. The two main types of post-purchase homeownership services are: 1) sustainable homeownership services; and 2) delinquency and foreclosure prevention services (Quercia, Gorham and Rohe 2006). Sustainable homeownership programs help homeowners acquire the skills to maintain and improve their housing investment, while delinquency and foreclosure prevention services are offered to homeowners who have encountered problems meeting their mortgage obligations.

Both types of assistance can help lower-income homeowners deal with rising housing costs while coping with incomes that fail to keep pace with those increased costs. Sustainable homeownership education and counseling provide training in home maintenance, repairs, insurance, home safety, budgeting, financial management, and how to avoid predatory lenders. This type of assistance is preventive in nature and can help lower the probability of default or foreclosure. Default counseling can help improve the financial stability of homeowners by providing budgeting, credit building or repair, and other such skills. Foreclosure preventions programs can offer alternatives to losing the home, including loan modification or partial forbearance, which can give the homeowner time to cure the default (Quercia and Cowan 2008).

Other Programs Available to Low-Income Homeowners

A number of other programs are also available to lower-income homeowners to help them meet rapidly increasing housing costs. Some forms of assistance increase the resources a homeowner has to meet rising housing costs, such as the cash benefits received under the Social Security Income, and Earned Income Tax Credit programs. Other forms of assistance decrease, or at least limit the rate of increase, of housing costs, such as property tax "circuit breakers" that cap or limit the amount of property taxes owed by lower-income, older homeowners. Often, however, lower-income homeowners lack information on the type or scope of assistance available.

Need for Coordination

Despite the availability of many forms of assistance, there is a lack of coordination among the various programs, which often results in eligible households not receiving help for which they

are eligible, failure to complete needed repairs, and significant inefficiencies for both programs and homeowners. The lack of coordination among programs is the result of several factors. First, the various assistance programs have different program eligibility criteria. Second, programs work with different time frames. Third, different state and local agencies administer rehabilitation and weatherization programs. Rehabilitation programs are often directed to community development corporations, while weatherization programs are usually directed towards community action agencies (Wolfe 2004). These agencies lack a history of collaboration.

In an attempt to improve the coordination among the range of services intended to assist lower-income homeowners, the Ford Foundation, in collaboration with the Energy Programs Consortium (EPC), developed a demonstration project called the Weatherization, Rehab and Asset Preservation (WRAP) program. The WRAP program was designed to assess the feasibility of coordinating housing rehabilitation and weatherization programs at the local level and to assess the benefits of that coordination.

In this paper, we first describe the WRAP program and homeowners it served. We then focus on several important policy-relevant questions.

- Did the WRAP program serve a truly needy population?
- What were the major repairs needed by the lower-income homeowners in the program?
- To what extent was the WRAP program able to address those needs?
- What were the main obstacles to coordinating weatherization and rehabilitation programs
- Finally, what lessons can we learn from the WRAP program about coordinating rehab and weatherization programs?

The WRAP Program

The Ford Foundation and the EPC established the WRAP program in 2002 as a demonstration program designed to test the feasibility of coordinating housing weatherization and rehabilitation services at the local level for the purpose of helping lower-income homeowners maintain their property, lower energy costs, reduce safety hazards, and increase the asset value of their homes. Ford and EPC initially designed the program with four key features: 1) the program would work

through local agencies; 2) the program would combine assistance from weatherization and rehab funding sources to make improvements to the homes; 3) each site would have a case manager to help the participating homeowners work with the lead agency and access other social services they might need; and 4) the program would maximize neighborhood impacts by concentrating its efforts in limited geographic areas. Ford and EPC also set performance goals for participating organizations. Each organization would be expected to weatherize and rehab an average of fifty homes per year for a three-year period, and that the total of 150 homes would be approximately 10 percent of all homes in the target neighborhood. Although the original focus was on physical improvements to the property, the program evolved to place greater emphasis on accessing social services and counseling for clients as the extent of the need for those services became more apparent.

Ford and EPC selected six nonprofit organizations in five states to participate in the first phase of the program, and then selected five additional organizations for a second phase of the program, which began a year later. They picked some organizations because they were already trying to combine rehab with weatherization. Others they chose because they were working with either Ford or EPC on other projects. All eleven organizations were judged to be capable, well managed and well respected in their respective communities. The six organizations chosen in the first phase were: 1) the Community Renewal Team, Hartford, CT; 2) the Massachusetts Affordable Housing Alliance (MAHA), Dorchester, MA; 3) the Action Energy, Gloucester, MA; 4) the Community Development Corporation of Long Island, Freeport, NY; 5) the Chattanooga Neighborhood Enterprise, Chattanooga, TN; and 6) the Community Action Council of South Texas, Rio Grande City, TX.

The five organizations chosen in the second phase were: 1) the Anchorage Neighborhood Housing Services, Anchorage, AK; 2) the St. Joseph's Carpenter Society, Camden, NJ; 3) the Neighborhood Housing Services of New York, Staten Island, NY; 4) the Energy Coordinating Agency, Philadelphia, PA; and 5) the Social Development Commission, Milwaukee, WI.

Ford provided each participating organization with a Challenge Grant of up to $100,000 a year, renewable for up to three years to pay for half of the development and administrative costs of the

program. To receive the grant, each organization had to raise matching funds for the balance of the administrative costs, plus funding for the actual rehab and weatherization work. Local sources of funding varied among the organizations and included: 1) state public benefit funds; 2) utility company donations; 3) private foundation grants; 4) WAP and LIHEAP funds; 5) HOME and CDBG funds; and 6) state housing finance agency funds. Each organization also had to develop a strategic plan before it received program funds. Completing those two required tasks took some organizations longer than others, and so the programs in each phase have been operating for different lengths of time.

The two principal characteristics that distinguish the WRAP programs at the different locations are: 1) the type of lead organization and 2) the program model for combining rehab and weatherization services. The type of lead organization determined the expertise that it brought to the program while the program model determined what the lead agency needed to do to combine rehab and weatherization services. The lead agencies can be classified as one of four types: Community Development Corporations (CDCs), Community Action Agencies (CAAs), a stand-alone weatherization agency, and a housing advocacy group. Six of the lead organizations were CDCs, which typically have experience with HUD-funded housing rehab and loan programs (See Table 1). Three agencies were CAAs, which typically administer weatherization and social service grant programs funded by the Department of Energy and the Department of Health and Human Services. One agency was a stand-alone weatherization agency that administered Department of Energy weatherization grant programs, and one was a housing advocacy group with connections to home repair and renovation programs run by other local organizations.

Table 1: Taxonomy of WRAP Lead Agencies and Program Models

	Program Model		
Type of Lead Organization	Self-Contained	Partnership, Informal Relationship	Partnership, Formal Relationship
CDC/NHS	Freeport Rio Grande City	Anchorage Camden Chattanooga Staten Island	
CAA	Milwaukee	Gloucester Hartford	Gloucester Hartford
Weatherization			Philadelphia
Housing Advocacy		Dorchester	Dorchester

There were two basic program models for providing both weatherization and rehab services to clients: the self contained and partnership models. Some agencies developed self-contained programs by expanding the range of services they offered in-house to include the missing components of a coordinated program. The lead agency in Freeport, for example, greatly expanded its rehab capacity to complement its existing weatherization and limited rehab programs. Other lead agencies developed partnership models by coordinating with outside organizations which provided the missing components. In the partnership model, separate agencies provide the weatherization and rehab components. For example, in Camden, the lead agency provides the rehab, while the Camden County Office on Economic Opportunity and the Board of Public Utilities Comfort Partners Program provide the weatherization services.

Within the partnership model, there were two subsets that can be distinguished by the nature of the relationship between the agencies. Formal partnerships were created between participating agencies in some instances, with staff from the second agency participating directly in the WRAP program. At other sites, the relationships were informal, with the outside agency or agencies working with WRAP clients on a referral basis. The two subsets of the partnership model are not mutually exclusive, and three of the eight partnership-model lead agencies established both formal and informal relationships with other organizations. In Dorchester, for example, ABCD and MAHA are formal partners in the Challenge Grant, while other agencies in the area provide the rehab services on a referral basis. (Table 1 about here.)

At least four people were typically involved with the WRAP program at each site. The Executive Director had overall responsibility for the program as part of his/her general oversight of the organization. A project director directly managed the program. A WRAP counselor worked with the clients and coordinated all of the services. Finally, a housing specialist inspected the home, determined the work that needed to be done, and oversaw the work to ensure that it was done properly.

Evaluation of the WRAP Program

An evaluation is an integral part of the WRAP program. Ford and EPC wanted to determine whether a "business case" could be made for expanding the program, which meant documenting

the program's development and implementation, accomplishments, and impacts. Our overall evaluation consisted of three components: 1) process, which examined facilitators of and impediments to the development and implementation of the program; 2) output, which focused on who the program served, what their needs were, the extent to which the program was able to address those needs, and the resources used; and 3) impact, which examined the longer-term effects of the program on the clients, their neighborhoods, and the organizations that participated in the program.

The process evaluation focused on local-, state-, and/or national-level factors that either facilitated or hindered program implementation. For this component of the evaluation, we conducted key informant interviews with key personnel at each site at two points in time: first, late in the initial year of program operation and, second, during the last year of program operation. During the site visits, we interviewed each member of the program staff and representatives of public-sector and private-sector organizations which provided funding for the program. Each person was asked about what he/she perceived as obstacles to and facilitators of program development and operation. The process evaluation also draws on what we learned from our participation in semi-annual meetings of WRAP program staff, and on quarterly reports filed by local program directors.

The output evaluation was based on an intake questionnaire that all WRAP clients completed, initial property inspection reports that listed the repairs needed to each unit, and a completion report that listed the repairs that were actually made to each unit. The cost and sources of funding for the completed work was also recorded.

This paper is based on what we learned from the first two components of the evaluation. First, from the outputs component, we examine who the program served, what their needs were, how completely the program addressed those needs, and the resources the program accessed to do the work. From the process component, we examine the key obstacles to coordinating weatherization and rehab programs. Finally, we discuss the lessons learned for future efforts to coordinate rehabilitation and weatherization assistance to assist lower-income homeowners maintain and afford their homes.

Program Outputs

Table 2 shows the outputs of each WRAP program in terms of the number of clients enrolled, the number of properties inspected, and the number of properties completed. The initial program design set a target of 150 units to be completed within the three-year challenge grant period, but that proved to be difficult for each of the programs to reach within the three-year time period. Two of the more active sites, Rio Grande City and Philadelphia, achieved the goal of enrolling 150 homeowners within three years, but fell short of reaching 150 completions. The Freeport program completed fifty-one homes within three years, but it completed an additional sixty-two in the subsequent year. On the other end of the spectrum, the Hartford program was not able to raise sufficient matching funds and dropped out after one year. The Chattanooga program started, stopped for a period of time to reorganize, and restarted, only to stop again after an additional year when it lost its funding from the city. The Staten Island program was not able to form a viable partnership with the local weatherization agency and after one year withdrew from the program.

Table 2: WRAP Intakes, Inspections, and Completions

Site	Intakes	Inspections	Completions
Phase I Sites			
Chattanooga[1]	42	29	14
Dorchester[2]	47	44	38
Freeport	126	118	113
Gloucester[2]	70	70	70
Hartford[3]	29	29	10
Rio Grande City	155	149	110
Phase II Sites			
Anchorage[4]	44	26	22
Camden[4]	53	49	2
Milwaukee[4]	138	123	85
Philadelphia	160	146	140
Staten Island[5]	41	31	0
TOTAL	927	814	604

Data as of 11/7/07

1. Chattanooga completed two years of the Challenge Grant period.
2. Dorchester and Gloucester considered one site for the WRAP Program administration, but they are treated separately for the evaluation.
3. Hartford completed one year of the Challenge Grant period.
4. Anchorage, Camden, and Milwaukee were still operating within the Challenge Grant period as of 11/7/07.
5. Staten Island completed one year of the Challenge Grant period.

Did the WRAP Program Serve a Truly Needy Population?

The WRAP program was designed to assist lower-income homeowners maintain their homes, reduce energy use, and increase the asset value of their homes. Data on the characteristics of program participants indicate that the local programs were well targeted to needy households. A full 39 percent of the program participants were extremely low income (less than 30 percent of the area median income), just under 33 percent were very low income (between 30 and 50 percent of the area median income), and 25 percent were low-income (between 50 and 80 percent of the area median income). Less than 3 percent had incomes above 80 percent of the area median. WRAP clients also tended to be considerably older than the general population (35 percent of them were 60 years of age or older) and more likely to be black or Latino (46 percent were black and 36 percent were Latino). Moreover, almost 40 percent of all WRAP households included at least one disabled person.

The characteristics of the WRAP householders did, however, vary considerably among the local programs. In Philadelphia, for example, 95 percent of the householders are black and 63 percent are 60 years old or older. In Gloucester, 97 percent of the householders are white, and only 20 percent are 60 years old or older. These differences are largely due to variation in both the overall demographic characteristics of the cities and in the specific neighborhoods targeted for the WRAP program.

WRAP program participants tended to own homes of modest values. Forty-two percent owned homes valued at less than $100,000, 45 percent between $100,000 and $300,000 and 13 percent over $300,000. A full 40 percent had no mortgage on their homes. A full 77 percent of those with mortgages had interest rates below 8 percent, while 23 percent had rates of 8 percent or higher. The energy bills of WRAP clients ranged from under $50 to over $1,000 per month with 63 percent paying less than $300 per month and 27 percent paying $300 per month or more. At the time they applied for the program, 46 percent of WRAP clients reported closing off one or more rooms in the winter because they were too cold to use. Twenty-one percent reported closing one or more rooms in the summer because they were too hot to comfortably use.

The characteristics of the properties, however, vary substantially among the sites. In Philadelphia, for example, 63 percent of the WRAP properties are valued at less than $125,000, while in Gloucester 84.3 percent of the WRAP properties are valued at over $250,000. These differences largely reflect home values in the various regional housing markets.

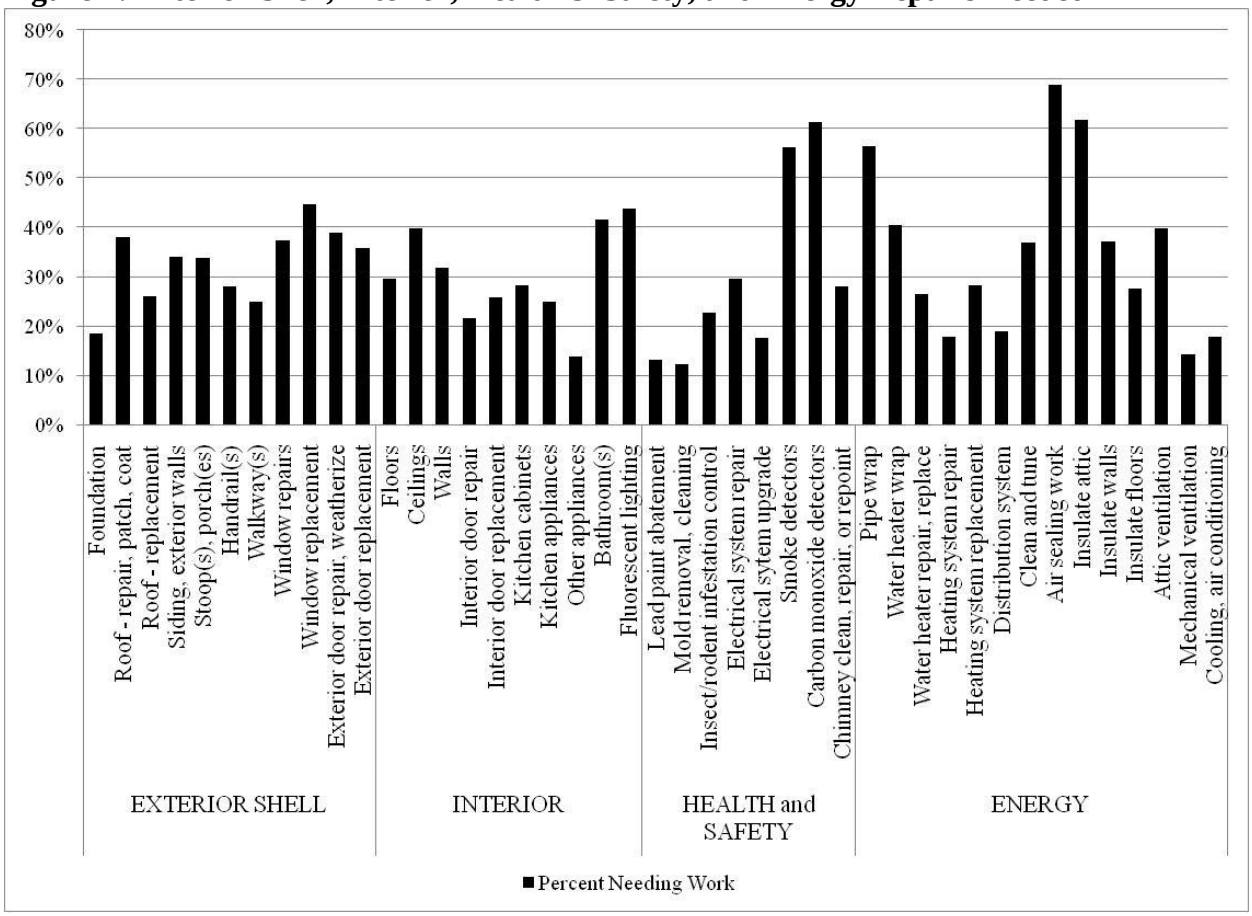
What Major Repairs Were Needed by the Lower-income Homeowners in the Program?

Data collected by the property inspectors at each WRAP site indicate a wide range of deficiencies in the homes owned by WRAP clients. Figure 1 indicates the percentage of housing units in need of various types of exterior, interior, health and safety, and energy repairs. Looking at the exterior shell, over 35 percent of all homes needed doors repaired or weatherized, windows repaired or replaced, and roofs repaired. Frequently-needed interior repairs included installing fluorescent lighting and problems with bathrooms and ceilings, which were often damaged by water from leaky roofs. The most frequently needed health and safety repairs were the installation of carbon-monoxide and smoke detectors and repairs to electrical systems. Finally, the most frequently needed energy- related items were attic ventilation, attic insulation, air sealing, water heater and pipe wrapping.

To What Extent Was the WRAP Program Able to Address Those Needs?

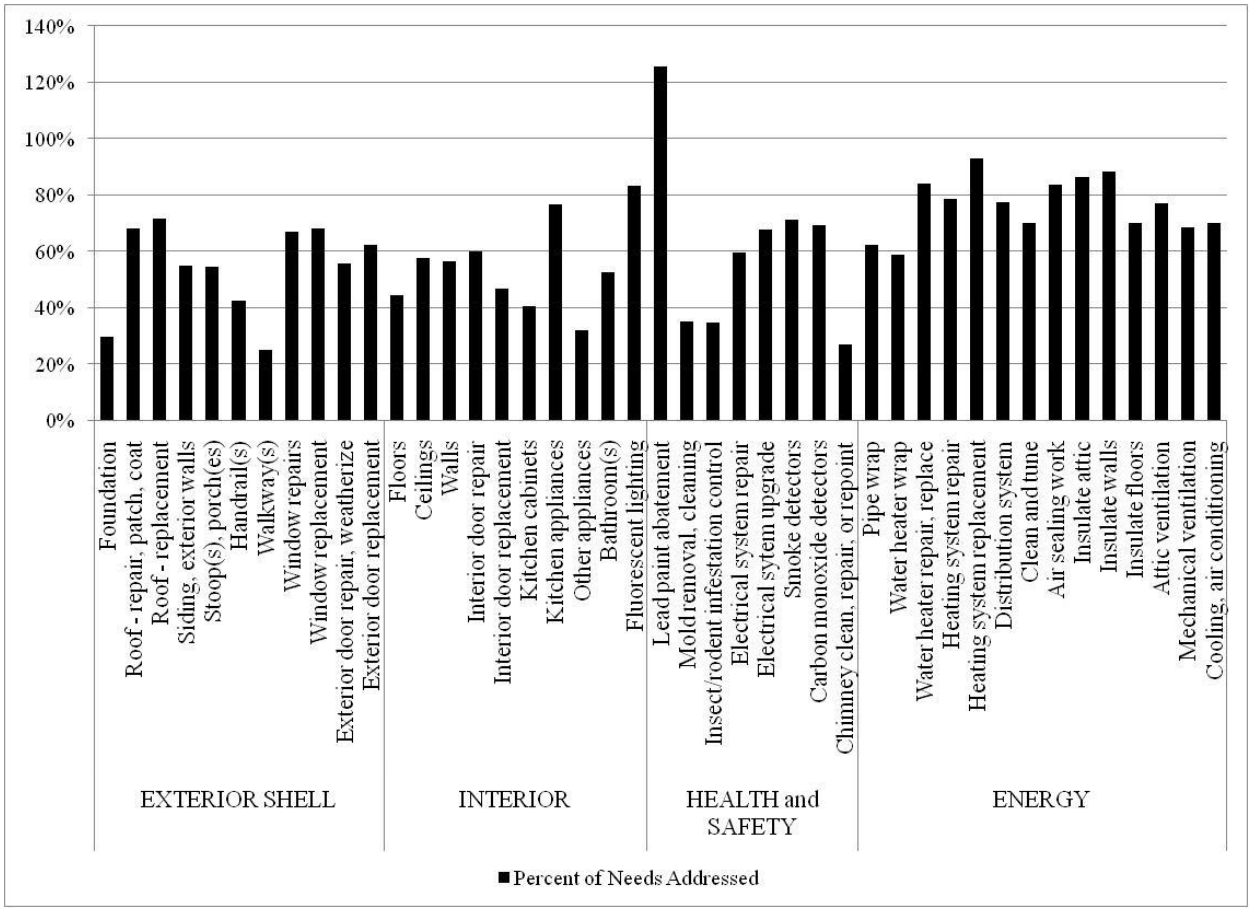
Figure 2 shows the percentage of units for which the identified need was address by the WRAP programs.[4] The programs were not able to address all of the identified needs, but they were able to address over 75 percent of the units needing most types of energy-related repairs, as well as those needing the replacement of inefficient kitchen appliances and installation of fluorescent lighting. Other needs, such as repairs to foundations, walkways, kitchen cabinets, or chimneys, were more frequently left undone. The more frequently addressed needs are those typically paid for with weatherization grants while the less frequently addressed needs are those more frequently paid for with rehabilitation loans.

Figure 1: Exterior Shell, Interior, Health & Safety, and Energy Repairs Needed



Data from 814 units inspected as of 11/7/07

Figure 2: Exterior Shell, Interior, Health & Safety, and Energy Repairs Done



Data from 604 units finished as of 11/07/07

result of deliberate choices made by the homeowners in consultation with the housing specialists and WRAP counselors. Other repairs, however, were left undone because the client was unwilling to secure a loan to do the work. The reasons homeowners refused to take loans will be disccused below.

The WRAP programs typically relied on multiple funding sources for work. In over 60 percent of the cases the sites managed to blend (rehab and weatherization funds). Both rehab and weatherization funds were used to finance 371 of the 604 units completed.[5] The sites, however, have not been as successful at blending loans and grants. Only two sites--Freeport and Gloucester--used more than thirty loans. Overall the sites averaged 1.7 grants per units versus 0.5 loans. Table 3 shows the funding sources and types.

Table 3: Funding Sources and Types

		Rehab		Weatherization	
Site	Total Completions	Grants	Loans	Grants	Loans
Anchorage	25	20	0	0	0
Camden	2	3	0	0	0
Chattanooga	14	2	23	0	10
Dorchester	38	14	18	28	0
Freeport	113	7	100	112	0
Gloucester	70	6	89	122	1
Hartford	10	3	5	2	0
Milwaukee	85	35	24	91	0
Philadelphia	140	239	8	139	0
Rio Grande City	110	60	12	184	0
Staten Island	0	0	0	0	0
TOTAL	604	389	279	681	11

Table 4 shows the amount of funding by source and type. The WRAP program organizations have done over $8.5 million in rehab and weatherization work on the 604 homes--an overall average of over $14,000 per unit. For organizations that completed the challenge grant period or had more than fifty completions,[6] the average amount per unit ranged from a low of $6,698 in Philadelphia, to a high of $28,905 in Gloucester. Rehab funding split about 58/42 between the number of loans and grants, but loans accounted for 70 percent of the dollar amount. Weatherization, on the other hand, was over 98 percent grants, both in type of assistance and dollar amount.

Table 4: Funding Amounts by Source and Type

	Rehab		Weatherization	
Site	Grants	Loans	Grants	Loans
Anchorage	$92,541	$0	$0	$0
Camden	$8,000	$0	$1,300	$0
Chattanooga	$10,445	$331,105	$0	$11,380
Dorchester	$139,168	$283,028	$159,245	$0
Freeport	$48,295	$1,519,323	$748,113	$0
Gloucester	$28,977	$1,694,909	$273,754	$25,680
Hartford	$6,000	$54,089	$11,067	$0
Milwaukee	$463,437	$82,280	$568,011	$0
Philadelphia	$400,041	$202,200	$335,617	$0
Rio Grande City	$636,783	$161,390	$252,072	$0
Staten Island	$0	$0	$0	$0
TOTAL	$1,883,687	$4,328,324	$2,349,179	$37,060

What Were the Main Obstacles to Coordinating Weatherization and Rehab Programs?

As discussed above, there was great variation among local WRAP programs in the number of units successfully rehabilitated and weatherized. Three of the local WRAP organizations did not complete the three-year Challenge Grant period, and one other has only reported two completions through its second year. Other sites experienced a variety of difficulties in coming up to speed, although they eventually managed to overcome the obstacles. Clearly, coordinating rehab and weatherization assistance was more challenging than anticipated by all those involved with the program. In this section of the paper we discuss the challenges faced by the local WRAP programs and how they were addressed. The challenges can be broken down into two categories: (1) those that relate to differences in the federal and state programs that fund weatherization and rehabilitation programs, and (2) those that relate to the WRAP program requirements and local program administration. In the next section, we will consider the lessons learned about coordinating weatherization and rehabilitation programs.

Challenges Posed by Differing Federal Program Regulations

One of the key objectives of the WRAP program was to develop new strategies to address the barriers presented by the current system of support for housing weatherization and rehabilitation. Those barriers, however, are more formidable than anticipated. Differences in program eligibility criteria and procedures, and the timing and form of funding greatly inhibited the ability of the WRAP programs to offer comprehensive services to their clients in an efficient manner.

Program Eligibility Criteria and Procedures. A major challenge of coordinating weatherization and rehab programs at the local level is that the federal programs that support these activities have different eligibility standards rooted in different philosophies about assistance to lower-income homeowners. Weatherization programs target the neediest households and impose no responsibility for the homeowner to contribute to the costs. Rehab programs typically target a somewhat higher income group and often require the homeowner to bear part or all of the cost of repairs. Eligibility for DOE and HHS weatherization programs is based on the federally defined poverty level. Although the DOE allows the states some flexibility in establishing eligibility guidelines for its programs, client income cannot exceed the greater of 65 percent of state median income or 150 percent of the federal poverty level unless households receive support from Social

Security or Temporary Assistance to Needy Families programs. Moreover, states typically use these same guidelines in determining eligibility for their public benefit programs (EPC 2004). Housing and Urban Development guidelines, however, use area median income (AMI) as the basis for eligibility and allow funds to go to clients who make up to 80 percent of AMI. The income cutoffs based on the HUD guidelines are often substantially higher than those based on the DOE guidelines. Thus, many prospective WRAP clients qualified for rehab assistance but not weatherization assistance.

WRAP staff members in seven of the eleven local programs cited differences in the eligibility criteria of HUD and DOE programs as a significant obstacle to serving their clients. For example, many owners of two- and three-family homes, quite common in Dorchester, were over the income limits for weatherization assistance due to the rental payments they received. In other instances, the income of adult children who had moved back home made households ineligible for weatherization assistance. WRAP clients had to have income low enough to qualify for weatherization grants but high enough to qualify for rehab loans, which severely constrained the number of households that could be assisted. Adding to this problem is that the DOE and HUD programs have different procedures for calculating qualifying incomes. This means that the local WRAP staff had to calculate client eligibility incomes at least two different ways.

Three WRAP programs were able to overcome the problem of inconsistent eligibility criteria by working with their state or local public benefit funds to raise their income limits. The program directors in both Dorchester and Gloucester lobbied the Massachusetts' Public Service Commission, which agreed to raise the public benefit program's income eligibility limit to match the Housing and Urban Development guidelines. The WRAP program in Freeport also worked with town and state officials and received approval to use their public benefit funds for weatherization work on the homes of clients whose incomes exceeded DOE limits. The waivers allowed those sites to bridge the gap at the upper levels of eligibility while subsidized loans (zero interest, deferred payment, forgivable) helped at the lower levels. No other WRAP site had similar success in standardizing their income eligibility criteria.

Differing program inspection procedures and criteria also served as obstacles to effective and efficient program coordination. The specified procedures for inspecting homes, the certification of inspectors, the criteria for determining the repairs to be done, and the requirements for collecting and reporting data vary substantially between DOE- and HUD-funded programs. Thus, most local WRAP programs were unable to arrange for one coordinated home inspection. Rather, they had to conduct two separate inspections--an inconvenience to homeowners and a duplication of effort.

Timing and Form of Funding. For a variety of reasons local WRAP programs often had trouble coordinating the availability of weatherization and rehabilitation funding. They often found themselves sitting on weatherization funding that had to be spent by a certain date, while they waited for rehabilitation funding to become available.

During the Freeport program's first year, for example, a substantial amount of weatherization funding was available, but their application for HOME funds was delayed. Faced with clients who expected work to commence and the need to spend the weatherization funds by the end of the program year, the staff decided to go ahead with the weatherization work and to return at a later date to finish the other needed repairs. This frustrated both program staff and clients and undermined the goal of a more efficient rehabilitation process with fewer burdens on the clients. Moreover, given the time that passed between the weatherization work and the arrival of funds for the rehabilitation work clients had to be recertified for funding--and some no longer qualified.

The program staff in Rio Grande City had a similar problem which it described in a quarterly report.

> Because funds for one project are rarely available at the same time they are available for another, it has proven difficult to coordinate projects in the way that WRAP envisions. An example of this is the $600,000 that the TDHCA Energy Office made available for weatherization activities in the WRAP colonias. The money had to be spent by July 31, 2003, yet we did not have any rehab money available to combine with the weatherization money. Thus, our weatherization director had to select homes that could be weatherized without the need for major rehab. As funds become available, we will go back and offer rehabilitation to those clients, but unfortunately, some of the neediest people in the

colonias had to be passed over since their homes could not be weatherized without extensive rehab work.

Staff members in Anchorage, Dorchester, Gloucester, Hartford and Camden also identified the timing of funds as a major obstacle to program implementation and success. They offered two suggestions for avoiding this problem. First, wait until funds for both weatherization and rehabilitation are in hand before beginning the program. The WRAP program in Camden tried to pursue this strategy, but it still ran into problems when the distribution of rehabilitation funding approved by the state was delayed for over a year. Second, several program staff members suggested the creation of a single fund that could be used for both weatherization and rehabilitation. There were no successful examples of this among the WRAP programs.

The goal of the WRAP program was to assist lower-income homeowners in repairing their homes by blending weatherization and rehabilitation program funds. Weatherization assistance, however, is typically provided to clients in the form of grants, while rehabilitation assistance is typically provided in the form of loans, grants, or both (See Table 5). The typical WRAP client receives a grant for some or all of the weatherization-related improvements, and takes out a loan to cover the remaining improvements. Based on interviews with staff members at six sites, relying on clients' ability and willingness to take out loans significantly reduced the percentage of needs that the programs could address because of the wide range of incomes the program served, as well as other important differences among lower-income homeowners. Many lower-income families simply cannot qualify for loans due to bad credit or high debt payments. Owners of properties without mortgages, or with relatively small mortgages, may have the equity to qualify for loans, but not the discretionary income to pay them back. Some key informants also noted that homeowners without mortgages seemed to be less willing to encumber their properties.

As shown in Table 4, the sites with the highest percentages of extremely low-income clients and the lowest percentages of properties with a mortgage (Milwaukee, Philadelphia, and Rio Grande City) had the highest grant-to-loan ratios. Moreover, many of those interviewed said that older homeowners were often unwilling to take loans for fear of burdening their children with debt. Clouded titles prevented yet others from obtaining loans since lending institutions normally require clear title before a loan is given. As described in a quarterly report from Philadelphia: We have come across at

> least half a dozen clients in the WRAP area that have been beset by tangled titles. A tangled title, of course, precludes clients from using the property as collateral on home improvement loans, and renders them ineligibility to access rehab-related assistance programs.

Many homeowners, even those who could qualify, simply did not want to take out loans. According to a quarterly report from Chattanooga, "The biggest challenge is convincing the clients that there is a possibility that they will have to apply for a loan for the rehab." This led the Chattanooga program staff to develop a new deferred-payment loan product, which is forgiven after seven years. Another manifestation of the refusal to take out loans was what one informant referred to as the "free money" syndrome. Clients were "spoiled" by the grants and unwilling to go into debt to make additional repairs.

Challenges Posed by the WRAP Program and Local Program Administration

The challenges related to local administration and program design included: 1) staffing; 2) developing effective partnerships; and 3) the targeting requirement and data collection.

Staffing Challenges. Implementation of the WRAP programs in several sites was slowed by staffing problems, including intra-agency conflict, staff turnover, and lack of staff skills. Interagency conflict arose in several WRAP programs since the program required cooperation between units with little or no experience in working together. The WRAP program in Rio Grande City, for example, reported conflict between the WRAP program staff and the site's Weatherization Department staff. Issues of turf, who gets credit for work done, and interpersonal conflict undermined the early implementation of the program. These problems led to the termination of the original WRAP program staff, the hiring of new staff and a reorganization of the program to clarify staff responsibilities. The WRAP program in Freeport also experienced some early tension among staff members in the organization's Homeownership Division and its Weatherization Division who were asked to cooperate in carrying out the WRAP program. Again, the tension revolved around lines of authority. Mediation by the CDC's executive director resolved this tension and the program moved forward.

Lack of staff skills was also mentioned as an important challenge by those interviewed in several sites. In Philadelphia, for example, the WRAP inspectors were well trained in weatherization inspections but had little experience conducting general rehabilitation inspections. Thus, many of the early home inspections did not identify rehabilitation needs. The agency responded by sending inspectors to rehabilitation training and having them re-inspect many of the units. Rio Grande City also reported difficulty, given its remote location, in finding someone with the skills necessary to manage the multifaceted WRAP program.

Staff turnover also slowed program implementation in several sites. Beyond the turnover in the Rio Grande City program, the programs in Chattanooga, Hartford, Milwaukee, and Philadelphia reported staff turnover as an important obstacle to program implementation. In some cases it was turnover in the program directors, in others it was turnover in the case managers or rehab specialists. Given the unique characteristics of the WRAP program it took a considerable amount of time for new staff members to learn the program procedures.

Partnership Challenges. To meet the goals of the WRAP program, the lead agencies had to have developed formal and/or informal partnerships with one or more state and local organizations. If the lead agency was a weatherization agency, for example, they needed to develop partnerships with the state and/or local organization responsible for housing rehabilitation as well as social service agencies that could assist families to address a range of problems such unemployment and substance abuse. The most productive agencies tended to be the ones that established those relationships.

The WRAP program in Gloucester, for example, benefited from close relationships with their state's energy agency. As mentioned earlier, it was willing to provide a waiver to its income guidelines to allow WRAP clients with incomes up to 80 percent of the AMI to access its weatherization funds. Gloucester also developed an effective partnership with the city's Department of Community Development, which provided funding for the rehabilitation work done on the houses of WRAP clients. Rio Grande City also benefited from a close relationship with its state's weatherization agency, which helped it secure an extra allocation of

weatherization funds for the WRAP program, while the program in Freeport established a productive partnership with the town's Department of Community Development.

In several other instances, however, the lead agencies did not have or were unable to develop those partnerships, which led them to withdraw from the program. The lead agency in Staten Island, for example, was not able to convince the local weatherization agency to partner with it. According to local staff, the weatherization organization felt that it should have been chosen as the lead agency and, thus, it was unwilling to participate in the program. In Hartford, the lead agency's inability to forge a partnership with the city's housing rehabilitation program led to its dropping out of the program. According to the program staff, the rehabilitation agency which was part of the mayor's office, saw the WRAP program as competition and would not make rehab funds available to it.

Other partnerships were established but were not as effective as hoped. The staff of the WRAP program in Dorchester, for example, worked hard to secure referral agreements with several social service agencies serving residents of their target community. Yet, few or no referrals were received from those partnering agencies. Also, the weatherization and rehabilitation agencies to which the program referred clients were said to be slow in getting back to the clients, slow to schedule inspections, and slow to begin work on their homes.

Targeting Challenges. In designing the local WRAP programs, the sponsoring agencies were asked to target the program to specific neighborhoods within their communities. More specifically, they asked that an area be chosen so that 10 percent of the units could be included in the program. This guideline was designed to encourage other property owners to fix up their homes and to increase overall property values in the targeted communities. This targeting requirement, however, resulted in several unforeseen problems. First, by restricting the pool of potential applicants, it made it more difficult for several sites to recruit a sufficient number of clients to meet the goal of 150 participants. At least two sites, Dorchester and Anchorage, found it difficult to recruit a sufficient number of WRAP clients so sought to expand their respective target areas.

Second, several WRAP staff members expressed frustration over their inability to serve otherwise eligible clients who lived outside the target area. Third, targeting the local WRAP programs to relatively small areas made it more difficult for some local program staffs to garner political support for the program. The WRAP program in Dorchester, for example, found it difficult to gain the support of city agencies, which argued that giving priority to WRAP clients would be seen as favoring the Dorchester area over other areas of the city. The WRAP programs in both Gloucester and Rio Grande City chose larger target areas to begin with, making it easier to find a sufficient number of interested and qualified participants.

Data Collection Challenges. As a demonstration program, the Ford Foundation wanted to carefully document the impacts of the WRAP program on the participating organizations, the clients, and the target neighborhoods to see if could develop a "business case" for the program and interest other organizations in supporting it. The Foundation also wanted to help the participating organizations in further developing their program evaluation and monitoring capabilities. To this end, the Ford Foundation made it clear that a portion of the $100,000 per year that it provided to each organization was to cover the costs of collecting data on program outputs and impacts. The data collection protocols developed for the evaluation required local program staff to: conduct extensive intake interviews with program clients; provide data on both the repair needs and the actual work done on each home; take photographs of a random sample of properties in both the WRAP neighborhoods and a comparison neighborhood every six months; record staff time devoted to the program; and submit quarterly narrative reports on program progress.

Several organizations found these data collection requirements to be more difficult and time consuming than anticipated. The program staff in Chattanooga was the most critical of data collection requirements. In one quarterly report they say that, "a continuing challenge is difficulty in convincing our customers to answer long and tedious questions that are not directly related to their credit issues." In fact, the intake questionnaire did contain questions on health issues, insurance claims and other issues unrelated to eligibility issues but important for the impact evaluation. Also, as one of the largest and most sophisticated organizations involved in the WRAP program, CNE has its own data collection protocols and data bases. They had

originally thought they could extract much of the data needed for WRAP program evaluation from their normal data bases but this proved more difficult than anticipated. Staff at many of the other sites also felt that the data reporting requirements were excessive and diverted staff time away from actually running the program.

Lessons Learned

Policy makers have focused considerable attention on expanding homeownership opportunities to lower-income families. They have paid much less attention, however, to assisting them in sustaining homeownership. Rising housing costs--due to increases in variable-rate mortgages, taxes, and energy and maintenance costs--coupled with flat incomes pose significant threats to lower-income homeowners and the neighborhoods in which they live.

There are several programs designed to assist lower-income families sustain homeownership, however, those programs are seldom coordinated. Weatherization programs, for example, may assist lower-income homeowners with energy saving improvements but often ignore important structural defects such as sinking foundations or worn out roofs. Rehabilitation programs, on the other hand, may overlook important energy conservation measures such as replacing an old furnace or replacing single-pane windows with energy efficient ones. Thus, there is a strong logic for coordinating lower-income homeowner assistance programs.

With this idea in mind, the Ford Foundation and EPC developed a demonstration program designed to coordinate weatherization and housing rehabilitation and other services at the local level. The WRAP program provided a total of eleven nonprofit organizations with operating support to develop coordinated homeownership assistance programs targeted to lower-income families. The participating organizations included community development corporations, community action agencies, independent weatherization agencies and housing advocacy organizations. The participating organizations either expanded the services they offered in-house, such as developing a new housing rehabilitation program, or developed partnerships with other local agencies.

The overriding lesson we draw from this evaluation is that coordinating weatherization and rehabilitation assistance at the local level is very difficult. As reported above, three of the local WRAP programs were unable to develop the local relationships needed to implement their programs, while the others fell well short of their goals to provide coordinated assistance to 150 families over the three-year demonstration period. Having said this, several of the WRAP programs were able to provide coordinated homeownership services to their clients and a total of 604 low-income households received assistance with a wide variety of weatherization and home repair needs.

The reasons for the difficulty in coordinating weatherization and rehabilitation programs are many. First, the federal programs that support these programs have rigid guidelines concerning program eligibility and inspection procedures that greatly inhibit the ability of local programs to provide comprehensive services to low-income homeowners. Many potential WRAP clients, for example, qualified for rehab assistance but were "over income" for weatherization assistance, or qualified for weatherization assistance but were not interested in or could not qualify for a rehabilitation loan. Moreover, several local programs also had difficulty in coordinating the timing of weatherization and rehabilitation funding. They had weatherization funds that needed to be spent by the end of a program year while waiting for rehabilitation funds to arrive.

The most obvious solution to the problem is for HUD and DOE officials to work to better coordinate their respective program guidelines. Interagency working groups have addressed this topic in the past but no real action has been taken. Given that energy costs have become a much larger share of total housing costs and that higher income groups are also struggling to meet high energy bills this topic should be revisited. Even relatively small changes, such as standardizing the way household incomes are calculated, would facilitate program coordination.

Changing to a unified definition of what is included as income does not mean changing income eligibility levels. The threshold for one program could be 150 percent of poverty, for example, while it could still be 80 percent of AMI for a different program. The change would allow one agency to certify income and have another agency use that to determine whether the family was

eligible for its programs, which would save staff time. The change would also allow a single agency to look at the eligibility level for different programs and tell its client if he/she qualifies.

The WRAP program has also shown that state energy agencies can play an important role in helping local agencies offer comprehensive rehabilitation services. By granting waivers or changing the eligibility criteria for the public benefits funds they control, weatherization funds can be used to serve clients that fall between the DOE and HUD eligibility guidelines. The states might also grant waivers to allow their funds to be used over a longer period of time which would eliminate the timing issues experienced by several WRAP programs.

The WRAP demonstration program also found that many lower-income homeowners, particularly elderly ones, are reluctant to take out loans for housing rehabilitation. There is not much that can be done by local program officials about this reluctance other than to anticipate it and to be prepared to do weatherization work with grant funds without addressing other rehabilitation needs. The reluctance of many program clients to take out loans also means that it may be difficult to achieve a concentration of rehabilitated units and the positive spin-off effects originally hoped for.

A host of local management issues also contributed to the difficulty in offering comprehensive homeownership assistance programs. Those problems included difficulties in establishing effective partnerships with other local organizations, internal conflicts between divisions within the managing agencies, and finding and keeping skilled program staff. Some of these problems are not unfamiliar to those involved in managing small nonprofit organizations, however the unique nature of the WRAP program and its emphasis on the coordination of services made them more salient.

Although some WRAP programs found ways to overcome the many challenges to coordinating weatherization and rehabilitation programs at the local level, this evaluation clearly shows that the WRAP approach is limited in its ability to address the needs of the many lower-income homeowners in the country. This has led the Ford Foundation and EPC to try a different approach with the creation of WRAP II.

WRAP II builds on lessons learned from the first WRAP program. The new program will offer an energy-efficient mortgage with subsidized rates for lower-income households participating in existing weatherization programs or who want to make energy efficiency upgrades to their homes. The mortgages will allow those homeowners to refinance out of higher-rate mortgages to finance the improvements and, in effect, apply the savings from improved efficiency to pay for the additional amounts borrowed. WRAP II will address the need for both weatherization and rehab repairs that the WRAP program documented and will be available to homeowners whose incomes are in the gap between the eligibility limits for existing weatherization and rehab programs. The energy-efficient mortgage is intended to fill the gap in financing options--the lack of weatherization loans--that the WRAP program revealed, and to expand weatherization options beyond the range of incomes currently served by the grant programs. While WRAP II is still in the development stage, it is scheduled to begin operating in three states in the fall of 2008--Maine, Massachusetts, and New York.

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ENDNOTES:

[1] Despite the gains, the gap between white and minority homeownership remains at 25 percent. The continued gap is attributable in part to the rapid growth in young minority households that tend to have lower homeownership rates than older households (Joint Center for Housing Studies 2006).

[2] During the same period, the homeownership rate declined by almost 1 percent for households in the lowest income quintile and increased by more than 10 percent for households in the highest income quintile (The Opportunity Agenda 2006).

[3] LIHEAP received a $5.1 billion in fiscal year 2006. Despite its magnitude, LIHEAP currently serves only about 17 percent of the eligible population with average payments of $311 per family.

[4] The data for lead abatement are due to under-reporting of the presence of lead paint in the initial inspection reports. Some of the inspectors were not familiar with rehab requirements and did not document the lead problem when inspecting the property, but the problem was addressed during the actual rehab work.

[5] The sites reported the funding sources and amounts, although some data on the sources was missing. The reports indicate sources for 557 of the 604 units, with 371 combined, fifty-nine rehab only, and 127 weatherization only.

Safer Chemicals Healthy Families

A Platform for Reform of the Toxic Substances Control Act

A reformed Toxic Substances Control Act (TSCA) would serve as the backbone of a sound and comprehensive chemicals policy that protects public health and the environment, while restoring the luster of safety to U.S. goods in the world market. Any effective reform of TSCA should:

- **Immediately Initiate Action on the Worst Chemicals**: Persistent, bioaccumulative toxicants (PBTs) are uniquely hazardous. Any such chemical to which people could be exposed should be phased out of commerce. Exposure to other toxic chemicals, such as formaldehyde, that have already been extensively studied, should be reduced to the maximum extent feasible.
- **Require Basic Information for All Chemicals**: Manufacturers should be required to provide basic information on the health hazards associated with their chemicals, how they are used, and the ways that the public or workers could be exposed.
- **Protect the Most Vulnerable**: Chemicals should be assessed against a health standard that explicitly requires protection of the most vulnerable subpopulations. That population is likely to usually be children, but it could also be workers, pregnant women, or another vulnerable population.
- **Use the Best Science and Methods**: The National Academy of Sciences' recommendations for reforming risk assessment at the Environmental Protection Agency (EPA) should be adopted. Regulators should expand development and use of information gleaned from "biomonitoring," the science of detecting human chemical contamination, to inform and impel efforts to reduce these exposures.
- **Hold Industry Responsible for Demonstrating Chemical Safety**: Unlike pharmaceuticals, chemicals are currently presumed safe until proven harmful. The burden of proving harm falls entirely on EPA. Instead, chemical manufacturers should be responsible for demonstrating the safety of their products.
- **Ensure Environmental Justice**: Effective reform should contribute substantially to reducing the disproportionate burden of toxic chemical exposure placed on people of color, low-income people and indigenous communities.
- **Enhance Government Coordination**: The EPA should work effectively with other agencies, such as FDA, that have jurisdiction over some chemical exposures. The ability of the states to enact tougher chemical policies should be maintained and state/federal cooperation on chemical safety encouraged.
- **Promote Safer Alternatives**: There should be national support for basic and applied research into green chemistry and engineering, and policy should favor chemicals and products that are shown to be benign over those with potential health hazards.
- **Ensure the Right to Know**: The public, workers, and the marketplace should have full access to information about the health and environmental hazards of chemicals and the way in which government safety decisions are made.

Safer Chemicals Healthy Families

A national campaign calling for stronger federal standards on toxic chemicals

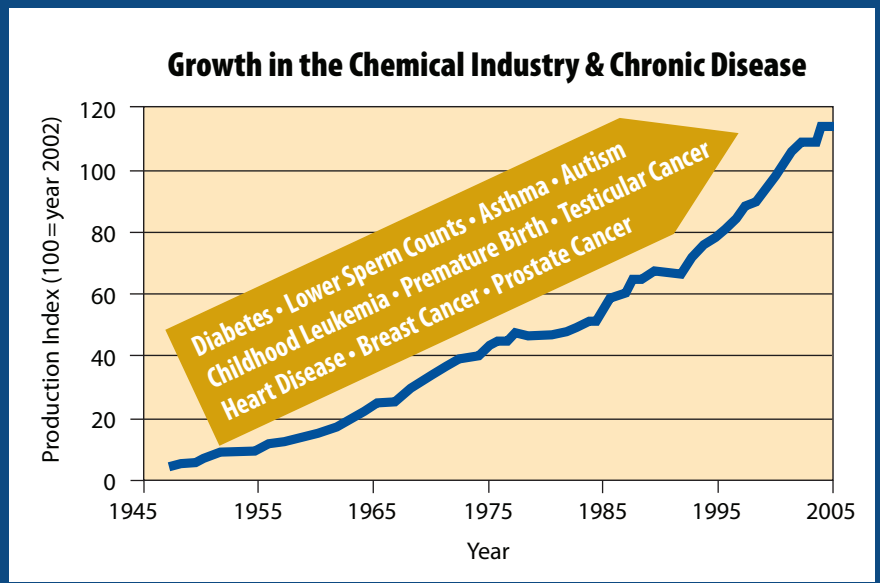
It's time for common sense limits on toxic chemicals

Dangerous chemicals are in our homes, places of work, and the products we use every day. Every week, new science is linking the increase in exposure to toxic chemicals to the increase in serious and chronic health problems among Americans.

While the rates of asthma, diabetes, childhood cancers, infertility, and learning and behavioral disorders keep going up, the federal system that should protect us from health-harming chemicals hasn't changed in 33 years. The Toxic Substances Control Act (TSCA)—intended to give the United States Environmental Protection Agency (EPA) the power to regulate toxic chemicals—just doesn't work.

The EPA has only required testing on approximately 200 of the more than 80,000 chemicals that have been on the market since the law passed in 1976. Clearly, TSCA is not working.

Now, we have the chance to fix this problem—and to protect future generations from serious health and environmental harm. Bombarded with disturbing news stories and scientific studies, Americans from all walks of life have started to demand change. And with a new Congress and administration, we have the chance to build on this momentum and pass a strong bill to reform TSCA—and start putting common sense limits on harmful chemicals.



How our lax chemical rules made Hurricane Katrina even worse

FEMA (Federal Emergency Management Agency) supplied Hurricane Katrina survivors with trailers lined with plywood imported from China. The plywood was made with adhesives that release large amounts of formaldehyde, a chemical known to cause cancer, asthma attacks, and other breathing problems, and is suspected of harming the nervous and immune systems.

Unlike the U.S., China, the European Union, and Japan have banned the type of toxic plywood used in the FEMA trailers. China manufactures a safer, low-formaldehyde version to sell to those countries, but continues to make the cheaper, high-formaldehyde version for sale in the U.S. When petitioned to take action to control the problem, the EPA said it doesn't have the authority to act under TSCA.

Formaldehyde in FEMA trailers is but one example of the kind of stories we will continue to hear unless the U.S. updates its policies to keep our citizens safe and to promote the innovation and green industries we need to stay competitive in the global marketplace.

American businesses are changing how they use chemicals

STAPLES. Kaiser Permanente. Hewlett-Packard. Hospira. True Textiles. Catholic Healthcare West. Seventh Generation. Method. Earthbound Farms. Leading businesses are redesigning their products and encouraging their suppliers to move away from the use of dangerous chemicals.

"We've taken a cautious approach to materials, meaning that where there is credible evidence that a material we're using may result in environmental or public health harm, we should strive to replace it with safer alternatives."

—Kathy Gerwig, Kaiser Permanente

"Made in USA should be a guarantee, not a warning."

Michael Wright,
United Steelworkers,
quoting consumer advocate
Esther Peterson

Footnotes for this document are available at *www.saferchemicals.org*.
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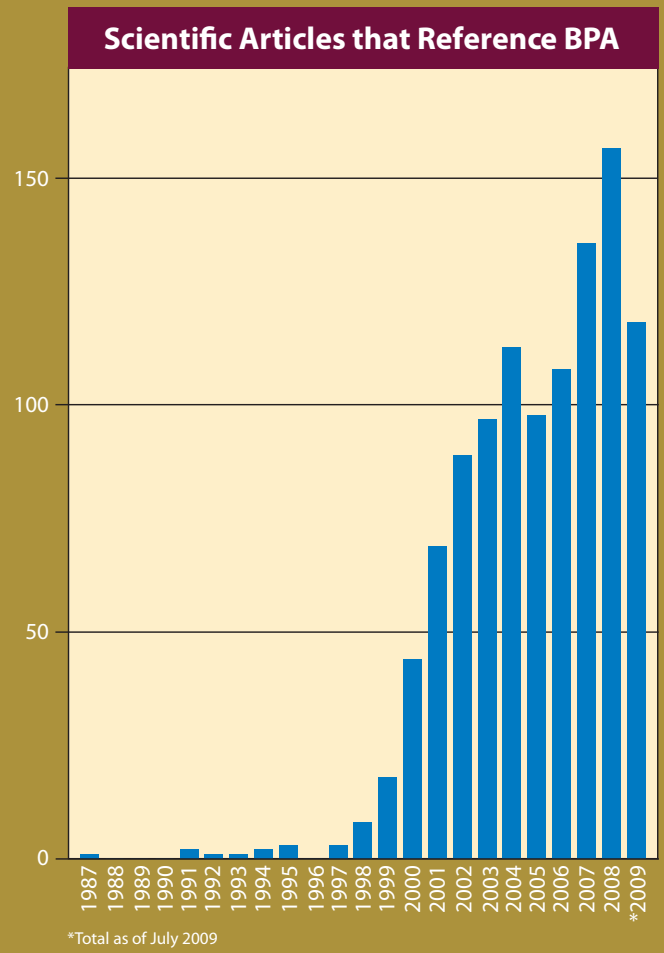
How do we know that the Toxic Substances Control Act, our national chemical policy, needs to be fixed?

Look at the numbers:

Since **1976** when TSCA was passed, more than **80,000** different chemicals have been produced and used in the United States. In these **33** years, EPA has required testing on just **200** of these 80,000 chemicals. Only **5** chemicals have been restricted. EPA tried to use TSCA to restrict asbestos **18** years ago and failed. It hasn't tried since.

Science changes but regulations haven't kept up: A BPA case study



*Total as of July 2009

For 33 years, TSCA has stayed the same. But the science on how chemicals can cause harm has changed dramatically. Look at Bisphenol A: Ten years ago, there were very few studies on this chemical used to make baby bottles, plastic food and beverage containers, and the linings of canned food, soda cans, and baby food jars. Over the last decade, an explosion of new research has linked BPA to cancer, heart disease, obesity, infertility, and hyperactivity. Motivated by public concern over this new science, states, cities, retailers, and manufacturers are doing what EPA can't—taking action to protect us from this dangerous chemical.

What we want

Congress is writing a new proposal to reform TSCA, updating last year's Kid-Safe Chemicals Act. Using common sense principles and current science, the Safer Chemicals, Healthy Families campaign will work with Congress to repair our broken chemical management system.

Here's what the Safer Chemicals, Healthy Families Campaign wants Congress to do:

1. Immediately initiate action on chemicals we know are extremely dangerous.

Persistent, bioaccumulative toxicants (PBTs) are uniquely hazardous. Any such chemical to which people could be exposed should be phased out of commerce. Exposure to other toxic chemicals, such as formaldehyde, that have already been extensively studied, should be reduced to the maximum extent feasible. Green chemistry research should be expanded and safer chemicals favored over those with known health hazards.

2. Require basic information to identify chemicals of concern.

Chemical manufacturers should be held responsible for the safety of their products and should be required to provide full information on the health and environmental hazards associated with their chemicals, how they are used, and the ways that the public or workers could be exposed. The public, workers, and businesses should have full access to information about safety of chemicals.

3. Protect all people and vulnerable groups using the best science.

Chemicals should meet a standard of safety for all people, including children, pregnant women, and workers. The extra burden of toxic chemical exposure on people of color, low-income and indigenous communities must be reduced. The EPA should adopt the recommendations of The National Academy of Sciences on how to better assess risks from chemicals. And regulators should expand the development and use of information gleaned from "biomonitoring," the science of detecting human chemical contamination, to inform and impel efforts to reduce such exposures.

Safer Chemicals Healthy Families

Who we are

Safer Chemicals, Healthy Families is a groundbreaking and growing coalition of diverse groups united by their common concern about toxic chemicals in our homes, places of work, and products we use every day.

The federal system that should protect us from health-harming chemicals just doesn't work. The Safer Chemicals, Healthy Families campaign channels the collective expertise, influence, and passion of more than four million individuals into a powerful movement. We invite you to join these founding organizations.

Alaska Community Action on Toxics
American Association on Intellectual and Developmental Disabilities
American Nurses Association
Association of Reproductive Health Professionals
The Autism Society
Breast Cancer Fund
Center for Environmental Health
Center for International Environmental Law
Clean New York
Clean Production Action
Clean Water Action
Coalition for a Safe & Healthy Connecticut
Commonweal
Connecticut Coalition for Environmental Justice
Developmental Disabilities Nurses Association
Earthjustice
Ecology Center
Environment Illinois
Environmental Defense Fund
Environmental Health Fund
Environmental Health Strategy Center
GHASP/Mothers for Clean Air
Galveston Baykeeper
Greenpeace
Healthy Child Healthy World
Informed Green Solutions, Inc.
Institute for Agriculture and Trade Policy
Just Transition Alliance
Learning Disabilities Association
Maine League of Conservation Voters
Maine Organic Farmers and Gardeners Association
Maine People's Alliance
Maine Women's Lobby
Moms Rising
Mount Sinai Children's Environmental Health Center
Natural Resources Council of Maine
Natural Resources Defense Council
Nurses for Global Health
Oregon Center for Environmental Health
Planned Parenthood Federation of America
Physicians for Social Responsibility
REACT—Rubbertown Emergency Action
Reproductive Health Technologies Project
Safer States
Toxic Justice
Toxics Action Center
US Public Interest Research Group
Washington Public Interest Research Group
Washington Toxics Coalition
WE ACT for Environmental Justice
Women's Voices for the Earth

Add your voice to the millions who are asking for common sense limits on toxic chemicals. Join us today!

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The Why and What of TSCA Reform

Richard A. Denison, Ph.D.
Senior Scientist

National Safe and Healthy Housing Coalition

December 1, 2009

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What I'll cover

- Drivers for TSCA reform
- What's wrong with TSCA?
- What does TSCA reform look like?
  - 2008 Kid-Safe Chemicals Act
  - *Safer Chemicals, Healthy Families*
    - Who we are
    - What we want: Campaign's platform
- A new bill: Coming soon

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Drivers for TSCA Reform

- Major reform of others' policies: REACH, CEPA
- State legislation and policy changes
  - Shift from bans to policies: CA, ME, WA
- GAO put chemicals on its 2009 "high-risk" list
- 1 of 5 top priorities of EPA Administrator Jackson
- Congressional action: Oversight hearings, CPSC phthalate ban, BPA ban bill, Kid-Safe Chemicals Act
- Market demand, esp. from downstream users
- ACC: "TSCA is in dire need of modernization"
- EPA: Principles for TSCA reform issued in Sept.

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TSCA - Key structural flaws in:

- Developing information about chemicals:
  - High hurdle to require chemical testing
  - Burden of proof to show potential risk AND that insufficient data exist
- Acting on information EPA does get:
  - Virtually no criteria to identify chemicals warranting action; case-by-case
  - No mandate to assess existing chemicals
  - Near-impossible hurdle to regulate

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TSCA- The Dog that Didn't Bark

The basics (by the numbers):

- **80,000** chemicals in commerce since TSCA passed in 1976.
- Required testing on **200** in **33** years.
- **5** chemicals have been restricted.
- **18 years** since EPA tried and failed *to regulate asbestos*

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Formaldehyde, Katrina and the FEMA Trailers

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The Kid-Safe Chemicals Act of 2008 (S. 3040, H.R. 6100)

- Basic data for all industrial chemicals
- Industry has burden to demonstrate safety
- Safety standard: "Reasonable certainty of no harm" (FQPA)
- EPA must determine if industry meets std.
- Expands national biomonitoring by CDC
- Expands Right to Know via public database
- Tightens conditions for CBI claims

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Safer Chemicals Healthy Families

Who We Are

- **National and State Environmental Groups** (NRDC, EDF, Washington Toxics Coalition, Clean Water Action....
- **Environmental Justice Groups** (Connecticut Coalition for Environmental Justice, WEACT, Just Transition Alliance...)
- **Health-affected Groups** (Autism Society of America, American Association on Intellectual and Developmental Disabilities, Breast Cancer Fund...
- **Health Professionals** (American Nurses Association, Association of Reproductive Health Professionals, Mt. Sinai Children's Environmental Health Center, Planned Parenthood Federation of America)
- **Concerned Parents** (Momsrising.org, Learning Disabilities Association)

www.saferchemicals.org

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Safer Chemicals Healthy Families

Our platform

1) ***Quick Action*** on the Worst Chemicals

(PBT's and other extensively studied known bad actors like formaldehyde.)

2) ***Information*** for All Chemicals

(Comprehensive hazard and exposure information, with burden on industry. Make it public to inform the market.)

3) ***Protection*** for the Most Vulnerable

(Health-based standard. Best/latest science and methods. Ensure everyone is included in the protections.)

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What's Next

- Bill introduction – January?
  - US Senate: Primary sponsors Lautenberg and Boxer, chairs of the relevant Senate subcommittee and committee, respectively
  - US House: Primary sponsors Rush and Waxman, chairs of the relevant House subcommittee and committee, respectively
- Informational Hearings: next Senate 12/2

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What's Next

- Coming year:
  - Stakeholder negotiations?
  - Legislative hearings?
  - Subcommittee, committee votes?
  - Adoption in this Congress seems possible, but
    - Midterm elections in 2010
    - Climate, health care legislation
    - State of the economy
- If not, start anew in the 112th Congress

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EDF materials for more information

TSCA, REACH & CEPA: Not That Innocent

www.edf.org/chempolicyreport

TSCA Reform

www.edf.org/page.cfm?tagID=12814

EDF Chemicals & Nanomaterials Blog

www.edf.org/chemandnano

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