



# NJ Comfort Partners Participant Survey Findings Final Report

Prepared for the New Jersey Comfort Partners Working Group

May 2003

# Table of Contents

Executive Summary ..... i

    Introduction..... i

    Methodology ..... i

    Core Survey ..... ii

    Arrearage Survey ..... vii

    Findings..... viii

I. Introduction .....1

    A. Background.....1

    B. Evaluation .....2

    C. Organization of the Report.....3

II. Methodology .....4

    A. Core Survey .....4

    B. Arrearage Survey .....4

III. Core Survey Findings .....6

    A. Understanding of the Comfort Partners Program .....6

    B. Customer Motivation .....9

    C. Satisfaction with Program Services .....10

    D. Measures .....14

    E. Energy Education and Program Impact on Energy Use .....20

    F. Impact on Comfort and Bills.....26

IV. Arrearage Survey Findings .....28

V. Summary of Findings.....36

    A. Core Survey .....36

    B. Arrearage Survey .....37

## Executive Summary

This report presents the findings from the Comfort Partners Core Survey and the Comfort Partners Arrearage Survey. In these surveys, we spoke with recipients of Program services in order to determine how well the recipients understand the Program, their level of satisfaction with services received, impacts of services on comfort in the home, and impacts of the Program on energy use behavior. The Survey Report is part of the Process Evaluation but was delayed in order to obtain sufficient sample sizes of the study group for the surveys.

### *Introduction*

The Residential Low Income Program Working Group consists of Public Service Electric and Gas, Jersey Central Power and Light, Conectiv Power Delivery, Rockland Electric Company, New Jersey Natural Gas, NUI Elizabethtown Gas, and South Jersey Gas. The Residential Low Income Program Working Group designed the Comfort Partners Program to meet usage reduction goals and to improve energy affordability for low-income customers.

The Comfort Partners Program was designed to overcome the market barriers affecting energy usage and energy affordability for low-income customers. The Program delivers comprehensive usage reduction and energy education services to low-income customers. The Program also includes an arrearage forgiveness component designed to assist customers in retiring outstanding arrears.

The Residential Low Income Program Working Group commissioned a comprehensive evaluation “to determine the extent to which Program goals are being achieved and to provide feedback on how the Program might be modified to better achieve these goals.” The Working Group contracted with RoperASW (work is currently being performed by APPRISE Incorporated) to conduct this evaluation. The evaluation team includes APPRISE, MaGrann Associates, Blasnik and Associates, and Renaissance Consulting and Analysis.

### *Methodology*

The Core Survey was conducted between June and November 2002. Data on approximately 1,702 Comfort Partners participants were provided to APPRISE by HDMC and JCP&L during this time period. The 494 cases were selected for the Core Survey in batches as participant data were received. Overall, 351 participants in the selected Core Survey sample, or 71 percent, completed the survey. The remaining 143 participants in the sample, or 29 percent, did not complete the survey.

The Arrearage Survey was conducted between June 2002 and February 2003. During this time period, data on 264 Comfort Partners participants who signed up for the arrearage reduction plan were provided to APPRISE from HDMC and the utility companies. Of these, 241 cases were selected for the Arrearage Survey sample. Overall, 141 participants in the selected Arrearage Survey sample, or 59 percent, completed surveys. One hundred participants in the sample, or 41 percent, did not complete the survey.

### *Core Survey*

The Core Survey focused on six main topics – understanding of the Program; customer motivation to reduce energy use; satisfaction with Program services; measures; energy education and impact on energy use; and impact on comfort and bills. This section summarizes the survey findings in each area.

#### **Understanding of the Program**

Customers were asked directly and indirectly about their understanding of the Comfort Partners Program. Table 1 shows that when asked directly, 92 percent of customers said that they understood the Program and 60 percent said that they understood the partnership nature of the Program. However, when asked about the responsibilities of the partners and the benefits of the Program, the customers demonstrated a lower level of understanding. Customers who stated that the service provider's responsibility was to reduce energy usage or bills, weatherize the home or make the home more comfortable, or provide information or education were considered to understand the service provider's responsibility. Customers who stated that their responsibility was to reduce their usage, follow recommendations for reducing usage, or learn about energy usage were considered to understand their responsibility. Customers who stated that the benefits of the Program were reduced energy usage, bills, saving money, or a safer or more comfortable home were considered to understand the benefits of the Program. Forty-four percent of customers appeared to understand the service provider's responsibility, 31 percent to understand the customer's responsibility, and 53 percent to understand the benefits of the Program.

**Table 1**  
**Understanding of the Program**

	Understand the Comfort Partners Program? <sup>1</sup>	Understand the Partnership Nature of the Program? <sup>2</sup>	Understand the Service Provider's Responsibility <sup>3</sup>	Understand the Customer's Responsibility <sup>4</sup>	Understand the Benefits of the Program <sup>5</sup>
Yes	92%	60%	44%	31%	53%
No	7%	38%	56%	69%	47%
Don't know	1%	2%	0%	0%	0%

<sup>1</sup>351 respondents. <sup>2</sup>299 respondents. <sup>3</sup>291 respondents. <sup>4</sup>297 respondents. <sup>5</sup>348 respondents.

## Customer Motivation

We assessed customers' motivation to save energy by asking about the affordability of monthly energy bills and what customers feel are the benefits of saving energy. Table 2 shows that, while only 26 percent of customers stated that their current utility bill is not affordable, 76 percent said that their bills are somewhat or very difficult to pay. Seventy-one percent cited reduced bills or energy usage as a benefit of the Program. Others mentioned energy security and the environment.

**Table 2**  
**Customer Motivation**

	Percent Responding
Bill is not affordable <sup>1</sup>	26%
Bill is somewhat or very difficult to pay <sup>2</sup>	76%
Benefit of saving energy is to reduce bills/energy usage <sup>3</sup>	71%

<sup>1</sup>346 respondents. <sup>2</sup>346 respondents. <sup>3</sup>327 respondents.

## Satisfaction with Program Services

Table 3 displays customer satisfaction with different aspects of the Program. Satisfaction levels are generally very high. Seventy-seven percent said that they were very or somewhat satisfied with the enrollment process, 94 percent said that they were very or somewhat satisfied with the measures installed, 91 percent said that they were very or somewhat satisfied with the energy education, and 96 percent said that, overall, they were very or somewhat satisfied with the Program.

**Table 3**  
**Satisfaction with the Program**

	Enrollment Process <sup>1</sup>	Measures Installed <sup>2</sup>	Energy Education <sup>3</sup>	Overall <sup>4</sup>
Very satisfied	54%	74%	57%	77%
Somewhat satisfied	23%	20%	34%	19%
Somewhat dissatisfied	3%	4%	3%	2%
Very dissatisfied	0%	1%	1%	1%
Don't know	19%	1%	5%	1%

<sup>1</sup>289 respondents. <sup>2</sup>348 respondents. <sup>3</sup>349 respondents. <sup>4</sup>351 respondents.

Overall, the most common reason that customers reported being dissatisfied with measures was that they did not receive everything they expected from the Program (23 percent).

Overall, 23 percent of customers stated that they did not receive everything they expected from the Program.

## Measures

Table 4 shows that satisfaction with individual measures received was also very high. Table 4 shows that 88 to 96 percent of customers were very or somewhat satisfied with each measure received.

**Table 4**  
**Satisfaction with Measures Received**

	CFLs <sup>1</sup>	Aerator <sup>2</sup>	Showerhead <sup>3</sup>	Tank Wrap <sup>4</sup>	Insulation <sup>5</sup>	Air Sealing <sup>6</sup>	Duct Sealing <sup>7</sup>	Thermostat <sup>8</sup>	Refrigerator <sup>9</sup>
Very satisfied	74%	76%	65%	75%	80%	73%	70%	71%	81%
Somewhat satisfied	21%	20%	27%	21%	14%	23%	19%	17%	11%
Somewhat dissatisfied	3%	3%	3%	1%	2%	1%	3%	4%	4%
Very dissatisfied	2%	0%	2%	0%	3%	1%	0%	8%	3%
Don't know	0%	0%	3%	3%	1%	1%	8%	0%	1%

<sup>1</sup>313 respondents. <sup>2</sup>119 respondents. <sup>3</sup>63 respondents. <sup>4</sup>147 respondents. <sup>5</sup>192 respondents. <sup>6</sup>220 respondents. <sup>7</sup>91 respondents. <sup>8</sup>24 respondents. <sup>9</sup>187 respondents.

Table 5 provides information on the persistence of some of the installed measures. Twelve percent of customers removed CFLs, mostly because of burning out or breakage, and 11 percent of customers removed CO detectors, mostly the result of their going off or needing new batteries.<sup>1</sup> Only a small percentage of the customers removed aerators or showerheads.

**Table 5**  
**Removal of Measures**

	CFLs <sup>1</sup>	Aerator <sup>2</sup>	Showerhead <sup>3</sup>	CO Detector <sup>4</sup>
Yes	12%	4%	2%	11%
No	88%	96%	98%	89%
Don't know	0%	0%	0%	0%

<sup>1</sup>313 respondents. <sup>2</sup>119 respondents. <sup>3</sup>63 respondents. <sup>4</sup>269 respondents.

<sup>1</sup> The overall removal rate for CFLs was only 2 percent, as the average number of light bulbs installed in a home was 7 and, overall, customers removed .15 bulbs on average.

Customers were asked whether they had any lights that were used two or more hours per day that were not replaced by the Program, and if they did, what were the reasons that those bulbs were not replaced. Table 6 shows that 27 percent of customers had bulbs that were not replaced. Overall, providers failed to replace bulbs in 9 percent of the homes, and providers did not have the proper bulbs in 6 percent of the homes.

**Table 6**  
**Light Bulbs that Were Not Replaced**

	Percent Responding
Percent with opportunities not addressed <sup>1</sup>	27%
Percent where provider failed <sup>2</sup>	9%
Percent where need greater diversity of bulbs <sup>2</sup>	6%

<sup>1</sup>283 respondents. <sup>2</sup>282 respondents.

### Energy Education and Program Impact on Energy Use

The Process Evaluation report found that providers were inconsistent in the delivery of energy education and did not adhere to Program protocols for this delivery. The survey attempted to measure energy education received and retained by customers. Customers were asked whether providers explained energy bills, furnished them with a written list of suggested actions, furnished them with a verbal list of suggested actions, and gave them an estimate of the dollar amount they may expect to save from taking such actions. Table 7 shows that 52 percent of respondents said that the provider did explain their energy bills, 42 percent said that the provider gave them a written list of actions, and 26 percent stated that the provider gave them an estimate of the savings from these actions.

**Table 7**  
**Education Provided**

	Explanation of Energy Bills <sup>1</sup>	Written List of Actions <sup>2</sup>	Estimate of \$ Savings from Actions <sup>3</sup>
Yes	52%	42%	26%
No	37%	38%	67%
Don't know	11%	20%	7%

<sup>1</sup>298 respondents. <sup>2</sup>349 respondents. <sup>3</sup>349 respondents.

Table 8 displays the percent of customers estimated to take actions to reduce energy usage, both prompted and unprompted. Forty-two percent of customers stated that the provider gave them a written list of actions to take, and they were asked what actions they committed to. Customers who said that they would reduce the heating temperature, set back the heating temperature at night or when not at home, turn down the hot water temperature, reduce the shower time, use cold water for wash, line dry, reduce the use of air conditioners, reduce the

use of electric space heaters, unplug an extra refrigerator or freezer, reduce the refrigerator temperature, close doors or windows, use shades or curtains, or conserve water were considered to have an action that would reduce energy usage. Seventeen percent of customers are able to cite an action that they agreed to take to reduce energy usage. When prompted, however, a much higher percentage of customers appear to be changing their behavior to reduce use. All customers were asked whether they reduced their hot water use, air conditioning use, dryer use, dishwasher use, or heating temperature. Seventy-seven percent of respondents stated that they did reduce one or more of these uses, and 68 percent of respondents could state an action associated with one of those end uses.

**Table 8**  
**Percent of Customers with Actions**  
**Expected to Reduce Energy Use**

	Percent Responding
Percent with written list of actions <sup>1</sup>	42%
Percent with non-prompted actions <sup>2</sup>	17%
Percent with one or more reduced uses (prompted) <sup>3</sup>	77%
Percent with one or more reduced end uses and associated action <sup>4</sup>	68%

<sup>1</sup>349 respondents. <sup>2</sup>349 respondents. <sup>3</sup>351 respondents. <sup>4</sup>351 respondents.

### Impact on Comfort and Bills

Customers were asked about the effect that the Program had on the comfort of their home. They were asked whether the home was more or less comfortable in the winter, colder or warmer in the winter, more or less drafty in the winter, and more or less comfortable in the summer. Table 9 displays the responses to these questions for those customers who received air sealing or insulation. Fifty-two percent said the home was more comfortable in the winter, 52 percent said the home was warmer in the winter, 66 percent said that the home was less drafty in the winter, and 61 percent said that the home was more comfortable in the summer.

**Table 9**  
**Impact on Comfort**  
**Respondents Who Received Air Sealing or Insulation**

	Comfort in Winter <sup>1</sup>	Cold Home in Winter <sup>2</sup>	Drafty Home in Winter <sup>3</sup>	Comfort in Summer <sup>4</sup>
Better	52%	52%	66%	61%
No change	13%	16%	13%	25%
Worse	0%	0%	0%	3%
Don't know	35%	31%	21%	12%

<sup>1</sup>93 respondents. <sup>2</sup>61 respondents. <sup>3</sup>70 respondents. <sup>4</sup>287 respondents.

Nearly half of the customers stated that they felt their bills had declined since receiving energy services. Ninety-eight percent of these customers said this was the result of work done by the Program, 83 percent said it was because of actions taken by household members, and 52 percent said it was because of other changes in the home.

### *Arrearage Survey*

In the Arrearage Survey, customers were asked about their general understanding of the Arrearage Plan, and then about each specific plan they participated in. Customers with two utilities can participate in two plans; therefore, some of the findings are tabulated by plan, rather than by respondent.

Table 10 reports findings about customers' understanding of their payment plans. Only 86 percent of the customers responded that they were on the Debt Reduction Plan, and when asked specifically about each plan, responded affirmatively to being on at least one plan. While 84 percent of customers stated that they understand the plan, 94 percent of customers understand that their responsibility is to pay their bills, 55 percent reported that the plan lasts 12 or 24 months (the actual lengths of the plans), and 23 percent cited a figure when asked how much of their arrears will be forgiven.

**Table 10**  
**Understanding of the Arrearage Plan**

	Know on Plan <sup>1</sup>	Understand Plan <sup>2</sup>	Understand Responsibility <sup>3</sup>	Know how long plan lasts <sup>4</sup>	Know how much will be forgiven <sup>5</sup>
Yes	86%	84%	94%	55%	23%
No	14%	13%	6%	45%	77%
Don't know	0%	3%	0%	0%	0%

<sup>1</sup>141 respondents. <sup>2</sup>135 respondents. <sup>3</sup>131 respondents. <sup>4</sup>127 plans. <sup>5</sup>130 plans.

Table 11 displays responses related to the affordability of the payment plan. Eighty-nine percent of customers stated that they are more likely to pay their bill on the Debt Reduction Plan. Fifty-nine percent of respondents said that their utility bill is more affordable under the plan, and 57 percent stated that the plan has made other bills easier to pay. Seventy-one percent of respondents stated that their current plan bill is affordable and 93 percent were somewhat or very confident that they will succeed in making all future payments on the plan.

**Table 11**  
**Affordability**

	Percent Responding
More likely to pay bill <sup>1</sup>	89%
Bill is more affordable <sup>2</sup>	59%
Other bills are easier to pay <sup>3</sup>	57%
Plan is affordable <sup>4</sup>	71%
Very or somewhat confident will succeed on plan <sup>5</sup>	93%

<sup>1</sup>132 respondents. <sup>2</sup>95 respondents. <sup>3</sup>94 respondents. <sup>4</sup>139 plans. <sup>5</sup>139 plans.

## Findings

### Core Survey

Findings from the Core Survey are summarized below.

- Understanding of the Program:* While most customers stated that they feel they have a good understanding of the Comfort Partners Program, answers that they provided to other questions indicate that their understanding is not very broad. Ninety-two percent of customers stated that they understand the Program, but only 60 percent stated that they understand the partnership nature of the Program. Furthermore, the majority of customers do not understand that they have a responsibility to try to take actions to reduce their energy use, and only 40 percent of customers stated that a benefit of the Program is to reduce their energy use or save money. These findings point to a need to strengthen the energy education component of the Program.
- Customer motivation:* Customer motivation to reduce energy bills is assessed by responses to questions about affordability of bills and what customers feel are the benefits of saving energy. While 65 percent of customers stated that their bills are affordable, 76 percent stated that their monthly energy bills are very or somewhat difficult to pay. The majority of customers felt that the benefits of saving energy are reductions in their bills and energy use. Some customers cited other benefits including energy security and the environment. It appears that customers are struggling with their current utility bills and have adequate incentive to take actions to reduce energy usage.
- Satisfaction with Program services:* Customer satisfaction with Program services is generally very high. While 77 percent of customers said that they were very or somewhat satisfied with the enrollment process, 94 percent said that they were very or somewhat satisfied with the measures installed, 91 percent said that they were very or somewhat satisfied with the energy education, and 96 percent said that overall, they were very or somewhat satisfied with the Program. These findings are consistent with field observations that found that providers were successful in

forming relationships with the customers and communicated well with them while in the home. The most common reason that customers gave for being dissatisfied with measures was that they did not receive everything they expected from the Program. Overall, 23 percent of customers stated that they did not receive everything they expected from the Program.

- *Measures:* Customers were also generally very satisfied with the measures received. Eighty-eight to 96 percent of customers were very or somewhat satisfied with each measure received. Removal rates were about 2 percent for CFLs and 10 percent for CO detectors, and a few percent for aerators and showerheads. More than a fourth of the customers stated that they had a light on for two or more hours per day that was not replaced by the Program, and one-third of these customers stated that the reason the light was not replaced was that the provider failed to replace it. These findings suggest that modest improvement in CFL placement is possible.
- *Energy education and Program impact on energy use:* Customers were asked about the energy education received. Fifty-two percent of customers stated that providers explained their energy bills, 42 percent stated that providers furnished them with a written list of suggested actions, and 26 percent stated that the provider gave them a dollar estimate of savings from taking these actions. These findings again point to a need to strengthen the educational component of the audit. Customers were asked the open-ended question of what actions they had agreed to take and whether they had been able to take these actions. Only 17 percent of respondents said that they committed to actions and were able to name an action agreed to that is expected to reduce energy use. However, the figure is much more favorable when customers were prompted with specific end uses. In this case, 77 percent of respondents reported that they had reduced one or more end uses, and 68 percent could identify an action associated with one of these end uses that is expected to reduce energy use.
- *Impact on comfort and bills:* Customers were asked what impact the Program had on the comfort of their home. Of those customers who received insulation or air sealing, 52 percent said that their home was more comfortable in the winter since receiving Program services, 52 percent said that their home was warmer in the winter, 66 percent said that their home was less drafty in the winter, and 61 percent said that their home was more comfortable in the summer. Forty-six percent of customers felt that their bills had declined since receiving services and 98 percent of these customers attributed this to work done by the Comfort Partners Program. Eighty-three percent also attributed the decline to actions they had taken to reduce their energy use. Based on these customer reports, the Program appears to have positively impacted a majority of the customers' comfort levels and bills.

### **Arrearage Survey**

Findings from the Arrearage Survey are summarized below.

- *Program understanding:* Customers do not appear to have a good understanding of the Debt Reduction Plan. Eighty-four percent of customers stated that they understand the rules of the plan, but some customers appeared to be confused about whether they are on the Debt Reduction plan, and many customers do not know how much of their arrears will be forgiven. Most customers do understand that their responsibility is to pay their bills on time.
- *Probability of paying the bill:* Eighty-nine percent of the customers stated that they were more likely to pay their bill now that they are on the plan. Most of these customers stated this was because it was easier to pay the plan amount or because of the arrearage forgiveness.
- *Affordability:* The majority of customers felt that the plan had made bills more affordable. Fifty-nine percent stated that their utility bill was more affordable under the payment plan, and 57 percent said that being on the plan made other bills easier to pay. Seventy-one percent stated that their plans were affordable.
- *Payments:* Monthly payments averaged \$148 and ranged from \$25 to \$385. Seventy-nine percent of customers stated that they had made all monthly payments since being enrolled in the plan.
- *Predicted success:* Fifty-four percent of respondents were very confident that they would be able to make all remaining plan payments, and 39 percent were somewhat confident that they would make all remaining payments. The most common factor cited that may affect success on the plan was a loss of income.

## I. Introduction

This report presents the findings from the Comfort Partners Core Survey and the Comfort Partners Arrearage Survey. In these surveys, we spoke with recipients of Program services in order to determine how well the recipients understand the Program, their level of satisfaction with services received, impacts of services on comfort in the home, and impacts of the Program on energy use behavior. The Survey Report is part of the Process Evaluation but was delayed in order to obtain sufficient sample sizes of the study group for the surveys.

### A. *Background*

The Residential Low Income Program Working Group consists of Public Service Electric and Gas, Jersey Central Power and Light, Conectiv Power Delivery, Rockland Electric Company, New Jersey Natural Gas, NUI Elizabethtown Gas, and South Jersey Gas. The Residential Low Income Program Working Group designed the Comfort Partners Program to meet usage reduction goals and to improve energy affordability for low-income customers.

The Comfort Partners Program was designed to overcome the market barriers affecting energy usage and energy affordability for low-income customers, including:

- Lack of information on how to improve energy efficiency and on the benefits of energy efficiency,
- Lack of capital to upgrade energy efficiency and, in many cases, to keep up with regular bills,
- Inadequate targeting of low-income customers by market-based residential service providers, and
- Split incentives between renters and landlords.

The Comfort Partners Program addresses the market barriers through:

- Direct installation of all cost-effective energy efficiency measures (addressing all fuels),
- Comprehensive, personalized customer energy education and counseling, and
- Arrearage forgiveness for participants who agree to payment plans.

The Comfort Partners Program is targeted to customers with income at or below 150% of the federal poverty income guidelines or who are receiving benefits from certain public assistance programs.

## ***B. Evaluation***

The Residential Low Income Program Working Group commissioned a comprehensive evaluation “to determine the extent to which Program goals are being achieved and to provide feedback on how the Program might be modified to better achieve these goals.” The Working Group contracted with RoperASW (work is currently being performed by APPRISE Incorporated) to conduct this evaluation. The evaluation team includes APPRISE, MaGrann Associates, Blasnik and Associates, and Renaissance Consulting and Analysis.

The comprehensive evaluation of the Comfort Partners Program consists of seven evaluation components.

- 1) *Tracking System Evaluation*: Assessment of the consistency of information tracked by the utilities, the sufficiency of the data for management and reporting, the accuracy of the data in the system, and the efficiency of the tracking system procedures
- 2) *Comprehensiveness Evaluation*: Examination of the appropriateness of Comfort Partners protocols and practices, and the comprehensiveness of service delivery
- 3) *Process Evaluation*: Review of the effectiveness of the Program design and implementation, measurement of customer reactions to the education component and customer satisfaction with Program services, and identification of barriers to Program delivery and low-income customer participation
- 4) *Baseline Affordability Impact Projections*: Projections of the affordability impacts of the Program using baseline usage data, Program service delivery data, and engineering models of Program impacts
- 5) *Baseline Usage Impact Projections*: Projections of the usage impacts of the Program using baseline usage data, Program service delivery data, and engineering models of Program impacts
- 6) *Affordability Impact*: Analysis of affordability impacts of the Program for 2002 based on customer billing and payment data, service delivery data, and affordable payment data
- 7) *Usage Impact*: Analysis of usage impacts of the Program for 2002 based on customer billing and payment data and service delivery data

The Tracking System Evaluation was completed by 3/15/02. The Comprehensiveness Evaluation and the Process Evaluation were completed by 8/15/02. The Baseline Affordability Impact Projections and the Baseline Usage Impact Projections were completed by 2/15/03. The Affordability Impact and the Usage Impact analyses will be completed by 2/28/04.

### *C. Organization of the Report*

Four sections follow this introduction.

- 1) *Section II – Methodology*: Provides a description of the sample data and sample selection procedures.
- 2) *Section III – Core Survey Findings*: Provides analysis of the findings from the Core Survey on understanding of the Program and services received, satisfaction with the Program and services received, measures, impacts of energy education, and impacts of the Program on comfort and bills.
- 3) *Section IV – Arrearage Survey Findings*: Provides analysis of the findings from the survey on the Arrearage Reduction Component.
- 4) *Section V – Summary of Findings*: Provides a summary of the findings in this report.

APPRISE prepared this report under contract to the participating utilities of the Residential Low Income Working Group. The participating utilities and HDMC facilitated this research by furnishing Program data to APPRISE. Any errors or omissions in this report are the responsibility of APPRISE. Further, the statements, findings, conclusions, and recommendations are solely those of analysts from APPRISE and do not necessarily reflect the views of the Working Group or the member utilities.

## II. Methodology

This section describes the methodology for selecting the Core Survey and Arrearage Survey samples, and the response rates for each survey.

### A. Core Survey

The Core Survey was conducted between June and November 2002. Data on approximately 1,702 Comfort Partners participants were provided to APPRISE by HDMC and JCP&L during this time period.

Of the 1,702 Comfort Partners participants for whom data were received, 259 were not available for selection as sample for the Core Survey because they were selected for either the Arrearage Survey (241 cases – 33 of which were selected for a combined Core/Arrearage Survey sample) or the qualitative survey (51 cases). The remaining 1,443 cases were sorted by Enrollment or WARM ID and selected based on the participants' gas and/or electric providers. In all, 494 cases were selected in batches for the Core Survey as participant data were received.

Overall, 351 participants in the selected Core Survey sample, or 71 percent, completed the survey. The remaining 143 participants in the sample, or 29 percent, did not complete the survey for the following reasons.

- 39 were not contacted
- 37 had a wrong, unpublished, or disconnected phone number
- 23 could not complete the survey for “other” reasons, including mental instability, denial/awareness of Program participation, or hearing impairment
- 18 could not be reached because the phone call was consistently not answered or the phone line was consistently busy
- 10 terminated the phone call
- 9 did not speak English
- 7 refused to take survey

### B. Arrearage Survey

The Arrearage Survey was conducted between June 2002 and February 2003. During this time period, data on approximately 264 Comfort Partners participants who signed up for the Debt Reduction Plan were provided to APPRISE from HDMC and the utility companies. Some of these cases were not selected as part of the Arrearage Survey sample if they had an arrearage balance of \$0 or had already been selected as part of any sample other than the combined core/arrearage sample. In all, 241 cases were selected for the Arrearage Survey sample.

Overall, 141 participants in the selected Arrearage Survey sample, or 59 percent, completed surveys. One hundred participants in the sample, or 41 percent, did not complete the survey for the following reasons.

- 43 had a wrong, unpublished, or disconnected phone number
- 23 could not complete the survey for “other” reasons, including mental instability, denial of Program participation, or hearing impairment
- 15 could not be reached because the phone call was consistently not answered
- 11 were not contacted
- 6 did not speak English
- 1 refused to take survey

### III. Core Survey Findings

The Core Survey was designed for all Comfort Partners Program recipients in order to measure their understanding of the Program, their motivation to decrease energy usage, their satisfaction with the Program and the measures received, the energy education received and remembered, problems with the installed measures, the impact of the Program on energy use behavior, and the impact on comfort and bills.

The survey was adapted during the interview process, and some questions were not asked of all respondents. Additionally, some questions were asked only of subsets of respondents who received particular services or responded in a particular manner to a previous question. All tables document the number of respondents to each question.

#### A. *Understanding of the Comfort Partners Program*

The first section of the survey assessed customers' understanding of the Comfort Partners Program. Respondents were asked, "Do you feel you have a good understanding of the Comfort Partners Program?" and "Do you understand the partnership nature of the Program?" Table III-1 displays the answers to these questions. While 92 percent of respondents felt that they understand the Program, only 60 percent felt that they understand the partnership nature of the Program.

**Table III-1**  
**Understanding of the Program**

	Understand the Comfort Partners Program? <sup>1</sup>	Understand the Partnership Nature of the Program? <sup>2</sup>
Yes	92%	60%
No	7%	38%
Don't know	1%	2%

<sup>1</sup>351 respondents. <sup>2</sup>299 respondents.

The next two tables address the customers' understanding of the partnership. The customer was asked, "What is your understanding of the service provider's responsibility under the Program?" and "What is your understanding of your responsibility under the Program?" Table III-2 displays the answers provided about the service provider's responsibility. Answers total to more than 100 percent, as customers could provide more than one answer. Thirty percent of the respondents said that the service provider had a responsibility to reduce the customer's energy usage or energy bills, 11 percent said the service provider should weatherize the home or make the home more comfortable, and 9 percent said that the provider should provide education or information. Other customers had more vague replies, such as "provide assistance" or "do their job". Most of the 29 percent of customers who did

not provide any of the listed responses stated that they did not know what the service provider's responsibility was.

**Table III-2**  
**Service Provider's Responsibility**

	Service Provider's Responsibility*
Reduce energy usage or energy bills	30%
Provide services, do their job	24%
Provide assistance	14%
Weatherize home or make home more comfortable	11%
Provide information or education	9%
None of the above	29%

\*291 respondents.

The next table displays what the respondent thought his or her responsibility was. Again, answers total to more than 100 percent as respondents could provide more than one response. Thirty percent stated that his/her responsibility was to reduce energy use or to follow the service provider's recommendations, and 2 percent said that it was to learn about energy use. Other respondents stated that it was to use or maintain installed measures, cooperate or be thankful for the Program, or keep up with their payments. Forty-four percent of the respondents did not provide any of the above responses; most of these respondents said that they did not know what their responsibility was or that they did not have any responsibility.

**Table III-3**  
**Customer's Responsibility**

	Customer's Responsibility*
Reduce energy use/ Follow recommendations	30%
Use or maintain installed measures	12%
Keep up with payments	12%
Cooperate / Be thankful for Program	8%
Learn about energy use	2%
None of the above	44%

\*297 respondents.

Customers were asked what they thought were the benefits of participating in the Comfort Partners Program. Table III-4 displays the responses to this question. Answers total to more than 100 percent, as respondents could provide more than one answer. Forty percent of

respondents replied that it was to reduce their energy use or energy bills or to help them save money. The next most common answers were that they received services or products, that they received help or assistance, or that the Program made their home safer or more comfortable. Six percent of respondents cited the education that they received as a benefit of the Program. About 16 percent of the respondents either did not know what the benefits were or stated that everything about the Program was helpful.

**Table III-4**  
**Benefits of Program**

	Benefits of Program*
Reduce energy use or energy bills/save money	40%
Received services/products	18%
Received help/assistance	16%
Make home safer or more comfortable	11%
Received education	6%
Received new refrigerator	5%
Received arrearage forgiveness	2%
Improve customer's health	1%
Utility service was not disconnected	1%
None of the above	16%

\*348 respondents.

One of the findings from earlier research reported in the Process Evaluation study was that customers were not given much information about the Program when they enrolled. Table III-5 displays respondents' answers to the question of what information was provided when they enrolled. Answers total more than 100 percent, as respondents could provide more than one response. The most common responses were that a provider would visit the home and provide free services, that the provider would check the customer's usage or inspect the home, and that the customers received brochures or forms. Only 5 percent of the respondents stated that the Program would help them save energy or money. Forty-one percent of the respondents did not know what information was provided or said that no information was provided.

**Table III-5**  
**Information Provided at Enrollment**

	Information Provided*
Provider would visit home/provide free services	27%
Provided Program brochures/forms	15%
Program would check usage/inspect home	14%

	Information Provided*
Program description	9%
Eligibility/Screening information	5%
Program would help save energy/money	5%
Contact information/phone numbers	3%
Arrearage Reduction plan description	1%
Program would help make home more comfortable	1%
Energy-saving tips	1%
None of the above	41%

\*289 respondents.

## B. Customer Motivation

We assessed customers' motivation to save energy by asking about the affordability of monthly energy bills and what customers feel are the benefits of saving energy. Table III-6 displays the responses to the question, "Your household's total electric and gas bill is approximately \$X a month. Is this an amount your household can afford to pay each month?" Sixty-five percent of respondents said that the bill was affordable, 26 percent said it was not, and 7 percent said that they did not know.

**Table III-6**  
**Affordability of Monthly Energy Bills**

	Percent Responding*
Yes, bill is affordable	65%
No, bill is not affordable	26%
Don't know if bill is affordable	7%
Refused	1%

\*346 respondents.

Customers were also asked how difficult it was for them to pay the bill. Table III-7 displays the responses to this question. About one-fourth of respondents said that it was very difficult, and about one half said that it was somewhat difficult. Only 20 percent said that it was not at all difficult.

**Table III-7**  
**Difficulty in Paying Monthly Energy Bills**

	Percent Responding*
Very difficult	23%
Somewhat difficult	53%

	Percent Responding*
Not at all difficult	20%
Don't know	4%
Refused	1%

\*346 respondents.

Table III-8 displays the customers' responses to the question, "What do you feel are the benefits of saving energy?" Answers total to more than 100 percent, as respondents could provide more than one response. Almost three-fourth of the respondents said that the benefit was to reduce their energy bills or their energy usage. Other customers mentioned energy security or that it was good for the environment.

**Table III-8**  
**Benefits of Saving Energy**

	Percent Responding*
Reduce bills/ reduce energy use	71%
Energy security/ Good for the country	13%
Good for the environment	10%
Improved comfort	4%
Everyone benefits	4%
None of the above	14%

\*327 respondents.

### *C. Satisfaction with Program Services*

This section focuses on the customers' satisfaction with the Program services. Table III-9 shows that 77 percent said that they were very or somewhat satisfied with the enrollment process, 94 percent said they were very or somewhat satisfied with the measures installed, 91 percent said that they were very or somewhat satisfied with the energy education, and 96 percent said that, overall, they were very or somewhat satisfied with the Program.

**Table III-9**  
**Satisfaction with the Program**

	Enrollment Process <sup>1</sup>	Measures Installed <sup>2</sup>	Energy Education <sup>3</sup>	Overall <sup>4</sup>
Very satisfied	54%	74%	57%	77%
Somewhat satisfied	23%	20%	34%	19%
Somewhat dissatisfied	3%	4%	3%	2%
Very dissatisfied	0%	1%	1%	1%

	Enrollment Process <sup>1</sup>	Measures Installed <sup>2</sup>	Energy Education <sup>3</sup>	Overall <sup>4</sup>
Don't know	19%	1%	5%	1%

<sup>1</sup>289 respondents. <sup>2</sup>348 respondents. <sup>3</sup>349 respondents. <sup>4</sup>351 respondents.

Customers were asked why they were dissatisfied with the measures. Table III-10 displays the responses to this question. Answers total to more than 100 percent, as customers could provide more than one response. The few customers who expressed dissatisfaction were most likely to say that they did not receive all of the measures that they expected.

**Table III-10**  
**Reasons Why Dissatisfied with Measures**

	Percent Responding*
Didn't receive all expected services/measures	2%
Unhappy with insulation work	1%
Heating doesn't work well	1%
Work not done neatly	1%
Unhappy with Program	<1%
Measures installed have not helped	<1%
Ducts collapsed after being wrapped	<1%
Were not dissatisfied	96%

\*348 respondents.

While more than half of the customers who were dissatisfied with the measures stated it was because they did not receive everything they expected, Table III-11 shows that, overall, 23 percent of customers did not receive everything they expected from the Program.

**Table III-11**  
**Received Everything Expected from Program**

	Percent Responding*
Yes	77%
No	23%
Don't know	1%

\*300 respondents.

Customers were asked which measures or services they expected but did not receive. Answers total to more than 100 percent, as customers could provide more than one response. Table III-12 shows that the most common measures that were expected but not received were windows, insulation, and air sealing. Customers may have confused the Comfort Partners program with the WAP program that does provide window repairs and replacements.

**Table III-12**  
**Expected Measures/Services That Were Not Received**

	Percent Responding*
New or repaired windows	5%
Insulation	4%
Caulking/weatherstripping/air sealing	3%
Refrigerator	2%
New thermostat	1%
Light bulbs	1%
Attic work	1%
Replacement doors	1%
New air conditioner	1%
Ventilation work	1%
Fix leaks	1%
New furnace	<1%
Test additional refrigerator/freezer	<1%
Switch fuel source	<1%
Hot water tank/pipe wrap	<1%
Make house less hot/cold	<1%
None of the above	82%

\*300 respondents.

One factor that may affect how satisfied customers are with the Program is the time to complete the job. Customers were asked how soon the work was completed after it was promised. Table III-13 shows that 70 percent of respondents stated that work was completed very soon after being promised, 19 percent said that it was somewhat soon, and 10 percent said that it was not at all soon.

**Table III-13  
Timeliness of Work Completion**

	Percent Responding*
Very soon after promised	70%
Somewhat soon after promised	19%
Not at all soon after promised	10%
Don't know	1%

\*351 respondents.

Customers were asked how knowledgeable they felt the providers were about energy usage and how courteous and professional they felt the providers were. Table III-14 shows that 81 percent of respondents stated that they felt the providers were very knowledgeable about energy usage, and 85 percent said that the service providers were very courteous and professional.

**Table III-14  
Rating of Service Providers**

	How knowledgeable about energy usage? <sup>1</sup>	How courteous and professional? <sup>2</sup>
Very	81%	85%
Somewhat	16%	13%
Not at all	1%	1%
Don't know	2%	0%

<sup>1</sup>350 respondents. <sup>2</sup>351 respondents.

Table III-15 shows customers' responses when asked how they thought the Program could be improved. Answers total to more than 100 percent, as customers could provide more than one response. The most common responses were to provide all work that is promised, to open the Program up to more people and market the Program better, and to provide new windows or window repair.

**Table III-15  
How the Program Could Ge Improved**

	Percent Responding*
Provide all work that is promised	4%
Open the Program up to more people/Market the Program better	4%
Provide new windows/repair windows	4%
Hire better/more polite providers	3%

	Percent Responding*
On time for appointments/Less time between appointments	3%
Provide more services	3%
Complete jobs	3%
Provide more education/Ask homeowners about their concerns	2%
Do a better job on insulation	2%
Return phone calls	1%
Clean up better/Do a neater job	1%
Give the customer an easier way to deal with problems	1%
Give customer more say about services provided	1%
Fix/admit damage done by providers	1%
Provide new AC units/ central AC	1%
Replace appliances	<1%
Help reduce bill more	<1%
None of the above	74%

\*351 respondents.

#### D. Measures

Interviewers had information from the Program database on the measures and services that the customers received from the Program. Therefore, each survey was tailored to the specific set of services that each customer received. If a customer received a particular measure, the customer was asked whether he/she was aware that this measure was installed. Table III-16 displays the responses to these questions. This table shows that nearly all customers who received insulation, a tank wrap, a thermostat, or a showerhead were aware that they received these measures. Eighty-eight percent of customers were aware they received an aerator, 82 percent were aware they received air sealing, and 79 percent were aware that they received duct sealing.

**Table III-16**  
**Awareness of Measures Received**

	Aerator <sup>1</sup>	Showerhead <sup>2</sup>	Tank Wrap <sup>3</sup>	Insulation <sup>4</sup>	Air Sealing <sup>5</sup>	Duct Sealing <sup>6</sup>	Thermostat <sup>7</sup>
Yes	88%	95%	97%	99%	82%	79%	96%
No	4%	5%	2%	1%	10%	19%	4%
Didn't receive	5%	0%	1%	0%	5%	2%	0%

	Aerator <sup>1</sup>	Showerhead <sup>2</sup>	Tank Wrap <sup>3</sup>	Insulation <sup>4</sup>	Air Sealing <sup>5</sup>	Duct Sealing <sup>6</sup>	Thermostat <sup>7</sup>
Don't know	2%	0%	0%	0%	3%	0%	0%

<sup>1</sup>135 respondents. <sup>2</sup>66 respondents. <sup>3</sup>151 respondents. <sup>4</sup>210 respondents. <sup>5</sup>268 respondents. <sup>6</sup>115 respondents. <sup>7</sup>27 respondents.

Customers were asked whether they understood how to use the CO detector and the thermostat that were installed by the Program. Table III-17 shows that 92 percent said that they understood how to use the CO detector, and 88 percent said that they understood how to use the thermostat. The information about the CO detector is consistent with on-site observations where providers were seen to consistently spend a great deal of time explaining how the CO detector works.

**Table III-17**  
**Understanding of How to Use Measures**

	CO Detector <sup>1</sup>	Thermostat <sup>2</sup>
Yes	92%	88%
No	6%	12%
Didn't receive	1%	0%
Don't know	1%	0%

<sup>1</sup>271 respondents. <sup>2</sup>26 respondents.

Customers were asked how satisfied they were with each measure received. Table III-18 shows that 88 to 96 percent of customers were very or somewhat satisfied with each measure received. Customers were most likely to be very satisfied with the refrigerator and the insulation. Lower levels of satisfaction were expressed about the thermostat.

**Table III-18**  
**Satisfaction with Measures Received**

	CFLs <sup>1</sup>	Aerator <sup>2</sup>	Showerhead <sup>3</sup>	Tank Wrap <sup>4</sup>	Insulation <sup>5</sup>	Air Sealing <sup>6</sup>	Duct Sealing <sup>7</sup>	Thermostat <sup>8</sup>	Refrigerator <sup>9</sup>
Very satisfied	74%	76%	65%	75%	80%	73%	70%	71%	81%
Somewhat satisfied	21%	20%	27%	21%	14%	23%	19%	17%	11%
Somewhat dissatisfied	3%	3%	3%	1%	2%	1%	3%	4%	4%
Very dissatisfied	2%	0%	2%	0%	3%	1%	0%	8%	3%
Don't know	0%	0%	3%	3%	1%	1%	8%	0%	1%

<sup>1</sup>313 respondents. <sup>2</sup>119 respondents. <sup>3</sup>63 respondents. <sup>4</sup>147 respondents. <sup>5</sup>192 respondents. <sup>6</sup>220 respondents. <sup>7</sup>91 respondents. <sup>8</sup>24 respondents. <sup>9</sup>187 respondents.

One of the purposes of the survey was to measure the persistence of some of the installed measures. Table III-19 shows responses to questions about whether certain measures were removed. About 12 percent of customers removed one or more CFLs, and 11 percent removed the CO detector. Customers were most likely to remove a CFL because it burned out or broke, and customers were most likely to remove the CO detector because it went off or the batteries ran out. Only a few percent of the customers removed an aerator or a showerhead.

While 12 percent of customers removed one of more CFLs, the mean number of bulbs removed for customers who removed bulbs was 1.6 and the mean number of bulbs removed over all customers was .15. As the average number of bulbs installed in a household was 7, the overall removal rate was only 2 percent.

**Table III-19**  
**Removal of Measures**

	CFLs <sup>1</sup>	Aerator <sup>2</sup>	Showerhead <sup>3</sup>	CO Detector <sup>4</sup>
Yes	12%	4%	2%	11%
No	88%	96%	98%	89%
Don't know	0%	0%	0%	0%

<sup>1</sup>313 respondents <sup>2</sup>119 respondents. <sup>3</sup>63 respondents. <sup>4</sup>269 respondents.

Table III-20 displays the reasons customers give for removing the CFLs. As mentioned above, the most common reason was that it burned out or broke (5 percent). A few customers also stated that they removed a CFL because it was not bright enough.

**Table III-20**  
**Why CFLs Were Removed**

	Percent Responding*
Burned out	4%
Not bright enough	4%
Broke	1%
None of the above	91%

\*313 respondents.

Customers were asked whether any of the CFLs installed by the Program had burned out. Table III-21 shows that, overall, 11 percent of customers stated that one or more of the CFLs burned out.

**Table III-21  
CFLs Burned Out**

	Burned Out*
Yes	11%
No	88%
Don't know	1%

\*313 respondents.

Customers were asked how satisfied they were with the CFLs, by room. Table III-22 shows that 86 percent were satisfied with CFLs in all rooms, 11 percent were satisfied with the bulbs in some rooms, and 3 percent were satisfied in no rooms.

**Table III-22  
Satisfaction with CFLs – By Room**

	Percent Responding*
All rooms	86%
Some rooms	11%
No rooms	3%

\*312 respondents.

Customers were asked where they were dissatisfied with the CFLs. Table III-23 shows that customers were most likely to be dissatisfied with the CFLs in the kitchen or the living room.

**Table III-23  
Rooms Where Dissatisfied with CFLs**

	Percent Responding*
Kitchen	4%
Living room	4%
Bedroom	3%
Bathroom	2%
Dining room	1%
Hallway	1%
Basement	1%
Laundry	<1%
Computer room	<1%

	Percent Responding*
Porch	<1%
All rooms	<1%
None of the above	87%

\*42 respondents.

Customers were asked, “Are there any lights in your home that were not replaced with new bulbs as part of the Comfort Partners Program that are on for at least two hours per day?” Table III-24 shows that 27 percent of customers replied that there were.

**Table III-24**  
**Percent with Light Bulbs That Were Not Replaced**

	Percent Responding*
Yes	27%
No	72%
Don’t know	1%

\*283 respondents.

Customers were asked why these bulbs were not replaced. Table III-25 shows that the most common response was that the provider did not replace them or did not ask about that particular light. The next most common reason for not replacing the light was that the CFL would not fit in the fixture.

**Table III-25**  
**Reasons Why Light Bulbs Were Not Replaced**

	Percent Responding*
Provider failed to replace	9%
CFL would not fit	6%
Customer chose not to replace	2%
Already using CLF there	1%
Provider ran out of bulbs	<1%
Other	<1%
Don’t know	9%
All bulbs were replaced	73%

\*282 respondents.

Customers were asked how much time elapsed between the audit and the time that the refrigerator was delivered. Table III-26 shows that most refrigerators were delivered

relatively quickly. More than half of the customers replied that the refrigerator was delivered in less than two weeks, and one-fourth said that it was delivered between two weeks and one month after the audit.

**Table III-26**  
**Time Elapsed Until Refrigerator Delivery**

	Percent Responding*
< 2 weeks	53%
2 weeks – 1 month	26%
1 month – 2 months	9%
> 2 months	5%
Don't know	6%

\*187 respondents.

Customers were asked whether the insulation that was installed limited the use of their home in any way. Table III-27 shows that only 17 percent of customers stated that the insulation affected the use of their homes a lot or a little.

**Table III-27**  
**Use of Home Limited by Insulation**

	Percent Responding*
A lot	6%
A little	11%
Not at all	81%
Don't know	1%

\*205 respondents

Customers were also asked whether the use of their home was made more difficult by the air sealing work that was done by the Program. Table III-28 shows that only 5 percent of customers stated that the work made it more difficult to use their homes.

**Table III-28**  
**Use of Home Made Difficult by Air Sealing**

	Percent Responding*
Yes, made more difficult	5%
No, did not make more difficult	94%
Don't know	1%

\*213 respondents

### E. Energy Education and Program Impact on Energy Use

The Process Evaluation report found that providers were inconsistent in the delivery of energy education and did not adhere to Program protocols for this delivery. The survey attempted to measure energy education received and retained by customers. This section of the report furnishes information on the questions that addressed these topics.

Customers were asked whether providers explained energy bills, provided them with a written list of suggested actions, and gave them an estimate of the dollars they may expect in savings from taking such actions. Table III-29 displays the responses to these questions. This table shows that 52 percent of respondents said that the provider did explain their energy bills, 42 percent said that the provider gave them a written list of actions, and 26 percent stated that the provider gave them an estimate of the savings from these actions.

**Table III-29**  
**Education Provided**

	Explanation of Energy Bills <sup>1</sup>	Written List of Actions <sup>2</sup>	Estimate of \$ Savings from Actions <sup>3</sup>
Yes	52%	42%	26%
No	37%	38%	67%
Don't know	11%	20%	7%

<sup>1</sup>298 respondents. <sup>2</sup>349 respondents. <sup>3</sup>349 respondents.

About two-thirds of the way through the implementation of the survey, we decided to add an additional question as to whether households had received a verbal list of actions that they could take in order to reduce energy usage. There were 120 responses to this question. Table III-30 displays information on this subset of respondents. A higher percentage of these respondents reported receiving energy education. Sixty-five percent of these customers reported receiving a verbal list of actions, compared to 57 percent who reported receiving a written set of actions.

**Table III-30**  
**Education Provided**  
**Respondents Who Were Asked About Verbal List**

	Explanation of Energy Bills <sup>1</sup>	Written List of Actions <sup>2</sup>	Verbal List of Actions <sup>3</sup>	Estimate of \$ Savings from Actions <sup>4</sup>
Yes	63%	57%	65%	38%
No	26%	26%	23%	52%
Don't know	12%	18%	13%	10%

<sup>1</sup>120 respondents. <sup>2</sup>120 respondents. <sup>3</sup>120 respondents. <sup>4</sup>118 respondents.

Customers were asked what actions they had agreed to take and which actions they had been able to take. Table III-31 displays the answers provided to these questions. The most common mentions were turning off lights, reducing the temperature in the home, using the CFLs that were provided by the Program, and reducing AC use.

**Table III-31  
Actions Agreed To**

	Actions Agreed To <sup>1</sup>	Actions Taken <sup>2</sup>
Turn off lights	9%	4%
Reduce temperature	5%	3%
Use CFLs	4%	3%
Conserve energy	4%	1%
Reduce use of AC/Increase AC temperature	4%	2%
Close doors or windows	2%	1%
Set back heat at night/when not at home	2%	<1%
Turn down hot water temperature	2%	<1%
Use measures/don't remove measures	1%	1%
Use cold water for wash	1%	1%
Conserve water	1%	1%
Keep up with payments/Stick to budget	1%	1%
Close up leaks in home	1%	<1%
Turn off appliances when not in use	1%	0%
Use appliances during off-peak times	1%	<1%
Use shades or blinds	1%	0%
Stop using extra refrigerator/freezer	<1%	<1%
Keep refrigerator at certain temperature	1%	<1%
Reduce shower time	1%	<1%
Line dry clothes	<1%	<1%
Agree to have work done	<1%	0%
Stop using electric space heater	1%	0%
Replace windows	<1%	0%
All of the actions agreed to	NA	8%
None of the above	74%	78%

<sup>1</sup>349 respondents. <sup>2</sup>349 respondents.

The table above listed all actions that were mentioned by respondents, even though some relate to merely using the installed measures, and some are quite vague, such as “conserve energy”. To determine the percentage of customers who reported actions that are expected to reduce energy usage, in addition to the reductions in energy usage from the installed measures, we tallied the number of actions that each customer reported that are expected to impact energy usage. These actions included reducing the heating temperature, setting back the heating temperature at night or when not at home, turning down the hot water temperature, reducing the shower time, using cold water for wash, line drying, reducing the use of air conditioners, reducing the use of electric space heaters, unplugging an extra refrigerator or freezer, reducing the refrigerator temperature, closing doors or windows, using shades or curtains, or conserving water. Table III-32 shows that only 17 percent of the respondents can readily name an action agreed to that is expected to reduce energy use.

**Table III-32**  
**Number of Actions Agreed to**  
**That Are Expected to Reduce Energy Usage**

	Percent Responding*
0	83%
1	14%
2	3%

\*349 respondents.

Customers were asked specifically whether they had reduced the use of their hot water, air conditioner, dryer, and dishwasher as a result of the Program. While only a few percent of respondents volunteered actions related to some of these uses when asked the open-ended question described above, a larger percentage of respondents said that they had reduced the use of these items when asked specifically. Table III-33 shows that 48 percent of respondents stated that they reduced the use of their hot water, 45 percent that they reduced the use of their air conditioner, 36 percent that they reduced the use of their dryer, and 19 percent that they reduced the use of their dishwasher.

**Table III-33**  
**Reduced End Uses**

	Hot Water <sup>1</sup>	Air Conditioning <sup>2</sup>	Dryer <sup>3</sup>	Dishwasher <sup>4</sup>
Yes, have reduced use	48%	45%	36%	19%
No, have not reduced use	46%	42%	45%	25%
Don't have this item	NA	3%	16%	54%
Don't Know	6%	10%	3%	1%

<sup>1</sup>350 respondents. <sup>2</sup>345 respondents. <sup>3</sup>348 respondents. <sup>4</sup>313 respondents.

Customers who had experienced a winter since receiving services were asked whether they kept their home at a higher or lower temperature compared to the winter before receiving services. Table III-34 shows that 7 percent of respondents stated that they kept their home at a higher temperature, 18 percent that they kept it at a lower temperature, and 43 percent that they kept it at the same temperature.

**Table III-34**  
**Temperature Setting Compared to Winter Before Receiving Services**

	Percent Responding*
Higher temperature	7%
Lower temperature	18%
Same temperature	43%
Don't know	32%

\*122 respondents

Table III-35 below analyzes the number of reduced end uses for each customer, based on the questions reported individually above in Tables III-33 and III-34. This table shows that 77 percent of respondents, when prompted, reported at least one reduced end use. Moreover, a majority of these respondents reported more than one reduced end use. Sixty-eight percent could name an action related to one of these end uses that is expected to reduce energy use.

**Table III-35**  
**Number of Reduced End Uses**

	Percent Responding*
0	23%
1	27%
2	29%
3	16%
4	5%

\*351 respondents

Customers who stated that they reduced the use of their hot water were asked what actions they had taken to reduce this use. Table III-36 shows that the most common responses were that they turned down their hot water temperature, they reduced the number and length of their showers and baths, and that they used cold water for washing.

**Table III-36**  
**Actions Taken to Reduce Use of Hot Water**

	Percent Responding*
Turn down temperature	19%
Reduce number and length of showers/baths	15%
Use cold water for washing	15%
Reduce amount of time heater is on	3%
Use less hot water	2%
Don't wash as often	1%
Don't let water run	1%
Use low-flow showerhead/aerator	1%
None of the above	57%

\*350 respondents

Customers were asked whether the auditor turned down their hot water temperature and whether they raised the setting back to where it was. Table III-37 shows that 44 percent of respondents said that the auditor turned down the hot water temperature. Eight percent of those respondents stated that they turned the setting back to where it had been.

**Table III-37**  
**Reduced Temperature of Hot Water**

	Percent Responding*
Yes	44%
No	29%
Don't Know	28%

\*347 respondents.

Customers who reported that they had reduced their air conditioning use were asked what actions they had taken to reduce this use. Table III-38 shows that the most common responses were using the air conditioner fewer hours per day, using fewer air conditioning units, or using a lower setting on the unit.

**Table III-38**  
**Actions Taken to Reduce Use of Air Conditioning**

	Percent Responding*
Use fewer hours per day	18%
Use fewer units	12%
Use lower setting on unit	10%
Turn up thermostat	6%
Open windows and use fans	2%
Use only when very hot	1%
Don't use/use less	<1%
Bought new energy efficient air conditioner	1%
None of the above	60%

\*345 respondents

Customers who stated that they had reduced the use of their clothes dryer were asked what actions they had taken to reduce this use. Table III-39 shows that customers were most likely to state that they used full loads, line dried the clothes, or cleaned out their lint filters.

**Table III-39**  
**Actions Taken to Reduce Use of Clothes Dryer**

	Percent Responding*
Using full loads	18%
Line drying	14%
Cleaning out the lint	7%
Install vent/ Other work done by Program	3%
Reducing number of loads	1%
Don't use	1%
Use at night	1%
None of the above	66%

\*348 respondents.

Customers who said that they reduced their use of their dishwasher were asked what actions they had taken to reduce this use. Table III-39 shows that the most common responses were to use full loads or to not use the dishwasher very much.

**Table III-39**  
**Actions Taken to Reduce Use of Dishwasher**

	Percent Responding*
Use full loads	11%
Don't use much or at all	5%
Use energy saver mode	3%
Use less often	2%
Use at night	<1%
None of the above	81%

\*313 respondents.

### ***F. Impact on Comfort and Bills***

Customers were asked about the effect of the Program on the comfort of their home. They were asked whether the home was more or less comfortable in the winter, colder or warmer in the winter, more or less drafty in the winter, and more or less comfortable in the summer. Table III-40 displays the responses to these questions. Forty-five percent said the home was more comfortable in the winter, 53 percent the home was warmer in the winter, 67 percent said that the home was less drafty in the winter, and 56 percent said that the home was more comfortable in the summer.

**Table III-40**  
**Impact on Comfort**

	Comfort in Winter <sup>1</sup>	Cold Home in Winter <sup>2</sup>	Drafty Home in Winter <sup>3</sup>	Comfort in Summer <sup>4</sup>
Better	45%	53%	67%	56%
No change	20%	19%	16%	31%
Worse	0%	0%	0%	2%
Don't know	35%	28%	17%	11%

<sup>1</sup>127 respondents. <sup>2</sup>74 respondents. <sup>3</sup>93 respondents. <sup>4</sup>347 respondents.

Table III-41 compares the responses to these questions for those customers who received air sealing or insulation. This table shows that a slightly higher percentage of customers who received these services noted that the home was more comfortable in the winter or the summer.

**Table III-41**  
**Impact on Comfort**  
**Respondents Who Received Air Sealing or Insulation**

	Comfort in Winter <sup>1</sup>	Cold Home in Winter <sup>2</sup>	Drafty Home in Winter <sup>3</sup>	Comfort in Summer <sup>4</sup>
Better	52%	52%	66%	61%
No change	13%	16%	13%	25%
Worse	0%	0%	0%	3%
Don't know	35%	31%	21%	12%

<sup>1</sup>93 respondents. <sup>2</sup>61 respondents. <sup>3</sup>70 respondents. <sup>4</sup>287 respondents.

Customers were asked whether they perceived a change in their energy bills after receiving Program services. Table III-42 shows that nearly half of the respondents said they felt that their bills had declined.

**Table III-42**  
**Impact on Energy Bills**

	Percent Responding*
Lower bills	46%
No change in bills	36%
Higher bills	3%
Don't know	15%

\*299 respondents

Customers who stated that they felt their bills had declined were asked whether they felt that the reduction was the result of work done by Comfort Partners, because of actions taken by household members, or because of other changes in the home. Table III-43 shows that 98 percent of respondents credited Comfort Partners for the reduction in the bills, 83 percent felt it was due to actions taken by household members, and 52 percent felt that other changes in the home affected usage.

**Table III-43**  
**Causes of Reduction in Energy Bills**

	Work done by Comfort Partners <sup>1</sup>	Actions taken by household members <sup>2</sup>	Other changes in home <sup>3</sup>
Yes	98%	83%	52%
No	1%	15%	45%
Don't know	1%	2%	4%

<sup>1</sup>137 respondents. <sup>2</sup>137 respondents. <sup>3</sup>137 respondents.

## IV. Arrearage Survey Findings

The Arrearage Survey was designed for Comfort Partners Program recipients who had enrolled in the Debt Reduction Plan. The purpose of this survey was to measure understanding of the plan, affordability of the plan payment amount, and predicted success on the plan.

The first survey question asked whether the respondent had signed up for the Debt Reduction payment plan. All customers who responded affirmatively to this question were asked general questions about the payment plans. Customers were then asked specifically about a PSE&G plan, an electric utility payment plan, and a gas utility payment plan for each of their provider utilities.

Table IV-1 displays the answers to the question of whether the customer signed up for a Debt Reduction payment plan as part of Comfort Partners. All of the respondents should have replied that they did sign up for the plan, as the households were selected for the survey based on data received from HDMC and the utilities. This table shows that 96 percent of the customers knew that they had enrolled. These customers were asked the following survey questions.

**Table IV-1**  
**Signed Up for Payment Plan**

	Percent Responding*
Yes	96%
No	4%

\*141 respondents.

Customers were asked whether they understood the rules of the Debt Reduction payment plan. Table IV-2 shows that 84 percent of respondents stated that they did understand the rules.

**Table IV-2**  
**Understand Rules of the Plan**

	Percent Responding*
Yes	84%
No	13%
Don't know	3%

\*135 respondents.

Customers who stated that they did not understand the plan were asked what questions they had about the plan. Table IV-3 shows that customers who did have a question were most likely to say that they did not understand how the plan was run.

**Table IV-3  
Questions About the Plan**

	Percent Responding*
How the plan is run	4%
How to keep bills down	1%
Reading the bill	1%
Whether I'm on the plan	1%
None of the above	92%

\*135 respondents.

Customers were asked, "What, as you understand them, are your responsibilities under the payment plan?" Answers total to more than 100 percent, as customers could provide more than one response. Table IV-4 shows that the vast majority of customers understand that their responsibility is to pay their bills on time.

**Table IV-4  
Customer Responsibilities**

	Percent Responding*
Pay bills/make payments on time	94%
Conserve energy	5%
None of the above	5%

\*131 respondents.

Customers were asked, "Is it more likely that you will pay your bill each month knowing that you have the opportunity to have part of your debt forgiven?" Table IV-5 shows that 89 percent of respondents said that they were more likely to pay their bills.

**Table IV-5  
More Likely to Pay Bill**

	Percent Responding*
Yes	89%
No	5%
Don't know	6%

\*132 respondents.

Customers who stated that they were more likely to pay their bills were asked why they were more likely to pay. Table IV-6 shows that customers were most likely to say that it was easier to pay the plan amount or because of the arrearage forgiveness.

**Table IV-6  
Why More Likely to Pay Bill**

	Percent Responding*
Easier to pay plan amount	39%
Arrearage forgiveness	16%
To not owe/To catch up	11%
To not get shut off	11%
Second chance/To keep agreement	9%
Better off financially	5%
Have to pay bills	5%
None of the above	8%

\*111 respondents.

One of the purposes of the survey was to assess the affordability of the payment plans. Customers were asked whether their bills were more or less affordable under the payment plan. Table IV-7 shows that 59 percent of customers stated that their bills were more affordable, and 11 percent of customers said that their bills were less affordable.

**Table IV-7  
Bill More or Less Affordable**

	Percent Responding*
More affordable	59%
Less affordable	11%
No change	28%
Don't know	2%

\*95 respondents.

Customers were also asked whether the payment plan had made other bills easier or more difficult to pay. Table IV-8 shows that 57 percent stated that the payment plan made other bills easier to pay, and 13 percent said that it made other bills more difficult to pay.

**Table IV-8  
Other Bills Easier or More Difficult to Pay**

	Percent Responding*
Easier	57%
More Difficult	13%
No change	29%

	Percent Responding*
Don't know	1%

\*94 respondents.

The rest of the Arrearage Survey focused on individual payment plans. Table IV-9 shows that 75 of the customers surveyed had a PSE&G payment plan, 32 had an electric company payment plan, and 32 had a gas company payment plan.

**Table IV-9  
Debt Reduction Plan**

	Number of Respondents
PSE&G Plan	75
Electric Plan	32
Gas Plan	32

Customers with two separate utility companies who had arrears with both companies could be enrolled in more than one payment plan. Table IV-10 shows the number of payment plans that people said they were participating in. Fourteen customers answered no to questions about participating in each payment plan. This may have been due to a problem with the tense of the question, which stated, "Do you have a debt reduction payment plan with (utility name)?" Customers who had been removed from the plan prior to the survey may have answered no to this question. The customers who stated that they did not have a plan were not asked the remaining questions on the survey about specific payment plans.

**Table IV-10  
Number of Payment Plans**

	Respondents	
	Number	Percent
0	14	10%
1	103	76%
2	18	13%

Customers were asked how long their payment plan lasts, how many months they have been on the plan, and how many of those months they had made payments. Table IV-11 shows that the majority of customers stated that the plan lasts 12 months or 24 months. In fact, all plans except PSE&G's last 12 months, and PSE&G's plan lasts 24 months. The majority of customers had been on the plan for fewer than six months when the survey was implemented. The number of months that customers said payments were made closely matches the number of months that customers said they had been on the plan.

**Table IV-11**  
**Number of Months on Plan and Made Payment**

	Months Plan Lasts <sup>1</sup>	Months on Plan <sup>2</sup>	Months Made Payments <sup>3</sup>
<6 months	1%	56%	59%
6-11 months	4%	23%	21%
12 months	40%	11%	10%
18 months	1%	0%	0%
24 months	15%	1%	1%
>24 months	2%	1%	1%
Don't know	37%	7%	7%

<sup>1</sup>127 plans. <sup>2</sup>138 plans. <sup>3</sup>135 plans.

Table IV-12 shows the calculation of the percent of the months on the plan that payments were made, based on the customers' reports about the length of time they had been on the plan and the number of months they had made payments. The majority of customers appear to have made all of the scheduled payments.

**Table IV-12**  
**Percent of Months on Plan that Payment Was Made**

	Percent of Plans*
<50%	2%
50%-99%	11%
100%	79%
Don't know	8%

\*136 plans

Customers were asked what their monthly payments were for each plan that they participated in. Table IV-13 shows that the mean payment plan amount was \$148. Payments ranged from \$25 to \$385.

**Table IV-13**  
**Monthly Payment**

		Monthly Payment*
Mean		\$148
Minimum		\$25
Percentile	25	\$100
	50	\$144

		Monthly Payment*
	75	\$180
Maximum		\$385

\*130 plans.

Customers were asked whether each plan payment was affordable. Table IV-14 shows that 71 percent said that the plans were affordable.

**Table IV-14**  
**Affordable Payment**

	Percent of Plans*
Yes	71%
No	27%
Don't know	1%

\*139 plans.

Customers were asked how much they owed the utility prior to enrolling in the plan and how much would be forgiven. A few of the customers did not know how much they owed, and the majority of customers did not know how much would be forgiven. The mean amount owed was \$723, the mean amount forgiven was \$394, and the mean percent forgiven was 61 percent.

**Table IV-15**  
**Amount Owed and Amount Forgiven**

		Amount Owed <sup>1</sup>	Amount Forgiven <sup>2</sup>	Percent Forgiven <sup>3</sup>
Mean		\$723	\$394	61%
Minimum		\$0	\$0	0%
Percentile	25	\$400	\$200	47%
	50	\$650	\$342	50%
	75	\$1000	\$600	100%
Maximum		\$2130	\$1000	125%

<sup>1</sup>109 plans. <sup>2</sup>30 plans. <sup>3</sup>29 plans.

Customers were asked, "How confident are you that you will be able to make each of your monthly payments for the remaining months until you complete the plan?" Table IV-16 shows the responses to this question. Fifty-four percent of respondents reported that they were very confident, and 39 percent said that they were somewhat confident.

**Table IV-16**  
**Confidence in Ability to Make Payments**

	Percent Of Plans*
Very confident	54%
Somewhat confident	39%
Not at all confident	5%
Don't know	2%

\*139 plans.

Customers who were somewhat or not confident that they could successfully make all remaining plan payments were asked what would be the highest monthly payment that the household could afford without difficulty. The answers to this question were analyzed in conjunction with the answers to the question about what their monthly payment was. Table IV-17 displays the percent of the current monthly bill that customers stated they could afford. The mean response was 82 percent.

**Table IV-17**  
**Percent of Bill Household Can Afford**

		Percent Can Afford*
Mean		82%
Minimum		31%
Percentile	25	60%
	50	68%
	75	100%
Maximum		172%

\*38 plans.

Customers were asked what factors would affect their ability to complete the payment plan. Table IV-18 shows that the most common response was a loss of income.

**Table IV-18**  
**What Will Affect Ability to Complete Plan?**

	Percent of Plans*
Loss of Income	46%
Additional expenses	5%
Assistance payments	2%
Help from friends/family	1%

	Percent of Plans*
Illness/Disability	4%
Other	5%
Nothing	23%
Don't know	14%

\*129 plans.

## V. Summary of Findings

This section summarizes the key findings from the Core Survey and the Arrearage Survey.

### A. Core Survey

Findings from the Core Survey are summarized below.

- *Understanding of the Program:* While most customers reported that they feel they have a good understanding of the Comfort Partners Program, answers that they provided to other questions indicate that their understanding is not very broad. Ninety-two percent of customers said that they understand the Program, but only 60 percent stated that they understand the partnership nature of the Program. Furthermore, the majority of customers do not understand that they have a responsibility to try to take actions to reduce their energy use, and only 40 percent of customers stated that a benefit of the Program is to reduce their energy use or save them money. These findings point to a need to strengthen the energy education component of the Program.
- *Customer motivation:* Customer motivation to reduce energy bills is assessed by customer responses to questions about affordability of bills and what they feel are the benefits of saving energy. While 65 percent of customers responded that their bills are affordable, 76 percent said that their monthly energy bills are very or somewhat difficult to pay. The majority of customers felt that the benefits of saving energy are to reduce their bills and energy use. Some customers cited other benefits including energy security and the environment. It appears that customers are struggling with their current utility bills and have adequate incentive to take actions to reduce energy usage.
- *Satisfaction with Program services:* Customer satisfaction with Program services is generally very high. While 77 percent of customers said that they were very or somewhat satisfied with the enrollment process, 94 percent said that they were very or somewhat satisfied with the measures installed, 91 percent said that they were very or somewhat satisfied with the energy education, and 96 percent said that overall, they were very or somewhat satisfied with the Program. These findings are consistent with field observations that found that providers were successful in forming relationships with the customers and communicated well with them while in the home. The most common reason that customers gave for being dissatisfied with measures was that they did not receive everything they expected from the Program. Overall, 23 percent of customers stated that they did not receive everything they expected from the Program.
- *Measures:* Customers were also generally very satisfied with the measures received. Eighty-eight to 96 percent of customers were very or somewhat satisfied with each

measure received. Removal rates were about 2 percent for CFLs and 10 percent for CO detectors, and only a few percent for aerators and showerheads. More than a fourth of the customers stated that they had a light on for 2 or more hours per day that was not replaced by the Program, and one-third of these customers stated that the reason the light was not replaced was that the provider failed to replace it. These findings suggest that modest improvement in CFL replacement is possible.

- *Energy education and Program impact on energy use:* Customers were asked about the energy education received. Fifty-two percent of customers reported that providers explained their energy bills, 42 percent that providers furnished them with a written list of suggested actions, and 26 percent that the provider gave them a dollar estimate of savings from taking these actions. These findings again point to a need to strengthen the educational component of the audit. Customers were asked the open-ended question of what actions they had agreed to take and whether they had been able to take these actions. Only 17 percent of respondents said that they committed to actions and were able to name an action agreed to that is expected to reduce energy use. However, the figure is much more favorable when customers were prompted with specific end uses. In this case, 77 percent of respondents stated that they had reduced one or more end uses, and 68 percent could cite an action associated with one of these end uses that is expected to reduce energy use.
- *Impact on comfort and bills:* Customers were asked what impact the Program had on the comfort of their home. Of those customers who received insulation or air sealing, 52 percent said that their home was more comfortable in the winter since receiving Program services, 52 percent said that their home was warmer in the winter, 66 percent said that their home was less drafty in the winter, and 61 percent said that their home was more comfortable in the summer. Forty-six percent of customers felt that their bills had declined since receiving services, and 98 percent of these customers attributed this to work done by the Comfort Partners Program. Eighty-three percent also attributed the decline to actions they had taken to reduce their energy use. Based on these customer reports, the Program appears to have positively impacted a majority of the customers' comfort levels and bills.

## ***B. Arrearage Survey***

Findings from the Arrearage Survey are summarized below.

- *Program understanding:* Customers do not appear to have a good understanding of the Debt Reduction Plan. Eighty-four percent of customers stated that they understand the rules of the plan, but some customers appeared to be confused about whether they are on the Debt Reduction plan, and many customers do not know how much of their arrears will be forgiven. Most customers do understand that their responsibility is to pay their bills on time.

- *Probability of paying the bill:* Eighty-nine percent of the customers stated that they were more likely to pay their bill now that they are on the plan. Most of these customers said this was because it was easier to pay the plan amount or because of the arrearage forgiveness.
- *Affordability:* The majority of customers felt that the plan had made bills more affordable. Fifty-nine percent stated that their utility bill was more affordable under the payment plan, and 57 percent said that being on the plan made other bills easier to pay. Seventy-one percent stated that their plans were affordable.
- *Payments:* Monthly payments averaged \$148 and ranged from \$25 to \$385. Seventy-nine percent of customers stated that they had made all monthly payments since being enrolled in the plan.
- *Predicted success:* Fifty-four percent of respondents were very confident that they would be able to make all remaining plan payments, and 39 percent were somewhat confident that they would make all remaining payments. The most common factor cited that may affect success on the plan was a loss of income.

# Appendix



*Appendix B: Arrearage Survey*

