



Focus on Energy Evaluation

WPS Territory-wide Home Performance with ENERGY STAR Increased Incentives Program Evaluation

January 27, 2011

Evaluation Contractor: Tetra Tech

Prepared by: Tom Mauldin, Perry Grossman, Lauren Abraham, and Lynn Hoefgen, NMR Group





# State of Wisconsin Public Service Commission of Wisconsin

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### 1. EXECUTIVE SUMMARY

This report presents the process evaluation results for the Wisconsin Public Service (WPS) Territory-wide Home Performance with ENERGY STAR (HPWES) Increased Incentives program, which is an enhancement to the Focus on Energy (Focus) HPWES program. By increasing incentives for completing a package of the most cost-effective measures and creating urgency by limiting the time the bonus is available, the WPS program aims to increase project completion rates. The evaluation is based on the results from in-depth telephone interviews with ten home performance contractors and telephone surveys with 210 program participants conducted in November of 2010. In addition, an analysis of program participation and savings was completed as part of the Track 1 activities.<sup>1</sup>

The primary objective of this evaluation effort is to assess reasons why the participation is lower than anticipated, what could be done to boost participation, project completion, and savings, and also to assess the effects of the WPS program design features. A secondary objective is to understand to what degree, if any, the increased incentives offered through the WPS HPWES program influenced the installation of measures recommended by program consultants/contractors in the WPS territory.

### 1.1 KEY FINDINGS

In this section we present a summary of the key findings of the evaluation regarding program design, participation, satisfaction, and program influence.

# 1.1.1 Program design

Most WPS participants are aware of the program requirements; however, few are aware of the reduced-rate financing offer. Sixty-three percent of the WPS participants who completed a bonus project were aware of the requirement to install at least three measures within six months, though only 17 percent were aware of the reduced-rate financing offer.

One-half of the consultants/contractors reported that the three-measure requirement has increased the number of measures installed for WPS bonus projects, which is supported by the Track 1 analysis<sup>2</sup>. One respondent estimated that the three-measure requirement has increased the number of measures installed by one-third, while another indicated that the effect has been a 50 percent increase. No respondents reported that the requirement decreased the number of measures. The Track 1 analysis found that the average number of measures installed per project increased by ten percent between 2009 and 2010 in the WPS territory compared to six percent in the Focus territory, though there is no difference in the average number of measures installed per project between the two territories in 2010.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Laura Schauer, Tetra Tech, Tom Mauldin and Lynn Hoefgen, NMR. *Home Performance with ENERGY STAR Increased Incentives Track 1 Analysis*. December 21, 2010.

<sup>&</sup>lt;sup>2</sup> The Track 1 analysis assessed program participation and savings. Further details on the Track 1 analysis are provided in Section 2.2.

<sup>&</sup>lt;sup>3</sup> Laura Schauer, Tetra Tech, Tom Mauldin and Lynn Hoefgen, NMR. *Home Performance with ENERGY STAR Increased Incentives Track 1 Analysis*. December 21, 2010.



Most of the consultants/contractors reported that the six-month requirement has shortened the length of time between audit and installation. Of the seven consultants and contractors who reported this, two indicated that the amount time between audit and installation has decreased by one-third, while another respondent estimated that it has decreased by 50 percent. The Track 1 analysis does not indicate that the WPS program is substantially reducing the time period between the initial assessment and installation.<sup>4</sup>

All consultants/contractors reported that that WPS bonus projects are more efficient than Focus projects. All six of the consultants and contractors that had completed HPWES projects outside of the WPS territory over the past year reported that that the final efficiency level of projects that received WPS bonus rewards was greater than the efficiency of Focus projects. These consultants/contractors judged the efficiency level of WPS bonus projects to be greater by 45 percent, on average, than the efficiency level of projects outside of the WPS territory. The Track 1 analysis found that the average gas savings per project increased by 16 percent in the WPS territory but declined by four percent in the Focus territory between 2009 and 2010; however, the increase in electricity savings in the two territories was similar. In 2010, the WPS territory had, on average, 16 percent more gas savings and two percent more electricity savings than in the Focus territory.

Most contractors report that WPS participants do not meet program requirements due to installing too few measures. Four of five consultants/contractors with participating customers that did not meet WPS program requirements said this occurred because customers installed fewer than three measures. Three of these four respondents reported that the reason why the customers did not add three or more measures was because their homes simply did not need three measures.

Most WPS participants reported that they would have installed the same number of measures in the same timeframe without the program requirements, though most contractors reported that the requirements were influential. The majority of WPS participants (66 percent) reported that they would have installed the recommended measures within six months in the absence of the six-month requirement, although most consultants and contractors (seven of ten) reported that the requirement was influential in encouraging participants to install recommended measures. In addition, most WPS participants (83 percent) reported that they would have installed the same number of measures in the absence of the three-measure requirement, while most consultants and contractors (seven of ten) reported that the requirement was influential in encouraging participants to install recommended measures.

### 1.1.2 Participation

Participation in the WPS HPWES program has fallen short of expectations, though participation in 2010 has improved more in the WPS territory than the Focus territory. Through October of 2010, 127 homeowners had completed participation in the WPS HPWES program. These 127 participants represent 13 percent of the targeted net electricity savings and 21 percent of targeted net gas savings for 2010.<sup>5</sup> However, the WPS territory exhibited a

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<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> WECC. Wisconsin Public Service Programs Monthly Performance Report. October 2010.



higher projected increase (23 percent) in the number of completed projects than the Focus territory (9 percent) between 2009 and 2010. In addition, the completion rate (the percentage of initial audits that install measures) in the WPS territory increased by a somewhat greater degree between 2009 and 2010 in the WPS territory than the Focus territory (20 percent vs. 12 percent). However, the 2010 completion rates are similar: 54.5 percent in the WPS territory ad 52.1 percent in the Focus territory.<sup>6</sup>

Consultants and contractors suggested a variety of strategies to boost participation in the WPS HPWES program. Four respondents suggested increased marketing to homeowners, and recommended emphasizing the benefits and quantifying the dollar savings to customers. Two qualified contractors recommended one-stop shopping, one of whom stated, "Having a consultant and then a contractor and then a consultant again is confusing for the customer." Another respondent suggested that the program assist customers with the process of bringing contractors in to perform and complete the work.

Few consultants or contractors reported changing their marketing strategies or business practices due to the WPS program. Only two of ten consultants/contractors reported altering their marketing strategies and three respondents reported altering other business practices. One respondent changed his advertisements to reflect the WPS incentives while another provided additional information to his ally partners located within the WPS territory. In addition, one respondent reported hiring additional help, and another added an extra disclosure form reiterating the six-month period in which customers have to make the renovations.

Most consultants and contractors (eight of ten) reported that customers who have an audit but do not install the recommended measures do so because it is too expensive. In addition, the WPS respondents who did not install any measures indicated that it was too expensive/could not afford it (13 percent), that they were too busy/did not get around to it (13 percent), and that they were not finished yet (17 percent). While over one-quarter of participants reported that there was nothing the program could do to help persuade them to install the measures, a few suggested that the program do the installation, offer more money or get the contractors to finish the job.

The majority of consultants and contractors reported that customers chose not to have audits because they are too expensive, though some also mentioned that customers are not aware of the benefits. Seven of ten respondents reported that customers chose not to have audits because they are too expensive, though four respondents also mentioned that customers are not aware of the benefits.

### 1.1.3 Satisfaction

Most consultants/contractors were satisfied with the overall WPS program, the amount of the bonus rewards, and the measures covered; however, fewer were satisfied with the level of outreach/marketing and the reduced-rate financing offer. Eight of the ten consultants/contractors were satisfied with the overall program; two respondents suggested increasing awareness of the program. Nine respondents were satisfied with the amount of the

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<sup>&</sup>lt;sup>6</sup> Laura Schauer, Tetra Tech, Tom Mauldin and Lynn Hoefgen, NMR. *Home Performance with ENERGY STAR Increased Incentives Track 1 Analysis*. December 21, 2010.



bonus rewards. Eight of ten consultants/contractors were satisfied with the measures covered by the WPS bonus, though eight also perceived value in including bonus rewards for both water heating and HVAC measures.

Only five of ten consultants/contractors were satisfied with the level of outreach/marketing done by the program; suggestions for improvement include providing program information with customers' energy bills and sending flyers with detailed savings information. Only two of ten consultants/contractors were satisfied with the reduced-rate financing offer. One respondent suggested, "Make it a better deal for the client," and further commented, "When they give up their rewards it's huge."

The majority of participants were satisfied with all aspects of the HPWES program. Over 90 percent of participants—both WPS and Focus—were satisfied with the amount of cash-back rewards, the measures covered, their interactions with the consultant/contractor, the quality of word completed, and the overall program (Table 1-1). Among the few participants who were not satisfied, most cited the cost of the measures, scheduling issues with their consultant/contractor, while Focus participants thought the incentive levels were too low.

Table 1-1. Participant Satisfaction with HPWES Program Components

Program Component	WPS Full Participant	Focus Full Participant
Sample size	53	106
Amount of cash-back rewards	96%	87%
Measures covered	92%	96%
Interactions with Installer	91%	100%
Quality of work done	94%	97%
Overall program	96%	98%

(Base: All respondents)

# 1.1.4 Program influence

The program influence questions asked of consultants/contractors and participants were not designed to yield net impact results; rather, they were intended to provide insight into program design and process findings. We benchmark the results of key program influence questions from the surveys of WPS participants against those from Focus participants in order to provide indicators of potential differences in net savings resulting from the increased incentives. We present the combined results for the four measures targeted in the evaluation—attic insulation, sidewall insulation, air sealing, and foundation insulation.

WPS participants do not appear to clearly attribute more program influence than do Focus participants. A somewhat lower percentage of WPS participants (69 percent vs. 83 percent) reported that they would have added the measures at the same time without the HPWES reward (Table 1-2). In addition, a slightly lower percentage of WPS participants (66 percent vs. 77 percent) said they were very likely to have bought the measures without the HPWES reward. Both of these results indicate greater program influence for the WPS program. However, a similar percentage of all participants (70 to 72 percent) indicated that the consultant/contractor was influential in their decision. In addition, fewer WPS participants (43 percent) than Focus participants (59 percent) described the impact of the HPWES program on their decision as influential. Overall, these results do not clearly indicate that the



WPS program had a stronger influence than the Focus program on the decision of participants to install measures.

**Table 1-2. Summary of Program Influence** 

Percentage of Participants who	WPS Full Participant	Focus Full Participant
Sample size	77	174
Would have added measure at same time without HPWES reward	69%*	83%*
Were very likely to buy measure without HPWES reward	66%*	77%*
Rated the consultant/contractor as influential	70%	72%
Said the HPWES program was influential to their decision	43%*	59%*

<sup>\*</sup> indicates a statistically significant difference at the 90 percent confidence level.

Due to small sample sizes for measure-specific results, we do not present the program influence results for each measure here; however, the measure-specific results are presented in Section 6.1.1. Overall, the measure-specific results do not indicate that the WPS program had a clearly stronger influence on the decision of participants to install attic insulation or foundation insulation, but suggest that the WPS program may have had a somewhat greater influence on the decision of participants to install sidewall insulation and air sealing.

The federal tax incentive appears to have had more influence on Focus projects than WPS projects. Forty percent of WPS participants and 50 percent of Focus participants reported receiving outside financial assistance, primarily the federal tax credit. About one-half of these WPS participants reported being likely to buy the measures without the outside incentive, compared to 70 percent of Focus participants.

Consultants and contractors reported that that the WPS incentives were more influential than the Focus incentives. All six consultants/contractors who work in both the WPS and Focus territory rated the WPS incentives as influential, while only two respondents rated the Focus incentives as influential. The average rating, on a scale of 0 to 10, where 0 means "not at all influential" and 10 means "extremely influential", was an 8.7 for WPS and 6.0 for Focus.

All consultants and contractors reported that the WPS bonus rewards were influential in encouraging participants to install recommended measures. However, only one consultant/contractor reported that the reduced-rate financing offer is influential.

Consultants and contractors generally reported that the WPS program has not influenced them to change their recommendation practices. However, a few respondents mentioned that they are more likely to recommend insulation because it is more cost-effective due to the higher incentive levels or simply to meet the three-measure requirement in order to receive the higher incentives.

### 1.2 CONCLUSIONS AND RECOMMENDATIONS

It appears that the WPS HPWES program will fall substantially short of 2010 savings targets, however the WPS territory exhibited somewhat greater improvement than the Focus territory in 2010 in terms of completion rates, the volume of completed projects, and average energy savings per project. However, it is not entirely clear whether these upward trends are due to the WPS program enhancements. In addition, the Track 1 database analysis does not

### 1. Executive Summary...



indicate that the WPS program is having the intended impacts to the extent initially conceptualized.<sup>7</sup>

According to consultants/contractors, the lower than anticipated volume of initial audits is primarily due to a lack of customer awareness of the WPS increased incentives. This result suggests that a broad-based marketing campaign would be an effective strategy to encourage more initial audits. The HPWES program already initiated a marketing campaign in late summer 2010, though it is unclear whether this campaign is specifically focused on the WPS territory or the state as a whole. Because WPS rewards are triple the Focus rewards, it would be valuable to market this information directly to WPS customers—either through WPS bill stuffers or an advertising campaign targeted to the WPS region. While the primary objective of the bonus rewards is to encourage the installation of recommended measures, it should also serve to persuade customers to have the initial audits as well. However, it is worth noting that participation may be somewhat negatively affected in 2011 by the expiration of the federal tax credit for home energy improvements; about one-third of all HPWES program participants reported receiving the federal tax credit though less than ten percent reported that they were unlikely to have bought the measures without them.

It may also be beneficial to coordinate with consultants/contractors regarding the marketing campaign, as few appear to actively market the higher WPS incentives. They are often in contact with customers, but do not appear to be effectively utilizing the opportunity provided by the WPS program to step up their own marketing, as few consultants/contractors reported changing their marketing strategies. In addition, further training of consultants/contractors on how to persuade customers to install recommend measures could also be beneficial. We understand that the program is investigating the use of the Energy Performance Score<sup>8</sup>, which may prove useful in helping customer understand the benefits of installing measures.

Consultants/contractors reported that the primary reason why participants who have an initial audit do not meet the WPS program requirements is because their homes did not need three or more targeted measures. This indicates that there may not be a large pool of homes that require three or more of the targeted measures. The program could relax the three-measure requirement, or add more targeted measures in order to increase the pool of potential participants. HVAC equipment and water heating equipment may be potential options—most consultants/contractors indicated that the WPS program would benefit from the inclusion of bonus rewards for HVAC and water heating measures. While the WPS HPWES program already offers bonus rewards for boilers and furnaces through the Heating Equipment Bonus program, water heaters are not eligible for bonus rewards. Inclusion of these measures in the three-measure requirement would increase the pool of eligible customers.

Another key objective for the WPS program is to reduce the length of time between initial audit and measure installation. While most consultants/contractors reported a decrease, the Track 1 analysis does not indicate that the WPS program is substantially reducing the time period between the initial assessment and installation.

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<sup>&</sup>lt;sup>7</sup> Laura Schauer, Tetra Tech, Tom Mauldin and Lynn Hoefgen, NMR. *Home Performance with ENERGY STAR Increased Incentives Track 1 Analysis*. December 21, 2010.

<sup>&</sup>lt;sup>8</sup> http://energytrust.org/residential/new-home-solutions/eps.aspx.

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Overall, consultants/contractors and participants appear satisfied with the design of the program, the level of incentives, and the program requirements. However, it was evident from the program tracking data and the evaluation results that the reduced-rate financing offer has not been effective. The consultants/contractors did not attribute much influence to it, and few participants were even aware of the offer. These results suggest that there is a clear need to convince the consultants/contractors to promote this offer, and to more prominently include the offer in customer marketing campaigns. Because of the general lack of familiarity with the offer, it is difficult to judge whether the offer itself is attractive enough to induce participation, though one consultant/contractor believed that the financing offer could be improved and some WPS participants reported selecting the cash-back rewards because they did not need financing.

While most participants reported being satisfied with their consultant/contractor, some participants encountered difficulties with scheduling the installation and the post-audit. Given the six-month requirement, backlogged consultants/contractors could become an obstacle to completing projects on time. While extensions may be granted on a case-by-case basis, the program might benefit by taking a more active role in working with consultants/contractors. Questions could be included in the HPWES customer satisfaction survey in order to elicit feedback specific to contractors regarding scheduling and other key metrics. If issues are identified for a particular consultant/contractor, then the program can work with them to resolve the problems. In addition, it could be useful to provide results of the satisfaction surveys to consultants/contractors in order to benchmark their performance. This also indicates that the program should consider recruiting more consultants/contractors in order to provide more options for participants to have their work performed in a timely manner.

There is conflicting evidence regarding the relative influence of the WPS incentives and Focus incentives on the customers' decision to install recommended measures. While consultants/contractors indicate that the WPS incentives are more influential than the Focus incentives, the participant surveys do not clearly indicate that the WPS program had a stronger influence on the decision of participants to install measures. Thus, while this evaluation was not designed to estimate net savings, it is unclear whether the WPS increased incentives are influencing customers to a greater degree than the Focus incentives.



### 2. INTRODUCTION

This report presents the results of the Track 2 and Track 3 evaluation efforts for the Wisconsin Public Service (WPS) Territory-wide Home Performance with ENERGY STAR (HPWES) program. The analysis is based on results from in-depth interviews with home performance contractors and telephone surveys with program participants conducted in November of 2010.

The primary objective of this evaluation effort is to assess reasons why the participation is lower than anticipated, what could be done to boost participation, completion rate, and savings and also to assess the effects of the WPS program design features. A secondary objective is to understand to what degree, if at all, the increased incentives offered through the WPS HPWES program influenced the installation of measures recommended by program consultants/contractors in the WPS territory.

The remainder of this section provides a background of the program and the methodology employed for the evaluation.

# 2.1 BACKGROUND

The WPS HPWES Increased Incentive program is an enhancement to the Focus on Energy (Focus) HPWES program. By increasing incentives for completing a package of the most cost-effective measures and creating urgency by limiting the time the bonus is available, the program aims to increase project completion rates.<sup>9</sup>

The Focus HPWES program works with a network of independent consultants/contractors who help customers increase energy efficiency, comfort, safety, and durability of their homes. The consultant/contractor first completes a comprehensive evaluation of a home's insulation, air leakage, mechanical equipment, moisture and ventilation, combustion safety, and carbon monoxide. The consultant/contractor then provides a report with a list of recommended energy efficiency measures. The HPWES program provides cash rewards to the homeowner and the consultant/contractor to encourage the former to install recommended measures. Lastly, the consultant/contractor performs a post-assessment in order to verify the energy savings. Both consultants and qualified contractors conduct initial assessments, develop recommendations, and conduct post-assessments; however, qualified contractors also install measures. The majority of program projects participate through the consultant path.

According to a recent analysis of historical Focus HPWES savings, in 2009 insulation measures represented 86 percent of kWh savings and 78 percent of therm savings. The other significant measures included water heating (11 percent of kWh savings) and air sealing (19 percent of therm savings). The insulation was installed in different spaces in the home, including attic (installed in 84 percent of homes), sill box (62 percent), sidewall (44 percent), foundation (25 percent), and floor (18 percent).

<sup>&</sup>lt;sup>9</sup> WECC. Focus on Energy Proposed Implementation Plan Territory-Wide Initiatives For Wisconsin Public Service Customers. July 1, 2009.

<sup>&</sup>lt;sup>10</sup> Laura Schauer, Tetra Tech. Review of Historic Energy Savings from the Home Performance with ENERGY STAR Program. September 23, 2010.



In the WPS program, the incentive amounts are increased relative to the Focus (non-WPS) program, with homeowners having the option of choosing either triple rewards or reduced interest-rate financing plus \$250 in cash. For example, a Focus participant would receive \$100 for installing attic insulation, whereas a WPS participant would receive \$300. However, to be eligible for the increased rewards and reduced-rate financing, participants must complete at least three recommended insulation, air sealing, and/or combustion safety measures within six months of the initial assessment.

Through October of 2010, 127 homeowners had completed participation in the WPS HPWES program. These 127 participants represent 13 percent of the targeted net electricity savings and 21 percent of targeted net gas savings for 2010.<sup>11</sup>

### 2.2 METHODOLOGY

This section documents the study methodology. Embedded in the discussion are the researchable issues addressed by each activity.

Note that the activities detailed and analyzed within this report are based on self-report data. An analysis of program participation and savings was completed as part of the Track 1 activities. The primary objective of Track 1 activities is to identify any potential impacts of the WPS programs' enhancements over the Focus on Energy program, particularly in terms of increased participation and/or savings. We completed this review using the program participation and savings data captured in Wisconsin Energy Conservation Corporation's (WECC) program tracking database. Where applicable, the results from the Track 1 analysis are included within this report; however, the Track 2 and 3 activities are primarily process evaluation-driven and based on self-report data.

### 2.2.1 Consultant/contractor interviews

The objectives of the in-depth telephone interviews with consultants and qualified contractors was to capture their perspectives regarding a variety of researchable issues:

- Satisfaction with and suggestions for improvement of WPS program outreach, design, and incentive levels
- Level of customer interest in program and reasons for participating and not participating
- Suggestions on how to boost participation
- Changes to, and success of, their own marketing and business practices due to enhanced WPS program
- Relative impact of WPS increased incentives and Focus rewards
- Indicators of program influence

<sup>&</sup>lt;sup>11</sup> WECC. Wisconsin Public Service Programs Monthly Performance Report. October 2010.

<sup>&</sup>lt;sup>12</sup> Laura Schauer, Tetra Tech, Tom Mauldin and Lynn Hoefgen, NMR. *Home Performance with ENERGY STAR Increased Incentives Track 1 Analysis*. December 21, 2010.



- Level of competition, before and after the introduction of the enhanced WPS program
- Comparison of projects and participant decision-making in WPS vs. non-WPS territory
- Rationale why customers do not meet the requirements of the enhanced WPS program.

Our goal was to complete interviews with 15 participating consultants/contractors who had completed at least one project that received the WPS bonus rewards. However, the team identified only 16 unique consultants/contractors who had completed WPS bonus projects, and therefore attempted to complete as many interviews as possible from this group. The team was able to complete ten interviews from this group; six of these ten respondents had also completed Focus HPWES projects. These interviews were conducted from November 10 to November 18, 2010.

Respondents were screened to ensure that they had completed at least one project that had received WPS bonus rewards. We targeted the person who conducted the initial audit and post-audit of the home, regardless of whether or not he or she was involved in installing measures.

Each consultant/contractor respondent was asked to answer questions regarding all of the WPS bonus projects that he or she was involved with. Customer names and addresses for specific WPS bonus projects were obtained from program tracking data in order to refresh their recall. If a respondent could not recall the specific projects during the interview or if the respondent worked for a business that had completed over 20 projects, the respondent was asked how many WPS bonus projects he or she recalled doing audits for.

The ten respondents represented 46 WPS bonus projects, as shown in Table 2-1.

Table 2-1. Number of WPS Bonus Projects per Consultant/Contractor Respondent

Number of WPS Bonus Projects	Number of Respondents
Sample size	10
One	5
Two to five	2
Six to ten	2
11 to 20	1
Total projects	46
Average number of projects	4.6
Median number of projects	1.5

(Base: All Respondents)

Due to the small sample size, all findings from the consultant/contractor interviews should be viewed as qualitative in nature. Weighted averages are based on the number of specific WPS bonus projects that each respondent recalled auditing.



# 2.2.2 Participant surveys

This telephone survey targeted participants from within the WPS territory as well as participants outside of the WPS territory (Focus) in order to conduct a cross-sectional analysis. Comparing the responses of these two groups allows us to identify the impact of the WPS program on customers' decision-making processes and satisfaction. We also interviewed participants from the WPS territory who completed a HPWES project but did not receive the increased incentives in order to understand reasons why they did not meet program requirements. Lastly, the survey also interviewed WPS customers who received a pre-assessment but did not install any measures in order to better understand their rationale for not installing any measures.

The evaluation team identified the following researchable issues for participants:

- How and when participants heard about the program
- Customer motivations for participating in the program
- Level of satisfaction with and influence of various components, including increased incentives, six-month requirement, and reduced-rate financing
- Indicators of program influence
- Level of consultant/contactor and program influence on customers' decision to install measures
- Satisfaction with quality of work and interaction with consultants/contractors
- Reasons why participant did not install recommended measures through enhanced WPS program.

The program influence questions were not designed to yield net impact results; rather, they were intended to provide insight into program design and process findings. We benchmark the results of key program influence questions from the WPS participant surveys against the Focus participant surveys in order to provide indicators of potential differences in net savings resulting from the increased incentives.

Because of the low participation in the WPS program, we sampled all participants from the WPS territory. In addition, we randomly sampled full participants from the non-WPS (Focus) territory.

A total of 210 surveys were completed with HPWES participants: 104 with participants from the WPS territory and 106 with participants from the Focus territory. All 106 of the Focus respondents had completed program participation and received standard Focus rewards; we identify these respondents as "Focus Full Participants" (Table 2-2). Of the 104 WPS surveys, 53 were conducted with respondents who had completed participation and received the WPS bonus rewards; we identify these respondents as "WPS Full Participants." Surveys were also completed with 27 WPS participants who had installed measures, but did not meet the requirements to receive WPS bonus rewards, either because they installed fewer than three recommended measures or because the installation took longer than six months; we identify these respondents as "WPS Partial Participants." Lastly, 24 surveys were completed with respondents from the WPS territory who had received an initial assessment but had not yet installed any measures; we identify these respondents as "WPS Assessment Only"

# 2. Introduction...



participants. The participant surveys were conducted between November 9 and November 22, 2010.

Table 2-2. Number of Participant Survey Respondents by Type

Respondent Category	Number of Respondents
Focus full participant	106
WPS full participant	53
WPS partial participant	27
WPS assessment only	24



# 3. MARKETING AND PARTICIPATION

In this section we present the results of the consultant/contractor interviews and the participant surveys regarding the marketing and of the HPWES program.

### 3.1 AWARENESS OF THE HPWES PROGRAM

Participants indicated that they became aware of the HPWES Program through a range of sources (Table 3-1). Most became aware from a contractor or insulation vendor (32 percent for WPS Participants, 26 percent for Focus participants) or from family, neighbors or friends (WPS 16 percent, Focus 21 percent). WPS participants were slight more likely than Focus participants to have learned about the program through their energy auditor (11 percent vs. five percent) and the Focus website (seven percent vs. one percent).

Table 3-1. Source of Awareness of HPWES Program, Participants

Source of Awareness	WPS Participants	Focus Full Participant
Sample size	104	106
From a contractor/insulation vendor	32%	26%
From family, neighbor, or friend	16%	21%
Newspaper advertisement	5%	10%
From the person conducting an audit on my home/consultant	11%	5%
Radio advertisement	9%	6%
From a meeting/exhibit/trade show	8%	5%
Utility company	3%	8%
Television advertisement	7%	4%
Mailing/Literature	0%	10%
From Focus on Energy website	7%	1%
Other advertisement	3%	2%
Internet	2%	2%
Don't know	7%	7%
Refused	0%	0%

(Base: All respondents; multiple responses)



Consultants/contractors were asked to identify the one source from which they received the most referrals. Table 3-2 shows that four out of ten respondents identified the Focus on Energy website as their primary source of referrals. The other primary referral source appears to be word of mouth from family, neighbors, friends, and past customers.

Table 3-2. Source of Referrals, Consultants/Contractors

Source of Most Referrals	Primary Source (Single Response)	Other Sources (Multiple Response)
Sample size	10	10
Focus on Energy website	4	5
Word of mouth: family, neighbor, or friend, or past customer	2	4
Other energy efficiency programs	1	2
Trade ally (non-contractor)	1	2
Word of mouth (past customers)	1	2
Other consultants	1	1
Equally from all sources	1	0
Internet	0	4
A contractor/insulation vendor	0	2
Focus on Energy call center	0	1
Our own advertisements (phone book, radio, website)	0	1
Call center in Madison	0	1

(Base: All Respondents)

### 3.2 REASONS FOR PARTICIPATING IN THE PROGRAM

# 3.2.1 Participants

Saving money on heating their homes was the biggest driver for participation for both WPS (29 percent) and Focus (33 percent) participants (Table 3-3). Rebates were mentioned next most often (WPS 24 percent, Focus 13 percent). After that, WPS (17 percent) and Focus (13 percent) participants mentioned wanting to be more comfortable or warmer in their homes, followed by wanting to reduce drafts in their homes (WPS 17 percent, Focus 12 percent). Learning about energy efficiency was the next most cited response (WPS 15 percent, Focus 13 percent). Overall, the reasons for participating for WPS and Focus participants tended to be similar.



Table 3-3. Reason for Participating in Program, Participants

Reason for Participating	WPS Participants	Focus Full Participant
Sample size	104	106
Save money on heating my home	29%	33%
Rebates	24%	13%
Be more comfortable or warmer in my home	17%	13%
Reduce drafts in my home	17%	12%
Learn more about the energy efficiency of my home	15%	13%
House needed work	7%	8%
Reduce my carbon footprint/help with climate change or global warming	10%	5%
Ice dams or moisture problems	8%	3%
It's a good idea	3%	7%
Help the environment	3%	5%
Save energy	3%	5%
Other work being done to home	2%	3%
Contractor recommendation	3%	1%
Increase the value of my home	1%	2%
Tax credit	1%	2%
Thinking of doing it anyway	0%	2%
Quality work	1%	1%
Other	4%	6%
Don't know	0%	<1%

(Base: All respondents; multiple responses)

### 3.2.2 Consultants/contractors

Table 3-4 displays the reasons consultants and contractors cited for customers participating in the WPS program, and the results largely correspond to those provided by the participants. Five of ten respondents said that customers participate to take advantage of the incentives, four of ten said customers participate to save money on home heating, and three of ten said customers participate to address existing problems such as ice damming.

Table 3-4. Reasons for Participation in WPS HPWES Program, Consultants/Contractors

Reason	Number of Consultants/Contractors
Sample size	10
To take advantage of the incentives	5
Save money on heating home	4
To address existing problem (such as ice damming)	3
Recommended by consultant/contractor	2
Be more comfortable or warmer in home	1
Recommended by someone else (trade contractor, friend, etc.)	1

(Base: All Respondents; multiple response)



### 3.2.3 Other decision factors

Most WPS participants (78 percent) and Focus participants (77 percent) indicated that their primary goal was to install the measures, rather than installing the measures as part of a larger remodeling project (Table 3-5). Because the WPS assessment-only participants did not install any measures, they were not asked this series of questions

Table 3-5. Installation Part of a Larger Remodeling Project, Participants

	WPS Full and Partial Participants	Focus Full Participant
Sample size	80	106
Primarily goal to install items	78%	77%
Larger remodeling project	21%	23%
Other	1%	0%
Don't know	0%	0%
Refused	0%	0%

(Base: WPS Full and Partial Participants, Focus Full Participants)

Over one-half of WPS participants (52 percent) and Focus participants (60 percent) said that they treated the recommended measures as one group (see Table 3-6). Forty-six percent of WPS Participants and 37 percent of Focus participants indicated that they considered the measures individually.

Table 3-6. Measures Considered Individually or as One Group, Participants

	<b>WPS Full and Partial Participants</b>	Focus Full Participant
Sample size	80	106
One group	53%	60%
Individually	46%	37%
Don't know	1%	3%
Refused	0%	0%

(Base: WPS Full and Partial Participants, Focus Full Participants)

### 3.3 LEVEL OF CUSTOMER INTEREST

Six of ten consultants/contractors reported that customer interest in the HPWES program in the WPS territory had increased since the WPS bonus program launched in October 2009 (Table 3-7). When asked why they thought customer interest had increased, two respondents explained that they were busier and that inquiries regarding the program had increased. Another respondent stated his customer base was increasingly located in the WPS territory.

Four consultants/contractors reported that customer interest in the program had remained the same. Two respondents identified insufficient advertising as the reason for customer interest not changing since the WPS bonus program launched. Another respondent said that customer interest had not changed because the majority of homes in his area are heated by liquid petroleum rather than natural gas provided by WPS. None of the respondents said that customer interest had decreased since the WPS bonus program launched.



Table 3-7. Customer Interest in HPWES Program in WPS Territory, Consultants/Contractors

Customer Interest in HPWES Program Since Bonus Program Launch in October 2009	Number of Consultants/Contractors
Sample size	10
Greater	6
Same	4
Lower	0

(Base: All Respondents)

Through October of 2010, 127 homeowners had completed participation in the WPS HPWES program. These 127 participants represent 13 of the targeted net electricity savings and 21 percent of targeted net gas savings for 2010. However, based on the Track 1 analysis, the WPS territory exhibited a higher projected increase (23 percent) in the number of completed projects than the Focus territory (9 percent) between 2009 and 2010. In addition, the completion rate (the percentage of initial audits that install measures) in the WPS territory increased by a somewhat greater degree between 2009 and 2010 in the WPS territory than the Focus territory (20 percent vs. 12 percent). However, the 2010 completion rates are similar: 54.5 percent in the WPS territory ad 52.1 percent in the Focus territory. However, the 2010 completion rates are

### 3.4 COMPETITION

Consultants and contractors were asked how much competition they have for home energy evaluations and measure installations now, compared to before the WPS program launched in October 2009. Six of ten respondents said that the level of competition for home energy projects was the same as before the WPS bonus program launched in October of 2009 (Table 3-8). One respondent suggested that the overall market for home energy projects had remained the same, yet the portion of WPS customers participating in the program had increased slightly. Another respondent stated that competition had not increased because the amount of work had increased too.

Four of ten respondents reported that the level of competition for home energy projects had increased since the WPS bonus program launched. One respondent cited federal funding and the push to make homes more efficient, which has resulted in more competition. Another attributed increased competition to the recession and decline in the construction industry, causing small companies and entrepreneurs to branch out into home renovations in order to earn additional income. Another respondent who noticed an increase in competition commented that the number of individuals in his area performing energy audits had tripled. None of the respondents said that competition for home energy projects had declined since October of 2009.

<sup>&</sup>lt;sup>13</sup> WECC. Wisconsin Public Service Programs Monthly Performance Report. October 2010.

<sup>&</sup>lt;sup>14</sup> Laura Schauer, Tetra Tech, Tom Mauldin and Lynn Hoefgen, NMR. *Home Performance with ENERGY STAR Increased Incentives Track 1 Analysis*. December 21, 2010.



Table 3-8. Competition for Home Energy Projects, Consultants/Contractors

Level of Competition for Home Energy Projects since WPS Bonus Program Launch in October 2009	Number of Consultants/Contractors
Sample size	10
Same	6
Greater	4
Lower	0

(Base: All Respondents)

### 3.5 CHANGES TO MARKETING AND BUSINESS PRACTICES

Two of ten consultants/contractors reported altering their marketing strategies in response to the changes to the HPWES program in the WPS territory (Table 3-9). One respondent changed his advertisements to reflect the additional incentives available to WPS natural gas customers. The other respondent provided additional information to his ally partners located within the WPS territory.

Three of ten respondents reported altering other business practices in response to the changes to the HPWES program in the WPS territory. One respondent reported hiring additional help, while another reported seeking additional training. Lastly, one respondent reported adding an extra disclosure form reiterating the six-month period in which customers have to make the renovations.

Table 3-9. Made Changes to Marketing Strategy and Business Practices, Consultants/Contractors

	Changes to Marketing Strategy	Changes to Other Business Practices
Sample size	10	10
Yes	2	3
No	8	7

(Base: All Respondents)



### 4. WPS PROGRAM DESIGN

In this section we present the results of the consultant/contractor interviews and the participant surveys regarding the design of the WPS HPWES program.

### 4.1 BONUS INCENTIVE OFFERS

Table 4-1 shows that only some of the WPS participants surveyed were aware of bonus cash-back rewards. Thirty-six percent of WPS full participant were aware, 54 percent of WPS assessment-only participants were aware, though only four percent of WPS partial participants were aware. <sup>15</sup> Because a higher percentage of WPS assessment only respondents had their initial audit more recently than those who completed projects (61 percent vs. 47 percent), it may be that they simply have clearer recall or that the consultants/contractors are doing a better job at conveying program information now.

WPS Full Participant | WPS Partial Participant | WPS Assessment Only 53 Sample size 27 4% 54% Yes 36% 93% 42% No 60% Don't know 4% 4% 4% Refused 0% 0% 0%

Table 4-1. Awareness of Bonus Cash-back Rewards, Participants

(Base: All WPS respondents)

The percentage of respondents who were aware that the HPWES program offers reducedrate financing to Wisconsin Public Service customers varied among the three WPS groups (Table 4-2). Forty-two percent of WPS Assessment-only participants were aware while only 17 percent of WPS Full Participants were aware and none of the partial participants were aware.

WPS Full Participant | WPS Partial Participant **WPS Assessment Only** Sample size 53 27 24 Yes 17% 0% 42% No 75% 100% 54% Don't know 8% 0% 4% Refused 0% 0% 0%

Table 4-2. Awareness of Reduced-rate Financing Offer, Participants

(Base: All WPS respondents

<sup>&</sup>lt;sup>15</sup> Because the program tracking data did not contain audit date information for all participants (about 35 percent of respondents were missing pre-audit dates), it is possible that some of the WPS partial participants may have received their initial audit before the WPS program launched in October 2009. This may partially explain why so few partial participants are familiar with the WPS program components, although given the high awareness among full participants and assessment only respondents, it is more likely that the partial participants were simply not informed about the program. Thirty-six percent of the full participants, 59 percent of the partial participants, and four percent of the assessment only participants did not have a pre-audit date available.



When WPS full participants were asked why they had chosen to receive the bonus cash-back rewards instead of the reduced-rate financing, they indicated most commonly that they "had the money" (34 percent) and secondarily that they were unaware of the financing offer (15 percent) (Table 4-3).

Table 4-3. Why Chose Bonus Case Back Rewards, Participants

	WPS Full Participant
Sample size	50
Had the money	36%
Unaware of financing offer	15%
Wouldn't have chosen the financing	12%
Rebate offer made more sense	8%
To offset cost	4%
Not worried about financing	4%
Needed money for additional remodeling	2%
Financial reward was doubled at the time	2%
Didn't want additional interest	2%
Cannot qualify for financing	2%
Better investment	2%
Other	6%
Don't know	10%

(Base: WPS Full Participants who took bonus cash-back rewards)

The majority of WPS participants were aware of the program requirement to install at least three recommended items within six months of the audit (Table 4-4).

Table 4-4. Awareness of WPS Program Requirements, Participants

	WPS Full Participant	<b>WPS Partial Participant</b>	WPS Assessment Only
Sample size	52	27	21
Yes	63%	48%	76%
No	33%	44%	19%
Don't know	4%	7%	5%
Refused	0%	0%	0%

(Base: All WPS respondents)



### 4.1.1 Influence of bonus offers

Consultants and contractors were asked to rate the influence of the WPS program incentive offers in encouraging participants to install the recommended measures, using a scale of 0 to 10, where 0 means "not at all influential" and 10 means "extremely influential." On average, respondents rated the WPS bonus cash-back rewards as a 9.5, and the reduced rate financing as a 2.5 (Table 4-5). All ten respondents rated the bonus cash-back rewards as "influential" in encouraging participants to install the recommended measures. Only one respondent rated the \$250 cash-back reward plus reduced-rate financing offer as "influential."

Table 4-5. Influence of WPS Program Bonus Offers, Consultants/Contractors

Influence in Encouraging Participants to Install Recommended Measures	Bonus Cash-back Rewards	\$250 Cash-back Reward Plus Reduced-rate Financing
Sample size	10	10
Influential (7-10)	10	1
Somewhat influential (4-6)	0	1
Not influential (0-3)	0	4
N/A	0	3
Don't know	0	1
Average	9.5	2.5
Median	10	1.5

(Base: All Respondents)

### 4.2 PROGRAM REQUIREMENTS

### 4.2.1 Consultant/contractor perspectives

Five of ten consultants/contractors reported that the requirement to install at least three recommended measures affected the number of measures installed. One respondent estimated that the three-measure requirement had increased the number of measures installed by one-third, while another indicated that the effect had been a 50 percent increase. The Track 1 analysis found that the average number of measures installed per project increased by 10 percent between 2009 and 2010 in the WPS territory compared to six percent in the Focus territory, though there is no difference in the average number of measures installed per project between the two territories in 2010. <sup>16</sup>

Seven of ten consultants/contractors reported that the requirement to install measures within six months of the audit had had the effect of shortening the length of time between audit and installation (Table 4-6). Two of those seven indicated that the amount time between audit and installation had decreased by one-third, while another respondent estimated that it had

<sup>&</sup>lt;sup>16</sup> Laura Schauer, Tetra Tech, Tom Mauldin and Lynn Hoefgen, NMR. *Home Performance with ENERGY STAR Increased Incentives Track 1 Analysis*. December 21, 2010.



decreased by 50 percent. The Track 1 analysis does not indicate that the WPS program is substantially reducing the time period between the initial assessment and installation.<sup>17</sup>

Five of ten respondents reported that the six-month requirement had affected participation levels. Four of those five indicated that the effect was an increase in participation levels. One respondent estimated that the six-month requirement had increased participation by 15 to 20 percent, while another estimated that the requirement had increased participation by 50 percent. When asked how the six-month requirement had affected participation levels, one respondent replied, "I think it makes them think about it quicker; make a decision." However, one respondent stated that the six-month requirement had decreased participation levels, commenting, "There are people we did audits for three years ago that we can't get into the program."

Table 4-6. Effect of Six Month Requirement, Consultants/Contractors

	Number of Consultants/Contractors
Sample size	10
The time between audit and installation	7
Participation levels	5
None	2
Don't know	1

(Base: All Respondents; multiple response)

# 4.2.2 Participant perspectives

Table 4-7 shows the self-reported likelihood of WPS participants to install measures within six months without the program requirement. Most respondents (66 percent) indicated that they would have still installed the measures within six months.

For those WPS participants who indicated they would not have installed the measures within six months if it were not for the program requirement, five respondents indicated they would act within 12 months and two respondents said 24 months.

Table 4-7. Would have Added Measures within Six Months without Program Requirement,
Participants

	WPS Full Participant
Sample size	53
Yes	66%
No	28%
Don't know	6%
Refused	0%

(Base: WPS Full Participants)

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<sup>&</sup>lt;sup>17</sup> Ibid.



The majority of WPS participants (83 percent) indicated that, even if the program had not required them to add at least three measures in order to receive a reward, they still would have added the same measures (Table 4-8).

Table 4-8. Would have Installed Same Number of Measures without Program Requirements,
Participants

	•
	<b>WPS Full Participant</b>
Sample size	53
Yes	83%
No	13%
Don't know	4%
Refused	0%

(Base: WPS Full Participants)

The seven respondents who indicated that they would not have installed the required three items cited attic insulation (7), air sealing (5), exhaust fan (4), sillbox insulation (3), and sidewall insulation (3) as the most measures they most likely would not have added (Table 4-9). Also shown in the table is the quantity of each measure installed by all 53 WPS full participants. The measures selected most often for removal tend to parallel the types of measures installed.

Table 4-9. Items WPS Full Participants Would Not Have Added, Participants

	WPS Full Participant	
	Items Participants Would Not Have Installed	Installed Items
Sample size	7	53
Attic insulation	7	43
Air sealing	5	42
Exhaust fan	4	18
Sillbox insulation	3	37
Sidewall insulation	3	27
Floor insulation	2	9
Water heater	1	2
Kneewall insulation	1	6
Foundation insulation	1	15
Chimney liner for water heater	1	3

(Base: WPS Full Participants who indicated that they would not have added three measures)

### 4.3 INFLUENCE OF PROGRAM REQUIREMENTS

Consultants and contractors were asked to rate the influence of WPS program requirements in encouraging participants to install the recommended measures, using a scale of 0 to 10, where 0 means "not at all influential" and 10 means "extremely influential." On average, consultants/contractors rated the requirement to install at least three recommended measures a 7.3 and the requirement to install measures within six months a 6.9. As shown in Table 4-5, seven respondents rated the requirement to install at least three recommended measures and the requirement to install measures within six months as "influential" in encouraging participants to install the recommended measures.



Table 4-10. Influence of WPS Program Components, Consultants/Contractors

Influence in Encouraging Participants to Install Recommended Measures	Requirement to Install at Least Three Recommended Measures	Requirement to Install Measures Within Six Months
Sample size	10	10
Influential (7–10)	7	7
Somewhat influential (4–6)	2	1
Not influential (0-3)	1	2
N/A	0	0
Don't know	0	0
Average	7.3	6.9
Median	8	8

(Base: All Respondents)

### 4.4 REASONS FOR NOT RECEIVING WPS BONUS

### 4.4.1 Reasons for not meeting program requirements

Five of ten consultants/contractors reported that they had audited a home that was eligible for bonus rewards but did not meet program requirements. Table 4-11 displays the reasons reported by consultants/contractors why eligible customers did not meet program requirements. Four of five respondents indicated that customers did not meet program requirements because they added fewer than three measures. Three of these four respondents indicated that the reason customers did not add three or more measures was that their homes simply did not need three measures, and therefore it did not make sense. One respondent indicated that customers did not meet program requirements because they took longer than six months to decide they wanted the measures. Other reasons reported by respondents include homes being heated with wood or liquefied petroleum and therefore not being eligible for the WPS bonus program, and the poor energy performance of the home.

Table 4-11. Why Customers Did Not Meet Enhanced WPS Program Requirements, Consultants/Contractors

Reason	Number of Consultants/Contractors
Sample size	5
Added less than three measures	4
More than six months to add measures	1
Heated with wood or liquefied petroleum	1
Poor performance	1

(Base: Respondents Reporting They Audited a Home that Was Eligible for Bonus Rewards but Did Not Meet Program Requirements; multiple response)

# 4.4.2 Not installing enough measures

WPS participants who installed recommended measures but did not qualify for the WPS bonus rewards were asked why they did not meet program requirements. Twenty-seven percent of these WPS participants indicated that they did not know the bonus rewards were



available. Eighteen percent said they could not afford to add three items and 14 percent indicated that the contractor was unavailable.

When prompted for any other reasons, nearly all either indicated that they did not know, or could not provide any other reasons. Individual respondents stated that they did not know about the bonus rewards, the measures were too expensive, the measures were sufficient, that they were waiting for an attic assessment first, and that they were still thinking about it.

One of the respondents stated that, "They [consultant/contractor] made a priority list and it recommended they do the insulation, but the other ones are lower on the list of priorities." A respondent noted that they "never got a response back from the list of contractors that were recommended." Another stated, "We were going to reroof the house and at that point I had a chance to get to the area of the attic where a lot of the leakage was occurring and I wanted to get an assessment of that before I started my own energy work."

Table 4-12. Why Not Able to Meet Program Requirements, Participants

	WPS Partial Participant	
	Primary Reason (Single Response)	Other Reasons (Multiple Response)
Sample size	22	22
Did not know the bonus rewards were available	27%	5%
Too expensive/Could not afford it	18%	5%
Contractor unavailable	14%	0%
The items we decided on were sufficient	9%	5%
Sold home	5%	0%
New house	5%	0%
It was a low priority	5%	0%
Waiting for attic assessment first	0%	5%
Thinking about it	0%	5%
No other reasons	0%	32%
Other	5%	50%
Don't know	14%	64%

(Base: WPS Partial Participants)

Consultant/Contractor Perspective. Table 4-13 displays the reasons why consultants and contractors believe that customers who had an audit later decided not to install the recommended measures. Most respondents (eight of ten) reported that customers who had an audit but did not install the recommended measures decided not install them because it was too expensive. Other reasons identified by respondents include the relatively low price of natural gas, inability to finance the recommended measures, and customers either not caring or not believing that the energy savings justify the expense. One respondent indicated that customers choose not to follow through with recommended measures because of confusion caused by conflicting opinions or statements between consultants and contractors. This respondent stated that consultants and contractors often have different opinions regarding which measures to install and sometimes use different language, which can confuse the customer.



Table 4-13. Reasons for Not Installing Recommended Measures, Consultants/Contractors

Reason	Number of Consultants/Contractors
Sample size	10
Too expensive/could not afford	8
Did not think energy savings justified costs	1
Customer confusion	1
Customer does not care	1
Relatively low price of natural gas	1
Inability to finance recommended improvements	1
Don't know	1

(Base: All Respondents; multiple response)

# 4.4.3 Not installing any measures

Those WPS respondents who did not install any measures indicated that it was too expensive/could not afford it (13 percent), that they were too busy/did not get around to it, and that they were not finished yet (13 percent), as well as other reasons (See Table 4-14). Some respondents indicated that they were working on getting the items done, saying they were "[I am] waiting for the auditor to come back." Another participant said, "I'm not done yet. I'm putting in insulation and a solar hot water heater." Finally, one respondent stated, "We plan on doing what was recommended but the person we were referred to declined the request for proposal."

Table 4-14. Reasons for not Installing any Measures, Participants

Mentioned	WPS Assessment Only
Sample size	24
Too expensive/could not afford	13%
Too busy/didn't get around to it	13%
Not finished yet/plan to do in future	17%
Work tied to larger remodeling/renovation project	8%
Decided to do work on their own	8%
Contractors have not followed through/declined request for proposal	8%
Length of investment return	4%
Other	8%

(Base: WPS assessment only; multiple response)

One-quarter of the WPS participants who did not install any measures indicated that they were still planning to do so (Table 4-15). Several respondents were trying to have their contractor return to do the work or waiting for appropriate timing. One respondent indicated that the project would be completed within the six months, but suggested increased publicity "advertising/bill insert about larger rebate (triple through WPS)."

Other respondents suggested that the program could help persuade them to install the items by doing the installation (13 percent), offering more money (eight percent), or getting the contractors to finish the job. However, some respondents reported that there was nothing the program could do (29 percent). Another respondent said that they "use propane, not natural



gas, which kept [us] out of the program because they did not qualify." They recommended opening up the program to all heating fuels.

Table 4-15. What the Program Could Do to Convince People to Install Measures, Participants

Mentioned	WPS Assessment Only
Sample size	24
Planning to install items	24%
Program could install items	13%
More money	8%
Get the contractor to finish the job	4%
Ineligible – do not use natural gas	4%
Nothing	29%
Don't know	4%
Other	4%

(Base: WPS assessment only; multiple response)

Nearly 80 percent of the WPS participants who had only the initial assessment were still considering installing the items recommended by the program audit (Table 4-16). This indicates that they may still install measures through the program, and if they install at least three recommended measures within six months of the initial audit they would be eligible to receive the WPS bonus rewards. Sixty-one percent of these respondents had their initial audit in June 2010 or later, which would leave them within the six-month time period at the time of the survey.

Table 4-16. Still Considering Installing the Measures, Participants

	WPS Assessment Only
Sample size	24
Yes	79%
No	8%
Don't know	8%
Refused	4%

(Base: WPS Assessment Only respondents)



Consultant/Contractor Perspective. Table 4-17 displays the reasons consultants and contractors cited for customers deciding not to have an energy audit. The majority of respondents (seven of ten) reported that customers chose not to have an audit because it was too expensive. Four of ten respondents indicated that customers chose not to have an audit because they are unaware of the benefits. Other reasons identified by respondents for not having an audit include not believing that an audit was needed, preoccupation with the holidays, and a concern the incentives were insufficient for liquefied petroleum customers.

Table 4-17. Reasons for Not Having an Energy Audit, Consultants/Contractors

Reason	Number of Consultants/Contractors
Sample size	10
Too expensive/could not afford	7
Unaware of benefits	4
Do not believe they need it	1
Preoccupied with holidays	1
Incentives not significant enough for liquefied petroleum customers	1
Don't know	1

(Base: All Respondents; multiple response)

# 4.4.4 Suggestions to boost participation

Consultants and contractors were asked if they had any suggestions on how to boost participation in the WPS HPWES program. Four respondents suggested increased marketing to homeowners, one of whom recommended quantifying the dollar savings to customers and suggested workshops or home shows as venues in which to do so. Two qualified contractors recommended one-stop shopping, one of whom stated, "Having a consultant and then a contractor and then a consultant again is confusing for the customer." One respondent suggested educating consumers by informing them of the benefits of an energy audit and raising awareness that information provided by installers or manufacturers of products may be inaccurate or may not be the best choice for customers. Another respondent suggested assisting customers with the process of bringing contractors in to perform and complete the work.



# 5. SATISFACTION

In this section we present the results of the consultant/contractor interviews and the participant surveys regarding their satisfaction with the HPWES program.

### 5.1 CONSULTANT AND CONTRACTOR SATISFACTION

Table 5-1 displays consultant and contractor satisfaction ratings for various program components, including the level of outreach and marketing done by the program, the amount of the bonus rewards, the reduced rate financing offer, the measures covered by the bonus reward and financing offer, and the overall program. Respondents rated their level of satisfaction with program components on a scale of 0 to 10, where 0 means "not at all satisfied" and 10 means "extremely satisfied." On average, respondents were "satisfied" with the measures covered by the bonus reward and financing offer, the amount of the bonus rewards, and the overall program. Respondents were, on average, "somewhat satisfied" with the level of outreach/marketing and the reduced rate-financing offer.

**Level of outreach and marketing.** Consultants and contractors were divided concerning the level of outreach and marketing done by the program. While five of ten respondents were "satisfied" with this aspect of the program, four of ten were "not satisfied." One respondent said, "There hasn't been anything going on. It is a big surprise with these incentives. No one is calling period." Suggestions for improving this aspect of the program include providing program information with customers' energy bills and sending flyers with "actual values to look at."

Amount of bonus rewards. Nine of ten consultants/contractors were "satisfied" with the amount of the bonus rewards, while one respondent was "somewhat satisfied." This respondent suggested increasing the reward for sill box insulation, commenting, "All of the box sills are being foamed now, and foam is very expensive. Putting \$100 towards a \$1,000 measure isn't that significant." Another respondent suggested targeting incentives towards older homes, saying, "The older stock needs more items, you're going to have a greater potential for energy savings in those houses. If there was some way to target it towards the more needy older housing stock, that would be a good thing."

**Reduced-rate financing offer.** Two of ten consultants/contractors were "satisfied" with the reduced-rate financing offer, one respondent was "somewhat satisfied," four respondents were "not satisfied," and two respondents did not have any experience with this aspect of the program. One respondent who was dissatisfied with the reduced-rate financing offer suggested, "Make it a better deal for the client," and further commented, "When they give up their rewards it's huge."

**Measure coverage.** Eight of ten consultants/contractors were "satisfied" with the measures covered by the bonus reward and financing offer, although one respondent was "not satisfied" and suggested that the program include incentives for water heaters and allow ceiling fans to count towards the three measures required to qualify for the bonus.

**Overall program.** Eight of ten consultants/contractors were "satisfied" with the overall program and two respondents are "somewhat satisfied." One respondent commented, "People are not aware or they feel they are too good to be true. We should be getting phone calls and we are not. The economy is so bad in Oshkosh that no one is doing anything.



People are reluctant in that market." Two respondents suggested increasing awareness of the program in order to improve the overall program.

Table 5-1. Satisfaction with WPS Program Components, Consultants/Contractors

Satisfaction	Level of Outreach and Marketing	Amount of the Bonus Rewards	Reduced- Rate Financing Offer	Measures Covered by the Bonus Reward and Financing Offer	The Overall Program
Sample size	10	10	10	10	10
Satisfied (7–10)	5	9	2	8	8
Somewhat satisfied (4–6)	0	1	1	0	2
Not satisfied (0-3)	4	0	4	1	0
N/A	0	0	2	0	0
Don't know	1	0	1	1	0
Average	5.1	8.7	3.9	8.9	8.1
Median	7	9	2	10	8.5

(Base: All Respondents)

# 5.1.1 Offering additional measures

Eight of ten consultants/contractors perceived value in including bonus rewards for both water heating and HVAC measures, one respondent perceived value in including bonus rewards for water heating measures only, and one respondent did not perceive any value in including bonus rewards for either water heating or HVAC measures (Table 5-2). One respondent said that including bonus rewards for water heating and HVAC measures would boost participation. Another respondent commented that customers are more familiar with water heating and HVAC than other measures because they are directly related to energy bills, stating "I think if there was an extra option to get something done ... they relate to it a lot easier."

Table 5-2. Bonus Rewards for Water Heating or HVAC Measures, Consultants/Contractors

Do you perceive any value in including bonus rewards for water heating or HVAC measures?	Number of Consultants/Contractors
Sample size	10
Yes, both water heating and HVAC	8
Yes, water heating	1
No	1
Yes, HVAC	0

(Base: All Respondents)



### 5.2 PARTICIPANT SATISFACTION

Table 5-3 addresses WPS and Focus participant perception of benefits of installing the HPWES measures.

Participants indicated that they benefit from reduced energy costs, reduced energy usage, increased comfort, and, most strongly, a better understanding of energy efficient options. No clear differences stand out between the groups in term of reported benefits.

Table 5-3. Realized benefits from installing items through the program, Participants

	WPS Full Participant	WPS Partial Participant	Focus Full Participant
Sample size	53	27	106
Reduced energy costs	51%	70%	69%
Reduced energy usage	58%	70%	65%
Increased comfort	81%	78%	76%
Better understanding of energy efficient options	92%	89%	92%

(Base: WPS Full, Partial, and Focus Full Participants; multiple responses)

Table 5-4 shows that, when asked about other benefits, participants mentioned a wide range of benefits including reduced noise, eliminating ice damage, confidence associated with knowing more about energy efficiency, and satisfaction of knowing it's a better home. No appreciable differences are apparent between the participant groups.

Table 5-4. Realized benefits from installing items through the program, Participants

	WPS Full Participant	WPS Partial Participant	Focus Full Participant
Sample size	53	27	106
Satisfaction of knowing it's a better home	9%	0%	7%
Quieter	6%	7%	5%
Eliminated ice damage	4%	4%	0%
More interest in energy saving and the environment	4%	0%	2%
Less complaints from tenants	2%	0%	0%
Increased level of security	1%	0%	0%
Confidence associated with knowing more about energy efficiency	0%	4%	0%
Cooler attic	0%	0%	2%
Relief the project is finished	0%	0%	1%
Improved foundation	0%	0%	1%
Increased value of the house	0%	0%	1%
Other	1%	0%	2%
Negative comment (cost)	2%	11%	5%

(Base: WPS Full, Partial, and Focus Full Participants; multiple responses)

One WPS participant said that it was "A wonderful experience working with the consultant and contractor. Two hundred percent impressed with them." Another participant indicated a problem with air quality, "I have a problem with indoor air quality that is left to be worked out—



because there is not much air leaking out. Houses need fresh air and there is not much fresh air. I have three smelly rooms; it's an indoor air quality problem." Another participant addressed a recommendation independently, "Well, we tacked down instead of [doing] the suggested caulking. We found they were loose and we just put in little nails and we found that that did the job."

Additional comments mentioned saving money, comfort, quality of living, fewer drafts, no odor, and a better understanding of energy efficiency. Said one WPS participant, "We were very satisfied with the report. We had one contractor that dragged his feet but other than that it was a very good experience and it was educational."

# 5.2.1 Satisfaction by program component

Participants were asked about their satisfaction with various elements of the program, using a scale of 0 to 10, where 0 means "not at all satisfied" and 10 means "extremely satisfied." The following tables provide mean and median values and group satisfaction scores: "Satisfied" (7–10 rating), "Somewhat Satisfied" (4–6 rating), and "Not Satisfied" (0–3 rating).

The majority of respondents were satisfied with the cash-back rewards (Table 5-5). There was a higher level of satisfaction for WPS full participants (9.2) and Focus full participants (8.7) than WPS partial participants (7.3).

Table 5-5. Satisfaction with the Amount of Cash-back Rewards, Participants

	WPS Full Participant	WPS Partial Participant	Focus Full Participant
Sample size	53	27	103
Mean	9.2	7.3	8.7
Median	10.0	8.0	9.0
Sample size	53	27	106
Satisfied	96%	63%	87%
Somewhat satisfied	4%	30%	9%
Not satisfied	0%	7%	1%
Don't know	0%	0%	3%
Refused	0%	0%	0%

(Base: All respondents)

Respondents with satisfaction scores of less than six (on a scale from 0–10) answered questions on why they were not satisfied. The sample sizes are very small so it is difficult to make comparisons across the groups. Three WPS partial participants and three Focus participants indicated that there was not enough money. Two Focus participants indicated that the measures were too expensive. One WPS partial participant indicated that there was too short of a time to get the necessary funds.



Table 5-6 shows that participants had high satisfaction, across respondent categories, with the measures covered by the program. No major patterns are evident, other than slightly lower mean satisfaction for WPS assessment only respondents (7.8) and WPS partial participants (8.0) than WPS full participants (9.0) and Focus participants (9.3). Among those respondents who were not satisfied, one Focus participant said the program should give rebates for rental units.

Table 5-6. Satisfaction with Measures Covered by the Program, Participants

	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	53	25	18	105
Mean	9.0	8.0	7.8	9.3
Median	10.0	8.0	8.0	10.0
Sample size	53	27	24	106
Satisfied	92%	78%	71%	96%
Somewhat satisfied	8%	15%	4%	3%
Not satisfied	0%	0%	0%	0%
Don't know	0%	7%	25%	1%
Refused	0%	0%	0%	0%

(Base: All respondents)

The vast majority of program participants surveyed were satisfied with their interactions with their auditor (Table 5-7). Average ratings ranged from 8.3 for WPS partial participants to 9.6 for Focus respondents. Those respondents who were not satisfied indicated that the auditor was upset that the recommended contractor was not used, that the contractor was of low quality, and that the contractor did not explain things clearly.

Table 5-7. Satisfaction with Interactions with the Consultant/Contractor, Participants

	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	52	27	24	106
Mean	9.3	8.3	8.7	9.6
Median	10.0	9.0	9.0	10.0
Sample size	53	27	24	106
Satisfied	91%	81%	88%	100%
Somewhat satisfied	6%	19%	13%	0%
Not satisfied	2%	0%	0%	0%
Don't know	2%	0%	0%	0%
Refused	0%	0%	0%	0%

(Base: All respondents)



Table 5-8 shows that the quality of the work by the auditor was well regarded across all participant groups. Average ratings ranged from 8.4 to 9.5. Among those respondents who were not satisfied, two participants indicated that the work was not completed.

Table 5-8. Satisfaction with the Quality of Work Done, Participants

	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	53	27	24	106
Mean	9.1	8.4	8.9	9.5
Median	10.0	9.0	9.0	10.0
Sample size	53	27	24	106
Satisfied	94%	89%	92%	97%
Somewhat satisfied	4%	7%	4%	2%
Not satisfied	2%	4%	0%	0%
Don't know	0%	0%	4%	1%
Refused	0%	0%	0%	0%

(Base: All respondents)

Participants also had high satisfaction with the overall program, as shown in Table 5-9. Among those respondents who were not satisfied, one WPS full participant indicated consultant /contractor issues, and one Focus participant said "Other people should not have to pay for my home energy costs."

Table 5-9. Satisfaction with the Program, Participants

	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	53	27	22	106
Mean	9.2	8.1	8.0	9.3
Median	10.0	8.0	8.0	10.0
Sample size	53	27	24	106
Satisfied	96%	89%	79%	98%
Somewhat satisfied	4%	11%	13%	2%
Not satisfied	0%	0%	0%	0%
Don't know	0%	0%	8%	0%
Refused	0%	0%	0%	0%



# 5.2.2 Future participation

Nearly all respondents indicated that they would participate in the program again if they purchased a home in the near future (Table 5-10).

Table 5-10. Would Participate again if Purchased a Home in the Future, Participants

	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	53	27	24	106
Yes	100%	89%	92%	96%
No	0%	7%	8%	1%
Don't know	0%	4%	0%	3%
Refused	0%	0%	0%	0%

(Base: All respondents)

Many respondents indicated that they had recommended the program to others (Table 5-11). WPS full participants (90 percent) and Focus full participants (90 percent) had the highest rates, compared with WPS partial participants at 78 percent and WPS assessment-only participants at 58 percent, as might be expected.

Table 5-11. Have Recommended the Program to Others, Participants

	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	53	27	24	106
Yes	92%	78%	58%	90%
No	8%	15%	42%	9%
Don't know	0%	7%	0%	1%
Refused	0%	0%	0%	0%



# 5.2.3 Program suggestions

Participants for the most part indicated that they had no recommendations for changes to the program. However, WPS partial participants were more likely to recommend more money/rebates (19 percent), advertising/visibility (15 percent), and clearer information (11 percent). A higher percentage (13 percent) of Focus respondents also recommended more money/rebates. The other suggestions mentioned were a longer list of dependable contractors, quicker response time, and adding more options (Table 5-12).

Table 5-12. Suggested Changes, Participants

	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	53	27	24	106
More money/more rebates	4%	19%	4%	13%
More advertising/visibility	8%	15%	0%	8%
More accessible and clearer information	6%	11%	8%	3%
Add more options	6%	7%	0%	5%
Longer list of dependable contractors	2%	0%	4%	4%
Quicker response time (audit/rebate/etc.)	2%	4%	0%	1%
More location coverage	2%	0%	0%	1%
Offer payment plan/sliding scale rebates	0%	4%	0%	1%
More consultant/contractor oversight	2%	0%	4%	2%
Improve follow up	2%	4%	0%	1%
Offer the project again/ongoing	2%	0%	0%	2%
Nothing/don't know	57%	33%	63%	47%
Other	6%	7%	4%	11%



### 6. WPS PROGRAM INFLUENCE

In this section we present the results of the consultant/contractor interviews and the participant surveys regarding the influence of the HPWES program on the participants' decisions to install recommended measures. Because the focus of the evaluation was on assessing participation, measuring program influence became a secondary objective.

## 6.1 PARTICIPANT PERSPECTIVES

These program influence questions were not designed to yield net impact results; rather, they were intended to provide insight into program design and process findings. We benchmark the results of key program influence questions from the WPS participant surveys against the Focus participant surveys in order to provide indicators of potential differences in net savings resulting from the increased incentives.

We first begin with a summary analysis of the key program influence results, followed by a detailed presentation of the question responses.

## 6.1.1 Summary

Attic insulation. A slightly lower percentage of WPS participants (82 percent vs. 91 percent) reported that they would have added the attic insulation at the same time without the HPWES reward. A similar percentage (82 percent) of all participants said they were very likely to have bought attic insulation without the HPWES reward. About three-quarters of all participants indicated that the consultant/contractor was influential in their decision. Slightly fewer WPS participants (47 percent) than Focus participants (57 percent) described the impact of the HPWES program on their decision as influential. Overall, these results do not indicate that the WPS program had a clearly stronger influence on the decision of participants to install attic insulation.

**Sidewall insulation.** A lower percentage of WPS participants (59 percent vs. 82 percent) reported that they would have added the sidewall insulation at the same time without the HPWES reward and that they were very likely to have bought sidewall insulation without the HPWES reward (63 percent vs. 85 percent). A slightly higher percentage of WPS participants indicated that the consultant/contractor was influential in their decision (65 percent vs. 52 percent. However, fewer WPS participants (29 percent) than Focus participants (43 percent) described the impact of the HPWES program on their decision as influential. Overall, these results suggest that the WPS program had a somewhat greater influence on the decision of participants to install sidewall insulation.



Table 6-1. Summary of Program Influence Questions for Attic Insulation and Sidewall Insulation

	Attic Insulation		Sidewall Insulation	
Percentage of Participants who	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant
Sample size	32	83	16	28
Would have added measure at same time without HPWES reward	82%	91%	59%*	82%*
Were very likely to buy measure without HPWES reward	82%	82%	63%	85%
Rated the consultant/contractor as influential	76%	72%	65%	52%
Said the HPWES program was influential to their decision	47%	57%	29%	43%

<sup>\*</sup> indicates a statistically significant difference at the 90 percent confidence level.

**Air sealing.** A lower percentage of WPS participants (59 percent vs. 89 percent) reported that they would have added the air sealing at the same time without the HPWES reward and that they were very likely to have bought air sealing without the HPWES reward (47 percent vs. 77 percent). A slightly lower percentage of WPS participants indicated that the consultant/contractor was influential in their decision (63 percent vs. 77 percent. A similar percentage of all respondents—about one-half—described the impact of the HPWES program on their decision as influential. Overall, these results suggest that the WPS program had a somewhat greater influence on the decision of participants to install air sealing.

**Foundation insulation.** A slightly higher percentage of WPS participants (64 percent vs. 55 percent) reported that they would have added the foundation insulation at the same time without the HPWES reward. About one-half of all participants said they were very likely to have bought foundation insulation without the HPWES reward. A lower percentage of WPS participants indicated that the consultant/contractor was influential in their decision (71 percent vs. 87 percent) and described the impact of the HPWES program on their decision as influential (38 percent vs. 87 percent). Overall, these results do not indicate that the WPS program had a stronger influence on the decision of participants to install foundation insulation.

Table 6-2. Summary of Program Influence Questions for Air Sealing and Foundation Insulation

	Air Sealing		Foundation	Insulation
Percentage of Participants who	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant
Sample size	15	33	13	30
Would have added measure at same time without HPWES reward	59%*	89%*	64%	55%
Were very likely to buy measure without HPWES reward	47%*	77%*	50%	52%
Rated consultant/contractor as influential	63%	77%	71%	87%
Said HPWES program was influential to their decision	53%	52%	38%*	87%*

<sup>\*</sup> indicates a statistically significant difference at the 90 percent confidence level.



## 6.1.2 When first talked to consultant/contractor

Participants were asked where they were in the planning, purchasing or installation process when they first talked to their consultant/contractor about attic insulation and sidewall insulation (Table 6-3). Note the small sample size, particularly for the WPS participants.

Approximately one-half or more of the WPS participants and two-thirds or more of the Focus participants reported talking to their consultant/contractor during initial planning phase for attic insulation and sidewall insulation. Compared to Focus participants, it appears that WPS participants were somewhat more likely to talk to their consultant/contractor later in the process—either while getting estimates or after planning but before installation.

Table 6-3. Point in Process when Talked to Consultant/Contractor about Attic Insulation and Sidewall Insulation, Participants

	Attic Insulation		Sidewall Insulation	
	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant
Sample size	34	89	17	33
During initial planning before talking to				
contractors	59%	67%	47%	73%
While talking to contractors/getting				
estimates for project	24%	19%	24%	18%
After planning but before installation	12%	9%	18%	6%
After audit	0%	2%	0%	0%
Other	3%	1%	0%	3%
Don't know	3%	1%	12%	0%

(Base: All respondents)

About one-half of the WPS participants and one-half or more of the Focus participants reported talking to their consultant/contractor during initial planning phase for air sealing and foundation insulation (Table 6-4). Again, compared to Focus participants, it appears that WPS participants were somewhat more likely to talk to their consultant/contractor later in the process—while getting estimates or after planning but before installation.

Table 6-4. Point in Process when Talked to Consultant/Contractor about Air Sealing and Foundation Insulation, Participants

·					
	Air Se	aling	Foundation Insulation		
	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant	
Sample size	17	35	14	31	
During initial planning before talking to					
contractors	53%	54%	50%	61%	
While talking to contractors/getting					
estimates for project	18%	26%	36%	29%	
After planning but before installation	18%	14%	7%	6%	
End of the insulation installment	0%	6%	0%	0%	
When fixing ice dams	0%	0%	0%	3%	
Other	6%	0%	7%	0%	
Don't know	6%	0%	0%	0%	



# 6.1.3 Specific plans for installation

Two-thirds of both WPS and Focus participants reported that they were specifically looking to add attic insulation at the time they first talked to their consultant/contractor (Table 6-5). Fewer than one-half of both WPS and Focus participants reported that they were specifically looking to add air sealing when they first talked to their consultant/contractor. In contrast, a lower percentage of WPS participants than Focus participants (53 percent vs. 67 percent) were looking to install sidewall insulation, though a higher percentage of WPS respondents were looking to install foundation insulation (57 percent vs. 26 percent).

Table 6-5. Specifically Looking to Add the Measure at that Time, Participants

	Percenta	age Yes	Sample Size		
	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant	
Attic insulation	68%	66%	34	89	
Sidewall insulation	53%	67%	17	33	
Air sealing	47%	43%	17	35	
Foundation insulation	57%	26%	14	31	

(Base: All respondents)

# 6.1.4 Timing of Installation

Most respondents report that they would have added the measure at the same time in the absence of the HPWES program incentive (Table 6-6). Fewer WPS participants than Focus participants reported that they would added sidewall insulation (59 percent vs. 82 percent) and air sealing (59 percent vs. 89 percent).

Table 6-6. Would Have Added Measure at Same Time, Participants

	Percent	age Yes	Sample Size		
	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant	
Attic insulation	82%	91%	34	89	
Sidewall insulation	59%	82%	17	33	
Air sealing	59%	89%	17	35	
Foundation insulation	64%	55%	14	31	



Of those respondents who said they would not have installed the measure at the same time, a somewhat higher percentage of WPS respondents reported that they would have installed the measure at a later date (Table 6-7).

Table 6-7. Would Have Added Measure at a Later Date, Participants

	Percenta	age Yes	Sample Size		
	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant	
Attic insulation	12%	0%	34	89	
Sidewall insulation	12%	6%	17	33	
Air sealing	12%	6%	17	35	
Foundation insulation	21%	16%	14	31	

(Base: All respondents)

# 6.1.5 Likelihood of purchase without HPWES incentive

When asked how likely they were to have bought the same level of attic insulation without the HPWES incentive, on a scale of 0 to 10 where 0 means "not at all likely" and 10 means "very likely," WPS respondents and Focus respondents provided nearly identical responses (Table 6-8). In contrast, WPS respondents appear less likely to have purchased the same sidewall insulation (average of 6.9 vs. 8.4).

Table 6-8. Rating of Likelihood of Buying Attic Insulation or Sidewall Insulation without HPWES Reward, Participants

•					
	Attic Ir	nsulation	Sidewall	Insulation	
	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant	
Sample size	33	89	16	33	
Mean	8.2	8.1	6.9	8.4	
Median	9	10	10	9	
Very likely (7–10)	82%	82%	63%	85%	
Somewhat likely (4–6)	12%	7%	6%	12%	
Not likely (0-3)	6%	11%	31%	3%	



As shown in Table 6-9, WPS respondents also appear less likely to have purchased air sealing without the HPWES incentive (average of 5.5 vs. 7.9), though they exhibit a similar likelihood of purchasing foundation insulation (average of 6.6 vs. 5.9).

Table 6-9. Rating of Likelihood of Buying Air Sealing or Foundation Insulation without HPWES Reward, Participants

	Air Sealing		Foundation Insulation	
	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant
Sample size	15	35	14	31
Mean	5.5	7.9	6.6	5.9
Median	5	9	6.5	7
Very likely (7–10)	47%	77%	50%	52%
Somewhat likely (4–6)	20%	11%	29%	19%
Not likely (0–3)	33%	11%	21%	29%

(Base: All respondents)

## 6.1.6 Rating of consultant/contractor influence

When asked to rate how much influence, on a 0 to 10 scale where 0 is "not at all influential" and 10 is "extremely influential," their consultant/contractor had on their decision to add the measure, both WPS and Focus respondents provided similar ratings for attic insulation (Table 6-10). However, WPS respondents reported slightly greater consultant/contractor influence for sidewall insulation (average of 7.0 vs. 6.2).

Table 6-10. Rating of Consultant/Contractor Influence on Decision to Add Attic Insulation or Sidewall Insulation, Participants

·					
	Attic Ins	ulation	Sidewall Insulation		
	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant	
Sample size	34	87	17	31	
Mean	8.0	7.6	7.0	6.2	
Median	9	9	8	7	
Very influential (7-10)	76%	72%	65%	52%	
Somewhat influential (4-6)	18%	17%	12%	32%	
Not influential (0-3)	6%	10%	24%	16%	



Table 6-11 shows that WPS respondents reported lower levels of consultant/contractor influence than Focus respondents for both air sealing (average of 6.6 vs. 8.0) and foundation insulation (average of 7.4 vs. 8.0).

Table 6-11. Rating of Consultant/Contractor Influence on Decision to Add the Air Sealing or Foundation Insulation, Participants

	Air Se	aling	Foundation Insulation	
	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant
Sample size	16	35	14	31
Mean	6.6	8.0	7.4	8.6
Median	7.5	9	8	10
Very influential (7-10)	63%	77%	71%	87%
Somewhat influential (4-6)	25%	17%	21%	10%
Not influential (0-3)	13%	6%	7%	3%

(Base: All respondents)

## 6.1.7 Impact of HPWES program on decision

Survey respondents were asked, in an open-ended question, to describe the impact of the HPWES program on their decision to add the measure at the time. The responses were then categorized into one of six categories: (1) influential, (2) no influence, (3) little influence, (4) accelerated decision, (5) made an easier decision, and (6) other. WPS respondent are slightly less likely than Focus respondents to attribute influence to the HPWES program for attic insulation and sidewall insulation (Table 6-12).

Table 6-12. Impact of HPWES on Decision to Add Attic Insulation or Sidewall Insulation,
Participants

	Attic Insu	lation	Sidewall I	nsulation
	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant
Sample size	32	83	17	28
Influential	47%	57%	29%	43%
No influence	6%	12%	12%	4%
Little influence	16%	13%	18%	36%
Accelerated decision	6%	4%	0%	4%
Easier decision	9%	2%	6%	11%
Other	16%	12%	35%	4%



About one-half of all respondents attribute influence to the HPWES program for air sealing, though only 38 percent of WPS respondents do so for foundation insulation compared to 87 percent for Focus respondents (Table 6-13).

Table 6-13. Impact of HPWES on Decision to Add Air Sealing or Foundation Insulation,
Participants

	Air Sea	ling	Foundation	Insulation
	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant
Sample size	15	33	13	30
Influential	53%	52%	38%	87%
No influence	7%	9%	8%	3%
Little influence	0%	18%	23%	3%
Accelerated decision	0%	3%	0%	0%
Easier decision	7%	0%	8%	0%
Other	33%	18%	23%	7%

(Base: All respondents)

#### 6.2 CONSULTANT AND CONTRACTOR PERSPECTIVES

Consultants and contractors reported that WPS bonus incentives and reduced-rate financing are more influential than Focus incentives in encouraging participants to install the recommended measures (Table 6-14). Respondents were asked to rate each set of incentives on a scale of 0 to 10, where 0 means "not at all influential" and 10 means "extremely influential". All six consultants/contractors who work in both territories rated the WPS incentives as "influential," with an average rating of 8.7. Two of six respondents rated the Focus incentives as "influential" and four respondents rated the Focus incentives as "somewhat influential," with an average rating of 6.0.

Table 6-14. Influence Rating of Incentives Outside and Inside of WPS Territory, Consultants/Contractors

Influence of Incentives	Focus Incentives in Projects Outside of WPS Territory	WPS Bonus Incentives and Reduced Rate Financing in WPS Territory
Sample size	6	6
Influential (7–10)	2	6
Somewhat influential (4–6)	4	0
Not influential (0-3)	0	0
Average	6.0	8.7
Median	5.5	8.5

(Base: Respondents that Have Completed Projects Both Inside and Outside of WPS Territory)



Six of the ten consultants and contractors had completed HPWES projects outside of the WPS territory over the past year. All six of these respondents said the final efficiency levels of projects that received WPS bonus rewards were greater than efficiency of projects they had completed outside the WPS territory (Table 6-15).

Table 6-15. Efficiency Level of WPS Bonus Projects Compared to Focus HPWES Projects, Consultants/Contractors

Efficiency Level of WPS Bonus Projects	Number of Consultants/Contractors
Sample size	6
Greater	6
Lower	0
Same	0

(Base: Respondents that Have Completed Projects Both Inside and Outside of WPS Territory)

Table 6-16 displays the amount by which these six respondents said the efficiency levels of WPS bonus projects exceeded the efficiency levels of projects outside of the WPS territory. The minimum is ten to fifteen percent greater efficiency, while the maximum is 200 percent greater efficiency. The median percentage greater efficiency is 40 percent. These six respondents represent 38 individual projects. When weighted by the number of projects per respondent, the average percentage greater efficiency of WPS projects compared to projects outside of the WPS territory is 45 percent. The Track 1 analysis found that the average gas savings per project increased by 16 percent in the WPS territory but declined by four percent in the Focus territory between 2009 and 2010; however, the increase in electricity savings in the two territories was similar. In 2010, the WPS territory had, on average, 16 percent more gas savings and two percent more electricity savings than in the Focus territory.

Table 6-16. Difference in Efficiency Level of WPS Bonus Projects, Consultants/Contractors

Percentage Greater Efficiency	Number of Consultants/Contractors
Sample size	6
0–25%	2
26–50%	2
51–100%	1
Over 100%	1
Median	40%
Weighted average	45%

(Base: Respondents that Have Completed Projects Both Inside and Outside of WPS Territory)

The six respondents who had completed HPWES projects outside of the WPS territory over the past year were asked if the WPS projects were different from the Focus projects, and if so, how the WPS projects were different. Three of the six respondents stated that the WPS projects differed from the Focus projects. Two respondents indicated that WPS projects differ from Focus projects in that more measures are installed in WPS projects. The third respondent said that the WPS projects are better received, and commented, "I'm seeing more people following through to completion on WPS projects because of the increased incentive levels."



## 6.2.1 Measure-specific influence

In order to assess the level of program influence for the WPS increased incentives, each consultant/contractor was asked a series of questions based on two specific measures. The two measures were pre-assigned to respondents by selecting the top two measures that generated the most energy savings in the WPS bonus projects for each respondent's organization. The two measures were selected among the four most common measures installed—attic insulation, sidewall insulation, air sealing, and foundation insulation.

Ten consultants and contractors were interviewed and each was asked the series of questions regarding two specific measures, representing 20 respondent-measure combinations. For seven of the consultants and contractors who were interviewed, attic insulation was one of the top two energy-saving measures. Therefore, seven respondents were asked the series of questions for attic insulation. Likewise, five respondents were asked about sidewall insulation, four respondents were asked about air sealing, and four respondents were asked about foundation insulation. The average value for this series of questions is calculated by weighting the number of specific WPS bonus projects each respondent completed.

Table 6-17 displays the percentage of participants with specific plans to install attic insulation, sidewall insulation, air sealing, and foundation insulation prior to the consultant/contractor's visit. On average, 57 percent of participants had specific plans to install attic insulation prior to the visit. The average percentage for sidewall insulation is 32 percent. Virtually no participants had specific plans to do air sealing prior to the consultant/contractor's visit. The average percentage of households with specific plans to install foundation insulation is 42 percent.

Table 6-17. Percentage of Households with Specific Plans to Install Measure Prior to Visit,
Consultants/Contractors

Percentage of Households	Attic insulation	Sidewall insulation	Air sealing	Foundation insulation
Sample size	7	5	4	4
Number of projects	36	33	11	12
0–25%	3	1	4	2
26–50%	2	2	0	1
51–75%	1	0	0	0
76–100%	1	2	0	1
Median	50%	33%	0%	26%
Weighted average	57%	32%	1%	42%



For those households that did have specific plans to install a particular measure prior to the visit, consultant/contractors were asked how the customers knew they needed the measure. Most respondents reported that a contractor told them their house needed the measure, or they ascertained it on their own (Table 6-18.)

Table 6-18. How Households Learned They Needed Measure, Consultants/Contractors

How Households Learned They Needed Measure	Attic insulation	Sidewall insulation	Air sealing	Foundation insulation
Sample size	7	4	1	3
A contractor spoke with them	4	3	0	1
Their own assessment	3	2	0	0
Felt the homes were cold/drafty	1	0	1	1
High energy bills	1	0	0	0
Recommended by family, friend, etc.	1	0	0	0
Other	0	0	0	1

(Base: Respondents Reporting that Greater than Zero Percent of Households had Specific Plans to Install Measure Prior to Visit; multiple response)

Table 6-19 displays the percentage of households that consultant/contractors estimated would have installed measures at the time that they did in the absence of the HPWES program. Respondents indicated on average that 59 percent of households would have added attic insulation, 36 percent of households would have added sidewall insulation, 29 percent would have done air sealing, and 30 percent of households would have added foundation insulation at the time that they did in the absence of the program.

Table 6-19. Likelihood of Installing Measure at the Same Time without Incentives,
Consultants/Contractors

Percentage of Households	Attic insulation	Sidewall insulation	Air sealing	Foundation insulation
Sample size	7	5	4	4
Number of projects	36	33	11	12
0–25%	3	3	3	2
26–50%	0	1	1	0
51–75%	1	0	0	0
76–100%	3	1	0	2
Median	75%	17%	0%	60%
Weighted average	59%	36%	29%	30%



Consultants/contractors rated the likelihood on a 0 to 10 scale (with 0 being "not at all likely" and 10 being "very likely") that the households they serviced would have installed the same level or R-value of a particular measure had they not received the rebate through the WPS HPWES program (Table 6-20). Two of six respondents reported that it was "likely" that their households would have installed the same level or R-value of attic insulation. Three of five respondents reported that it was "likely" that their households would have installed the same level or R-value of sidewall insulation. No respondents reported that it was "likely" that their households would have done the same level of air sealing. Finally, one respondent reported that it was "likely" that his households would have installed the same level or R-value of foundation insulation.

Table 6-20. Likelihood of Installing Measure without Incentives, Consultants/Contractors

Likelihood of Installing Same Level or R-value	Attic insulation	Sidewall insulation	Air sealing	Foundation insulation
Sample size	7	5	4	4
Number of projects	34	33	11	12
Likely (7–10)	2	3	0	1
Somewhat likely (4–6)	2	1	1	0
Not likely (0-3)	2	1	3	3
Don't know	1	0	0	0
Median	4.5	8	1.5	1.5
Weighted average	3.6	7.6	2.6	2.3

(Base: All Respondents)

Consultants/contractors were asked how influential they believed the information and services they provided to customers were in the customer's decision to install a particular measure to program specifications using a scale from 0 to 10, where 0 is "not at all influential" and 10 is "extremely influential" (Table 6-21). Respondents generally said that the information and services they provided to customers were "influential" in customers' decisions to install attic insulation, sidewall insulation, air sealing, and foundation insulation to program specifications.

Table 6-21. Influence of Information and Services on Decision to Install Measure,
Consultants/Contractors

Influence of Information and Services	Attic insulation	Sidewall insulation	Air sealing	Foundation insulation
Sample size	7	5	4	4
Number of projects	34	32	11	12
Influential (7-10)	6	3	4	3
Somewhat influential (4–6)	0	1	0	1
Not influential (0-3)	0	0	0	0
Don't know	1	1	0	0
Median	9	8.5	9.5	9.5
Weighted average	9.1	8.3	9.1	8.9



Table 6-22 displays the ratings that the consultants/contractors provided for the level of influence of the overall program on customers' decisions to install measures to program specifications. Respondents generally believe that the overall program was "influential" in customers' decisions to install attic insulation, air sealing, and foundation insulation to program specifications, and, to a lesser degree, for sidewall insulation.

Table 6-22. Influence of Overall Program on Decision to Install Measure,
Consultants/Contractors

Influence of Overall Program	Attic insulation	Sidewall insulation	Air sealing	Foundation insulation
Sample size	7	5	4	4
Number of projects	34	33	11	12
Influential (7–10)	5	4	4	3
Somewhat influential (4–6)	1	0	0	0
Not influential (0-3)	0	1	0	1
Don't know	1	0	0	0
Median	9	9	9	9.5
Weighted average	8.9	7.5	8.4	8.5

(Base: All Respondents)

## 6.2.2 Recommendation practices

Consultants and contractors generally reported that their measure recommendation practices had not changed since they first participated in the WPS bonus program (Table 6-23). However, two of seven respondents indicated that their attic insulation recommendation practices had changed since they first participated. One of those respondents stated that he had become more likely to recommend attic insulation because the program decreases the payback period associated with insulation, making attic insulation a more worthwhile investment for the customer. Additionally, this respondent explained that he is more likely to recommend attic insulation due to the three-measure requirement in order to "kick in the bonus." The second respondent who reported changing his attic insulation recommendation practices explained that the WPS program, combined with additional knowledge and training, had led to more consistent use of attic insulation materials and had raised awareness of the importance of air sealing before insulating.



One of the five respondents reported that his sidewall insulation recommendation practices had changed and indicated that he had recommended sidewall insulation in a few cases where he may not have before because the program makes it more cost-effective to the homeowner. Additionally, one of four respondents reported that his foundation insulation recommendation practices had changed, and stated that he was doing more foundation insulation because of the program.

Table 6-23. Impact of Program on Consultant/Contractor Measure Recommendation Practices

Changes to Recommendation Practices Since Participating in WPS Bonus Program	Attic insulation	Sidewall insulation	Air sealing	Foundation insulation
Sample size	7	5	4	4
Yes	2	1	0	1
No	5	4	4	3

(Base: All Respondents)

Table 6-24 displays how much the program influenced consultants/contractors' changes to recommendation practices for specific measures. Respondents reported the level of influence on a scale of 0 to 10, with 0 meaning "no influence" and 10 meaning "high influence." Of the two respondents reporting changes to their attic insulation recommendation practices, one respondent reported that the program was "somewhat influential" while the other respondent reported that the program was "not influential." One respondent indicated that the program was "influential" in the changes to his sidewall insulation practices, and another respondent reported that the program was "influential" in the changes to his foundation insulation recommendation practices.

Table 6-24. Influence of Program in Changes to Consultant/Contractor Recommendation Practices

Influence of Program in Changes to Recommendation Practices	Attic insulation	Sidewall insulation	Air sealing	Foundation insulation
Sample size	2	1	0	1
Influential (7–10)	0	1	ı	1
Somewhat influential (4–6)	1	0		0
Not influential (0-3)	1	0	_	0

(Base: Respondents Reporting that Their Measure Recommendation Practices Have Changed Since Participating in the WPS Bonus Program)



## 7. OUTSIDE FINANCIAL ASSISTANCE

In this section we present finding from the participant survey regarding the type of financial assistance outside of the HPWES program.

Fifty percent of Focus participants indicated that they received additional assistance. Forty percent of WPS participants indicated that they received additional assistance (Table 7-1).

**Table 7-1. Other Financial Assistance, Participants** 

	WPS Full and Partial Participants	Focus Full Participant
Sample size	80	106
Yes	40%	50%
No	56%	42%
Don't know	5%	8%
Refused	0%	0%

(Base: WPS Full and Partial Participants, Focus Full Participants)

#### 7.1.1 Sources of assistance

For those receiving additional assistance, Table 7-2 shows that the top source for additional assistance was federal tax credits for WPS participants (84 percent) and Focus participants (75 percent). Focus participants (34 percent) were more likely to receive rebates from utilities than WPS participants (nine percent) were.

Table 7-2. Who Receive Rebate From, Participants

	WPS Full and Partial Participants	Focus Full Participant
Sample size	32	53
Federal tax credit	84%	75%
Utility company	9%	34%
Manufacturer	9%	8%
Local government	3%	2%
Don't know	0%	2%
Refused	0%	0%

(Base: WPS Full and Partial Participants, Focus Full Participants who received additional assistance)

## 7.1.2 How participants learned about other sources of assistance

Table 7-3 shows that consultant and qualified contractors that did audits were the most common source for finding out about other sources of assistance, but more so for Focus participants (45 percent) than WPS respondents (28 percent). Focus participants also gained awareness more from newspapers (21 percent versus 16 percent). The next most common sources were television advertisements, radio advertisements, from utilities, internet search,



the installing contractor, and word of mouth, in roughly equal proportions for WPS and Focus respondents.

Table 7-3. How Found Out About Sources of Assistance, Participants

	WPS Full and Partial Participants	Focus Full Participant
Sample size	32	53
Consultant/Qualified contractor that did audit	28%	45%
Newspaper	16%	21%
Television advertisements	13%	13%
Learned about tax incentive	9%	5%
Radio advertisements	9%	2%
Flier with utility bill or in the mail	6%	6%
Internet search	9%	2%
Installing contractor	9%	0%
Word of mouth	6%	4%
Focus on Energy website	3%	2%
General knowledge	3%	2%
Work at a utility company	0%	2%
News (TV)	3%	0%
Insulation retailer	0%	2%
Other	1%	1%
Don't know	9%	4%
Refused	0%	0%

(Base: WPS Full and Partial Participants, Focus Full Participants who received additional assistance; multiple responses)

## 7.1.3 Likelihood of installing without outside incentive

The survey respondents who reported receiving a financial incentive other than the HPWES rewards were asked to rate the likelihood, on a scale of 0 to 10 where 0 means "not at all likely" and 10 means "very likely", that they would have bought the same level of measure without the outside financial incentive (Table 7-4 and Table 7-5). WPS respondents generally reported being less likely to have done so without the outside incentive. Note, however, that the samples sizes are small.

Table 7-4. Rating of Likelihood of Buying Attic Insulation or Sidewall Insulation without Other Financial Incentive, Participants

	Attic Ins	sulation	Sidewall II	nsulation
	WPS Full Participant	Focus Full Participant	WPS Full Participant	Focus Full Participant
Sample size	16	47	3	12
Mean	6.8	8.2	5.3	7.5
Median	8	10	6	8.5
Very likely (7–10)	56%	81%	33%	75%
Somewhat likely (4–6)	25%	13%	33%	17%
Not likely (0–3)	19%	6%	33%	8%



Table 7-5. Rating of Likelihood of Buying Air Sealing or Foundation Insulation without Other Financial Incentive, Participants

	Air Se	ealing	Foundation	Insulation
	WPS Full Participant			Focus Full Participant
Sample size	7	15	5	17
Mean	5.0	7.0	6.4	7.5
Median	4	8	8	8
Very likely (7–10)	29%	73%	60%	82%
Somewhat likely (4–6)	43%	7%	20%	0%
Not likely (0–3)	29%	20%	20%	18%



## 8. PARTICIPANT SURVEY DEMOGRAPHICS

In this section, we provide an overview of the demographic characteristics of the participant survey respondents, and include Census data for Wisconsin (American Community Survey 2006–2008) for comparison.

As might be expected, all survey respondents owned their homes, compared to 70 percent of Wisconsin residents. Table 8-1 shows that the four respondent groups had roughly similar size homes. Most homes ranged from 1,400–3,499 square feet.

Table 8-1. Size of Home

Square Feet	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	48	27	24	106
1,400	17%	15%	8%	20%
1,400-1,999	34%	33%	38%	31%
2,000-2,499	17%	37%	4%	20%
2,500-3,499	17%	0%	29%	17%
3,500-3,999	4%	4%	4%	3%
4,000-4,999	2%	4%	4%	0%
5,000 or more	0%	0%	8%	0%
Don't know	9%	7%	4%	9%

(Base: All respondents)

Table 8-2 shows the percentage of homes built by decade from the participant survey and the Census. For the most part the percentages are consistent with the percentage in the population with the exception of a few cells.

Table 8-2. Decade Home Was Built

145.00 2.1 200440 1.0.00 1140 24.00					
Decade	Census Data	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	2,548,132	56	29	24	117
1930s or earlier	22%	27%	28%	17%	31%
1940s	6%	5%	0%	8%	6%
1950s	11%	14%	7%	4%	15%
1960s	10%	7%	21%	17%	15%
1970s	15%	9%	17%	17%	11%
1980s	10%	9%	7%	4%	5%
1990s	14%	14%	14%	17%	11%
2000 or later	11%	13%	7%	13%	5%
Don't know/refused	0%	2%	0%	4%	1%



As Table 8-3 shows, the head of household education levels are fairly consistent across the respondent groups, which appear to be higher than the Census levels.

**Table 8-3. Highest Level of Education** 

Education	Census Data	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	3,727,936	51	27	21	97
Less than ninth grade	4%	0%	0%	0%	1%
Ninth to twelfth grade no diploma	8%	2%	4%	0%	0%
High school graduate (includes GED)	34%	14%	22%	14%	8%
Some college, no degree	20%	18%	7%	19%	15%
Associates degree	9%	16%	4%	10%	4%
Bachelors degree	17%	20%	33%	29%	30%
Graduate or professional degree	9%	29%	30%	29%	40%
Don't know/refused	_	2%	0%	0%	1%
Refused	_	0%	0%	0%	1%

(Base: All respondents)

Table 8-4 presents the total household income information for the survey respondents in 2009, before taxes. The participants appear to earn higher incomes than the Wisconsin population. While there is some variation between respondent groups, there do not appear to be any major trends other than slightly higher incomes in the WPS assessment only group, which fits with the larger home size finding for that group.

Table 8-4. Household Income

Household Income	Census Data	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	2,236,518	48	24	19	81
Less than \$29,999	32%	10%	4%	0%	9%
\$30,000-\$49,999	36%	10%	33%	21%	20%
\$50,000-\$74,999	14%	35%	15%	29%	27%
\$75,000-\$99,999	17%	14%	19%	5%	13%
\$100,000 or more	6%	25%	22%	38%	19%
Refused	0	3	3	2	14
Don't know	0	0	0	0	3



The number of years lived at their home is relatively consistent across the participant groups, as shown in Table 8-5.

Table 8-5. Years Lived in Home

	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	56	29	24	117
Less than 1 year	2%	0%	4%	2%
1–2 years	15%	7%	13%	14%
3-4 years	11%	15%	0%	10%
5-10 years	26%	30%	25%	19%
More than 10 years	43%	48%	58%	52%
Don't know	0%	0%	0%	2%
Refused	2%	0%	0%	1%

(Base: All respondents)

In general, participants are over-represented in the 35–54 and 55–74 age groups and under-represented in the under 24 age group and the 75 and over age group (Table 8-6). These findings seem reasonable, as younger residents (under 24) may be more likely to rent and older residents (over 75) may be more likely to live in retirement homes.

Average household sized ranged from 2.3–2.5, which is very close to the 2.4 average in Wisconsin.

Table 8-6. Number and Age Group of Persons Living in the Home

Age	Census Data	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	<i>5,598,453</i>	56	29	24	117
Under 20	26%	22%	16%	27%	24%
20–24	7%	2%	0%	2%	2%
25–34	13%	11%	15%	2%	12%
35–54	14%	33%	32%	37%	30%
55–74	15%	30%	34%	29%	31%
75 and over	18%	1%	3%	3%	3%
Average household size	2.4	2.4	2.3	2.5	2.4



Relatively few HPWES survey respondents (15 percent to 17 percent) reported borrowing to finance home improvements (Table 8-7).

**Table 8-7. Borrowing to Finance Improvements** 

	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	53	27	24	106
Yes	17%	15%	17%	17%
No	83%	85%	71%	82%
Did not make any improvements to home	0%	0%	8%	0%
Don't know	0%	0%	4%	1%
Refused	0%	0%	0%	0%

(Base: All respondents)

A modest percentage of respondents have participated in other Focus Programs (Table 8-8). The percentages are consistent across the respondent groups (ranging from 15–17 percent). These respondents mentioned specific measures, such as windows, hot water heaters, boilers, and solar panels.

Table 8-8. Participation in Other Focus on Energy Programs

	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	53	27	24	106
Yes	15%	15%	17%	16%
No	81%	81%	79%	81%
Don't know	4%	4%	4%	3%
Refused	0%	0%	0%	0%

(Base: All respondents)

More men responded to the survey, other than the Focus full participants (51 percent) who are comparable to the 50 percent representation in Wisconsin as a whole (Table 8-9).

Table 8-9. Gender

Gender	Census Data	WPS Full Participant	WPS Partial Participant	WPS Assessment Only	Focus Full Participant
Sample size	5,598,453	53	27	24	106
Female	50%	30%	19%	29%	49%
Male	50%	70%	81%	71%	51%

(Base: All respondents)

Table 8-10 shows that most respondents indicating that they receive both natural gas and electricity from WPS. No clear patterns are visible across the groups other than lower gas use (71 percent) by WPS assessment only respondents, compared to WPS full and partial participants (91 percent to 100 percent). This suggests that the WPS assessment only respondents may have chosen not to install recommended measures because they do not



receive gas service from WPS and therefore are not eligible for the WPS bonus rewards for heating measures, such as insulation and air sealing.

Table 8-10. Services Received from WPS

	WPS Full Participant	WPS Partial Participant	WPS Assessment Only
Sample size	53	27	24
Both natural gas and electricity	83%	85%	63%
Natural gas only	8%	15%	8%
Electricity only	9%	0%	29%
Neither natural gas nor electricity	0%	0%	0%
Don't know	0%	0%	0%
Refused	0%	0%	0%



### 9. CONCLUSIONS AND RECOMMENDATIONS

It appears that the WPS HPWES program will fall substantially short of 2010 savings targets, however the WPS territory exhibited somewhat greater improvement than the Focus territory in 2010 in terms of completion rates, the volume of completed projects, and average energy savings per project. However, it is not entirely clear whether these upward trends are due to the WPS program enhancements. In addition, the Track 1 database analysis does not indicate that the WPS program is having the intended impacts to the extent initially conceptualized.<sup>18</sup>

According to consultants/contractors, the lower than anticipated number of initial audits is primarily due to a lack of customer awareness of the WPS increased incentives. This result suggests that a broad-based marketing campaign would be an effective strategy to encourage more initial audits. The HPWES program already initiated a marketing campaign in late summer 2010, though it is unclear whether this campaign is specifically focused on the WPS territory or the state as a whole. Because WPS rewards are triple the Focus rewards, it would be valuable to market this information directly to WPS customers—either through WPS bill stuffers or an advertising campaign targeted to the WPS region. While the primary objective of the bonus rewards is to encourage the installation of recommended measures, it should also serve to persuade customers to have the initial audits as well. However, it is worth noting that participation may be somewhat negatively affected in 2011 by the expiration of the federal tax credit for home energy improvements; about one-third of all HPWES program participants reported receiving the federal tax credit though less than ten percent reported that they were unlikely to have bought the measures without them.

It may also be beneficial to coordinate with consultants/contractors regarding the marketing campaign, as few appear to actively market the higher WPS incentives. They are often in contact with customers, but do not appear to be effectively utilizing the opportunity provided by the WPS program to step up their own marketing, as few consultants/contractors reported changing their marketing strategies. In addition, further training of consultants/contractors on how to persuade customers to install recommend measures could also be beneficial. We understand that the program is investigating the use of the Energy Performance Score, which may prove useful in helping customer understand the benefits of installing measures.

Consultants/contractors reported that the primary reason why participants who have an initial audit do not meet the WPS program requirements is because their homes did not need three or more targeted measures. This indicates that there may not be a large pool of homes that require three or more of the targeted measures. The program could relax the three measure requirement, or add more targeted measures in order to increase the pool of potential participants. HVAC equipment and water heating equipment may be potential options—most consultants/contractors indicated that the WPS program would benefit from the inclusion of bonus rewards for HVAC and water heating measures. While the WPS HPWES program already offers bonus rewards for boilers and furnaces through the Heating Equipment Bonus program, water heaters are not eligible for bonus rewards. Inclusion of these measures in the three measure requirement would increase the pool of eligible customers.

<sup>&</sup>lt;sup>18</sup> Laura Schauer, Tetra Tech, Tom Mauldin and Lynn Hoefgen, NMR. *Home Performance with ENERGY STAR Increased Incentives Track 1 Analysis*. December 21, 2010.

#### 9. Conclusions and Recommendations...



Another key objective for the WPS program is to reduce the length of time between initial audit and measure installation. While most consultants/contractors reported a decrease, the Track 1 analysis does not indicate that the WPS program is substantially reducing the time period between the initial assessment and installation.

Overall, consultants/contractors and participants appear satisfied with the design of the program, the level of incentives, and the program requirements. However, it was evident from the program tracking data and the evaluation results that the reduced-rate financing offer has not been effective. The consultants/contractors did not attribute much influence to it, and few participants were even aware of the offer. These results suggest that there is a clear need to convince the consultants/contractors to promote this offer, and to more prominently include the offer in customer marketing campaigns. Because of the general lack of familiarity with the offer, it is difficult to judge whether the offer itself is attractive enough to induce participation, though one consultant/contractor believed that the financing offer could be improved and some WPS participants reported selecting the cash-back rewards because they did not need financing.

While most participants reported being satisfied with their consultant/contractor, some participants encountered difficulties with scheduling the installation and the post-audit. Given the six month requirement, backlogged consultants/contractors could become an obstacle to completing projects on time. While extensions may be granted on a case-by-case basis, the program might benefit by taking a more active role in working with consultants/contractors. Questions could be included in the HPWES customer satisfaction survey in order to elicit feedback specific to contractors regarding scheduling and other key metrics. If issues are identified for a particular consultant/contractor, then the program can work with them to resolve the problems. In addition, it could be useful to provide results of the satisfaction surveys to consultants/contractors in order to benchmark their performance. This also indicates that the program should consider recruiting more consultants/contractors in order to provide more options for participants to have their work performed in a timely manner.

There is conflicting evidence regarding the relative influence of the WPS incentives and Focus incentives on the customers' decision to install recommended measures. While consultants/contractors indicate that the WPS incentives are more influential than the Focus incentives, the participant surveys do not clearly indicate that the WPS program had a stronger influence on the decision of participants to install measures. Thus, while this evaluation was not designed to estimate net savings, it is unclear whether the WPS increased incentives are influencing customers to a greater degree than the Focus incentives.



## WPS HPWES Consultant/Contractor IDI Guide

# **Respondent Category**

 Consultant or qualified contractor who has completed at least one project that received WPS bonus cashback rewards

#### Introduction

Hello, I'm calling from NMR. We are speaking with consultants and qualified contractors about their participation in the Wisconsin Public Service Home Performance with ENERGY STAR program. Could I speak with [named sample in database]?

- 1 Yes
- 2 No (ATTEMPT TO CONVERT)

I'm not selling anything; I'd just like to ask your opinion about this program. I'd like to assure you that your responses will be kept confidential and your individual responses will not be revealed to anyone.

(Who is doing this study: The Public Service Commission of Wisconsin, which oversees Focus on Energy and the Home Performance with ENERGY STAR Program, is overseeing evaluations of the energy efficiency equipment being installed through different programs.)

(**Why are you conducting this study:** Studies like this help the state of Wisconsin better understand contractors' opinions about the types of equipment being rebated through programs.)

(**Timing**: This survey should take about 30 minutes. Is this a good time for us to speak with you? IF NOT, SET UP CALL BACK APPOINTMENT OR OFFER TO LET THEM CALL US BACK.)

(**Sales concern**: I am not selling anything; we would simply like to learn about your experience with the program. Your responses will be kept confidential. If you would like to talk with someone from the Public Service Commission about this study, feel free to call Carole Stemrich at 608-266-8174. If you would like to talk with the Home Performance with ENERGY STAR program, feel free to call Carter Dedolph at 608-249-9322).



- P1 Have you completed the initial energy audit/assessment and post energy audit/assessment for at least one HPWES project that received Wisconsin Public Service bonus rewards or reduced rate financing?
  - 1 Yes
  - 2 No
  - D Don't know
  - R Refused

[If P1 = No then ask if there is some else you can to speak to, and request their name and phone number.]

## **BACKGROUND QUESTIONS**

- A1. First, I want to ask a few questions about yourself and the company you work for. In what year did you first become involved with the Focus Home Performance with ENERGY STAR program?
  - 1 2009
  - 2 2008
  - 3 2007
  - 4 2006
  - 5 2005
  - 6 2004
  - 7 Before 2004
  - 8 Don't know/unsure
  - 9 Other (RECORD)
- A3 How did you first hear about the **WPS Bonus** Home Performance with ENERGY STAR initiative?

(INDICATE ALL THAT APPLY. PROBE: ANYTHING ELSE?)

- 1 Through Focus on Energy contact
- 2 Attended workshop or training seminar and learned about the program
- 3 Through a manufacturer/supply house
- 4 From a customer
- 5 Learned about the program at trade show
- 6 Saw/heard ads for the program (Where?\_\_\_\_\_
- 7 Attended a program-sponsored information session
- 8 Focus on Energy website
- 9 Business colleague
- 10 Business customer
- 11 Other
- 12 Don't know/unsure



- A6. About how many residential households did you provide audit services to over the past year, including households serviced outside of the program?
- A7c. You said before that you provided audits to [A6] households over the past year. Of those households, about what percentage participated in the Home Performance with ENERGY STAR program?

%
---

- A8a. In addition to providing audit services to customers, what other services or products do you offer? [Indicate all that apply]
  - 1 No, provide audit services only
  - 2 Sell insulation
  - 3 Install insulation
  - 4 Perform air sealing
  - 4 Other (SPECIFY)
  - 5 Don't know
  - 6 Refused
- A9. How are households generally referred to you? (Indicate all that apply)
  - 1 From Focus on Energy website
  - 2 From a meeting/exhibit/trade show (SPECIFY NAME, DATE)
  - 3 A contractor/insulation vendor
  - 4 From a designer/architect (SPECIFY NAME)
  - 5 From family, neighbor, or friend
  - 6 Mailing/Literature (SPECIFY)
  - 7 Utility company
  - 8 Trade ally (non-contractor)
  - 9 Other (SPECIFY)
- A10. (IF A9 IS MORE THAN ONE SOURCE) From which of the sources mentioned do you receive the most referrals? (INDICATE ONLY ONE)
  - 1 From Focus on Energy website
  - 2 From a meeting/exhibit/trade show (SPECIFY NAME, DATE)
  - 3 A contractor/insulation vendor
  - 4 From a designer/architect (SPECIFY NAME)
  - 5 From family, neighbor, or friend
  - 6 Mailing/Literature (SPECIFY)
  - 7 Utility company
  - 8 Trade ally (non-contractor)
  - 9 Other (SPECIFY)



- A11. What other Focus on Energy programs are you involved with? (INDICATE ALL THAT APPLY. PROBE: ANYTHING ELSE?)
  - 1. ENERGY STAR Products
  - 2 Targeted Home Performance with ENERGY STAR
  - 3 Wisconsin ENERGY STAR Homes (WESH)
  - 4 Business Programs (SPECIFY FOR SECTOR)
  - 5 ACES (Apartment and Condominium Energy Services)
  - 6 Milwaukee Community Pilot/Together We Save
  - 7 Other (RECORD)
  - 8 None, not involved in other Focus on Energy programs
  - 9 Don't know
  - 10 Refused

## **Confirmation of households**

- S1 We would like to ask you about [# OF HOUSEHOLDS] specific households in this survey. These are: [READ OFF PARTICIPANT NAMES AND ADDRESSES]. Do you recall doing the pre and post energy audits/assessments on these specific projects?
  - 1 Yes, recall all of them
  - 2 Yes, only recall some of them
  - 3 No, don't recall any of them specifically
  - D Don't know
  - R Refused

S2	-	ONLY RECALL SOME OF THEM] Which of these projects do you recall? [LIST DJECTS AND RECORD WHICH PROJECTS RECALL]
S3	ls th	nere someone else we could speak with who might recall the other projects?
	1 2 D R	Yes (REQUEST CONTACT INFORMATION AND ATTEMPT TO REACH) No Don't know Refused
S4		w many of these WPS projects were part of a larger remodeling job in the home sus a retrofit intended primarily to install measures? (READ LIST)
	1	Larger remodeling project
	2	Primarily to install measures
	3	Other (SPECIFY)
	-8	Don't know
	-9	Refused



# **WPS - FOCUS COMPARISON**

-9

Refused

[For respondents who completed both WPS and non-WPS projects]

WFC1	Have you completed any HPWES projects <i>outside</i> of the WPS territory over the past year?				
	1 Yes 2 No (SKIP TO WPS1) D Don't know (SKIP TO WPS1) R Refused				
WFC2	[IF WFC1 = YES] Would you say that the final efficiency level of the projects that received WPS bonus rewards are lower, the same, or higher than those projects from outside the WPS territory?				
	<ul> <li>Lower</li> <li>Same</li> <li>Greater</li> <li>Don't know</li> <li>Refused</li> </ul>				
WFC3	[IF WFC2 = LOWER OR GREATER] What percentage lower/greater?				
WFC4	Are the WPS projects different from the Focus projects?				
	1 Yes 2 No D Don't know R Refused				
WFC5	[IF WFC4 = YES] How are the WPS projects different? [PROBE: types of measures installed, etc]				
WFC6	On a scale of 0 to 10, where 0 means "not at all influential" and 10 means "extremely influential", how influential were the Focus program incentives in encouraging participants to install the recommended measures in projects located <i>outside</i> the WPS territory?				
	Response 0 – 10 -8 Don't know				



WFC7

On a scale of 0 to 10, where 0 means "not at all influential" and 10 means "extremely influential", how influential were the WPS bonus incentives and reduced rate financing in encouraging participants to install the recommended measures in the WPS territory?

\_\_\_ Response 0 – 10

- -8 Don't know
- -9 Refused

WFC8 Why do you provide these particular influence ratings?

## **WPS PROGRAM DESIGN**

WPS1a Compared t

Compared to before the WPS bonus program launched in October 2009, would you say customer interest in the HPWES program in the WPS territory is lower, the same, or greater now?

- 1 Lower
- 2 Same
- 3 Greater
- D Don't know
- R Refused

WPS1b Why do you say that?

WPS2 Why do you think customers decide to participate in the WPS HPWES program? (INDICATE ALL THAT APPLY)

- 1 Save money on heating home
- 2 Be more comfortable or warmer in home
- 3 Reduce drafts in home
- 4 Increase the value of home
- 5 Reduce my carbon footprint/help with climate change or global warming
- 6 Reduce air pollution
- 7 Help the environment
- 13 Other (SPECIFY)
- 14 Don't know
- 15 Refused



WPS3a Why do you think customers decide not to have an energy audit?

WPS3b Why do you think customers who have an audit later decide not to install the recommended measures?

(INDICATE ALL THAT APPLY)

WPS3a	WPS3b	
1	1	Too expensive/could not afford
2	2	Work tied to larger remodeling/renovation project
3	3	Too much paperwork
4	4	Too busy/didn't get around to it
5	5	Decided to do work on their own
6	6	Did not think energy savings justified costs
7	7	The project would have required disruptive work in the house
8	8	Other (SPECIFY)
9	9	Don't know
10	10	Refused

WPS3c Do you have any suggestions on how to boost participation in the WPS HPWES program?

WPS4a Compared to before the WPS bonus program launched in October 2009, would you say the level of competition for home energy projects is lower, the same, or greater now?

- 1 Lower
- 2 Same
- 3 Greater
- D Don't know
- R Refused

WPS4b Why do you say that?

WPS10 Have you altered your marketing strategies in response to the changes to the HPWES program in the WPS territory?

- 1 Yes
- 2 No
- D Don't know
- R Refused

WPS11 [IF WPS10 = YES] How have you changed your marketing strategies?



WPS12	<ul> <li>[IF WPS10 = YES] Have these changes been successful?</li> <li>1 Yes</li> <li>2 No</li> <li>D Don't know</li> <li>R Refused</li> </ul>
WPS13	[IF WPS12 = YES] How so?
WPS14	Have you altered any other business practices in response to the changes to the HPWES program in the WPS territory?
	1 Yes 2 No D Don't know R Refused
WPS15	[IF WPS14 = YES] How have you changed your business practices?
WPS16	On a scale of 0 to 10, where 0 means "not at all influential" and 10 means "extremely influential", how influential were the following aspects of the WPS program in encouraging participants to install the recommended measures?
	Response 0 – 10 -8 Don't know -9 Refused
WPS16a WPS16b WPS16c WPS16d	The bonus cashback rewards \$250 cashback reward plus reduced-rate financing Requirement to install at least three recommended measures Requirement to install measures within six months
WPS17	Has the requirement to install at least three recommended measures affected participation levels, the number of measures installed, or the time between audit and installation? (INDICATE ALL THAT APPLY)
	<ul> <li>Participation levels</li> <li>Number of measures installed</li> <li>The time between audit and installation</li> <li>Other (RECORD)</li> <li>None</li> <li>Don't know</li> <li>Refused</li> </ul>
WPS18	[IF WPS17 = PARTICIPATION] How has the three measures requirement affected participation levels? [PROBE INCREASE OR DECREASE, HOW MUCH]



WPS19 [IF WPS17 = NUMBER MEASURES] How has the three measures requirement affected the number of measures installed per home? [PROBE INCREASE OR DECREASE, HOW MUCH] **WPS20** IIF WPS17 = TIME1 How has the three measures requirement affected the time between audit and installation? [PROBE INCREASE OR DECREASE, HOW MUCH] WPS21 Has the requirement to install measures within six months of the audit affected participation levels, the number of measures installed, or the time between audit and installation? (INDICATE ALL THAT APPLY) 1 Participation levels 2 Number of measures installed The time between audit and installation 3 7 Other (RECORD) 8 None 9 Don't know Refused 10 WPS22 [IF WPS21 = PARTICIPATION] How has the six month requirement affected participation levels? [PROBE INCREASE OR DECREASE, HOW MUCH] WPS23 [IF WPS21 = NUMBER MEASURES] How has the six month requirement affected the number of measures installed per home? [PROBE INCREASE OR DECREASE, HOW MUCH] WPS24 [IF WPS21 = TIME] How has the six month requirement affected the time between audit and installation? [PROBE INCREASE OR DECREASE, HOW MUCH] WPS25 On a scale of 0 to 10, where 0 means "not at all satisfied" and 10 means "extremely satisfied", how satisfied are you with the following aspects of the WPS program? Response 0 – 10 -8 Don't know -9 Refused WPS25a The level of outreach and marketing done by the program \_\_\_\_ The amount of the bonus rewards WPS25b The reduced rate financing offer \_ WPS25c WPS25d The measures covered by the bonus reward and financing offer WPS25e The overall program WPS26a [IF WPS25a <6] Do you have any suggestions on how to improve the program outreach and marketing? WPS26b [IF WPS25b <6] Do you have any suggestions on how to improve the amount of the bonus rewards?



WPS26c [IF WPS25c <6] Do you have any suggestions on how to improve the reduced

rate financing offer?

WPS26d [IF WPS25d <6] Do you have any suggestions on how to improve the measures

included in the WPS program?

WPS26d [IF WPS25d <6] Do you have any suggestions on how to improve the overall

WPS program?

WPS27a In addition to the bonus cashback rewards for insulation, air sealing, and

combustion safety measures, do you perceive any value in including bonus

rewards for water heating or HVAC measures?

- 1 Yes, water heating
- 2 Yes, HVAC
- 3 Yes, both water heating and HVAC
- 4 No
- -8 Don't know
- -9 Refused

WPS27b [IF WPS27a = 1, 2, or 3] Why do you say that?

WPS28 Were any homes that you audited eligible for the WPS bonus rewards but did

not meet program requirements?

- 1 Yes
- 2 No (SKIP TO B1)
- -8 Don't know (SKIP TO B1)
- -9 Refused (SKIP TO B1)

WPS29 How come these homes did not meet program requirements? (INDICATE ALL

THAT APPLY)

- 1 Added less than three measures
- 2 More than six months to add measures
- 3 Didn't understand program requirements
- 7 Other (SPECIFY)
- 9 Don't know
- 10 Refused

WPS30a [IF WPS29= LESS THAN THREE MEASURES] What was the main reason why

they did not add three or more measures?

WPS30b Were there any other reasons?

- 1 Could not afford to add three measures
- 2 Decided that the measures we added were sufficient
- 3 Did not think energy savings justified costs for other measures
- 4 The measures would have required disruptive work in the house
- 8 Other (SPECIFY)
- 9 Don't know
- 10 Refused



WPS31a [IF WPS29= MORE THAN SIX MONTHS] What was the main reason why they did not add the measures within six months?

WPS31b Were there any other reasons?

- 1 Too busy/didn't get around to it
- Work tied to larger remodeling/renovation project that took longer than six months
- 3 Needed more time to save up enough money for project
- 8 Other (SPECIFY)
- 9 Don't know
- 10 Refused

WPS32 What could the program have done to help these customers meet the requirements?

## PROGRAM ATTRIBUTION QUESTIONS

For sections B, C, E, and F: Ask questions about two out of the following four measures, selecting the measures that account for the most savings from the respondents' WPS projects:

- Attic insulation
- Sidewall insulation
- Air sealing
- Foundation insulation

For example, if attic insulation and air sealing are the two measures with the most savings, then measure #1 = attic insulation and measure #2 = air sealing.

#### Measure #1

B1a.	How many (or what percent) of households you serviced through WPS Home
	Performance with ENERGY STAR had specific plans to install [measure #1] prior to
	your visit with them?

D Don't know R Refused



B2.	[ IF B1a > 0] How did they know they needed the [measure #1]? (INDICATE ALL THAT APPLY)
	1 A contractor spoke with them 2 Their own assessment 3 Felt the homes were cold/drafty 4 Had ice damming 5 Their own prior experience 6 Other (RECORD)
В3а.	If the program rebate or the information and services you provided had not been available through the WPS Home Performance with ENERGY STAR Program, what number (or percentage) of the households you served through the program would have added the [measure #1] in their home at the time they did?
	D Don't know R Refused
B5.	On a 0 to 10 scale, with 0 being not at all likely and 10 being very likely, how likely is that (this household/these households) would have installed the same [level or R-value] of [measure #1] had they not received the rebate through the WPS Home Performance with ENERGY STAR program?
	0 to 10 rating D Don't know R Refused
B7.	On a scale from 0 to 10, where 0 is not at all influential and 10 is extremely influential, how influential do you believe the information and services you provided to them as a (contractor/qualified consultant) was in their decision to install the [measure #1] to program specifications?
	0 to 10 rating D Don't know R Refused
B8.	On a scale from 0 to 10, where 0 is not at all influential and 10 is extremely influential, how influential do you believe the overall program was in their decision to install the [measure #1] to program specifications?
	0 to 10 rating D Don't know R Refused



## Measure #2

Now I want to ask you similar questions about [measure #2].

C1a.	a. How many (or what percent) of households you serviced through the WPS Home Performance with ENERGY STAR had specific plans to install [measure #2] prior to your visit with them?	
	D R	Don't know Refused
C2.	[ IF C	C1a > 0] How did they know they needed the [measure #2]? (INDICATE ALL THAT
	1 2 3 4 5 6	A contractor spoke with them Their own assessment Felt the homes were cold/drafty Had ice damming Their own prior experience Other (RECORD)
C3a.	availa numb	program rebate or the information and services you provided had not been able through the WPS Home Performance with ENERGY STAR Program, what per or percentage of the households you served through the program would have d the [measure #2] in their home at the time they did?
	D R	Don't know Refused
C5.	that (	0 to 10 scale, with 0 being not at all likely and 10 being very likely, how likely is this households/these households) would have installed the same [level or R-of [measure #2] had they not received the rebate through the WPS Home ormance with ENERGY STAR program?
	D R	0 to 10 rating Don't know Refused
C7.	how i	scale from 0 to 10, where 0 is not at all influential and 10 is extremely influential, influential do you believe the information and services you provided to them as a ractor/qualified consultant) was in their decision to install the [measure #2] to ram specifications?
	D R	0 to 10 rating Don't know Refused



C8.	On a scale from 0 to 10, where 0 is not at all influential and 10 is extremely influential, how influential do you believe the overall program was in their decision to install the [measure #2] to program specifications?	
	0 to 10 rating D Don't know R Refused	
MEA	SURE #1 RECOMMENDATION AND INFLUENCE QUESTIONS	
E1.	Have any of your recommendation practices regarding [measure #1] changed since you first participated in the <b>WPS</b> bonus program?	
	1 Yes 2 No (SKIP TO E7) D Don't know	
E2.	How has it changed? (RECORD VERBATIM)	
E3.	Why do you think your recommendation practices changed? (RECORD VERBATIM)	
E6.	On a scale of 0 to 10, with 0 meaning no influence and 10 meaning high influence, how influential was the program in your changes in your [measure #1] recommendation practices?	
	0 to 10 rating D Don't know R Refused	
E7.	Please tell me in your own words what impact, if any, has the WPS program had on your recommendation practices for [measure #1]? (RECORD VERBATIM)	
MEA	SURE #2 RECOMMENDATION AND INFLUENCE QUESTIONS	
F1.	Have any of your recommendation practices regarding [measure #2] changed since you first participated in the <b>WPS</b> bonus program?	
	1 Yes 2 No (SKIP TO F8) D Don't know	
F2.	How has it changed? (RECORD VERBATIM)	
F3.	Why do you think your recommendation practices changed? (RECORD VERBATIM)	



F6. On a scale of 0 to 10, with 0 meaning no influence and 10 meaning high influence, how influential was the information and/or requirements of the program in changes in your [measure #2] recommendation practices?

\_\_\_\_ 0 to 10 rating

D Don't know

R Refused

F8. Please tell me in your own words what impact, if any, has the WPS program had on your recommendation practices for [measure #2]? (RECORD VERBATIM)

## **WRAP-UP**

I just have a couple more questions for you to wrap up this interview.

- G1. Are there any other tools or assistance the program could provide to you to help you sell the WPS HPWES bonus program? (RECORD VERBATIM)
- G2. These are all the questions I have for you. Is there anything you'd like to comment on regarding your participation or your customers' participation in this program? (RECORD VERBATIM)



## **WPS & Focus HPWES Participant Survey**

## WPS & Focus Home Performance with ENERGY STAR Participant Survey

## NOTE:

- 1. Variable names are in bold type.
- 2. Questions are asked of all respondents unless indicated otherwise.
- 3. A code of -8 means the respondent answered, "Don't know"
- 4. A code of -9 means the respondent refused to answer the question.

## **Respondent Category [RESP]:**

- 1 WPS full participant: Participant from WPS territory who completed HPWES project and received WPS bonus rewards
- 2 WPS partial participant: Participant from WPS territory who completed HPWES project who did install enough measures
- WPS partial participant: Participant from WPS territory who completed HPWES project but did not install enough measures
- WPS assessment only: Participant from WPS territory who completed HPWES pre-assessment but did not install any measures
- Focus full participant: Participant from non-WPS territory who completed HPWES project

## **Measures Installed at home:**

- 1 Attic insulation
- 2 Sill box insulation
- 3 Foundation insulation
- 4 Floor Insulation
- 5 Air sealing
- 6 Boiler
- 7 Central air conditioner
- 8 Chimney liner for water heater
- 9 Furnace
- 10 Sidewall insulation
- 11 Chimney liner
- 12 Water heater with fuel conversion



# DIALSCR Hello, my name is \_\_\_\_\_ and I am calling on behalf of the Wisconsin Focus on Energy Home Performance with ENERGY STAR program. May I speak with [contact name]? 1 Yes 2 No

## **Identification of Appropriate Decision-Maker(s)**

- C1 Do you recall participating in the Home Performance with ENERGY STAR program?
  - 1 Yes
  - 2 No
  - -8 Don't know
- Through the Home Performance with ENERGY STAR program, you would have received an energy efficiency assessment of your home [IF RESP ≠ 4: "and a rebate for installing" [read all measures]].

Were you personally involved in the decision to participate in the program?

- 1 Yes (SKIP TO N1)
- 2 No
- -8 Don't know

(ASK IF DOESN'T RECALL ANY OF THESE MEASURES)

- Is it possible that someone else would know about the energy efficiency assessment of your home [IF RESP ≠ 4: "and the [read all measures] you received a rebate for"] through the Home Performance with ENERGY STAR program? (RECORD ONE NUMBER)
  - 1 Yes
  - 2 No (THANK AND TERMINATE)
  - -8 Don't know (THANK AND TERMINATE)
  - -9 Refused (THANK AND TERMINATE)
- C4 May I please speak with that person? (RECORD ONE NUMBER)
  - 1 Yes (BEGIN THE SURVEY AGAIN WITH THIS NEW RESPONDENT)
  - 2 No (TERMINATE)
  - -8 Don't know (TERMINATE)
  - -9 Refused (TERMINATE)



C4a Hello, my name is [interviewer name], and I am calling on behalf of the Wisconsin Focus on Energy Home Performance with ENERGY STAR program.

Through the Home Performance with ENERGY STAR program, you would have received an energy efficiency assessment of your home

Were you personally involved in the decision to participate in the program?

- 1 Yes (SKIP TO N1)
- 2 No
- D Don't know
- C3a Is it possible that someone else would know about the energy efficiency assessment of your home [IF RESP ≠ 4: "and the [read all measures] you received a rebate for"] through the Home Performance with ENERGY STAR program? (RECORD ONE NUMBER)
  - 1 Yes
  - 2 No (THANK AND TERMINATE)
  - -8 Don't know (THANK AND TERMINATE)
  - -9 Refused (THANK AND TERMINATE)
- **C4a** May I please speak with that person? (RECORD ONE NUMBER)
  - 1 Yes (BEGIN THE SURVEY AGAIN WITH THIS NEW RESPONDENT)
  - 2 No (TERMINATE)
  - -8 Don't know (TERMINATE)
  - -9 Refused (TERMINATE)
- **C5** [**IF RESP** ≠ **4**] Our records show that you received rebates to install [*read all measures*] through the program. Is this correct?
  - 1 Yes (SKIP TO C7)
  - 2 No



## C6 [IF C5 = 2] What is incorrect? (DO NOT READ; INDICATE ONE)

- 1 Did not receive [measure #1]
- 2 Did not receive [measure #2]
- 3 Did not receive [measure #3]
- 4 Did not receive [measure #4]
- 5 Did not receive [measure #5]
- 6 Did not receive [measure #6]
- 7 Did not receive [measure #7]
- 8 Did not receive [measure #8]

(IF (C6=1) THEN REMOVE [MEASURE #1] FROM LIST OF COMPLETED MEASURES. IF (C6=2) THEN REMOVE MEASURE#2. SAME FOR OTHER MEASURES)

Need to recode measures to not include the selected measure above for future reference.

meas1x=meas1

meas2x=meas2

meas3x=meas3

meas4x=meas4

meas5x=meas5

meas6x=meas6

meas7x=meas7

meas8x=meas8

measox=measo

if (c6=1) meas1x=""

if (c6=2) meas2x=""

if (c6=3) meas3x=""

if (c6=4) meas4x=""

if (c6=5) meas5x=""

if (c6=6) meas6x=""

if (c6=7) meas7x=""

if (c6=8) meas8x=""



N1 First, how did you hear about the services offered through the Home Performance with ENERGY STAR program?

(DO NOT READ; INDICATE ALL THAT APPLY)

For N1\_1 through N1\_15

- 0 Not
- 1 Mentioned

N1_1 N1_2 N1_3 N1_4 N1_5 N1_6 N1_7 N1_8 N1_9 N1_10 N1_11 N1_12 N1_13 N1_14 N1_15	From Focus on Energy website From a meeting/exhibit/trade show (SPECIFY NAME, DATE) From the person conducting an audit on my home/consultant From a contractor/insulation vendor (SPECIFY NAME) From a designer/architect (SPECIFY NAME) From family, neighbor, or friend Mailing/Literature (SPECIFY) Radio advertisement Newspaper advertisement Television advertisement Other advertisement (SPECIFY) Utility company Other (SPECIFY) Don't know Refused
N1_2Name	From a meeting/exhibit/trade show (SPECIFY NAME)
N1_2Date	From a meeting/exhibit/trade show (SPECIFY DATE)
N1_4Name	From a contractor/insulation vendor (SPECIFY NAME)
N1_5Name	From a designer/architect (SPECIFY NAME)
N1_7Name	Mailing/Literature (SPECIFY)
N1_11Nam	Other advertisement (SPECIFY)
N1_13Nam	Other (SPECIFY)



## N2 Why did you decide to participate in the program?

For N2\_1 through N2\_11

- 0 Not
- 1 Mentioned

N2_1	Save money on heating my home
N2_2	Be more comfortable or warmer in my home
N2_3	Reduce drafts in my home
N2_4	Increase the value of my home
N2_5	Reduce my carbon footprint/help with climate change or global warming
N2_6	Reduce air pollution
N2_7	Help the environment
N2_8	Learn more about the energy efficiency of my home
N2_9	Other (SPECIFY)
N2_10	Don't know
N2_11	Refused

## **N2 9Name** Other (SPECIFY)

**N3a** Did a consultant or a qualified contractor perform the energy audits of your home? A consultant would only perform the energy audits, whereas a qualified contractor would perform the audits and also install some of the items.

- 1 Consultant
- 2 Qualified contractor
- -8 Don't know
- -9 Refused

[Use N3a response in following questions in place of "consultant/qualified contractor". IF N3a = Don't Know or Refused, use 'consultant']

```
if (ans=1) instlr="consultant"
if (ans=2) instlr="qualified contractor"
if (ans="D" | ans="R") instlr="consultant"
```

**N3b** Our records show that a [instlr] audited your home. Did the [instlr] provide you with a written report about the Home Performance evaluation conducted on your home?

- 1 Yes
- 2 No
- -8 Don't know
- -9 Refused



- **N3c** Did this [instlr] mention that you could receive a rebate if you purchased and installed [read all measures] through the program?
  - 1 Yes
  - 2 No
  - -8 Don't know
  - -9 Refused
- **N3d** What other information did the [instlr] provide to you? (RECORD VERBATIM)

## [IF RESP = 4, SKIP TO WPS20]

- N4 Was the installation of the [read all measures] part of a larger remodeling project in your home, or was it the primary goal of the project?? (READ LIST; INDICATE ONLY ONE)
  - 1 Larger remodeling project
  - 2 Primarily goal to install items
  - 3 Other (SPECIFY)
  - -8 Don't know
  - -9 Refused

## **N4\_oth** Other (specify)

- **N5** Did you or will you also receive financial assistance, rebate, or tax credit from someone other than the Home Performance with ENERGY STAR program for purchasing the [read all measures]?
  - 1 Yes
  - 2 No (SKIP TO N9)
  - -8 Don't know (SKIP TO N9)
  - -9 Refused (SKIP TO N9)



## N6 Who did, or will, you receive it from? (READ LIST; INDICATE ALL THAT APPLY)

For N6\_1 through N6\_8

- 0 Not mentioned
- 1 Mentioned
- N6\_1 Installation contractor
- N6\_2 Manufacturer
- N6\_3 Local government N6\_4 Federal tax credit
- N6\_5 Utility company
- N6\_6 Someone else (SPECIFY)
- N6\_7 Don't know
- N6\_8 Refused

## **N6\_oth** Someone else (SPECIFY)

# N7 How did you first find out about these other sources of assistance? (DO NOT READ; INDICATE ALL THAT APPLY)

For N7\_1 through N7\_8

- 0 Not mentioned
- 1 Mentioned
- N7\_1 Consultant/Qualified contractor that did audit
- N7\_2 Installing contractor
- N7\_3 Television advertisements
- N7\_4 Radio advertisements
- N7\_5 Newspaper
- N7 6 Other (SPECIFY)
- N7 7 Don't know
- N7\_8 Refused

## N7\_oth Other (SPECIFY)

# N8 About how much was that other financial assistance? (RECORD TO THE NEAREST DOLLAR)

- 1 Enter amount
- -8 Don't know
- -9 Refused



N8_Do	ol	Enter Do	ollar amount
			Amount
N9	When you decided to install the [read all measures] in your home, did you consider the items altogether as one group or did you consider each measure individually? (READ LIST; INDICATE ONLY ONE)		
		1 2 3 -8 -9	One group Individually Other (SPECIFY) Don't know Refused
N9_ot	N9_oth Other (specify)		
N10	I wou	uld like to	ask you some specific questions about the [measure] you installed.
		ENERGY	ndicate that you received [measure reward] from the Home Performance 'STAR program to offset the costs. Does this amount sound about
			ER NOTE: RESPONDENTS MAY HAVE ALSO RECEIVED A N RWARD OR COMFORT BONUS, WHICH THEY MAY MENTION]
		1 2 -8 -9	Yes (SKIP TO N11) No Don't know (SKIP TO N11) Refused (SKIP TO N11)
N10_c	ost	How n	nuch did you receive from the program to help offset the costs?
			Enter amount



## [ASK SERIES FOR MEASURE 1 FROM ABOVE LIST]

N11\_1 I would like to ask you some specific question about the [measure].

At exactly what point in the planning, purchasing or installation process were you when you first talked to the [instlr]? (READ LIST; INDICATE ONLY ONE)

- 1 During the initial planning before talking to contractors
- While talking to contractors/getting estimates for the project
- 3 After planning but before installation
- 4 Other (SPECIFY)
- -8 Don't know
- -9 Refused
- N11\_1\_oth Other (SPECIFY)
- N12 1 Were you specifically looking to add the [measure] at that time?
  - 1 Yes
  - 2 No
  - -8 Don't know
  - -9 Refused

## **Direct Attribution—Timing**

- T1\_1 If the [measure reward] for the [measure] had not been available through the Home Performance with ENERGY STAR program, would you have added this [measure] to your home at the same time?
  - 1 Yes (SKIP TO EQ1)
  - 2 No
  - -8 Don't know
  - -9 Refused
- **T2\_1** Would you have added the [measure] at a later date? (PROVIDE INSTALLATION DATE IF NECESSARY)
  - 1 Yes
  - 2 No (SKIP TO 01)
  - -8 Don't know
  - -9 Refused



## **Overall Impacts Questions**

01_1	On a 0 to 10 scale, with 0 being not at all likely and 10 being very likely, how likely is that you would have bought the same level of [measure] if you had not received the [measure reward] through the Home Performance with ENERGY STAR program?		
	1 Enter response -8 Don't know -9 Refused		
O1_1_1	Enter response number		
	Number 0-10		
02_1	How much influence did the [instlr] have in your decision to add the [measure] to the specifications installed? Please rate the influence on a 0 to 10 scale, where 0 is not at all influential and 10 is extremely influential.		
	1 Enter response -8 Don't know -9 Refused		
O2_1_1	Enter response number		
	Number 0-10		
O4_1	Can you please describe what impact, if any, the Home Performance with ENERGY STAR program had on your decision to add the [measure] at the time you did?		
O5_1	[ <b>IF N5 =1</b> ] Earlier you said you also received financial assistance from [ <i>FILL WITH N6 RESPONSE</i> ]. On a 0 to 10 scale, with 0 being not at all likely and 10 being very likely, how likely is that you would have bought the same level of [ <i>measure</i> ] if you had not received this other financial incentive?		
	1 Enter response -8 Don't know -9 Refused		
O5_1_1	Enter response number		
	Number 0-10		



## [ASK SERIES FOR MEASURE 2 FROM ABOVE LIST]

Now I would like to ask you some specific question about the [measure].

At exactly what point in the planning, purchasing or installation process were you when you first talked to the [instlr]? (READ LIST; INDICATE ONLY ONE)

- 1 During the initial planning before talking to contractors
- While talking to contractors/getting estimates for the project
- 3 After planning but before installation
- 4 Other (SPECIFY)
- -8 Don't know
- -9 Refused
- N11\_2\_oth Other (SPECIFY)
- **N12\_2** Were you specifically looking to add the [measure] at that time?
  - 1 Yes
  - 2 No
  - -8 Don't know
  - -9 Refused

## **Direct Attribution—Timing**

- T1\_2 If the [measure reward] for the [measure] had not been available through the Home Performance with ENERGY STAR program, would you have added this [measure] to your home at the same time?
  - 1 Yes (SKIP TO EQ1)
  - 2 No
  - -8 Don't know
  - -9 Refused
- **T2\_2** Would you have added the [measure] at a later date? (PROVIDE INSTALLATION DATE IF NECESSARY)
  - 1 Yes
  - 2 No (SKIP TO 01)
  - -8 Don't know
  - -9 Refused



## **Overall Impacts Questions**

01_2	On a 0 to 10 scale, with 0 being not at all likely and 10 being very likely, how likely is that you would have bought the same level of [measure] if you had not received the [measure reward] through the Home Performance with ENERGY STAR program?	
	1 Enter response -8 Don't know -9 Refused	
01_1_2	Enter response number	
	Number 0-10	
O2_2	How much influence did the [instlr] have in your decision to add the [measure] to the specifications installed? Please rate the influence on a 0 to 10 scale, where 0 is not at all influential and 10 is extremely influential.	
	1 Enter response -8 Don't know -9 Refused	
O2_1_2	Enter response number	
	Number 0-10	
04_2	Can you please describe what impact, if any, the Home Performance with ENERGY STAR program had on your decision to add the [measure] at the time you did?	
O5_2	[ <b>IF N5 =1</b> ] Earlier you said you also received financial assistance from [ <i>FILL WITH N6 RESPONSE</i> ]. On a 0 to 10 scale, with 0 being not at all likely and 10 being very likely, how likely is that you would have bought the same level of [ <i>measure</i> ] if you had not received this other financial incentive?	
	1 Enter response -8 Don't know -9 Refused	
O5_1_2	Enter response number	
	Number 0-10	



## **WPS Program Questions**

## [For all WPS program participants; IF RESP = 1, 2, 3, or 4]

# **WPS1a** Does your home receive natural gas, electricity, or both natural gas and electricity from Wisconsin Public Service?

- 1 Natural Gas only
- 2 Electricity only
- 3 Both natural gas and electricity
- 4 Neither natural gas nor electricity
- -8 Don't Know
- -9 Refused

# **WPS1b** [IF WPS1a=4] Are you sure that your home does not receive natural gas or electricity service from Wisconsin Public Service?

- 1 Yes
- 2 No
- -8 Don't know
- -9 Refused

## [IF WPS1b=1, SKIP TO S6]

## WPS2a

Were you aware that the Home Performance with ENERGY STAR program offers bonus cashback rewards to Wisconsin Public Service customers that are higher than the usual program rewards?

- 1 Yes
- 2 No
- -8 Don't know
- -9 Refused

## WPS2b

Were you aware that the Home Performance with ENERGY STAR program offers reduced-rate financing to Wisconsin Public Service customers?

- 1 Yes
- 2 No
- -8 Don't know
- -9 Refused



## WPS2c

In order to be eligible for the bonus cashback rewards and reduced-rate financing offer, were you aware of the program requirement to install at least three recommended items within six months of the audit?

- 1 Yes
- 2 No
- -8 Don't know
- -9 Refused

## WPS3a

[IF RESP =1] Did you elect to receive the bonus cashback rewards or the reduced rate financing offer?

- 1 Bonus cashback rewards
- 2 Reduced rate financing
- -8 Don't know
- -9 Refused

if (ans=1) Bontype="bonus cashback reward" if (ans=2) Bontype="reduced rate financing"

**WPS3b** [IF WPS3a = 1 AND WPS2b=1] Why did you choose to receive the bonus

cash back rewards instead of the reduced rate financing offer?

**WPS3c** [IF WPS3a = 2] Why did you choose to receive the reduced rate financing offer

instead of the bonus cashback rewards?

## [For WPS program participants who received WPS bonus rewards or financing; IF RESP=1]

## WPS4

If the program had **not** required you to add the [read all measures] within six months of the audit in order to receive the [\$reward\_sum OR IF WPS3a=2 "reduced rate financing"], would you still have added them when you did?

1 Yes (SKIP TO WPS6)

2 No

-8 Don't know (SKIP TO WPS6)

-9 Refused (SKIP TO WPS6)



## WPS5

How many months would it have taken you to add the [read all measures] without the six month requirement? Please count from the time of the audit.

- 1 Record number of months
- -8 Don't know
- -9 Refused

## **WPS5\_mon** Enter number of months

Months

## WPS6

If the program had **not** required you to add at least three items in order to receive the [\$reward\_sum OR IF WPS3a=2 "reduced rate financing"], would you still have added the same [measure\_count] items?

- 1 Yes (SKIP TO S6)
- 2 No
- -8 Don't know (SKIP TO S6)
- -9 Refused (SKIP TO S6)

## WPS7

Which items would you have **not** added to your home in the absence of the requirement to add three items? [Accept multiple response]

- 1 [*measure #1*]
- 2 [measure #2]
- 3 [measure #3]
- 4 [measure #4]
- 5 [measure #5]
- 6 [measure #6]
- 7 [measure #7]
- 8 [*measure #8*]

## [For WPS partial program participants; IF RESP = 2, 3,]

## WPS9a

[IF RESP=2] Your home underwent an audit through the program and was eligible for the WPS bonus cashback rewards or reduced rate financing offer if you installed three or more recommended items within six months of the audit. What was the main reason why you did not add the items within six months of the audit?

- 1 Too busy/didn't get around to it
- Work tied to larger remodeling/renovation project, took longer than six months
- 3 Needed more time to save up enough money for project
- 4 Other (SPECIFY)
- -8 Don't know
- -9 Refused



WPS9aoth Other (specify)

WPS9b [IF RESP=2] Were there any other reasons?

For WPS9\_1 through WPS9\_6

0 Not

1 Mentioned

**WPS9\_1** Too busy/didn't get around to it

WPS9\_2 Work tied to larger remodeling/renovation project that took longer than six

months

WPS9\_3 Needed more time to save up enough money for project

WPS9\_4 Other (SPECIFY)

WPS9\_5 Don't know WPS9\_6 Refused

**WPS9both** Other (specify)

WPS10a [IF RESP=3] Your home underwent an audit through the program and was

eligible for the WPS bonus cashback rewards or reduced rate financing offer if you installed three or more recommended items within six months of the audit. What was the main reason why you did not add at least three items to your

home?

- 1 Could not afford to add three items
- 2 The items we decided on were sufficient
- 3 Did not think energy savings justified costs for other items
- 4 The other items would have required disruptive work in the house
- 5 Other (SPECIFY)
- 6 Don't know
- 7 Refused

**WPS10aot** Other (specify)



WPS10b [IF RESP=3] Were there any other reasons?

For WPS10\_1 through WPS10\_7

- 0 Not
- 1 Mentioned

WPS10_1	Could not afford to add three items
WPS10_2	The items we decided on were sufficient
WPS10_3	Did not think energy savings justified costs for other items
WPS10_4	The other items would have required disruptive work in the house
WPS10_5	Other (SPECIFY)
WPS10_6	Don't know
WPS10_7	Refused

**WPS10bot** Other (specify)

WPS13 What could the program have done to help you meet the requirements to add

at least three recommended items within six months of the audit?

# [For WPS program participants who had an assessment but did not install any measures; IF RESP=4]

WPS20 I und

I understand that your home underwent an audit through the program but chose not to install any recommended items. Why did you decide not to install any items through the program?

(DO NOT READ; INDICATE ALL THAT APPLY)

For WPS20\_1 through WPS20\_10

- 0 Not
- 1 Mentioned

WPS20_1	Too expensive/could not afford
WPS20_2	Work tied to larger remodeling/renovation project
WPS20_3	Too much paperwork
WPS20_4	Too busy/didn't get around to it
WPS20_5	Decided to do work on their own
WPS20_6	Did not think energy savings justified costs
WPS20_7	The project would have required disruptive work in the house
WPS20_8	Other (SPECIFY)
WPS20_9	Don't know
WPS20_10	Refused

**WPS20oth** Other (specify)



WPS22 What could the program do to convince you to install the recommended items?

## **Satisfaction**

- S6 [IF RESP ≠ 4] What benefits, if any, have you realized in your home as a result of installing the [read all measures] through the Home Performance with ENERGY STAR program?
  - 1 Continue

Did you experience... (ROTATE. READ LIST, RECORD RESPONSE)

For S6\_a through S6\_e

- 1 Yes
- 2 No
- -8 Don't know
- -9 Refused

S6_a	Reduced energy costs
<b>S</b> 6_b	Reduced energy usage
S6_c	Increased comfort
<b>S</b> 6_d	Better understanding of energy efficient options
<b>S</b> 6_e	Anything else? (SPECIFY)

**S6\_e\_oth** Other (specify)



## [ALL RESPONDENTS]

**S8** f

- On a scale of 0 to 10, where 0 means "not at all satisfied" and 10 means "extremely satisfied", how satisfied are you with the following aspects of the program?
  - 1 Continue

## (ROTATE. READ LIST, RECORD RESPONSE)

	For S7_a through S7_f			
	88 99	Response 0 – 10 Don't know Refused		
\$7_a \$7_b \$7_c \$7_d \$7_e \$7_f	The amount of the cashback rewards [IF WPS2b=1] The reduced-rate financing offer The items covered by the program Your interactions with the [instlr] The quality of work done by the [instlr] The overall program			
S8_a	[IF S7_a < rewards?	c 6] Why were you not sat	isfied with the amou	int of the cashback
\$8_b	[IF S7_b <	c 6] Why were you not sat	isfied with the reduc	ed rate financing offer?
S8_c	[IF S7_c < program?	c 6] Why were you not sat	isfied with the items	covered by the
S8_d	[IF S7_d <	< 6] Why were you not sat	isfied with your inter	ractions with the [instlr]?
S8_e	[IF S7_e < the [instlr]	< 6] Why were you not saf ?	isfied with the qualit	y of the work done by

[IF S7\_f < 6] Why were you not satisfied with the overall program?



S10	Would you participate in this program again if you purchased a home in the near future?		
	1 2 -8 -9	Yes No Don't know Refused	
S11	Have you recommended the program to others?		
	1 2 -8 -9	Yes No Don't know Refused	
<b>S12</b>		changes, if any, to the program would you recommend? ORD VERBATIM)	
		Additional Demographics	
D1		finished. I just have a few additional questions about your household to e're getting a representative sample of participants.	
D1	make sure we		
D1	make sure we	e're getting a representative sample of participants.	
D1	Do you own o	e're getting a representative sample of participants.  or rent your home?  Own  Rent	
	Do you own o	e're getting a representative sample of participants.  or rent your home?  Own  Rent  Refused	
	make sure we Do you own of 1 2 -9 What is the ap 1 -8 -9	e're getting a representative sample of participants.  or rent your home?  Own Rent Refused  oproximate square footage of the living space of your home?  Enter number in square feet Don't know	



D3 In what year was your home built? 1 Enter year built Don't know -8 Refused -9 D3\_yrEnter year Year **D4** How long have you lived at this home? (READ LIST) 1 Less than 1 year 2 1-2 years 3 3-4 years 4 5-10 years 5 More than 10 years -8 Don't know Refused -9 D5 Including yourself, how many people currently living in your home year-round are in the following age groups? (READ CATEGORIES; RECORD RESPONSE) For D5\_1 through D5\_6 Number of persons Refused D5 1 Under 20 years old D5 2 20-24 years old 25-34 years old D5 3 D5 4 35-54 years old D5\_5 55-74 years old 75 or older D5\_6 **D6** Did you borrow money to finance any of the improvements in your home? 1 Yes 2 No 3 Did not make any improvements to home -8 Don't know -9 Refused

## B: WPS and Focus HPWES Participant Survey...



D7 Have you participated or been involved in any other Focus on Energy program?

- 1 Yes
- 2 No
- -8 Don't know
- -9 Refused

**D7\_1** [**IF D7=1**] Which program(s)?

**End** THANK YOU FOR YOUR TIME.

**GENDER** 

1 Male

2 Female