

BALTIMORE RESEARCH

Report on STEP NON-PARTICIPANT Survey

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Background information on Baltimore Research

Founded in 1960, Baltimore Research is a 53-year old, full service marketing research firm and focus facility located in Towson, MD. We provide research consultation, research design, data collection, analysis, field management, and recruiting and focus facilities. the company offers both qualitative and quantitative research solutions.

Background information on Pinnacle Communications

Pinnacle Communications has been using award-winning strategies and creative services to develop and implement social marketing campaigns for 16 years. Our work has increased awareness about important issues and influenced positive behavior.

Report Authors

Jeff Henn is one of two in-house research consultants at Baltimore Research. He was certified at RIVA Inc. Training Institute, which is the industry gold standard for moderator education and research consultation. Jeff has been with Baltimore Research since the fall of 2002 and is an expert at conducting qualitative and quantitative field studies. He holds a Bachelor's degree in Psychology and a Master of Arts in Experimental Psychology, both from Towson University. He also is a member of the Marketing Research Association (MRA) and is a former board member of their Mid-Atlantic Chapter. Additionally, Jeff is a member of the Qualitative Research Consultants Association (QRCA).

Tracey Haldeman has extensive experience working on social marketing, branding and marketing at national, regional, state and local levels with Pinnacle Communications. With over 23 years of experience working with government agencies, retail, health care, corporate and non-profits, Tracey has a deep practical understanding of designing and implementing strategies for successful change. As President of Pinnacle Communications, she has developed and implemented programs for energy conservation, reduction of solid waste disposal, smoking cessation, reduction of teen pregnancy, reduction of drunk driving, reduction of infant mortality and low birth weight babies, increasing recycling participation, and recruitment for social service volunteering. Tracey has earned a master's degree from Georgetown University's Communication, Culture and Technology program.

Research purpose and objectives

The agency that runs Small Town Energy Program (STEP) seeks to determine the relevant knowledge attitudes, beliefs and behaviors (KABB) of program participants and non-participants, and to link these to specific elements of STEP. In so doing they can identify the specific ways in which the STEP program design is successful / not successful, and identify actionable items through which to modify the program and make the case for future funding.

Analysis of Non-Participants

Demographics

139 residents started taking the non-participant survey. Of those who started, approximately 70%, or 97 residents, completed the entire survey. It is common place to see participant fatigue in survey research with different people choosing to drop out at different points along the survey. With that in mind, it is important to note that many questions will have different response counts. In general, the number of responses per question trends downward further into the questionnaire.

Emerging from the demographic information in the following charts and tables, the typical profile of a non-participant in this data set is one who is **female**, **Caucasian**, middle-aged (**30-49 years** of age or **55-64 years** of age), **married**, and well-educated with a **4-year degree or higher**.



Table 1. Age Range frequencies

Figure 1. Percent of sample by gender

While more than two-thirds of the sample reported a household income above \$75,000, it is noteworthy that 25% of the sample chose "prefer not to answer". See figure four for a complete breakdown of household income.



Figure 2. Breakdown of educational attainment



Figure 3. Percent of sample by marital status



Figure 4. Breakdown of household income.



Figure 5. Percent of sample by ethnicity. As indicated by pie chart, none in this sample were Asian or Hawaiian / Pacific Islander.

With regard to ethnicity, the sample makeup was fairly representative of the general population of this area, with some degree of fluctuation accounting for the significant portion that did not respond.

Home Characteristics

Almost 80% of this sample resides in one of two neighborhoods: **Town of University Park** (42.4%) or **City of Hyattsville** (36.7%). Figure six provides a complete breakdown of sample participants by town / neighborhood.



Figure 6. Percentage of sample in various neighborhoods.

As shown in table two, on average, households have **2.91 people** living under the same roof. The highest number cited in one house was nine. Interestingly, the mode, or most frequently occuring mention was a household size of two, while the median or midpoint in the sample was three. Coupling the arithmetic mean with the median may provide the most accurate depiction.

Number of people in household					
2.91					
3					
2					
1					
9					

Table 2. Analysis of typical household size.

When it came to type of dwelling, and type of ownership, almost the entire sample resides in a **detached single family house** (93.5% of the sample as shown in figure seven) and are **homeowners** (96.6% of sample) rather than renters (shown in figure eight). Note that no one selected an option for "other" type of dwelling.



Figure 7. Percentage of sample by type of dwelling.



Figure 8. Proportion of homeowners to renters.

Over 90% of the sample indicated living in homes that are **more than 40 years old** with the largest percentage of homes in the range of 41-80 years of age (65%). The second highest percentage was 25.6% for homes > 80 years of age. See figure nine for a complete breakdown of estimated ages of homes.



Figure 9. Estimated ages of homes.

As displayed in table three, the average duration of residing in a given home was 12.4 years. However the median and the mode were notably lower than the mean in this analysis. The mode was only three years. The raw data shows that there were several who have been in their current homes for 20+, 30+, 40+ and even one at 55 years.

	Years at address	
Mean		12.4
Median		9
Mode		3
Minimum		0
Maximum		55
Count		117

Table 3. Analysis of years living at present address.

Energy Evaluation

Whether in the last 12 months, or as distant as more than two years ago, collectively, 21% of the sample has had a whole-house energy evaluation by a certified evaluator in the past. While only about 20% were **unaware** of such a service, it is telling that over half of the sample was aware, but opted not to have one performed. Table four shows the complete breakdown of responses.

Have you previously had a whole-house energy evaluation (also known as an audit or assessment) performed on your home by a certified energy evaluator?

Answer Options	Response Percent
a) No, we were not aware that such a service existed	22.4%
b) No, there were other reasons we opted not to have it performed	56.9%
c) Yes, within the past 12 months	6.0%
d) Yes, 1 – 2 years ago	7.8%
e) Yes, more than 2 years ago	6.9%

Table 4. Percentage of sample that have had a whole-house energy evaluation

When it came to self-reporting on their confidence to complete certain tasks related to having a whole-house energy evaluation, survey takers trended toward neutral to confident **overall** as shown in table five. The tasks that were rated with a greater degree of **uncertainty** relative to the entire set of options, were things such as *finding a qualified energy evaluator*, *reviewing the proposals and selecting a qualified improvement contractor*, *evaluating if the job was done correctly*, and *identify and obtain the applicable licenses / rebates*.

Please rate how confident you are in your ability to complete each of the following tasks

Answer Options	VERY UNSURE	Somewhat unsure	Neither confident nor unsure	Somewhat confident	VERY CONFIDENT	Response Count
Find a qualified energy evaluator	13%	22%	16%	24%	26%	109
Schedule the home energy evaluation	5%	15%	12%	29%	39%	109
Review the home energy report	6%	13%	9%	31%	41%	109
Select the appropriate upgrade measures based on the report	6%	14%	12%	34%	35%	109
Obtain proposals to get the improvements done	8%	15%	18%	25%	34%	107
Review the proposals and select a qualified improvement contractor	9%	17%	17%	28%	30%	109
Evaluate if the job was done correctly	13%	19%	22%	26%	20%	108
Identify and obtain the applicable incentives / rebates	9%	22%	18%	29%	21%	109

Table 5. Confidence in completing energy evaluation tasks. Note percentages in the neither, somewhat, & very confident columns.

Agreement levels were generally low toward statements that presented obstacles / barriers to having a whole-house energy evaluation. Generally speaking, survey takers trended toward being neutral, somewhat disagreeing or strongly disagreeing with those statements. Those statements that received some to strong agreement are boxed in red in table six below. Clearly for this sample, a key concern for them is cost. 58% indicated concern over affordability of improvements, and 40% indicated concern over fees for the evaluation.

whole-house energy ev	valuation perfor		iome.				
Answer Options	1 STRONGLY DISAGREE	2 Somewhat disagree	3 Neither agree nor disagree	4 Somewhat agree	5 STRONGLY AGREE	N/A Not applicable	Response Count
It will be difficult to find a qualified evaluator.	24%	27%	23%	17%	7%	2%	100
It is difficult to schedule the time to have the service performed.	25%	22%	14%	25%	10%	4%	100
Having to straighten up the house is a barrier to having the evaluation performed.	40%	24%	17%	10%	4%	4%	98
Concern about security / safety from strangers in our home is a barrier to having the evaluation performed.	33%	27%	18%	14%	5%	3%	100
We don't trust the contractors involved will be unbiased in their recommendations.	20%	26%	25%	20%	8%	1%	100
It will tell us we need to make improvements we cannot afford.	10%	8%	21%	31%	27%	3%	100
We don't need the evaluation because our house is already as energy efficient as it needs to be.	36%	27%	20%	10%	4%	3%	100
We don't need the evaluation because we already know how to make our home more energy efficient.	18%	30%	20%	17%	12%	3%	100
We rent so do not believe that having the evaluation will help us.	26%	4%	10%	1%	3%	56%	99
The overall process is too complicated.	26%	23%	20%	20%	9%	2%	100
Cost is a barrier to having the evaluation performed – because it has a fee, or the fee is too high.	23%	14%	19%	19%	21%	4%	100

How much does your household agree or disagree with each of the following statements about having a

Table 6. Agreement to statements about performing a whole-whose energy evaluation.

Aside from the pre-defined list of concerns laid out in the questionnaire, non-participants had few other concerns, with only about 12% mentioning something else. When analyzing their specific responses, most of them fell under an existing category such as cost / affordability or trustworthiness of the contractors. Table eight shows all verbatim *other* responses. While this is only one perspective, it is worth mentioning that a homeowner indicated he / she qualified for a grant, but could not front the money to get started.

Does your household have any concerns, other than those listed in the
preceding question, about having a whole-house energy evaluation performed
on your home?Answer OptionsResponseResponse

	Percent	Count
a) No	88.1%	89
b) Yes: please specify	11.9%	12

Table 7. Percent of sample who indicated "other" concerns about having a whole-house energy evaluation.

Verbatim responses for those who indicated "yes" to having concerns other than the ones listed:

Those conducting evaluations have limited knowledge of buildings.

We know there is an energy efficiency problem, know what it is, but we cannot afford to have fixed, so there is no point in further evaluations.

Overall cost is a barrier. Other such grant programs require homeowners to wait for tax rebates or reimbursement. There is simply no disposable income right now to pay upfront. I qualify for and have applied for grants that would cover the cost.

it's complicated.

cost

JUST DON'T THINK WE COULD AFFORD IT

We don't need another government program "incentivize" people to improvements they can do on their own. This program is yet another example of big government waste. While the goals of energy efficiency are laudable, a government-sponsored program is not needed. Persons have enough incentives in terms of cost-savings from improvements done on their own. I already had one the year before the StepUP started.

enegry cost records misplaced

Since the house is split into multiple units, more than one blower door would need to be used. There is only one HVAC zone though.

Hiring contractors to do any kind of work is a PITA

My heating bill has never gone over \$180 a month for 3000+ square feet - hot water heater, so highest bill is \$145 a month. Last month was \$70 for heat. I only run the a/c a little in the summer.

Table 8. Verbatim "other" responses.

Non-participants generally felt that the reasons presented to them for having a whole-house energy evaluation and / or making improvements to the energy efficiency of their homes were fairly important. Table nine details the sample's distribution of responses to six key reasons for having an evaluation or making improvements. The ratings of *somewhat unimportant* and *neither important nor unimportant* had the lowest selection percentages across the sample, yet *very unimportant* was selected noticeably more frequently. This could be due to a perception of "well I cannot afford any of this, therefore none of these reasons matter to me." As noted elsewhere, affordability is a significant barrier for some households.

The following statements could be reasons for having an energy evaluation or improving the energy efficiency of your home. Please rate the importance of each.

Answer Options	1 VERY UNIMPORTANT	2 Somewhat unimportant	3 Neither important nor unimportant	4 Somewhat important	5 VERY IMPORTANT	Response Count
To find out how much energy we use in our home and for what purposes	14%	9%	6%	45%	26%	100
To find out if there are any health or safety issues in our home (e.g. moisture, gas leaks)	14%	4%	8%	26%	48%	100
To increase the value of our home	13%	6%	12%	41%	27%	99
To save money on our energy bills	13%	2%	4%	27%	54%	100
To make our home less drafty/temperatures more consistent between rooms	13%	2%	5%	33%	47%	100
To reduce our household's carbon footprint	14%	5%	15%	31%	34%	97

Table 9. Importance of six key reasons for performing energy evaluation / improvements.

Non-participants were roughly evenly split over having concerns or not with implementing home energy improvements (figure ten). Overwhelming, the specific responses given by those who indicated concerns could be summed up with one word: **cost.** A few others mentioned things such as *would the repairs really be worth it*, and *disruption to their household / lives*. **Appendix A shows a complete list** of actual write-in responses given in the survey.



Figure 10. Concern with implementing home energy improvements.

Table ten gives a complete breakdown of how much people agreed or disagreed with several attitudinal statements regarding energy use and the environment. Attitudes toward conserving energy and helping the environment were generally positive amongst non-participants. They tended to **disagree** with the statements: *there is not much we can do to decrease the amount of energy used in our home, and economic growth and creating jobs should be the top priority, even if the environment suffers to some extent*. Conversely, they tended to **agree** with energy conservation statements about making a positive difference in the environment for future generations, an easy way to control household energy costs, and protecting the environment at the cost of economic growth. The sample was roughly split on the last attitudinal statement: *our efforts to save energy and help the environment only make a difference if others do it too.*

					-		
Answer Options	1 STRONGLY DISAGREE	2 Somewhat disagree	3 Neither agree nor disagree	4 Somewhat agree	5 STRONGLY AGREE	N/A Not applicable	Response Count
There is not much we can do to decrease the amount of energy used in our home.	21%	49%	11%	15%	1%	2%	98
Conserving energy makes a positive difference to future generations or the environment.	4%	1%	5%	21%	65%	3%	98
Efficiency actions can provide an easy way for us to control energy costs in our household.	2%	2%	9%	40%	47%	0%	98
Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs	7%	13%	16%	29%	31%	4%	98
Economic growth and creating jobs should be the top priority, even if the environment suffers to some extent	26%	36%	16%	16%	5%	1%	98
Convenience is more important to us than saving money	22%	41%	17%	13%	6%	0%	98
Our efforts to save energy and help the environment only make a difference if others do it too	17%	31%	13%	23%	15%	0%	98

Please indicate the extent to which you agree or disagree with each of the following statements.

Table 10. Attitudes toward energy efficiency.

In terms of taking actions to conserve energy and save costs, non-participants were quite likely to engage in several behavior choices somewhat or very often. The one action that they were **least likely to engage in** was **hang clothes on the line** instead of using a dryer. The sample was roughly split on unplugging appliances while not in use. Table eleven shows a clear trend that non-participants quite often engage in energy efficient behaviors.

How often do you do each of the following?								
Answer Options	1 VERY RARELY	2 Somewhat rarely	3 Sometimes	4 Somewhat often	5 VERY OFTEN	Response Count		
Turn off lights when not in use	1%	1%	5%	24%	68%	98		
Wash clothes in cold water	9%	5%	19%	18%	48%	98		
Turn down thermostat in the winter	3%	5%	12%	28%	52%	98		
Unplug appliances when not in use	20%	22%	21%	15%	20%	98		
Dry clothes on the line instead of a dryer	51%	19%	10%	7%	12%	98		

Table 11. Frequency of performing energy efficient behaviors

Awareness of STEP

As shown in figure eleven, close to 90% of the non-participants were aware of STEP.



Figure 11. Non-participants' awareness of STEP.

Sources of information

The two main sources of information about STEP for non-participants were **community newsletter** and **community listserv**. As shown in figure 12, other noteworthy mentions were **community website**, and **from a step participant / neighbor / word of mouth**. The percentage for step participant / neighbor / word of mouth is actually higher when taking into account specific "other" mentions. Table 12 details the write-ins that non-participants offered.



Figure 12. Sources of information about STEP.

Other specific mentions for sources of information about STEP:
Neighbors
Signs in yards
focus group
Signs in neighbors yards
Signs in neighbors' yards
signs on neighbors' lawns
At a board meeting
hyattsville arts festival
Yard signs everywhere in the city

Table 12. Write-ins for "other" on sources of information about STEP.

When asked about the two **most influential** sources of information for deciding whether or not to join the Small Town Energy Program, participants' most frequently cited sources were **word-of-mouth**, **Community Newsletter**, and **community listserve**. Other noteworthy mentions include other **step participants** (arguably same as word of mouth) and the **step website**. . See **appendix B** for a **complete list of actual responses** given in the survey.

Impression of STEP

The overwhelming impressions of STEP were positive. While approximately 20% of the sample was neutral (see table 13), 78.2% were somewhat to very positive about STEP. Of the two who mentioned **somewhat negative**, specific reasons given were: *Intrusive, waste of money* and *Costly recommendations and complicated process*.

Would you say what your household has heard about the STEP program is							
Answer Options	Response Percent	Response Count					
Very negative	0.0%	0					
Somewhat negative	2.3%	2					
Neutral - neither positive nor negative	19.5%	17					
Somewhat positive	34.5%	30					
Very positive	43.7%	38					

Table 13. General impressions of STEP.

Importance of Benefits

Non-participants responded favorably to all benefits listed. Across the board, they generally ranked all five benefits as being somewhat or very important to them with minor exception. Within the **very unimportant rating**, *our community supports the program* and *a low interest rate loan is available to participants* were the most frequently cited benefits. In other words, non-participants saw those as the less compelling reasons to participate in a program like STEP. Again, as mentioned earlier in this report, those who indicated **very unimportant** are likely from households who see the program as cost-prohibitive and generally unattainable at this time. For those who are less sensitive to the cost of STEP, it makes sense they would be less interested in having a low-interest rate loan available.

Specific "other" mentions listed were things that weren't exactly benefits, but considerations that survey participants felt were worth mentioning. They included: *That every aspect of involvement be wholly voluntary, clarifying that we don't want another loan,* and *I would need to have a fairly well-paid job.* Table 14 shows a complete summary of all responses given to the potential benefits of participating in STEP.

The following are benefits of participating in STEP. Please rate how important each of the following benefits would be to your household if it were to decide to participate in a program such as STEP. (Please select only one answer for each benefit).

Answer Options	1 VERY UNIMPORTAN	2 Somewhat IT unimportant	3 Neither important nor unimportant	-	Somewhat important	5 VERY IMPORTANT	Response Count
An Energy Coach is available to provide unbiased advice and assistance throughout the process	11%	5%	5%		30%	48%	97
The program helps us get Pepco and State incentives / rebates for making improvements	10%	4%	2%		28%	56%	97
The program provides additional financial incentives / rebates for making improvements	11%	5%	2%		30%	51%	96
Our community supports the program.	15%	2%	14%		40%	28%	97
A low interest rate loan is available to participants	20%	13%	11%		27%	29%	97
Other (please sp	becify)						3

Table 14. Importance of benefits of STEP.

<u>Appendix A – Write-in responses by those who expressed concerns with</u> <u>implementing home energy improvements</u>

Concern #1
Concerns about cost of these improvements
Cost
costs of improvements
Cost
Cost
Cost
Selecting a contractor
how much needs to be done
limited choice of contractors chosen
cost
costs
Cost
price
finances
Recommendations will not take into account the overall building integrity.
Cost
Unclear that I we need to redo an energy audit as we have already invested in significant improvements in 2010
Can't afford it.
thought they would be expensive
Cost
Cost
cost
Money
cost
cost
MONEY
Cost
disruption of routine
Is it really worth the extra cost?
Finances
how to make the basement more energy efficient
I am a renter so I cannot do anything without consent from the owner.
Financial concerns
Cost of Upgrades
Cost
Cost would be too high
just one more contractor in the house. Some houses have been robbed about contractors have been in. I want the contractors to be on the CHEA approved contractor list.
Cost
money

Cost
Finding a qualified contractor to do the work
Finding the "right" contractor
cost of upgrades
Cost
Cost
Finding a contractor
Lack of finances

Concern #2

How difficult it may be to implement the recommendations
Cost
reliable and honest contractor
Cost
Cost
Disruption to the household
cost
competing priorities for home repair resources
cost
time to hire contractors, be there to meet them, etc
Many of the energy saving devises and products are flimsy and cheaply made. They aren't durable.
Time
Qualified and careful contractors
sign in our yard
cost
the benefits will exceed my life expectancy
Cost
identifying an honest contractor
Done right
The attic is currently a conditioned space but I am sure more insulation is needed. Finding someone to dense pack or spray foam the attic would not only be costly but time-consuming. The land lords wouldn't go for it.
Finding out about problems that we didn't know existed (oh gosh, i have to fix that now too????)
having to use annual leave for the repairs. I just had kitchen/bath counters put in, and it was a home owners nightmare with poor quality work, and they had to keep coming back, but I like the finished product.
Time
time
disruption of our lives
Inconvenience
Cost
Cost
Right person to do job
Expense
Cleaning out attic and basement for work to be done

<u>Appendix B – Write-in Responses for the 2 most influential sources of</u> <u>information about STEP</u>

Source 1 (most influential)
newletter
community website
From a STEP participant / neighbor / word of mouth
word of mouth
event
Word of Mouth
word of mouth
Heat and air
neighbors
From a neighbor
Community newsletter
word of mouth
Neighbor
Community Listserve
listserve
Interested in saving energy
neighbor
neighborhood
internal budget
STEP Participant
money
STEP website
Friend recommendation
A neighbor or friend who knows about buildings, construction, building
maintenance.
Neighbors
community newsletter
Community listserv
list serve
Community newsletter
STEP event
city of Hyattsville
neighbors
at my door
IETTER FROM MAYOR
Myself
Info provided by program
Participant
webserve
Mayotte
friend/neighbor
STEP-UP Guidance
participant
If our neighbors participated

Town Newsletter
energy saving
newsletter
STEP website
personal recommendation from a friend
Friend/Neighbor
newsletter
Word of mouth
Friends/neighbors
step event
Neighbor recommendation
Neighbor
website
people who have already done this
Newspaper interview
The STEP coordinator
Save money
listserve members
how much it costs
neighbor
listserv
neighbor
City information
Step Event
Community meeting
Neighbor
neighbor
Website
community listserv
website
Word of Mouth
STEP participant/neighbor

Source 2 (2nd most influential)
word of mouth
community listserv
Savings account
Community newsletter
newsletter
Listserv
community information
Drafty windows
listserv
From listserv
Word of Mouth
community listserve
Community listserv
Neighbor
newsletter
the program was well organized and through
friend
staffer
Listserv
STEP participant
Community newsletter
An unbiased neighbor who's been through the program,.
Municipal government
community list serve
STEP participant
word of mouth
Step staffer
none
STEP participant
neighbor
town newsletter
neighbor FROM A STEP PARTICIPANT
Recommendation of town
neighbors
Word of mouth
town
Cost
event
Community newsletter
Mayor and Council members
cost of improvements
STEP website
Community newsletter
positive press explaining how it benefited someone
ListServe
word of mouth

Listserv recommendations
Representative
community presence
community listserv
Personal friend
Internet research
Less energy use
how much it costs
newsletter
listserv
Community information
Step Website
STEP energy coach
Newsletter
HOPE Listserve
STEP website
Community Listserv