

# City of Worcester, Massachusetts



## LESSONS FROM THE RESIDENTIAL REBATE PILOT Program Evaluation - Survey Results

### **Summary:**

A participant survey ran 5/6/2015 – 6/3/2015. Most participants were reached via an e-mail survey tool (Constant Contact), though a few participants with no e-mail address were contacted via regular mail. Cumulatively, the total response rate was 65%.

	Total Projects	Of*	Response Rate
Total EPS Responses	95	145	66%
Total HERS Responses	9	14	64%
Total Responses	104	159	65%

\*Excludes repeat participants who participated more than once in the Pilot (different properties).

### **Overarching Survey Questions:**

- 1) Was WE-RRP a successful program?
  - a. Was it administered well?
  - b. Did it work as a change agent, pushing people to do the work they would not otherwise do?
- 2) How accurate and helpful was the HERS/EPS score in deciding to install energy conservation measures?
- 3) Other: What have the City learned from the RRP that should shape the next Green Communities Grant proposal/application?

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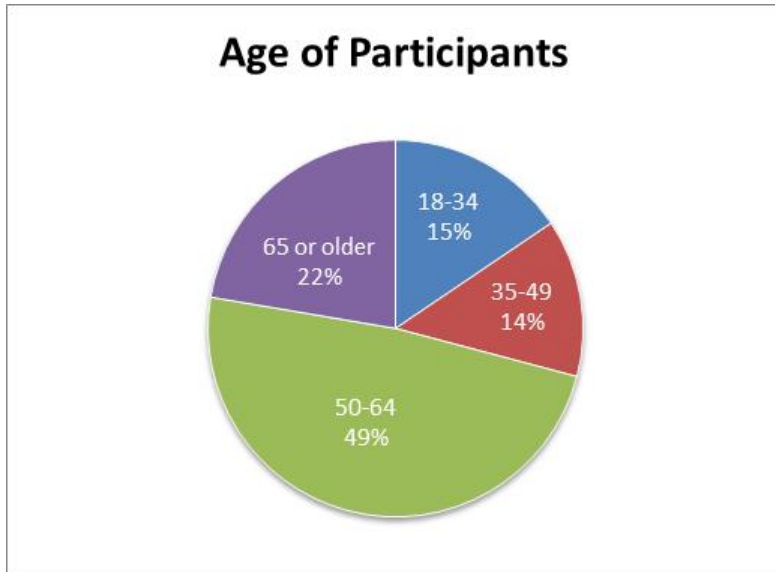
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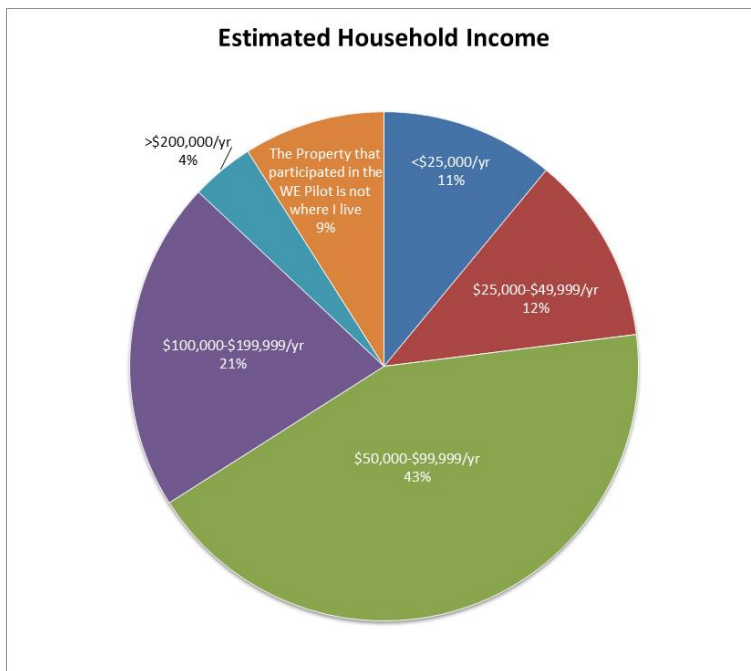
## I - Participant Characteristics

Q1 – “What is your age?”



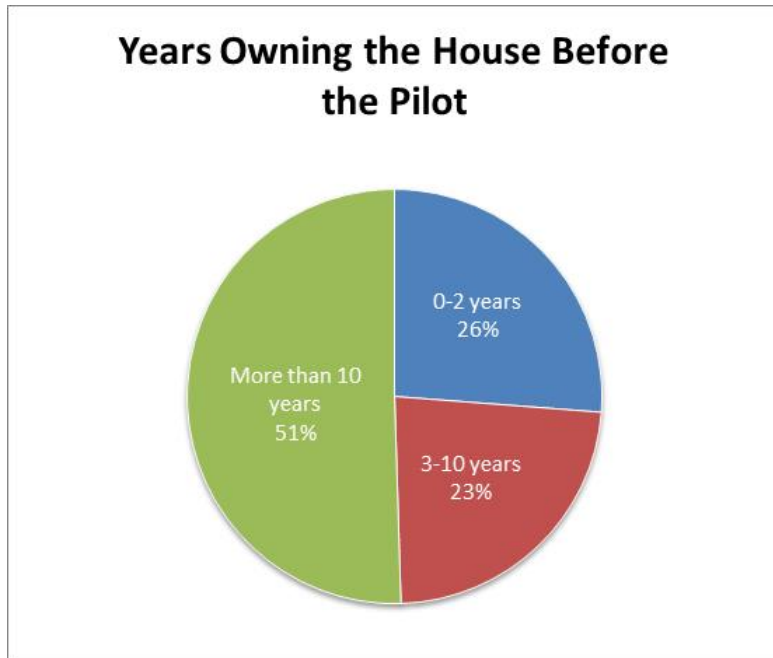
*Initial Observations: Half of all participants fell into the 50-64 years old age group. All other age groups were represented.*

Q4 – “If your property is the place of your primary residence, what is your estimated household income level? (A household includes all the people who occupy a housing unit as their usual place of residence.)”



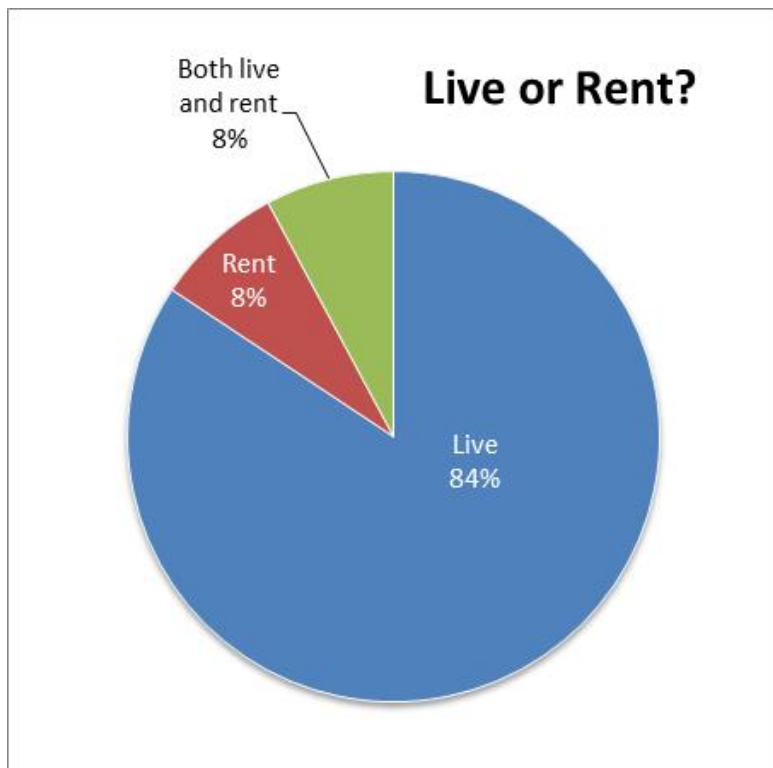
*Initial Observations: The largest section of the participant fell into the \$50,000-\$99,999/yr household income category. More analysis is needed to see association between household income and the number of residents.*

Q6 – “How long had you owned the participating Property before applying to the WE Pilot?”



*Initial Observations: Half (the majority) of the participants owned their home for over 10 years, while about a quarter were new homeowners (0-2 yrs) and about a quarter owned it between 3 and 10 years.*

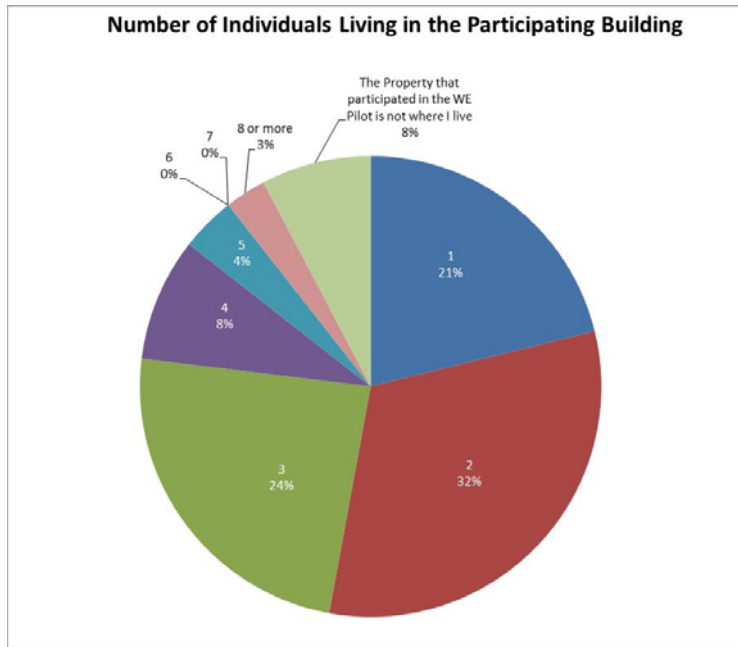
Q8 - Do you live at or rent out your Property?



*Initial Observations: Vast majority of the properties in the survey (84%) were home-owner occupied.*

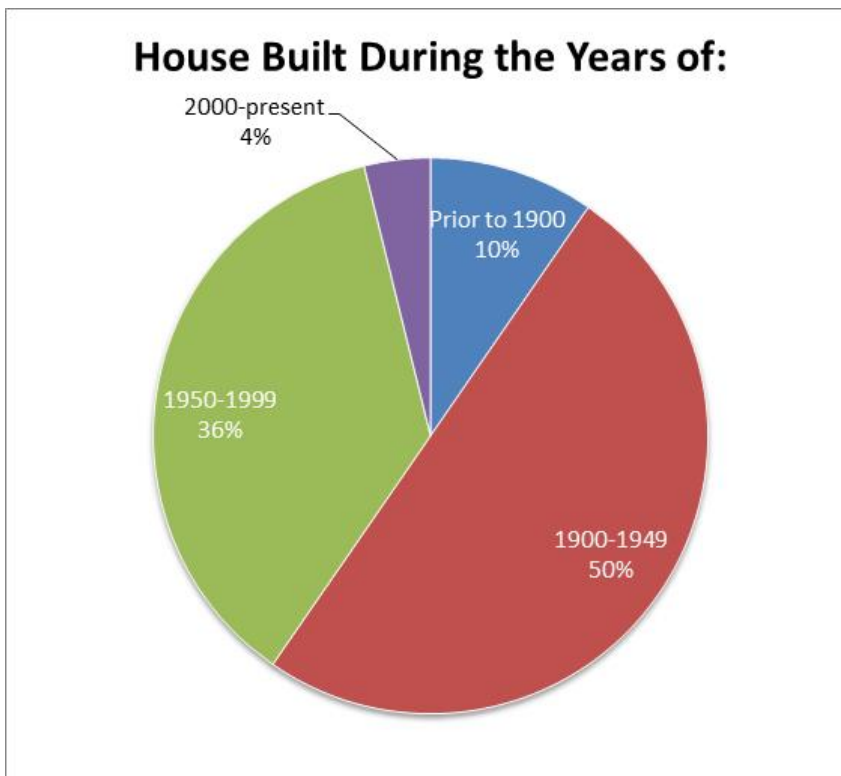
## II - Property Characteristics

Q5 – “If your property is the place of your primary residence, how many individuals (including children) reside in your household? (A household includes all the people who occupy a housing unit as their usual place of residence.)”



*Initial Observations: 77% of the respondents had 1-3 people living in the participating property.*

Q7 – “During what time period was your Property built?”



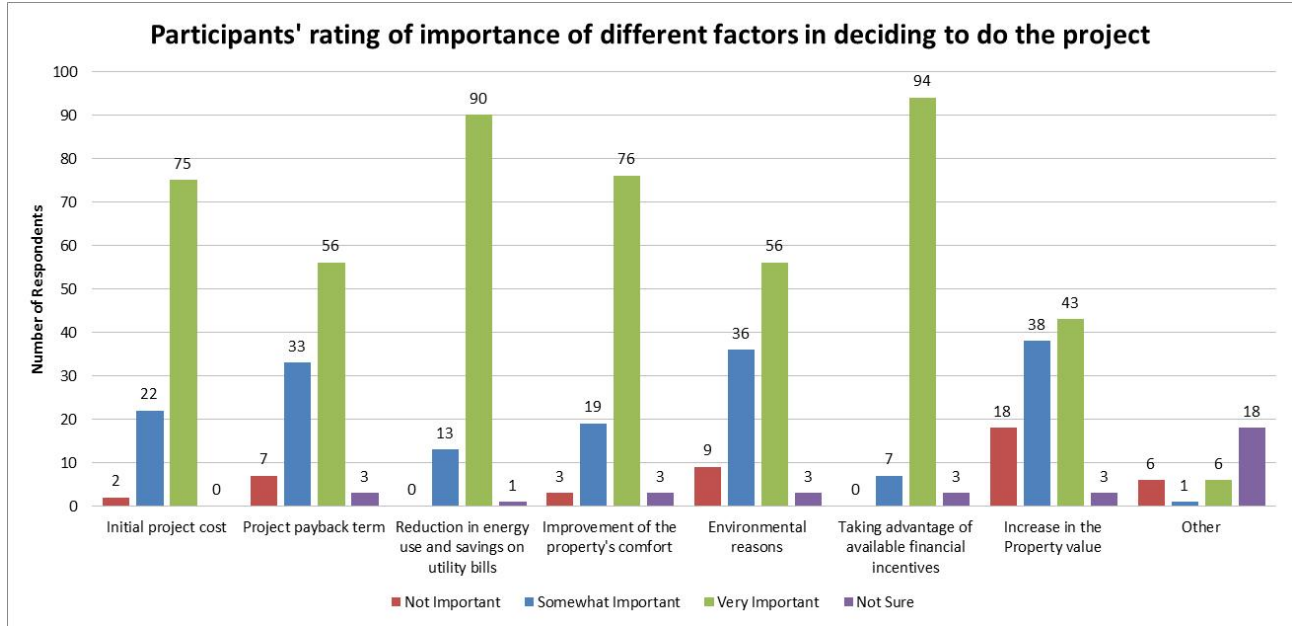
*Initial Observations: Half (majority) of the properties that participated in the Pilot and the follow-up survey, were constructed in the first half of the 20<sup>th</sup> century.*

*10% were constructed prior to 1900, and 36% were constructed in the second half of the 20<sup>th</sup> century.*

*A small section of the participating properties, 4%, were of relatively new construction (post-2000).*

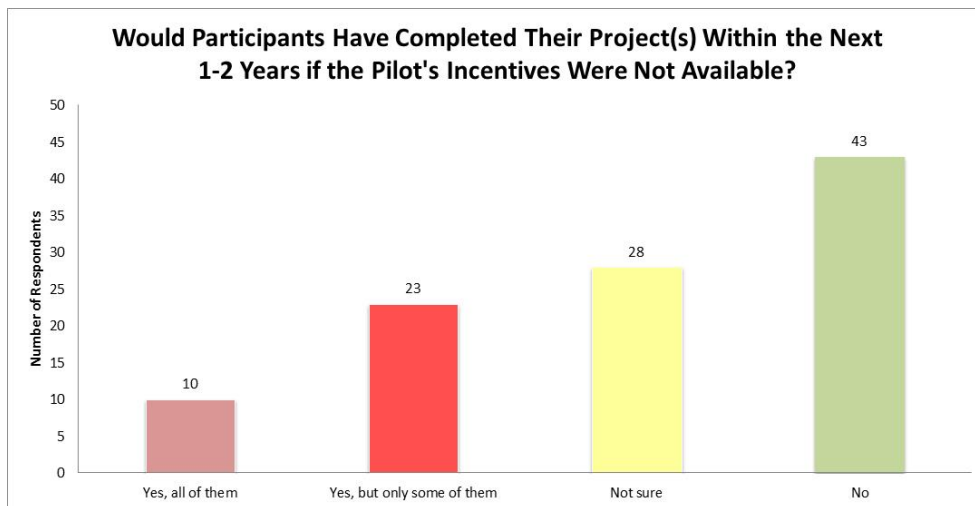
### III - Reasons for Doing the Project

Q12 – “How important were each of the following factors in deciding to do your Energy Efficiency Project?”



*Initial Observations: All suggested factors rated high by the survey participants, with reduction in energy use/utility cost savings and taking advantage of available financial incentives rated the highest.*

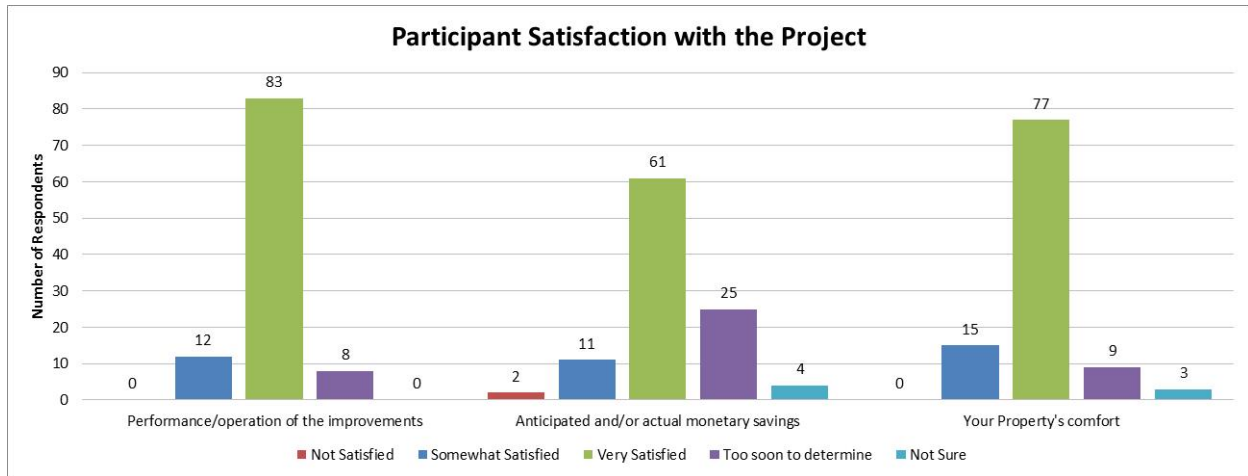
Q13 – “Would you have been likely to complete your Energy Efficiency Project within the next 1-2 years if the WE Pilot's incentives were not available?”



*Initial Observations: 43 (or 41% of the) survey participants stated that they would not have completed their projects if the Pilot incentives were not available.*

## IV - Benefits, Challenges, Participants Satisfaction

Q14 – “Please rate your satisfaction with your Energy Efficiency Project's improvements according to the questions below.”

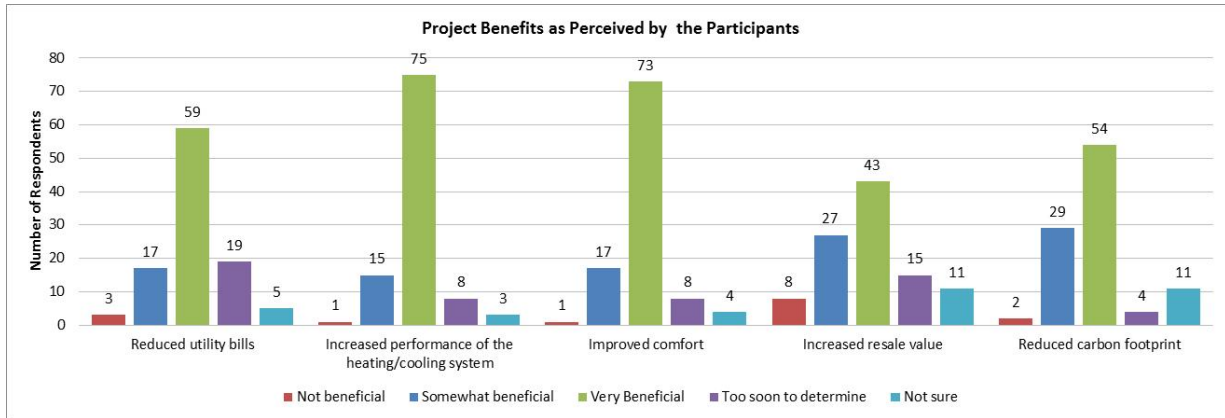


*Initial Observations: Majority of the survey participants were satisfied with the project's outcomes.*

Q14 – verbal comments:

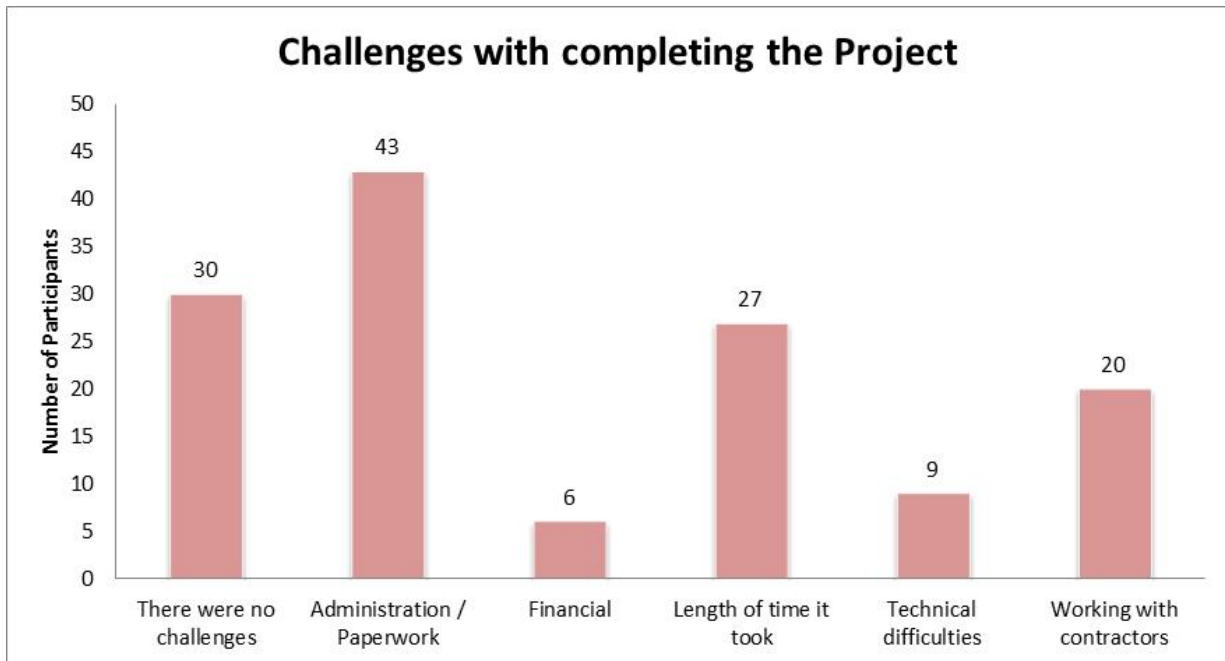
- Even though the water heats up fast -- I feel we waste a lot of water.
- Heat pump heats + I'm sure will cool extremely well. Very good elec. savings. We also had a solar roof (panels) put up - the savings from both I'm sure will be very satisfactory.
- Highly increased system reliability, thermal comfort, and fuel efficiency.
- I feel that the project is of great financial help to me and my family. thanks
- I have not seen the rebate yet, which is where my real satisfaction will come from.
- I might have looked for a property with more solar potential if I had been more informed. I also didn't consider back-up heating or solar hot water, because I was not familiar enough with these options. Finally, I think I should have given more consideration to heat pumps as an alternative to window AC--I'm still not sure about the costs and benefits of heat pumps compared to my very fine high efficiency boiler.
- It was such a cold winter so I am not sure of savings yet.
- Since we did not include an HVAC system, I am not sure how the property comfort has changed. Also, we need to add more insulation in order to actually feel the benefits of the gas heating system.
- The PV panels have only just been turned on.
- Unfortunately electric rates went way up and oil prices came down so it did not seem worth it to run the DMS for heat during most winter days.
- We noticed an immediate difference in our energy bills as a result of the insulation, and we also found that we could maintain a lower temperature in the house with no loss in comfort.

Q16 – “How beneficial do you consider the following outcomes of your Energy Efficiency Project?”



*Initial Observations: Most survey participants found all suggested project benefits as highly beneficial.*

Q15 – “Were there any challenges associated with completing your Energy Efficiency Project?”



*Initial Observations: Survey participants selected a number of challenges, with the highest number being administration/paperwork, length of time it took to complete the project, and working with contractors. 22% (30) of the survey participants reported no challenges.*

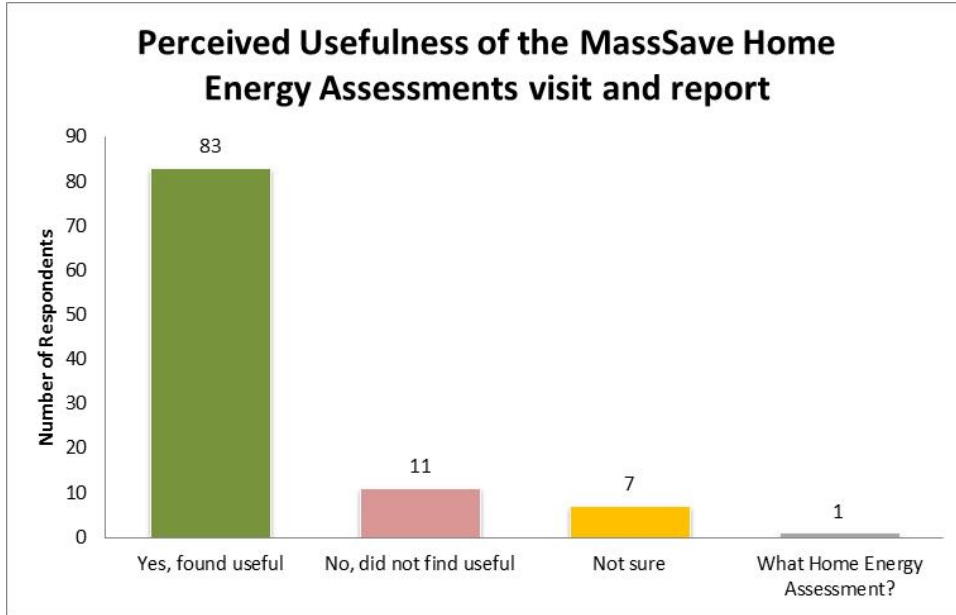
## Q15 – Verbal Comments:

- Any time you get assistance it's worth whatever it takes.
- Awful paperwork process. If I knew how bad it was going to be to get all the paperwork done for the rebate I would never have participated.
- Contractors didn't submit permits before work was done.
- Contractors were mostly unscrupulous. It would help denizens of the city immensely if they were able to speak with the city inspector first before any project took place - this way, the potential pitfalls, rights and privileges of the owner and the contractor may be ascertained even before signing the contract for work to be rendered.
- "Had to interview 8 contractors before finding a reputable one to move forward with.
- Pre and post inspections were hard to schedule and ended up being very sub-par quality."
- I found some of the forms confusing, and I'm pretty good at this stuff.
- It took a lot of homework to understand all hoops to jump through and in what order to do them in.
- It was my first time dealing with contractors.
- Meghan Donahue (from City of Worcester) was a TERRIFIC help. But it took a LONG Time get paper work passed -- and because of a minor miscommunication a lot longer to get rebate.
- Not really. There were complications, delays, and communication snafus, but they were minor. I received excellent service overall.
- Not too bad. WEP people were great to work with.
- Primary contractor (installer) was wonderful to work with. Did a good job, etc. Sub-contractor -- old furnace removal -- horrible in many ways. We almost asked him to leave the house before he completed removal. Sloppy, nasty, destructive, racist, unpleasant, etc. Primary contractor apologized, but said this subcontractor was the best of a bad lot.
- The City of Worcester Staff I worked with were extremely knowledgeable, helpful and pleasant to work with!
- The gentleman we hired did not communicate very well with us. It looks like he did a good job though.
- The paper work was handled by the contractor, a good thing. The cost of the HERS report was excessive, and reduced the advantage of the programs subsidy.
- The staff was very professional and helpful. So easy to work with.
- The time it took to rectify the failure to pull a permit for the installation of insulation. Not a big deal, it just took get a response.
- There had not been a permit pulled - so there was quite a delay on payment
- "There was some slow down with the Boston office but the
- Contractor straightened it out. (mass Save.). The Pilot program was excellent"
- Very poor communications on the part of the contractors.
- When I began, the program was undergoing revisions, and I was getting very contradictory instructions. I chose to nail down all of the steps early, hoping to prevent missteps. I remember George Saliba being a Huge help.
- While we were pleased with the eventual result, we had some issues with Energy Monster. First, their initial bid came in much (2x) higher than our prior year assessment. We had another firm offer a second opinion - and we went with this firm. We (and Worcester Energy) also had trouble scheduling the final audit with Energy Monster. It took weeks of calls and emails before they finally scheduled an appointment. If you do the pilot again, I'd encourage you to include Conservation Services Group.



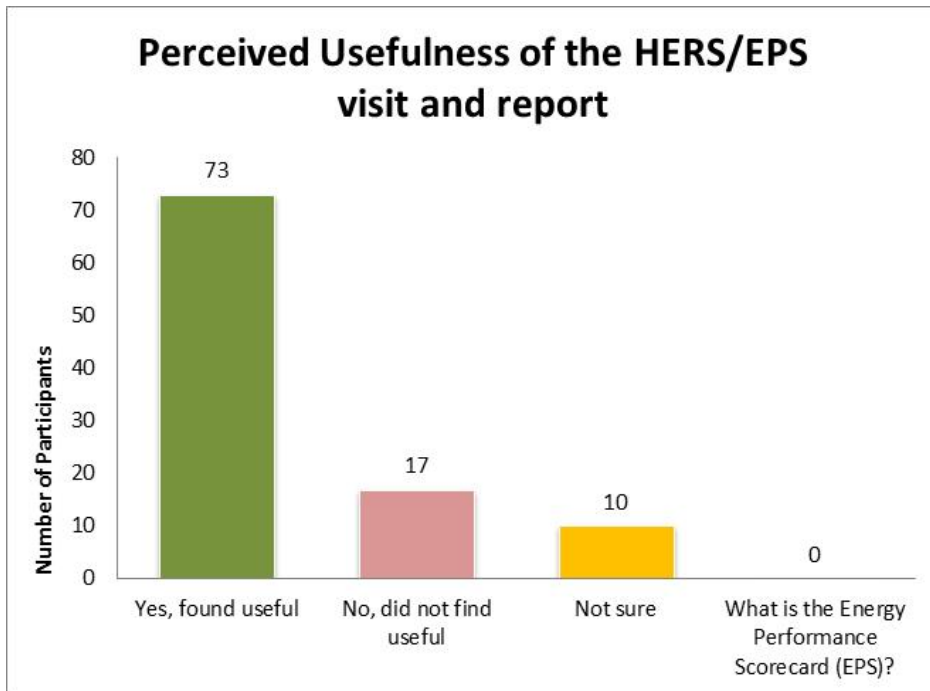
## V - Energy Assessments / Performance Scoring

Q18 – “Did you find the MassSave Home Energy Assessment visit and associated report useful?”

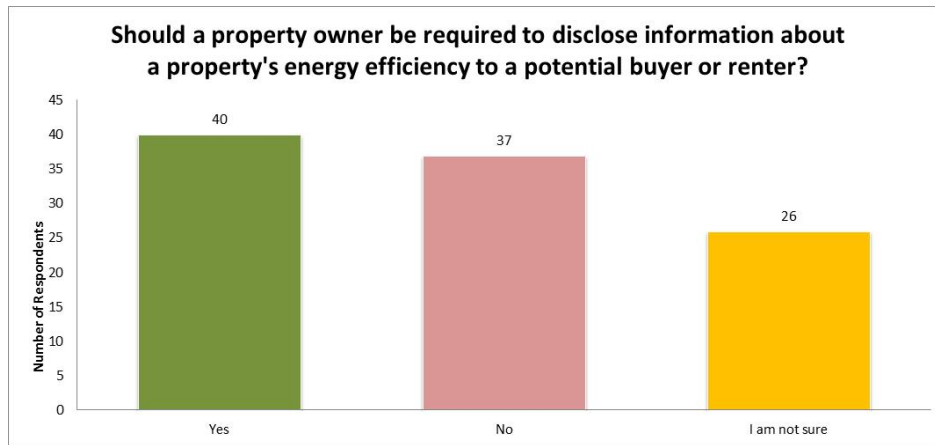


*Initial Observations:  
Most survey participants found both the MassSave Home Energy Assessment and Energy Performance Scoring useful.*

Q19 – “Did you find the Energy Performance Scorecard (EPS) [or the Home Energy Rating System (HERS) report] useful?”



Q20 – “Do you think a property owner should be required to disclose information about a property's energy efficiency (such as an EPS or HERS) to a potential buyer or renter?”

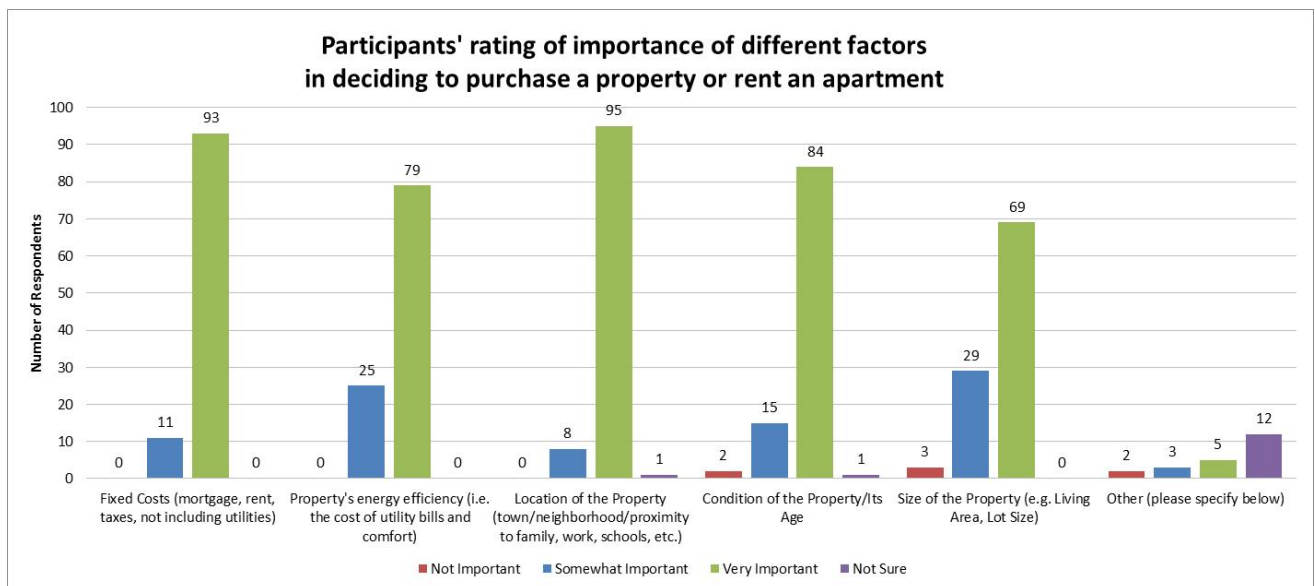


Other Comment:

- Not required - but might be a good idea

*Initial Observations: Survey participants split nearly equally between a positive and a negative response to the question.*

Q21 – “How important are the following factors in deciding whether or not you will purchase a property or rent an apartment?”

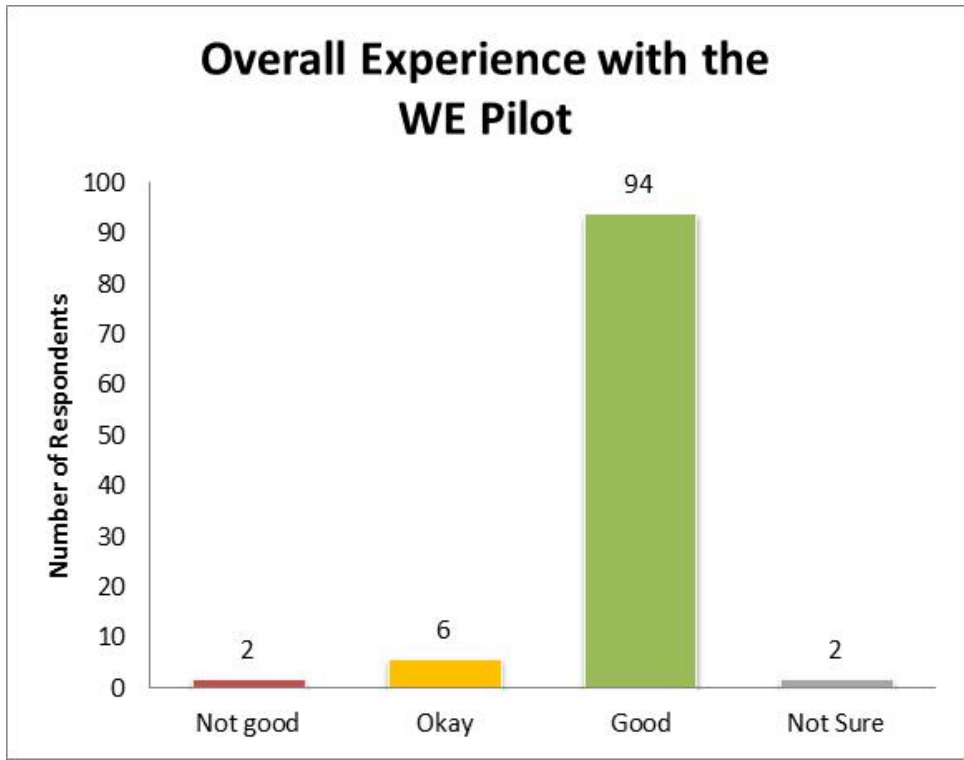


Other comments:

- how the house is situated on the land; how the property, including the land, has been used in the past; lead in the house and/or in the soil... functional spaces in the house....
- It's important to know what you can afford
- Other: Feel of the neighborhood (trees, walkable and bikeable)

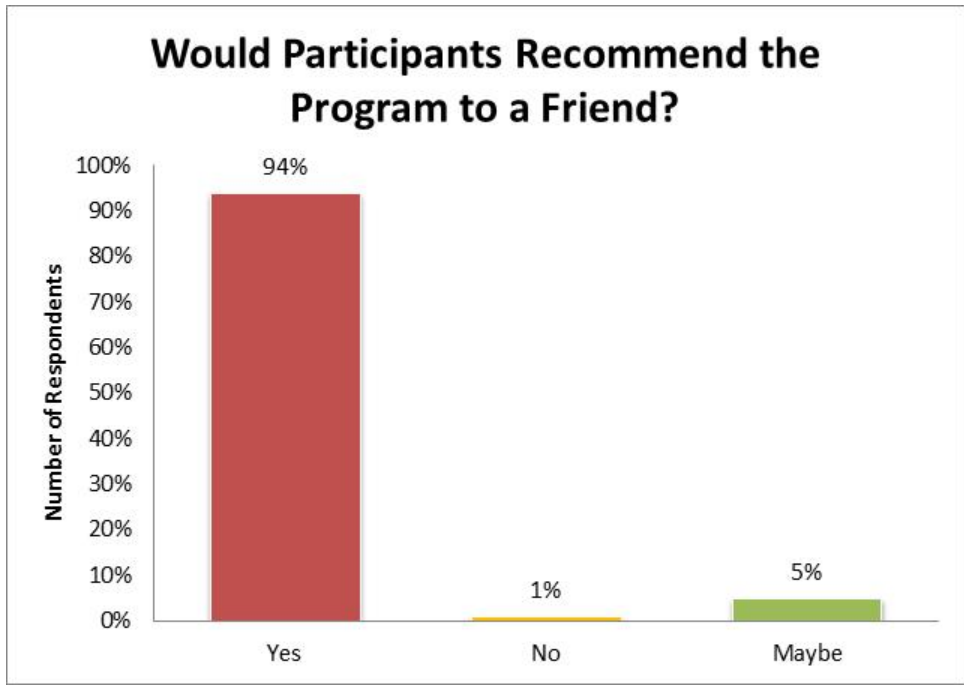
**VI - Satisfaction with Administration of the Pilot**

Q22 – “How would you rate your overall experience with the WE Pilot?”



*Initial Observations:  
Survey participants overwhelmingly had a good overall experience with the Pilot.*

Q24 – “If the City runs a similar program in the future, would you recommend it to a friend or family member?”



Q23 – “What could we have done better/differently to improve your experience with the WE Pilot?”

- "1. Increase scope of incentives. i.e. certain insulation types were incentivized, and not others. When I asked why, there was no particular reasoning. The selection seemed unfounded/relatively arbitrary. There are plenty of situations where loose blown cellulose, rigid insulation (foam-board), and open-cell spray foam are a very good solution, but that cannot be incentivized. I recommend increasing scope to include other high-value insulation techniques. I understand excluding poor performers (fg batts, rockwool, etc.), so consider making a list of exclusions rather than inclusions.
- 2. Find a solution for oil bills. I have oil and was required to submit monthly fuel bills as part of the application, but since I price shop for every fill, and don't have a monthly bill, this was not doable & a work-around was needed. Not a huge hassle, but something to consider before next program rollout.
- 3. I have more feedback. Contact if interested. 413-329-0608, benjamin.rivest@gmail.com"
- Add more projects under the WE
- Administrative paperwork was a real pain. Had to resubmit my claim several times and at one point my claim was going to be rejected as they were not sure they would accept a claim for a Solar Electric System. (???) Ended up taking a couple extra months to finally receive my payment claim. The people at City Hall that I dealt with though, were extremely helpful and courteous.
- Allowed someone to apply for a different rebate at a later date. Having to make a decision whether we should upgrade something else was a little stressful over the project we were already working on.
- "Can't say enough good things about the people who coordinated the WE Pilot. We were able to contact them by phone or email and have questions answered at several times in the process.
- This is the first time we have participated in a program such as this and while we ran into some roadblocks with mistakes that the contractors had made we were able to proceed with the steps necessary to receive our rebate.
- Are very happy we participated and enjoying the wonderful cool efficiency of the ductless heat pump. We also enjoyed the savings during the heating season and the fact that our living space was kept at a more constant comfortable temperature.
- Thank you to all involved."
- City staff was wonderful. Next Step Living was [conscience?] but slow (probably more process time). Generated need for amendment. Given my specific situation created more delay. Lots of hard work. Thanks.
- Contractors were not fully aware of the program and, therefore, were not able to provide assistance that would have been helpful.
- Errors were made in our original applications approval. We were approved for a sizable amt for solar, accepted a solar contract, then we were told there was an error and we did not qualify. By the time we got a blueprint and \$amount finalized, the program was out of money. This was very upsetting.

- Every person involved in the WE Pilot program was very helpful gave clear directions on what we had to do. We thank everyone concerned in this project. So far we have seen savings from the heat pump and the insulation from Mass Save. (The solar panels are also helping with costs and seem to absorb the heat from the sun. We are looking forward to the comfort and savings from the pump and solar)
- "Everyone at WE pilot were quite friendly and helpful - no complaints here.
- I however do wish, that WE also held a concurrent education session meant for homeowners about potential pitfalls when working with contractor etc."
- Everything went very well with my home.
- Getting the word out to homeowners of this wonderful program. I only found out about by word of mouth.
- Give me some indication when I will be receiving my rebate.
- Given me a way to evaluate the carbon footprint and efficiency of our wood burning fireplace insert as part of the overall energy profile.
- Having to go through MassSave was tough. Conservation services (the group that runs MassSaves) is hard to deal with, and generally not helpful. In the past they have tried to charge me outrageous prices for energy upgrades through their contractors. Also many of their rules do not make sense. For instance I was upgraded from oil heat to gas heat. Therefore I was not eligible for any Mass Saves rebates which I really could have used. In order to receive them I would have had to upgrade to another oil system. I was trying to go to the cleanest, most efficient system I could afford, which is certainly not an oil fired system. In the future, it would be better if the city could run these programs without involving MassSaves.
- I am completely satisfied with the Worcester program. My contacts with those who managed the program were both informative and effective in dealing with the other components of Mass Save. If I left a message, I received callbacks ASAP, and I always felt heat they were operating in my best interests.
- I found it went pretty smoothly - the only hiccup came when I found out we needed a mechanical permit/inspection along with electrical and plumbing.
- I have not yet processed my rebate as my Contractor just completed the installation of my minisplit air Conditioners. Everyone has been as the project was delayed several weeks by the bad winter weather.
- I personally had a great experience. It was a lot of babysitting paperwork and figuring things out as I went along; the women in the office were extremely helpful to me. I was able to meet in person and correspond via email with questions.
- I recommended this to people who started the process and finding ran out. Upsetting for them
- "I was extremely satisfied with the program and glad to have the opportunity to participate to help me offset the costs! I thought that the administrative part/paperwork was reasonable. The turn around time to get approvals very prompt!
- Everyone I worked with at the City was extremely pleasant and helpful."
- I was fortunate to have learned about the WE Pilot ahead of time. Although it took a year to benefit from it, the rebate is helping to repay my heat loan. Worcester should make

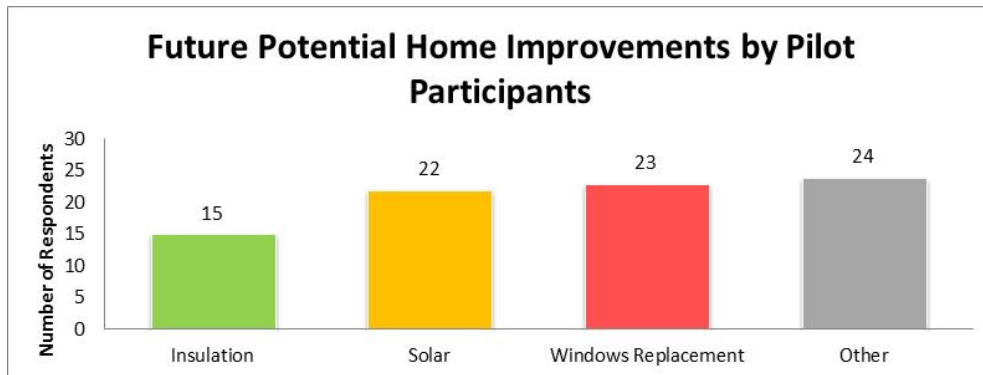
such rebates more widely available and should ensure that low to moderate income families have priority access to them.

- I was very impressed with the ease in filling out the paperwork. Marlyn Feliciano was very helpful every step of the way. She was a joy to work with.
- I was very impressed with the efficiency and kindness of all the people I spoke with at City Hall.
- I was very pleased with everything - the workers and workmanship
- I went into this knowing that I would be dealing with a bureaucracy and believing it would be a headache. Frankly it was not. I think both the documentation about the program and the people from your agency that I dealt with could not have been more straightforward nor more helpful. I want to thank you for this program, I could not have all of this improvements without your help!
- I wouldn't change anything.
- Increase rebate to cover cost of HERS (LEED) certification. I realize this is not required in new program, but fan door test was invaluable to finding massive air leak in basement and attic
- Increase the funds.
- Instructions clunky.
- Insulation Only: Make sure installer has pulled permit before starting and completing job. I had to make many calls and visits to both installer and city permits. I took 3 weeks to get permit and more time to get my check.
- it was okay--took a while to get all the paperwork completed, submitted and approved
- Less paper work.
- less paperwork
- More information to confirm it is a legit program
- My experience was pleasurable and very helpful, from the Next Step Living (energy audits), to Worcester Energy Residential Rebate Pilot Program at City Hall, and also with Commerce bank on Main St.
- My home energy assessment was done by CSG whom I later learned could not under the pilot program perform the EPS scorecard. That was a bit of a disappointed as I had to have another company come out to essentially do it again (Energy Monster). Additionally, when I first had my energy assessment performed, I received a recommendation to have blown-in insulation installed which I went ahead with before I learned of the pilot program. I was unable to take advantage of the pilot program for work that had already been performed and that too was disappointing.
- nothing
- Nothing I came down to City Hall people help me fill it out followed up with me it was a very positive experience
- Nothing, everything was fairly easy. The employees of the city were very knowledgeable and willing to assist with any questions as well.
- Nothing, went smoothly staff were very helpful and accommodating

- "Overall, we're very pleased with the program and the end result. It took quite a while between our application and our approval, though I recognize that only a few staff were working on this (and they were very responsive!). We had a negative experience with Energy Monster, who (in our view) manipulated the energy assessment to increase the cost. (We had had a MassSave audit the previous year, so we knew the baseline). We ultimately went with a contractor associated with Conservation Services Group.
- Thank you for offering this program!"
- paperwork between Worcester and Next Step Living/pilot project people was too complicated - there was miscommunications between the two groups so that the needed forms/reports were difficult to coordinate
- paperwork reduction, promptness improvement, better brochure clarity.
- Processing time
- quicker processing- less paperwork- the program requirements changed several times. It would be better to have requirements, publish those requirements and then follow those requirements without significant changes.
- Refer to earlier mention of planning difficulties.
- Remove Next Step Living as a vendor
- Since I was an early participant, some of the issues eventually resolved . The expense of the HERS report was excessive . And appeared only as a justification , and not a real guide Choosing a replacement heating system which was a blinded process, I relied on the contractors advice. A source of cost effective products was not readily available in a lay formate. A list of " good" choices for systems would have been helpful. The end results were not, as of date, shared as promised. Has the program meet its designed intent?
- Speed up processing and allow more time to complete project. I was lucky my plumber had time to do work in the allotted time.
- The amount of paperwork and follow up visits to get the rebate was absurd. As stated earlier if I knew this was going to be the process I never would have had the improvements done.
- The contractor that I used did not call for an inspection after work was completed, which I assumed they would handle. I then had to do this on my own and miss more time from work, which was obviously inconvenient.
- The people were very helpful and knew the program
- There didn't seem to be a dedicated line to call and talk to someone. I always had to call, leave a message and wait for a call back. However that may have been because I think the primary person I was working with ended up leaving and there was a period before there was a new hire.
- There was a change in personnel during our experience. It all turned out ok but notifying people in the application process would have been helpful. Less trips to City Hall.
- There was a lot of turn over in the office making the submission of the proper paperwork extremely difficult. It would be better if more of the application could be done online!

## VII - Future Planned Projects

Q17 – “What other home improvement projects, associated with energy efficiency/conservation or renewable energy, would you like to do in the future at this Property or other properties you own in Worcester?”



- "- replacing windows  
- adding insulation  
- solar panels"
- All set now!!
- Already replaced every window in the house after the energy audit.
- Asbestos removal
- Better windows
- Boiler and ductless mini splits when our funds allow
- Change all household lighting to LED
- Converting to an energy efficient furnace ASAP, and energy efficient frig.. Gas fireplace insert.
- Ductless heating/cooling.
- Find a more energy efficient solution for my water tank and down the road I would be interested in installing solar panels on my roof.
- ground source heat pump, on demand hot water heating, solar.
- Have solar already - installed about same time. Any ideas to help would be appreciated. Thanx
- Hybrid heat pump furnace
- I did solar panels
- I have been rejected by two electric solar installers based on my. Hip roofs surface area, but. Would like to participate in solar utilization. Heat pump hot water, or solar hot water generation, Geothermal heating or cooling, and have had a proposal for ductless cooling, secondary heating system, cost have curtailed its instillation.
- "I would like to install insulation in the attic and basement of this house. I can't do that without a decent incentive structure to assist financing.
- I also would like to install solar on this house. Haven't found a good deal on that yet."
- I would like to replace the original single pane windows.
- If I had to do it all over again, I would consider a deeper retrofit of an existing house, including hard insulation on the outside, better attic ventilation; some means of cooling the house other than conventional AC; back up heating system, solar hot water, use of grey water; cold storage in the basement....
- Improved windows, solar
- Increase the insulation of the house, replace windows where we can. Install a solar water heater to the house.
- Install more insulation.
- insulate the walls, install small windmills, change some old windows to new efficient windows.
- Insulation and a new furnace in another property
- Maybe insulation.
- More insulation work and solar panels.
- Need to replace all windows on main floor, have to cover them with plastic to keep out the cold.
- New windows. I have 56 windows and can't afford to replace them.
- none
- None
- None
- Not sure.
- Nothing at the moment. Just prior to the replacement of the ancient boiler, the installation of insulation, and the removal of asbestos we replaced the gas hot water heating tank. After the work was completed with the heating system we purchased a new, more efficient gas dryer.



- Oil to gas conversion, energy saving windows
- Outdoor space
- Pellet Stove. I have oil heat which is very expensive. New hot water system, may solar or heat pump.
- Possibly install solar energy panels
- Possibly insulation.
- Reevaluation of insulation under sunroom, and in attic, in kitchen and bathroom area.
- Replace siding, and delead back porch.
- Replace the remainder of my inefficient windows.
- Replace the roofing structure and windows
- Replace very old air conditioning central units. Add insulation, new appliances
- Replace windows
- Replace windows
- Replace windows
- Replacement energy efficient windows
- Replacement windows
- Replacement windows and doors. Possibly Solar.
- Replacement windows; Insulation.
- Review of current insulation and upgrade if possible. Also new energy efficient windows
- Roofing, windows
- Roofing, Windows, and insulation
- Solar
- Solar
- Solar
- Solar Domestic Hot Water
- Solar heating,
- Solar maybe
- Solar or wind
- Solar panels
- Solar panels or other means to reduce the cost of electricity
- Solar.
- Split ductless heat/air
- Spray in insulation in the attic?
- Tankless water heater- Mine is over 12 years old, a GE tank heater, that will most likely blow up in the next year. Due to financial restrictions, this is unfeasible at this time though, as I am trying to complete my graduate degree, which I have been in the program for 10 years, and it is very costly.
- Water heater
- Water heater change. Gas stove to heat living area without heating rest of house, and for use when electricity fails.
- We don't have any at the moment.
- Window's and door's washing dryer
- Windows, storm door
- Would love to go solar, but not enough roof space in correct positions to make it feasible.