

Resilient Homes (Phase 2): The Timperley Green Homes trial on methods to motivate home-owners to address property-level effects of climate change

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Executive Summary

Background and Set-up

Until recently, the UK Government has relied on a combination of strategic legislation, national public information campaigns, and targeted funding and subsidies to help home-owners address the effects of climate change. This has almost exclusively encouraged the take-up of mitigation measures (action to reduce the likelihood of severe impacts of global warming) and the conservation of energy consumption in particular. In contrast, the messages about adaptation measures (action to cope with the inevitable impacts of global warming), and flood prevention in particular, has been concentrated on specific areas where work has been done to establish a high risk to land and property. Compared to energy conservation, there have been fewer resources directed at motivating the public to adapt their properties in this area. However, individuals are increasingly being seen by policymakers as needing to take personal responsibility to protect their dwellings against the effects of flooding. This report conveys the results from a trial in Timperley (in west Manchester), which has proved to be highly informative in establishing the mix of influencing strategies that public bodies will need to employ in order to motivate householders to respond effectively to future climate change campaigns.

Attitudinal studies commissioned by the Agency and carried out by the University of Salford team¹ have previously showed that residents would respond positively to incentive schemes that encourage them to purchase energy-saving and flood protection measures for their homes. The non-cash incentives that were offered to the residents were selected not only to change the context of their decision, but also to boost local economies and move home owners to more sustainable behaviour such as healthy eating, greater use of public transport, higher skills attainment and sustainable improvements to gardens.

In response to this work, the Environment Agency requested that a small scale trial be mounted to show how a reward scheme would work in practice. Householders were offered a 100% return on investment in the form of the non-cash rewards that were tested in the attitudinal study. The 50 houses in the study area were assessed by the Environment Agency to be under a moderate or significant risk of flooding and did not have an organised green community presence when the programme started.

¹ (see http://www.sobe.salford.ac.uk/data/assets/pdf_file/0019/9622/report_FINAL_160909.pdf for full report)

The trial strategy included two other elements. The first was the use of a green community group to instil an understanding that the area was beginning to organise to promote pro-environmental issues. The other was the supply of information and assistance at optimum points in the decision-making process for each householder. These three elements; incentives, optimum information, and norm-based community-level influences were adopted to fit the theoretical model that was developed by Salford with reference to the Theory of Reasoned Action. The trial set out to test whether this multi-strand strategy that engaged with or circumvented many of the barriers to decision-making could be successful.

Conclusions

Confirmation of attitudes

The answers to the attitudinal survey for the trial showed a marked similarity to the earlier work carried out by the Salford team. Significantly, 82% of respondents were aware that their houses were in a flood risk area, precisely the same proportion that acknowledged this in the survey of England and Wales in 2009. The 80% of the respondents in Timperley that felt that the chances of their houses being flooded are low or very low compared very well to the 78% who gave the same answer for the larger study. This confirms assumptions that prompted the work on the trail; that impersonal and understated education and awareness campaigns are unlikely to overcome strongly held beliefs by many householders that there is no credible impending threat to their property from flooding.

The Timperley sample was also as attracted to taking advantage of non-cash rewards as other respondents. While there was a significant number of people in Timperley that were prepared to spend some money on their measures (72%) the trial found that for many residents, the amount they needed to spend (even knowing they would receive this back in rewards) was prohibitive. The statistical median value for the expenditure range that the residents were willing to make on installing flood protection measures was £100 - £500 and £500 - £1000 for energy saving. These sums would fall short of the investment needed to achieve recommended standards for the average house.

The nature and timing of information

The lessons from the Timperley study show that it is not necessarily the content of information sources, or even presentation that is significant in motivating retrofit investment. Rather, the timing, tailoring, and the source of the information appeared to be the crucial aspects. The Salford team identified three potential key

intervention points when attempting to motivate property-level investment. These were:

- Information at the point of decision on whether to allow surveyors into the house
- Information at the point of decision on whether to take up some or all of the surveyor's recommendations
- Information on how to behave differently once the measures have been obtained.

The study found that face-to-face interaction with householders is an essential component, but that interventions need to be timed to meet householder needs. This suggests that programmes that plan for standard contact points will often fail to engage householders who have different needs at different times. For suppliers involved in delivering the Green Deal, this finding could have significant cost implications. Commissioning bodies would do well to ensure that suppliers have factored sufficient contact time into their delivery programmes to accommodate this tendency.

A further finding was that the strategies employed in the trial lead to a significant number (around half of all participating households) allowing survey teams through their doors. The Salford team concluded that time spent talking to householders on their own property, offering tailored information (in response to questions) from a trusted source, and with the promise of rewards that capture the imagination was an effective tactic that overcame doubts about the proposition. The information in the questionnaire, listing as it did all of the common interventions for energy and flooding, seemed to help residents to understand the nature of the request and led many to move to the next stage.

The second decision point, choosing to act on the report recommendations, was facilitated by a hand delivered copy of the report, and a brief face-to-face explanation of its contents. This was supplemented by follow-up telephone calls to those who were slower to make up their minds. The evidence at this stage is that those who opted to purchase measures were probably already convinced that they wanted energy saving products either through the early interactions with the co-ordinator, or by talking to the energy surveyor who also spent time answering residents questions while on the premises. Persuasion beyond this point was more difficult, probably because the technical and financial barriers were beyond the abilities of the co-ordinator to overcome. However, it is conceivable; even likely, that there will be residents in future programmes who will need encouragement to read/re-read their reports and make a decision, possibly with supplementary advice from their trusted source of information.

The issue of trust was also raised by some residents who commented that being approached by a community group with University backing reassured them that there was no commercial ‘catch’ to the scheme. Nevertheless, one resident reported that he still heard other residents say they were suspicious of the scheme because they had been repeatedly approached by energy companies asking them to switch providers or convince them to buy energy saving products and this had made them defensive.

The issue of cost and preparedness to pay

The price of measures, particularly for flood protection products, was not anticipated to be a significant barrier at the start of the project. However, this proved to be a serious factor for the minority of residents who overcame all other de-motivations up to the point of purchase.

The survey findings showed that 72% of respondents said they would be prepared to pay between £100 and £500 for flood protection measures. The estimate for door and air brick protection prior to start of the trial was between £1,500 and £2,000. Those residents that went on to request a contractor visit to provide a quote for supplying and (where appropriate) fitting the products were offered prices in the range of £2,500 to £3,000. Most of the residents who were considering flood protection were dissuaded from moving to the final stage when they saw the survey estimates, and the rest declined to place an order when the contractor estimates arrived. All said that they did not have that amount of disposable income to invest, despite knowing that the non-cash rewards would represent 100% compensation for their outlay.

Some residents linked the high perceived cost and the low perceived risk as a reason for declining to act on the flood survey recommendations. Others said that there was a lack of evidence that flooding was a serious threat while some put their faith on the engineering work carried out by the Environment Agency and United Utilities in the local area.

Connecting these responses to the five questions derived from the Theory of Reasoned Action it is apparent that, while many said they understood there was a problem (from climate change producing heavier and more frequent downpours) that could lead to flooding, none of the other four conditions for behaviour change were met. There was a distinct lack of understanding about what to do about protecting their houses and the lack of urgency to act suggested minimal emotional investment in the issue. The lack of belief that acting would make a difference and the absence of evidence that anyone else was acting in this manner meant that there were too few positive influencing factors for the strategy to encourage, and too many negative factors to work around.

The factors that worked against the acceptance to buy energy measures included a perception that the cost of energy saving measures was prohibitive, and a belief (against the surveyor's finding) that the measures the resident had in place were sufficient. Another reason for declining the offer was the disturbance that would be caused from (for example) moving possessions out of the loft space, or the mess caused by cavity wall insulation work.

Many people who were prepared to consider energy measures did so because they thought that they felt would reap financial benefits in the future. There was no corresponding belief that investment in flood protection would produce similar benefits. The implications for the government regarding the cost of flood measures are considerable. The government's new policy approach to flood defence funding is to invite a wider circle of stakeholders (or beneficiaries) including local authorities and the private sector to share the cost of flood protection. While this will potentially help government money go further and hence lead to the protection of more flood-threatened areas, a considerable amount of work will need to be done with communities on awareness and the understanding of flood risks before householders will be persuaded to invest in their houses.

The availability of time to consider the proposition

Some residents who declined to participate in the door-to-door questionnaire, and others who failed to respond to their survey reports said that they could not spare the time to get involved in the project. While some may have used this response to avoid becoming involved in something that did not interest them, those who said they were interested in climate change and were prepared to participate in the project found that other matters were more pressing. A few were motivated to select measures and install them without the assistance of the programme thus avoiding the need to wait for contractors. Others said that they were positively influenced by their interaction with the project and would, if time allowed, consider improving their homes in the near future using the recommended measures in their report as a guide.

The difficulty in overcoming resistance in time-poor households is a perennial problem for many public policies that require the public to divert away from their normal activities in order to assimilate the message and (hopefully) change their behaviour accordingly. The offer of incentives appears to have had the ability to attract, or at least intrigue some residents and draw them into the next phase of the project. The 50% acceptance of home surveys provides some encouragement to strategists considering how to improve access for future programmes such as the Green Deal.

The value of intrinsically sustainable rewards

The trial in Timperley relied largely on offering all the rewards tested in the attitudinal work in 2009. Only furniture refurbishment and beauty sessions (offered as a suggestion by Salford College) were added to the Timperley list. There was no apparent dissatisfaction with the fact that all of the non-cash rewards had some kind of intrinsic sustainable value. Once again fruit and vegetable vouchers were the most popular choice both in the attitudinal work and in the take-up of rewards after purchases were made. Residents implied that this was an easy choice as it was a constant need and saved them money.

The significance of collective community action

The Salford academic team chose Action for Sustainable Living (AfSL) as their delivery body for a number of reasons. In previous surveys the team found that residents were willing to speak to people who lived relatively locally and did not give the impression that they had any motive other than to help the University team to make the trial a success. In addition, the majority of Timperley residents said they would be interested in attending a 'green' community meeting. The combination of AfSL involvement and the impression that there were plans to start a local group was designed to provide an indication that there was pro-environmental activity in the area and that acting in this way would not be a lone activity.

The Future of Property-level Flood Protection Policy

The results of the Timperley Green Homes Trial suggest that policy-makers should consider how they can build all three strategies (better information, incentives, and community-level activity) recommended by the Salford team into future campaigns aimed at home-owners. The cost of flood protection measures for homeowners will need to come down either through incentivisation or through some kind of market intervention in the same way that some basic (insulation) measures schemes have used private sector funding to bring down the cost of energy saving measures. More work needs to be done to work with communities and encourage the formation community flood groups well before floods cause damage to property and loss of life. In some locations, the Environment Agency has found it difficult to motivate residents to commit themselves to these groups because people do not consider that it is worth the devoting the time to an issue they perceive as being a remote possibility.

Finally, the timing and nature of advice to residents about the threat of flooding and the action required to alleviate this will need to be re-visited as there is very little evidence that the material being distributed to date is having a demonstrable

effect on motivating the recipients to invest in their homes. Two elements of this could be improved. First, the range and accessibility of products must be better explained and (preferably) shown to residents. Secondly, the likelihood and potential impact of a flood event needs to be communicated in a more graphic and memorable manner. Clearly a balance needs to be struck between making residents concerned enough to act, and the possibility of driving people out of the area and blighting neighbourhoods. However, the approach that has been taken to date leaves residents vulnerable because of their under-perception of the risks and an over-confidence in civil protection schemes.

1.0 Introduction

1.1 Background

Until recently, the UK Government has relied on a combination of strategic legislation, public information in national campaigns, and targeted funding and subsidies to help home-owners address the effect of climate change. This has almost exclusively emphasised mitigation measures (action to reduce the likelihood of severe impacts of global warming) and the conservation of energy consumption in particular. The Climate Change Act 2008 placed legally binding limits on greenhouse gas emissions and it has been identified that individual members of the public need to reduce their carbon emissions in order to achieve these targets (HM Government 2006). There have been a number of public and private sector campaigns seeking to motivate the public to use less energy at home (Boardman 2004; Ofgem 2008). Yet, despite government messages, many millions of homes in the UK are not energy-efficient due to absent or minimal insulation and inefficient heaters and appliances (DECC 2010a). The most recent strategy relies on householders accepting measures at no cost, and then agreeing to ‘pay as they save’ over a number of years until the debt is recovered. This Green Deal is due to be offered nationwide in 2012.

In comparison to these mitigation measures, information designed to motivate the take-up of adaptation measures (action to cope with the inevitable impacts of global warming), and flood prevention in particular, has been directed at specific areas deemed to be at risk by the Environment Agency and Local Authorities. Compared to energy conservation, there have been fewer resources devoted to this policy objective. However, individuals are increasingly being seen by policymakers as needing to take personal responsibility to protect their dwellings against the effects of flooding (Pitt 2008). In *Making Space for Water*, the government (DEFRA 2004) shifted its stance away from a central responsibility to protect property, and towards one in which other organisations and individuals take a more prominent role (Johnson and Priest 2008).

The Resilient Homes programme was instigated by the Environment Agency of England and Wales in 2009 to understand how to engage with neighbourhood groups in ways that would persuade them to understand and act upon the threats from climate change on their properties and their lives. Part of this initiative was devoted to testing an innovative incentivisation programme which was undertaken by Salford University and the local authorities of Salford City Council and (later) Trafford Borough Council. The programme was designed to investigate the preparedness of householders in England and Wales to install and pay for energy

conservation and flood-protection measures for their homes. It tested attitudes to their awareness of climate change and its impacts, their stated levels of responsibility for taking action, and their knowledge of what to do to protect their houses. Having established clear attitudinal tendencies towards personal responsibility and the ability to be motivated by incentives, the project undertook a trial in a flood-threatened neighbourhood in Timperley, western Greater Manchester. This report conveys the results from this trial which have proved to be highly informative in establishing the mix of influences that public bodies will need to introduce into future climate change campaigns in order to motivate the owners of property to retrofit in response to climate change.

1.2 Revisiting Phase 1: attitudes to investing in property-level measures

The Salford team reported their earlier findings in a full report (Bichard and Kazmierczak 2009) to the Environment Agency in 2009.

(http://admin.cms.salford.ac.uk/_data/assets/pdf_file/0019/9622/report_FIN_AL_160909.pdf).

The work covered attitudes to climate change and the response to treating existing houses (or retrofitting) to make them better prepared for the effects of global warming). A number of groups were approached for their views including tenants in social housing, social and private landlords, and owner-occupiers. An international review of the ways that other countries inform residents about the threat of climate change was also carried out.

The two surveys from the 2009 work most relevant to this report were carried out to test owner-occupiers on their attitudes to climate change and their home. Each survey asked householders the same set of questions to determine how well informed residents were about the threat of climate change, and whether they considered that it was their responsibility to protect their homes against damage caused by global warming. The residents were asked about their awareness of the energy and flood-prevention measures that they could take, and how much they would pay to fit these measures in their homes. Finally, they were asked about their interest in receiving non-cash rewards in return for investing in the energy and flood measures.

One of the surveys was conducted door to door and canvassed 100 people in urban areas of Salford, some of whom lived in very deprived areas. The other survey contacted 1,043 people living in flood risk areas in England and Wales by telephone. The responses from the national survey results were very similar to those gained from Salford, although there were some significant differences. Just

40% of the Salford participants said they had double glazed windows compared to 85% of the England and Wales sample. Larger numbers in Salford were willing to accept non-cash rewards in return for investing in climate change mitigation and adaptation (75% compared to about 60% in the wider survey). However, of those 60%, the majority said they would accept rewards up to 100% of their investment compared to up to 200% in Salford. These differences are likely to have arisen as a result of the higher numbers of people on low income in the Salford sample.

Analysis of differences in answers from the telephone survey respondents across four different social grades indicated that people from higher income households were more aware of their contribution to climate change and the possibility to make a difference. Those belonging to lower-income socio-economic grades were more concerned about the effects of climate change, including flooding.

The respondents who had previously experienced flooding were more concerned about climate change and more likely to have undertaken precautionary measures such as subscribing to Floodline Warnings Direct or buying flood insurance. They also had more interest in installing flood resistance and resilience measures compared to those who had not been flooded before. However, more respondents who had been previously flooded also thought that responsibility for the protection of their houses rested with the government. Finally, higher awareness of climate change also led to householders being more willing to spend more money to protect their houses.

The results showed that, in terms of the flood protection measures that householders would consider for their houses, raising electrical fixtures and installing airbrick covers and door guards were seen as the most appealing, while tiled flooring was the least popular option. Less than 50% of the residents said they had the full range of loft insulation, wall insulation, double glazing, an efficient boiler and energy-saving appliances. Energy-saving appliances and energy-efficient boilers were top of the list of things that the householders would consider buying in the future. Just under half of the respondents said they would not be willing to invest anything towards flood-protection and energy-saving improvements. However, nearly a quarter of the respondents would invest at least £500.

The most popular non-cash rewards for investing in flood protection or energy-saving were vouchers for fruit and vegetables (51.7% of positive answers), followed by free meals at restaurants (44.2%), tickets for entertainment (33%) and vouchers for leisure and health centres (27%). The least popular reward was free public transport. One possible explanation for this is that people over 60 are given free access to bus services, and large proportion of people in this age group own their own homes. However, it is also possible that access to free public transport is simply not an attractive incentive to the majority of owner-occupiers. Nearly half

of the respondents said they would participate in a reward scheme should it be offered in their area.

The most important recommendations from this first phase of the research were:

- There is a need for a climate change strategy which is aimed at householders and promotes prompt action to make physical changes to the fabric of their premises.
- The social psychology literature and attitudinal surveys carried out for this study supports the proposition that reward-based incentive schemes will motivate many householders to purchase energy-saving and flood-protection measures for their homes.
- Carefully selected non-cash incentives that can boost local economies, help develop communities and aid delivery of current governmental campaigns.
- People with little disposable income should be eligible to receive flood protection grants.
- Innovative awareness-raising and education programmes should not be pursued to the exclusion of community-level discussions and debates using local leaders and motivators.

1.3 Background to Phase 2 - the Trial

The results of the Phase 1 work were presented to the Environment Agency in July 2009, prompting a discussion about how the attitudinal work could be translated into policy. The report presented clear evidence that an incentive scheme based on non-cash rewards could be successful. However, this had to be balanced against the usual caution about attitudinal work. It is often the case that there is a gap between what people say they would do in answer to a survey question, and what they would actually do when faced with a decision. This is particularly true when the decision requires respondents to spend their own money.

The Environment Agency concluded that there was merit in the proposition, but that a limited 'proof of concept' trial needed to be mounted to show that householders could be persuaded to buy energy or flood measures in response to an offer of a reward. It was agreed that the Salford team would design a pilot directed at a limited number of streets in a flood-threatened area. It was not possible to return to the previous study area of East Salford due to the low numbers of owner-occupiers in the flood-threatened areas of the city. In addition, those who owned their houses in this area were predominantly over the age of 60 which would have limited the ability to test the concept across a demographic

range. It also had ramifications for the reward offer as public transport is already free to the over-60s in England.

2.0 Developments in the behaviour change and policy contexts

2.1 Recent influences on the theoretical basis of the study

In their 2009 report, the Salford team set out the theoretical basis for a strategy that would motivate home-owners to respond to the threats caused by climate change. The report explained that fact-based campaigns aimed at changing people's behaviour by influencing rational cognitive processes were not effective because behaviour does not change as a result of knowing more, and because there is no clear cause and effect connection between climate change and the actions required to address it. The report went on to say that 'while social norms (what other people do or are perceived to approve of) have a significant impact on the behaviour of individuals, this is dependent on an acute consciousness that the tide is turning and that new behaviour has become commonplace' (Bichard and Kazmierczack 2009).

The report also covered the range of motivational options for policy-makers including financial disincentives such as higher energy prices. These were considered to be easily applied but were also inequitable to low income households. In the UK for example, the introduction of energy-use taxes would significantly increase the problem of fuel poverty unless complex countermeasures were introduced to reverse this effect.

Cash-based incentives were reported to have mixed results for encouraging sustainable behaviour as they may either result in a "spill over" to other types of behaviour or, with equal probability, reduce the likelihood of engaging in other environmental behaviours unless more money is offered. However, the report concluded that the main reasons why direct financial reward may be counter-productive are the high cost of money-based schemes, and the lack of control over the goods and services that the participants will buy with the reward money. The report stated that 'spending could easily go towards more frequent flights to holiday destinations rather than more solar panels. Pay as you save energy schemes may be attractive to some, but those already concerned about high energy bills could worry that they will not be able to repay the debt incurred by accepting energy-saving measures. These schemes also rely on efficient energy management of the home, something that may not be achieved in some households (Bichard and Kazmierczack 2009).

Since the Salford report was published there has been a change of government. The incoming coalition administration has proposed the introduction of a scheme

whereby householders would accept the installation of energy-saving measures (primarily insulation) at no initial cost, and then pay off the debt over time with the money saved from lower fuel bills. The scheme, termed the Green Deal, is due to be introduced from 2012. The Salford team contends that, while the strategy that will be employed by the Green Deal may be effective and deserves to be presented to Britain's owner-occupiers, it may not appeal to those who doubt they need additional measures, or worry about the effect it will have on resale values, or are concerned about the debt they will incur. This is why the team has focused on testing whether non-cash incentive schemes may be employed to complement this and other strategies being considered by the government and the energy companies. The Salford work on attitudes suggests that, at worst, non-cash incentives with intrinsic sustainable value would have a neutral effect on the householder, but at best they could provide a positive motivation to respond to the threats of climate change while at the same time introducing sustainable products and services to householders.

For the next stage of the project, the Salford team chose to continue to rely on the theoretical work that stems from the Theory of Reasoned Action (Ajzen and Fishbein 1980). The Salford team relied on this work to explain the barriers that inhibit action in response to climate change and was summarised in the previous report into the following set of questions individuals ask themselves before acting:

- Do I understand that there is a problem?
- Do I care about the problem?
- Do I know what to do about the problem?
- Will my solution work or make a difference?
- What will others think of me if I act?

Since the report was published, the Salford University team continued to find work that linked back to the theory. For example, Grothmann and Patt's (2005: 203) theoretical model of private proactive adaptation to climate change drew from this and other literature in psychology and behavioural economics. Their model starts from the perspective of risk appraisal and the assessment of the probability and severity of impact. Only when the perceived threat exceeds a certain threshold does the individual carry out the adaptation appraisal, which includes an assessment of their belief in the effectiveness of the actions, the perceived ability to carry out the adaptive responses, and the perceived cost of the action. The individual then makes a decision based on a synthesis of this appraisal.

Similarly, Lamond and Proverbs (2009), based on a literature review of empirical studies, identified the mental steps that need to be completed by a resident living on a flood plain. Their pre-requisite for action included an awareness of the risk, the perception that the risk is sufficient to warrant action, and owning the problem rather than expecting an outside agency to solve it. Once this is achieved, the

person needs knowledge of the solution, resources to implement it, and a belief that the solution is effective and beneficial. Barriers to completion of these steps may be informational, financial or emotional (denial of risks; attribution of responsibility to others etc.).

Social psychologists explain (Swim et. al. 2009) that individual decisions about how to react to the threat of climate change are weighed against the likely impact on the life of the individual. The way people decide whether to act depends on the ability to process the following list of factors:

- Threat appraisal – what is the likelihood that the threat materialises?
- Coping appraisal - if the threat occurs, what is the severity of its impact and how long will this last?
- Affective responses – are there strong emotional responses to the threat and how will these affect the decision to act?
- Motivational processes - how much priority should be placed on acting in a timely manner?

Many of these questions are influenced by the amount of information people have been able to acquire and understand. It is also important to understand that people have different values and will look for solutions to threats from sources like climate change from different quarters. One way to see how this might work in a neighbourhood context is to consider research based on Maslow's hierarchy of human needs, which can be used to categorise the population into three main types of people (Rose, Dade and Scott 2007). These are:

- Inner directed 'pioneers' - pioneers like to meet challenging and intriguing people and connect through their own networks. They like to be associated with good causes where they can put their values into practice. Their reaction to threats is to do something about it themselves and they search for brands that bring new possibilities.
- Outer directed 'prospectors' - prospectors like to meet important people and connect through big brands and organisations. They like to be associated with success and don't like threats to the things that they have worked for. Their reaction to threats is to organise and they search for brands that make them feel good.
- Security driven 'settlers' - settlers like to meet people like themselves and people they know. They connect through clubs and family and like to be associated with tradition. Their reaction to a problem is to look for somebody do something about it and they search for brands that make them feel secure.

This evidence suggests that there are multiple influencers at work on householders confronted with a decision about investing in their homes. The Salford team was minded to continue to concentrate on two of these for the trial. These are ‘incentives’ and ‘norms’, sometimes referred to as ‘nudge’ and ‘think’ respectively (John et. al. 2009). The team wished to test whether these factors, combined with much more effective and targeted education and awareness efforts, would make a difference to householder behaviour. This was reinforced by another report released after the attitudinal work was completed. The Cabinet Office report ‘MINDSPACE’ argued that, in policy terms, it is very difficult to change people’s minds. However, with a well-designed strategy, it is possible to change the context within which people make decisions.

This selective incorporation of influencers could be said to offer only a partial approach to a more complex problem. However, the Salford team noted that Kollmuss and Agyeman (2002), who tried to produce a unified summary model of all the sociological and psychological behavioural theories, had to conclude that the answer to ‘what shapes pro-environmental behaviour is such a complex one that it cannot be visualized in one single framework or diagram’. They decided that ‘such a single diagram with all the factors that shape and influence behaviour would be so complicated that it would lose its practicality and probably even its meaning.’

2.2 The significance of targeted information

The Salford team gave more thought to the nature of information offered to householders in the trial design period. They found that Lorenzoni et al. (2007) concluded that information is inconsequential in behaviour change programmes compared to the list of other factors that lead to inaction, including a lack of understanding about the causes and consequences of climate change, scepticism about the information received, downplaying the immediacy and significance of the impacts of climate change, externalising responsibility and blame, reluctance to change lifestyles, and fatalism as reasons for inaction.

However, that is not to say that it has no place in an effective behaviour change strategy, and during the design of the pilot the Salford team used the learning from the attitude surveys which suggested that respondents who experienced face-to-face surveys found the examples of measures that were presented to them helpful when answering the questions. In other words, they had an immediate influence on their attitudes.

The team concluded that, for energy measures, the confusion was less associated with what to buy and more closely related to the priority that should be given to each intervention. An examples of this was the choice between increasing the

amount of loft insulation, or replacing one or more single glazed windows with more efficient glazing units. For flood measures, there was a general lack of understanding about any of the basic measures that could be applied to houses to make them either resistant or resilient to flood waters and (through the reluctance to invest adequately) an under-estimate of the implications of being flooded in their home.

This finding implies that policymakers have more work to do on basic education and awareness, but that if this is done to the exclusion of other influencing factors then it will still not be enough to sway homeowners to invest in their property. An additional and larger challenge for authorities is to overcome the barrier of homeowner's perceptions that they have already acted responsibly and sufficiently to the advice because they have either applied some measures to their house (energy), or think they have understood the threat and discounted its importance (flood). Homeowners may also believe the government is not serious about energy conservation because there is not enough evidence that others (such as companies and local government) are leading by example. This is why it is important, prior to any behavioural change measures being implemented, to understand people's baseline position. The Sustainable Development Commission (2010) explained this by stating that 'any intervention aimed at changing behaviour needs to start from an understanding of where people are (not where policymakers think they are) and take account of motivations and barriers while also recognising that people's acceptance of change is often dependent on how involved they feel they have been in the decision.'

While not employed in the trial, the team had considered some interesting work using specific fact-based tactics that appeared to have been very effective in motivating householders to invest in energy conservation measures. A PhD project carried out at Plymouth University used thermal images to prompt householders to change their energy-use behaviour (Pahl 2010). In one study, a small group of householders in Devon were shown thermal images of heat loss from their property. The graph below (Figure 2.1) indicates that after one year, the householders that were shown the thermal image had a much lower carbon footprint than households that were not shown these images.

A second study was carried out targeting Homebase customers who had never purchased a green product before. These householders were shown thermal images of their properties and were encouraged to install draught proofing. Figure 2.2 indicates that a higher percentage of householders who were shown a thermal image of their property went on to install draught-proofing, compared to those who were not.

The literature suggests that, whilst a majority of householders are aware that climate change is a serious issue, the potential consequences of the threats posed

by climate change seem to be underestimated and misunderstood. This, alongside the relationship between socio-demographic characteristics of people and their opinions, may have significant implications for each neighbourhood approached by a retrofit project. This evidence suggests that the nature and means of delivery of each education and awareness package needs to be tailored if it is to make an impression on its audience.

Figure 2.1

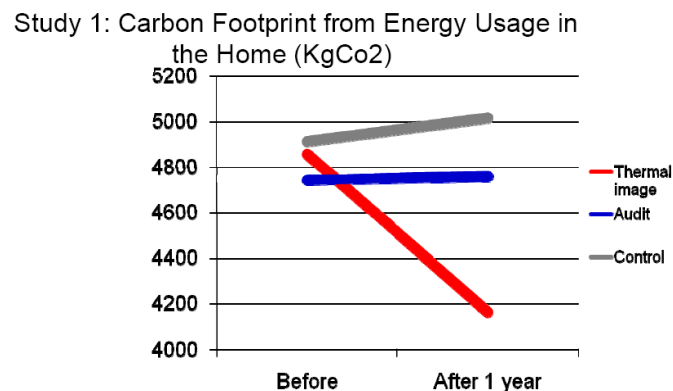
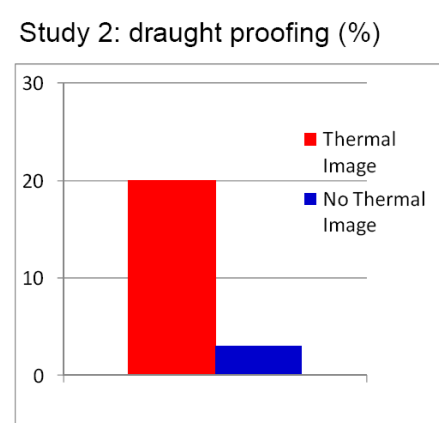


Figure 2.2



2.3 The importance of rewards

The Salford team was interested to see if there was any more that could be identified on the importance of incentives. The attitudinal study had shown very clearly that householders said they would be motivated by non-cash incentives. Kollmuss and Agyeman (2002) revealed that Fietkau and Kessel (1981) had used sociological as well as psychological factors to explain this influence. The work covered many of the variables considered by others including attitude and values, opportunities to take action, the feedback received in response to taking action, and knowledge. This research showed that 'behavioural incentives' can reinforce and support [pro-environmental] behaviour.

Smith et al. (2003) concluded that positive incentives can be used to stimulate a variety of behaviours, and can consolidate behaviour change. This work concludes that rewards are an operational concept for describing the positive value that an individual ascribes to an object, behavioural act or an internal physical state. Rewards can encourage learning, and positive emotions and are generally considered more effective than punishment in bringing about positive behaviour.

The team's interest in testing the effect of non-financial incentives was supported by these and other studies during the planning stage of the trial. It was recognised that, in the longer-term, a reliance on incentives is not desirable if it results in a

lack of proactive behaviour in the absence of a financial stimulus. However, non-cash incentives have the potential, in association with other tactics, to achieve two objectives. First, they are well suited to motivate once-in-a-while transactions (such as buying a new boiler or insulation) which does not require repeated behaviour. Secondly, they allow the resident to experience the benefits of the purchase without the need to be entirely convinced by the other arguments associated with climate change.

2.4 The significance of community influencers

The Salford team developed their understanding and their views on the importance of civic collaborative action as a motivator for individual householders. The 2009 Salford report cited the work of John et al. (2009) on the ‘think’ element which is associated with discussions between peers (neighbours and friends). This they argued, offered the potential to create a consensus around the need to support ‘green’ initiatives and to overcome doubts by listening to those convinced of the arguments to live a more sustainable life. Others say engagement can take place in the private or public sphere and in the form of socio-political participation (Hoppner and Whitmarsh 2011). This work argues that socio-political participation is important to stimulate people’s belief that they can make a difference. Private sphere actions include domestic energy conservation, walking or cycling to work, using public transport, reducing or recycling or reusing waste, food choices and purchasing environmental products. Public sphere actions include: voting, taking part in an environmental campaign, responding to policy consultation, joining community groups, etc.

The Salford team added to this evidence by looking at both academic and non-academic studies that sought to describe this effect in more depth. Some of the most detailed work was on deliberative and inclusionary procedures or DIPS, which include techniques such as citizens’ juries, consensus conferences, future search conferencing and round tables. Agyeman and Angus (2003) explain that ‘DIPS should also be seen as a challenge to the traditional incapacity in local government to embark on power, or control-sharing projects. DIPS are, by their very nature, processes and procedures aimed at opening up decision making; about making it more transparent and about hearing different perspectives’.

The use of locally based community organisers to interface with the residents was considered in the design of the pilot with reference to the recent Green Alliance report *New Times, New Connections* (Scott 2010). The report states that civic groups can have a vital mediating influence in articulating the climate change message within communities, and their value is often repeated in case studies carried out to date. The report opines that ‘it’s not possible to crack climate change

without reinvigorating civic responsibility. We'll never be able to make our lifestyles more sustainable without the social cohesion that makes it feel good to be doing these things as part of something bigger.' In general, the assumption is that civic groups are made up of people from the community who are more likely to be more trusted by the people they are trying to influence than (for example) energy companies or the council. However, a further, less obvious, benefit of relying on civic groups as climate change intermediaries lies in their staying power. The Green Alliance report explains this by saying that 'the on-going interaction also means that behaviours are more likely to be sustained over the long-term, as they benefit from collective support and positive reinforcement.'

The Salford team concluded that investing in community groups to facilitate retrofit work was important for two reasons. First, the people that make up community groups are the most likely trusted messenger/persuader on the door step or at community gatherings. Secondly, community groups will be active in the neighbourhood long after the retrofit teams have departed. The introduction of energy-saving measures is unlikely to work to their potential without the perpetuation of the mindset that helped them to be adopted in the first place. Any community group, regardless of its core purpose (faith, arts, sports, single issue campaign etc.) has the potential to influence incentive-driven behaviour and convert this into longer-term habitual behaviour provided the group can be persuaded of the merits of the cause and has the capacity and resources to deliver the message to the neighbourhood or stakeholder group. Community action can provide the visual cues that respondents in surveys complain they are missing in their area. This may begin with changes in purchasing behaviour, and later cascade into lifestyle choices.

It is therefore likely that a mix of different strategies, including community organisation, will need to be employed in order to accelerate the rate of change necessary for wholesale adoption of sustainable measures in the home. This view is supported by a number of workers investigating the role of behaviour change in the field of energy consumption. A report to government by the Committee on Climate Change (Guy 2009) stated that there was 'not one but a multiplicity of ways to encourage behaviour change confirming the need for packages of mutually supporting measures which target behaviour at a number of different levels – structural, social and psychological.' The Green Alliance report *Bringing it Home* (Phillips and Rowley 2011) on ways that government can help people live more sustainably through a better understanding of human behaviour concludes that 'the heterogeneity of individuals and groups within society...means there will be different reactions to any one policy. This suggests an array of interventions is required... to embed behaviour change comprehensively across the society.' The report goes on to say that the 'successful initiatives are likely to need all the policy tools available; a mix of well-designed information, incentives, regulation services and nudges to encourage the desired actions and outcomes.'

Within this widely held view of adopting a diverse range of approaches, the significance of community-based networks and face-to-face approaches to change behaviour is a recurring theme. An evaluation of the DEFRA Environmental Action Fund highlighted that settings where a trusted source provides face-to-face support were particularly effective at facilitating behaviour change and that peer-based learning is especially powerful. There are also references to individuals working within green community groups that were set up to attract grants to install alternative energy generation. Housing co-operatives and some Transition Towns groups have also engaged residents in procurement circles or energy conservation drives.

2.5 Flood-protection measures

The major imperatives for investing in more effective flood protection were set out in the Pitt Review of 2008. The issue recently has not been about whether there is merit in this activity, but how the cost of adaptation can be covered in a timely manner, and how individual householders can be engaged when neighbourhood level protection is unfeasible.

Whitmarsh and colleagues (2011) state that despite the clear implications of climate change mitigation and adaptation for individual values, choices and behaviours, public engagement is currently limited. Benyon (2011) states that while the Government says that protecting homes from the threat of flooding and coastal erosion is incredibly important, schemes which will contribute the most in terms of protection to households and economic benefit per pound have been prioritised (Benyon 2011). This suggests that many homes will be left un-protected unless they are encouraged to purchase property-level measures.

The UK Government recently announced a change in the way civic flood defence schemes will be funded (DEFRA 2011). DEFRA has calculated that the economic benefit that an average householder can expect as a result of civil works in their area is £30,000 per household. This figure is based on insurance claim data as well as evidence from the floods in 2007. This information could be helpful in future communication with householders providing there is additional work on the acceptance of the level of risk.

In addition, a recent report on climate change highlighted that people's knowledge and awareness of climate change is often improved by having experienced recent severe events such as storms or flooding (Zsamboky et al. 2011). It further suggests that people can protect themselves and their property against climate change by taking into account impacts of climate change such as heat waves,

drought and flooding when deciding house location or how to renovate existing buildings to make them more resilient. The attitudinal work that was done in Phase 1 and other studies suggests that, while those who have experienced flooding are likely to be more interested in protection measures, it does not necessarily mean that they will act upon their interest.

3.0 Background to the study

3.1 Project aim and objectives

The trial designed to test the attitudinal work carried out as Phase 1 of the study was re-named Timperley Green Homes in order to tag it more directly to the community. The trial period started in September 2010 and ended in June 2011. The initiative was part of the wider group of Phase 2 projects under the Environment Agency's 'Resilient Homes' initiative that commenced in January 2009. Timperley lies within the administrative boundaries of Trafford Borough Council in the west of the Greater Manchester conurbation and the Authority was joint funder with the Environment Agency for the study.

After reviewing the findings from Phase 1, the Environment Agency was concerned to know if the attitudes expressed by the respondents would be converted into decisive action, and in what proportions. Rather than go directly to a roll-out pilot, the Agency asked Salford University to design a small scale trial for about 12 households as a 'proof of concept' study to show how a reward scheme could work in practice. Timperley Green Homes was designed to offer non-cash rewards and assess the reasons that householders gave for either accepting or refusing the incentives.

The trial was designed in three parts. First, residents would be contacted in the same way as the house-to-house survey in neighbouring Salford during Phase 1. The same attitudinal questionnaire was put to participating households testing their attitudes toward climate change, attribution of responsibility, and interest in investing in property-level measures as well as their interest in the non-cash rewards. An additional question about their interest in joining a local green community group was added at this stage. Next, the residents who expressed interest in participating in the reward scheme were contacted and a combined flood and energy survey of their home was organised. Finally, a report with recommendations for energy and flood measures was produced along with a list of rewards, and the residents were then invited to purchase some or all of the measures in return for rewards valued at the same amount as their expenditure.

3.2 The study area of Timperley

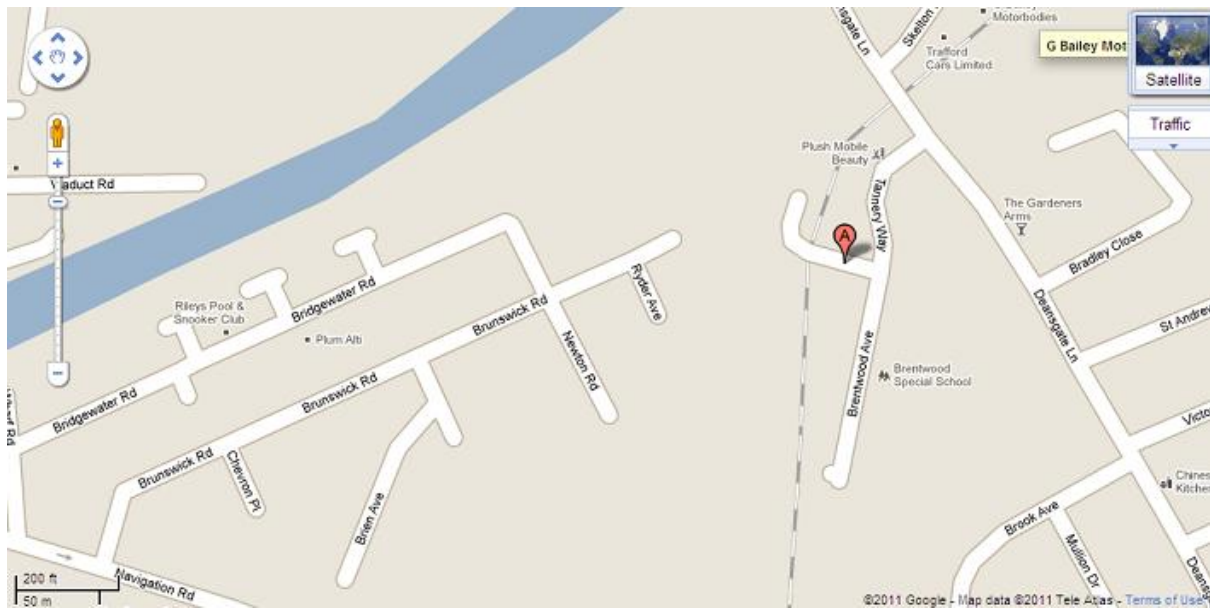
3.2.1 Flood threats to the area

The town of Timperley is located in Altrincham in Northwest England. The name Timperley has been derived from the term Timber Leah, the Anglo-Saxon term for a 'clearing in a wood'. Ronald (1996) states that Timperley was originally a small feudal settlement and over the centuries it has transformed into a bustling and densely populated dormitory suburb.

The project location criteria included an area of mixed residential architecture and residents predominantly in the mid-range income bracket across a broad demographic spread. The area also needed to be classed as either a significant or moderate flood risk. Part of the area north of Altrincham town centre fits these criteria and a number of streets close to the Navigation Road tram station were selected including Houldsworth Avenue (22 houses), Brentwood Avenue (24 houses), Tannery Way (18 houses), Bradley Close (35 houses), Deansgate Lane (19 houses), Ryder Avenue (10 houses), Brunswick Road (39 houses), Brien Avenue (7 houses), Bridgewater Road (8 houses), Lampton Close (12 houses) and Newton Road (17 houses).

Most of the houses around this area are semi-detached. Figure 3.1 shows the location of the target streets within the search area. The Bridgewater Canal is the larger watercourse, while Timperley Brook is shown as a dashed line. The road marked as 'A' is Houldsworth Avenue, one of the streets at the highest risk of flooding. The houses that are considered for the project were categorised under three output areas: Trafford 020A; Trafford 023 and Trafford 024 as determined by the Neighbourhood Statistics Office. Trafford 020A area covers the houses that are located in Houldsworth Avenue, Brentwood Avenue, Tannery Way, Bradley Close and some houses in Deansgate Lane (Office for National Statistics 2010). The remaining houses in Deansgate Lane fall under Trafford 023. The Trafford 020A area covers the houses in Ryder Avenue, Brunswick Road, Brien Avenue, Bridgewater Road, Lampton Close and Newton Road.

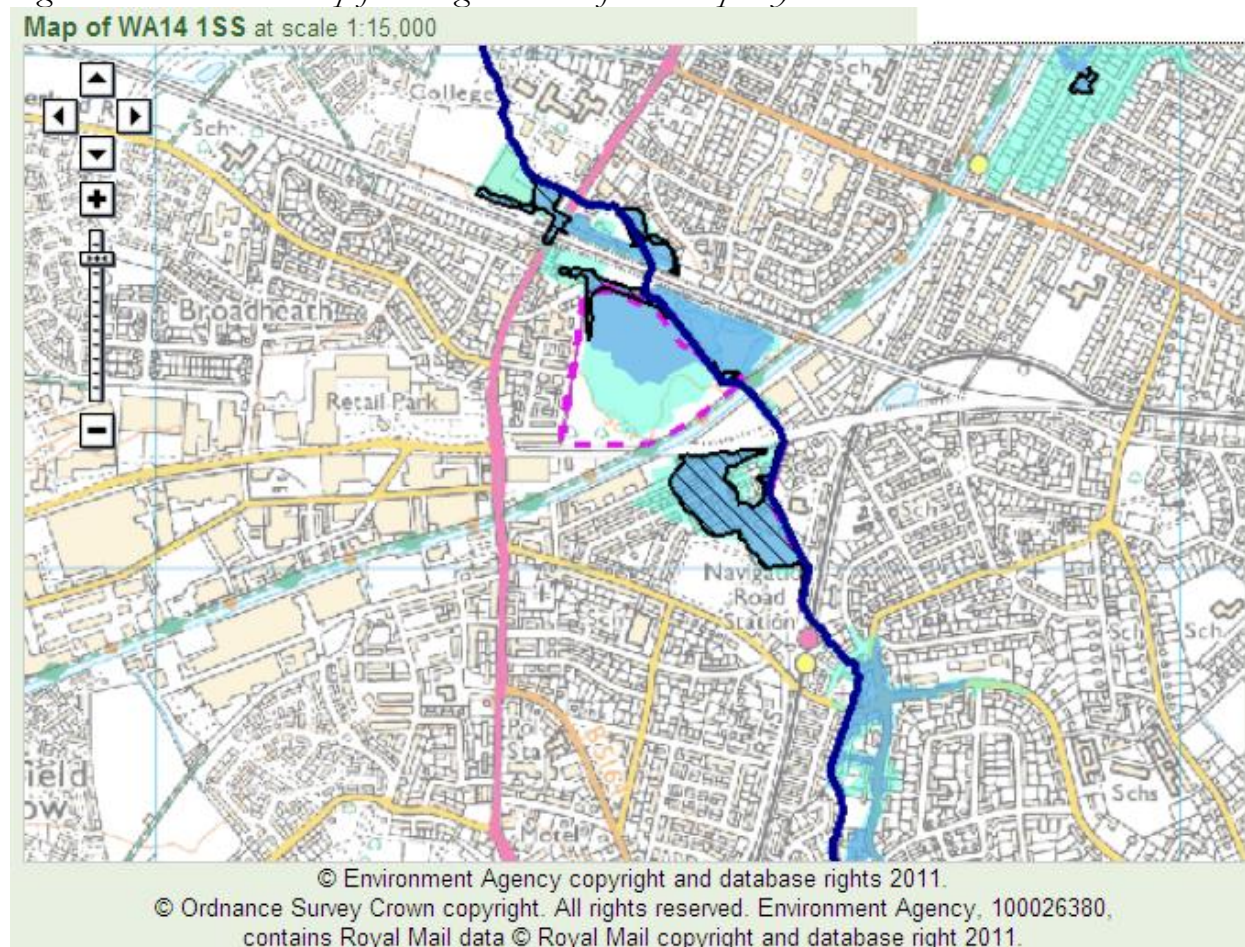
Figure 3.1: location map of selected streets (source: Google Maps)



The National Flood Risk Assessment 2008 (cited Environment Agency 2009) stated that about 2.4 million properties are at risk of river and coastal flooding in England and Wales. For Timperley, the threat is primarily assessed to be from Timperley Brook which runs close to Houldsworth Avenue. Timperley Brook has been listed by the Environment Agency as a possible ordinary watercourse that has the potential to flood. The shaded area in Figure 3.2 shows the extent of potential flooding in the area, while the hatched area contains the extent of the study area for the pilot. The land around Houldsworth Avenue is assessed to be at 'significant' (1 in 75 years) risk of flooding. The remainder of the study areas is assessed by the Agency to be at 'moderate' (1 in 200 years) risk of flooding. The Environment Agency has contacted all of the houses in the areas to notify them of the threat, and made it known that they can join the free Floodline Direct warning service.

The Agency has invested in civil containment works in and around the Brook, most recently in 2007. This included the construction of a retention tank near Navigation Road to reduce the chances of flooding in the event of excessive rain or rising river water. At this time, the Brook was cleared of rubbish and the embankments were strengthened. The work probably resulted in a reduction in the 'significant' flood footprint for the area although there was no assessment at that time to confirm the precise forecasted effect of the work. However, many residents remembered the flood of 1981, and parts of the area are often flooded when heavy rain inundates drainage systems filling the cellars of some houses.

Figure 3.2: Flood risk map for navigation area from Timperley Brook



3.2.2 Housing type environment

The 2001 April Census showed that there were 4,233 households in Timperley ward, of which 4,026 were houses or bungalows and 207 were flats, maisonettes or apartments. The vacancy rate was a less than 3% in 2001, considerably lower than the North West average of 4.6%. The tenure mix of the Borough (*Table 3.1*) shows a similar range to the national number. The Office for National Statistics shows that Timperley houses are 95% owner-occupied or privately rented, with just 4% of properties owned by social landlords.

Table 3.1: Dwellings by tenure, April 2009

Description	Trafford	England
Owner-occupied/privately rented	83.7%	81.9%
Local authority	0.0%	8.1%
Registered social landlord	16.3%	9.7%
Other public sector	0.0%	0.3%

The dwelling stock by council tax band (*Table 3.2*) shows that the range is again similar to the national average except for a lower than average distribution of Band A properties (19.5% against 25% for England).

Table 3.2: Dwelling Stock by Council Tax band, 2009

Dwelling stock by council tax band	Trafford	England
Band A	19.47%	24.99%
Band B	21.36%	19.51%
Band C	26.7%	21.71%
Band D	15.03%	15.28%
Band E	7.78%	9.44%
Band F	4.48%	4.99%
Band G	4.26%	3.52%
Band H	0.93%	0.56%

Some streets have consistent architecture while others are mixed structures. For example, the houses in Houldsworth Avenue are arranged in a close and are semi-detached whereas Brentwood Avenue has terraced houses within limited garden areas. Brunswick Road, Brien Avenue and Newton Road have mixed terraced and semi-detached houses, while Ryder Avenue and Lampton Avenue mainly have semi-detached houses.

3.2.3 People and their status

Although it is not possible to directly allocate social grade using Census information, the Market Research Society has developed a method for using this data to segment the population. The approximated social grades for Timperley ward and other areas are listed in Table 3.3. The data shows that the whole of Timperley ward contains a higher than average number of more affluent people, and a correspondingly lower amount of people without jobs and on benefit. The nature of the houses in the streets selected for the trial indicate that this skew against national distribution may not be as pronounced among the respondents of this study, but unlike some of the areas in Salford (Higher Broughton and Higher Kersal) in the attitudinal study of 2009, the streets could not be said to be suffering from deprivation.

Table 3.3: Social grade

Description	Timperley	Trafford	England
All people aged 16 and over in households	8,769	165,995	38,393,304
AB: Higher and intermediate managerial/administrative/Professional	2,684 (30.6%)	44,215 (26.6%)	8,520,649 (22.2%)
C1: Supervisory, clerical, junior managerial/administrative/professional	3,106 (35.4%)	52,879 (31.9%)	11,410,569 (29.7%)
C2: Skilled manual workers	1,048 (12.0%)	20,530 (12.4%)	5,780,577 (15.1%)
D: Semi-skilled and unskilled manual workers	934 (10.7%)	23,378 (14.1%)	6,538,308 (17.0%)
E: On state benefit, unemployed, lowest grade workers	997 (11.4%)	24,993 (15.1%)	6,143,201 (16.0%)

3.2.4 Educational attainment

Labour market statistics (NOMIS 2010) show that in the Borough of Trafford, 84.8% of people have an NVQ1 or higher qualification and 72.4% of people have NVQ2 or higher. The corresponding figures for Great Britain are 78.9% and 65.4% respectively. In 2009 (according to the Department for Children, Schools and Families Office for National Statistics), 63% of pupils in Trafford achieved five or more A to C- grade passes including English and Maths at GCSE, or an equivalent level of qualification, during 2008 to 2009. During this period, 60% of males and 65% of females attained this standard, while England had figures of 47% for males and 54% for females.

The statistics on qualifications (Table 3.4) show that 25% of people do not have any qualifications in Trafford against 29% for England, and 24% of people in the Borough have level 4/5 qualifications compared to 17% in England.

Table 3.4: Key figures for educational qualifications

Description*	Trafford	England
All people	151,445	35,532,091
No qualifications	37,366	10,251,674
Level 1 qualifications	24,454	5,909,093
Level 2 qualifications	31,591	6,877,530
Level 3 qualifications	11,408	2,962,282
Level 4/5 qualifications	36,836	7,072,052
Other qualifications: Level unknown	9,790	2,459,460

Source: Office for National Statistics

3.2.5 Employment and benefits

The economically active population of Trafford is 79.9% while the figure for Great Britain is 78.9% (Office for National Statistics 2009). Between January 2007 and December 2007, Trafford had a 76.39% employment rate, with 4.2% being unemployed. Table 3.5 shows benefits claimants as a percentage of working age population during August 2007.

Table 3.5: Benefits claimants as percentage of working age population, August 2007

Categories	Trafford	England
Any key working age benefit	13%	14%
Jobseeker's Allowance	2%	2%
Incapacity Benefits	7%	7%

Source: Office for National Statistics

The distribution of occupations in Trafford resembled the national distribution as Table 3.6 shows.

Table 3.6: Occupations of all people in employment

Employment Categories	Trafford (%)	England (%)
Managers and senior officials	16.5	15.3
Professional occupations	14.2	11.2
Associate professional and technical occupations	15.3	13.8

Employment Categories	Trafford (%)	England (%)
Administrative and secretarial occupations	15.1	13.4
Skilled trades occupations	9.0	11.6
Personal service occupations	6.3	6.9
Sales and customer service occupations	8.2	7.7
Process; plant and machine operatives	6.4	8.4
Elementary occupations	9.1	11.8

Source: Department for Work and Pensions (Office for National Statistics)

3.2.6 Health

Life expectancy at birth (between 2006 and 2008) for females in Trafford was 82.4 years and for males was 78.1 years compared to 80.6 years and 76.3 years across the whole of the North West (Office for National Statistics 2010). The 2001 Census showed that 69.9% of Trafford residents said that their health was in a ‘good’ state, while 21.2% said it was ‘fairly good’ and 9% said it was ‘not good’. The figures for England were 68.8% (good), 22.2% (fairly good) and 9% (not good). The same census showed that 17.7% of people in Trafford had a limiting long-term illness, 13% of these were of working age.

3.2.7 Transport

The Navigation Road Metrolink (light rail) station is about 10 minutes’ walk from the houses in the Trial area. There are numerous bus routes in the area and stops on Navigation Road, Brook Lane, and Harwarden Road are all within easy walking distance. The residents’ main mode of travel to work was driving by car or van (45% according to the 2001 census). However, 8% of people said they used public transport and 6% used Metrolink to travel to work. This was an encouragement to offer season tickets for public transport in the rewards package. Table 7 shows the resident population’s travel to work methods (from Census 2001 cited Office for National Statistics 2011).

Table 3.7: Method of travel to work - resident population

Description	Timperley	Trafford	England
All people	8,092	151,445	35,532,091
Works mainly at or from home	524	8,609	2,055,224
Underground, metro, light rail or tram	501	4,954	709,386
Train	51	888	950,023
Bus, minibus or coach	166	6,976	1,685,361
Taxi or minicab	21	549	116,503
Driving a car or van	3,616	59,903	12,324,166
Passenger in a car or van	290	5,545	1,370,685
Motorcycle, scooter or moped	49	667	249,456
Bicycle	170	2,988	634,588
On foot	421	7,624	2,241,901
Other	30	443	104,205
Not currently working	2,253	52,299	13,090,593

There is 45% car ownership in Trafford which is close to the national average. Table 8 shows the statistics for car ownership for Timperley ward, Trafford and for England. It shows that 33% own two cars or vans in Timperley, which is considerably more than the national average.

Table 3.8: Number of cars or vans

Description	Unit	Timperley	Trafford	England
All households	Count (Households)	4,472	89,313	20,451,427
Households with no cars or vans	Percentage	14.74	24.67	26.84
Households with one car or van	Percentage	45.89	43.67	43.69
Households with two cars or vans	Percentage	33.12	26.21	23.56
Households with three cars or vans	Percentage	5.10	4.30	4.52
Households with four or more cars or vans	Percentage	1.16	1.16	1.39
All cars or vans in the area	Count (Vehicles)	5,921	101,828	22,607,629

3.2.8 Energy consumption

The Office for National Statistics and Valuation Office Agency hold information on energy efficiency based on the Decent Homes Standard (DHS). This is expressed as a Standard Assessment Procedure (SAP) Rating. The measure ranges from 1 (highly inefficient) to 100 (highly efficient). The score for energy efficiency for private sector housing in Trafford is at 58. The same data shows that 94% of houses in Timperley had central heating.

The domestic energy consumption and average consumption for different categories of energy are shown in Table 9 from January to December 2008 for Trafford, the North West region and England (Office for National Statistics 2011).

Table 3.9: Domestic energy consumption, 2008

Description	Unit	Trafford	England
Consumption of ordinary domestic electricity	Megawatt hours	34,3751	68,443,488
Consumption of Economy 7 domestic electricity	Megawatt hours	59,064	26,973,258
Consumption of domestic gas	Megawatt hours	1,736,704	325,846,653
Average consumption of ordinary domestic electricity	Kilowatt hours	3,982	3,800
Average consumption of Economy 7 domestic electricity	Kilowatt hours	6,130	5,789
Average consumption of domestic gas	Kilowatt hours	19,385	16,799

The data shows that people in Trafford use more energy on average than the national rates of consumption. This would accord with higher than average affluence levels across the whole of the borough.

3.2.9 Summary of the study area

The information gathered about Timperley ward revealed that it fulfilled the requirements of the Trail in the following ways:

- It was an area of higher than average income compared to national data although it could not be described as an affluent neighbourhood thus

supporting the requirement that residents had sufficient disposable income to be able to respond to the reward scheme proposition.

- The houses that were chosen for the pilot were mixed in terms of both age and design being mainly modest terraced and semi-detached buildings contained within well-maintained urban surroundings.
- According to the Office for National Statistics (2004) the majority of the households were owner occupied; either being owned outright, or through a mortgage or loan.
- The area did not have an organised green community group
- The area was assessed to be either at moderate or significant risk of flooding by the Environment Agency.

4.0 Research techniques and methods

4.1 Influences on the design of the Trial

A large part of a successful behaviour change programme revolves around the ability of designers and policymakers to gain the trust and commitment of the people that are being targeted. The emerging evidence suggests that this is something that it is difficult for individual organisations to deliver on their own. Some have the resources and the technical ability, others have access to information about housing tenure, type and location, while yet others have an understanding of local householder needs and attitudes, and an affinity with the people. A comprehensive retrofit programme would need to include all of these attributes to be successful. The large number of initiatives from different funding streams directed at different parts of the community has produced a confusing landscape for householders. The Sustainable Development Commission (SDC) investigation into neighbourhood retrofit, 'The Future is Local', concluded that 'the myriad sources and providers make it difficult to understand what resources are available. This can dampen enthusiasm for projects. The multiplicity of providers also makes it hard to understand whether the support is meeting user needs, particularly those of communities (SDC 2010, p80)'.

The SDC work recommended that neighbourhood partnerships should be formed to ensure retrofit projects are successful. This has obvious practical (project management) attractions, but there is also merit in this idea from a behaviour change perspective. Different bodies and intermediaries can play different roles to gain the trust of householders. Some may carry trust through authority, while others may gain this through brand or by shared experience.

Work in this area implies that a strategy based on a single approach is unlikely to work and multiple strand strategies should be designed to appeal to different groups. This might be achieved in one single initiative if it were flexible enough to cater for variation in individual unmet needs.

Based on the analysis of a number of studies over 30 years, the psychologist Paul C.Stern (2009) summarises much of this work into a number of contributing factors that influence decisions to adopt sustainable actions including:

- non-financial factors are as important as financial ones;
- offering savings can be important but is not definitive because:
 - consumers rarely treat efficiency actions as investments;
 - cost minimisation is one of many motives;

- people economise on cognitive effort as well as money; and
- inertia is a barrier to change (habits, risk aversion etc.)

Stern's prescription for an effective energy-saving campaign includes the following list of factors:

- address multiple factors
- combine influence factors, including information, incentives, marketing, quality assurance, convenience;
- tailor the offer;
- understand the issues from the consumer's perspective – no presumption of understanding;
- understand that some interventions are beyond consumer's controls (manufacturer's specifications, availability of suppliers/contractors, constraints of home design etc.); and
- monitor constantly – to allow regular adjustments in response to unforeseen difficulties.

From this, Stern outlines the six principles of a successful campaign:

- Prioritise high impact actions
- Provide sufficient financial incentives
- Strongly market the programme
- Provide valid information from credible sources at the point of decision
- Keep it simple
- Provide quality assurance

The Trial design attempted to incorporate many of these principles, while also maintaining a close association with the attitudes tested in Phase 1. This was achieved in a number of ways. The Trial was based on a 'simple' proposition offering rewards in return for action on a few 'high impact' measures. The use of a community group backed by an academic team provided the 'credible source'.

4.2 Data collection techniques

4.2.1 Data collection in the context of the study

Data collection associated with this study was spread over a number of distinct steps. These included:

- Step 1: Respondent answers as a result of 50 house-to-house attitudinal investigations similar to the ones that were carried out in the previous (Phase 1) study.
- Step 2: Analysis of findings after the completion of a combined energy and flood survey for 25 houses.
- Step 3: Post-trial interviews with those residents that accepted rewards in return for purchasing recommended measures.

In addition, a project diary was set up at the start of the Trial where observations by the researchers and the community liaison staff were recorded to add additional anecdotal evidence to the primary data sets.

A group of trained survey team members from the environmental community organisation Action for Sustainable Living (AfSL) was employed to carry out the surveys. The AfSL team provided the main interface between the University of Salford co-ordinators and the residents. The full range of the AfSL involvement in the project included:

- contact with prospective participants through door-to-door and community meeting events;
- co-ordination of participant recruitment, including the carrying out of the pre-participation attitudinal survey;
- co-ordination of the energy and flood survey visits;
- first point of contact for support, including co-ordination of any follow-up questions from householders' questions;
- co-ordination of follow-up surveys and reports, and reception of rewards requests (including proof-of-purchase receipts);
- final reward delivery to householders; and
- participation on Steering Group.

4.2.2 The attitudinal investigation

In the interests of continuity, the Trial used the same structured survey instrument as had been employed in the Phase 1 work. This was a questionnaire comprising open and closed questions and taking approximately 20 minutes to complete.

The questionnaire used in the survey consisted of four parts. The first part focused on concerns about climate change and its impacts, with a particular focus on flood protection and energy efficiency. It also included questions about the perception

and experience of flood risk and actions taken to prepare for flooding. The second part of the questionnaire investigated the current uptake of and future interest in flood-protection improvements and energy-saving measures, followed by questions relating to preparedness to pay for them. Thirdly, the questionnaire included questions on the preference for rewards that the community would accept in making the changes. The final part of the questionnaire investigated the characteristics of the respondents. One additional question on willingness to join a green community group was added to the trial questionnaire.

There were 211 houses in the selected area and invitation letters were sent to all of them to inform residents about the project and when the survey team planned to be in their street. The letter introduced the theme of the project and primed residents to make a decision on their willingness to take part in the project. Most of the interviews were carried out in residents' homes although a few were undertaken by telephone.

4.2.3 *The energy and flood surveys*

The Energy Saving Trust (EST) was asked to supply the energy audits as the organisation was already active in the Timperley area involving a project with AfSL and offered a similar service throughout Greater Manchester. Being a publicly funded body, it was reasoned by the research team that EST represented at least a neutral party to the residents. EST agreed to supply an adapted preparatory survey called The Home Action Plan (HAP). The HAP is delivered by a Domestic Energy Assessor (DEA) and covers energy, renewables, water, waste and transport, but in this case the assessor only considered the energy conservation issues of each house.

In addition to the initial visit, EST offered signposting to the Energy Saving Trust Advice Centre, a free service under normal Advice Centre duties. The Advice Centres provided guidance on the implications of the energy conservation report recommendations including a list of recommended products under the Energy Saving Recommended scheme. It also offered a list of accredited installers. When a resident indicated that they needed assistance in obtaining a product, the AfSL representative took over and guided the resident through the procurement and installation process.

Finally, EST undertook a follow-up survey, checked that the work had been done and confirmed the amount on the receipts for the purchased measures. The flood survey work was undertaken by Floodconsult. The company also performed the same duties as EST on all aspects of flood protection.

4.2.4 Distribution and choice of rewards

The rewards were compiled from a range of donors or providers that fit the ‘inherently sustainable’ criteria of the study team. Residents were offered rewards to the value of 100% return on their investment in energy and flood measures. The Phase 1 rewards were retained for the Timperley trial, but others were added to reflect new ideas that were suggested further to the original report. The list offered to the Timperley residents included:

- fruit and vegetable vouchers (bought from and supplied by Co-operative Food);
- gardening and landscaping (garden designers tendered for the planning and supervision work, materials were purchased and the social enterprise Blue Skies via Groundwork Trust Manchester, Salford, Stockport, Tameside and Trafford supplied free labour);
- furniture makeover work (supplied at face value by tendering companies);
- bus passes (supplied at half price by First Bus);
- Metrolink (light rail) season tickets (purchased at face value from GMPTE);
- Train travel (Transpennine Express offered £250 of travel per household, other companies purchased at face value);
- Sporting tickets (free season tickets for the rugby league team Salford City Reds, Altrincham FC);
- Vouchers to attend further education courses (supplied free by Salford College); and
- free restaurant meals and beauty sessions (supplied free by Salford College.)

4.2.5 Survey report and rewards brochure

Additional data was collected from the 25 residents who elected to have combined energy conservation and flood risk surveys. These were arranged after the AfSL followed up those residents who answered positively to a question about whether they would be interested in participating in further stages of the Trial. For the majority of the houses that were visited, one surveyor from EST and one from Floodconsult arranged to visit each house together to minimise disturbance and to emphasise that the two issues were linked.

On completion of the visit, each surveyor then produced a brief report including recommendations for energy-conservation or flood-protection measures. These were submitted to the Salford University team, who inserted them into a report that also contained an introduction and summary of recommendations, an indicative summary of costs and a full list of rewards. The reports were then

delivered to the residents and an explanation of the report was offered to those who wanted a face-to-face explanation of the contents.

Appendix A contains a sample report which has been edited to protect the identity of the householder.

4.2.6 *Project diary and post trial questionnaire*

The final elements of data collected during the Trial included observations about the way the residents reacted to the interventions during the programme. In addition, those residents who bought measures and received rewards were interviewed using the same structured attitudinal survey format to see if their views had been altered by their interaction with the programme's operatives.

4.3 Data analysis techniques

The Trial adopted descriptive statistical methods similar to those employed for the Phase 1 analysis of attitudes. Information gathered by the survey of 50 householders in Timperley was analysed using PASW Statistics Software. PASW Statistics 18 combines new and enhanced capabilities to support the entire data set from preparation to delivering final tests and outputs.

Information related to demographic details of the random sample is presented using bar charts, histograms, pie charts, tables, etc. Meanwhile, perceptions were also analysed through PASW Statistics Software to obtain information that was able to be applied to statistical tests and communicable outputs. Further, Spearman's rank correlation was computed for the variables relating to awareness of climate change, flooding and energy saving and owners' preference for different rewards in the survey instrument. Component Analysis (PCA) was used to reduce the inter-correlated data set and principal components were formed. Later Varimax rotation was applied to maximise the variance of factor loadings and to assist the classification of variables. Kaiser criterion (eigenvalue one test) was then applied and only the components with an eigenvalue larger than 1.0 were retained. Median values of ordinal variables and principal component scores were compared between unrelated samples with the Mann-Whitney test (U) and the Kruskal-Wallis test (H).

5.0 Results of the trial

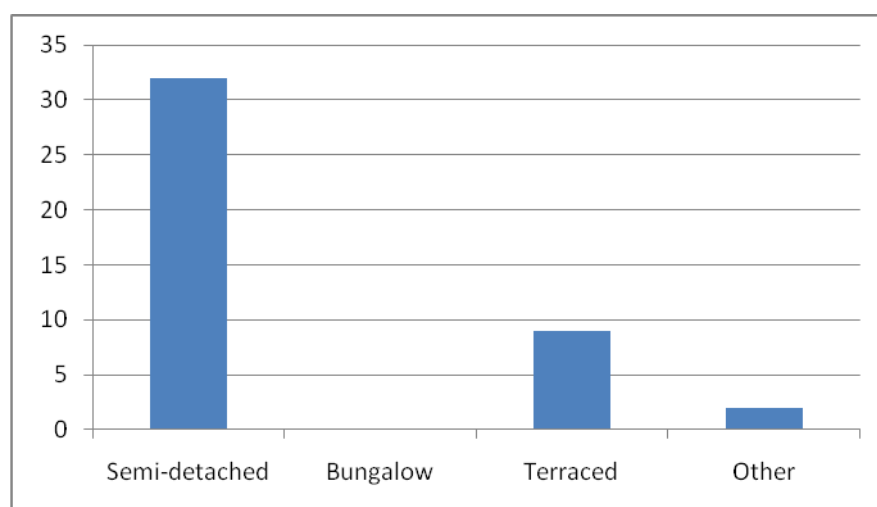
5.1 The attitude survey

5.1.1 About the residents

Initially, invitation letters to take part in the survey were sent out to 211 houses in the selected area. Three weeks later the survey team started to conduct door-to-door interviews using a structured survey questionnaire. Lack of time or non-answers were the main reasons residents gave for turning down a request to be interviewed. A small number (about one dozen) said they were renting their house and the interview was terminated. The success rate improved somewhat when the survey team adopted later (evening) time slots for their visits to the area. After eight weeks the surveyors had completed 50 questionnaires (a response rate of 24%) and a decision was made to stop the exercise as it was considered that an acceptable number of householders had indicated that they would be willing to graduate to final stages of the trial. The householders that responded in the greatest numbers to the survey lived on Ryder Avenue (40%), Bridgewater Road (37%), Bradley Close (32%), Newton Road (29%) and Houldsworth Avenue (27%).

Figure 5.1 shows the type of houses that the respondents owned when they took part in the survey.

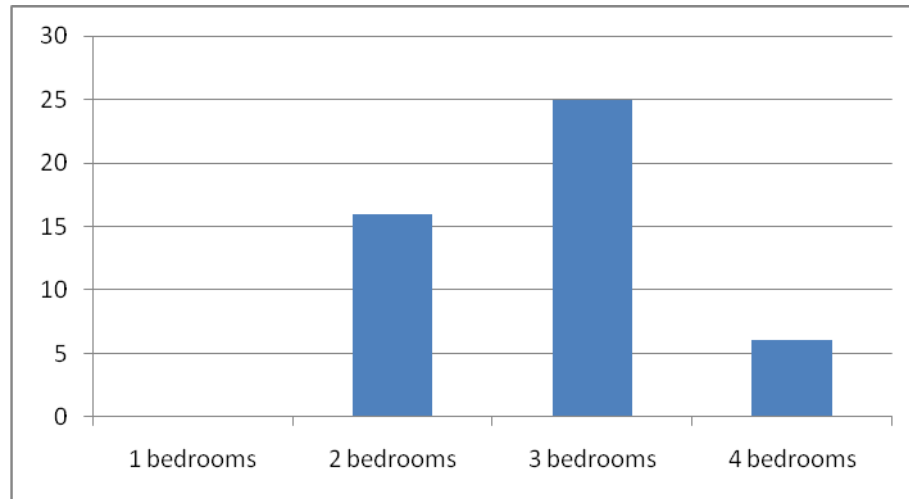
Figure 5.1: House types owned by the respondents



All the respondents lived in houses with two or more bedrooms and 50% of the houses had three bedrooms (see Figure 5.2). During the survey there were 91

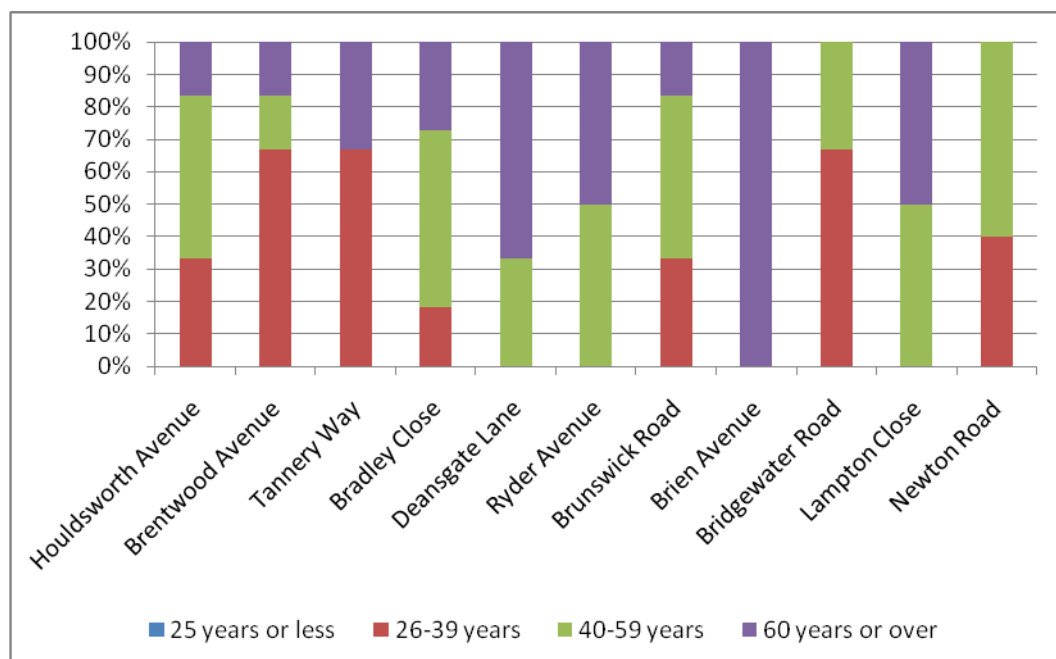
adults and 19 children living in the participating houses, and 70% of the households had no children living there at the time.

Figure 5.2: Number of houses with different number of bedrooms



In terms of age, 42% of respondents were aged between 40 and 59, with 32% aged between 26 and 39 and none aged 25 or less. Figure 5.3 shows the distribution of different age groups among the respondents according to street. The median age range of the householders was 40 to 59 years.

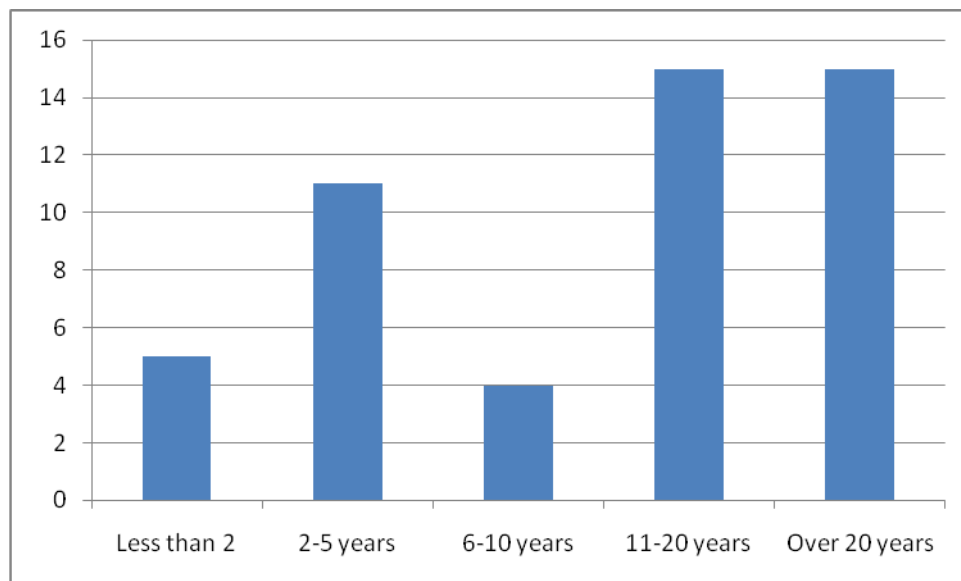
Figure 5.3: Respondents' age groups



Most of the people (around 60%) living in the Trial area had lived there more than 10 years and about 22% of respondents had lived there for between two to five years. Figure 5.4 shows the respondents' length of residency.

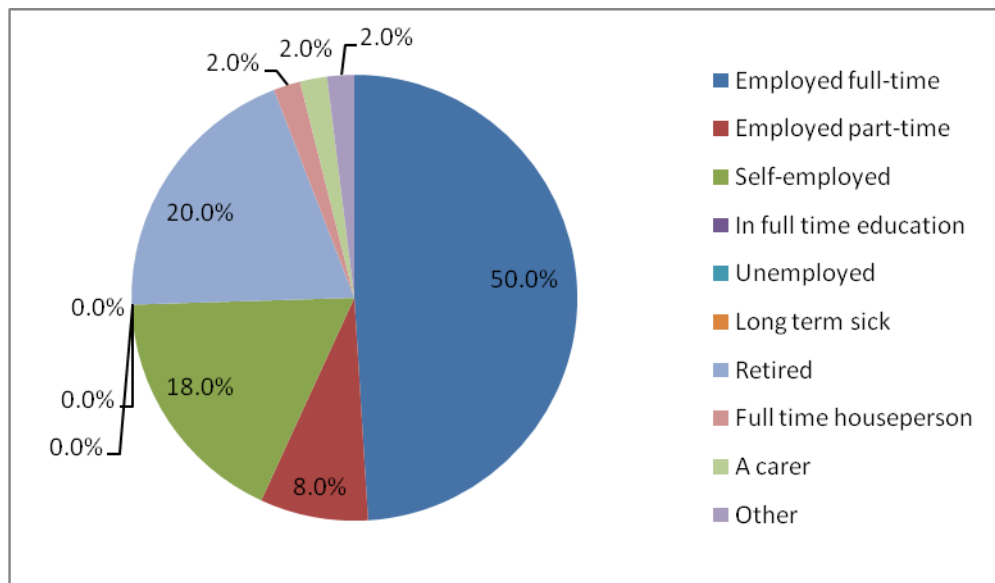
The study was conducted with residents who were either the owners of their house or were living with the owners. In response to the survey question, 92% said that they did have the power to make decisions on the expenditure on the house.

Figure 5.4: Respondents' length of residency in the houses



Occupation splits show that half of the respondents were full time employed, 18% of the respondents were self-employed and 20% had retired. The status of the respondents' employment is shown in Figure 5.5.

Figure 5.5: Employment status of respondents



5.1.2 Awareness about climate change and flooding

The survey revealed that 52% of respondents were concerned about how climate change could affect their lives and their property. However, 36% of respondents neither agreed nor disagreed with this statement (Figure 5.6). This was significantly lower than previous findings during Phase 1. However, most (close to 80%) of respondents strongly agreed or agreed that using fossil fuels to heat their house was affecting the climate (Figure 5.7) and an even larger number (86%) thought that using less energy in their home would make a difference to climate change (Figure 5.8). These responses are in keeping with the results from the earlier attitudinal work by the Salford team.

Figure 5.6: Level of concern about how climate change affecting their property and them

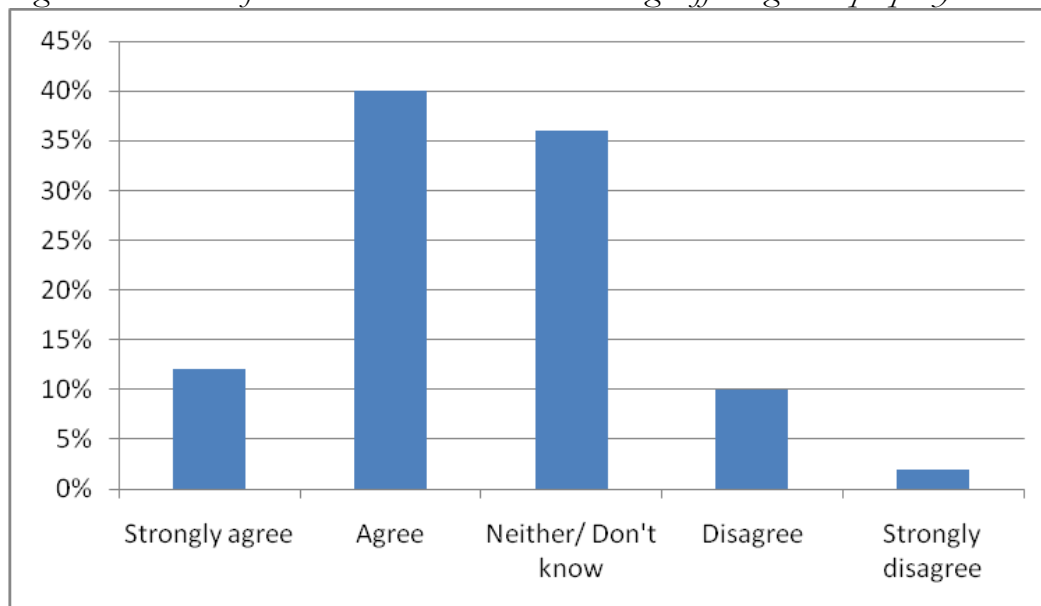


Figure 5.7: Level of agreement with the statement ‘using fossil fuels to produce energy for my home is changing the Earth’s Climate’

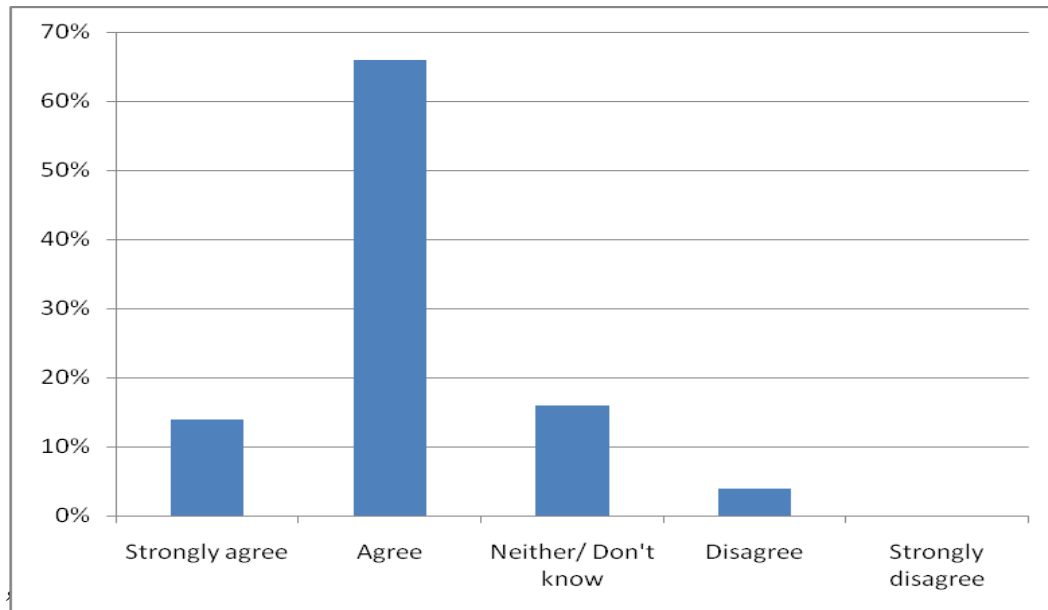
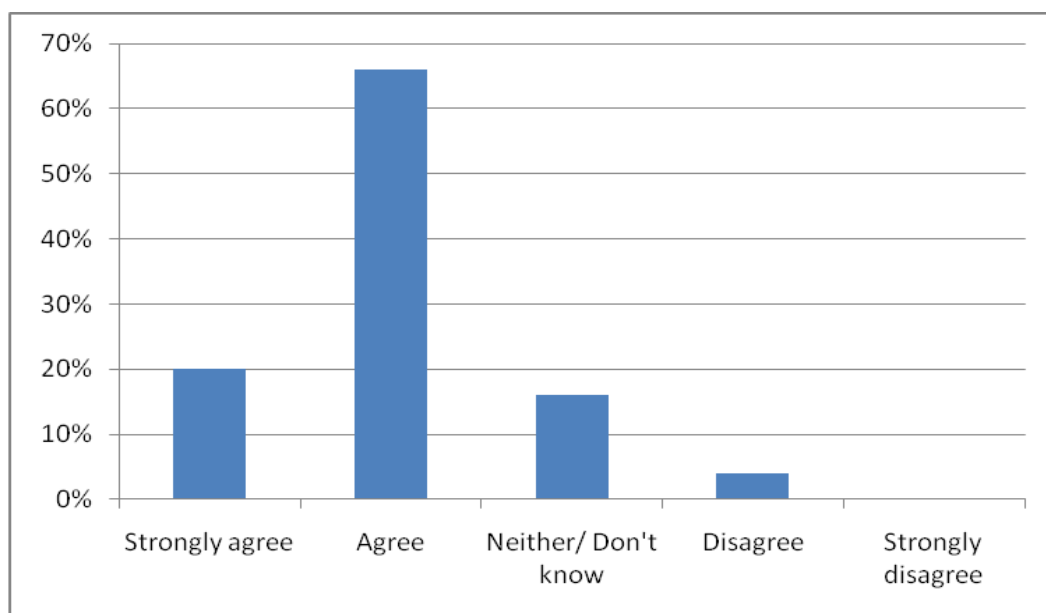


Figure 5.8: Level of agreement with the statement ‘using less energy in my home will make a difference to climate change’



The response to the questions on flooding also broadly followed answers given in previous surveys. The results for Timperley showed that 78% of residents stated that their houses would not be affected by flooding, even though some stated that they had seen flooding in their roads and gardens in the past (Figure 5.9). This is despite the fact that 82% of respondents were aware that their house was in a flood risk area (Figure 5.10). One respondent, who had lived in the area for more than 11 years, said that he had seen very high water levels in the Brook. Another

resident mentioned houses in the street had ground water issues. The respondent also mentioned that the underground streams had flooded the basements of houses in Brunswick Road and thought that a high water table was responsible for flooding basements, and saturating soil in gardens after heavy rain.

Figure 5.9: Response to the question 'is the house in a flood risk area?'

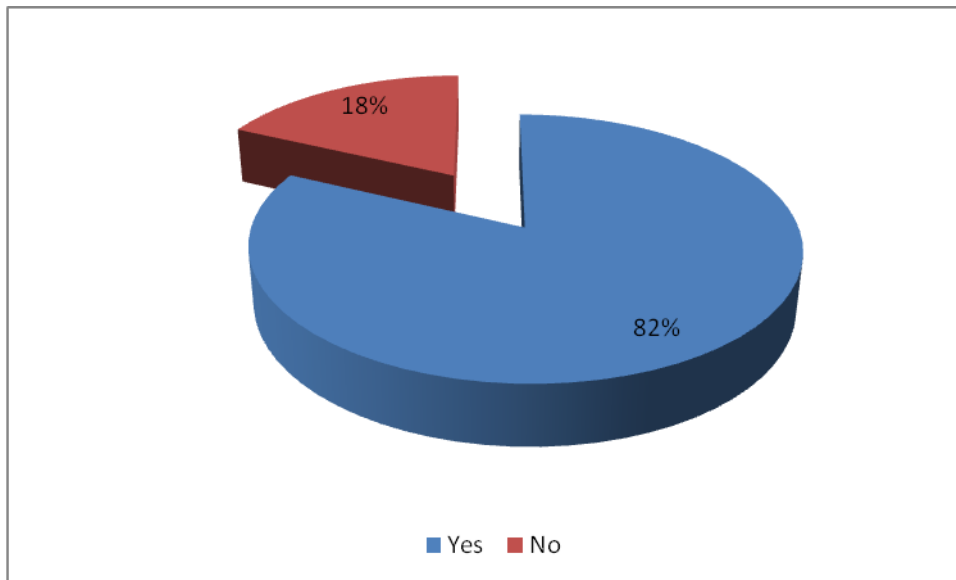
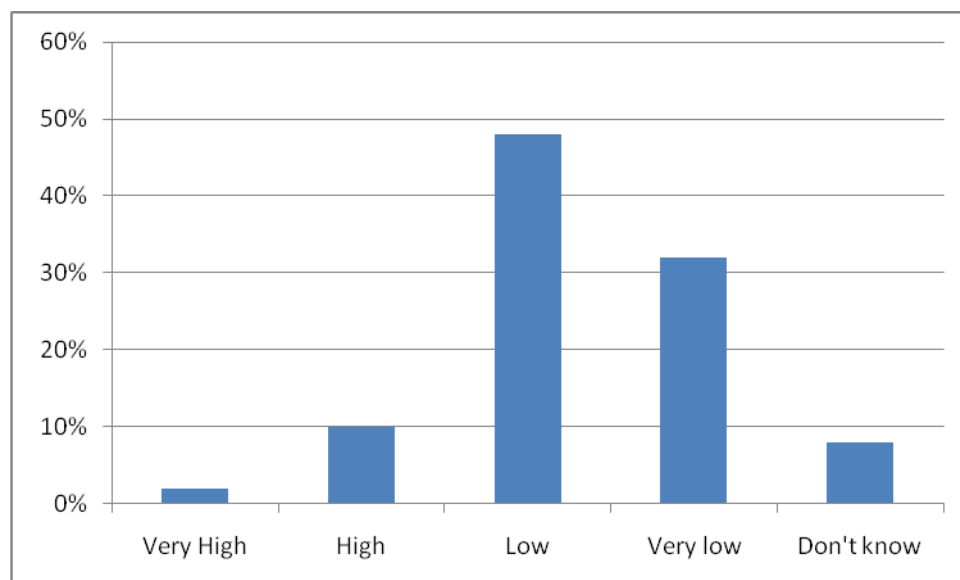


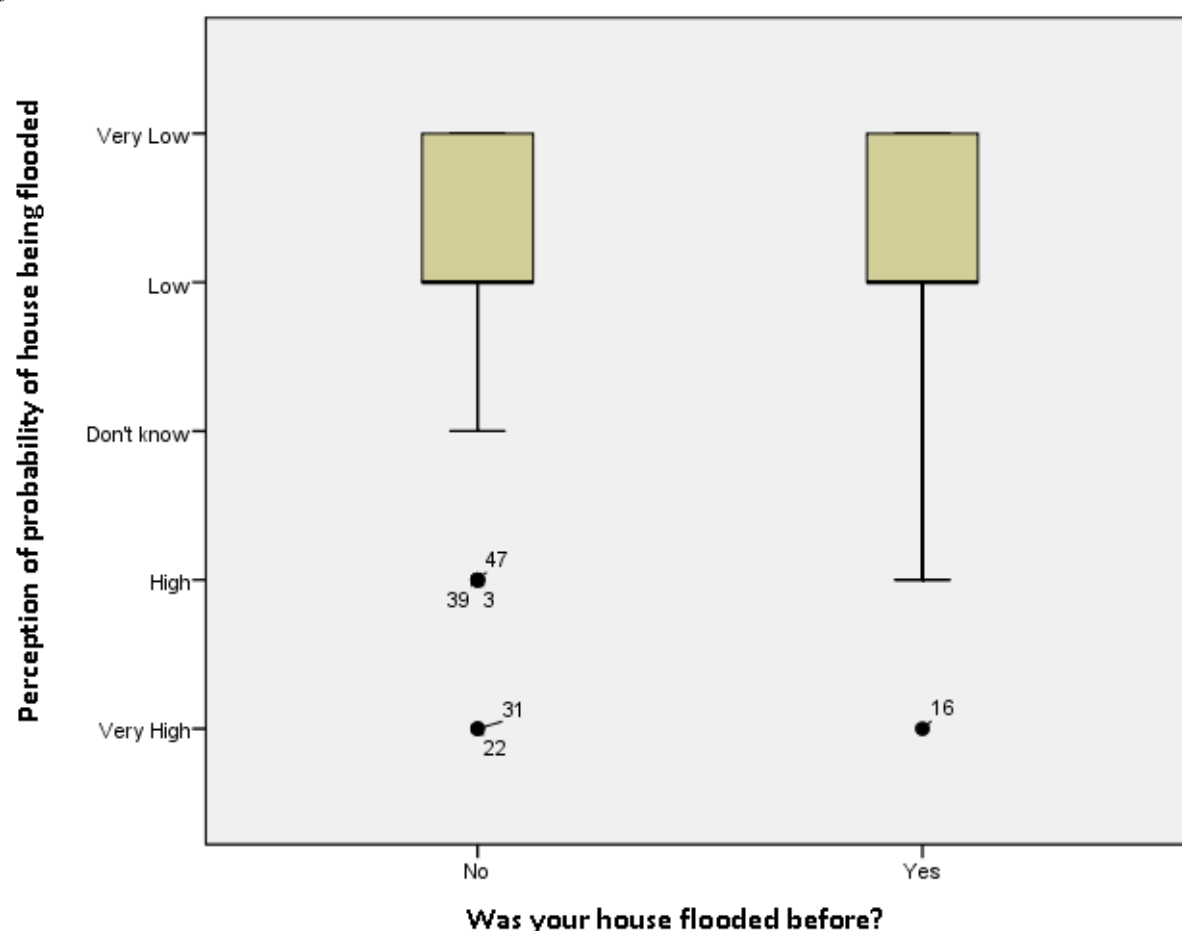
Figure 5.10: Perceived likelihood of the property being flooded



The general perception of the residents on the probability of their property being flooded was low, regardless of whether they had previously been flooded. Figure 5.11 shows that the perception of residents whose houses had not been flooded was very low, whereas those that did have this experience still tended to say that

the likelihood was 'low' or said they did not know. However, it was noted that there were outliers who thought the risk of flooding was 'very high' or 'high'. Figure 5.11 shows the correlation between experience of flooding and perception of future risk.

Figure 5.11: A cross-tabulation between perceptions of probability of being flooded and previous flood event



Residents were asked whether they were aware of the Environment Agency's free flood notification service 'Floodline Warnings Direct' and whether they had registered. Most (88%) of the residents said that they were aware of the Environment Agency Floodline Warnings Direct but just 40% had registered with the service, a figure very similar to previous surveys. Analysis showed that older respondents were more likely to have subscribed to the scheme. The reasons given for not registering were mainly concerned with a lack of interest resulting from disbelief that flooding was something that they needed to be concerned about. Residents felt that there was little justification to act in a timely manner as a result of information they received from the Environment Agency. A few residents thought that the civil works and overspill area on nearby playing fields that had been carried out on Timperley Brook would protect them from flooding in the future.

A further layer of comfort was provided by those residents who held flood insurance. About two-thirds of residents said they had cover against flooding and a further 22% may have had this in their policies but were unsure.

In order to establish attribution, the respondents were asked whether they thought that homeowners should be responsible for protecting their homes or whether government should meet this responsibility. The results showed that over 70% of residents agreed or strongly agreed with the statement that ‘Home owners have a responsibility to protect their homes from flooding’ while over 50% of residents agreed that ‘Government has the responsibility to protect their homes from flooding’ (Figures 5.12 and 5.13). This apparent conflict also occurred in previous surveys. The report by Bichard and Kazmierczak (2009) explains that the attribution of both house owners and government may indicate an acceptance to invest in measures providing the authorities show commitment to do what they can to help flood-threatened communities. The feeling of personal responsibility was strong with just 16% disagreeing.

Figure 5.12: Perceptions about whether homeowners have a responsibility to protect their home

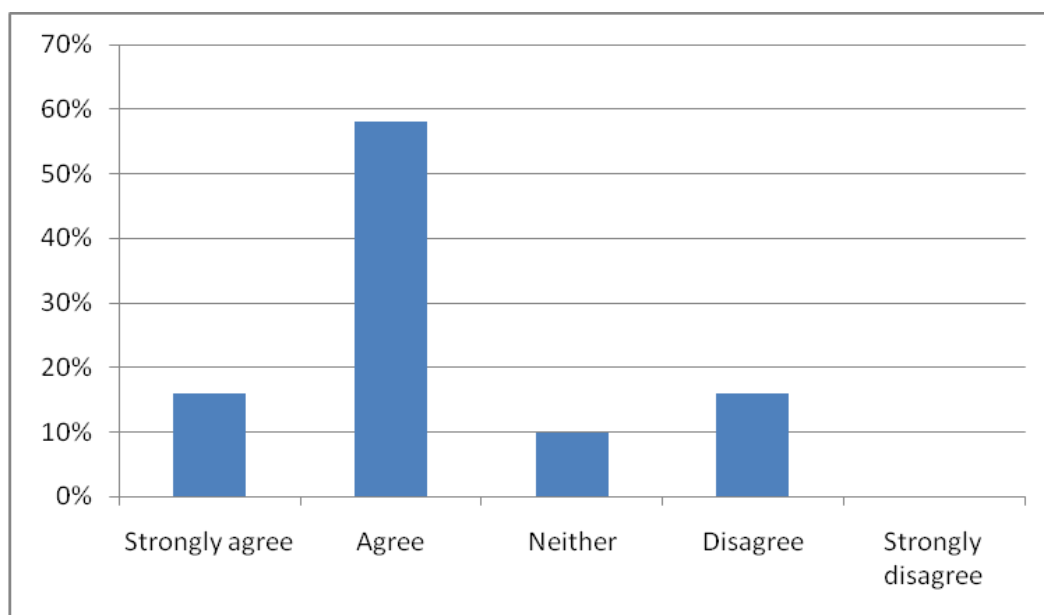


Figure 5.13: Perceptions about whether government has a responsibility to protect their home

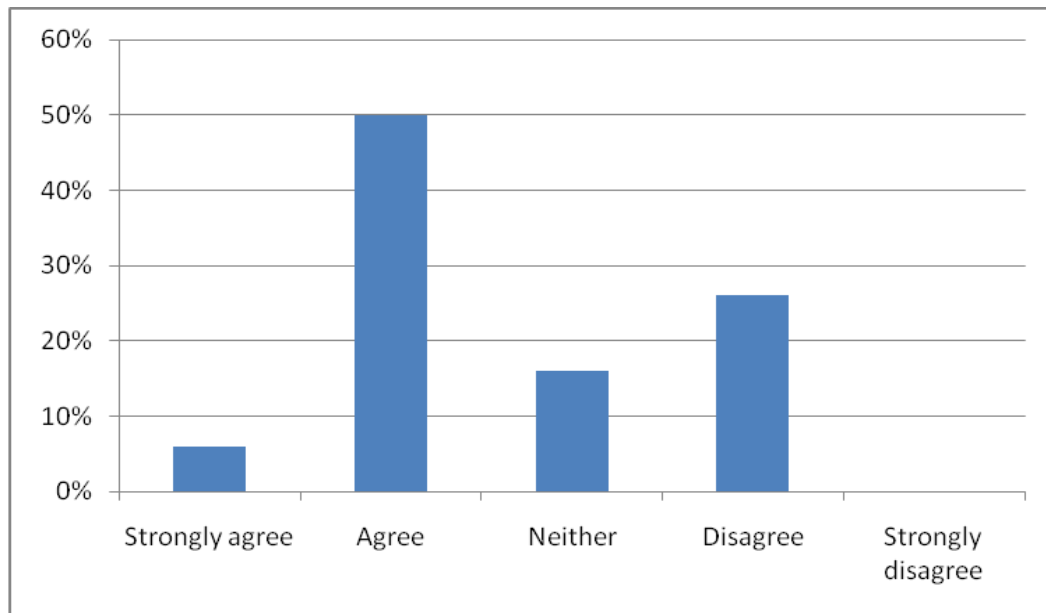


Table 5.1 shows that people who said they were concerned about climate change and its effect on their property were more likely to agree that less usage of energy in the home will make a difference to climate change. The results suggest that this relationship is statistically significant. In addition, there was a weak positive correlation between people who were concerned about climate change and their agreement that the use of fossil fuels in their house could affect the earth's climate. ($r = + 0.340$, $p = 0.238$). Although there was a positive correlation between people who were concerned about climate change and homeowners' responsibility to protect their home, the relationship was not statistically significant. Similarly, the relationship between people concerned about climate change and a belief that government has the responsibility to protect their home showed a positive correlation but was not significant. This analysis also showed weaker positive correlations between the perceptions 'using less energy in my home will make a difference to climate change' and 'homeowners have a responsibility to protect their homes from flooding' ($r = 0.300$ and $p = 0.035$).

Table 5.1: Spearman's rank correlation between variables explaining perceptions about climate change

Variables		1	2	3	4	5	6	7	8
1	I am concerned about how climate change might affect me and my property	1.000	0.340 *	0.573 **	ns	ns	Ns	ns	ns
2	Using coal, oil and gas to produce energy for my home is changing the Earth's climate		1.000	0.495 **	0.283 *	ns	Ns	ns	ns
3	Using less energy in my home will make a difference to climate change			1.000	ns	ns	Ns	0.300 *	ns
4	Has your house ever been affected by flooding?				1.000	ns	Ns	ns	ns
5	Are you aware that your house is in a flood risk area?					1.000	Ns	ns	ns
6	What do you think the chances are that you will be flooded?						1.000	ns	ns
8	Homeowners have a responsibility to protect their homes from flooding							1.000	ns
9	Is the Government's responsibility to protect my home from flooding								1.000

* Correlation is significant at the 0.05 level (2-tailed); ** Correlation is significant at the 0.01 level (2-tailed); ns – not significant

Furthermore, the study used Principal Components Analysis (PCA) which is a variable reduction technique which maximises the amount of variance accounted for in the observed variables by a smaller group of variables called components. The use of Principal Component Analysis in the study led to the identification of two principal components (PCs) which explains 60.702% of total variance in the

views that are included in the components. The principal components are PC1 – awareness of climate change and PC2 – attributed responsibility and flooding event (Table 5.2).

Table 5.2: Principal component loadings for analysed variables

Variables	Principal components	
	PC1 - Awareness of climate change	PC2 - Attributed responsibility and flooding event
Less use of energy in home makes difference to climate change	0.849	0.057
Concern about climate change	0.788	-0.139
Usage of coal, oil and gas in house changes earth's climate	0.667	-0.179
Has your house flooded before?	-0.272	0.741
Homeowners have a responsibility to protect their home	0.501	0.693
Government has the responsibility to protect their home	0.119	-0.658

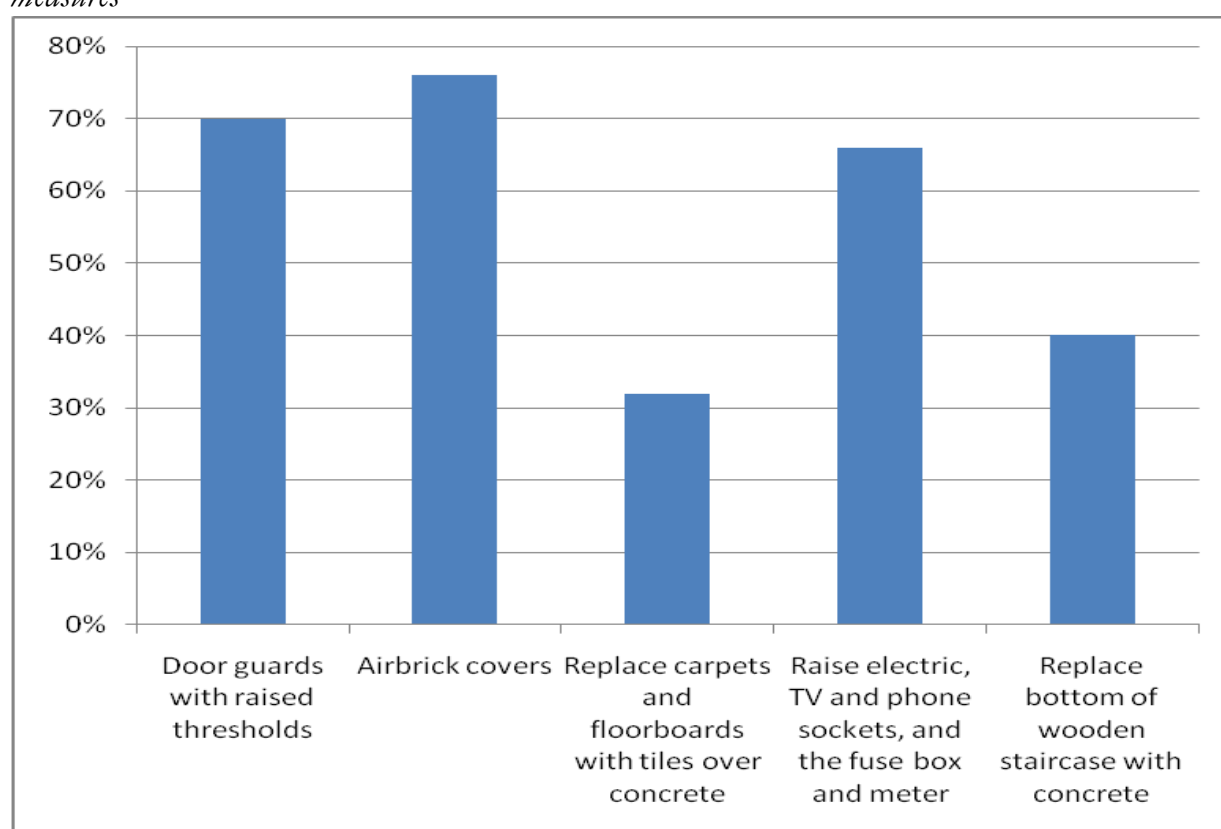
Extraction method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization

Awareness of climate change comprised factors related to perceptions about ‘concern about climate change’, ‘less use of energy in the home makes a difference to climate change’, and ‘use of coal, oil and gas in the house changes the earth's climate’. The PC2 group comprised ‘government has the responsibility to protect their home’, ‘home owners have a responsibility to protect their home’ and whether flooding had affected their house before. The variable ‘homeowners have a responsibility to protect their home’ made the analysis a complex structure because it was loaded on both of the principal components. However, the loading was higher on PC2 than PC1. The Kruskal-Wallis test between principal components and age of residents suggests that principal components do not significantly differ across age groups. This is an important point as it suggests that residents hold broadly the same views regardless of their age or (as the previous attitude work by Salford found), their income bracket or geographical situation).

5.1.3 Willingness to install flood-protection and energy-conservation measures

The survey results show that installing airbrick covers (76%) and door guards with raised threshold (70%), and raising electric, TV and phone sockets and the fuse box and meter (66%) are the three flood protection measures that were most preferred by the residents. These were also the top three answers given in previous studies conducted by the Salford team although the order of preference was different. In the earlier surveys, raised electrics was the most preferred measure. Figure 5.14 shows the distribution of measures chosen by the Timperley sample.

Figure 5.14: Percentage of residents who would consider installing the given flood-protection measures



In a further similarity to the previous surveys, some of the respondents rejected tiled floors as they thought it would make their rooms colder although there is no evidence for this, while others thought this would require major work. However, there was a general feeling that any flood protection work would not be justified as it was unlikely (they believed) that their house would be affected by flooding.

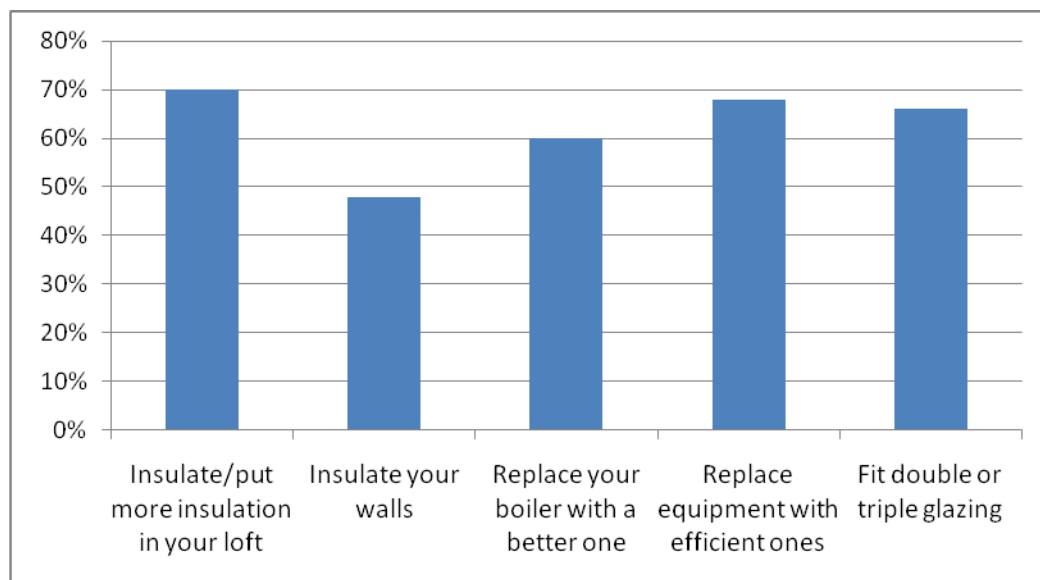
A further consistency with earlier surveys revealed that residents in Timperley did not have a good understanding of the different flood-protection measures available to them. Placing sandbags was the most frequently mentioned flood measure, and

many said maintaining drains and having a pump to drain water where needed was important.

The awareness of energy conservation measures in Timperley was higher for energy-saving measures, and many already had some of the measures, or said they would be willing to install them. Figure 5.15 shows that the most preferred measure was putting more insulation in the loft (70%) followed by replacing inefficient appliances (68%) and fitting double or triple glazing (66%). There was a common resistance to cavity wall insulation from those that thought it would cause too much disturbance or mess.

More residents attempted to answer the open question based on their knowledge of energy-saving measures compared to the question on flood protection where examples of the measures needed to be shown to many of the respondents. Answers included energy saving lighting systems, low energy bulbs, cavity wall insulation, turning off all electrical equipment when going out of homes, energy-efficient boilers/condensing boiler, roof insulation, solar panels, ground source heating, efficient appliances, solar water heaters, wind turbines, triple/double glazing, improved loft insulation, better central heating systems, wall insulation and Eco flush (in toilets). Energy-saving bulbs and appliances and better loft insulation and thermal glazing were the most popular answers from this list (see Figure 5.16).

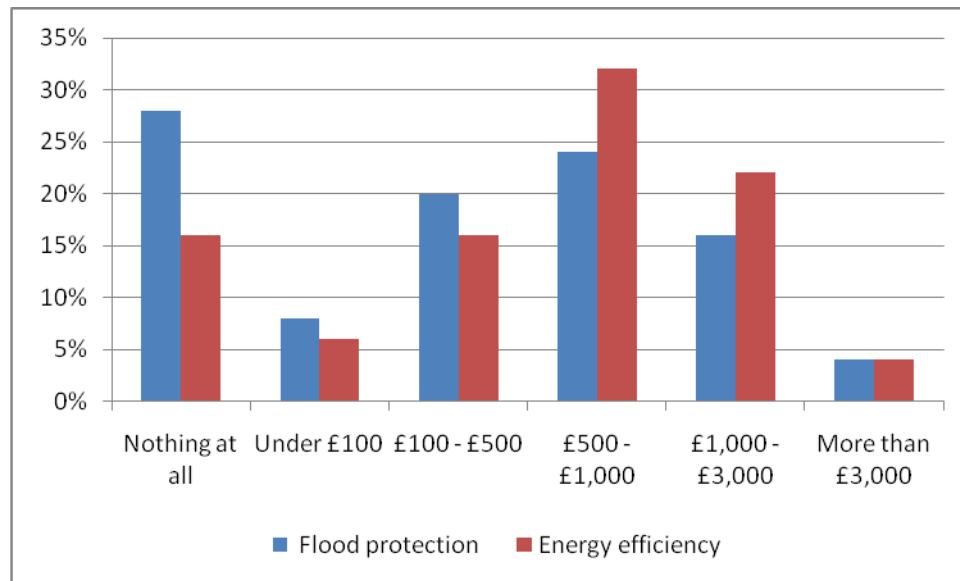
Figure 5.16: Percentage of respondents who would consider installing the given energy-efficiency measures



The question about the amount of money residents would spend on flood and energy measures showed Timperley residents were prepared to spend more than the average householder from the telephone survey for England and Wales. Figure 5.16 shows 72% of respondents would spend money on flood protection despite

the expression by many that flooding was unlikely. Over three quarters (84%) were prepared to install energy-saving measures and more were prepared to spend higher amounts on energy compared to flood measures. The statistical median value for expenditure range that the residents were willing to pay for flood protection was £100-£500 while for energy-saving measures it was £500-£1,000.

Figure 5.16: Amount of money residents said they were willing to spend on flood-protection and energy-efficiency measures

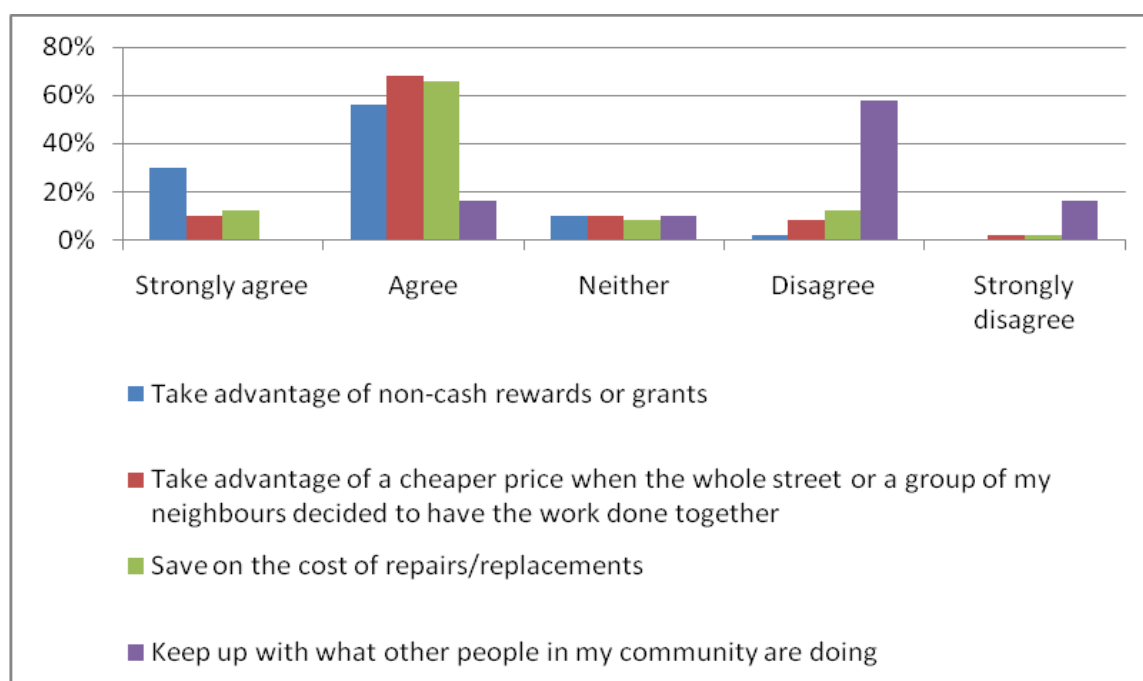


The question about interest in joining a local environmental community group resulted in 70% of respondents saying they were prepared to get involved if such a group were set up. This was not borne out in attendance figures at two meetings called during the study period.

5.1.4 The attraction of motivational factors including incentives

The survey in Timperley showed that more than three quarters of the respondents agreed or strongly agreed that they would consider taking advantage of incentives such as non-cash rewards or grants, and cheaper prices for whole-street or group purchases to install flood measures in their houses. Of these choices, non-cash rewards was the most attractive incentive with 30% strongly agreeing with this statement (see Figure 5.17).

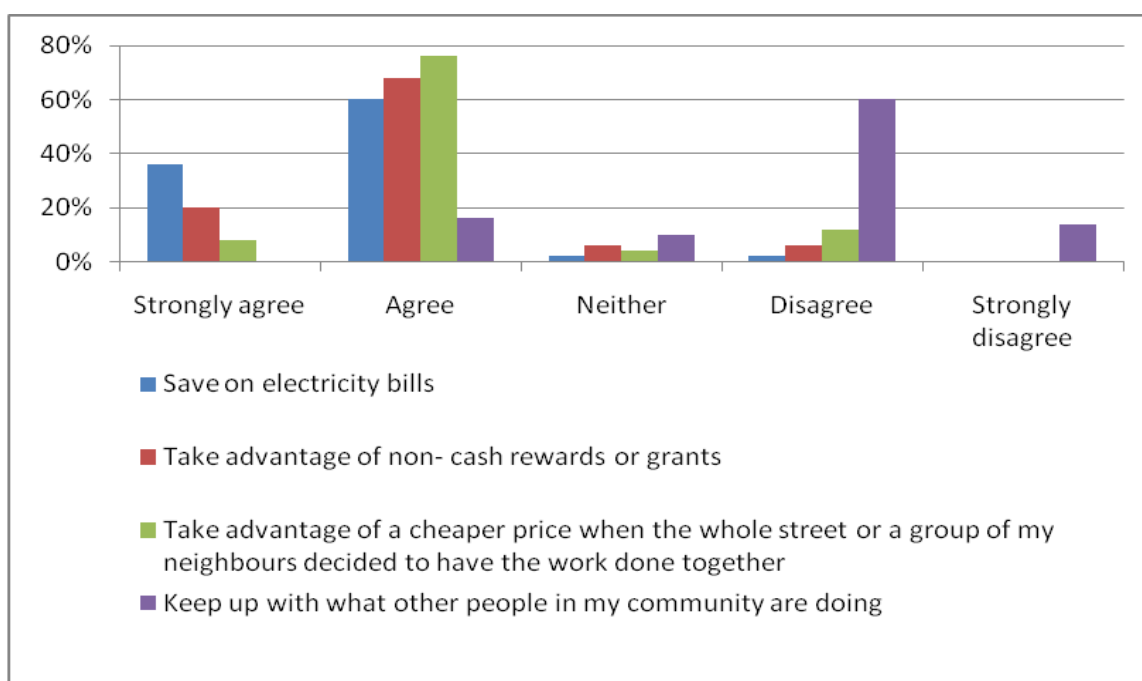
Figure 5.17: Level of agreement with the above stated statements for flood-protection measures



The least-favoured reason for purchasing flood measures was because other people in the community had done so, with 74% of residents disagreeing or strongly disagreeing with this statement. More than half the respondents agreed or strongly agreed that investing in flood protection could save on their insurance bill (68%); could give them peace of mind (62%); could allow them to take advantage of non-cash rewards like free goods or services (66%); and could increase the value of their house (54%).

When the same question was asked about the motivation to invest in energy conservation (Figure 5.18), over 95% of respondents agreed or strongly agreed that saving money on electricity bills would motivate them to install energy-saving measures. Similar to their answer on motivation and flood measures, buying energy conservation measures because others were doing the same thing resulted in 74% saying that they disagreed or strongly disagreed with the statement. The most popular motivator was, again, non-cash rewards (88%) and taking advantage of cheaper prices (84%).

Figure 5.18: Level of agreement with statements for energy-saving measures

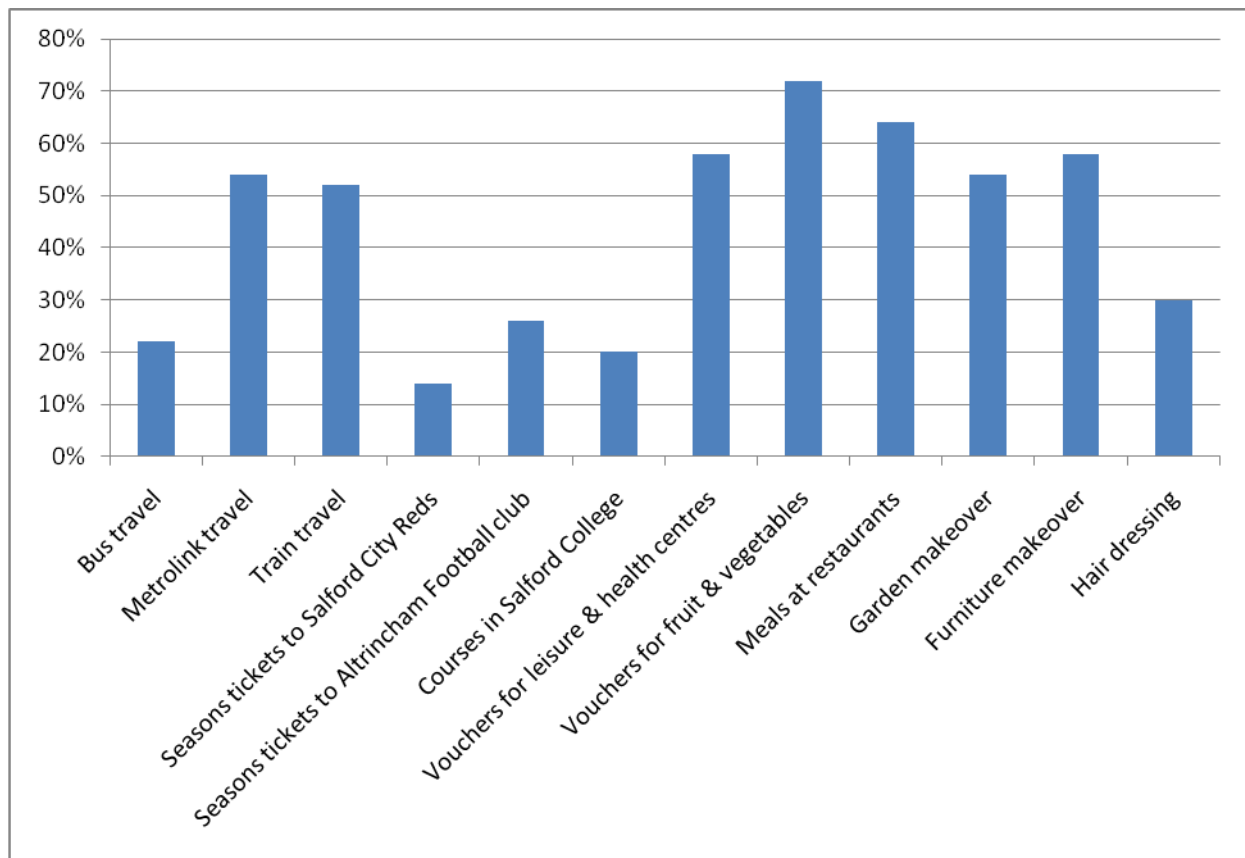


More than 70% of respondents agreed or strongly agreed that installing energy-saving measures would make them feel like they are doing something about climate change; taking advantage of non-cash rewards like free goods or services; and increasing the value of their house. About 72% of respondents felt installing energy measures in their houses would increase the value of their house while just 54% of the householders thought this was the case if flood-protection measures were to be installed. Those living in newly built properties did not feel the need for energy-saving measures as they thought that the house should be within current standards in energy saving.

5.1.5 Preferences for non-cash rewards

In keeping with earlier surveys, the Timperley residents chose free vouchers for fruit and vegetables (72%) and free meals at restaurants (64%) as the top two rewards that they would accept in return for investing in their houses. Other popular answers included free furniture makeovers (58%), vouchers for leisure and health centres (58%), free garden makeover (54%), free Metrolink travel (54%) and free train travel (52%). The full results for incentive preferences are shown in Figure 5.19.

Figure 5.19: Non-cash rewards preferences



Those rewards that were less attractive included the free football and rugby season tickets (only 14% said yes), free courses in Salford College (20%), and free bus travel (22%). As in previous surveys, public transport proved to be less popular than other rewards although the close proximity of Navigation Road Metrolink stop is probably the cause of the attraction to the Metrolink reward. The offer of a course at Salford College rather than the more local further education institution (Trafford College) may have led some to reject this reward. Salford College was retained as a course donor for the study because Trafford College chose not to participate in the trial. The full results of preferred rewards are shown in Figure 5.19.

In answer to the open question about other rewards they might like to receive, respondents proposed a list of ideas shown in Table 5.3.

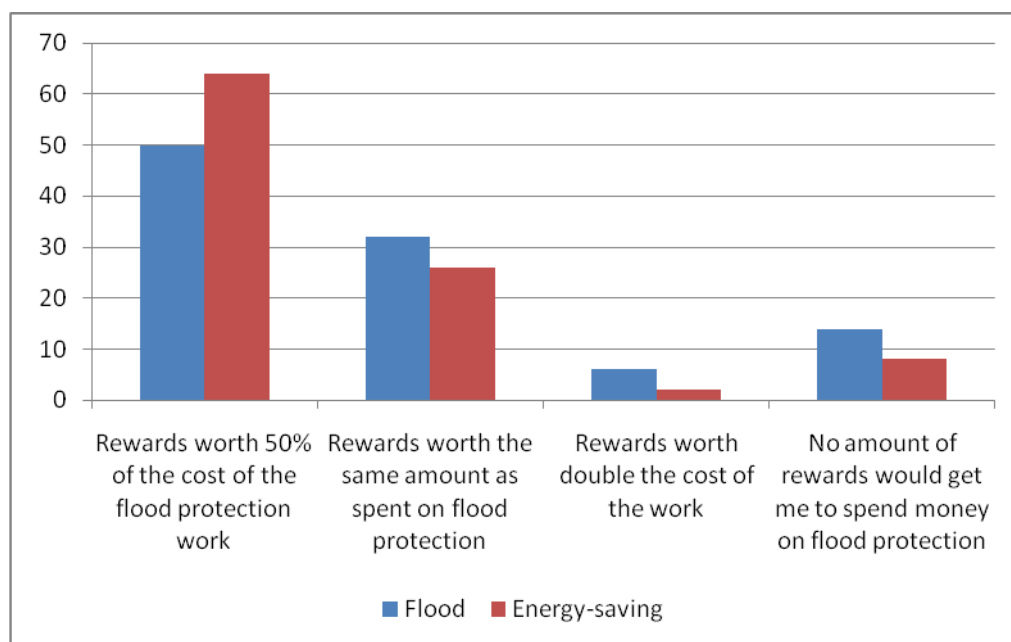
Table 5.3: Other preferred rewards proposed by residents (individual suggestions)

Rewards Category	Rewards
Entertainment	<ul style="list-style-type: none"> • Free ticket for a cruise • Vouchers for days out • Free leisure breaks • Flights to different countries • Season ticket to Manchester United Football Club • Cinema /theatre tickets • Free bikes, Campaign equipment • Vouchers for children's toys
Food	<ul style="list-style-type: none"> • Vouchers for local shop/supermarket
Clothing	<ul style="list-style-type: none"> • Store vouchers • Vouchers for children school uniform
Health	<ul style="list-style-type: none"> • Private health care for family members • Providing of (additional carers or respite • Vouchers for childcare
Related to work to be carried out	<ul style="list-style-type: none"> • Providing free labour contractors to do work free of charge or to do additional work that needs to be done at home (where the cost of materials is covered by residents) • Subsidised insurance (for flooding) • Payment for tradesmen to do the work
Other	<ul style="list-style-type: none"> • Reduction in council tax • Provide cheap/interest free loans • Free car tax

Among these rewards, tickets for cinema or theatres, vouchers for leisure activities and stores vouchers for food and clothing are the most commonly stated rewards. Interestingly, one of the residents said that buying the energy efficiency measures would pay for itself in the long run and rewards were not necessary.

Half the respondents said that they were prepared to accept rewards worth 50% of the cost of the flood protection work while 64% of respondents were prepared to accept the same for energy efficiency. About 32% of respondents preferred rewards of equal value for flood protection and 26% for energy-saving measures. This is similar to the results for the England and Wales survey and shows that Timperley is an average neighbourhood with disposable income that matches the socio-economic profile suggested by the neighbourhood statistics compiled by the Office of National Statistics. Figure 5.20 shows the spread of reward values in return for installing any measures.

Figure 5.20: Percentage of residents who would accept different values of rewards for installing any measures



Only 6% and 2% of respondents were prepared to accept rewards which were worth double the cost of installing measures for flood protection and energy saving respectively, while 14% (flood) and 8% (energy) of respondents said that no amount of rewards would get them to spend money on the suggested measures.

5.2 Summary of the flood and energy survey

5.2.1 Acceptance of household surveys and recommended measures

Residents who said they wanted to take part in the next stage of the project were contacted about their interest in accepting free flood and energy audit surveys of their homes. The audits were scoped to provide a clear picture of the status of their house against the recommended levels of flood protection (from the Environment Agency) and energy conservation (from the Energy Saving Trust). The recommendations in the reports also served as a guide against which to judge requests for rewards as a result of purchased measures. It was made clear to the residents that they could only buy measures from the list of recommendations in their report if they wanted to claim rewards from the scheme. The contractors were not associated with any particular brand or type of measure allowing the surveyor to suggest a wide range of solutions.

Floodconsult and the Energy Saving Trust (EST) provided trained personnel to carry out the audits. Each householder was contacted separately and the visits arranged according to their convenience and the availability. The AfSL project coordinator provided a link between the survey teams and the residents where this was required. A total of 25 householders expressed interest in having a surveyor visit their properties although three opted for an energy-only report. Of these, all but one household (which opted out of both audits due to personal reasons) were completed within the study.

Flood-protection measures were recommended for 10 of the 21 houses that opted for the flood audit. All 10 houses were advised to buy demountable externally fitted flood barriers for front and rear doors (often referred to as door guards), airbrick covers, and remedial works to make good gaps in masonry and paving and pipes including surface waste water pipes for dishwashers, sinks and washing machines. In addition to the required recommended work, all the houses were advised to have temporary self-inflating sandbags for doors and surface-mounted electric pumps for those with basements as additional (desirable) measures. Foul sewage non return valves were the next most commonly recommended measures (25% of houses).

Just over half the houses that had an energy-saving survey were recommended to purchase mineral wool insulation or equivalent loft insulation to achieve a 270mm thick layer between and across the roof joists in the loft. This was the most commonly recommended measure. Boiler and radiator controls (27% of the houses visited), cavity wall insulation (25%) and insulation for solid walls (21%) were the other commonly recommended energy measures for these dwellings.

Following the production of the two audit reports, a main report was prepared for each household by the University of Salford team. In addition to the surveys, the main report also included the list of rewards that were being offered to residents. Detailed instructions of how residents could choose the rewards were also provided in this section (see Appendix A). The Salford project manager and the AfSL project coordinator were personally involved in delivering the main reports to the residents and provided additional explanations in order to guide their selection. Residents were given time to make their decision and the project coordinator kept in regular contact with each resident at this time to make sure that there was no impediment that could be addressed by the team that undermined the ability of the householder to make a decision. Letters were also sent to the participants reminding them that the offer to reward them against their purchases was time limited and only valid for a 10 weeks period.

Later, the residents who decided to undertake improvements communicated their interest to the project coordinator who provided them with information on the contractors that they could approach in order to obtain and install their chosen measures. The contractors were invited to provide a quotation for the work before the resident made a decision to proceed.

Initially eight people expressed their interest to buy some or all of the recommended measures in their reports. By the end of the trial period, five had purchased energy-saving measures and three were still contemplating the offer. None were contemplating flood measures. The energy measures that these five purchased included:

- cavity wall insulation (the EST recommended contractor carried out the work);
- replacement rear door with a UPVC door to prevent drafts;
- loft insulation;
- new storage heaters; and
- a new boiler.

Finally, following the delivery of rewards, a post evaluation attitudinal survey was conducted among those five residents who took part in all the stages of the project.

5.2.2 Selection of rewards

The following rewards packages were claimed by the residents:

- A beauty (pamper) package from Salford College and Co-operative Food fruit and vegetable vouchers. The value of this package compensated the resident for spending approximately £150.
- A Metrolink season ticket and fruit and vegetable vouchers. The value of this package compensated the resident for spending approximately £750.
- A front and rear garden makeover, including a new fence and the creation of new borders, and fruit and vegetable vouchers. The value of this package compensated the resident for spending approximately £2,300.
- Fruit and vegetable vouchers. The value of this package compensated the resident for spending approximately £160.

One of the residents that responded to the energy survey bought space heaters worth approximately £1,900 but declined to receive any rewards. He said that he was grateful for the time and advice given to him to improve the energy efficiency of his home. However, because he could afford the new measures, he did not consider that it was appropriate to ask for the reward package. The total value of the reward packages for the energy-saving measures was approximately £3,360, an average of £840 per house. The overall expenditure on energy-saving measures (including the resident who declined the rewards) was £5,260, making the average spend on measures by residents £1,052.

5.2.3 Community perspectives: findings from the project diary and the post project evaluation interviews

While the attitudinal questionnaire carried out at the start of the trial captured the views of residents on the substantive issues that were being tested by the study, the Salford team also wanted to understand the community's opinions on various aspects of climate change and home improvement as the study progressed into the house survey and reward stages. A Project Diary was maintained to record any views, observations and questions that arose during resident interactions. This section of the report summarises the information collected through the Project Diary. Although the study may not be able to generalise the findings from this aspect of the research, it provided a richness of information that qualifies some of the attitudes and (later) decisions of the residents as they reacted to the choices given to them by the incentive scheme.

In addition, the residents who undertook either flood and/or energy audit surveys were invited to take part in the post evaluation survey. The five residents who completed every stage of the Trial process and all other residents who had undertaken any of the surveys and did not opt for any improvements were also approached and asked if they would be willing to be interviewed. Seven out of

twenty four residents (including four of the five who completed all stages of the project and three who just had surveys) agreed to participate in the post evaluation survey. The structure of the interviews followed the original script of the attitudinal questionnaire to determine if the resident's views had changed in response to their experience during the Trial.

a) Climate change and the experience of flooding

It was observed that many participants did have a good awareness of issues around climate change and agreed that something needed to be done to control its impacts. However, there was less confidence about whether it was possible to make a difference, particularly on flooding, even if significant collective effort was possible. Approximately three-quarters of residents knew that they lived in a flood-threatened area, but very few thought that there was more than a low or very low risk that their own house would be flooded. This was the same finding in very similar proportions in the earlier attitudinal work done by the Salford team. The Project Diary illustrates the depth of the problem as it captured many detailed accounts of admittedly minor flooding events in the study area which, on the evidence of the survey, did not influence the residents to act on their experiences.

Although some residents had not experienced a flood in their own properties, they had observed their neighbours' properties or roads becoming inundated. An example of this was a resident from Deansgate Lane who remembered that the bottom of the Lane was flooded after it rained constantly for a whole day. He also volunteered that the cellars of terraced houses in Deansgate Lane are regularly flooded and that when his extension was built it required the foundations to be four to five metres deep before the builders reached dry, solid ground. Another respondent said he had lived in his property for over 30 years and had experienced flooding in his cellar every year except the last two years.

Another resident who has seen flood water come as far as her raised doorstep but not higher observed flooding on Brunswick, Newton and Bridgewater Roads. However, she also said that flooding had become less of a problem since larger drains were installed. Interestingly, she asked the project team whether they had visited Houldsworth Avenue because she had heard of flooding there. However, the project was not able to find a supporting statement from any participants living there that this had occurred.

Timperley Brook flows directly behind the houses in Houldsworth Avenue and residents there mentioned that they clear blockages from the concrete drains four times a year. Another resident said he had seen water levels rise to the height of the decking in his garden. A resident, who had lived in her house since 1960 and had experienced flooding in the area as recently as 2006, was more concerned about flooding from heavy rainfall than by flooding from the Brook. She also

remembered the local pub (Gardener's Arms) had experienced flooding in the past. A resident from Brunswick Avenue who had seen flooding further along the road mentioned that it was due to poor drainage which had since been resolved. A resident from Brentwood Avenue perceived the risk of flooding as low, although he observed that since a car park was built over allotment land at the end of the street there had been more surface run-off into the street. Another resident felt that the risk of flooding was probably low although half the old railway bank (which is about 20ft high) that ran along Deansgate Lane had been removed to make way for a car park. The resident even felt very strongly that removing this natural barrier was going to increase the flood risk.

A resident who had lived in the area for 70 years stated that local houses had suffered from ground water issues and that there were three sources of underground water running through streams or pipes. He had heard of the basement of some homes on Brunswick Road being flooded and said that the water table rises into the basement of the house and that the soil in his garden is saturated after rain. The resident further mentioned that there had been a meeting approximately two years previously called by the Environment Agency and the regional water company United Utilities. The meeting was not very well attended, but the authorities explained the engineering measures that would be done to minimise the impact of the rising water table and this (the resident thought) had led to the improved drainage. This story was also recounted by other residents in Brunswick Road. Since the project was completed, a resident in Bradley Close contacted the Salford team to say that United Utilities had offered to fit non-return valves in her house to minimise the chance of internal flooding in the future.

Another resident said that she had seen flooding in her garden and conservatory but believed that there was only a low risk of flooding since improvements to drainage had been made. However, this resident was one of the few who stated that she would consider installing flood-protection measures if the risk of flooding increased. Another resident who had lived in the property for over three years, and had lived on Navigation Road previously, said they had experienced flooding in their cellar and that this flooding was caused by blocked drains leading to 'sewage-infested flood water'. Again, this resident believed that there was a low risk of flooding since the improvements, but said that he would consider protecting his property further if the risk of flooding increased.

In summary, the study found that people were generally concerned about climate change and those who initially seemed sceptical about climate change at first tended to shift their views after interacting with the Trail team. Further, although many people had not seen flooding directly from Timperley Brook or the Bridgewater Canal, they had seen flooding around their house or their neighbours' properties as a result of surface-water flooding after heavy rain.

b) Primary reasons for low perception of the risk of flooding

A typical view from residents was that there was risk of flooding in their area, but it was not considered to be a 'high risk'. Many explained their view with reference to the civil work that had been carried out by the Environment Agency within the past three years including an increase in the height of the embankments either side of the Brook, dredging the channel, clearing blockages and installing new drainage pipes in a few roads and installing a collection vessel and overspill scheme onto Navigation Road Recreation Ground that has been designed to impound water when water in the Brook threatens to overtop the embankments.

One of the residents from Houldsworth Avenue believed that their houses were built with enough space underneath the building to allow flood water to drain away and said there was 'no way' Houldsworth Avenue would flood because of this and the civil works to the Brook.

The Environment Agency's flood risk mapping did not seem to be something that residents had looked at recently. The Agency has sent information through the post to all flood-threatened properties in England and Wales, but none of the residents mentioned this. This evidence suggests that householders are not absorbing the information that the Agency sends to them. However, for those that did read the literature, there is some evidence that it may have a negative effect. A resident from Bradley Close said he was annoyed about the letters he kept receiving from the Environment Agency as he felt it could increase his insurance premiums. One positive note from the Project Diaries was that some residents said that they are open to changing their opinions if presented with further compelling evidence that they should act.

Although statistically residents' past experience of flooding did show a relationship with their concern about future flooding, this may have been counteracted by a view expressed by some that the marketability of their properties may be affected if they disclosed that they believed that flooding might affect their property at some point in the future.

c) Remarks around choosing flood-protection measures

None of the residents in the Trial opted to act on their flood survey recommendations by the end of the programme. The low perception of risk from flooding was likely to be the main influencing factor for this outcome, but the Project Diary suggests that there were other issues that may have undermined a commitment to buy property-level flood protection.

One additional barrier was the absence of any evidence either from the authorities or their fellow residents that there was any need for urgent action on flood

protection. One resident pointed to a number of houses in the vicinity that had experienced flooding in the past but had failed to invest in measures to stop flooding in the future. Most of the people contacted during the survey period did not know what to do or who to contact when flood waters threatened, suggesting minimal contact, or a lack of acknowledgement of contact, from the Environment Agency.

Another possible barrier to action was the position of flood insurance. One resident from Bradley Close said that even if it did flood he was fully insured and so would not be financially inconvenienced. Clearly this resident would be physically inconvenienced if his house was flooded, but his circumstances may have meant that he was able to move away while the house was cleaned and refurbished.

A further concern was the actual or perceived disturbance that would be caused by installing flood protection. One of the residents from Bradley Close who had agreed to a flood survey was initially interested in installing airbrick covers. However, later he declined to purchase these as he thought that the installation would be messy and might affect the appearance of his property. In fact, replacement airbrick covers are often interchangeable in design terms with standard airbricks, but the resident was adamant that he did not wish to take the chance and decided not to take up the measure.

Yet another issue arose for people living in terraced properties. These residents realised that their neighbours would need to invest to protect their properties from flooding in order for their purchase to be effective due to the common void beneath the terraced row. A resident mentioned that although he is willing to improve the flood protection for his house, he was not confident that his neighbours would do the same. This concern ultimately led to his decision to opt out of the project.

Some residents found that there were technical barriers to their preferred choices. A householder in Deansgate Lane was originally interested in installing non-return valves in his basement. However, when the contractor came to give an estimate for the work he advised the resident that a better solution would be to install a sump and pump. While acceptable in principle, the resident had an existing arrangement with the water company United Utilities that offered financial compensation for the likelihood of flooding and this benefit would have been removed if he had installed the pump. He decided that it was financially more beneficial to keep receiving the compensation rather than adopt a faster means of clearing the basement of flood water.

The overall cost of the flood measures proved to be a disincentive for the other residents who were minded to purchase the recommended flood measures in their

report. The prices for the measures in the report were suggested by Floodconsult based on a range of products on the market. It appeared from the report that a householder could purchase a set of airbrick covers and door guards for approximately £1,000 to £1,500. However, when the contractor recommended by the Environment Agency and some Cumbria local authorities came to price the work the cost was often more than double this figure. At least two residents declined to buy the measures at these prices even though they were being offered the value of the measures back in non-cash rewards. The reason given for this was that it outstripped their disposable capital; they simply did not have that sum available to them in their bank accounts.

One of the anticipated obstacles to adopting a key property-level measure – the door guard – did not feature in the reasons residents gave for their decline to purchase flood measures. Most of the door guard models are heavy to manoeuvre and bulky to store and can therefore be unpopular, particularly for elderly residents. It may be that for the reasons recorded above residents did not seriously consider acquiring the door guards and this is why the issue of their size and weight never arose.

The evidence from the project diary shows that there are multiple barriers to motivating residents to invest in property-level flood protection. While some of these can be overcome with better information, and higher numbers of community participation, some are structural issues that can only be tackled at central government level.

d) Issues arising from the energy efficiency measures

It was observed that many of the residents were more enthusiastic and inquisitive about what they could do to save energy in their homes. A few residents said that they had already made energy efficiency improvements (such as buying a condensing gas-fired boiler). However, they were interested in finding out what else they could do to improve the energy efficiency of their houses.

Those that explained why they would not be interested in taking up energy efficiency improvements included one of the residents who said that his property was recently built and the resident believed that it was already energy efficient. Another resident felt that he had done everything he could to make his home energy efficient.

There were other residents who were supportive of the proposal that they should invest in energy conservation but still declined to participate. One of the reasons was cost. One householder said that he would consider loft insulation at a later date, but repeatedly stated that he did not think he would have the disposable income for the foreseeable future. Other reasons given for non-participation

included a view that new purchases were only made to replace appliances when they were broken and not just because there was a more efficient model available. Another resident said that he was very interested in energy efficiency measures, but since he was moving house he did not want to be part of the second phase.

It was clear from the attitudinal survey that respondents understood that there were immediate benefits that resulted from investing in energy-efficiency measures, while it was harder to convince people that flood-protection measures would result in similar returns.

e) Resident reactions to the offer of rewards

It was observed that many residents appreciated and were intrigued by the wide range of rewards that were offered through the project. Fruit and vegetable vouchers were again the most attractive reward chosen by residents, as they were for all of the attitudinal surveys carried out by the Salford team. Public transport again failed to attract much interest although the second highest value reward given to a resident in the trial was a Metrolink season ticket.

Few residents stated that they would be interested in going to the further education college to do a course and none of those choosing rewards opted for this. This may have been because the courses were being offered by Salford College, which was more distant than Trafford College premises. Trafford declined to take part in the trial. However, the distance (a few kilometres) did not dissuade one resident who chose the beauty paper package, a service offered by Salford College as a training opportunity for students taking beautician courses.

There were some negative reactions to the offer of non-cash rewards. One of the residents thought it would have been better offer to install the measures directly, avoiding the need for him to pay for them and then claim back the value in rewards. Another commented that he would prefer rewards to be directly related to the issues raised, such as a cash grant or professional assistance to help with the purchase of the measures.

There were some who had difficulty in finding sufficient amounts of reward from the list to interest them. Many older residents who were in receipt of free public transport were not interested in these rewards, while one of the residents had a public transport pass and grew his own fruit and vegetables, which limited the choice even further. He said that he would appreciate free private healthcare as he was a carer.

A few residents felt that if people could afford to pay for flood-protection or energy-efficiency measures then they should spend the money without expecting a

reward. One man felt that more appropriate incentives could be no or low-interest loans to pay for the measures, or council tax rebates.

Some residents benefited from a longer discussion about the issues around climate change and the need for the measures on offer. One householder from Bradley Close who was initially sceptical about the project changed his mind and eventually wanted to purchase every measure that was suggested in his report. This resident was over the age of 60 and had strong views and some pride about his ability to go through life without the need to 'take something for nothing'. Even though he spent almost £2,000 on energy saving measures, he refused to accept any of the rewards that were due to him.

f) The value of community engagement

The trial was designed to place community activists at the interface between the academic team and the residents in Timperley. While there was no control group testing other types of liaison personnel, the Project Diary recorded a good relationship between the AfSL team and the residents. There was an intention at the start of the trial to try to foster a new green community group. The creation and facilitation of this type of group was the mainstay of the Action for Sustainable Living organisation. To this end, there were two calls through letter and personal communication for residents to come to community meetings.

The first community meeting invited residents to hear from the Environment Agency and the National Flood Forum on issues around flooding. Just two residents attended this meeting although both of them were recruited to the scheme during the evening. Later, residents were consulted about convenient times and a second meeting was called with the same result (although a different pair of residents came this time).

When asked why they thought their fellow residents had not come to the meeting, the people at those meetings suggested a number of different reasons. One said that while she would like to be part of a community group, she did not believe there was much of a community spirit on her street as people did not stay long in the area. Another resident commented that people in the area were friendly but kept themselves to themselves, so he would be surprised if a community group could be formed.

A resident from Ryder Avenue talked about a meeting that had been called a few years ago between the community and United Utilities when properties on Brunswick Road suffered from frequent flooding and only six people came to the event. He thought many people assumed that their neighbours would be there and could explain what transpired, allowing them to stay at home. Another householder said he did not believe there was any community spirit in the area.

One woman was quite enthused by the project and supported the idea of a community action team, but doubted she had the time to participate.

5.3 Changes in attitude

One of the residents who initially disagreed with the statement that she is 'concerned about how climate change might affect her and her property' changed her view and agreed to the statement after being involved in the project. She also changed from agreeing (in the original survey) to strongly agreeing that she believed that using less energy in her home will make a difference to climate change. Another project participant who remained sceptical about the onset of climate change nevertheless accepted that he needed to protect his home against flooding and improve the energy efficiency of the dwelling as a result of the discussions he had with the trial team. Further, one of the residents strongly agreed that the project had changed his concern over climate change and its effects. However, two other residents did not feel that the project had changed their concern over climate change.

Two residents who strongly agreed that the project changed their awareness about the risk of flooding changed the way they perceived the chances of their property being flooded from very low (originally) to 'high' by the end of the trial. One of these residents said that he is now registered with the Environment Agency's flood warning service. Another resident agreed that the project has increased his awareness over risk of flooding. In addition, a resident who knew that he was in flood risk area still strongly agreed that the project has increased his awareness of the issues. The same resident also strongly agreed that using less energy in his home will make difference to climate change, after receiving the energy audit. Another resident who installed a new rear door strongly agreed that project had changed his awareness about the risk of flooding in his area. He still thought that the chance of being flooded was low, but his original answer was that it was very low. The evidence from the post evaluation survey is that the perception of risk from flooding had not changed very much as a result of contact from the project.

Perception of resident's about the Government's responsibility towards flooding

The post evaluation survey presented interesting results on perceptions on resident's and government's responsibility towards flooding. In one reaction, a resident agreed that homeowners do have a responsibility to protect their homes from flooding while disagreeing with the statement that it is government's responsibility to protect homes from flooding. This resident changed her mind about this (first saying that government did have a responsibility to protect,

indicating a change in attribution of responsibility. Another resident who initially agreed that it was government's responsibility to protect their home changed their view in the opposite direction to strongly agreeing about the government's role at the end of the project. This resident disagreed with the statement that it is the home owner's responsibility to protect against flooding in both surveys. Meanwhile, another resident who initially agreed with both the statements on responsibility adopted a neutral position regarding the role of home owners in the second survey. One of the residents who strongly agreed about his concern towards climate change changed his view and agreed that it is also government's responsibility to protect his home. This resident retained a consistent view on home owner's responsibility towards protecting their homes.

A further resident who remained sceptical about climate change and who originally disagreed that homeowners have a responsibility to protect their homes from flooding later agreed to this statement. In addition, the resident strongly agreed at the beginning of the project that it is government's responsibility to protect his home from flooding changed but later changed his view to neither agree nor disagree.

On balance these results show that the increased understanding about flooding gained from exposure to the project operatives did influence homeowners to indicate that they should take more responsibility for protecting their property and to move away from thinking it was government's responsibility. However, this was not a universal finding and some of those that changed their attitude only moved to occupy a more neutral position. This indicated that, while a more intensive interaction can influence attitudes to flooding, a more persuasive strategy will need to be adopted before a decisive shift can be guaranteed.

Changes in behaviours towards flood protection and energy efficiency

When the residents were asked whether the project changed any of their actions or behaviours one of the residents said she was switching off her lights more often than before, and had replaced incandescent bulbs with energy saving versions. She also changed the light fittings in the kitchen and replaced her old fridge with an energy efficient model. Another resident mentioned that he was also more aware about leaving lights on and reduced amount of time that his boiler was switched on. He also took the advice in his flood report and re-pointed brickwork and carried out other minor repairs to plug gaps in his masonry.

The residents were asked for any reasons that prevented them from taking up the recommended actions from the flood and energy audit surveys. Various responses were given to this question including:

- they did not have the time to act right now although many were quite interested in undertaking the energy saving measures in the future and acknowledged usefulness of the energy audit reports
- technical reasons such as they thought the cavity between their walls was too small.
- they were wary of the disruption and hassle involved in carrying out the work.
- they could not afford the measures, particularly for flood protection.

Other Observations

The resident who agreed to install a new boiler said it was helpful to have someone to explain the value of the improvement and to assist with the procurement and instalment of the new appliance. The same resident felt that the rewards were a good incentive and motivated her to spend her money to make the recommended improvements. When asked about their motivation to participate, residents said that taking advantage of the rewards; saving on insurance bills; and, receiving peace of mind were all factors in their decision to buy energy measures.

It was noted that fruit and vegetables vouchers, Metrolink tickets, free meal lunch at a restaurant; and a garden make over were the preferred rewards at the start of the study. One resident said she would prefer to receive rewards worth just of 50% of the cost of the energy saving improvements at the initial stage of the project, and have the balance at the end of the project. Another resident who initially felt that he would only accept rewards worth double the cost of both flood and energy measures, changed his view and accepted rewards worth the same amount as he spent.

6.0 Conclusions and Recommendations

6.1 Confirmation of Attitudes

The Timperley attitudinal survey results showed a marked similarity to the other telephone and door to door surveys that had been carried out by the Salford team since 2009. Significantly, 82% of respondents were aware that their houses were in a flood risk area, precisely the same proportion that acknowledged this in the survey of England and Wales in 2009. The 80% of the respondents in Timperley that felt that the chances of their houses being flooded are low or very low compared very well to the 78% who gave the same answer for the larger study.

The Timperley sample also followed earlier results when three quarters strongly agreed or agreed that they would be interested in taking advantage of non-cash rewards. There was majority (although lesser) interest in grants, and cheaper prices when the whole street or a group bought measures. While there was a significant number of people in Timperley that were prepared to spend some money on their measures (72%) the trial found that for many residents, the amount they needed to spend (even knowing they would receive this back in rewards) was prohibitive. The statistical median value for the expenditure range that the residents were willing to make on installing flood protection measures was £100 - £500 and £500 - £1000 for energy saving. However, the project diary evidence suggested that this depended on circumstances with some residents saying that concern about job security made a decision to make non-essential investments on their house very difficult.

6.2 The nature and timing of information

The lessons from the Timperley study show that it is not necessarily the content of information sources, or even their presentation that is significant in the motivation towards retrofit action. Rather, the timing, tailoring, and the source of the information appeared to be the crucial aspects in the efficacy of education and awareness material. The Salford team identified three potential key intervention points when attempting to motivate property-level investment. These were:

- Information at the point of decision on whether to allow surveyors into the house

- Information at the point of decision on whether to take up some or all of the surveyor's recommendations
- Information on how to behave differently once the measures have been obtained.

The study found that face-to-face interaction with householders is an essential component, but that interventions need to be timed to meet householder needs. In addition, programmes that assume standard contact points will often fail many householders who have different needs at different times. For suppliers involved in delivering the Green Deal, this finding could have significant cost implications. Commissioning bodies would do well to ensure that suppliers have factored sufficient contact time into their delivery programmes to accommodate this tendency.

A further finding was that the strategies employed in the trial lead to a significant number (around half of all participating households) allowing survey teams through their doors. The Salford team concluded from this that time spent talking to householders on their own property, offering tailored information (in response to questions), from a trusted source, and with the promise of rewards that capture the imagination were an effective combination to overcome doubts about the proposition. The information in the questionnaire, listing as it did all of the common interventions for energy and flooding, seemed to help residents to understand the nature of the request and led many to move to the next stage.

The second decision point, choosing to act on the report recommendations, was facilitated by a hand delivered copy of the report, and a brief face-to-face explanation of its contents. This was supplemented by follow-up telephone calls to those who were slower to make up their minds. The evidence at this stage is that those who opted to purchase measures were probably already convinced that they wanted energy saving products either through the early interactions with the co-ordinator, or by talking to the energy surveyor who also spent time answering residents questions while on the premises. Persuasion beyond this point was more difficult, probably because of technical and financial barriers were beyond the abilities of the co-ordinator to overcome. However, it is conceivable; even likely, that there will be residents in future programmes who would need encouragement to read/re-read their reports and make a decision, possibly with supplementary advice from their trusted source of information.

The issue of trust was also raised by some residents who commented that being approached by a community group with University backing reassured them that there was no commercial 'catch' to the scheme. Nevertheless, one resident reported that he still heard other residents say they were suspicious of the scheme because they had recently had to contend with many energy companies trying to

get them to switch providers or buy energy saving products and this had made them defensive.

6.3 The issue of cost and preparedness to pay

The price of measures, particularly for flood protection products, was not anticipated to be a significant barrier at the start of the project. However, this proved to be a serious factor for the minority of residents who overcame all other de-motivations up to the point of purchase.

The survey findings showed that 72% of respondents said they would be prepared to pay between £100 and £500 for flood protection measures. The estimate for door and air brick protection that was offered to the research team by the survey team prior to start of the trial was between £1,500 and £2,000. Those residents that went on to request a contractor visit to provide a quote for supplying and (where appropriate) fitting the products were offered prices in the range of £2,500 to £3,000. Most of the residents who were considering flood protection were dissuaded from moving to the final stage when they saw the survey estimates, and the rest declined to place an order when the contractor estimates arrived. All said that they did not have that amount of disposable income to invest, despite knowing that the non-cash rewards would represent 100% compensation for their outlay.

Some residents linked the high perceived cost and the low perceived risk as a reason for declining to act on the flood survey recommendations. Others said that there was a lack of evidence that flooding was a serious threat while some put their faith on the engineering work carried out by the Environment Agency and United Utilities in the local area.

Connecting these responses to the five questions derived from the theory of reasoned action it is apparent that, while many said they understood there was a problem (from climate change producing heavier and more frequent downpours) that could lead to flooding; none of the other four conditions for behaviour change were met. There was a distinct lack of understanding about what to do about protecting their houses and the lack of urgency to act suggested minimal emotional investment in the issue. The lack of belief that acting would make a difference and the absence of evidence that anyone else was acting in this manner meant that there were too few positive influencing factors for the strategy to encourage and too many negative factors to work around.

The factors that worked against the acceptance to buy energy measures included a perception that the cost of energy saving measures was prohibitive, and a belief

(against the surveyor's finding) that the measures the resident had in place were sufficient. Another reason for declining the offer was the disturbance that would be caused from (for example) moving possessions out of the loft space, or the mess caused by cavity wall insulation work. One resident was suspicious of cavity wall insulation and thought it would cause his walls to become damp, a common concern although rarely justified. These are all well documented reasons for inaction on energy conservation.

Many people who were prepared to consider energy measures did so because they thought that they felt would reap financial benefits in the future. There was no corresponding belief in the investment in flood protection. The implications for the government regarding the cost of flood measures are considerable. The government's new policy approach to flood defence funding is to invite a wider circle of stakeholders (or beneficiaries) including local authorities and the private sector to share the cost of flood protection. While this will potentially help government money go further and hence lead to the protection of more flood-threatened areas, a considerable amount of work will need to be done with communities on awareness and the understanding of flood risks before householders will be persuaded to invest in their houses.

6.4 The availability of time to consider the proposition

Some residents who declined to participate in the door-to-door questionnaire, and others who failed to respond to their survey reports said that they could not spare the time to get involved in the project. While some may have used this response to avoid becoming involved on something that did not interest them, others who said they were interested in climate change and were prepared to participate in the project found that they could not devote the time to consider the issues. A few were motivated to select measures and install them in their own time thus avoiding the need to wait for contractors. Others said that they were positively influenced by their interaction with the project and would, if time allowed, consider improving their homes in the near future using the recommended measures in their report as a guide.

The difficulty in overcoming resistance in time-poor households is a perennial problem for many public policies that require the public to concentrate for a period of time in order to assimilate the message and (hopefully) change their behaviour accordingly. The offer of incentives appears to have had the ability to attract, or at least intrigue some residents and draw them into the next phase of the project. The 50% acceptance of home surveys provides some encouragement to strategists considering how to improve access for future programmes such as the Green Deal.

6.5 The value of intrinsically sustainable rewards

The trial in Timperley relied largely on offering all the rewards tested in the attitudinal work in 2009. Only furniture refurbishment and beauty sessions (offered as a suggestion by Salford College) were added to the Timperley list. There was no apparent dissatisfaction with the fact that all of the non-cash rewards had some kind of intrinsic sustainable value. Some residents in the Timperley trial were unclear why cash grants or a more direct form of incentive could not be offered, while others made suggestions for rewards without sustainable value. This followed the pattern of responses in the earlier surveys.

Once again fruit and vegetable vouchers were the most popular choice both in the attitudinal work and in the take-up of rewards after purchases were made. Residents implied that this was an easy choice as it was a constant need and saved them money.

6.6 The significance of collective community action

The Salford academic team chose Action for Sustainable Living as their delivery body for a number of reasons. In previous surveys the team found that residents were willing to speak to people who lived relatively locally and did not give the impression that they had any motive other than to help the University team to make the trial a success. In addition, the majority of Timperley residents said they would be interested in attending a 'green' community meeting. The combination of AfSL involvement and the impression that there were plans to start a local group was designed to provide an indication that there was pro-environmental activity in the area and that acting in this way would not be a lone activity.

6.7 The Future of Property-level Flood Protection Policy

The results of the Timperley Green Homes Trial suggest that policy-makers should consider how they can build all three strategies (better information, incentives, and community-level activity) recommended by the Salford team into future campaigns aimed at home-owners. The cost of flood protection measures for homeowners will need to come down either through incentivisation or through some kind of market intervention in the same way that some basic (insulation) measures schemes have used private sector funding through the energy companies to bring down the cost of energy saving measures. More work needs to be done to work with

communities and encourage the formation community flood groups well before floods cause damage to property and loss of life. In some locations, the Environment Agency has found it difficult to motivate residents to commit themselves to these groups because people do not consider that it is worth the devoting the time to an issue they perceive as being a remote possibility.

Finally, the timing and nature of advice to residents about the threat of flooding and the action required to alleviate this will need to be re-visited as there is very little evidence that the material being distributed to date is having a demonstrable effect on motivating the recipients to invest in their homes. Two elements of this could be improved. First, the range and accessibility of products must be better explained and (preferably) shown to residents. Secondly, the likelihood and potential impact of a flood event needs to be communicated in a more graphic and memorable manner. Clearly a balance needs to be struck between making residents concerned enough to act, and the possibility of driving people out of the area and blighting neighbourhoods. However, the approach that has been taken to date leaves residents vulnerable because of their under-perception of the risks and an over-confidence in civil protection schemes.

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8.0 Appendix A

Sample survey and Rewards brochure

Resilient Homes Questionnaire

Information filled in by the interviewer

Interviewer's initials:

Area Navigation road, Timperley

Address: Street name:

Number:

Type of house Semi-detached

CIRCLE ONE Bungalow

Terraced

Other(specify)

Introduction

Hello, my name is..... , I representAfSL.... and I am carrying out a survey for the University of Salford as part of the "Resilient homes" project. A few days ago you should have received a letter describing this project – do you remember seeing it? Do you want me to remind you what this study is about? Could I take 15 minutes of your time and ask you a few questions about the climate change effects on your house, and what you can do to protect your house and belongings from these effects? By completing this questionnaire you will be entered into a prize draw of 10 high street shopping vouchers worth £50.

Before we start, I want to make sure you understand that no names or addresses will be used in this work, and your answers will be combined with everyone else's and never linked to you personally.

House ownership

1. Can I confirm that you are either the owner of this house, or are you living with the owner of this house?

Yes ☐¹

No ☐²

If the answer is NO, then ask if you can speak to the owner. If the house is rented then terminate the interview.

2. Are you involved in deciding how money is spent in your house?

Yes ☐¹

No ☐²

If the answer is no, then ask if there is someone in the house that can answer the survey questions. If not then the interview should be terminated.

Climate change and what it means for you and your home

I am going to ask you a few questions about climate change and how it might affect you and your house.

Choose a response for each of the following statements:

3. I am concerned about how climate change might affect me and my property? TICK (✓) ONE BOX

Strongly agree
☐¹

Agree
☐²

Neither
☐³

Disagree
☐⁴

Strongly disagree
☐⁵

4. Using coal, oil and gas to produce energy for my home is changing the Earth's climate TICK (✓) ONE BOX

Strongly agree
☐¹

Agree
☐²

Don't know
☐³

Disagree
☐⁴

Strongly disagree
☐⁵

5. Using less energy in my home will make a difference to climate change TICK (✓) ONE BOX

Strongly agree
☐¹

Agree
☐²

Don't know
☐³

Disagree
☐⁴

Strongly disagree
☐⁵

6. One of the possible effects of climate change is more frequent and more severe flooding. To your knowledge, has your house ever been affected by flooding? TICK (✓) ONE BOX

Yes ☐¹

No ☐²

7. Are you aware that your house is in a flood risk area? TICK (✓) ONE BOX

Yes ☐¹

No ☐²

8. What do you think the chances are that you will be flooded? TICK (✓) ONE BOX

Very High
☐¹

High
☐²

Low
☐³

Very Low
☐⁴

Don't know
☐⁵

9. Are you aware of the Environment Agency Floodline Warnings Direct? TICK (✓) ONE BOX

Yes, I am registered ☐¹

Yes, but I am not registered ☐²

I know nothing about it ☐³

If the answer is box 2, ask why they have not registered

10. Is your house insured against flooding?

Yes ☐¹

No ☐²

Choose a response for each of the following statements:

11. Homeowners have a responsibility to protect their homes from flooding TICK (✓) ONE BOX

Strongly agree
☐¹

Agree
☐²

Neither
☐³

Disagree
☐⁴

Strongly disagree
☐⁵

12. It is the Government's responsibility to protect my home from flooding TICK (✓) ONE BOX

Strongly agree
☐¹

Agree
☐²

Neither
☐³

Disagree
☐⁴

Strongly disagree
☐⁵

Making changes to your house

I would now like to ask you a few questions the changes you might make to your house to use less energy and to make it less vulnerable to flood damage.

13. Can you think about things you could do to stop flood water entering your house or to limit the damage water can cause to your house and belongings?

(a).....

(b).....

(c).....

(d).....

(e).....

14. Can you think about ways to improve your house that would reduce the amount of energy you use in the house?

(a).....

(b).....

(c).....

(d).....

(e).....

15. I am going to read out a list of improvements that can protect a house from flood damage. Ignoring how much this would cost for the time being, tell me if you would consider having any of them done to your house. *If the answer is NO, then why not?* TICK (✓) ONE BOX IN EACH ROW?

Door guards with raised thresholds	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	Why not?	No knowledge <input type="checkbox"/> ³
Air brick covers	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	Why not?	No knowledge <input type="checkbox"/> ³
Replace carpets and floorboards with tiles over concrete	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	Why not?	No knowledge <input type="checkbox"/> ³
Raise electric, TV and phone sockets, and the fuse box and meter	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	Why not?	No knowledge <input type="checkbox"/> ³
Replace bottom of wooden staircase with concrete	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	Why not?	No knowledge <input type="checkbox"/> ³

16. I am going to read out a list of improvements that can save energy in your house. Ignoring how much this would cost for the time being, tell me if you would consider having any of them done in your house. *If the answer is NO, then why not?* TICK (✓) ONE BOX IN EACH ROW

Insulate/put more insulation in your loft	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	Why not?	No knowledge <input type="checkbox"/> ³
Insulate your walls	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	Why not?	No knowledge <input type="checkbox"/> ³
Replace your boiler with a better one	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	Why not?	No knowledge <input type="checkbox"/> ³
Replace equipment (kettle, fridge, washing machine, etc.) with efficient ones	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	Why not?	No knowledge <input type="checkbox"/> ³
Fit double or triple glazing	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	Why not?	No knowledge <input type="checkbox"/> ³

17. How much money would you be prepared to spend to make the improvements that I just mentioned to your house? TICK (✓) ONE BOX

To protect your house from flooding:

Nothing at all	<input type="checkbox"/> ¹
Under £100	<input type="checkbox"/> ²
£100 - £500	<input type="checkbox"/> ³
£500 - £1,000	<input type="checkbox"/> ⁴
£1,000 - £3,000	<input type="checkbox"/> ⁵
More than £3,000	<input type="checkbox"/> ⁶

To make your house more energy efficient:

Nothing at all	<input type="checkbox"/> ¹
Under £100	<input type="checkbox"/> ²
£100 - £500	<input type="checkbox"/> ³
£500 - £1,000	<input type="checkbox"/> ⁴
£1,000 - £3,000	<input type="checkbox"/> ⁵
More than £3,000	<input type="checkbox"/> ⁶

Motivations and rewards

I would now like to ask you a few questions about what might help you to change your mind to make some, or more changes to your house in order to save energy or prevent flood damage.

18. How would you respond to the following statements; I would consider making changes to my house to prevent flood damage in order to... TICK (✓) ONE BOX IN EACH ROW

Give me peace of mind	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵
Save on my insurance bill	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵
Save on the cost of repairs/replacements	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵
Increase the value of my house	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵
Keep up with what other people in my community are doing	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵
Take advantage of a cheaper price when the whole street or a group of my neighbours decided to have the work done together	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵
Take advantage of cash rewards or grants	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵
Take advantage of non-cash rewards like free goods or services	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵

19. I would consider making changes to my house to save energy in order to... TICK (✓) ONE BOX IN EACH ROW

Feel like I am doing something about climate change	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵
Save on electricity bills	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵
Increasing the value of my house	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵
Keep up with what other people in my community are doing	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵
Take advantage of a cheaper price when the whole street or a group of my neighbours decided to have the work done together	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵

Take advantage of cash rewards or grants	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵
Take advantage of non-cash rewards like free goods or services	Strongly agree <input type="checkbox"/> ¹	Agree <input type="checkbox"/> ²	Neither <input type="checkbox"/> ³	Disagree <input type="checkbox"/> ⁴	Strongly disagree <input type="checkbox"/> ⁵

20. How many of the following rewards would you accept in exchange for flood-proofing your home or making your home more energy-efficient? TICK (✓) ONE BOX IN EACH ROW

Free bus travel	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	I don't know <input type="checkbox"/> ³
Free Metrolink travel	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	I don't know <input type="checkbox"/> ³
Free train travel	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	I don't know <input type="checkbox"/> ³
Free season tickets to Salford city Reds	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	I don't know <input type="checkbox"/> ³
Free season tickets to Altrincham Football Club	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	I don't know <input type="checkbox"/> ³
Free access to courses at Salford College	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	I don't know <input type="checkbox"/> ³
Vouchers for fruit and vegetables	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	I don't know <input type="checkbox"/> ³
Free meals at restaurants	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	I don't know <input type="checkbox"/> ³
Free garden makeover	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	I don't know <input type="checkbox"/> ³
Free furniture makeover	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	I don't know <input type="checkbox"/> ³
Free hairdressing session	Yes <input type="checkbox"/> ¹	No <input type="checkbox"/> ²	I don't know <input type="checkbox"/> ³

21. Are there any other rewards other than cash that you would accept in return for making the flood protection or energy saving improvements in your home?

.....

.....

.....

.....

22. Thinking now about the value of the rewards that you would accept, which of the following would help you to spend money on flood protection TICK (✓) ONE BOX

Rewards worth 50% of the cost of the flood protection work	<input type="checkbox"/> ¹
Rewards worth the same amount as I spend on flood protection	<input type="checkbox"/> ²
Rewards worth double the cost of the flood protection work	<input type="checkbox"/> ³
No amount of rewards would get me to spend money on flood protection	<input type="checkbox"/> ⁴

23. What value of reward would you accept in exchange for spending on energy-saving improvements? TICK (✓) ONE BOX

- | | |
|---|---------------------------------------|
| Rewards worth 50% of the cost of the energy saving work | <input type="checkbox"/> ¹ |
| Rewards worth the same amount as I spend on energy saving | <input type="checkbox"/> ² |
| Rewards worth double the cost of the energy saving work | <input type="checkbox"/> ³ |
| No amount of rewards would get me to spend money on energy saving | <input type="checkbox"/> ⁴ |

24. Are you aware that some people qualify for grants for energy saving improvements to their homes? TICK (✓) ONE BOX

Yes ☐¹ No ☐²

About you and your home

I would like to finish by asking you some questions about your own situation so that, if this scheme is allowed to run, then we can match the right rewards to the right people in the next phase of the project.

25. How large is your house? TICK (✓) ONE BOX

- | | |
|----------------------|---------------------------------------|
| 1 bedroom | <input type="checkbox"/> ¹ |
| 2 bedrooms | <input type="checkbox"/> ² |
| 3 bedrooms | <input type="checkbox"/> ³ |
| 4 bedrooms | <input type="checkbox"/> ⁴ |
| More than 4 bedrooms | <input type="checkbox"/> ⁵ |

26. How many people are living in your household? FILL IN

Adults (over 18): Children (under 18):

27. How long have you lived in this house TICK (✓) ONE BOX

- | | |
|-------------------|---------------------------------------|
| Less than 2 years | <input type="checkbox"/> ¹ |
| 2-5 years | <input type="checkbox"/> ² |
| 6-10 years | <input type="checkbox"/> ³ |
| 11-20 years | <input type="checkbox"/> ⁴ |
| Over 20 years | <input type="checkbox"/> ⁵ |

28. How old are you? TICK (✓) ONE BOX

- | | |
|------------|---------------------------------------|
| 25 or less | <input type="checkbox"/> ¹ |
| 26-39 | <input type="checkbox"/> ² |
| 40-59 | <input type="checkbox"/> ³ |
| 60 or over | <input type="checkbox"/> ⁴ |

29. How would you describe yourself? TICK (✓) ONE BOX

- | | |
|------------------------|--|
| Employed full-time | <input type="checkbox"/> ¹ |
| Employed part-time | <input type="checkbox"/> ² |
| Self-employed | <input type="checkbox"/> ³ |
| In full time education | <input type="checkbox"/> ⁴ |
| Unemployed | <input type="checkbox"/> ⁵ |
| Long term sick | <input type="checkbox"/> ⁶ |
| Retired | <input type="checkbox"/> ⁷ |
| Full time houseperson | <input type="checkbox"/> ⁸ |
| A carer | <input type="checkbox"/> ⁹ |
| Other (<i>write</i>) | <input type="checkbox"/> ¹⁰ |

Finishing the interview:

Thank you for your time. By completing this questionnaire you have been entered into a prize draw of 10 high street shopping vouchers worth of £50.

As you were informed in the letter, this project has two stages: In this first stage we are trying to find out if people like you are willing to make improvements in their homes that would protect them from flood damage and help them save energy. We are also trying to learn, what sort of rewards people like you would be willing to accept for making these changes to your home.

In phase two of the project, which is likely to start in summer this year, we will be actually offering rewards to people who agree to make flood-proofing or energy-saving changes to their homes. So, people who make their houses more energy-efficient or safer from flood will not only enjoy their peace of mind or lower electricity bills but also get rewards, such as free public transport, for doing so. We are looking for properties in this second part of the project.

Would you like to take part in the phase two of the project and participate in a scheme where you receive a free flood and energy survey, and then rewards worth as much as you spend on the improvements to your house? TICK (✓) ONE BOX

- | | |
|---|---------------------------------------|
| Yes | <input type="checkbox"/> ¹ |
| No | <input type="checkbox"/> ² |
| I would like to think about it, contact me please | <input type="checkbox"/> ³ |

If the answer was “yes” or “would like to think about it”, is it possible to take your name and phone number so we can contact you again?

NAME:.....

Phone number:.....

Finally, would you be interested in explore ways in which, together with your neighbours, you might help your neighbourhood become more sustainable?

- | | |
|-----|---------------------------------------|
| Yes | <input type="checkbox"/> ¹ |
| No | <input type="checkbox"/> ² |



Timperley Green Homes Reward Scheme



Energy Saving & Flood Protection Reports

For



No, Street name



Dear Mr. XXX,

I am pleased to present you with the results of the energy and flood survey that we offered to you under the Timperley Green Homes programme. The surveyors were looking at your house to see if they could recommend measures that would make your home warmer and more energy efficient (saving you money on your gas and electricity bills), and more protected against flooding. Not every house will need all of these things, and you are not required to take on all of their recommendations right now to qualify for your rewards.

A summary of the recommendations is set out on the next page, along with an example of the rewards that you may wish to claim. Some of these were the rewards that you mentioned that you would prefer when we interviewed you earlier in the programme. After you have looked at the summary, please take time to read the detailed reports and the full list of rewards in later sections of this report. You may find that there are new rewards that we have added that you would prefer, or you may have simply changed your mind since we asked you about your preferences.

When you have decided what you want to do, contact Tony Li on 0161 237 3357 or any of the Action for Sustainable Living Team and they will guide you through the next step of the programme. We really value your participation, and it is possible that your contribution to the programme will lead to a different approach by government to helping people to plan for changes to our climate in coming years.

Yours sincerely,

Professor Erik Bichard

Summary Report and Guide to Choose Your Rewards

The following section summarises the two survey report recommendations for your house (Table 1), and gives examples of the rewards you can claim against the cost of these measures (Table 2). The full energy and flood reports, and a full list of the rewards are contained in the following sections of this document.

Table1: Recommended Flood Protection & Energy Saving Measures
For No, Street name

Category	Recommendations	Indicative cost *
Flood protection	Exterior products – 3 Flood barriers for external doors	£2,250
	Foul sewage non return valves	£550
	Surface water pipes	£30
	Air brick cover	£120 (fitted)
	Sealant kit to water proof external walls	£125
	Vent Cover	£300
Energy saving	Hot water tank insulation	Approx. £20
	Boiler upgrade using the same fuel	£3,000
Total cost of flood protection measures		£3,375
Total cost of energy saving measures		£3,020
Total cost of all measures		£6,395

*- Subject to professional quote where appropriate

You can choose now to respond to all of the above recommendations, or just some of them. Providing the scheme is still running, you may be able to purchase some of the recommended products now, and others at a later date. Remember that whatever you decide, you can choose rewards that match the amount you spend. We have prepared an example of the things you might like to choose that will match to cost of the measures recommended in your report.

Table 2: Possible Rewards for No, Street name

Preferred Rewards	Cost of Rewards
10 evening meals at a restaurant for two people	£150
Free travel from Manchester Piccadilly to Edinburgh for two people for a weekend in November 2010	£220
Free Metrolink travel for one year	£875
Seasons tickets to travel in Northern rail Between Altrincham and Manchester stations for six months	£ 468
10 times beauty treatments	£250
Garden makeover	£1,750
Furniture makeover	£1,600
Annual seasons tickets to Altrincham Football Club for two people	£450
Annual seasons tickets to Salford City Reds for two people	£312
Free fruit and vegetables for a year	£350
Total cost of rewards	£6,425

Finally, when you have decided what you would like to purchase from your survey recommendations, and selected the rewards equal to the cost of your purchases, please contact Tony Li who will explain how the work will be completed, and any further discussions that need to take place regarding your reward selections.

We thank you for your participation, and encourage you to speak to your neighbours and others in the community about the programme.

Household Level Flood Protection Survey

Conducted By Dave Tierney FRICS FloodconsultMain St, Saxton N YorkshireLS24 9PZ

Telephone: 0113 815 0782Email: flood@fastmail.fm

Property **Resident's address** - Name of the resident

Date of Survey: 08/09/2010

Flood Protection Survey Summary Report

Resident's address

General Construction

Resident's address, is a 2 storey semi-detached house built around 1996. The external cavity walls are constructed of brick. They are not rendered.

This property does not have a basement. The property has garden to the front, garden to the rear and paving to the side



Front Door



Rear Door

All windows are PVCu, all are double glazed. All external doors are wider than 0.9m. There are two external doors which are over 0.9m and up to 1.8m wide, they are PVCu. There are no external doors over 1.8m wide. All of the doors are double glazed.

Floor coverings are carpet and tiled. None of the ground floor is suspended.

Construction

The foundations appear to be original. We were unable to inspect the foundations and thus cannot comment on their condition.

We were unable to determine if there has been water through the under-ground foundations in the past. There is no evidence of repair work to the foundations.

The above ground construction is in good condition. Above ground the external walls have air bricks, service utility penetrations, utility meter boxes and in total there are :-

- 1 air bricks,
- 2 Utility boxes,

6 service penetrations
0 other low level wall penetrations.

Constraints

The property is not heritage listed. The property is not in a conservation area. No covenants are in force.

At the time of the visit the property was in good condition. There were no visible signs of internal dampness to walls or floors. A full damp survey is outside the scope of this report and no guarantees are implied or should be taken as to the effectiveness of any damp proof courses or membranes.

The external walls are of cavity construction. In our opinion both the party wall and the party wall foundations are a potential source of flooding. There is no evidence of previous flood damage or that work has been done to waterproof the masonry structure of the external walls.

The external walls have numerous points of potential flood water ingress – vents, cables, domestic appliance pipes, utility services, etc. All these need sealing up by methods outlined in this report. 9 number

The following Essential works should be carried out at this property

It is possible to defend this property up to 0.90m above threshold level by the use of resistance measures as outlined below. Defending a property above this level could affect the structural integrity of the house. No attempt to increase the level (height) of protection above this limit should be undertaken.

Works required to External Walls (prevents flood water entering property through walls)

Make good to all masonry, seal up all holes, and apply proprietary colourless water resistant coating to the walls to above potential flood level. All service entry routes, passing through the walls should be sealed with proprietary sealant. The use of sealants either for the treatment of masonry or walls and/or for joints is important. Sealing masonry and walls to just above flood level prevents ingress of water into the fabric of the building, likewise joints, holes etc. should be sealed wherever possible (within reason)

Vents and other openings (prevents flood water entering property through vents and air bricks)

All vents/openings in walls etc..should be protected by a removable seal or removable cover . (covers should be removed after floods to preserve ventilation and air flow) Always use BSI Kite-marked or equivalent standard products if available.

Waste pipes (any pipes through a wall below potential flood level present a flood risk)

Low level drainage pipes such as dishwashers, sink outlets, washing machine pipes up to 50mm dia should be fitted with non-return valves or be lifted to pass through the wall at a higher level.- greater than 1.0m above ground level.

DrainageFoul – Flood water must be prevented from ‘backing up’ into the house – especially into ground floor via 100mm/110mm dia foul sewage pipe – fit non return - will possible need manhole

Floors.

It is assumed that solid floors are water resistant and further works are not recommended. If not cracks and service entry points through the floor should be sealed with proprietary sealant.

Suspended floors in the sub void, a low point or well can be created in the surface of the soil or concrete sub-floor. This will assist cleaning and drainage after a flood. This can be particularly effective when a pump is installed at the low point to remove water (see Pumps below).

Alternatively, the void can be filled completely to reduce the rate of future water ingress and prevent ‘puddles’ of water remaining inside the property for a long time after flooding. This can be an expensive and disruptive option and is usually outside the level of available grants.

Flood Barriers to Doors and Windows

Flood barriers for external doors and windows usually take the form of flood boards made of plastic or metal, which can be quickly installed across a doorway or window before a flood arrives. They usually slide into a frame which has already been attached to the door frame or window frame, to provide a watertight seal from floodwaters. To ensure good quality construction and to have an effective defence against flood it is essential that barriers are (Kitemarked) to BS PAS 1188:2003 or BS PAS 1188:2003

Small Submersible Pumps

Pumps are always useful in any flood situation, either as installed in a sump to collect and discharge ground water or to collect and discharge seepage and leakage from flood protection products which, even if Kitemarked, are allowed a certain level of water ingress. The recommendation for pumps is not an admission of failure, it is based upon an expert knowledge of building construction. The pump is there to deal with water getting into the under-floor void. There is also the issue of leakage rates from flood defence products which even under the BSI Kitemarked scheme allow up to 1 litre per hour per metre of aperture edge seal below the designed maximum water depth.

Essential Work

Door Barriers	Reqd	Budget Cost each fitted Average price
Flood barrier External Fix (Kitemarked) to BS PAS 1188:2003 or BS PAS 1188:2003 0.6m high up to 0.9m wide	1	£900
Flood barrier External Fix (Kitemarked) to BS PAS 1188:2003 or BS PAS 1188:2003 0.6m high and between 0.91m to 1.8m wide	2	£1100

Foul Sewage Non Return Valves *

Reqd ...1...

£550.00 fitted

100mm/110mm dia foul sewage pipe

– will possible need manhole

Surface WaterPipes – usually approx. 38mm dia

(Dishwasher/sink/washing machines pipes)

Reqd ...1...

£30.00 each

Air Brick Covers to BS PAS 1188:2003
or BS PAS 1188:2009

Reqd ...1...

£20 to £125 each

Vent Covers (Gas/Boiler etc..)

Reqd ...6...

approx. £50

to BS PAS 1188:2003 or BS PAS 1188:2009 *

Note - Take care when covering and then uncovering vents for gas/oil fires and boilers , all appliances should be checked by a competent person before use.

Sealant Kit/Waterproof - sealant liquid/tubes 20 Lts sealant
per prop

5 tubes

Allow £125

.....

Desirable work

**Electric pump surface mount – can be used in sub floor with
suitable installation of pipes (alternative power may be needed)** Req'd ...1...
£250.00

Temporary self inflating sand bags - per door pack Req'd ...3...
£120.00 each

Advice

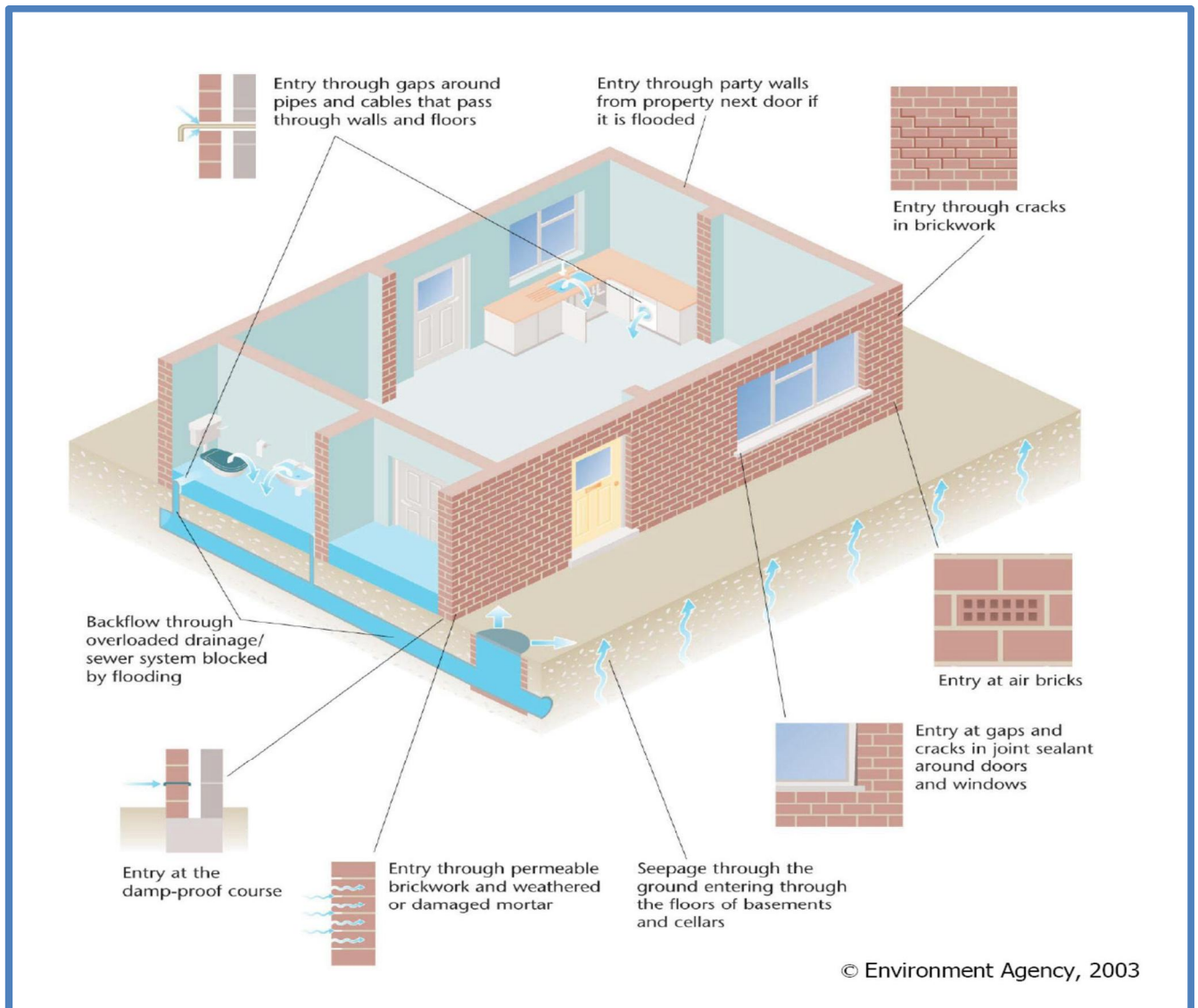
We advise that if the recommended essential measures in this report are put into place, the property will have a higher level of flood protection. It is expected that the flood protection products will be fit for purpose and are installed as per the manufacturers' requirements or even fitted by them. Some of the products specified above are suitable for DIY installation although in certain circumstances professional help will be required. Items described as desirable may not be eligible for grants but could be vital in increasing the flood resistance of your property

Flood Risk etc...

This report covers the risk of flooding to the above property. The survey and other information is an assessment of flooding and outlines the measures that can be taken to reduce the risk of flooding by the provision of flood defence products and other mitigation measures

After reading the survey report, the following diagram will be useful in identifying why relevance has been placed on certain aspects of the survey and the measures proposed to prevent flooding.

Floodwaters do not only enter properties above ground, see diagram below - which shows water routes into a property.



What are the causes of flooding?

Although flooding can result from a single event, it more commonly occurs through a combination of events:

- rainfall fills rivers, streams and ditches beyond their capacity. Floodwater overflows river banks and flood defences

- coastal storms can lead to overtopping and breaching of coastal flood defences.

Properties built behind these defences are therefore still at risk from flooding, although the 'residual' risk is lower. However, the consequences of this type of

flood could be high when blocked or overloaded drainage ditches, drains and sewers overflow across roads, gardens and into property

- overloaded sewers can sometimes back up into properties when they become blocked or too full

- rainfall can be so intense that it is unable to soak into the ground or enter drainage systems. Instead the water flows overland, down hills and slopes. Property at the bottom of hills or in low spots may be vulnerable. In urban areas floodwater may become contaminated with domestic sewage

- prolonged, heavy rainfall soaks into the ground and can cause the ground to saturate. This results in rising groundwater levels which leads to flooding above the ground. Floodwater may enter properties through basements or at ground floor level. Groundwater flooding may take weeks or months to dissipate

- a reservoir or canal may cause flooding either from overtopping or bank failure. This type of flooding (infrastructure failure) can result in rapidly flowing, deep water that can cause significant damage or loss of life.

More Information

Further options are available to protect properties; these are discussed in the resistance and resilience study at

<http://www.defra.gov.uk/environment/flooding/documents/manage/frs-scope.pdf>

Further information is also from the National Flood Forum

The National Flood Forum, Snuff Mill Warehouse, Bewdley, Worcestershire, DY12 2EL

Telephone No. 01299 403055 <http://www.floodforum.org.uk/>

General Information Association of British Insurers (ABI)

Flood risk in the UK For many people, flooding is a fact of life. There are more than 2 million homes at risk from coastal or inland flooding (10 % of total homes in the UK), and around 400,000 homes at very high risk of flooding (greater than 1.3 % annual probability or 1-in-75 chance).

Further information on flooding and on Flood insurance in the UK English Heritage - English Heritage can advise on the repairs and protection of listed buildings. Visit- www.english-heritage.org.uk or contact them on **0870 333 1181**

National Flood Forum (NFF) can offer support to those affected by flooding including general information about all types of flood products, possible sources of help and strategies for coping.

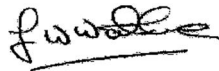
Visit the NFF website www.floodforum.org.uk or contact them on **01299 403055**

ABI's publication 'Flood Resilient Homes' which can be found at <http://www.abi.org.uk>

Conclusion

This report is designed to offer a realistic approach to flood risk surveying and the use of flood protection measures. It is not a detailed building survey. It does provide best practice advice for the use of flood resistance products. Whilst flood protection measures offer increased protection there is always a possibility that flood water might enter the property through unknown means or overtop the installed protection measures.

Report author



Laurence Waterhouse FRSA, MCInstCES.

Resident's name
Resident's address

10 September 2010

Your free home energy report

Dear Resident's name,

Thank you for filling in a home energy check questionnaire. We have used your answers to put together your personalised home energy report. Your report reveals how you can:

- **Stop wasting £ 88 on fuel bills**
- **Reduce your carbon footprint by 0.7 tonnes of carbon dioxide**

Your report also shows how energy efficient your home is now and gives you a rating from A (very good - very efficient) to G (very poor - less efficient). We've also included practical advice on how to improve your rating and cut your energy use to help fight climate change.

Funded by government / the Scottish Government, the Energy Saving Trust provides free, impartial, expert advice on saving energy. Our friendly advisors can talk you through the recommendations in your report. We can even tell you about any special grants and offers available in your area for energy saving measures and put you in touch with local professional installers.

You've already made an important step towards saving energy, so why not contact us today and let us help you save even more? Call your nearest advice centre free on **0800 512 012**.

Yours sincerely

Janine Wood

Senior Energy Advisor

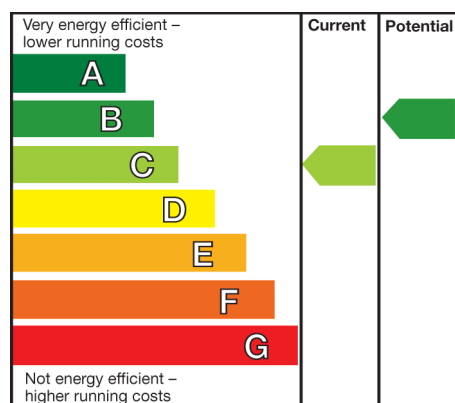
PS. There are grants and offers available to help with the cost of energy saving measures. Call us today to find out more.

The advice centres are separate legal entities
providing services to the Energy Saving Trust under contract.
powered by the  **NHER**
National Home Energy Rating

How energy efficient is your home right now?

Here's a look at your home today in terms of energy efficiency, including what you've done so far to save energy. If there's one or more improvement in the list, then good news: you're already on course to becoming more energy efficient. This will be reflected in your home's overall energy efficiency, also below.

Energy efficiency rating



(This is not valid as an Energy Performance Certificate)

Already Installed

Cavity wall insulation installed

200mm of loft insulation

Full double glazing

A room thermostat on the heating system

A programmer (timeclock) on the heating system

Thermostatic radiator valves on the radiators

What household savings can you make?

Bearing in mind the steps you've already taken to save energy, here is our estimate of your household's current running costs, CO₂ emissions and energy use. As you'll see, we believe you can reduce these figures and make yearly savings along the way - cutting the energy you use per year by **20%**.

	Current	Potential	Saving
Estimated running costs	£569 per year	£481 per year	£88 per year
Estimated carbon dioxide emissions	2.2 tonnes per year	1.5 tonnes per year	0.7 tonnes per year

Read on to find out exactly where these savings can be made at home and call us on **0800 512 012** for practical help and guidance.

The predicted fuel costs are provided for guidance only and are an indicative estimate based on an assessment of the amount of energy that would be needed to deliver a defined level of comfort in this home assuming standard occupancy levels. The fuel costs only take into account the cost of fuel and not any associated service, maintenance or safety inspection costs. The energy use includes the energy used in producing and delivering the fuels to this home. The assessment of energy use has been made using BREDEM12, the Building Research Establishment's preferred method of assessing fuel costs.

For free, impartial and expert advice, call us on 0800 512 012.

What improvements can you make now?

Here's what you can do next to save even more energy and money at home. These improvements will make your home more comfortable, cut down the amount of CO₂ it produces - and reduce its impact on climate change. And they could also push up the value of your property. If you rent rather than own your home, it may not be up to you to carry out all the improvements on the list. But the more you can make, the more you'll save in energy and bills.

We've assumed that you'll make the improvements in the following order - from low cost to more advanced measures. If you make them all, you could save 20% of the energy you use every year.

Lower cost measures/improvements	Potential savings per year	Potential Carbon Dioxide savings per year
1 Hot water tank insulation	£37.00	0.3 tonne(s)
Medium cost measures/improvements		
2 Boiler upgrade using the same fuel	£51.00	0.4 tonne(s)
Grand Total	£88.00	0.7 tonne(s)

More about the improvements we've recommended

Some of the improvements we've suggested might need a little explanation. Here's more detail about the changes you could make to your home.

Improvement	Information
1 Hot water tank insulation	Fit an insulating jacket to your hot water tank. These are readily available from DIY stores. Typically, the energy required to provide domestic hot water makes up around 15% of a household energy bill (or around 20% of CO ₂ emissions).
2 Boiler upgrade using the same fuel	Install a fully controlled Energy Saving Recommended boiler. Typically an Energy Saving Recommended rated boiler uses around a third less fuel than a 15 year old appliance.

Remember that help and advice on costs and local installers are just a phone call away.

Call us on **0800 512 012** for ongoing guidance and support.

Our standards of performance are monitored by a market research company who may contact you in a few months to check whether you found our service useful.

For free, impartial and expert advice, call us on 0800 512 012.



energy saving trust[®]

What other changes could you make in your home?

On top of these improvements, we've used the information from your questionnaire to suggest a range of other ways you could save energy.

Thermostat on Cylinder

Make sure the thermostat on your hot water cylinder is correctly adjusted: 60 degrees C is the minimum recommended temperature.

Room Thermostat

Ensure that your room thermostat is set at the right temperature, typically 18 - 21 degrees.

Heating Programmer

Make sure you regularly check the heating pattern of your heating programmer to ensure that it stays in line with the current occupancy of the house. Make sure the programmer does not accidentally get set to, or left on CONSTANT by mistake. If there is a power outage, check your programmer has not lost its schedule or the clock changed.

TRVs

Make sure that thermostatic radiator valves are set appropriately for the occupancy of the room.


Domestic Appliances

Purchase 'Energy Saving Recommended' domestic appliances when replacements are needed. Energy saving products use less energy and therefore have less of an environmental impact, as well as being cheaper to run.



energy saving trust[®]

For free, impartial and expert advice, call us on 0800 512 012.



.....

Start saving
money and
energy today

.....

Take your next step towards a more
comfortable and energy efficient home

.....

Call your nearest advice centre
free on **0800 512 012**.

.....

Our advisors are totally independent.
We're not selling anything.



Start saving money and energy today

Your report

Your home energy report shows how you can save energy at home and cut your fuel bills. The Energy Saving Trust can help you make it happen.

Take action

Our friendly advisors at your nearest advice centre can talk you through the recommendations in your report and discuss the best options for your home.

Our expert team can:

- tell you about grants and offers available for energy saving measures
- give you details of local professional installers
- arrange a no obligation insulation survey for your home
- give you expert advice on energy efficiency, renewable energy and travelling with lower carbon emissions.

Unlimited support

Our advice centres are set up to help make it as easy as possible for you to save energy. We can provide you with ongoing tailor-made support as you work through the recommendations in your report. Call us as little or as often as you want on 0800 512 012.

Energy Saving Trust

We are an independent, non-profit making organisation who provide free, impartial advice tailored to help you save energy at home. Our advice centres across the UK are specifically designed to help people take action to save energy.

The Energy Saving Trust is one of the UK's leading organisations set up to address the damaging effects of climate change. We aim to cut emissions of carbon dioxide – the main greenhouse gas causing climate change – by promoting the sustainable and efficient use on energy.

✱ To find out more call free on **0800 512 012** or visit **energysavingtrust.org.uk**



Your Rewards

Thank you for participating in Timperly Green Homes project. If you are planning to purchase some or all of the recommendations in your flood and energy survey, you will be able to choose rewards from the following pages that are worth at least as much as you spend on your house. The Green Homes rewards work very much like a supermarket loyalty card scheme. Once the energy saving and/or flood protection materials have arrived at your house and any installation work is complete, the surveyor who visited you earlier will come back to make sure everything is to your satisfaction and will make a note of the money you have spent on your house. You can then place your order for one or more of the rewards you selected by contacting the Green Homes representative who has been visiting your house during the scheme.

The values of some of the rewards are obvious, like the price of a season ticket on Metrolink (£874 per year). However, some will need an additional visit (such as your garden make-over) in order to establish what work you would like to have done, and how much that is likely to cost. If you choose one of these then your Green Homes representative will take you through the process of choosing that particular reward.

We hope you enjoy your rewards, and thank you again for participating in the project.

Professor Erik Bichard

University of Salford

REWARDS LIST

TRANSPORT

Train Travel

Ask for as many passes as you like on trains run by Manchester's two major carriers. Rewards include:

- Free travel on First TransPennine Express trains from Manchester stations



to different destinations such as Lake District,

Yorkshire, Northeast, Merseyside, Scotland, Blackpool, etc.

[As a guide, you (for a family of four) could travel from Manchester Piccadilly to Glasgow on the 3rd weekend of November for £190]

- Season tickets to travel on Northern Rail trains to save you money on regular journeys between Manchester stations such as Hale, Altrincham, Bolton, Rochdale, Stockport, etc.



[Between Altrincham and Manchester stations Weekly - £20.30; Monthly - £78; 6 months - £467.80; Annual - £812]

- *Train card* is a seasons ticket for unlimited travel anywhere in the Greater Manchester ticketing area at any time. [Train card: Weekly - £23; Monthly - £78; Annual - £744.50]

Example of this type of Reward:

6 Months Rail pass - £467.80

Metrolink Travel



Similar to the train rewards, you can ask for as many passes as you like. Whether you are a regular commuter, or always wanted to travel more to go out on the town or see relatives and friends, a Metrolink pass is available in the following forms:

- Annual Season ticket (Adult) - £875.00;
- 4 Weekly (Adult) - £82.10;
- Weekly (Adult) - £21.80;
- 4 Weekly (Child) - £39.30.

Example of this type of Reward:

12 Months Tram pass - £875

Bus Travel

Travel on buses run by First Bus includes:



- Free travel within city centre and around Greater Manchester in *First* Bus for 6 months (Adult Monthly pass is £55, and Annual pass is £ 550)

- Free travel in Stage Coach buses in anywhere in Manchester for a value worth of £210 for 6 months



Example of this type of Reward:

Monthly Bus pass - £55

FOOD

Fruit & Vegetables

Free vouchers for fruit and vegetables supplied by Co-operative Food or Summerfield stores.

Choose any value you like. As a guide, one year supply for an average household would be

around £500, while 6 months would be £250. The nearest shop to your house is either 385, Washway Road, or 375 Stockport Road.



Example of this type of Reward:

***6 months supply of fruit &
vegetables for £250***

Restaurants

Lunch as La Sallian, Salford City College Training Restaurant

The Training Restaurant based at the college's DLS Centre (Weaste Lane, Salford, M6 8QS) is bright and modern and offers great food and drink. Many students have gone on to gain impressive placements and jobs including working with Mitch Tonks. The students have also won a number of prestigious awards within the industry.

Open for lunch and evening dining (please ask for opening times), you can be sure to enjoy good food, service and company.

Each voucher will cover either lunch or an evening meal for two people including one drink, usually costing about £10 for lunch and £15 for dinner. The cost for

lunch with two courses is £5.95, lunch with three courses is £7.95 and a three courses dinner is £13.50.

The cost of hosting a large party can be claimed as a reward providing an estimate based on menu and numbers is obtained from the restaurant prior to claiming the reward.

Example of this type of Reward:

Three courses evening meal for two - £ 27

COURSES AND FURTHER EDUCATION

Salford City College offers full time, part time, day time and evening courses. The



Leisure Learning programme is very popular. There are a wide range of leisure courses including art, languages, fitness and crafts which run for 10 weeks, normally costing £65. Some of the courses that Salford City College offer are:

- | | |
|---|--|
| <ul style="list-style-type: none">• Hair dressing• Beauty Therapy• Creative• Health and Social care• Counselling• Languages• Literacy | <ul style="list-style-type: none">• Numeracy• Brick work• Electrical/Welding• Basis DIY skills• Painting Decorating• Information Technology |
|---|--|

The College also offers vocational course such as a Level 3 qualification in Counselling Skills (£700) or Photo Image Capture and Presentation (£388), or Carpentry and Joinery (£705). The full list of courses can be found on the leaflet at the back of this section of your report.

Please contact your Green Homes representative if you are interested in this reward.

Examples of this type of Reward:

A 10 weeks course in DIY Skills - £65

A Level 3 Qualification in Counselling Skills - £700

BEAUTY

Salford City College offers a range of services by their talented students. You could have a beauty treatment a cut and blow, perming, tinting and colouring to a range of holistic and beauty treatments such as massages, manicures, Indian head massages and aromatherapy.

You could choose the one-day 'Pamper package' which includes a number of treatments specially selected for you, and including refreshments and lunch. Normal cost £25.

Example of this type of Reward:

***Have a pamper day - tailored
beauty treatments - £25***

TICKETS TO SPORTING EVENTS

You can ask for a season ticket to the matches of the following teams:

- Seasons tickets for Salford City Reds (Rugby League). Prices for the 2010 season were: Adult – Standing £130; Main stand £156



- Seasons tickets to Altrincham Football Club Adult: Seating - £265; Standing - £225



Example of this type of Reward:

***Season ticket to Altrincham
Football Club - £265***

GARDEN MAKEOVERS

This reward includes the provision of free services from a garden designer and landscaping team. It will start with an initial visit to help design the new garden, will continue with supervision of all planting and other works. The total cost should be equal to the value that you spend on energy and/or flood measures. As every garden is different we can't give a single value for your garden makeover, but as an example, a reward for a 3m X 2m front garden makeover including clearance, a new path, re-turfing and new planting might be worth between £700 and £800.

Contact your Green Homes representative if you are interested in this reward.

Example of this type of Reward:

*Select your design and enjoy a
garden makeover - £750*

FURNITURE RESTORATION

You will receive free furniture restoring services including designing, painting and other works. The total cost should be equal to the value that you spend on furniture restoring. The value of this reward is dependant on the furniture you would like to restore, however, as a guide a typical three piece suite would cost approximately £1,000 to reupholster and recover.

Example of this type of Reward:

*Select your design and enjoy a
furniture makeover - £1,000*

Adult Course Directory 2010

**SALFORD
CITY
COLLEGE**



Welcome to Salford City College

Whether you have studied with us before or are considering joining us for the first time, we look forward to welcoming you to the college. This course guide shows the courses that are available in September, but we will have more courses starting throughout the year particularly in January and April.

With the current economic climate there has never been a more important time to keep your skills up to date and to learn new skills. Trinity Business Training is always keen to speak to employers about the training needs for their organisation and how the training of their staff can help with the effectiveness of their business.

So, if you are looking for a part time, full time, daytime or evening course, for fun or leading to a qualification, then we hope we have a course that will suit you. If you cannot find the course that you are looking for please contact us and we might be able to point you in the right direction.

As a student at the college, you will be able to take advantage of the facilities such as the learning resource centres, fitness suites and additional study support.

We look forward to seeing you at enrolment.

* Careers/Educational Advice And Guidance

Unsure of courses and career options?
Thinking of further or higher education?
Considering taking up training?
Unemployed and wanting to retrain?
Looking for a career change?

For **FREE**, impartial, confidential advice, contact Student Services on **0161 631 5000**

**Pull
out
and
keep**

ENROLMENT DATES

Please note that all enrolments for adults are done through the Walkden Centre, City Campus Skill Centre, De La Salle Centre or telephone enrolments via the main Admissions Team on 0161 631 5002.

Tuesday 31st August 2010, 2pm – 7pm
Wednesday 1st September 2010, 2pm – 7pm
Thursday 2nd September 2010, 2pm – 7pm
Friday 3rd September 2010, 10am – 2pm

Venues:

Walkden Centre & City Campus Skill Centre
Tuesday, Wednesday, Thursday, Friday

De La Salle Centre

Tuesday and Wednesday only

Please note that late enrolments can be done after this date. If the course you want to do has started, please call us on 0161 631 5001 to see if it is possible for you still to join.





Adult Course Directory 2010

Course Title	Course Code	Day	Start Date	End Date	Location	No of Weeks	Hours per wk	Start Time	End Time	Total Course Cost	Enrol by Phone
Access to HE ▲											
Access to HE Diploma Level 3 (Health and Care Pathway)	C10W-AHE-OL3-000-01	FT	13/09/10	01/07/11	Walkden Centre	34	15	FT	FT	£1,380	
Access to HE Diploma Level 3 (Humanities Pathway)	C10W-AHE-OL3-000-03	FT	13/09/10	01/07/11	Walkden Centre	34	15	FT	FT	£1,380	
Access to HE Diploma Level 3 (Science Pathway)	C10W-AHE-OL3-000-05	FT	13/09/10	01/07/11	Walkden Centre	34	15	FT	FT	£1,380	
Pre Access to HE Diploma Level 2	C10W-AHE-OL2-000-01	FT	13/09/10	01/07/11	Walkden Centre	34	15	FT	FT	£1,380	
Animal Care											
Level 1 Animal Care	C10W-ANI-OL1-000-01	Wed	15/09/10	22/06/11	Walkden Centre	35	3	18.00	21.00	£365	
Introduction to Dog Grooming	C10W-DOG-OL1-000-01	Tues	14/09/10	23/11/10	Walkden Centre	10	3	18.00	21.00	£150●	☎
Beauty Therapy											
NVQ Level 1 Beauty Therapy	C10W-BEA-NV1-000-03	Wed/Thur	15/09/10	30/06/11	Walkden Centre	33	6	18.00	21.00	£664	
NVQ Level 2 Beauty Therapy	C10W-BEA-NV2-000-02	Tues/Wed	14/09/10	22/06/11	Walkden Centre	34	6	18.00	21.00	£682	
NVQ Level 2 Beauty Therapy	*	FT	07/09/10	01/07/11	De La Salle Centre	35	16	FT	FT	£1,345	
NVQ Level 3 Beauty Therapy	*	FT	07/09/10	01/07/11	De La Salle Centre	35	16	FT	FT	£1,355	
Introduction to Beauty, Style and Make Up	C10W-S07-LLC-000-01	Tues	14/09/10	23/11/10	Walkden Centre	10	2	19.00	21.00	£65●	☎
Brickwork ▲											
Intro. Cert. & Cert. in Basic Construction Skills - Brickwork	C10C-BWK-OL1-000-04	Tues/Thur	14/09/10	10/03/11	City Campus Skill Centre	22	6	18.00	21.00	£487	
Level 1 Diploma in Brickwork	C10C-BWK-DL1-000-03	Tues/Thur	14/09/10	30/06/11	City Campus Skill Centre	35	6	18.00	21.00	£705	
Level 2 Diploma in Brickwork	C10C-BWK-DL2-000-03	Tues/Thur	14/09/10	30/06/11	City Campus Skill Centre	35	6	18.00	21.00	£705	
Carpentry & Joinery ▲											
Intro. Cert. & Cert. in Basic Construction Skills - Carpentry & Joinery	C10C-WOD-OL1-000-05	Tues/Thur	14/09/10	10/03/11	City Campus Skill Centre	22	6	18.00	21.00	£487	
Level 1 Diploma in Carpentry & Joinery	C10C-WOD-DL1-000-04	Tues/Thur	14/09/10	30/06/11	City Campus Skill Centre	35	6	18.00	21.00	£705	
Level 2 Diploma in Carpentry & Joinery	C10C-WOD-DL2-000-03	Tues/Thur	14/09/10	30/06/11	City Campus Skill Centre	35	6	18.00	21.00	£705	
Level 3 Diploma in Carpentry & Joinery	C10C-WOD-DL3-000-02	Tues/Thur	14/09/10	30/06/11	City Campus Skill Centre	35	6	18.00	21.00	£705	
Childcare											
Award in Supporting Teaching and Learning in Schools	C10W-STL-OL2-000-01	Fri	17/09/10	26/11/10	Walkden Centre	10	3	09.45	14.15	£119	
Construction Multi Skills ▲											
Intro. Cert. & Cert. in Basic Construction Skills - Multi Skills	C10C-MOP-OL1-000-06	Tues/Thur	14/09/10	10/03/11	City Campus Skill Centre	22	6	18.00	21.00	£487	
Construction Studies ▲											
BTEC Level 3 Diploma in Construction	C10C-CON-DL3-000-01	Tues	14/09/10	30/06/12	City Campus Skill Centre	70	7	09.00	17.00	£1,620	
HNC in Construction	C10C-CON-OL4-000-01	Thur	16/09/10	02/07/12	City Campus Skill Centre	70	7	09.00	17.00	£1,875	
Counselling											
Bereavement Counselling - Introduction	C10W-S01-LLC-000-01	Wed	15/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65●	☎
Level 2 Certificate in Counselling Concepts	C10W-COU-OL2-000-01	Wed	15/09/10	24/11/10	Walkden Centre	10	3	18.00	21.00	£150●	☎
Level 2 Certificate in Counselling Concepts	C10W-COU-OL2-000-02	Thur	16/09/10	25/11/10	Walkden Centre	10	3	12.00	15.00	£150●	☎
Level 2 Certificate in Counselling Concepts	C10W-COU-OL2-000-03	Thur	16/09/10	25/11/10	Walkden Centre	10	3	18.00	21.00	£150●	☎
Counselling for Sexual Minority Issues - College Certificate	C10W-CSM-OL3-000-01	Thur	07/10/10	16/12/10	Walkden Centre	10	3	18.00	21.00	£150●	☎
Certificate in Cognitive Behaviour Therapy	C10W-CBT-OL3-000-01	Fri	17/09/10	16/12/10	Walkden Centre	30	3	10.00	13.00	£550●	☎
Certificate in Cognitive Behaviour Therapy	C10W-CBT-OL3-000-02	Mon	13/09/10	06/06/11	Walkden Centre	30	3	10.00	13.00	£550●	☎
Certificate in Therapeutic Hypnosis	C10W-CBT-OL3-000-01	Tues	14/09/10	06/06/11	Walkden Centre	30	4	17.30	21.00	£750●	☎
Level 3 Certificate in Counselling Skills	C10W-COU-OL3-000-01	Tues	14/09/10	17/05/11	Walkden Centre	30	4	17.00	21.00	£700	
Level 3 Certificate in Counselling Skills	C10W-COU-OL3-000-02	Wed	15/09/10	18/05/11	Walkden Centre	30	4	17.00	21.00	£700	
Level 3 Certificate in Counselling Skills	C10W-COU-OL3-000-03	Thur	16/09/10	19/05/11	Walkden Centre	30	4	10.00	14.00	£700	
Level 3 Certificate in Counselling Skills - Fast-track	C10W-COU-OL3-000-04	Thur	11/11/10	26/05/10	Walkden Centre	24	5	16.00	21.00	£700	
Level 4 Diploma in Therapeutic Counselling	C10W-COU-OL4-000-01	Tues	14/09/10	13/07/12	Walkden Centre	74	5	09.30	15.00	£1,600	
Level 4 Diploma in Therapeutic Counselling	C10W-COU-OL4-000-02	Tues	14/09/10	13/07/12	Walkden Centre	74	5	15.30	21.00	£1,600	
Creative											
Creative Flower Arranging - Intermediate	C10W-S03-LLC-000-01	Tues	14/09/10	23/11/10	Walkden Centre	10	2	19.00	21.00	£65●	☎
Certificate in Interior Design Level 1	C10W-INT-OL1-000-01	Tues	09/11/10	24/05/11	Walkden Centre	24	2.5	18.30	21.00	£216	☎
Certificate in Drawing and Painting Level 1	C10W-DAP-OL1-000-01	Wed	10/11/10	25/05/11	Walkden Centre	24	2.5	18.30	21.00	£216	☎
CG Award in Photo Image Capture and Presentation Level 1	C10W-PHO-OL1-000-01	Tues	14/09/10	14/06/11	Walkden Centre	33	2	19.00	21.00	£232	☎
CG Award in Photo Image Capture and Presentation Level 3	C10W-PHO-OL3-000-01	Wed	15/09/10	15/06/11	Walkden Centre	32	3	18.00	21.00	£388	
Digital Photography - Beginners	C10W-S09-LLC-000-09	Wed	15/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65●	☎
Drawing & Painting - Mixed Ability	C10W-S09-LLC-000-06	Tues	14/09/10	23/11/10	Walkden Centre	10	2	19.00	21.00	£65●	☎
Garment Making - Beginners	C10W-S09-LLC-000-04	Tues	14/09/10	23/11/10	Walkden Centre	10	2	19.00	21.00	£65●	☎
Garment Making - Intermediate/Advanced	C10W-S09-LLC-000-10	Thur	15/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65●	☎
Handcrafted Card Making	C10W-S09-LLC-000-05	Tues	14/09/10	23/11/10	Walkden Centre	10	2	19.00	21.00	£65●	☎
Interior Design for the Home - Beginners	C10W-S09-LLC-000-03	Thur	16/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65●	☎
Photoshop - Beginners	C10W-S09-LLC-000-07	Tues	14/09/10	23/11/10	Walkden Centre	10	2	19.00	21.00	£65●	☎
Soft Furnishings - Beginners	C10W-S09-LLC-000-08	Wed	15/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65●	☎
Watercolours - Beginners	C10W-S09-LLC-000-01	Wed	15/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65●	☎
Electrical/Welding ▲											
Certificate in Electrotechnical Technology Level 2	C10C-ETT-OL2-000-02	Tues/Thur	14/09/10	30/06/11	City Campus Skill Centre	35	6	18.00	21.00	£705	
Certificate in Electrotechnical Technology Level 3	C10C-ETT-OL3-000-02	Tues/Thur	14/09/10	30/06/11	City Campus Skill Centre	35	6	18.00	21.00	£705	
Gas ARC Welding	C10C-WEL-OL1-000-03	Tues/Thur	14/09/10	25/11/10	City Campus Skill Centre	10	6	18.00	21.00	£280●	☎
Hairdressing											
NVQ Level 1 Hairdressing	C10W-HAI-NV1-000-03	Tues/Wed	14/09/10	22/06/11	Walkden Centre	33	6	18.00	21.00	£656	
NVQ Level 1 Hairdressing	C10W-HAI-NV1-000-04	Wed/Thur	15/09/10	23/06/11	Walkden Centre	33	6	18.00	21.00	£656	
NVQ Level 1 Hairdressing	*	Tues/Thur	14/09/10	30/06/11	De La Salle Centre	33	6	17.00	20.00	£656	
NVQ Level 1 Hairdressing	*	FT	13/09/10	01/07/11	De La Salle Centre	35	11	FT	FT	£1,337	
NVQ Level 2 Hairdressing	C10W-HAI-NV2-000-03	Tues/Thur	14/09/10	23/06/11	Walkden Centre	34	6	18.00	21.00	£692	
NVQ Level 2 Barbering	*	Mon/Tues	13/09/10	28/06/11	Pendleton Centre	34	6	17.00	20.00	£682	
NVQ Level 3 Hairdressing	*	FT	07/09/10	01/07/11	De La Salle Centre	35	16	FT	FT	£1,355	
Health and Social Care											
Intro Diploma in Vocational Studies - Health and Social Care	C10W-VOC-OL1-000-01	Wed	15/09/10	22/06/11	Walkden Centre	35	3	18.00	21.00	£383	
Information Technology											
Certificate for IT Users Level 1 (New CLAIT) - OCR	C100-NCL-OL1-000-01	Tues	28/09/10	25/01/11	Little Hulton Skill Centre	15	3	09.15	12.15	£175	
Certificate for IT Users Level 1 (New CLAIT) - OCR	C100-NCL-OL1-000-03	Wed	22/09/10	09/02/11	Little Hulton Skill Centre	18	2.5	09.30	12.00	£175	
Certificate for IT Users Level 1 (New CLAIT) - OCR	C10C-MCL-OL1-000-01	Wed	29/09/10	26/01/11	City Campus Skill Centre	15	3	09.30	12.30	£175	
Award in ICT User Skills (ECDL Essentials)	C100-ECD-OL1-000-02	Wed	22/09/10	19/01/10	Little Hulton Skill Centre	15	3	12.00	15.00	£162	
Award in ICT User Skills (ECDL Essentials)	C10W-ECD-OL1-000-01	*	*	*	Walkden Centre	*	*	*	*	£162	
Certificate in ICT User Skills (ECDL Extra)	C100-ECD-OL2-000-01	Mon	13/09/10	21/02/11	Little Hulton Skill Centre	20	3	09.30	12.30	£223	
Certificate in ICT User Skills (ECDL Extra)	C10C-ECD-OL2-000-01	Thur	30/09/10	10/03/11	City Campus Skill Centre	20	3	09.00	12.00	£223	

Key to symbols: ★ Please enquire for details ☎ Enrol by phone ▲ Some of these courses may require an entry test prior to enrolment ● No Fee Reduction Available



Adult Course Directory 2010

Course Title	Course Code	Day	Start Date	End Date	Location	No of Weeks	Hours per wk	Start Time	End Time	Total Course Cost	Enrol by Phone
Languages											
Holiday Spanish - Beginners	C10W-S12-LLC-000-02	Thur	16/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65	☎
Holiday Spanish - Intermediate	C10W-S12-LLC-000-10	Wed	15/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65	☎
Spanish - Advanced	C10W-S12-LLC-000-11	Wed	15/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65	☎
Award in Language Skills - Spanish	C10W-SPA-OL1-000-01	Wed	15/09/10	23/03/11	Walkden Centre	24	2.5	18.30	21.00	£216	
Award in Language Skills - Spanish	C10W-SPA-OL1-000-02	Thur	16/09/10	24/03/11	Walkden Centre	24	2.5	18.30	21.00	£216	
GCSE Spanish	C10W-SPA-OL2-000-01	Tues	14/09/10	17/05/11	Walkden Centre	30	2	19.00	21.00	£219	
Conversational French - Beginners	C10W-S12-LLC-000-05	Tues	14/09/10	23/11/10	Walkden Centre	10	2	19.00	21.00	£65	☎
Conversational French - Advanced	C10W-S12-LLC-000-06	Tues	14/09/10	23/11/10	Walkden Centre	10	2	19.00	21.00	£65	☎
Award in Language Skills - French	C10W-FRE-OL1-000-01	Thur	16/09/10	24/03/11	Walkden Centre	24	2.5	18.30	21.00	£216	
Holiday Italian - Beginners	C10W-S12-LLC-000-08	Wed	15/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65	☎
Award in Language Skills - Italian	C10W-FRE-OL1-000-02	Thur	16/09/10	24/03/11	Walkden Centre	24	2.5	18.30	21.00	£216	
Holiday Greek - Beginners	C10W-S12-LLC-000-09	Wed	15/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65	☎
Greek Intermediate	C10W-S12-LLC-000-04	Thur	16/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65	☎
Leisure - General											
Creative Writing	C10W-LIT-VAR-000-01	Tues	14/09/10	25/01/11	Walkden Centre	15	3	18.00	21.00	£0	
Intro to Basic DIY Construction Skills	C10C-S05-LLC-000-01	Thur	16/09/10	24/11/10	City Campus Skill Centre	10	2	18.30	20.30	£65	☎
Life Coaching - Beginners	C10W-S14-LLC-000-02	Tues	14/09/10	23/11/10	Walkden Centre	10	2	19.00	21.00	£65	☎
Lifeskills: Managing Change & Stress	C10W-S14-LLC-000-03	Tues	14/09/10	23/11/10	Walkden Centre	10	2	19.00	21.00	£65	☎
Line Dancing - Beginners	C10W-S08-LLC-000-01	Wed	15/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65	☎
Prepare for your Retirement	C10W-S14-LLC-000-01	Thur	16/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65	☎
Reiki Healing - Beginners	C10W-S14-LLC-000-03	Wed	15/09/10	24/11/10	Walkden Centre	10	2	19.00	21.00	£65	☎
Literacy											
Introduction to Adult Literacy	C10C-LIT-VAR-000-02	Thur	16/09/10	30/06/11	City Campus Skill Centre	34	2.75	09.45	12.00	£0	
Certificate in Adult Literacy	C10C-LIT-VAR-000-03	Wed	15/09/10	26/01/11	City Campus Skill Centre	16	2.75	09.45	12.00	£0	
Certificate in Adult Literacy	C100-LIT-VAR-000-01	Mon	13/09/10	17/01/11	The Lower Kersal Centre	16	2.75	09.15	12.00	£0	
Certificate in Adult Literacy	C10C-LIT-VAR-000-01	Tues	14/09/10	26/01/11	Walkden Centre	15	3	18.00	21.00	£0	
Certificate in Adult Literacy	C100-LIT-VAR-000-02	Tues	14/09/10	25/01/11	Rainbow Rooms	16	2.75	09.15	12.00	£0	
Certificate in Adult Literacy	C100-LIT-VAR-000-04	Mon	20/09/10	24/01/11	Mocha Parade	15	2	09.30	11.30	£0	
Certificate in Adult Literacy	C10C-LIT-VAR-000-01	Tues	14/09/10	26/01/11	City Campus Skill Centre	15	3	18.00	21.00	£0	
Certificate in Adult Literacy Level 1	C100-LIT-OL1-000-01	Tues	14/09/10	07/12/10	Little Hulton Skill Centre	12	2.5	12.30	15.00	£0	
Certificate in Adult Literacy Level 1	C10C-LIT-OL1-000-01	Tues	14/09/10	07/12/10	City Campus Skill Centre	12	2.5	09.30	12.00	£0	
Certificate in Adult Literacy Level 2	C10C-LIT-OL2-000-01	Mon	13/09/10	20/12/10	City Campus Skill Centre	14	2.25	09.45	12.00	£0	
Certificate in Adult Literacy Level 2	C100-LIT-OL2-000-01	Thur	16/09/10	09/12/10	Little Hulton Skill Centre	12	2.5	09.30	12.00	£0	
GCSE English	C10W-ELA-OL2-000-01	Tues	14/09/10	17/05/11	Walkden Centre	30	3	18.00	21.00	£309	
GCSE English	C10W-ELA-OL2-000-02	Thur	16/09/10	19/05/11	Walkden Centre	30	3	18.00	21.00	£309	
Nail Services											
NVQ Level 2 Nails	C10W-NAI-NV2-000-02	Tues/Wed	14/09/10	22/06/11	Walkden Centre	34	6	18.00	21.00	£682	
NVQ Level 2 Nails	*	FT	07/09/10	01/07/11	De La Salle Centre	35	16	FT	FT	£1,345	
NVQ Level 3 Nails	C10W-NAI-NV3-000-02	Tues/Thur	14/09/10	23/06/11	Walkden Centre	34	6	18.00	21.00	£692	
Numeracy											
Introduction to Adult Numeracy	C10C-NUM-VAR-000-04	*	*	*	City Campus Skill Centre	*	*		*	£0	
Certificate in Adult Numeracy Entry Level 3	C100-NUM-EL3-000-01	Mon	13/09/10	21/02/11	Little Hulton Skill Centre	14	2.25	14.45	17.00	£0	
Certificate in Adult Numeracy Entry Level 3	C10C-NUM-EL3-000-01	Tues	14/09/10	07/12/10	City Campus Skill Centre	12	2.5	12.30	15.00	£0	
Certificate in Adult Numeracy Level 1	C10C-NUM-OL1-000-01	Mon	13/09/10	21/02/11	Little Hulton Skill Centre	14	2.25	12.30	14.45	£0	
Certificate in Adult Numeracy Level 2	C10C-NUM-OL2-000-01	Thur	16/09/10	09/12/10	City Campus Skill Centre	12	2.5	12.45	15.15	£0	
Certificate in Adult Numeracy Level 2	C100-NUM-OL2-000-01	Fri	17/09/10	10/12/10	Little Hulton Skill Centre	12	2.5	12.15	14.45	£0	
Certificate in Adult Numeracy	C100-NUM-VAR-000-01	Tues	14/09/10	25/01/11	The Lower Kersal Centre	16	2.75	09.15	12.00	£0	
Certificate in Adult Numeracy	C100-NUM-VAR-000-02	Wed	22/09/10	02/02/11	Rainbow Rooms	16	2	09.45	11.45	£0	
Certificate in Adult Numeracy	C10E-NUM-VAR-000-01	Mon	13/09/10	24/01/11	Walkden Centre	15	3	18.00	21.00	£0	
Certificate in Adult Numeracy	C10C-NUM-VAR-000-01	Tues	14/09/10	25/01/11	City Campus Skill Centre	15	3	18.00	21.00	£0	
Certificate in Adult Numeracy	C10W-NUM-VAR-000-01	Mon	13/09/10	24/01/11	Walkden Centre	15	3	18.00	21.00	£0	
Certificate in Adult Numeracy	C100-NUM-VAR-000-03	Wed	22/09/10	02/02/11	Mocha Parade	16	2	09.45	11.45	£0	
Certificate in Adult Numeracy	C100-NUM-VAR-000-04	Tues	14/09/10	25/01/11	Guild Hall Comm Centre	16	2.75	09.15	12.00	£0	
Certificate in Adult Numeracy	C100-NUM-VAR-000-05	Wed	22/09/10	02/02/11	Sure Start Children's Centre	16	2	12.30	14.30	£0	
Certificate in Adult Numeracy	C10E-NUM-VAR-000-02	Mon	13/09/10	24/01/11	Walkden Centre	16	3	18.00	21.00	£0	
Certificate in Adult Numeracy	C100-NUM-VAR-000-06	Wed	22/09/10	02/02/11	Mocha Parade	16	2	09.45	11.45	£0	
Certificate in Adult Numeracy	C100-NUM-VAR-000-07	Wed	22/09/10	02/02/11	Rainbow Rooms	16	2	09.45	11.45	£0	
Certificate in Adult Numeracy	C10W-NUM-VAR-000-02	Mon	13/09/10	24/01/11	Walkden Centre	15	3	18.00	21.00	£0	
Certificate in Adult Numeracy	C10C-NUM-VAR-000-02	Tues	14/09/10	25/01/11	City Campus Skill Centre	15	3	18.00	21.00	£0	
Certificate in Adult Numeracy	C100-NUM-VAR-000-08	Wed	22/09/10	08/06/11	Mocha Parade	30	2	12.30	14.30	£0	
Certificate in Adult Numeracy	C10C-NUM-VAR-000-05	Tues	14/09/10	25/01/11	City Campus Skill Centre	18	2	12.45	14.45	£0	
GCSE Maths	C10W-MAT-OL2-000-01	Tues	14/09/10	17/05/11	Walkden Centre	30	3	18.00	21.00	£309	
GCSE Maths	C10W-MAT-OL2-000-02	Wed	15/09/10	18/05/11	Walkden Centre	30	3	18.00	21.00	£309	
Painting & Decorating ▲											
Intro. Cert. & Cert. in Basic Construction Skills - Painting & Decorating	C10C-PAD-OL1-000-03	Tues/Thur	14/09/10	10/03/11	City Campus Skill Centre	22	6	18.00	21.00	£487	
Introduction to Painting and Decorating	C10C-PTD-OL1-000-01	Tues	14/09/10	23/11/10	City Campus Skill Centre	10	3	18.00	21.00	£150	☎
Developing Painting and Decorating	C10C-PTD-OL1-000-02	Thur	16/09/10	25/11/10	City Campus Skill Centre	10	3	18.00	21.00	£150	☎
Plumbing ▲											
Certificate in Basic Plumbing Studies	C10C-PLU-OL2-000-03	FT	07/09/10	08/07/11	City Campus Skill Centre	36	18			£1,350	
OCN Plumbing	C10C-PLU-OL1-000-01	Tues	14/09/10	23/11/10	City Campus Skill Centre	10	3	17.45	20.45	£150	☎
Professional Studies											
A1 Assessor Award	C10W-ASS-OL4-000-01	Ind Appt	22/09/10	26/06/11	Walkden Centre	*	*	*	*	£337	
V1 Verifier Award	C10W-VER-OL4-000-01	Ind Appt	22/09/10	26/06/11	Walkden Centre	*	*	*	*	£350	
Preparing to Teach in the Lifelong Learning Sector (PTLLS) Level 3	C10W-PTL-OL3-000-01	Wed	22/09/10	01/12/10	Walkden Centre	10	3	17.30	20.30	£161	
Certificate in Teaching in the Lifelong Learning Sector (CTLTS) Level 4	C10W-CTL-OL4-000-01	Tues	28/09/10	07/06/11	Walkden Centre	30	4	17.00	21.00	£456	
PGDE Post. Grad. Certificate in Education	C10W-PCE-OL5-000-05	Mon/Tues	13/09/10	06/07/11	Walkden Centre	30	8	10.00	15.00	*	
Edexcel Diploma in Teaching in the Lifelong Learning Sector	C10W-DTL-OL4-000-01	Mon/Tues	13/09/10	06/07/11	Walkden Centre	30	8	10.00	15.00	*	
PGDE Post. Grad. Certificate in Education (Phase 1) Group 1	C10W-PCE-OL5-000-01	Tues	28/09/10	07/06/11	Walkden Centre	30	4	16.00	20.00	*	
PGDE Post. Grad. Certificate in Education (Phase 1) Group 2	C10W-PCE-OL5-000-02	Thur	30/09/10	09/06/11	Walkden Centre	30	4	10.00	15.00	*	
PCDE Post. Grad. Certificate in Education (Phase 2) Group A	C10W-PCE-OL5-000-03	Wed	15/09/10	18/05/11	Walkden Centre	30	4	10.00	15.00	*	
PCDE Post. Grad. Certificate in Education (Phase 2) Group B	C10W-PCE-OL5-000-04	Thur	16/09/10	19/05/11	Walkden Centre	30	4	16.00	20.00	*	
Shorthand (Teeline)											
OCR Shorthand Speed Skills Level 1	C10W-SHT-OL1-000-01	Thur	16/09/10	30/06/11	Walkden Centre	35	2	18.00	20.00	£250	☎
Travel											
Level 2 Air Cabin Crew (NCFE)	C10W-ACC-OL2-000-01	Tues	14/09/10	10/05/11	Walkden Centre	30	3	18.00	21.00	£320	
Yoga											
Hatha Yoga	C10W-S08-LLC-000-03	Tues	14/09/10	23/11/10	Walkden Centre	10	1.5	18.00	19.30	£48	☎
Hatha Yoga	C10W-S08-LLC-000-04	Tues	14/09/10	23/11/10	Walkden Centre	10	1.5	19.30	21.00	£48	☎

Key to symbols: ★ Please enquire for details ☎ Enrol by phone ▲ Some of these courses may require an entry test prior to enrolment * No Fee Reduction Available

Adult Course Directory 2010

FEES

All fees quoted are for UK and EU residents only. Please contact the Admissions Team on 0161 631 5001 for overseas prices. Fees are due and payable in full at the time of enrolment unless you are a home student aged 16 to 18 years old undertaking a full or part time LSC Funded Course. You may be asked to provide proof of age and will need to bring details of your exam results.

- If you are 19+ and are paying your fees yourself you can either:
- Pay all your fees in full and receive a 5% discount if course fees are £100 or over
 - Apply for instalments for course fees over £100
 - Qualify for a fee reduction if you are in receipt of one of the benefit type listed

Other reductions may be available. Contact Admissions on 0161 631 5001 for more information

Benefit Type	Evidence Required
Unemployed people in receipt of Job Seekers' Allowance	Award notice/letter from Job Centre
Income Support	Most recent award notice/letter from the benefits agency
Housing/Council Tax Benefit	Award notice/letter from your local authority
Working Tax Credit (subject to household income of less than £15,276*) *Please note the household income threshold is set by the Government and may be subject to change	Current Tax Credit award notice The award notice must be valid for the start date of your course
Pension Credit - Guarantee Credit only	Current Pension Credit Award Notice
Income Related Employment & Support Allowance (ESA)	Letter from Job Centre
Unwaged Dependants (as defined by Jobcentre Plus) of those listed above	Appropriate evidence must include students name
Asylum Seekers who have legally been in the UK pending consideration of their claim by the Home Office for longer than 6 months and are in receipt of the equivalent income-based benefit and their dependants	Evidence of benefits and a copy of your current application for asylum
Asylum Seekers refused asylum but eligible and granted support under Section 4 of the Immigration and Asylum Act 1999	Proof of eligibility



ESOL – English for Speakers of Other Languages

ESOL courses are offered at a wide range of levels for students who have no English skills at all, up to an advanced level. The courses are offered day time and evening at the City Campus Skill Centre. All students are asked to attend an assessment prior to a course being selected so that the tutors can ensure that students are put on the right level of course. Please contact Admissions on 0161 631 5001 for the next ESOL Information Session.

CENTRE LOCATIONS

City Campus Skill Centre
Lissadel Street, Salford, M6 6AP

De La Salle Centre
Weaste Lane, Salford, M6 8QS

Eccles Centre
Chatsworth Road, Eccles, M30 9FJ

Guild Hall Community Centre
Guild Avenue, Walkden, M28 3AS

Little Hulton Skill Centre
26 Hulton District Centre, Little Hulton, M28 0AU

Lower Broughton Sure Start Children's Centre
120 Great Clowes Street, Lower Broughton
Salford, M7 1RN

The Lower Kersal Centre
Northallerton Road, Lower Kersal, M7 3TP

Mocha Parade
Mocha Parade Shopping Centre,
Lower Broughton, M7 1QE

Pendleton Centre
Dronfield Road, Salford, M6 7FR

Rainbow Rooms
259 Liverpool Road, Eccles, M30 0QN

Walkden Centre
Walkden Road, Worsley, M28 7QD

**SALFORD
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Available in other formats upon request. All information is correct at the time of going to print. We reserve the right to make changes to any of the information printed.