

Evaluation of the Household Waste Incentives Pilot Scheme

Final Report to Defra (Waste Strategy Division)
Appendix 1: London

July 2006

London

Bromley and Sutton

Aim of scheme

The aim of this incentive trial was to introduce 'Recycling Champions' who would be responsible for encouraging recycling and reducing waste within a group of households. Prizes were awarded to both the recycling champions and the group of households that achieved the greatest increase in the amount of material that was recycled.

Area features/demographics

The scheme ran in the London Boroughs of Bromley and Sutton. The Borough wide recycling rates and rank in the Index of Multiple Deprivation are listed in the table below for the two authorities.

	Recycling rate (2004-05)	Index of Multiple Deprivation
Bromley	23%	196
Sutton	28%	199

Scheme description

Bromley - A Champion was appointed for each of 30 housing blocks (each block containing about 30 residences), with responsibility for increasing participation, and also increasing the proportion of the waste that each participant recycles. Each recycling Champion was incentivised through a discount voucher scheme, and each block was incentivised through environmental initiatives adapted to each blocks' specific requirements. A further incentive/prize was provided to the block that achieved the greatest increase in its recycling rate by the end of the scheme.

Sutton - The Council planned to recruit 24 Recycling Champions. The Recycling Champions promoted waste reduction, reuse and recycling within their local community, being responsible for cascading waste awareness information to 6,000 properties within their community. The aims of this specific project included increasing the amount of waste recycled, developing community cohesion and participation in the scheme and increasing knowledge of residents taking part in the scheme so as they could also encourage their friends and members of the wider community.

Defra funding

The total amount of Defra funding for the two projects was £21,400. This funding support equates to around £1.67 per household in Sutton (6,000 households) and £12.67 in Bromley (900 households).

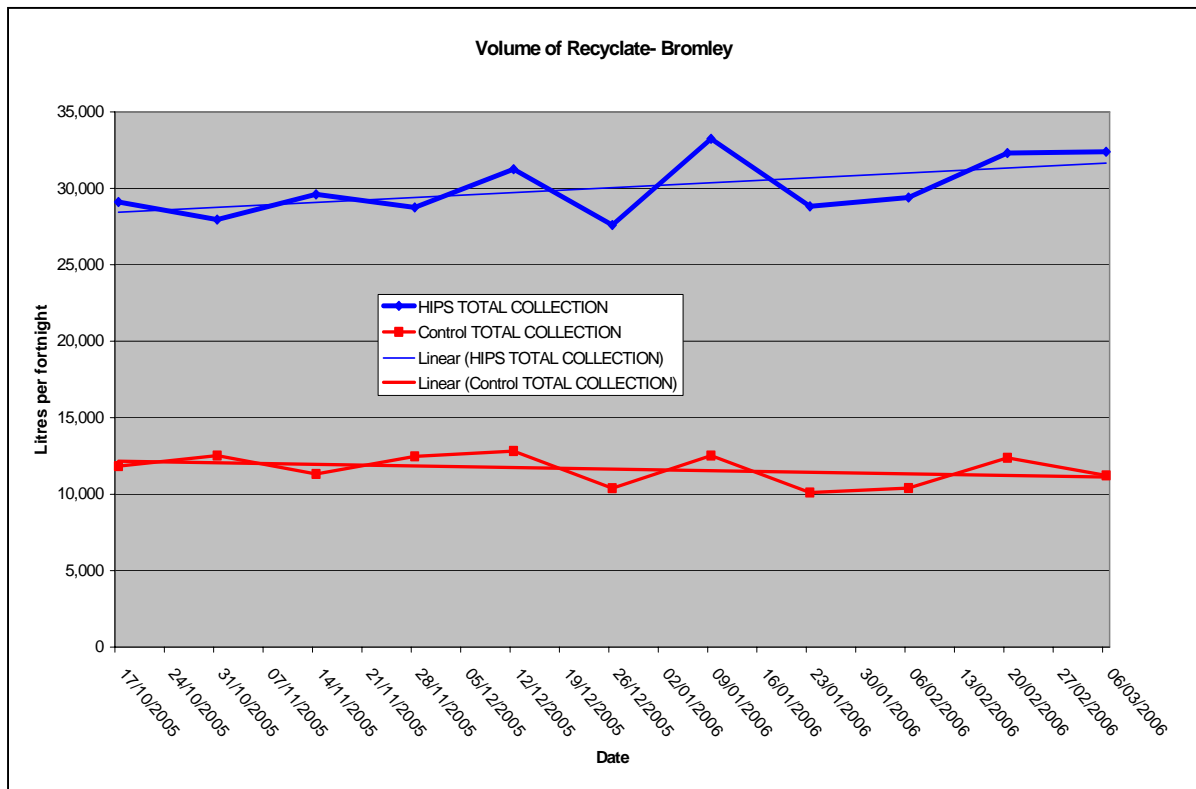
Monitoring mechanism used

Monitoring was achieved through a combination of recycling tonnage collected, recording levels of recycling bin contamination and measurement of participation rates.

Key results

The Sutton campaign concentrated on one very basic message; “what we want and don’t want in our green wheeled recycling bins”. A comparison of waste tonnages with the same six-week period in 2005 shows an increase of 10 tonnes of recyclables in the selected area. The number of recycling bins rejected during the six-week period following a door stepping exercise also showed a slight reduction of between 3 to 5 bins.

Bromley increased the amount of recyclable material that was collected, but the level of contamination also increased. Results in the performance (of volume of recyclate collected) in the pilot area versus the control is shown below:



Anecdotal evidence from collection crews in Sutton suggests that contamination has reduced by around 10%.

Conclusions

- The recruitment of Champions took longer than expected but all of the champions were enthusiastic. Sutton received many positive reports from residents who found it

very helpful to have someone on the spot that they could address recycling questions to.

- The schemes would appear to have had a positive effect in increasing the amount of recyclable material that was collected. However, whilst the level of contamination fell in Sutton, it increased in Bromley suggesting that in the latter case more communication work needs to be focussed upon contamination issues.
- From the data available it has not been possible to determine the specific impact the Recycling Champions have had in contributing to the increased diversion rate in Sutton.
- Bromley do not intend to continue with the incentive scheme but will continue to keep in touch with the Champions that they have already recruited, as they are likely to be employed to assist with future PR and communications on a voluntary basis.

Key lessons learned

- Croydon were also intending to participate in this incentive trial as part of the South London Waste Disposal Group but they were forced to pull out very early on as it became clear that they would be unable to recruit enough Recycling Champions within the timescales of the pilot.
- The recycling champions have provided a method for explaining recycling schemes to householders face-to-face, and the householders involved in the trial have received this very positively.

Hammersmith & Fulham and Lambeth

Aim of scheme

The aim of this scheme was to increase the use of bring banks by residents in estates of flats by offering a Community Reward scheme to improve the estate environment.

Area features/demographics

The scheme ran in the London Boroughs of Hammersmith & Fulham and Lambeth, covering approximately 1,640 households in pilot areas and approximately 1,870 households in control areas. Both pilot and control areas included a high, medium, low rise and sheltered accommodation estate in each Borough.

Hammersmith & Fulham is ranked 77th on the Index of Multiple Deprivation, Lambeth ranks 87th on the same index. Thus both areas cover relatively deprived communities in the upper quartile of the Index.

In 2004-05 the Hammersmith & Fulham had a recycling rate of 19.5%, Lambeth had a recycling rate of 16.5%.

Scheme description

Both the London Boroughs of Lambeth and Hammersmith & Fulham have made significant progress towards improving the ease of use of estate bring banks by expanding the number of co-mingled recycling bring banks near estate blocks. However, the councils recognised that estate bring banks can be more difficult for residents to use than kerbside recycling schemes since recyclables must usually be carried further distances to banks. As a result local diversion rates in estate areas are generally lower than the borough averages.

This incentive intended to reward the 'estate' community by providing a prize which met the needs of the local community, such as additional green spaces, children's play grounds or landscape improvements. Four estates in each borough were chosen to take part in the project. The two estates in each borough that increased their recycling the most were to win a reward, and these estates would share the prize fund of £40,000. The exact allocation of money to each estate was to be based on their improvement in recycling. Four further estates in each borough acted as control areas.

Defra funding

Defra funding for this scheme was £119,000, which covered the prize fund, all publicity and promotional material and data processing costs. This funding support from Defra equates to support of around £34 per household.

Monitoring mechanism used

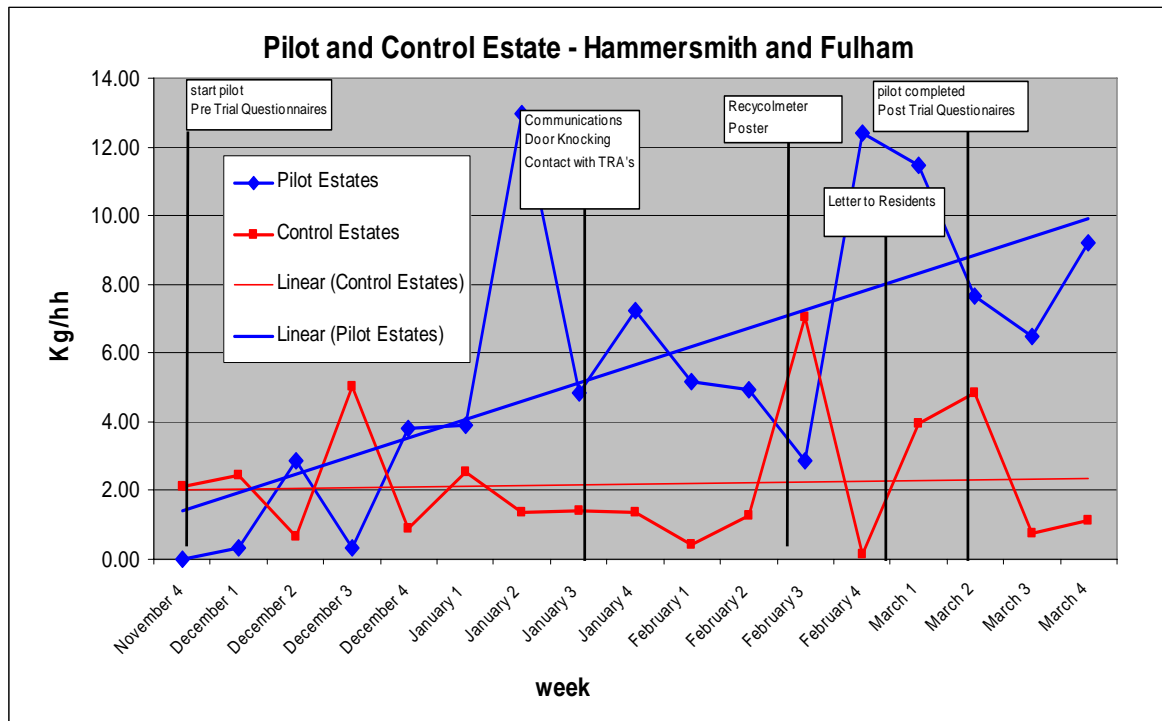
To allow different size estates to be included in the pilot, the success of the scheme was measured by the increase in kilograms per household in the trial areas.

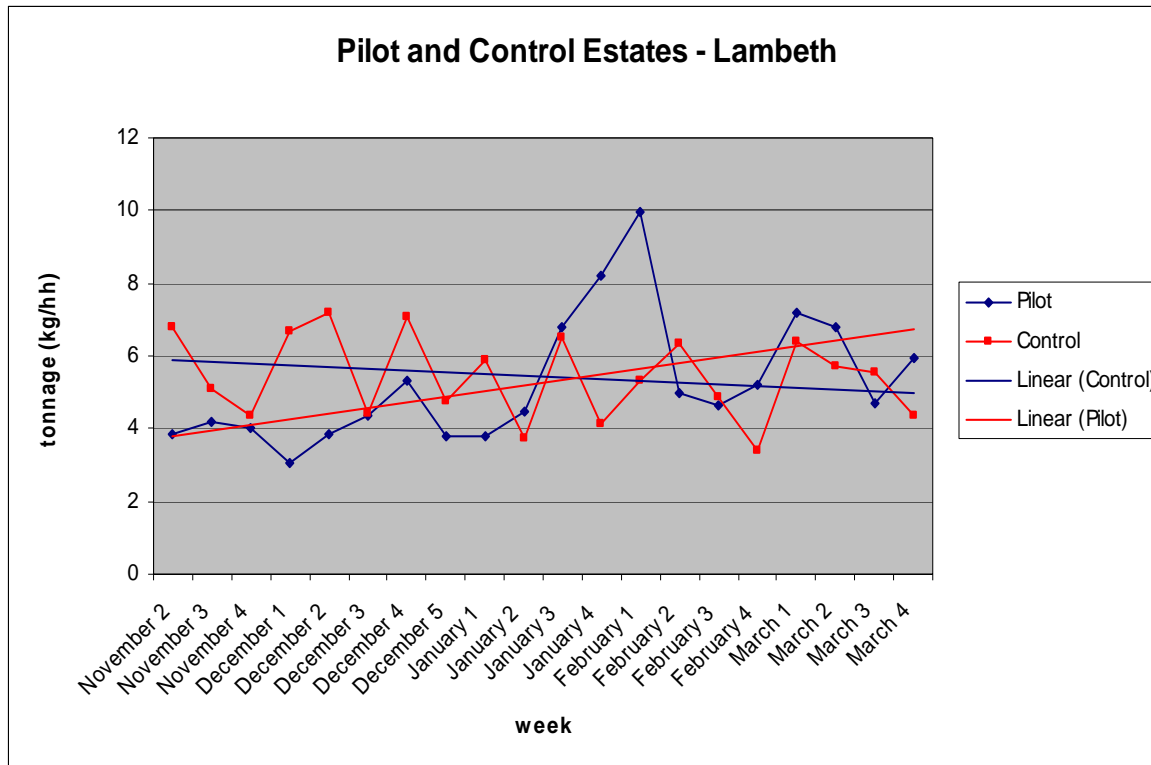
An attitudinal survey was also carried out in the pilot areas.

Key results

Results for the weight of recyclables collected (kilograms per household) is shown in the two graphs below: -

- The pilot estates in Hammersmith and Fulham have increased, while the control estates show no increase in recycling performance.
- In Lambeth the pilot estates increased their recycling performance whilst the control estate's performance deteriorated.





However it should be noted that Hammersmith & Fulham had significant technical and operational problems with their on-board weighing equipment and this has affected the reliability of the results obtained. As a result of these problems, Hammersmith & Fulham (with Defra’s agreement) initially extended their trial by two months to try and validate the data being recorded. Ultimately however, owing to safety related problems which subsequently came to light, all 3 vehicles fitted with the weighing equipment had to be temporarily taken out of service making it impossible to continue collecting any weight data. As the ongoing lack of data made it impossible to award prizes in-line with recycling performance (with Defra’s agreement) Hammersmith & Fulham have divided their prize fund equally between the four pilot estates.

Although Lambeth also had some problems with the on-board weighing system, the data obtained is reliable enough to be validated, and two winning estates have been identified.

Results from the pre and post trial questionnaires and door-stepping attitudinal survey have been reported in April 2006 by ‘Recycle Western Riverside’ and showed that: -

In Hammersmith and Fulham:

- 47% of households on the control estates claimed to use the recycling service. 40% were aware of the service but did not use it and 13% were not aware of the service.
- 68% of households on the pilot estates claimed to use the recycling service. 29% were aware of the service but did not use it and 3% were not aware of the service.

In Lambeth:

- 66% of households on the control estates claimed to use the recycling service. 22% were aware of the service but did not use it and 12% were not aware of the service.
- 48% of households on the pilot estates claimed to use the recycling service. 43% were aware of the service but did not use it and 9% were not aware of the service.

In both areas:

- 90% of those questions in both boroughs said they would recycle if a community incentive were in place to reward recycling.
- There was an increase in the number of households claiming to recycle daily or 'a few times a week' in the incentive areas. (No comparable data is available for the control areas).
- Householders on pilot estates who did not recycle were equally likely to start recycling if they were:
 - provided with a reusable bag,
 - the banks were closer to their home, or
 - they were provided with a community incentive.
- Just over half (53%) of householders who were asked said they would like any incentive funding to be spend on a new or improved children's play area. 35% said they would like funding to be spent on landscaping around the estate.

Conclusion

The tonnage data and survey results suggest that the incentive has positively influenced the attitudes and recycling behaviour of householders in the pilot areas and lead to an increase in tonnages collected from the pilot estate communities. However, the significant problems with the on-board weighing equipment creates some uncertainty about the degree of improvement in the recyclables capture results.

Key lessons learned

- Officers noted that the amount of officer time required to operate and monitor this small pilot scheme was far greater than envisaged and proved a strain on existing resources. If the scheme were to be operated on a larger scale (e.g. borough wide) additional resources would be needed in the form of several full time staff members.
- The costs of providing ongoing incentives to all estates on a boroughwide basis offering the scale of reward provided for in the pilot would be unsustainable for any authority to offer without the costs being totally underwritten by Defra / central government
- Problems with the reliability and usability of the bin weighing system (including both hardware and software), were a key concern for both the authorities operating this incentive scheme. Other authorities considering operating an incentive that utilises bin-weighing technology should ensure that the bin weighing systems have been

demonstrated to work effectively at all levels before launching publicity for any incentive scheme that relies upon this type of equipment.

- The safety problems experienced by Hammersmith & Fulham arose largely because of a change in design, by the vehicle and bin-lift manufacturers, of a crucial part of the bin-lifting equipment. The design changes occurred between delivery of the first vehicle and 2 subsequent vehicles delivered some 6 to 9 months later. They were carried out without the knowledge either of the council or the weighing equipment manufacturers and therefore had not benefited from the development testing undergone by the original design. Officers would like to stress that this situation was unusual and was probably a one-off occurrence that is unlikely to be repeated.
- Although in the case of Hammersmith & Fulham, the safety problems that emerged were very important, these were a side issue in terms of the principle of using dynamic onboard bin weighing as a means of monitoring weight data. The experience gained by Hammersmith & Fulham and to some extent Lambeth would suggest that at least some weighing systems require more development and refinement before they can be relied upon in day to day use, on Local Authority type work.

Further Information

As part of the incentive scheme a detailed attitudinal survey was undertaken, copies of this may be available from the relevant authority.

Haringey

Aim of scheme

The aim of this scheme was to encourage householders to recycle their waste by offering a combination of incentives including community rewards (of up to £5,000), prize draws (£100) and charitable donations (up to £20,000).

Area features/demographics

The scheme covered all 95,000 households in Haringey. The borough is ranked highly in the Index of Multiple Deprivation at 27th. In 2004-05 Haringey had a recycling rate of 14%.

Haringey currently provides approximately 80% of its households with a weekly collection of recyclables.

Scheme description

This scheme was made up of a number of elements:

1) Better Haringey Recycler of the Year

The council sought nomination for two awards 'Recycler of the Year' and 'Recycling Estate of the Year'.

- 'Recycler of the Year' nominees were organisations or individuals who had made a great contribution to recycling themselves and had also encouraged others to recycle.
- 'Recycling Estate of the Year'. The sole criteria was hearing about housing estates where tenants had made a great contribution to recycling themselves, and who had encouraged others to recycle. The three winning estates received £10,000 worth of environmental improvements.

The finalists from these two categories were entered into the Better Haringey Recycler of the Year grand final. The winner received £500 plus £3,000 for a charity of their choice.

2) Area Assemblies 'Make a Difference' budgets

The Council has an existing scheme called 'Make A Difference'. This involves each of the seven Area Assemblies receiving £50,000 for community-based projects that are nominated, voted for, and decided by local people and councillors. The community incentive built on this existing resource by stating that, if the Borough-wide recycling participation rate rose from 55% in July 2005 to 60% by February 2006, then each Area Assembly would receive an additional £5,000 (a total of £35,000 extra).

3) Charity Recycling Fund

The Council's statutory recycling target for 2005/06 was 18%. This part of the Haringey incentives schemes proposed giving charities financial rewards on the basis of a recycling charity fund that increased the more that residents recycled. The charities were chosen on the basis of their local, national and international functions, thus reflecting Haringey's diverse demographics. Charities were also chosen on the basis of their work in supporting people and the environment. If the 18% target were reached, the recycling charity fund would raise £20,000 for these charities.

4) Kerbside Recycling Draws and Grand Recycling Draws

Over the course of the pilot 114 addresses (19 wards with 6 winners in each ward) were chosen at random. These addresses were checked on their day of recyclables collections to ensure they had recycled. If they had, they won £100. If they had not, their next-door neighbour's recycling box would be checked, and they would win the cash if they had recycled (and so on until winners were declared).

All those whom claimed their £100 prizes would then qualify for the Grand Recycling Draws where seven entries were again chosen at random (one per Area Assembly) to win a further £500.

Defra funding

Defra funding for this scheme was £118,000, which covered the prize fund, all publicity and promotional material and data processing costs. This funding support from Defra equates to support of around £1.24 per household.

Monitoring mechanism used

Tonnage and participation data was used to monitor the success of the incentive schemes piloted.

Key results

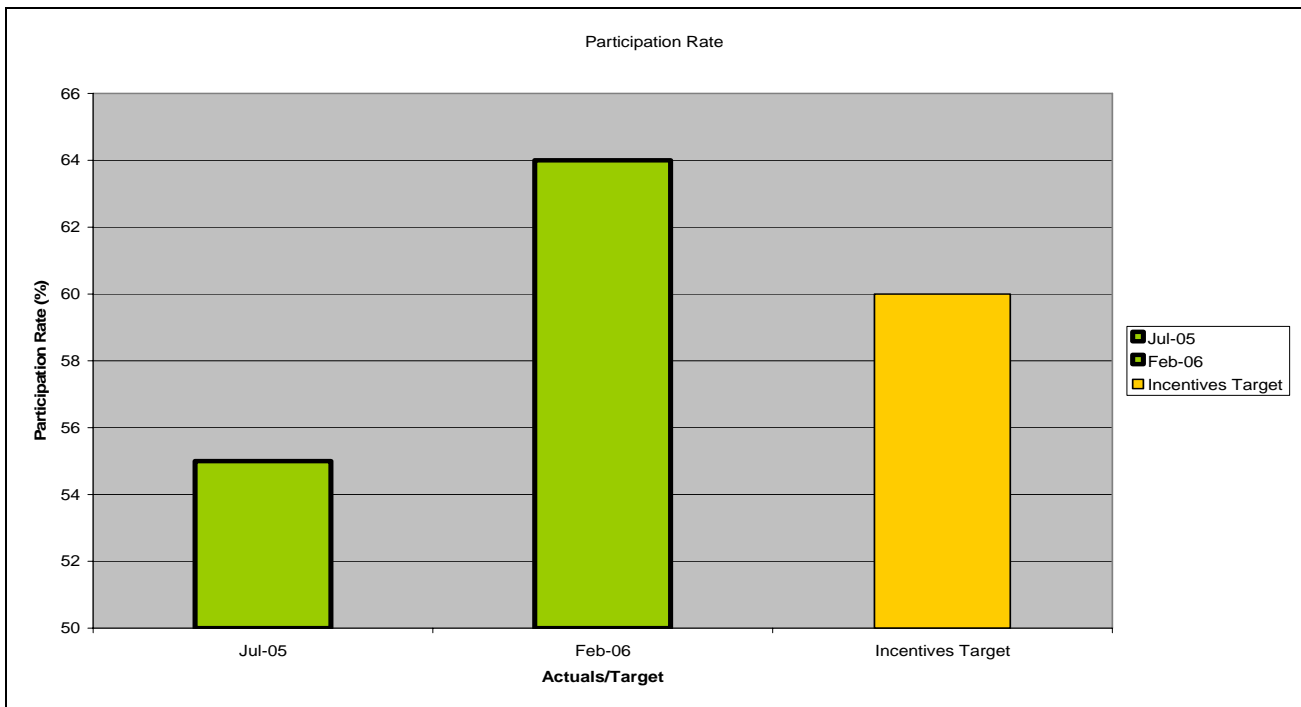
The graphs that follow show that:

- Recycling rate has increased by 6 percentage points (comparing average for 2004-05 with average for 2005-06).
- Participation rates have increased by 9 percentage points between July 2005 and February 2006.

These results suggest that the package of incentives has helped the Council to:

- Meet its statutory target of recycling 18% of household waste in 2005/06. Subject to audit, the Council has reached a figure of 20%.

- Meet its participation target of 60% Borough-wide. A figure of 64% was achieved in the February 2006 survey of resident participation.



Conclusion

- The pilot incorporated four different incentives (recycler of the year award, prize draws, community rewards and charitable donations) each of which may have motivated different individuals to varying degrees. It is difficult to ascertain which of the incentives was most beneficial in helping to achieve the improved performance.
- Not all prize draw winners claimed their prize. In Haringey, only 62% of the prize draw winners claimed their £100 prize.

Key lessons learned

- Haringey officers felt that the significant support they received from senior management and members was critical to the success of the scheme.
- Anecdotal evidence suggests that the community based projects generated the greatest interest.
- The prize draw scheme was developed with two distinct phases to examine whether the winners would talk to family, friends and colleagues about their initial £100 win, but also to investigate if the prospect of a further win of £500 would keep conversations going in the intervening period (i.e. prolonging the shelf-life of the incentive). Feedback from winners indicated that this aspiration was achieved.

Further Information

A detailed final report of the incentive schemes piloted in Haringey has been produced by



the authority and is available for other authorities to benefit from their experiences.

Havering

Aim of scheme

This incentive scheme was designed to encourage householders to participate in the kerbside recycling scheme through the use of fortnightly prize draws enabling participating residents to win cash prizes or environmentally friendly products.

Area features/demographics

The scheme covered all 96,000 households in Havering, the borough is ranked 176th in the Index of Multiple Deprivation. In 2004-05 Havering had an overall recycling rate of 15.51%.

Havering currently provides a weekly black sack refuse collection and a weekly orange sack recycling service. The waste contractor collects both recycled and general waste sacks at the same time.

Scheme description

The scheme was well publicised. The Launch took place in October, and materials were distributed at six key locations in the borough on a number of days. Regular features appeared in Living, the council's community newspaper, which is distributed to all households. Obtaining coverage in local commercial newspapers proved difficult. Despite efforts including regular press releases etc., features in these became sporadic and low key.

Residents were encouraged to collect, from libraries and other access points, sequential numbered sticky labels (eight to a sheet) to attach to their filled orange kerbside recycling sacks. Leaflets explained the scheme, detailing what materials could be recycled via the kerbside scheme.

The sticky labels were removed from the sacks at the MRF and the labels from non-contaminated sacks were entered into 14 fortnightly Draws, and three Super Draws.

The ten prizes awarded in each of the fortnightly draws were:

- 1st - £40
- 2nd - £30
- 3rd - £20
- 4th, 5th, 6th Home Composter
- 7th, 8th, 9th Water Butt
- 10th Fleece made of recycled material.

The three Super Draws' prizes varied between; 1st prize of £300-£150, 2nd prize of £200-£100, and 3rd prize of £100-50.

The winning numbers were published in Living and the council's website, so that residents could claim their prize. Winning households who saw their number in the paper then had to make arrangements to receive their prize.

Defra funding

Defra funding for this scheme was £50,900, which covered the prize fund and all publicity material. This funding support from Defra equates to support of around £0.53 per household.

Monitoring mechanism used

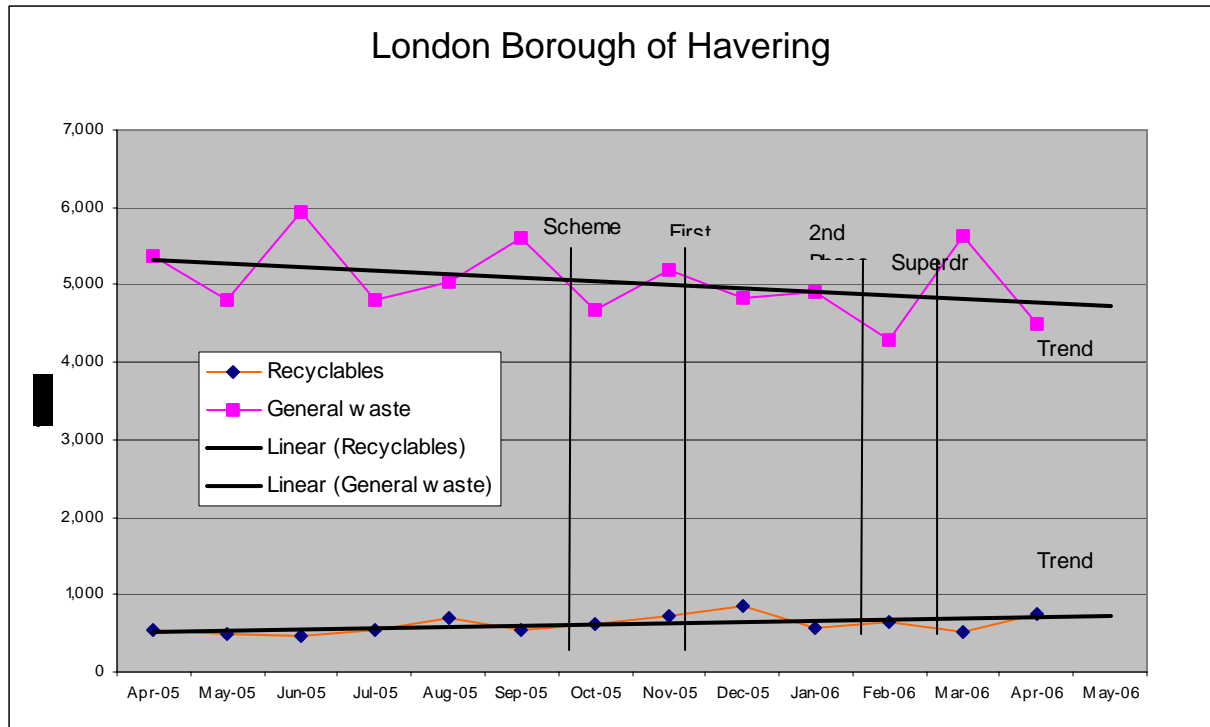
The intention was to compare data on tonnage collected with control data from neighbouring boroughs to measure any trends in tonnages.

Key results

The graph below shows the monthly weights of material collected in Havering between April 2005 and March 2006. It highlights two major trends:

- An increase in recycling tonnages
- A decrease in residual waste tonnages.

Unfortunately, Havering was unable to gather data from neighbouring authorities with which to compare performance. Without this comparison data it is difficult to ascertain whether these trends are due to the incentive scheme alone or, if not, what the impact from external factors, e.g. national recycling publicity, has been.



Conclusion

- From the data currently available it is not possible to determine what specific impact the incentive has had on Havering's recycling performance.
- Feedback suggests that the council is unlikely to be in a position to use its own resources to fund any future incentives for residents to recycle as there is a perceived high probability of residents' resistance to "incentives funded from the council tax". The Council may seek sponsorship for future exercises, however the recruitment of sponsors could be both time consuming and costly.

Key lessons learned

- Initially, Havering planned to provide labels (to be distributed with the councils magazine Living) on which residents would write their name and address. However following a discussion with the Metropolitan Police over possible identity theft concerns, the labels were changed to include sequential numbering (thus precluding inclusion within Living). The use of sequential numbering has made the process of claiming prizes more convoluted and time-consuming (for both the residents and the authority) - officers suggest this explains why the claim rate for prizes is low at approximately 30%.
- Obtaining control/comparison data from neighbouring authorities and the waste contractor proved difficult in Havering. Other authorities should consider how they

would measure the impact of their schemes. Using control data from a similar or neighbouring authority should only be considered where there is a joint commitment to gather and share the information.

- Havering officers consider that a larger prize is a more effective motivator; thus £400 every other month would be better than £50 weekly. They also suggest that larger prizes are more newsworthy and thus more likely to get the significant press coverage required.

It pays to recycle
Recycle and win cash prizes

Super Draws £150, £100, £50
Fortnightly Draws £40, £30 and £20

Draws start on 25 November for six months.

To take part, pick up the numbered labels, instructions, terms and conditions and orange sacks available from all libraries, Public Advice & Service Centres, the Town Hall, and Mercury House, Romford.

Winning numbers will be announced on www.havering.gov.uk, 'Living in Havering' and Time FM radio station.

Biffa **Time fm 102.5** **CLEANAWAY** **defra** **elwa** **think green** **19**

Islington, Enfield and Hackney

Aim of scheme

The aim of this scheme was to increase the use of bring banks by residents in estates of flats through the use of a Community Reward scheme.

Area features/demographics

The scheme ran in the London boroughs of Enfield, Hackney and Islington targeting 5,600 households (including controls) in a range of different types of flats. Each of the boroughs provides communal recycling containers for these properties.

The Borough wide recycling rates and rank in the Index of Multiple Deprivation are listed in the table below for each of the authorities.

	Recycling rate (2004-05)	Index of Multiple Deprivation
Enfield	24%	93
Hackney	12%	20
Islington	11%	81

Scheme description

The three boroughs worked together to incentivise estates of flats. The project was based on specific estates throughout each borough and involved high, mid and low rise properties. Each estate had a comparable control estate. Both pilot and control estates are provided with communal containers for recyclables

Each month the estates, in each borough, with the greatest increase in recycling rates over a baseline level received a reward of £1,500 to be used by estates community groups, tenants associations etc. Each borough also provided an overall prize (£2,000) for the highest achieving estate overall at the end of the six month trial. These community awards could be used for increased sustainability such as landscape improvement, gardening works or the purchase of environmentally friendly products such as energy saving light bulbs.

Defra funding

Defra funding for this scheme was £43,500, which covered the prize fund, all publicity, promotion and communication material. This funding support from Defra equates to support of around £7.77 per household.

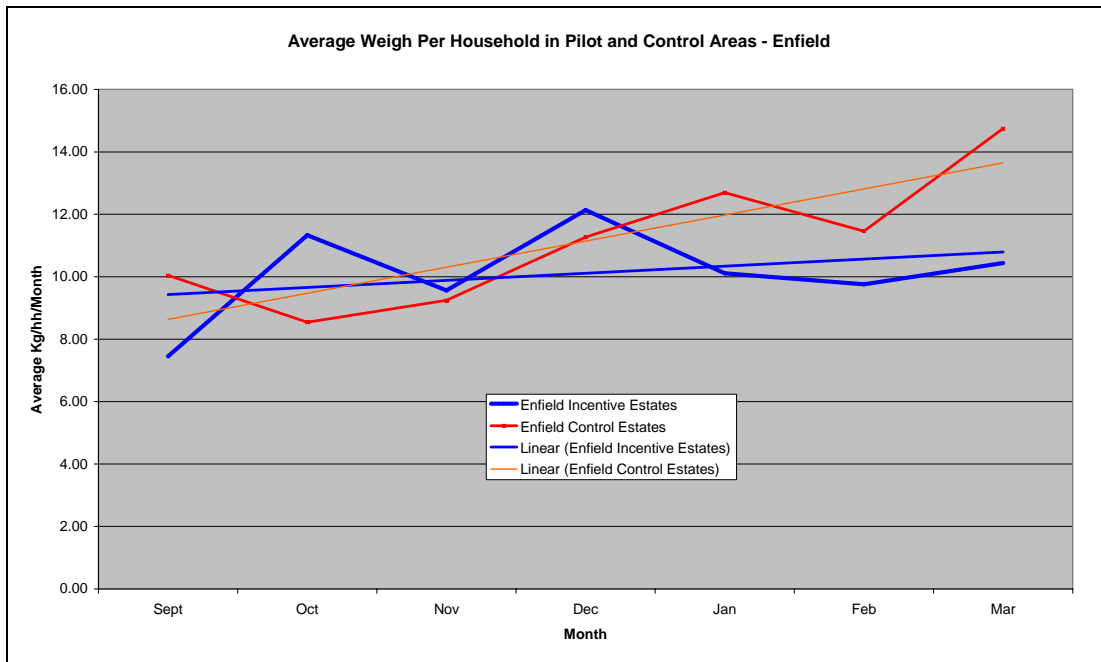
Monitoring mechanism used

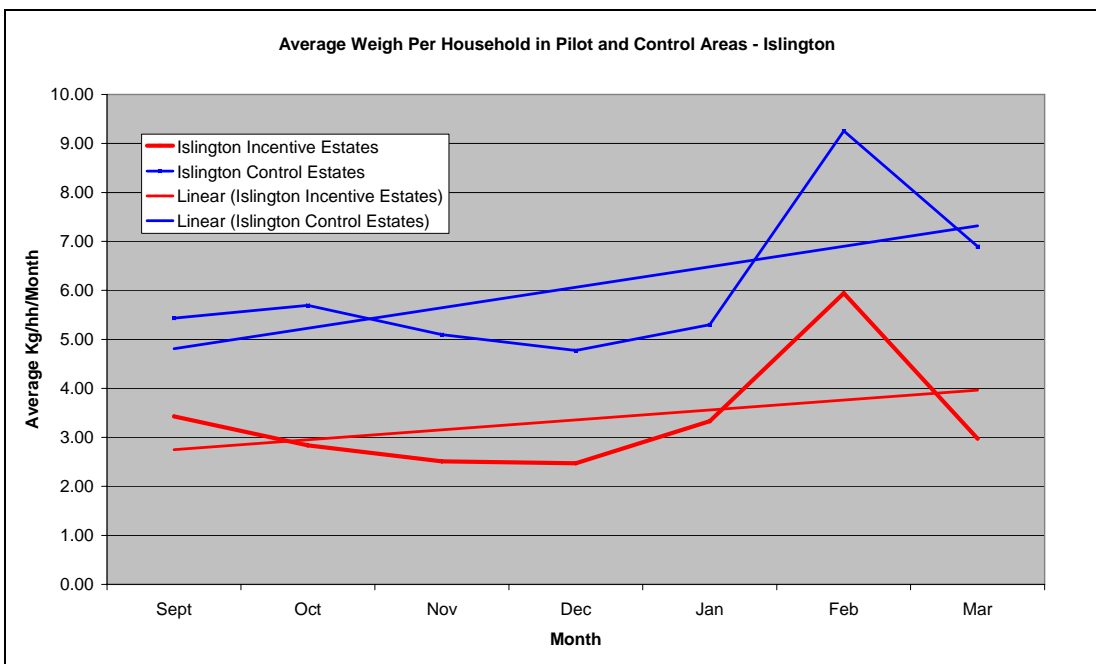
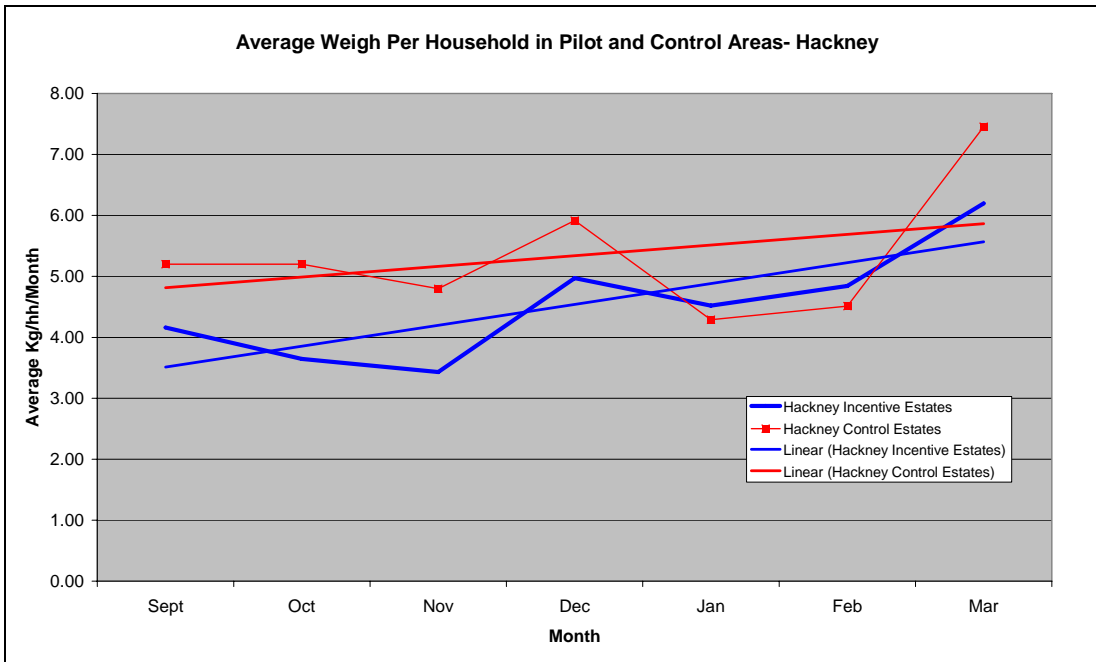
Due to the different number of households on each estate the weight of recyclables collected per household was used to monitor success of the scheme.

Key results

The three graphs below show the Kg/hh/month in the pilot and control areas of the 3 boroughs. It shows that: -

- In Enfield the average weigh of dry recyclables collected per household in the control areas has increased at a higher rate than in the trial areas.
- In Hackney and Islington the average weigh of dry recyclables collected per household in the trial areas has increased at a slightly higher rate than in the control areas.





It should be noted that these weights per household are based on fill levels of communal recycling bins, thus there is potential for a small margin or error to be present in these results.

A survey conducted in Islington (covering 170 households) showed that the majority of residents questioned did not feel an incentive would encourage them to recycle more, but a good reliable service would.

Conclusion

- The results show that the amounts of recyclables collected in the pilot areas in Hackney and Islington has increased at a slightly higher rate than in the control areas, which suggested the incentive has had a small positive impact on recycling behaviour. However officers have also suggested that this increase may also be due to the error margin of using volumetric conversions.
- This limited impact may be due to the low value of the community reward (an estate would have to have been the top performing authority for each of the 6th months to win the total prize money (for its borough) of £11,000.
- Although the three boroughs have varying recycling rates and level of deprivation, it is difficult to see from these results how these may have effected the impact of the incentive.
- The results of the Islington survey suggest that a reliable service is more important than a community or individual financial reward.

Key lessons learned

- Anecdotal evidence suggests that flats that had lower housing representative to tenant ratios showed better results. This suggests that having local individuals to whom the community have access to can help promote the scheme.

- Feedback from the doorknockers that spoke to residents suggests that residents felt they would not see where the money would be spent meaning they thought they would not see or get to enjoy the benefit of it. For these householders a community reward may not be an incentive or the value of the reward may not have been large enough for householders to see what improvements it would bring and thus incentivise them to recycle.

Westminster

Aim of scheme

This scheme aimed to incentivise residents to recycle through the use of a prize draw scheme with prizes of £50 in shopping vouchers.

Area features/demographics

The scheme covered all 112,000 residential properties in Westminster. The borough is ranked 110th in the Index of Multiple Deprivation and had a recycling rate of 15% in 2004-05.

89% of properties are flats and tower or mansion blocks. The area is diverse in culture with only 55.8% of Westminster's residents are born in the UK, compared to an average of 90.7% for England as a whole.

Westminster currently provides a twice weekly, black sack, refuse collection and a weekly recycling box collection service for approximately 60% of residents, the rest being served by estate collection services and bring banks.

Scheme description

Prize draw labels were provided with the Council's recycling newsletter and sent to all properties. Householders who participated in the recycling scheme (kerbside, near entrance or bring banks) were encouraged to put their names on the labels provided prior to their recyclables being put into collection containers in the competition weeks.

All recycled waste is collected via two transfer stations and officers picked the winners from the recycled waste presented once tipped from the collection vehicles. The picking was conducted on four separate occasions in the competition week in order to ensure that all residents had a chance of winning. Winning residents received a £50 shopping voucher prize.

Defra funding

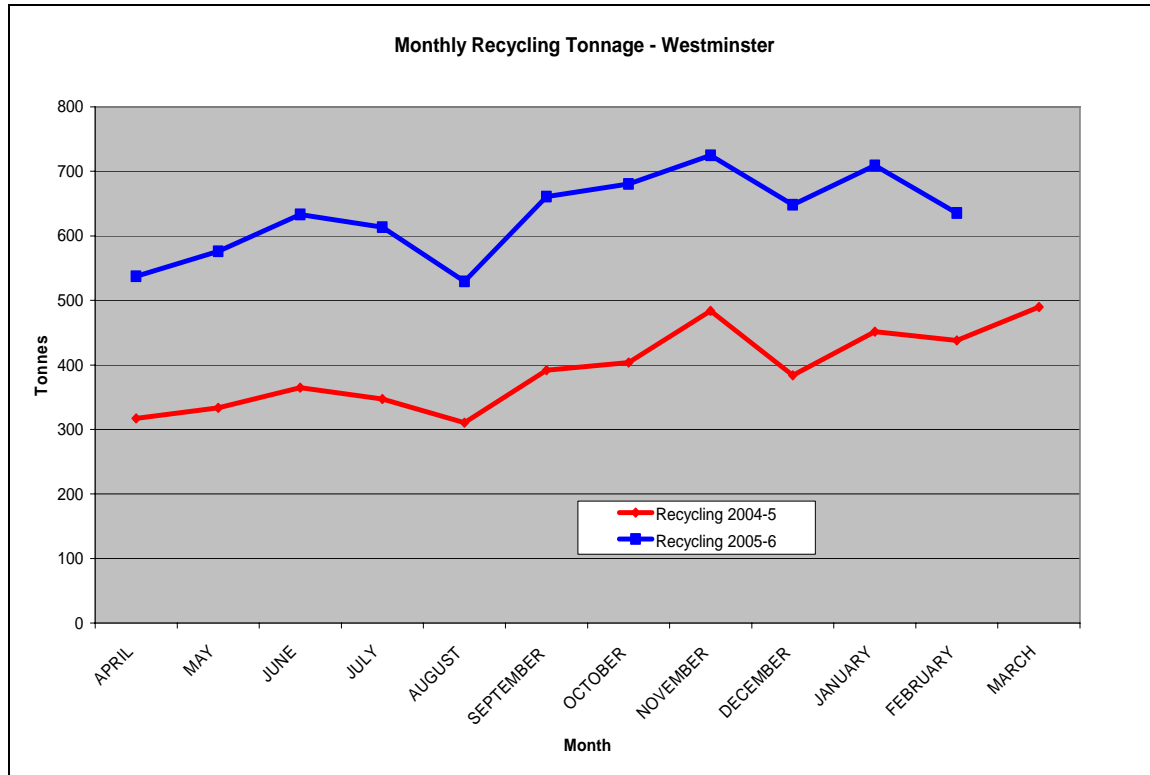
Defra funding for this scheme was £4,000, which covered the prize fund and all publicity material. This funding support from Defra equates to support of around £0.04 per household in the borough.

Monitoring mechanism used

Tonnage data was collected and compared to figures for 2004-05 and participation data collected the week prior to, the week during, and the week after a prize draw collection was used to assess the impact of the incentive.

Key results

The graph below shows the kerbside recycling tonnages for 2004-05 and 2005-06. The collected recyclables tonnages increased by approximately 25% (when compared to the same period in 2004-05). However 30,000 new households have been added to the kerbside collection scheme, and thus it is difficult to say how much of this increase is attributable to the incentive scheme. This difficulty is highlighted by the fact that similar monthly trends in the recycling performance over the months that the incentive was offered can be seen the same time of year in 2004-05.



Westminster Council also conducted set out rate monitoring. This was conducted the week before, during and the week after a prize draw week. These results showed that set out rate in the week prior, during and after a prize draw collection. Results were as follows: -

- Before 32%,
- During 30%,
- After 29%.

This result again suggests the prize draw has had no noticeable impact on recycling behaviour as the set out rate has fallen. However, this result should be treated with some caution as external factors such as inclement weather and seasonal holidays can equally affect set-out rates. It also makes no account of those households who recycle regularly but do not do so every week

Conclusion

- From the data provided it is difficult to identify any specific impact that the incentive may have had particularly given the fall in set-out rate observed.
- Newsletters were delivered to 112,000 properties, but a telephone survey of 500 residents determined that only 4% of residents were aware of the 'Message on a Bottle' campaign.
- The results of the project are disappointing in that the crews and recycling officers eventually collected only 23 vouchers from 112,000 residences.

Key lessons learned

Anecdotal feedback suggests that the voucher offered to reduce the shopping bill might not have been as effective as a motivating factor as vouchers that householders could use to buy more luxury items they would not buy every week, such as electrical goods.