Domestic Waste Scrutiny Review - Comparison Work

Phase 1 - Monitoring & Evaluation - October to December 2013

Resident door step survey

A doorstep survey was carried out with residents in both the test and control areas to establish what barriers there are to residents fully participating in the kerbside recycling service and waste reduction activities generally. Questions were also asked to discover what activities and facilities would encourage residents to participate more, which would then inform the project work.

Your Local Link were commissioned to complete the survey work and asked to post surveys through the letterbox at properties where they were unable to speak directly with residents. A freepost envelope was included with the survey along with details of a prize draw for £25 worth of shopping vouchers to act as an incentive to participate in the survey.

228 surveys were returned in total (including both postal returns and door step interviews) which equates to an 18.5% response rate overall.

Type of respondents headline figures:

- Both areas responded to the survey in fairly equal measures;
 - YO30 Control area = 16.9%
 - YO31 Test area = 14.1%
 - Didn't supply postcode = 3%
- 30% of the respondents were male, 66% female and 4% did not specify.
- Age range in area/that responded to survey
 - 16-24 = 1.8%
 - 25-34 = 11%
 - -35-44 = 18.9%
 - 45-54 = 21.5%
 - 55-64 = 14%
 - 65-74 = 17.1%
 - -75+=9.6%
 - Prefer not to say / No age specified = 6.1%
- 94.7% of respondents classed themselves as 'White British'. 1.8% specified 'Asian or Asian British' and 3.5% classed themselves as 'Other' and specified nationalities including; Chinese, French, German, Indian, Irish, Polish and Turkish.

- 36% of respondents were married, 25% single, 7% cohabiting and the remaining 32% were in a civil partnership, widowed or preferred not to say.
- 78.5% of respondents asked to be entered in to the prize draw.

Evaluation of 'Type of respondent':

The survey results establish a lot about the residents to be targeted as part of the bespoke campaign. Many residents that responded are single or cohabiting without children, and there is also a large elderly community within both areas. Although targeting project work in schools was an option, it is clear from the survey results it is important to also target other community venues.

The prize draw acted as a positive incentive to residents to complete the survey suggesting financial incentives may be effective within the area as part of the project work.

There was a wide range in the age of respondents suggesting it may be necessary to have varied activities available for different residents to participate in.

Current waste disposal and recycling habits headline figures

- Facilities used in the last 6 months
 - Rubbish bin = 100%
 - Recycling boxes = 97%
 - HWRC = 46%
 - Recycling banks = 32%
 - Other = 6% (specified answers included; Charity shops, freecycle, green bin, rag and bone man, skips)
- Common reasons cited for not using recycling boxes
 - 'Can't afford replacement boxes'
 - 'Boxes too heavy'
 - 'Crew doesn't always empty'
 - 'Use other facilities' (banks at the local community centre etc)
 - 'Boxes unsuitable' (too small, difficult to store etc.)
- Reasons for not using HWRC
 - Don't have a car = 50%
 - Don't know the opening hours = 7.4%
 - Don't need to use it = 37.7%
 - Don't know what I can take to site = 4.1%

- Other = 0.8% (Reasons included; 'Don't want to pay to tip', 'Can't find it', 'Costs', 'Just leave things out for CYC to remove', 'Rag and bone man').
- Knowledge of what can be recycled at the kerbside
 - Full knowledge = 88%
 - Some knowledge = 9%
 - No knowledge = 2%
 - No answer = 1%
- Would benefit from more information about recycling
 - Yes = 46%
 - No = 42%
 - Don't know = 9%
 - No answer = 3%

Evaluation of Current waste disposal and recycling habits headline figures Most residents across a wide age and gender range have full knowledge of what they can recycle at the kerbside and use the boxes regularly to do so. The small amount of residents that don't use the recycling boxes cited various reasons with the most common being not wanting to pay to replace boxes that have been lost.

Despite the fact that 98% of residents claimed to have full or some knowledge of what can be recycled at the kerbside, 55% of residents also said that they felt they would or might benefit from more information about what they could recycle. This suggests that residents would like to know more about recycling outside of the kerbside service.

54% of respondents do not use the HWRCs. Of these respondents 50% said that this was because they didn't have a car. Of this number when asked how they would dispose of larger items of furniture and electrical items the majority (49%) stated they would pay someone to remove it and 42% said they would donate it to charity. This suggests that putting a reuse scheme/collection service in place may be welcome to residents without transportation.

The costs of replacing boxes or disposing of some materials at the HWRC featured in many of the comments of those residents that stated that they did not use these facilities. However this was a relatively small number of residents within the survey area.

Waste prevention, reuse and other recycling headline figures

• Other items recycled by residents;

- Batteries = 39%
- Carrier bags = 43%
- Cartons = 17%
- Music/textiles = 18%
- Other items included; clothes, foil, light bulbs, plastic, paint tins, printer cartridges, shoes.
- Extra recycling put out in bags
 - Yes = 27%
 - No = 51%
 - Sometimes = 16%
 - No answer = 6%
- How would you dispose of furniture and electrical items that you no longer use?
 - Rubbish bin = 9%
 - Sell or pass on = 47%
 - HWRC = 45%
 - Charity = 50%
 - Pay for removal = 27%
 - Other included; Gypsies, Rag and bone man, Skips.
- Washable nappies?
 - Yes = 2%
 - No = 27%
 - Maybe in the future = 6.5%
 - Not applicable = 64.5%
- Mailing preference service?
 - Yes = 16%
 - No = 77%
 - n/a = 7%

Evaluation of waste prevention, reuse and other recycling habits

Residents were keen to recycle other items and high percentages claimed to recycle other materials at recycling banks or collection points such as carrier bags and batteries. It would be interesting to look at facilities available in the area for the items that were not as widely recycled such as textiles and tetra packs.

There was little interest across the board in using washable nappies. For many it was not applicable but for those residents for whom it did apply most stated that they 'did not use them and never would'. Promoting this waste

prevention activity within the test area may be fruitless as there is so little interest from residents and a campaign may not achieve much impact or tonnage reduction.

The mailing preference service was not very well used overall but very popular with residents with many comments that they would like to sign up to the service or find out additional ways that they can reduce the amount of junk mail delivered to their property. This suggested a Junk Mail waste prevention campaign in the test area may be effective in reducing waste overall at very little cost to the Council.

Participation monitoring

An exercise has been taking place in both the control and test areas to establish current participation and set out rates in the kerbside recycling service.

To monitor participation and set out rates, all properties were monitored over 4 consecutive recycling collections (period of 8 weeks) and information gathered about how often residents set recycling out for collection, how many boxes they present and what materials are presented. It was then possible to work out a percentage participation rate by street and overall by area.

Current projections from the participation monitoring work show that participation vastly varies ranges from street to street. In some streets only 42.5% of residents regularly present their recycling boxes for collection, whereas in neighbouring streets participation is as high as 75%. It is important to look at the factors that affect poorer levels of participation, particularly when it is on a street by street basis. What this data does suggest is that localised work (potentially even targeting a single street for a campaign) may be beneficial in terms of increasing participation rates.

In some parts of both areas participation levels are relatively high, although this does not necessarily reflect a high capture rate of recyclable materials. It may be that participation in the service is high but tonnages remain low due to a lack of awareness of the materials that can and cannot be recycled.

Recycling tonnage monitoring

To assess whether there has been any increase in the amount of material collected it is important to look at the tonnages of recycling collected from each area. To do this a separate crew was sent out to complete one

recycling collection per area and returned tonnage figures by type of material.

On average York residents produced around 6.53kg of recyclables per household per collection in the 2012/2013 financial year. In November 2013 the amounts measured per household per collection in the test and control areas were 6.07kg and 7.12kg respectively.

Within the test area the amount of recycling collected per household was significantly lower than the average across the city which gives positive scope for improvement.

<u>Phase 2 - Planning, project work and area based communications –</u> January to March 2014

Implications of monitoring work on planning

The results from the period of monitoring and evaluation were important in planning the project work and bespoke communications as the results offered an insight in to current behaviours and attitudes.

78% of respondents to the doorstep survey asked to be entered in to the prize draw demonstrating that this may have acted as an incentive to participate.

Specific project work carried out in the test area has been influenced by the results of the monitoring work. For example; Over half of respondents to the survey claimed that they did not use the HWRC, and over half of this number stated that this was because they did not have a car. Because of this a community reuse collection of bulky items was arranged to give residents without transport access to an important waste collection service.

Smarter York Challenge Brochure

A brochure was developed specific to the test area and delivered to residents at the start of the project. The brochure was designed to engage with residents in the test area, raise awareness of waste prevention and create interest in planned activities. Further campaign specific communications were developed throughout the project with the same bespoke branding.

A copy of the brochure is attached in Appendix A.

Incentive scheme 1 - 'Return to Sender' campaign

The 'Return to Sender' campaign was developed in response to the results of the doorstep survey where 77% of respondents stated that they had not

signed up to the Mailing preference service and still received junk mail. Qualitative data collected from the survey work suggested that residents would be interested in joining the service or finding out how they could avoid junk mail.

The 'Return to Sender' incentive scheme was designed to help and encourage residents to take practical steps to avoid junk mail, preventing waste at source and reducing the amount of waste sent to landfill. Residents were sent a letter inviting them to take part in the incentive scheme. A 'No Junk Mail' sticker, embossed with the Smarter York branding was included with the letter. Half of the properties in the test area received a letter simply encouraging them to take part and outlining the environmental benefits of reducing junk mail, whilst the other half of properties in test area received a letter inviting them to take part and informing them that all properties that participated would be entered in to a prize draw with a financial reward. This approach allowed us to engage with all residents in the area, but also offered us the opportunity to test the effectiveness of financial incentives versus encouragement only in improving levels of participation.

Communications

Promoting the prevention of junk mail was a relatively inexpensive yet effective waste prevention activity as it was possible to quantify the results of a campaign by the number of residents that had joined a scheme or were displaying a junk mail sticker etc.. This means that it is possible to understand the effect of communications and accurately measure the effectiveness of a campaign and use this information when directing future resources.

Campaign results:

Residents responded well to the incentive and participation levels were relatively high.

- 202 properties displayed a junk mail sticker which equates to a participation rate of more than 32.2% within the overall test area.
- 95 properties within the area that received encouragement only displayed a junk mail sticker which equates to a 32.09% participation rate.
- 107 properties within the area that were included in the financial incentive displayed a junk mail sticker which equates to a 32.33% participation rate.

Evaluation

There was a high level of response from residents in the test area to this incentive, demonstrating that there is an interest and demand for this type of waste prevention activity. Surprisingly the results showed that in this instance the financial incentive was not a factor in determining levels of participation and residents from the area that simply received encouragement to display their sticker were just as likely to participate in the campaign. This may be in part because very little effort was required to participate with the potential for long term positive benefits (i.e. Display a sticker on one occasion, avoid junk mail for x months). Had the subject of the incentive been focused on different WP activities (for example; reducing the amount of food waste produced over a set period) and had more action on the part of the resident been required there may have been less participation overall and particularly in the streets that were not offered any incentive to participate.

Incentive scheme 2 - 'StreetbyStreet' campaign

The StreetbyStreet campaign (SbS) was a campaign specifically designed to increase participation in the kerbside recycling service and to also improve the capture of materials.

The monitoring exercise completed in December 2013 captured street specific data regarding the number households that put out recycling boxes on collection day. A 'set out' rate was calculated per street which was based on households presenting at least one box on collection day. 'Set out' was monitored over 4 consecutive collections and using the data we were able to calculate participation in the service, based on the average number of properties putting out at least one box against the number of properties in the street.

Prior to the start of the SbS incentive residents were informed that properties in the street with the most improved participation in the recycling collection at the end of the campaign would receive one £5 voucher per household. Street specific stickers embossed with campaign branding were provided to each property to display on their recycling boxes as a reminder and encouragement to other properties in the street to participate. The incentive was also designed to introduce elements of competition and community spirit to determine if these were factors in encouraging increased participation.

Campaign results

- Peter Hill Drive & Court (monitored as one street) won the incentive with an overall increase in participation of 16.18%
- 24% of properties in the test area displayed SbS stickers on their recycling boxes.

Evaluation

Participation levels in this incentive were not as high as the 'Return to Sender' campaign, however more action was required on the part of the resident to participate. Residents were required to display stickers on their recycling boxes and also to regularly present their boxes for collection. It is unclear whether the SbS incentive was successful in fostering community spirit and whether this was a factor in participation levels. Some streets performed very well and a high percentage of properties displayed stickers but this was not always the case in neighbouring streets.

Community reuse collection

A community reuse collection was arranged in partnership with the British Heart Foundation to offer residents in the test area the opportunity to dispose of reusable goods in a sustainable way. Residents were sent a letter advising them of the date of the collection and providing them with details of what would and wouldn't be accepted. The survey work carried out prior to the campaign showed that 54% of residents in the area did not use the HWRCs, and of these residents 50% said that this was because they didn't have a car. When residents were asked how they would dispose of larger items of furniture and electrical items the majority (49%) stated they would pay someone to remove it and 42% said they would donate it to charity. The collection was arranged to meet the needs of these residents.

Communications



Campaign results

There was a poor take up for the community furniture collection and only 10 households took part. The British Heart Foundation (who operated the collection) were pleased to have been involved in the campaign for the opportunity to promote their collection service, and have since received several service requests from households within the test area.

Compost bin one day sale

A reduced price compost bin sale was arranged within the test area in partnership with the Friends of St Nicolas fields (FOSNF) as the majority of properties in the area receive garden waste collections and have outside space capable of housing composting equipment.

The sale was specifically advertised within the test area with targeted communications at local venues, but also advertised to a wider audience through a press release, updates on the council website and advertising through council social media channels. 13 compost bins were sold on the day.

Communications



Phase 3 - Monitoring, evaluation and recommendations

Following the campaign work a period of monitoring and evaluation has taken place in both the test and control areas. This is to establish whether there have been any significant changes in the behaviour of residents in the area that could be attributed to the campaign work.

Activities followed the same methodology of the pre campaign monitoring exercises and included;

- Resident surveys
- Participation monitoring
- Collection of materials Tonnage monitoring

Participation monitoring

The participation monitoring followed the same procedure as the pre campaign monitoring exercise. All properties in both the test and control areas were monitored over an 8 week period (4 collections) and the number of times each property presented recycling boxes for collection was recorded along with which materials were presented for collection. The data from the first round of monitoring was used to calculate street specific participation rates and from these make assumptions about participation levels in the area. The second set of data acts as a comparison to establish any change in the number of properties presenting boxes for collection and the levels of participation. The table below demonstrates participation levels before and after the campaign activities had been delivered.

Evaluation

There has been a marked improvement in participation and set out rates in most streets within the test area and any decreases were minimal. Overall there was an increase in participation of 6.18% as detailed in the table on page 21. There was also a noticeable increase in the number of boxes presented by individual households.

TABLE 1 Street Names	Number of properties	Participation Rate Pre- campaign %	Participation Rate Post Campaign %	Annex G Difference +/- %			
Test Area							
Kingsway North	148	52.87%	58.70%	5.83%			
Water Lane	84	50.89%	50.60%	-0.29%			
Spalding Avenue	128	51.95%	60.90%	8.95%			
St Philips Grove	64	44.10%	46.80%	2.70%			
Burdyke Avenue	52	50.48%	62.02%	11.54%			
Peter Hill Drive & Court	59	51.69%	67.87%	16.18%			
Sutton Way	10	42.50%	47.50%	5.00%			
Burton Green	84	57.10%	56.55%	-0.55%			
Average	629	50.21%	56.39%	6.18%			
Control Area							
Monkton Road	58	62.60%	68.97%	6.37%			
Byland Avenue	90	66.90%	68.33%	1.43%			
Kirkham Avenue	54	61.57%	56.48%	-5.09%			
Bell farm Avenue	80	59.06%	41.56%	-17.50%			
Roche Avenue	56	55.36%	58.04%	2.68%			
Middleham Avenue	62	51.21%	48.79%	-2.42%			
Lilling Avenue	18	59.72%	66.67%	6.95%			
Foston Grove	22	45.45%	44.32%	-1.13%			
Healey Grove	18	63.89%	52.78%	-11.11%			
Elmfield Avenue	24	64.58%	57.29%	-7.29%			
Sefton Avenue	32	73.44%	63.28%	-10.16%			
Barfield Road	36	74.31%	53.47%	-20.84%			
Thornfield Avenue	22	67.05%	55.68%	-11.37%			
Friars Walk	18	65.28%	54.17%	-11.11%			
The Crossway	14	75%	64.29%	-10.71%			
Average	604	63.03%	56.94%	-6.08%			

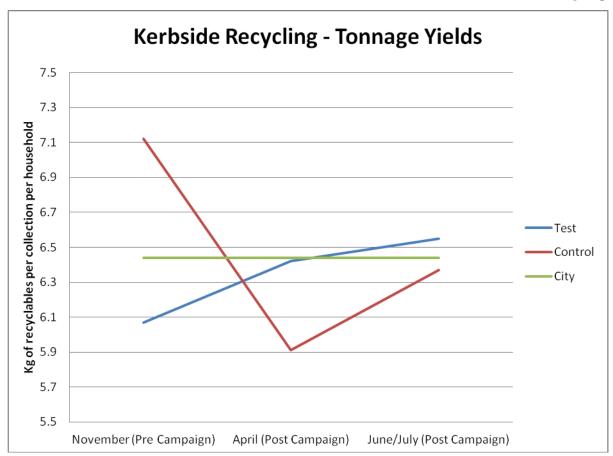
Control Area - Participation rates recorded in many streets deteriorated over the course of the project. This was due to anomalies created by a change of collection times and householders not putting recyclables out early enough for collection.

Tonnage monitoring

Several dedicated collections of recycling were made in the test and control areas before and after the targeted campaign work to provide a snapshot of the weight and mix of materials being collected. This data is important in affirming any changes recorded through participation monitoring exercises. The table and graph below illustrates the data recorded through these collections.

Test Area - 629 households						
Date	Total recycling collected (kg)	Total glass (kg)	Total plastic/cans (kg)	Total paper/card (kg)	Average recycling per household (kg)	
Pre campaign monitoring						
Nov. 2013	3,820	940	1,000	1,880	6.07	
Post campaign monitoring						
April 2014	4,040	1,040	1,140	1,860	6.42	
June 2014	4,120	1,070	1,150	1,900	6.55	
Total	8,160	2,110	2,290	3,760		
Average	4,080	1,055	1,145	1,880	6.49	
Analysis						
Difference	260	115	145	-	0.42	
% change	6.8%	12.2%	14.5%	-	6.9%	

Control Area - 604 households						
Date	Total recycling collected (kg)	Total glass (kg)	Total plastic/cans (kg)	Total paper/card (kg)	Average recycling per household (kg)	
Pre campaign monitoring						
Nov. 2013	4,300	1,060	1,130	2,110	7.12	
Post campaign monitoring						
April 2014	3,570	920	1,010	1,640	5.91	
July 2014	3,850	990	1,090	1,770	6.37	
Total	7,420	1,910	2,100	3,410		
Average	3,710	955	1,050	1,705	6.14	
Analysis						
Difference	-590	-105	-80	-405	0.98	
% change	-13.7%	-9.9%	-7.1%	-19.2%	-13.8%	



Following the campaign work in the test area the amount of recycling materials collected per household increased by an average of 0.42kg or 6.9%. This was measured over several collections to provide more robust data. Replicated city wide this could help capture 1,000 tonnes of additional recyclables and thereby save £100,000 per annum in landfill disposal costs at current rates.

The weight of plastic bottles/cans and glass increased whilst paper/card stayed the same. No change in the amount of paper/card being collected could be attributed to changes in behaviour encouraged by the 'No Junk Mail' waste prevention campaign

In the control area there was a significant reduction in the amount of recyclables collected in November 2013 compared to April 2014. This was primarily due to a change of collection times and householders not putting recyclables out early for collection. There was an increased tonnage for a collection made at the beginning of July 2014, however, and it is anticipated that normal performance levels will soon be restored.

Expenditure

Action	Cost
Doorstep survey (using private company)	£2,300
Survey prize draw (vouchers)	£25
Vehicle and crew for tonnage monitoring	£900
Smarter York Challenge brochure print	£200
'No Junk Mail' letters – print	£100
'No Junk Mail' stickers – print	£42
'No Junk Mail' scheme prize draw (vouchers)	£100
'StreetbyStreet' recycling incentive stickers – print	£485
'StreetbyStreet' recycling incentive prizes (£5 voucher per household)	£350
'StreetbyStreet' recycling incentive – Letter print	£168
Reuse collection flyer print	£150
Drop in sessions (room hire)	£56
Second survey printing	£150
Compost Bin one day sale - FOSNF	£1,618
Total	£6,644

Expenditure was kept to a minimum by utilising staffing resources for many elements of the project work. Experience of using private company for first survey was not positive and in house delivered second survey delivered comparable results. This indicates it would be more cost effective and beneficial to keep work in house for any future customer survey needs.

Increasing funding would improve the quantity and effectiveness of waste prevention campaigns offered to residents. Further input of resources would allow the team to continue to engage with residents in both the test and control areas. This would help maintain participation and satisfaction levels with kerbside collection services but also provide opportunities to develop other new initiatives.

Survey results

A survey was carried out with residents in the test area to establish if any changes were evident following the campaign. Questions were asked to discover which activities residents participated in and facilities they used. This data can then be compared to data from the first survey. 95 surveys were returned in total which equates to a 15.1% response rate overall. The response rate is lower than the original survey however the second survey was completed by post and there were no doorstep interviews. This reduced the cost of completing the survey considerably.

Waste disposal and recycling habits headline figures

- Facilities used in the last 3 months (during campaign)
 - Rubbish bin = 100%
 - Recycling boxes = 96%
 - HWRC = 42%
 - Recycling banks = 29%
 - Other = 12% (specified answers included Charity shops, furniture store, supermarket bag recycling, internet)
- Increased recycling in last 3 months?
 - Yes = 39%
 - No = 52%
 - No answer = 9%
- Knowledge of what can be recycled at the kerbside
 - Full knowledge = 90%
 - Some knowledge = 7%
 - No knowledge = 0%
 - No answer = 3%

From the survey results it appears that the number of residents using recycling boxes has remained the same. This is not reflected in the participation monitoring where a significant increase in participation was noticed. It may be that this has not been fully captured by the survey. The proportion of respondents using recycling boxes is very high at 96%. Actual participation in the test area averaged at 56% post campaign.

However 39% of survey respondents said that they felt they had increased the amount that they recycled despite the fact that the majority were already using recycling boxes.

Despite this, the levels of knowledge of what could be recycled at the kerbside remained constant.

It is likely that the survey results do not fully reflect a wide cross section of residents within the test area. When looking at the survey results it is clear that the respondents appear to be committed recyclers that are already using the services well. The survey results do however give us an indication of how well waste prevention campaigns were received within the area and how effective the communications campaign was.

Waste prevention, reuse and other recycling headline figures

- Awareness of campaign adverts/services in last 3 months
 - Yes = 62%

- No = 34%
- No Answer = 4%
- Usage of advertised services (eg textile bank, reuse collection, junk mail sticker)
 - Yes = 60%
 - No = 36%
 - No answer = 4%
- Other items recycled by residents
 - Batteries = 54%
 - Carrier bags = 59%
 - Cartons = 58%
 - Music/textiles = 26%
 - Other items included; Toys, electricals, books, clothes, furniture, ink cartridges
- How residents have disposed of furniture/electricals in last 3 months
 - Bin = 2%
 - BHF collection = 3%
 - Sold or passed on = 33%
 - HWRC = 34%
 - Charity = 37%
 - Paid someone to remove it = 5%
 - Other = 29%
- How many residents have purchased a home compost bin or started to compost more in the last 3 months
 - Yes = 12 %
 - No = 82%
 - No answer = 6%
- Number of residents signed up the mail preference service
 - Yes = 38%
 - No = 59%
 - No answer = 3%
- Number of residents displaying a 'No Junk mail' sticker = 47.3% A significant number of residents were aware of the campaign work and became involved in various waste prevention activities demonstrating that the communications campaign was effective and memorable. The survey results demonstrated a change in behaviour from residents as they have been made aware of alternative disposal methods of various items. Pre campaign the vast majority of residents disposed of furniture and electrical items by selling them or paying someone/the Council to remove the item. Post campaign the proportion of residents

Annex G

paying someone to remove items had reduced whilst the proportion that disposed of items by donating to charity or using the Household Waste Recycling centres remained high. The proportion of residents that would have disposed of items in the bin or a landfill skip also reduced. During the 'Return to Sender' campaign residents were provided with a 'No junk mail' sticker and given information about how to reduce junk mail and sign up to the mail preference service. The percentage of residents signed up to the service following the campaign had risen significantly from 16% to 38% suggesting the communication material used during this campaign was very effective.