

## **Report of the Head of Waste Services**

**29 November 2011**

### **Community Safety Overview & Scrutiny Committee**

### **Waste Management Services - Briefing Paper**

#### **Summary**

1. This report is provided to the Community Safety Overview & Scrutiny Committee to help them review performance in key waste management service areas and identify opportunities for improving waste prevention, reuse, recycling and composting, and thereby reducing the amount of waste sent to landfill for disposal.
2. This report explains the work which has been undertaken to achieve our current high levels of recycling & composting and low levels of waste sent to landfill.
  - In 1999/2000 we recycled & composted 10% of household waste, by 2010/2011 this had increased to 45.1%
  - In 1999/2000 we landfilled 90% of household waste, by 2010/2011 this had reduced to 54.9%

#### **Background & Context**

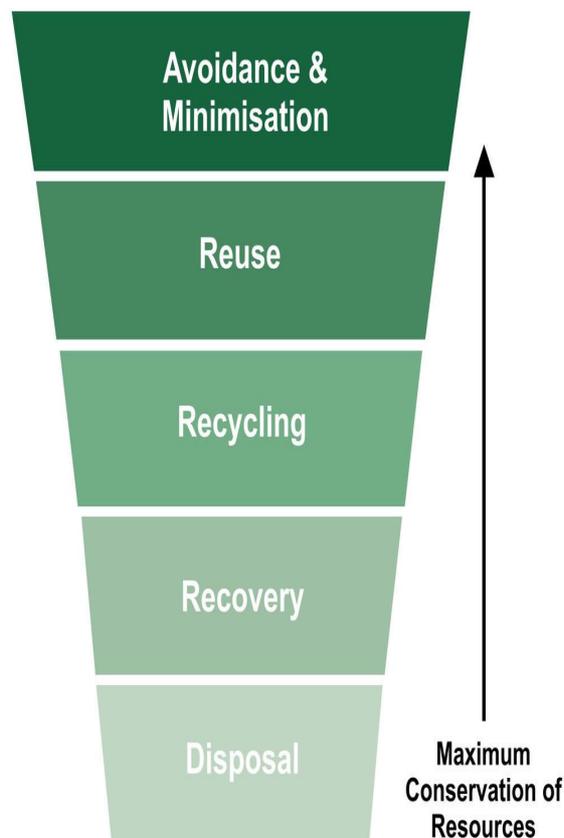
##### **Zero Waste York**

3. The Council uses a Zero Waste approach to developing our waste management strategy. The concept of zero waste was introduced in 'Waste Strategy for England 2007' as being a simple way of encapsulating the aim to go as far as possible in reducing the environmental impact of waste. It is a visionary goal which seeks to prevent waste occurring, conserves resources and recovers all value from materials.
4. To help maintain the momentum in the challenge to keep reducing waste our waste management strategy will be delivered through Zero Waste York. A new campaign, launched in 2011, primarily promoting

waste prevention and reduction with the aim of reducing residual waste per household.

5. Zero Waste York provides a framework on which we can build and focus all of our waste management projects. This approach also helps to establish better links with sustainable development work being undertaken in other council directorates, external organisations and community groups.
6. The Zero Waste York initiative supports the waste hierarchy focus on waste prevention (avoidance and minimisation), then reuse, then recycling and composting, then ensuring that all value is recovered from materials and finally landfill disposal. The waste hierarchy, Figure 1.0, prioritises the methods for dealing with waste. It sets out five levels of activities ranked according to environmental impact. The principle is to deal with as much waste as possible in the upper levels of the hierarchy. Not producing waste in the first place benefits the environment even more than recycling.

**Figure 1.0 Waste Hierarchy**



## Waste Prevention & Reuse

7. A comprehensive waste prevention work plan is being delivered each financial year. A programme of targeted campaigns is being delivered covering reuse, home composting, food waste, packaging, real nappies, charity shops and schools education. The continuity of this work programme has contributed to reducing total household waste arisings by 6.6% (6,420 tonnes) between 2008/2009 and 2010/2011.
8. The key aim is to deliver multi faceted campaigns delivering a range of messages. This approach was highlighted in the Choose2Reuse Fashion Show held on 28 May 2010. The fashion show was primarily used to help raise awareness of the Choose2Reuse campaign which aims to remove the stigma attached to buying second hand items. Working with local students and colleges, however, the event provided an important link with education and showcased the fantastic local talent of up and coming student designers who redesigned second hand clothing.
9. A key element of work in 2011/2012 has been to build campaigns and promotional messages around Zero Waste. In summary, key activities include:
  - **Home Composting** - York Rotters promotional work targeting Haxby/Wigginton and Micklegate. Also working in partnership with Yorwaste, a total of 2,320 tonnes of compost was given away to residents at Harewood Whin waste management facility.
  - **Love Food Hate Waste** - Sustainable food day at York Food Festival 2011.
  - **Choose2Reuse** - Stall at Fashion City York fashion village during April and September 2011. Redesign and repair workshops held during October and November 2011.
  - **Sustainable Schools** - Developed Service Level Agreement for waste collection services giving schools access to a wider range of recycling facilities, e.g. household batteries.

## Kerbside Recycling

10. The kerbside recycling collections generate more tonnage than any other recycling service.

11. Kerbside recycling collections were first introduced in the late 90s with a small trial of c.900 households. Since then collections have developed in phases from 2002/3 onwards, with the most significant roll out prior to the commencement of alternate week collections of refuse and garden waste in 2005. At this time plastic bottles and cardboard were also added onto collections and this contributed towards increased recycling performance.
12. Approximately 97% of all households are provided with a fortnightly kerbside recycling collection (c.82,814 households) for paper, glass, plastic bottles, cardboard and cans. A further 2.5% of households (2,162) properties receive a weekly recycling collection from Friends of St Nicholas Fields (FOSNF) under a Service Level Agreement.
13. All households with the kerbside recycling service are provided with a collection for three material streams: paper and cardboard, glass bottles and jars, plastic bottles and cans. Residents separate materials into these categories prior to collection making collections quicker and more efficient as no further separation is required at the kerbside.
14. Houses are provided with three 55 litre boxes for storing and presenting recyclables. One box is used for each of the material streams as described in above. Each box has a lid or a net. Additional containers and lids/nets are currently available free upon request.
15. Flats are provided with shared wheeled bins, for recycling the material streams detailed above, and a reusable blue bag to store and carry recycling. The bin sizes and numbers are calculated to provide adequate capacity for the number of residents in each block of flats. All bins are either new plastic bins or refurbished metal bins. The bins are usually located in a refuse bin store or close to the flat in a suitable location.
16. Friends of St Nicholas Fields (FOSNF) collect recycling from 2,162 households within the city walls and a few streets just outside this area. This work is part of a Service Level Agreement and the collections differ slightly in that they are weekly and offer to collect foil as well as all other items listed above. They use one 55 litre black recycling box for all materials which are separated at the kerbside. Lids are available upon request. Some flats and smaller properties have been provided with one-use plastic blue carrier bags which are provided to residents for storage of recycling and replaced as required.

## **Garden Waste**

17. Garden waste is collected from approximately 61,580 households using green wheeled bins. This material is composted and made into a soil conditioner. In 2011, a total of 2,320 tonnes of compost was given away free to residents. This winter (November to March) the collection frequency of garden waste has been reduced, to make the service more efficient and cost effective. FOSNF also collect garden waste from 2,162 households as part of their service provision.

## **Residual Waste**

18. Almost all households are provided with an alternate week collection of refuse, which is landfilled. A total of 55,810 tonnes (54.47%) of municipal waste was landfilled in 2010/11 (NPI 193). This equates to 582 kg of residual waste per household (NPI 191). Our ambition is to reduce residual waste per household through various waste prevention, reuse, recycling and composting activities.

## **Household Waste Recycling Centres**

19. We have three Household Waste Recycling Centres which are provided for residents to recycle and dispose of a wide range of items including electrical items, garden waste, cartons, textiles, shoes, books and wood as well as all other items collected through the kerbside recycling collections. These are located at Hazel Court, Beckfield Lane and Towthorpe.

## **Bring Recycling Centres**

20. We have an extensive network of bring recycling banks at 56 locations throughout the city. These sites are provided at a variety of locations such as public car parks, community centres, supermarkets and public house car parks. The number of recycling banks and range of materials collected at each site depends on available space and demand for materials to be recycled.

## **Waste Private Finance Initiative (Waste PFI) – Residual Waste Processing Facility**

21. Members of City of York Council and North Yorkshire County Council have agreed to award a contract to AmeyCespa for the management of residual waste in York and North Yorkshire for 25 years.

22. The solution being proposed is Allerton Waste Recovery Park and the proposed location for this facility is Allerton quarry and landfill which is close to the A1M/A59 junction near to Knaresborough.
23. Residual waste will be processed at the facility to recover value after waste prevention, reuse and recycling activities have taken place. The new facility will reduce the amount of waste going to landfill by at least 90% and will help increase recycling.
24. The technologies being proposed include mechanical sorting and reclamation that will recover around 20,000 tonnes of recyclable materials per year from black bag waste that arrives at the facility. Anaerobic Digestion (AD) will be used to treat up to 40,000 tonnes of food waste each year and generate renewable energy. The remaining waste will be processed in an 'Energy From Waste Plant' and this will produce enough electricity to supply around 40,000 homes (based on Office of National Statistics Data for the region).
25. Allerton Waste Recovery Park will also include a visitor centre, where local people will be able to view the operation and learn more about reducing, reusing and recycling waste. School groups will be encouraged to use the centre which will be available for local community groups to use.
26. AmeyCespa submitted a planning application for the Allerton Waste Recovery Park in September 2011 following more than a year of public consultation. If planning permission is granted it is envisaged that the waste processing facility will be operating by 2015.

### **Food Waste**

27. The Waste PFI processing plant detailed above has the capacity to treat food waste that is collected as part of the residual waste stream. There are consequently no plans to introduce a separate collection service for food waste.

### **Waste Collection Policies Review**

28. The Waste Improvement Network of South East Local Authorities noted that the "biggest factor in explaining variations in costs between councils is different collection policies". Within York there are a range of policies for collections, from differing size of containers, to bags and

a combination of both, along with a variety of collection points selected by communities. A thorough review of all waste collection policies is required to ensure that residents are receiving a true value for money service which balances individual needs with Council costs.

29. A review of policies to identify areas where improvements can be made is being carried out. A priority rating is to be given to all policies to ensure timely progress. The number one priority will be policies regarding presentation, followed by those with financial impacts. A report will be presented to the Cabinet in 2012. The policies review will include:
- Assisted collections
  - Bin size criteria
  - Waste presentation points
  - Container replacement policy

### **Communications**

30. Every year we communicate information about our services, events and activities in different ways to attempt to reach as many residents as possible. Methods commonly used in our communications plans include: one off and regular events such as Choose2Reuse Christmas fair, practical workshops, competitions, press releases, waste collection calendars, leaflets, posters, CYC website, internal communications to CYC staff, articles in newsletters such as Your Ward, Your Voice, Streets Ahead, Your Local Link adverts and attendance at events and surveys.
31. The recycling survey revealed that 59% of respondents find out about recycling services through council leaflets, 10% through the Press, 4% through the website, 4% Your Voice and 3% through Your Local Link.
32. Research shows that waste services information and messages are not capturing the attention of a large proportion of residents. Traditional methods of delivering information are not proving to be very effective and need to be revamped and modernised. A new approach to communications and more effective targeting of campaigns therefore needed to be developed. A key way forward is to build campaigns and promotional messages around Zero Waste.

33. A dedicated Zero Waste York website has therefore been set up to improve and modernise the method of delivering information and messages to residents. This website is supported by a comprehensive social networking package, including Facebook, Twitter and Flickr, that is utilised as a tool to promote the website and improve the way we communicate with residents.
34. In 2011, we also produced a Zero Waste themed reuse and recycling special insert to Your Voice which gave a wealth of information on how residents could reduce their rubbish and recycle more items.

### **Performance Measures**

35. During 2010/11 we recycled, composted and reused 45.06% (24,130 tonnes) of household waste (NPI 192). We aim to increase this to 47.3% by the end of 2011/12. This will be achieved through a programme of increased communication about the kerbside recycling collections, building on previous successful communications work. This has been possible due to increased budget of £20k provided to the service in 2011/12.
36. Improvements have also been made to bring recycling banks (additions of cardboard, plastic bottle and carton banks), significant improvements to the Household Waste Recycling Centres and introduction of garden waste collections to more than 63,000 households.
37. These improvements to the services have resulted in an increase from 10% of household waste recycled and composted in 1999/2000 to 45% in 2010/11. This is shown in graph 1 over page.
38. During this same period the tonnage of waste sent to landfill has dropped significantly, from 84,500 tonnes (90%) in 1999/2000 to 49,610 tonnes (54.9%) in 2010/11.
39. This data is summarised in table 1.0 below for the period 1999/2000 to quarter one 2011/12.
40. The complex nature of the collection rounds, and a recent review of all collection rounds to make them more efficient, means that it is not possible to provide comparative tonnage data for different property types (for example tonnages for terraced streets only). To collect information at this level of detail would require all household waste to be

collected in chipped wheeled bins that would need to be weighed at the time of collection. We would not be able to weigh individual bin bags collected. This is a particularly sensitive matter, politically.

## **Benchmarking**

41. The systems used to benchmark our waste services against those of other similar authorities are currently being reviewed, so it is not currently possible to benchmark data for 2010/11. However, there is good benchmark data available for 2009/10, as follows:

### NPI 191 residual household waste per household

It is better to have a lower score which indicates less residual waste produced per household. We rank 21 out of 52 unitary authorities (614 kg per household in 2009/10 reduced to 582kg per household in 2010/11). This means that there are 20 authorities with a lower score than us and 31 which produce more residual waste per household.

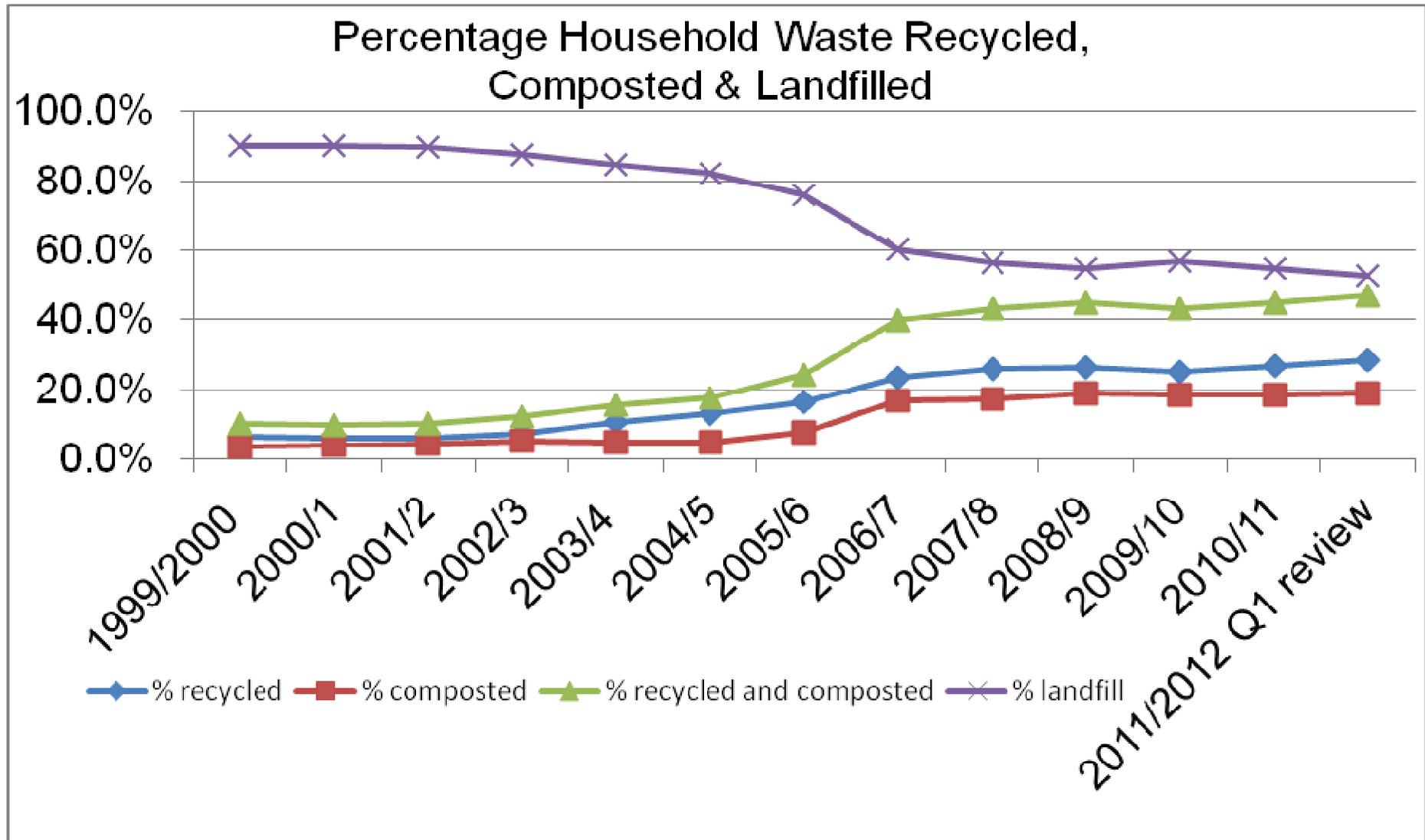
### NPI 192 household waste reused, recycled and composted

We rank in the top quartile (40 out of 52) for unitary authorities 43.26%. It is better to have a higher score for this indicator. The top quartile includes all unitary authorities with recycling rates in the range 43.2% to 55%.

**Table 1.0**  
**Household Waste - Recycling, Composting & Landfill**

Year	Recycled		Composted		composted & recycled	composted & recycled	Landfill	
	Tonnes	% recycled	Tonnes	% composted	Tonnes	% recycled and composted	Tonnes	%
<i>1999/2000</i>	5,920	6.3%	3,480	3.7%	9400	10.0%	84,500	90.0%
<i>2000/1</i>	5,550	6.0%	3,570	3.8%	9120	9.8%	83,890	90.2%
<i>2001/2</i>	5,700	5.9%	4,310	4.5%	10010	10.3%	86,850	89.7%
<i>2002/3</i>	7,220	7.3%	4,960	5.0%	12180	12.3%	86,690	87.7%
<i>2003/4</i>	10,550	10.7%	4,660	4.7%	15210	15.4%	83,400	84.6%
<i>2004/5</i>	12,970	12.9%	4,920	4.9%	17890	17.8%	82,780	82.2%
<i>2005/6</i>	16,100	16.5%	7,390	7.6%	23490	24.1%	74,070	75.9%
<i>2006/7</i>	23,440	23.3%	16,730	16.6%	40170	39.9%	60,430	60.1%
<i>2007/8</i>	25,530	26.0%	17,080	17.4%	42610	43.4%	55,640	56.6%
<i>2008/9</i>	25,560	26.4%	18,090	18.7%	43650	45.1%	53,070	54.9%
<i>2009/10</i>	22,920	25.0%	16,750	18.3%	39670	43.3%	52,060	56.8%
<i>2010/11</i>	24,130	26.7%	16,560	18.3%	40690	45.1%	49,610	54.9%
<i>2011/2012</i> <i>Q1</i> <i>review</i>	25,390	28.4%	16,790	18.8%	42180	47.2%	47,270	52.9%

Graph1 - Percentage of household waste recycled, composted and landfilled



## **Consultation**

### **Kerbside Recycling Improvement Project**

42. In 2011/12 we are aiming to increase the amount of material collected through the kerbside recycling collections by a minimum of 1% of total household waste arisings. This will equate to a diversion of approx 900 additional tonnes of recycling from landfill and will contribute to improving our household waste recycling, composting and reuse performance. This is being achieved through additional communications to residents throughout the year.
43. One of the most effective methods of changing behaviour is speaking directly to residents. Between the end of August and early October 2011 a targeted recycling survey was carried out across the city. The aim was to engage with residents on the doorstep about their recycling service, ensuring that they understand how to correctly recycle and to motivate them to participate as much as they can in order to increase recycling.
44. The target audience was households in poorer performing areas of the city, where crews report fewer boxes presented or problems such as contaminated boxes. The project encompassed a doorstep survey and an opportunity for residents to talk with knowledgeable recycling promoters about the collections.
45. Over the course of 6 weeks we obtained 5,967 responses to the survey and offered these residents advice and information. The areas which were surveyed comprised mainly areas of terraced housing, some estates, city centre households (FOSNF) and flats. Areas surveyed included: Clifton, Leeman Road, the Groves, Holgate, Acomb, Chapelfields, Heworth, Fishergate, South Bank, Clementhorpe and Tang Hall.
46. In addition to the survey, 3 focus groups were held, with some of these residents, to explore in depth the issues surrounding containers, storage space and other container options (in particular looking at whether residents of households with limited storage space would prefer a different container) to find out how recycling could be made easier to encourage greater participation. The focus groups comprised small groups of residents from flats, city centre properties and terraced properties. 7 different recycling containers were also evaluated and ranked in order of preference by the groups.

47. A summary of the main findings of the survey and focus groups can be found in Annex 1.
48. The findings demonstrate that the vast majority of residents spoken to claimed to recycle (94%). Residents mainly use the kerbside collections, but claimed use of the household waste recycling centres and local recycling bring banks is also high.
49. When exploring factors that would encourage residents to start recycling it is positive to note that 33% of residents indicated that simply receiving a recycling box would encourage them to do so. All residents interviewed were offered the option to order replacement or additional recycling containers and 1,767 households requested a box/lid/net/recycling bag for their household, totalling 4586 container requests. These have all been delivered. It should be noted that, for most households surveyed, appropriate recycling containers have already been provided in the past 2 years.
50. The most popular suggestions to encourage further recycling, seen in both the survey and focus groups, was to increase the range of materials collected (for example inclusion of mixed plastic, cartons, foil). Although most residents were recycling the correct items, it is recommended that we continue regular communications about how to take part in the collections to ensure this continues.
51. Investigations into residents' satisfaction with the recycling boxes revealed that 82% of respondents are satisfied with the container and 89% satisfied with the location of collection. Whilst most residents are satisfied with their container, some expressed that there is room for improvement. One of the main issues for properties where storage space is limited, such as terrace houses with no forecourt and other city centre properties, is the need for a container that is easier to carry through the house that will not cause a mess, or something that can be easily transported around the property to the front kerbside collection point.
52. Whilst there is no one container which meets all of the requirements, there was one favoured container which was a bin with a handle (see Annex 1 for details).
53. Overall satisfaction with the collections was very high with 85% saying they were very or quite satisfied with their collection (CYC or FOSNF).

Residents in the FOSNF area were more likely to be very satisfied with their collection. Satisfaction varied with property type and residents of flats and flats above shops were less satisfied than others.

54. Where residents stated that they were less satisfied with collections the main reasons were boxes not being returned correctly after collection, litter left after collection, collection frequency and not being able to recycle everything they would like for example foil, tetra packs.
55. Residents were also asked whether they would be interested in becoming a Recycling Hero. Such a person would help to promote recycling initiatives within their local community and encourage others to take part. 311 residents agreed to become Recycling Heroes.

### **Options For Service Development In 2012/13**

56. In order to continue to improve the waste collection services we need to consider the feedback from residents through the recent survey and focus groups.
57. There is budget provision to provide smaller and/or alternative style of kerbside recycling containers to those residents with limited storage space or who would prefer a different container for practical purposes. Details about the types of containers that were tested by residents at the focus groups is provided in Annex 1. These containers would all need to be operationally tested to ensure their suitability and robustness.
58. Some of the other issues raised by residents should be easy to resolve, such as making sure recycling boxes and lids are returned correctly and left tidy after collection. Other matters, however, such as extending the range of materials that can be recycled will be much more difficult and might not be feasible due to operational capacity and financial implications.
59. In order to provide more focus on waste prevention and reuse, and to help boost the household waste recycling, composting and reuse performance, a comprehensive Zero Waste based campaigns plan for 2012/13 is being developed. We welcome the opportunity to work with the Scrutiny Committee to help develop this plan and promote the activities within it. We have a revenue budget of £20k and would welcome comments on the following proposals for waste prevention and reuse work in 2012/13:

- 100 day waste reduction challenge - To run from April until June 2012. This would be a comprehensive plan of activities to encourage residents to reduce their waste by a minimum amount (for example 1kg per week per household) over the challenge period. We hope to develop various challenges and activities to engage with businesses residents, schools and other groups to reduce waste arisings.
- Recycling Heroes - Recent recycling survey revealed enthusiasm from 311 residents to help others recycle. We need to develop a plan for how these residents could take part in waste reduction and recycling activities and also wider environmental projects.
- Reuse Centre - We would like to explore opportunities to collaborate with community groups and local businesses to establish a reuse centre for a variety of materials.
- Choose2Reuse (C2R) – This campaign promotes reuse as a way of saving residents money whilst also helping the environment. We would like to develop a bespoke York campaign for C2R which would involve partnerships with the other organisations (some of whom are already involved in this). The campaign promotes alternative ways of reusing items; from buying and selling or giving and receiving second hand items to getting creative and redesigning or rethinking items altogether.

## **Council Plan**

60. The Without Walls Sustainable Community Strategy 2008-2025 provides a sustainable framework which aims for York to be a city with low levels of pollution and waste production and high levels of recycling. Zero Waste York will make a major contribution to fulfilling these aims by placing environmental sustainability at the heart of everything we do.
61. Zero Waste York will also be a fundamental driver to help 'Protect the environment' which is one of five key priority areas identified in the Council Plan 2011 - 2015. To help make this happen we will continue to promote the value of waste as a natural and viable resource and will produce less waste overall.
62. To help achieve these aims York will be one of the best performing areas in the country for waste services; we will produce less waste overall and re-use, recycle and compost more household waste by:
  - Reusing, recycling and composting the maximum practicable amount of household waste.

- Maximising opportunities for re-use of unwanted items and waste by working closely with community and other groups.
- Maximising the recovery of materials and/or energy from waste that is not re-used, recycled or composted so as to further reduce the amount of waste sent to landfill.

63. The work outlined in this report supports the Council’s aim to make York a sustainable city through increasing recycling and reducing waste landfilled.

**Implications**

64. Any implications arising from the issues raised in this information report will be addressed within any associated decision making reports required in the future.

**Risk Management**

65. There is budgetary provision to fund the work identified in the ‘Options For Service Development In 2012/13’ section of this report. Any other changes to services would be subject to availability of additional budgetary provision.

**Conclusions**

66. This briefing paper provides information to enable members of the Scrutiny Committee to help further identify their ambitions for the provision of waste services in the city.

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**Wards Affected:** *List wards or tick box to indicate all* **All**

**For further information please contact the author of the report**

**Background Papers:**

- Waste Management Strategy Update 2011 - Cabinet Report 06/12/11
- Waste Collection Policies Review - Cabinet Report January 2012
- Household Waste Recycling Centres Review (including permits scheme) - Cabinet Report January 2012

**Annexes**

- Annex 1 - Headline findings from the doorstep recycling survey