

Report of the Assistant Director for Transport, Highways and Environment

Update on Recycling of Waste

Summary

1. Members have asked for a briefing on the collection of Kerbside recycling.
2. This report sets out the current performance in relation to collection and disposal.

Background

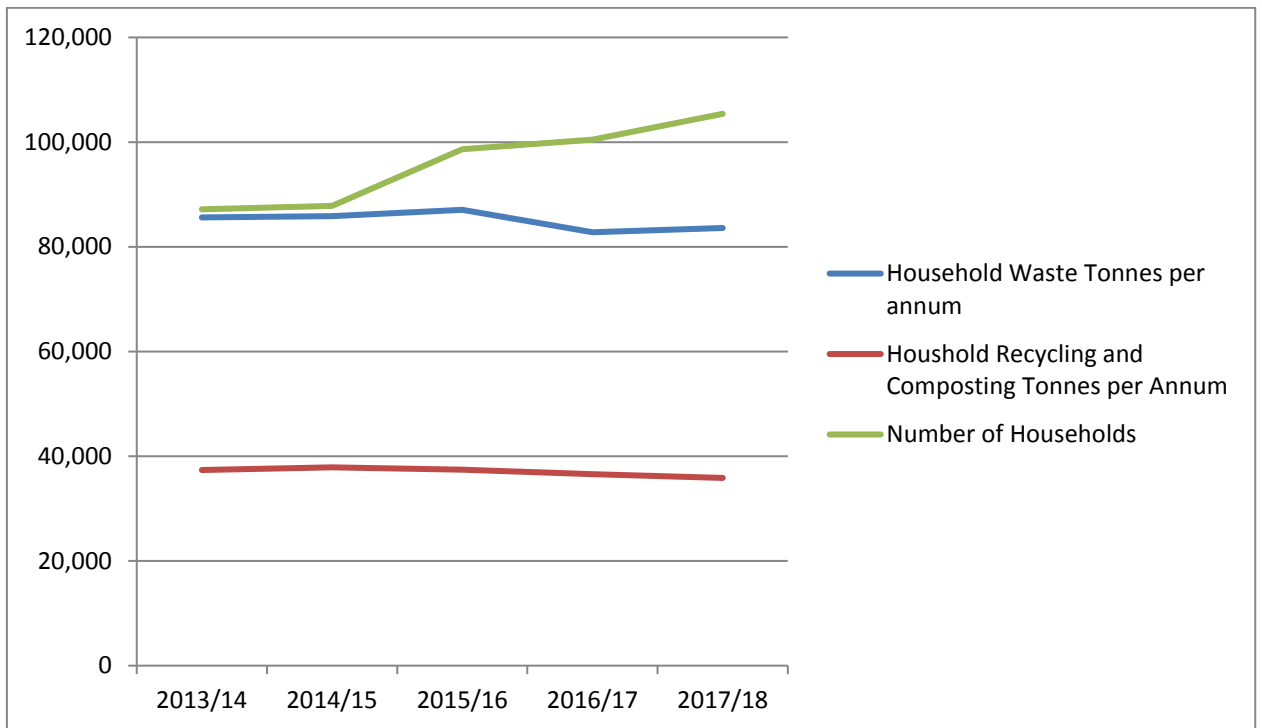
3. Kerbside recycling collections were first introduced in York during the late 1990s with a small trial of c.900 households. From 2002/3 onwards the collections expanded in phases, with the most significant roll out in 2005 prior to the commencement of alternate week collections.
4. All households are now provided with a fortnightly kerbside recycling collection. We collect three material streams: paper and cardboard, glass bottles and jars, plastic bottles and cans.
5. 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 above, each box has a lid or a net. Additional boxes and lids/nets are available. Flats are provided with shared wheeled bins, for recycling the material streams detailed above.
6. There is currently no limit to the number of recycling boxes a resident can present, other than for Cardboard which allows one additional box.
7. St Nick's provide a weekly city centre recycling collection to c.2420 households (2.76% of households) as part of a five year contract.

Recycling Banks & HWRCs

8. The recycling bring bank network across York was originally formed in the 1970s and there are currently 49 recycling bring bank sites spread around the city.
9. In 2017/18 the recycling bring bank sites collected approximately 800 tonnes of recyclable material.
10. On 6 March 2017 the Executive Member for the Environment approved a process of consultation looking at the provision of recycling bring banks across the City. The consultation sought the views of the people that use the bring banks, our service provider – Yorwaste who service the recycling sites and the owners/ managers of the land where the banks are situated.
11. We are due to revisit this consultation with Yorwaste during the autumn in order to agree recommendations for improvements to the sites. This report is not yet on the forward plan. This will include addressing issues of fly tipping and contaminations which are common at bring bank sites.
12. In addition to the recycling bring bank network, there are 2 Household Waste Recycling Centres (HWRCs) which are for residents to take their household waste for recycling. The HWRCs have a wide range of banks available for recycling the following materials; garden waste, wood, paper, cardboard, car batteries, household batteries, metal, cans, plastic bottles, cartons, books, mineral oil, vegetable oil, glass, textiles, hard plastics, gas bottles, turf, televisions, small Waste Electrical and Electronic Equipment (WEEE), bikes, fluorescent tubes and fridge/freezers.

Recycling & composting performance

	2013/14	2014/15	2015/16	2016/17	2017/18
Households (Experian)	87,162	87,802	98,660	100,494	105,405
Total weight of household waste (t)	85,595	85,876	87,069	82,782	83,575
Tonnes of household waste collected for recycling & composting	37,345	37,880	37,448	36,573	35,854
Household recycling & composting rate	44%	44%	43%	44%	43%



13. The city's household recycling and composting rate has remained relatively stable over the last 5 years. This is to be expected considering no significant changes in service have been made.
14. Recyclate is collected using other methods including via the HWRCs, bring banks and by Third Party Recycling groups. However, the greatest contribution to the city's recycling rate is from the kerbside collection with over 11,000 tonnes collected in 2017/18. This is followed by the HWRCs which collected nearly 8,000 tonnes in the same period.
15. City of York residents present some of the highest Kg's per House household of dry recycling in the region. This places pressure on collection schedules, particularly at peak times of the year.

Mixed Plastic

16. Mixed plastic is a term that covers all non-bottle plastic packaging from households. It includes rigid and flexible plastic packaging items of various polymer types and colours and excludes plastic bottles and non-packaging items.
17. At the moment plastic bottles are the only plastic material officially accepted in our kerbside recycling collection. They are made of high grade plastic material PET1 (Polyethylene Terephthalate) and HDPE2 (High Density Polyethylene) which have consistently strong recycling

markets in which to sell the material. Mixed plastic, however, can be poorer quality and dirty. These factors, coupled with the instability of the recycling markets, has meant that it has previously not been possible to consider introducing mixed plastics to the existing kerbside recycling collection.

18. Some mixed plastic is already put into the recycling boxes by residents and we collect it. This low level of 'contamination' material is currently acceptable to our contractor (Yorwaste Ltd) because our recycling is mixed with other recycling, thus reducing the overall percentage of contamination.
19. Black plastic doesn't reflect light, so can not be seen and sorted by the scanners in the recycling facility and could end up contaminating other materials such as glass bottles.

Recycling markets

20. The council uses Yorwaste as its contractor for dealing with the majority of its waste that is collected. This council has a services contract with Yorwaste which is priced on a cost plus mechanism.
21. For dealing with recyclates there is a fixed fee which covers the fixed costs of building, plant and equipment and staffing levels and also a small variable fee for every tonne of material going through the transfer station. At forecast tonnage levels the cost per tonne of processing materials equates to approximately £13.80 per tonne.
22. Yorwaste is responsible for sourcing markets for the recycling material and will use its market intelligence to endeavour to get the best available prices for the materials and only use compliant reproprocessors, they also personally audit all new suppliers at the outset and UK outlets every two years. When supplying non-UK outlets only legitimate brokers are used.
23. In 2018/19 the council is budgeting for a rebate of c£500k from the sale of kerbside recyclate equating to c £40.00 per tonne.

Allerton Waste Recovery Park (AWRP)

24. AWRP is designed so residual domestic refuse (i.e. waste that is thrown into the grey bin) goes through a Mechanical Treatment (MT) process to further separate recyclable material. This was key to CYC's ambitions in relation to the project and the facility. The MT process will recover recyclable material (such as metals and plastics) and it is anticipated that it will increase by more than 1% on our reported recycling figures and

work is ongoing to increase the amount further. This recycling figure doesn't factor in additional materials that are recovered and recycled, such as the bottom ash from the incinerator and bricks and rubble, which are recycled in road aggregate and in building materials and provides a further 12% (this is an estimated figure based on the typical performance of an EfW facility) to the material that is recovered and recycled. Organic material (e.g. food waste) is also separated and is fed into an Anaerobic Digester, which contributes to the energy generated by the facility.

25. This is important in terms of gaining additional value from residual waste, but it remains the priority for residents to separate as much recyclable material as they can and present in the kerbside recycling boxes. This material is clean and has a high value, whereas, the material in residual waste is mixed with all sorts of other material (including organic material) and is not a clean product at the end. Recyclable material is subject to the same market forces as any other commodity and it is difficult to find a market when the quality of the recyclable material is low.

Comingling

26. For comingled recycling the waste is transported to Seamer Carr where it is processed. There is only limited markets for such material and the processing cost (including transfer) for dealing with such material is c.£65 per tonne and we receive no income, we are currently comingling around 320 tonnes per month.
27. When collecting recycling some crews tip boxes of recycling into separate wheelie bins, once the wheelie bin is full it is then emptied into the relevant compartment in the refuse collection vehicle. There is a perception from some residents that comingling is taking place when it isn't, as they just see recycling boxes being tipped into a wheelie bin and then into what they think is an ordinary refuse vehicle, not one with separate compartments. We have therefore introduced different coloured wheelie bins for tins/plastic and cardboard/paper.

Service costs

28. The gross cost of dry recycling collection is circa £2.3 m
29. The net cost of kerbside recycling is £1.2m

Recommendations

30. The Committee are asked to consider the briefing and any further work they wish to see.

Reason: To inform Members of the current performance regarding collection and disposal.

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Report **Date** 15/09/2018
Approved

Wards Affected:

All

For further information please contact the author of the report

Abbreviations

AWRP – Allerton Waste Recovery Park
CYC – City of York Council
EfW – Energy from Waste
HDPE2 (High density polyethylene)
HWRC – Household Waste recycling Centre
MT – Mechanical Treatment
PET1 (Polyethylene terephthalate)
WEEE – Waste Electrical and Electronic Equipment