

North Yorkshire Council

Transport, Economy, Environment and Enterprise Overview and Scrutiny Committee

17 October 2024

Review of Future Household Waste Collection Options

Report of the Corporate Director of Environment

1.0 PURPOSE OF REPORT

- 1.1 To update members on the progress of the work to date of the Central Waste Management Team in relation to the future harmonisation of waste and recycling services across North Yorkshire, and to receive Member's views thereon.
- 1.2 To update members on the contractual performance of Allerton Waste Recovery Park during 2023/24.

2.0 SUMMARY

- 2.1 North Yorkshire Council wants to provide one consistent approach to waste and recycling to get the most from our resources, deliver high performance to our residents and businesses and achieve value for money. A detailed and comprehensive modelling exercise concludes that the most efficient and effective system is the alternate fortnightly collection of recycling and fortnightly collection of residual waste. This service is currently provided in the Selby locality. A public consultation exercise sought the views of residents on their existing collection service and the proposal to adopt the Selby approach. Twice as many residents are happy with wheeled bins rather than boxes or bags, although some residents are concerned that the proposed approach is not suited to locations with limited outdoor space. A degree of flexibility will ensure the service is designed to meet local needs. A range of bespoke collection methods including smaller bins, bags, frequent collections of smaller containers and community recycling points will be considered with residents. It is clear that 'one size fits all' is not appropriate. The proposed harmonised approach incorporates flexibility to deliver a service aligned to property types and access arrangements, tailored to resident's needs.
- 2.2 The legislative context is uncertain. The Environment Act 2021 sets out recycling segregation requirements but not all provisions have been brought into force, with some policies under review by the Government. It is inequitable to our residents and crews to continue to deliver a range of different waste collection services. Nearly nine in ten residents say it is important or very important for North Yorkshire residents to have access to an equal recycling service. The modelling work supports the view that it is not 'technically or economically practicable to collect recyclable household waste in those recyclable waste streams separately' and the Government policy review of comingled collections does not affect the proposed twin-stream approach. On balance and weighing up the merits of taking a decision now or waiting until national government confirms its requirements, it is recommended that North Yorkshire Council takes the decision to act now to deliver a harmonised waste service across the County.

2.3 A report is scheduled to go before the Executive on 5 November followed by Council on 13 November.

2.4 This report also includes a summary of performance for the Allerton Waste Recovery Park (AWRP) contract in terms of recycling and landfill diversion.

3.0 BACKGROUND
















3.1 The new North Yorkshire Council as a Unitary Authority has a duty under the Environmental Protection Act 1990 to arrange for both the collection and disposal of household waste. Under the previous two tiers of local government these duties were split between the seven District and Borough Councils as Waste Collection Authorities (WCAs), and North Yorkshire County Council as the Waste Disposal Authority (WDA).

3.2 Following Local Government Reorganisation (LGR), North Yorkshire Council wants to provide one consistent approach to waste and recycling to get the most from our resources, deliver high performance to our residents and businesses and achieve value for money. We must also meet legislation requirements including the Environment Act 2021 to collect a consistent set of recycling materials and meet recycling targets.

4.0 HARMONISED WASTE SERVICE

4.1 Significant progress has been made to provide residents with consistent and reliable waste services, including bringing the externally provided Selby waste service in-house, harmonising the garden and bulky waste services including fees and charges, and implementing a new staffing structure reflecting the target operating model of the council.

4.2 To harmonise kerbside recycling collection services into a single model, the WCAs and WDA have worked with WRAP and environmental consultancy Eunomia to evaluate the existing approaches and the options to harmonise collections. The difference in recycling approaches in contrast to consistent garden and residual services is shown by the following illustration.

	Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby
Dry Recycling			Fortnightly 				Four Weekly 
Garden Waste			Fortnightly (Charged) 				
Residual Waste			Fortnightly 				
	Craven	Hambleton	Harrogate	Richmondshire	Ryedale	Scarborough	Selby

4.3 A summary of the key criteria considered follows:

- Recycling rate – changing the collection system alone does not impact on dry recycling yields so the recycling rate is unaffected by the options modelled. It is noted however, that our experience in North Yorkshire of changing from a box to a wheeled based scheme does increase the recycling yield. This is because residents have greater capacity in the recycling bin and place less recycling in the residual bin.
- Resources – The options with the fewest number of staff and vehicles needed to deliver collections is the fully comingled approach (a single recycling wheeled bin currently provided in Scarborough and Skipton localities) and an alternate fortnightly approach (two recycling wheeled bins currently provided in Selby). This reflects the efficiency of using single compartment vehicles and a reduced number of containers per pick up. The option requiring the largest number of staff and vehicles is the multi stream approach (three boxes or bags provided in the Richmondshire and Malton localities).
- Costs – The option delivering the highest overall cost reduction compared to the baseline is the alternate fortnightly recycling service currently provided in Selby. This reflects the reduction in vehicles and front-line staff, and the separation of paper and cardboard from cans, glass and plastics to reduce processing costs and generate income. The multi-stream three box/bag approach currently provided in Richmondshire and Malton is the next most cost-effective collection method but is more reliant on volatile revenue streams offsetting the higher vehicle and front-line staffing costs. The fully comingled option currently delivered in the Scarborough and Skipton localities is the most expensive option. The low vehicle and staffing costs of the fully comingled approach is more than offset by higher processing fees making it more expensive than other options and the baseline. The upfront capital costs to purchase the vehicles and containers varies across the options. The lowest capital cost is incurred by implementing the fully comingled approach where each household receives a single recycling bin. The highest capital cost is providing two recycling bins for the alternate fortnightly recycling service.
- Carbon modelling – the carbon modelling quantifies the impact on greenhouse gas emissions across the collection and disposal process relative to the baseline. Transport emissions from the collection and onward haulage of waste, determines the impact on greenhouse gas emissions. The multi-stream 3 box/bag approach delivers the greatest carbon benefit due to the fuel efficiency of resource recovery vehicles compared to less fuel-efficient refuse collection vehicles used in the remaining options. Outside the scope of the modelling exercise is the decarbonisation of the waste fleet and the options to address carbon emissions such as changing driving behaviours, and alternative fuels. The fleet service is currently commissioning a consultant to draft a Decarbonisation Plan to provide a road map towards suitable alternative fuel vehicles and fuel infrastructure. The alternative fuel vehicles will be phased in as technology and infrastructure develops. The fleet service is also examining the viability of interim lower carbon fuels.

4.4 The outcome of the modelling exercise is that adopting either the multi-stream or alternate fortnightly option as a single collection system delivers a financial saving compared to the baseline, whereas the fully comingled solution is more expensive than the baseline. The most efficient and effective collection method is delivered by adopting the approach currently undertaken in the Selby area, whereby:

- Residents segregate paper and cardboard in one wheeled bin, and cans, glass and plastic in a second wheeled bin. This protects paper and cardboard material quality, restricts contamination and processing costs and results in the lowest overall financial cost,

- Refuse collection vehicles are used for residual waste, recycling and garden waste collections, affording the greatest flexibility when deploying resources, and Eunomia have made every effort to accurately model the options. Inevitably an exercise of this size and complexity requires some assumptions e.g. recycling values, spare vehicles, procurement price of vehicles and bins etc. Accurate costs will be determined when a full route optimisation exercise is conducted following selection of the preferred approach. The options appraisal modelling discussed in this report illustrates the relative costs and performance against the baseline and the options considered.
- Single chambered vehicles achieve maximum payloads and efficiency compared to twin and multi-stream vehicles whereby compartments fill at differing rates.

4.5 Overall, the alternate fortnightly approach using two wheeled bins delivers the most efficient, effective and resilient service to residents and businesses.

5.0 CONSULTATION UNDERTAKEN AND RESPONSES

5.1 A number of consultation exercises have sought the views of residents and interested parties, to help us understand how the current service and proposal will affect our communities.

5.2 Waste Task and Finish Group

5.2.1 A cross-party task and finish group was established in November 2023 which comprised representatives from all the councils' political groups. The objective of the task and finish group was to consider an efficient and effective consistent collection system across the whole of North Yorkshire that meets the requirements of the Environment Act and that:

- is affordable from both a collection and disposal perspective
- supports reduction in carbon footprint in line with Climate Change commitments and contributes towards 2030 and longer-term carbon targets
- ensures no loss / reduction of service to residents with an aim to improve the service
- provides consistency of terms and conditions for staff in all locality areas

5.2.2 The group has been involved in the development of the proposal and the public consultation.

5.3 Let's Talk Rubbish

5.3.1 A 10-week public consultation took place between 8 July and 16 September. A total of 10,475 responses were received and the number of responses means we can be confident that the survey results reflect the views of people in North Yorkshire.

5.3.2 The survey was hosted on the Council's digital engagement platform which was supported by a marketing campaign. Paper surveys, including an easy read version and alternative formats such as large print, were supplied where required. Alongside the online and paper survey, 26 face to face engagement events were held across the county, where officers spoke directly to over 330 residents.

5.3.3 The results of the survey show high satisfaction with existing services where just wheeled bins are used with 9 out of 10 residents happy or very happy. The lowest levels of satisfaction are for those with box only or bag or box collections with 3 out of 10 residents happy or very happy.

5.3.4 As part of the consultation, we asked residents, ‘What do you think about our idea to improve recycling services in North Yorkshire?’ The feedback generated a broad range of insights, which were categorised into positive, neutral, and negative sentiments based on the tone and content of the responses. In total, 6,513 responses were analysed, providing valuable perspectives on the proposed changes.

5.3.5 The table below shows the number of sentiments broken down into positive, neutral and negative.

	Number of comments	% of all comments
Positive sentiments	3,297	51%
Neutral sentiments	1,142	17%
Negative sentiments	2,074	32%

5.3.6 Positive sentiments were from residents who expressed clear support for the proposal. Respondents in this category appreciated the potential for modernising recycling services, making waste management more effective, and improving environmental outcomes. Many were enthusiastic about the proposed improvements, with comments highlighting the benefits of better recycling infrastructure and its impact on community cleanliness.

5.3.7 Neutral sentiment often acknowledged the potential benefits of the proposal but also raised practical concerns, such as space limitations for additional bins and potential confusion over collection schedules. Comments in this category typically weighed the pros and cons of the changes, with residents showing cautious optimism about the improvements but highlighting areas that might require more attention.

5.3.8 Negative sentiment were from respondents primarily concerned about the added complexity of managing more recycling bins and the potential impact on service frequency. Many negative comments focused on the challenge of storing additional bins, particularly for households with limited outdoor space.

5.4 Disability Forum Feedback

5.4.1 Alongside the face-to-face events, officers attended the Selby, Craven and Harrogate Disability forums during the consultation.

5.4.2 Feedback from the Selby forum was very positive with members stating that wheeled bins were a vast improvement, are easier to move and to recycle more materials compared to the previous kerbside boxes which caused an obstruction when blown around in high winds resulting in litter. Feedback from the Harrogate forum was positive with wheeled bins seen as an improvement, with a desire for residents to remove wheeled bins from pavements and clear labelling. A single wheeled bin is currently used for all recycling in the Craven locality and members were very supportive of this collection method, and suggested there would be ‘lessons learnt’ from other areas that had implemented the proposed changes.

5.5 Social media

5.5.1 The Let’s Talk Rubbish consultation was shared on the council’s social media channels on Facebook, Instagram and X (formally Twitter) and from these channels was reshared to a number of other community groups. In addition, targeted paid for advertising was used to promote the survey on Facebook, Instagram and YouTube,

along with a supporting animation that received over 65,000 views on Facebook alone. The social media posts had a combined reach of over 36,000 and all relevant comments have been collated as part of the consultation results.

5.6 Consultation conclusion

- 5.6.1 The consultation shows that most respondents are in support of the use of wheeled bins for recycling as opposed to boxes or bags. Most of the concerns raised relate to issues such as lack of outdoor space, confused set out arrangements, and how other residents may cope with collections. However, many concerns are perceptions and not borne out by experience. In the former Selby District Council area where the proposed scheme has operated since April 2020, 9 out of 10 respondents are happy or very happy with their current recycling containers.

6.0 ALLERTON WASTE RECOVERY PARK

- 6.1 AWRP has been operational since 1 March 2018 and consists of a Mechanical Treatment (MT) plant, an Anaerobic Digester (AD) and Energy from Waste (EfW) facility to receive and treat residual waste from across York and North Yorkshire.
- 6.2 The site also has a Visitor and Education Centre where members of the public and groups can visit the facility to learn about management of waste. AWRP has hosted over 6,500 tours either in person or virtually (which commenced during the COVID-19 pandemic). Online carbon pledges have offset 1,572kg of carbon since the Visitor Centre was launched in 2018.
- 6.3 Recycling performance for 2023-24 was 1.78% against a contractual target of 5% which was a reduction of 0.24% when compared to the prior year. The main reasons for the reduction in performance were linked to less tonnage throughput in the MT plant and continued difficulties placing plastics into recycling markets.
- 6.4 AWRP had one planned maintenance shutdown in June 2023. The EfW returned to service 48 hours later than scheduled, but there were no unplanned shutdowns or outages during 2023-24. Landfill diversion performance last year was the highest since the start of the contract, with 94.86% of waste being diverted away from landfill.
- 6.5 Further details of the contractual performance will be provided in a presentation on the day of the meeting.

7.0 CONTRIBUTION TO COUNCIL PRIORITIES

- 7.1 The Council has declared a Climate Emergency and pledged to play its part in tackling the causes and impacts of climate change.
- 7.2 Service harmonisation delivers the following specific Council Plan ambitions:
- Place and Environment:
 - o A clean, environmentally sustainable and attractive place to live, work and visit
 - o Communities are supported and work together to improve their local area
 - Health and Wellbeing
 - o People are supported to have a good quality of life and enjoy active and healthy lifestyles
 - Organisation
 - o A carbon neutral council

8.0 ALTERNATIVE OPTIONS CONSIDERED

8.1 No alternative options were considered. This report is for information only.

9.0 IMPACT ON OTHER SERVICES/ORGANISATIONS

9.1 Service harmonisation will have impact on a wide range of services, but this report is for information only.

10.0 FINANCIAL IMPLICATIONS

10.1 Eunomia¹ have carried out a desktop exercise where they have modelled, costed and compared several options to the baseline i.e. current service costs of £30m. The recommended option is an alternate fortnightly collection of one of two wheeled bins for separating recycling materials, which is currently provided in the Selby locality.

10.2 Based on the findings, annual savings generated from the alternate fortnightly approach are estimated to be £561k, using average rebate values over the last 3 years.

10.3 It is important to note that rebate values for materials recycled and tonnage volumes are outside of the Council's direct control and vary from year to year, therefore North Yorkshire Council are currently subject to rebate value and tonnage volatility. For example, the lowest rebate value compared to the highest rebate value over the last three financial years would provide a range of £579k additional cost to a £1,223k saving per annum, with the alternate fortnightly collection proposal being the most favourable option across the range of rebate values. The values included in this report enable a comparison of the options presented but may not represent actual costs that are affected by variables outside of the Council's direct control.

10.4 The alternate fortnightly collection system requires a capital investment for the containers of £8,080k due to the need for additional 240-litre bins to be rolled out across the county (apart from in the Selby locality). The rollout of bins will be phased over a number of years, and therefore the investment required is subject to changes in market rates at the time of purchase. The average annual saving would provide a payback period of 13 years, but as previously mentioned, the annual saving is subject to market volatility.

10.5 The capital cost for vehicles would not be an additional cost to the Council, as vehicles would be upgraded upon the end of their useful life as part of the vehicle replacement plan. The modelling indicates that implementing the service currently provided in the Selby locality would reduce the waste fleet by 3 vehicles.

10.6 The annual saving of £561k generated by the alternate fortnightly approach would contribute to the MTFS saving of £750k. The remainder would be generated through further efficiencies in vehicles and staffing, including reductions in hours and overtime as efficiency increases. Utilising a £750k annual saving, would lead to a payback period of 11 years.

10.7 The first phase of the roll-out (if the alternate fortnightly approach is taken forward) would be to implement the model in the Malton locality. This would require total funding of approximately £1,340,000 to purchase the bins, the cost of delivery, and communications to residents.

¹ The main source of the financial information is the Eunomia modelling, but the Council's recent tendering exercises to procure haulage, bulking, processing has been used to update some of Eunomia's assumptions on these costs and recycling rebate revenues.

10.8 The Financial implications will be included in the report to Executive in the future for approval prior to commencement of the agreed option.

11.0 LEGAL IMPLICATIONS

11.1 North Yorkshire Council as a Unitary Authority has a duty under the Environmental Protection Act 1990 to arrange for the collection and disposal of household waste, and to comply with the waste provisions contained within the Environment Act 2021 and future secondary legislation and statutory guidance.

12.0 EQUALITIES IMPLICATIONS

12.1 An Equality Impact Assessment screening will be required for service harmonisation, but this report is for information only.

13.0 CLIMATE CHANGE IMPLICATIONS

13.1 A Climate Change Impact Assessment will be required for service harmonisation, but this report is for information only.

14.0 POLICY IMPLICATIONS

14.1 Service harmonisation will require the development of a range of new policies, but this report is for information only.

15.0 REASONS FOR RECOMMENDATIONS

15.1 For Members to note the work to date and provide their views on future service harmonisation, and to note the recycling and landfill diversion performance of AWRP during 2023/24.

16.0 RECOMMENDATION (S)

16.1 Members note the feedback and provide views for which will be fed into the Executive and Full Council reports.

16.2 Members note the performance of AWRP during 2023/24

APPENDICES: None

BACKGROUND DOCUMENTS: None

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