

HARBOROUGH DISTRICT COUNCIL

WASTE AND RECYCLING STRATEGY 2011-2022
COLLECTION OPTIONS APPRAISAL

Introduction

This report is an appendix to the Waste and Recycling Strategy 2011-2022 and aims to give high level consideration of how different waste collection arrangements contribute to the strategic aims of the strategy. The report considers the two options for waste collection kerbside sort and co-mingled and assesses the strengths of each option under three main categories cost, performance and operational issues.

The type of waste and recycling collection system and frequency of collection adopted by a local authority can have a major impact on their success in managing its waste in a manner that is suggested by the waste hierarchy.

Harborough District Council should evaluate, how, its collection practices assist in meeting the Council's strategic objectives for waste and recycling.

Strategic Objectives

1. To encourage change within the community to move the management of waste higher up the waste hierarchy. (Appendix A, Page 8)
2. To provide a waste and recycling collection service that is simple, scalable and increases dry recycling rate.
3. To provide a waste and recycling service that can recognise the financial constraints on HDC and make collections more effective and efficient.
4. To manage waste in a way that minimises the environmental impact to our citizens.
5. To act as community leaders and manage Council waste in an effective manner.
6. To examine how the Council can manage waste collected on streets and in parks more effectively.

Changing waste and recycling collection arrangements can be costly and problematic however, it is essential that the Council considers whether its current arrangements will meet the strategic objectives set by the Strategy. Any change to the system will need to be for the long-term as frequent changes can cause public confusion and has significant implementation costs.

The strategy recognises a number of challenges that the current system provides;

- Making the best use of collected materials
- Improving our dry recycling performance
- Expanding the range of materials collected at the kerbside
- Maintain and improve the reduction in the amount of waste produced in the district.

- Delivering an enhanced, but financially deliverable service
- Minimising our Carbon Impact

There are two main collection systems adopted by the local authorities:

Kerbside sort – involves the sorting of materials at kerbside into different compartments of a specialist collection vehicle.

Co-mingled – involves the collection of materials in a single compartment vehicle with the sorting of these materials occurring at a MRF (Materials Recovery Facility). This option can include the two stream co-mingled model, here residents are provided with two recycling containers and are asked to place different materials in each container, typically paper/card (fibre) in one and plastics, glass and cans (containers) in the other. These materials are kept separate but collected on one vehicle which has two compaction chambers.

The debate about which system is better has been contested for some time, however more and more local authorities seem to be adopting the single stream co-mingled model. Recent adopters of the co-mingle approach include Rugby Borough Council and Leicester City Council. The choice of collection system adopted must be right for each authority and its residents. Ultimately, it is down to each authority to decide which system is right for them and local authorities have to make decisions that are right for local circumstances.

Methodology

When undertaking the options appraisal a variety of different data sources will be taken into account in the assessment of the options:

- Desk top review of previous studies and reports.
- National performance data
- Costs (indicative costs for options)
- Member consultation (All Member Workshop 10th October 2011)

In undertaking this appraisal, three key factors need to be taken into consideration;

Cost: The cost of waste collection services for most local authorities are a major component of its annual budget. The need to provide more efficient services is a major driver for the Waste and Recycling Strategy and it is a fundamental consideration when reviewing collection options. HDC's current waste and recycling service cost approx £1.6m per annum taking collection costs, gate fees, recycling credits and income from recyclates into account. This will act as a baseline for assessing all options.

Performance: The performance of the service option can be measured using national indicator information and by comparing Harborough's current performance with that of other authorities. When considering performance the waste hierarchy will be adopted to establish which systems manage their waste and recycling resources.

Operational Issues: Operational issues such as ease of use, street cleanliness, health and safety and carbon impact will all be important factors in deciding which option is preferred in the future.

Options Appraisal

The table below provides a summary of the key findings from the research and consultation undertaken.

| | Kerbside Sort | | Co-Mingled | |
|-------------|---|------|--|------|
| Cost | <p>The kerbside sort system is considered to be more reliant on human resource and involves more vehicle movements. It is therefore, considered to be more expensive than Co-mingled collection. The costs of collection can rise when adding more materials to the current collection arrangements.</p> <p>This system does attract a higher resale value for recyclates as they are considered to be of better quality.</p> | 5/10 | <p>The costs of a co-mingled service are considered to be cheaper because of lower human resource and vehicular requirements.</p> <p>Mixing food and green waste can incur higher gate fees as the product needs to be further reprocessed. Green waste only can be sent for composting. The cost can be offset by the savings offered by this system in other areas.</p> <p>More recycling materials can be introduced without the cost of collection increasing.</p> | 8/10 |
| Performance | <p>HDC are the only council with kerbside sort arrangements in the top ten overall for recycling/composting.</p> <p>When considering the performance for the collection of dry recyclates only 3 of the top 30 performers adopt a kerbside sort methodology (2008/2009)</p> | 4/10 | <p>Nearly all of the top performers for overall recycling/composting and dry recyclates adopt the co-mingled system.</p> <p>The top nine performers for 2010/2011 all use co-mingled collection. HDC is the tenth on the strength of its high composting rate.</p> <p>27 of the top 30 performers for collecting dry recyclate use the co-mingled methodology.</p> | 8/10 |

| | | | | |
|---------------------------|---|--------------|--|--------------|
| Operational | <p>Kerbside sort is considered to have a higher carbon impact than co-mingled. The system cannot easily deploy the use of compaction vehicles and therefore can collect at high volume/low density. In rural areas pods can require tipping off at regular intervals involving inefficient practice.</p> <p>Materials stored in open boxes on the kerbside can be blown around during inclement/windy weather which can cause litter.</p> <p>Kerbside sort system is considered to be more confusing for residents which can act as a demotivating factor when trying to encourage behavioural change.</p> <p>Kerbside sort system has increased manual handling risks.</p> | 5/10 | <p>The co-mingled system has a lower carbon footprint. This is especially true in a rural district where large amounts of volume and density can be collected in compaction vehicles.</p> <p>Materials stored in wheeled bins with closed lid have a much lower likelihood of causing litter.</p> <p>The system is considered to be easier for residents and encourages recycling through the simplicity of the collection arrangements.</p> <p>Co-mingled collection has lower health and safety risks associated with manual handling.</p> | 9/10 |
| Summary/ Total | Kerbside sort systems are considered to be more costly, lower performing and operational more difficult than co-mingled collection. | 14/30 | Co-mingled collections are considered to be lower cost, better performing and operationally easier than kerbside sort collections. | 25/30 |

Conclusions

The table above clearly indicates that there are many advantages of a co-mingled system over kerbside sort. It is also considered that the co-mingled option would enable the council to collect a wider range of materials at the kerbside which would improve our dry- recycling collection rate, one of the strategic aims of the Waste and Recycling Strategy. The co-mingled system also has added benefits in terms of lower cost, reduced risk and reduced litter.

HDC should prepare a full business case for moving from the current collection system to a co-Mingled system and that the business case is considered by the Council at the earliest opportunity.

