



COMMITTEE TITLE: Clean & Green Committee

DATE: 26th February 2024

REPORT TITLE:	Waste Strategy – Options Modelling
REPORT OF:	Marcus Hotten, Director of Environment
REPORT IS FOR:	Decision
WARDS:	ALL

REPORT SUMMARY

The report sets out different options (paragraph 2.10) of waste collection service that are to be modelled to predicts a range of outcomes: recycling rates; the gross and net cost of the collection service; the whole system collection and disposal costs; and carbon emissions.

These model outcomes are assessed against as set of criteria as set out in paragraph 2.12, further options can be modelled if required.

RECOMMENDATIONS

Members are asked to:

R1. To Note the content of the report, specifically the options proposed for modelling as set out in paragraph 2.10

R2. To agree the proposed assessment criteria, as set out in paragraph 2.12

SUPPORTING INFORMATION

1.0 REASONS FOR RECOMMENDATIONS

- 1.1 To ensure that the Council's waste collection service can adapt to anticipated changes that may be required by the Government.
- 1.2 To ensure that procurement of Waste Collection Vehicles and the future of design and location of any operational depot considers longer term strategic needs.

- 1.3 To explore opportunities to minimise waste collection and maximise kerb-side recycling.

2.0 BACKGROUND INFORMATION

- 2.1 On the 26th June, 2023 the Clean and Green Committee resolved to appoint a suitable consultant to support the development of a waste strategy, supported by a Waste Strategy Working Group.
- 2.2 The Waste & Resources Action Programme (WRAP) is a Non-Government Organisation working globally to tackle causes of climate crisis, and have been established on the United Kingdom since 2000.
- 2.3 WRAP work closely with local authorities to improve recycling quality and quantity of recycling, providing free to use resources and support, including the appointment of consultants to assist with developing and modelling waste collection options.

With WRAP's support, Ricardo consultancy were appointed to undertake the work.

Development of a Draft Waste and Recycling Strategy

- 2.4 To assist in the development of a strategy it was proposed that a Working Group be established to meet the following objectives:
- To identify and discuss strategic drivers and key principles that are likely to shape the strategy; these key principles will include reducing the impact that waste management has on climate change.
 - To commission the modelling of a range of contrasting waste collection options with accompanying estimated costs and recycling rates;
 - To identify any options that satisfy the previously identified key principles;
 - To draw up a draft strategy based on the outcomes of the modelling and testing.
- 2.5 The strategy will be research based and data-driven, setting out the reasons for our approach; the principles of what we will do; and the targets that we will strive to meet.

Modelling Steps

- 2.6 The methodology to achieve the above objectives sets out six milestones within the modelling to assist in the development of a finalised strategy. These are summarised below:
- 1. Benchmarking** – The Council performance is compared to similar authorities
 - 2. Baseline Modelling** – To establish resources and costs to deliver the existing waste collection service

3. **Options Modelling** – Options that are of interest in terms of resource requirements, costs, recycling performance and carbon emissions
4. **Stage 1 Options Appraisal** – To assess the Options against the baseline considering the Council objectives, constraints and priorities
5. **Stage 2 Options Appraisal** – Assess the variants and sensitivities against the service baseline and the Options
6. **Final Report** – Consolidates all analysis results to recommend a best path forward for consideration by Members.

Progress To Date

- 2.7 Ricardo consultants, working closely with Officers, have strived to benchmark against other similar authorities and establish the baseline costs of the existing service. Therefore steps 1. & 2. are nearing completion. The findings will be set out in a future report.

Step 3 - Options Modelling

- 2.8 A number of contrasting waste collection options are to be put forward and modelled. The options put forward are by no means an exhaustive list of the different combinations of collection systems that can be created. The options will consider different ways in which the waste can be presented by the residents, or the type of vehicle it is collected in.
- 2.9 The options were chosen to provide contrasting approaches to the collection of waste and recycling, as to provide a meaningful range of outputs and strategic options. The options should not be construed as pre-emptive to a preferred option or change to service.

2.10 The options are summarised below.

Options	Residual waste	Dry recycling	Food waste
Baseline	Weekly – Black sacks	Fortnightly - Multi-stream – Reusable sacks/Box	Weekly – Kitchen caddies
Option 1	Weekly – Black sacks	Fortnightly – Twin Stream (Split-back vehicle) Week 1 – Paper & Plastics (wheelie bin) + Food(caddy) Week 2 – Glass (box) + Food (caddy)	
Option 1a	Weekly – Black sacks	Fortnightly - Twin-stream (open-back vehicle) Week 1 – Paper & Plastics (bin) Week 2 – Glass (box)	Weekly Food– Kitchen caddies
Option 2	Weekly – Black sacks	Weekly Collection - Multi-stream recycling – Romaquip multicompartiment vehicle	
Option 2a	Weekly – Black sacks	Weekly – Multi Stream - Paper & Plastics (Sacks) (split-back vehicle) - Glass (box) (open back vehicle)	Weekly Food– Kitchen caddies
Option 3	Weekly – Black sacks	Fortnightly – Co-mingled (all dry recycling together) (wheeled bins) (open-back vehicle)	Weekly Food– Kitchen caddies
Option 4	Fortnightly – 240L Wheeled bins	Fortnightly - Twin-stream – (open-back vehicle) Week 1 – Paper & Plastics Week 2 – Glass (box)	Weekly Food – Kitchen caddies

2.11 The modelling will predict a number of key outcomes for the Council to consider. These key outcomes are: recycling rates; the gross and net cost of the collection service; the whole system collection and disposal costs; and carbon emissions.

2.12 These outputs will be assessed against the below suggested qualitative criteria.

- **Deliverability Risk** – Is the collection systems a proven method that can be delivered at the scale of the Borough?
- **Flexibility** – extent to which methodology is flexible to changes in waste composition.
- **Ease of Use** – Level of convenience, and easy to use and understand for residents

- **Public Acceptability** – the extent to which the collection methodology would be understood and accepted by residents.
- **Local environmental impacts (litter etc.)** – The level of impact on the cleanliness of the street scene
- **Exposure to market risk** – the evaluation of exposure to market risk (price) – recycle and other income streams
- **Local policy alignment** – Is this sympathetic to local Council and County policy
- **Legislation compliance** – Will the collection system comply with the Environment Act, or will exemptions be required.
- **Waste Hierarchy** – maximising the re-use and recycling opportunities within the waste system collection
- **Environmental impact/Carbon impact** – Carbon footprint of the collection and disposal systems

2.13 Ricardo consultants originally were to seek the view of the Waste Strategy Working Group as to the criteria ranking, and the weight given to each of the criteria. In consultation with the Chair of the Clean & Green Committee, a preference has been expressed that a survey is circulated to all Members of the Clean & Green Committee, as to provide an opportunity for all members of the Committee to provide a view upon the assessment criteria.

2.14 From the survey results, an average of the scores will be used to assess against the options set out above in paragraph 2.10. This will provide an assessment of the options and focus for further discussion and analysis.

2.15 These findings will be shared with the Clean & Green Committee at a subsequent Committee meeting.

3.0 OTHER OPTIONS CONSIDERED

3.1 There are various collection options that could be modelled, however, it advised that the initial modelling is undertaken and reviewed. Should the analysis indicate that further options should be considered, then modelling of further options can be undertaken.

4.0 RELEVANT RISKS

4.1 There is the possibility that the development of the strategy will be delayed, however milestones are currently being achieved within the anticipated time scale.

5.0 ENGAGEMENT/CONSULTATION

5.1 Consultation with relevant stakeholders will be considered as set out in the report to follow, once the business case for the different options has been established.

6.0 FINANCIAL IMPLICATIONS

6.1 There are no direct financial implications arising from this report.

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7.0 LEGAL/GOVERNANCE IMPLICATIONS

7.1 There are no direct legal implications arising from this report.

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8.0 ECONOMIC IMPLICATIONS

8.1 There are no direct economic implications arising from this report

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9.0 EQUALITY & HEALTH IMPLICATIONS

9.1 The Public Sector Equality Duty applies to the Council when it makes decisions. The duty requires us to have regard to the need to:

- a. Eliminate unlawful discrimination, harassment and victimisation and other behaviour prohibited by the Act. In summary, the Act makes discrimination etc. on the grounds of a protected characteristic unlawful.
- b. Advance equality of opportunity between people who share a protected characteristic and those who do not.
- c. Foster good relations between people who share a protected characteristic and those who do not, including tackling prejudice and promoting understanding.

The protected characteristics are age, disability, gender reassignment, pregnancy and maternity, marriage and civil partnership, race, religion or belief, gender, and sexual orientation. The Act states that 'marriage and civil partnership' is not a relevant protected characteristic for (b) or (c) although it is relevant for (a).

The report is to note, so will not have a disproportionate adverse impact on anybody with a protected characteristic and the Health and Wellbeing Strategy looks to reduce the health inequalities in relation to some of the protected characteristics.

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10.0 ENVIRONMENTAL AND CLIMATE IMPLICATIONS

10.1 The no direct environmental and climate implications arising from this report. However, the opportunities to reduce carbon footprint through increased recycling and whole system treatment costs will be considered in the options appraisal set out in the body of the report.

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APPENDICES

None

BACKGROUND PAPERS

None