

Central Bedfordshire Council

Sustainable Communities Overview & Scrutiny Committee

24th April 2018

Waste Collection & Street Cleansing- Service Design and Delivery Method

Report of: Cllr Ian Dalgarno, (ian.dalgarno@centralbedfordshire.gov.uk)

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Purpose of this report

1. To outline the possible options for the kerbside collection of household waste in Central Bedfordshire and seek recommendations from the Committee to take forward to Executive on 10th May 2018 based on consideration of:
 - the results to date of the current consultation
 - further modelling of potential financial savings of options
 - potential impact on environmental performance (recycling rates) and
 - operational issues for deliverability of each option.

RECOMMENDATIONS

The Committee is asked to:

1. Consider the information contained in the report and appendices and raise key points for Executive to consider on 10th May 2018.

Background

2. In order to achieve a balanced budget, the Council is required to make significant savings and efficiencies within the Medium Term Financial Plan (MTFP). To this end the current MTFP includes a total saving target of £2.55m from retendering and changes to waste services in 2019/20.
3. The current recycling rate for Central Bedfordshire is 46%. Under the revised Waste Framework Directive from 2008, EU member states must achieve 50% recycling rate (including composting and re-use) by 2020. It is expected that these requirements will be transposed into UK law.

4. The Council's waste collection services are currently delivered by Biffa Municipal Ltd. under two contracts which expire in 2019. The end of these contracts presents an opportunity to fully review the design of the services and set the way they are delivered into the future. This opportunity will not come around again for a period of at least 7 years.
5. A report to Executive on 6th February 2018 set out the options for future waste collection in Central Bedfordshire and gained approval to carry out a public consultation on the possible options for the future service. In addition to a comprehensive consultation, further work has been undertaken to further understand the financial implications, environmental performance and operational considerations for each of the options.

Options being considered

6. Details of the future collection options are described below and set out in Appendix A:

Option 1. Recycling - Continue as is

7. This is the recycling system currently adopted across Central Bedfordshire where recycling is presented by residents fortnightly, mixed in a wheeled bin.

Option 2. Recycling - Separate paper and card

8. For this recycling option, residents would present their paper and cardboard in a box by the side of their wheeled bin containing the rest of the recycling (plastic packaging and metal tins and cans) and they are collected fortnightly.

Option 3. Recycling - Separate glass

9. This recycling option is the same as option 1 with fortnightly collection of recycling, but glass would be collected separately using a box by the side of the wheeled bin containing plastic packaging, tins and cans, and paper and card. This is the current recycling system for around 13,000 households in the south of Central Bedfordshire.

Option 4. Weekly food waste collection

10. This involves the roll out of separate weekly food waste collection in the south to harmonise the service across the whole of Central Bedfordshire. All residents in the south would receive a small brown outdoor caddy to use for kerbside collections and a smaller kitchen caddy and a roll of bags to use in the house.

Option 5. Three-weekly residual (black bin) collection

11. This involves the collection of residual (black bin) waste on a three-weekly basis rather than fortnightly.

Option 6. Chargeable green (garden) waste collection

12. This involves charging for the green waste collection, for residents who want to use it. Green waste would be collected fortnightly and for the full year rather than the 9 months of the current service. The service would be optional and an indicative annual charge of £40 per household has been proposed and consulted on.

Summary of Findings

13. Interim **consultation results** suggest that the public are supportive of enhanced recycling with a preference for food waste collections and separate paper/card recycling services. Opinions on both three-weekly residual (black bin) collections or chargeable garden waste services are less positive, however, such views would be influenced if mitigating factors were put in place.
14. The **Financial modelling** assumes food waste collections are rolled out across the area and suggests that the most cost-effective option would be to move to a new recycling service including separate paper and card collection, combined with the introduction of a year-round, discretionary and chargeable garden waste service. Whilst there are some variables that could affect the costings of this option (e.g. take up of the garden waste service and market value of paper and card) this combination would enable the financial savings target to be achieved. The next best value option would be to introduce three weekly residual black bin collections (instead of chargeable garden waste) together with separate paper and card collection and food waste collection services.
15. **The environmental performance** analysis would suggest that all options would deliver some improvement in recycling rates due to the roll out of food waste. However, not all options are predicted to achieve the environmental performance target of 50%. The option that delivers the highest recycling rate includes food waste collection together with separate glass collection and three weekly black bin collection (57%).
16. There are some important **operational issues** which have been highlighted which could impact the deliverability of the options. Some would require appropriate service negotiations or policies to enable the option to be delivered or to mitigate their impacts.

Consultation - interim results

17. In order to fully understand the views of the residents of Central Bedfordshire, the council is undertaking an extensive consultation exercise which launched on 26 February and will close on 20 April. The approach has included:
 - Household leaflets delivered across Central Bedfordshire and inviting 211,000 residents to give their views on options around future recycling and waste services

- A written survey, open to all residents, and available on line and through paper copies
 - A telephone survey with a sample of 1,200 people who are representative of the whole population
 - A series of discussion groups with residents from towns and villages across Central Bedfordshire
18. The Council has promoted the consultation widely and at the point of report preparation (03/04/18) in the region of 14,000 responses have been submitted via the open survey. The full Interim Findings Report can be found in Appendix B and includes the interim results of the open survey, the results of the telephone survey and some feedback from discussion groups. Please note that a further and complete report of the results will be published and presented to the Executive when the consultation is concluded.
19. A summary of the interim headline results are set out below:
- There are some consistent themes emerging from all of the consultation methods
 - Almost everyone agreed it is important to recycle as much as possible
 - The majority agree that savings should be found from these services
 - Separating paper and cardboard is the most popular recycling option
 - The majority of respondents support food waste collection for every household in Central Bedfordshire
 - Whilst the majority do not support three-weekly domestic waste collections, around a third did. Retention of free garden waste services would be the most influential factor in changing the minds of those who disagreed with this option.
 - A similar majority do not support the introduction of charges for green waste collection, although around a third did. Retention of two weekly bin collection would be the most influential factor in changing the minds of those who disagreed with this option.
 - Comments in the surveys and focus groups highlight some of the issues and concerns residents raised about with each of the options and some of these could be mitigated.

Financial Modelling

20. The Environmental Services team have accessed independent consultancy support from environmental consultancy Eunomia, funded by the Waste and Resources Action Programme (WRAP) to investigate the requirements and related costs for all options available to the Council for service design. The modelling includes one off capital costs of containers and infrastructure such as adaptations required at tipping facilities, the ongoing capital costs of container replacement and ongoing revenue costs of vehicles, staff, depots, waste transfer, waste disposal and recycling material sales.
21. The indicative costs and savings of each of the options has been modelled in comparison to the Business as Usual (BAU) baseline and are set out in table 1 below.

Important note: The figures are indicative only and are to be used as a comparison between the various options rather than taken as an absolute cost or saving. They do not show cost variances against the base budget held in the service.

Table 1- Financial Costs/Savings against Baseline (BAU)

Recycling Option	Food (Option 4)	Residual (Option 5) (where applicable)	Chargeable Garden waste (Option 6) (where applicable)	Costs/Savings (,000)				Total: Revenue and Annualised Capital
				Revenue	Capital: One-off costs	Capital: Additional annual container	Capital: Annualised	
Recycling (Option 1)- Co-mingled Recycling (as is)								
Option 1	Weekly	Fortnightly	Free	£15	£187	£58	£77	£92
Option 1 with 3-weekly residual	Weekly	3-weekly	Free	-£1,105	£187	£58	£77	-£1,028
Option 1 with chargeable garden	Weekly	Fortnightly	Chargeable	-£1,846	£650	£48	£113	-£1,733
Recycling (Option 2)- Co-mingled with Separate Paper & Card								
Option 2	Weekly	Fortnightly	Free	-£1,353	£1,016	£139	£241	-£1,112
Option 2 with 3-weekly residual	Weekly	3-weekly	Free	-£2,720	£1,016	£139	£241	-£2,479
Option 2 with chargeable garden	Weekly	Fortnightly	Chargeable	-£3,214	£1,479	£129	£277	-£2,937
Recycling (Option 3)- Co-mingled with Separate Glass								
Option 3	Weekly	Fortnightly	Free	-£65	£400	£64	£104	£39
Option 3 with 3-weekly residual	Weekly	3-weekly	Free	-£1,075	£395	£64	£104	-£972
Option 3 with chargeable garden	Weekly	Fortnightly	Chargeable	-£1,926	£860	£54	£140	-£1,786

22. The roll out of weekly food waste collections to the south of the area has been included in the modelling for all options. This was a prerequisite of the WRAP funding and shows the effect of harmonising the services across the whole of Central Bedfordshire. It is purely for the purposes of financial modelling. If it is decided not to roll out food waste collections the impact on costs is a net revenue and annualised capital cost avoidance for each scenario of £91k.
23. In all cases assumptions have been used relating to areas such as material costs, locations of future depots and tipping points, material tonnages, staffing and vehicle requirements. For example, the savings for chargeable garden waste are based on several assumptions including where residents might dispose of their green waste if they don't join the scheme and the likely participation rate (a participation rate of 43% has been used in the modelling, this is the median rate from comparator authorities). Any differences in these assumptions once the scheme was operational would impact on the actual costs.
24. Also, these indicative figures rely heavily on the modelled prices for recycling. These can fluctuate considerably over a short period. The market for paper and card has declined considerably since the first modelling was produced, and it is uncertain when or to what extent the market might recover.
25. The modelling does not show the impact the decline in the market has on the current base budget held within the service because the baseline costs are also impacted and the modelling shows the variance against the baseline. The effect of the market on base budget will need to be reflected via associated pressures of several hundred thousand pounds that will need to be offset from the figures in the table.
26. The figures show there are opportunities to make significant savings or roll out services at a very low cost. The table shows the combination of

Recycling Option 2 – separate paper and card, weekly food waste collection and chargeable green waste collection offers the most significant savings. The second most financially beneficial combination of options is Recycling Option 2 – separate paper and card, weekly food waste collection and three-weekly residual waste collection.

Environmental Performance

27. The modelled recycling and residual waste mass flow for each of the collection options was used to calculate the greenhouse gas (GHG) emissions of collection and disposal. The model accounts for the GHG impacts from the following activities:

- Recycling in to other items;
- Residual (Black bin waste) disposal;
- Infrastructure (running or MRFs and depots); and
- Transport (collection and onward transport).

All options show a net GHG reduction due to the collection of food waste from the south of the area.

28. The recycling rates for each option have been modelled and are set out in table 2 below. These all show an increase on the current rate of 46% due to the collection of food waste in the south and the inclusion of glass in to the materials collected in option 3.

Table 2- Predicted Recycling Rates

Recycling Option	Food (Option 4)	Residual (Option 5) (where applicable)	Chargeable Garden waste (Option 6) (where applicable)	Recycling Rate
Recycling (Option 1)- Co-mingled Recycling (as is)				
Option 1	Weekly	Fortnightly	Free	49%
Option 1 with 3-weekly residual	Weekly	3-weekly	Free	55%
Option 1 with chargeable garden	Weekly	Fortnightly	Chargeable	48%
Recycling (Option 2)- Co-mingled with Separate Paper & Card				
Option 2	Weekly	Fortnightly	Free	49%
Option 2 with 3-weekly residual	Weekly	3-weekly	Free	55%
Option 2 with chargeable garden	Weekly	Fortnightly	Chargeable	48%
Recycling (Option 3)- Co-mingled with Separate Glass				
Option 3	Weekly	Fortnightly	Free	51%
Option 3 with 3-weekly residual	Weekly	3-weekly	Free	57%
Option 3 with chargeable garden	Weekly	Fortnightly	Chargeable	51%

29. This table shows that the recycling rate increases in all options. This is due to the collection of food waste from the south, the inclusion of glass

collection or the change in recycling behaviour encouraged by three weekly black bin collection. The combination of options that is likely to generate the highest recycling rate is Recycling Option 3 – separate glass, weekly food waste collection and three-weekly black bin collection.

30. When looking at each recycling option independently, only Recycling Option 3 – separate glass, would achieve the target of 50% on it's own. Recycling Options 1 and 2 only achieve the target once combined with three weekly black bin collection. Any combination of the recycling options with three-weekly collection look to increase recycling rates to well over 50% which is the target.
31. To improve the quality and volume of recycling the Waste (England and Wales) Regulations 2012 require all local authorities to collect paper, glass, plastics and metals separately from each other unless it can be demonstrated that it is not necessary to produce high quality/volumes of recycling or it is not technically, environmentally or economically practicable to do so. The analysis carried out indicates that separate collection of one or more of the four materials is not 'necessary' to comply with the regulations and so any of the options is suitable to take forward.

Operational Considerations

32. The practicality of operating each of the options has been further investigated, including researching other local authorities who already operate these systems. The results of this work are described below.

Option 1. Recycling - Continue as is

33. This is the current system used across the whole of Central Bedfordshire to collect recycling. The operational advantages of this system are that:
 - This is a tried and tested system,
 - It does not involve any changes to the current system.
34. There are no operational disadvantages or risks related to this option.

Option 2. Recycling - Separate paper/card

35. The operational advantages of this method are:
 - This gives residents more capacity for recycling avoiding overflowing bins or the need for larger bins.
36. However, the operational disadvantages are that:
 - Each section of the vehicle must be exactly the right size to ensure both sides fill up at the same rate and further work will be necessary to ensure the system is as efficient as possible,
 - The specialised vehicles cannot be used to collect other materials reducing the flexibility of the fleet,
 - The lead times for procuring specialised vehicles is longer than for standard vehicles,
 - An additional container is required for residents to store

- The additional container increases the time taken to collect and could cause road congestion,
- Boxes are unlikely to be large enough to contain the large volumes of cardboard packaging collected and might put any excess in the wheeled bin thereby contaminating the plastic and cans,
- Open boxes can lead to paper and card blowing out of the box causing littering,
- This requires residents to further sort their recycling increasing contamination and reducing efficiency if they don't,
- A thorough communications campaign would be required to roll out this option.

37. The operational risks are that:

- The transfer station, owned and operated by a neighbouring authority would need to be adapted, at their discretion, to allow separate tipping of paper and cardboard and sorting of the mixed plastic and cans and this is not viable at the current time,
- The paper and card may also require further sorting and there are only a handful of facilities available to do this,
- Central Bedfordshire Council do not currently have the expertise or resources to sell materials directly on the open market,
- The specialised vehicles are more prone to breakdown risking delays in collections,
- Open boxes lead to paper becoming dirty and wet and of less value.

Option 3. Recycling - Separate glass

38. This system has the operational advantage that:

- Glass can be collected separately across the whole of the council area, without impacting on the way residents present the rest of their materials.

However, the disadvantages are that:

- Each section of the vehicle must be exactly the right size to ensure both sides fill up at the same rate and this is more difficult to predict where historic information on the potential volumes of glass does not exist.
- The specialised vehicles cannot be used to collect other materials reducing the flexibility of the fleet,
- The lead times for procuring specialised vehicles is longer than for standard vehicles,
- An additional container is required for residents to store
- The additional container increases the time taken to collect and could cause road congestion,
- This requires residents to further sort their recycling increasing contamination and reducing efficiency if they don't,

- A thorough communications campaign would be required to roll out this option.

The operational risks are that:

- A new deposit return scheme is being introduced by national government which could impact on the volumes of glass being left out for collection making this option less efficient
- The transfer station, owned and operated by a neighbouring authority will need to be adapted, at their discretion, to allow separate tipping of paper and cardboard,
- Central Bedfordshire Council do not currently have the expertise or resources to sell materials directly on the open market,
- The specialised vehicles are more prone to breakdown risking delays in collections.

Option 4. Weekly food waste collection

39. The operational advantages of this option are that:

- This is a tried and tested system across the north of Central Bedfordshire. There is high participation in the scheme with almost 5,000t of food waste being collected annually,
- It is fairly simple operationally to roll out food waste collections to the south,
- It will be simple for residents to understand and does not impact on the way residents present the rest of their materials for collection,
- Separate vehicles are used so there are no issues with sections of the vehicle filling up more quickly than others,
- No modifications to the transfer station are required.

40. The operational issues are that:

- Additional resource will be required to roll out food waste collection to the south of the area including designing and distributing communications, distributing outdoor and kitchen caddies and bags and ensuring that the collection runs smoothly once it is in place.
- An additional container is required,
- This requires residents to further sort their waste, reducing the efficiency of the service if they don't,
- A thorough communications campaign would be required to roll out this option.

41. There are few risks related to this option as we have successfully rolled it out and are operating it within the north of the area.

Option 5. Three-weekly residual (black bin) collection

42. Operational advantages include the need for fewer vehicles and crew to operate this system.

43. The operational issues are that:

- Significant additional resource will be required to roll out a three-weekly collection system including, but not limited to, designing and delivering communications, dealing with requests for larger bins,

delivering larger bins and collecting in old bins, inspecting bins and dealing with complaints,

- If residents struggle to contain three weeks of residual waste in their bins they may leave out additional side waste or leave bin lids up and policies around these issues will need to be drawn up and approved,
- Residents may be confused about which bins to present each week resulting in more complaints and calls to the contact centre,
- General calls to the contact centre will increase as a result of anticipated customer questions and concerns,
- A thorough communications campaign would be required to roll out this option.

The risks are:

- A move to three-weekly collections could influence customer satisfaction and could be seen as a reduction in service,
- Although food waste would be collected weekly from all households some residents will not use this, potentially causing odour and pest issues in their residual bins,
- As a system this is not well established; only 17 out of 369 district and unitary authorities responsible for waste collection have moved to a three-weekly collection of residual waste so there is limited data on the risks and issues of doing so.

44. The findings from further research on other local authorities who have introduced three-weekly residual collections is summarised in Appendix C. This includes information on when three-weekly collections were introduced, the collection system provided, policies for nappies and hygiene waste, provision for larger households, impact on flytipping, policies for replacement bins, closing of bin lids, side waste, assisted collections and clinical collections.

Option 6. Chargeable green (garden) waste collection

45. The operational advantages of this service are that:

- Based on updated research, as this is not a statutory service that councils are legally required to provide, 188 (47%) of councils now charge for these collections so there is good data available on the impacts of introducing it,
- Frequent requests for replacement bags for garden waste in the north would no longer be made,
- No additional collection vehicles would be required in the north as overall amounts of green waste are not forecast to increase (due to the extra green waste from bins being offset by the lower estimated participation rates),

46. The operational issues are that:

- Additional resource will be required including designing and distributing ongoing communications, collecting in and distributing

bins, administering the scheme and ensuring that the collection runs smoothly once it is in place,

- An additional wheeled bin is required, however options for retaining bags or having a smaller bin at a lower cost are possible,
- The roll out of the scheme is operationally challenging, involving the removal of bins where residents have not joined the scheme,
- There must be some way for collection crews to easily identify which bins have been paid for that cannot be tampered with or copied,
- Policies, for example, for larger bins, additional bins, concessions or continuing to use bags, would have to be agreed and approved.
- A thorough communications campaign would be required to roll out this option.

47. The operational risks are that:

- The service would be resourced to a level based on the modelling, but participation or volumes of garden waste could be much higher than anticipated and as a result more vehicles could be required at short notice,

48. The findings from further research on other Local Authorities that have introduced charged garden waste schemes is summarised in Appendix D. This includes information on the charge, the months collected, charges for additional bins and the availability of sacks or smaller bins.

Council Priorities

49. The review of waste collection services supports three of the Council's key priorities –

- a. Provide Value for Money- Maintaining a range of recycling services whilst providing cost savings and efficiencies
- b. Enhance Central Bedfordshire- Keeping the number and movement of waste vehicles down to a minimum and reducing emissions.
- c. Quality Universal Services- Continuing to provide excellent recycling and waste collection service to Central Bedfordshire residents.

Corporate Implications

Legal Implications

50. Recycling: Under the revised Waste Framework Directive from 2008, member states must achieve 50% recycling rate (including composting and re-use) by 2020. Individual local authorities do not currently have specific recycling targets. The EU's Circular Economy Package, containing proposed recycling targets for member states of between 60 and 70% by 2030 will likely be adopted by the UK before it exits the EU.

51. Garden waste: The collection of garden waste is non-statutory. Under the Controlled Waste Regulations 2012, local authorities are permitted to

charge for collection of garden waste, and a third of local authorities currently do so.

52. Food waste: The collection of food is non-statutory. Government published a Food Waste Recycling Action Plan in July 2016 to help increase the quality and quantity of food waste collected for recycling and are planning further work in 2018 to encourage a higher capture rate from households. The Circular Economy Package includes measures to achieve the UN's Sustainable Development Goal of halving per capita global food waste at the retail and consumer level.
53. Three-weekly collections: There is no legislation that requires local authorities to collect any waste at a specific frequency.
54. Separate collection: The Waste (England and Wales) Regulations 2012 require all local authorities to collect paper, glass, plastics and metals separately from each other unless it can be demonstrated that it is not necessary to produce high quality recyclate or it is not technically, environmentally or economically practicable to do so. The modelling has shown that all of the options, including BAU, comply with the regulations.
55. Receptacles: Local authorities are at liberty to specify the type and number of receptacles used by householders to present waste for collection under the Environmental Protection Act 1990.

Financial and Risk Implications

56. The costs, savings, issues and risks of each option are set out in the relevant section of this report. The figures are indicative and to be used as a comparison between the various options and the baseline rather than taken as an absolute cost or saving. Also, these costs do not take in to consideration the £300k saving or £2.25m saving already in the current MTFP in 2019/20. For MTFP purposes any additional savings would need to be shown as net of these pressures and savings.
57. The figures show there are opportunities to make significant savings or roll out services at a very low cost but these should be considered alongside the related consultation feedback, environmental performance and operating issues set out in the report and appendices.

Equalities Implications

58. Central Bedfordshire Council has a statutory duty to promote equality of opportunity, eliminate unlawful discrimination, harassment and victimisation and foster good relations in respect of nine protected characteristics; age disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation.
59. This report includes the interim results of the consultation on the changes that may impact on residents. The Council has followed good practice guidance by conducting a consultation to ascertain their needs, attitudes and priorities and consider their feedback as part of the service design process. We also have a duty to demonstrate assessment of consultation feedback from an equalities perspective and the approach shows compliance with this.

Sustainability Implications

60. The environmental impacts are covered within the main report. All options show a net GHG reduction and an increase in recycling due to the collection of food waste from the south, the inclusion of glass collection or the change in recycling behaviour encouraged by three weekly black bin collection.

Conclusion and next Steps

61. Overview and Scrutiny Committee are invited to review the updated financial and operational impact analysis of the options and the interim public consultation feedback and raise key points to be considered by Executive. Executive will make a decision regarding the future waste collection system for the whole of Central Bedfordshire Council on 10 May 2018.

Appendices

Appendix A:	Future Collection Options
Appendix B:	Consultation- Interim Findings Report
Appendix C:	3 Weekly Collections Research Findings
Appendix D:	Chargeable Green Research Findings

Background Papers

None

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