Dual Stream Recycling Implementation

Cabinet Member for Waste and Recycling

Lichfield district Scouncil

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no

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Key Decision?

Local Ward All

Members

Overview and Scrutiny Committee

1. Executive Summary

- 1.1 This report provides the outcome of a review requested following the severe disruption caused to many residents, in May 2022, by the initial implementation of the new dual-stream recycling service to households across the district. The review was undertaken by an independent industry expert; it covers the design and implementation of the new service and was concluded on 12 August 2022. The review included interviewing officers and members, observation of collection rounds and data analysis.
- 1.2 The conclusion and key recommendations of the review are considered and, along with additional comments from the Overview & Scrutiny Committee, will be used to inform both the next phase of the project and a 9-point Service Plan for the Joint Waste Service in the medium term.

2. Recommendations

- 2.1 That the Committee note the report of the independent expert into the design and implementation of dual stream recycling collection services in Lichfield and provide comments.
- 2.2 That the Committee consider and comment on how the three key recommendations arising from the report could be achieved, i.e. the need to:
 - i. Improve scrutiny of the joint waste service, using scenario planning, pilots, and progressive implementation of major change.
 - ii. Ensure the service team has sufficient skills, competences, and confidence to implement major change programmes going forward.
 - iii. Increase the acquisition, use and interpretation of service data, including an increased focus on trend analysis and operational analytics.

3. Background

3.1 The Tamworth and Lichfield Joint Waste Service (JWS) has now largely implemented the agreed changes to the recycling service; transitioning to dual-stream collections, with residents asked to separate paper and card from glass, cans and plastics. There remain a small portion of households, approximately 3500 across Lichfield and Tamworth - notably flats and houses of multiple occupation (HMOs), who have not moved onto the new service yet, and there are some known ongoing issues with communal bins and households who generate unusual levels of waste.

3.2 Councillors received significant numbers of concerns from residents at the outset of the implementation of this new service and consequently, a review of its design and implementation was requested. The purpose of this report is to provide the Committee with the findings of that report.

Implementation

3.3 The implementation of the new service took place over an 8-week period from 4 April to 27 May. During this period a range of service changes were implemented:

Date	Activity
4 April – 15 April	Delivery of bins
18 April – 27 May	Delivery of bags
2 May	New round structure for recycling, refuse and organics commenced
2 May	First dual stream recycling rounds (number) commenced – jointly with co-mingled service
17 May	Final co-mingled rounds ceased

- 3.4 Whilst it was considered that implementing all these changes concurrently was unavoidable, it is clear from the report's findings that while the roll out benefitted from having a detailed implementation plan and risk register, it was not clear if any assumptions were tested or scrutinised prior to the roll out.
- 3.5 Other issues were identified only through the intervention of the two Chief Executives (from Lichfield and Tamworth):
 - The new rounds implemented as part of the new recycling service rollout, undertaken by a
 commercial organisation rather than one experienced at providing a local authority service, together
 with the decision to divert drivers from collection rounds to bag deliveries, significantly restricted the
 crews' capacity and capability to complete new recycling rounds.
 - There was therefore a period of persistent round non-completions which adversely impacted on residents, particularly following the commencement of dual-stream collections from 2 May.
 - There was frustration from ward Councillors and residents over a lack of urgency in the response to these issues which were being reported daily.
 - Despite training prior to implementing the new service, waste crews were unclear in some areas over what could be recycled, and over side-waste and whether it was to be collected or not. The service was slow in implementing 'toolbox talks' to aid understanding of the collection crews.
 - Bin 'tagging' caused significant anger to residents as crews were correctly refusing to collect waste put out, but without explaining on the red and yellow tags exactly why.
 - The inability of the service to complete daily co-mingled and dual stream rounds led to capacity being moved from other services (refuse and organics) to support. This further exacerbated residents' frustrations because it led to these services also failing to collect full rounds at times.
 - Early positive communications with residents over the new service were lost as it was not backed-up with daily, consistent messaging.
- 3.6 These issues inevitably placed enormous pressure on the service, not helped by an initial slow response to them and this pressure was worsened by a number of other factors:
 - Two drivers resigned at the start of the roll-out (the scarcity of HGV drivers is a national challenge). Both drivers have subsequently returned.
 - Our waste reprocessor also had to move to dual-stream disposal leading to persistent delays (90-minutes+) tipping the RCVs (Refuse Collection Vehicles). There was a slow reaction to the

- issues extended wait times was causing to the remainder of rounds. Fortunately, these problems now appear to be resolved.
- The period of highest pressure delivering bags whilst running both dual-stream and co-mingled collections – was increased due to bag delivery delays and pausing the delivery of new bags to focus on requests for second bags.

The impact on service completions is presented as Appendix 1. (to follow)

3.7 The independent review details commentary on 7 specific areas of implementation. The follow section sets out this commentary, along with the lessons the services has learned from it.

Review commentary	Service learning
New Vehicles and Driver Training – Twin track vehicles used to collect the bin and bags had to be specially ordered in and drivers and loaders trained. The vehicles design meant 35% capacity was given to paper and card and 65% capacity to glass, plastic and mixed metals.	There is limited flexibility in how the load is separated – the RCV has 3 bin lifts, so the load has to be split in thirds. Tonnages collected do support this split. In the first 10 weeks 962 tonnes (36%) of paper & card were collected, 1,686 (64%) tonnes glass, cans and plastics.
Round Review – New service takes longer as an operative has to attend each property because of the additional time used in emptying a blue bin and blue bag. To assist in the design of the new rounds, consultants from Biffa were commissioned and suggested an additional two crews with vehicles.	The new rounds were slower than modelled, with crews collecting from fewer households per hour than anticipated. Initial modelling suggested an average of 8.5 recycling crews per day (and the service budgeted such), the round review suggested this could be reduced to 7.8 — which was what the new service was launched at. The service is currently running at 8.8 crews. A further review of the rounds is intended (some days are easier than others), which may bring the number of crews closer to the budgeted 8.5.
Public Information Campaign – Initial information was sent and received well. However, once problems started occurring, public response became hostile. Additional negative public comments were received following a press release stating that the blue bags procured were not the correct size. This exasperated the situation.	Communications was a critical point of failure in the project. Both the Joint Waste and Customer Contact teams were overwhelmed by the volume of complaints and service requests that were received – all of which required an element of manual processing and many required double-handling (Customer Contact then Joint Waste). The service became slow to respond to even the most routine requests, exacerbating resident dissatisfaction. The waste service presents a huge opportunity for better customer response automation (very high volumes of very low complexity queries).
Staffing – The report identifies that there is considerable pressure on the availability of HGV drivers. A national shortage and wage inflation led at the point of implementation to two drivers leaving. Therefore, there was a shortage of	Diverting drivers to bag deliveries, plus the unexpected departure of 2 drivers at the start of the service roll-out left the service stretched and

drivers during a critical part of the implementation.

ill-resourced to respond to pressures when initial implementation struggled.

Transferring bag deliveries to a third party was an option considered, however it was felt that an external contractor with less district knowledge could have led to inconsistent and unreliable deliveries. In hindsight, this may have been the wrong decision.

The service has now implemented a driver training plan to up-skill existing staff to both fill driver vacancies and provide greater resilience for staffing pressures. The service is targeting the training of 10 additional drivers by the end of the municipal year.

Management of the Implementation

Programme – The report identifies whether at the point of implementation began to go wrong whether the programme was managed in an active way and mitigation actions followed. The report furthermore states that in a materially changing environment, it is vital to have staff with experience of managing change and have both the governance and executive structures in place to support real time decision making and date to test assumptions.

A critical omission in the project management was an escalation route for risks and issues. As a result, when the lack of (additional) driver availability became a critical point of failure — whilst it may not have been possible to mitigate the underlying issue - the service was slow to manage the consequences and did not quickly get on the front-foot to support residents and keep them informed.

The service is governed by a Joint Waste Committee (JWC) consisting of the Leaders and Portfolio Holders from the two authorities. There is the potential for the JWC to act as an explicit Project Board for any subsequent service changes of this magnitude.

Data – The report finds that data that the service collects is not assembled or analysed from past rounds to inform understanding and future services. The only exception is data surrounding the number of missed property collections. The author of the report recommends the Bartec system to track collections and this data can be extremely useful and should be a source for better trend analysis and service reviews.

As with communications, there is a huge opportunity to use automation and improved systems to enhance the way the service handles the large amount of data collected and translate that data into management information that can be used to drive service improvement and better inform future service changes.

Transportation and Tipping Off – The distance from the BTS and effectiveness of it were two further issues that compounded the problems associated with the implementation.

The limited waste transfer and disposal infrastructure within Staffordshire restricts options – the current disposal contractor is the only disposal facility within practicable travel time from Lichfield & Tamworth. The service is already engaging with the contractor to improve systems and reduce turnaround times. The issue

of improved Staffordshire waste infrastructure is
being progressed at Chief Executive level.

Initial Performance / Impact of the new Dual Stream Recycling Service

- 3.8 Full dual-stream collections commenced 30 May and tonnages have been monitored. Weekly tonnages for the first 10 weeks of the dual stream collections are presented as Appendix 2. (to follow)
- 3.9 Whilst it remains early to draw conclusions from (joint Lichfield and Tamworth) data, initial indications include:
 - Following the completion of the implementation phase, service reliability has improved but clearly at the beginning of implementation this service struggled and regularly failed to complete rounds effectively.
 - No appreciable increase in residual waste. Over the first 10 weeks of the new service the
 average weekly residual tonnage was 650 tonnes the average for the 3 months prior to the
 switch was 760 tonnes per week. This suggests that recycled material is not finding its way into
 the refuse stream.
 - Missed bin reports have reduced from their initial peak.
 - Rejected / contaminated bins have also reduced from their initial peak in weeks 1-4 but would appear to be plateauing at a little over 1,100 per week or around 1.4% of households.
 - The quality of the recycling collected has been transformed which was the fundamental intention of the transition to dual stream. Prior to the transition, levels of contamination in our recycling were around 14%; since the switch every single load of recycling has achieved the new contamination thresholds of 1% paper and 5% for glass, cans, and plastic.

Next Steps

3.10 The implementation of the dual stream recycling to general households has been largely completed, the service has stabilised with collections restored and recycling being collected. However, the dual stream project is not at an end, key activities over the next 3-6 months include:

Activity	Target date
Assessing and supporting the households that are continuing to struggle with the new service.	31 October 2022
Assessing the effectiveness of the recycling bags – whilst the majority of households are managing with one bag (6,500 or 8% have requested a second bag), capacity remains a concern.	31 December 2022
Smoothing and levelling the new recycling rounds to ensure that resources are deployed most efficiently – currently some days / rounds are notably more challenging than others.	31 October 2022
Planning for Christmas collections – especially in the context of the increased amounts of paper and card produced over the festive period.	31 October 2022

Transitioning multi-occupancy properties onto dual-stream collections. These properties (with communal bins) have tended to produce poorer quality recycling with higher levels of contamination which will struggle to meet the more stringent contamination levels for dual stream. Officers are currently assessing the multi-occupancy properties (201 sites across both authorities).	28 February 2023
Transitioning 250 trade waste customers onto dual-stream recycling.	28 February 2023

- 3.11 Following the Dynamic Outcomes Review recommendations, it is proposed that the Tamworth and Lichfield Joint Waste Committee be asked to undertake oversight and scrutiny of this next phase of the project implementation. This would include more detailed assessment of operational implementation plans, with a particular focus on risk and issue management. The Committee's views on whether this will sufficiently improve scrutiny of this service are welcomed.
- 3.12 The review also identifies challenges with communications and the use of data. Problems with service consistency in May overwhelmed communications channels; responses to service requests were slow, a failing service and poorly implemented service transition was cultivated and the messaging regarding the intent of the change to improve recycling was lost. The Council has recently introduced a robot to process Universal Credit Change of Circumstances applications which has been very successful, processing two thirds of applications. There is an opportunity to end-to-end automate the majority of Joint Waste service requests and it is proposed that this is the next service to explore the implementation of robot technology.

Conclusion

3.13 The initial sense of chaos experienced by residents through the change from a co-mingling to dual-stream recycling service has now settled. While the rollout is not fully complete, and there remain issues that need to be responded to, the service is performing better again and delivering better outputs in terms of improved recycling. However, the project implementation involved a period of service disruption that significantly impacted residents and must not be repeated. The Dynamic Outcomes Review has identified the learning points that must be used to inform both the latter stages of this project and the subsequent service changes that are anticipated based in the Government Waste and Resources Strategy.

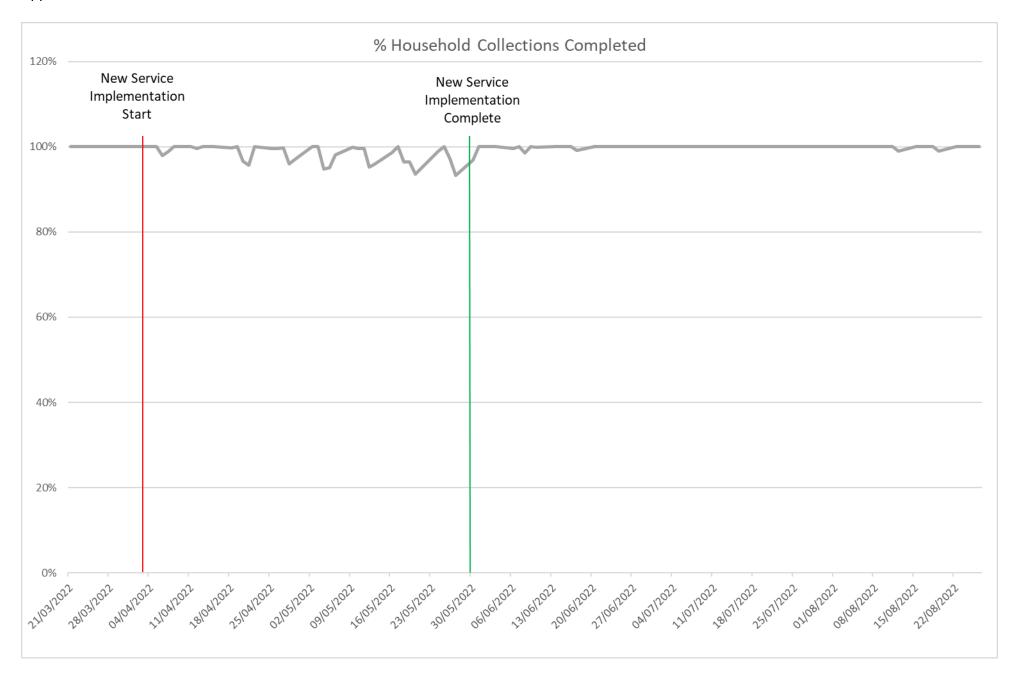
Alternative Options	Not applicable for scrutiny – options are being sought for consideration before final action plans are agreed.								
Consultation	All officers and members involved in key decisions were contacted (as was practicable).								
Financial Implications	 Council on 14 December 2021 approved the following budgets for the implementation of dual stream recycling: Capital and transition costs – Total £329,000 funded by contributions from Lichfield DC of (£193,000) and Tamworth BC of (£136,000). Central Assumptions Revenue Cost – Total up to 2025/26 of £1,038,000 less cost sharing with Staffordshire CC of (£504,000) results in a cost to the Joint Waste Service of £534,000. This is funded by contributions from Lichfield DC of (£310,000) and Tamworth BC of (£224,000). 								

	The full implementation of the new approach to dual stream recycling is ongoing and a number of next steps are proposed as part of the review. Therefore at this stage it is difficult to accurately project the ultimate level of any additional costs compared to the Approved Budget. However, once the implementation including the proposed next steps is sufficiently complete, the full costs of the implementation will be determined and provided to the relevant Committees.
Approved by Section 151 Officer	Yes
Legal Implications	Procurement matters relating the dual stream implementation are still sub-judice and therefore exempt from publication until a legal resolution is in place. Sections of the report have been redacted from publication on this basis but will be available for members to consider in the confidential section of the agenda.
Approved by Deputy Monitoring Officer	Yes
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Contribution to the Delivery of the Strategic Plan	Improvement of recycling rates is a key outcome for the Council Delivery Plan. This report seeks to clarify the lessons learned for future projects and an action plan to take the service forward.
Equality, Diversity and Human Rights Implications	None relevant to the review
Crime & Safety Issues	None relevant to the review
Environmental Impact	Clearly recycling rates will be impacted by the scheme and tracking has begun. It is still to early to draw conclusions from the data but there are encouraging signs of reduction in refuse, which is a key outcome to support delivery of the Strategic Plan.
GDPR / Privacy Impact Assessment	None relevant to the review. Relevant exemptions have been applied.

	Risk Description & Risk Owner	Original Score (RYG)	How We Manage It	Current Score (RYG)
Α	Publication of the report will jeopardise any ongoing legal or contractual discussions.	Likelihood: Red Impact: Yellow Severity of Risk: Red	Exemptions applied in line with the Local C	Likelihood: Green Impact: Yellow Severity of Risk: Green
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None	Relevant web links
	Cabinet 12 October 2021 and Council 14 December 2021
	Cabinet 7 September 2021 and Council 9 November 2021 Dual Stream Recycling Financial Matters update
	Introduction of Dual Stream Recycling in 2022 & Associated Financial Matters
None	Background documents

Appendix 1



Appendix 2

	Week 1	Week 2	Weeks 1&2	Week 3	Week 4	Weeks 3&4	Cha	inge	Week 5	Week 6	Weeks 5&6	Chan	ge
	w/c 30.05.	w/c 06.06.22	Total	w/c 13.06.22	w/c 20.06.22	Total	Count	%	w/c 27/06/22	w/c 04/07/22	Total	Count	%
Paper & Card	99,040	92,500	191,540	97,640	92,850	190,490	- 1,050	-1%	93,420	91,180	184,600	- 5,890	-3%
Glass, cans & plastic	166,820	156,550	323,370	183,086	183,482	366,568	43,198	13%	169,020	157,760	326,780	- 39,788	-11%
Residual	683,640	616,480	1,300,120	721,930	611,640	1,333,570	33,450	3%	689,100	610,440	1,299,540	- 34,030	-3%
Organics	380,008	328,690	708,698	358,776	306,300	665,076	- 43,622	-6%	290,930	261,220	552,150	- 112,926	-17%
Comingled	42,940	7,100	50,040	-	-	-	- 50,040	-100%	-	-	-	-	
	-	-	-	-	-	-	-		-	-	-	-	
Missed bins	105	405	510	237	171	408	- 102	-20%	84	158	242	- 166	-41%
Contaminated recycling bins	1,174	1,615	2,789	815	981	1,796	- 993	-36%	411	662	1,073	- 723	-40%
	Week 7	Week 8	Weeks 7&8	Cha	inge	Week 9	Week 10	Weeks 9&10	Cha	inge			
	w/c 11/07/22	w/c 18/07/22	Total	Count	%	w/c 11/07/22	w/c 18/07/22	Total	Count	%			
Paper & Card	99,700	100,020	199,720	15,120	8%	99,600	95,740	195,340	- 4,380	-2%			
Glass, cans & plastic	171,940	169,720	341,660	14,880	5%	165,940	161,980	327,920	- 13,740	-4%			
Residual	672,840	624,240	1,297,080	- 2,460	0%	687,735	577,600	1,265,335	- 31,745	-2%			
Organics	266,940	197,580	464,520	- 87,630	-16%	203,820	222,440	426,260	- 38,260	-8%			
Comingled	-	-	-	-		-	-	-	-				
	-	-	-	-		-	-	_	_				
Missed bins	155	155	310	68	28%	174	154	328	18	6%			
Contaminated recycling bins	561	562	1,123	50	5%	519	565	1,084	- 39	-3%			