

REPORT TO:	ENVIRONMENTAL & DEVELOPMENT SERVICES COMMITTEE	AGENDA ITEM: 6
DATE OF MEETING:	25 JANUARY 2024	CATEGORY: DELEGATED
REPORT FROM:	STRATEGIC DIRECTOR (SERVICE DELIVERY)	OPEN
MEMBERS' CONTACT POINT:	GARY CHARLTON – HEAD OF OPERATIONAL SERVICES gary.charlton@southderbyshire.gov.uk	DOC:
SUBJECT:	WASTE COLLECTION ROUTE OPTIMISATION	
WARD(S) AFFECTED:	ALL	TERMS OF REFERENCE:

1. Recommendations

- 1.1 That the Committee approves the changes to the collection days in the areas set out in the report.

2.0 Purpose of the Report

- 2.1 To update the committee on route optimisation and seek approval to commence business transformation to optimise waste collection routes. This change requires day changes to circa 811 residential properties across the District.

3.0 Detail

- 3.1 Operational Services currently provides household waste collection services to over 51,300 residential properties spanning 2500 streets across the District. The waste collection routes currently in operation were derived from analysis work carried out over ten years ago, although there have been modest updates in recent years. Since 2019 the District has grown by more than 5000 dwellings, with the current rounds being based on streets, not individual properties, which has led to imbalanced rounds.
- 3.2 In 2020 a project to use a route optimisation consultancy (Webaspx) and route optimisation software was approved, however due to the loss of key individuals within the service this work was halted until early 2023. A full review of waste collection services routes has been undertaken and the best deliverable options have been reached.
- 3.3 The reviewed routes have taken into account the varied nature of the rural, semi-rural and urban collection areas. The principle to the proposed changes is to create a rural collection vehicle for each waste stream (refuse, garden & recycling) this vehicle will be required to travel significant miles but have far fewer collections, this will allow for the remaining rounds to be within high density urban and some semi-rural areas. The

hours worked for each team will also be levelled out by taking this approach as each round will be tasked with similar levels of collections.

- 3.4 The revised rounds require five refuse freighters to complete standard waste (black bin) collections, five refuse freighters to complete garden waste (brown bin) collections and six refuse freighters to complete the mixed domestic recycling collections. In addition, route optimisation reviewed ancillary activities and the service will have one dedicated trade vehicle and one dedicated HTA (hard to access properties) vehicle.
- 3.5 Currently within the service we have sufficient refuse freighters to deliver the new round. For fleet planning the completion of route optimisation has given clarity to the number of refuse freighters needed to deliver the service over the medium term and will form a key component of the Fleet Replacement Strategy.
- 3.6 The route optimisation review highlighted a total of 811 properties which require a day change to facilitate the best possible outcome for efficiencies. The majority of changes (over 550 properties) will come from the village of Shardlow moving from Tuesday to a Monday collection. Other smaller street areas affected are in Dalby, Oslosten, Radbourne, Sutton on the Hill, Thurstaston, Trusley and Etwall with these moving from a Monday to a Tuesday collection. Appendix A provides a full list of the streets affected by area.
- 3.7 Working through the desktop analysis and vehicle testing a sample of rounds, the waste collections team are satisfied that these changes will provide the optimum level of collections for each team, whilst still allowing for some growth to collection areas. It should be noted that due to property growth within the District it is now advisable that route optimisation exercise is carried every two years to ensure a maintained balanced approach to collections.
- 3.8 Subject to approval the proposed changes would come into operation week commencing 26 February 2024. Colleagues in customer services have indicated that this timescale is suitable for any potential spike in customer contact. Communication with affected residents will commence w/c 29 January 2024, with letter drops to each affected property delivered by the Operational Services team. Any resident who's bin was missed by the day change will have a follow up collection on the Saturday of that week.

4.0 Financial Implications

Value for Money

- 4.1 In terms of anticipated revenue budget savings, the revised routes anticipate a reduction in miles travelled and thereby fuel usage. With the inclusion of a dedicated rural round the average expected reduction in mileage is 20 miles per day, over 5000 miles per annum.
- 4.2 The route optimisation review will generate substantial efficiencies for the team collection by creating balanced collection rounds which are more consistent in size, timings and are achievable to be completed with the lowest possible resource use.
- 4.3 The route optimisation review will provide improved planning for customers that require assistance or additional support. The balancing of collection numbers to each round

will give spare tonnage capacity to vehicles and present opportunities for growth to the in-house trade waste collection service.

5.0 Corporate Implications

Employment Implications

5.1 None

Legal Implications

5.2 None

Corporate Plan Implications

5.3 The proposals align with the key Council Plan aim that “Our services have the right resources and are modern, responsive, efficient and effective”.

Risk Impact

5.4 Implementing new collection routes carries a reputational risk. Utilising route optimisation allows for routes to be determined whilst taking into account operational variables, increasing confidence that new routes will work in practice minimising both cost and reputational risk.

6.0 Community Implications

Consultation

6.1 None required.

Equality and Diversity Impact

6.2 None

Social Value Impact

6.3 None

Environmental Sustainability

6.4 Less fuel used by reducing vehicle mileage will lead to an emission saving of an estimated 2000kgs in CO, achieved through the redesign of more efficient routes.

6.5 Continually updating optimised routes at the point new properties come on stream will ensure the Council always achieves the lowest mileage, fuel use and CO2 emissions possible given the type of vehicles currently in use.

Appendix A

Collection Day Change = Tuesday WK2 to Monday WK2		
Street Name	Town/Village	Number of properties
Alts Nook Way	Shardlow	18
Ambaston Lane	Shardlow	15
Aston Lane	Shardlow	1
Canal Bank	Shardlow	17
Cavendish Close	Shardlow	21
Cavendish Court	Shardlow	15
Cheal Close	Shardlow	59
Clover Court	Shardlow	20
Cowlishaw Close	Shardlow	13
Derwent Court	Shardlow	4
Glenn Way	Shardlow	52
Great Wilne	Shardlow	13
London Road	Shardlow	87
Long Row	Shardlow	34
Mill Green The Wharf	Shardlow	24
Millfield	Shardlow	14
The Maltings	Shardlow	10
The Wharf	Shardlow	49
Wakelyn Close	Shardlow	11
West End Drive	Shardlow	46
Wilne Lane	Shardlow	29
Collection Day Change = Monday Wk1 to Tuesday Wk1		
Street Name	Town/Village	Number of properties
Radbourne Lane	Dalbury	1
Cropper Lane	Osleston	31
Osleston Lane	Osleston	1
Tithebarn Lane	Osleston	3
Watery Lane	Osleston	3
Church Lane	Radbourne	10
Gardens Cottages Radbourne	Radbourne	2
Radbourne Common	Radbourne	16
Radbourne Lane	Radbourne	7
Radbourne Village	Radbourne	13
Silverhill Farm Court	Radbourne	3
Acre Lane	Sutton on the Hill	2
Ash Lane	Sutton on the Hill	1
Back Lane	Sutton on the Hill	14
Brook Lane	Sutton on the Hill	11
Church Lane	Sutton on the Hill	4
Common Lane	Sutton on the Hill	7
Common Piece Lane	Sutton on the Hill	7
Dish Lane	Sutton on the Hill	14
Field View	Sutton on the Hill	1

James Lane	Sutton on the Hill	1
Keepers Cottage	Sutton on the Hill	1
Marlpit Lane	Sutton on the Hill	13
Rectory Farm	Sutton on the Hill	3
Rectory Farm Cottages	Sutton on the Hill	1
Schoolpiece Lane	Sutton on the Hill	1
Sutton Hall	Sutton on the Hill	1
Bleak End	Thurvaston	1
Brookley Meadows	Thurvaston	1
Burrows Lane	Thurvaston	3
Church Close	Thurvaston	1
Culland Lane	Thurvaston	1
Glebe Close	Thurvaston	1
Long Lane	Thurvaston	21
Radfords Rise	Thurvaston	1
Spring Mount	Thurvaston	1
Sunset Meadows	Thurvaston	1
Thurvaston Lane	Thurvaston	11
Gardeners Cottage	Trusley	1
Hilltop Lane	Trusley	1
Home Farm	Trusley	1
Ivy Close Farm	Trusley	1
Taylors Lane	Trusley	7
The Elms Farm	Trusley	1
Trusley Hall	Trusley	2
Trusley Manor	Trusley	8
Trusley Road	Trusley	3
Heage Lane	Etwall	24