

ITEM No ...3.....

REPORT TO: NEIGHBOURHOOD SERVICES COMMITTEE – 10 JANUARY 2022

REPORT ON: RECYCLING IMPROVEMENT FUND - PURCHASE OF ADDITIONAL ROUTE OPTIMISATION SOFTWARE AND IN CAB UNITS

REPORT BY: EXECUTIVE DIRECTOR OF NEIGHBOURHOOD SERVICES

REPORT NO: 9-2022

1.0 PURPOSE OF REPORT

1.1 To seek approval for the purchase of additional route optimisation software and in cab units.

2.0 RECOMMENDATIONS

2.1 It is recommended that Committee approve the purchase of additional route optimisation software and in cab units.

2.2 It is recommended to direct award the purchase of additional route optimisation software and in cab units to Integrated Skills Limited (ISL), Leeds, via their partnership with Bramble Hub. ISL provide existing software and in cab units to both Waste Management and the Roads Maintenance Partnership. Corporate Procurement has advised that the award can be made via the Crown Commercial Service (CCS) Framework RM3821 Lot 1b. If approval is granted, installation will be completed by 31st March 2022.

3.0 FINANCIAL IMPLICATIONS

3.1 The Executive Director of Corporate Services advises that the cost of the installation can be met with the grant funding of £87,962 awarded by Zero Waste Scotland from the Recycling Improvement Fund.

3.2 Recurring revenue costs for the operation of the additional software, licences and subscriptions can be met from allowances within the existing Neighborhood Services revenue budget.

4.0 BACKGROUND

4.1 A bid for funding was submitted in July 2021 from Dundee City Council to the Recycling Improvement Fund administered by Zero Waste Scotland. In December 2021 confirmation was received, that in principle funding has been awarded for the purchase of additional route optimisation software and in cab units.

4.2 Route optimisation software is used to plan efficient waste collection routes daily, weekly or monthly. Algorithms produce efficient and reliable routes using detailed information on bin type, location and specific issues in relation to households (e.g. assisted collections). The software also considers road conditions and known roadworks, as well as vehicle capacities and service time windows to provide the optimised solution.

- 4.3 Once routes are optimised with routing and health and safety data processed, the information is relayed to in-cab tablets which allow for real time recording and reporting. Overall, the software helps to avoid any potential inefficiencies of existing routes, reduces excess mileage, enhances customer service, and provides an opportunity to reduce operational costs and can be tested as part of future collection changes and alternative scenario planning.
- 4.4 Route optimisation software and navigational tools has been implemented successfully, initially within a small number of refuse collection vehicles. The grant provided through the Recycling Improvement Fund will allow this technology to be rolled out across the wider waste management fleet, ensuring further route efficiencies to be introduced.
- 4.5 The funding also permits in-cab tablets to be fitted to refuse collection vehicles, covering all waste streams. The navigational tools used in the vehicles reduces the need for paper maps and route sheets as data is recorded and displayed digitally. Health and safety guidance and customer notes can all be displayed on the navigation devices, assisting waste crews with clear advice within specific routes.
- 4.6 It is anticipated introducing the software across the operational fleet will contribute to improving the quality and quantity of recyclable materials collected. For example, the software allows real time reporting by collection crews in instances of contaminated bins which allow householders to be notified to ensure the correct materials are deposited in the correct recycling bins.
- 4.7 Carbon savings would be achieved through an overall reduction in mileage travelled by vehicles due to more efficient routing and the ability to recover more waste for recycling rather than energy from waste or landfill.
- 4.8 This will aid Dundee City's progress towards 2025 waste and recycling targets and Scotland's net-zero carbon commitment. The implementation of route optimisation software by 2022 to improve the operational efficiency of collection routes is a stated action within Waste & Recycling Action Plan & Strategy 2020 – 2025.

5.0 POLICY IMPLICATIONS

- 5.1 This report has been subject to an assessment of any impacts on Equality and Diversity, Fairness and Poverty, Environment and Corporate Risk. There are no major issues.

6.0 CONSULTATIONS

- 6.1 The Council Management Team have been consulted in the preparation of this report and agree with its contents.

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7th December 2021