



To: Executive Councillor for Environmental and Waste Services
Report by: Jas Lally, Head of Refuse and Environment
Relevant scrutiny committee: Environment Scrutiny Committee
Wards affected: All Wards

PROJECT FOR THE ROUTE OPTIMISATION OF REFUSE AND RECYCLING COLLECTION SERVICES.

Key Decision

1. Executive summary

- 1.1 The procurement of a route optimisation software capability, in conjunction with the other districts from the RECAP (Recycling for Cambridgeshire and Peterborough) Partnership, is in its final stages, with a fully operational system anticipated to be in place by 1st June 2011.
- 1.2 A comprehensive program of data manipulation and checking will be undertaken over several months to ensure that the systems is able to accurately map routes based on bespoke knowledge of our city ensuring impacts such as traffic, schools, and resident participation are considered before mapping new collection routes.
- 1.3 Routing of collection rounds has not been undertaken since the introduction of alternate weekly collections in October 2005; and the City has changed, evolved and developed significantly since this time. The use of software for route optimisation is now considered best practice. It is anticipated that fuel and carbon savings can be achieved by undertaking this project as well as a potential for a rationalisation of the collection vehicle fleet.
- 1.4 As a result of the route optimisation project we will undertake comprehensive communication with residents and stakeholders hence the advanced timeline for this project. The planning and Union negotiations that may be required will mean that the time frame for the project will not fit with the scheduled Environment Scrutiny Committees.

2. Recommendations

The Executive Councillor is recommended:

- a) To approve the decision to delegate to the Executive Councillor in discussion with the Head of Refuse & Environment the authority to implement changes to refuse and recycling collection service as a result of the route optimisation project.
- b) To provide a briefing at a later date to committee Members and other interested Councillors about the changes to be implemented.

3. Background

3.1 This project includes the development of a compatible in-house route optimisation capability for the RECAP partnership and undertaking route optimisation in waste services within the two partner areas of Cambridge City and Huntingdonshire. It will also include developing and agreeing a strategic approach to partnership route optimisation in support of advanced partnership working.

3.2 Both Cambridge City Council and Huntingdonshire District Council have immediate route optimisation needs for refuse collection and kerbside recycling services (commercial waste services to be included within Cambridge City) to achieve the most efficient and effective operational approach to waste management, with a view to the system being available for reviewing other cyclic services such as Grounds Maintenance and Street Cleansing in the future. In addition, South Cambridgeshire intends to undertake a route optimisation work following introduction of a new recycling collection service in October 2010.

3.3 The project objectives are:-

- To reduce the cost of refuse & recycling operations at Cambridge City Council from the 2011/12 base budget in time for 2012/13 financial year.
- To reduce the fuel usage based on 2010/11 figures and consequently carbon emissions from the refuse & recycling fleet at Cambridge City Council by April 2012.

These will support the Council's vision by enabling the Council to minimise its impact on the environment from waste and pollution.

3.4 A formal review of boundaries between Cambridge City and South Cambridgeshire District Council is underway, due to the amount of growth on the fringes of administrative boundaries over the last 20 years. The capability to map rounds across the boundaries will

support this work in relation to waste management and other cyclic services in establishing where efficiencies in service provision can be gained in the decisions regarding which operational base will carry out services in boundary areas.

- 3.5 Cambridgeshire and Peterborough will see some of the greatest amount of growth in the UK, with current population estimates, showing an increase of around 17% on 2009 figures by 2016. With this expansion of population it is anticipated that property numbers will grow by approximately 6,700 in the next 5 years. The ability to effectively review and develop rounds for the City and across the partnership on an ongoing basis will enable partners' more efficiently respond to the growth agenda.
- 3.6 It is proposed to undertake an extensive program of mapping our existing collection services using both data from existing CRM systems and knowledge from staff undertaking collections.
- 3.7 A series of adjustments to the data will take place to take account of working practices for example single sided collections on busy roads, high risk collection areas for example schools during the start and finish of the school day and traffic for example rush out trunk roads and rat runs.
- 3.8 It will then be possible to map and model a series of scenarios, which will offer options available for consideration. These options may include collection day changes and changes to working practices of staff. The implications of the options will vary and are likely to be proportionate to the saving both in carbon and financial that can be achieved.
- 3.9 The model options will then be benchmarked against our existing services and the project objectives.
- 3.10 It is intended that residents will have bins emptied on the same day of the week in a similar format to the current system with black bins collected one week and blue and green bins collected the following week.
- 3.11 Alternative working patterns will be modelled, for example the four-day week recently adopted by Peterborough City Council. These alternative models will also be bench marked against existing working patterns.

Communication

- 3.12 The project aims to identify efficiencies in collection services. It is likely that the most efficiency can be gained by changing collection days for residents in some or all areas, which may cause confusion and disruption and consequently will impact on residents. Communication with residents will be carefully prepared to reduce the risk of disruption and ensure a smooth transition through any change.
- 3.13 Communication will be considered in a variety of formats including web based information, area committee meetings, Cambridge Matters magazines, communication with resident groups and individual letters.
- 3.14 Briefings will be arranged for Members to fully explain the changes and the reasoning behind the decisions.

4. Implications

Human Resources

- 4.1 The undertaking of this project has human resource requirements in addition to normal duties for all staff involved in ensuring the system has accurate data. This includes both office and operational staff.
- 4.2 Some of the scenarios mapped will significantly impact on staff. This will include mapping the best, anticipated achievable savings. This may result in a reduction in fleet and consequently staffing levels. This may also result in changes to staff working patterns and consequently staff terms and conditions, for example if a four-day week working pattern is considered. The decision to implement the optimisation findings will be made in consultation with the Executive Councillor where any implications, which may impact on staffing levels, will be highlighted.
- 4.3 Any staffing level changes or changes to terms and conditions will be managed in accordance with the Organisational Change Policy.

Financial

- 4.4 Potential savings resulting from route optimisation work in Cambridge City have been estimated at £150k per annum. This was included in the budget report approved in the last cycle.

Environmental

- 4.5 It is anticipated that the project will have a positive impact on carbon emissions by reducing the fuel used by the collection fleet.

Stakeholder

- 4.6 Change is likely for a proportion of residents. The level of collection day changes will be discussed in full with the Executive Councillor for decision. The extent of changes to collection days can be altered based on a balance of change versus efficiency savings and environmental benefit.
- 4.7 The collect and return service will continue to be offered to elderly or disabled residents.

5. Background papers

These background papers were used in the preparation of this report:

RECAP Partnership Project Initiation Document for Route Optimisation.

6. Appendices

7. Inspection of papers

To inspect the background papers or if you have a query on the report please contact:

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