

As local authorities strive to meet EU waste targets under constrained budgets, many are looking to improve the efficiency of waste collection services. With population growth and housing developments also contributing to increases in service demand, councils are under more pressure than ever before.

Newcastle City Council is one local authority that has made significant cost savings and improvements to its waste services. Using a combination of Ordnance Survey data, available through the Public Sector Mapping Agreement (PSMA), geographic information system software and vehicle tracking, the council has worked with a software solution, RouteSmart, to redesign its waste management collections.

The PSMA offers public sector organisations access to geographical datasets to help better plan and deliver services. The main purpose of the agreement between the Government and Ordnance Survey is to promote more effective joint working between public bodies. Any organisation in the public sector in England and Wales, regardless of size, can tap into the dataset to drive up efficiencies.

In 2010, Newcastle City Council remodelled the refuse collections for 117,000 properties using RouteSmart software aided by Ordnance Survey's OS MasterMap Integrated Transport Network (ITN) – a national road network for Great Britain. It provides a flexible foundation for publishing, transport, telematic and asset management solutions and can be integrated with all OS MasterMap layers.

This enabled the council to reduce the number of required vehicles while still maintaining a weekly service. The routes were also "balanced" in terms of working hours, with each crew having the same amount of work.

In total, 205 routes were remodelled or introduced and the project delivered £248,000 worth of savings for the local authority. These savings were recovered through the reduction in fleet numbers, saving £100,000 on vehicle procurement, and a further £148,000 through fuel, crew and vehicle cost

Newcastle City Council's adoption of a software solution has encouraged other local authorities in the Northeast to follow its approach. **Ian Carter** reports

Mapping out efficiencies



Smarter routes for collection

savings. Newcastle's drive for efficient services has not stopped there. In 2012, the local authority reduced its vehicle requirement by a further two while maintaining the same service standards. Plans are being considered to make further efficiencies by moving to managed weekly alternate collections.

Procurement exercise

Following the original project at Newcastle, the North East Regional Improvement and Efficiency Partnership instigated a procurement exercise to use similar technology in other local authorities across the Northeast covering 1.1 million households.

The regional project has now become a reference point throughout the UK, demonstrating the benefits of working in partnership and the ease of planning and providing joint services across individual authorities using routing software. It is estimated that the cost savings across the Northeast is between £3m-£5m each year. At the larger authorities, such as Northumberland, Durham, Newcastle

and Sunderland their joint reduction in annual mileage across services is approximately 444,000 miles, with a corresponding saving in carbon emissions. As well as enabling councils to design new, efficient waste collection routes, the project has also supported the development of routes for the new unitary councils of Durham and Northumberland, which previously comprised seven and six district councils, each with their own depots.

Although a number of local authorities are using Ordnance Survey data to support waste collection, the team at Newcastle has delivered significant efficiencies and benefits.

Not only is the city council adopting similar techniques for other service delivery units such as special educational needs transport, but surrounding local authorities have enjoyed similar success by working in partnership and utilising the data available. ■

For more information and to register for the PSMA, visit:
www.ordnancesurvey.co.uk/psma/

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