



Efficiencies in Refuse Collection Services

To: All Chief Executives, Main Contacts and APSE Contacts

Key Issues

- The period of financial austerity is set to continue
- Projected further reductions are likely to be in the region of a further 20%
- Demand on Council Services particularly in Adult Social care are predicted to rise exponentially in the next 5 years
- Refuse Collection Services have significant budgets and costs and should be as efficient as possible.
- This briefing considers a number of tools available to APSE member local authorities as they strive to be ever more efficient.

1. Introduction

Refuse collection is a service which touches every Council resident and as such is a very important service, for both the residents, and the Council. As a number of Councils will know from experience, changing the way a refuse service is provided carries with it a significant risk, the opportunity for service failure on a huge scale, and reputational damage that can be hard to ever recover from should things go wrong.

For these reasons refuse collection service alterations and changes can sometimes be disregarded or considered too difficult or political sensitive to tackle but this service also comes at a significant cost. During these challenging financial times APSE would suggest the very strategy behind the service should be reviewed along with the performance of the service to identify the opportunity for savings.

The strategy behind a refuse collection service will probably set the benchmark for the costs of the service with different collection and disposal methodologies incurring different cost and income regimes. These strategies can come about as a result of Member direction to reflect the values, aims and objectives of a particular Council or an individual service and may well not be arrived at from a purely commercial perspective. Indeed the

complexity of waste regulation and legislative compliance varies across the four nations of the UK.

Decisions on the very nature of the service need to be the starting point for any review and should be challenged regularly to ensure the decisions arrived at originally remain valid as material recycling, disposal methods and vehicle technologies change, improve and develop to become less costly and to ensure compliance with the changing legislative frameworks.

2. Service Design

A starting point in exploring refuse collection and recycling efficiencies is to consider if you have challenged your initial service design.

A detailed options appraisal should be undertaken to establish what type of service the Council wants to provide:--

- Does the council want to maximise the amount of recycling?
- Does the Council want to maximise its income from recyclates?
- Are residents to become co-producers within a kerbside sorted service?
- Are receptacles and ease of collection factors supporting a large bin or co-mingled service?
- What frequency of collection is desired, monthly, fortnightly, weekly or alternate weekly?
- What nature of materials are going to be collected and by what type of vehicles?
- What are the regulatory requirements under the differing UK government administrations?

All these factors impact on the cost of the service and they can individually be multi million pound decisions with long term implications that once set are very difficult to change.

To source segregate recyclates to maximise income requires a more costly collection regime but returns a higher income yield to offset that cost. To co-mingle recyclates in large bins to simplify collection leads to lower collection costs but may lead to lower value for the material due to a need for secondary processing.

The nature and type of receptacles to be used by the householders to store the waste and the frequency of collections has a huge bearing on service costs. As briefly outlined here there are a huge number of variables and alternative possibilities within the options available at service design stage. The method of service chosen will have implications for both the collection and disposal methodologies to be used by the Council. Indeed both the collection and disposal strategies should be designed to work in harmony with one another which is particularly important in two tier areas.

3. Service Delivery

Are you able to challenge the method of service delivery? This will be another strategic decision to be considered and reviewed periodically and would then concern the very delivery mechanism for the agreed service. Is it provided directly by the council 'in-house' or is the service 'outsourced' via a contract arrangement? If so are there options to insource the service for further efficiencies? Again there are multiple reasons for choosing the methods of delivery and a detailed appraisal taking into account the aims and aspirations of the Council should be undertaken prior to any final decision. Where services are outsourced consideration at the start, not part way through the process, should take into account how contracts will be cost-effectively managed, what key performance standards contractors will be expected to deliver on, what workforce standards will be in place and any wider socio-economic considerations such as social value clauses, skills and jobs.

Whatever service delivery method is chosen against a backdrop of reducing council funding it should be the most cost effective and efficient method available that meets the strategic aims of the Council.

APSE exists to support in-house and local services and recognises there will be pressures to seek cost reductions as a consequence of the current and anticipated squeeze on local authority funding. Reductions in staff numbers are already a reality and APSE advocates that the trade unions are fully involved where any changes to the workforce are planned.

4. Improving Efficiency

A number of opportunities exist to improve efficiency and better understand the service currently provided.

Benchmarking

Previously under the Best Value inspection and CPA regimes a huge amount of performance information was gathered and a great deal of effort went into identifying and ranking services and whole Council performance. Under the current regimes performance data and reporting has been reduced but it is now more important than ever that services can demonstrate that what they are doing is of a good quality and indeed provides good value for money.

APSE has invested many years in benchmarking and the current APSE Performance Networks service has a huge database of cost and quality information across Refuse Collection Services, including information that will assist in process mapping, which is available to Performance Networks members, to enable service managers to compare and understand how their own services are performing.

APSE benchmarking data provides a secure environment from which managers can gain an understanding of how their services perform utilising that information to make better informed judgments and decisions about cost and quality and the value for money of their services.

Performance and productivity

Initially workforce productivity used to be the first point of call and again this needs to be considered. Whilst no organisation has huge resources to undertake time and motion studies it is worth reviewing employee performance on a regular basis. Key considerations could be:-

- Are your residential rounds reflective of optimum performance?
- Are the tonnages collected balanced between rounds and vehicles?
- Are the employees delivering a fair level of performance?
- Are levels of productivity consistent with the quality of the service provided?

The benchmarking of all these inputs and outputs will be a worthwhile indicator of performance but actually 'getting back to the floor' and studying what goes on may pay significant dividends. APSE Solutions have undertaken a number of recent work-studies with member authorities to assist with understanding workforce utilisation and productivity which have provided some helpful and interesting results in assessing performance and productivity.

Technology and route optimisation and design

Refuse and recycling vehicles are expensive resources and should be deployed scientifically.

Refuse rounds should be regularly reviewed and kept digitised for regular scrutiny, routes are usually developed from local knowledge and if held on a file or map they may have remained the same for a number of years. Are routes and rounds still appropriate and relevant to the demands of a modern refuse collection and recycling service?

Route optimisation is the process of planning a set of schedules for Refuse Rounds and other services that are:

- *Resource optimised:* an optimised design minimises the number of vehicles/assets in use, the mileage and the cost;

- *Balanced workloads*: an effective round design makes each round a fair day's work for the crew, irrespective of the type of round or service, whether it is urban or rural in nature.
- *Achievable in practice*: beautiful maps of rounds are of little use if they do not work in practice

One specialist company identified cost savings of 15% from the implementation of their software and users can gain even more benefits with additional investment in associated 'in-cab technology'.

Vehicle type

Multiple vehicle movements in densely populated areas have the potential to cause a noise nuisance, inconvenience and the increased risk of damage to infrastructure and private property. Where materials are collected separately, vehicle movements could be reduced by using multi-compartment vehicles.

Split bodied vehicles able to handle different waste streams at the same collection point and can help to reduce the number of residential visits required and thereby reduce overall collection costs.

New vehicles are usually a significant investment and If new vehicles are needed opportunities to trial vehicles first should be explored, 'try before you buy' involving the workforce who will operate the vehicles usually gives a good indicator on how any new system will perform.

With refuse freighters having a life expectancy of up to 8 years the suitability of vehicles to accommodate additional materials such as food waste or other dry recyclables at some point in the future should not be overlooked. Accepting Council capital investment is also becoming more difficult to secure a specialist study of external financing options with internal procurement and finance teams may enable that ground breaking opportunity to purchase those vehicles and re-design the service unlocking the potential for savings.

Collection streams and frequency

The type, number and frequency of collections have a huge impact on collection costs. Most recently Bury Council elected to revise its 240 litre wheeled bin service over four different waste streams utilising 4 containers.

The significant change was in the frequency of collections with 3 streams moving to a collection frequency of once every three weeks.

- Grey bins (for waste that can't be recycled) to be emptied less often - once every 3 weeks instead of 2.

- Green bins (for paper and cardboard) to be emptied more often - once every 3 weeks instead of 4.
- Blue bins (for glass bottles and jars, plastic bottles, cans and tins, empty aerosol cans and aluminium foil) to be emptied more often - once every 3 weeks instead of 4.
- Brown bins (for garden waste and food waste) to be emptied once every 2 weeks - as they are now.
- Most households will continue to have a collection of at least one type of waste every week.

Bury Council wanted to secure a significant cost saving alongside a substantial increase in its recycling rate. The new service is anticipated to increase the current level of recycling from around 47% to between 55% and 60% by March 2015 and over 60% by March 2016. Should these levels be achieved then disposal savings of £860,000 will be realised. There are also councils in Scotland and Wales that are moving to a three weekly service for some waste streams.

Chargeable waste.

Pay As You Throw (PAYT), also known as variable charging, refers to charging households for the collection, treatment and disposal of their waste. Crucially, it is charged according to the quantity of waste set out for collection, measured by volume, weight, size or number of containers, or a combination of these.

PAYT is controversial as it touches on issues of equity, the relationship between the individual and the State and the 'polluter pays' principle. It has been attacked as a bin tax by some sections of the press and led to privacy fears about the use of microchips in bins.

PAYT schemes have been operating in the US and continental Europe for some time and there is no evidence of increased fly tipping where it has been introduced.

In the UK, existing legislation forbids any sort of charge to be made for household waste collection. The previous government's Waste Strategy (2007) made provision for a number of PAYT pilot schemes, but no local authorities took up the opportunity.

The Coalition Government have now repealed the legislation permitting this, ensuring that it is off the agenda for some time to come. However Councils can charge for discretionary services like bulky waste collection and for garden waste, such charges are often unpopular with the public and can be counterproductive by reducing recycling but more and more councils are raising revenue through charging for green waste collections. Where however there is a good public education campaign, explaining charging strategies, there is anecdotal evidence of a smoother transition to these arrangements.

A BBC survey in June 2012 found that around one in three councils have a charge for the Garden Waste Collection Service and whilst this fluctuates with some Councils removing the charge more and more are now considering introducing charges for the service. Most recently Swindon Council introduced a chargeable service from March 2014 and the target was to save £720,000 in the first year which is highly likely to be exceeded.

Staff engagement and commitment

Refuse Collection Services are also heavily labour dependent, the staff know their jobs well and engaging them in service redesign, whether it be through a structured program or ad hoc workshops, can help to generate a large number of additional ideas that may be worthy of consideration within any efficiency drive.

More importantly good employee engagement impacts positively on levels of absenteeism, on retention, on levels of innovation, on customer service, on positive outcomes in public services and on staff advocacy of the organisations. All these factors will contribute to service cost.

Continued Awareness Raising and Communication

Customer participation within recycling schemes remains of major importance. Any scheme will only realise its full potential if residents are actively engaged with it and place out the maximum amount of material in the appropriate receptacle on the correct day. Continued awareness campaigns and publicising the success of the service can assist with resident engagement, specialist material is readily available for use from the resource library on the Wrap website and from presentations and best practice case studies at APSE advisory groups and seminar events.

5. APSE Comment

APSE exists to support local services and recognises there will be pressures to seek cost reduction as a consequence of the current and anticipated squeeze of local authority funding. The current unprecedented period of austerity is set to continue with an incoming government in May 2015 likely to continue the deficit reduction program and Local Government rumoured to be once again at the forefront of further significant budget reductions - times have never been harder.

Before services valued by residents are stopped we have a duty to ensure the services we provide are as efficient and cost effective as we can possibly make them. A good quality refuse and recycling service that treats waste as a valuable resource can contribute to overall savings targets by being as efficient and effective as possible, thereby reducing the amount the Council spends overall.

For Councils that want to look at service design in more detail APSE can provide cost and quality comparator data via its Performance Networks service and assist with any options appraisal through its specialist APSE Solutions ethical consultancy arm. APSE training also offers a range of supportive courses for waste and project managers to ensure staff have the skills to develop further efficiencies and innovation in frontline service delivery.

This briefing was prepared with the kind assistance of John Jeffrey APSE Associate Consultant and formerly Director of Localities at Cheshire West and Chester Council.

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