

Kerbside Recycling – Experiences from authorities receiving funding from the National Waste Minimisation and Recycling Fund

Appendix XIII: Lichfield District Council

Lichfield District Council

Introduction

Lichfield District Council (LDC) received Round 2 funding to introduce kerbside collection of dry recyclables from difficult to reach households (for example high rise flats, sheltered housing and rural properties). Prior to the start of the project in 2002/03 LDC's BVPI 82a was 19.2% and its BVPI 82b was 23.4%. The combined rates rose from 42.6% to 47.42% by 2004/05.

Description of the collections

Recycling and refuse collections before the Round 2 funding

LDC is situated in South Staffordshire and comprises two main urban populations with a large number of households in rural areas. Waste collection is carried out by its in house Team of Operatives. The authority comprised of approximately 38,000 households.

Lichfield implemented their first kerbside recycling scheme in 1995 using an orange sack. The orange sacks were distributed annually and collected fortnightly and targeted newspapers, magazines, glass, cans, textiles.

The collections took place on the same day as the refuse collection using a caged vehicle, the orange sacks were then taken to a small MRF (materials recycling facility) and hand sorted. By 1997, two thirds of the district, in the more densely populated areas was served by the separate recyclables collection.

LDC operated a weekly collection for refuse using a black sack, two sacks of garden waste were also permitted as part of the service. Both black and orange sacks were provided by LDC.

In 1997 LDC introduced a fortnightly garden waste collection from about two thirds of the households using 240L wheelie bins

By 2001/02 LDC had a combined recycling and composting rate of 26.5%.

The recycling rate became steady but as the scheme was rolled out to include other properties, the methods used for sorting materials became difficult to manage and LDC had no secure long term contracts for the sale of materials. As part of a best value review of waste management it was decided there was a need to take full and detailed reviews of LDC's recycling and refuse collection services.

With cross party support and an active Community Services Portfolio Member, Officers and Members researched for 12 months the various options for waste collection. After the findings of the site visits and research, LDC embarked upon a major consultation exercise, where they sent out a summary of the full consultation document to all households within the District, attended 25 Roadshows across the district, with a media campaign to coincide with the roadshows. A full consultation document was also sent to other stakeholders and organisations.

After the consultation a report and proposal were submitted for Member approval, and following approval it was decided to introduce a fully integrated waste collection scheme, placing the emphasis on recycling. Households would be given 2 boxes, where kerbside collection is feasible, for dry recyclables (38L box for paper and card and 55L box for glass, plastic and cans plus textiles), and to include areas of high population density with gardens that would also be included in the garden waste collection scheme using 240L bins. A 240L wheelie bin would be provided for residual waste.

Dry recyclables would be collected weekly, garden and refuse would be collected on alternate weeks. Dry recyclables would be sorted at the kerbside into newspapers and magazines, cardboard, mixed steel and aluminium cans, plastic bottles, textiles and mixed glass. Kerbsider vehicles would be used for the dry recyclables and Rotopress vehicles for the garden waste and refuse collections.

As part of the implementation of the new waste collection service, there was a major communications and media campaign planned, once again with roadshows, press releases, letters, leaflets, public meetings and surveying of areas with access difficulties that had been identified by Team Leaders on refuse and recycling crews. There was also an intensive training programme for staff and crews. During the implementation period, in anticipation of some adverse public response, a frequently asked question (and answer) pack was provided to all Members to enable them to effectively deal with any complaints brought to them on the new arrangements. Strong Member support for the system assisted in getting it implemented smoothly.

Distribution of the bins and boxes was carried out within a 6 month period, the first containers to be delivered were the boxes. This enabled householders to familiarise themselves with the weekly dry recyclable collection starting in July 2002, prior to the changeover to an alternate weekly collection of refuse and green waste commencing September 2002. An additional bin was available to households of 5 or more people or families with babies and children under 3 years using disposable nappies (as part of the campaign to encourage the use of real nappies, householders were requested to fill in a questionnaire), but visits were made to all residents requesting a larger bin. No side waste is collected but residents can have as many recycling boxes as they request.

With this three stream collection LDC managed to raise its combined recycling and composting rate to 42.6% in 2002/03.

It was identified however, that following changes to the waste collection, that certain areas of the district were not covered by separate collections due to access issues and the cost of providing specialised collections. LDC decided to bid for Round 2 funding to provide a fair and equitable service across the district, and had identified 6,500 hard to reach households as not having access to kerbside collections for recycling and garden waste collections.

Kerbside Recycling Experiences

Collections funded from Round 2 NWMRF

Funding of £410,000 was provided by Round 2 to set up 40 “Eco-box” mini recycling centres to serve 1,500 multi-occupancy properties. Eco-boxes comprise a standard 240L or 360L wheelie bin inside a plastic outer casing. In addition 10,000 boxes (5,000 38L and 5,000 55L) were purchased for weekly dry recyclables collection from 5,000 remote rural properties. Also 3 Kerbsider vehicles were added to the current fleet via a leasing agreement to service the collections, one being specially fitted with a bin lift so it could service the Eco-boxes.

Different coloured Eco-boxes are used for different materials: yellow for plastic; grey for glass; blue for paper (no card); and brown for cans. Eco-boxes are emptied weekly.

Roll-out of the collection

The collections to the rural areas were implemented in April 2003 with boxes being delivered prior to receiving the collections. Leaflets were provided with the containers informing householders how to sort and present their waste and recyclables. As the properties had already been provided with bins for garden waste and switched to an alternate week collection the only new aspect was the recycling boxes.

The roll-out of the Eco-boxes was more protracted as site visits had to take place and negotiations held with landlords and wardens on the operation of the service and to find the most suitable sites – ideally outside and not in a bin store, in a convenient location for residents but such that the visual and possible sound impacts were minimised. LDC found that landlords were hard to contact but their agreement was necessary before the Eco-boxes could be delivered. On the whole, residents were keen to have convenient recycling facilities.

Three additional customer service staff were employed for a full 12 months, including the roll-out period of the Round 2 funded collections, so that any issues could be handled quickly. Two of the staff were part time and one was full time and they were employed three months prior to implementation. Project staff met weekly and all operations staff and the portfolio member attended these meetings. A re-structuring exercise was carried out to align finance and HR more closely with operations.

Communications and promotion of the collection

A new leaflet was created for the households included in separate collections as a result of Round 2 funding. These leaflets were delivered with the boxes to rural properties.

On-site visits were made to wardens and landlords of multi-occupancy properties.

Performance of the collection

It is difficult to estimate precisely the additional tonnages recycled as a result of the project, over the last two years there has been major development of new properties within Lichfield District which has had an impact upon the collections rounds. Also, the rounds have been revised to incorporate the new properties so that the three new vehicles do not just service the 6,500 hard to reach properties.

Overall, 9,395 tonnes of dry recyclables were collected in 2004/05 from 39,587 households which was equivalent to 237kg/household/year. In the same year 11,242 tonnes of garden waste were collected from 36,500 households i.e. those which are not multi-occupancy, equivalent to 308kg/household/year.

Total waste arisings have increased slightly since 2001/02, before the box collections commenced. In 2001/02 total waste arisings were 42,766 tonnes and in 2004/05 were 43,722 tonnes, an increase of 956 tonnes or 2% on 2001/02 tonnages.

A participation survey, funded by WRAP is due to take place during January 2006. Feedback from the crews suggests that participation is high in all the collections.

Standard collection costs

It is difficult to compare collection costs between authorities for many reasons including contracting out versus in-house service, lease versus purchase of capital equipment, accounting practices, etc. Therefore, for the purpose of the case study analysis, Kerbside Analysis Tool (KAT) has been used to estimate a standardised cost for each collection. It should be stressed that the use of KAT is to overcome difficulties in comparing a service that is operated and paid for in a number of different ways across authorities and not as a reflection of perceived inaccuracies in the audited or declared costs for individual authorities.

KAT uses information on the infrastructure actually employed to carry out the collection, for example the number and type of vehicles, and applies a unit cost, uniform depreciation and financing. **The standard costs calculated by KAT are not the same as the price paid to a contractor for operating the service or the same as the costs that appear in the audited accounts of the authority.** However, they enable a fair comparison between authorities of the costs of running kerbside collections.

Standard costs have been estimated for all the kerbside collections operating in the authority including refuse collection, regardless of if they were funded by Round 2 or not. It is sometimes impossible to separate out the elements funded by Round 2, for example if it only covered part of a collection or if it replaced an existing collection. Therefore, the cost analysis can only be undertaken at an authority wide level. Refuse collection costs are included as well as those for recyclables collection because it provides a useful base reference against which to compare the costs of the recyclables collections, refuse collection costs not being uniform over the country.

The cost analysis is for the financial year 2004/05 and can therefore be directly related to the performance above.

The standard collection costs for the refuse and kerbside collections in LDC are presented in Table 1. All the costs are **gross**, i.e. do not include any benefits from the sales of materials or from the receipt of recycling credits if payable.

Kerbside Recycling Experiences

Table 1: KAT standard gross collection costs for household waste collected at the kerbside

Collected stream	Round 2 funding	Total households served	Collection frequency	Tonnes collected 04/05 (T)	Collection cost per tonne (£)	Collection cost per household (£)
Refuse	–	39,587	Fortnightly	23,085	39	33
Garden	–	36,500	Fortnightly	11,242		
Sorted dry	For 6,500 hlds	39,587	Weekly	9,395	147	33
Total		39,587		43,722	62	68

When considering the costs presented in Table 1 it is essential to remember that they cover the collection of household waste/recyclables only, i.e. trade waste is not included, and additional costs for spare vehicles, depots and other support costs relating to collection are not included. Post collection costs, such as gate fees for refuse, MRF processing and composting, and ancillary costs such as for promotion, education, call centres and communications are also not included. Depending on the extent of these facilities and activities, and also the level of recycling credits or sales revenues, the standard KAT cost may be lower or higher than the audited accounts and a direct comparison is impossible.

Lessons learnt

Overall, Officers are proud of all of the recycling and composting collection services. They feel that the schemes have been well accepted and are very successful. Outlined below are the positive elements from the last 4 years, including:

- organising the communications programme which Officers feel should be continuous and drip fed to householders in order to establish sorting waste as “the norm”;
- feedback from the public on communications has been very positive;
- taking on three additional staff, one of whom has been retained, to deal with queries, although officers felt that even higher staffing levels would have been beneficial;
- running the consultation process which was well received by the public;
- organising good press coverage or responding to negative press quickly and positively;
- strong leadership from the Chief Executive who has a background in environmental services;
- strong Member cross party support who showed a united front despite complaints from householders;
- recognition by LDC that waste collection is an important service which needs good customer relationship management;
- promoting a good team spirit among the crews and a positive working atmosphere together with providing supportive training; and

- positive feedback on LDC's high recycling rate which means more householders are doing more to recycle their waste.

Some of the less positive aspects of the collection schemes were:

- anticipated volumes were based on the experience in Daventry but this did not correlate well to Lichfield, leading to the initial collections being overwhelmed by materials; and
- under resourced collection crews led to an increase in calls to environmental services because recyclables collections were delayed.



Developments following the Round 2 funding

Most of the vehicles used to collect dry recyclables (except those purchased with Round 2 funding) are approximately 4 years old and at the stage when their lease can be broken. LDC wishes to move to co-mingled collection with compaction of materials to reduce collection costs. Split 'Twin-pack' vehicles will be used, with a 70/30 split. It is anticipated that 70% of each vehicle will be used for paper and card (or depending on the markets, just newspapers and magazines).

The authority has identified a new partner, RU Recycling who will separate the materials at a proposed MRF in Derby. (RU recycling has pioneered the automated MRF in another case study authority, Blackburn with Darwen).

Materials will first be taken to a transfer station in Burntwood for bulking and baling. LDC will pay a gate fee for the service and receive income from their contractor from the sale of materials with the gate fee expected to decrease as the tonnages collected increase. LDC

Kerbside Recycling Experiences

hopes to reduce the number of vehicles it uses for dry recyclables collection from 9 to 6 (plus one cage vehicle for rural areas).

LDC is part of the South Staffordshire Waste Partnership, which represents 5 WCAs. The partnership is seeking secure treatment options for biodegradable waste including kitchen waste, particularly as the authorities have faced planning issues finding sites for open windrow composting. It is hoped that 50% of households will be served with kitchen and garden waste collections by spring 2006, with 100% of households served by April 2007. The option of including card with green waste is to be investigated.