Basic Costings for a Borough-Wide Rollout of Food Waste Collection Services from Flats

July 2016

The recent flats food waste trials allowed us to create a rough model of what a borough wide rollout of this service would look like from a cost perspective.

Increasing waste diversion from disposal would be the only source of "revenue" in this model, based on a menu-pricing differential of £14.68 per tonne and assuming the average amount collected from individual properties was 0.6 kg/household/week. The model also assumes 2,400 flats sites.

				Total Saving
kg/hh/wk	Properties	Total Diversion (T)	Diversion Saving per tonne	(annual)
0.6	44,000	1,372.8	£14.68	£20,152.70

The capital costs of this rollout are explored below:

Total

Item	Number	Cost per unit	Total Cost
Bin Housings	2400	£305	£732,000
240/140 bins	2400	£19.23	£46,152
7L Caddies	44,000	£1.17	£51,480
Leaflets	44,000	£0.10	£4,400
Bin Stickers	2400	£0.95	£2280
Total			£836,312

The cost for the bin housings assumes a roughly even split of 240 and 140 litre bins (which cost £310 and £300 respectively). It is also assumed that the number required would be approximately one per flats site, with some requiring multiples and other unsuitable for the service.

Both the Bin Housings and the bins themselves could be replaced with a single, low cost unit. Though not as attractive as the one used in the trials, similar ones have been used in other local authorities with some success. Both budget lines here could be replaced with a single one totalling £120k at £50 per unit.

Operational running costs of the scheme are detailed below (all are per annum):

Item	Number	Cost per unit	Total Cost
Liners (roll of 26)	264,000	£0.52	£137,280
Delivery of Liners	44,000	£0.13	£5,720.00
Vehicle and crew	3	£100,000	£300,000.00

£443,000.00

This model is based on each household receiving one roll of liners every two months. The vehicle and crew line includes purchase cost and depreciation over 7 years plus all vehicle extras (MOT / Fuel etc) and crew salaries for one driver and one loader. The number of crews is a product of the average number of sites the flats recycling crews currently have on their rounds (189 per day) determining the round size here based on a five day working week.

All lines relating to the purchase and delivery of liners can be removed if the operational and political decision to go ahead without resupply of these is made. Alternatively, an alternative solution involving residents containing their food waste in ordinary plastic bags can be sought in partnership with the AD plant and the NLWA.

Below is a minimum expenditure model where we use the cheapest bin/housing option detailed above and do not continue delivering liners past the initial roll.

Capital Costs				
l ¹	tem M	Number	Cost per unit	Total Cost
Bin Housings		2400	£50	£120,000
7L Caddies		44,000	£1.17	£51,480
Leaflets		44,000	£0.10	£4,400
Liners (roll of 26 with caddy)		44,000	£0.52	£22,880
Bin Stickers		2400	£0.95	£2,280
Total				£201,040
Operational Costs (per annum)				
Vehicle and crew		3	£100,000	£300,000.00
Total				£300,000.00

Even with the most optimistic financial conditions this service would never generate a net saving unless disposal costs were to rise dramatically. Any decision to pursue this roll out would have to be justified through other means such as service equality for flats or a desire to do whatever is necessary to meet our recycling targets.