

Appendix 5a

FINANCIAL MODEL

Garden Waste - Basingstoke & Deane District Financial Model

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This model has been prepared for our client:

Project Integra

The model should not be distributed further without the prior written consent of Jacobs Babtie.
This model has been prepared by Jacobs Babtie from information supplied in connection with this

Jacobs Babtie retains ownership of this model.

May 2005

**Basingstoke and Deane District Council
Assumptions**

Demographics	
Total targeted households council area	38,342
Household growth	1.50%

Productivity & Vehicle Crew	
Productivity properties collected per man per day	300
No of Drivers per vehicle including driver	1
No of Loaders per vehicle including driver	1
Total productivity per vehicle (hh/v/day)	300
Driver cost	22000
Loader Cost	20000
Labour per vehicle	42000
Spare crew ratio	0

Assumed that residual workforce can cover

Vehicle Cost	
Total Cost of 6x4 R.C.Vehicle	120000
Spare vehicle requirement ratio	0
Fuel Economy (km / l)	1.41
Fuel cost per vehicle	11633
Maintenance Yr1	13500
Maintenance Yr2	13500
Maintenance Yr3	13500
Maintenance Yr4	13500
Maintenance Yr5	13500
Maintenance Yr6	13500
Maintenance Yr7	13500
Tyres per vehicle	1500
RFL (Road Fund License) per vehicle	2250
Insurance per vehicle	1000

Assumed that residual RCVs can assist

Other	
Management and admin	38400
Radio	1500
Publicity per new household	1.0
% p.a. replacement sacks	100%
Number of days beteen collection per hh	10
Cost of sack including delivery	1
Depreciation Yrs	7
Fuel price per litre	0.80
Collecting Distance per day	80
Round trip distance to Tip	20
Trips to tip per week	3.3
Weeks collected per year	44

1 Supervisor at £28,800 and 0.5 admin at £19,200

3 years, new houses in subsequent years

2 weekly collection

Changes post 13/4/05

Household growth included in model

Vehicle costs changed to be consistent with costs used elsewhere for 6x4 vehicles

Insurance reduced, RFL reduced, tyres reduced, maintenance increased

Fuel economy reduced

Fuel price increased

Driver & Loader salary costs reduced

Replacement policy for sacks changed.

**Basingstoke and Deane District Council
Implementation Programme**

	15%	20%	35%
Year 1			
Percentage Participation %			
Targeted households	38,342	38,342	38,342
Households participating	5,751	7,668	13,420
Additional Number of households served	5,751	7,668	13,420
Number of sacks in stock to cover replacements	0	0	0
Total Number of sacks required	5,751	7,668	13,420
Replacement vehicles	0	0	0
Collection vehicles	2	3	5
Total Collection vehicles	2	3	5
Total Collection crew incl spares	2.0	3.0	5.0
Total Supervision	1	1	1
Publicity per targeted household	0.33	0.33	0.33
Year 2			
Targeted households	38,917	38,917	38,917
Households participating (increase due to h'hld growth)	5,838	7,783	13,621
Sacks for new households	86	115	201
Number of sacks in stock to cover replacements	5,838	7,783	13,621
Total Number of sacks required	5,924	7,898	13,822
Replacement vehicles	0	0	0
Collection vehicles	2	3	5
Total Collection vehicles	2	3	5
Total Collection crews	2	3	5
Total Supervision	1	1	1
Publicity per targeted household	0.33	0.33	0.33
Year 3			
Targeted households	39,501	39,501	39,501
Households participating (increase due to h'hld growth)	5,925	7,900	13,825
Sacks for new households	88	117	204
Number of sacks in stock to cover replacements	5,925	7,900	13,825
Total Number of sacks required	6,013	8,017	14,030
Replacement vehicles	0	0	0
Collection vehicles	2	3	5
Total Collection vehicles	2	3	5
Total Collection crews	2	3	5
Total Supervision	1	1	1
Publicity per targeted household	0.33	0.33	0.33
Year 4			
Targeted households	40,093	40,093	40,093
Households participating (increase due to h'hld growth)	6,014	8,019	14,033
Sacks for new households	89	119	207
Number of sacks in stock to cover replacements	6,014	8,019	14,033
Total Number of sacks required	6,103	8,137	14,240
Replacement vehicles	0	0	0
Collection vehicles	3	3	5
Total Collection vehicles	3	3	5
Total Collection crews	3	3	5
Total Supervision	1	1	1
Publicity per new targeted household	1.00	1.00	1.00
Year 5			
Targeted households	40,695	40,695	40,695
Households participating (increase due to h'hld growth)	6,104	8,139	14,243
Sacks for new households	90	120	210
Number of sacks in stock to cover replacements	6,104	8,139	14,243
Total Number of sacks required	6,194	8,259	14,454
Replacement vehicles	0	0	0
Collection vehicles and crews	3	3	5
Total Collection vehicles	3	3	5
Total Collection crews	3	3	5
Total Supervision	1	1	1
Publicity per new targeted household	1.00	1.00	1.00
Year 6			
Targeted households	41,305	41,305	41,305
Households participating (increase due to h'hld growth)	6,196	8,261	14,457
Sacks for new households	92	122	214
Number of sacks in stock to cover replacements	6,196	8,261	14,457
Total Number of sacks required	6,287	8,383	14,670
Replacement vehicles	0	0	0
Collection vehicles and crews	3	3	5
Total Collection vehicles	3	3	5
Total Collection crews	3	3	5
Total Supervision	1	1	1
Publicity per new targeted household	1.00	1.00	1.00
Year 7			
Targeted households	41,925	41,925	41,925
Households participating (increase due to h'hld growth)	6,289	8,385	14,674
Sacks for new households	93	124	217
Number of sacks in stock to cover replacements	6,289	8,385	14,674
Total Number of sacks required	6,382	8,509	14,891
Replacement vehicles	0	0	0
Collection vehicles and crews	3	3	5
Total Collection vehicles	3	3	5
Total Collection crews	3	3	5
Total Supervision	1	1	1
Publicity per new targeted household	1.00	1.00	1.00

**Basingstoke and Deane District Council
Cost database**

	15% participation		20% participation		35% participation	
	Capital	Revenue	Capital	Revenue	Capital	Revenue
Year1						
Collection sack cost (per unit) - Including delivery	£1.00		£1.00		£1.00	
Capital cost of collection vehicles (per vehicle per annum)	£17,143		£17,143		£17,143	
Vehicle Fuel Cost		£11,633		£11,633		£11,633
Vehicle Maintenance		£13,500		£13,500		£13,500
Tyres		£1,500		£1,500		£1,500
RFL		£2,250		£2,250		£2,250
Insurance Per Vehicle		£1,000		£1,000		£1,000
Crew costs (per vehicle per year)		£42,000		£42,000		£42,000
Supervision & Support costs (per year)		£38,400		£38,400		£38,400
Radio per authoritu		£1,500		£1,500		£1,500
Publicity per household		0.33		0.33		0.33
Year2						
Collection sack cost (per unit) - Including delivery	£1.00		£1.00		£1.00	
Capital cost of collection vehicles (per vehicle per annum)	£17,143		£17,143		£17,143	
Vehicle Fuel Cost		£11,633		£11,633		£11,633
Vehicle Maintenance		£13,500		£13,500		£13,500
Tyres		£1,500		£1,500		£1,500
RFL		£2,250		£2,250		£2,250
Insurance Per Vehicle		£1,000		£1,000		£1,000
Crew costs (per vehicle per year)		£42,000		£42,000		£42,000
Supervision & Support costs (per year)		£38,400		£38,400		£38,400
Radio		£0		£0		£0
Publicity		0.33		0.33		0.33
Year3						
Collection sack cost (per unit) - Including delivery	£1.00		£1.00		£1.00	
Capital cost of collection vehicles (per vehicle per annum)	£17,143		£17,143		£17,143	
Vehicle Fuel Cost		£11,633		£11,633		£11,633
Vehicle Maintenance		£13,500		£13,500		£13,500
Tyres		£1,500		£1,500		£1,500
RFL		£2,250		£2,250		£2,250
Insurance Per Vehicle		£1,000		£1,000		£1,000
Crew costs (per vehicle per year)		£42,000		£42,000		£42,000
Supervision & Support costs (per year)		£38,400		£38,400		£38,400
Radio		£0		£0		£0
Publicity		0.33		0.33		0.33
Year4						
Collection sack cost (per unit) - Including delivery	£1.00		£1.00		£1.00	
Capital cost of collection vehicles (per vehicle per annum)	£17,143		£17,143		£17,143	
Vehicle Fuel Cost		£11,633		£11,633		£11,633
Vehicle Maintenance		£13,500		£13,500		£13,500
Tyres		£1,500		£1,500		£1,500
RFL		£2,250		£2,250		£2,250
Insurance Per Vehicle		£1,000		£1,000		£1,000
Crew costs (per vehicle per year)		£42,000		£42,000		£42,000
Supervision & Support costs (per year)		£38,400		£38,400		£38,400
Radio		£0		£0		£0
Publicity		£1		£1		£1
Year5						
Collection sack cost (per unit) - Including delivery	£1.00		£1.00		£1.00	
Capital cost of collection vehicles (per vehicle per annum)	£17,143		£17,143		£17,143	
Vehicle Fuel Cost		£11,633		£11,633		£11,633
Vehicle Maintenance		£13,500		£13,500		£13,500
Tyres		£1,500		£1,500		£1,500
RFL		£2,250		£2,250		£2,250
Insurance Per Vehicle		£1,000		£1,000		£1,000
Crew costs (per vehicle per year)		£42,000		£42,000		£42,000
Supervision & Support costs (per year)		£38,400		£38,400		£38,400
Radio		£0		£0		£0
Publicity		£1		£1		£1
Year6						
Collection sack cost (per unit) - Including delivery	£1.00		£1.00		£1.00	
Capital cost of collection vehicles (per vehicle per annum)	£17,143		£17,143		£17,143	
Vehicle Fuel Cost		£11,633		£11,633		£11,633
Vehicle Maintenance		£13,500		£13,500		£13,500
Tyres		£1,500		£1,500		£1,500
RFL		£2,250		£2,250		£2,250
Insurance Per Vehicle		£1,000		£1,000		£1,000
Crew costs (per vehicle per year)		£42,000		£42,000		£42,000
Supervision & Support costs (per year)		£38,400		£38,400		£38,400
Radio		£0		£0		£0
Publicity		£1		£1		£1
Year7						
Collection sack cost (per unit) - Including delivery	£1.00		£1.00		£1.00	
Capital cost of collection vehicles (per vehicle per annum)	£17,143		£17,143		£17,143	
Vehicle Fuel Cost		£11,633		£11,633		£11,633
Vehicle Maintenance		£13,500		£13,500		£13,500
Tyres		£1,500		£1,500		£1,500
RFL		£2,250		£2,250		£2,250
Insurance Per Vehicle		£1,000		£1,000		£1,000
Crew costs (per vehicle per year)		£42,000		£42,000		£42,000
Supervision & Support costs (per year)		£38,400		£38,400		£38,400
Radio		£0		£0		£0
Publicity		£1		£1		£1

**Basingstoke and Deane District Council
Financial Model**

Year		15%		20%		35%	
		Capital	Revenue	Capital	Revenue	Capital	Revenue
Year 1	Cost of sacks	£5,751		£7,668		£13,420	
	Capital cost of collection vehicles	£34,286		£34,286		£85,714	
	Fuel Cost		£23,267		£34,900		£58,167
	Vehicles Maintenance		£27,000		£40,500		£67,500
	Tyres		£3,000		£4,500		£7,500
	RFL		£4,500		£6,750		£11,250
	Insurance Per Vehicle		£2,000		£3,000		£5,000
	Crew costs		£84,000		£126,000		£210,000
	Supervision & Support costs		£38,400		£38,400		£38,400
	Radio		£1,500		£1,500		£1,500
	Publicity		£12,781		£12,781		£12,781
	Grand Totals Capital Costs (£)	£40,037		£41,954		£99,134	
	Grand total revenue net costs (£)		£196,448		£268,331		£412,098
	Total cost per household (£)		41.12		40.46		38.10
	Year 2	Cost of sacks	£5,924		£7,898		£13,822
Capital cost of collection vehicles		£34,286		£51,429		£85,714	
Fuel Cost			£23,267		£34,900		£58,167
Vehicles Maintenance			£27,000		£40,500		£67,500
Tyres			£3,000		£4,500		£7,500
RFL			£4,500		£6,750		£11,250
Insurance Per Vehicle			£2,000		£3,000		£5,000
Crew costs			£84,000		£126,000		£210,000
Supervision & Support costs			£38,400		£38,400		£38,400
Radio			£0		£0		£0
Publicity			£12,972		£12,972		£12,972
Grand Totals Capital Costs (£)		£40,209.55		£59,327.02		£99,536.58	
Grand total revenue net costs (£)			£195,139		£267,023		£410,789.75
Total cost per household (£)			40.32		41.93		37.47
Year 3		Cost of sacks	£5,925		£7,900		£13,825
	Capital cost of collection vehicles	£34,286		£51,429		£85,714	
	Fuel Cost		£23,267		£34,900		£58,167
	Vehicles Maintenance		£27,000		£40,500		£67,500
	Tyres		£3,000		£4,500		£7,500
	RFL		£4,500		£6,750		£11,250
	Insurance Per Vehicle		£2,000		£3,000		£5,000
	Crew costs		£84,000		£126,000		£210,000
	Supervision & Support costs		£38,400		£38,400		£38,400
	Radio		£0		£0		£0
	Publicity		£13,167		£13,167		£13,167
	Grand Totals Capital Costs (£)	£40,210.85		£59,328.75		£99,539.60	
	Grand total revenue net costs (£)		£195,334		£269,217		£410,984.34
	Total cost per household (£)		39.75		41.59		36.93
	Year 4	Cost of sacks	£6,103		£8,137		£14,240
Capital cost of collection vehicles		£51,429		£51,429		£85,714	
Fuel Cost			£34,900		£34,900		£58,167
Vehicles Maintenance			£40,500		£40,500		£67,500
Tyres			£4,500		£4,500		£7,500
RFL			£6,750		£6,750		£11,250
Insurance Per Vehicle			£3,000		£3,000		£5,000
Crew costs			£126,000		£126,000		£210,000
Supervision & Support costs			£38,400		£38,400		£38,400
Radio			£0		£0		£0
Publicity			£13,167		£13,167		£13,167
Grand Totals Capital Costs (£)		£57,531.46		£59,565.75		£99,954.36	
Grand total revenue net costs (£)			£254,050		£254,050		£397,817.38
Total cost per household (£)			51.81		39.11		35.47
Year 5		Cost of sacks	£6,194		£8,259		£14,454
	Capital cost of collection vehicles	£51,429		£51,429		£85,714	
	Fuel Cost		£34,900		£34,900		£58,167
	Vehicles Maintenance		£40,500		£40,500		£67,500
	Tyres		£4,500		£4,500		£7,500
	RFL		£6,750		£6,750		£11,250
	Insurance Per Vehicle		£3,000		£3,000		£5,000
	Crew costs		£126,000		£126,000		£210,000
	Supervision & Support costs		£38,400		£38,400		£38,400
	Radio		£0		£0		£0
	Publicity		£13,167		£13,167		£13,167
	Grand Totals Capital Costs (£)	£57,623.00		£59,687.81		£100,167.96	
	Grand total revenue net costs (£)		£254,050		£254,050		£397,817.38
	Total cost per household (£)		51.06		38.55		34.96
	Year 6	Cost of sacks	£6,287		£8,383		£14,670
Capital cost of collection vehicles		£51,429		£51,429		£85,714	
Fuel Cost			£34,900		£34,900		£58,167
Vehicles Maintenance			£40,500		£40,500		£67,500
Tyres			£4,500		£4,500		£7,500
RFL			£6,750		£6,750		£11,250
Insurance Per Vehicle			£3,000		£3,000		£5,000
Crew costs			£126,000		£126,000		£210,000
Supervision & Support costs			£38,400		£38,400		£38,400
Radio			£0		£0		£0
Publicity			£13,167		£13,167		£13,167
Grand Totals Capital Costs (£)		£57,715.92		£59,811.70		£100,384.76	
Grand total revenue net costs (£)			£254,050		£254,050		£397,817.38
Total cost per household (£)			50.32		37.99		34.46
Year 7		Cost of sacks	£6,382		£8,509		£14,891
	Capital cost of collection vehicles	£51,429		£51,429		£85,714	
	Fuel Cost		£34,900		£34,900		£58,167
	Vehicles Maintenance		£40,500		£40,500		£67,500
	Tyres		£4,500		£4,500		£7,500
	RFL		£6,750		£6,750		£11,250
	Insurance Per Vehicle		£3,000		£3,000		£5,000
	Crew costs		£126,000		£126,000		£210,000
	Supervision & Support costs		£38,400		£38,400		£38,400
	Radio		£0		£0		£0
	Publicity		£13,167		£13,167		£13,167
	Grand Totals Capital Costs (£)	£57,810.23		£59,937.45		£100,604.82	
	Grand total revenue net costs (£)		£254,050		£254,050		£397,817.38
	Total cost per household (£)		49.59		37.45		33.97

Basingstoke and Deane District Council

