

Appendix 5b

FINANCIAL MODEL

Garden Waste - Hart District Council

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This model has been prepared for our client:

Project Integra

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May 2005

**Garden Waste
Hart District Council
Assumptions**

Demographics	
Total targeted households council area	20,000
Household growth	1.50%

Productivity & Vehicle Crew	
Productivity properties collected per man per day	450
No of Drivers per vehicle including driver	1
No of Loaders per vehicle including driver	1
Total productivity per vehicle (hh/v/day)	450
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	14105
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 between 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	50
Trips to tip per week	3.3
Weeks collected per year	44

All houses targeted in first 3 years, new houses in

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.

**Garden Waste
Hart District Council
Implementation Programme**

Percentage Participation %		15%	20%	35%
Year 1	Targeted households	20,000	20,000	20,000
	Households participating	3,000	4,000	7,000
	Additional Number of households served	3,000	4,000	7,000
	Number of sacks in stock to cover replacements	0	0	0
	Total Number of sacks required	6,000	8,000	14,000
	Replacement vehicles	0	0	0
	Collection vehicles	1	1	2
	Total Collection vehicles	1	1	2
	Total Collection crew incl spares	1.0	1.0	2.0
	Total Supervision	1	1	1
	Publicity per targeted household	0.33	0.33	0.33
Year 2	Targeted households	20,300	20,300	20,300
	Households participating (increase due to h'hld growth)	3,045	4,060	7,105
	Sacks for new households	45	60	105
	Number of sacks in stock to cover replacements	3,045	4,060	7,105
	Total Number of sacks required	3,090	4,120	7,210
	Replacement vehicles	0	0	0
	Collection vehicles	1	1	2
	Total Collection vehicles	1	1	2
	Total Collection crews	1	1	2
	Total Supervision	1	1	1
	Publicity per targeted household	0.33	0.33	0.33
Year 3	Targeted households	20,605	20,605	20,605
	Households participating (increase due to h'hld growth)	3,091	4,121	7,212
	Sacks for new households	46	61	107
	Number of sacks in stock to cover replacements	3,091	4,121	7,212
	Total Number of sacks required	3,136	4,182	7,318
	Replacement vehicles	0	0	0
	Collection vehicles	1	1	2
	Total Collection vehicles	1	1	2
	Total Collection crews	1	1	2
	Total Supervision	1	1	1
	Publicity per targeted household	0.33	0.33	0.33
Year 4	Targeted households	20,914	20,914	20,914
	Households participating (increase due to h'hld growth)	3,137	4,183	7,320
	Sacks for new households	46	62	108
	Number of sacks in stock to cover replacements	3,137	4,183	7,320
	Total Number of sacks required	3,183	4,245	7,428
	Replacement vehicles	0	0	0
	Collection vehicles	1	1	2
	Total Collection vehicles	1	1	2
	Total Collection crews	1	1	2
	Total Supervision	1	1	1
	Publicity per new targeted household	1.00	1.00	1.00
Year 5	Targeted households	21,227	21,227	21,227
	Households participating (increase due to h'hld growth)	3,184	4,245	7,430
	Sacks for new households	47	63	110
	Number of sacks in stock to cover replacements	3,184	4,245	7,430
	Total Number of sacks required	3,231	4,308	7,539
	Replacement vehicles	0	0	0
	Collection vehicles and crews	1	1	2
	Total Collection vehicles	1	1	2
	Total Collection crews	1	1	2
	Total Supervision	1	1	1
	Publicity per new targeted household	1.00	1.00	1.00
Year 6	Targeted households	21,546	21,546	21,546
	Households participating (increase due to h'hld growth)	3,232	4,309	7,541
	Sacks for new households	48	64	111
	Number of sacks in stock to cover replacements	3,232	4,309	7,541
	Total Number of sacks required	3,280	4,373	7,652
	Replacement vehicles	0	0	0
	Collection vehicles and crews	1	1	2
	Total Collection vehicles	1	1	2
	Total Collection crews	1	1	2
	Total Supervision	1	1	1
	Publicity per new targeted household	1.00	1.00	1.00
Year 7	Targeted households	21,869	21,869	21,869
	Households participating (increase due to h'hld growth)	3,280	4,374	7,654
	Sacks for new households	48	65	113
	Number of sacks in stock to cover replacements	3,280	4,374	7,654
	Total Number of sacks required	3,329	4,438	7,767
	Replacement vehicles	0	0	0
	Collection vehicles and crews	1	1	2
	Total Collection vehicles	1	1	2
	Total Collection crews	1	1	2
	Total Supervision	1	1	1
	Publicity per new targeted household	1.00	1.00	1.00

	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		£14,105		£14,105		£14,105
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 vehicle		£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		£14,105		£14,105		£14,105
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		£14,105		£14,105		£14,105
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		£14,105		£14,105		£14,105
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		£14,105		£14,105		£14,105
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		£14,105		£14,105		£14,105
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		£14,105		£14,105		£14,105
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

**Garden Waste
Hart District Council
Financial Model**

	15%		20%		35%	
	Capital	Revenue	Capital	Revenue	Capital	Revenue
Year 1						
Cost of sacks	£6,000		£8,000		£14,000	
Capital cost of collection vehicles	£17,143		£17,143		£34,286	
Fuel Cost		£14,105		£14,105		£28,210
Vehicles Maintenance		£13,500		£13,500		£27,000
Tyres		£1,500		£1,500		£3,000
RFL		£2,250		£2,250		£4,500
Insurance Per Vehicle		£1,000		£1,000		£2,000
Crew costs		£42,000		£42,000		£84,000
Supervision & Support costs		£38,400		£38,400		£38,400
Radio		£1,500		£1,500		£3,000
Publicity		£6,667		£6,667		£6,667
Grand Totals Capital Costs (£)	£23,143		£25,143		£48,286	
Grand total revenue net costs (£)		£120,922		£120,922		£196,777
Total cost per household (£)		48.02		36.52		35.01
Year 2						
Cost of sacks	£3,090		£4,120		£7,210	
Capital cost of collection vehicles	£17,143		£17,143		£34,286	
Fuel Cost		£14,105		£14,105		£28,210
Vehicles Maintenance		£13,500		£13,500		£27,000
Tyres		£1,500		£1,500		£3,000
RFL		£2,250		£2,250		£4,500
Insurance Per Vehicle		£1,000		£1,000		£2,000
Crew costs		£42,000		£42,000		£84,000
Supervision & Support costs		£38,400		£38,400		£38,400
Radio		£0		£0		£0
Publicity		£6,767		£6,767		£6,767
Grand Totals Capital Costs (£)	£20,232.86		£21,262.86		£41,495.71	
Grand total revenue net costs (£)		£119,522		£119,522		£193,876.80
Total cost per household (£)		45.90		34.68		33.13
Year 3						
Cost of sacks	£3,091		£4,121		£7,212	
Capital cost of collection vehicles	£17,143		£17,143		£34,286	
Fuel Cost		£14,105		£14,105		£28,210
Vehicles Maintenance		£13,500		£13,500		£27,000
Tyres		£1,500		£1,500		£3,000
RFL		£2,250		£2,250		£4,500
Insurance Per Vehicle		£1,000		£2,000		£2,000
Crew costs		£42,000		£42,000		£84,000
Supervision & Support costs		£38,400		£38,400		£38,400
Radio		£0		£0		£0
Publicity		£6,868		£6,868		£6,868
Grand Totals Capital Costs (£)	£20,233.53		£21,263.76		£41,497.29	
Grand total revenue net costs (£)		£119,623		£120,623		£193,978.10
Total cost per household (£)		45.25		34.43		32.65
Year 4						
Cost of sacks	£3,183		£4,245		£7,428	
Capital cost of collection vehicles	£17,143		£17,143		£34,286	
Fuel Cost		£14,105		£14,105		£28,210
Vehicles Maintenance		£13,500		£13,500		£27,000
Tyres		£1,500		£1,500		£3,000
RFL		£2,250		£2,250		£4,500
Insurance Per Vehicle		£1,000		£1,000		£2,000
Crew costs		£42,000		£42,000		£84,000
Supervision & Support costs		£38,400		£38,400		£38,400
Radio		£0		£0		£0
Publicity		£0		£0		£0
Grand Totals Capital Costs (£)	£20,326.25		£21,387.38		£41,713.64	
Grand total revenue net costs (£)		£112,755		£112,755		£187,109.93
Total cost per household (£)		42.42		32.07		31.26
Year 5						
Cost of sacks	£3,231		£4,308		£7,539	
Capital cost of collection vehicles	£17,143		£17,143		£34,286	
Fuel Cost		£14,105		£14,105		£28,210
Vehicles Maintenance		£13,500		£13,500		£27,000
Tyres		£1,500		£1,500		£3,000
RFL		£2,250		£2,250		£4,500
Insurance Per Vehicle		£1,000		£1,000		£2,000
Crew costs		£42,000		£42,000		£84,000
Supervision & Support costs		£38,400		£38,400		£38,400
Radio		£0		£0		£0
Publicity		£0		£0		£0
Grand Totals Capital Costs (£)	£20,374.00		£21,451.05		£41,825.06	
Grand total revenue net costs (£)		£112,755		£112,755		£187,109.93
Total cost per household (£)		41.81		31.61		30.81
Year 6						
Cost of sacks	£3,280		£4,373		£7,652	
Capital cost of collection vehicles	£17,143		£17,143		£34,286	
Fuel Cost		£14,105		£14,105		£28,210
Vehicles Maintenance		£13,500		£13,500		£27,000
Tyres		£1,500		£1,500		£3,000
RFL		£2,250		£2,250		£4,500
Insurance Per Vehicle		£1,000		£1,000		£2,000
Crew costs		£42,000		£42,000		£84,000
Supervision & Support costs		£38,400		£38,400		£38,400
Radio		£0		£0		£0
Publicity		£0		£0		£0
Grand Totals Capital Costs (£)	£20,422.47		£21,515.67		£41,938.15	
Grand total revenue net costs (£)		£112,755		£112,755		£187,109.93
Total cost per household (£)		41.21		31.16		30.37
Year 7						
Cost of sacks	£3,329		£4,438		£7,767	
Capital cost of collection vehicles	£17,143		£17,143		£34,286	
Fuel Cost		£14,105		£14,105		£28,210
Vehicles Maintenance		£13,500		£13,500		£27,000
Tyres		£1,500		£1,500		£3,000
RFL		£2,250		£2,250		£4,500
Insurance Per Vehicle		£1,000		£1,000		£2,000
Crew costs		£42,000		£42,000		£84,000
Supervision & Support costs		£38,400		£38,400		£38,400
Radio		£0		£0		£0
Publicity		£0		£0		£0
Grand Totals Capital Costs (£)	£20,471.66		£21,581.27		£42,052.93	
Grand total revenue net costs (£)		£112,755		£112,755		£187,109.93
Total cost per household (£)		40.61		30.71		29.94

