

**DRAFT****Carterton and Masterton Recycling and Rubbish Facts and Statistics June 2006****Infrastructure**

## Masterton District Council

- Nursery Road Landfill, closing for acceptance of general refuse October 2006, a clean fill operation will continue until resource consents expire.
- Transfer station is being built at Nursery Road, due to open October 2006 for the handling of general refuse.
- Rural Transfer Stations at
  - Castlepoint
  - Mauriceville
  - Riversdale
  - Tinui
- At each of the above facilities rubbish can be dropped off for a charge
- Recycling centres located at each transfer station, where recyclable or reusable materials can be dropped off free of charge.
- The council owns land adjacent to the Nursery Road landfill and transfer station where materials e.g. green waste, soils and rubbles, tyres can be deposited for a charge.
- Hazardous household waste, gas cylinders, car batteries and domestic quantities of used oil can be dropped of at Nursery Road at no charge.

## Carterton District Council

- Dalefield Road Landfill closed, although resource consent still current.
- Dalefield Road transfer station is open for handling general refuse. There is a charge for refuse.
- A recycling centre is located at Dalefield Road and a drop of point is located behind the town clock.
- Council land beside the landfill is used for the processing of green waste, rubble, scrap metal etc. There is a charge for depositing these materials.



## Council Services to Households

- Household recycling and rubbish is collected from all households within the urban areas each week.
- Carterton provides 26 rate-funded official green rubbish bags per year to households with the urban area. Additional bags can be purchased as required for \$2.00 each (June 2006).
- Masterton operates a fully user pays system; bags can be purchased for about \$1.50 each.
- For both councils the bag price covers the cost rubbish collection and disposal, as well as the bag manufacturing and distribution costs.
- Households may use as many rubbish bags as they require
- Households in the rural areas may deposit official bags at the regions transfer stations free of charge.
- Carterton district bags can not be used in Masterton or vice versa.
- All urban households are entitled to a 45 litre green recycling box.
- The recyclables placed in or beside the box (depending on the material) are collected once a week and sorted by hand at the kerbside by the collector. A list of the materials recycled at the kerbside can be found at [http://www.waiwaste.org.nz/recycling/recycling\\_collection.htm](http://www.waiwaste.org.nz/recycling/recycling_collection.htm)
- The collection and sorting of recyclable materials is paid for by the rates.

## Council Services to Businesses

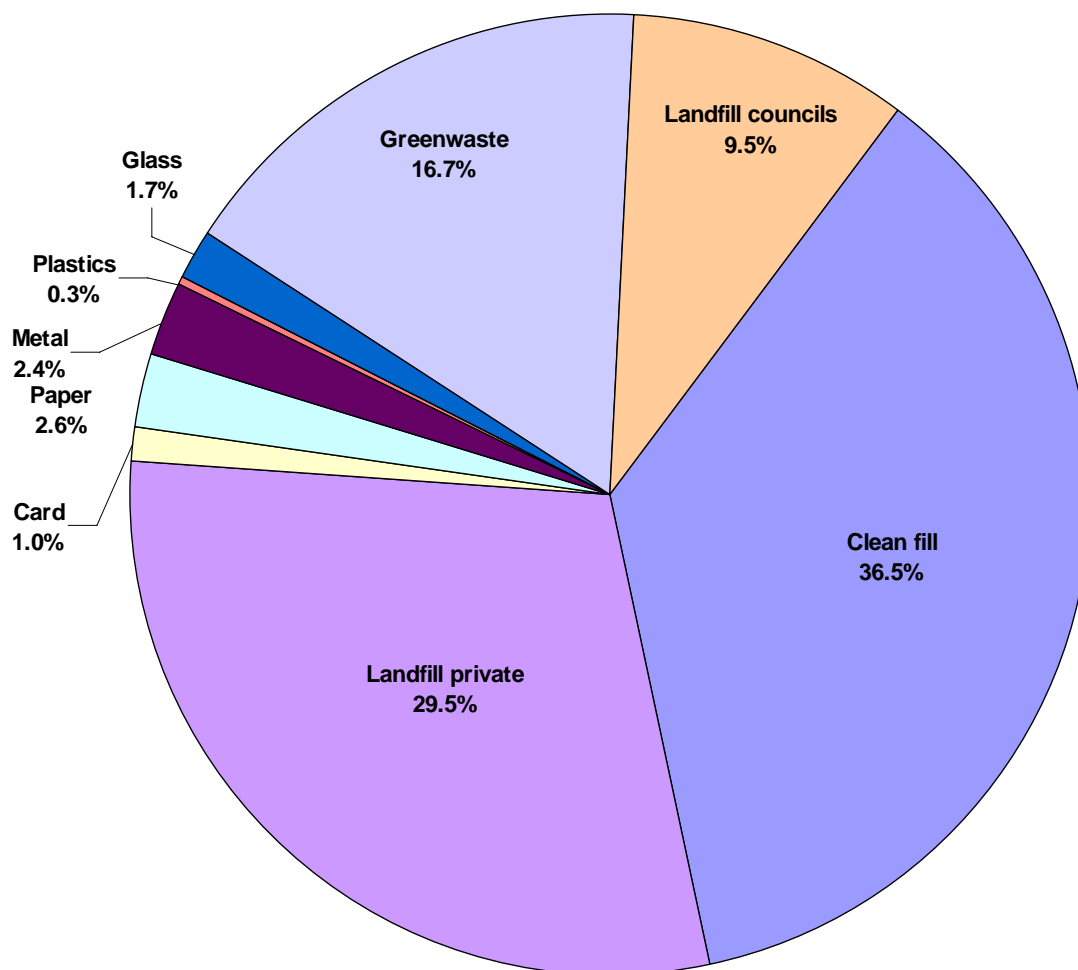
- Each business in the CBD is provided with one green recycling box.
- Businesses can buy as many official rubbish bags as they require.
- Schools are able to receive one rate funded green recycling box.
- Recycling and refuse are collected weekly. Large commercial volumes are not collected by the council's services and private collectors are available.
- Schools and businesses can drop off recyclable materials at the regions transfer stations free of charge.

## How do the Councils promote waste reduction?

- Carterton and Masterton District Councils along with South Wairarapa District Councils have established Waste Management Wairarapa, a joint committee to assist the three councils in addressing solid waste management issues collectively. Its powers are limited to advising the three councils and acting upon their directions.
- Carterton and Masterton have in addition employed a Waste Minimisation Officer to investigate, recommend and promote waste minimisation to schools, homes and businesses throughout the two districts. This has an emphasis on WHY people need to take responsibility for their own waste and HOW they can do something about it (e.g. composting, kerbside recycling, reducing packaging and waste generally).
- The councils provide facilities for recycling and kerbside collection and divert over 7400 tonnes of materials away from landfill (year 2005-06).
- The councils encourage people (through price differentials) to separate and drop off separately green waste, soil and rubble, scrap metal and other recyclable materials.
- The councils via Waste Management Wairarapa have signed up to the zero waste initiative and are looking for year on year reductions in the amount of solid waste going to landfill. As part of this strategy, the councils decided not to create a new landfill in the Wairarapa, but to transport solid waste to an already established landfill at Bonny Glen in the Manawatu.
- The councils fund schools participation in the national Enviroschools program.
- The councils help reduce waste in the Greater Wellington Region through the Wellington Regional Environment Agency committee. Representatives from the councils in the region meet quarterly to share ideas and arrange regional waste minimisation initiatives and research.

## Overall picture of waste disposed of in 2005

The total amount of material disposed of in 2005 was 42986 tonnes



Carterton and Masterton Councils handle/control about 11% of the waste stream (9.5% rubbish and 1.6% of the recycling). The remainder of the waste stream is brought to Nursery Road by commercial operators and private individuals.

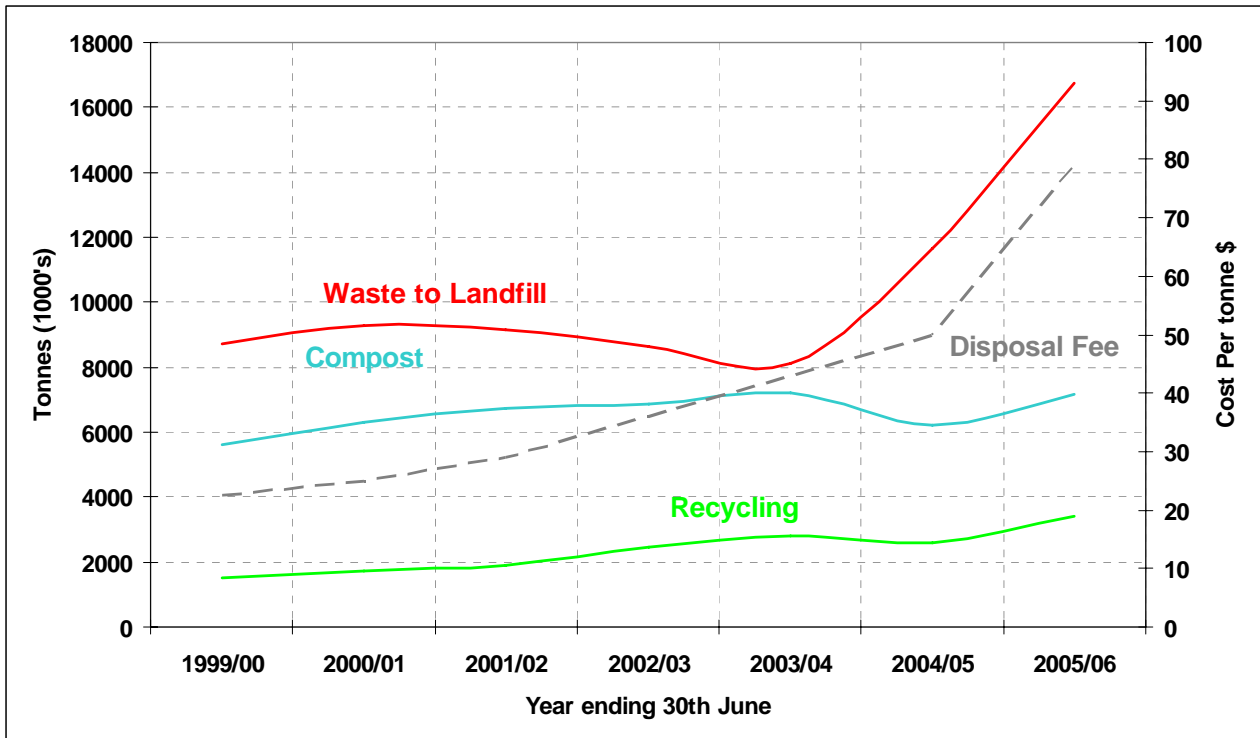
A good majority of the material deposited is clean fill; this consists of natural materials such as clay, soil, rock, gravel and sand plus other inert materials such as concrete, bricks, demolition rubble and ceramics. This material is disposed of free of charge.

Waste sent to landfill by the council and commercial operators for a disposal fee of \$78.75 per tonne, makes up a slightly larger percentage, which adds up to 39% of the waste stream. The weight sent to landfill is 16752 tonnes and will cost the community over \$2 million to dispose of at Bonny Glen.

Recyclable materials and green waste form the remainder of the waste stream and amounts to almost 25% of the waste stream. This represents an amount that would otherwise go to landfill without the efforts of both council and private/commercial recycling activity. If the clean fill waste is excluded from the total then the proportion of waste diverted away from landfill via recycling and composting would increase to over 38%.

## Tonnes of General Waste Landfilled, Composted and Recycled

General waste sent to landfill fell steadily as disposal charges increased, however since 2003/04 strong economic growth in New Zealand has increased the amount of waste produced in the Wairarapa. It appears that increasing the disposal fee does not have an impact on reducing waste to landfill.

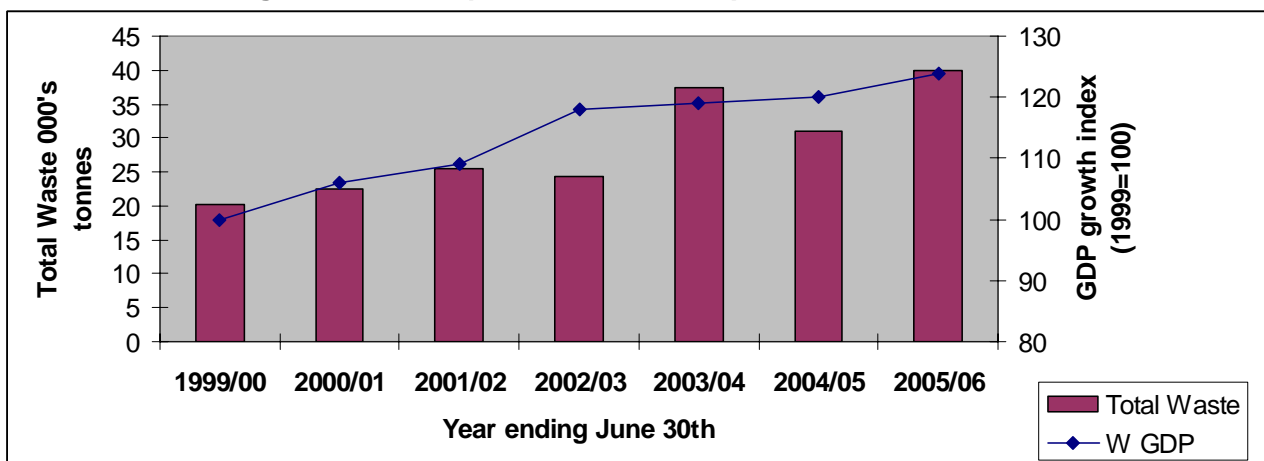


The amount recycled has increased steadily since recording began. Initially only drop off points were available. Since the introduction of kerbside pick up services for recyclables the figure has continued to climb to a total of 3389 tonnes for 2005/06.

Composting grew steadily until 2003/04 but has dipped in 2004. This may be due to i) the increase in fees for green waste, ii) the growth in commercial operators bringing in green waste and the limited capturing of accurate volumes from these at the weigh bridge.

The chart above does not include all waste produced at Carterton District Councils Dalefield Road transfer station. Only general refuse and recycling are brought from Carterton to Masterton. It also omits clean fill arriving at both Dalefield Road and Nursery Road.

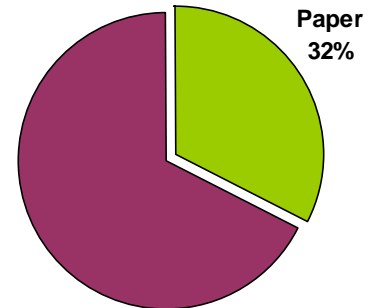
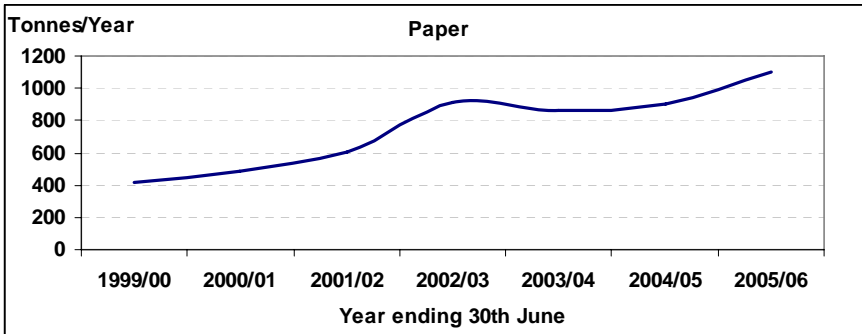
### Total Waste Tonnage and Wairarapa GDP relationship



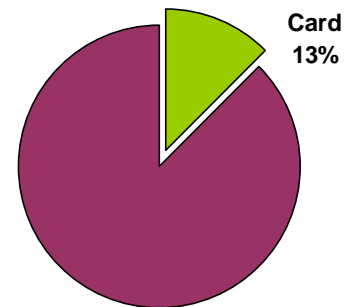
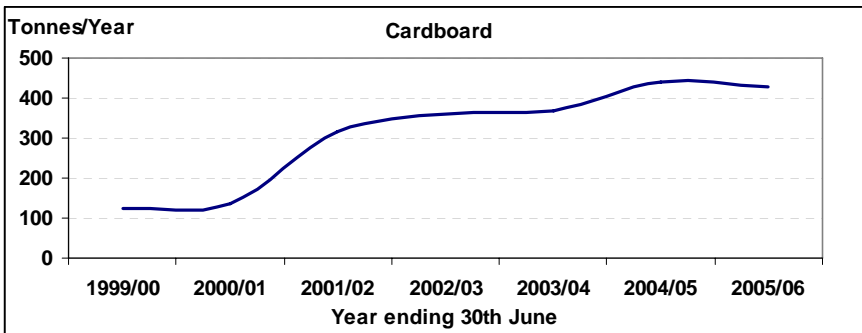
## Breakdown of recycling materials collected

The total amount of recyclable material diverted from landfill in 2005 was **3389 tonnes**. The charts below show the trends since 2000 and the percentage of each material as part of the total recycling tonnage (excluding compost). The figures are derived from monthly tonnages provided by Tararua Resource Recovery.

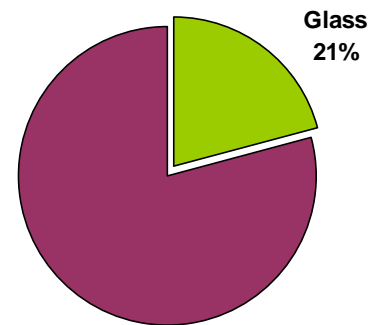
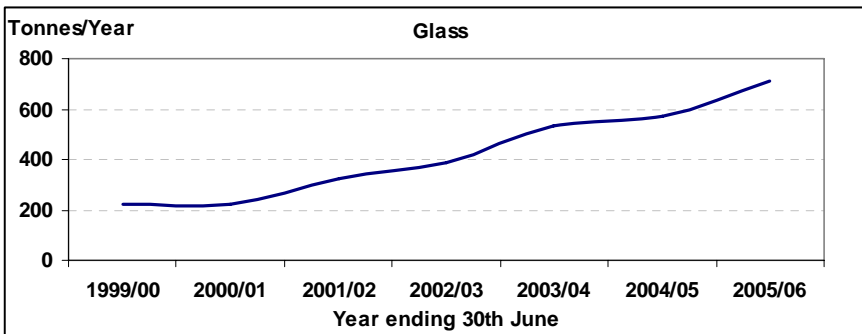
Paper 1101 tonnes per year



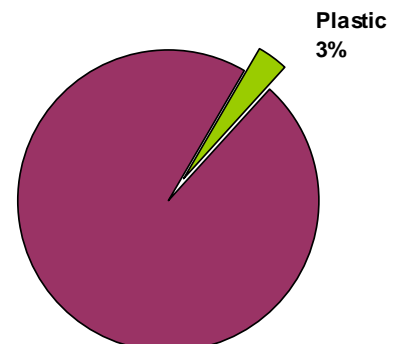
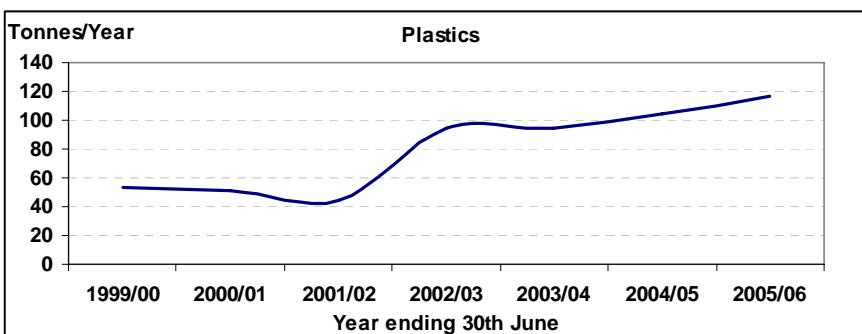
Cardboard 429 tonnes per year



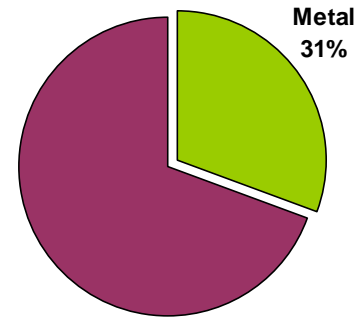
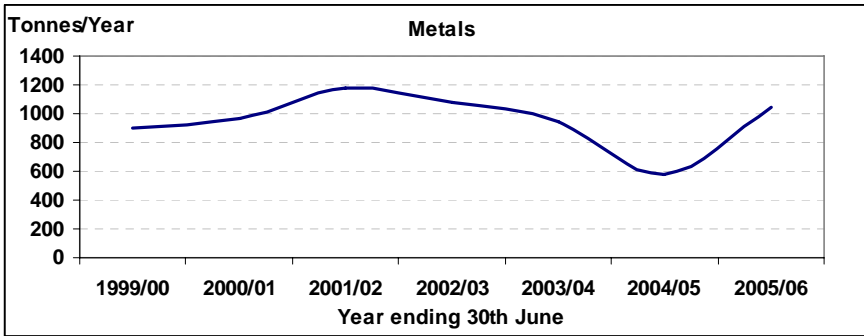
Glass 711 tonnes per year



Plastic 117 tonnes per year

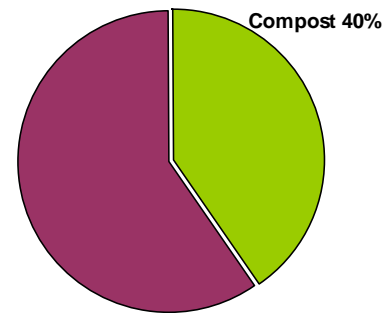
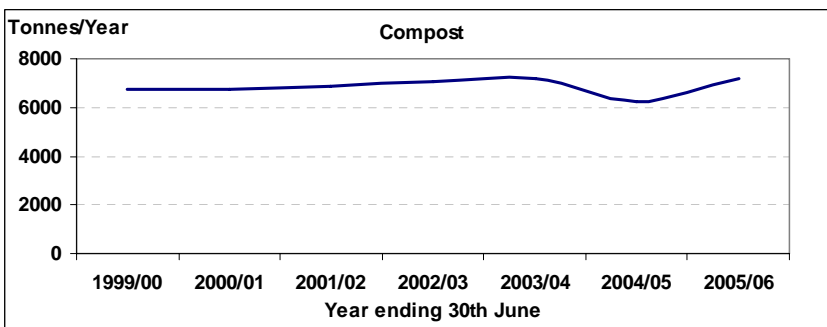


**Metal 1041 tonnes per year**



Of the metal deposited, 197.9 tonnes is from vehicles brought to the scrap metal yard.

**Compost 7165 tonnes per year**

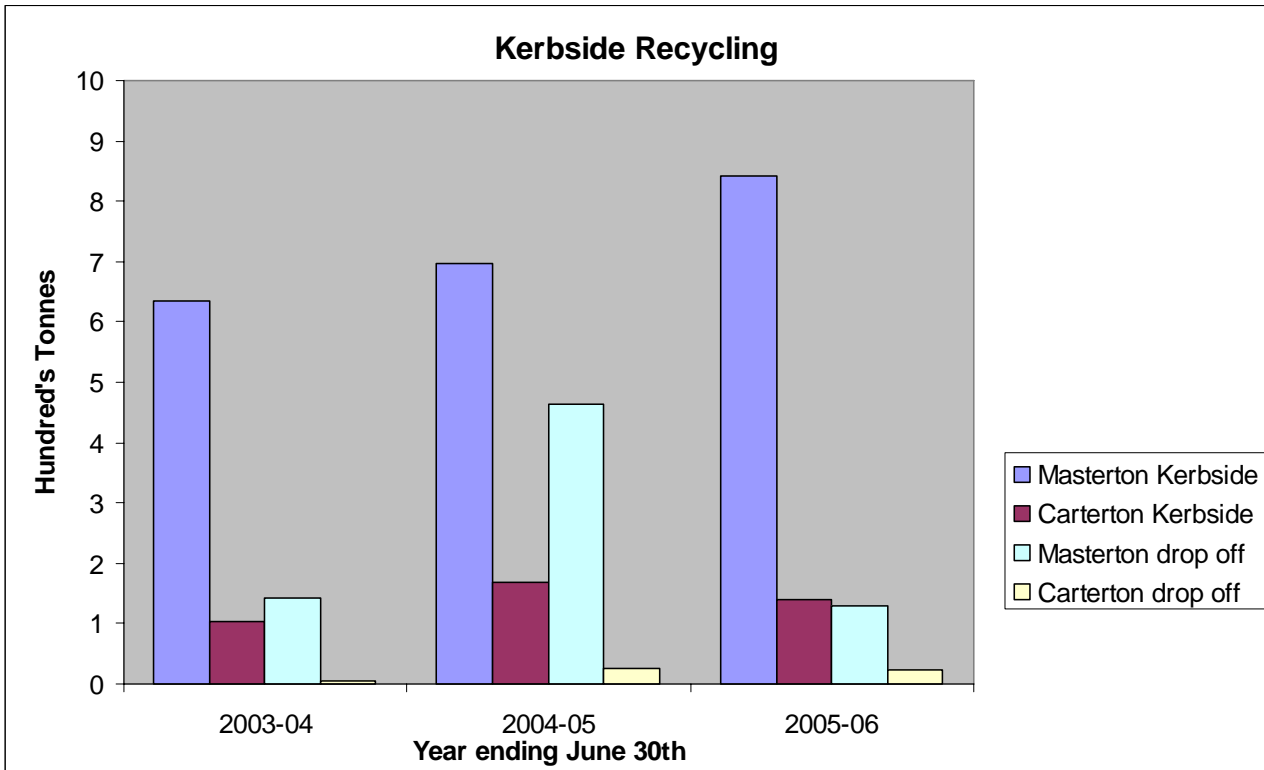


In 2005 around 7165 tonnes of green waste, such as branches, glass clippings and leaves were composted by Masterton. The pie chart shows the percentage of compost against all other recycled materials. Green waste can be dropped off at Nursery Road Transfer Station for a small charge. Carterton residents can drop off green waste at Dalefield Road for a small charge; however this material is not currently composted. . Currently there is no differential charge levied on commercial operators bringing in green waste.

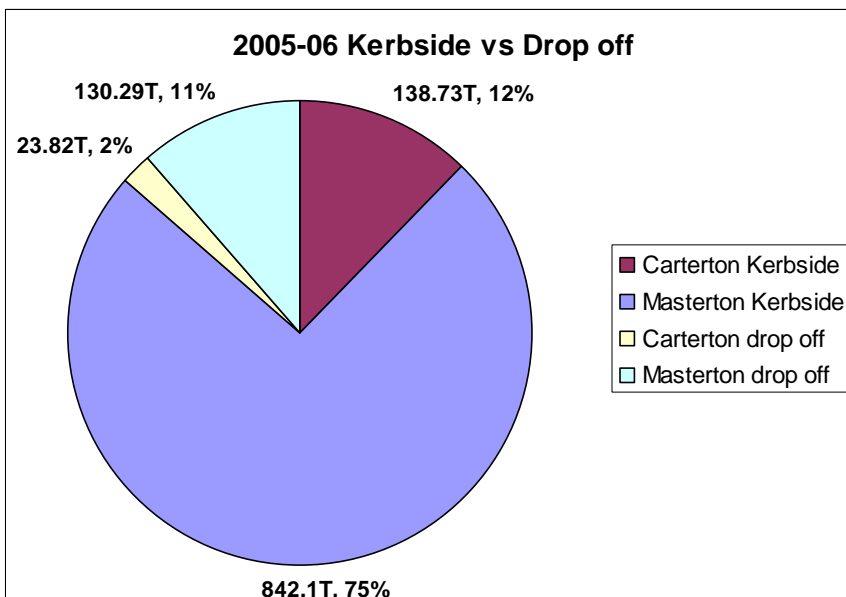
Ideally households that spray for weeds should not bring material in for composting, however the amount of green waste going to landfill is not known.

## Kerbside Recycling vs. Drop Off Centres

Each household and business in the Carterton and Masterton urban areas receives a 45 litre green recycling bin. This is collected each week from the Kerbside. In 2005 the council contractors made 536 journeys and collected around 980 tonnes of material.

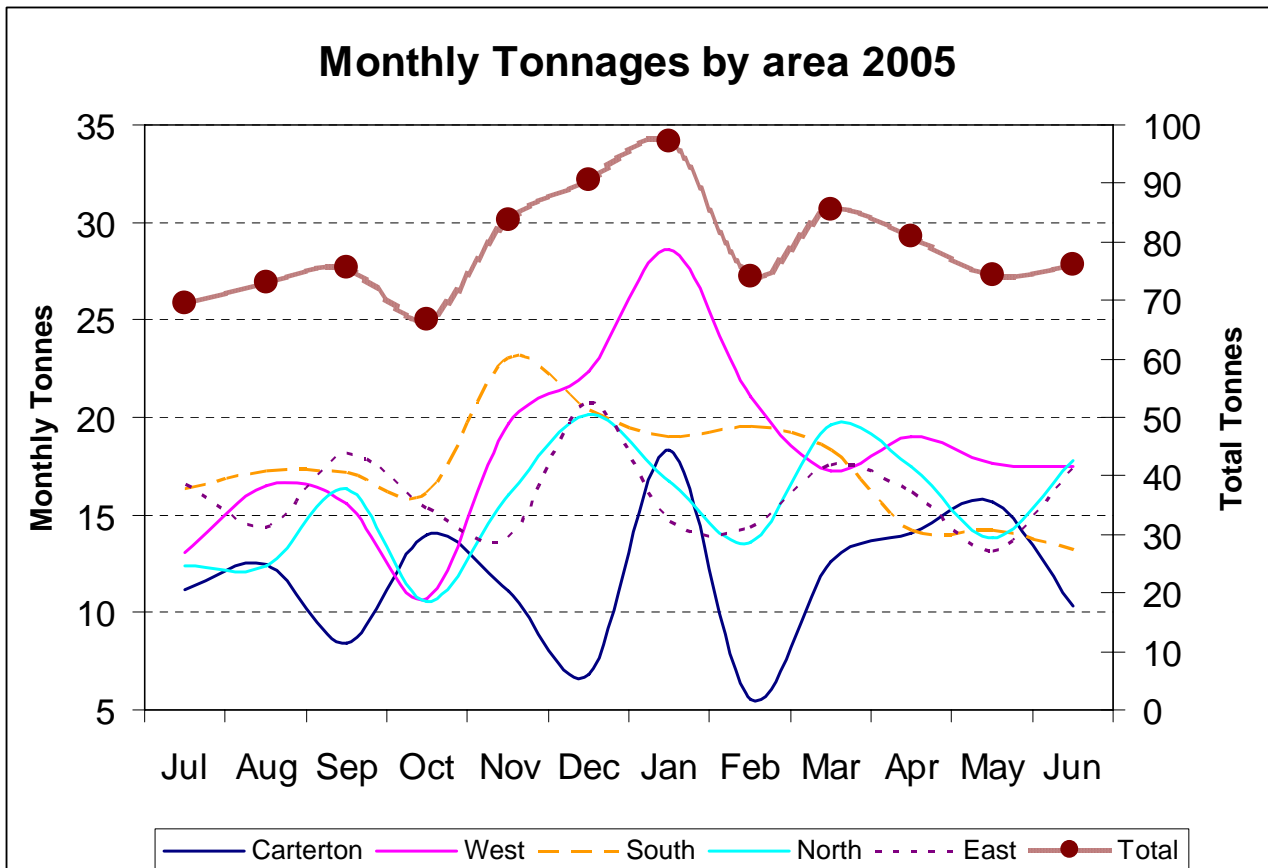


Weights for Kerbside recycling have increased where as the weights at the drop off centres is fairly constant. The figures for Masterton drop off are not accurate; the database assumes each person delivering recycling brings in 30kg. The tonnage for 2004-05 is possibly an anomaly as there is no corresponding peak in the recycling tonnages shown above; however it does correspond to a drop in compost figures for 2004.



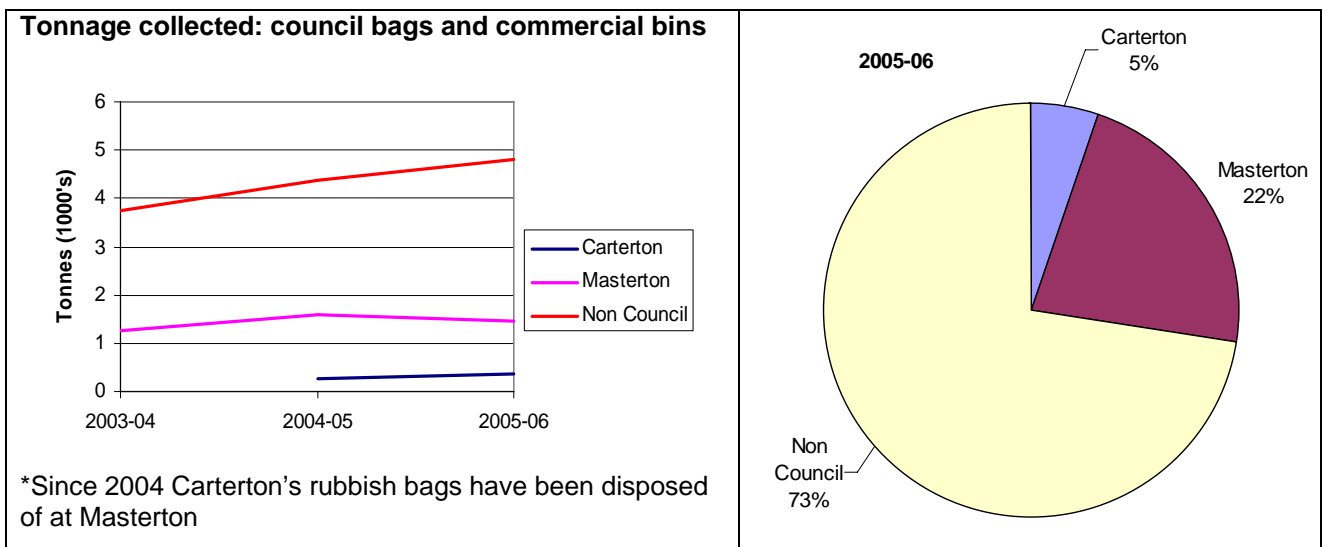
The kerbside collection accounts for most of the materials being recycled 87%. As expected given its larger urban area Masterton produces the bulk of the recycling.

Taking each area individually, 85% of Carterton's and 86% of Masterton's recycling is picked up at the Kerbside.



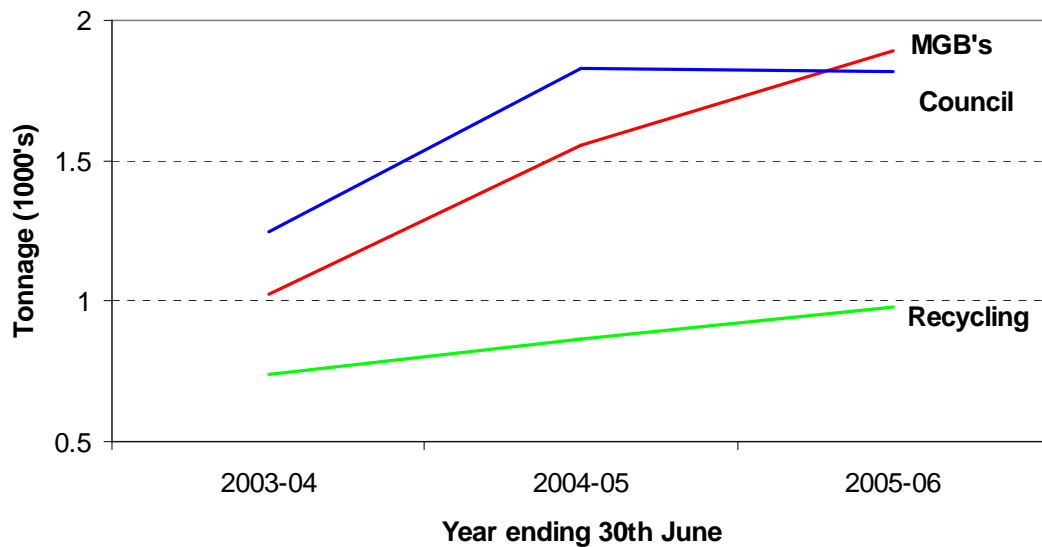
## Council Rubbish Bags and Commercial Collectors

Both councils collect rubbish bags from households and businesses in the urban area. The amount collected by the councils has increased slightly over the last 3 years, however there has been a large growth from the commercial mobile garbage bin and skip bin collectors. In Masterton all council bags must be purchased, in Carterton 26 bags are provided funded via the rates. Commercial collectors have varying charges depending on the service provided.

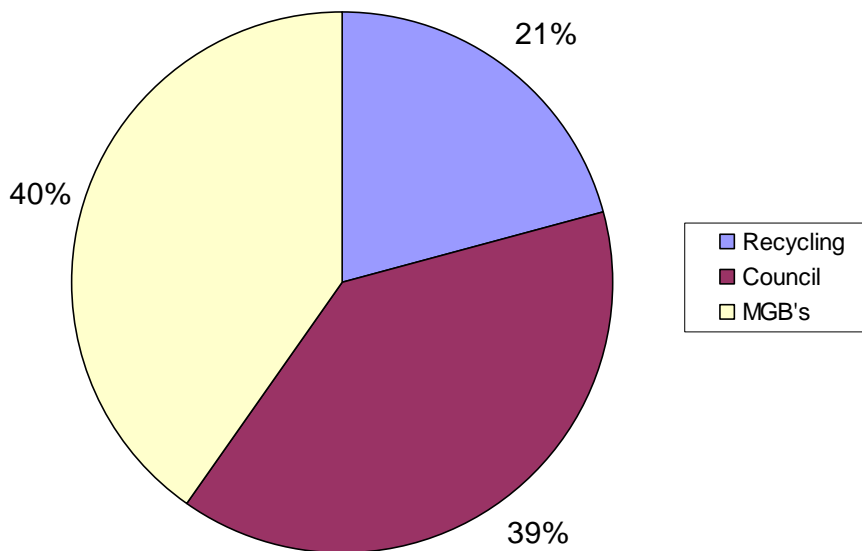


In 2005, 73% of the domestic type rubbish was disposed of by the commercial collectors. Of this 39% originated predominately from households and 61% from businesses.

## Kerbside Domestic Refuse vs. Kerbside Recycling



## Kerbside collection percentages 2005



In 2005 kerbside recycling rate reached 21% of the materials collected. Although bag collections have reduced slightly, the amount from mobile garbage bins (MGB's) continues to climb.

Official rubbish bags are collected by the councils each week. Evidence from solid waste analysis surveys within NZ indicate that food scraps make up about 35% and green waste about 11% of the rubbish bag. Newsprint, magazines and junk mail is about 28% of the

rubbish. So, if people composted at home and recycled more at the kerbside, well over half the household waste could be avoided.

MGB operators provide 120 and 250 litre bins on a user pays basis. Typically surveys indicate that organics make up 65% of the waste and paper 16%. Most of the organics is green waste that could be composted. If people chose to compost or use a green waste collection service and recycled more they would slash their waste along with their disposal costs. A green waste collection service is typically half the price of a rubbish collection service.

The tables below show the numerical tonnages used in the charts in this document.

**2005-06 Total Waste Figures at Nursery Road (tonnes)**

Clean fill	15672	
Landfill private	12673	Rubbish brought in by businesses and individuals
Card	429	
Paper	1101	
Metal	1041	
Plastics	115	
Glass	711	
Green waste	7165	
Landfill councils	4079	Rubbish brought in by Masterton & Carterton contractors
Total	42986	

**Seven year totals (tonnes)**

Year	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Landfill	8708	9289	9144	8625	8127	11664	16752
Recycling	1491	1719	1878	2481	2817	2610	3389
Compost	5606	6313	6743	6849	7196	6219	7165
Cleanfill	4500	5104	7823	6357	19241	11490	15672
Total Waste	20305	22425	25588	24312	37381	31983	42978

**Diverted Material (tonnes)**

	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Compost	6713	6743	6849	7044	7196	6219	7165
Paper	418	490	607	912	864	900	1101
Cardboard	126	138	318	359	370	442	429
Glass	220	223	322	386	535	571	711
Metals	896	971	1182	1081	948	580	1041
Plastics	53	51	45	94	94	105	117
Textiles	5	6	7	7	6	12	0

### Kerbside Vs Drop off

	2003-04	2004-05	2005-06
Carterton tonnage	104.30	167.33	138.73
Masterton tonnage	633.92	696.78	842.10
<b>Total</b>	<b>738.22</b>	<b>864.11</b>	<b>980.83</b>
Carterton journeys	61	70	69
Masterton journeys	424	415	467
<b>Total journeys</b>	<b>485</b>	<b>485</b>	<b>536</b>
Carterton drop off	5.47	24.82	23.82
Masterton drop off	141.84	464.85	130.29
<b>Total drop off</b>	<b>147.31</b>	<b>489.67</b>	<b>154.11</b>

### Recycling per area 2005-06

	Carterton	West	South	North	East	Total
Jul	11.14	13.06	16.33	12.4	16.6	69.53
Aug	12.48	16.49	17.25	12.42	14.39	73.03
Sep	8.4	15.55	17.21	16.32	18.17	75.65
Oct	13.98	10.73	16.09	10.57	15.36	66.73
Nov	11.07	19.7	23.04	16.02	13.83	83.66
Dec	6.83	22.38	20.37	20.17	20.74	90.49
Jan	18.32	28.59	18.98	16.76	14.65	97.3
Feb	5.5	21.07	19.56	13.63	14.37	74.13
Mar	12.62	17.26	18.3	19.65	17.58	85.41
Apr	14.07	18.99	14.25	17.45	16.16	80.92
May	15.65	17.67	14.19	13.84	13.14	74.49
Jun	10.35	17.52	13.22	17.79	17.36	76.24
<b>Total</b>	<b>140</b>	<b>219</b>	<b>209</b>	<b>187</b>	<b>192</b>	

### Council Bags vs MGBs (tonnes)

	Bags Masterton	Bags Carterton	Bags Total	MGB's	Total
Jul-05	124	30	154	127	281
Aug-05	135	41	176	147	323
Sep-05	136	27	163	142	305
Oct-05	124	39	163	155	318
Nov-05	128	33	161	163	324
Dec-05	144	33	177	178	355
Jan-06	112	29	141	166	307
Feb-06	113	34	147	147	294
Mar-06	144	23	167	161	328
Apr-06	118	24	142	168	310
May-06	132	21	153	141	294
Jun-06	135	21	156	157	313
	1545	355	1900	1852	3752

### Last three years trend rubbish vs recycling (tonnes)

	Kerbside Recycling	Bags Carterton	Bags Masterton	Total Council	Total Non Council
2003-04	738.22		1247	1247	3754
2004-05	864.11	250	1577	1827	4368
2005-06	980.83	355	1463	1818	4818
	2583.16	605	4287	4892	12940