

US EPA ARCHIVE DOCUMENT

Table 1
MATERIALS GENERATED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2006
(In thousands of tons and percent of total generation)

	Thousands of Tons								
Materials	1960	1970	1980	1990	2000	2002	2004	2005	2006
Paper and Paperboard	29,990	44,310	55,160	72,730	87,740	84,070	87,550	85,130	85,290
Glass	6,720	12,740	15,130	13,100	12,620	12,570	12,650	12,760	13,200
Metals									
Ferrous	10,300	12,360	12,620	12,640	13,530	13,560	13,980	13,820	14,220
Aluminum	340	800	1,730	2,810	3,150	3,180	3,190	3,190	3,260
Other Nonferrous	180	670	1,160	1,100	1,560	1,570	1,640	1,670	1,650
<i>Total Metals</i>	<i>10,820</i>	<i>13,830</i>	<i>15,510</i>	<i>16,550</i>	<i>18,240</i>	<i>18,310</i>	<i>18,810</i>	<i>18,680</i>	<i>19,130</i>
Plastics	390	2,900	6,830	17,130	25,340	27,180	29,210	28,950	29,490
Rubber and Leather	1,840	2,970	4,200	5,790	6,530	6,660	6,690	6,670	6,540
Textiles	1,760	2,040	2,530	5,810	9,440	10,320	10,930	11,280	11,840
Wood	3,030	3,720	7,010	12,210	13,020	13,340	13,730	13,900	13,930
Other **	70	770	2,520	3,190	4,190	4,280	4,460	4,540	4,550
Total Materials in Products	54,620	83,280	108,890	146,510	177,120	176,730	184,030	181,910	183,970
Other Wastes									
Food Scraps	12,200	12,800	13,000	20,800	27,110	27,920	29,730	30,480	31,250
Yard Trimmings	20,000	23,200	27,500	35,000	30,530	31,160	31,770	32,070	32,400
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,580	3,650	3,690	3,720
Total Other Wastes	33,500	37,780	42,750	58,700	61,140	62,660	65,150	66,240	67,370
Total MSW Generated - Weight	88,120	121,060	151,640	205,210	238,260	239,390	249,180	248,150	251,340
	Percent of Total Generation								
Materials	1960	1970	1980	1990	2000	2002	2004	2005	2006
Paper and Paperboard	34.0%	36.6%	36.4%	35.4%	36.8%	35.1%	35.1%	34.3%	33.9%
Glass	7.6%	10.5%	10.0%	6.4%	5.3%	5.3%	5.1%	5.1%	5.3%
Metals									
Ferrous	11.7%	10.2%	8.3%	6.2%	5.7%	5.7%	5.6%	5.6%	5.7%
Aluminum	0.4%	0.7%	1.1%	1.4%	1.3%	1.3%	1.3%	1.3%	1.3%
Other Nonferrous	0.2%	0.6%	0.8%	0.5%	0.7%	0.7%	0.7%	0.7%	0.7%
<i>Total Metals</i>	<i>12.3%</i>	<i>11.4%</i>	<i>10.2%</i>	<i>8.1%</i>	<i>7.7%</i>	<i>7.6%</i>	<i>7.5%</i>	<i>7.5%</i>	<i>7.6%</i>
Plastics	0.4%	2.4%	4.5%	8.3%	10.6%	11.4%	11.7%	11.7%	11.7%
Rubber and Leather	2.1%	2.5%	2.8%	2.8%	2.7%	2.8%	2.7%	2.7%	2.6%
Textiles	2.0%	1.7%	1.7%	2.8%	4.0%	4.3%	4.4%	4.5%	4.7%
Wood	3.4%	3.1%	4.6%	6.0%	5.5%	5.6%	5.5%	5.6%	5.5%
Other **	0.1%	0.6%	1.7%	1.6%	1.8%	1.8%	1.8%	1.8%	1.8%
Total Materials in Products	62.0%	68.8%	71.8%	71.4%	74.3%	73.8%	73.9%	73.3%	73.2%
Other Wastes									
Food Scraps	13.8%	10.6%	8.6%	10.1%	11.4%	11.7%	11.9%	12.3%	12.4%
Yard Trimmings	22.7%	19.2%	18.1%	17.1%	12.8%	13.0%	12.7%	12.9%	12.9%
Miscellaneous Inorganic Wastes	1.5%	1.5%	1.5%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%
Total Other Wastes	38.0%	31.2%	28.2%	28.6%	25.7%	26.2%	26.1%	26.7%	26.8%
Total MSW Generated - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Generation before materials recovery or combustion. Does not include construction & demolition debris, industrial process wastes, or certain other wastes.

** Includes electrolytes in batteries and fluff pulp, feces, and urine in disposable diapers.

Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Table 2
RECOVERY* OF MUNICIPAL SOLID WASTE, 1960 TO 2006
(In thousands of tons and percent of generation of each material)

Materials	Thousands of Tons								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Paper and Paperboard	5,080	6,770	11,740	20,230	37,560	37,980	40,820	42,040	44,020
Glass	100	160	750	2,630	2,880	2,730	2,730	2,760	2,880
Metals									
Ferrous	50	150	370	2,230	4,610	4,910	5,100	4,930	5,080
Aluminum	Neg.	10	310	1,010	860	760	710	690	690
Other Nonferrous	Neg.	320	540	730	1,060	1,050	1,190	1,200	1,180
<i>Total Metals</i>	50	480	1,220	3,970	6,530	6,720	7,000	6,820	6,950
Plastics	Neg.	Neg.	20	370	1,480	1,480	1,720	1,760	2,040
Rubber and Leather	330	250	130	370	820	1,150	1,020	940	870
Textiles	50	60	160	660	1,320	1,510	1,760	1,800	1,810
Wood	Neg.	Neg.	Neg.	130	1,240	1,260	1,290	1,310	1,310
Other **	Neg.	300	500	680	980	990	1,120	1,140	1,130
Total Materials in Products	5,610	8,020	14,520	29,040	52,810	53,820	57,460	58,570	61,010
Other Wastes									
Food Scraps	Neg.	Neg.	Neg.	Neg.	680	740	660	690	680
Yard Trimmings	Neg.	Neg.	Neg.	4,200	15,770	16,000	19,810	19,860	20,100
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	4,200	16,450	16,740	20,470	20,550	20,780
Total MSW Recovered - Weight	5,610	8,020	14,520	33,240	69,260	70,560	77,930	79,120	81,790
Materials	Percent of Generation of Each Material								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Paper and Paperboard	16.9%	15.3%	21.3%	27.8%	42.8%	45.2%	46.6%	49.4%	51.6%
Glass	1.5%	1.3%	5.0%	20.1%	22.8%	21.7%	21.6%	21.6%	21.8%
Metals									
Ferrous	0.5%	1.2%	2.9%	17.6%	34.1%	36.2%	36.5%	35.7%	35.7%
Aluminum	Neg.	1.3%	17.9%	35.9%	27.3%	23.9%	22.3%	21.6%	21.2%
Other Nonferrous	Neg.	47.8%	46.6%	66.4%	67.9%	66.9%	72.6%	71.9%	71.5%
<i>Total Metals</i>	0.5%	3.5%	7.9%	24.0%	35.8%	36.7%	37.2%	36.5%	36.3%
Plastics	Neg.	Neg.	0.3%	2.2%	5.8%	5.4%	5.9%	6.1%	6.9%
Rubber and Leather	17.9%	8.4%	3.1%	6.4%	12.6%	17.3%	15.2%	14.1%	13.3%
Textiles	2.8%	2.9%	6.3%	11.4%	14.0%	14.6%	16.1%	16.0%	15.3%
Wood	Neg.	Neg.	Neg.	1.1%	9.5%	9.4%	9.4%	9.4%	9.4%
Other **	Neg.	39.0%	19.8%	21.3%	23.4%	23.1%	25.1%	25.1%	24.8%
Total Materials in Products	10.3%	9.6%	13.3%	19.8%	29.8%	30.5%	31.2%	32.2%	33.2%
Other Wastes									
Food, Other^	Neg.	Neg.	Neg.	Neg.	2.5%	2.7%	2.2%	2.3%	2.2%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	51.7%	51.3%	62.4%	61.9%	62.0%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	7.2%	26.9%	26.7%	31.4%	31.0%	30.8%
Total MSW Recovered - %	6.4%	6.6%	9.6%	16.2%	29.1%	29.5%	31.3%	31.9%	32.5%

* Recovery of postconsumer wastes; does not include converting/fabrication scrap.

** Recovery of electrolytes in batteries; probably not recycled.

Neg. = Less than 5,000 tons or 0.05 percent.

^ Includes recovery of paper for composting.

Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Table 3
MATERIALS DISCARDED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2006
(In thousands of tons and percent of total discards)

Materials	Thousands of Tons								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Paper and Paperboard	24,910	37,540	43,420	52,500	50,180	46,090	46,730	43,090	41,270
Glass	6,620	12,580	14,380	10,470	9,740	9,840	9,920	10,000	10,320
Metals									
Ferrous	10,250	12,210	12,250	10,410	8,920	8,650	8,880	8,890	9,140
Aluminum	340	790	1,420	1,800	2,290	2,420	2,480	2,500	2,570
Other Nonferrous	180	350	620	370	500	520	450	470	470
<i>Total Metals</i>	<i>10,770</i>	<i>13,350</i>	<i>14,290</i>	<i>12,580</i>	<i>11,710</i>	<i>11,590</i>	<i>11,810</i>	<i>11,860</i>	<i>12,180</i>
Plastics	390	2,900	6,810	16,760	23,860	25,700	27,490	27,190	27,450
Rubber and Leather	1,510	2,720	4,070	5,420	5,710	5,510	5,670	5,730	5,670
Textiles	1,710	1,980	2,370	5,150	8,120	8,810	9,170	9,480	10,030
Wood	3,030	3,720	7,010	12,080	11,780	12,080	12,440	12,590	12,620
Other **	70	470	2,020	2,510	3,210	3,290	3,340	3,400	3,420
Total Materials in Products	49,010	75,260	94,370	117,470	124,310	122,910	126,570	123,340	122,960
Other Wastes									
Food Scraps	12,200	12,800	13,000	20,800	26,430	27,180	29,070	29,790	30,570
Yard Trimmings	20,000	23,200	27,500	30,800	14,760	15,160	11,960	12,210	12,300
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,580	3,650	3,690	3,720
Total Other Wastes	33,500	37,780	42,750	54,500	44,690	45,920	44,680	45,690	46,590
Total MSW Discarded - Weight	82,510	113,040	137,120	171,970	169,000	168,830	171,250	169,030	169,550
Materials	Percent of Total Discards								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Paper and Paperboard	30.2%	33.2%	31.7%	30.5%	29.7%	27.3%	27.3%	25.5%	24.3%
Glass	8.0%	11.1%	10.5%	6.1%	5.8%	5.8%	5.8%	5.9%	6.1%
Metals									
Ferrous	12.4%	10.8%	8.9%	6.1%	5.3%	5.1%	5.2%	5.3%	5.4%
Aluminum	0.4%	0.7%	1.0%	1.0%	1.4%	1.4%	1.4%	1.5%	1.5%
Other Nonferrous	0.2%	0.3%	0.5%	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%
<i>Total Metals</i>	<i>13.1%</i>	<i>11.8%</i>	<i>10.4%</i>	<i>7.3%</i>	<i>6.9%</i>	<i>6.9%</i>	<i>6.9%</i>	<i>7.0%</i>	<i>7.2%</i>
Plastics	0.5%	2.6%	5.0%	9.7%	14.1%	15.2%	16.1%	16.1%	16.2%
Rubber and Leather	1.8%	2.4%	3.0%	3.2%	3.4%	3.3%	3.3%	3.4%	3.3%
Textiles	2.1%	1.8%	1.7%	3.0%	4.8%	5.2%	5.4%	5.6%	5.9%
Wood	3.7%	3.3%	5.1%	7.0%	7.0%	7.2%	7.3%	7.4%	7.4%
Other **	0.1%	0.4%	1.5%	1.5%	1.9%	1.9%	2.0%	2.0%	2.0%
Total Materials in Products	59.4%	66.6%	68.8%	68.3%	73.6%	72.8%	73.9%	73.0%	72.5%
Other Wastes									
Food Scraps	14.8%	11.3%	9.5%	12.1%	15.6%	16.1%	17.0%	17.6%	18.0%
Yard Trimmings	24.2%	20.5%	20.1%	17.9%	8.7%	9.0%	7.0%	7.2%	7.3%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	2.1%	2.1%	2.1%	2.2%	2.2%
Total Other Wastes	40.6%	33.4%	31.2%	31.7%	26.4%	27.2%	26.1%	27.0%	27.5%
Total MSW Discarded - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Discards after materials and compost recovery. In this table, discards include combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes, or certain other wastes.

** Includes electrolytes in batteries and fluff pulp, feces, and urine in disposable diapers.

Details may not add to totals due to rounding.
Source: Franklin Associates, A Division of ERG

Table 4
PAPER AND PAPERBOARD PRODUCTS IN MSW, 2006
(In thousands of tons and percent of generation)

Product Category	Generation (Thousand tons)	Recovery		Discards (Thousand tons)
		(Thousand tons)	(Percent of generation)	
Nondurable Goods				
Newspapers				
Newsprint	8,830	7,780	88.1%	1,050
Groundwood inserts	3,530	3,090	87.5%	440
Total Newspapers	<u>12,360</u>	<u>10,870</u>	87.9%	<u>1,490</u>
Books	1,130	290	25.7%	840
Magazines	2,570	1,040	40.5%	1,530
Office-type Papers*	6,320	4,150	65.7%	2,170
Telephone Directories	680	130	19.1%	550
Standard Mail**	5,890	2,280	38.7%	3,610
Other Commercial Printing	6,630	1,400	21.1%	5,230
Tissue Paper and Towels	3,430	Neg.	Neg.	3,430
Paper Plates and Cups	1,180	Neg.	Neg.	1,180
Other Nonpackaging Paper***	4,650	Neg.	Neg.	4,650
Total Paper and Paperboard Nondurable Goods	<u>44,840</u>	<u>20,160</u>	45.0%	<u>24,680</u>
Containers and Packaging				
Corrugated Boxes	31,430	22,630	72.0%	8,800
Milk Cartons	510	Neg.	Neg.	510
Folding Cartons	5,570	890	16.0%	4,680
Other Paperboard Packaging	160	Neg.	Neg.	160
Bags and Sacks	1,340	340	25.4%	1,000
Other Paper Packaging	1,430	Neg.	Neg.	1,430
Total Paper and Paperboard Containers and Packaging	<u>40,440</u>	<u>23,860</u>	59.0%	<u>16,580</u>
Total Paper and Paperboard	<u>85,280</u>	<u>44,020</u>	51.6%	<u>41,260</u>

* High-grade papers such as copy paper and printer paper; both residential and commercial.

** Formerly called Third Class Mail by the U.S. Postal Service.

*** Includes tissue in disposable diapers, paper in games and novelties, cards, etc.

Table 4 does not include 10,000 tons of paper used in durable goods (Table 1).

Neg. = Less than 5,000 tons or 0.05 percent.

Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Table 5
GLASS PRODUCTS IN MSW, 2006
(In thousands of tons and percent of generation)

Product Category	Generation (Thousand tons)	Recovery		Discards (Thousand tons)
		(Thousand tons)	(Percent of generation)	
Durable Goods*	1,810	Neg.	Neg.	1,810
Containers and Packaging				
Beer and Soft Drink Bottles	7,500	2,300	30.7%	5,200
Wine and Liquor Bottles	1,670	250	15.0%	1,420
Food and Other Bottles and Jars	<u>2,220</u>	<u>330</u>	14.9%	<u>1,890</u>
Total Glass Containers	11,390	2,880	25.3%	8,510
Total Glass	<u>13,200</u>	<u>2,880</u>	21.8%	<u>10,320</u>

* Glass as a component of appliances, furniture, consumer electronics, etc.

Neg. = Less than 5,000 tons or 0.05 percent.

Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Table 6
METAL PRODUCTS IN MSW, 2006
(In thousands of tons and percent of generation)

Product Category	Generation (Thousand tons)	Recovery		Discards (Thousand tons)
		(Thousand tons)	(Percent of generation)	
Durable Goods				
Ferrous metals*	11,470	3,340	29.1%	8,130
Aluminum**	1,100	Neg.	Neg.	1,100
Lead†	1,190	1,180	99.2%	10
Other nonferrous metals‡	460	Neg.	Neg.	460
Total Metals in Durable Goods	<u>14,220</u>	<u>4,520</u>	<u>31.8%</u>	<u>9,700</u>
Nondurable Goods				
Aluminum	220	Neg.	Neg.	220
Containers and Packaging				
Steel				
Food and other cans	2,510	1,580	62.9%	930
Other steel packaging	240	160	66.7%	80
Total Steel Packaging	<u>2,750</u>	<u>1,740</u>	<u>63.3%</u>	<u>1,010</u>
Aluminum				
Beer and soft drink cans	1,440	650	45.1%	790
Food and other cans	80	Neg.	Neg.	80
Foil and closures	420	40	9.5%	380
Total Aluminum Packaging	<u>1,940</u>	<u>690</u>	<u>35.6%</u>	<u>1,250</u>
Total Metals in Containers and Packaging	<u>4,690</u>	<u>2,430</u>	<u>51.8%</u>	<u>2,260</u>
Total Metals	<u>19,130</u>	<u>6,950</u>	<u>36.3%</u>	<u>12,180</u>
Ferrous	14,220	5,080	35.7%	9,140
Aluminum	3,260	690	21.2%	2,570
Other nonferrous	1,650	1,180	71.5%	470

* Ferrous metals (iron and steel) in appliances, furniture, tires, and miscellaneous durables.

** Aluminum in appliances, furniture, and miscellaneous durables.

† Lead in lead-acid batteries.

‡ Other nonferrous metals in appliances and miscellaneous durables.

Neg. = Less than 5,000 tons or 0.05 percent.

Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Table 7

PLASTICS IN PRODUCTS IN MSW, 2006
(In thousands of tons, and percent of generation by resin)

Product Category	<u>Generation</u>	<u>Recovery</u>		<u>Discards</u>
	(Thousand tons)	(Thousand tons)	(Percent of Gen.)	(Thousand tons)
Durable Goods				
PET	470			
HDPE	650			
PVC	520			
LDPE/LLDPE	760			
PP	1,420			
PS	740			
Other resins	4,230			
Total Plastics in Durable Goods	8,790	530	6.0%	8,260
Nondurable Goods				
Plastic Plates and Cups				
LDPE/LLDPE	20			20
PS	870	Neg.		870
Subtotal Plastic Plates and Cups	890			890
Trash Bags				
HDPE	290			290
LDPE/LLDPE	790			790
Subtotal Trash Bags	1,080			1,080
All other nondurables*				
PET	250			250
HDPE	420			420
PVC	670			670
LDPE/LLDPE	1,600			1,600
PP	880			880
PS	590			590
Other resins	90			90
Subtotal All Other Nondurables	4,500			4,500
Total Plastics in Nondurable Goods, by resin				
PET	250			250
HDPE	710			710
PVC	670			670
LDPE/LLDPE	2,410			2,410
PP	880			880
PS	1,460			1,460
Other resins	90			90
Total Plastics in Nondurable Goods	6,470	Neg.	Neg.	6,470
Plastic Containers & Packaging				
Soft drink bottles				
PET	940	290	30.9%	650
Milk and water bottles				
HDPE	710	220	31.0%	490

HDPE = High density polyethylene

PET = Polyethylene terephthalate PS = Polystyrene

LDPE = Low density polyethylene

PP = Polypropylene

PVC = Polyvinyl chloride

LLDPE = Linear low density polyethylene

* All other nondurables include plastics in disposable diapers, clothing, footwear, etc.

** Other plastic packaging includes coatings, closures, caps, trays, shapes, etc.

Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Table 7 (continued)
PLASTICS IN PRODUCTS IN MSW, 2006
(In thousands of tons, and percent of generation by resin)

Product Category	Generation	Recovery		Discards
	(Thousand tons)	(Thousand tons)	(Percent of Gen.)	(Thousand tons)
Plastic Containers & Packaging, cont.				
Other plastic containers				
PET	1,150	210		940
HDPE	1,560	240		1,320
PVC	100			100
LDPE/LLDPE	50			50
PP	80	10		80
PS	0			0
Other resins	490			490
Subtotal Other Containers	3,430	460	13.4%	2,970
Bags, sacks, & wraps				
HDPE	850	80		770
PVC	70			70
LDPE/LLDPE	2,800	280		2,520
PP	710			710
PS	0			0
Other resins	200			200
Subtotal Bags, Sacks, & Wraps	4,630	360	7.8%	4,270
Other Plastics Packaging**				
PET	250	120		130
HDPE	1,560	40		1,520
PVC	310			310
LDPE/LLDPE	540			540
PP	960	10		950
PS	350	10		340
Other resins	550			550
Subtotal Other Packaging	4,520	180	4.0%	4,340
Total Plastics in Containers & Packaging, by resin				
PET	2,340	620		1,720
HDPE	4,680	580		4,100
PVC	480			480
LDPE/LLDPE	3,390	280		3,110
PP	1,750	20		1,730
PS	350	10		340
Other resins	1,240			1,240
Total Plastics in Cont. & Packaging	14,230	1,510	10.6%	12,720
Total Plastics in MSW, by resin				
PET	3,060	620		2,440
HDPE	6,040	580		5,460
PVC	1,670			1,670
LDPE/LLDPE	6,560	280		6,280
PP	4,050	20		4,030
PS	2,550	10		2,540
Other resins	5,560	530		5,030
Total Plastics in MSW	29,490	2,040	6.9%	27,450

HDPE = High density polyethylene

LDPE = Low density polyethylene

LLDPE = Linear low density polyethylene

PET = Polyethylene terephthalate PS = Polystyrene

PP = Polypropylene

PVC = Polyvinyl chloride

* All other nondurables include plastics in disposable diapers, clothing, footwear, etc.

** Other plastic packaging includes coatings, closures, caps, trays, shapes, etc.

Some detail of recovery by resin omitted due to lack of data.

This table understates the recovery of plastics due to the dispersed nature of plastics recycling activities.

Source: Franklin Associates, A Division of ERG

Table 8
RUBBER AND LEATHER PRODUCTS IN MSW, 2006
(In thousands of tons and percent of generation)

Product Category	Generation (Thousand tons)	Recovery		Discards (Thousand tons)
		(Thousand tons)	(Percent of generation)	
Durable Goods				
Rubber in Tires*	2,490	870	34.9%	1,620
Other Durables**	<u>2,950</u>	<u>Neg.</u>	Neg.	<u>2,950</u>
<i>Total Rubber & Leather</i>				
<i>Durable Goods</i>	5,440	870	16.0%	4,570
Nondurable Goods				
Clothing and Footwear	780	Neg.	Neg.	780
Other Nondurables	<u>280</u>	<u>Neg.</u>	Neg.	<u>280</u>
<i>Total Rubber & Leather</i>				
<i>Nondurable Goods</i>	1,060	Neg.	Neg.	1,060
Containers and Packaging	40	Neg.	Neg.	40
<i>Total Rubber & Leather</i>	<u>6,540</u>	<u>870</u>	13.3%	<u>5,670</u>

* Automobile and truck tires. Does not include other materials in tires.

** Includes carpets and rugs and other miscellaneous durables.

Neg. = Less than 5,000 tons or 0.05 percent.

Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Table 9
CATEGORIES OF PRODUCTS GENERATED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2006
(In thousands of tons and percent of total generation)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2002	2003	2004	2005	2006
Durable Goods <i>(Detail in Table 12)</i>	9,920	14,660	21,800	29,810	36,980	38,440	39,360	39,880	40,280	40,170
Nondurable Goods <i>(Detail in Table 15)</i>	17,330	25,060	34,420	52,170	64,120	62,110	62,420	65,600	64,320	64,180
Containers and Packaging <i>(Detail in Table 18)</i>	27,370	43,560	52,670	64,530	76,020	76,180	75,360	78,550	77,310	79,620
Total Product** Wastes	54,620	83,280	108,890	146,510	177,120	176,730	177,140	184,030	181,910	183,970
Other Wastes										
Food Scraps	12,200	12,800	13,000	20,800	27,110	27,920	28,820	29,730	30,480	31,250
Yard Trimmings	20,000	23,200	27,500	35,000	30,530	31,160	31,470	31,770	32,070	32,400
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,580	3,620	3,650	3,690	3,720
Total Other Wastes	33,500	37,780	42,750	58,700	61,140	62,660	63,910	65,150	66,240	67,370
Total MSW Generated - Weight	88,120	121,060	151,640	205,210	238,260	239,390	241,050	249,180	248,150	251,340
Products	Percent of Total Generation									
	1960	1970	1980	1990	2000	2002	2003	2004	2005	2006
Durable Goods <i>(Detail in Table 12)</i>	11.3%	12.1%	14.4%	14.5%	15.5%	16.1%	16.3%	16.0%	16.2%	16.0%
Nondurable Goods <i>(Detail in Table 15)</i>	19.7%	20.7%	22.7%	25.4%	26.9%	25.9%	25.9%	26.3%	25.9%	25.5%
Containers and Packaging <i>(Detail in Table 19)</i>	31.1%	36.0%	34.7%	31.4%	31.9%	31.8%	31.3%	31.5%	31.2%	31.7%
Total Product** Wastes	62.0%	68.8%	71.8%	71.4%	74.3%	73.8%	73.5%	73.9%	73.3%	73.2%
Other Wastes										
Food Scraps	13.8%	10.6%	8.6%	10.1%	11.4%	11.7%	12.0%	11.9%	12.3%	12.4%
Yard Trimmings	22.7%	19.2%	18.1%	17.1%	12.8%	13.0%	13.1%	12.7%	12.9%	12.9%
Miscellaneous Inorganic Wastes	1.5%	1.5%	1.5%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Total Other Wastes	38.0%	31.2%	28.2%	28.6%	25.7%	26.2%	26.5%	26.1%	26.7%	26.8%
Total MSW Generated - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Generation before materials recovery or combustion. Does not include construction & demolition debris, industrial process wastes, or certain other wastes.

** Other than food products.

Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Table 10
RECOVERY* OF MUNICIPAL SOLID WASTE, 1960 TO 2006
(In thousands of tons and percent of generation of each category)

	Thousands of Tons								
Products	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 13)</i>	350	940	1,360	3,460	6,510	7,320	7,600	7,570	7,430
Nondurable Goods <i>(Detail in Table 16)</i>	2,390	3,730	4,670	8,800	17,560	17,680	20,070	20,400	21,590
Containers and Packaging <i>(Detail in Table 20)</i>	2,870	3,350	8,490	16,780	28,740	28,820	29,790	30,600	31,990
Total Product** Wastes	5,610	8,020	14,520	29,040	52,810	53,820	57,460	58,570	61,010
Other Wastes									
Food, Other^	Neg.	Neg.	Neg.	Neg.	680	740	660	690	680
Yard Trimmings	Neg.	Neg.	Neg.	4,200	15,770	16,000	19,810	19,860	20,100
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	4,200	16,450	16,740	20,470	20,550	20,780
Total MSW Recovered - Weight	5,610	8,020	14,520	33,240	69,260	70,560	77,930	79,120	81,790
	Percent of Generation of Each Category								
Products	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 13)</i>	3.5%	6.4%	6.2%	11.6%	17.6%	19.0%	19.1%	18.8%	18.5%
Nondurable Goods <i>(Detail in Table 16)</i>	13.8%	14.9%	13.6%	16.9%	27.4%	28.5%	30.6%	31.7%	33.6%
Containers and Packaging <i>(Detail in Table 21)</i>	10.5%	7.7%	16.1%	26.0%	37.8%	37.8%	37.9%	39.6%	40.2%
Total Product** Wastes	10.3%	9.6%	13.3%	19.8%	29.8%	30.5%	31.2%	32.2%	33.2%
Other Wastes									
Food, Other^	Neg.	Neg.	Neg.	Neg.	2.5%	2.7%	2.2%	2.3%	2.2%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	51.7%	51.3%	62.4%	61.9%	62.0%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	7.2%	26.9%	26.7%	31.4%	31.0%	30.8%
Total MSW Recovered - %	6.4%	6.6%	9.6%	16.2%	29.1%	29.5%	31.3%	31.9%	32.5%

* Recovery of postconsumer wastes; does not include converting/fabrication scrap.

** Other than food products.

^ Includes recovery of paper for composting.

Neg. = Less than 5,000 tons or 0.05 percent.

Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Table 11
CATEGORIES OF PRODUCTS DISCARDED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2006
(In thousands of tons and percent of total discards)

	Thousands of Tons								
Products	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 14)</i>	9,570	13,720	20,440	26,350	30,470	31,120	32,280	32,710	32,740
Nondurable Goods <i>(Detail in Table 17)</i>	14,940	21,330	29,750	43,370	46,560	44,430	45,530	43,920	42,590
Containers and Packaging <i>(Detail in Table 22)</i>	24,500	40,210	44,180	47,750	47,280	47,360	48,760	46,710	47,630
Total Product** Wastes	49,010	75,260	94,370	117,470	124,310	122,910	126,570	123,340	122,960
Other Wastes									
Food Wastes	12,200	12,800	13,000	20,800	26,430	27,180	29,070	29,790	30,570
Yard Trimmings	20,000	23,200	27,500	30,800	14,760	15,160	11,960	12,210	12,300
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,580	3,650	3,690	3,720
Total Other Wastes	33,500	37,780	42,750	54,500	44,690	45,920	44,680	45,690	46,590
Total MSW Discarded - Weight	82,510	113,040	137,120	171,970	169,000	168,830	171,250	169,030	169,550
	Percent of Total Discards								
Products	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 14)</i>	11.6%	12.1%	14.9%	15.3%	18.0%	18.4%	18.8%	19.4%	19.3%
Nondurable Goods <i>(Detail in Table 17)</i>	18.1%	18.9%	21.7%	25.2%	27.6%	26.3%	26.6%	26.0%	25.1%
Containers and Packaging <i>(Detail in Table 23)</i>	29.7%	35.6%	32.2%	27.8%	28.0%	28.1%	28.5%	27.6%	28.1%
Total Product** Wastes	59.4%	66.6%	68.8%	68.3%	73.6%	72.8%	73.9%	73.0%	72.5%
Other Wastes									
Food Scraps	14.8%	11.3%	9.5%	12.1%	15.6%	16.1%	17.0%	17.6%	18.0%
Yard Trimmings	24.2%	20.5%	20.1%	17.9%	8.7%	9.0%	7.0%	7.2%	7.3%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	2.1%	2.1%	2.1%	2.2%	2.2%
Total Other Wastes	40.6%	33.4%	31.2%	31.7%	26.4%	27.2%	26.1%	27.0%	27.5%
Total MSW Discarded - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Discards after materials and compost recovery. In this table, discards include combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes, or certain other wastes.

** Other than food products.

Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Table 12
PRODUCTS GENERATED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2006
(WITH DETAIL ON DURABLE GOODS)
(In thousands of tons and percent of total generation)

Products	Thousands of Tons								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods									
Major Appliances	1,630	2,170	2,950	3,310	3,640	3,540	3,570	3,610	3,580
Small Appliances**				460	900	900	920	950	1,020
Furniture and Furnishings	2,150	2,830	4,760	6,790	7,990	8,240	8,640	8,870	9,100
Carpets and Rugs**				1,660	2,570	2,810	2,930	2,980	3,070
Rubber Tires	1,120	1,890	2,720	3,610	4,930	4,700	4,460	4,250	3,900
Batteries, lead acid	Neg.	820	1,490	1,510	2,280	2,290	2,450	2,490	2,470
Miscellaneous Durables									
Selected Consumer Electronics***					1,900	2,070	2,440	2,670	2,900
Other Miscellaneous Durables					12,770	13,890	14,470	14,460	14,130
Total Miscellaneous Durables	5,020	6,950	9,880	12,470	14,670	15,960	16,910	17,130	17,030
Total Durable Goods	9,920	14,660	21,800	29,810	36,980	38,440	39,880	40,280	40,170
Nondurable Goods									
(Detail in Table 15)									
Containers and Packaging	27,370	43,560	52,670	64,530	76,020	76,180	78,550	77,310	79,620
(Detail in Table 18)									
Total Product Wastes†	54,620	83,280	108,890	146,510	177,120	176,730	184,030	181,910	183,970
Other Wastes									
Food Scraps	12,200	12,800	13,000	20,800	27,110	27,920	29,730	30,480	31,250
Yard Trimmings	20,000	23,200	27,500	35,000	30,530	31,160	31,770	32,070	32,400
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,580	3,650	3,690	3,720
Total Other Wastes	33,500	37,780	42,750	58,700	61,140	62,660	65,150	66,240	67,370
Total MSW Generated - Weight	88,120	121,060	151,640	205,210	238,260	239,390	249,180	248,150	251,340
Percent of Total Generation									
Products	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods									
Major Appliances	1.8%	1.8%	1.9%	1.6%	1.5%	1.5%	1.4%	1.5%	1.4%
Small Appliances**				0.2%	0.4%	0.4%	0.4%	0.4%	0.4%
Furniture and Furnishings	2.4%	2.3%	3.1%	3.3%	3.4%	3.4%	3.5%	3.6%	3.6%
Carpets and Rugs**				0.8%	1.1%	1.2%	1.2%	1.2%	1.2%
Rubber Tires	1.3%	1.6%	1.8%	1.8%	2.1%	2.0%	1.8%	1.7%	1.6%
Batteries, Lead-Acid	Neg.	0.7%	1.0%	0.7%	1.0%	1.0%	1.0%	1.0%	1.0%
Miscellaneous Durables									
Selected Consumer Electronics***					0.8%	0.9%	1.0%	1.1%	1.2%
Other Miscellaneous Durables					5.4%	5.8%	5.8%	5.8%	5.6%
Total Miscellaneous Durables	5.7%	5.7%	6.5%	6.1%	6.2%	6.7%	6.8%	6.9%	6.8%
Total Durable Goods	11.3%	12.1%	14.4%	14.5%	15.5%	16.1%	16.0%	16.2%	16.0%
Nondurable Goods									
(Detail in Table 15)									
Containers and Packaging	31.1%	36.0%	34.7%	31.4%	31.9%	31.8%	31.5%	31.2%	31.7%
(Detail in Table 19)									
Total Product Wastes†	62.0%	68.8%	71.8%	71.4%	74.3%	73.8%	73.9%	73.3%	73.2%
Other Wastes									
Food Scraps	13.8%	10.6%	8.6%	10.1%	11.4%	11.7%	11.9%	12.3%	12.4%
Yard Trimmings	22.7%	19.2%	18.1%	17.1%	12.8%	13.0%	12.7%	12.9%	12.9%
Miscellaneous Inorganic Wastes	1.5%	1.5%	1.5%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%
Total Other Wastes	38.0%	31.2%	28.2%	28.6%	25.7%	26.2%	26.1%	26.7%	26.8%
Total MSW Generated - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Generation before materials recovery or combustion. Does not include construction & demolition debris, industrial process wastes, or certain other wastes. Details may not add to totals due to rounding.

** Not estimated separately prior to 1990.

*** Not estimated separately prior to 1999. Preliminary data; may undergo revision.

† Other than food products.

Neg. = Less than 5,000 tons or 0.05 percent.

Source: Franklin Associates, A Division of ERG

Table 13
RECOVERY* OF PRODUCTS IN MUNICIPAL SOLID WASTE, 1960 TO 2006
(WITH DETAIL ON DURABLE GOODS)
(In thousands of tons and percent of generation of each product)

Products	Thousands of Tons								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods									
Major Appliances	10	50	130	1,070	2,000	2,290	2,390	2,420	2,410
Small Appliances**				10	20	20	10	10	10
Furniture and Furnishings	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Carpets and Rugs**				Neg.	190	160	210	250	250
Rubber Tires	330	250	150	440	1,290	1,790	1,590	1,470	1,360
Batteries, lead acid	Neg.	620	1,040	1,470	2,130	2,140	2,430	2,470	2,450
Miscellaneous Durables									
Selected Consumer Electronics***					190	250	340	360	330
Other Miscellaneous Durables					690	670	630	590	620
<i>Total Miscellaneous Durables</i>	10	20	40	470	880	920	970	950	950
Total Durable Goods	350	940	1,360	3,460	6,510	7,320	7,600	7,570	7,430
Nondurable Goods <i>(Detail in Table 16)</i>	2,390	3,730	4,670	8,800	17,560	17,680	20,070	20,400	21,590
Containers and Packaging <i>(Detail in Table 20)</i>	2,870	3,350	8,490	16,780	28,740	28,820	29,790	30,600	31,990
Total Product Wastes†	5,610	8,020	14,520	29,040	52,810	53,820	57,460	58,570	61,010
Other Wastes									
Food Scraps	Neg.	Neg.	Neg.	Neg.	680	740	660	690	680
Yard Trimmings	Neg.	Neg.	Neg.	4,200	15,770	16,000	19,810	19,860	20,100
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	4,200	16,450	16,740	20,470	20,550	20,780
Total MSW Recovered - Weight	5,610	8,020	14,520	33,240	69,260	70,560	77,930	79,120	81,790
Percent of Generation of Each Product									
Products	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods									
Major Appliances	0.6%	2.3%	4.4%	32.3%	54.9%	64.7%	66.9%	67.0%	67.3%
Small Appliances**				2.2%	2.2%	2.2%	1.1%	1.1%	1.0%
Furniture and Furnishings	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Carpets and Rugs**				Neg.	7.4%	5.7%	7.2%	8.4%	8.1%
Rubber Tires	29.5%	13.2%	5.5%	12.2%	26.2%	38.1%	35.7%	34.6%	34.9%
Batteries, Lead-Acid	Neg.	75.6%	69.8%	97.4%	93.4%	93.4%	99.2%	99.2%	99.2%
Miscellaneous Durables									
Selected Consumer Electronics***					10.0%	12.1%	13.9%	13.5%	11.4%
Other Miscellaneous Durables					5.4%	4.8%	4.4%	4.1%	4.4%
<i>Total Miscellaneous Durables</i>	0.2%	0.3%	0.4%	3.8%	6.0%	5.8%	5.7%	5.5%	5.6%
Total Durable Goods	3.5%	6.4%	6.2%	11.6%	17.6%	19.0%	19.1%	18.8%	18.5%
Nondurable Goods <i>(Detail in Table 16)</i>	13.8%	14.9%	13.6%	16.9%	27.4%	28.5%	30.6%	31.7%	33.6%
Containers and Packaging <i>(Detail in Table 21)</i>	10.5%	7.7%	16.1%	26.0%	37.8%	37.8%	37.9%	39.6%	40.2%
Total Product Wastes†	10.3%	9.6%	13.3%	19.8%	29.8%	30.5%	31.2%	32.2%	33.2%
Other Wastes									
Food Scraps	Neg.	Neg.	Neg.	Neg.	2.5%	2.7%	2.2%	2.3%	2.2%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	51.7%	51.3%	62.4%	61.9%	62.0%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	7.2%	26.9%	26.7%	31.4%	31.0%	30.8%
Total MSW Recovered - %	6.4%	6.6%	9.6%	16.2%	29.1%	29.5%	31.3%	31.9%	32.5%

* Recovery of postconsumer wastes; does not include converting/fabrication scrap.

** Not estimated separately prior to 1990.

*** Not estimated separately prior to 1999.

† Other than food products.

Neg. = Less than 5,000 tons or 0.05 percent. Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Table 14
PRODUCTS DISCARDED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2006
(WITH DETAIL ON DURABLE GOODS)
(In thousands of tons and percent of total discards)

Products	Thousands of Tons								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods									
Major Appliances	1,620	2,120	2,820	2,240	1,640	1,250	1,180	1,190	1,170
Small Appliances**				450	880	880	910	940	1,010
Furniture and Furnishings	2,150	2,830	4,760	6,790	7,990	8,240	8,640	8,870	9,100
Carpets and Rugs**				1,660	2,380	2,650	2,720	2,730	2,820
Rubber Tires	790	1,640	2,570	3,170	3,640	2,910	2,870	2,780	2,540
Batteries, lead acid	Neg.	200	450	40	150	150	20	20	20
Miscellaneous Durables									
Selected Consumer Electronics***					1,710	1,820	2,100	2,310	2,570
Other Miscellaneous Durables					12,080	13,220	13,840	13,870	13,510
Total Miscellaneous Durables	5,010	6,930	9,840	12,000	13,790	15,040	15,940	16,180	16,080
Total Durable Goods	9,570	13,720	20,440	26,350	30,470	31,120	32,280	32,710	32,740
Nondurable Goods <i>(Detail in Table 17)</i>	14,940	21,330	29,750	43,370	46,560	44,430	45,530	43,920	42,590
Containers and Packaging <i>(Detail in Table 22)</i>	24,500	40,210	44,180	47,750	47,280	47,360	48,760	46,710	47,630
Total Product Wastes†	49,010	75,260	94,370	117,470	124,310	122,910	126,570	123,340	122,960
Other Wastes									
Food Scraps	12,200	12,800	13,000	20,800	26,430	27,180	29,070	29,790	30,570
Yard Trimmings	20,000	23,200	27,500	30,800	14,760	15,160	11,960	12,210	12,300
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,580	3,650	3,690	3,720
Total Other Wastes	33,500	37,780	42,750	54,500	44,690	45,920	44,680	45,690	46,590
Total MSW Discarded - Weight	82,510	113,040	137,120	171,970	169,000	168,830	171,250	169,030	169,550

Products	Percent of Total Discards								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods									
Major Appliances	2.0%	1.9%	2.1%	1.3%	1.0%	0.7%	0.7%	0.7%	0.7%
Small Appliances**				0.3%	0.5%	0.5%	0.5%	0.6%	0.6%
Furniture and Furnishings	2.6%	2.5%	3.5%	3.9%	4.7%	4.9%	5.0%	5.2%	5.4%
Carpets and Rugs**				1.0%	1.4%	1.6%	1.6%	1.6%	1.7%
Rubber Tires	1.0%	1.5%	1.9%	1.8%	2.2%	1.7%	1.7%	1.6%	1.5%
Batteries, Lead-Acid	Neg.	0.2%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%
Miscellaneous Durables									
Selected Consumer Electronics***					1.0%	1.1%	1.2%	1.4%	1.5%
Other Miscellaneous Durables					7.1%	7.8%	8.1%	8.2%	8.0%
Total Miscellaneous Durables	6.1%	6.1%	7.2%	7.0%	8.2%	8.9%	9.3%	9.6%	9.5%
Total Durable Goods	11.6%	12.1%	14.9%	15.3%	18.0%	18.4%	18.8%	19.4%	19.3%
Nondurable Goods <i>(Detail in Table 17)</i>	18.1%	18.9%	21.7%	25.2%	27.6%	26.3%	26.6%	26.0%	25.1%
Containers and Packaging <i>(Detail in Table 23)</i>	29.7%	35.6%	32.2%	27.8%	28.0%	28.1%	28.5%	27.6%	28.1%
Total Product Wastes†	59.4%	66.6%	68.8%	68.3%	73.6%	72.8%	73.9%	73.0%	72.5%
Other Wastes									
Food Scraps	14.8%	11.3%	9.5%	12.1%	15.6%	16.1%	17.0%	17.6%	18.0%
Yard Trimmings	24.2%	20.5%	20.1%	17.9%	8.7%	9.0%	7.0%	7.2%	7.3%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	2.1%	2.1%	2.1%	2.2%	2.2%
Total Other Wastes	40.6%	33.4%	31.2%	31.7%	26.4%	27.2%	26.1%	27.0%	27.5%
Total MSW Discarded - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Discards after materials and compost recovery. In this table, discards include combustion with energy recovery.

Does not include construction & demolition debris, industrial process wastes, or certain other wastes.

** Not estimated separately prior to 1990.

*** Not estimated separately prior to 1999. Preliminary data; may undergo revision.

† Other than food products.

Neg. = Less than 5,000 tons or 0.05 percent. Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Table 15
PRODUCTS GENERATED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2006
(WITH DETAIL ON NONDURABLE GOODS)
(In thousands of tons and percent of total generation)

Products	Thousands of Tons								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 12)</i>	9,920	14,660	21,800	29,810	36,980	38,440	39,880	40,280	40,170
Nondurable Goods									
Newspapers	7,110	9,510	11,050	13,430	14,790	13,620	13,560	13,060	12,360
Books and Magazines	1,920	2,470	3,390						
Books**				970	1,240	910	1,270	1,110	1,130
Magazines**				2,830	2,230	2,000	2,470	2,580	2,570
Office-Type Papers	1,520	2,650	4,000	6,410	7,420	7,250	7,040	6,620	6,320
Directories**				610	680	650	640	660	680
Standard Mail***				3,820	5,570	5,160	5,570	5,830	5,890
Other Commercial Printing	1,260	2,130	3,120	4,460	7,380	6,600	7,680	6,450	6,630
Tissue Paper and Towels	1,090	2,080	2,300	2,960	3,220	3,310	3,220	3,460	3,430
Paper Plates and Cups	270	420	630	650	960	950	1,090	1,160	1,180
Plastic Plates and Cups†			190	650	870	770	970	930	890
Trash Bags**				780	850	1,000	1,090	1,060	1,080
Disposable Diapers	Neg.	350	1,930	2,700	3,340	3,430	3,530	3,600	3,630
Other Nonpackaging Paper	2,700	3,630	4,230	3,840	4,250	4,030	4,550	4,490	4,590
Clothing and Footwear	1,360	1,620	2,170	4,010	6,470	7,140	7,640	8,080	8,640
Towels, Sheets and Pillowcases**				710	820	900	940	980	1,030
Other Miscellaneous Nondurables	100	200	1,410	3,340	4,030	4,390	4,340	4,250	4,130
Total Nondurable Goods	17,330	25,060	34,420	52,170	64,120	62,110	65,600	64,320	64,180
Containers and Packaging <i>(Detail in Table 18)</i>	27,370	43,560	52,670	64,530	76,020	76,180	78,550	77,310	79,620
Total Product Wastes‡	54,620	83,280	108,890	146,510	177,120	176,730	184,030	181,910	183,970
Other Wastes	33,500	37,780	42,750	58,700	61,140	62,660	65,150	66,240	67,370
Total MSW Generated - Weight	88,120	121,060	151,640	205,210	238,260	239,390	249,180	248,150	251,340
	Percent of Total Generation								
Products	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 12)</i>	11.3%	12.1%	14.4%	14.5%	15.5%	16.1%	16.0%	16.2%	16.0%
Nondurable Goods									
Newspapers	8.1%	7.9%	7.3%	6.5%	6.2%	5.7%	5.4%	5.3%	4.9%
Books and Magazines	2.2%	2.0%	2.2%						
Books**				0.5%	0.5%	0.4%	0.5%	0.4%	0.4%
Magazines**				1.4%	0.9%	0.8%	1.0%	1.0%	1.0%
Office-Type Papers***	1.7%	2.2%	2.6%	3.1%	3.1%	3.0%	2.8%	2.7%	2.5%
Directories**				0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Standard Mail§				1.9%	2.3%	2.2%	2.2%	2.3%	2.3%
Other Commercial Printing	1.4%	1.8%	2.1%	2.2%	3.1%	2.8%	3.1%	2.6%	2.6%
Tissue Paper and Towels	1.2%	1.7%	1.5%	1.4%	1.4%	1.4%	1.3%	1.4%	1.4%
Paper Plates and Cups	0.3%	0.3%	0.4%	0.3%	0.4%	0.4%	0.4%	0.5%	0.5%
Plastic Plates and Cupst			0.1%	0.3%	0.4%	0.3%	0.4%	0.4%	0.4%
Trash Bags**				0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
Disposable Diapers	Neg.	0.3%	1.3%	1.3%	1.4%	1.4%	1.4%	1.5%	1.4%
Other Nonpackaging Paper	3.1%	3.0%	2.8%	1.9%	1.8%	1.7%	1.8%	1.8%	1.8%
Clothing and Footwear	1.5%	1.3%	1.4%	2.0%	2.7%	3.0%	3.1%	3.3%	3.4%
Towels, Sheets and Pillowcases**				0.3%	0.3%	0.4%	0.4%	0.4%	0.4%
Other Miscellaneous Nondurables	0.1%	0.2%	0.9%	1.6%	1.7%	1.8%	1.7%	1.7%	1.6%
Total Nondurables	19.7%	20.7%	22.7%	25.4%	26.9%	25.9%	26.3%	25.9%	25.5%
Containers and Packaging <i>(Detail in Table 19)</i>	31.1%	36.0%	34.7%	31.4%	31.9%	31.8%	31.5%	31.2%	31.7%
Total Product Wastes‡	62.0%	68.8%	71.8%	71.4%	74.3%	73.8%	73.9%	73.3%	73.2%
Other Wastes	38.0%	31.2%	28.2%	28.6%	25.7%	26.2%	26.1%	26.7%	26.8%
Total MSW Generated - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Generation before materials recovery or combustion. Does not include construction & demolition debris, industrial process wastes, or certain other wastes. Details may not add to totals due to rounding.

** Not estimated separately prior to 1990.

*** High-grade paper such as printer paper; generated in both commercial and residential sources.

§ Not estimated separately prior to 1990. Formerly called Third Class Mail and Standard (A) Mail by the U.S. Postal Service.

† Not estimated separately prior to 1980.

‡ Other than food products.

Neg. = Less than 5,000 tons or 0.05 percent.

Source: Franklin Associates, A Division of ERG

Table 16
RECOVERY* OF PRODUCTS IN MUNICIPAL SOLID WASTE, 1960 TO 2006
(WITH DETAIL ON NONDURABLE GOODS)
(In thousands of tons and percent of generation of each product)

Products	Thousands of Tons								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 13)</i>	350	940	1,360	3,460	6,510	7,320	7,600	7,570	7,430
Nondurable Goods									
Newspapers	1,820	2,250	3,020	5,110	8,720	9,900	10,410	10,680	10,870
Books and Magazines	100	260	280						
Books**				100	240	170	250	270	290
Magazines**				300	710	560	890	960	1,040
Office-Type Papers	250	710	870	1,700	4,090	3,850	4,200	4,110	4,150
Directories**				50	120	90	100	120	130
Standard Mail***				200	1,830	1,560	1,830	2,090	2,280
Other Commercial Printing	130	340	350	700	810	400	980	750	1,400
Tissue Paper and Towels	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Paper Plates and Cups	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Plastic Plates and Cupst			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Trash Bags**				Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Disposable Diapers				Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Other Nonpackaging Paper	40	110	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Clothing and Footwear	50	60	150	520	900	990	1,250	1,250	1,250
Towels, Sheets and Pillowcases**				120	140	160	160	170	180
Other Miscellaneous Nondurables	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Nondurable Goods	2,390	3,730	4,670	8,800	17,560	17,680	20,070	20,400	21,590
Containers and Packaging <i>(Detail in Table 20)</i>	2,870	3,350	8,490	16,780	28,740	28,820	29,790	30,600	31,990
Total Product Wastes†	5,610	8,020	14,520	29,040	52,810	53,820	57,460	58,570	61,010
Other Wastes	Neg.	Neg.	Neg.	4,200	16,450	16,740	20,470	20,550	20,780
Total MSW Recovered - Weight	5,610	8,020	14,520	33,240	69,260	70,560	77,930	79,120	81,790
	Percent of Generation of Each Product								
Products	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 13)</i>	3.5%	6.4%	6.2%	11.6%	17.6%	19.0%	19.1%	18.8%	18.5%
Nondurable Goods									
Newspapers	25.6%	23.7%	27.3%	38.0%	59.0%	72.7%	76.8%	81.8%	87.9%
Books and Magazines	5.2%	10.5%	8.3%						
Books**				10.3%	19.4%	18.7%	19.7%	24.3%	25.7%
Magazines**				10.6%	31.8%	28.0%	36.0%	37.2%	40.5%
Office-Type Papers***	16.4%	26.8%	21.8%	26.5%	55.1%	53.1%	59.7%	62.1%	65.7%
Directories**				8.2%	17.6%	13.8%	15.6%	18.2%	19.1%
Standard Mail§				5.2%	32.9%	30.2%	32.9%	35.8%	38.7%
Other Commercial Printing	10.3%	16.0%	11.2%	15.7%	11.0%	6.1%	12.8%	11.6%	21.1%
Tissue Paper and Towels	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Paper Plates and Cups	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Plastic Plates and Cupst			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Trash Bags**				Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Disposable Diapers				Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Other Nonpackaging Paper	1.5%	3.0%	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Clothing and Footwear	Neg.	Neg.	Neg.	13.0%	13.9%	13.9%	16.4%	15.5%	14.5%
Towels, Sheets and Pillowcases**				16.9%	17.1%	17.8%	17.0%	17.3%	17.5%
Other Miscellaneous Nondurables	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Nondurables	13.8%	14.9%	13.6%	16.9%	27.4%	28.5%	30.6%	31.7%	33.6%
Containers and Packaging <i>(Detail in Table 21)</i>	10.5%	7.7%	16.1%	26.0%	37.8%	37.8%	37.9%	39.6%	40.2%
Total Product Wastes†	10.3%	9.6%	13.3%	19.8%	29.8%	30.5%	31.2%	32.2%	33.2%
Other Wastes	Neg.	Neg.	Neg.	7.2%	26.9%	26.7%	31.4%	31.0%	30.8%
Total MSW Recovered - %	6.4%	6.6%	9.6%	16.2%	29.1%	29.5%	31.3%	31.9%	32.5%

* Recovery of postconsumer wastes; does not include converting/fabrication scrap.

Details may not add to totals due to rounding.

** Not estimated separately prior to 1990.

*** High-grade paper such as printer paper; generated in both commercial and residential sources.

§ Not estimated separately prior to 1990. Formerly called Third Class Mail and Standard (A) Mail by the U.S. Postal Service.

† Not estimated separately prior to 1980.

‡ Other than food products.

Neg. = Less than 5,000 tons or 0.05 percent.

Source: Franklin Associates, A Division of ERG

Table 17
PRODUCTS DISCARDED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2006
(WITH DETAIL ON NONDURABLE GOODS)
(In thousands of tons and percent of total discards)

Products	Thousands of Tons								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 14)</i>	9,570	13,720	20,440	26,350	30,470	31,120	32,280	32,710	32,740
Nondurable Goods									
Newspapers	5,290	7,260	8,030	8,320	6,070	3,720	3,150	2,380	1,490
Books and Magazines	1,820	2,210	3,110						
Books**				870	1,000	740	1,020	840	840
Magazines**				2,530	1,520	1,440	1,580	1,620	1,530
Office-Type Papers	1,270	1,940	3,130	4,710	3,330	3,400	2,840	2,510	2,170
Directories**				560	560	560	540	540	550
Standard Mail***				3,620	3,740	3,600	3,740	3,740	3,610
Other Commercial Printing	1,130	1,790	2,770	3,760	6,570	6,200	6,700	5,700	5,230
Tissue Paper and Towels	1,090	2,080	2,300	2,960	3,220	3,310	3,220	3,460	3,430
Paper Plates and Cups	270	420	630	650	960	950	1,090	1,160	1,180
Plastic Plates and Cups†			190	650	870	770	970	930	890
Trash Bags**				780	850	1,000	1,090	1,060	1,080
Disposable Diapers	Neg.	350	1,930	2,700	3,340	3,430	3,530	3,600	3,630
Other Nonpackaging Paper	2,660	3,520	4,230	3,840	4,250	4,030	4,550	4,490	4,590
Clothing and Footwear	1,310	1,560	2,020	3,490	5,570	6,150	6,390	6,830	7,390
Towels, Sheets and Pillowcases**				590	680	740	780	810	850
Other Miscellaneous Nondurables	100	200	1,410	3,340	4,030	4,390	4,340	4,250	4,130
Total Nondurable Goods	14,940	21,330	29,750	43,370	46,560	44,430	45,530	43,920	42,590
Containers and Packaging <i>(Detail in Table 22)</i>	24,500	40,210	44,180	47,750	47,280	47,360	48,760	46,710	47,630
Total Product Wastes‡	49,010	75,260	94,370	117,470	124,310	122,910	126,570	123,340	122,960
Other Wastes	33,500	37,780	42,750	54,500	44,690	45,920	44,680	45,690	46,590
Total MSW Discarded - Weight	82,510	113,040	137,120	171,970	169,000	168,830	171,250	169,030	169,550
	Percent of Total Discards								
Products	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 14)</i>	11.6%	12.1%	14.9%	15.3%	18.0%	18.4%	18.8%	19.4%	19.3%
Nondurable Goods									
Newspapers	6.4%	6.4%	5.9%	4.8%	3.6%	2.2%	1.8%	1.4%	0.9%
Books and Magazines	2.2%	2.0%	2.3%						
Books**				0.5%	0.6%	0.4%	0.6%	0.5%	0.5%
Magazines**				1.5%	0.9%	0.9%	0.9%	1.0%	0.9%
Office-Type Papers***	1.5%	1.7%	2.3%	2.7%	2.0%	2.0%	1.7%	1.5%	1.3%
Directories**				0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Standard Mail§				2.1%	2.2%	2.1%	2.2%	2.2%	2.1%
Other Commercial Printing	1.4%	1.6%	2.0%	2.2%	3.9%	3.7%	3.9%	3.4%	3.1%
Tissue Paper and Towels	1.3%	1.8%	1.7%	1.7%	1.9%	2.0%	1.9%	2.0%	2.0%
Paper Plates and Cups	0.3%	0.4%	0.5%	0.4%	0.6%	0.6%	0.6%	0.7%	0.7%
Plastic Plates and Cups†			0.1%	0.4%	0.5%	0.5%	0.6%	0.6%	0.5%
Trash Bags**				0.5%	0.5%	0.6%	0.6%	0.6%	0.6%
Disposable Diapers	Neg.	0.3%	1.4%	1.6%	2.0%	2.0%	2.1%	2.1%	2.1%
Other Nonpackaging Paper	3.2%	3.1%	3.1%	2.2%	2.5%	2.4%	2.7%	2.7%	2.7%
Clothing and Footwear	1.6%	1.4%	1.5%	2.0%	3.3%	3.6%	3.7%	4.0%	4.4%
Towels, Sheets and Pillowcases**				0.3%	0.4%	0.4%	0.5%	0.5%	0.5%
Other Miscellaneous Nondurables	0.1%	0.2%	1.7%	1.9%	2.4%	2.6%	2.5%	2.5%	2.4%
Total Nondurables	18.1%	18.9%	21.7%	25.2%	27.6%	26.3%	26.6%	26.0%	25.1%
Containers and Packaging <i>(Detail in Table 23)</i>	29.7%	35.6%	32.2%	27.8%	28.0%	28.1%	28.5%	27.6%	28.1%
Total Product Wastes‡	59.4%	66.6%	68.8%	68.3%	73.6%	72.8%	73.9%	73.0%	72.5%
Other Wastes	40.6%	33.4%	31.2%	31.7%	26.4%	27.2%	26.1%	27.0%	27.5%
Total MSW Discarded - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Discards after materials and compost recovery. In this table, discards include combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes, or certain other wastes.
 ** Not estimated separately prior to 1990.
 *** High-grade paper such as printer paper; generated in both commercial and residential sources.
 § Not estimated separately prior to 1990. Formerly called Third Class Mail and Standard (A) Mail by the U.S. Postal Service.
 † Not estimated separately prior to 1980.
 ‡ Other than food products.
 Neg. = Less than 5,000 tons or 0.05 percent. Details may not add to totals due to rounding.
 Source: Franklin Associates, A Division of ERG

Table 18
PRODUCTS GENERATED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2006
(WITH DETAIL ON CONTAINERS AND PACKAGING)
(In thousands of tons)

Products	Thousands of Tons								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 12)</i>	9,920	14,660	21,800	29,810	36,980	38,440	39,880	40,280	40,170
Nondurable Goods <i>(Detail in Table 15)</i>	17,330	25,060	34,420	52,170	64,120	62,110	65,600	64,320	64,180
Containers and Packaging									
Glass Packaging									
Beer and Soft Drink Bottles	1,400	5,580	6,740	5,640	5,710	7,040	7,010	7,180	7,500
Wine and Liquor Bottles	1,080	1,900	2,450	2,030	1,910	1,600	1,570	1,700	1,670
Food and Other Bottles & Jars	3,710	4,440	4,780	4,160	3,420	2,230	2,280	2,070	2,220
Total Glass Packaging	6,190	11,920	13,970	11,830	11,040	10,870	10,860	10,950	11,390
Steel Packaging									
Beer and Soft Drink Cans	640	1,570	520	150	Neg.	Neg.	Neg.	Neg.	Neg.
Food and Other Cans	3,760	3,540	2,850	2,540	2,630	2,420	2,450	2,130	2,510
Other Steel Packaging	260	270	240	200	240	240	240	240	240
Total Steel Packaging	4,660	5,380	3,610	2,890	2,870	2,660	2,690	2,370	2,750
Aluminum Packaging									
Beer and Soft Drink Cans	Neg.	100	850	1,550	1,520	1,490	1,480	1,450	1,440
Other Cans	Neg.	60	40	20	50	50	50	50	80
Foil and Closures	170	410	380	330	380	400	390	400	420
Total Aluminum Packaging	170	570	1,270	1,900	1,950	1,940	1,920	1,900	1,940
Paper & Paperboard Pkg									
Corrugated Boxes	7,330	12,760	17,080	24,010	30,210	30,110	31,490	30,930	31,430
Milk Cartons			790	510	550	530	470	500	510
Folding Cartons			3,820	4,300	5,820	5,550	5,540	5,530	5,570
Other Paperboard Packaging	3,840	4,830	230	290	200	180	170	160	160
Bags and Sacks			3,380	2,440	1,490	1,440	1,270	1,120	1,340
Wrapping Papers			200	110	Neg.	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	2,940	3,810	850	1,020	1,670	1,720	1,460	1,400	1,430
Total Paper & Board Pkg	14,110	21,400	26,350	32,680	39,940	39,530	40,400	39,640	40,440
Plastics Packaging									
Soft Drink Bottles			260	430	830	870	850	850	940
Milk Bottles			230	530	690	710	800	800	710
Other Containers	60	910	890	1,430	2,630	2,930	3,150	3,110	3,430
Bags and Sacks			390	940	1,650	1,740	1,810	1,640	1,830
Wraps			840	1,530	2,550	2,740	2,940	2,810	2,800
<i>Subtotal Bags, Sacks, and Wraps</i>			1,230	2,470	4,200	4,480	4,750	4,450	4,630
Other Plastics Packaging	60	1,180	790	2,040	3,510	3,700	4,410	4,440	4,520
Total Plastics Packaging	120	2,090	3,400	6,900	11,860	12,690	13,960	13,650	14,230
Wood Packaging	2,000	2,070	3,940	8,180	8,120	8,250	8,430	8,520	8,480
Other Misc. Packaging	120	130	130	150	240	240	290	280	390
Total Containers & Pkg	27,370	43,560	52,670	64,530	76,020	76,180	78,550	77,310	79,620
Total Product Wastes†	54,620	83,280	108,890	146,510	177,120	176,730	184,030	181,910	183,970
Other Wastes									
Food Scraps	12,200	12,800	13,000	20,800	27,110	27,920	29,730	30,480	31,250
Yard Trimmings	20,000	23,200	27,500	35,000	30,530	31,160	31,770	32,070	32,400
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,580	3,650	3,690	3,720
Total Other Wastes	33,500	37,780	42,750	58,700	61,140	62,660	65,150	66,240	67,370
Total MSW Generated - Weight	88,120	121,060	151,640	205,210	238,260	239,390	249,180	248,150	251,340

* Generation before materials recovery or combustion.

Details may not add to totals due to rounding.

† Other than food products.

Neg. = Less than 5,000 tons or 0.05 percent.

Source: Franklin Associates, A Division of ERG

Table 19
PRODUCTS GENERATED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2006
(WITH DETAIL ON CONTAINERS AND PACKAGING)
(In percent of total generation)

Products	Percent of Total Generation								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 12)</i>	11.3%	12.1%	14.4%	14.5%	15.5%	16.1%	16.0%	16.2%	16.0%
Nondurable Goods <i>(Detail in Table 15)</i>	19.7%	20.7%	22.7%	25.4%	26.9%	25.9%	26.3%	25.9%	25.5%
Containers and Packaging									
Glass Packaging									
Beer and Soft Drink Bottles	1.6%	4.6%	4.4%	2.7%	2.4%	2.9%	2.8%	2.9%	3.0%
Wine and Liquor Bottles	1.2%	1.6%	1.6%	1.0%	0.8%	0.7%	0.6%	0.7%	0.7%
Food and Other Bottles & Jars	4.2%	3.7%	3.2%	2.0%	1.4%	0.9%	0.9%	0.8%	0.9%
Total Glass Packaging	7.0%	9.8%	9.2%	5.8%	4.6%	4.5%	4.4%	4.4%	4.5%
Steel Packaging									
Beer and Soft Drink Cans	0.7%	1.3%	0.3%	0.1%	Neg.	Neg.	Neg.	Neg.	Neg.
Food and Other Cans	4.3%	2.9%	1.9%	1.2%	1.1%	1.0%	1.0%	0.9%	1.0%
Other Steel Packaging	0.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Total Steel Packaging	5.3%	4.4%	2.4%	1.4%	1.2%	1.1%	1.1%	1.0%	1.1%
Aluminum Packaging									
Beer and Soft Drink Cans	Neg.	0.1%	0.6%	0.8%	0.6%	0.6%	0.6%	0.6%	0.6%
Other Cans	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	0.03%
Foil and Closures	0.2%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Total Aluminum Packaging	0.2%	0.5%	0.8%	0.9%	0.8%	0.8%	0.8%	0.8%	0.8%
Paper & Paperboard Pkg									
Corrugated Boxes	8.3%	10.5%	11.3%	11.7%	12.7%	12.6%	12.6%	12.5%	12.5%
Milk Cartons			0.5%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Folding Cartons			2.5%	2.1%	2.4%	2.3%	2.2%	2.2%	2.2%
Other Paperboard Packaging	4.4%	4.0%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Bags and Sacks			2.2%	1.2%	0.6%	0.6%	0.5%	0.5%	0.5%
Wrapping Papers			0.1%	0.1%	Neg.	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	3.3%	3.1%	0.6%	0.5%	0.7%	0.7%	0.6%	0.6%	0.6%
Total Paper & Board Pkg	16.0%	17.7%	17.4%	15.9%	16.8%	16.5%	16.2%	16.0%	16.1%
Plastics Packaging									
Soft Drink Bottles			0.2%	0.2%	0.3%	0.4%	0.3%	0.3%	0.4%
Milk Bottles			0.2%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Other Containers	0.1%	0.8%	0.6%	0.7%	1.1%	1.2%	1.3%	1.3%	1.4%
Bags and Sacks			0.3%	0.5%	0.7%	0.7%	0.7%	0.7%	0.7%
Wraps			0.6%	0.7%	1.1%	1.1%	1.2%	1.1%	1.1%
<i>Subtotal Bags, Sacks, and Wraps</i>			0.8%	1.2%	1.8%	1.9%	1.9%	1.8%	1.8%
Other Plastics Packaging	0.1%	1.0%	0.5%	1.0%	1.5%	1.5%	1.8%	1.8%	1.8%
Total Plastics Packaging	0.1%	1.7%	2.2%	3.4%	5.0%	5.3%	5.6%	5.5%	5.7%
Wood Packaging	2.3%	1.7%	2.6%	4.0%	3.4%	3.4%	3.4%	3.4%	3.4%
Other Misc. Packaging	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%
Total Containers & Pkg	31.1%	36.0%	34.7%	31.4%	31.9%	31.8%	31.5%	31.2%	31.7%
Total Product Wastes†	62.0%	68.8%	71.8%	71.4%	74.3%	73.8%	73.9%	73.3%	73.2%
Other Wastes									
Food Scraps	13.8%	10.6%	8.6%	10.1%	11.4%	11.7%	11.9%	12.3%	12.4%
Yard Trimmings	22.7%	19.2%	18.1%	17.1%	12.8%	13.0%	12.7%	12.9%	12.9%
Miscellaneous Inorganic Wastes	1.5%	1.5%	1.5%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%
Total Other Wastes	38.0%	31.2%	28.2%	28.6%	25.7%	26.2%	26.1%	26.7%	26.8%
Total MSW Generated - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Generation before materials recovery or combustion.
 Details may not add to totals due to rounding.
 † Other than food products.
 Neg. = Less than 5,000 tons or 0.05 percent.
 Source: Franklin Associates, A Division of ERG

Table 20
RECOVERY* OF PRODUCTS IN MUNICIPAL SOLID WASTE, 1960 TO 2006
(WITH DETAIL ON CONTAINERS AND PACKAGING)
(In thousands of tons)

Products	Thousands of Tons								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 13)</i>	350	940	1,360	3,460	6,510	7,320	7,600	7,570	7,430
Nondurable Goods <i>(Detail in Table 16)</i>	2,390	3,730	4,670	8,800	17,560	17,680	20,070	20,400	21,590
Containers and Packaging									
Glass Packaging									
Beer and Soft Drink Bottles	90	140	730	1,890	1,530	2,160	2,150	2,200	2,300
Wine and Liquor Bottles	10	10	20	210	430	240	240	250	250
Food and Other Bottles & Jars	Neg.	Neg.	Neg.	520	920	330	340	310	330
Total Glass Packaging	100	150	750	2,620	2,880	2,730	2,730	2,760	2,880
Steel Packaging									
Beer and Soft Drink Cans	10	20	50	40	Neg.	Neg.	Neg.	Neg.	Neg.
Food and Other Cans	20	60	150	590	1,530	1,420	1,500	1,340	1,580
Other Steel Packaging	Neg.	Neg.	Neg.	60	160	160	160	160	160
Total Steel Packaging	30	80	200	690	1,690	1,580	1,660	1,500	1,740
Aluminum Packaging									
Beer and Soft Drink Cans	Neg.	10	320	990	830	720	670	650	650
Other Cans	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Foil and Closures	Neg.	Neg.	Neg.	20	30	40	40	40	40
Total Aluminum Pkg	Neg.	10	320	1,010	860	760	710	690	690
Paper & Paperboard Pkg									
Corrugated Boxes	2,520	2,760	6,390	11,530	20,330	20,690	21,440	22,100	22,630
Milk Cartons			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Folding Cartons			520	340	410	450	450	680	890
Other Paperboard Packaging			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Bags and Sacks			Neg.	200	300	310	270	280	340
Wrapping Papers			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	220	350	300	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Paper & Board Pkg	2,740	3,110	7,210	12,070	21,040	21,450	22,160	23,060	23,860
Plastics Packaging									
Soft Drink Bottles			10	140	290	270	290	290	290
Milk Bottles			Neg.	20	210	220	230	230	220
Other Containers	Neg.	Neg.	Neg.	20	260	280	440	440	460
Bags and Sacks									
Wraps									
<i>Subtotal Bags, Sacks, and Wraps</i>			Neg.	60	180	180	190	230	360
Other Plastics Packaging	Neg.	Neg.	Neg.	20	90	90	90	90	180
Total Plastics Packaging	Neg.	Neg.	10	260	1,030	1,040	1,240	1,280	1,510
Wood Packaging	Neg.	Neg.	Neg.	130	1,240	1,260	1,290	1,310	1,310
Other Misc. Packaging	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Containers & Pkg	2,870	3,350	8,490	16,780	28,740	28,820	29,790	30,600	31,990
Total Product Wastes†	5,610	8,020	14,520	29,040	52,810	53,820	57,460	58,570	61,010
Other Wastes									
Food Scraps	Neg.	Neg.	Neg.	Neg.	680	740	660	690	680
Yard Trimmings	Neg.	Neg.	Neg.	4,200	15,770	16,000	19,810	19,860	20,100
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	4,200	16,450	16,740	20,470	20,550	20,780
Total MSW Recovered - Weight	5,610	8,020	14,520	33,240	69,260	70,560	77,930	79,120	81,790

* Recovery of postconsumer wastes; does not include converting/fabrication scrap.

† Other than food products.

Details may not add to totals due to rounding.

Neg. = Less than 5,000 tons or 0.05 percent.

Source: Franklin Associates, A Division of ERG

Table 21
RECOVERY* OF PRODUCTS IN MUNICIPAL SOLID WASTE, 1960 TO 2006
(WITH DETAIL ON CONTAINERS AND PACKAGING)
(In percent of generation of each product)

Percent of Generation of Each Product									
Products	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 13)</i>	3.5%	6.4%	6.2%	11.6%	17.6%	19.0%	19.1%	18.8%	18.5%
Nondurable Goods <i>(Detail in Table 16)</i>	13.8%	14.9%	13.6%	16.9%	27.4%	28.5%	30.6%	31.7%	33.6%
Containers and Packaging									
Glass Packaging									
Beer and Soft Drink Bottles	6.4%	2.5%	10.8%	33.5%	26.8%	30.7%	30.7%	30.6%	30.7%
Wine and Liquor Bottles	Neg.	Neg.	Neg.	10.3%	22.5%	15.0%	15.3%	14.7%	15.0%
Food and Other Bottles & Jars	Neg.	Neg.	Neg.	12.5%	26.9%	14.8%	14.9%	15.0%	14.9%
Total Glass Packaging	1.6%	1.3%	5.4%	22.1%	26.1%	25.1%	25.1%	25.2%	25.3%
Steel Packaging									
Beer and Soft Drink Cans	1.6%	1.3%	9.6%	26.7%	Neg.	Neg.	Neg.	Neg.	Neg.
Food and Other Cans	Neg.	1.7%	5.3%	23.2%	58.2%	58.7%	61.2%	62.9%	62.9%
Other Steel Packaging	Neg.	Neg.	Neg.	30.0%	66.7%	66.7%	66.7%	66.7%	66.7%
Total Steel Packaging	Neg.	1.5%	5.5%	23.9%	58.9%	59.4%	61.7%	63.3%	63.3%
Aluminum Packaging									
Beer and Soft Drink Cans	Neg.	10.0%	37.6%	63.9%	54.6%	48.3%	45.3%	44.8%	45.1%
Other Cans	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Foil and Closures	Neg.	Neg.	Neg.	6.1%	7.9%	10.0%	10.3%	10.0%	9.5%
Total Aluminum Pkg	Neg.	1.8%	25.2%	53.2%	44.1%	39.2%	37.0%	36.3%	35.6%
Paper & Paperboard Pkg									
Corrugated Boxes	34.4%	21.6%	37.4%	48.0%	67.3%	68.7%	68.1%	71.5%	72.0%
Milk Cartons			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Folding Cartons			Neg.	Neg.	7.0%	8.1%	8.1%	12.3%	16.0%
Other Paperboard Packaging			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Bags and Sacks			Neg.	Neg.	20.1%	21.5%	21.3%	25.0%	25.4%
Wrapping Papers			Neg.	Neg.		Neg.			
Other Paper Packaging	7.5%	9.2%	35.3%	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Paper & Board Pkg	19.4%	14.5%	27.4%	36.9%	52.7%	54.3%	54.9%	58.2%	59.0%
Plastics Packaging									
Soft Drink Bottles			3.8%	32.6%	34.9%	31.0%	34.1%	34.1%	30.9%
Milk Bottles			Neg.	3.8%	30.4%	31.0%	28.8%	28.8%	31.0%
Other Containers	Neg.	Neg.	Neg.	1.4%	9.9%	9.6%	14.0%	14.1%	13.4%
Bags and Sacks									
Wraps									
<i>Subtotal Bags, Sacks, and Wraps</i>			Neg.	2.4%	4.3%	4.0%	4.0%	5.2%	7.8%
Other Plastics Packaging	Neg.	Neg.	Neg.	1.0%	2.6%	2.4%	2.0%	2.0%	4.0%
Total Plastics Packaging	Neg.	Neg.	Neg.	3.8%	8.7%	8.2%	8.9%	9.4%	10.6%
Wood Packaging	Neg.	Neg.	Neg.	1.6%	15.3%	15.3%	15.3%	15.4%	15.4%
Other Misc. Packaging	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Containers & Pkg	10.5%	7.7%	16.1%	26.0%	37.8%	37.8%	37.9%	39.6%	40.2%
Total Product Wastes†	10.3%	9.6%	13.3%	19.8%	29.8%	30.5%	31.2%	32.2%	33.2%
Other Wastes									
Food Scraps	Neg.	Neg.	Neg.	Neg.	2.5%	2.7%	2.2%	2.3%	2.2%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	51.7%	51.3%	62.4%	61.9%	62.0%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	7.2%	26.9%	26.7%	31.4%	31.0%	30.8%
Total MSW Recovered - %	6.4%	6.6%	9.6%	16.2%	29.1%	29.5%	31.3%	31.9%	32.5%

* Recovery of postconsumer wastes; does not include converting/fabrication scrap.

† Other than food products.

Details may not add to totals due to rounding.

Neg. = Less than 5,000 tons or 0.05 percent.

Source: Franklin Associates, A Division of ERG

Table 22
PRODUCTS DISCARDED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2006
(WITH DETAIL ON CONTAINERS AND PACKAGING)
(In thousands of tons)

Products	Thousands of Tons								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 14)</i>	9,570	13,720	20,440	26,350	30,470	31,120	32,280	32,710	32,740
Nondurable Goods <i>(Detail in Table 17)</i>	14,940	21,330	29,750	43,370	46,560	44,430	45,530	43,920	42,590
Containers and Packaging									
Glass Packaging									
Beer and Soft Drink Bottles	1,310	5,440	6,010	3,750	4,180	4,880	4,860	4,980	5,200
Wine and Liquor Bottles	1,070	1,890	2,430	1,820	1,480	1,360	1,330	1,450	1,420
Food and Other Bottles & Jars	3,710	4,440	4,780	3,640	2,500	1,900	1,940	1,760	1,890
Total Glass Packaging	6,090	11,770	13,220	9,210	8,160	8,140	8,130	8,190	8,510
Steel Packaging									
Beer and Soft Drink Cans	630	1,550	470	110	Neg.	Neg.	Neg.	Neg.	Neg.
Food and Other Cans	3,740	3,480	2,700	1,950	1,100	1,000	950	790	930
Other Steel Packaging	260	270	240	140	80	80	80	80	80
Total Steel Packaging	4,630	5,300	3,410	2,200	1,180	1,080	1,030	870	1,010
Aluminum Packaging									
Beer and Soft Drink Cans	Neg.	90	530	560	690	770	810	800	790
Other Cans	Neg.	60	40	20	50	50	50	50	80
Foil and Closures	170	410	380	310	350	360	350	360	380
Total Aluminum Pkg	170	560	950	890	1,090	1,180	1,210	1,210	1,250
Paper & Paperboard Pkg									
Corrugated Boxes	4,810	10,000	10,690	12,480	9,880	9,420	10,050	8,830	8,800
Milk Cartons			790	510	550	530	470	500	510
Folding Cartons			3,300	3,960	5,410	5,100	5,090	4,850	4,680
Other Paperboard Packaging	3,840	4,830	230	290	200	180	170	160	160
Bags and Sacks			3,380	2,240	1,190	1,130	1,000	840	1,000
Wrapping Papers			200	110	Neg.	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	2,720	3,460	550	1,020	1,670	1,720	1,460	1,400	1,430
Total Paper & Board Pkg	11,370	18,290	19,140	20,610	18,900	18,080	18,240	16,580	16,580
Plastics Packaging									
Soft Drink Bottles			250	290	540	600	560	560	650
Milk Bottles			230	510	480	490	570	570	490
Other Containers	60	910	890	1,410	2,370	2,650	2,710	2,670	2,970
Bags and Sacks									
Wraps									
<i>Subtotal Bags, Sacks, and Wraps</i>			1,230	2,410	4,020	4,300	4,560	4,220	4,270
Other Plastics Packaging	60	1,180	790	2,020	3,420	3,610	4,320	4,350	4,340
Total Plastics Packaging	120	2,090	3,390	6,640	10,830	11,650	12,720	12,370	12,720
Wood Packaging	2,000	2,070	3,940	8,050	6,880	6,990	7,140	7,210	7,170
Other Misc. Packaging	120	130	130	150	240	240	290	280	390
Total Containers & Pkg	24,500	40,210	44,180	47,750	47,280	47,360	48,760	46,710	47,630
Total Product Wastes†	49,010	75,260	94,370	117,470	124,310	122,910	126,570	123,340	122,960
Other Wastes									
Food Scraps	12,200	12,800	13,000	20,800	26,430	27,180	29,070	29,790	30,570
Yard Trimmings	20,000	23,200	27,500	30,800	14,760	15,160	11,960	12,210	12,300
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,580	3,650	3,690	3,720
Total Other Wastes	33,500	37,780	42,750	54,500	44,690	45,920	44,680	45,690	46,590
Total MSW Discarded - Weight	82,510	113,040	137,120	171,970	169,000	168,830	171,250	169,030	169,550

* Discards after materials and compost recovery. In this table, discards include combustion with energy recovery.

Does not include construction & demolition debris, industrial process wastes, or certain other wastes.

† Other than food products.

Neg. = Less than 5,000 tons or 0.05 percent. Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Table 23
PRODUCTS DISCARDED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2006
(WITH DETAIL ON CONTAINERS AND PACKAGING)
(In percent of total discards)

Products	Percent of Total Discards								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Durable Goods <i>(Detail in Table 14)</i>	11.6%	12.1%	14.9%	15.3%	18.0%	18.4%	18.8%	19.4%	19.3%
Nondurable Goods <i>(Detail in Table 17)</i>	18.1%	18.9%	21.7%	25.2%	27.6%	26.3%	26.6%	26.0%	25.1%
Containers and Packaging									
Glass Packaging									
Beer and Soft Drink Bottles	1.6%	4.8%	4.4%	2.2%	2.5%	2.9%	2.8%	2.9%	3.1%
Wine and Liquor Bottles	1.3%	1.7%	1.8%	1.1%	0.9%	0.8%	0.8%	0.9%	0.8%
Food and Other Bottles & Jars	4.5%	3.9%	3.5%	2.1%	1.5%	1.1%	1.1%	1.0%	1.1%
Total Glass Packaging	7.4%	10.4%	9.6%	5.4%	4.8%	4.8%	4.7%	4.8%	5.0%
Steel Packaging									
Beer and Soft Drink Cans	0.8%	1.4%	0.3%	0.1%	Neg.	Neg.	Neg.	Neg.	Neg.
Food and Other Cans	4.5%	3.1%	2.0%	1.1%	0.7%	0.6%	0.6%	0.5%	0.5%
Other Steel Packaging	0.3%	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Steel Packaging	5.6%	4.7%	2.5%	1.3%	0.7%	0.6%	0.6%	0.5%	0.6%
Aluminum Packaging									
Beer and Soft Drink Cans	Neg.	0.1%	0.4%	0.3%	0.4%	0.5%	0.5%	0.5%	0.5%
Other Cans	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	0.05%
Foil and Closures	0.2%	0.4%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Total Aluminum Pkg	0.2%	0.5%	0.7%	0.5%	0.6%	0.7%	0.7%	0.7%	0.7%
Paper & Paperboard Pkg									
Corrugated Boxes	5.8%	8.8%	7.8%	7.3%	5.8%	5.6%	5.9%	5.2%	5.2%
Milk Cartons			0.6%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Folding Cartons			2.4%	2.3%	3.2%	3.0%	3.0%	2.9%	2.8%
Other Paperboard Packaging	4.7%	4.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
Bags and Sacks			2.5%	1.3%	0.7%	0.7%	0.6%	0.5%	0.6%
Wrapping Papers			0.1%	0.1%	Neg.	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	3.3%	3.1%	0.4%	0.6%	1.0%	1.0%	0.9%	0.8%	0.8%
Total Paper & Board Pkg	13.8%	16.2%	14.0%	12.0%	11.2%	10.7%	10.7%	9.8%	9.8%
Plastics Packaging									
Soft Drink Bottles			0.2%	0.2%	0.3%	0.4%	0.3%	0.3%	0.4%
Milk Bottles			0.2%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Other Containers	0.1%	0.8%	0.6%	0.8%	1.4%	1.6%	1.6%	1.6%	1.8%
Bags and Sacks									
Wraps									
<i>Subtotal Bags, Sacks, and Wraps</i>			0.9%	1.4%	2.4%	2.5%	2.7%	2.5%	2.5%
Other Plastics Packaging	0.1%	1.0%	0.6%	1.2%	2.0%	2.1%	2.5%	2.6%	2.6%
Total Plastics Packaging	0.1%	1.8%	2.5%	3.9%	6.4%	6.9%	7.4%	7.3%	7.5%
Wood Packaging	2.4%	1.8%	2.9%	4.7%	4.1%	4.1%	4.2%	4.3%	4.2%
Other Misc. Packaging	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%
Total Containers & Pkg	29.7%	35.6%	32.2%	27.8%	28.0%	28.1%	28.5%	27.6%	28.1%
Total Product Wastes†	59.4%	66.6%	68.8%	68.3%	73.6%	72.8%	73.9%	73.0%	72.5%
Other Wastes									
Food Scraps	14.8%	11.3%	9.5%	12.1%	15.6%	16.1%	17.0%	17.6%	18.0%
Yard Trimmings	24.2%	20.5%	20.1%	17.9%	8.7%	9.0%	7.0%	7.2%	7.3%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	2.1%	2.1%	2.1%	2.2%	2.2%
Total Other Wastes	40.6%	33.4%	31.2%	31.7%	26.4%	27.2%	26.1%	27.0%	27.5%
Total MSW Discarded - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Discards after materials and compost recovery. In this table, discards include combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes, or certain other wastes.
† Other than food products.
Neg. = Less than 5,000 tons or 0.05 percent. Details may not add to totals due to rounding.
Source: Franklin Associates, A Division of ERG

Table 24
SELECTED EXAMPLES OF SOURCE REDUCTION PRACTICES

Source Reduction Practice	MSW Product Categories			
	Durable Goods	Nondurable Goods	Containers & Packaging	Organics
Redesign				
Materials reduction	<ul style="list-style-type: none"> Downgauge metals in appliances 	<ul style="list-style-type: none"> Paperless purchase orders 	<ul style="list-style-type: none"> Concentrates 	<ul style="list-style-type: none"> Xeriscaping
Materials substitution	<ul style="list-style-type: none"> Use of composites in appliances and electronic circuitry 		<ul style="list-style-type: none"> Cereal in bags Coffee brick Multi-use products 	
Lengthen life	<ul style="list-style-type: none"> High mileage tires Electronic components reduce moving parts 	<ul style="list-style-type: none"> Regular servicing Look at warranties Extend warranties 	<ul style="list-style-type: none"> Design for secondary uses 	
Consumer Practices				
	<ul style="list-style-type: none"> Purchase long lived products 	<ul style="list-style-type: none"> Repair Duplexing Sharing Reduce unwanted mail 	<ul style="list-style-type: none"> Purchasing: products in bulk, concentrates 	
Reuse				
By design	<ul style="list-style-type: none"> Modular design 	<ul style="list-style-type: none"> Envelopes 	<ul style="list-style-type: none"> Reusable pallets Returnable secondary packaging 	
Secondary	<ul style="list-style-type: none"> Borrow or rent for temporary use Give to charity Buy or sell at garage sales 	<ul style="list-style-type: none"> Clothing Waste paper scratch pads 	<ul style="list-style-type: none"> Loosefill Grocery sacks Dairy containers Glass and plastic jars 	
Reduce/Eliminate Toxins				
	<ul style="list-style-type: none"> Eliminate PCBs 	<ul style="list-style-type: none"> Soy ink, waterbased Waterbased solvents Reduce mercury 	<ul style="list-style-type: none"> Replace lead foil on wine bottles 	
Reduce Organics				
Food scraps				<ul style="list-style-type: none"> Backyard composting Vermi-composting
Yard trimmings				<ul style="list-style-type: none"> Backyard composting Grasscycling

Source: Franklin Associates, A Division of ERG

Table 25
NUMBER AND POPULATION SERVED BY
CURBSIDE RECYCLABLES COLLECTION PROGRAMS, 2006

Region	Number of Programs	Population (in thousands)	Population Served	
			(in thousands)	Percent*
NORTHEAST	3,299	50,613	42,639	84%
SOUTH	797	83,332	25,028	30%
MIDWEST	3,749	46,347	28,159	61%
WEST	814	63,384	48,244	76%
<i>Total</i>	<u>8,659</u>	<u>243,675</u>	<u>144,070</u>	59%
<i>Percent of Total U.S. Population</i>		299,398	144,070	48%

* Percent of population served by curbside programs was calculated using population of states reporting data.

Source: U.S. Census Bureau 2006, *BioCycle* April 2006, California Integrated Waste Management Board, Illinois Recycling Association, www.coloradocurbside.com, Nebraska State Recycling Association, Pennsylvania Department of Environmental Protection

Table 26

MATERIALS RECOVERY FACILITIES, 2006

Region	Number	Estimated Throughput (tpd)
NORTHEAST	140	24,351
SOUTH	156	20,782
MIDWEST	132	18,793
WEST	117	22,042
<i>U.S. Total</i>	<u>545</u>	<u>85,967</u>

Source: Governmental Advisory Associates, Inc.

Table 27
MUNICIPAL WASTE-TO-ENERGY PROJECTS, 2006

Region	Number Operational	Design Capacity (tpd)
NORTHEAST	40	46,537
SOUTH	24	31,131
MIDWEST	16	10,912
WEST	6	4,280
<i>U.S. Total*</i>	86	92,860

* Projects on hold or inactive were not included.
 Facilities in Hawaii and Alaska not included.
 WTE includes mass burn, modular, and refuse-derived
 fuel-combustion facilities.

Source: "The IWSA Directory of Waste-To-Energy Plants."
 Integrated Waste Services Association, 2007.

Table 28
LANDFILL FACILITIES, 2006

Region	Number of Landfills *
NORTHEAST	133
SOUTH	676
MIDWEST	425
WEST	<u>520</u>
<i>U.S. Total *</i>	1,754

* Excludes landfills in Alaska and Hawaii.

Source: BioCycle April 2006.

Revised with data from Alabama Department of Environmental Management, Arizona Department of Environmental Quality, Arkansas Department of Environmental Quality, California Integrated Waste Management Board, Colorado Department of Public Health and Environment, and Louisiana Department of Environmental Quality.

Table 29
GENERATION, MATERIALS RECOVERY, COMPOSTING, COMBUSTION,
AND DISCARDS OF MUNICIPAL SOLID WASTE, 1960 TO 2006
(In thousands of tons and percent of total generation)

	Thousands of Tons								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Generation	88,120	121,060	151,640	205,210	238,260	239,390	249,180	248,150	251,340
Recovery for recycling	5,610	8,020	14,520	29,040	52,810	53,820	57,460	58,570	61,010
Recovery for composting*	Neg.	Neg.	Neg.	4,200	16,450	16,740	20,470	20,550	20,780
Total Materials Recovery	5,610	8,020	14,520	33,240	69,260	70,560	77,930	79,120	81,790
Discards after recovery	82,510	113,040	137,120	171,970	169,000	168,830	171,250	169,030	169,550
Combustion with energy recovery**	0	400	2,700	29,700	33,730	33,350	34,390	33,400	31,380
Discards to landfill, other disposal†	82,510	112,640	134,420	142,270	135,270	135,480	136,860	135,630	138,170

	Pounds per Person per Day								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Generation	2.68	3.25	3.66	4.50	4.64	4.55	4.65	4.59	4.60
Recovery for recycling	0.17	0.22	0.35	0.64	1.03	1.02	1.07	1.08	1.12
Recovery for composting*	Neg.	Neg.	Neg.	0.09	0.32	0.32	0.38	0.38	0.38
Total Materials Recovery	0.17	0.22	0.35	0.73	1.35	1.34	1.45	1.46	1.50
Discards after recovery	2.51	3.03	3.31	3.77	3.29	3.21	3.20	3.12	3.10
Combustion with energy recovery**	0.00	0.01	0.07	0.65	0.66	0.63	0.64	0.62	0.57
Discards to landfill, other disposal†	2.51	3.02	3.24	3.12	2.63	2.58	2.55	2.51	2.53
Population (thousands)	179,979	203,984	227,255	249,907	281,422	287,985	293,660	296,410	299,398

	Percent of Total Generation								
	1960	1970	1980	1990	2000	2002	2004	2005	2006
Generation	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Recovery for recycling	6.4%	6.6%	9.6%	14.2%	22.2%	22.5%	23.1%	23.6%	24.3%
Recovery for composting*	Neg.	Neg.	Neg.	2.0%	6.9%	7.0%	8.2%	8.3%	8.3%
Total Materials Recovery	6.4%	6.6%	9.6%	16.2%	29.1%	29.5%	31.3%	31.9%	32.5%
Discards after recovery	93.6%	93.4%	90.4%	83.8%	70.9%	70.5%	68.7%	68.1%	67.5%
Combustion with energy recovery**	0.0%	0.3%	1.8%	14.5%	14.2%	13.9%	13.8%	13.5%	12.5%
Discards to landfill, other disposal†	93.6%	93.1%	88.6%	69.3%	56.8%	56.6%	54.9%	54.7%	55.0%

* Composting of yard trimmings, food scraps and other MSW organic material. Does not include backyard composting.

** Includes combustion of MSW in mass burn or refuse-derived fuel form, and combustion with energy recovery of source separated materials in MSW (e.g., wood pallets and tire-derived fuel).

† Discards after recovery minus combustion with energy recovery. Discards include combustion without energy recovery. Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Figure 1: Definition of terms

The materials flow methodology produces an estimate of total municipal solid waste generation in the United States, by material categories and by product categories.

The term **generation** as used in this report refers to the weight of materials and products as they enter the waste management system from residential, commercial, institutional, and industrial sources and before materials recovery or combustion takes place. Preconsumer (industrial) scrap is not included in the generation estimates. Source reduction activities (e.g., backyard composting of yard trimmings) take place *ahead of* generation.

Source reduction activities reduce the amount or toxicity of wastes before they enter the municipal solid waste management system. Reuse is a source reduction activity involving the recovery or reapplication of a package, used product, or material in a manner that retains its original form or identity. Reuse of products such as refillable glass bottles, reusable plastic food storage containers, or refurbished wood pallets is considered to be source reduction, not recycling.

Recovery of materials as estimated in this report includes products and yard trimmings removed from the waste stream for the purpose of recycling (including composting). For recovered products, recovery equals reported purchases of postconsumer recovered material (e.g., glass cullet, old newspapers) plus net exports (if any) of the material. Thus, recovery of old corrugated containers (OCC) is the sum of OCC purchases by paper mills plus net exports of OCC. If recovery as reported by a data source includes converting or fabrication (preconsumer) scrap, the preconsumer scrap is *not* counted towards the recovery estimates in this report. Imported secondary materials are also not counted in recovery estimates in this report. For some materials, additional uses, such as glass used for highway construction or newspapers used to make insulation, are added into the recovery totals.

Combustion of MSW with energy recovery, often called “waste-to-energy,” is estimated in this report. Combustion of separated materials—wood and rubber from tires—is included in the estimates of combustion with energy recovery in this report.

Discards include MSW remaining after recovery for recycling (including composting). These discards presumably would be combusted without energy recovery or landfilled, although some MSW is littered, stored or disposed onsite, or burned onsite, particularly in rural areas. No good estimates for these other disposal practices are available, but the total amounts of MSW involved are presumed to be small.

Figure 2. Paper and paperboard products generated in MSW, 2006

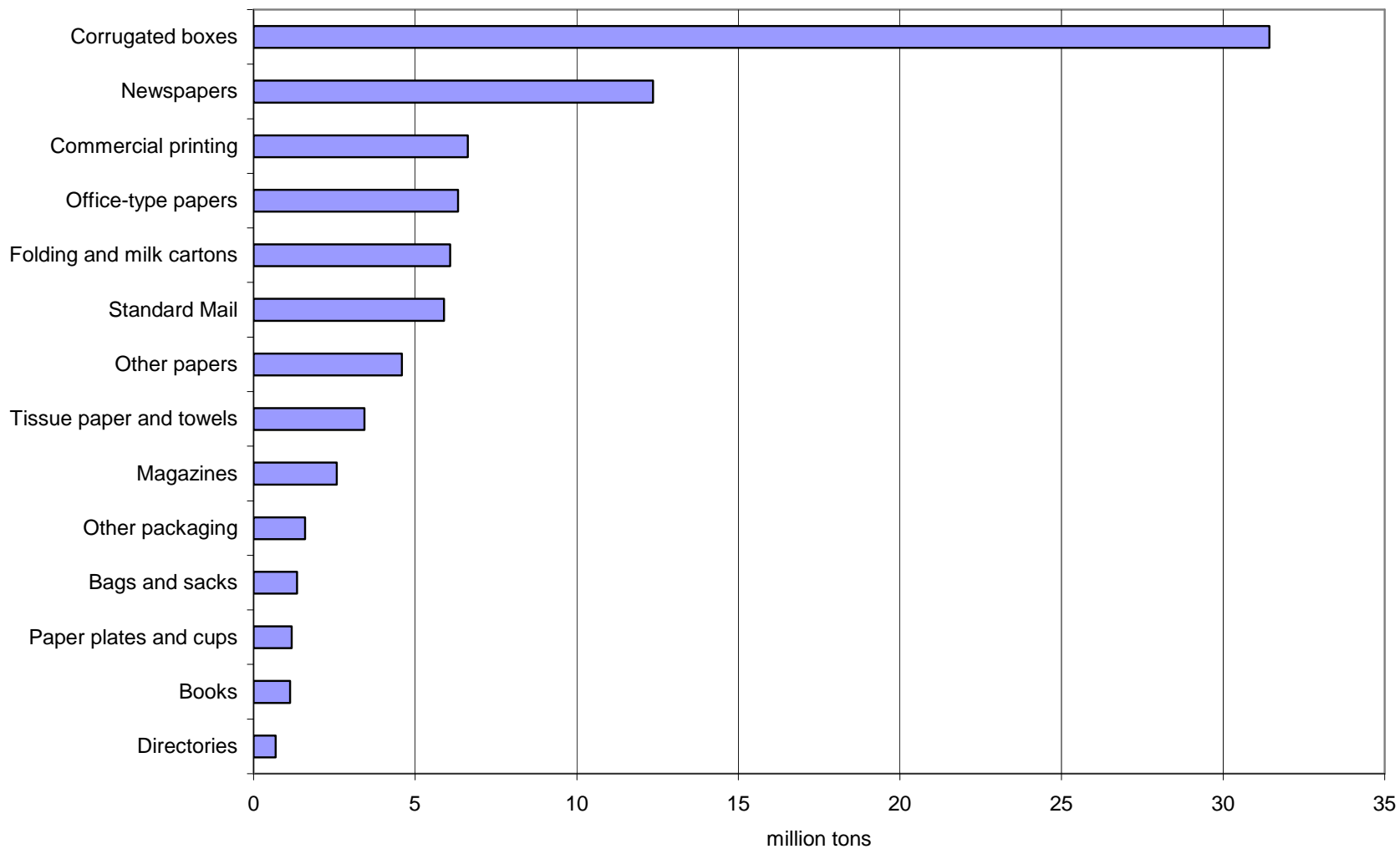


Figure 3. Paper and paperboard generation and recovery, 1960 to 2006

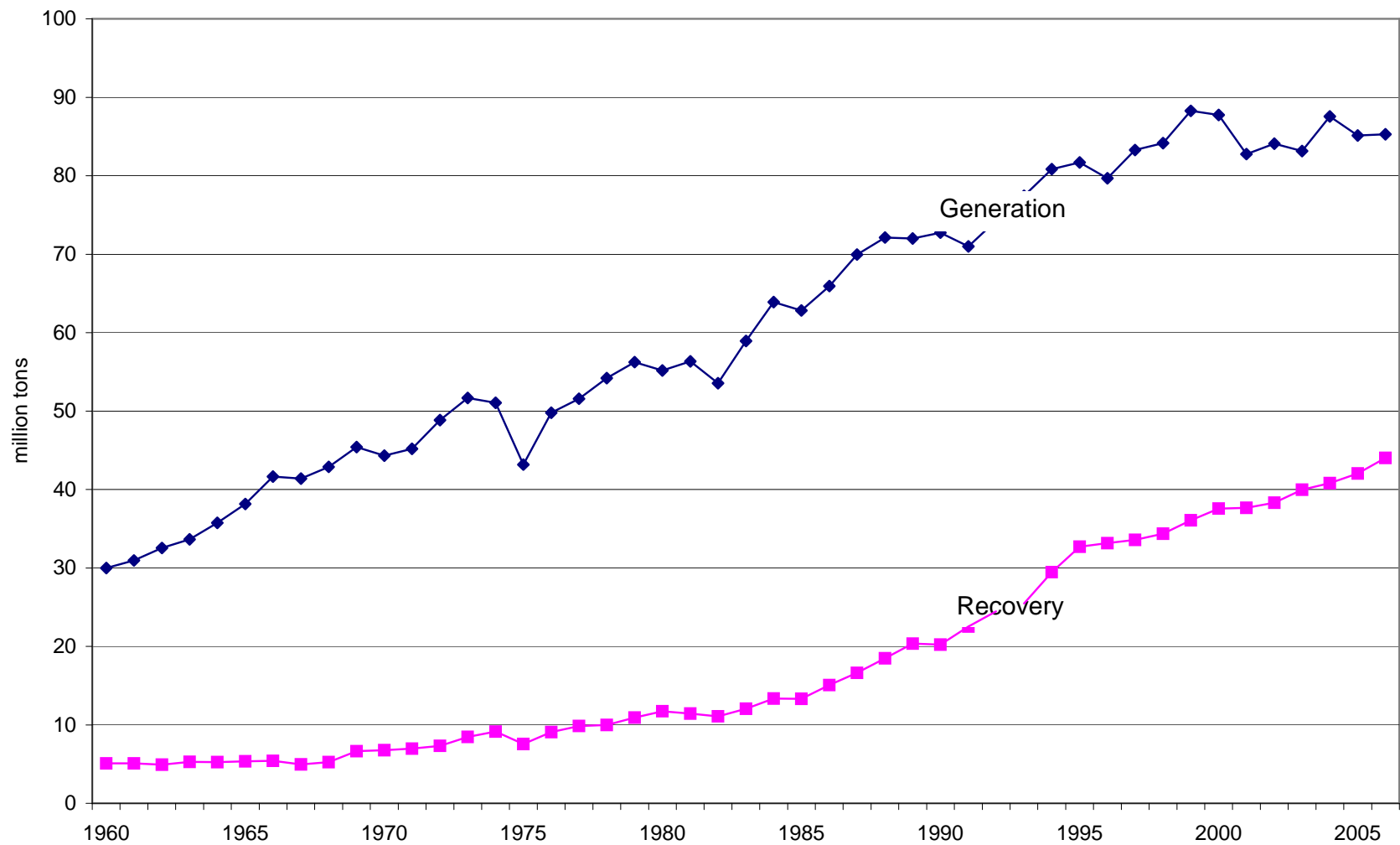


Figure 4. Glass products generated in MSW, 2006

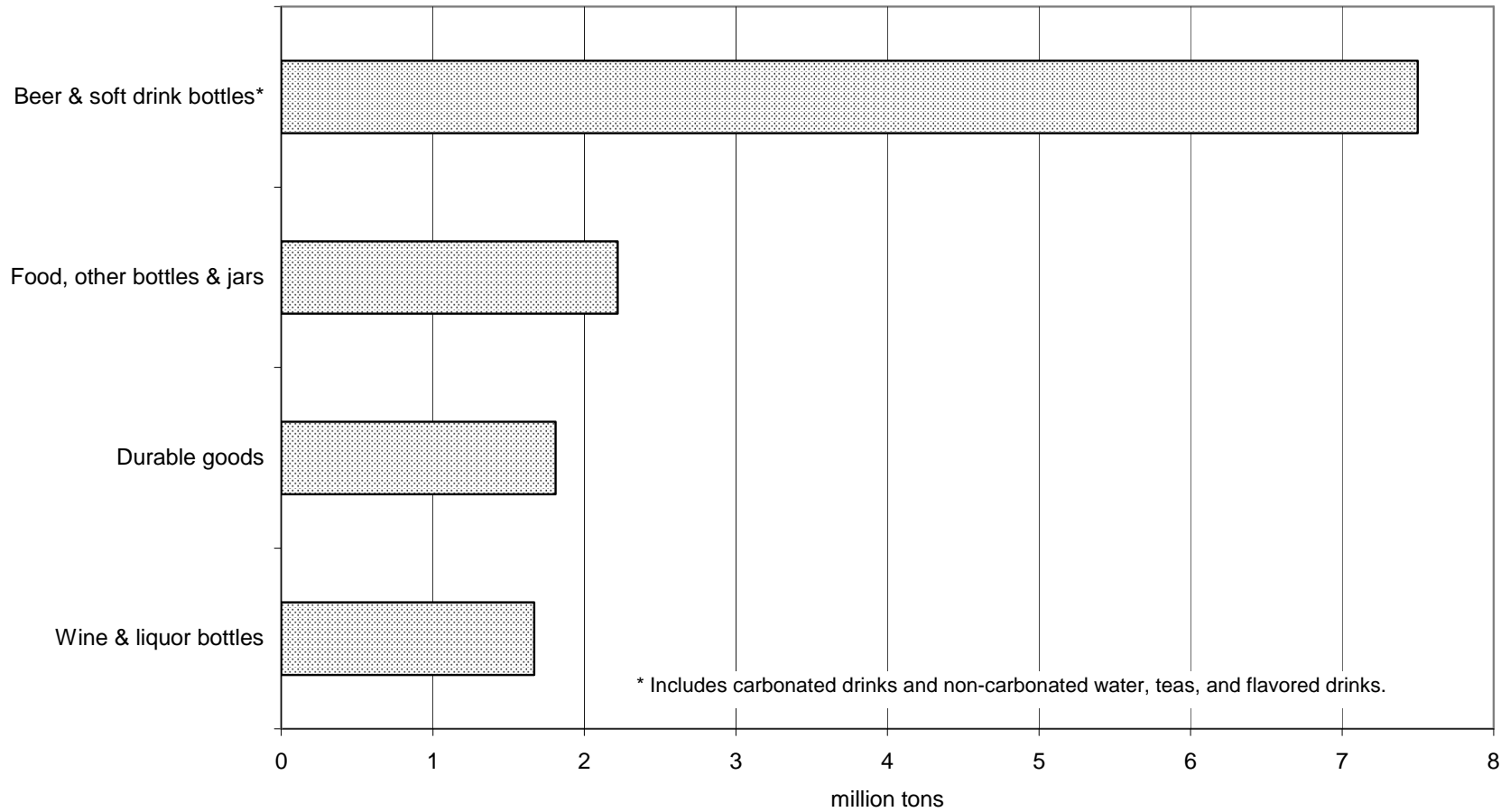


Figure 5. Glass generation and recovery, 1960 to 2006

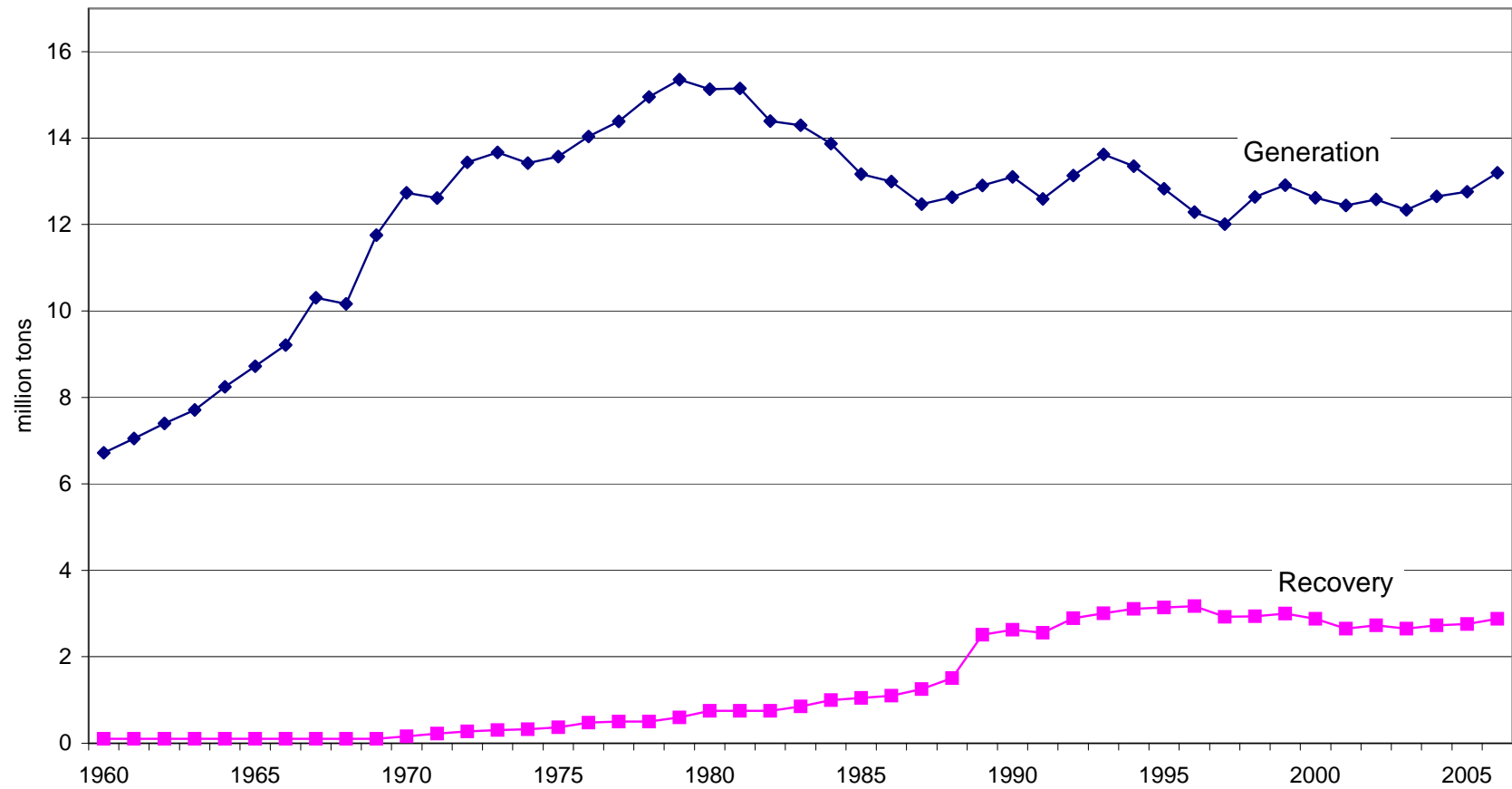


Figure 6. Metal products generated in MSW, 2006

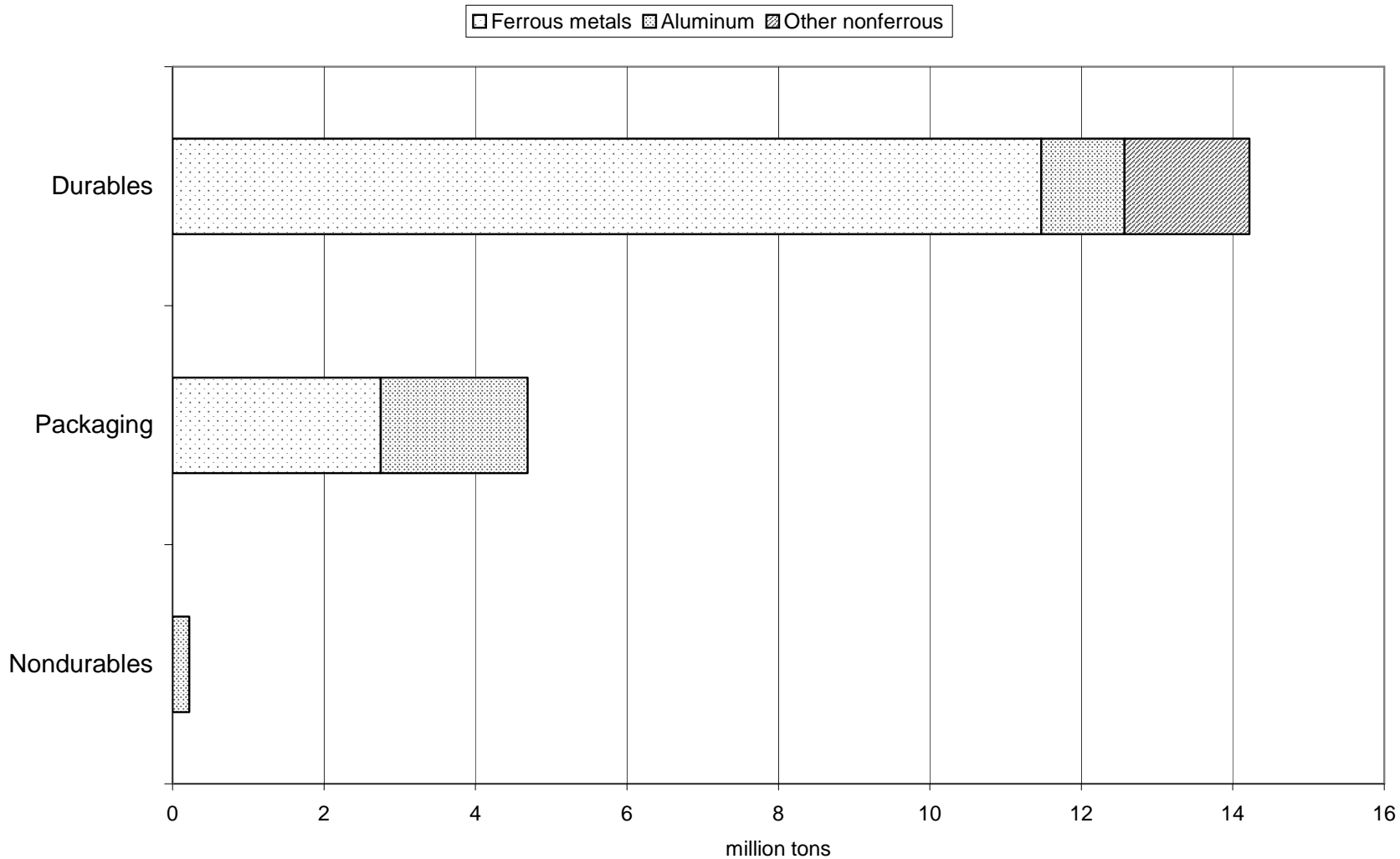


Figure 7. Metals generation and recovery, 1960 to 2006

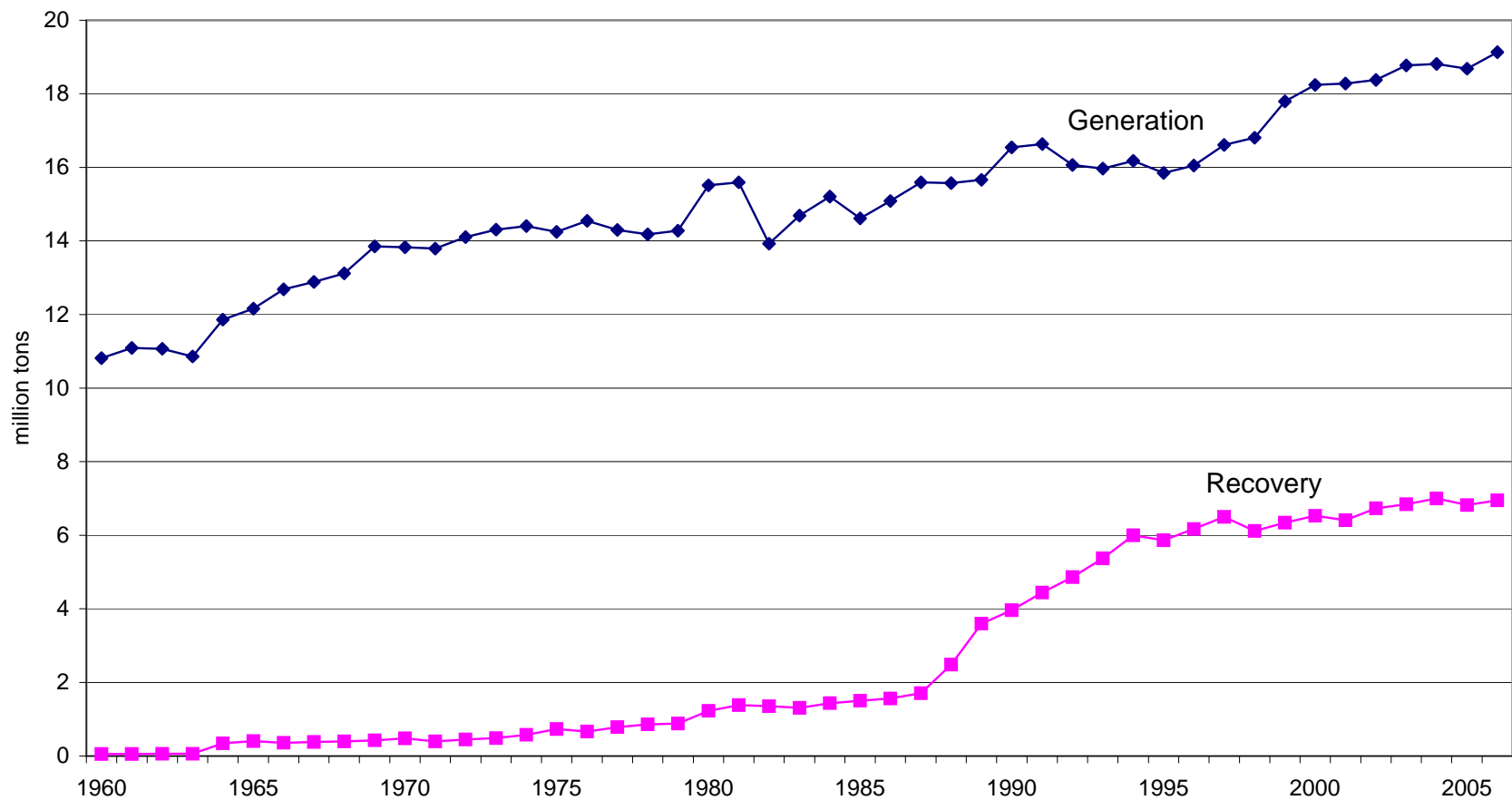


Figure 8. Plastics products generated in MSW, 2006

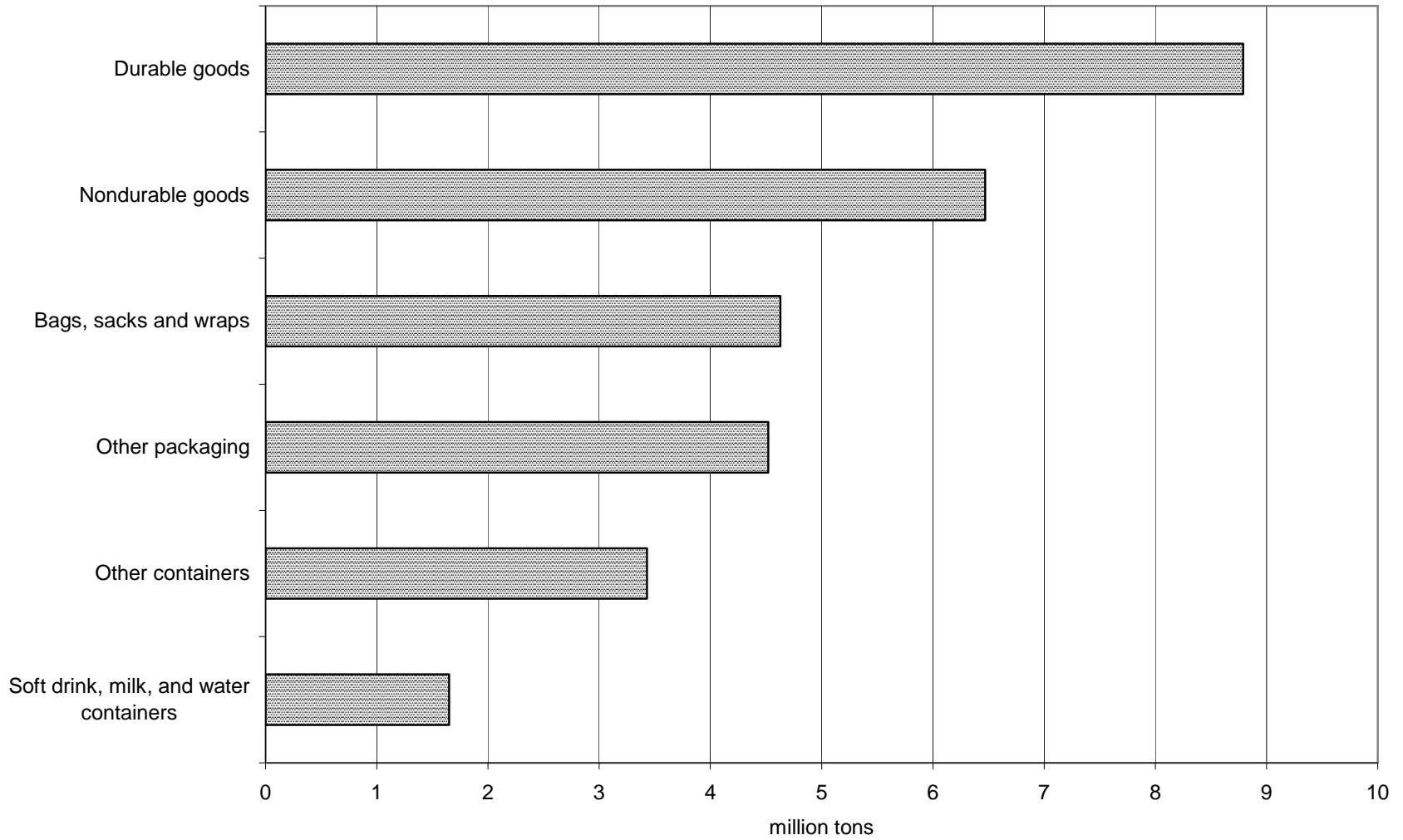


Figure 9. Plastics generation and recovery, 1960 to 2006

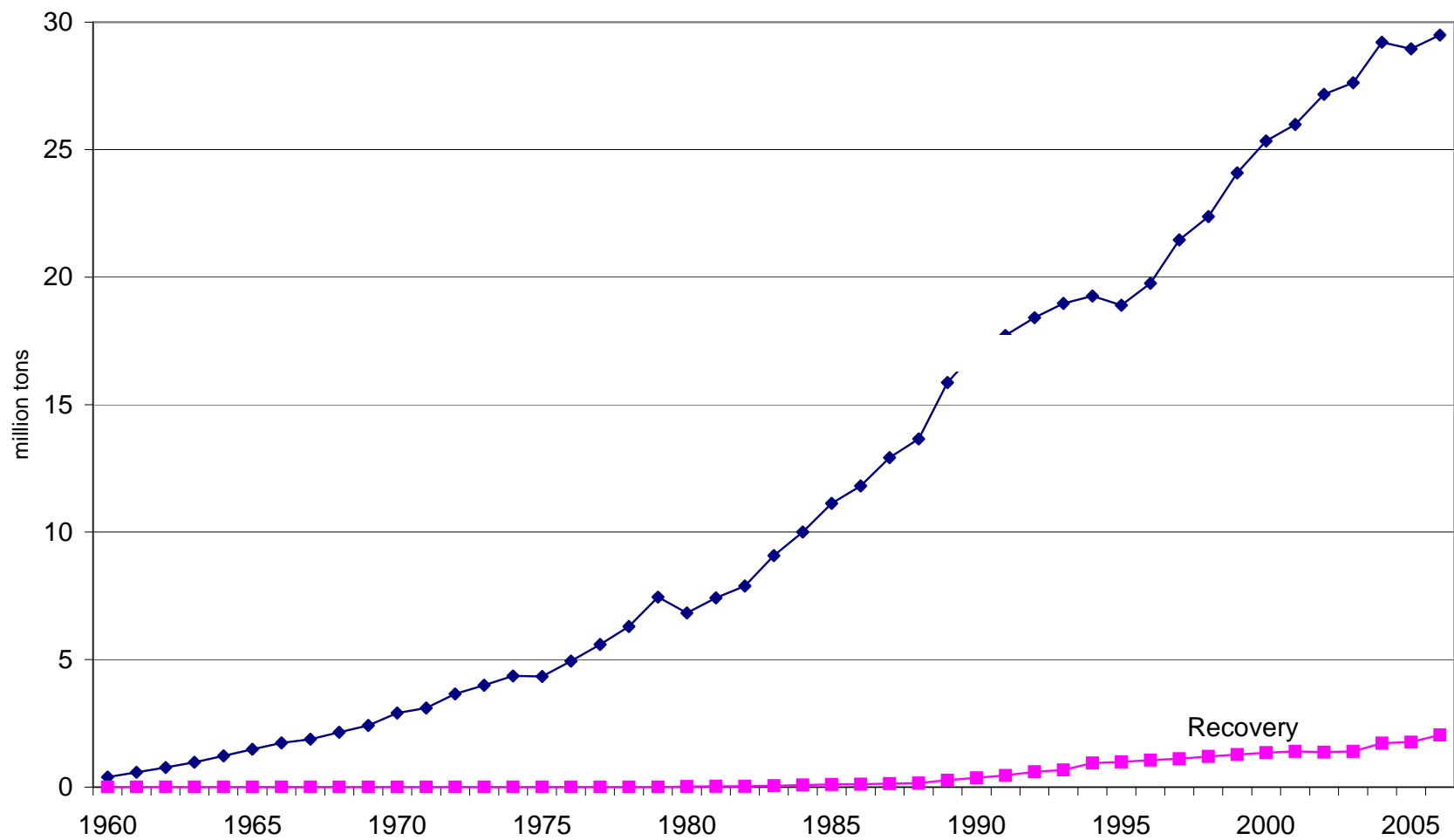


Figure 10. Generation of materials in MSW, 1960 to 2006

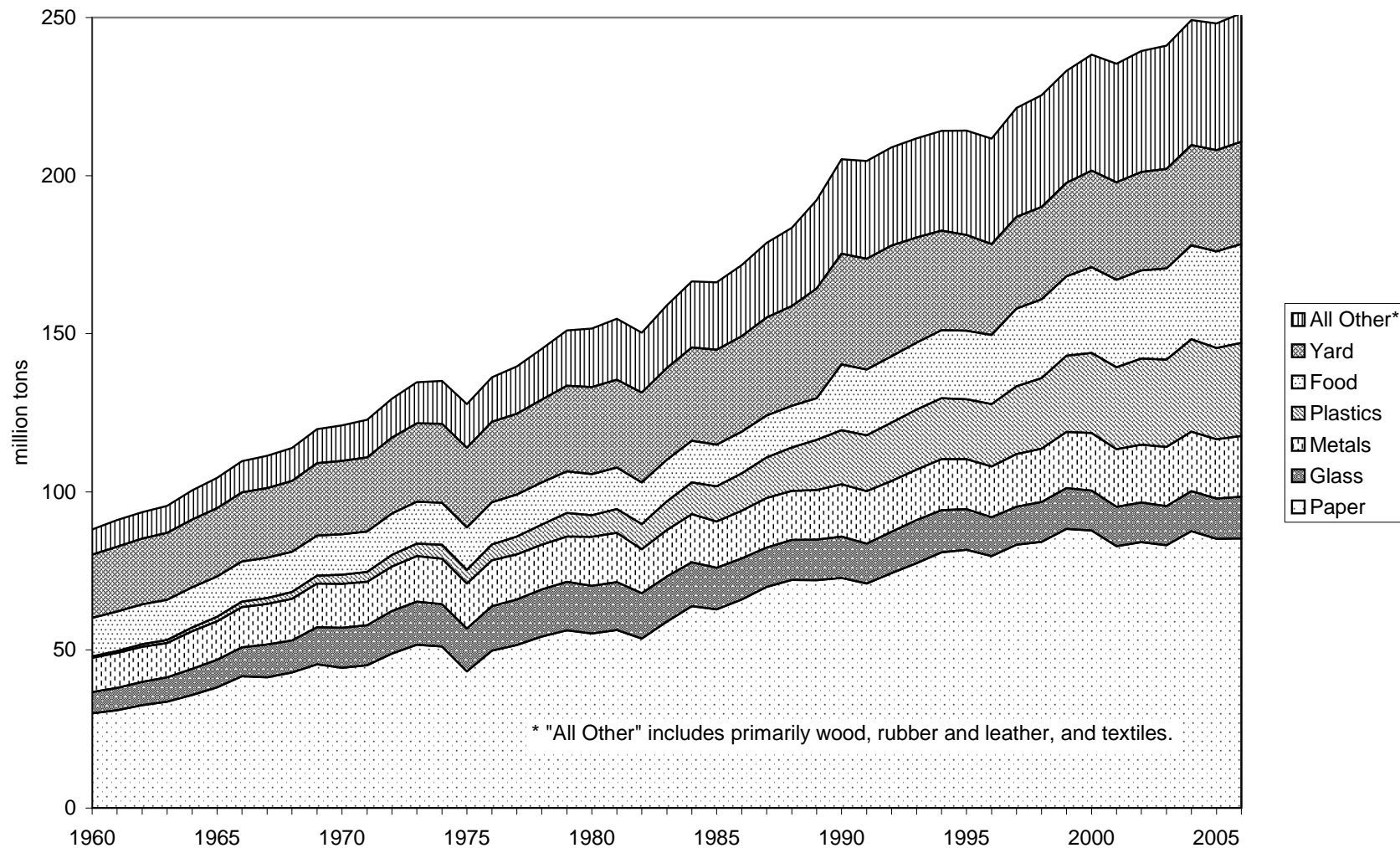


Figure 11. Recovery and discards of materials in MSW, 1960 to 2006

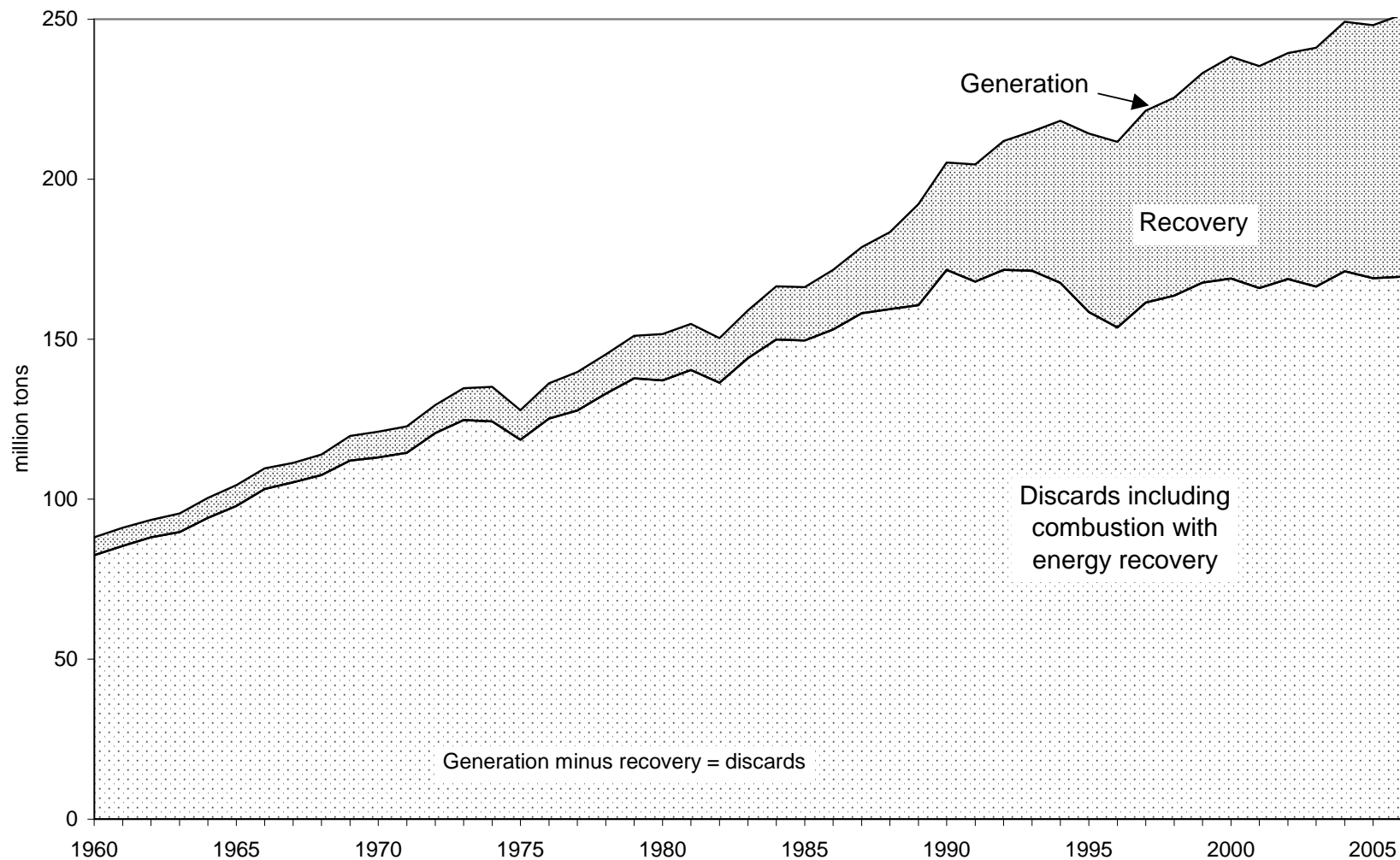
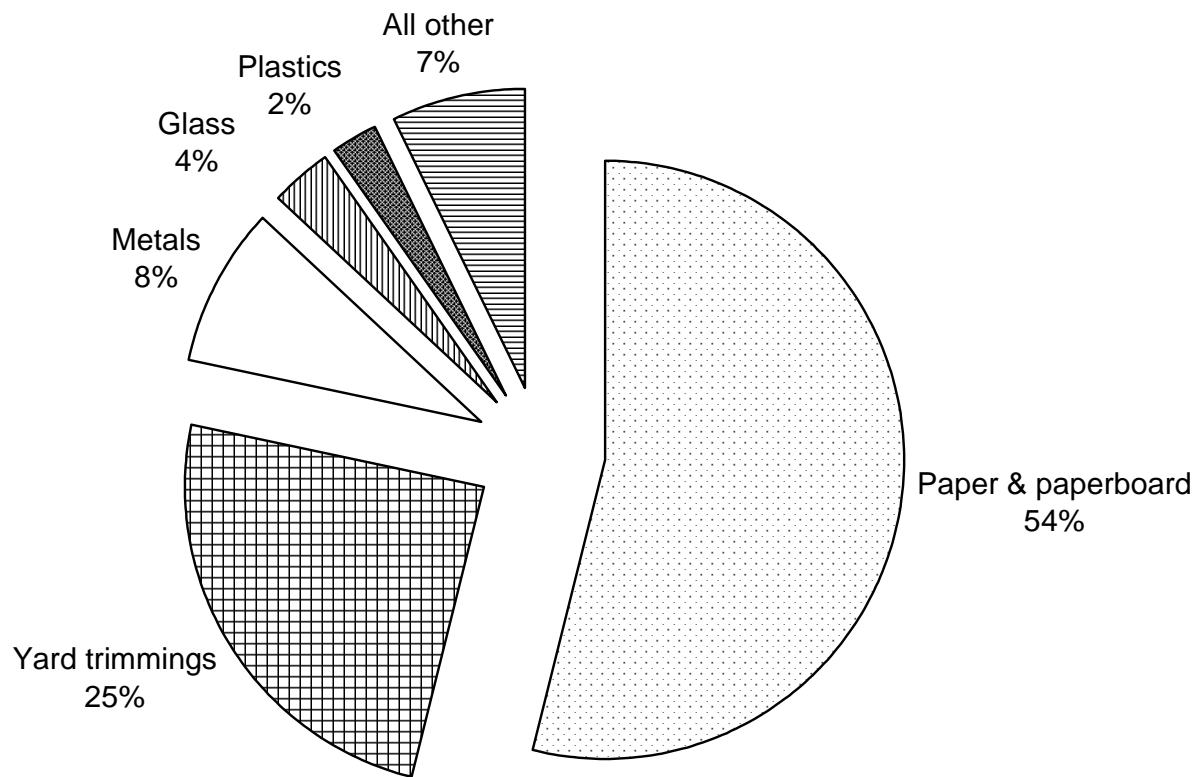
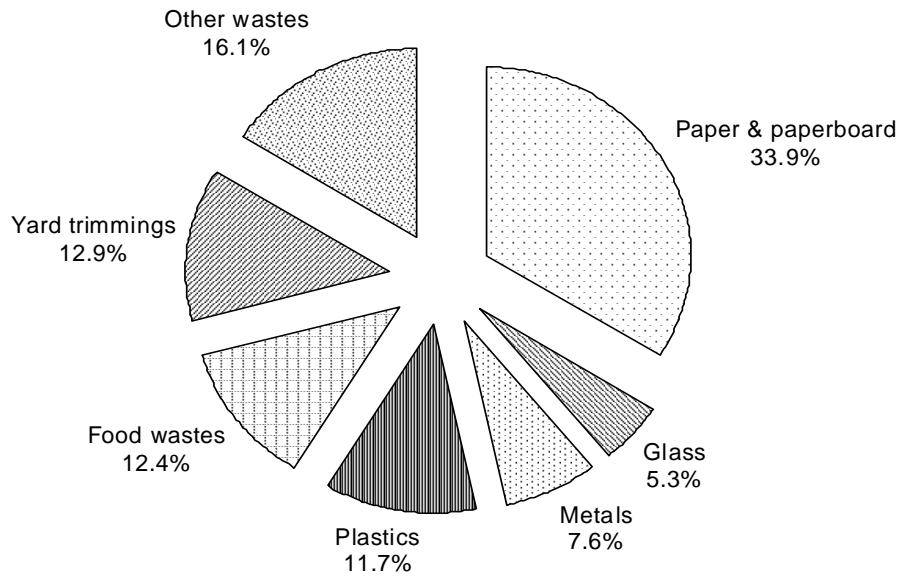


Figure 12. Materials recovery,* 2006

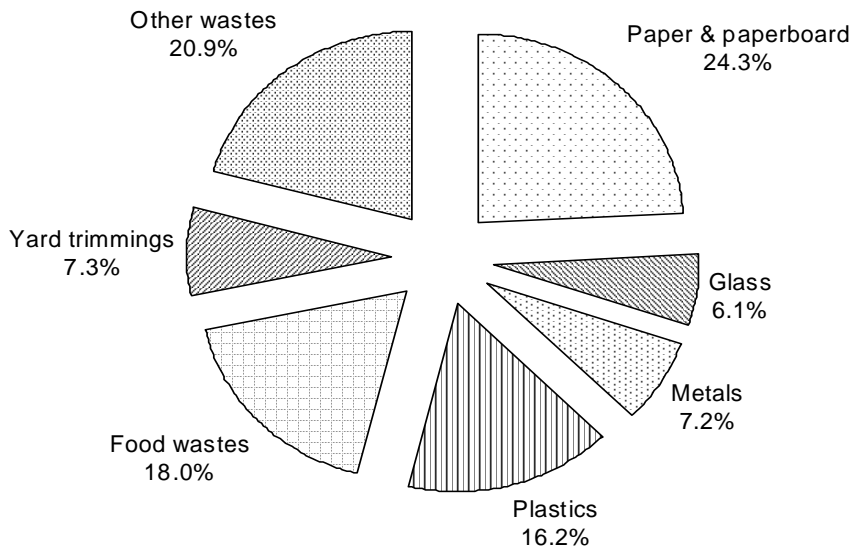


* In percent by weight of total recovery

**Figure 13. Materials generated and discarded*
in municipal solid waste, 2006
(In percent of total generation and discards)**



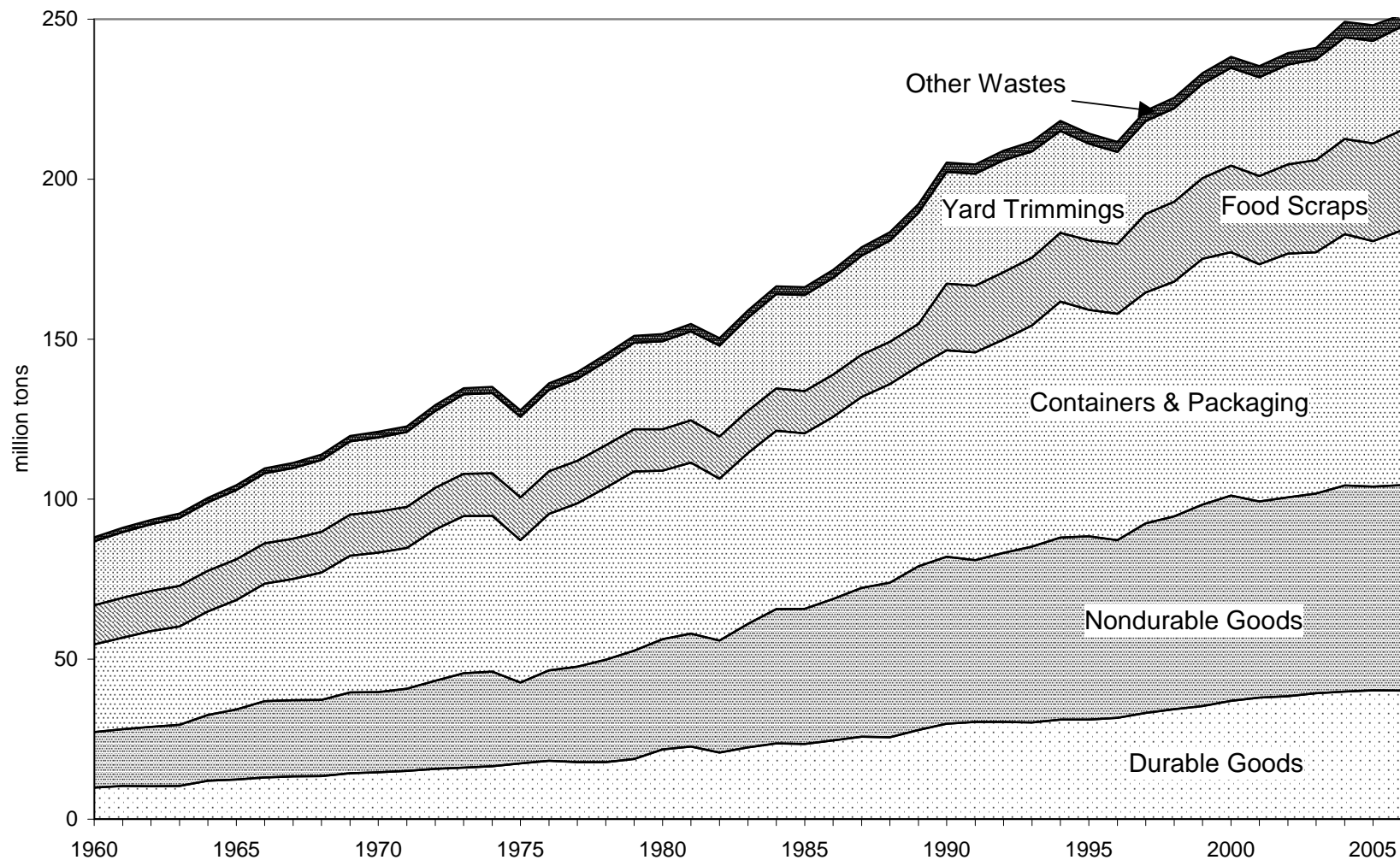
Generation



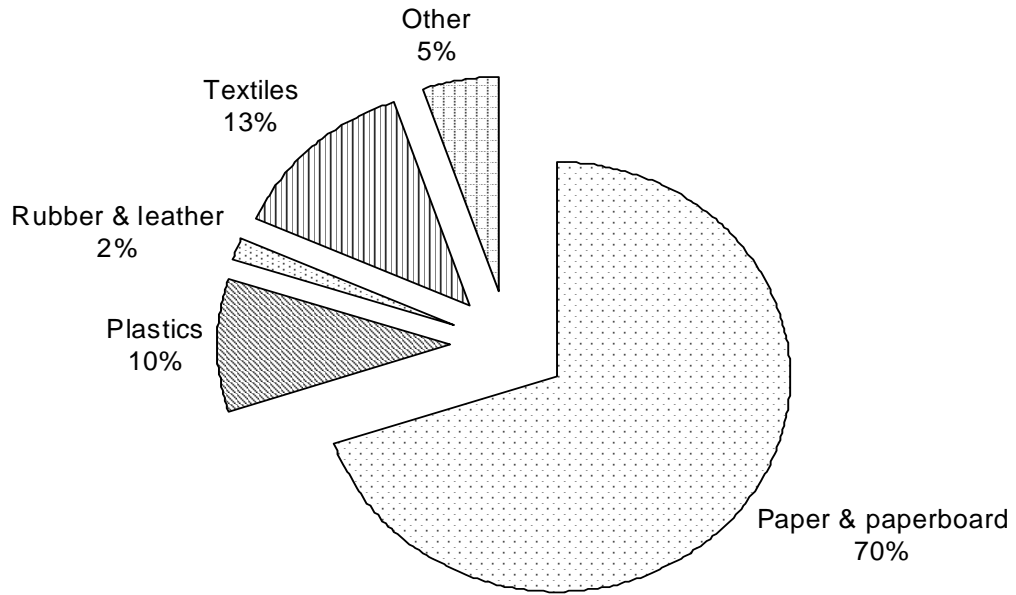
Discards

* Discards in this figure include combustion with energy recovery.

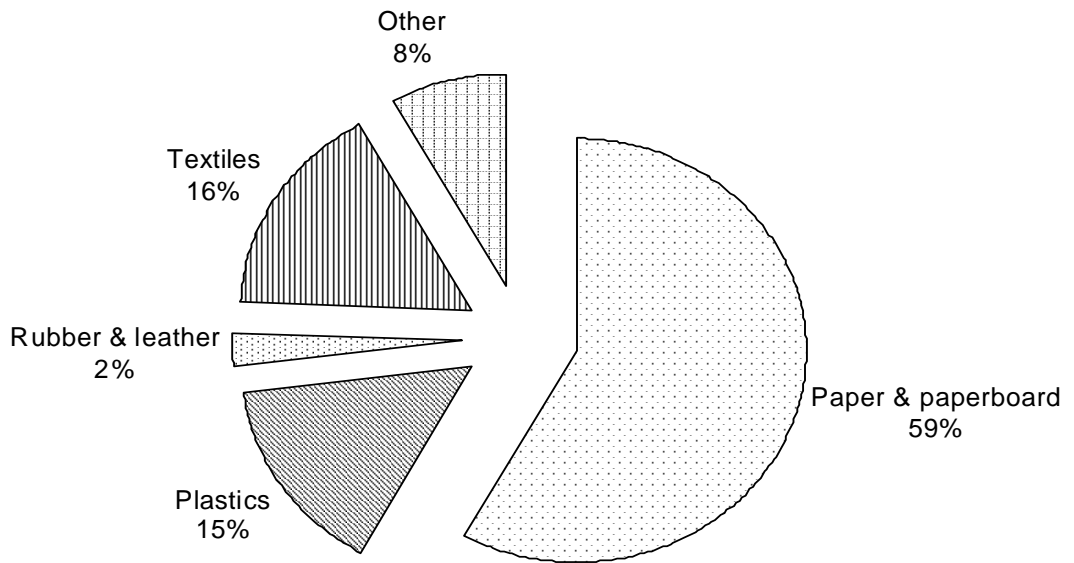
Figure 14. Generation of products in MSW, 1960 to 2006



**Figure 15. Nondurable goods generated and discarded*
in municipal solid waste, 2006
(In percent of total generation and discards)**



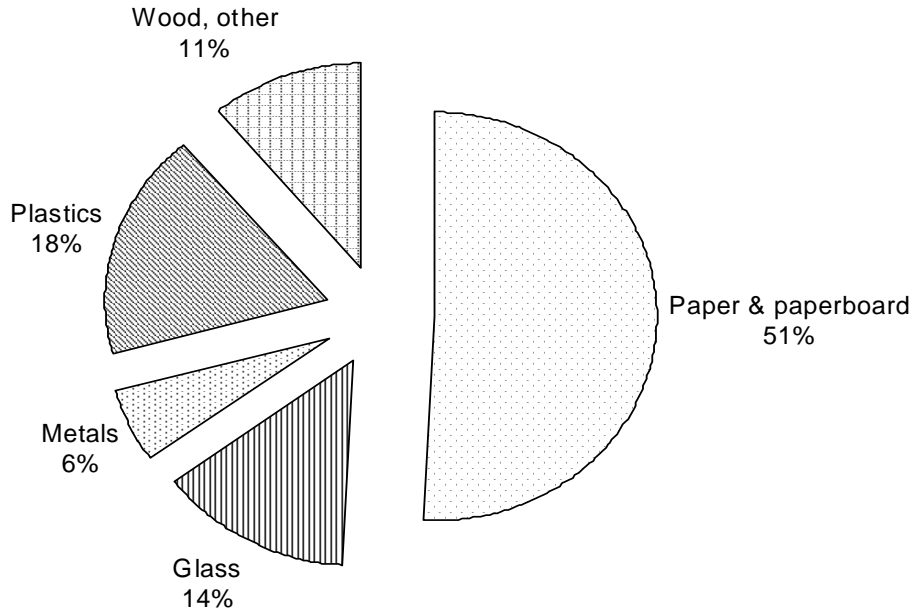
Generation



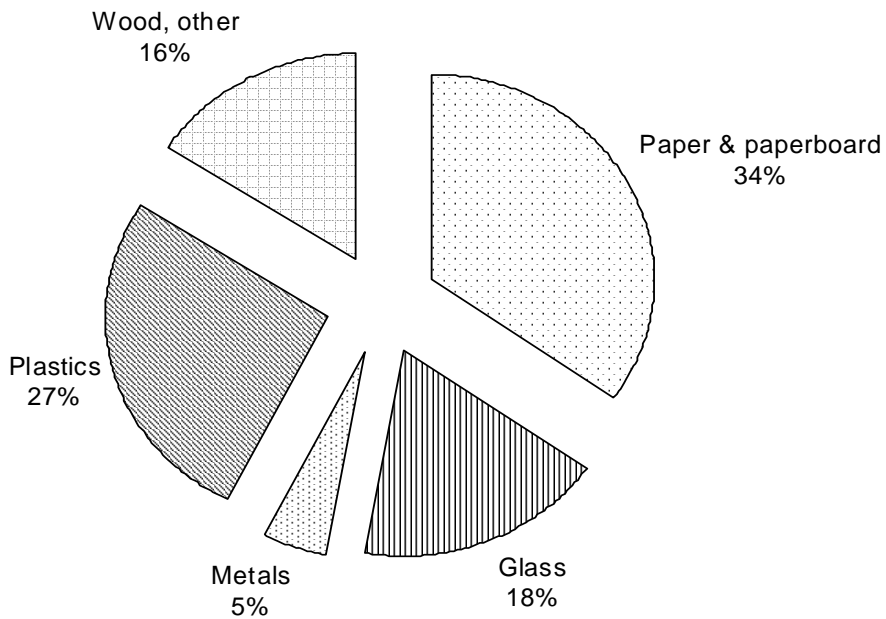
Discards

*Discards in this figure include combustion with energy recovery.

**Figure 16. Containers and packaging generated and discarded*
in municipal solid waste, 2006
(In percent of total generation and discards)**



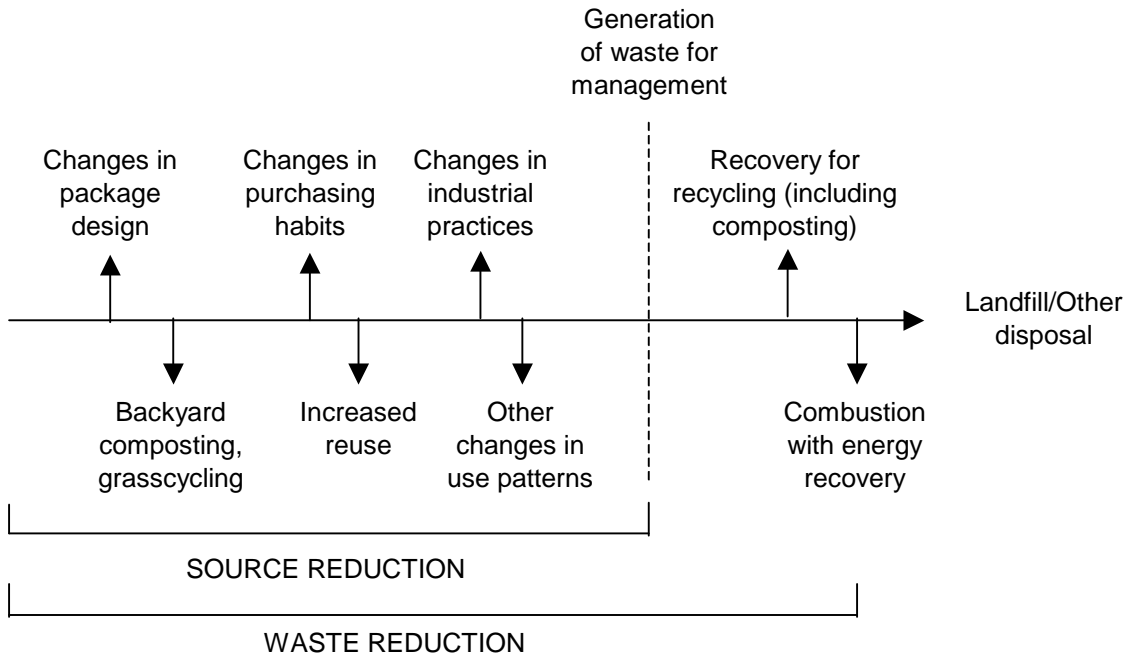
Generation



Discards

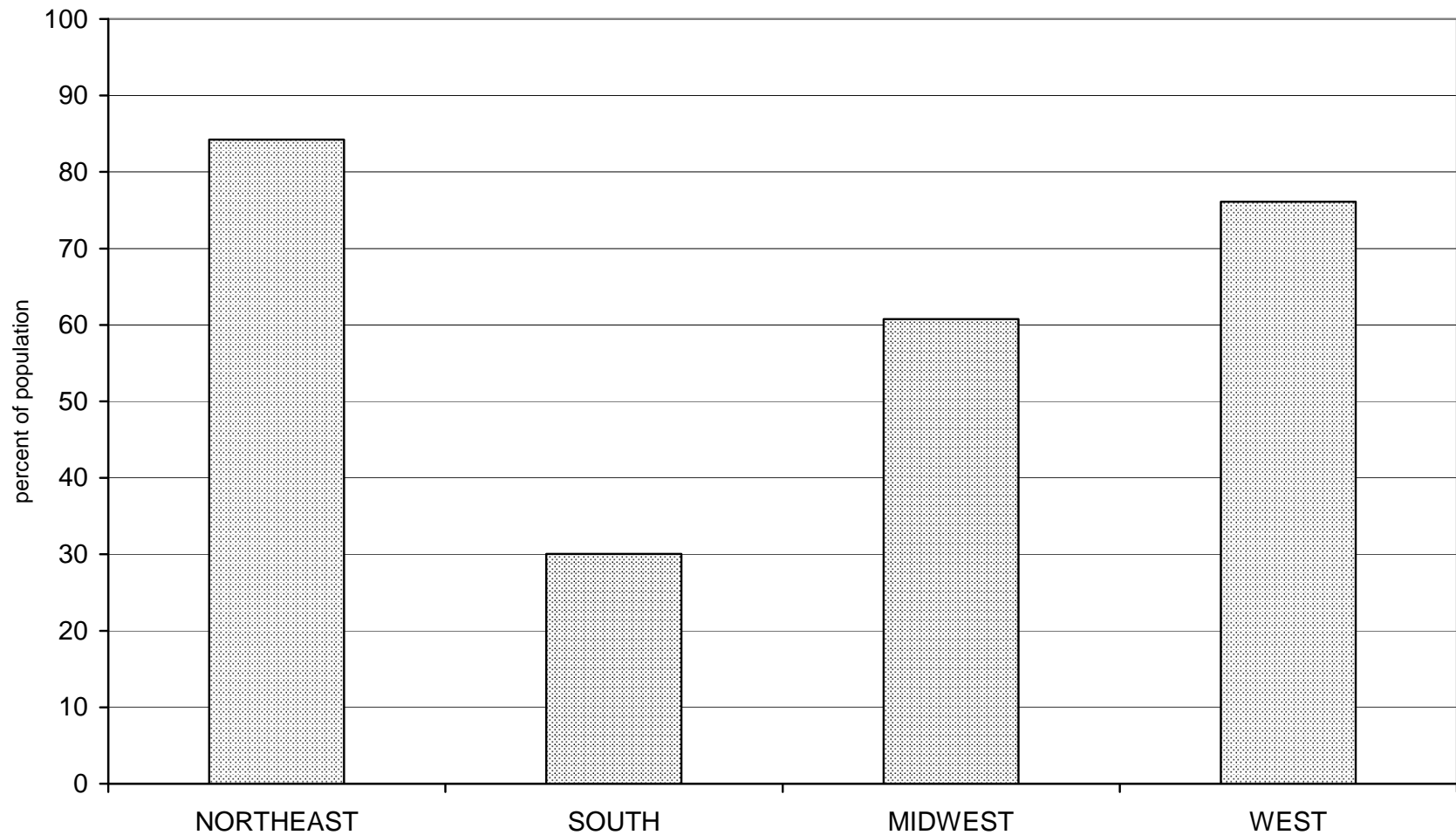
*Discards in this figure include combustion with energy recovery.

Figure 17. Diagram of solid waste management



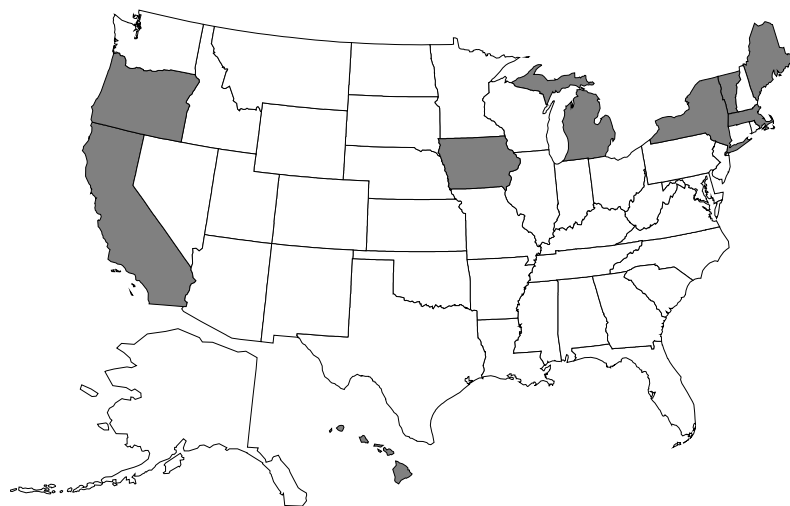
Source: Franklin Associates, A Division of ERG

Figure 18. Population served by curbside recycling, 2006



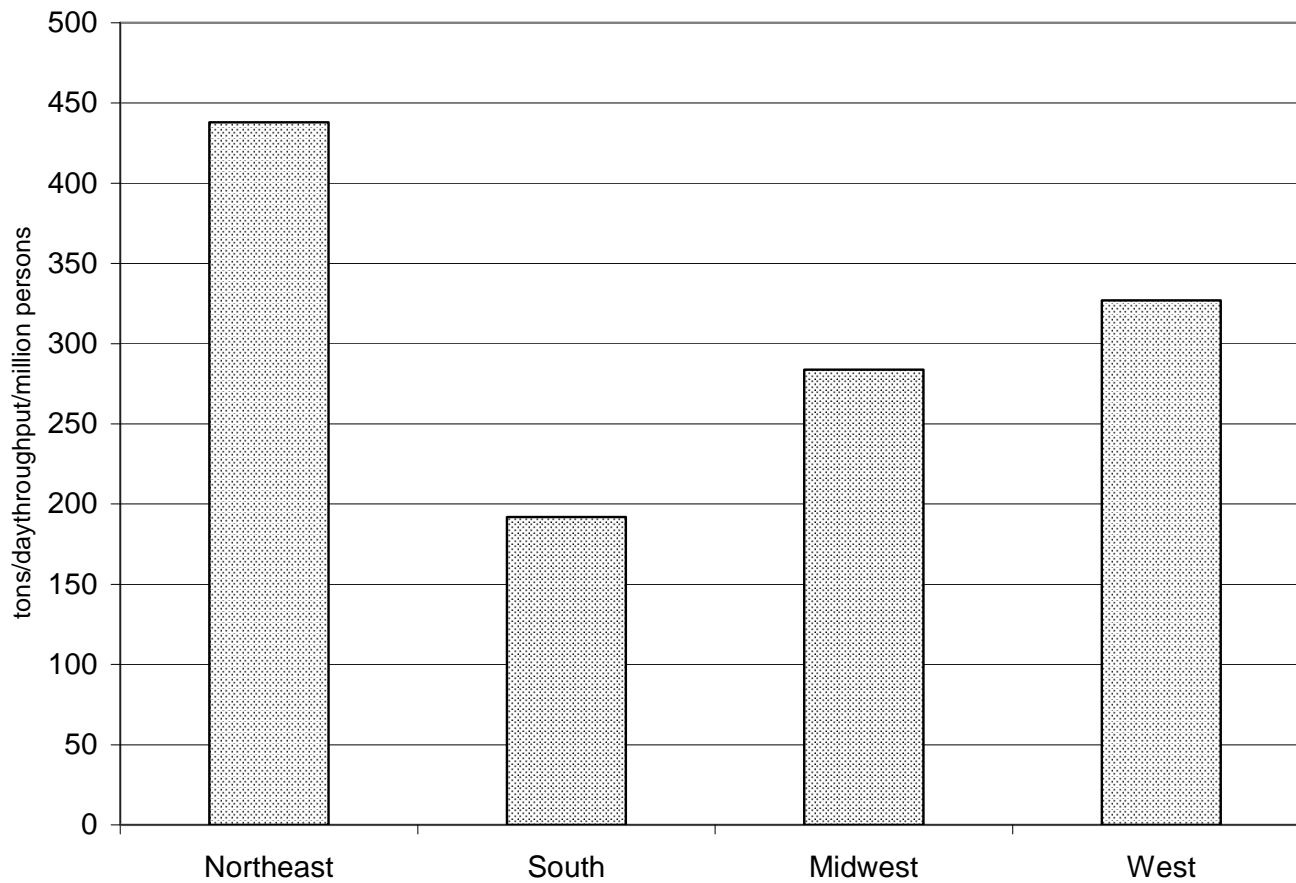
Source: U.S. Census Bureau 2006, BioCycle April 2006, California Integrated Waste Management Board, Illinois Recycling Association, www.coloradocurbside.com, Nebraska State Recycling Association, Pennsylvania Department of Environmental Protection

Figure 19. States With Bottle Deposit Rules



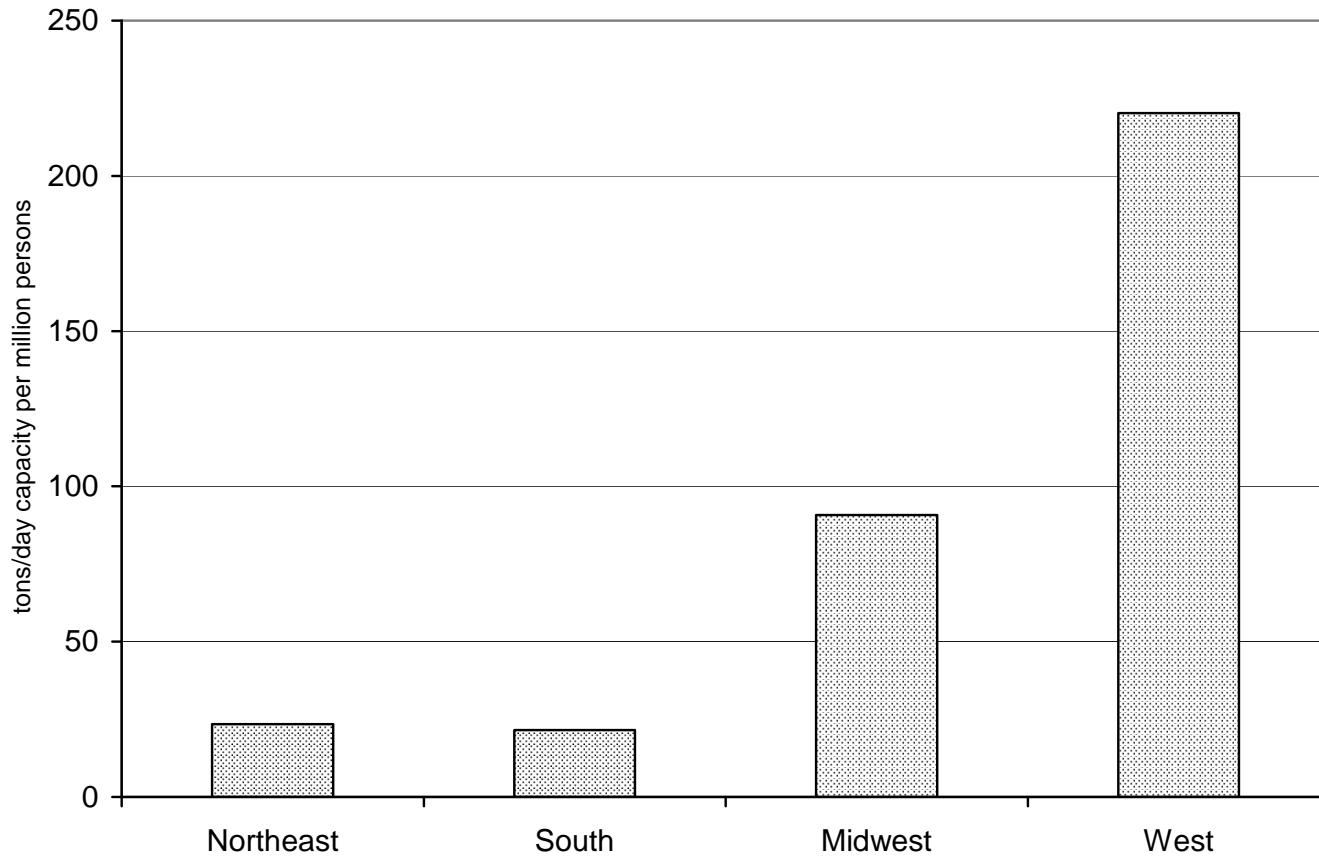
Source: Container Recycling Institute, 2006.

**Figure 20. Estimated MRF throughput, 2006
(tons per day per million persons)**



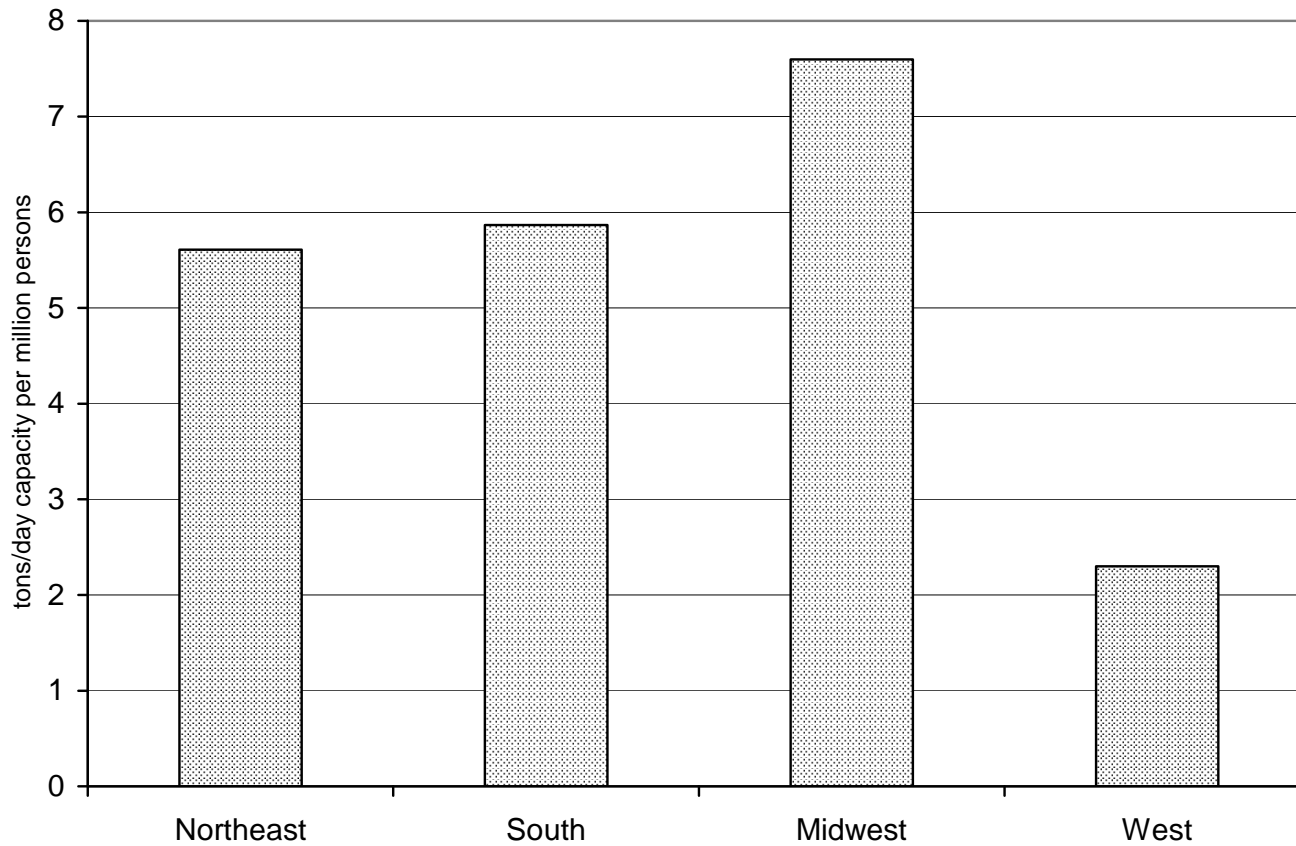
Source: U.S. Census Bureau, Governmental Advisory Associates, Inc.

**Figure 21. Mixed waste processing estimated capacity, 2006
(tons per day per million persons)**



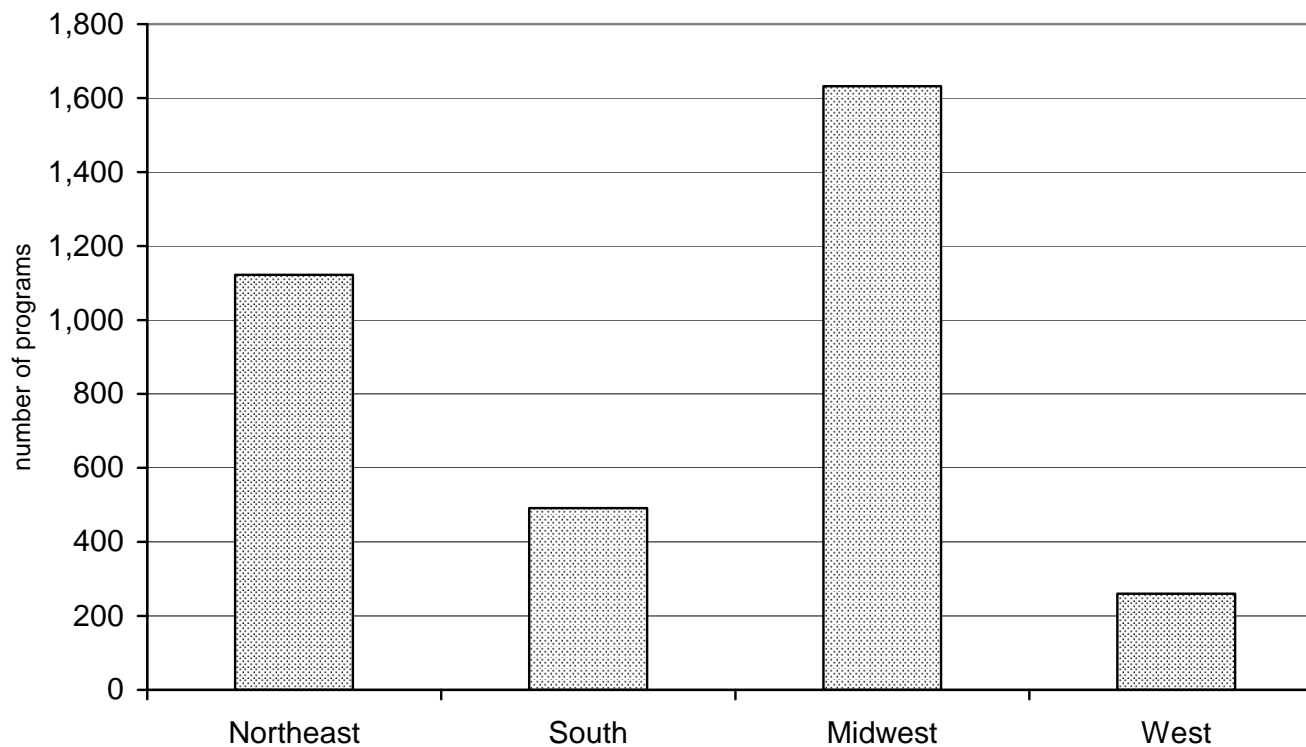
Source: U.S. Census Bureau, 2006 and Governmental Advisory Associates, Inc. 2005 data.
2006 data not available.

**Figure 22. MSW composting capacity, 2006
(Capacity in tons per day per million persons)**



Source: U.S. Census Bureau; *BioCycle*, November 2006.

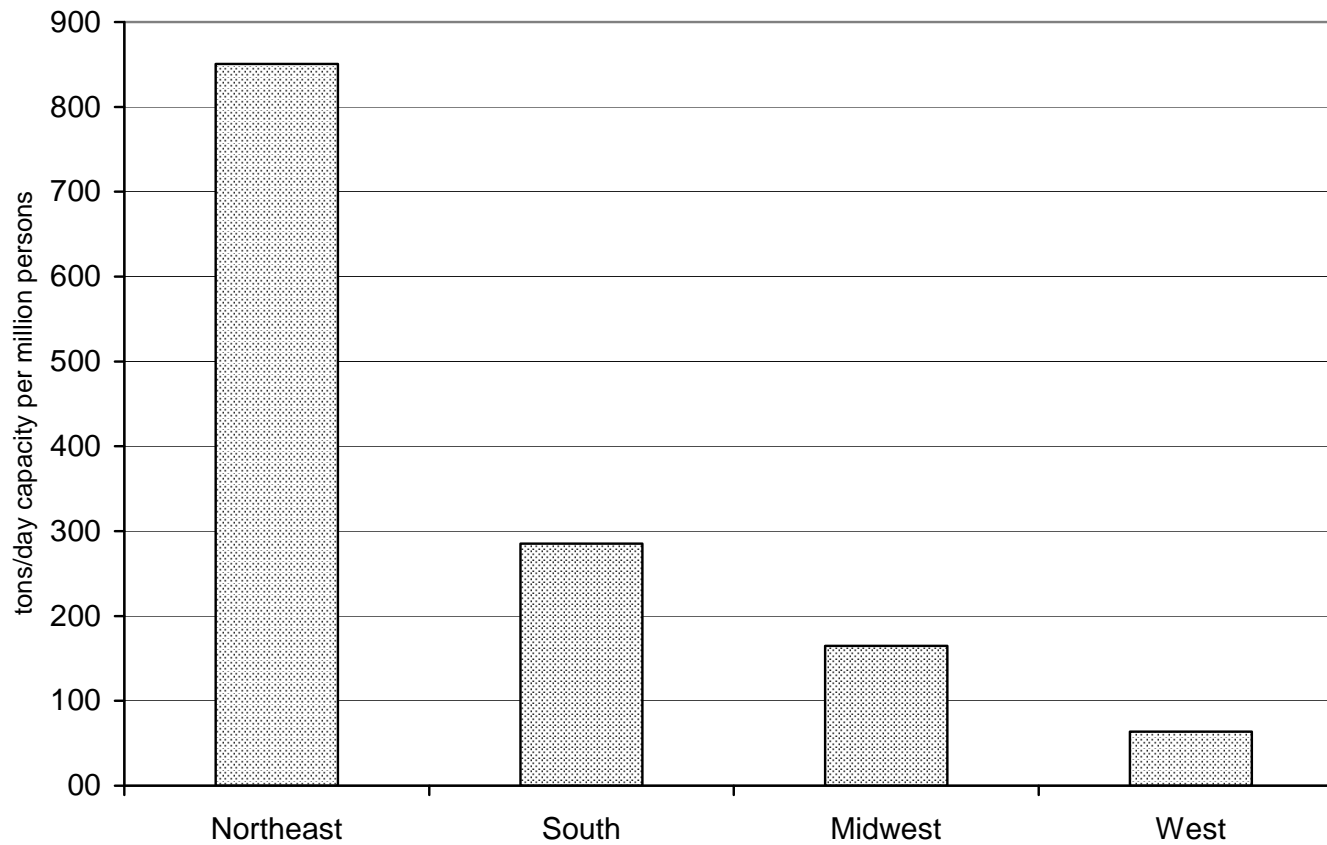
**Figure 23. Yard trimmings composting programs, 2006
(In number of programs)**



Source: *BioCycle* April 2006.

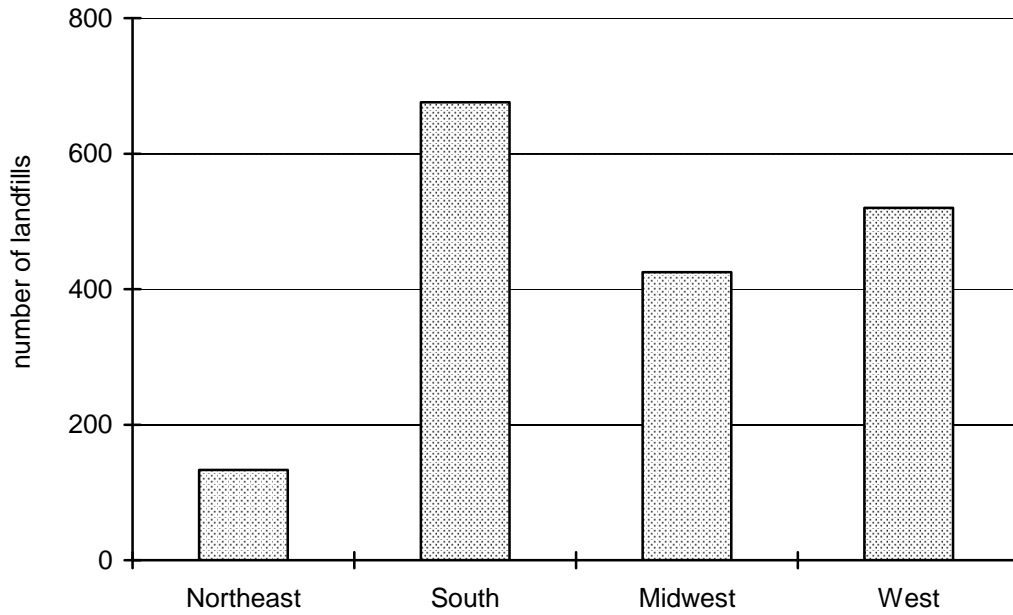
Revised with data from Arkansas Department of Environmental Quality, California Integrated Waste Management Board, and Colorado Department of Public Health and Environment.

**Figure 24. Municipal waste-to-energy capacity, 2006
(Capacity in tons per million persons)**



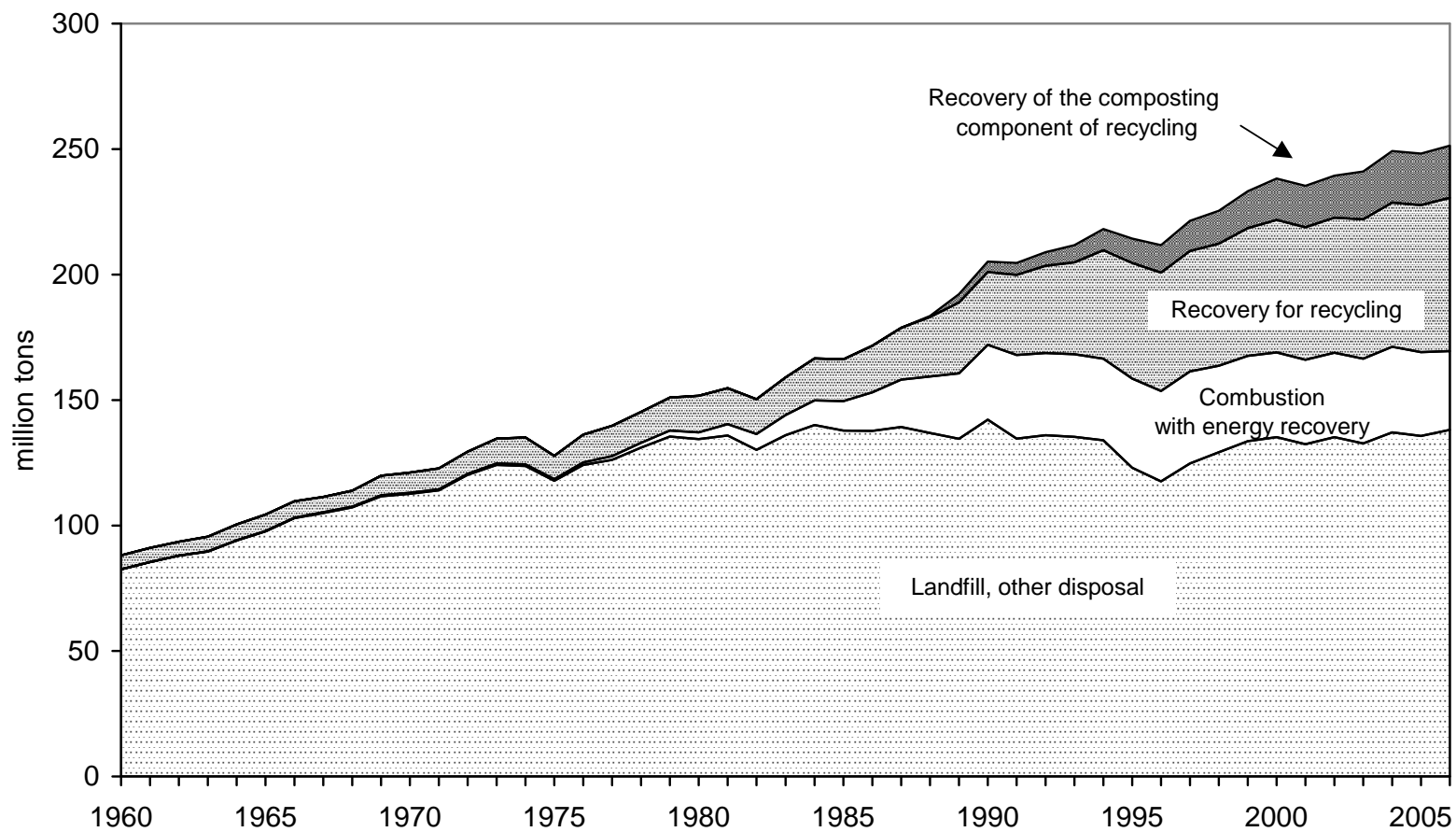
Source: U.S. Census Bureau, Integrated Waste Services Association 2007.

Figure 25. Number of landfills in the U.S., 2006



Source: BioCycle April 2006.
Revised with data from Alabama Department of Environmental Management, Arizona Department of Environmental Quality, Arkansas Department of Environmental Quality, California Integrated Waste Management Board, Colorado Department of Public Health and Environment, and Louisiana Department of Environmental Quality.

Figure 26. Municipal solid waste management, 1960 to 2006



Source: Franklin Associates, A Division of ERG