

Table 1

MATERIALS GENERATED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2003
(In thousands of tons and percent of total generation)

Materials	Thousands of Tons								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Paper and Paperboard	29,990	44,310	55,160	72,730	81,670	87,740	82,660	84,200	83,100
Glass	6,720	12,740	15,130	13,100	12,830	12,620	12,580	12,830	12,470
Metals									
Ferrous	10,300	12,360	12,620	12,640	11,640	13,490	13,520	13,630	14,000
Aluminum	340	800	1,730	2,810	2,960	3,140	3,190	3,200	3,230
Other Nonferrous	180	670	1,160	1,100	1,260	1,560	1,570	1,570	1,590
<i>Total Metals</i>	<i>10,820</i>	<i>13,830</i>	<i>15,510</i>	<i>16,550</i>	<i>15,860</i>	<i>18,190</i>	<i>18,280</i>	<i>18,400</i>	<i>18,820</i>
Plastics	390	2,900	6,830	17,130	18,900	24,670	25,270	26,320	26,650
Rubber and Leather	1,840	2,970	4,200	5,790	6,030	6,530	6,670	6,660	6,820
Textiles	1,760	2,040	2,530	5,810	7,400	9,430	9,810	10,260	10,590
Wood	3,030	3,720	7,010	12,210	12,780	12,940	13,180	13,410	13,630
Other **	70	770	2,520	3,190	3,650	4,190	4,280	4,280	4,320
Total Materials in Products	54,620	83,280	108,890	146,510	159,120	176,310	172,730	176,360	176,400
Other Wastes									
Food Scraps	12,200	12,800	13,000	20,800	21,740	26,480	26,980	27,280	27,550
Yard Trimmings	20,000	23,200	27,500	35,000	29,690	27,730	27,980	28,300	28,600
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,150	3,500	3,540	3,580	3,620
Total Other Wastes	33,500	37,780	42,750	58,700	54,580	57,710	58,500	59,160	59,770
Total MSW Generated - Weight	88,120	121,060	151,640	205,210	213,700	234,020	231,230	235,520	236,170
Materials	Percent of Total Generation								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Paper and Paperboard	34.0%	36.6%	36.4%	35.4%	38.2%	37.5%	35.7%	35.8%	35.2%
Glass	7.6%	10.5%	10.0%	6.4%	6.0%	5.4%	5.4%	5.4%	5.3%
Metals									
Ferrous	11.7%	10.2%	8.3%	6.2%	5.4%	5.8%	5.8%	5.8%	5.9%
Aluminum	0.4%	0.7%	1.1%	1.4%	1.4%	1.3%	1.4%	1.4%	1.4%
Other Nonferrous	0.2%	0.6%	0.8%	0.5%	0.6%	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>7.4%</i>	<i>7.8%</i>	<i>7.9%</i>	<i>7.8%</i>	<i>8.0%</i>
Plastics	0.4%	2.4%	4.5%	8.3%	8.8%	10.5%	10.9%	11.2%	11.3%
Rubber and Leather	2.1%	2.5%	2.8%	2.8%	2.8%	2.8%	2.9%	2.8%	2.9%
Textiles	2.0%	1.7%	1.7%	2.8%	3.5%	4.0%	4.2%	4.4%	4.5%
Wood	3.4%	3.1%	4.6%	6.0%	6.0%	5.5%	5.7%	5.7%	5.8%
Other **	0.1%	0.6%	1.7%	1.6%	1.7%	1.8%	1.9%	1.8%	1.8%
Total Materials in Products	62.0%	68.8%	71.8%	71.4%	74.5%	75.3%	74.7%	74.9%	74.7%
Other Wastes									
Food Scraps	13.8%	10.6%	8.6%	10.1%	10.2%	11.3%	11.7%	11.6%	11.7%
Yard Trimmings	22.7%	19.2%	18.1%	17.1%	13.9%	11.8%	12.1%	12.0%	12.1%
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%	25.5%	24.7%	25.3%	25.1%	25.3%
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, Ltd.

Table 2

RECOVERY* OF MUNICIPAL SOLID WASTE, 1960 TO 2003
(In thousands of tons and percent of generation of each material)

Materials	Thousands of Tons								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Paper and Paperboard	5,080	6,770	11,740	20,230	32,700	37,560	37,680	38,330	39,960
Glass	100	160	750	2,630	3,140	2,660	2,400	2,450	2,350
Metals									
Ferrous	50	150	370	2,230	4,130	4,610	4,570	4,910	5,090
Aluminum	Neg.	10	310	1,010	930	860	780	760	690
Other Nonferrous	Neg.	320	540	730	810	1,060	1,060	1,060	1,060
<i>Total Metals</i>	50	480	1,220	3,970	5,870	6,530	6,410	6,730	6,840
Plastics	Neg.	Neg.	20	370	990	1,350	1,400	1,370	1,390
Rubber and Leather	330	250	130	370	540	820	1,200	1,150	1,100
Textiles	50	60	160	660	900	1,290	1,440	1,490	1,520
Wood	Neg.	Neg.	Neg.	130	1,260	1,240	1,250	1,260	1,280
Other **	Neg.	300	500	680	750	980	980	980	980
<i>Total Materials in Products</i>	5,610	8,020	14,520	29,040	46,150	52,430	52,760	53,760	55,420
Other Wastes									
Food Scraps	Neg.	Neg.	Neg.	Neg.	570	680	730	740	750
Yard Trimmings	Neg.	Neg.	Neg.	4,200	9,030	15,770	15,820	16,000	16,100
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<i>Total Other Wastes</i>	Neg.	Neg.	Neg.	4,200	9,600	16,450	16,550	16,740	16,850
<i>Total MSW Recovered - Weight</i>	5,610	8,020	14,520	33,240	55,750	68,880	69,310	70,500	72,270
Materials	Percent of Generation of Each Material								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Paper and Paperboard	16.9%	15.3%	21.3%	27.8%	40.0%	42.8%	45.6%	45.5%	48.1%
Glass	1.5%	1.3%	5.0%	20.1%	24.5%	21.1%	19.1%	19.1%	18.8%
Metals									
Ferrous	0.5%	1.2%	2.9%	17.6%	35.5%	34.2%	33.8%	36.0%	36.4%
Aluminum	Neg.	1.3%	17.9%	35.9%	31.4%	27.4%	24.5%	23.8%	21.4%
Other Nonferrous	Neg.	47.8%	46.6%	66.4%	64.3%	67.9%	67.5%	67.5%	66.7%
<i>Total Metals</i>	0.5%	3.5%	7.9%	24.0%	37.0%	35.9%	35.1%	36.6%	36.3%
Plastics	Neg.	Neg.	0.3%	2.2%	5.2%	5.5%	5.5%	5.2%	5.2%
Rubber and Leather	17.9%	8.4%	3.1%	6.4%	9.0%	12.6%	18.0%	17.3%	16.1%
Textiles	2.8%	2.9%	6.3%	11.4%	12.2%	13.7%	14.7%	14.5%	14.4%
Wood	Neg.	Neg.	Neg.	1.1%	9.9%	9.6%	9.5%	9.4%	9.4%
Other **	Neg.	39.0%	19.8%	21.3%	20.5%	23.4%	22.9%	22.9%	22.7%
<i>Total Materials in Products</i>	10.3%	9.6%	13.3%	19.8%	29.0%	29.7%	30.5%	30.5%	31.4%
Other Wastes									
Food, Other [^]	Neg.	Neg.	Neg.	Neg.	2.6%	2.6%	2.7%	2.7%	2.7%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	30.4%	56.9%	56.5%	56.5%	56.3%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<i>Total Other Wastes</i>	Neg.	Neg.	Neg.	7.2%	17.6%	28.5%	28.3%	28.3%	28.2%
<i>Total MSW Recovered - %</i>	6.4%	6.6%	9.6%	16.2%	26.1%	29.4%	30.0%	29.9%	30.6%

* 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, Ltd.

Table 3
MATERIALS DISCARDED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2003
(In thousands of tons and percent of total discards)

Materials	Thousands of Tons								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Paper and Paperboard	24,910	37,540	43,420	52,500	48,970	50,180	44,980	45,870	43,140
Glass	6,620	12,580	14,380	10,470	9,690	9,960	10,180	10,380	10,120
Metals									
Ferrous	10,250	12,210	12,250	10,410	7,510	8,880	8,950	8,720	8,910
Aluminum	340	790	1,420	1,800	2,030	2,280	2,410	2,440	2,540
Other Nonferrous	180	350	620	370	450	500	510	510	530
Total Metals	10,770	13,350	14,290	12,580	9,990	11,660	11,870	11,670	11,980
Plastics	390	2,900	6,810	16,760	17,910	23,320	23,870	24,950	25,260
Rubber and Leather	1,510	2,720	4,070	5,420	5,490	5,710	5,470	5,510	5,720
Textiles	1,710	1,980	2,370	5,150	6,500	8,140	8,370	8,770	9,070
Wood	3,030	3,720	7,010	12,080	11,520	11,700	11,930	12,150	12,350
Other **	70	470	2,020	2,510	2,900	3,210	3,300	3,300	3,340
Total Materials in Products	49,010	75,260	94,370	117,470	112,970	123,880	119,970	122,600	120,980
Other Wastes									
Food Scraps	12,200	12,800	13,000	20,800	21,170	25,800	26,250	26,540	26,800
Yard Trimmings	20,000	23,200	27,500	30,800	20,660	11,960	12,160	12,300	12,500
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,150	3,500	3,540	3,580	3,620
Total Other Wastes	33,500	37,780	42,750	54,500	44,980	41,260	41,950	42,420	42,920
Total MSW Discarded - Weight	82,510	113,040	137,120	171,970	157,950	165,140	161,920	165,020	163,900
Materials	Percent of Total Discards								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Paper and Paperboard	30.2%	33.2%	31.7%	30.5%	31.0%	30.4%	27.8%	27.8%	26.3%
Glass	8.0%	11.1%	10.5%	6.1%	6.1%	6.0%	6.3%	6.3%	6.2%
Metals									
Ferrous	12.4%	10.8%	8.9%	6.1%	4.8%	5.4%	5.5%	5.3%	5.4%
Aluminum	0.4%	0.7%	1.0%	1.0%	1.3%	1.4%	1.5%	1.5%	1.5%
Other Nonferrous	0.2%	0.3%	0.5%	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%
Total Metals	13.1%	11.8%	10.4%	7.3%	6.3%	7.1%	7.3%	7.1%	7.3%
Plastics	0.5%	2.6%	5.0%	9.7%	11.3%	14.1%	14.7%	15.1%	15.4%
Rubber and Leather	1.8%	2.4%	3.0%	3.2%	3.5%	3.5%	3.4%	3.3%	3.5%
Textiles	2.1%	1.8%	1.7%	3.0%	4.1%	4.9%	5.2%	5.3%	5.5%
Wood	3.7%	3.3%	5.1%	7.0%	7.3%	7.1%	7.4%	7.4%	7.5%
Other **	0.1%	0.4%	1.5%	1.5%	1.8%	1.9%	2.0%	2.0%	2.0%
Total Materials in Products	59.4%	66.6%	68.8%	68.3%	71.5%	75.0%	74.1%	74.3%	73.8%
Other Wastes									
Food Scraps	14.8%	11.3%	9.5%	12.1%	13.4%	15.6%	16.2%	16.1%	16.4%
Yard Trimmings	24.2%	20.5%	20.1%	17.9%	13.1%	7.2%	7.5%	7.5%	7.6%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	2.0%	2.1%	2.2%	2.2%	2.2%
Total Other Wastes	40.6%	33.4%	31.2%	31.7%	28.5%	25.0%	25.9%	25.7%	26.2%
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. 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, Ltd.

Table 4
PAPER AND PAPERBOARD PRODUCTS IN MSW, 2003
(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	10,260	8,480	82.7%	1,780
Groundwood inserts	2,380	1,930	81.1%	450
Total Newspapers	12,640	10,410	82.4%	2,230
Books	1,030	190	18.4%	840
Magazines	2,270	750	33.0%	1,520
Office Papers	7,150	3,990	55.8%	3,160
Telephone Directories	640	100	15.6%	540
Standard (A) Mail*	5,400	1,750	32.4%	3,650
Other Commercial Printing	6,950	880	12.7%	6,070
Tissue Paper and Towels	3,250	Neg.	Neg.	3,250
Paper Plates and Cups	970	Neg.	Neg.	970
Other Nonpackaging Paper**	3,960	Neg.	Neg.	3,960
Total Paper and Paperboard Nondurable Goods	44,260	18,070	40.8%	26,190
Containers and Packaging				
Corrugated Boxes	29,710	21,180	71.3%	8,530
Milk Cartons	450	Neg.	Neg.	450
Folding Cartons	5,560	450	8.1%	5,110
Other Paperboard Packaging	180	Neg.	Neg.	180
Bags and Sacks	1,230	260	21.1%	970
Other Paper Packaging	1,700	Neg.	Neg.	1,700
Total Paper and Paperboard Containers and Packaging	38,830	21,890	56.4%	16,940
Total Paper and Paperboard	83,090	39,960	48.1%	43,130

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

** Includes tissue in disposable diapers, paper in games and novelties, cards, 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 5
GLASS PRODUCTS IN MSW, 2003
(In thousands of tons and percent of generation)

Product Category	Generation (Thousand tons)	Recovery		Discards (Thousand tons)
		(Thousand tons)	(Percent of generation)	
Durable Goods*	1,780	Neg.	Neg.	1,780
Containers and Packaging				
Beer and Soft Drink Bottles	6,440	1,250	19.4%	5,190
Wine and Liquor Bottles	1,520	350	23.0%	1,170
Food and Other Bottles and Jars	2,730	750	27.5%	1,980
<i>Total Glass Containers</i>	10,690	2,350	22.0%	8,340
<i>Total Glass</i>	12,470	2,350	18.8%	10,120

* 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, 2003
(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*	11,160	3,370	30.2%	7,790
Aluminum**	1,060	Neg.	Neg.	1,060
Lead†	1,140	1,060	93.0%	80
Other nonferrous metals‡	450	Neg.	Neg.	450
<i>Total Metals in Durable Goods</i>	<u>13,810</u>	<u>4,430</u>	<u>32.1%</u>	<u>9,380</u>
Nondurable Goods				
Aluminum	230	Neg.	Neg.	230
Containers and Packaging				
Steel				
Food and other cans	2,600	1,560	60.0%	1,040
Other steel packaging	240	160	66.7%	80
<i>Total Steel Packaging</i>	<u>2,840</u>	<u>1,720</u>	<u>60.6%</u>	<u>1,120</u>
Aluminum				
Beer and soft drink cans	1,480	650	43.9%	830
Food and other cans	50	Neg.	Neg.	50
Foil and closures	410	40	9.8%	370
<i>Total Aluminum Packaging</i>	<u>1,940</u>	<u>690</u>	<u>35.6%</u>	<u>1,250</u>
Total Metals in Containers and Packaging	<u>4,780</u>	<u>2,410</u>	<u>50.4%</u>	<u>2,370</u>
Total Metals	<u>18,820</u>	<u>6,840</u>	<u>36.3%</u>	<u>11,980</u>
Ferrous	14,000	5,090	36.4%	8,910
Aluminum	3,230	690	21.4%	2,540
Other nonferrous	1,590	1,060	66.7%	530

* 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, 2003
(In thousands of tons, and percent of generation by resin)

Product Category	Generation	Recovery		Discards
	(Thousand tons)	(Thousand tons)	(Percent of Gen.)	(Thousand tons)
Durable Goods				
PET	470			
HDPE	630			
PVC	490			
LDPE/LLDPE	740			
PP	1,320			
PS	710			
Other resins	4,030			
Total Plastics in Durable Goods	8,390	330	3.9%	8,060
Nondurable Goods				
Plastic Plates and Cups				
LDPE/LLDPE	20			20
PS	710			710
Subtotal Plastic Plates and Cups	730			730
Trash Bags				
HDPE	270			270
LDPE/LLDPE	750			750
Subtotal Trash Bags	1,020			1,020
All other nondurables*				
PET	220			220
HDPE	450			450
PVC	630			630
LDPE/LLDPE	1,670			1,670
PP	910			910
PS	620			620
Other resins	100			100
Subtotal All Other Nondurables	4,600			4,600
Total Plastics in Nondurable Goods, by resin				
PET	220			220
HDPE	720			720
PVC	630			630
LDPE/LLDPE	2,440			2,440
PP	910			910
PS	1,330			1,330
Other resins	100			100
Total Plastics in Nondurable Goods	6,350	0	0.0%	6,350
Plastic Containers & Packaging				
Soft drink bottles				
PET	1,070	270	25.2%	800
Milk and water bottles				
HDPE	720	230	31.9%	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, 2003
(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	940	100		840
HDPE	1,280	190		1,090
PVC	80			80
LDPE/LLDPE	40			40
PP	70			70
PS	0			0
Other resins	400			400
<i>Subtotal Other Containers</i>	<u>2,810</u>	<u>290</u>	10.3%	<u>2,520</u>
Bags, sacks, & wraps				
HDPE	780	30		750
PVC	70			70
LDPE/LLDPE	2,640	150		2,490
PP	690			690
PS	0			0
Other resins	200			200
<i>Subtotal Bags, Sacks, & Wraps</i>	<u>4,380</u>	<u>180</u>	4.1%	<u>4,200</u>
Other Plastics Packaging**				
PET	170	40		130
HDPE	1,010	20		990
PVC	200			200
LDPE/LLDPE	350			350
PP	620	10		610
PS	230			230
Other resins	350	20		330
<i>Subtotal Other Packaging</i>	<u>2,930</u>	<u>90</u>	3.1%	<u>2,840</u>
Total Plastics in Containers & Packaging, by resin				
PET	2,180	410		1,770
HDPE	3,790	470		3,320
PVC	350			350
LDPE/LLDPE	3,030	150		2,880
PP	1,380	10		1,370
PS	230			230
Other resins	950	20		930
<i>Total Plastics in Cont. & Packaging</i>	<u>11,910</u>	<u>1,060</u>	8.9%	<u>10,850</u>
Total Plastics in MSW, by resin				
PET	2,870	410		2,460
HDPE	5,140	470		4,670
PVC	1,470			1,470
LDPE/LLDPE	6,210	150		6,060
PP	3,610	10		3,600
PS	2,270			2,270
Other resins	5,080	350		4,730
<i>Total Plastics in MSW</i>	<u>26,650</u>	<u>1,390</u>	5.2%	<u>25,260</u>

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.

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, 2003
(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*	3,080	1,100	35.7%	1,980
Other Durables**	<u>2,830</u>	<u>Neg.</u>	Neg.	<u>2,830</u>
<i>Total Rubber & Leather Durable Goods</i>	5,910	1,100	18.6%	4,810
Nondurable Goods				
Clothing and Footwear	580	Neg.	Neg.	580
Other Nondurables	<u>300</u>	<u>Neg.</u>	Neg.	<u>300</u>
<i>Total Rubber & Leather Nondurable Goods</i>	880	Neg.	Neg.	880
Containers and Packaging	30	Neg.	Neg.	30
<i>Total Rubber & Leather</i>	<u>6,820</u>	<u>1,100</u>	16.1%	<u>5,720</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 2003
(In thousands of tons and percent of total generation)

Products	Thousands of Tons								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods <i>(Detail in Table 12)</i>	9,920	14,660	21,800	29,810	31,140	36,840	38,040	38,540	39,490
Nondurable Goods <i>(Detail in Table 15)</i>	17,330	25,060	34,420	52,170	57,250	64,120	61,180	62,240	62,120
Containers and Packaging <i>(Detail in Table 18)</i>	27,370	43,560	52,670	64,530	70,730	75,350	73,510	75,580	74,790
Total Product** Wastes	54,620	83,280	108,890	146,510	159,120	176,310	172,730	176,360	176,400
Other Wastes									
Food Scraps	12,200	12,800	13,000	20,800	21,740	26,480	26,980	27,280	27,550
Yard Trimmings	20,000	23,200	27,500	35,000	29,690	27,730	27,980	28,300	28,600
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,150	3,500	3,540	3,580	3,620
Total Other Wastes	33,500	37,780	42,750	58,700	54,580	57,710	58,500	59,160	59,770
Total MSW Generated - Weight	88,120	121,060	151,640	205,210	213,700	234,020	231,230	235,520	236,170
Products	Percent of Total Generation								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods <i>(Detail in Table 12)</i>	11.3%	12.1%	14.4%	14.5%	14.6%	15.7%	16.5%	16.4%	16.7%
Nondurable Goods <i>(Detail in Table 15)</i>	19.7%	20.7%	22.7%	25.4%	26.8%	27.4%	26.5%	26.4%	26.3%
Containers and Packaging <i>(Detail in Table 19)</i>	31.1%	36.0%	34.7%	31.4%	33.1%	32.2%	31.8%	32.1%	31.7%
Total Product** Wastes	62.0%	68.8%	71.8%	71.4%	74.5%	75.3%	74.7%	74.9%	74.7%
Other Wastes									
Food Scraps	13.8%	10.6%	8.6%	10.1%	10.2%	11.3%	11.7%	11.6%	11.7%
Yard Trimmings	22.7%	19.2%	18.1%	17.1%	13.9%	11.8%	12.1%	12.0%	12.1%
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%	25.5%	24.7%	25.3%	25.1%	25.3%
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.

** Other than food products.

Details may not add to totals due to rounding.

Source: Franklin Associates, Ltd.

Table 10

RECOVERY* OF MUNICIPAL SOLID WASTE, 1960 TO 2003
(In thousands of tons and percent of generation of each category)

	Thousands of Tons								
Products	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods <i>(Detail in Table 13)</i>	350	940	1,360	3,460	5,010	6,350	6,960	7,190	7,160
Nondurable Goods <i>(Detail in Table 16)</i>	2,390	3,730	4,670	8,800	13,610	17,560	18,100	18,030	19,270
Containers and Packaging <i>(Detail in Table 20)</i>	2,870	3,350	8,490	16,780	27,530	28,520	27,700	28,540	28,990
Total Product** Wastes	5,610	8,020	14,520	29,040	46,150	52,430	52,760	53,760	55,420
Other Wastes									
Food, Other^	Neg.	Neg.	Neg.	Neg.	570	680	730	740	750
Yard Trimmings	Neg.	Neg.	Neg.	4,200	9,030	15,770	15,820	16,000	16,100
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	4,200	9,600	16,450	16,550	16,740	16,850
Total MSW Recovered - Weight	5,610	8,020	14,520	33,240	55,750	68,880	69,310	70,500	72,270
	Percent of Generation of Each Category								
Products	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods <i>(Detail in Table 13)</i>	3.5%	6.4%	6.2%	11.6%	16.1%	17.2%	18.3%	18.7%	18.1%
Nondurable Goods <i>(Detail in Table 16)</i>	13.8%	14.9%	13.6%	16.9%	23.8%	27.4%	29.6%	29.0%	31.0%
Containers and Packaging <i>(Detail in Table 21)</i>	10.5%	7.7%	16.1%	26.0%	38.9%	37.9%	37.7%	37.8%	38.8%
Total Product** Wastes	10.3%	9.6%	13.3%	19.8%	29.0%	29.7%	30.5%	30.5%	31.4%
Other Wastes									
Food, Other^	Neg.	Neg.	Neg.	Neg.	2.6%	2.6%	2.7%	2.7%	2.7%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	30.4%	56.9%	56.5%	56.5%	56.3%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	7.2%	17.6%	28.5%	28.3%	28.3%	28.2%
Total MSW Recovered - %	6.4%	6.6%	9.6%	16.2%	26.1%	29.4%	30.0%	29.9%	30.6%

* 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.

Table 11

CATEGORIES OF PRODUCTS DISCARDED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2003
(In thousands of tons and percent of total discards)

Products	Thousands of Tons								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods <i>(Detail in Table 14)</i>	9,570	13,720	20,440	26,350	26,130	30,490	31,080	31,350	32,330
Nondurable Goods <i>(Detail in Table 17)</i>	14,940	21,330	29,750	43,370	43,640	46,560	43,080	44,210	42,850
Containers and Packaging <i>(Detail in Table 22)</i>	24,500	40,210	44,180	47,750	43,200	46,830	45,810	47,040	45,800
Total Product** Wastes	49,010	75,260	94,370	117,470	112,970	123,880	119,970	122,600	120,980
Other Wastes									
Food Wastes	12,200	12,800	13,000	20,800	21,170	25,800	26,250	26,540	26,800
Yard Trimmings	20,000	23,200	27,500	30,800	20,660	11,960	12,160	12,300	12,500
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,150	3,500	3,540	3,580	3,620
Total Other Wastes	33,500	37,780	42,750	54,500	44,980	41,260	41,950	42,420	42,920
Total MSW Discarded - Weight	82,510	113,040	137,120	171,970	157,950	165,140	161,920	165,020	163,900
Products	Percent of Total Discards								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods <i>(Detail in Table 14)</i>	11.6%	12.1%	14.9%	15.3%	16.5%	18.5%	19.2%	19.0%	19.7%
Nondurable Goods <i>(Detail in Table 17)</i>	18.1%	18.9%	21.7%	25.2%	27.6%	28.2%	26.6%	26.8%	26.1%
Containers and Packaging <i>(Detail in Table 23)</i>	29.7%	35.6%	32.2%	27.8%	27.4%	28.4%	28.3%	28.5%	27.9%
Total Product** Wastes	59.4%	66.6%	68.8%	68.3%	71.5%	75.0%	74.1%	74.3%	73.8%
Other Wastes									
Food Scraps	14.8%	11.3%	9.5%	12.1%	13.4%	15.6%	16.2%	16.1%	16.4%
Yard Trimmings	24.2%	20.5%	20.1%	17.9%	13.1%	7.2%	7.5%	7.5%	7.6%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	2.0%	2.1%	2.2%	2.2%	2.2%
Total Other Wastes	40.6%	33.4%	31.2%	31.7%	28.5%	25.0%	25.9%	25.7%	26.2%
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. 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, Ltd.

Table 13

RECOVERY* OF PRODUCTS IN MUNICIPAL SOLID WASTE, 1960 TO 2003
(WITH DETAIL ON DURABLE GOODS)
(In thousands of tons and percent of generation of each product)

Products	Thousands of Tons								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods									
Major Appliances	10	50	130	1,070	2,070	2,000	1,990	2,290	2,320
Small Appliances**				10	10	20	20	20	20
Furniture and Furnishings	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Carpets and Rugs**				Neg.	20	30	30	40	40
Rubber Tires	330	250	150	440	670	1,290	1,870	1,790	1,700
Batteries, lead acid	Neg.	620	1,040	1,470	1,620	2,130	2,130	2,130	2,130
Miscellaneous Durables									
Selected Consumer Electronics***						190	210	250	290
Other Miscellaneous Durables						690	710	670	660
<i>Total Miscellaneous Durables</i>	10	20	40	470	620	880	920	920	950
Total Durable Goods	350	940	1,360	3,460	5,010	6,350	6,960	7,190	7,160
Nondurable Goods <i>(Detail in Table 16)</i>	2,390	3,730	4,670	8,800	13,610	17,560	18,100	18,030	19,270
Containers and Packaging <i>(Detail in Table 20)</i>	2,870	3,350	8,490	16,780	27,530	28,520	27,700	28,540	28,990
Total Product Wastes†	5,610	8,020	14,520	29,040	46,150	52,430	52,760	53,760	55,420
Other Wastes									
Food Scraps	Neg.	Neg.	Neg.	Neg.	570	680	730	740	750
Yard Trimmings	Neg.	Neg.	Neg.	4,200	9,030	15,770	15,820	16,000	16,100
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	4,200	9,600	16,450	16,550	16,740	16,850
Total MSW Recovered - Weight	5,610	8,020	14,520	33,240	55,750	68,880	69,310	70,500	72,270
	Percent of Generation of Each Product								
Products	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods									
Major Appliances	0.6%	2.3%	4.4%	32.3%	60.5%	54.9%	55.1%	64.7%	66.7%
Small Appliances**				2.2%	1.4%	2.2%	2.2%	2.2%	2.2%
Furniture and Furnishings	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Carpets and Rugs**				Neg.	0.9%	1.2%	1.1%	1.4%	1.4%
Rubber Tires	29.5%	13.2%	5.5%	12.2%	17.8%	26.2%	38.5%	38.1%	35.6%
Batteries, Lead-Acid	Neg.	75.6%	69.8%	97.4%	89.5%	93.4%	93.0%	93.4%	93.0%
Miscellaneous Durables									
Selected Consumer Electronics***						9.0%	9.3%	9.9%	10.4%
Other Miscellaneous Durables						5.5%	5.3%	5.0%	4.8%
<i>Total Miscellaneous Durables</i>	0.2%	0.3%	0.4%	3.8%	5.2%	6.0%	5.9%	5.8%	5.7%
Total Durable Goods	3.5%	6.4%	6.2%	11.6%	16.1%	17.2%	18.3%	18.7%	18.1%
Nondurable Goods <i>(Detail in Table 16)</i>	13.8%	14.9%	13.6%	16.9%	23.8%	27.4%	29.6%	29.0%	31.0%
Containers and Packaging <i>(Detail in Table 21)</i>	10.5%	7.7%	16.1%	26.0%	38.9%	37.9%	37.7%	37.8%	38.8%
Total Product Wastes†	10.3%	9.6%	13.3%	19.8%	29.0%	29.7%	30.5%	30.5%	31.4%
Other Wastes									
Food Scraps	Neg.	Neg.	Neg.	Neg.	2.6%	2.6%	2.7%	2.7%	2.7%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	30.4%	56.9%	56.5%	56.5%	56.3%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	7.2%	17.6%	28.5%	28.3%	28.3%	28.2%
Total MSW Recovered - %	6.4%	6.6%	9.6%	16.2%	26.1%	29.4%	30.0%	29.9%	30.6%

* 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.

Source: Franklin Associates, Ltd.

Table 14

PRODUCTS DISCARDED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2003
(WITH DETAIL ON DURABLE GOODS)
(In thousands of tons and percent of total discards)

Products	Thousands of Tons								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods									
Major Appliances	1,620	2,120	2,820	2,240	1,350	1,640	1,620	1,250	1,160
Small Appliances**				450	700	880	890	880	900
Furniture and Furnishings	2,150	2,830	4,760	6,790	7,170	7,850	8,100	8,350	8,550
Carpets and Rugs**				1,660	2,210	2,540	2,650	2,770	2,820
Rubber Tires	790	1,640	2,570	3,170	3,100	3,640	2,990	2,910	3,070
Batteries, lead acid	Neg.	200	450	40	190	150	160	150	160
Miscellaneous Durables									
Selected Consumer Electronics***						1,930	2,050	2,280	2,500
Other Miscellaneous Durables						11,860	12,620	12,760	13,170
Total Miscellaneous Durables	5,010	6,930	9,840	12,000	11,410	13,790	14,670	15,040	15,670
Total Durable Goods	9,570	13,720	20,440	26,350	26,130	30,490	31,080	31,350	32,330
Nondurable Goods <i>(Detail in Table 17)</i>	14,940	21,330	29,750	43,370	43,640	46,560	43,080	44,210	42,850
Containers and Packaging <i>(Detail in Table 22)</i>	24,500	40,210	44,180	47,750	43,200	46,830	45,810	47,040	45,800
Total Product Wastes†	49,010	75,260	94,370	117,470	112,970	123,880	119,970	122,600	120,980
Other Wastes									
Food Scraps	12,200	12,800	13,000	20,800	21,170	25,800	26,250	26,540	26,800
Yard Trimmings	20,000	23,200	27,500	30,800	20,660	11,960	12,160	12,300	12,500
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,150	3,500	3,540	3,580	3,620
Total Other Wastes	33,500	37,780	42,750	54,500	44,980	41,260	41,950	42,420	42,920
Total MSW Discarded - Weight	82,510	113,040	137,120	171,970	157,950	165,140	161,920	165,020	163,900
Percent of Total Discards									
Products	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods									
Major Appliances	2.0%	1.9%	2.1%	1.3%	0.9%	1.0%	1.0%	0.8%	0.7%
Small Appliances**				0.3%	0.4%	0.5%	0.5%	0.5%	0.5%
Furniture and Furnishings	2.6%	2.5%	3.5%	3.9%	4.5%	4.8%	5.0%	5.1%	5.2%
Carpets and Rugs**				1.0%	1.4%	1.5%	1.6%	1.7%	1.7%
Rubber Tires	1.0%	1.5%	1.9%	1.8%	2.0%	2.2%	1.8%	1.8%	1.9%
Batteries, Lead-Acid	Neg.	0.2%	0.3%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
Miscellaneous Durables									
Selected Consumer Electronics***						1.2%	1.3%	1.4%	1.5%
Other Miscellaneous Durables						7.1%	7.7%	7.6%	7.9%
Total Miscellaneous Durables	6.1%	6.1%	7.2%	7.0%	7.2%	8.4%	9.1%	9.1%	9.6%
Total Durable Goods	11.6%	12.1%	14.9%	15.3%	16.5%	18.5%	19.2%	19.0%	19.7%
Nondurable Goods <i>(Detail in Table 17)</i>	18.1%	18.9%	21.7%	25.2%	27.6%	28.2%	26.6%	26.8%	26.1%
Containers and Packaging <i>(Detail in Table 23)</i>	29.7%	35.6%	32.2%	27.8%	27.4%	28.4%	28.3%	28.5%	27.9%
Total Product Wastes†	59.4%	66.6%	68.8%	68.3%	71.5%	75.0%	74.1%	74.3%	73.8%
Other Wastes									
Food Scraps	14.8%	11.3%	9.5%	12.1%	13.4%	15.6%	16.2%	16.1%	16.4%
Yard Trimmings	24.2%	20.5%	20.1%	17.9%	13.1%	7.2%	7.5%	7.5%	7.6%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	2.0%	2.1%	2.2%	2.2%	2.2%
Total Other Wastes	40.6%	33.4%	31.2%	31.7%	28.5%	25.0%	25.9%	25.7%	26.2%
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. 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.

† Other than food products.

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

Source: Franklin Associates, Ltd.

Table 17

PRODUCTS DISCARDED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2003
(WITH DETAIL ON NONDURABLE GOODS)
(In thousands of tons and percent of total discards)

Products	Thousands of Tons								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods (Detail in Table 14)	9,570	13,720	20,440	26,350	26,130	30,490	31,080	31,350	32,330
Nondurable Goods									
Newspapers	5,290	7,260	8,030	8,320	6,130	6,070	3,420	3,120	2,230
Books and Magazines	1,820	2,210	3,110						
Books**				870	930	1,000	790	740	840
Magazines**				2,530	1,880	1,520	1,340	1,380	1,520
Office Papers	1,270	1,940	3,130	4,710	3,600	3,330	3,130	3,230	3,160
Directories**				570	430	560	560	560	540
Standard (A) Mail***				3,620	3,910	3,740	3,660	3,500	3,650
Other Commercial Printing	1,130	1,790	2,770	3,760	5,650	6,570	6,000	6,910	6,070
Tissue Paper and Towels	1,090	2,080	2,300	2,960	2,970	3,220	3,270	3,310	3,250
Paper Plates and Cups	270	420	630	650	970	960	990	950	970
Plastic Plates and Cups†			190	640	770	870	800	770	730
Trash Bags**				780	780	850	830	1,000	1,020
Disposable Diapers	Neg.	350	1,930	2,700	3,010	3,340	3,430	3,430	3,470
Other Nonpackaging Paper	2,660	3,520	4,230	3,840	4,270	4,250	4,010	4,030	3,910
Clothing and Footwear	1,310	1,560	2,020	3,490	4,410	5,570	5,810	6,150	6,330
Towels, Sheets and Pillowcases**				590	610	680	720	740	780
Other Miscellaneous Nondurables	100	200	1,410	3,340	3,320	4,030	4,320	4,390	4,380
Total Nondurable Goods	14,940	21,330	29,750	43,370	43,640	46,560	43,080	44,210	42,850
Containers and Packaging (Detail in Table 22)	24,500	40,210	44,180	47,750	43,200	46,830	45,810	47,040	45,800
Total Product Wastes‡	49,010	75,260	94,370	117,470	112,970	123,880	119,970	122,600	120,980
Other Wastes	33,500	37,780	42,750	54,500	44,980	41,260	41,950	42,420	42,920
Total MSW Discarded - Weight	82,510	113,040	137,120	171,970	157,950	165,140	161,920	165,020	163,900
Products	Percent of Total Discards								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods (Detail in Table 14)	11.6%	12.1%	14.9%	15.3%	16.5%	18.5%	19.2%	19.0%	19.7%
Nondurable Goods									
Newspapers	6.4%	6.4%	5.9%	4.8%	3.9%	3.7%	2.1%	1.9%	1.4%
Books and Magazines	2.2%	2.0%	2.3%						
Books**				0.5%	0.6%	0.6%	0.5%	0.4%	0.5%
Magazines**				1.5%	1.2%	0.9%	0.8%	0.8%	0.9%
Office Papers	1.5%	1.7%	2.3%	2.7%	2.3%	2.0%	1.9%	2.0%	1.9%
Directories**				0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Standard (A) Mail***				2.1%	2.5%	2.3%	2.3%	2.1%	2.2%
Other Commercial Printing	1.4%	1.6%	2.0%	2.2%	3.6%	4.0%	3.7%	4.2%	3.7%
Tissue Paper and Towels	1.3%	1.8%	1.7%	1.7%	1.9%	1.9%	2.0%	2.0%	2.0%
Paper Plates and Cups	0.3%	0.4%	0.5%	0.4%	0.6%	0.6%	0.6%	0.6%	0.6%
Plastic Plates and Cups†			0.1%	0.4%	0.5%	0.5%	0.5%	0.5%	0.4%
Trash Bags**				0.5%	0.5%	0.5%	0.5%	0.6%	0.6%
Disposable Diapers	Neg.	0.3%	1.4%	1.6%	1.9%	2.0%	2.1%	2.1%	2.1%
Other Nonpackaging Paper	3.2%	3.1%	3.1%	2.2%	2.7%	2.6%	2.5%	2.4%	2.4%
Clothing and Footwear	1.6%	1.4%	1.5%	2.0%	2.8%	3.4%	3.6%	3.7%	3.9%
Towels, Sheets and Pillowcases**				0.3%	0.4%	0.4%	0.4%	0.4%	0.5%
Other Miscellaneous Nondurables	0.1%	0.2%	1.7%	1.9%	2.1%	2.4%	2.7%	2.7%	2.7%
Total Nondurables	18.1%	18.9%	21.7%	25.2%	27.6%	28.2%	26.6%	26.8%	26.1%
Containers and Packaging (Detail in Table 23)	29.7%	35.6%	32.2%	27.8%	27.4%	28.4%	28.3%	28.5%	27.9%
Total Product Wastes‡	59.4%	66.6%	68.8%	68.3%	71.5%	75.0%	74.1%	74.3%	73.8%
Other Wastes	40.6%	33.4%	31.2%	31.7%	28.5%	25.0%	25.9%	25.7%	26.2%
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. 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 1990. Formerly called Third Class 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, Ltd.

Table 18
PRODUCTS GENERATED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2003
(WITH DETAIL ON CONTAINERS AND PACKAGING)
(In thousands of tons)

Products	Thousands of Tons								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods <i>(Detail in Table 12)</i>	9,920	14,660	21,800	29,810	31,140	36,840	38,040	38,540	39,490
Nondurable Goods <i>(Detail in Table 15)</i>	17,330	25,060	34,420	52,170	57,250	64,120	61,180	62,240	62,120
Containers and Packaging									
Glass Packaging									
Beer and Soft Drink Bottles	1,400	5,580	6,740	5,640	5,120	5,710	5,990	6,070	6,440
Wine and Liquor Bottles	1,080	1,900	2,450	2,030	1,790	1,910	1,760	1,810	1,520
Food and Other Bottles & Jars	3,710	4,440	4,780	4,160	4,620	3,420	3,160	3,240	2,730
Total Glass Packaging	6,190	11,920	13,970	11,830	11,530	11,040	10,910	11,120	10,690
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	2,690	2,630	2,360	2,420	2,600
Other Steel Packaging	260	270	240	200	210	240	240	240	240
Total Steel Packaging	4,660	5,380	3,610	2,890	2,900	2,870	2,600	2,660	2,840
Aluminum Packaging									
Beer and Soft Drink Cans	Neg.	100	850	1,550	1,590	1,520	1,510	1,490	1,480
Other Cans	Neg.	60	40	20	40	50	50	50	50
Foil and Closures	170	410	380	330	350	380	390	400	410
Total Aluminum Packaging	170	570	1,270	1,900	1,980	1,950	1,950	1,940	1,940
Paper & Paperboard Pkg									
Corrugated Boxes	7,330	12,760	17,080	24,010	28,800	30,210	28,950	30,110	29,710
Milk Cartons**			790	510	510	550	510	530	450
Folding Cartons**			3,820	4,300	5,310	5,820	5,590	5,550	5,560
Other Paperboard Packaging	3,840	4,830	230	290	260	200	190	180	180
Bags and Sacks**			3,380	2,440	1,980	1,490	1,440	1,440	1,230
Wrapping Papers**			200	110	70	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	2,940	3,810	850	1,020	1,150	1,670	1,730	1,720	1,700
Total Paper & Board Pkg	14,110	21,400	26,350	32,680	38,080	39,940	38,410	39,530	38,830
Plastics Packaging									
Soft Drink Bottles**			260	430	650	830	870	1,020	1,070
Milk Bottles**			230	530	620	690	740	710	720
Other Containers	60	910	890	1,430	1,180	2,630	2,730	2,790	2,810
Bags and Sacks**			390	940	1,200	1,650	1,640	1,740	1,630
Wraps**			840	1,530	1,710	2,550	2,580	2,740	2,750
Other Plastics Packaging	60	1,180	790	2,040	2,220	2,840	2,680	2,840	2,930
Total Plastics Packaging	120	2,090	3,400	6,900	7,580	11,190	11,240	11,840	11,910
Wood Packaging	2,000	2,070	3,940	8,180	8,510	8,120	8,170	8,250	8,330
Other Misc. Packaging	120	130	130	150	150	240	230	240	250
Total Containers & Pkg	27,370	43,560	52,670	64,530	70,730	75,350	73,510	75,580	74,790
Total Product Wastes†	54,620	83,280	108,890	146,510	159,120	176,310	172,730	176,360	176,400
Other Wastes									
Food Scraps	12,200	12,800	13,000	20,800	21,740	26,480	26,980	27,280	27,550
Yard Trimmings	20,000	23,200	27,500	35,000	29,690	27,730	27,980	28,300	28,600
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,150	3,500	3,540	3,580	3,620
Total Other Wastes	33,500	37,780	42,750	58,700	54,580	57,710	58,500	59,160	59,770
Total MSW Generated - Weight	88,120	121,060	151,640	205,210	213,700	234,020	231,230	235,520	236,170

* Generation before materials recovery or combustion.

Details may not add to totals due to rounding.

** Not estimated separately prior to 1980. Paper wraps not reported separately after 1996.

† Other than food products.

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

Source: Franklin Associates, Ltd.

Table 19
PRODUCTS GENERATED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2003
(WITH DETAIL ON CONTAINERS AND PACKAGING)
(In percent of total generation)

Products	Percent of Total Generation								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods <i>(Detail in Table 12)</i>	11.3%	12.1%	14.4%	14.5%	14.6%	15.7%	16.5%	16.4%	16.7%
Nondurable Goods <i>(Detail in Table 15)</i>	19.7%	20.7%	22.7%	25.4%	26.8%	27.4%	26.5%	26.4%	26.3%
Containers and Packaging									
Glass Packaging									
Beer and Soft Drink Bottles	1.6%	4.6%	4.4%	2.7%	2.4%	2.4%	2.6%	2.6%	2.7%
Wine and Liquor Bottles	1.2%	1.6%	1.6%	1.0%	0.8%	0.8%	0.8%	0.8%	0.6%
Food and Other Bottles & Jars	4.2%	3.7%	3.2%	2.0%	2.2%	1.5%	1.4%	1.4%	1.2%
Total Glass Packaging	7.0%	9.8%	9.2%	5.8%	5.4%	4.7%	4.7%	4.7%	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%	1.3%	1.1%	1.0%	1.0%	1.1%
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%	1.4%	1.2%	1.1%	1.1%	1.2%
Aluminum Packaging									
Beer and Soft Drink Cans	Neg.	0.1%	0.6%	0.8%	0.7%	0.6%	0.7%	0.6%	0.6%
Other Cans	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
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%	0.9%	0.8%	0.8%	0.8%	0.8%
Paper & Paperboard Pkg									
Corrugated Boxes	8.3%	10.5%	11.3%	11.7%	13.5%	12.9%	12.5%	12.8%	12.6%
Milk Cartons**			0.5%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Folding Cartons**			2.5%	2.1%	2.5%	2.5%	2.4%	2.4%	2.4%
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%	0.9%	0.6%	0.6%	0.6%	0.5%
Wrapping Papers**			0.1%	0.1%	0.0%	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	3.3%	3.1%	0.6%	0.5%	0.5%	0.7%	0.7%	0.7%	0.7%
Total Paper & Board Pkg	16.0%	17.7%	17.4%	15.9%	17.8%	17.1%	16.6%	16.8%	16.4%
Plastics Packaging									
Soft Drink Bottles**			0.2%	0.2%	0.3%	0.4%	0.4%	0.4%	0.5%
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%	0.6%	1.1%	1.2%	1.2%	1.2%
Bags and Sacks**			0.3%	0.5%	0.6%	0.7%	0.7%	0.7%	0.7%
Wraps**			0.6%	0.7%	0.8%	1.1%	1.1%	1.2%	1.2%
Other Plastics Packaging	0.1%	1.0%	0.5%	1.0%	1.0%	1.2%	1.2%	1.2%	1.2%
Total Plastics Packaging	0.1%	1.7%	2.2%	3.4%	3.5%	4.8%	4.9%	5.0%	5.0%
Wood Packaging	2.3%	1.7%	2.6%	4.0%	4.0%	3.5%	3.5%	3.5%	3.5%
Other Misc. Packaging	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Total Containers & Pkg	31.1%	36.0%	34.7%	31.4%	33.1%	32.2%	31.8%	32.1%	31.7%
Total Product Wastes†	62.0%	68.8%	71.8%	71.4%	74.5%	75.3%	74.7%	74.9%	74.7%
Other Wastes									
Food Scraps	13.8%	10.6%	8.6%	10.1%	10.2%	11.3%	11.7%	11.6%	11.7%
Yard Trimmings	22.7%	19.2%	18.1%	17.1%	13.9%	11.8%	12.1%	12.0%	12.1%
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%	25.5%	24.7%	25.3%	25.1%	25.3%
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.

** Not estimated separately prior to 1980. Paper wraps not reported separately after 1996.

† Other than food products.

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

Source: Franklin Associates, Ltd.

Table 20
RECOVERY* OF PRODUCTS IN MUNICIPAL SOLID WASTE, 1960 TO 2003
(WITH DETAIL ON CONTAINERS AND PACKAGING)
(In thousands of tons)

Products	Thousands of Tons								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods <i>(Detail in Table 13)</i>	350	940	1,360	3,460	5,010	6,350	6,960	7,190	7,160
Nondurable Goods <i>(Detail in Table 16)</i>	2,390	3,730	4,670	8,800	13,610	17,560	18,100	18,030	19,270
Containers and Packaging									
Glass Packaging									
Beer and Soft Drink Bottles	90	140	730	1,890	1,670	1,410	1,270	1,300	1,250
Wine and Liquor Bottles	10	10	20	210	470	400	360	370	350
Food and Other Bottles & Jars	Neg.	Neg.	Neg.	520	1,000	850	770	780	750
Total Glass Packaging	100	150	750	2,620	3,140	2,660	2,400	2,450	2,350
Steel Packaging									
Beer and Soft Drink Cans	10	20	50	40	Neg.	Neg.	Neg.	Neg.	Neg.
Food and Other Cans	20	60	150	590	1,510	1,530	1,370	1,420	1,560
Other Steel Packaging	Neg.	Neg.	Neg.	60	50	160	160	160	160
Total Steel Packaging	30	80	200	690	1,560	1,690	1,530	1,580	1,720
Aluminum Packaging									
Beer and Soft Drink Cans	Neg.	10	310	990	900	830	740	720	650
Other Cans	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Foil and Closures	Neg.	Neg.	Neg.	20	30	30	40	40	40
Total Aluminum Pkg	Neg.	10	320	1,010	930	860	780	760	690
Paper & Paperboard Pkg									
Corrugated Boxes	2,520	2,760	6,390	11,530	18,480	20,330	19,890	20,690	21,180
Milk Cartons**			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Folding Cartons**			520	340	1,080	410	460	450	450
Other Paperboard Packaging			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Bags and Sacks**			Neg.	200	340	300	310	310	260
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	19,900	21,040	20,660	21,450	21,890
Plastics Packaging									
Soft Drink Bottles**			10	140	300	290	310	270	270
Milk Bottles**			Neg.	20	190	210	210	220	230
Other Containers	Neg.	Neg.	Neg.	20	150	260	280	280	290
Bags and Sacks**			Neg.	30	40	10	10	10	10
Wraps**			Neg.	30	40	170	170	170	170
Other Plastics Packaging	Neg.	Neg.	Neg.	20	20	90	100	90	90
Total Plastics Packaging	Neg.	Neg.	10	260	740	1,030	1,080	1,040	1,060
Wood Packaging	Neg.	Neg.	Neg.	130	1,260	1,240	1,250	1,260	1,280
Other Misc. Packaging	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Containers & Pkg	2,870	3,350	8,490	16,780	27,530	28,520	27,700	28,540	28,990
Total Product Wastes†	5,610	8,020	14,520	29,040	46,150	52,430	52,760	53,760	55,420
Other Wastes									
Food Scraps	Neg.	Neg.	Neg.	Neg.	570	680	730	740	750
Yard Trimmings	Neg.	Neg.	Neg.	4,200	9,030	15,770	15,820	16,000	16,100
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	4,200	9,600	16,450	16,550	16,740	16,850
Total MSW Recovered - Weight	5,610	8,020	14,520	33,240	55,750	68,880	69,310	70,500	72,270

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

** Not estimated separately prior to 1980. Paper wraps not reported separately after 1996.

† 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, Ltd.

Table 21
RECOVERY* OF PRODUCTS IN MUNICIPAL SOLID WASTE, 1960 TO 2003
(WITH DETAIL ON CONTAINERS AND PACKAGING)
(In percent of generation of each product)

Percent of Generation of Each Product									
Products	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods <i>(Detail in Table 13)</i>	3.5%	6.4%	6.2%	11.6%	16.1%	17.2%	18.3%	18.7%	18.1%
Nondurable Goods <i>(Detail in Table 16)</i>	13.8%	14.9%	13.6%	16.9%	23.8%	27.4%	29.6%	29.0%	31.0%
Containers and Packaging									
Glass Packaging									
Beer and Soft Drink Bottles	6.4%	2.5%	10.8%	33.5%	32.6%	24.7%	21.2%	21.4%	19.4%
Wine and Liquor Bottles	Neg.	Neg.	Neg.	10.3%	26.3%	20.9%	20.5%	20.4%	23.0%
Food and Other Bottles & Jars	Neg.	Neg.	Neg.	12.5%	21.6%	24.9%	24.4%	24.1%	27.5%
Total Glass Packaging	1.6%	1.3%	5.4%	22.1%	27.2%	24.1%	22.0%	22.0%	22.0%
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%	56.1%	58.2%	58.1%	58.7%	60.0%
Other Steel Packaging	Neg.	Neg.	Neg.	30.0%	23.8%	66.7%	66.7%	66.7%	66.7%
Total Steel Packaging	Neg.	1.5%	5.5%	23.9%	53.8%	58.9%	58.8%	59.4%	60.6%
Aluminum Packaging									
Beer and Soft Drink Cans	Neg.	10.0%	36.5%	63.9%	56.6%	54.6%	49.0%	48.3%	43.9%
Other Cans	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Foil and Closures	Neg.	Neg.	Neg.	6.1%	8.6%	7.9%	10.3%	10.0%	9.8%
Total Aluminum Pkg	Neg.	1.8%	25.2%	53.2%	47.0%	44.1%	40.0%	39.2%	35.6%
Paper & Paperboard Pkg									
Corrugated Boxes	34.4%	21.6%	37.4%	48.0%	64.2%	67.3%	68.7%	68.7%	71.3%
Milk Cartons**			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Folding Cartons**			Neg.	Neg.	20.3%	7.0%	8.2%	8.1%	8.1%
Other Paperboard Packaging			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Bags and Sacks**			Neg.	Neg.	17.2%	20.1%	21.5%	21.5%	21.1%
Wrapping Papers**			Neg.	Neg.	Neg.	Neg.	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%	52.3%	52.7%	53.8%	54.3%	56.4%
Plastics Packaging									
Soft Drink Bottles**			3.8%	32.6%	46.2%	34.9%	35.6%	26.5%	25.2%
Milk Bottles**			Neg.	3.8%	30.6%	30.4%	28.4%	31.0%	31.9%
Other Containers	Neg.	Neg.	Neg.	1.4%	12.7%	9.9%	10.3%	10.0%	10.3%
Bags and Sacks**			Neg.	3.2%	3.3%	0.6%	0.6%	0.6%	0.6%
Wraps**			Neg.	2.0%	2.3%	6.7%	6.6%	6.2%	6.2%
Other Plastics Packaging	Neg.	Neg.	Neg.	1.0%	0.9%	3.2%	3.7%	3.2%	3.1%
Total Plastics Packaging	Neg.	Neg.	Neg.	3.8%	9.8%	9.2%	9.6%	8.8%	8.9%
Wood Packaging	Neg.	Neg.	Neg.	1.6%	14.8%	15.3%	15.3%	15.3%	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%	38.9%	37.9%	37.7%	37.8%	38.8%
Total Product Wastes†	10.3%	9.6%	13.3%	19.8%	29.0%	29.7%	30.5%	30.5%	31.4%
Other Wastes									
Food Scraps	Neg.	Neg.	Neg.	Neg.	2.6%	2.6%	2.7%	2.7%	2.7%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	30.4%	56.9%	56.5%	56.5%	56.3%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	7.2%	17.6%	28.5%	28.3%	28.3%	28.2%
Total MSW Recovered - %	6.4%	6.6%	9.6%	16.2%	26.1%	29.4%	30.0%	29.9%	30.6%

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

** Not estimated separately prior to 1980. Paper wraps not reported separately after 1996.

† 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, Ltd.

Table 22
PRODUCTS DISCARDED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2003
(WITH DETAIL ON CONTAINERS AND PACKAGING)
(In thousands of tons)

Products	Thousands of Tons								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods <i>(Detail in Table 14)</i>	9,570	13,720	20,440	26,350	26,130	30,490	31,080	31,350	32,330
Nondurable Goods <i>(Detail in Table 17)</i>	14,940	21,330	29,750	43,370	43,640	46,560	43,080	44,210	42,850
Containers and Packaging									
Glass Packaging									
Beer and Soft Drink Bottles	1,310	5,440	6,010	3,750	3,450	4,300	4,720	4,770	5,190
Wine and Liquor Bottles	1,070	1,890	2,430	1,820	1,320	1,510	1,400	1,440	1,170
Food and Other Bottles & Jars	3,710	4,440	4,780	3,640	3,620	2,570	2,390	2,460	1,980
Total Glass Packaging	6,090	11,770	13,220	9,210	8,390	8,380	8,510	8,670	8,340
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	1,180	1,100	990	1,000	1,040
Other Steel Packaging	260	270	240	140	160	80	80	80	80
Total Steel Packaging	4,630	5,300	3,410	2,200	1,340	1,180	1,070	1,080	1,120
Aluminum Packaging									
Beer and Soft Drink Cans	Neg.	90	540	560	690	690	770	770	830
Other Cans	Neg.	60	40	20	40	50	50	50	50
Foil and Closures	170	410	380	310	320	350	350	360	370
Total Aluminum Pkg	170	560	950	890	1,050	1,090	1,170	1,180	1,250
Paper & Paperboard Pkg									
Corrugated Boxes	4,810	10,000	10,690	12,480	10,320	9,880	9,060	9,420	8,530
Milk Cartons**			790	510	510	550	510	530	450
Folding Cartons**			3,300	3,960	4,230	5,410	5,130	5,100	5,110
Other Paperboard Packaging	3,840	4,830	230	290	260	200	190	180	180
Bags and Sacks**			3,380	2,240	1,640	1,190	1,130	1,130	970
Wrapping Papers**			200	110	70	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	2,720	3,460	550	1,020	1,150	1,670	1,730	1,720	1,700
Total Paper & Board Pkg	11,370	18,290	19,140	20,610	18,180	18,900	17,750	18,080	16,940
Plastics Packaging									
Soft Drink Bottles**			250	290	350	540	560	750	800
Milk Bottles**			230	510	430	480	530	490	490
Other Containers	60	910	890	1,410	1,030	2,370	2,450	2,510	2,520
Bags and Sacks**			390	910	1,160	1,640	1,630	1,730	1,620
Wraps**			840	1,500	1,670	2,380	2,410	2,570	2,580
Other Plastics Packaging	60	1,180	790	2,020	2,200	2,750	2,580	2,750	2,840
Total Plastics Packaging	120	2,090	3,390	6,640	6,840	10,160	10,160	10,800	10,850
Wood Packaging	2,000	2,070	3,940	8,050	7,250	6,880	6,920	6,990	7,050
Other Misc. Packaging	120	130	130	150	150	240	230	240	250
Total Containers & Pkg	24,500	40,210	44,180	47,750	43,200	46,830	45,810	47,040	45,800
Total Product Wastes†	49,010	75,260	94,370	117,470	112,970	123,880	119,970	122,600	120,980
Other Wastes									
Food Scraps	12,200	12,800	13,000	20,800	21,170	25,800	26,250	26,540	26,800
Yard Trimmings	20,000	23,200	27,500	30,800	20,660	11,960	12,160	12,300	12,500
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,150	3,500	3,540	3,580	3,620
Total Other Wastes	33,500	37,780	42,750	54,500	44,980	41,260	41,950	42,420	42,920
Total MSW Discarded - Weight	82,510	113,040	137,120	171,970	157,950	165,140	161,920	165,020	163,900

* Discards after materials and compost recovery. 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 1980. Paper wraps not reported separately after 1996.

† Other than food products.

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

Source: Franklin Associates, Ltd.

Table 23
PRODUCTS DISCARDED* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2003
(WITH DETAIL ON CONTAINERS AND PACKAGING)
(In percent of total discards)

Products	Percent of Total Discards								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Durable Goods <i>(Detail in Table 14)</i>	11.6%	12.1%	14.9%	15.3%	16.5%	18.5%	19.2%	19.0%	19.7%
Nondurable Goods <i>(Detail in Table 17)</i>	18.1%	18.9%	21.7%	25.2%	27.6%	28.2%	26.6%	26.8%	26.1%
Containers and Packaging									
Glass Packaging									
Beer and Soft Drink Bottles	1.6%	4.8%	4.4%	2.2%	2.2%	2.6%	2.9%	2.9%	3.2%
Wine and Liquor Bottles	1.3%	1.7%	1.8%	1.1%	0.8%	0.9%	0.9%	0.9%	0.7%
Food and Other Bottles & Jars	4.5%	3.9%	3.5%	2.1%	2.3%	1.6%	1.5%	1.5%	1.2%
Total Glass Packaging	7.4%	10.4%	9.6%	5.4%	5.3%	5.1%	5.3%	5.3%	5.1%
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%	0.7%	0.6%	0.6%	0.6%
Other Steel Packaging	0.3%	0.2%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
Total Steel Packaging	5.6%	4.7%	2.5%	1.3%	0.8%	0.7%	0.7%	0.7%	0.7%
Aluminum Packaging									
Beer and Soft Drink Cans	Neg.	0.1%	0.4%	0.3%	0.4%	0.4%	0.5%	0.5%	0.5%
Other Cans	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
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%	0.7%	0.7%	0.7%	0.7%	0.8%
Paper & Paperboard Pkg									
Corrugated Boxes	5.8%	8.8%	7.8%	7.3%	6.5%	6.0%	5.6%	5.7%	5.2%
Milk Cartons**			0.6%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Folding Cartons**			2.4%	2.3%	2.7%	3.3%	3.2%	3.1%	3.1%
Other Paperboard Packaging	4.7%	4.3%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%
Bags and Sacks**			2.5%	1.3%	1.0%	0.7%	0.7%	0.7%	0.6%
Wrapping Papers**			0.1%	0.1%	0.0%	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	3.3%	3.1%	0.4%	0.6%	0.7%	1.0%	1.1%	1.0%	1.0%
Total Paper & Board Pkg	13.8%	16.2%	14.0%	12.0%	11.5%	11.4%	11.0%	11.0%	10.3%
Plastics Packaging									
Soft Drink Bottles**			0.2%	0.2%	0.2%	0.3%	0.3%	0.5%	0.5%
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%	0.7%	1.4%	1.5%	1.5%	1.5%
Bags and Sacks**			0.3%	0.5%	0.7%	1.0%	1.0%	1.0%	1.0%
Wraps**			0.6%	0.9%	1.1%	1.4%	1.5%	1.6%	1.6%
Other Plastics Packaging	0.1%	1.0%	0.6%	1.2%	1.4%	1.7%	1.6%	1.7%	1.7%
Total Plastics Packaging	0.1%	1.8%	2.5%	3.9%	4.3%	6.2%	6.3%	6.5%	6.6%
Wood Packaging	2.4%	1.8%	2.9%	4.7%	4.6%	4.2%	4.3%	4.2%	4.3%
Other Misc. Packaging	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%
Total Containers & Pkg	29.7%	35.6%	32.2%	27.8%	27.4%	28.4%	28.3%	28.5%	27.9%
Total Product Wastes†	59.4%	66.6%	68.8%	68.3%	71.5%	75.0%	74.1%	74.3%	73.8%
Other Wastes									
Food Scraps	14.8%	11.3%	9.5%	12.1%	13.4%	15.6%	16.2%	16.1%	16.4%
Yard Trimmings	24.2%	20.5%	20.1%	17.9%	13.1%	7.2%	7.5%	7.5%	7.6%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	2.0%	2.1%	2.2%	2.2%	2.2%
Total Other Wastes	40.6%	33.4%	31.2%	31.7%	28.5%	25.0%	25.9%	25.7%	26.2%
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. 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 1980. Paper wraps not reported separately after 1996.

† Other than food products.

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

Source: Franklin Associates, Ltd.

Table 24
GENERATION, MATERIALS RECOVERY, COMPOSTING, COMBUSTION,
AND DISCARDS OF MUNICIPAL SOLID WASTE, 1960 TO 2003
(In thousands of tons and percent of total generation)

	Thousands of Tons								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Generation	88,120	121,060	151,640	205,210	213,700	234,020	231,230	235,520	236,170
Recovery for recycling	5,610	8,020	14,520	29,040	46,150	52,430	52,760	53,760	55,420
Recovery for composting*	Neg.	Neg.	Neg.	4,200	9,600	16,450	16,550	16,740	16,850
Total Materials Recovery	5,610	8,020	14,520	33,240	55,750	68,880	69,310	70,500	72,270
Discards after recovery	82,510	113,040	137,120	171,970	157,950	165,140	161,920	165,020	163,900
Combustion**	27,000	25,100	13,700	31,900	35,540	33,730	33,600	33,350	33,100
Discards to landfill, other disposal†	55,510	87,940	123,420	140,070	122,410	131,410	128,320	131,670	130,800

	Pounds per Person per Day								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
Generation	2.68	3.25	3.66	4.50	4.45	4.56	4.45	4.48	4.45
Recovery for recycling	0.17	0.22	0.35	0.64	0.96	1.02	1.02	1.02	1.04
Recovery for composting*	Neg.	Neg.	Neg.	0.09	0.20	0.32	0.32	0.32	0.32
Total Materials Recovery	0.17	0.22	0.35	0.73	1.16	1.34	1.33	1.34	1.36
Discards after recovery	2.51	3.04	3.31	3.77	3.29	3.22	3.12	3.14	3.09
Combustion**	0.82	0.67	0.33	0.70	0.74	0.66	0.65	0.63	0.62
Discards to landfill, other disposal†	1.69	2.36	2.98	3.07	2.55	2.56	2.47	2.51	2.46
Population (thousands)	179,979	203,984	227,255	249,907	263,168	281,422	284,797	287,974	290,810

	Percent of Total Generation								
	1960	1970	1980	1990	1995	2000	2001	2002	2003
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%	21.6%	22.4%	22.8%	22.8%	23.5%
Recovery for composting*	Neg.	Neg.	Neg.	2.0%	4.5%	7.0%	7.2%	7.1%	7.1%
Total Materials Recovery	6.4%	6.6%	9.6%	16.2%	26.1%	29.4%	30.0%	29.9%	30.6%
Discards after recovery	93.6%	93.4%	90.4%	83.8%	73.9%	70.6%	70.0%	70.1%	69.4%
Combustion**	30.6%	20.7%	9.0%	15.5%	16.6%	14.4%	14.5%	14.2%	14.0%
Discards to landfill, other disposal†	63.0%	72.6%	81.4%	68.3%	57.3%	56.2%	55.5%	55.9%	55.4%

* 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.
Details may not add to totals due to rounding.

Source: Franklin Associates, A Division of ERG

Figure 2. Paper and paperboard products generated in MSW, 2003

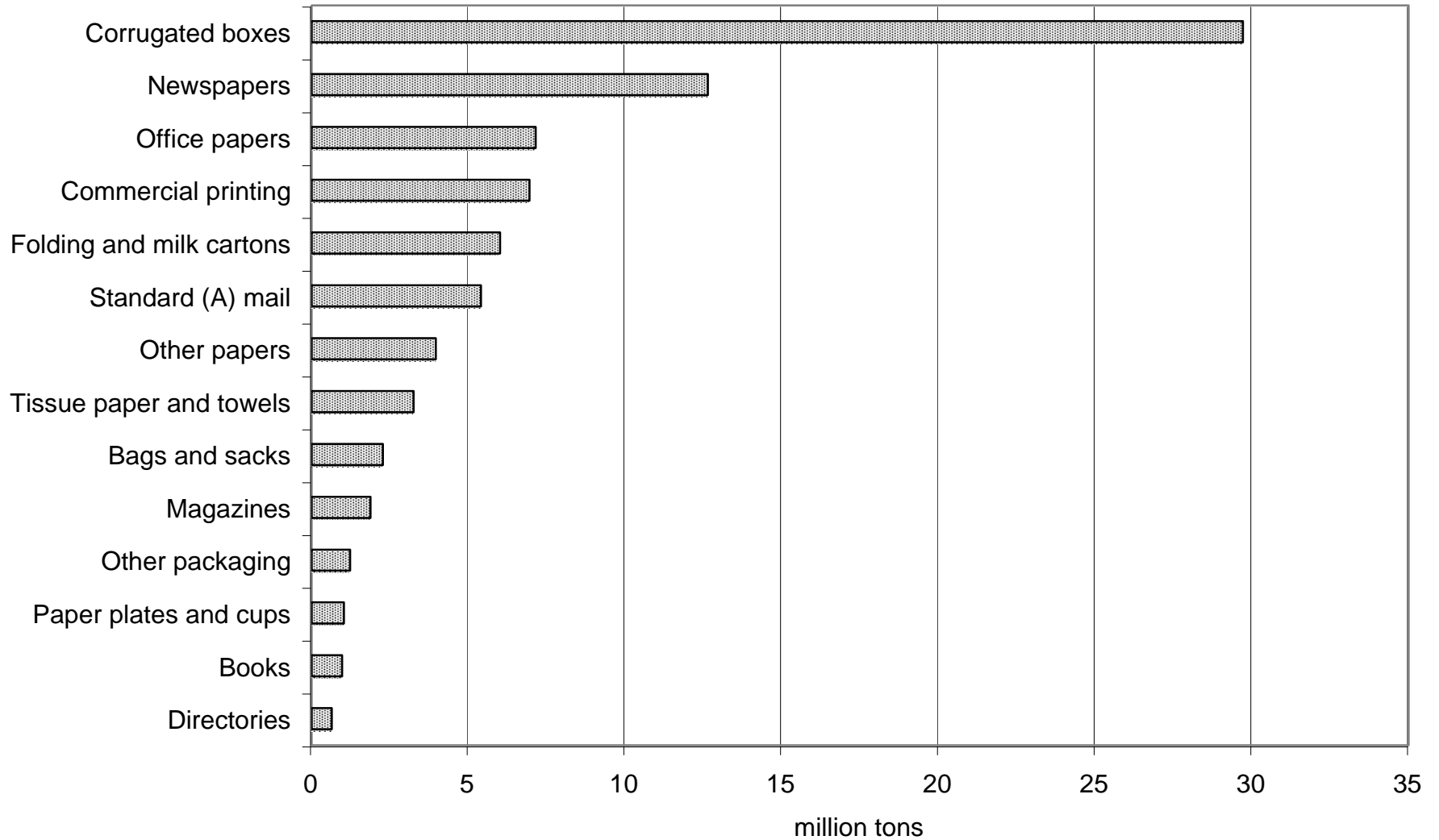


Figure 3. Paper generation and recovery, 1960 to 2003

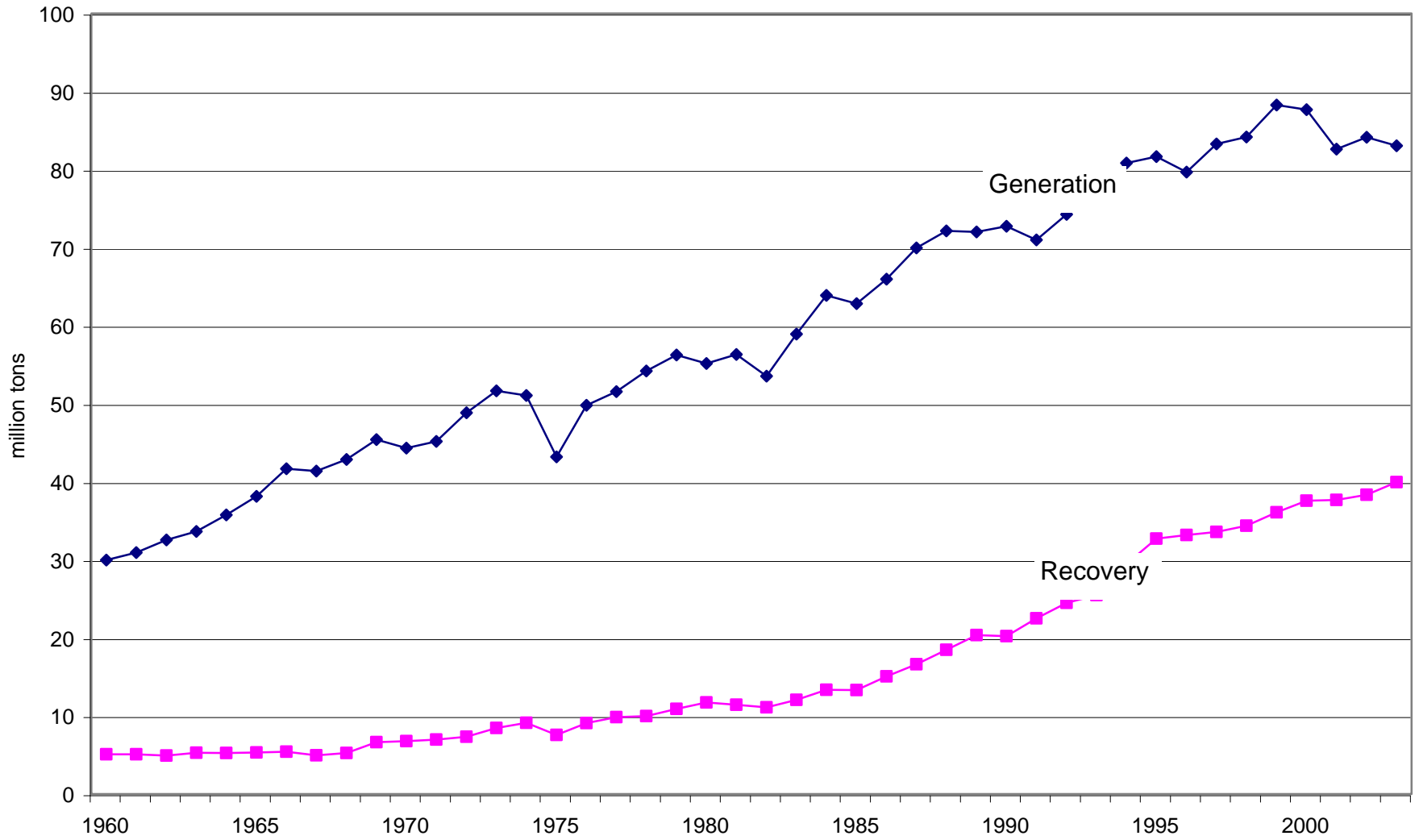


Figure 4. Glass products generated in MSW, 2003

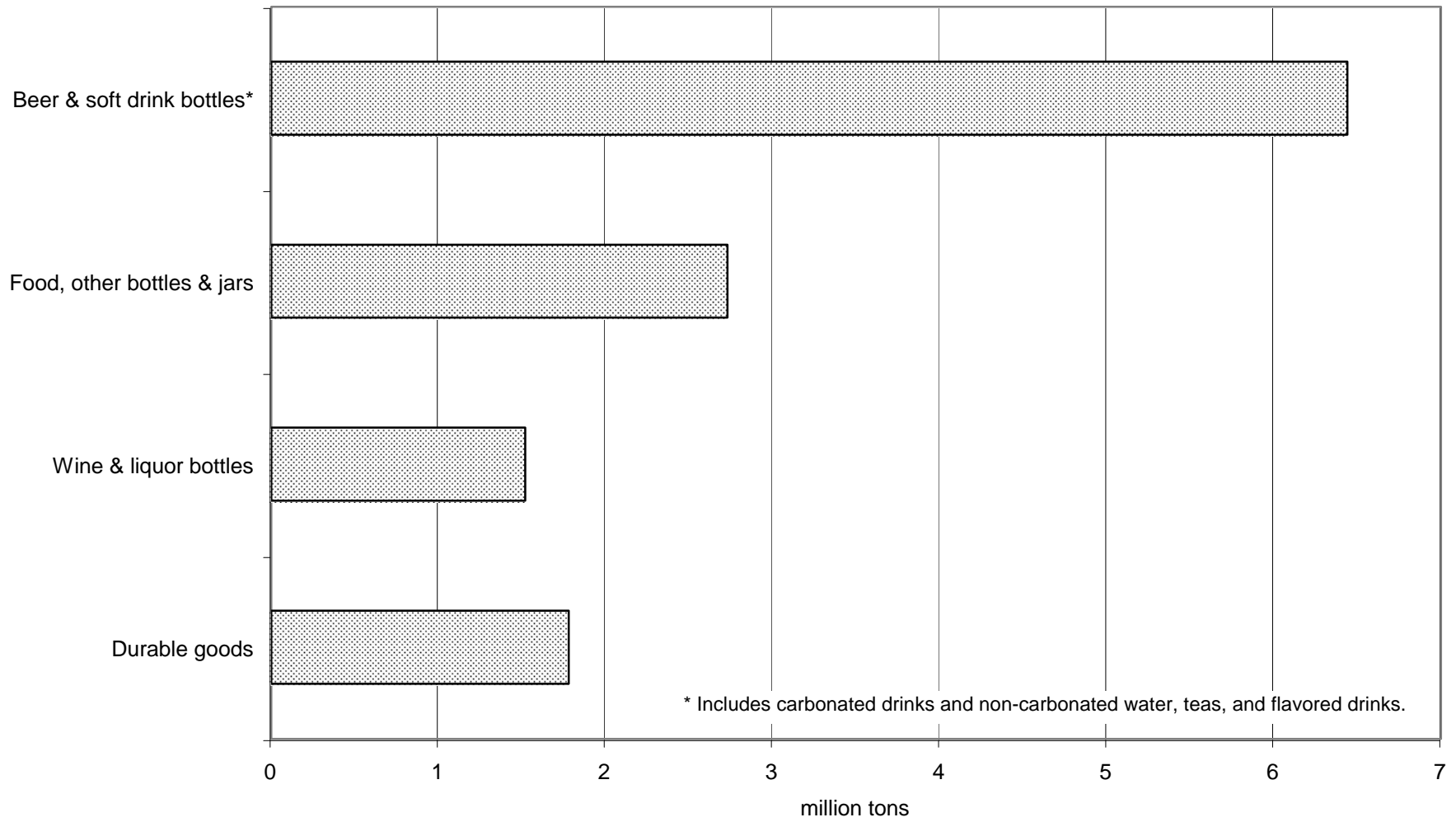


Figure 5. Glass generation and recovery, 1960 to 2003

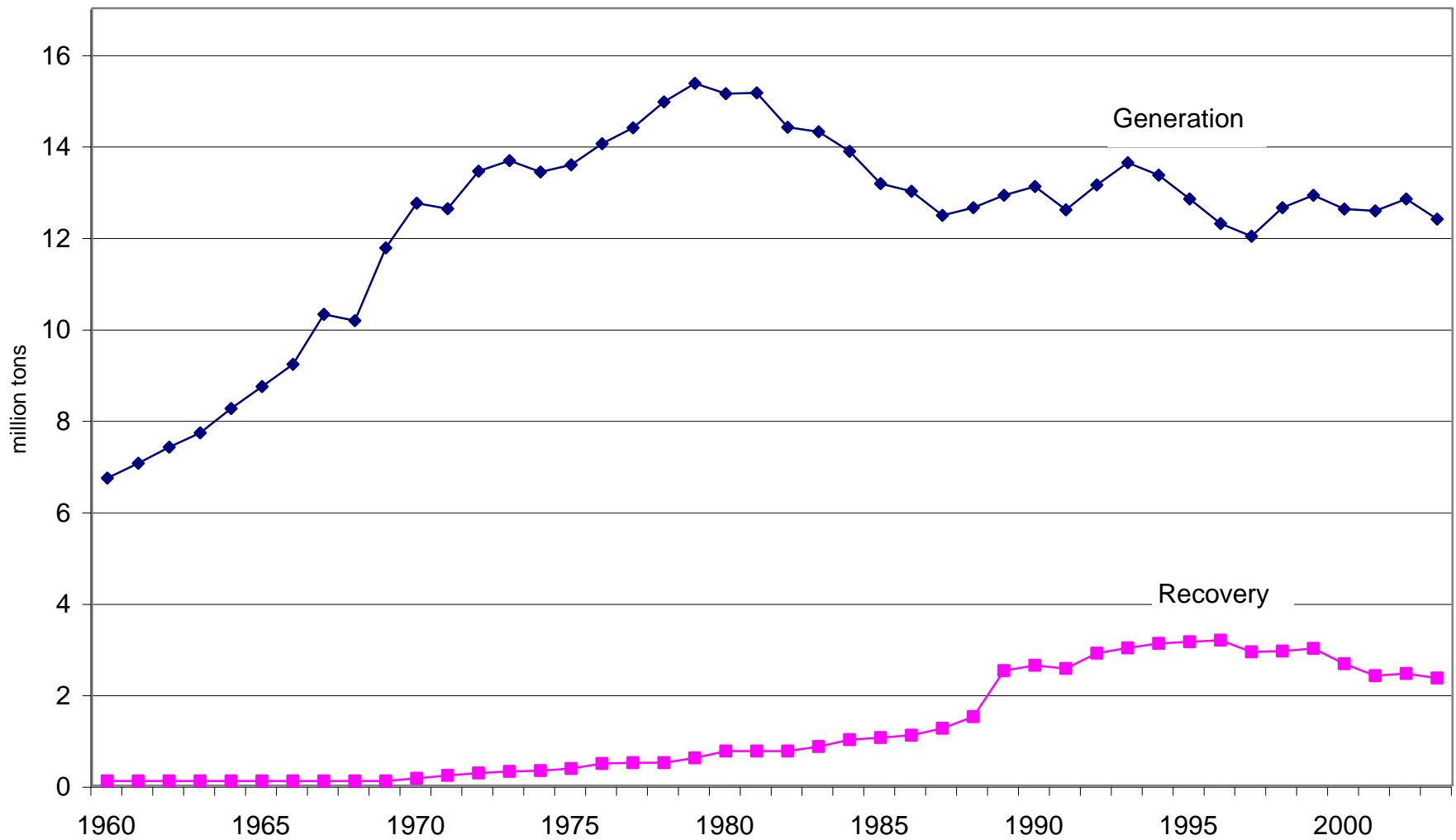


Figure 6. Metal products generated in MSW, 2003

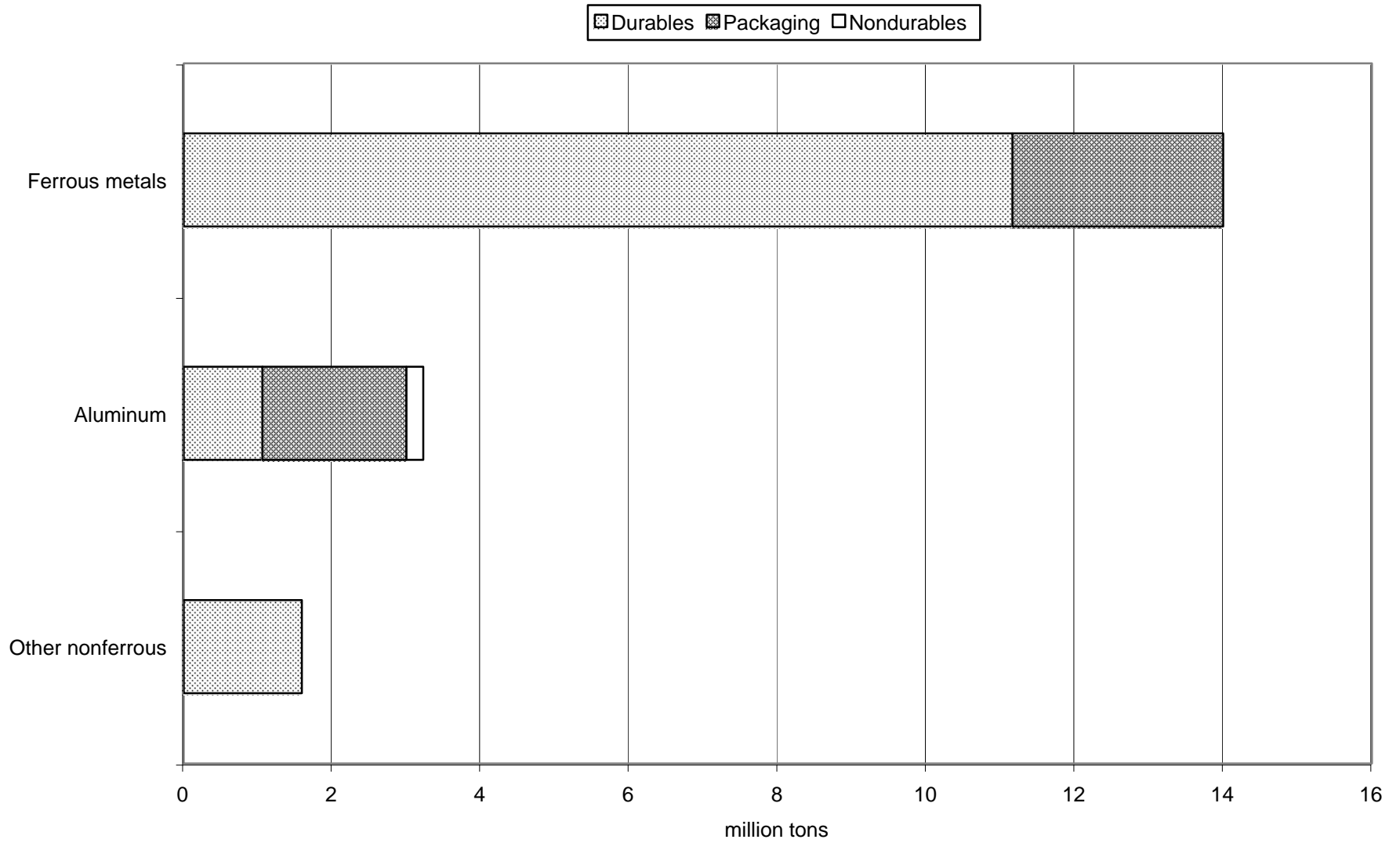


Figure 7. Metals generation and recovery, 1960 to 2003

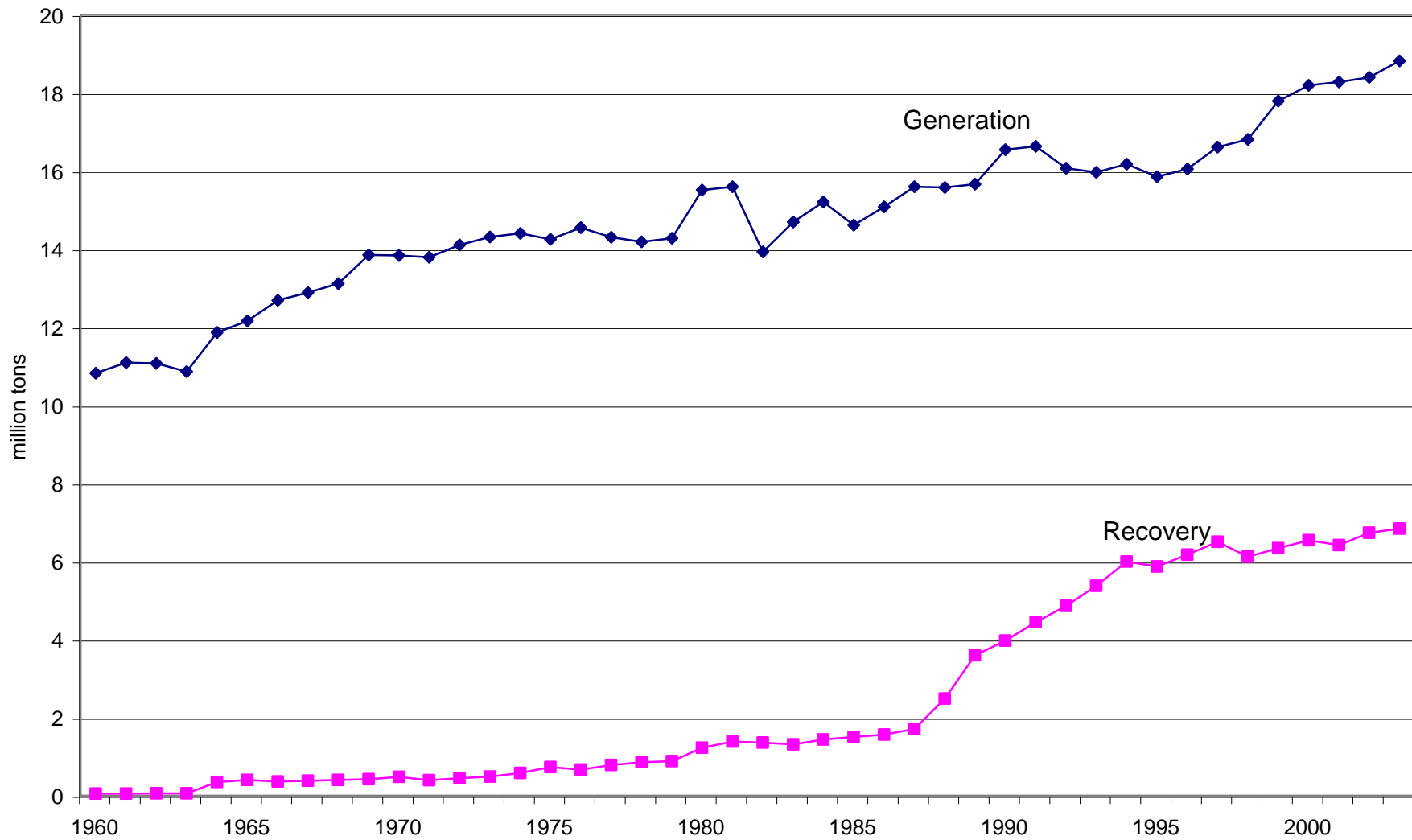


Figure 8. Plastics products generated in MSW, 2003

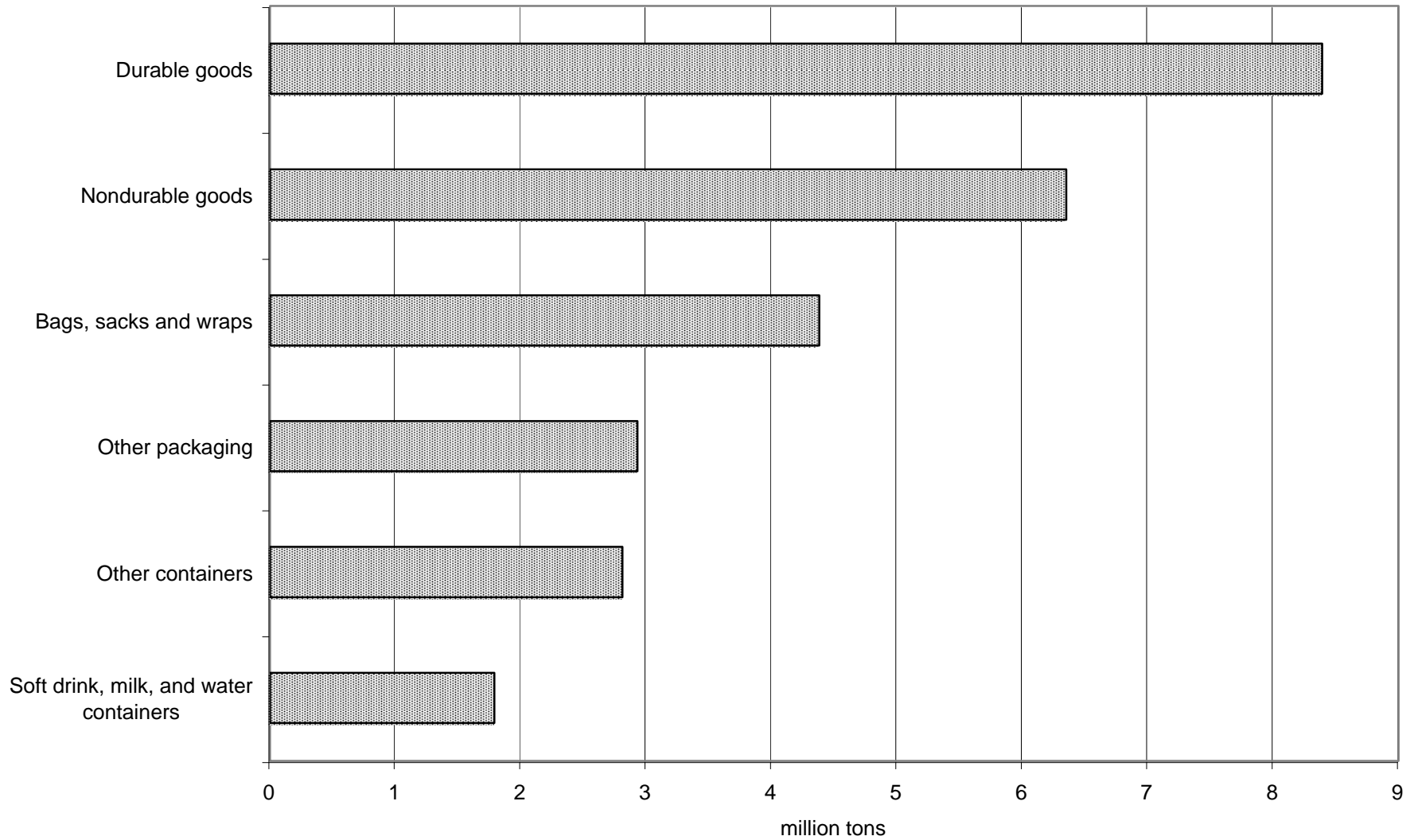


Figure 9. Plastics generation and recovery, 1960 to 2003

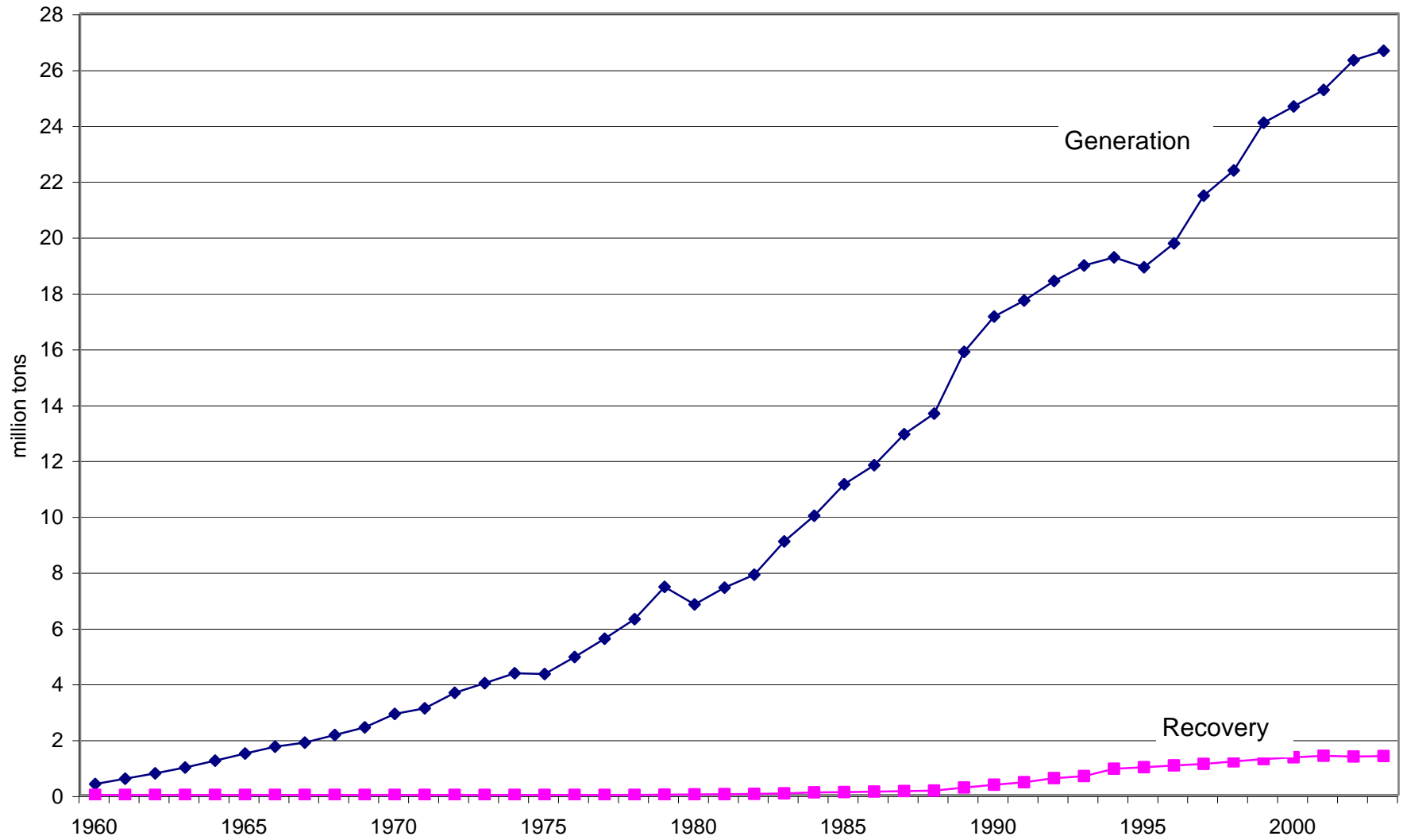


Figure 10. Generation of materials in MSW, 1960 to 2003

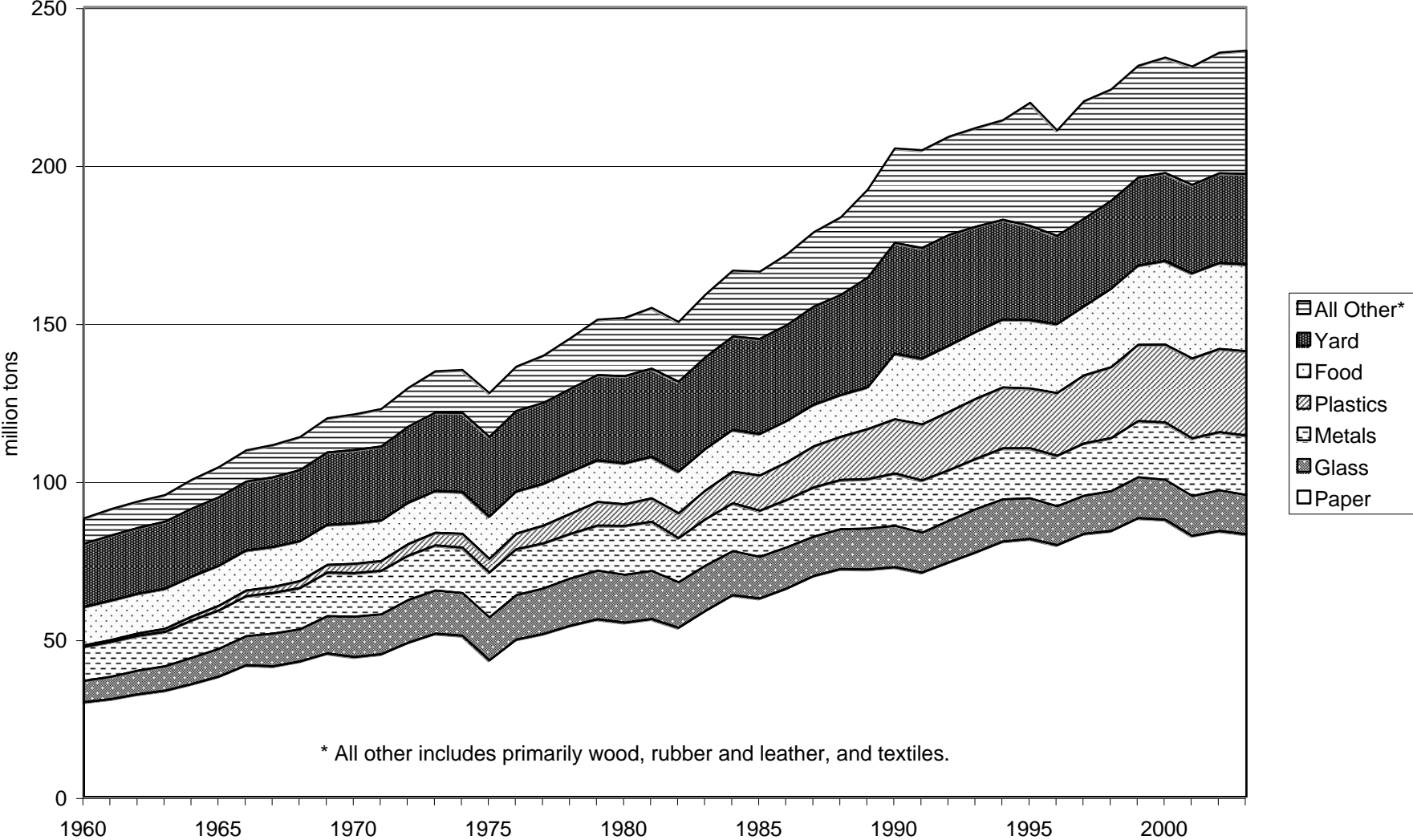


Figure 11. Recovery and discards of MSW,* 1960 to 2003

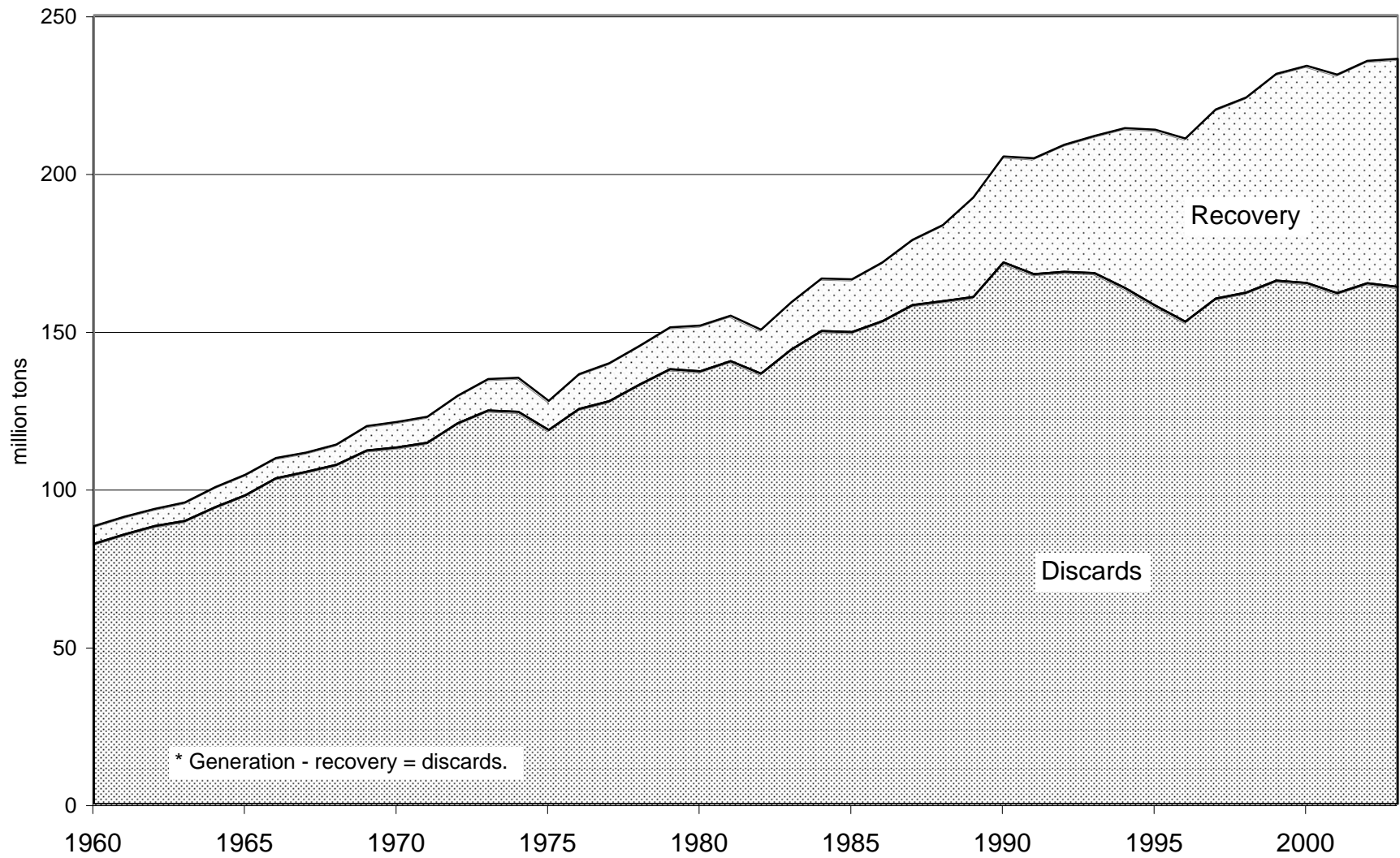
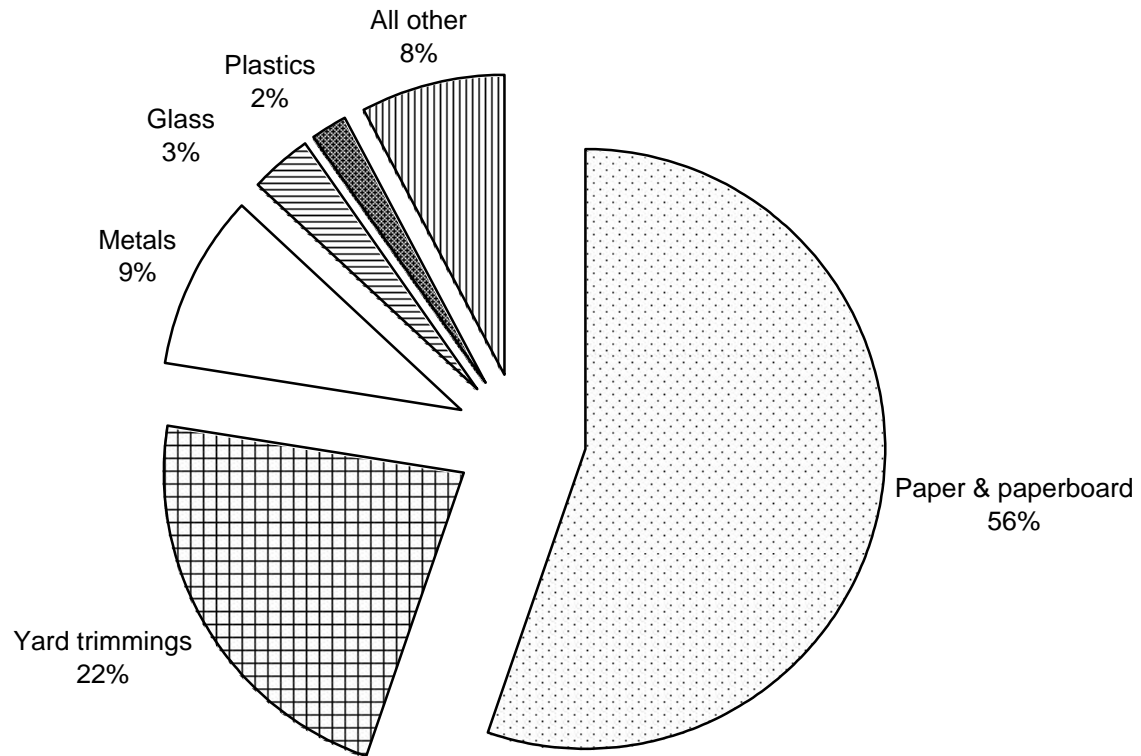


Figure 12. Materials recovery,* 2003



* In percent by weight of total recovery

**Figure 13. Materials generated and discarded
in municipal solid waste, 2003
(In percent of total generation and discards)**

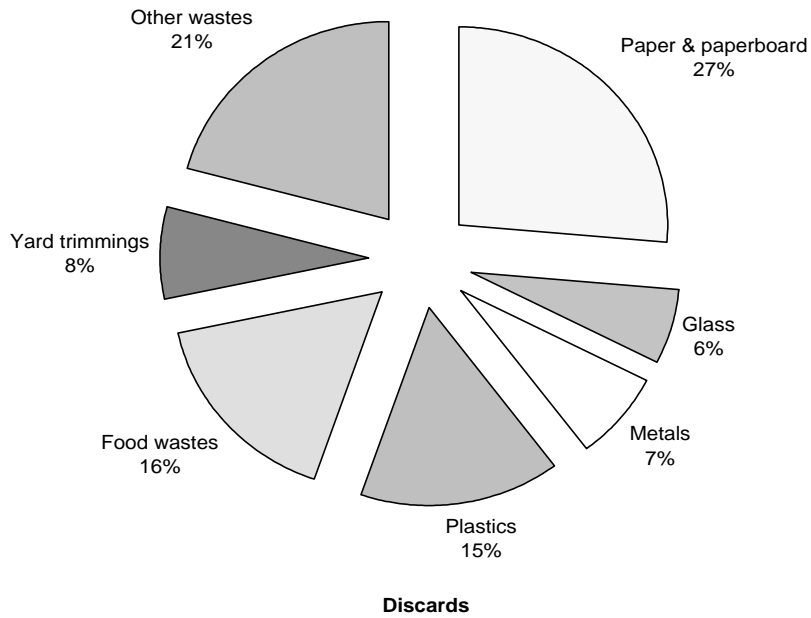
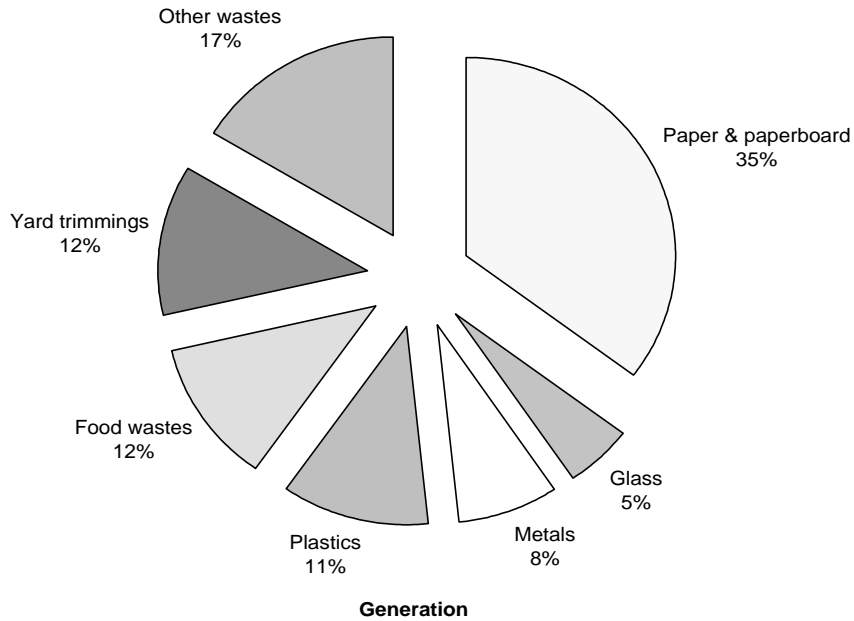
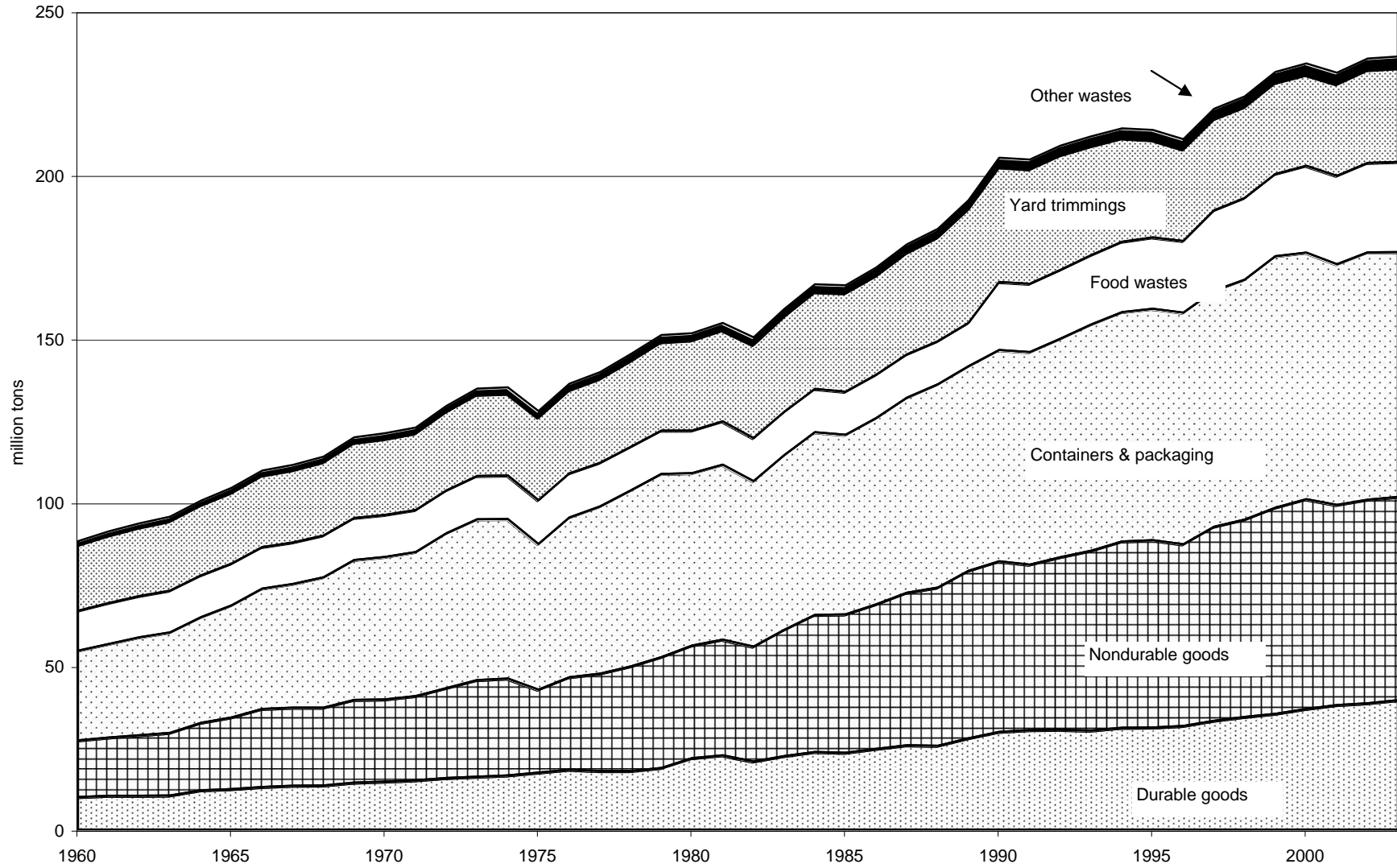


Figure 14. Generation of products in MSW, 1960 to 2003



**Figure 15. Nondurable goods generated and discarded
in municipal solid waste, 2003
(In percent of total generation and discards)**

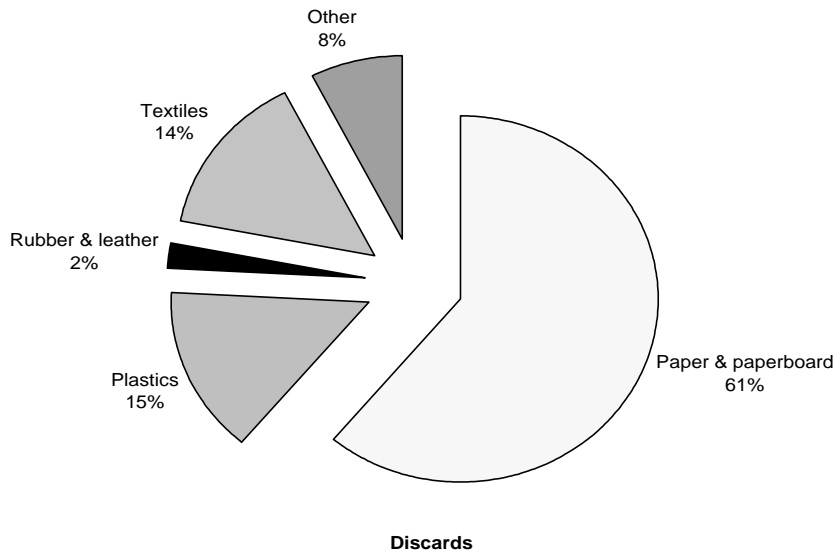
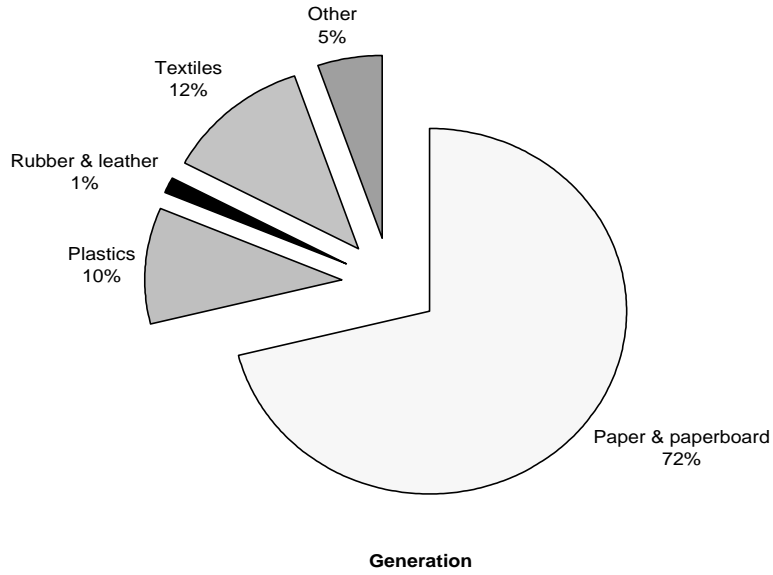


Figure 16. Containers and packaging generated and discarded in municipal solid waste, 2003
(In percent of total generation and discards)

