

**Municipal Solid Waste Generation, Recycling, and Disposal in the United States  
Detailed Tables and Figures for 2008**

U.S. Environmental Protection Agency  
Office of Resource Conservation and Recovery

November 2009



Table 1

**MATERIALS GENERATED\* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2008**  
(In thousands of tons and percent of total generation)

	Thousands of Tons								
<b>Materials</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2008</b>
Paper and Paperboard	29,990	44,310	55,160	72,730	87,740	83,160	84,840	82,530	77,420
Glass	6,720	12,740	15,130	13,100	12,760	12,550	12,540	12,520	12,150
Metals									
Ferrous	10,300	12,360	12,620	12,640	14,110	14,750	14,990	15,640	15,680
Aluminum	340	800	1,730	2,810	3,200	3,240	3,330	3,360	3,410
Other Nonferrous	180	670	1,160	1,100	1,600	1,620	1,740	1,780	1,760
<i>Total Metals</i>	<i>10,820</i>	<i>13,830</i>	<i>15,510</i>	<i>16,550</i>	<i>18,910</i>	<i>19,610</i>	<i>20,060</i>	<i>20,780</i>	<i>20,850</i>
Plastics	390	2,900	6,830	17,130	25,540	27,870	29,240	30,740	30,050
Rubber and Leather	1,840	2,970	4,200	5,790	6,710	7,070	7,360	7,540	7,410
Textiles	1,760	2,040	2,530	5,810	9,440	10,670	11,380	11,940	12,370
Wood	3,030	3,720	7,010	12,210	13,110	13,670	14,080	16,070	16,390
Other **	70	770	2,520	3,190	4,000	4,030	4,170	4,440	4,500
<b>Total Materials in Products</b>	<b>54,620</b>	<b>83,280</b>	<b>108,890</b>	<b>146,510</b>	<b>178,210</b>	<b>178,630</b>	<b>183,670</b>	<b>186,560</b>	<b>181,140</b>
<b>Other Wastes</b>									
Food Scraps	12,200	12,800	13,000	20,800	26,810	28,510	30,220	31,650	31,790
Yard Trimmings	20,000	23,200	27,500	35,000	30,530	31,470	32,070	32,630	32,900
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,620	3,690	3,750	3,780
<b>Total Other Wastes</b>	<b>33,500</b>	<b>37,780</b>	<b>42,750</b>	<b>58,700</b>	<b>60,840</b>	<b>63,600</b>	<b>65,980</b>	<b>68,030</b>	<b>68,470</b>
<b>Total MSW Generated - Weight</b>	<b>88,120</b>	<b>121,060</b>	<b>151,640</b>	<b>205,210</b>	<b>239,050</b>	<b>242,230</b>	<b>249,650</b>	<b>254,590</b>	<b>249,610</b>
	Percent of Total Generation								
<b>Materials</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2008</b>
Paper and Paperboard	34.0%	36.6%	36.4%	35.4%	36.7%	34.3%	34.0%	32.4%	31.0%
Glass	7.6%	10.5%	10.0%	6.4%	5.3%	5.2%	5.0%	4.9%	4.9%
Metals									
Ferrous	11.7%	10.2%	8.3%	6.2%	5.9%	6.1%	6.0%	6.1%	6.3%
Aluminum	0.4%	0.7%	1.1%	1.4%	1.3%	1.3%	1.3%	1.3%	1.4%
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>7.9%</i>	<i>8.1%</i>	<i>8.0%</i>	<i>8.2%</i>	<i>8.4%</i>
Plastics	0.4%	2.4%	4.5%	8.3%	10.7%	11.5%	11.7%	12.1%	12.0%
Rubber and Leather	2.1%	2.5%	2.8%	2.8%	2.8%	2.9%	2.9%	3.0%	3.0%
Textiles	2.0%	1.7%	1.7%	2.8%	3.9%	4.4%	4.6%	4.7%	5.0%
Wood	3.4%	3.1%	4.6%	6.0%	5.5%	5.6%	5.6%	6.3%	6.6%
Other **	0.1%	0.6%	1.7%	1.6%	1.7%	1.7%	1.7%	1.7%	1.8%
<b>Total Materials in Products</b>	<b>62.0%</b>	<b>68.8%</b>	<b>71.8%</b>	<b>71.4%</b>	<b>74.5%</b>	<b>73.7%</b>	<b>73.6%</b>	<b>73.3%</b>	<b>72.6%</b>
<b>Other Wastes</b>									
Food Scraps	13.8%	10.6%	8.6%	10.1%	11.2%	11.8%	12.1%	12.4%	12.7%
Yard Trimmings	22.7%	19.2%	18.1%	17.1%	12.8%	13.0%	12.8%	12.8%	13.2%
Miscellaneous Inorganic Wastes	1.5%	1.5%	1.5%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%
<b>Total Other Wastes</b>	<b>38.0%</b>	<b>31.2%</b>	<b>28.2%</b>	<b>28.6%</b>	<b>25.5%</b>	<b>26.3%</b>	<b>26.4%</b>	<b>26.7%</b>	<b>27.4%</b>
<b>Total MSW Generated - %</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

\* 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 2008**  
(In thousands of tons and percent of generation of each material)

	Thousands of Tons								
<b>Materials</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2008</b>
Paper and Paperboard	5,080	6,770	11,740	20,230	37,560	39,610	41,960	44,480	42,940
Glass	100	160	750	2,630	2,880	2,650	2,590	2,880	2,810
Metals									
Ferrous	50	150	370	2,230	4,680	5,210	5,030	5,280	5,290
Aluminum	Neg.	10	310	1,010	860	690	690	730	720
Other Nonferrous	Neg.	320	540	730	1,060	1,050	1,200	1,240	1,210
<i>Total Metals</i>	<i>50</i>	<i>480</i>	<i>1,220</i>	<i>3,970</i>	<i>6,600</i>	<i>6,950</i>	<i>6,920</i>	<i>7,250</i>	<i>7,220</i>
Plastics	Neg.	Neg.	20	370	1,480	1,530	1,760	2,100	2,120
Rubber and Leather	330	250	130	370	820	1,100	1,100	1,140	1,060
Textiles	50	60	160	660	1,320	1,560	1,850	1,920	1,890
Wood	Neg.	Neg.	Neg.	130	1,240	1,280	1,310	1,540	1,580
Other **	Neg.	300	500	680	980	980	1,140	1,170	1,150
<b><i>Total Materials in Products</i></b>	<b>5,610</b>	<b>8,020</b>	<b>14,520</b>	<b>29,040</b>	<b>52,880</b>	<b>55,660</b>	<b>58,630</b>	<b>62,480</b>	<b>60,770</b>
<b>Other Wastes</b>									
Food Scraps	Neg.	Neg.	Neg.	Neg.	680	750	690	810	800
Yard Trimmings	Neg.	Neg.	Neg.	4,200	15,770	18,330	19,860	20,900	21,300
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b><i>Total Other Wastes</i></b>	<b>Neg.</b>	<b>Neg.</b>	<b>Neg.</b>	<b>4,200</b>	<b>16,450</b>	<b>19,080</b>	<b>20,550</b>	<b>21,710</b>	<b>22,100</b>
<b><i>Total MSW Recovered - Weight</i></b>	<b>5,610</b>	<b>8,020</b>	<b>14,520</b>	<b>33,240</b>	<b>69,330</b>	<b>74,740</b>	<b>79,180</b>	<b>84,190</b>	<b>82,870</b>
	Percent of Generation of Each Material								
<b>Materials</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2008</b>
Paper and Paperboard	16.9%	15.3%	21.3%	27.8%	42.8%	47.6%	49.5%	53.9%	55.5%
Glass	1.5%	1.3%	5.0%	20.1%	22.6%	21.1%	20.7%	23.0%	23.1%
Metals									
Ferrous	0.5%	1.2%	2.9%	17.6%	33.2%	35.3%	33.6%	33.8%	33.7%
Aluminum	Neg.	1.3%	17.9%	35.9%	26.9%	21.3%	20.7%	21.7%	21.1%
Other Nonferrous	Neg.	47.8%	46.6%	66.4%	66.3%	64.8%	69.0%	69.7%	68.8%
<i>Total Metals</i>	<i>0.5%</i>	<i>3.5%</i>	<i>7.9%</i>	<i>24.0%</i>	<i>34.9%</i>	<i>35.4%</i>	<i>34.5%</i>	<i>34.9%</i>	<i>34.6%</i>
Plastics	Neg.	Neg.	0.3%	2.2%	5.8%	5.5%	6.0%	6.8%	7.1%
Rubber and Leather	17.9%	8.4%	3.1%	6.4%	12.2%	15.6%	14.9%	15.1%	14.3%
Textiles	2.8%	2.9%	6.3%	11.4%	14.0%	14.6%	16.3%	16.1%	15.3%
Wood	Neg.	Neg.	Neg.	1.1%	9.5%	9.4%	9.3%	9.6%	9.6%
Other **	Neg.	39.0%	19.8%	21.3%	24.5%	24.3%	27.3%	26.4%	25.6%
<b><i>Total Materials in Products</i></b>	<b>10.3%</b>	<b>9.6%</b>	<b>13.3%</b>	<b>19.8%</b>	<b>29.7%</b>	<b>31.2%</b>	<b>31.9%</b>	<b>33.5%</b>	<b>33.5%</b>
<b>Other Wastes</b>									
Food, Other^	Neg.	Neg.	Neg.	Neg.	2.5%	2.6%	2.3%	2.6%	2.5%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	51.7%	58.2%	61.9%	64.1%	64.7%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b><i>Total Other Wastes</i></b>	<b>Neg.</b>	<b>Neg.</b>	<b>Neg.</b>	<b>7.2%</b>	<b>27.0%</b>	<b>30.0%</b>	<b>31.1%</b>	<b>31.9%</b>	<b>32.3%</b>
<b><i>Total MSW Recovered - %</i></b>	<b>6.4%</b>	<b>6.6%</b>	<b>9.6%</b>	<b>16.2%</b>	<b>29.0%</b>	<b>30.9%</b>	<b>31.7%</b>	<b>33.1%</b>	<b>33.2%</b>

\* 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 and mixed MSW 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 2008**  
(In thousands of tons and percent of total discards)

	Thousands of Tons								
<b>Materials</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2008</b>
Paper and Paperboard	24,910	37,540	43,420	52,500	50,180	43,550	42,880	38,050	34,480
Glass	6,620	12,580	14,380	10,470	9,880	9,900	9,950	9,640	9,340
Metals									
Ferrous	10,250	12,210	12,250	10,410	9,430	9,540	9,960	10,360	10,390
Aluminum	340	790	1,420	1,800	2,340	2,550	2,640	2,630	2,690
Other Nonferrous	180	350	620	370	540	570	540	540	550
<i>Total Metals</i>	<i>10,770</i>	<i>13,350</i>	<i>14,290</i>	<i>12,580</i>	<i>12,310</i>	<i>12,660</i>	<i>13,140</i>	<i>13,530</i>	<i>13,630</i>
Plastics	390	2,900	6,810	16,760	24,060	26,340	27,480	28,640	27,930
Rubber and Leather	1,510	2,720	4,070	5,420	5,890	5,970	6,260	6,400	6,350
Textiles	1,710	1,980	2,370	5,150	8,120	9,110	9,530	10,020	10,480
Wood	3,030	3,720	7,010	12,080	11,870	12,390	12,770	14,530	14,810
Other **	70	470	2,020	2,510	3,020	3,050	3,030	3,270	3,350
<b>Total Materials in Products</b>	<b>49,010</b>	<b>75,260</b>	<b>94,370</b>	<b>117,470</b>	<b>125,330</b>	<b>122,970</b>	<b>125,040</b>	<b>124,080</b>	<b>120,370</b>
<b>Other Wastes</b>									
Food Scraps	12,200	12,800	13,000	20,800	26,130	27,760	29,530	30,840	30,990
Yard Trimmings	20,000	23,200	27,500	30,800	14,760	13,140	12,210	11,730	11,600
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,620	3,690	3,750	3,780
<b>Total Other Wastes</b>	<b>33,500</b>	<b>37,780</b>	<b>42,750</b>	<b>54,500</b>	<b>44,390</b>	<b>44,520</b>	<b>45,430</b>	<b>46,320</b>	<b>46,370</b>
<b>Total MSW Discarded - Weight</b>	<b>82,510</b>	<b>113,040</b>	<b>137,120</b>	<b>171,970</b>	<b>169,720</b>	<b>167,490</b>	<b>170,470</b>	<b>170,400</b>	<b>166,740</b>
	Percent of Total Discards								
<b>Materials</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2008</b>
Paper and Paperboard	30.2%	33.2%	31.7%	30.5%	29.6%	26.0%	25.2%	22.3%	20.7%
Glass	8.0%	11.1%	10.5%	6.1%	5.8%	5.9%	5.8%	5.7%	5.6%
Metals									
Ferrous	12.4%	10.8%	8.9%	6.1%	5.6%	5.7%	5.8%	6.1%	6.2%
Aluminum	0.4%	0.7%	1.0%	1.0%	1.4%	1.5%	1.5%	1.5%	1.6%
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>7.3%</i>	<i>7.6%</i>	<i>7.7%</i>	<i>7.9%</i>	<i>8.2%</i>
Plastics	0.5%	2.6%	5.0%	9.7%	14.2%	15.7%	16.1%	16.8%	16.8%
Rubber and Leather	1.8%	2.4%	3.0%	3.2%	3.5%	3.6%	3.7%	3.8%	3.8%
Textiles	2.1%	1.8%	1.7%	3.0%	4.8%	5.4%	5.6%	5.9%	6.3%
Wood	3.7%	3.3%	5.1%	7.0%	7.0%	7.4%	7.5%	8.5%	8.9%
Other **	0.1%	0.4%	1.5%	1.5%	1.8%	1.8%	1.8%	1.9%	2.0%
<b>Total Materials in Products</b>	<b>59.4%</b>	<b>66.6%</b>	<b>68.8%</b>	<b>68.3%</b>	<b>73.8%</b>	<b>73.4%</b>	<b>73.4%</b>	<b>72.8%</b>	<b>72.2%</b>
<b>Other Wastes</b>									
Food Scraps	14.8%	11.3%	9.5%	12.1%	15.4%	16.6%	17.3%	18.1%	18.6%
Yard Trimmings	24.2%	20.5%	20.1%	17.9%	8.7%	7.8%	7.2%	6.9%	7.0%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	2.1%	2.2%	2.2%	2.2%	2.3%
<b>Total Other Wastes</b>	<b>40.6%</b>	<b>33.4%</b>	<b>31.2%</b>	<b>31.7%</b>	<b>26.2%</b>	<b>26.6%</b>	<b>26.6%</b>	<b>27.2%</b>	<b>27.8%</b>
<b>Total MSW Discarded - %</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

\* 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, 2008**  
(In thousands of tons and percent of generation)

Product Category	Generation	Recovery		Discards
	(Thousand tons)	(Thousand tons)	(Percent of generation)	(Thousand tons)
<b>Nondurable Goods</b>				
Newspapers				
Newsprint	6,290	5,510	87.6%	780
Groundwood Inserts	2,510	2,220	88.4%	290
<b>Total Newspapers</b>	<u>8,800</u>	<u>7,730</u>	<u>87.8%</u>	<u>1,070</u>
Books	1,340	400	29.9%	940
Magazines	2,050	820	40.0%	1,230
Office-type Papers*	6,050	4,290	70.9%	1,760
Telephone Directories	840	180	21.4%	660
Standard Mail**	5,510	2,240	40.7%	3,270
Other Commercial Printing	5,130	2,200	42.9%	2,930
Tissue Paper and Towels	3,460	Neg.	Neg.	3,460
Paper Plates and Cups	1,250	Neg.	Neg.	1,250
Other Nonpackaging Paper***	4,690	Neg.	Neg.	4,690
<b>Total Paper and Paperboard</b>	<u>39,120</u>	<u>17,860</u>	<u>45.7%</u>	<u>21,260</u>
<b>Containers and Packaging</b>				
Corrugated Boxes	29,710	22,760	76.6%	6,950
Milk Cartons	490	Neg.	Neg.	490
Folding Cartons	5,340	1,880	35.2%	3,460
Other Paperboard Packaging	120	Neg.	Neg.	120
Bags and Sacks	1,170	440	37.6%	730
Other Paper Packaging	1,460	Neg.	Neg.	1,460
<b>Total Paper and Paperboard</b>	<u>38,290</u>	<u>25,080</u>	<u>65.5%</u>	<u>13,210</u>
<b>Containers and Packaging</b>	<u>38,290</u>	<u>25,080</u>	<u>65.5%</u>	<u>13,210</u>
<b>Total Paper and Paperboard^</b>	<u>77,410</u>	<u>42,940</u>	<u>55.5%</u>	<u>34,470</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, 2008**  
(In thousands of tons and percent of generation)

<b>Product Category</b>	<b>Generation</b>	<b>Recovery</b>		<b>Discards</b>
	<b>(Thousand tons)</b>	<b>(Thousand tons)</b>	<b>(Percent of generation)</b>	<b>(Thousand tons)</b>
<b>Durable Goods*</b>	2,100	Neg.	Neg.	2,100
<b>Containers and Packaging</b>				
Beer and Soft Drink Bottles	6,350	2,260	35.6%	4,090
Wine and Liquor Bottles	1,610	240	14.9%	1,370
Food and Other Bottles and Jars	<u>2,090</u>	<u>310</u>	<u>14.8%</u>	<u>1,780</u>
<b><i>Total Glass Containers</i></b>	<u>10,050</u>	<u>2,810</u>	<u>28.0%</u>	<u>7,240</u>
<b><i>Total Glass</i></b>	<u>12,150</u>	<u>2,810</u>	<u>23.1%</u>	<u>9,340</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, 2008**  
(In thousands of tons and percent of generation)

Product Category	Generation	Recovery		Discards
	(Thousand tons)	(Thousand tons)	(Percent of generation)	(Thousand tons)
<b>Durable Goods</b>				
Ferrous Metals*	13,130	3,680	28.0%	9,450
Aluminum**	1,310	Neg.	Neg.	1,310
Lead†	1,220	1,210	99.2%	10
Other Nonferrous Metals‡	540	Neg.	Neg.	540
<b>Total Metals in Durable Goods</b>	<b>16,200</b>	<b>4,890</b>	<b>30.2%</b>	<b>11,310</b>
<b>Nondurable Goods</b>				
Aluminum	220	Neg.	Neg.	220
<b>Containers and Packaging</b>				
<b>Steel</b>				
Food and Other Cans	2,310	1,450	62.8%	860
Other Steel Packaging	240	160	66.7%	80
<b>Total Steel Packaging</b>	<b>2,550</b>	<b>1,610</b>	<b>63.1%</b>	<b>940</b>
<b>Aluminum</b>				
Beer and Soft Drink Cans	1,390	670	48.2%	720
Food and Other Cans	70	10	14.3%	60
Foil and Closures	420	40	9.5%	380
<b>Total Aluminum Packaging</b>	<b>1,880</b>	<b>720</b>	<b>38.3%</b>	<b>1,160</b>
<b>Total Metals in Containers and Packaging</b>	<b>4,430</b>	<b>2,330</b>	<b>52.6%</b>	<b>2,100</b>
<b>Total Metals</b>	<b>20,850</b>	<b>7,220</b>	<b>34.6%</b>	<b>13,630</b>
Ferrous	15,680	5,290	33.7%	10,390
Aluminum	3,410	720	21.1%	2,690
Other nonferrous	1,760	1,210	68.8%	550

\* 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, 2008**  
(In thousands of tons, and percent of generation by resin)

Product Category	Generation	Recovery		Discards
	(Thousand tons)	(Thousand tons)	(Percent of Gen.)	(Thousand tons)
<b>Durable Goods</b>				
PET	610			
HDPE	780			
PVC	630			
LDPE/LLDPE	910			
PP	1,400			
PS	900			
Other resins	5,290			
<b>Total Plastics in Durable Goods</b>	<b>10,520</b>	<b>390</b>	<b>3.7%</b>	<b>10,130</b>
<b>Nondurable Goods</b>				
Plastic Plates and Cups				
LDPE/LLDPE	20			20
PS	760	Neg.		760
<b>Subtotal Plastic Plates and Cups</b>	<b>780</b>			<b>780</b>
Trash Bags				
HDPE	250			250
LDPE/LLDPE	680			680
<b>Subtotal Trash Bags</b>	<b>930</b>			<b>930</b>
All other nondurables*				
PET	240			240
HDPE	430			430
PVC	660			660
LDPE/LLDPE	1,430			1,430
PP	810			810
PS	600			600
Other resins	640			640
<b>Subtotal All Other Nondurables</b>	<b>4,810</b>			<b>4,810</b>
<b>Total Plastics in Nondurable Goods, by resin</b>				
PET	240			240
HDPE	680			680
PVC	660			660
LDPE/LLDPE	2,130			2,130
PP	810			810
PS	1,360			1,360
Other resins	640			640
<b>Total Plastics in Nondurable Goods</b>	<b>6,520</b>	<b>Neg.</b>	<b>Neg.</b>	<b>6,520</b>
<b>Plastic Containers &amp; Packaging</b>				
Bottles and Jars**				
PET	2,680	730	27.2%	1,950
Natural Bottles†				
HDPE	750	220	29.3%	530

HDPE = High density polyethylene

LDPE = Low density polyethylene

LLDPE = Linear low density polyethylene

PET = Polyethylene terephthalate

PP = Polypropylene

Neg. = negligible, less than 5,000 tons or 0.05 percent

PS = Polystyrene

PVC = Polyvinyl chloride

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

\*\* Injection stretch blow molded PET containers as described in the report series titled *Report on Postconsumer PET Container Recycling Activity*. National Association for PET Container Resources.

† White translucent homopolymer bottles as described in the report series titled *United States National Postconsumer Plastics Bottles Recycling Report*. American Chemistry Council and the Association of Postconsumer Plastic Recyclers.

Source: Franklin Associates, A Division of ERG



Table 7 (continued)

**PLASTICS IN PRODUCTS IN MSW, 2008**  
(In thousands of tons, and percent of generation by resin)

Product Category	Generation	Recovery		Discards
	(Thousand tons)	(Thousand tons)	(Percent of Gen.)	(Thousand tons)
<b>Plastic Containers &amp; Packaging, cont.</b>				
Other plastic containers				
HDPE	1,310	260	19.8%	1,050
PVC	40	Neg.		40
LDPE/LLDPE	40	Neg.		40
PP	430	20	4.7%	410
PS	70	Neg.		70
Other resins	10			10
<b>Subtotal Other Containers</b>	<b>1,900</b>	<b>280</b>	<b>14.7%</b>	<b>1,620</b>
Bags, sacks, & wraps				
HDPE	550	60	10.9%	490
PVC	80			80
LDPE/LLDPE	2,350	330	14.0%	2,020
PP	760			760
PS	0			0
Other resins	220			220
<b>Subtotal Bags, Sacks, &amp; Wraps</b>	<b>3,960</b>	<b>390</b>	<b>9.8%</b>	<b>3,570</b>
Other Plastics Packaging‡				
PET	210	NA		210
HDPE	1,280	30	2.3%	1,250
PVC	250	Neg.		250
LDPE/LLDPE	450	Neg.		450
PP	790	50	6.3%	740
PS	290	20	6.9%	270
Other resins	450	10	2.2%	440
<b>Subtotal Other Packaging</b>	<b>3,720</b>	<b>110</b>	<b>3.0%</b>	<b>3,610</b>
<b>Total Plastics in Containers &amp; Packaging, by resin</b>				
PET	2,890	730	25.3%	2,160
HDPE	3,890	570	14.7%	3,320
PVC	370			370
LDPE/LLDPE	2,840	330	11.6%	2,510
PP	1,980	70	3.5%	1,910
PS	360	20	5.6%	340
Other resins	680	10	1.5%	670
<b>Total Plastics in Cont. &amp; Packaging</b>	<b>13,010</b>	<b>1,730</b>	<b>13.3%</b>	<b>11,280</b>
<b>Total Plastics in MSW, by resin</b>				
PET	3,740	730	19.5%	3,010
HDPE	5,350	570	10.7%	4,780
PVC	1,660			1,660
LDPE/LLDPE	5,880	330	5.6%	5,550
PP	4,190	70	1.7%	4,120
PS	2,620	20	0.8%	2,600
Other resins	6,610	400	6.1%	6,210
<b>Total Plastics in MSW</b>	<b>30,050</b>	<b>2,120</b>	<b>7.1%</b>	<b>27,930</b>

HDPE = High density polyethylene

PET = Polyethylene terephthalate

PS = Polystyrene

LDPE = Low density polyethylene

PP = Polypropylene

PVC = Polyvinyl chloride

LLDPE = Linear low density polyethylene

NA = Not Available

‡ Other plastic packaging includes coatings, closures, lids, caps, clamshells, egg cartons, produce baskets, trays, shapes, loose fill, etc

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

Source: Franklin Associates, A Division of ERG

Table 8

**RUBBER AND LEATHER PRODUCTS IN MSW, 2008**  
(In thousands of tons and percent of generation)

Product Category	Generation	Recovery		Discards
	(Thousand tons)	(Thousand tons)	(Percent of generation)	(Thousand tons)
<b>Durable Goods</b>				
Rubber in Tires*	3,000	1,060	35.3%	1,940
Other Durables**	<u>3,340</u>	<u>Neg.</u>	<u>Neg.</u>	<u>3,340</u>
<i><b>Total Rubber &amp; Leather</b></i>				
<i><b>Durable Goods</b></i>	6,340	1,060	16.7%	5,280
<b>Nondurable Goods</b>				
Clothing and Footwear	760	Neg.	Neg.	760
Other Nondurables	<u>280</u>	<u>Neg.</u>	<u>Neg.</u>	<u>280</u>
<i><b>Total Rubber &amp; Leather</b></i>				
<i><b>Nondurable Goods</b></i>	1,040	Neg.	Neg.	1,040
<b>Containers and Packaging</b>	30	Neg.	Neg.	30
<i><b>Total Rubber &amp; Leather</b></i>	<u>7,410</u>	<u>1,060</u>	<u>14.3%</u>	<u>6,350</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 2008**  
(In thousands of tons and percent of total generation)

	Thousands of Tons								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b> <i>(Detail in Table 12)</i>	9,920	14,660	21,800	29,810	38,850	41,980	44,400	45,550	45,670
<b>Nondurable Goods</b> <i>(Detail in Table 15)</i>	17,330	25,060	34,420	52,170	64,010	62,280	63,650	61,760	58,710
<b>Containers and Packaging</b> <i>(Detail in Table 18)</i>	27,370	43,560	52,670	64,530	75,350	74,370	75,620	79,250	76,760
<b>Total Product** Wastes</b>	54,620	83,280	108,890	146,510	178,210	178,630	183,670	186,560	181,140
<b>Other Wastes</b>									
Food Scraps	12,200	12,800	13,000	20,800	26,810	28,510	30,220	31,650	31,790
Yard Trimmings	20,000	23,200	27,500	35,000	30,530	31,470	32,070	32,630	32,900
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,620	3,690	3,750	3,780
<b>Total Other Wastes</b>	33,500	37,780	42,750	58,700	60,840	63,600	65,980	68,030	68,470
<b>Total MSW Generated - Weight</b>	88,120	121,060	151,640	205,210	239,050	242,230	249,650	254,590	249,610
	Percent of Total Generation								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b> <i>(Detail in Table 12)</i>	11.3%	12.1%	14.4%	14.5%	16.3%	17.3%	17.8%	17.9%	18.3%
<b>Nondurable Goods</b> <i>(Detail in Table 15)</i>	19.7%	20.7%	22.7%	25.4%	26.8%	25.7%	25.5%	24.3%	23.5%
<b>Containers and Packaging</b> <i>(Detail in Table 19)</i>	31.1%	36.0%	34.7%	31.4%	31.5%	30.7%	30.3%	31.1%	30.8%
<b>Total Product** Wastes</b>	62.0%	68.8%	71.8%	71.4%	74.5%	73.7%	73.6%	73.3%	72.6%
<b>Other Wastes</b>									
Food Scraps	13.8%	10.6%	8.6%	10.1%	11.2%	11.8%	12.1%	12.4%	12.7%
Yard Trimmings	22.7%	19.2%	18.1%	17.1%	12.8%	13.0%	12.8%	12.8%	13.2%
Miscellaneous Inorganic Wastes	1.5%	1.5%	1.5%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%
<b>Total Other Wastes</b>	38.0%	31.2%	28.2%	28.6%	25.5%	26.3%	26.4%	26.7%	27.4%
<b>Total MSW Generated - %</b>	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 2008**  
(In thousands of tons and percent of generation of each category)

	Thousands of Tons								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b> (Detail in Table 13)	350	940	1,360	3,460	6,580	7,440	7,880	8,090	7,930
<b>Nondurable Goods</b> (Detail in Table 16)	2,390	3,730	4,670	8,800	17,560	18,920	19,770	20,970	19,310
<b>Containers and Packaging</b> (Detail in Table 20)	2,870	3,350	8,490	16,780	28,740	29,300	30,980	33,420	33,530
<b>Total Product** Wastes</b>	5,610	8,020	14,520	29,040	52,880	55,660	58,630	62,480	60,770
<b>Other Wastes</b>									
Food, Other^	Neg.	Neg.	Neg.	Neg.	680	750	690	810	800
Yard Trimmings	Neg.	Neg.	Neg.	4,200	15,770	18,330	19,860	20,900	21,300
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b>Total Other Wastes</b>	Neg.	Neg.	Neg.	4,200	16,450	19,080	20,550	21,710	22,100
<b>Total MSW Recovered - Weight</b>	5,610	8,020	14,520	33,240	69,330	74,740	79,180	84,190	82,870
	Percent of Generation of Each Category								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b> (Detail in Table 13)	3.5%	6.4%	6.2%	11.6%	16.9%	17.7%	17.7%	17.8%	17.4%
<b>Nondurable Goods</b> (Detail in Table 16)	13.8%	14.9%	13.6%	16.9%	27.4%	30.4%	31.1%	34.0%	32.9%
<b>Containers and Packaging</b> (Detail in Table 21)	10.5%	7.7%	16.1%	26.0%	38.1%	39.4%	41.0%	42.2%	43.7%
<b>Total Product** Wastes</b>	10.3%	9.6%	13.3%	19.8%	29.7%	31.2%	31.9%	33.5%	33.5%
<b>Other Wastes</b>									
Food, Other^	Neg.	Neg.	Neg.	Neg.	2.5%	2.6%	2.3%	2.6%	2.5%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	51.7%	58.2%	61.9%	64.1%	64.7%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b>Total Other Wastes</b>	Neg.	Neg.	Neg.	7.2%	27.0%	30.0%	31.1%	31.9%	32.3%
<b>Total MSW Recovered - %</b>	6.4%	6.6%	9.6%	16.2%	29.0%	30.9%	31.7%	33.1%	33.2%

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

\*\* Other than food products.

^ Includes recovery of paper and mixed MSW for composting.

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 11

**CATEGORIES OF PRODUCTS DISCARDED\* IN THE MUNICIPAL WASTE STREAM, 1960 TO 2008**  
(In thousands of tons and percent of total discards)

	Thousands of Tons								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b> <i>(Detail in Table 14)</i>	9,570	13,720	20,440	26,350	32,270	34,540	36,520	37,460	37,740
<b>Nondurable Goods</b> <i>(Detail in Table 17)</i>	14,940	21,330	29,750	43,370	46,450	43,360	43,880	40,790	39,400
<b>Containers and Packaging</b> <i>(Detail in Table 22)</i>	24,500	40,210	44,180	47,750	46,610	45,070	44,640	45,830	43,230
<b>Total Product** Wastes</b>	49,010	75,260	94,370	117,470	125,330	122,970	125,040	124,080	120,370
<b>Other Wastes</b>									
Food Wastes	12,200	12,800	13,000	20,800	26,130	27,760	29,530	30,840	30,990
Yard Trimmings	20,000	23,200	27,500	30,800	14,760	13,140	12,210	11,730	11,600
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,620	3,690	3,750	3,780
<b>Total Other Wastes</b>	33,500	37,780	42,750	54,500	44,390	44,520	45,430	46,320	46,370
<b>Total MSW Discarded - Weight</b>	82,510	113,040	137,120	171,970	169,720	167,490	170,470	170,400	166,740
	Percent of Total Discards								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b> <i>(Detail in Table 14)</i>	11.6%	12.1%	14.9%	15.3%	19.0%	20.6%	21.4%	22.0%	22.6%
<b>Nondurable Goods</b> <i>(Detail in Table 17)</i>	18.1%	18.9%	21.7%	25.2%	27.4%	25.9%	25.7%	23.9%	23.6%
<b>Containers and Packaging</b> <i>(Detail in Table 23)</i>	29.7%	35.6%	32.2%	27.8%	27.5%	26.9%	26.2%	26.9%	25.9%
<b>Total Product** Wastes</b>	59.4%	66.6%	68.8%	68.3%	73.8%	73.4%	73.4%	72.8%	72.2%
<b>Other Wastes</b>									
Food Scraps	14.8%	11.3%	9.5%	12.1%	15.4%	16.6%	17.3%	18.1%	18.6%
Yard Trimmings	24.2%	20.5%	20.1%	17.9%	8.7%	7.8%	7.2%	6.9%	7.0%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	2.1%	2.2%	2.2%	2.2%	2.3%
<b>Total Other Wastes</b>	40.6%	33.4%	31.2%	31.7%	26.2%	26.6%	26.6%	27.2%	27.8%
<b>Total MSW Discarded - %</b>	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 2008**  
**(WITH DETAIL ON DURABLE GOODS)**  
(In thousands of tons and percent of total generation)

	Thousands of Tons								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b>									
Major Appliances	1,630	2,170	2,950	3,310	3,640	3,480	3,610	3,620	3,690
Small Appliances**				460	1,040	1,040	1,180	1,390	1,530
Furniture and Furnishings	2,150	2,830	4,760	6,790	7,990	8,420	8,870	9,340	9,610
Carpets and Rugs**				1,660	2,570	2,860	2,980	3,140	3,220
Rubber Tires	1,120	1,890	2,720	3,610	4,930	4,760	4,960	5,000	4,690
Batteries, Lead-Acid	Neg.	820	1,490	1,510	2,280	2,290	2,490	2,580	2,530
Miscellaneous Durables									
Selected Consumer Electronics***					1,900	2,250	2,630	3,010	3,160
Other Miscellaneous Durables					14,500	16,880	17,680	17,470	17,240
<i>Total Miscellaneous Durables</i>	5,020	6,950	9,880	12,470	16,400	19,130	20,310	20,480	20,400
<b>Total Durable Goods</b>	9,920	14,660	21,800	29,810	38,850	41,980	44,400	45,550	45,670
<b>Nondurable Goods</b> <i>(Detail in Table 15)</i>	17,330	25,060	34,420	52,170	64,010	62,280	63,650	61,760	58,710
<b>Containers and Packaging</b> <i>(Detail in Table 18)</i>	27,370	43,560	52,670	64,530	75,350	74,370	75,620	79,250	76,760
<b>Total Product Wastes†</b>	54,620	83,280	108,890	146,510	178,210	178,630	183,670	186,560	181,140
<b>Other Wastes</b>									
Food Scraps	12,200	12,800	13,000	20,800	26,810	28,510	30,220	31,650	31,790
Yard Trimmings	20,000	23,200	27,500	35,000	30,530	31,470	32,070	32,630	32,900
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,620	3,690	3,750	3,780
<b>Total Other Wastes</b>	33,500	37,780	42,750	58,700	60,840	63,600	65,980	68,030	68,470
<b>Total MSW Generated - Weight</b>	88,120	121,060	151,640	205,210	239,050	242,230	249,650	254,590	249,610
	Percent of Total Generation								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b>									
Major Appliances	1.8%	1.8%	1.9%	1.6%	1.5%	1.4%	1.4%	1.4%	1.5%
Small Appliances**				0.2%	0.4%	0.4%	0.5%	0.5%	0.6%
Furniture and Furnishings	2.4%	2.3%	3.1%	3.3%	3.3%	3.5%	3.6%	3.7%	3.9%
Carpets and Rugs**				0.8%	1.1%	1.2%	1.2%	1.2%	1.3%
Rubber Tires	1.3%	1.6%	1.8%	1.8%	2.1%	2.0%	2.0%	2.0%	1.9%
Batteries, Lead-Acid	Neg.	0.7%	1.0%	0.7%	1.0%	0.9%	1.0%	1.0%	1.0%
Miscellaneous Durables									
Selected Consumer Electronics***					0.8%	0.9%	1.1%	1.2%	1.3%
Other Miscellaneous Durables					6.1%	7.0%	7.1%	6.9%	6.9%
<i>Total Miscellaneous Durables</i>	5.7%	5.7%	6.5%	6.1%	6.9%	7.9%	8.1%	8.0%	8.2%
<b>Total Durable Goods</b>	11.3%	12.1%	14.4%	14.5%	16.3%	17.3%	17.8%	17.9%	18.3%
<b>Nondurable Goods</b> <i>(Detail in Table 15)</i>	19.7%	20.7%	22.7%	25.4%	26.8%	25.7%	25.5%	24.3%	23.5%
<b>Containers and Packaging</b> <i>(Detail in Table 19)</i>	31.1%	36.0%	34.7%	31.4%	31.5%	30.7%	30.3%	31.1%	30.8%
<b>Total Product Wastes†</b>	62.0%	68.8%	71.8%	71.4%	74.5%	73.7%	73.6%	73.3%	72.6%
<b>Other Wastes</b>									
Food Scraps	13.8%	10.6%	8.6%	10.1%	11.2%	11.8%	12.1%	12.4%	12.7%
Yard Trimmings	22.7%	19.2%	18.1%	17.1%	12.8%	13.0%	12.8%	12.8%	13.2%
Miscellaneous Inorganic Wastes	1.5%	1.5%	1.5%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%
<b>Total Other Wastes</b>	38.0%	31.2%	28.2%	28.6%	25.5%	26.3%	26.4%	26.7%	27.4%
<b>Total MSW Generated - %</b>	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 2008**  
**(WITH DETAIL ON DURABLE GOODS)**  
(In thousands of tons and percent of generation of each product)

	Thousands of Tons								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b>									
Major Appliances	10	50	130	1,070	2,000	2,320	2,420	2,430	2,470
Small Appliances**				10	20	20	20	20	110
Furniture and Furnishings	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	10
Carpets and Rugs**				Neg.	190	190	250	280	260
Rubber Tires	330	250	150	440	1,290	1,700	1,720	1,770	1,660
Batteries, Lead-Acid	Neg.	620	1,040	1,470	2,130	2,140	2,470	2,560	2,510
Miscellaneous Durables									
Selected Consumer Electronics***					190	320	360	410	430
Other Miscellaneous Durables					760	750	640	620	480
<i>Total Miscellaneous Durables</i>	10	20	40	470	950	1,070	1,000	1,030	910
<b>Total Durable Goods</b>	350	940	1,360	3,460	6,580	7,440	7,880	8,090	7,930
<b>Nondurable Goods</b> (Detail in Table 16)	2,390	3,730	4,670	8,800	17,560	18,920	19,770	20,970	19,310
<b>Containers and Packaging</b> (Detail in Table 20)	2,870	3,350	8,490	16,780	28,740	29,300	30,980	33,420	33,530
<b>Total Product Wastes†</b>	5,610	8,020	14,520	29,040	52,880	55,660	58,630	62,480	60,770
<b>Other Wastes</b>									
Food Scraps	Neg.	Neg.	Neg.	Neg.	680	750	690	810	800
Yard Trimmings	Neg.	Neg.	Neg.	4,200	15,770	18,330	19,860	20,900	21,300
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b>Total Other Wastes</b>	Neg.	Neg.	Neg.	4,200	16,450	19,080	20,550	21,710	22,100
<b>Total MSW Recovered - Weight</b>	5,610	8,020	14,520	33,240	69,330	74,740	79,180	84,190	82,870
	Percent of Generation of Each Product								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b>									
Major Appliances	0.6%	2.3%	4.4%	32.3%	54.9%	66.7%	67.0%	67.1%	66.9%
Small Appliances**				2.2%	1.9%	1.9%	1.7%	1.4%	7.2%
Furniture and Furnishings	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	0.1%
Carpets and Rugs**				Neg.	7.4%	6.6%	8.4%	8.9%	8.1%
Rubber Tires	29.5%	13.2%	5.5%	12.2%	26.2%	35.7%	34.7%	35.4%	35.4%
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%	14.2%	13.7%	13.6%	13.6%
Other Miscellaneous Durables					5.2%	4.4%	3.6%	3.5%	2.8%
<i>Total Miscellaneous Durables</i>	0.2%	0.3%	0.4%	3.8%	5.8%	5.6%	4.9%	5.0%	4.5%
<b>Total Durable Goods</b>	3.5%	6.4%	6.2%	11.6%	16.9%	17.7%	17.7%	17.8%	17.4%
<b>Nondurable Goods</b> (Detail in Table 16)	13.8%	14.9%	13.6%	16.9%	27.4%	30.4%	31.1%	34.0%	32.9%
<b>Containers and Packaging</b> (Detail in Table 21)	10.5%	7.7%	16.1%	26.0%	38.1%	39.4%	41.0%	42.2%	43.7%
<b>Total Product Wastes†</b>	10.3%	9.6%	13.3%	19.8%	29.7%	31.2%	31.9%	33.5%	33.5%
<b>Other Wastes</b>									
Food Scraps	Neg.	Neg.	Neg.	Neg.	2.5%	2.6%	2.3%	2.6%	2.5%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	51.7%	58.2%	61.9%	64.1%	64.7%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b>Total Other Wastes</b>	Neg.	Neg.	Neg.	7.2%	27.0%	30.0%	31.1%	31.9%	32.3%
<b>Total MSW Recovered - %</b>	6.4%	6.6%	9.6%	16.2%	29.0%	30.9%	31.7%	33.1%	33.2%

\* 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 2008**  
**(WITH DETAIL ON DURABLE GOODS)**  
(In thousands of tons and percent of total discards)

	Thousands of Tons								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b>									
Major Appliances	1,620	2,120	2,820	2,240	1,640	1,160	1,190	1,190	1,220
Small Appliances**				450	1,020	1,020	1,160	1,370	1,420
Furniture and Furnishings	2,150	2,830	4,760	6,790	7,990	8,420	8,870	9,340	9,600
Carpets and Rugs**				1,660	2,380	2,670	2,730	2,860	2,960
Rubber Tires	790	1,640	2,570	3,170	3,640	3,060	3,240	3,230	3,030
Batteries, Lead-Acid	Neg.	200	450	40	150	150	20	20	20
Miscellaneous Durables									
Selected Consumer Electronics***					1,710	1,930	2,270	2,600	2,730
Other Miscellaneous Durables					13,740	16,130	17,040	16,850	16,760
<i>Total Miscellaneous Durables</i>	5,010	6,930	9,840	12,000	15,450	18,060	19,310	19,450	19,490
<b>Total Durable Goods</b>	9,570	13,720	20,440	26,350	32,270	34,540	36,520	37,460	37,740
<b>Nondurable Goods</b> (Detail in Table 17)	14,940	21,330	29,750	43,370	46,450	43,360	43,880	40,790	39,400
<b>Containers and Packaging</b> (Detail in Table 22)	24,500	40,210	44,180	47,750	46,610	45,070	44,640	45,830	43,230
<b>Total Product Wastes†</b>	49,010	75,260	94,370	117,470	125,330	122,970	125,040	124,080	120,370
<b>Other Wastes</b>									
Food Scraps	12,200	12,800	13,000	20,800	26,130	27,760	29,530	30,840	30,990
Yard Trimmings	20,000	23,200	27,500	30,800	14,760	13,140	12,210	11,730	11,600
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,620	3,690	3,750	3,780
<b>Total Other Wastes</b>	33,500	37,780	42,750	54,500	44,390	44,520	45,430	46,320	46,370
<b>Total MSW Discarded - Weight</b>	82,510	113,040	137,120	171,970	169,720	167,490	170,470	170,400	166,740
	Percent of Total Discards								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b>									
Major Appliances	2.0%	1.9%	2.1%	1.3%	1.0%	0.7%	0.7%	0.7%	0.7%
Small Appliances**				0.3%	0.6%	0.6%	0.7%	0.8%	0.9%
Furniture and Furnishings	2.6%	2.5%	3.5%	3.9%	4.7%	5.0%	5.2%	5.5%	5.8%
Carpets and Rugs**				1.0%	1.4%	1.6%	1.6%	1.7%	1.8%
Rubber Tires	1.0%	1.5%	1.9%	1.8%	2.1%	1.8%	1.9%	1.9%	1.8%
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%	1.2%	1.3%	1.5%	1.6%
Other Miscellaneous Durables					8.1%	9.5%	10.0%	9.9%	10.1%
<i>Total Miscellaneous Durables</i>	6.1%	6.1%	7.2%	7.0%	9.1%	10.8%	11.3%	11.4%	11.7%
<b>Total Durable Goods</b>	11.6%	12.1%	14.9%	15.3%	19.0%	20.6%	21.4%	22.0%	22.6%
<b>Nondurable Goods</b> (Detail in Table 17)	18.1%	18.9%	21.7%	25.2%	27.4%	25.9%	25.7%	23.9%	23.6%
<b>Containers and Packaging</b> (Detail in Table 23)	29.7%	35.6%	32.2%	27.8%	27.5%	26.9%	26.2%	26.9%	25.9%
<b>Total Product Wastes†</b>	59.4%	66.6%	68.8%	68.3%	73.8%	73.4%	73.4%	72.8%	72.2%
<b>Other Wastes</b>									
Food Scraps	14.8%	11.3%	9.5%	12.1%	15.4%	16.6%	17.3%	18.1%	18.6%
Yard Trimmings	24.2%	20.5%	20.1%	17.9%	8.7%	7.8%	7.2%	6.9%	7.0%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	2.1%	2.2%	2.2%	2.2%	2.3%
<b>Total Other Wastes</b>	40.6%	33.4%	31.2%	31.7%	26.2%	26.6%	26.6%	27.2%	27.8%
<b>Total MSW Discarded - %</b>	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 2008**  
**(WITH DETAIL ON NONDURABLE GOODS)**  
**(In thousands of tons and percent of total generation)**

	Thousands of Tons								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b> (Detail in Table 12)	9,920	14,660	21,800	29,810	38,850	41,980	44,400	45,550	45,670
<b>Nondurable Goods</b>									
Newspapers	7,110	9,510	11,050	13,430	14,790	13,570	12,790	10,780	8,800
Books and Magazines	1,920	2,470	3,390						
Books**				970	1,240	1,030	1,100	1,270	1,340
Magazines**				2,830	2,230	2,270	2,580	2,550	2,050
Office-Type Papers	1,520	2,650	4,000	6,410	7,420	7,130	6,620	6,060	6,050
Directories**				610	680	640	660	760	840
Standard Mail***				3,820	5,570	5,410	5,830	5,910	5,510
Other Commercial Printing	1,260	2,130	3,120	4,460	7,380	6,060	6,440	6,200	5,130
Tissue Paper and Towels	1,090	2,080	2,300	2,960	3,220	3,250	3,460	3,500	3,460
Paper Plates and Cups	270	420	630	650	960	970	1,160	1,230	1,250
Plastic Plates and Cups†			190	650	870	730	930	860	780
Trash Bags**				780	850	1,020	1,060	1,070	930
Disposable Diapers	Neg.	350	1,930	2,700	3,230	3,330	3,410	3,730	3,790
Other Nonpackaging Paper	2,700	3,630	4,230	3,840	4,250	4,180	4,490	4,260	4,630
Clothing and Footwear	1,360	1,620	2,170	4,010	6,470	7,370	7,890	8,320	8,820
Towels, Sheets and Pillowcases**				710	820	940	980	1,100	1,160
Other Miscellaneous Nondurables	100	200	1,410	3,340	4,030	4,380	4,250	4,160	4,170
<b>Total Nondurable Goods</b>	17,330	25,060	34,420	52,170	64,010	62,280	63,650	61,760	58,710
<b>Containers and Packaging</b> (Detail in Table 18)	27,370	43,560	52,670	64,530	75,350	74,370	75,620	79,250	76,760
<b>Total Product Wastes‡</b>	54,620	83,280	108,890	146,510	178,210	178,630	183,670	186,560	181,140
<b>Other Wastes</b>	33,500	37,780	42,750	58,700	60,840	63,600	65,980	68,030	68,470
<b>Total MSW Generated - Weight</b>	88,120	121,060	151,640	205,210	239,050	242,230	249,650	254,590	249,610
	Percent of Total Generation								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b> (Detail in Table 12)	11.3%	12.1%	14.4%	14.5%	16.3%	17.3%	17.8%	17.9%	18.3%
<b>Nondurable Goods</b>									
Newspapers	8.1%	7.9%	7.3%	6.5%	6.2%	5.6%	5.1%	4.2%	3.5%
Books and Magazines	2.2%	2.0%	2.2%						
Books**				0.5%	0.5%	0.4%	0.4%	0.5%	0.5%
Magazines**				1.4%	0.9%	0.9%	1.0%	1.0%	0.8%
Office-Type Papers***	1.7%	2.2%	2.6%	3.1%	3.1%	2.9%	2.7%	2.4%	2.4%
Directories**				0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Standard Mail§				1.9%	2.3%	2.2%	2.3%	2.3%	2.2%
Other Commercial Printing	1.4%	1.8%	2.1%	2.2%	3.1%	2.5%	2.6%	2.4%	2.1%
Tissue Paper and Towels	1.2%	1.7%	1.5%	1.4%	1.3%	1.3%	1.4%	1.4%	1.4%
Paper Plates and Cups	0.3%	0.3%	0.4%	0.3%	0.4%	0.4%	0.5%	0.5%	0.5%
Plastic Plates and Cups†			0.1%	0.3%	0.4%	0.3%	0.4%	0.3%	0.3%
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%	1.5%
Other Nonpackaging Paper	3.1%	3.0%	2.8%	1.9%	1.8%	1.7%	1.8%	1.7%	1.9%
Clothing and Footwear	1.5%	1.3%	1.4%	2.0%	2.7%	3.0%	3.2%	3.3%	3.5%
Towels, Sheets and Pillowcases**				0.3%	0.3%	0.4%	0.4%	0.4%	0.5%
Other Miscellaneous Nondurables	0.1%	0.2%	0.9%	1.6%	1.7%	1.8%	1.7%	1.6%	1.7%
<b>Total Nondurables</b>	19.7%	20.7%	22.7%	25.4%	26.8%	25.7%	25.5%	24.3%	23.5%
<b>Containers and Packaging</b> (Detail in Table 19)	31.1%	36.0%	34.7%	31.4%	31.5%	30.7%	30.3%	31.1%	30.8%
<b>Total Product Wastes‡</b>	62.0%	68.8%	71.8%	71.4%	74.5%	73.7%	73.6%	73.3%	72.6%
<b>Other Wastes</b>	38.0%	31.2%	28.2%	28.6%	25.5%	26.3%	26.4%	26.7%	27.4%
<b>Total MSW Generated - %</b>	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 2008**  
**(WITH DETAIL ON NONDURABLE GOODS)**  
(In thousands of tons and percent of generation of each product)

	Thousands of Tons								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b> (Detail in Table 13)	350	940	1,360	3,460	6,580	7,440	7,880	8,090	7,930
<b>Nondurable Goods</b>									
Newspapers	1,820	2,250	3,020	5,110	8,720	10,380	9,360	8,550	7,740
Books and Magazines	100	260	280						
Books**				100	240	190	270	360	390
Magazines**				300	710	750	960	1,010	820
Office-Type Papers	250	710	870	1,700	4,090	3,990	4,110	4,300	4,290
Directories**				50	120	100	120	140	180
Standard Mail***				200	1,830	1,750	2,090	2,380	2,240
Other Commercial Printing	130	340	350	700	810	560	1,440	2,790	2,200
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 Cups†			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	1,040	1,250	1,250	1,250
Towels, Sheets and Pillowcases**				120	140	160	170	190	200
Other Miscellaneous Nondurables	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b>Total Nondurable Goods</b>	2,390	3,730	4,670	8,800	17,560	18,920	19,770	20,970	19,310
<b>Containers and Packaging</b> (Detail in Table 20)	2,870	3,350	8,490	16,780	28,740	29,300	30,980	33,420	33,530
<b>Total Product Wastes‡</b>	5,610	8,020	14,520	29,040	52,880	55,660	58,630	62,480	60,770
<b>Other Wastes</b>	Neg.	Neg.	Neg.	4,200	16,450	19,080	20,550	21,710	22,100
<b>Total MSW Recovered - Weight</b>	5,610	8,020	14,520	33,240	69,330	74,740	79,180	84,190	82,870
	Percent of Generation of Each Product								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2007
<b>Durable Goods</b> (Detail in Table 13)	3.5%	6.4%	6.2%	11.6%	16.9%	17.7%	17.7%	17.8%	17.4%
<b>Nondurable Goods</b>									
Newspapers	25.6%	23.7%	27.3%	38.0%	59.0%	76.5%	73.2%	79.3%	88.0%
Books and Magazines	5.2%	10.5%	8.3%						
Books**				10.3%	19.4%	18.4%	24.5%	28.3%	29.1%
Magazines**				10.6%	31.8%	33.0%	37.2%	39.6%	40.0%
Office-Type Papers***	16.4%	26.8%	21.8%	26.5%	55.1%	56.0%	62.1%	71.0%	70.9%
Directories**				8.2%	17.6%	15.6%	18.2%	18.4%	21.4%
Standard Mail§				5.2%	32.9%	32.3%	35.8%	40.3%	40.7%
Other Commercial Printing	10.3%	16.0%	11.2%	15.7%	11.0%	9.2%	22.4%	45.0%	42.9%
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 Cups†			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%	14.1%	15.8%	15.0%	14.2%
Towels, Sheets and Pillowcases**				16.9%	17.1%	17.0%	17.3%	17.3%	17.2%
Other Miscellaneous Nondurables	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b>Total Nondurables</b>	13.8%	14.9%	13.6%	16.9%	27.4%	30.4%	31.1%	34.0%	32.9%
<b>Containers and Packaging</b> (Detail in Table 21)	10.5%	7.7%	16.1%	26.0%	38.1%	39.4%	41.0%	42.2%	43.7%
<b>Total Product Wastes‡</b>	10.3%	9.6%	13.3%	19.8%	29.7%	31.2%	31.9%	33.5%	33.5%
<b>Other Wastes</b>	Neg.	Neg.	Neg.	7.2%	27.0%	30.0%	31.1%	31.9%	32.3%
<b>Total MSW Recovered - %</b>	6.4%	6.6%	9.6%	16.2%	29.0%	30.9%	31.7%	33.1%	33.2%

\* 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 2008**  
**(WITH DETAIL ON NONDURABLE GOODS)**  
**(In thousands of tons and percent of total discards)**

	Thousands of Tons								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b> (Detail in Table 14)	9,570	13,720	20,440	26,350	32,270	34,540	36,520	37,460	37,740
<b>Nondurable Goods</b>									
Newspapers	5,290	7,260	8,030	8,320	6,070	3,190	3,430	2,230	1,060
Books and Magazines	1,820	2,210	3,110						
Books**				870	1,000	840	830	910	950
Magazines**				2,530	1,520	1,520	1,620	1,540	1,230
Office-Type Papers	1,270	1,940	3,130	4,710	3,330	3,140	2,510	1,760	1,760
Directories**				560	560	540	540	620	660
Standard Mail***				3,620	3,740	3,660	3,740	3,530	3,270
Other Commercial Printing	1,130	1,790	2,770	3,760	6,570	5,500	5,000	3,410	2,930
Tissue Paper and Towels	1,090	2,080	2,300	2,960	3,220	3,250	3,460	3,500	3,460
Paper Plates and Cups	270	420	630	650	960	970	1,160	1,230	1,250
Plastic Plates and Cups†			190	650	870	730	930	860	780
Trash Bags**				780	850	1,020	1,060	1,070	930
Disposable Diapers	Neg.	350	1,930	2,700	3,230	3,330	3,410	3,730	3,790
Other Nonpackaging Paper	2,660	3,520	4,230	3,840	4,250	4,180	4,490	4,260	4,630
Clothing and Footwear	1,310	1,560	2,020	3,490	5,570	6,330	6,640	7,070	7,570
Towels, Sheets and Pillowcases**				590	680	780	810	910	960
Other Miscellaneous Nondurables	100	200	1,410	3,340	4,030	4,380	4,250	4,160	4,170
<b>Total Nondurable Goods</b>	14,940	21,330	29,750	43,370	46,450	43,360	43,880	40,790	39,400
<b>Containers and Packaging</b> (Detail in Table 22)	24,500	40,210	44,180	47,750	46,610	45,070	44,640	45,830	43,230
<b>Total Product Wastes‡</b>	49,010	75,260	94,370	117,470	125,330	122,970	125,040	124,080	120,370
<b>Other Wastes</b>	33,500	37,780	42,750	54,500	44,390	44,520	45,430	46,320	46,370
<b>Total MSW Discarded - Weight</b>	82,510	113,040	137,120	171,970	169,720	167,490	170,470	170,400	166,740
	Percent of Total Discards								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2007
<b>Durable Goods</b> (Detail in Table 14)	11.6%	12.1%	14.9%	15.3%	19.0%	20.6%	21.4%	22.0%	22.6%
<b>Nondurable Goods</b>									
Newspapers	6.4%	6.4%	5.9%	4.8%	3.6%	1.9%	2.0%	1.3%	0.6%
Books and Magazines	2.2%	2.0%	2.3%						
Books**				0.5%	0.6%	0.5%	0.5%	0.5%	0.6%
Magazines**				1.5%	0.9%	0.9%	1.0%	0.9%	0.7%
Office-Type Papers***	1.5%	1.7%	2.3%	2.7%	2.0%	1.9%	1.5%	1.0%	1.1%
Directories**				0.3%	0.3%	0.3%	0.3%	0.4%	0.4%
Standard Mail§				2.1%	2.2%	2.2%	2.2%	2.1%	2.0%
Other Commercial Printing	1.4%	1.6%	2.0%	2.2%	3.9%	3.3%	2.9%	2.0%	1.8%
Tissue Paper and Towels	1.3%	1.8%	1.7%	1.7%	1.9%	1.9%	2.0%	2.1%	2.1%
Paper Plates and Cups	0.3%	0.4%	0.5%	0.4%	0.6%	0.6%	0.7%	0.7%	0.7%
Plastic Plates and Cups†			0.1%	0.4%	0.5%	0.4%	0.5%	0.5%	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%	1.9%	2.0%	2.0%	2.2%	2.3%
Other Nonpackaging Paper	3.2%	3.1%	3.1%	2.2%	2.5%	2.5%	2.6%	2.5%	2.8%
Clothing and Footwear	1.6%	1.4%	1.5%	2.0%	3.3%	3.8%	3.9%	4.1%	4.5%
Towels, Sheets and Pillowcases**				0.3%	0.4%	0.5%	0.5%	0.5%	0.6%
Other Miscellaneous Nondurables	0.1%	0.2%	1.7%	1.9%	2.4%	2.6%	2.5%	2.4%	2.5%
<b>Total Nondurables</b>	18.1%	18.9%	21.7%	25.2%	27.4%	25.9%	25.7%	23.9%	23.6%
<b>Containers and Packaging</b> (Detail in Table 23)	29.7%	35.6%	32.2%	27.8%	27.5%	26.9%	26.2%	26.9%	25.9%
<b>Total Product Wastes‡</b>	59.4%	66.6%	68.8%	68.3%	73.8%	73.4%	73.4%	72.8%	72.2%
<b>Other Wastes</b>	40.6%	33.4%	31.2%	31.7%	26.2%	26.6%	26.6%	27.2%	27.8%
<b>Total MSW Discarded - %</b>	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 2008**  
**(WITH DETAIL ON CONTAINERS AND PACKAGING)**  
**(In thousands of tons)**

	Thousands of Tons								
<b>Products</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2008</b>
<b>Durable Goods</b> <i>(Detail in Table 12)</i>	9,920	14,660	21,800	29,810	38,850	41,980	44,400	45,550	45,670
<b>Nondurable Goods</b> <i>(Detail in Table 15)</i>	17,330	25,060	34,420	52,170	64,010	62,280	63,650	61,760	58,710
<b>Containers and Packaging</b>									
<b>Glass Packaging</b>									
Beer and Soft Drink Bottles	1,400	5,580	6,740	5,640	5,710	6,840	6,540	6,760	6,350
Wine and Liquor Bottles	1,080	1,900	2,450	2,030	1,910	1,580	1,630	1,620	1,610
Food and Other Bottles & Jars	3,710	4,440	4,780	4,160	3,420	2,150	2,290	2,030	2,090
<b>Total Glass Packaging</b>	6,190	11,920	13,970	11,830	11,040	10,570	10,460	10,410	10,050
<b>Steel Packaging</b>									
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	2,600	2,130	2,430	2,310
Other Steel Packaging	260	270	240	200	240	240	240	240	240
<b>Total Steel Packaging</b>	4,660	5,380	3,610	2,890	2,870	2,840	2,370	2,670	2,550
<b>Aluminum Packaging</b>									
Beer and Soft Drink Cans	Neg.	100	850	1,550	1,520	1,480	1,450	1,420	1,390
Other Cans	Neg.	60	40	20	50	50	80	30	70
Foil and Closures	170	410	380	330	380	380	400	430	420
<b>Total Aluminum Packaging</b>	170	570	1,270	1,900	1,950	1,910	1,930	1,880	1,880
<b>Paper &amp; Paperboard Pkg</b>									
Corrugated Boxes	7,330	12,760	17,080	24,010	30,210	29,710	30,930	31,230	29,710
Milk Cartons			790	510	550	450	500	500	490
Folding Cartons			3,820	4,300	5,820	5,560	5,530	5,530	5,340
Other Paperboard Packaging	3,840	4,830	230	290	200	180	160	150	120
Bags and Sacks			3,380	2,440	1,490	1,240	1,120	1,140	1,170
Wrapping Papers			200	110	Neg.	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	2,940	3,810	850	1,020	1,670	1,440	1,400	1,390	1,460
<b>Total Paper &amp; Board Pkg</b>	14,110	21,400	26,350	32,680	39,940	38,580	39,640	39,940	38,290
<b>Plastics Packaging</b>									
PET Bottles and Jars			260	430	1,720	2,150	2,540	2,840	2,680
HDPE Natural Bottles			230	530	690	720	800	820	750
Other Containers	60	910	890	1,430	1,740	1,700	1,420	1,910	1,900
Bags and Sacks			390	940	1,650	1,630	1,640	1,010	940
Wraps			840	1,530	2,550	2,750	2,810	3,180	3,020
<i>Subtotal Bags, Sacks, and Wraps</i>			1,230	2,470	4,200	4,380	4,450	4,190	3,960
Other Plastics Packaging	60	1,180	790	2,040	2,840	2,940	3,210	3,870	3,720
<b>Total Plastics Packaging</b>	120	2,090	3,400	6,900	11,190	11,890	12,420	13,630	13,010
Wood Packaging	2,000	2,070	3,940	8,180	8,120	8,330	8,520	10,400	10,670
Other Misc. Packaging	120	130	130	150	240	250	280	320	310
<b>Total Containers &amp; Pkg</b>	27,370	43,560	52,670	64,530	75,350	74,370	75,620	79,250	76,760
<b>Total Product Wastes†</b>	54,620	83,280	108,890	146,510	178,210	178,630	183,670	186,560	181,140
<b>Other Wastes</b>									
Food Scraps	12,200	12,800	13,000	20,800	26,810	28,510	30,220	31,650	31,790
Yard Trimmings	20,000	23,200	27,500	35,000	30,530	31,470	32,070	32,630	32,900
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,620	3,690	3,750	3,780
<b>Total Other Wastes</b>	33,500	37,780	42,750	58,700	60,840	63,600	65,980	68,030	68,470
<b>Total MSW Generated - Weight</b>	88,120	121,060	151,640	205,210	239,050	242,230	249,650	254,590	249,610

\* 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 2008**  
**(WITH DETAIL ON CONTAINERS AND PACKAGING)**  
**(In percent of total generation)**

	Percent of Total Generation								
<b>Products</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2003</b>	<b>2005</b>	<b>2007</b>	<b>2008</b>
<b>Durable Goods</b> <i>(Detail in Table 12)</i>	11.3%	12.1%	14.4%	14.5%	16.3%	17.3%	17.8%	17.9%	18.3%
<b>Nondurable Goods</b> <i>(Detail in Table 15)</i>	19.7%	20.7%	22.7%	25.4%	26.8%	25.7%	25.5%	24.3%	23.5%
<b>Containers and Packaging</b>									
<b>Glass Packaging</b>									
Beer and Soft Drink Bottles	1.6%	4.6%	4.4%	2.7%	2.4%	2.8%	2.6%	2.7%	2.5%
Wine and Liquor Bottles	1.2%	1.6%	1.6%	1.0%	0.8%	0.7%	0.7%	0.6%	0.6%
Food and Other Bottles & Jars	4.2%	3.7%	3.2%	2.0%	1.4%	0.9%	0.9%	0.8%	0.8%
<b>Total Glass Packaging</b>	7.0%	9.8%	9.2%	5.8%	4.6%	4.4%	4.2%	4.1%	4.0%
<b>Steel Packaging</b>									
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%	1.1%	0.9%	1.0%	0.9%
Other Steel Packaging	0.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
<b>Total Steel Packaging</b>	5.3%	4.4%	2.4%	1.4%	1.2%	1.2%	0.9%	1.0%	1.0%
<b>Aluminum Packaging</b>									
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.	0.01%	0.03%
Foil and Closures	0.2%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
<b>Total Aluminum Packaging</b>	0.2%	0.5%	0.8%	0.9%	0.8%	0.8%	0.8%	0.7%	0.8%
<b>Paper &amp; Paperboard Pkg</b>									
Corrugated Boxes	8.3%	10.5%	11.3%	11.7%	12.6%	12.3%	12.4%	12.3%	11.9%
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%	2.1%
Other Paperboard Packaging	4.4%	4.0%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%
Bags and Sacks			2.2%	1.2%	0.6%	0.5%	0.4%	0.4%	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%	0.6%	0.6%	0.5%	0.6%
<b>Total Paper &amp; Board Pkg</b>	16.0%	17.7%	17.4%	15.9%	16.7%	15.9%	15.9%	15.7%	15.3%
<b>Plastics Packaging</b>									
PET Bottles and Jars			0.2%	0.2%	0.7%	0.9%	1.0%	1.1%	1.1%
HDPE Natural 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%	0.7%	0.7%	0.6%	0.8%	0.8%
Bags and Sacks			0.3%	0.5%	0.7%	0.7%	0.7%	0.4%	0.4%
Wraps			0.6%	0.7%	1.1%	1.1%	1.1%	1.2%	1.2%
<i>Subtotal Bags, Sacks, and Wraps</i>			0.8%	1.2%	1.8%	1.8%	1.8%	1.6%	1.6%
Other Plastics Packaging	0.1%	1.0%	0.5%	1.0%	1.2%	1.2%	1.3%	1.5%	1.5%
<b>Total Plastics Packaging</b>	0.1%	1.7%	2.2%	3.4%	4.7%	4.9%	5.0%	5.4%	5.2%
Wood Packaging	2.3%	1.7%	2.6%	4.0%	3.4%	3.4%	3.4%	4.1%	4.3%
Other Misc. Packaging	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
<b>Total Containers &amp; Pkg</b>	31.1%	36.0%	34.7%	31.4%	31.5%	30.7%	30.3%	31.1%	30.8%
<b>Total Product Wastes†</b>	62.0%	68.8%	71.8%	71.4%	74.5%	73.7%	73.6%	73.3%	72.6%
<b>Other Wastes</b>									
Food Scraps	13.8%	10.6%	8.6%	10.1%	11.2%	11.8%	12.1%	12.4%	12.7%
Yard Trimmings	22.7%	19.2%	18.1%	17.1%	12.8%	13.0%	12.8%	12.8%	13.2%
Miscellaneous Inorganic Wastes	1.5%	1.5%	1.5%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%
<b>Total Other Wastes</b>	38.0%	31.2%	28.2%	28.6%	25.5%	26.3%	26.4%	26.7%	27.4%
<b>Total MSW Generated - %</b>	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 2008**  
**(WITH DETAIL ON CONTAINERS AND PACKAGING)**  
(In thousands of tons)

	Thousands of Tons								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b> <i>(Detail in Table 13)</i>	350	940	1,360	3,460	6,580	7,440	7,880	8,090	7,930
<b>Nondurable Goods</b> <i>(Detail in Table 16)</i>	2,390	3,730	4,670	8,800	17,560	18,920	19,770	20,970	19,310
<b>Containers and Packaging</b>									
<b>Glass Packaging</b>									
Beer and Soft Drink Bottles	90	140	730	1,890	1,530	2,090	2,000	2,340	2,260
Wine and Liquor Bottles	10	10	20	210	430	240	250	240	240
Food and Other Bottles & Jars	Neg.	Neg.	Neg.	520	920	320	340	300	310
<b>Total Glass Packaging</b>	100	150	750	2,620	2,880	2,650	2,590	2,880	2,810
<b>Steel Packaging</b>									
Beer and Soft Drink Cans	10	20	50	40	Neg.	Neg.	Neg.	Neg.	Neg.
Food and Other Cans	20	60	150	590	1,530	1,560	1,340	1,570	1,450
Other Steel Packaging	Neg.	Neg.	Neg.	60	160	160	160	160	160
<b>Total Steel Packaging</b>	30	80	200	690	1,690	1,720	1,500	1,730	1,610
<b>Aluminum Packaging</b>									
Beer and Soft Drink Cans	Neg.	10	320	990	830	650	650	690	670
Other Cans	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	10
Foil and Closures	Neg.	Neg.	Neg.	20	30	40	40	40	40
<b>Total Aluminum Pkg</b>	Neg.	10	320	1,010	860	690	690	730	720
<b>Paper &amp; Paperboard Pkg</b>									
Corrugated Boxes	2,520	2,760	6,390	11,530	20,330	21,180	22,100	22,980	22,760
Milk Cartons			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Folding Cartons			520	340	410	450	1,190	1,550	1,880
Other Paperboard Packaging			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Bags and Sacks			Neg.	200	300	260	320	420	440
Wrapping Papers			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	220	350	300	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b>Total Paper &amp; Board Pkg</b>	2,740	3,110	7,210	12,070	21,040	21,890	23,610	24,950	25,080
<b>Plastics Packaging</b>									
PET Bottles and Jars			10	140	380	420	590	700	730
HDPE Natural Bottles			Neg.	20	210	230	230	230	220
Other Containers	Neg.	Neg.	Neg.	20	170	150	140	190	280
Bags and Sacks									
Wraps									
<i>Subtotal Bags, Sacks, and Wraps</i>			Neg.	60	180	180	230	380	390
Other Plastics Packaging	Neg.	Neg.	Neg.	20	90	90	90	90	110
<b>Total Plastics Packaging</b>	Neg.	Neg.	10	260	1,030	1,070	1,280	1,590	1,730
Wood Packaging	Neg.	Neg.	Neg.	130	1,240	1,280	1,310	1,540	1,580
Other Misc. Packaging	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b>Total Containers &amp; Pkg</b>	2,870	3,350	8,490	16,780	28,740	29,300	30,980	33,420	33,530
<b>Total Product Wastes†</b>	5,610	8,020	14,520	29,040	52,880	55,660	58,630	62,480	60,770
<b>Other Wastes</b>									
Food Scraps	Neg.	Neg.	Neg.	Neg.	680	750	690	810	800
Yard Trimmings	Neg.	Neg.	Neg.	4,200	15,770	18,330	19,860	20,900	21,300
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b>Total Other Wastes</b>	Neg.	Neg.	Neg.	4,200	16,450	19,080	20,550	21,710	22,100
<b>Total MSW Recovered - Weight</b>	5,610	8,020	14,520	33,240	69,330	74,740	79,180	84,190	82,870

\* 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 2008**  
**(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	2003	2005	2007	2008
<b>Durable Goods</b> <i>(Detail in Table 13)</i>	3.5%	6.4%	6.2%	11.6%	16.9%	17.7%	17.7%	17.8%	17.4%
<b>Nondurable Goods</b> <i>(Detail in Table 16)</i>	13.8%	14.9%	13.6%	16.9%	27.4%	30.4%	31.1%	34.0%	32.9%
<b>Containers and Packaging</b>									
<b>Glass Packaging</b>									
Beer and Soft Drink Bottles	6.4%	2.5%	10.8%	33.5%	26.8%	30.6%	30.6%	34.6%	35.6%
Wine and Liquor Bottles	Neg.	Neg.	Neg.	10.3%	22.5%	15.2%	15.3%	14.8%	14.9%
Food and Other Bottles & Jars	Neg.	Neg.	Neg.	12.5%	26.9%	14.9%	14.8%	14.8%	14.8%
<b>Total Glass Packaging</b>	1.6%	1.3%	5.4%	22.1%	26.1%	25.1%	24.8%	27.7%	28.0%
<b>Steel Packaging</b>									
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%	60.0%	62.9%	64.6%	62.8%
Other Steel Packaging	Neg.	Neg.	Neg.	30.0%	66.7%	66.7%	66.7%	66.7%	66.7%
<b>Total Steel Packaging</b>	Neg.	1.5%	5.5%	23.9%	58.9%	60.6%	63.3%	64.8%	63.1%
<b>Aluminum Packaging</b>									
Beer and Soft Drink Cans	Neg.	10.0%	37.6%	63.9%	54.6%	43.9%	44.8%	48.6%	48.2%
Other Cans	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	14.3%
Foil and Closures	Neg.	Neg.	Neg.	6.1%	7.9%	10.5%	10.0%	9.3%	9.5%
<b>Total Aluminum Pkg</b>	Neg.	1.8%	25.2%	53.2%	44.1%	36.1%	35.8%	38.8%	38.3%
<b>Paper &amp; Paperboard Pkg</b>									
Corrugated Boxes	34.4%	21.6%	37.4%	48.0%	67.3%	71.3%	71.5%	73.6%	76.6%
Milk Cartons			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Folding Cartons			Neg.	Neg.	7.0%	8.1%	21.5%	28.0%	35.2%
Other Paperboard Packaging			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Bags and Sacks			Neg.	Neg.	20.1%	21.0%	28.6%	36.8%	37.6%
Wrapping Papers			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	7.5%	9.2%	35.3%	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b>Total Paper &amp; Board Pkg</b>	19.4%	14.5%	27.4%	36.9%	52.7%	56.7%	59.6%	62.5%	65.5%
<b>Plastics Packaging</b>									
PET Bottles and Jars			3.8%	32.6%	22.1%	19.5%	23.2%	24.6%	27.2%
HDPE Natural Bottles			Neg.	3.8%	30.4%	31.9%	28.8%	28.0%	29.3%
Other Containers	Neg.	Neg.	Neg.	1.4%	9.8%	8.8%	9.9%	9.9%	14.7%
Bags and Sacks									
Wraps									
<i>Subtotal Bags, Sacks, and Wraps</i>			Neg.	2.4%	4.3%	4.1%	5.2%	9.1%	9.8%
Other Plastics Packaging	Neg.	Neg.	Neg.	1.0%	3.2%	3.1%	2.8%	2.3%	3.0%
<b>Total Plastics Packaging</b>	Neg.	Neg.	Neg.	3.8%	9.2%	9.0%	10.3%	11.7%	13.3%
Wood Packaging	Neg.	Neg.	Neg.	1.6%	15.3%	15.4%	15.4%	14.8%	14.8%
Other Misc. Packaging	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b>Total Containers &amp; Pkg</b>	10.5%	7.7%	16.1%	26.0%	38.1%	39.4%	41.0%	42.2%	43.7%
<b>Total Product Wastes†</b>	10.3%	9.6%	13.3%	19.8%	29.7%	31.2%	31.9%	33.5%	33.5%
<b>Other Wastes</b>									
Food Scraps	Neg.	Neg.	Neg.	Neg.	2.5%	2.6%	2.3%	2.6%	2.5%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	51.7%	58.2%	61.9%	64.1%	64.7%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
<b>Total Other Wastes</b>	Neg.	Neg.	Neg.	7.2%	27.0%	30.0%	31.1%	31.9%	32.3%
<b>Total MSW Recovered - %</b>	6.4%	6.6%	9.6%	16.2%	29.0%	30.9%	31.7%	33.1%	33.2%

\* 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 2008**  
**(WITH DETAIL ON CONTAINERS AND PACKAGING)**  
**(In thousands of tons)**

	Thousands of Tons								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b> <i>(Detail in Table 14)</i>	9,570	13,720	20,440	26,350	32,270	34,540	36,520	37,460	37,740
<b>Nondurable Goods</b> <i>(Detail in Table 17)</i>	14,940	21,330	29,750	43,370	46,450	43,360	43,880	40,790	39,400
<b>Containers and Packaging</b>									
<b>Glass Packaging</b>									
Beer and Soft Drink Bottles	1,310	5,440	6,010	3,750	4,180	4,750	4,540	4,420	4,090
Wine and Liquor Bottles	1,070	1,890	2,430	1,820	1,480	1,340	1,380	1,380	1,370
Food and Other Bottles & Jars	3,710	4,440	4,780	3,640	2,500	1,830	1,950	1,730	1,780
<b>Total Glass Packaging</b>	6,090	11,770	13,220	9,210	8,160	7,920	7,870	7,530	7,240
<b>Steel Packaging</b>									
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	1,040	790	860	860
Other Steel Packaging	260	270	240	140	80	80	80	80	80
<b>Total Steel Packaging</b>	4,630	5,300	3,410	2,200	1,180	1,120	870	940	940
<b>Aluminum Packaging</b>									
Beer and Soft Drink Cans	Neg.	90	530	560	690	830	800	730	720
Other Cans	Neg.	60	40	20	50	50	80	30	60
Foil and Closures	170	410	380	310	350	340	360	390	380
<b>Total Aluminum Pkg</b>	170	560	950	890	1,090	1,220	1,240	1,150	1,160
<b>Paper &amp; Paperboard Pkg</b>									
Corrugated Boxes	4,810	10,000	10,690	12,480	9,880	8,530	8,830	8,250	6,950
Milk Cartons			790	510	550	450	500	500	490
Folding Cartons			3,300	3,960	5,410	5,110	4,340	3,980	3,460
Other Paperboard Packaging	3,840	4,830	230	290	200	180	160	150	120
Bags and Sacks			3,380	2,240	1,190	980	800	720	730
Wrapping Papers			200	110	Neg.	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	2,720	3,460	550	1,020	1,670	1,440	1,400	1,390	1,460
<b>Total Paper &amp; Board Pkg</b>	11,370	18,290	19,140	20,610	18,900	16,690	16,030	14,990	13,210
<b>Plastics Packaging</b>									
PET Bottles and Jars			250	290	1,340	1,730	1,950	2,140	1,950
HDPE Natural Bottles			230	510	480	490	570	590	530
Other Containers	60	910	890	1,410	1,570	1,550	1,280	1,720	1,620
Bags and Sacks									
Wraps									
<i>Subtotal Bags, Sacks, and Wraps</i>			1,230	2,410	4,020	4,200	4,220	3,810	3,570
Other Plastics Packaging	60	1,180	790	2,020	2,750	2,850	3,120	3,780	3,610
<b>Total Plastics Packaging</b>	120	2,090	3,390	6,640	10,160	10,820	11,140	12,040	11,280
Wood Packaging	2,000	2,070	3,940	8,050	6,880	7,050	7,210	8,860	9,090
Other Misc. Packaging	120	130	130	150	240	250	280	320	310
<b>Total Containers &amp; Pkg</b>	24,500	40,210	44,180	47,750	46,610	45,070	44,640	45,830	43,230
<b>Total Product Wastes†</b>	49,010	75,260	94,370	117,470	125,330	122,970	125,040	124,080	120,370
<b>Other Wastes</b>									
Food Scraps	12,200	12,800	13,000	20,800	26,130	27,760	29,530	30,840	30,990
Yard Trimmings	20,000	23,200	27,500	30,800	14,760	13,140	12,210	11,730	11,600
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,620	3,690	3,750	3,780
<b>Total Other Wastes</b>	33,500	37,780	42,750	54,500	44,390	44,520	45,430	46,320	46,370
<b>Total MSW Discarded - Weight</b>	82,510	113,040	137,120	171,970	169,720	167,490	170,470	170,400	166,740

\* 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 2008**  
**(WITH DETAIL ON CONTAINERS AND PACKAGING)**  
**(In percent of total discards)**

	Percent of Total Discards								
Products	1960	1970	1980	1990	2000	2003	2005	2007	2008
<b>Durable Goods</b> <i>(Detail in Table 14)</i>	11.6%	12.1%	14.9%	15.3%	19.0%	20.6%	21.4%	22.0%	22.6%
<b>Nondurable Goods</b> <i>(Detail in Table 17)</i>	18.1%	18.9%	21.7%	25.2%	27.4%	25.9%	25.7%	23.9%	23.6%
<b>Containers and Packaging</b>									
<b>Glass Packaging</b>									
Beer and Soft Drink Bottles	1.6%	4.8%	4.4%	2.2%	2.5%	2.8%	2.7%	2.6%	2.5%
Wine and Liquor Bottles	1.3%	1.7%	1.8%	1.1%	0.9%	0.8%	0.8%	0.8%	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%
<b>Total Glass Packaging</b>	7.4%	10.4%	9.6%	5.4%	4.8%	4.7%	4.6%	4.4%	4.3%
<b>Steel Packaging</b>									
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%	0.6%	0.6%	0.5%	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%
<b>Total Steel Packaging</b>	5.6%	4.7%	2.5%	1.3%	0.7%	0.7%	0.5%	0.6%	0.6%
<b>Aluminum Packaging</b>									
Beer and Soft Drink Cans	Neg.	0.1%	0.4%	0.3%	0.4%	0.5%	0.5%	0.4%	0.4%
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%
<b>Total Aluminum Pkg</b>	0.2%	0.5%	0.7%	0.5%	0.6%	0.7%	0.7%	0.7%	0.7%
<b>Paper &amp; Paperboard Pkg</b>									
Corrugated Boxes	5.8%	8.8%	7.8%	7.3%	5.8%	5.1%	5.2%	4.8%	4.2%
Milk Cartons			0.6%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Folding Cartons			2.4%	2.3%	3.2%	3.1%	2.5%	2.3%	2.1%
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%	0.6%	0.5%	0.4%	0.4%
Wrapping Papers			0.1%	0.1%	Neg.	Neg.	Neg.	Neg.	Neg.
Other Paper Packaging	3.3%	3.1%	0.4%	0.6%	1.0%	0.9%	0.8%	0.8%	0.9%
<b>Total Paper &amp; Board Pkg</b>	13.8%	16.2%	14.0%	12.0%	11.1%	10.0%	9.4%	8.8%	7.9%
<b>Plastics Packaging</b>									
PET Bottles and Jars			0.2%	0.2%	0.8%	1.0%	1.1%	1.3%	1.2%
HDPE Natural 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%	0.9%	0.9%	0.8%	1.0%	1.0%
Bags and Sacks									
Wraps									
<i>Subtotal Bags, Sacks, and Wraps</i>			0.9%	1.4%	2.4%	2.5%	2.5%	2.2%	2.1%
Other Plastics Packaging	0.1%	1.0%	0.6%	1.2%	1.6%	1.7%	1.8%	2.2%	2.2%
<b>Total Plastics Packaging</b>	0.1%	1.8%	2.5%	3.9%	6.0%	6.5%	6.5%	7.1%	6.8%
Wood Packaging	2.4%	1.8%	2.9%	4.7%	4.1%	4.2%	4.2%	5.2%	5.5%
Other Misc. Packaging	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%
<b>Total Containers &amp; Pkg</b>	29.7%	35.6%	32.2%	27.8%	27.5%	26.9%	26.2%	26.9%	25.9%
<b>Total Product Wastes†</b>	59.4%	66.6%	68.8%	68.3%	73.8%	73.4%	73.4%	72.8%	72.2%
<b>Other Wastes</b>									
Food Scraps	14.8%	11.3%	9.5%	12.1%	15.4%	16.6%	17.3%	18.1%	18.6%
Yard Trimmings	24.2%	20.5%	20.1%	17.9%	8.7%	7.8%	7.2%	6.9%	7.0%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	2.1%	2.2%	2.2%	2.2%	2.3%
<b>Total Other Wastes</b>	40.6%	33.4%	31.2%	31.7%	26.2%	26.6%	26.6%	27.2%	27.8%
<b>Total MSW Discarded - %</b>	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
<b>Redesign</b>				
Materials reduction	• Downgauge metals in appliances	• Paperless purchase orders	• Concentrates	• Xeriscaping
Materials substitution	• Use of composites in appliances and electronic circuitry		• Cereal in bags • Coffee brick • Multi-use products	
Lengthen life	• High mileage tires • Electronic components reduce moving parts	• Regular servicing • Look at warranties • Extend warranties	• Design for secondary uses	
<b>Consumer Practices</b>				
	• Purchase long lived products	• Repair • Duplexing • Sharing • Reduce unwanted mail	• Purchasing: products in bulk, concentrates • Reusable bags	
<b>Reuse</b>				
By design	• Modular design	• Envelopes	• Reusable pallets • Returnable secondary packaging	
Secondary	• Borrow or rent for temporary use • Give to charity • Buy or sell at garage sales	• Clothing • Waste paper scratch pads	• Loosefill • Grocery sacks • Dairy containers • Glass and plastic jars	
<b>Reduce/Eliminate Toxins</b>				
	• Eliminate PCBs	• Soy ink, waterbased • Waterbased solvents • Reduce mercury	• Replace lead foil on wine bottles	
<b>Reduce Organics</b>				
Food scraps				• Backyard composting • Vermi-composting
Yard trimmings				• Backyard composting • Grasscycling

Source: Franklin Associates, A Division of ERG

**Table 25**

**NUMBER AND POPULATION SERVED BY  
CURBSIDE RECYCLABLES COLLECTION PROGRAMS, 2008**

<b>Region</b>	<b>Number of Programs</b>	<b>Population* (in thousands)</b>	<b>Population Served</b>	
			<b>(in thousands)</b>	<b>Percent**</b>
<b>NORTHEAST</b>	3,299	50,803	42,800	84%
<b>SOUTH</b>	797	85,536	25,690	30%
<b>MIDWEST</b>	3,749	46,579	28,300	61%
<b>WEST</b>	814	64,620	49,190	76%
<b><i>Total</i></b>	<u>8,659</u>	<u>247,538</u>	<u>145,980</u>	<u>59%</u>
Total U.S. Population		304,060		

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\* Population in states reporting data

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

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

**Table 26**  
**MATERIALS RECOVERY FACILITIES, 2008**

<b>Region</b>	<b>Number</b>	<b>Estimated Throughput (tpd)</b>
<b>NORTHEAST</b>	145	23,238
<b>SOUTH</b>	152	19,739
<b>MIDWEST</b>	136	19,584
<b>WEST</b>	112	20,123
<b><i>U.S. Total</i></b>	<b><u>545</u></b>	<b><u>82,684</u></b>

Source: Governmental Advisory Associates, Inc.

Table 27

**MUNICIPAL WASTE-TO-ENERGY PROJECTS, 2008**

<b>Region</b>	<b>Number Operational</b>	<b>Design Capacity (tpd)</b>
<b>NORTHEAST</b>	40	46,537
<b>SOUTH</b>	23	31,131
<b>MIDWEST</b>	16	10,912
<b>WEST</b>	8	6,141
<b><i>U.S. Total*</i></b>	<b>87</b>	<b>94,721</b>

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\* Projects on hold or inactive were 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, 2008**

<b>Region</b>	<b>Number of Landfills</b>
<b>NORTHEAST</b>	134
<b>SOUTH</b>	726
<b>MIDWEST</b>	416
<b>WEST</b>	536
<b><i>U.S. Total</i></b>	<b>1,812</b>

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Totals exclude 10 landfills in Hawaii and 300 landfills in Alaska.

Source: BioCycle December 2008.

Revised with data from Alabama Department of Environmental Management, California Integrated Waste Management Board, Colorado Department of Public Health and Environment, Hawaii Department of Health, and Nevada Division of Environmental Protection.

**Table 29**  
**GENERATION, MATERIALS RECOVERY, COMPOSTING, COMBUSTION,**  
**AND DISCARDS OF MUNICIPAL SOLID WASTE, 1960 TO 2008**  
(In thousands of tons and percent of total generation)

	Thousands of Tons								
	1960	1970	1980	1990	2000	2003	2005	2007	2008
Generation	88,120	121,060	151,640	205,210	239,050	242,230	249,650	254,590	249,610
Recovery for recycling	5,610	8,020	14,520	29,040	52,880	55,660	58,630	62,480	60,770
Recovery for composting*	Neg.	Neg.	Neg.	4,200	16,450	19,080	20,550	21,710	22,100
<b>Total Materials Recovery</b>	5,610	8,020	14,520	33,240	69,330	74,740	79,180	84,190	82,870
Discards after recovery	82,510	113,040	137,120	171,970	169,720	167,490	170,470	170,400	166,740
Combustion with energy recovery**	0	400	2,700	29,700	33,730	33,100	31,620	31,970	31,550
Discards to landfill, other disposal†	82,510	112,640	134,420	142,270	135,990	134,390	138,850	138,430	135,190

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	Pounds per Person per Day								
	1960	1970	1980	1990	2000	2003	2005	2007	2008
Generation	2.68	3.25	3.66	4.50	4.65	4.56	4.62	4.63	4.50
Recovery for recycling	0.17	0.22	0.35	0.64	1.03	1.05	1.08	1.14	1.10
Recovery for composting*	Neg.	Neg.	Neg.	0.09	0.32	0.36	0.38	0.39	0.40
<b>Total Materials Recovery</b>	0.17	0.22	0.35	0.73	1.35	1.41	1.46	1.53	1.50
Discards after recovery	2.51	3.03	3.31	3.77	3.30	3.15	3.16	3.10	3.00
Combustion with energy recovery**	0.00	0.01	0.07	0.65	0.66	0.62	0.58	0.58	0.57
Discards to landfill, other disposal†	2.51	3.02	3.24	3.12	2.64	2.53	2.58	2.52	2.43
Population (thousands)	179,979	203,984	227,255	249,907	281,422	290,850	296,410	301,621	304,060

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	Percent of Total Generation								
	1960	1970	1980	1990	2000	2003	2005	2007	2008
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%	22.1%	23.0%	23.5%	24.6%	24.3%
Recovery for composting*	Neg.	Neg.	Neg.	2.0%	6.9%	7.9%	8.2%	8.5%	8.9%
<b>Total Materials Recovery</b>	6.4%	6.6%	9.6%	16.2%	29.0%	30.9%	31.7%	33.1%	33.2%
Discards after recovery	93.6%	93.4%	90.4%	83.8%	71.0%	69.1%	68.3%	66.9%	66.8%
Combustion with energy recovery**	0.0%	0.3%	1.8%	14.5%	14.1%	13.7%	12.7%	12.6%	12.6%
Discards to landfill, other disposal†	93.6%	93.1%	88.6%	69.3%	56.9%	55.5%	55.6%	54.3%	54.2%

\* 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). 2008 includes 28,390 MSW, 620 wood, and 2,535 tires (1,000 tons)

† 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 - A. Municipal solid waste in the universe of Subtitle D wastes**

<b>Subtitle D Wastes</b>	
<b>The Subtitle D Waste included in this report is Municipal Solid Waste, which includes:</b>	
Containers and packaging such as soft drink bottles and corrugated boxes	
Durable goods such as furniture and appliances	
Nondurable goods such as newspapers, trash bags, and clothing	
Other wastes such as food scraps and yard trimmings.	
<b>Subtitle D Wastes not included in this report are:</b>	
Municipal sludges	Agricultural wastes
Industrial nonhazardous wastes	Oil and gas wastes
Construction and demolition debris	Mining wastes



## Figure 1- B. 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 Chapter 3 of 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.

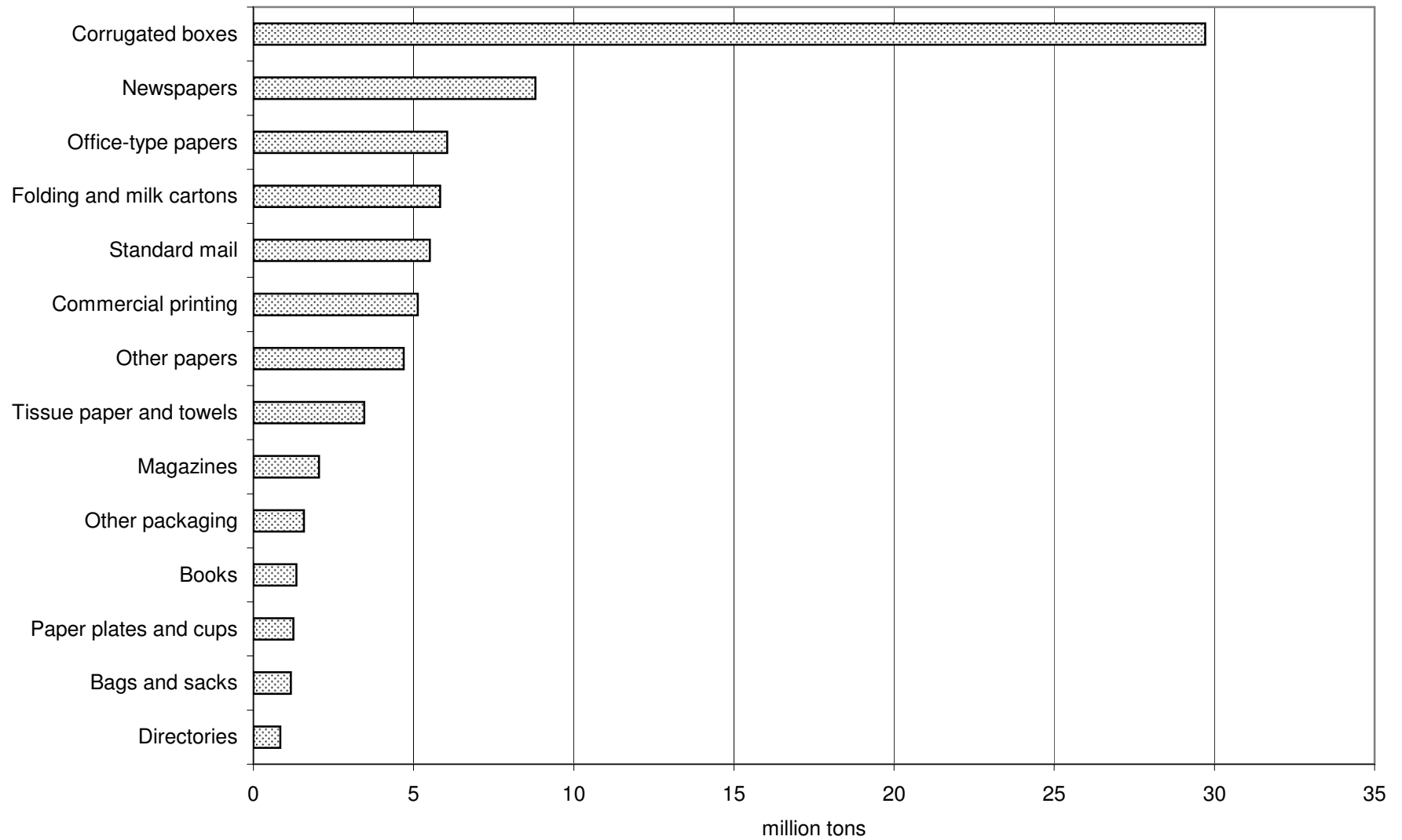
For the analysis of municipal solid waste, products are divided into three basic categories: durable goods, nondurable goods, and containers and packaging. The durable goods and nondurable goods categories generally follow the definitions of the U.S. Department of Commerce.

**Durable goods** are those products that last 3 years or more. Products in this category include major and small appliances, furniture and furnishings, carpets and rugs, tires, lead-acid batteries, consumer electronics, and other miscellaneous durables.

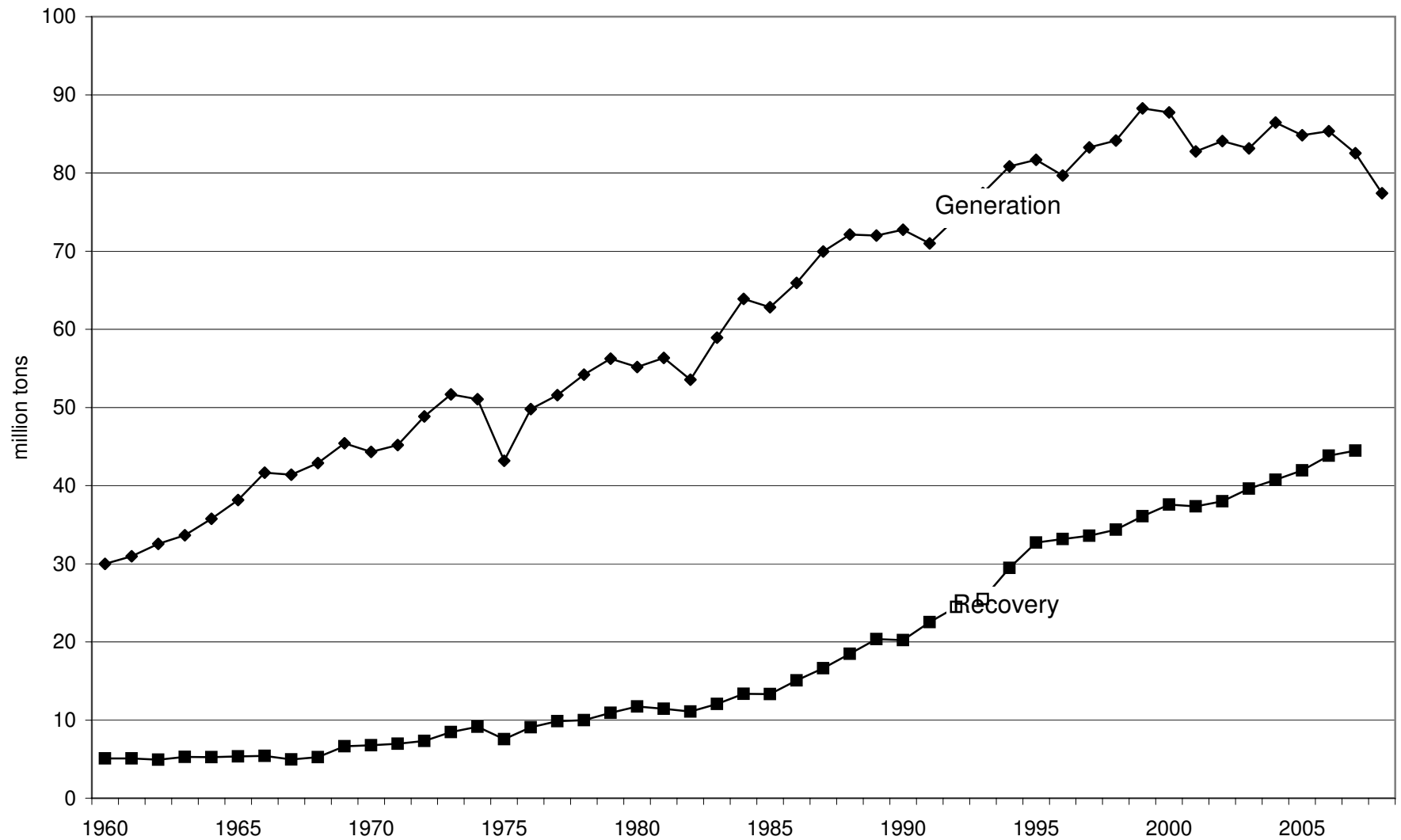
**Nondurable goods** are those products that last less than 3 years. Products in this category include newspapers, books, magazines, office papers, directories, mail, other commercial printing, tissue paper and towels, paper and plastic plates and cups, trash bags, disposable diapers, clothing and footwear, towels, sheets and pillowcases, other nonpackaging paper, and other miscellaneous nondurables.

**Containers and packaging** are assumed to be discarded the same year the products they contain are purchased. Products in this category include bottles, containers, corrugated boxes, milk cartons, folding cartons, bags, sacks, and wraps, wood packaging, and other miscellaneous packaging.

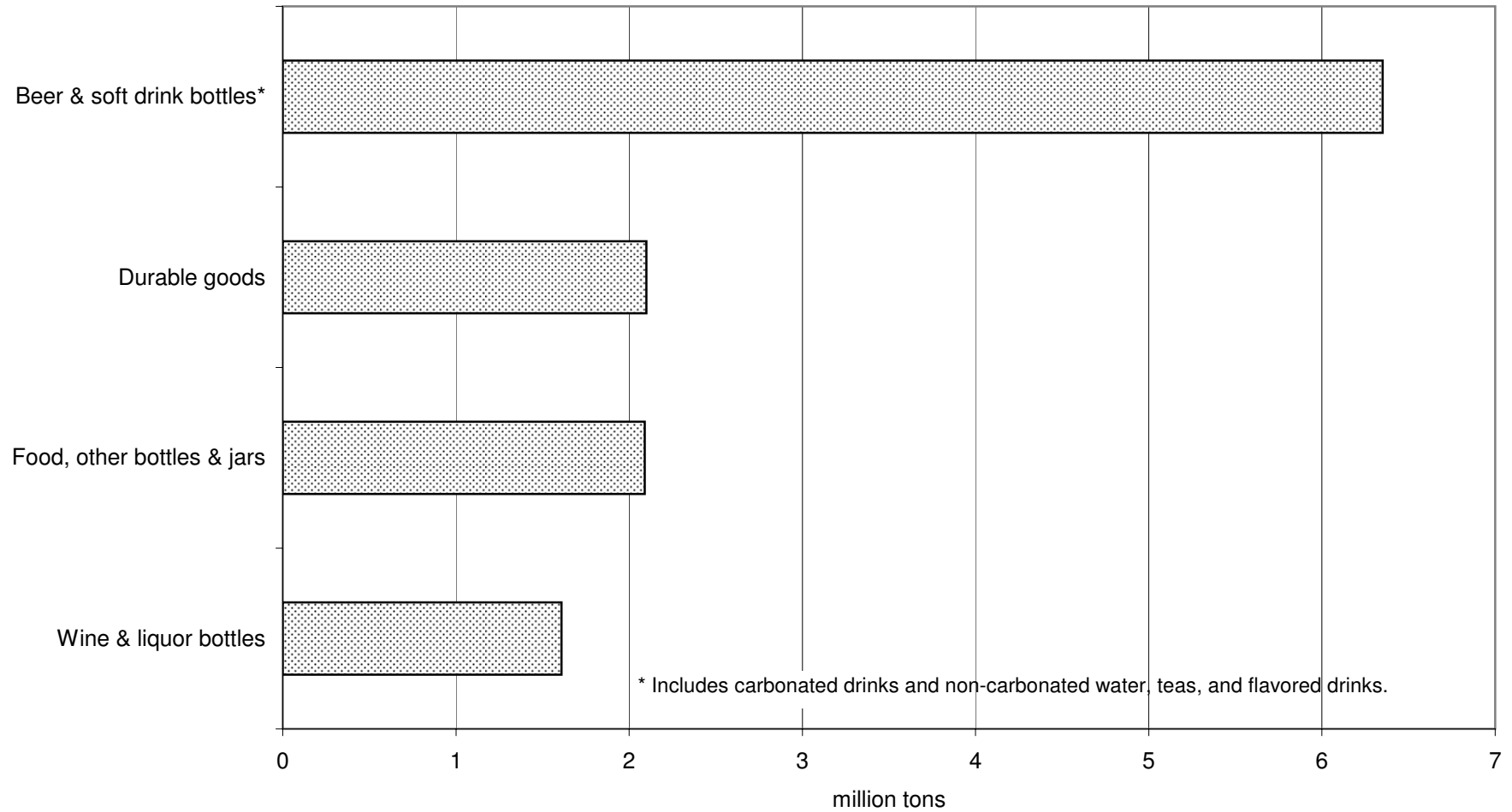
**Figure 2. Paper and paperboard products generated in MSW, 2008**



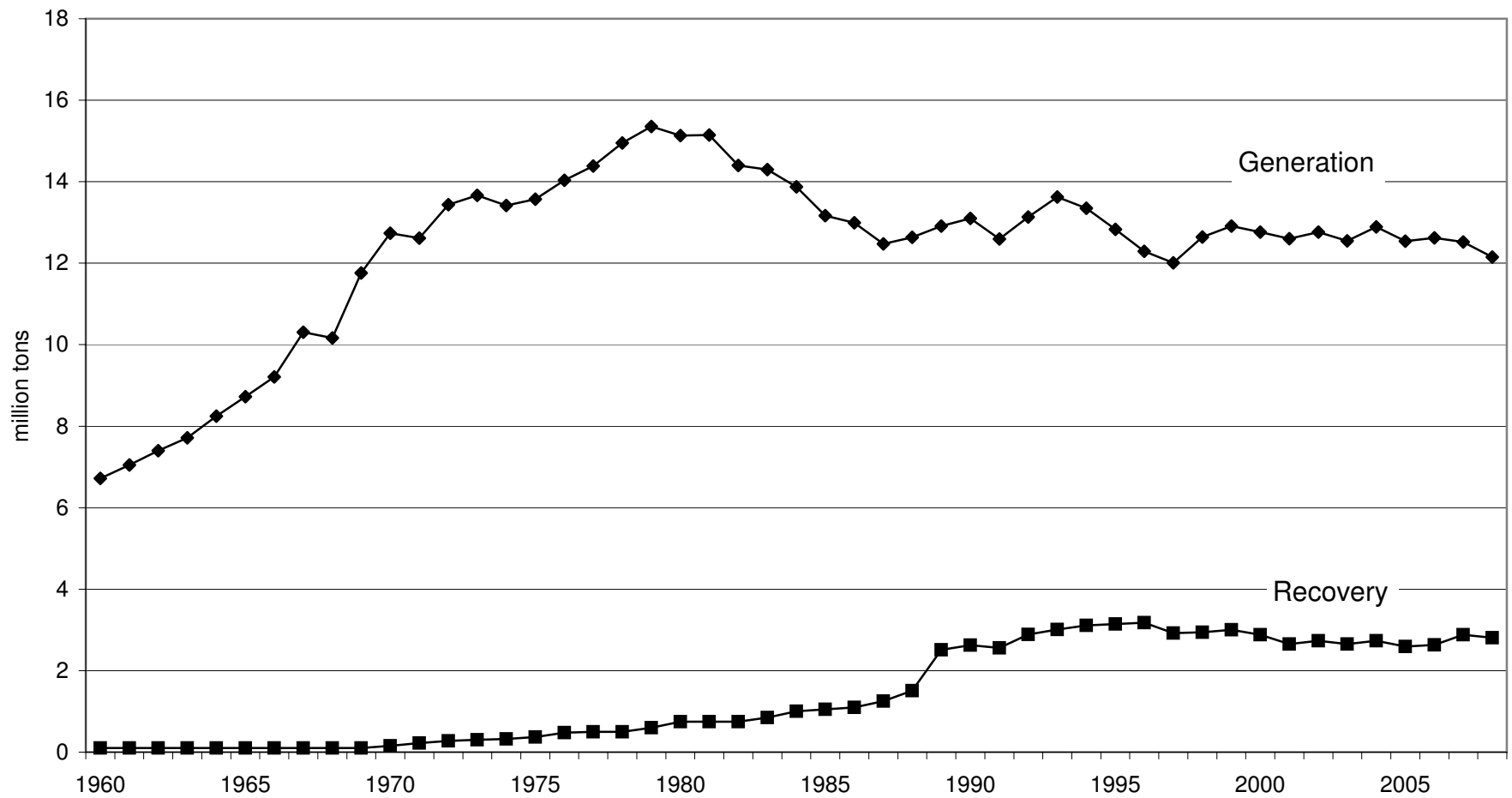
**Figure 3. Paper and paperboard generation and recovery, 1960 to 2008**



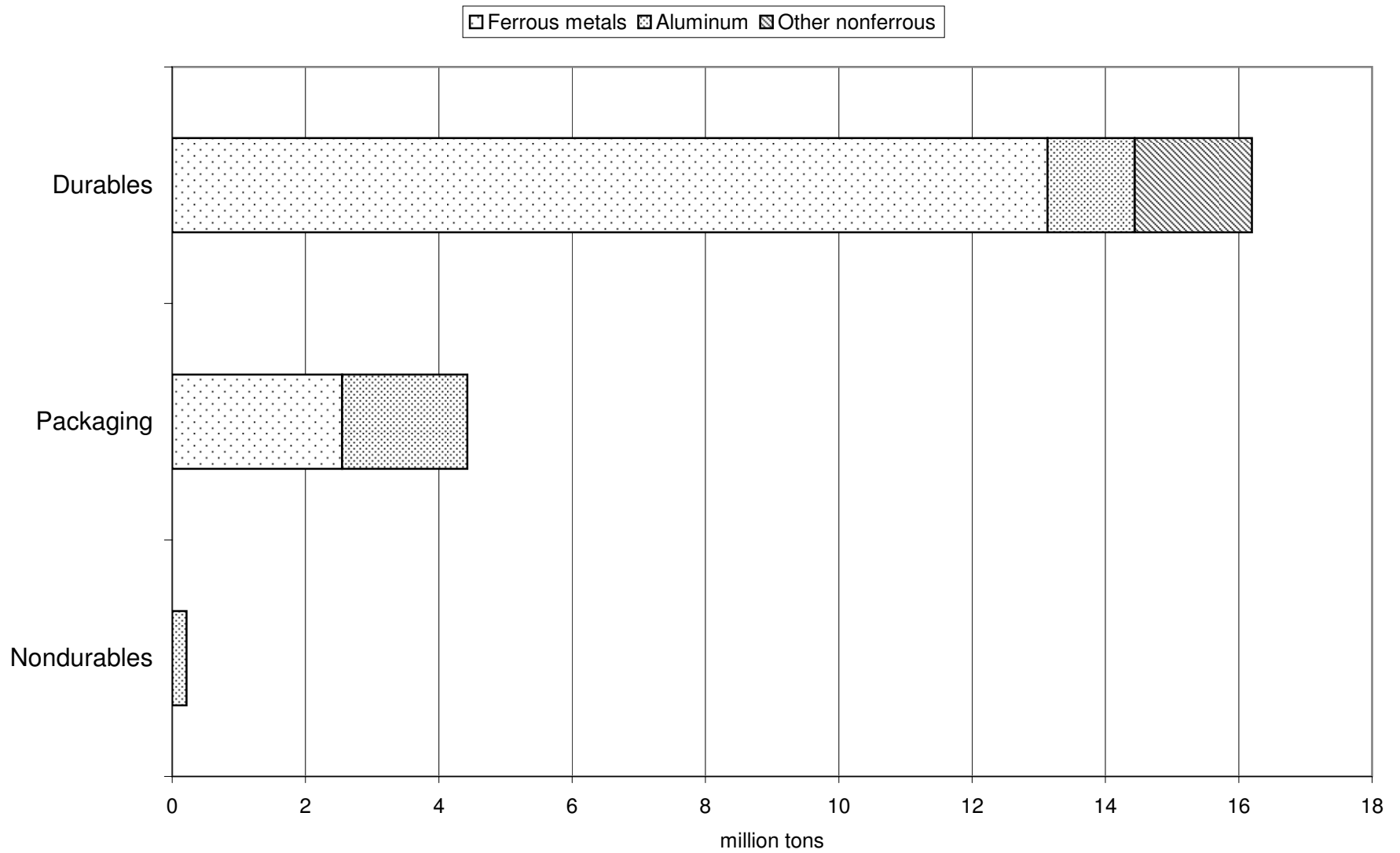
**Figure 4. Glass products generated in MSW, 2008**



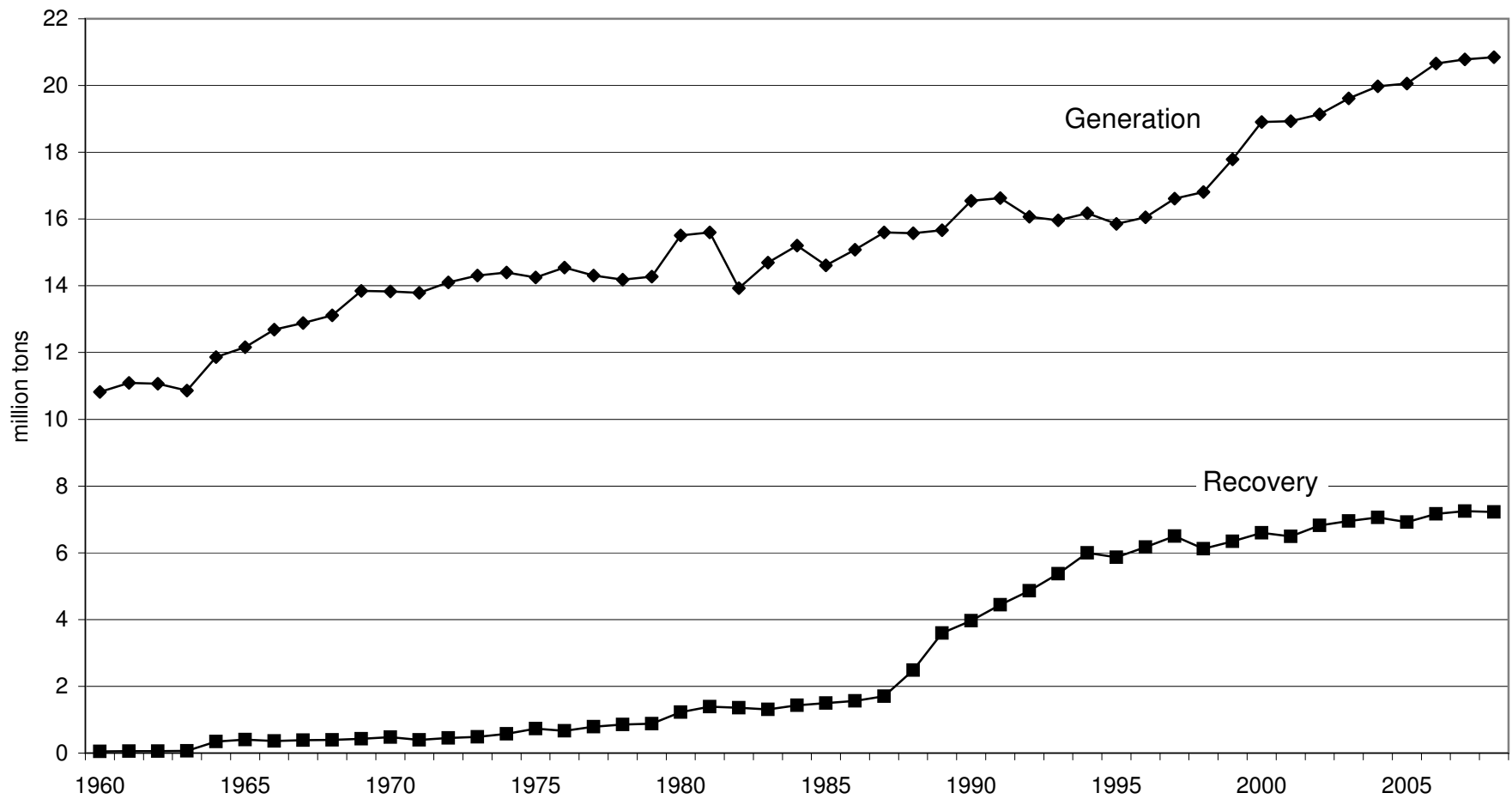
**Figure 5. Glass generation and recovery, 1960 to 2008**



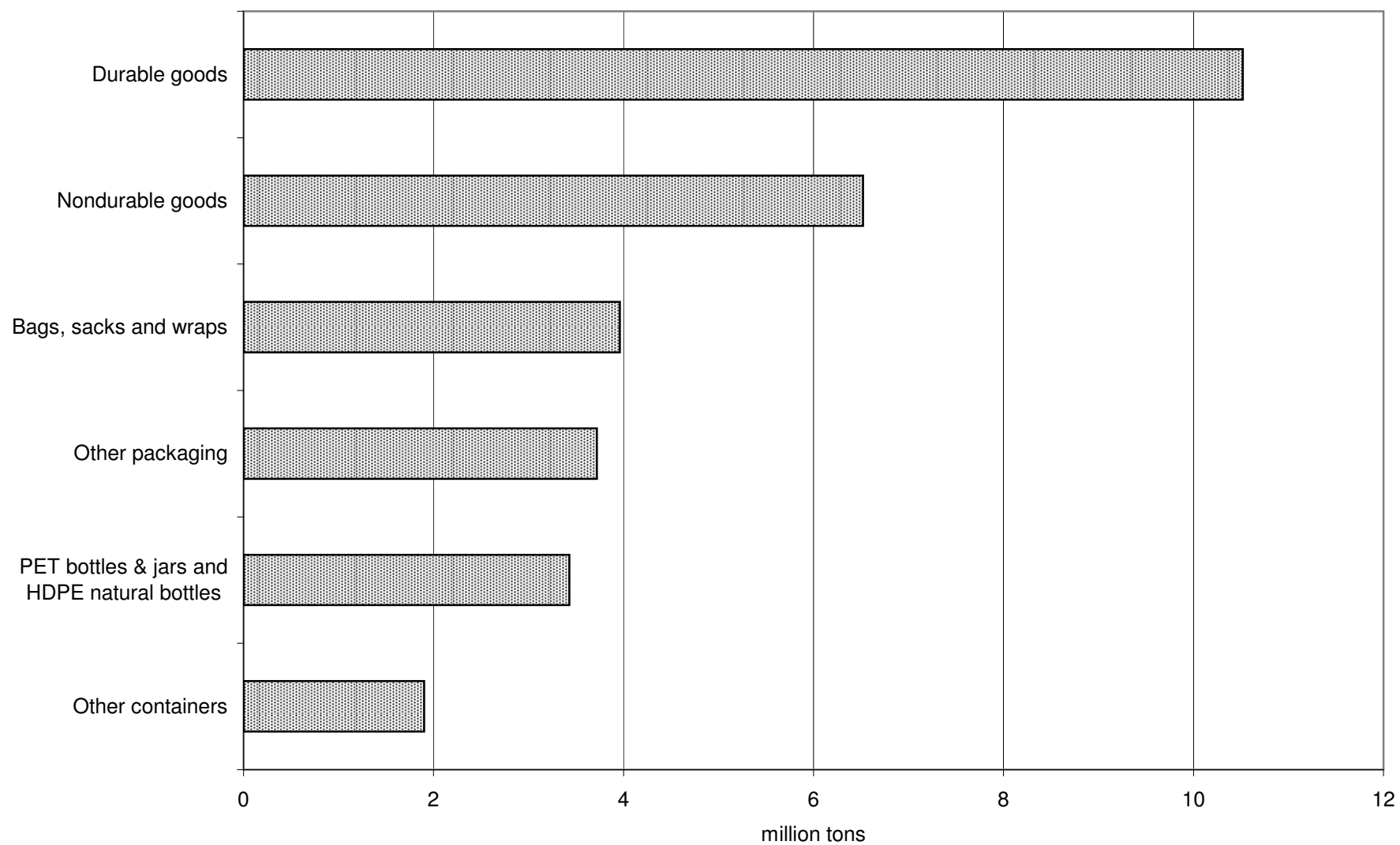
**Figure 6. Metal products generated in MSW, 2008**



**Figure 7. Metals generation and recovery, 1960 to 2008**

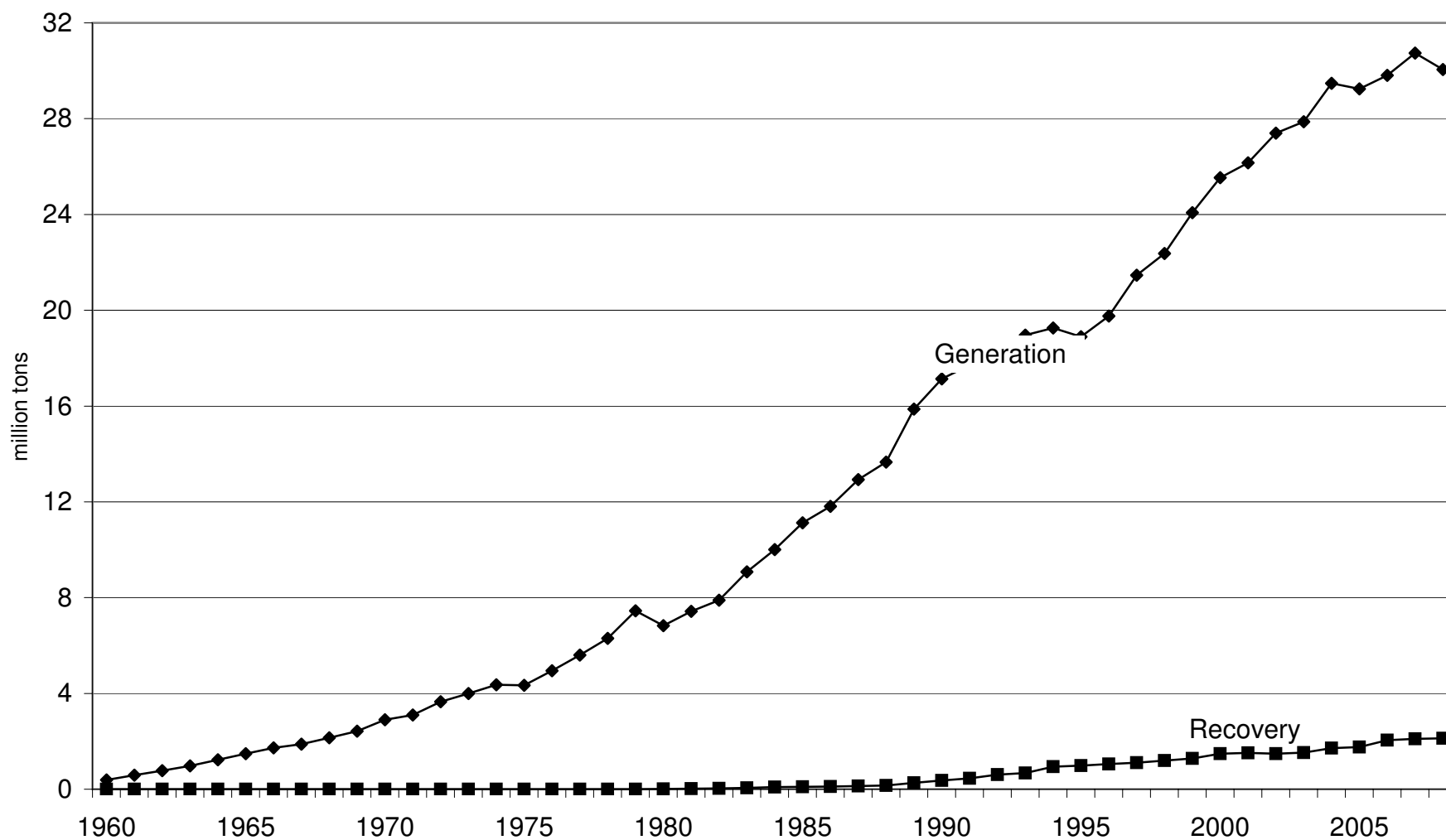


**Figure 8. Plastics products generated in MSW, 2008**

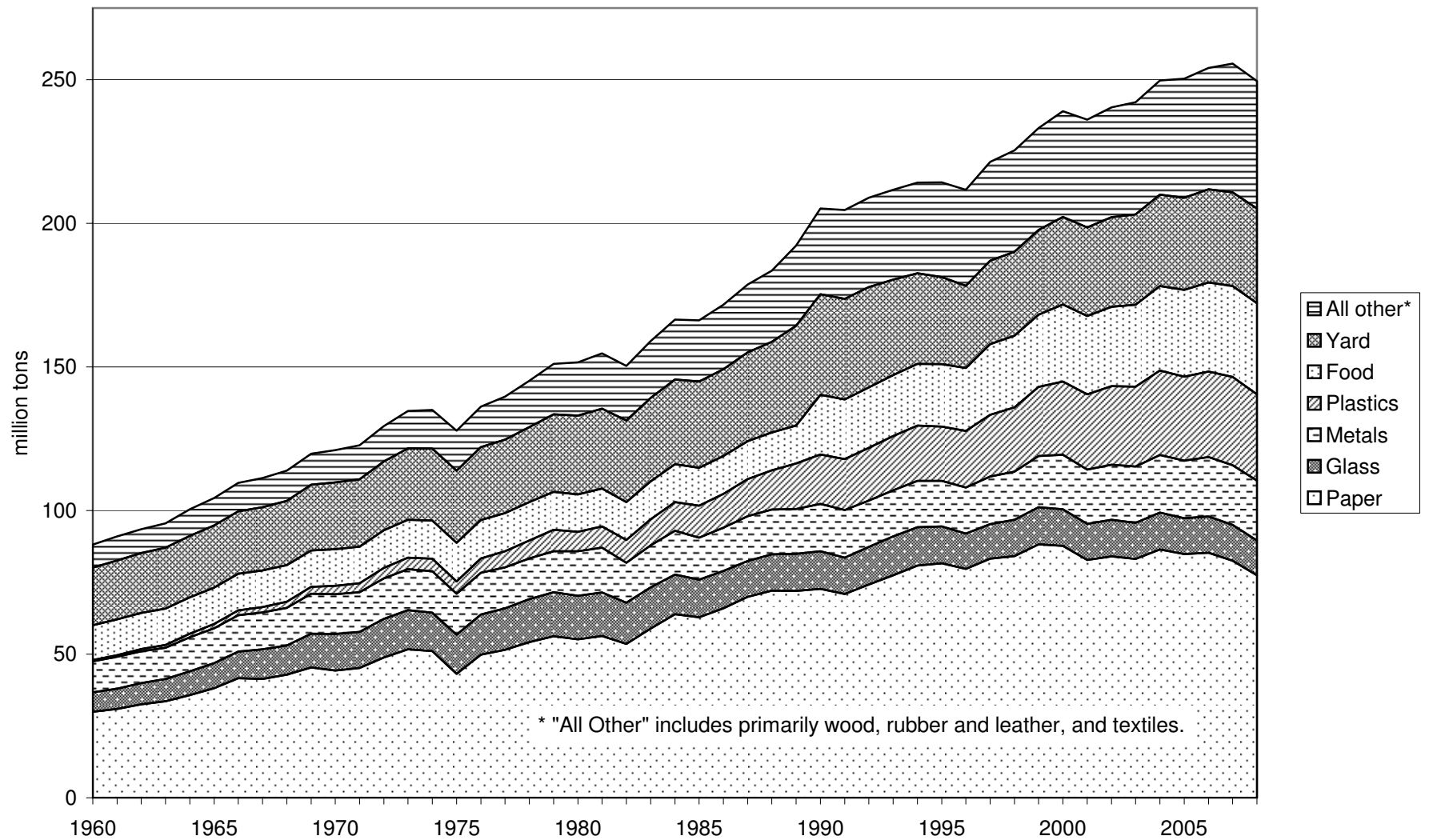




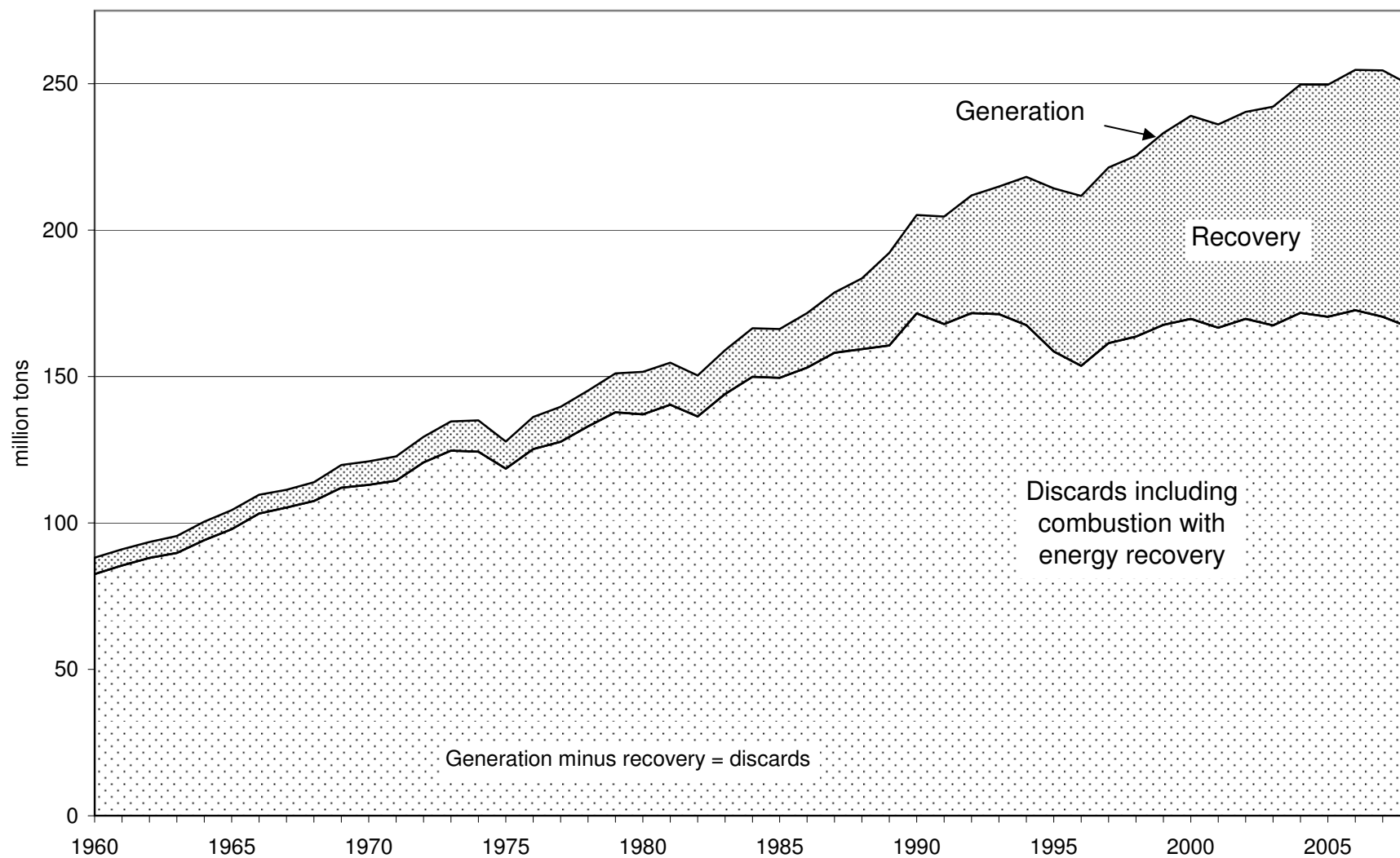
**Figure 9. Plastics generation and recovery, 1960 to 2008**



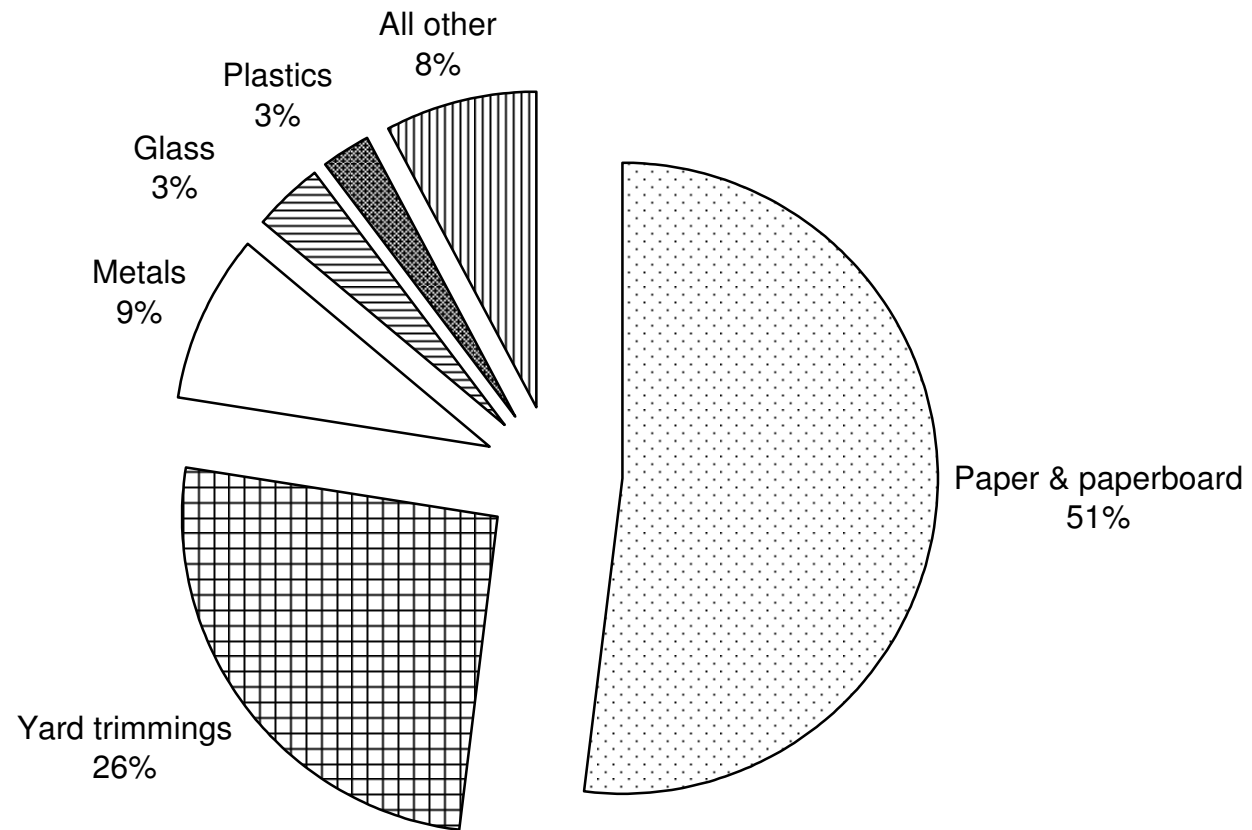
**Figure 10. Generation of materials in MSW, 1960 to 2008**



**Figure 11. Recovery and discards of materials in MSW, 1960 to 2008**

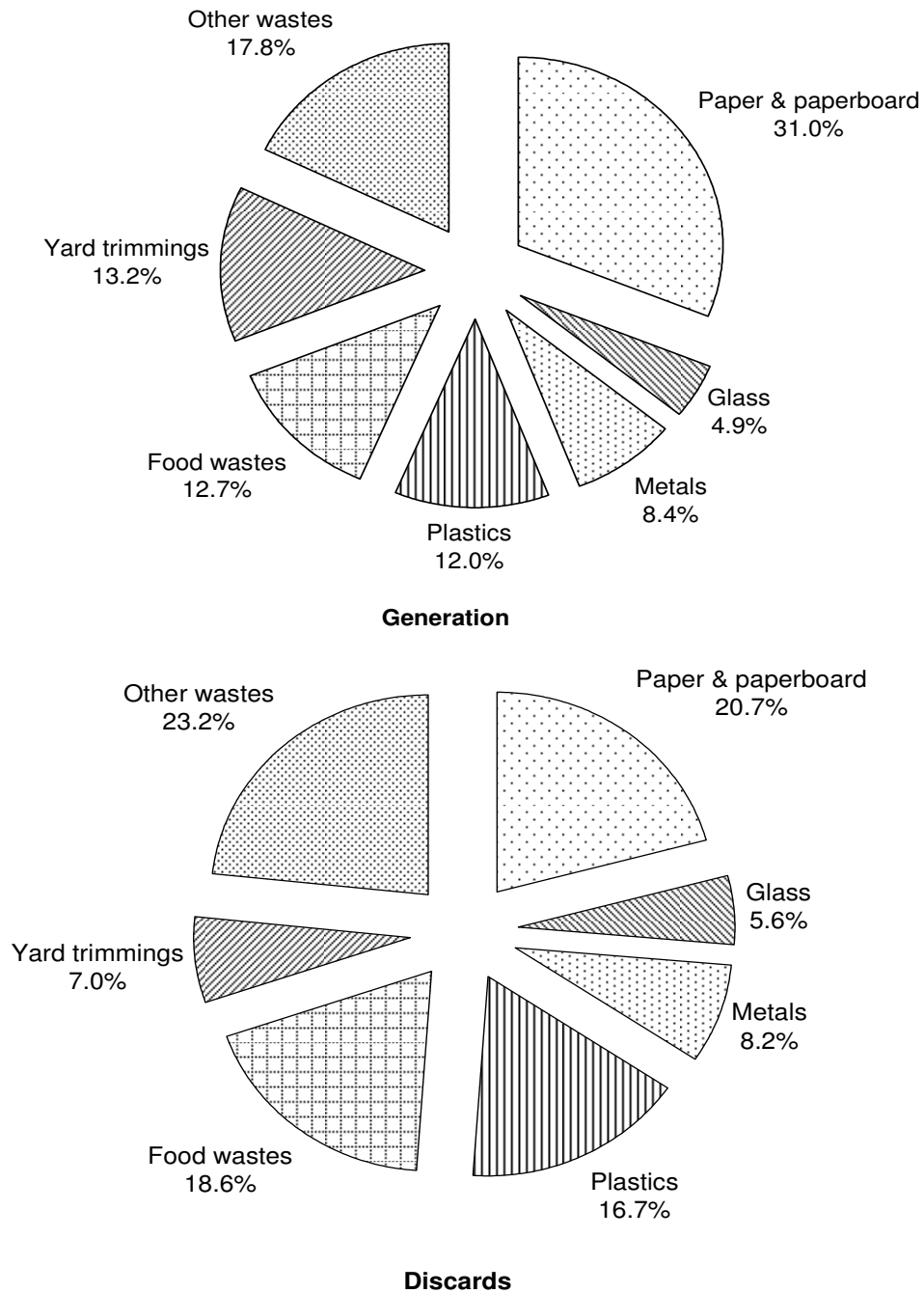


**Figure 12. Materials recovery,\* 2008**



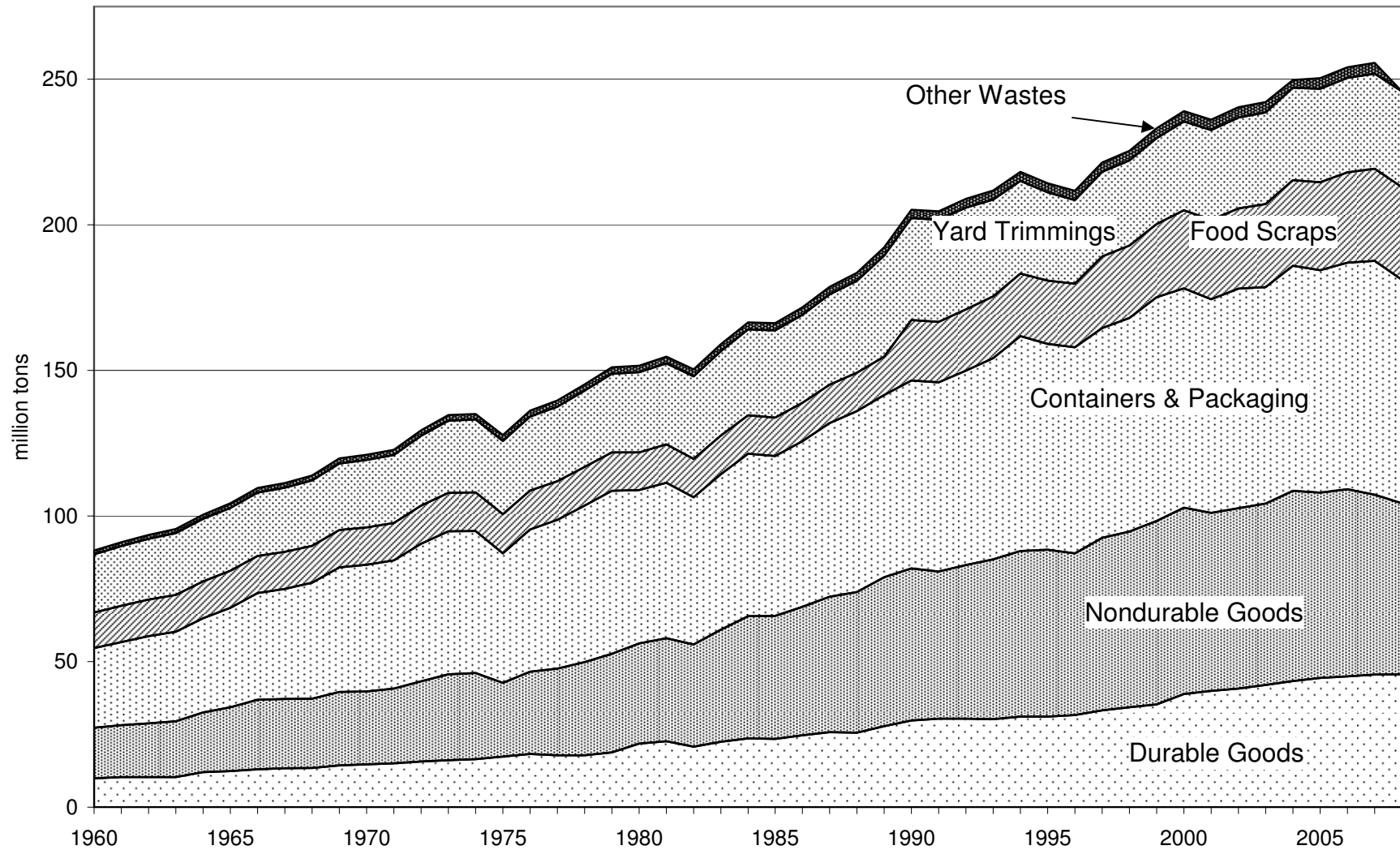
\* In percent by weight of total recovery

**Figure 13. Materials generated and discarded\*  
in municipal solid waste, 2008  
(In percent of total generation and discards)**

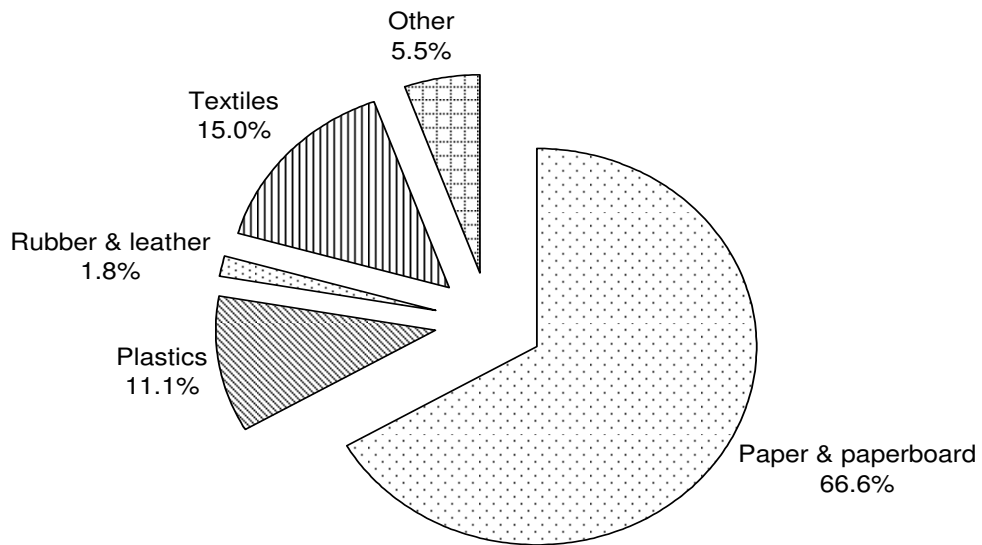


\* Discards in this figure include combustion with energy recovery.

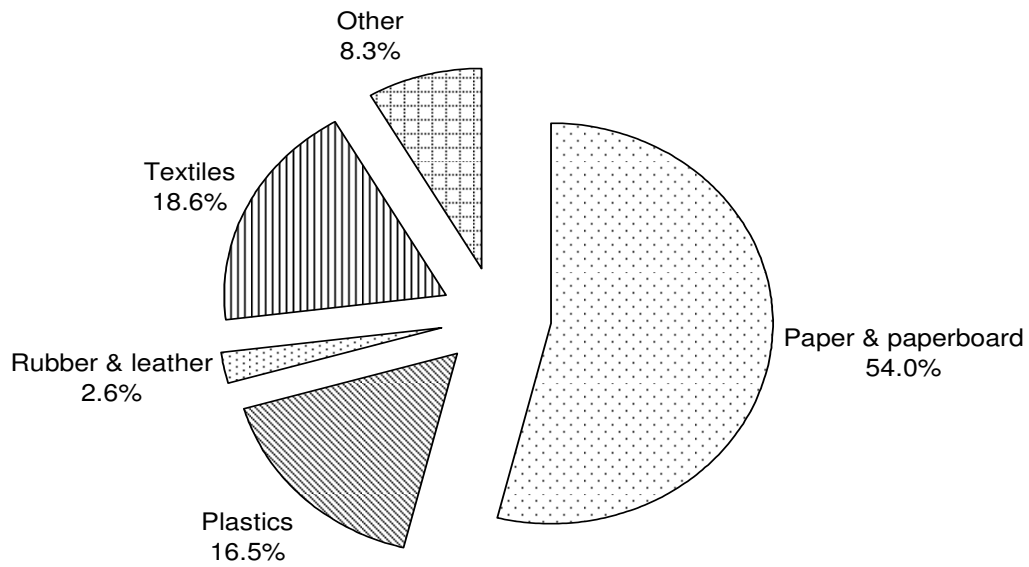
**Figure 14. Generation of products in MSW, 1960 to 2008**



**Figure 15. Nondurable goods generated and discarded\*  
in municipal solid waste, 2008**  
(In percent of total generation and discards)



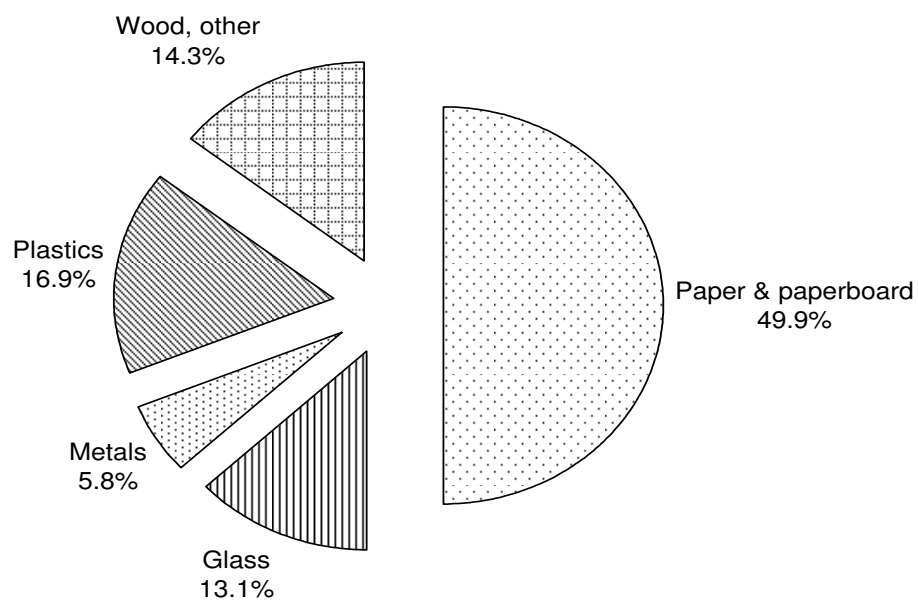
**Generation**



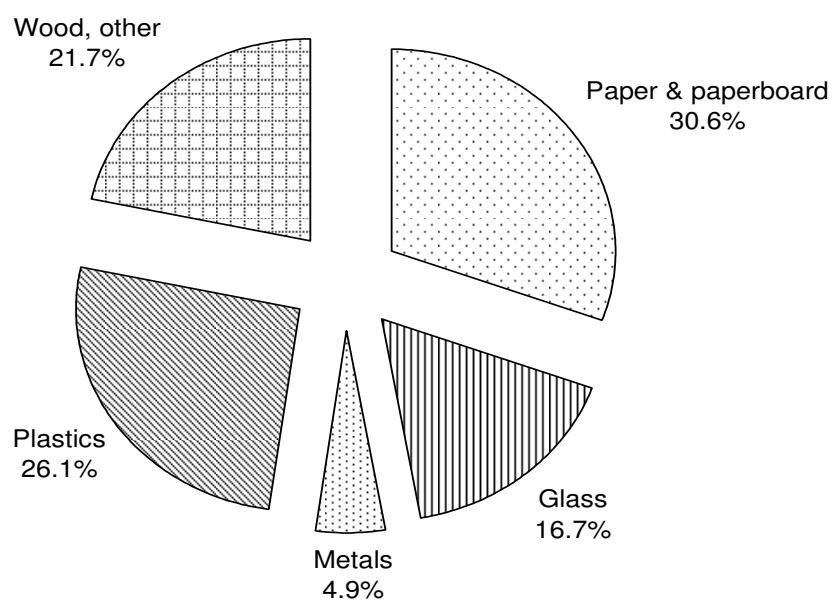
**Discards**

\*Discards in this figure include combustion with energy recovery.

**Figure 16. Containers and packaging generated and discarded\***  
**in municipal solid waste, 2008**  
(In percent of total generation and discards)



**Generation**

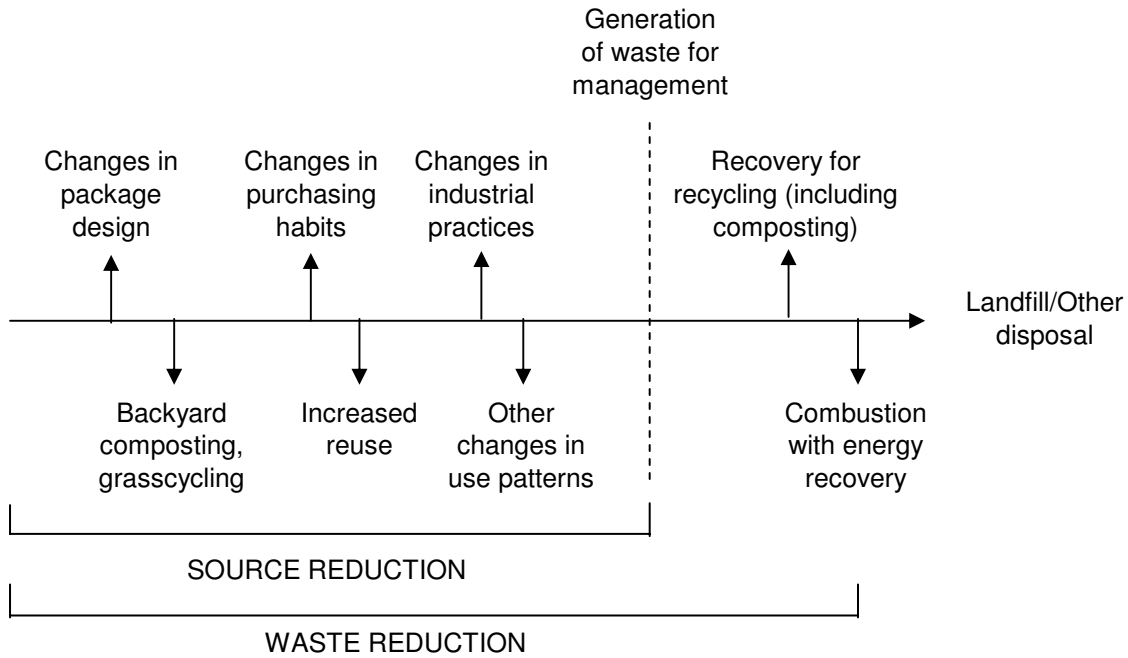


**Discards**

\*Discards in this figure include combustion with energy recovery.

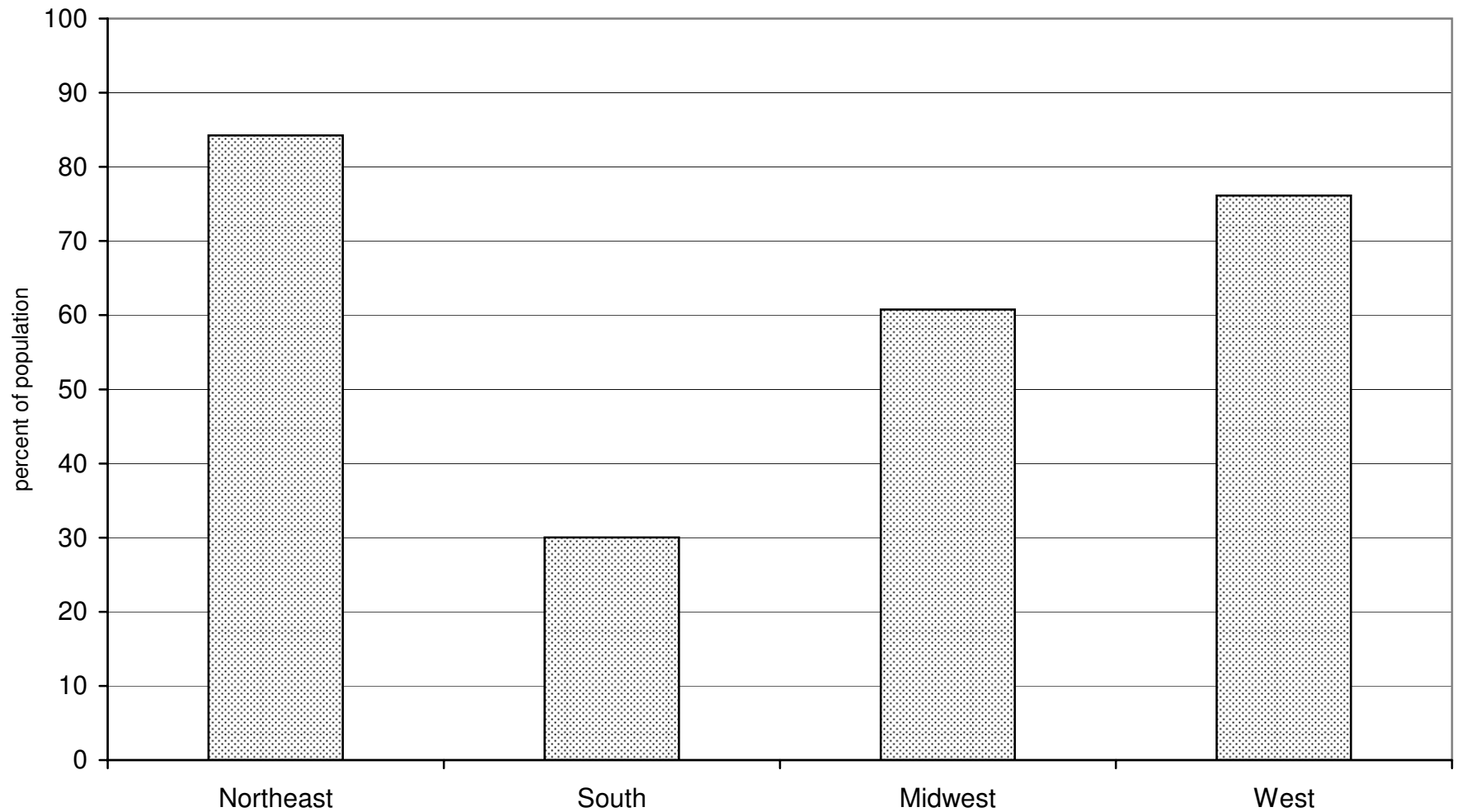


**Figure 17. Diagram of solid waste management**



Source: Franklin Associates, A Division of ERG

**Figure 18. Population served by curbside recycling, 2008**



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

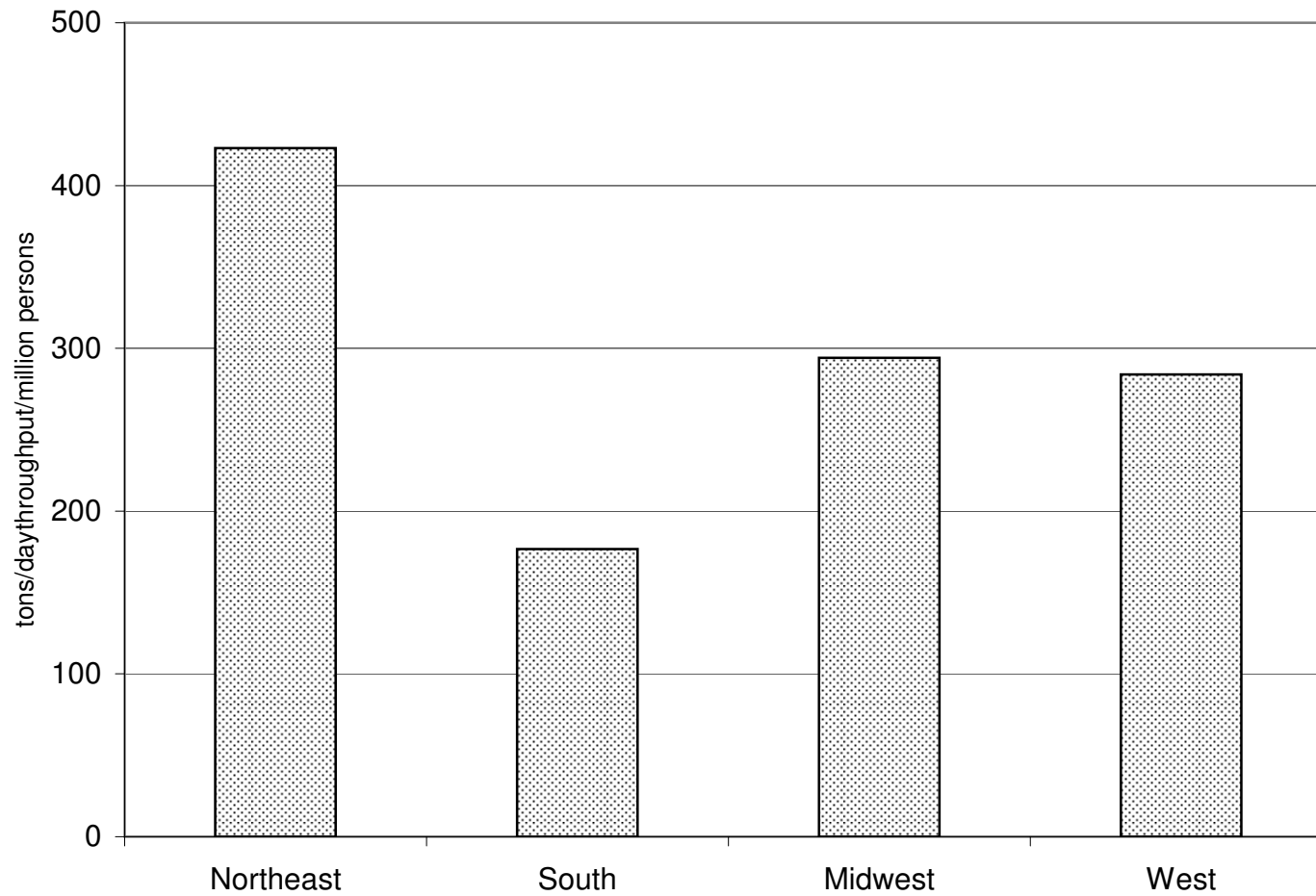
### Figure 19. States with Bottle Deposit Rules

Legend: States With Bottle Bills

Source: The Container Recycling Institute, 2006

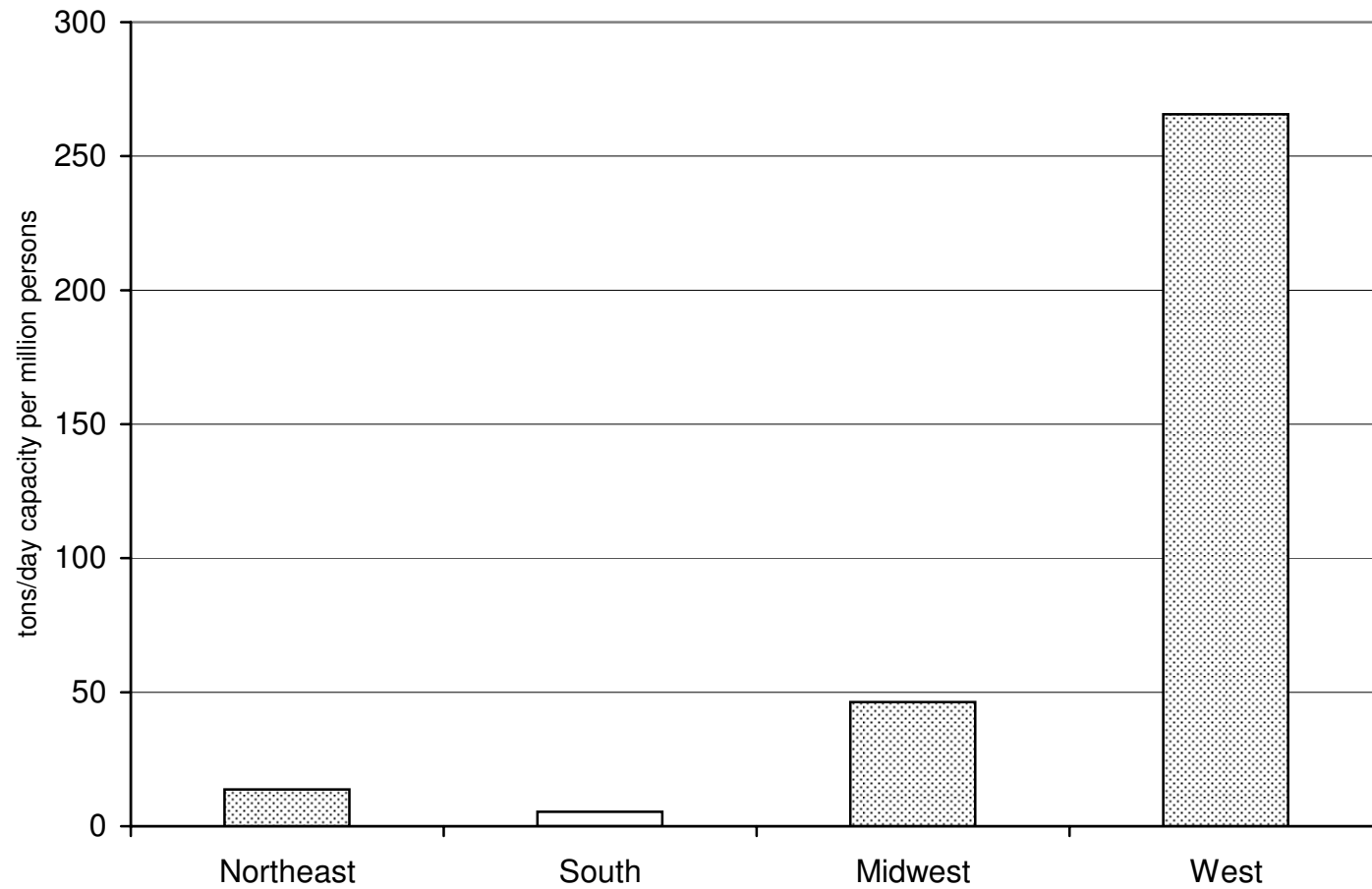
Source: The Container Recycling Institute, 2006

**Figure 20. Estimated MRF throughput, 2008  
(Tons per day per million persons)**



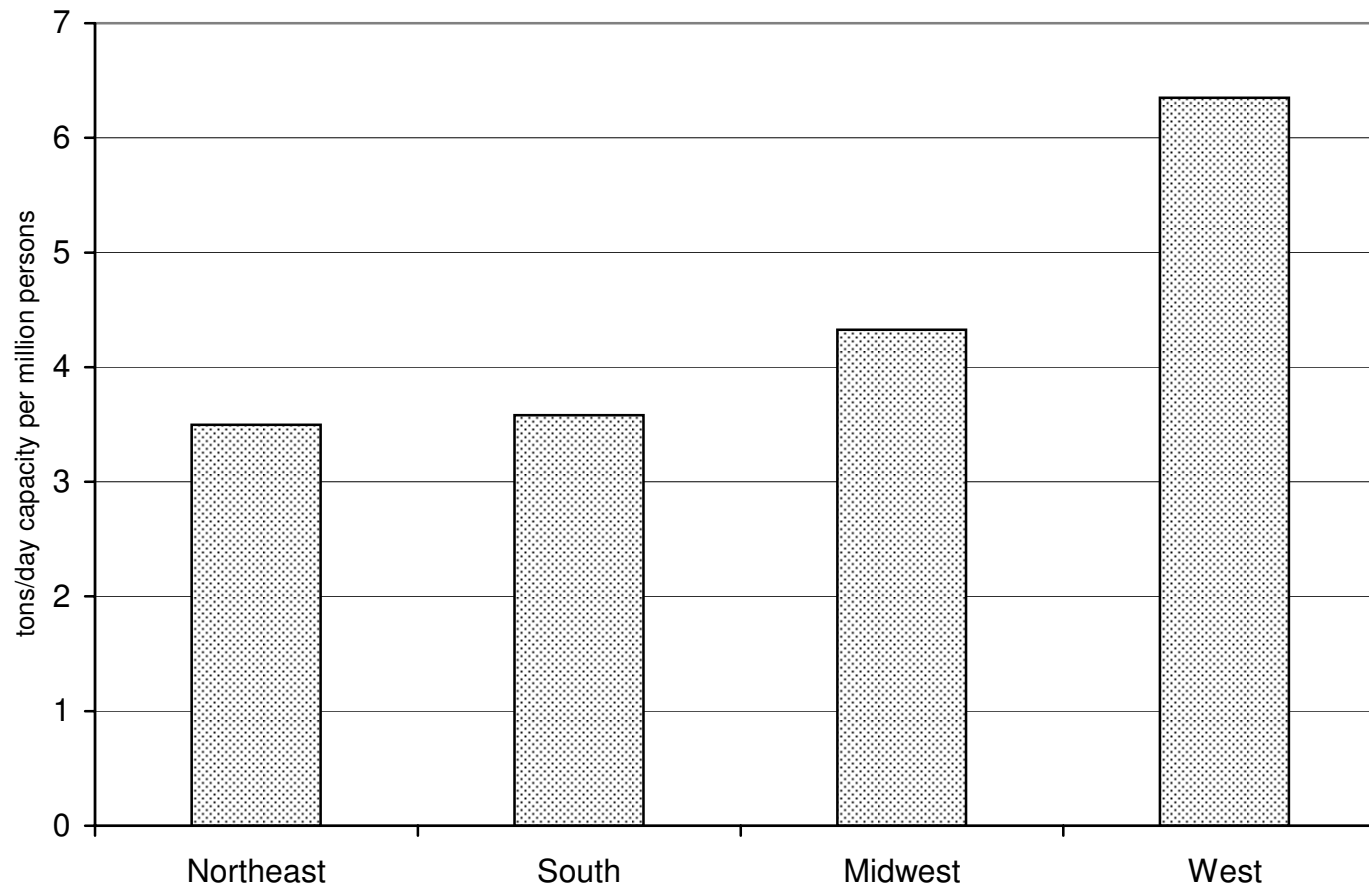
Source: U.S. Census Bureau, Governmental Advisory Associates, Inc.

**Figure 21. Mixed waste processing estimated throughput 2008  
(tons per day per million persons)**



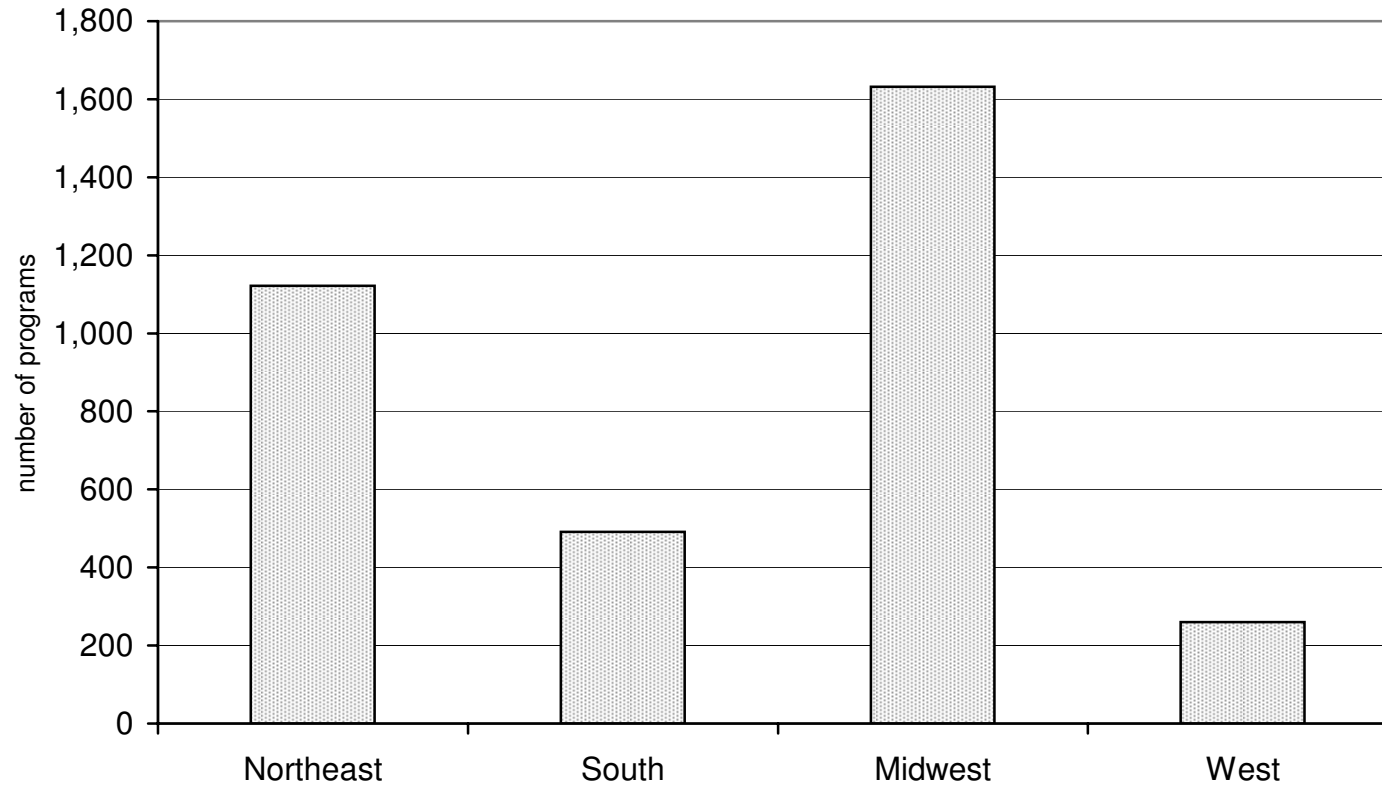
Source: U.S. Census Bureau; Governmental Advisory Associates, Inc.

**Figure 22. MSW composting capacity, 2008**  
(Capacity in tons per day per million persons)



Source: U.S. Census Bureau; *BioCycle*, November 2008.

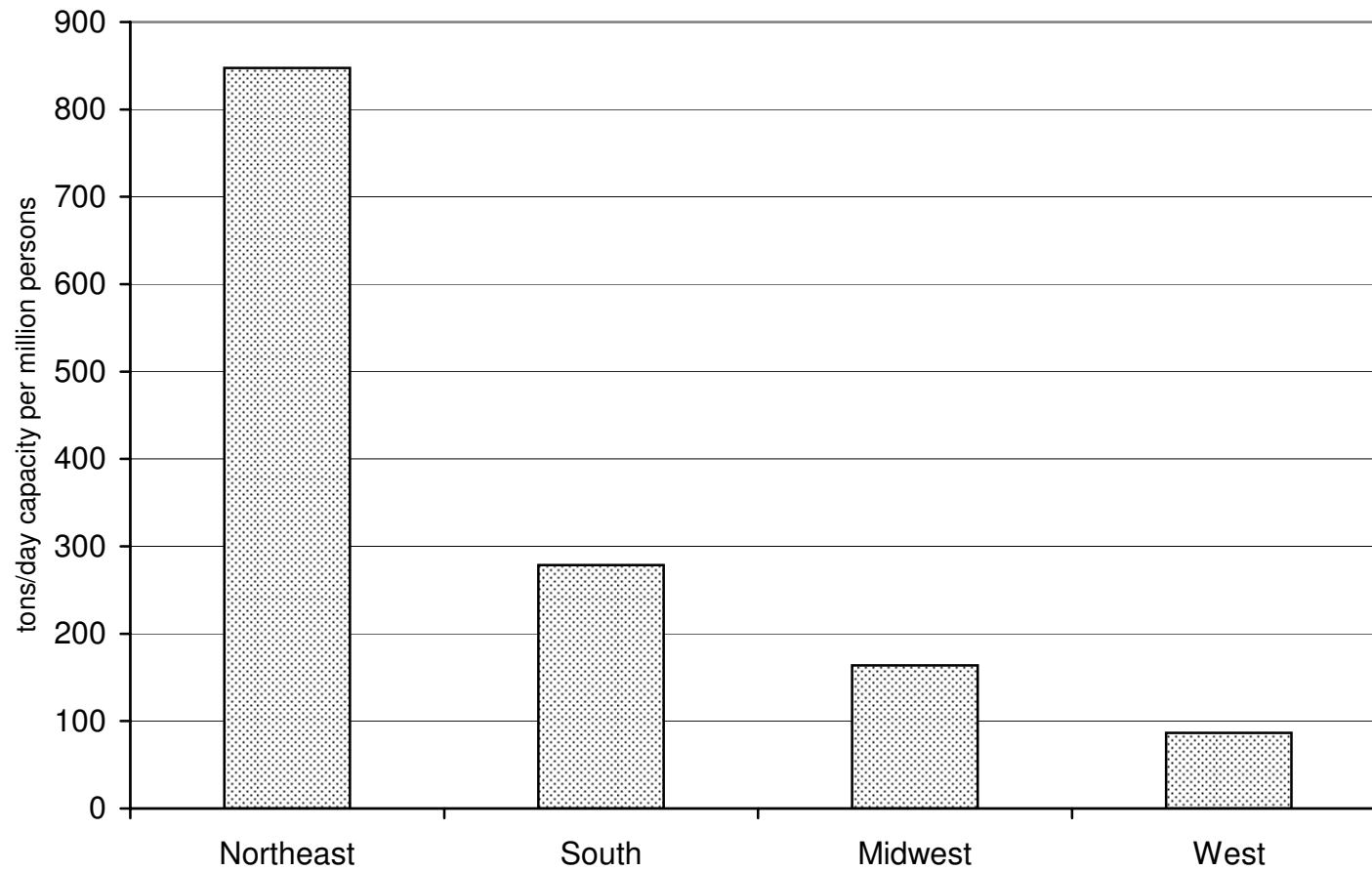
**Figure 23. Yard trimmings composting programs, 2008  
(In number of programs)**



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.

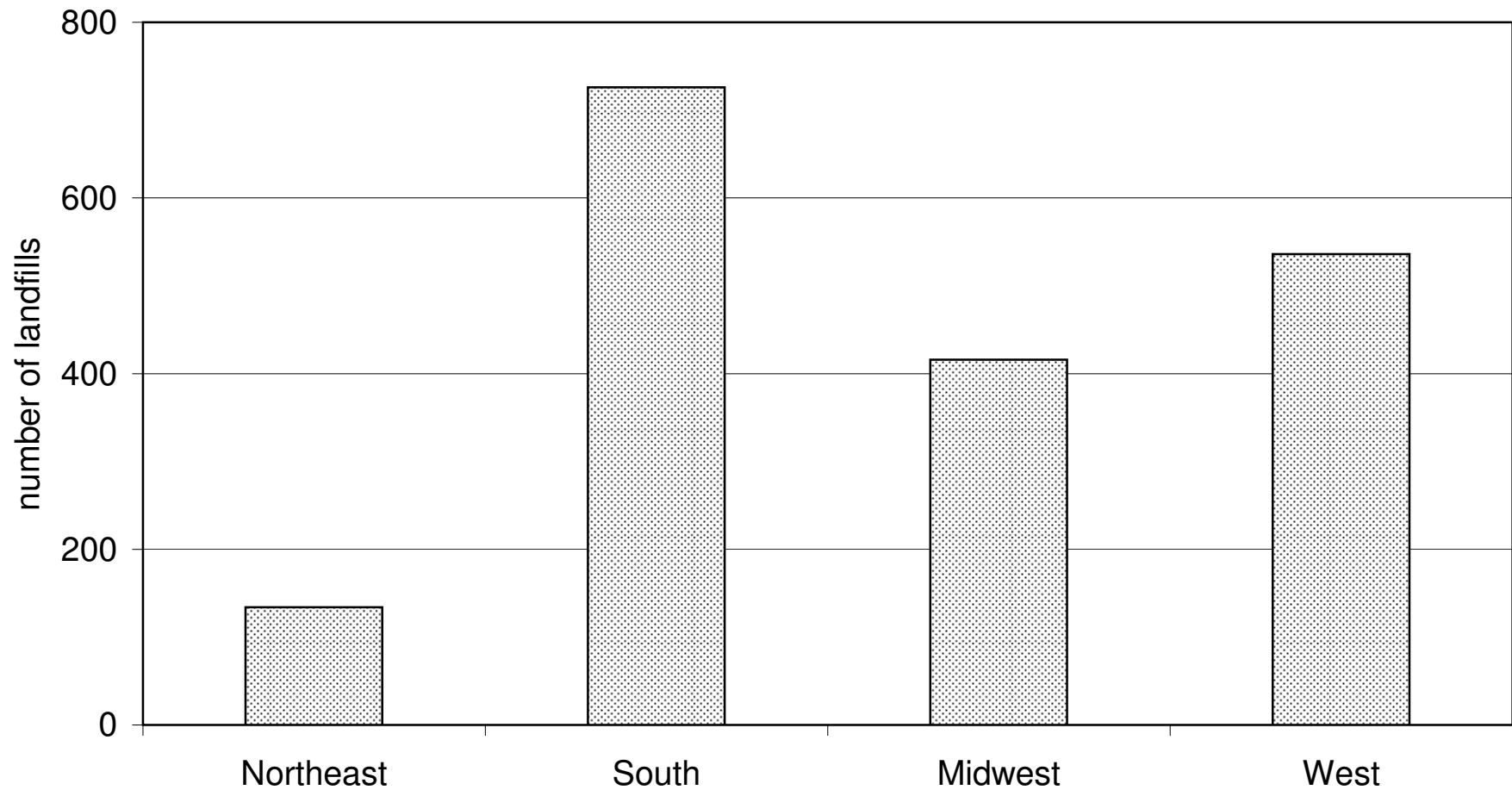
**Figure 24. Municipal waste-to-energy capacity, 2008**  
(Capacity in tons per million persons)



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

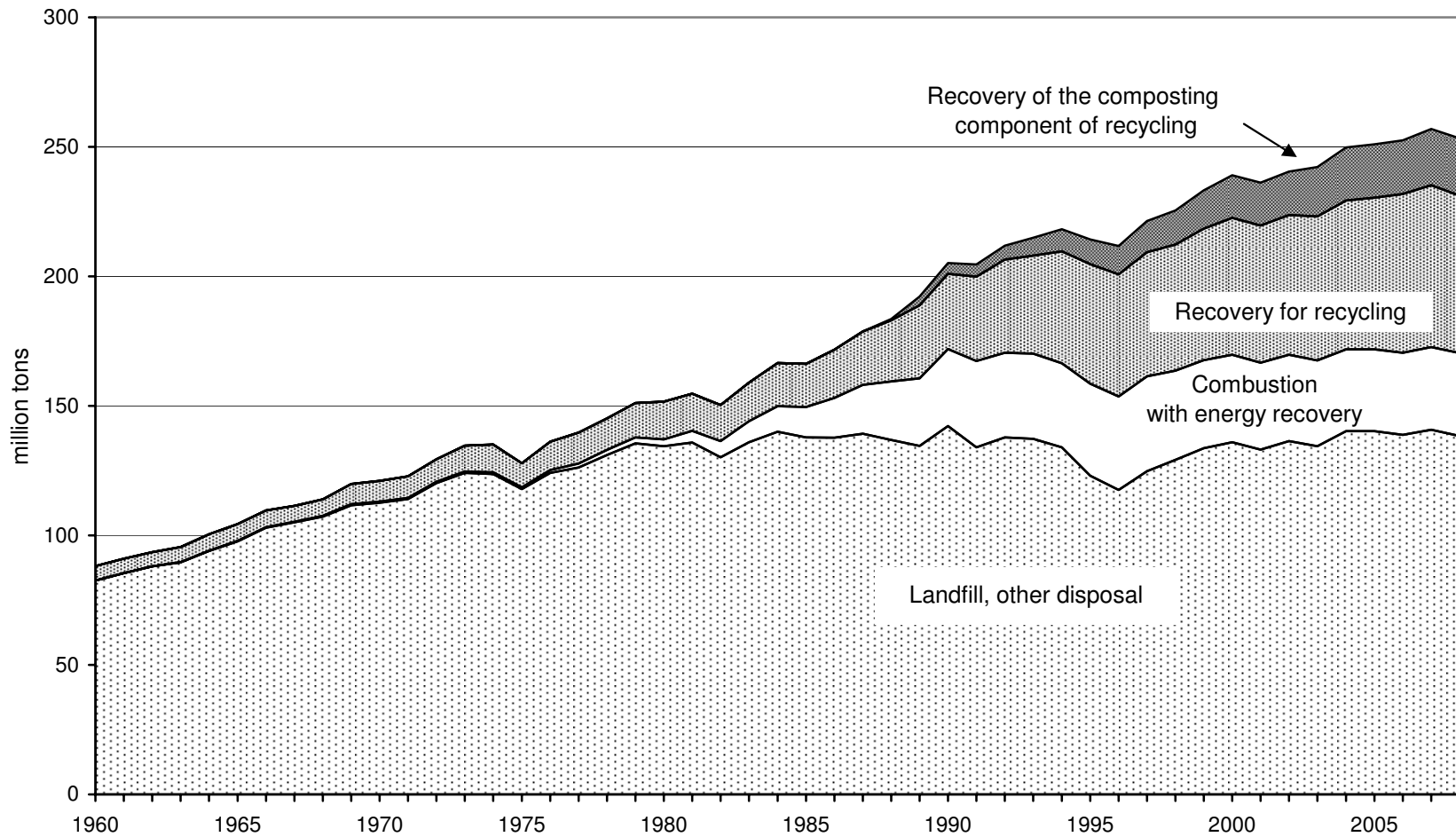


**Figure 25. Number of landfills in the U.S., 2008**



Source: BioCycle December 2008, Alabama Department of Environmental Management, California Integrated Waste Management Board, Colorado Department of Public Health and Environment, and Nevada Division of Environmental Protection

**Figure 26. Municipal solid waste management, 1960 to 2008**



Source: Franklin Associates, A Division of ERG