



Advancing Sustainable Materials Management: 2014 Tables and Figures

Assessing Trends in Material Generation, Recycling,
Composting, Combustion with Energy Recovery
and Landfilling in the United States

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Table 1. Materials Generated* in the Municipal Waste Stream, 1960 to 2014
(In thousands of tons and percent of total generation)

Materials	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Paper and Paperboard	29,990	44,310	55,160	72,730	87,740	84,840	71,310	68,620	68,560	68,610
Glass	6,720	12,740	15,130	13,100	12,770	12,540	11,520	11,590	11,540	11,480
Metals										
Ferrous	10,300	12,360	12,620	12,640	14,150	15,210	16,920	16,940	17,720	17,690
Aluminum	340	800	1,730	2,810	3,190	3,330	3,510	3,510	3,500	3,530
Other Nonferrous	180	670	1,160	1,100	1,600	1,860	2,020	1,980	2,010	2,040
Total Metals	10,820	13,830	15,510	16,550	18,940	20,400	22,450	22,430	23,230	23,260
Plastics	390	2,900	6,830	17,130	25,550	29,380	31,400	31,920	32,620	33,250
Rubber and Leather	1,840	2,970	4,200	5,790	6,670	7,290	7,750	8,100	8,350	8,210
Textiles	1,760	2,040	2,530	5,810	9,480	11,510	13,220	14,500	15,320	16,220
Wood	3,030	3,720	7,010	12,210	13,570	14,790	15,710	15,820	15,770	16,120
Other **	70	770	2,520	3,190	4,000	4,290	4,710	4,570	4,440	4,440
Total Materials in Products	54,620	83,280	108,890	146,510	178,720	185,040	178,070	177,550	179,830	181,590
Other Wastes										
Food	12,200	12,800	13,000	23,860	30,700	32,930	35,740	36,430	37,060	38,400
Yard Trimmings	20,000	23,200	27,500	35,000	30,530	32,070	33,400	33,960	34,200	34,500
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,690	3,840	3,900	3,930	3,970
Total Other Wastes	33,500	37,780	42,750	61,760	64,730	68,690	72,980	74,290	75,190	76,870
Total MSW Generated - Weight	88,120	121,060	151,640	208,270	243,450	253,730	251,050	251,840	255,020	258,460
Materials	Percent of Total Generation									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Paper and Paperboard	34.0%	36.6%	36.4%	34.9%	36.0%	33.4%	28.4%	27.2%	26.9%	26.5%
Glass	7.6%	10.5%	10.0%	6.3%	5.2%	4.9%	4.6%	4.6%	4.5%	4.4%
Metals										
Ferrous	11.7%	10.2%	8.3%	6.1%	5.8%	6.0%	6.7%	6.7%	6.9%	6.8%
Aluminum	0.4%	0.7%	1.1%	1.3%	1.3%	1.3%	1.4%	1.4%	1.4%	1.4%
Other Nonferrous	0.2%	0.6%	0.8%	0.5%	0.7%	0.7%	0.8%	0.8%	0.8%	0.8%
Total Metals	12.3%	11.4%	10.2%	7.9%	7.8%	8.0%	8.9%	8.9%	9.1%	9.0%
Plastics	0.4%	2.4%	4.5%	8.2%	10.5%	11.6%	12.5%	12.7%	12.8%	12.9%
Rubber and Leather	2.1%	2.5%	2.8%	2.8%	2.7%	2.9%	3.1%	3.2%	3.3%	3.2%
Textiles	2.0%	1.7%	1.7%	2.8%	3.9%	4.5%	5.3%	5.8%	6.0%	6.3%
Wood	3.4%	3.1%	4.6%	5.9%	5.6%	5.8%	6.3%	6.3%	6.2%	6.2%
Other **	0.1%	0.6%	1.7%	1.5%	1.6%	1.7%	1.9%	1.8%	1.7%	1.7%
Total Materials in Products	62.0%	68.8%	71.8%	70.3%	73.4%	72.9%	70.9%	70.5%	70.5%	70.3%
Other Wastes										
Food	13.8%	10.6%	8.6%	11.5%	12.6%	13.0%	14.2%	14.5%	14.5%	14.9%
Yard Trimmings	22.7%	19.2%	18.1%	16.8%	12.5%	12.6%	13.3%	13.5%	13.4%	13.3%
Miscellaneous Inorganic Wastes	1.5%	1.5%	1.5%	1.4%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%
Total Other Wastes	38.0%	31.2%	28.2%	29.7%	26.6%	27.1%	29.1%	29.5%	29.5%	29.7%
Total MSW Generated - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

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

Table 2. Materials Recycled and Composted* in Municipal Solid Waste, 1960 to 2014

(In thousands of tons and percent of generation of each material)

Materials	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Paper and Paperboard	5,080	6,770	11,740	20,230	37,560	41,960	44,570	44,360	43,400	44,400
Glass	100	160	750	2,630	2,880	2,590	3,130	3,210	3,150	2,990
Metals										
Ferrous	50	150	370	2,230	4,680	5,020	5,800	5,590	5,870	5,840
Aluminum	Neg.	10	310	1,010	860	690	680	710	700	700
Other Nonferrous	Neg.	320	540	730	1,060	1,280	1,440	1,390	1,370	1,360
<i>Total Metals</i>	50	480	1,220	3,970	6,600	6,990	7,920	7,690	7,940	7,900
Plastics	Neg.	Neg.	20	370	1,480	1,780	2,500	2,790	2,990	3,170
Rubber and Leather	330	250	130	370	820	1,050	1,440	1,500	1,490	1,440
Textiles	50	60	160	660	1,320	1,830	2,050	2,290	2,380	2,620
Wood	Neg.	Neg.	Neg.	130	1,370	1,830	2,280	2,410	2,470	2,570
Other **	Neg.	300	500	680	980	1,210	1,370	1,310	1,300	1,290
Total Materials in Products	5,610	8,020	14,520	29,040	53,010	59,240	65,260	65,560	65,120	66,380
Other Wastes										
Food	Neg.	Neg.	Neg.	Neg.	680	690	970	1,740	1,840	1,940
Yard Trimmings	Neg.	Neg.	Neg.	4,200	15,770	19,860	19,200	19,590	20,600	21,080
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	4,200	16,450	20,550	20,170	21,330	22,440	23,020
Total MSW Recycled and Composted - Weight	5,610	8,020	14,520	33,240	69,460	79,790	85,430	86,890	87,560	89,400
Materials	Percent of Generation of Each Material									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Paper and Paperboard	16.9%	15.3%	21.3%	27.8%	42.8%	49.5%	62.5%	64.6%	63.3%	64.7%
Glass	1.5%	1.3%	5.0%	20.1%	22.6%	20.7%	27.2%	27.7%	27.3%	26.0%
Metals										
Ferrous	0.5%	1.2%	2.9%	17.6%	33.1%	33.0%	34.3%	33.0%	33.1%	33.0%
Aluminum	Neg.	1.3%	17.9%	35.9%	27.0%	20.7%	19.4%	20.2%	20.0%	19.8%
Other Nonferrous	Neg.	47.8%	46.6%	66.4%	66.3%	68.8%	71.3%	70.2%	68.2%	66.7%
<i>Total Metals</i>	0.5%	3.5%	7.9%	24.0%	34.8%	34.3%	35.3%	34.3%	34.2%	34.0%
Plastics	Neg.	Neg.	0.3%	2.2%	5.8%	6.1%	8.0%	8.7%	9.2%	9.5%
Rubber and Leather	17.9%	8.4%	3.1%	6.4%	12.3%	14.4%	18.6%	18.5%	17.8%	17.5%
Textiles	2.8%	2.9%	6.3%	11.4%	13.9%	15.9%	15.5%	15.8%	15.5%	16.2%
Wood	Neg.	Neg.	Neg.	1.1%	10.1%	12.4%	14.5%	15.2%	15.7%	15.9%
Other **	Neg.	39.0%	19.8%	21.3%	24.5%	28.2%	29.1%	28.7%	29.3%	29.1%
Total Materials in Products	10.3%	9.6%	13.3%	19.8%	29.7%	32.0%	36.6%	36.9%	36.2%	36.6%
Other Wastes										
Food, Other^	Neg.	Neg.	Neg.	Neg.	2.2%	2.1%	2.7%	4.8%	5.0%	5.1%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	51.7%	61.9%	57.5%	57.7%	60.2%	61.1%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	6.8%	25.4%	29.9%	27.6%	28.7%	29.8%	29.9%
Total MSW Recycled and Composted - %	6.4%	6.6%	9.6%	16.0%	28.5%	31.4%	34.0%	34.5%	34.3%	34.6%

* Recycling and composting of postconsumer wastes; does not include converting/fabrication scrap. Details may not add to totals due to rounding.

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

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

^ Includes paper and mixed MSW for composting.

Table 3. Materials Combusted with Energy Recovery* in the Municipal Waste Stream, 1960 to 2014

(In thousands of tons and percent of total combusted)

Materials	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Paper and Paperboard		150	860	8,930	9,730	7,800	4,740	4,770	4,990	4,740
Glass		60	300	1,810	1,790	1,660	1,360	1,480	1,450	1,450
Metals										
Ferrous		60	250	1,690	1,610	1,640	1,810	2,020	2,040	2,020
Aluminum		0	30	300	390	410	440	470	460	470
Other Nonferrous		0	20	60	50	50	60	60	50	50
Total Metals		60	300	2,050	2,050	2,100	2,310	2,550	2,550	2,540
Plastics		0	140	2,980	4,120	4,330	4,530	4,990	4,910	4,980
Rubber and Leather		10	70	830	1,970	2,110	1,910	2,350	2,710	2,620
Textiles		10	50	880	1,880	2,110	2,270	2,790	3,030	3,140
Wood		10	150	2,080	2,290	2,270	2,310	2,550	2,500	2,540
Other **		0	30	410	540	510	540	590	580	570
Total Materials in Products		300	1,900	19,970	24,370	22,890	19,970	22,070	22,720	22,580
Other Wastes										
Food		50	260	4,060	5,820	5,870	6,150	6,830	6,970	7,150
Yard Trimmings		90	550	5,240	2,860	2,220	2,510	2,830	2,690	2,630
Miscellaneous Inorganic Wastes		10	50	490	680	670	680	770	780	780
Total Other Wastes		150	860	9,790	9,360	8,760	9,340	10,430	10,440	10,560
Total MSW Combusted - Weight		450	2,760	29,760	33,730	31,650	29,310	32,500	33,160	33,140
Materials	Percent of Total Combusted									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Paper and Paperboard		33.3%	31.2%	30.0%	28.8%	24.6%	16.2%	14.7%	15.0%	14.3%
Glass		13.3%	10.9%	6.1%	5.3%	5.2%	4.6%	4.6%	4.4%	4.4%
Metals										
Ferrous		13.3%	9.0%	5.7%	4.8%	5.2%	6.2%	6.2%	6.2%	6.1%
Aluminum		0.0%	1.1%	1.0%	1.2%	1.3%	1.5%	1.4%	1.4%	1.4%
Other Nonferrous		0.0%	0.7%	0.2%	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%
Total Metals		13.3%	10.8%	6.9%	6.1%	6.6%	7.9%	7.8%	7.8%	7.7%
Plastics		Neg.	5.1%	10.0%	12.2%	13.7%	15.5%	15.4%	14.8%	15.0%
Rubber and Leather		2.2%	2.5%	2.8%	5.9%	6.7%	6.5%	7.2%	8.2%	7.9%
Textiles		2.2%	1.8%	2.9%	5.6%	6.7%	7.7%	8.6%	9.1%	9.5%
Wood		2.2%	5.4%	7.0%	6.8%	7.2%	7.9%	7.8%	7.5%	7.7%
Other **		Neg.	1.1%	1.4%	1.6%	1.6%	1.8%	1.8%	1.7%	1.7%
Total Materials in Products		66.6%	68.8%	67.1%	72.3%	72.3%	68.1%	67.9%	68.5%	68.1%
Other Wastes										
Food		11.1%	9.4%	13.6%	17.3%	18.5%	21.0%	21.0%	21.0%	21.6%
Yard Trimmings		20.0%	20.0%	17.6%	8.5%	7.0%	8.6%	8.7%	8.1%	7.9%
Miscellaneous Inorganic Wastes		2.3%	1.8%	1.7%	1.9%	2.1%	2.3%	2.4%	2.4%	2.4%
Total Other Wastes		33.4%	31.2%	32.9%	27.7%	27.7%	31.9%	32.1%	31.5%	31.9%
Total MSW Combusted with Energy Recovery- %		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Products and materials combusted with energy recovery estimated at percentage total MSW after recycling and composting. In 2014, 19.6 percent of MSW after recycling and composting was combusted with energy recovery except for major appliances, tires, and lead-acid batteries (see Table 16). No combustion with energy recovery in 1960 (see Table 35). Does not include construction & demolition debris, industrial process wastes, or certain other wastes. Details may not add to totals due to rounding.

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

Table 4. Materials Landfilled* in the Municipal Waste Stream, 1960 to 2014
(In thousands of tons and percent of total landfilled)

Materials	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Paper and Paperboard	24,910	37,540	43,420	52,500	50,180	42,880	22,000	19,490	20,170	19,470
Glass	6,620	12,580	14,380	10,470	9,890	9,950	7,030	6,900	6,940	7,040
Metals										
Ferrous	10,250	12,210	12,250	10,410	9,470	10,190	9,310	9,330	9,810	9,830
Aluminum	340	790	1,420	1,800	2,330	2,640	2,390	2,330	2,340	2,360
Other Nonferrous	180	350	620	370	540	580	520	530	590	630
Total Metals	10,770	13,350	14,290	12,580	12,340	13,410	12,220	12,190	12,740	12,820
Plastics	390	2,900	6,810	16,760	24,070	27,600	24,370	24,140	24,720	25,100
Rubber and Leather	1,510	2,720	4,070	5,420	5,850	6,240	4,400	4,250	4,150	4,150
Textiles	1,710	1,980	2,370	5,150	8,160	9,680	8,900	9,420	9,910	10,460
Wood	3,030	3,720	7,010	12,080	12,200	12,960	11,120	10,860	10,800	11,010
Other **	70	470	2,020	2,510	3,020	3,080	2,800	2,670	2,560	2,580
Total Materials in Products	49,010	75,260	94,370	117,470	125,710	125,800	92,840	89,920	91,990	92,630
Other Wastes										
Food	12,200	12,800	13,000	23,860	30,020	32,240	28,620	27,860	28,250	29,310
Yard Trimmings	20,000	23,200	27,500	30,800	14,760	12,210	11,690	11,540	10,910	10,790
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,690	3,160	3,130	3,150	3,190
Total Other Wastes	33,500	37,780	42,750	57,560	48,280	48,140	43,470	42,530	42,310	43,290
Total MSW Landfilled - Weight	82,510	113,040	137,120	175,030	173,990	173,940	136,310	132,450	134,300	135,920
Materials	Percent of Total Landfilled									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Paper and Paperboard	30.2%	33.2%	31.7%	30.0%	28.8%	24.7%	16.1%	14.7%	15.0%	14.3%
Glass	8.0%	11.1%	10.5%	6.0%	5.7%	5.7%	5.1%	5.2%	5.2%	5.2%
Metals										
Ferrous	12.4%	10.8%	8.9%	5.9%	5.4%	5.9%	6.8%	7.0%	7.3%	7.2%
Aluminum	0.4%	0.7%	1.0%	1.0%	1.3%	1.5%	1.8%	1.8%	1.7%	1.7%
Other Nonferrous	0.2%	0.3%	0.5%	0.2%	0.3%	0.3%	0.4%	0.4%	0.5%	0.5%
Total Metals	13.1%	11.8%	10.4%	7.2%	7.1%	7.7%	9.0%	9.2%	9.5%	9.4%
Plastics	0.5%	2.6%	5.0%	9.6%	13.8%	15.9%	17.9%	18.2%	18.4%	18.5%
Rubber and Leather	1.8%	2.4%	3.0%	3.1%	3.4%	3.6%	3.2%	3.2%	3.1%	3.1%
Textiles	2.1%	1.8%	1.7%	2.9%	4.7%	5.6%	6.5%	7.1%	7.4%	7.7%
Wood	3.7%	3.3%	5.1%	6.9%	7.0%	7.5%	8.2%	8.2%	8.0%	8.1%
Other **	0.1%	0.4%	1.5%	1.4%	1.7%	1.8%	2.1%	2.0%	1.9%	1.9%
Total Materials in Products	59.4%	66.6%	68.8%	67.1%	72.3%	72.3%	68.1%	67.9%	68.5%	68.2%
Other Wastes										
Food	14.8%	11.3%	9.5%	13.6%	17.3%	18.5%	21.0%	21.0%	21.0%	21.6%
Yard Trimmings	24.2%	20.5%	20.1%	17.6%	8.5%	7.0%	8.6%	8.7%	8.1%	7.9%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	2.0%	2.1%	2.3%	2.4%	2.4%	2.3%
Total Other Wastes	40.6%	33.4%	31.2%	32.9%	27.7%	27.7%	31.9%	32.1%	31.5%	31.8%
Total MSW Landfilled - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Landfilling after recycling, composting, and combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes, or certain other wastes. Details may not add to totals due to rounding.

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

Table 5. Paper and Paperboard Products In MSW, 2014
(In thousands of tons and percent of generation)

Product Category	Generation	Recycled		Combusted with Energy Recovery	Landfilled
	(Thousand tons)	(Thousand tons)	(Percent of generation)	(Thousand tons)	(Thousand tons)
Nondurable Goods					
Newspapers/Mechanical Papers†	7,620	5,200	68.2%	470	1,950
Books	830				
Magazines	1,260				
Office-type Papers*	4,530				
Standard Mail**	4,050				
Other Commercial Printing	2,190				
Tissue Paper and Towels	3,640				
Paper Plates and Cups	1,380				
Other Nonpackaging Paper***	3,970				
Subtotal Nondurable Goods excluding Newspaper/Mechanical Papers§	21,850	9,710	44.4%	2,380	9,760
Total Paper and Paperboard Nondurable Goods	29,470	14,910	50.6%	2,850	11,710
Containers and Packaging					
Corrugated Boxes	30,490	27,280	89.5%	630	2,580
Gable Top/Aseptic Cartons‡	590				
Folding Cartons	5,410				
Other Paperboard Packaging	70				
Bags and Sacks	880				
Other Paper Packaging	1,690				
Subtotal Containers and Packaging excluding Corrugated Boxes§	8,640	2,210	25.6%	1,260	5,170
Total Paper and Paperboard Containers and Packaging	39,130	29,490	75.4%	1,890	7,750
Total Paper and Paperboard^	68,600	44,400	64.7%	4,740	19,460

† Starting in 2010, newsprint and groundwood inserts expanded to include directories and other mechanical papers previously counted as Other Commercial Printing.

* 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 paper in games and novelties, cards, etc.

§ Valid default values for separating out paper and paperboard sub-categories for recovery and discards were not available.

‡ Includes milk, juice, and other products packaged in gable top cartons and liquid food aseptic cartons.

^ Table 5 does not include 10,000 tons of paper used in durable goods (Table 1).

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

Table 6. Glass Products in MSW, 2014
(In thousands of tons and percent of generation)

Product Category	Generation	Recycled		Combusted with Energy Recovery	Landfilled
	(Thousand tons)	(Thousand tons)	(Percent of generation)	(Thousand tons)	(Thousand tons)
Durable Goods*	2,280	Neg.	Neg.	230	2,050
Containers and Packaging					
Beer and Soft Drink Bottles**	5,370	2,120	39.5%	640	3,180
Wine and Liquor Bottles	1,790	570	31.8%	240	1,140
Other Bottles and Jars	2,040	300	14.7%	340	1,790
Total Glass Containers	9,200	2,990	32.5%	1,220	6,110
Total Glass	11,480	2,990	26.0%	1,450	8,390

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

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks, and ready-to-drink alcoholic coolers and cocktails.

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

Details may not add to totals due to rounding.

Table 7. Metal Products in MSW, 2014
(In thousands of tons and percent of generation)

Product Category	Generation	Recycled		Combusted with Energy Recovery	Landfilled
	(Thousand tons)	(Thousand tons)	(Percent of generation)	(Thousand tons)	(Thousand tons)
Durable Goods					
Ferrous Metals*	15,520	4,260	27.4%	1,900	9,360
Aluminum**	1,520	NA	NA	210	1,310
Lead†	1,380	1,360	99%		20
Other Nonferrous Metals‡	660	Neg.	Neg.	50	610
Total Metals in Durable Goods	19,080	5,620	29.5%	2,160	11,300
Nondurable Goods					
Aluminum	200	NA	NA	40	160
Containers and Packaging					
Steel					
Cans	1,670	1,180	70.7%	100	390
Other Steel Packaging	500	400	80.0%	20	80
Total Steel Packaging	2,170	1,580	72.8%	120	470
Aluminum					
Beer and Soft Drink Cans§	1,270	700	55.1%	110	460
Other Cans	130	NA	NA	30	100
Foil and Closures	410	NA	NA	80	330
Total Aluminum Packaging	1,810	700	38.7%	220	890
Total Metals in Containers and Packaging	3,980	2,280	57.3%	340	1,360
Total Metals	23,260	7,900	34.0%	2,540	12,820
Ferrous	17,690	5,840	33.0%	2,020	9,830
Aluminum	3,530	700	19.8%	170	2,360
Other nonferrous	2,040	1,360	66.7%	50	630

* 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.

§ Aluminum can recycling does not include used beverage cans imported to produce new beverage cans.

NA = Not Available

Details may not add to totals due to rounding.

Table 8. Plastics in Products In MSW, 2014
(In thousands of tons and percent of generation by resin)

Product Category	Generation	Recycled		Combusted with energy Recovery	Landfilled
	(Thousand tons)	(Thousand tons)	(Percent of generation)	(Thousand tons)	(Thousand tons)
Durable Goods					
PET	540				
HDPE	1,340				
PVC	200				
LDPE/LLDPE	1,990				
PP	3,960				
PS	730				
Other resins	3,390				
Total Plastics in Durable Goods	12,150	910	7.5%	1,280	9,960
Nondurable Goods[†]					
Plastic Plates and Cups§					
LDPE/LLDPE	20				
PLA	20				
PP	140				
PS	840				
Subtotal Plastic Plates and Cups	1,020	Neg.	Neg.	200	820
Trash Bags					
HDPE	200				
LDPE/LLDPE	800				
Subtotal Trash Bags	1,000			200	800
All other nondurables*					
PET	660				
HDPE	570				
PVC	250				
LDPE/LLDPE	1,240				
PLA	30				
PP	1,290				
PS	200				
Other resins	520				
Subtotal All Other Nondurables	4,760	140	2.9%	910	3,710
Total Plastics in Nondurable Goods, by resin					
PET	660				
HDPE	770				
PVC	250				
LDPE/LLDPE	2,060				
PLA	50				
PP	1,430				
PS	1,040				
Other resins	520				
Total Plastics in Nondurable Goods	6,780	140	2.1%	1,310	5,330

Table 8. Plastics in Products In MSW, 2014
(In thousands of tons and percent of generation by resin)

Product Category	Generation	Recycled		Combusted with energy Recovery	Landfilled
	(Thousand tons)	(Thousand tons)	(Percent of generation)	(Thousand tons)	(Thousand tons)
Plastic Containers & Packaging					
Bottles and Jars**					
PET	2,920	910	31.2%	390	1,620
Natural Bottles†					
HDPE	780	230	29.5%	110	440
Other plastic containers					
HDPE	1,480	320	21.6%		
PVC	20	Neg.			
LDPE/LLDPE	40	Neg.			
PP	230	40	17.4%		
PS	80	Neg.			
Subtotal Other Containers	1,850	360	19.5%	290	1,200
Bags, sacks, & wraps					
HDPE	760	50	6.6%		
PVC	50				
LDPE/LLDPE	2,530	450	17.8%		
PP	560				
PS	150				
Subtotal Bags, Sacks, & Wraps	4,050	500	12.3%	700	2,850
Other Plastics Packaging‡					
PET	950	60	6.3%		
HDPE	700	10	1.4%		
PVC	320	Neg.			
LDPE/LLDPE	1,090	Neg.			
PLA	10	Neg.			
PP	930	20	2.2%		
PS	330	30	9.1%		
Other resins	390	Neg.			
Subtotal Other Packaging	4,720	120	2.5%	900	3,700
Total Plastics in Containers & Packaging, by resin					
PET	3,870	970	25.1%		
HDPE	3,720	610	16.4%		
PVC	390	Neg.			
LDPE/LLDPE	3,660	450	12.3%		
PLA	10	Neg.			
PP	1,720	60	3.5%		
PS	560	30	5.4%		
Other resins	390	Neg.			
Total Plastics in Containers & Packaging	14,320	2,120	14.8%	2,390	9,810

Table 8. Plastics in Products In MSW, 2014
(In thousands of tons and percent of generation by resin)

Product Category	Generation	Recycled		Combusted with energy Recovery	Landfilled
	(Thousand tons)	(Thousand tons)	(Percent of generation)	(Thousand tons)	(Thousand tons)
Total Plastics in MSW, by resin					
PET	5,070	970	19.1%		
HDPE	5,830	610	10.5%		
PVC	840	Neg.			
LDPE/LLDPE	7,710	450	5.8%		
PLA	60	Neg.			
PP	7,110	60	0.8%		
PS	2,330	30	1.3%		
Other resins	4,300	1,050	24.4%		
Total Plastics in MSW	33,250	3,170	9.5%	4,980	25,100

‡ Nondurable goods other than containers and packaging.

§ Due to source data aggregation, PET cups are included in "Other Plastic Packaging".

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

** Injection stretch blow molded PET containers as identified in *Report on Postconsumer PET Container Recycling Activity in 2014*. National Association for PET Container Resources. Recycling includes caps, lids, and other material collected with PET bottles and jars.

† White translucent homopolymer bottles as defined in the *2014 United States National Postconsumer Plastics Bottles Recycling Report*. American Chemistry Council and the Association of Postconsumer Plastic Recyclers.

Neg. = negligible, less than 5,000 tons

HDPE = High density polyethylene

LDPE = Low density polyethylene

LLDPE = Linear low density polyethylene

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

PP caps and lids recycled with PET bottles and jars are included in the recycling estimate for PET bottles and jars.

Other resins include commingled/undefined plastic packaging recycling.

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

Table 9. Rubber and Leather Products In MSW, 2014
(In thousands of tons and percent of generation)

Product Category	Generation	Recycled		Combusted with energy Recovery	Landfilled
	(Thousand tons)	(Thousand tons)	(Percent of generation)	(Thousand tons)	(Thousand tons)
Durable Goods					
Rubber in Tires*	3,550	1,440	40.6%	1,960	150
Other Durables**	3,570	Neg.	Neg.	450	3,120
Total Rubber & Leather					
Durable Goods	7,120	1,440	20.2%	2,410	3,270
Nondurable Goods					
Clothing and Footwear	830	Neg.	Neg.	160	670
Other Nondurables	260	Neg.	Neg.	50	210
Total Rubber & Leather					
Nondurable Goods	1,090	Neg.	Neg.	210	880
Total Rubber & Leather	8,210	1,440	17.5%	2,620	4,150

* 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.

Table 10. Products Generated* in the Municipal Waste Stream, 1960 to 2014
(In thousands of tons and percent of total generation)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	9,920	14,660	21,800	29,810	38,870	45,060	49,350	50,890	52,520	52,650
<i>(Detail in Table 14)</i>										
Nondurable Goods	17,330	25,060	34,420	52,170	64,010	63,650	53,250	51,430	51,540	52,270
<i>(Detail in Table 18)</i>										
Containers and Packaging	27,370	43,560	52,670	64,530	75,840	76,330	75,470	75,230	75,770	76,670
<i>(Detail in Table 22)</i>										
Total Product** Wastes	54,620	83,280	108,890	146,510	178,720	185,040	178,070	177,550	179,830	181,590
Other Wastes										
Food	12,200	12,800	13,000	23,860	30,700	32,930	35,740	36,430	37,060	38,400
Yard Trimmings	20,000	23,200	27,500	35,000	30,530	32,070	33,400	33,960	34,200	34,500
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,690	3,840	3,900	3,930	3,970
Total Other Wastes	33,500	37,780	42,750	61,760	64,730	68,690	72,980	74,290	75,190	76,870
Total MSW Generated - Weight	88,120	121,060	151,640	208,270	243,450	253,730	251,050	251,840	255,020	258,460
Products	Percent of Total Generation									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	11.3%	12.1%	14.4%	14.3%	16.0%	17.8%	19.7%	20.2%	20.6%	20.4%
<i>(Detail in Table 14)</i>										
Nondurable Goods	19.7%	20.7%	22.7%	25.0%	26.3%	25.1%	21.2%	20.4%	20.2%	20.2%
<i>(Detail in Table 18)</i>										
Containers and Packaging	31.1%	36.0%	34.7%	31.0%	31.2%	30.1%	30.1%	29.9%	29.7%	29.7%
<i>(Detail in Table 23)</i>										
Total Product** Wastes	62.0%	68.8%	71.8%	70.3%	73.4%	72.9%	70.9%	70.5%	70.5%	70.3%
Other Wastes										
Food	13.8%	10.6%	8.6%	11.5%	12.6%	13.0%	14.2%	14.5%	14.5%	14.9%
Yard Trimmings	22.7%	19.2%	18.1%	16.8%	12.5%	12.6%	13.3%	13.5%	13.4%	13.3%
Miscellaneous Inorganic Wastes	1.5%	1.5%	1.5%	1.4%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%
Total Other Wastes	38.0%	31.2%	28.2%	29.7%	26.6%	27.1%	29.1%	29.5%	29.5%	29.7%
Total MSW Generated - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

** Other than food products.

Table 11. Products Recycled and Composted* in the Municipal Waste Stream, 1960 to 2014

(In thousands of tons and percent of total generation)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	350	940	1,360	3,460	6,580	7,970	9,390	9,530	9,660	9,750
<i>(Detail in Table 15)</i>										
Nondurable Goods	2,390	3,730	4,670	8,800	17,560	19,770	19,190	17,270	16,410	17,180
<i>(Detail in Table 19)</i>										
Containers and Packaging	2,870	3,350	8,490	16,780	28,870	31,500	36,680	38,760	39,050	39,450
<i>(Detail in Table 24)</i>										
Total Product** Wastes	5,610	8,020	14,520	29,040	53,010	59,240	65,260	65,560	65,120	66,380
Other Wastes										
Food, Other^	Neg.	Neg.	Neg.	Neg.	680	690	970	1,740	1,840	1,940
Yard Trimmings	Neg.	Neg.	Neg.	4,200	15,770	19,860	19,200	19,590	20,600	21,080
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	4,200	16,450	20,550	20,170	21,330	22,440	23,020
Total MSW Recycled and Composted - Weight	5,610	8,020	14,520	33,240	69,460	79,790	85,430	86,890	87,560	89,400
Products	Percent of Total Generation									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	3.5%	6.4%	6.2%	11.6%	16.9%	17.7%	19.0%	18.7%	18.4%	18.5%
<i>(Detail in Table 15)</i>										
Nondurable Goods	13.8%	14.9%	13.6%	16.9%	27.4%	31.1%	36.0%	33.6%	31.8%	32.9%
<i>(Detail in Table 19)</i>										
Containers and Packaging	10.5%	7.7%	16.1%	26.0%	38.1%	41.3%	48.6%	51.5%	51.5%	51.5%
<i>(Detail in Table 25)</i>										
Total Product** Wastes	10.3%	9.6%	13.3%	19.8%	29.7%	32.0%	36.6%	36.9%	36.2%	36.6%
Other Wastes										
Food, Other^	Neg.	Neg.	Neg.	Neg.	2.2%	2.1%	2.7%	4.8%	5.0%	5.1%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	51.7%	61.9%	57.5%	57.7%	60.2%	61.1%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	6.8%	25.4%	29.9%	27.6%	28.7%	29.8%	29.9%
Total MSW Recycled and Composted - %	6.4%	6.6%	9.6%	16.0%	28.5%	31.4%	34.0%	34.5%	34.3%	34.6%

* Recycling and composting of postconsumer wastes; does not include converting/fabrication scrap. Details may not add to totals due to rounding.

** Other than food products.

^ Includes collection of soiled paper and mixed MSW for composting.

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

Table 12. Products Combusted with Energy Recovery* in the Municipal Waste Stream, 1960 to 2014

(In thousands of tons and percent of total combusted)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods		60	440	4,480	6,260	6,750	7,070	8,150	8,490	8,410
<i>(Detail in Table 16)</i>										
Nondurable Goods		90	580	7,380	9,000	7,980	6,030	6,740	6,960	6,870
<i>(Detail in Table 20)</i>										
Containers and Packaging		150	880	8,110	9,110	8,160	6,870	7,180	7,270	7,300
<i>(Detail in Table 26)</i>										
Total Product** Wastes		300	1,900	19,970	24,370	22,890	19,970	22,070	22,720	22,580
Other Wastes										
Food		50	260	4,060	5,820	5,870	6,150	6,830	6,970	7,150
Yard Trimmings		90	550	5,240	2,860	2,220	2,510	2,830	2,690	2,630
Miscellaneous Inorganic Wastes		10	50	490	680	670	680	770	780	780
Total Other Wastes		150	860	9,790	9,360	8,760	9,340	10,430	10,440	10,560
Total MSW Combusted with Energy Recovery - Weight		450	2,760	29,760	33,730	31,650	29,310	32,500	33,160	33,140
Products	Percent of Total Combusted									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods		13.3%	15.9%	15.1%	18.6%	21.3%	24.1%	25.1%	25.6%	25.4%
<i>(Detail in Table 16)</i>										
Nondurable Goods		19.9%	21.0%	24.8%	26.7%	25.2%	20.6%	20.7%	21.0%	20.7%
<i>(Detail in Table 20)</i>										
Containers and Packaging		33.3%	31.9%	27.3%	27.0%	25.8%	23.4%	22.1%	21.9%	22.0%
<i>(Detail in Table 27)</i>										
Total Product** Wastes		66.6%	68.8%	67.1%	72.3%	72.3%	68.1%	67.9%	68.5%	68.1%
Other Wastes										
Food		11.1%	9.4%	13.6%	17.3%	18.5%	21.0%	21.0%	21.0%	21.6%
Yard Trimmings		20.0%	20.0%	17.6%	8.5%	7.0%	8.6%	8.7%	8.1%	7.9%
Miscellaneous Inorganic Wastes		2.3%	1.8%	1.7%	1.9%	2.1%	2.3%	2.4%	2.4%	2.4%
Total Other Wastes		33.4%	31.2%	32.9%	27.7%	27.7%	31.9%	32.1%	31.5%	31.9%
Total MSW Combusted with Energy Recovery - %		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Products and materials combusted with energy recovery estimated at percentage total MSW after recycling and composting. In 2014, 19.6 percent of MSW after recycling and composting was combusted with energy recovery. Does not include construction & demolition debris, industrial process wastes, or certain other wastes. Details may not add to totals due to rounding.

** Other than food products.

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

Table 13. Products Landfilled* in the Municipal Waste Stream, 1960 to 2014
(In thousands of tons and percent of total landfilled)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	9,570	13,660	20,000	21,870	26,030	30,340	32,890	33,210	34,370	34,490
<i>(Detail in Table 17)</i>										
Nondurable Goods	14,940	21,240	29,170	35,990	37,450	35,900	28,030	27,420	28,170	28,220
<i>(Detail in Table 21)</i>										
Containers and Packaging	24,500	40,060	43,300	39,640	37,860	36,670	31,920	29,290	29,450	29,920
<i>(Detail in Table 28)</i>										
Total Product** Wastes	49,010	74,960	92,470	97,500	101,340	102,910	92,840	89,920	91,990	92,630
Other Wastes										
Food	12,200	12,750	12,740	19,800	24,200	26,370	28,620	27,860	28,250	29,310
Yard Trimmings	20,000	23,110	26,950	25,560	11,900	9,990	11,690	11,540	10,910	10,790
Miscellaneous Inorganic Wastes	1,300	1,770	2,200	2,410	2,820	3,020	3,160	3,130	3,150	3,190
Total Other Wastes	33,500	37,630	41,890	47,770	38,920	39,380	43,470	42,530	42,310	43,290
Total MSW Landfilled - Weight	82,510	112,590	134,360	145,270	140,260	142,290	136,310	132,450	134,300	135,920
Products	Percent of Total Landfilled									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	11.6%	12.1%	14.9%	15.0%	18.6%	21.3%	24.1%	25.1%	25.6%	25.4%
<i>(Detail in Table 17)</i>										
Nondurable Goods	18.1%	18.9%	21.7%	24.8%	26.7%	25.2%	20.6%	20.7%	21.0%	20.8%
<i>(Detail in Table 21)</i>										
Containers and Packaging	29.7%	35.6%	32.2%	27.3%	27.0%	25.8%	23.4%	22.1%	21.9%	22.0%
<i>(Detail in Table 29)</i>										
Total Product** Wastes	59.4%	66.6%	68.8%	67.1%	72.3%	72.3%	68.1%	67.9%	68.5%	68.2%
Other Wastes										
Food	14.8%	11.3%	9.5%	13.6%	17.3%	18.5%	21.0%	21.0%	21.0%	21.6%
Yard Trimmings	24.2%	20.5%	20.1%	17.6%	8.5%	7.0%	8.6%	8.7%	8.1%	7.9%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	1.9%	2.1%	2.3%	2.4%	2.4%	2.3%
Total Other Wastes	40.6%	33.4%	31.2%	32.9%	27.7%	27.7%	31.9%	32.1%	31.5%	31.8%
Total MSW Landfilled - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Landfilling after recycling, composting, and combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes, or certain other wastes. Details may not add to totals due to rounding.

** Other than food products.

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

Table 14. Products Generated* in the Municipal Waste Stream, 1960 to 2014
(With Detail On Durable Goods)
(In thousands of tons and percent of total generation)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods										
Major Appliances	1,630	2,170	2,950	3,310	3,640	3,610	4,020	4,190	4,470	4,650
Small Appliances**				460	1,040	1,180	1,830	1,950	1,950	1,960
Furniture and Furnishings	2,150	2,830	4,760	6,790	8,120	9,340	10,820	11,500	11,620	11,860
Carpets and Rugs**				1,660	2,460	2,960	3,720	3,860	3,820	3,730
Rubber Tires	1,120	1,890	2,720	3,610	4,930	4,910	5,130	5,540	5,760	5,560
Batteries, Lead-Acid	Neg.	820	1,490	1,510	2,280	2,750	3,020	2,890	2,860	2,840
Miscellaneous Durables										
Selected Consumer Electronics***					1,900	2,630	3,120	3,310	3,360	3,360
Other Miscellaneous Durables					14,500	17,680	17,690	17,650	18,680	18,690
<i>Total Miscellaneous Durables</i>	5,020	6,950	9,880	12,470	16,400	20,310	20,810	20,960	22,040	22,050
Total Durable Goods	9,920	14,660	21,800	29,810	38,870	45,060	49,350	50,890	52,520	52,650
Nondurable Goods	17,330	25,060	34,420	52,170	64,010	63,650	53,250	51,430	51,540	52,270
<i>(Detail in Table 18)</i>										
Containers and Packaging	27,370	43,560	52,670	64,530	75,840	76,330	75,470	75,230	75,770	76,670
<i>(Detail in Table 22)</i>										
Total Product Wastes†	54,620	83,280	108,890	146,510	178,720	185,040	178,070	177,550	179,830	181,590
Other Wastes										
Food	12,200	12,800	13,000	23,860	30,700	32,930	35,740	36,430	37,060	38,400
Yard Trimmings	20,000	23,200	27,500	35,000	30,530	32,070	33,400	33,960	34,200	34,500
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,690	3,840	3,900	3,930	3,970
Total Other Wastes	33,500	37,780	42,750	61,760	64,730	68,690	72,980	74,290	75,190	76,870
Total MSW Generated - Weight	88,120	121,060	151,640	208,270	243,450	253,730	251,050	251,840	255,020	258,460
Products	Percent of Total Generation									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods										
Major Appliances	1.8%	1.8%	1.9%	1.6%	1.5%	1.4%	1.6%	1.7%	1.8%	1.8%
Small Appliances**				0.2%	0.4%	0.5%	0.7%	0.8%	0.8%	0.8%
Furniture and Furnishings	2.4%	2.3%	3.1%	3.3%	3.3%	3.7%	4.3%	4.6%	4.6%	4.6%
Carpets and Rugs**				0.8%	1.0%	1.2%	1.5%	1.5%	1.5%	1.4%
Rubber Tires	1.3%	1.6%	1.8%	1.7%	2.0%	1.9%	2.0%	2.2%	2.3%	2.2%
Batteries, Lead-Acid	Neg.	0.7%	1.0%	0.7%	0.9%	1.1%	1.2%	1.1%	1.1%	1.1%
Miscellaneous Durables										
Selected Consumer Electronics***					0.8%	1.0%	1.2%	1.3%	1.3%	1.3%
Other Miscellaneous Durables					6.0%	7.0%	7.0%	7.0%	7.3%	7.2%
<i>Total Miscellaneous Durables</i>	5.7%	5.7%	6.5%	6.0%	6.7%	8.0%	8.3%	8.3%	8.6%	8.5%
Total Durable Goods	11.3%	12.1%	14.4%	14.3%	16.0%	17.8%	19.7%	20.2%	20.6%	20.4%
Nondurable Goods	19.7%	20.7%	22.7%	25.0%	26.3%	25.1%	21.2%	20.4%	20.2%	20.2%
<i>(Detail in Table 18)</i>										
Containers and Packaging	31.1%	36.0%	34.7%	31.0%	31.2%	30.1%	30.1%	29.9%	29.7%	29.7%
<i>(Detail in Table 23)</i>										
Total Product Wastes†	62.0%	68.8%	71.8%	70.3%	73.4%	72.9%	70.9%	70.5%	70.5%	70.3%
Other Wastes										
Food	13.8%	10.6%	8.6%	11.5%	12.6%	13.0%	14.2%	14.5%	14.5%	14.9%
Yard Trimmings	22.7%	19.2%	18.1%	16.8%	12.5%	12.6%	13.3%	13.5%	13.4%	13.3%
Miscellaneous Inorganic Wastes	1.5%	1.5%	1.5%	1.4%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%
Total Other Wastes	38.0%	31.2%	28.2%	29.7%	26.6%	27.1%	29.1%	29.5%	29.5%	29.7%
Total MSW Generated - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Generation before materials recycling, composting, combustion with energy recovery, or landfilling. 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. † Other than food products. Neg. = Less than 5,000 tons or 0.05 percent.

*** Not estimated separately prior to 2000. In 2014, the consumer electronics generation method was revised for 2010 through 2014. See <https://www.epa.gov/smm/studies-summary-tables-and-data-related-advancing-sustainable-materials-management-report> for further information.

Table 15. Products Recycled and Composted* in the Municipal Waste Stream, 1960 to 2014

(With Detail On Durable Goods)

(In thousands of tons and percent of total generation)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods										
Major Appliances	10	50	130	1,070	2,000	2,420	2,610	2,680	2,620	2,710
Small Appliances**				10	20	20	120	120	120	120
Furniture and Furnishings	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	10	10	10	10
Carpets and Rugs**				Neg.	190	250	270	290	240	210
Rubber Tires	330	250	150	440	1,290	1,640	2,270	2,330	2,330	2,250
Batteries, Lead-Acid	Neg.	620	1,040	1,470	2,130	2,640	2,980	2,860	2,830	2,810
Miscellaneous Durables										
Selected Consumer Electronics***					190	360	650	1,000	1,270	1,400
Other Miscellaneous Durables					760	640	480	240	240	240
<i>Total Miscellaneous Durables</i>	10	20	40	470	950	1,000	1,130	1,240	1,510	1,640
Total Durable Goods	350	940	1,360	3,460	6,580	7,970	9,390	9,530	9,660	9,750
Nondurable Goods	2,390	3,730	4,670	8,800	17,560	19,770	19,190	17,270	16,410	17,180
<i>(Detail in Table 19)</i>										
Containers and Packaging	2,870	3,350	8,490	16,780	28,870	31,500	36,680	38,760	39,050	39,450
<i>(Detail in Table 24)</i>										
Total Product Wastes†	5,610	8,020	14,520	29,040	53,010	59,240	65,260	65,560	65,120	66,380
Other Wastes										
Food, Other^	Neg.	Neg.	Neg.	Neg.	680	690	970	1,740	1,840	1,940
Yard Trimmings	Neg.	Neg.	Neg.	4,200	15,770	19,860	19,200	19,590	20,600	21,080
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	4,200	16,450	20,550	20,170	21,330	22,440	23,020
Total MSW Recycled and Composted - Weight	5,610	8,020	14,520	33,240	69,460	79,790	85,430	86,890	87,560	89,400
Products	Percent of Total Generation									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods										
Major Appliances	0.6%	2.3%	4.4%	32.3%	54.9%	67.0%	64.9%	64.0%	58.6%	58.3%
Small Appliances**				2.2%	1.9%	1.7%	6.6%	6.2%	6.2%	6.1%
Furniture and Furnishings	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	0.1%	0.1%	0.1%	0.1%
Carpets and Rugs**				Neg.	7.7%	8.4%	7.3%	7.5%	6.3%	5.6%
Rubber Tires	29.5%	13.2%	5.5%	12.2%	26.2%	33.4%	44.2%	42.1%	40.5%	40.5%
Batteries, Lead-Acid	Neg.	75.6%	69.8%	97.4%	93.4%	96.0%	98.7%	99.0%	99.0%	98.9%
Miscellaneous Durables										
Selected Consumer Electronics***					10.0%	13.7%	20.8%	30.2%	37.8%	41.7%
Other Miscellaneous Durables					5.2%	3.6%	2.7%	1.4%	1.3%	1.3%
<i>Total Miscellaneous Durables</i>	0.2%	0.3%	0.4%	3.8%	5.8%	4.9%	5.4%	5.9%	6.9%	7.4%
Total Durable Goods	3.5%	6.4%	6.2%	11.6%	16.9%	17.7%	19.0%	18.7%	18.4%	18.5%
Nondurable Goods	13.8%	14.9%	13.6%	16.9%	27.4%	31.1%	36.0%	33.6%	31.8%	32.9%
<i>(Detail in Table 19)</i>										
Containers and Packaging	10.5%	7.7%	16.1%	26.0%	38.1%	41.3%	48.6%	51.5%	51.5%	51.5%
<i>(Detail in Table 25)</i>										
Total Product Wastes†	10.3%	9.6%	13.3%	19.8%	29.7%	32.0%	36.6%	36.9%	36.2%	36.6%
Other Wastes										
Food, Other^	Neg.	Neg.	Neg.	Neg.	2.2%	2.1%	2.7%	4.8%	5.0%	5.1%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	51.7%	61.9%	57.5%	57.7%	60.2%	61.1%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	6.8%	25.4%	29.9%	27.6%	28.7%	29.8%	29.9%
Total MSW Recycled and Composted - %	6.4%	6.6%	9.6%	16.0%	28.5%	31.4%	34.0%	34.5%	34.3%	34.6%

* Recycling and composting of postconsumer wastes; does not include converting/fabrication scrap. Details may not add to totals due to rounding.

** Not estimated separately prior to 1990. † Other than food products.

*** Not estimated separately prior to 2000.

^ Includes collection of soiled paper and mixed MSW for composting.

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

Table 16. Products Combusted with Energy Recovery* in the Municipal Waste Stream, 1960 to 2014

(With Detail On Durable Goods)

(In thousands of tons and percent of total combusted)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods										
Major Appliances ^{± 5}		0	0	0	0	0	0	0	0	0
Small Appliances**				90	200	200	310	360	370	370
Furniture and Furnishings		Neg.	90	1,150	1,570	1,700	1,910	2,270	2,300	2,320
Carpets and Rugs**				290	440	490	610	710	710	690
Rubber Tires ⁵		Neg.	30	400	2,260	2,390	2,000	2,580	3,190	3,080
Batteries, Lead-Acid [±]		0	0	0	0	0	0	0	0	0
Miscellaneous Durables										
Selected Consumer Electronics										
Other Miscellaneous Durables										
<i>Total Miscellaneous Durables⁵</i>		60	320	2,550	1,790	1,970	2,240	2,230	1,920	1,950
Total Durable Goods		60	440	4,480	6,260	6,750	7,070	8,150	8,490	8,410
Nondurable Goods		90	580	7,380	9,000	7,980	6,030	6,740	6,960	6,870
<i>(Detail in Table 20)</i>										
Containers and Packaging		150	880	8,110	9,110	8,160	6,870	7,180	7,270	7,300
<i>(Detail in Table 26)</i>										
Total Product Wastes[†]		300	1,900	19,970	24,370	22,890	19,970	22,070	22,720	22,580
Other Wastes										
Food		50	260	4,060	5,820	5,870	6,150	6,830	6,970	7,150
Yard Trimmings		90	550	5,240	2,860	2,220	2,510	2,830	2,690	2,630
Miscellaneous Inorganic Wastes		10	50	490	680	670	680	770	780	780
Total Other Wastes		150	860	9,790	9,360	8,760	9,340	10,430	10,440	10,560
Total MSW Combusted with Energy Recovery - Weight		450	2,760	29,760	33,730	31,650	29,310	32,500	33,160	33,140

Products	Percent of Total Combusted									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods										
Major Appliances ^{± 5}		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small Appliances**				0.3%	0.6%	0.6%	1.1%	1.1%	1.1%	1.1%
Furniture and Furnishings		Neg.	3.3%	3.9%	4.7%	5.4%	6.5%	7.0%	7.0%	7.0%
Carpets and Rugs**				1.0%	1.3%	1.5%	2.1%	2.2%	2.1%	2.1%
Rubber Tires ⁵		Neg.	1.1%	1.3%	6.7%	7.6%	6.8%	7.9%	9.6%	9.3%
Batteries, Lead-Acid [±]		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Miscellaneous Durables										
Selected Consumer Electronics										
Other Miscellaneous Durables										
<i>Total Miscellaneous Durables⁵</i>		13.3%	11.6%	8.6%	5.3%	6.2%	7.6%	6.9%	5.8%	5.9%
Total Durable Goods		13.3%	15.9%	15.1%	18.6%	21.3%	24.1%	25.1%	25.6%	25.4%
Nondurable Goods		19.9%	21.0%	24.8%	26.7%	25.2%	20.6%	20.7%	21.0%	20.7%
<i>(Detail in Table 20)</i>										
Containers and Packaging		33.3%	31.9%	27.3%	27.0%	25.8%	23.4%	22.1%	21.9%	22.0%
<i>(Detail in Table 27)</i>										
Total Product Wastes[†]		66.6%	68.8%	67.1%	72.3%	72.3%	68.1%	67.9%	68.5%	68.1%

Table 16. Products Combusted with Energy Recovery* in the Municipal Waste Stream, 1960 to 2014
(With Detail On Durable Goods)
(In thousands of tons and percent of total combusted)

Products	Percent of Total Combusted									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Other Wastes										
Food		11.1%	9.4%	13.6%	17.3%	18.5%	21.0%	21.0%	21.0%	21.6%
Yard Trimmings		20.0%	20.0%	17.6%	8.5%	7.0%	8.6%	8.7%	8.1%	7.9%
Miscellaneous Inorganic Wastes		2.3%	1.8%	1.7%	1.9%	2.1%	2.3%	2.4%	2.4%	2.4%
Total Other Wastes		33.4%	31.2%	32.9%	27.7%	27.7%	31.9%	32.1%	31.5%	31.9%
Total MSW Combusted with Energy Recovery - %		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Products and materials combusted with energy recovery estimated at percentage total MSW after recycling and composting. In 2014, 19.6 percent of MSW after recycling and composting was combusted with energy recovery. Does not include construction & demolition debris, industrial process wastes, or certain other wastes. Details may not add to totals due to rounding.

** Not estimated separately prior to 1990.

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

† Other than food products.

§ Tires: tires to fuel based on industry percentage estimates applied to tire generation. Total Miscellaneous Durables: calculated as difference between total durable goods going to combustion and individual durable goods shown. The amounts of consumer electronics going to combustion with energy recovery are not available and are included in Total Miscellaneous Durables.

± Energy Recovery Council, 2016. Major appliances and lead-acid batteries are not accepted at waste-to-energy facilities.

Table 17. Products Landfilled* in the Municipal Waste Stream, 1960 to 2014
(With Detail On Durable Goods)
(In thousands of tons and percent of total landfilled)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods										
Major Appliances	1,620	2,120	2,820	2,240	1,640	1,190	1,410	1,510	1,850	1,940
Small Appliances**				360	820	960	1,400	1,470	1,460	1,470
Furniture and Furnishings	2,150	2,830	4,670	5,640	6,550	7,640	8,900	9,220	9,310	9,530
Carpets and Rugs**				1,370	1,830	2,220	2,840	2,860	2,870	2,830
Rubber Tires	790	1,640	2,540	2,770	1,380	880	860	630	240	230
Batteries, Lead-Acid		200	450	40	150	110	40	30	30	30
Miscellaneous Durables										
Selected Consumer Electronics***										
Other Miscellaneous Durables										
<i>Total Miscellaneous Durables</i>	5,010	6,870	9,520	9,450	13,660	17,340	17,440	17,490	18,610	18,460
Total Durable Goods	9,570	13,660	20,000	21,870	26,030	30,340	32,890	33,210	34,370	34,490
Nondurable Goods	14,940	21,240	29,170	35,990	37,450	35,900	28,030	27,420	28,170	28,220
<i>(Detail in Table 21)</i>										
Containers and Packaging	24,500	40,060	43,300	39,640	37,860	36,670	31,920	29,290	29,450	29,920
<i>(Detail in Table 28)</i>										
Total Product Wastes†	49,010	74,960	92,470	97,500	101,340	102,910	92,840	89,920	91,990	92,630
Other Wastes										
Food	12,200	12,750	12,740	19,800	24,200	26,370	28,620	27,860	28,250	29,310
Yard Trimmings	20,000	23,110	26,950	25,560	11,900	9,990	11,690	11,540	10,910	10,790
Miscellaneous Inorganic Wastes	1,300	1,770	2,200	2,410	2,820	3,020	3,160	3,130	3,150	3,190
Total Other Wastes	33,500	37,630	41,890	47,770	38,920	39,380	43,470	42,530	42,310	43,290
Total MSW Landfilled- Weight	82,510	112,590	134,360	145,270	140,260	142,290	136,310	132,450	134,300	135,920

Products	Percent of Total Landfilled									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods										
Major Appliances	2.0%	1.9%	2.1%	1.5%	1.2%	0.8%	1.0%	1.1%	1.4%	1.4%
Small Appliances**				0.2%	0.6%	0.7%	1.0%	1.1%	1.1%	1.1%
Furniture and Furnishings	2.6%	2.5%	3.5%	3.9%	4.7%	5.4%	6.5%	7.0%	6.9%	7.0%
Carpets and Rugs**				0.9%	1.3%	1.5%	2.1%	2.2%	2.1%	2.1%
Rubber Tires	1.0%	1.5%	1.9%	1.9%	1.0%	0.6%	0.6%	0.5%	0.2%	0.2%
Batteries, Lead-Acid	Neg.	0.2%	0.3%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%
Miscellaneous Durables										
Selected Consumer Electronics***										
Other Miscellaneous Durables										
<i>Total Miscellaneous Durables</i>	6.1%	6.1%	7.1%	6.5%	9.7%	12.2%	12.8%	13.2%	13.9%	13.6%
Total Durable Goods	11.6%	12.1%	14.9%	15.0%	18.6%	21.3%	24.1%	25.1%	25.6%	25.4%
Nondurable Goods	18.1%	18.9%	21.7%	24.8%	26.7%	25.2%	20.6%	20.7%	21.0%	20.8%
<i>(Detail in Table 21)</i>										
Containers and Packaging	29.7%	35.6%	32.2%	27.3%	27.0%	25.8%	23.4%	22.1%	21.9%	22.0%
<i>(Detail in Table 29)</i>										
Total Product Wastes†	59.4%	66.6%	68.8%	67.1%	72.3%	72.3%	68.1%	67.9%	68.5%	68.2%
Other Wastes										
Food	14.8%	11.3%	9.5%	13.6%	17.3%	18.5%	21.0%	21.0%	21.0%	21.6%
Yard Trimmings	24.2%	20.5%	20.1%	17.6%	8.5%	7.0%	8.6%	8.7%	8.1%	7.9%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	1.9%	2.2%	2.3%	2.4%	2.4%	2.3%
Total Other Wastes	40.6%	33.4%	31.2%	32.9%	27.7%	27.7%	31.9%	32.1%	31.5%	31.8%
Total MSW Landfilled - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Landfilling after recycling, composting, and combustion with energy recovery. Details may not add to totals due to rounding.

** Not estimated separately prior to 1990.

*** The amount of consumer electronics going to combustion with energy recovery versus landfilling are not available. These products are included in Total Miscellaneous Durables.

† Other than food products.

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

Table 18. Products Generated* in the Municipal Waste Stream, 1960 to 2014
(With Detail on Nondurable Goods)
(In thousands of tons and percent of generation of each product)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	9,920	14,660	21,800	29,810	38,870	45,060	49,350	50,890	52,520	52,650
<i>(Detail in Table 14)</i>										
Nondurable Goods										
Newspapers/Mechanical Papers†	7,110	9,510	11,050	13,430	14,790	12,790	9,880	8,380	8,050	7,620
Directories†**				610	680	660	-	-	-	-
Other Paper Nondurable Goods										
Books and Magazines	1,920	2,470	3,390							
Books**				970	1,240	1,100	990	860	850	830
Magazines**				2,830	2,230	2,580	1,590	1,470	1,410	1,260
Office-Type Papers***	1,520	2,650	4,000	6,410	7,420	6,620	5,260	4,750	4,770	4,530
Standard Mail§				3,820	5,570	5,830	4,340	4,150	4,150	4,050
Other Commercial Printing†	1,260	2,130	3,120	4,460	7,380	6,440	2,480	2,130	1,870	2,190
Tissue Paper and Towels	1,090	2,080	2,300	2,960	3,220	3,460	3,490	3,510	3,620	3,640
Paper Plates and Cups	270	420	630	650	960	1,160	1,350	1,290	1,320	1,380
Other Nonpackaging Paper	2,700	3,630	4,230	3,840	4,250	4,490	4,190	4,010	3,940	3,970
Total Other Paper Nondurable Goods							23,690	22,170	21,930	21,850
Disposable Diapers	Neg.	350	1,930	2,700	3,230	3,410	3,700	3,590	3,540	3,560
Plastic Plates and Cups§			190	650	870	930	890	1,060	1,010	1,020
Trash Bags**				780	850	1,060	980	1,020	980	1,000
Clothing and Footwear	1,360	1,620	2,170	4,010	6,470	7,890	9,100	10,310	11,120	12,150
Towels, Sheets and Pillowcases**				710	820	980	1,290	1,290	1,280	1,270
Other Miscellaneous Nondurables	100	200	1,410	3,340	4,030	4,250	3,720	3,610	3,630	3,800
Total Nondurable Goods	17,330	25,060	34,420	52,170	64,010	63,650	53,250	51,430	51,540	52,270
Containers and Packaging	27,370	43,560	52,670	64,530	75,840	76,330	75,470	75,230	75,770	76,670
<i>(Detail in Table 22)</i>										
Total Product Wastes†	54,620	83,280	108,890	146,510	178,720	185,040	178,070	177,550	179,830	181,590
Other Wastes	33,500	37,780	42,750	61,760	64,730	68,690	72,980	74,290	75,190	76,870
Total MSW Generated - Weight	88,120	121,060	151,640	208,270	243,450	253,730	251,050	251,840	255,020	258,460

Products	Percent of Generation of Each Product									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	11.3%	12.1%	14.4%	14.3%	16.0%	17.8%	19.7%	20.2%	20.6%	20.4%
<i>(Detail in Table 14)</i>										
Nondurable Goods										
Newspapers/Mechanical Papers†	8.1%	7.9%	7.3%	6.4%	6.1%	5.0%	3.9%	3.3%	3.2%	2.9%
Directories†**				0.3%	0.3%	0.3%	-	-	-	-
Other Paper Nondurable Goods										
Books and Magazines	2.2%	2.0%	2.2%							
Books**				0.5%	0.5%	0.4%	0.4%	0.3%	0.3%	0.3%
Magazines**				1.4%	0.9%	1.0%	0.6%	0.6%	0.6%	0.5%
Office-Type Papers***	1.7%	2.2%	2.6%	3.1%	3.0%	2.6%	2.1%	1.9%	1.9%	1.8%
Standard Mail§				1.8%	2.3%	2.3%	1.7%	1.6%	1.6%	1.6%
Other Commercial Printing†	1.4%	1.8%	2.1%	2.1%	3.0%	2.5%	1.0%	0.8%	0.7%	0.8%
Tissue Paper and Towels	1.2%	1.7%	1.5%	1.4%	1.3%	1.4%	1.4%	1.4%	1.4%	1.4%
Paper Plates and Cups	0.3%	0.3%	0.4%	0.3%	0.4%	0.5%	0.5%	0.5%	0.5%	0.5%
Other Nonpackaging Paper	3.1%	3.0%	2.8%	1.8%	1.7%	1.8%	1.7%	1.6%	1.5%	1.5%
Total Other Paper Nondurable Goods							9.4%	8.8%	8.6%	8.4%
Disposable Diapers	Neg.	0.3%	1.3%	1.3%	1.3%	1.3%	1.5%	1.4%	1.4%	1.4%
Plastic Plates and Cups§			0.1%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
Trash Bags**				0.4%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%

**Table 18. Products Generated* in the Municipal Waste Stream, 1960 to 2014
(With Detail on Nondurable Goods)**

(In thousands of tons and percent of generation of each product)

Products	Percent of Generation of Each Product									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Clothing and Footwear	1.5%	1.3%	1.4%	1.9%	2.7%	3.1%	3.6%	4.1%	4.4%	4.7%
Towels, Sheets and Pillowcases**				0.3%	0.3%	0.4%	0.5%	0.5%	0.5%	0.5%
Other Miscellaneous Nondurables	0.1%	0.2%	0.9%	1.6%	1.7%	1.7%	1.5%	1.4%	1.4%	1.5%
Total Nondurables	19.7%	20.7%	22.7%	25.0%	26.3%	25.1%	21.2%	20.4%	20.2%	20.2%
Containers and Packaging	31.1%	36.0%	34.7%	31.0%	31.2%	30.1%	30.1%	29.9%	29.7%	29.7%
<i>(Detail in Table 23)</i>										
Total Product Wastes†	62.0%	68.8%	71.8%	70.3%	73.4%	72.9%	70.9%	70.5%	70.5%	70.3%
Other Wastes	38.0%	31.2%	28.2%	29.7%	26.6%	27.1%	29.1%	29.5%	29.5%	29.7%
Total MSW Generated - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

† Starting in 2010, newsprint and groundwood inserts expanded to include directories and other mechanical papers previously counted as Other Commercial Printing.

** Not estimated separately prior to 1990.

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

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

§ Plastic Plates and Cups: Not estimated separately prior to 1980.

‡ Other than food products.

- Detailed data not available.

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

Table 19. Products Recycled and Composted* in Municipal Solid Waste, 1960 to 2014

(With Detail on Nondurable Goods)

(In thousands of tons and percent of generation of each product)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	350	940	1,360	3,460	6,580	7,970	9,390	9,530	9,660	9,750
<i>(Detail in Table 15)</i>										
Nondurable Goods										
Newspapers/Mechanical Papers†	1,820	2,250	3,020	5,110	8,720	9,360	7,070	5,870	5,390	5,200
Directories†††				50	120	120	-	-	-	-
Other Paper Nondurable Goods										
Books and Magazines	100	260	280							
Books**				100	240	270	-	-	-	-
Magazines**				300	710	960	-	-	-	-
Office-Type Papers***	250	710	870	1,700	4,090	4,110	-	-	-	-
Standard Mail§				200	1,830	2,090	-	-	-	-
Other Commercial Printing†	130	340	350	700	810	1,440	-	-	-	-
Tissue Paper and Towels	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	-	-	-	-
Paper Plates and Cups	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	-	-	-	-
Other Nonpackaging Paper	40	110	Neg.	Neg.	Neg.	Neg.	-	-	-	-
Total Other Paper Nondurable Goods							10,650	9,570	9,060	9,710
Disposable Diapers				Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Plastic Plates and Cups§			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Trash Bags**				Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Clothing and Footwear	50	60	150	520	900	1,250	1,250	1,470	1,600	1,900
Towels, Sheets and Pillowcases**				120	140	170	220	230	230	230
Other Miscellaneous Nondurables	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	130	130	140
Total Nondurable Goods	2,390	3,730	4,670	8,800	17,560	19,770	19,190	17,270	16,410	17,180
Containers and Packaging	2,870	3,350	8,490	16,780	28,870	31,500	36,680	38,760	39,050	39,450
<i>(Detail in Table 24)</i>										
Total Product Wastes†	5,610	8,020	14,520	29,040	53,010	59,240	65,260	65,560	65,120	66,380
Other Wastes	Neg.	Neg.	Neg.	4,200	16,450	20,550	20,170	21,330	22,440	23,020
Total MSW Recycled and Composted - Weight	5,610	8,020	14,520	33,240	69,460	79,790	85,430	86,890	87,560	89,400
Products	Percent of Generation of Each Product									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	3.5%	6.4%	6.2%	11.6%	16.9%	17.7%	19.0%	18.7%	18.4%	18.5%
<i>(Detail in Table 15)</i>										
Nondurable Goods										
Newspapers/Mechanical Papers†	25.6%	23.7%	27.3%	38.0%	59.0%	73.2%	71.6%	70.0%	67.0%	68.2%
Directories†††				8.2%	17.6%	18.2%	-	-	-	-
Other Paper Nondurable Goods										
Books and Magazines	5.2%	10.5%	8.3%							
Books**				10.3%	19.4%	24.5%	-	-	-	-
Magazines**				10.6%	31.8%	37.2%	-	-	-	-
Office-Type Papers***	16.4%	26.8%	21.8%	26.5%	55.1%	62.1%	-	-	-	-
Standard Mail§				5.2%	32.9%	35.8%	-	-	-	-
Other Commercial Printing†	10.3%	16.0%	11.2%	15.7%	11.0%	22.4%	-	-	-	-
Tissue Paper and Towels	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	-	-	-	-
Paper Plates and Cups	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	-	-	-	-
Other Nonpackaging Paper	1.5%	3.0%	Neg.	Neg.	Neg.	Neg.	-	-	-	-
Total Other Paper Nondurable Goods							45.0%	43.2%	41.3%	44.4%

Table 19. Products Recycled and Composted* in Municipal Solid Waste, 1960 to 2014
(With Detail on Nondurable Goods)
(In thousands of tons and percent of generation of each product)

Products	Percent of Generation of Each Product									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Disposable Diapers				Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Plastic Plates and Cups§			Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Trash Bags**				Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Clothing and Footwear	Neg.	Neg.	Neg.	13.0%	13.9%	15.8%	13.7%	14.3%	14.4%	15.6%
Towels, Sheets and Pillowcases**				16.9%	17.1%	17.3%	17.1%	17.8%	18.0%	18.1%
Other Miscellaneous Nondurables	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	3.6%	3.7%
Total Nondurables	13.8%	14.9%	13.6%	16.9%	27.4%	31.1%	36.0%	33.6%	31.8%	32.9%
Containers and Packaging	10.5%	7.7%	16.1%	26.0%	38.1%	41.3%	48.6%	51.5%	51.5%	51.5%
(Detail in Table 25)										
Total Product Wastes†	10.3%	9.6%	13.3%	19.8%	29.7%	32.0%	36.6%	36.9%	36.2%	36.6%
Other Wastes	Neg.	Neg.	Neg.	6.8%	25.4%	29.9%	27.6%	28.7%	29.8%	29.9%
Total MSW Recycled and Composted - %	6.4%	6.6%	9.6%	16.0%	28.5%	31.4%	34.0%	34.5%	34.3%	34.6%

* Recycling and composting of postconsumer wastes; does not include converting/fabrication scrap. Details may not add to totals due to rounding.

† Starting in 2010, newsprint and groundwood inserts expanded to include directories and other mechanical papers previously counted as Other Commercial Printing.

** Not estimated separately prior to 1990.

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

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

§ Plastic Plates and Cups: Not estimated separately prior to 1980.

‡ Other than food products.

- Detailed data not available.

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

Table 20. Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2014
(With Detail on Nondurable Goods)
(In thousands of tons and percent of total combusted)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	0	60	440	4,480	6,260	6,750	7,070	8,150	8,490	8,410
<i>(Detail in Table 16)</i>										
Nondurable Goods										
Newspapers/Mechanical Papers†	0	30	160	1,420	1,180	620	500	490	530	470
Directories†**				100	110	100	-	-	-	-
Other Paper Nondurable Goods										
Books and Magazines	0	10	60							
Books**				150	190	150	-	-	-	-
Magazines**				430	290	290	-	-	-	-
Office-Type Papers***	0	10	60	800	650	460	-	-	-	-
Standard Mail§				620	730	680	-	-	-	-
Other Commercial Printing†	0	10	60	640	1,270	910	-	-	-	-
Tissue Paper and Towels	0	10	50	500	620	630	-	-	-	-
Paper Plates and Cups	0	Neg.	10	110	190	210	-	-	-	-
Other Nonpackaging Paper	0	10	80	650	820	820	-	-	-	-
Total Other Paper Nondurable Goods							2,310	2,480	2,550	2,380
Disposable Diapers		Neg.	30	460	630	620	650	710	700	690
Plastic Plates and Cups§			Neg.	110	170	170	160	210	200	200
Trash Bags**				130	160	190	170	200	190	200
Clothing and Footwear	0	10	50	590	1,080	1,210	1,390	1,750	1,890	2,010
Towels, Sheets and Pillowcases**				100	130	150	190	210	210	200
Other Miscellaneous Nondurables	0	Neg.	20	570	780	770	660	690	690	720
Total Nondurables	0	90	580	7,380	9,000	7,980	6,030	6,740	6,960	6,870
Containers and Packaging	0	150	880	8,110	9,110	8,160	6,870	7,180	7,270	7,300
<i>(Detail in Table 26)</i>										
Total Product Wastes†	0	300	1,900	19,970	24,370	22,890	19,970	22,070	22,720	22,580
Other Wastes	0	150	860	9,790	9,360	8,760	9,340	10,430	10,440	10,560
Total MSW Combusted with Energy Recovery - Weight	0	450	2,760	29,760	33,730	31,650	29,310	32,500	33,160	33,140
Products	Percent of Total Combusted									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods		13.3%	15.9%	15.1%	18.6%	21.3%	24.1%	25.1%	25.6%	25.4%
<i>(Detail in Table 16)</i>										
Nondurable Goods										
Newspapers/Mechanical Papers†		6.7%	5.8%	4.8%	3.5%	2.0%	1.7%	1.5%	1.6%	1.4%
Directories†**				0.3%	0.3%	0.3%	-	-	-	-
Other Paper Nondurable Goods										
Books and Magazines		2.2%	2.2%							
Books**				0.5%	0.6%	0.5%	-	-	-	-
Magazines**				1.4%	0.9%	0.9%	-	-	-	-
Office-Type Papers***		2.2%	2.2%	2.7%	1.8%	1.4%	-	-	-	-
Standard Mail§				2.1%	2.2%	2.1%	-	-	-	-
Other Commercial Printing†		2.2%	2.2%	2.2%	3.8%	2.9%	-	-	-	-

Table 20. Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2014
(With Detail on Nondurable Goods)
(In thousands of tons and percent of total combusted)

Products	Percent of Total Combusted									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Tissue Paper and Towels		2.2%	1.8%	1.7%	1.8%	2.0%	-	-	-	-
Paper Plates and Cups		Neg.	0.4%	0.4%	0.6%	0.7%	-	-	-	-
Other Nonpackaging Paper		2.2%	2.8%	2.2%	2.4%	2.6%	-	-	-	-
Total Other Paper Nondurable Goods							7.9%	7.6%	7.7%	7.2%
Disposable Diapers		Neg.	1.1%	1.5%	1.9%	2.0%	2.2%	2.2%	2.1%	2.1%
Plastic Plates and Cups§			Neg.	0.4%	0.5%	0.5%	0.5%	0.6%	0.6%	0.6%
Trash Bags**				0.4%	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%
Clothing and Footwear		2.2%	1.8%	2.0%	3.2%	3.8%	4.7%	5.4%	5.7%	6.1%
Towels, Sheets and Pillowcases**				0.3%	0.4%	0.5%	0.7%	0.7%	0.6%	0.6%
Other Miscellaneous Nondurables		Neg.	0.7%	1.9%	2.3%	2.4%	2.3%	2.1%	2.1%	2.1%
Total Nondurables		19.9%	21.0%	24.8%	26.7%	25.2%	20.6%	20.7%	21.0%	20.7%
Containers and Packaging		33.3%	31.9%	27.3%	27.0%	25.8%	23.4%	22.1%	21.9%	22.0%
(Detail in Table 27)										
Total Product Wastes†		66.6%	68.8%	67.1%	72.3%	72.3%	68.1%	67.9%	68.5%	68.1%
Other Wastes		33.4%	31.2%	32.9%	27.7%	27.7%	31.9%	32.1%	31.5%	31.9%
Total MSW Combusted with Energy Recovery - %		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Products and materials combusted with energy recovery estimated at percentage total MSW after recovery for recycling and composting. In 2014, 19.6 percent of MSW after recycling and composting was combusted with energy recovery. Does not include construction & demolition debris, industrial process wastes, or certain other wastes. Details may not add to totals due to rounding.

† Starting in 2010, newsprint and groundwood inserts expanded to include directories and other mechanical papers previously counted as Other Commercial Printing.

** Not estimated separately prior to 1990.

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

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

§ Plastic Plates and Cups: Not estimated separately prior to 1980.

‡ Other than food products.

- Detailed data not available.

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

Table 21. Products Landfilled* in Municipal Solid Waste, 1960 to 2014
(With Detail on Nondurable Goods)
(In thousands of tons and percent of total landfilled)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	9,570	13,660	20,000	21,870	26,030	30,340	32,890	33,210	34,370	34,490
<i>(Detail in Table 17)</i>										
Nondurable Goods										
Newspapers/Mechanical Papers†	5,290	7,230	7,870	6,900	4,890	2,810	2,310	2,020	2,130	1,950
Directories†**				460	450	440	-	-	-	-
Other Paper Nondurable Goods										
Books and Magazines	1,820	2,200	3,050							
Books**				720	810	680	-	-	-	-
Magazines**				2,100	1,230	1,330	-	-	-	-
Office-Type Papers***	1,270	1,930	3,070	3,910	2,680	2,050	-	-	-	-
Standard Mail§				3,000	3,010	3,060	-	-	-	-
Other Commercial Printing†	1,130	1,780	2,710	3,120	5,300	4,090	-	-	-	-
Tissue Paper and Towels	1,090	2,070	2,250	2,460	2,600	2,830	-	-	-	-
Paper Plates and Cups	270	420	620	540	770	950	-	-	-	-
Other Nonpackaging Paper	2,660	3,510	4,150	3,190	3,430	3,670	-	-	-	-
Total Other Paper Nondurable Goods							10,730	10,120	10,320	9,760
Disposable Diapers		350	1,900	2,240	2,600	2,790	3,050	2,880	2,840	2,870
Plastic Plates and Cups§			190	540	700	760	730	850	810	820
Trash Bags**				650	690	870	810	820	790	800
Clothing and Footwear	1,310	1,550	1,970	2,900	4,490	5,430	6,460	7,090	7,630	8,240
Towels, Sheets and Pillowcases**				490	550	660	880	850	840	840
Other Miscellaneous Nondurables	100	200	1,390	2,770	3,250	3,480	3,060	2,790	2,810	2,940
Total Nondurables	14,940	21,240	29,170	35,990	37,450	35,900	28,030	27,420	28,170	28,220
Containers and Packaging	24,500	40,060	43,300	39,640	37,860	36,670	31,920	29,290	29,450	29,920
<i>(Detail in Table 28)</i>										
Total Product Wastes†	49,010	74,960	92,470	97,500	101,340	102,910	92,840	89,920	91,990	92,630
Other Wastes	33,500	37,630	41,890	47,770	38,920	39,380	43,470	42,530	42,310	43,290
Total MSW Landfilled - Weight	82,510	112,590	134,360	145,270	140,260	142,290	136,310	132,450	134,300	135,920
Products	Percent of Total Landfilled									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	11.6%	12.1%	14.9%	15.1%	18.6%	21.3%	24.1%	25.1%	25.6%	25.4%
<i>(Detail in Table 17)</i>										
Nondurable Goods										
Newspapers/Mechanical Papers†	6.4%	6.4%	5.9%	4.7%	3.5%	2.0%	1.7%	1.5%	1.6%	1.4%
Directories†**				0.3%	0.3%	0.3%	-	-	-	-
Other Paper Nondurable Goods										
Books and Magazines	2.2%	2.0%	2.3%							
Books**				0.5%	0.6%	0.5%	-	-	-	-
Magazines**				1.4%	0.9%	0.9%	-	-	-	-
Office-Type Papers***	1.5%	1.7%	2.3%	2.7%	1.9%	1.4%	-	-	-	-
Standard Mail§				2.1%	2.1%	2.1%	-	-	-	-

Table 21. Products Landfilled* in Municipal Solid Waste, 1960 to 2014
(With Detail on Nondurable Goods)
(In thousands of tons and percent of total landfilled)

Products	Percent of Total Landfilled									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Other Commercial Printing†	1.4%	1.6%	2.0%	2.1%	3.8%	2.9%	-	-	-	-
Tissue Paper and Towels	1.3%	1.8%	1.7%	1.7%	1.9%	2.0%	-	-	-	-
Paper Plates and Cups	0.3%	0.4%	0.5%	0.4%	0.5%	0.7%	-	-	-	-
Other Nonpackaging Paper	3.2%	3.1%	3.1%	2.2%	2.4%	2.6%	-	-	-	-
Total Other Paper Nondurable Goods							7.9%	7.6%	7.7%	7.2%
Disposable Diapers	Neg.	0.3%	1.4%	1.5%	1.9%	2.0%	2.2%	2.2%	2.1%	2.1%
Plastic Plates and Cups§			0.1%	0.4%	0.5%	0.5%	0.5%	0.6%	0.6%	0.6%
Trash Bags**				0.4%	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%
Clothing and Footwear	1.6%	1.4%	1.5%	2.0%	3.2%	3.8%	4.7%	5.4%	5.7%	6.1%
Towels, Sheets and Pillowcases**				0.3%	0.4%	0.5%	0.6%	0.7%	0.6%	0.6%
Other Miscellaneous Nondurables	0.1%	0.2%	1.0%	1.9%	2.3%	2.4%	2.3%	2.1%	2.1%	2.2%
Total Nondurables	18.1%	18.9%	21.7%	24.8%	26.7%	25.2%	20.6%	20.7%	21.0%	20.8%
Containers and Packaging	29.7%	35.6%	32.2%	27.3%	27.0%	25.8%	23.4%	22.1%	21.9%	22.0%
(Detail in Table 29)										
Total Product Wastes‡	59.4%	66.6%	68.8%	67.1%	72.3%	72.3%	68.1%	67.9%	68.5%	68.2%
Other Wastes	40.6%	33.4%	31.2%	32.9%	27.7%	27.7%	31.9%	32.1%	31.5%	31.8%
Total MSW Landfilled - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Landfilling after recycling, composting, and combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes, or certain other wastes. Details may not add to totals due to rounding.

† Starting in 2010, newsprint and groundwood inserts expanded to include directories and other mechanical papers previously counted as Other Commercial Printing.

** Not estimated separately prior to 1990.

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

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

§ Plastic Plates and Cups: Not estimated separately prior to 1980.

‡ Other than food products.

- Detailed data not available.

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

Table 22. Products Generated* in the Municipal Waste Stream, 1960 to 2014
(With Detail on Containers and Packaging)
(In thousands of tons)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	9,920	14,660	21,800	29,810	38,870	45,060	49,350	50,890	52,520	52,650
<i>(Detail in Table 14)</i>										
Nondurable Goods	17,330	25,060	34,420	52,170	64,010	63,650	53,250	51,430	51,540	52,270
<i>(Detail in Table 18)</i>										
Containers and Packaging										
Glass Packaging										
Beer and Soft Drink Bottles**	1,400	5,580	6,740	5,640	5,710	6,540	5,670	5,580	5,420	5,370
Wine and Liquor Bottles	1,080	1,900	2,450	2,030	1,910	1,630	1,700	1,820	1,740	1,790
Other Bottles & Jars	3,710	4,440	4,780	4,160	3,420	2,290	1,990	2,000	2,100	2,040
Total Glass Packaging	6,190	11,920	13,970	11,830	11,040	10,460	9,360	9,400	9,260	9,200
Steel Packaging										
Beer and Soft Drink Cans	640	1,570	520	150	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Cans	3,760	3,540	2,850	2,540	2,630	2,130	2,300	1,850	1,870	1,670
Other Steel Packaging	260	270	240	200	240	240	440	380	530	500
Total Steel Packaging	4,660	5,380	3,610	2,890	2,870	2,370	2,740	2,230	2,400	2,170
Aluminum Packaging										
Beer and Soft Drink Cans	Neg.	100	850	1,550	1,520	1,450	1,370	1,300	1,270	1,270
Other Cans	Neg.	60	40	20	50	80	70	120	120	130
Foil and Closures	170	410	380	330	380	400	460	430	410	410
Total Aluminum Packaging	170	570	1,270	1,900	1,950	1,930	1,900	1,850	1,800	1,810
Paper & Paperboard Pkg										
Corrugated Boxes	7,330	12,760	17,080	24,010	30,210	30,930	29,050	29,480	30,050	30,490
Other Paper & Paperboard Pkg										
Gable Top/Aseptic Cartons†			790	510	550	500	-	-	-	-
Folding Cartons			3,820	4,300	5,820	5,530	-	-	-	-
Other Paperboard Packaging	3,840	4,830	230	290	200	160	-	-	-	-
Bags and Sacks			3,380	2,440	1,490	1,120	-	-	-	-
Wrapping Papers			200	110	Neg.	Neg.	-	-	-	-
Other Paper Packaging	2,940	3,810	850	1,020	1,670	1,400	-	-	-	-
Subtotal Other Paper & Paperboard Pkg	6,780	8,640	9,270	8,670	9,730	8,710	8,630	8,530	8,510	8,640
Total Paper & Board Pkg	14,110	21,400	26,350	32,680	39,940	39,640	37,680	38,010	38,560	39,130
Plastics Packaging										
PET Bottles and Jars			260	430	1,720	2,540	2,670	2,790	2,880	2,920
HDPE Natural Bottles			230	530	690	800	800	780	780	780
Other Containers	60	910	890	1,430	1,740	1,420	1,830	1,850	1,830	1,850
Bags and Sacks			390	940	1,650	1,640	770	-	-	-
Wraps			840	1,530	2,550	2,810	3,160	-	-	-
Subtotal Bags, Sacks, and Wraps			1,230	2,470	4,200	4,450	3,930	3,810	3,780	4,050
Other Plastics Packaging	60	1,180	790	2,040	2,840	3,210	4,450	4,550	4,710	4,720
Total Plastics Packaging	120	2,090	3,400	6,900	11,190	12,420	13,680	13,780	13,980	14,320
Other Packaging										
Wood Packaging	2,000	2,070	3,940	8,180	8,610	9,230	9,770	9,610	9,410	9,680
Other Misc. Packaging	120	130	130	150	240	280	340	350	360	360
Total Containers & Pkg	27,370	43,560	52,670	64,530	75,840	76,330	75,470	75,230	75,770	76,670
Total Product Wastes†	54,620	83,280	108,890	146,510	178,720	185,040	178,070	177,550	179,830	181,590
Other Wastes										
Food	12,200	12,800	13,000	23,860	30,700	32,930	35,740	36,430	37,060	38,400
Yard Trimmings	20,000	23,200	27,500	35,000	30,530	32,070	33,400	33,960	34,200	34,500
Miscellaneous Inorganic Wastes	1,300	1,780	2,250	2,900	3,500	3,690	3,840	3,900	3,930	3,970
Total Other Wastes	33,500	37,780	42,750	61,760	64,730	68,690	72,980	74,290	75,190	76,870
Total MSW Generated - Weight	88,120	121,060	151,640	208,270	243,450	253,730	251,050	251,840	255,020	258,460

* Generation before materials recycling, composting, combustion with energy recovery, or landfilling. Details may not add to totals due to rounding.

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks, and ready-to-drink alcoholic coolers and cocktails.

† Includes milk, juice, and other products packaged in gable top cartons and liquid food aseptic cartons.

† Other than food products. Neg. = Less than 5,000 tons or 0.05 percent. NA = Not Available - Detailed data not available.

Table 23. Products Generated* in the Municipal Waste Stream, 1960 to 2014
(With Detail on Containers and Packaging)
(In percent of total generation)

Products	Percent of Total Generation									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	11.3%	12.1%	14.4%	14.3%	16.0%	17.8%	19.7%	20.2%	20.6%	20.4%
<i>(Detail in Table 14)</i>										
Nondurable Goods	19.7%	20.7%	22.7%	25.0%	26.3%	25.1%	21.2%	20.4%	20.2%	20.2%
<i>(Detail in Table 18)</i>										
Containers and Packaging										
Glass Packaging										
Beer and Soft Drink Bottles**	1.6%	4.6%	4.4%	2.7%	2.3%	2.6%	2.3%	2.2%	2.1%	2.1%
Wine and Liquor Bottles	1.2%	1.6%	1.6%	1.0%	0.8%	0.6%	0.7%	0.7%	0.7%	0.7%
Other Bottles & Jars	4.2%	3.7%	3.2%	2.0%	1.4%	0.9%	0.8%	0.8%	0.8%	0.8%
Total Glass Packaging	7.0%	9.8%	9.2%	5.7%	4.5%	4.1%	3.7%	3.7%	3.6%	3.6%
Steel Packaging										
Beer and Soft Drink Cans	0.7%	1.3%	0.3%	0.1%	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Cans	4.3%	2.9%	1.9%	1.2%	1.1%	0.8%	0.9%	0.7%	0.7%	0.6%
Other Steel Packaging	0.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%
Total Steel Packaging	5.3%	4.4%	2.4%	1.4%	1.2%	0.9%	1.1%	0.9%	0.9%	0.8%
Aluminum Packaging										
Beer and Soft Drink Cans	Neg.	0.1%	0.6%	0.7%	0.6%	0.6%	0.5%	0.5%	0.5%	0.5%
Other Cans	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	0.03%	0.05%	0.05%	0.05%
Foil and Closures	0.2%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Total Aluminum Packaging	0.2%	0.5%	0.8%	0.9%	0.8%	0.8%	0.8%	0.7%	0.7%	0.7%
Paper & Paperboard Pkg										
Corrugated Boxes	8.3%	10.5%	11.3%	11.5%	12.4%	12.2%	11.6%	11.7%	11.8%	11.8%
Other Paper & Paperboard Pkg										
Gable Top/Aseptic Cartons‡			0.5%	0.2%	0.2%	0.2%	-	-	-	-
Folding Cartons			2.5%	2.1%	2.4%	2.2%	-	-	-	-
Other Paperboard Packaging	4.4%	4.0%	0.2%	0.1%	0.1%	0.1%	-	-	-	-
Bags and Sacks			2.2%	1.2%	0.6%	0.4%	-	-	-	-
Wrapping Papers			0.1%	0.1%	Neg.	Neg.	-	-	-	-
Other Paper Packaging	3.3%	3.1%	0.6%	0.5%	0.7%	0.6%	-	-	-	-
<i>Subtotal Other Paper & Paperboard Pkg</i>							3.4%	3.4%	3.3%	3.3%
Total Paper & Board Pkg	16.0%	17.7%	17.4%	15.7%	16.4%	15.6%	15.0%	15.1%	15.1%	15.1%
Plastics Packaging										
PET Bottles and Jars			0.2%	0.2%	0.7%	1.0%	1.1%	1.1%	1.1%	1.1%
HDPE Natural Bottles			0.2%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Other Containers	0.1%	0.8%	0.6%	0.7%	0.7%	0.6%	0.7%	0.7%	0.7%	0.7%
Bags and Sacks			0.3%	0.5%	0.7%	0.6%	0.3%	-	-	-
Wraps			0.6%	0.7%	1.0%	1.1%	1.3%	-	-	-
<i>Subtotal Bags, Sacks, and Wraps</i>			0.8%	1.2%	1.7%	1.8%	1.6%	1.5%	1.5%	1.6%
Other Plastics Packaging	0.1%	1.0%	0.5%	1.0%	1.2%	1.3%	1.8%	1.8%	1.8%	1.8%
Total Plastics Packaging	0.1%	1.7%	2.2%	3.3%	4.6%	4.9%	5.4%	5.5%	5.5%	5.5%
Other Packaging										
Wood Packaging	2.3%	1.7%	2.6%	3.9%	3.5%	3.6%	3.9%	3.8%	3.7%	3.7%
Other Misc. Packaging	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Total Containers & Pkg	31.1%	36.0%	34.7%	31.0%	31.2%	30.1%	30.1%	29.9%	29.7%	29.7%
Total Product Wastes†	62.0%	68.8%	71.8%	70.3%	73.4%	72.9%	70.9%	70.5%	70.5%	70.3%
Other Wastes										
Food	13.8%	10.6%	8.6%	11.5%	12.6%	13.0%	14.2%	14.5%	14.5%	14.9%
Yard Trimmings	22.7%	19.2%	18.1%	16.8%	12.5%	12.6%	13.3%	13.5%	13.4%	13.3%
Miscellaneous Inorganic Wastes	1.5%	1.5%	1.5%	1.4%	1.4%	1.5%	1.5%	1.5%	1.5%	1.5%
Total Other Wastes	38.0%	31.2%	28.2%	29.7%	26.6%	27.1%	29.1%	29.5%	29.5%	29.7%
Total MSW Recycled and Composted - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Generation before materials recycling, composting, combustion with energy recovery, or landfilling. Details may not add to totals due to rounding.

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks, and ready-to-drink alcoholic coolers and cocktails.

‡ Includes milk, juice, and other products packaged in gable top cartons and liquid food aseptic cartons.

† Other than food products.

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

Table 24. Products Recycled and Composted* in Municipal Solid Waste, 1960 to 2014
(With Detail on Containers and Packaging)
(In thousands of tons)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	350	940	1,360	3,460	6,580	7,970	9,390	9,530	9,660	9,750
(Detail in Table 15)										
Nondurable Goods	2,390	3,730	4,670	8,800	17,560	19,770	19,190	17,270	16,410	17,180
(Detail in Table 19)										
Containers and Packaging										
Glass Packaging										
Beer and Soft Drink Bottles**	90	140	730	1,890	1,530	2,000	2,350	2,290	2,240	2,120
Wine and Liquor Bottles	10	10	20	210	430	250	540	620	600	570
Other Bottles & Jars	Neg.	Neg.	Neg.	520	920	340	240	300	310	300
Total Glass Packaging	100	150	750	2,620	2,880	2,590	3,130	3,210	3,150	2,990
Steel Packaging										
Beer and Soft Drink Cans	10	20	50	40	Neg.	Neg.				
Cans	20	60	150	590	1,530	1,340	1,540	1,310	1,320	1,180
Other Steel Packaging	Neg.	Neg.	Neg.	60	160	160	350	300	420	400
Total Steel Packaging	30	80	200	690	1,690	1,500	1,890	1,610	1,740	1,580
Aluminum Packaging										
Beer and Soft Drink Cans	Neg.	10	320	990	830	650	680	710	700	700
Other Cans	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	NA	NA	NA	NA
Foil and Closures	Neg.	Neg.	Neg.	20	30	40	NA	NA	NA	NA
Total Aluminum Pkg	Neg.	10	320	1,010	860	690	680	710	700	700
Paper & Paperboard Pkg										
Corrugated Boxes	2,520	2,760	6,390	11,530	20,330	22,100	24,690	26,810	26,590	27,280
Other Paper & Paperboard Pkg										
Gable Top/Aseptic Cartons†			Neg.	Neg.	Neg.	Neg.	-	-	-	-
Folding Cartons			520	340	410	1,190	-	-	-	-
Other Paperboard Packaging			Neg.	Neg.	Neg.	Neg.	-	-	-	-
Bags and Sacks			Neg.	200	300	320	-	-	-	-
Wrapping Papers			Neg.	Neg.	Neg.	Neg.	-	-	-	-
Other Paper Packaging	220	350	300	Neg.	Neg.	Neg.	-	-	-	-
Subtotal Other Paper & Paperboard Pkg							2,160	2,110	2,360	2,210
Total Paper & Board Pkg	2,740	3,110	7,210	12,070	21,040	23,610	26,850	28,920	28,950	29,490
Plastics Packaging										
PET Bottles and Jars			10	140	380	590	780	860	900	910
HDPE Natural Bottles			Neg.	20	210	230	220	220	220	230
Other Containers	Neg.	Neg.	Neg.	20	170	140	300	310	330	360
Bags and Sacks										
Wraps										
Subtotal Bags, Sacks, and Wraps			Neg.	60	180	230	450	440	510	500
Other Plastics Packaging	Neg.	Neg.	Neg.	20	90	90	100	70	80	120
Total Plastics Packaging	Neg.	Neg.	10	260	1,030	1,280	1,850	1,900	2,040	2,120
Other Packaging										
Wood Packaging	Neg.	Neg.	Neg.	130	1,370	1,830	2,280	2,410	2,470	2,570
Other Misc. Packaging	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Containers & Pkg	2,870	3,350	8,490	16,780	28,870	31,500	36,680	38,760	39,050	39,450
Total Product Wastes†	5,610	8,020	14,520	29,040	53,010	59,240	65,260	65,560	65,120	66,380

Table 24. Products Recycled and Composted* in Municipal Solid Waste, 1960 to 2014
(With Detail on Containers and Packaging)
(In thousands of tons)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Other Wastes										
Food, Other [^]	Neg.	Neg.	Neg.	Neg.	680	690	970	1,740	1,840	1,940
Yard Trimmings	Neg.	Neg.	Neg.	4,200	15,770	19,860	19,200	19,590	20,600	21,080
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	4,200	16,450	20,550	20,170	21,330	22,440	23,020
Total MSW Recycled and Composted - Weight	5,610	8,020	14,520	33,240	69,460	79,790	85,430	86,890	87,560	89,400

* Recycling and composting of postconsumer wastes; does not include converting/fabrication scrap. Details may not add to totals due to rounding.

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks, and ready-to-drink alcoholic coolers and cocktails.

‡ Includes milk, juice, and other products packaged in gable top cartons and liquid food aseptic cartons.

† Other than food products.

[^] Includes collection of soiled paper and mixed MSW for composting.

Neg. = Less than 5,000 tons or 0.05 percent. NA = Not Available - Detailed data not available.

Table 25. Products Recycled and Composted* in Municipal Solid Waste, 1960 to 2014
(With Detail on Containers and Packaging)
(In percent of generation of each product)

Products	Percent of Generation of Each Product									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	3.5%	6.4%	6.2%	11.6%	16.9%	17.7%	19.0%	18.7%	18.4%	18.5%
<i>(Detail in Table 15)</i>										
Nondurable Goods	13.8%	14.9%	13.6%	16.9%	27.4%	31.1%	36.0%	33.6%	31.8%	32.9%
<i>(Detail in Table 19)</i>										
Containers and Packaging										
Glass Packaging										
Beer and Soft Drink Bottles**	6.4%	2.5%	10.8%	33.5%	26.8%	30.6%	41.4%	41.0%	41.3%	39.5%
Wine and Liquor Bottles	Neg.	Neg.	Neg.	10.3%	22.5%	15.3%	31.8%	34.1%	34.5%	31.8%
Other Bottles & Jars	Neg.	Neg.	Neg.	12.5%	26.9%	14.8%	12.1%	15.0%	14.8%	14.7%
Total Glass Packaging	1.6%	1.3%	5.4%	22.1%	26.1%	24.8%	33.4%	34.1%	34.0%	32.5%
Steel Packaging										
Beer and Soft Drink Cans	1.6%	1.3%	9.6%	26.7%	Neg.	Neg.				
Cans	Neg.	1.7%	5.3%	23.2%	58.2%	62.9%	67.0%	70.8%	70.6%	70.7%
Other Steel Packaging	Neg.	Neg.	Neg.	30.0%	66.7%	66.7%	79.5%	78.9%	79.2%	80.0%
Total Steel Packaging	Neg.	1.5%	5.5%	23.9%	58.9%	63.3%	69.0%	72.2%	72.5%	72.8%
Aluminum Packaging										
Beer and Soft Drink Cans	Neg.	10.0%	37.6%	63.9%	54.6%	44.8%	49.6%	54.6%	55.1%	55.1%
Other Cans	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	NA	NA	NA	NA
Foil and Closures	Neg.	Neg.	Neg.	6.1%	7.9%	10.0%	NA	NA	NA	NA
Total Aluminum Pkg	Neg.	1.8%	25.2%	53.2%	44.1%	35.8%	35.8%	38.4%	38.9%	38.7%
Paper & Paperboard Pkg										
Corrugated Boxes	34.4%	21.6%	37.4%	48.0%	67.3%	71.5%	85.0%	90.9%	88.5%	89.5%
Other Paper & Paperboard Pkg										
Gable Top/Aseptic Cartons†			Neg.	Neg.	Neg.	Neg.	-	-	-	-
Folding Cartons			Neg.	Neg.	7.0%	21.5%	-	-	-	-
Other Paperboard Packaging			Neg.	Neg.	Neg.	Neg.	-	-	-	-
Bags and Sacks			Neg.	Neg.	20.1%	28.6%	-	-	-	-
Wrapping Papers			Neg.	Neg.	Neg.	Neg.	-	-	-	-
Other Paper Packaging	7.5%	9.2%	35.3%	Neg.	Neg.	Neg.	-	-	-	-
<i>Subtotal Other Paper & Paperboard Pkg</i>							25.0%	24.7%	27.7%	25.6%
Total Paper & Board Pkg	19.4%	14.5%	27.4%	36.9%	52.7%	59.6%	71.3%	76.1%	75.1%	75.4%
Plastics Packaging										
PET Bottles and Jars			3.8%	32.6%	22.1%	23.2%	29.2%	30.8%	31.3%	31.2%
HDPE Natural Bottles			Neg.	3.8%	30.4%	28.8%	27.5%	28.2%	28.2%	29.5%
Other Containers	Neg.	Neg.	Neg.	1.4%	9.8%	9.9%	16.4%	16.8%	18.0%	19.5%
Bags and Sacks										
Wraps										
<i>Subtotal Bags, Sacks, and Wraps</i>			Neg.	2.4%	4.3%	5.2%	11.5%	11.5%	13.5%	12.3%
Other Plastics Packaging	Neg.	Neg.	Neg.	1.0%	3.2%	2.8%	2.2%	1.5%	1.7%	2.5%
Total Plastics Packaging	Neg.	Neg.	Neg.	3.8%	9.2%	10.3%	13.5%	13.8%	14.6%	14.8%
Other Packaging										
Wood Packaging	Neg.	Neg.	Neg.	1.6%	15.9%	19.8%	23.3%	25.1%	26.2%	26.5%
Other Misc. Packaging	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Containers & Pkg	10.5%	7.7%	16.1%	26.0%	38.1%	41.3%	48.6%	51.5%	51.5%	51.5%
Total Product Wastes†	10.3%	9.6%	13.3%	19.8%	29.7%	32.0%	36.6%	36.9%	36.2%	36.6%

Table 25. Products Recycled and Composted* in Municipal Solid Waste, 1960 to 2014
(With Detail on Containers and Packaging)
(In percent of generation of each product)

Products	Percent of Generation of Each Product									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Other Wastes										
Food, Other^	Neg.	Neg.	Neg.	Neg.	2.2%	2.1%	2.7%	4.8%	5.0%	5.1%
Yard Trimmings	Neg.	Neg.	Neg.	12.0%	51.7%	61.9%	57.5%	57.7%	60.2%	61.1%
Miscellaneous Inorganic Wastes	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Total Other Wastes	Neg.	Neg.	Neg.	6.8%	25.4%	29.9%	27.6%	28.7%	29.8%	29.9%
Total MSW Recycled and Composted - %	6.4%	6.6%	9.6%	16.0%	28.5%	31.4%	34.0%	34.5%	34.3%	34.6%

* Recycling and composting of postconsumer wastes; does not include converting/fabrication scrap. Details may not add to totals due to rounding.

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks, and ready-to-drink alcoholic coolers and cocktails.

‡ Includes milk, juice, and other products packaged in gable top cartons and liquid food aseptic cartons.

† Other than food products.

^ Includes collection of soiled paper and mixed MSW for composting.

Neg. = Less than 5,000 tons or 0.05 percent. NA = Not Available - Detailed data not available.

Table 26. Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2014
(With Detail on Containers and Packaging)
(In thousands of tons)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	0	60	440	4,480	6,260	6,750	7,070	8,150	8,490	8,410
<i>(Detail in Table 16)</i>										
Nondurable Goods	0	90	580	7,380	9,000	7,980	6,030	6,740	6,960	6,870
<i>(Detail in Table 20)</i>										
Containers and Packaging										
Glass Packaging										
Beer and Soft Drink Bottles**	0	20	120	640	810	830	590	650	630	640
Wine and Liquor Bottles	0	10	50	310	290	250	210	240	230	240
Other Bottles & Jars	0	20	100	620	490	350	310	330	350	340
Total Glass Packaging	0	50	270	1,570	1,590	1,430	1,110	1,220	1,210	1,220
Steel Packaging										
Beer and Soft Drink Cans	0	10	10	20	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Cans	0	10	50	330	210	140	130	110	110	100
Other Steel Packaging	0	Neg.	Neg.	20	20	10	20	20	20	20
Total Steel Packaging	0	20	60	370	230	150	150	130	130	120
Aluminum Packaging										
Beer and Soft Drink Cans	0	Neg.	10	100	130	150	120	120	110	110
Other Cans	0	Neg.	Neg.	Neg.	10	10	10	20	20	30
Foil and Closures	0	Neg.	10	50	70	70	80	80	80	80
Total Aluminum Pkg	0	Neg.	20	150	210	230	210	220	210	220
Paper & Paperboard Pkg										
Corrugated Boxes	0	40	210	2,120	1,920	1,610	770	530	690	630
Other Paper & Paperboard Pkg										
Gable Top/Aseptic Cartons‡			20	90	110	90	-	-	-	-
Folding Cartons			70	670	1,050	790	-	-	-	-
Other Paperboard Packaging	0	20	Neg.	50	40	30	-	-	-	-
Bags and Sacks			70	380	230	150	-	-	-	-
Wrapping Papers			Neg.	20	Neg.	Neg.	-	-	-	-
Other Paper Packaging	0	10	10	170	320	250	-	-	-	-
<i>Subtotal Other Paper & Paperboard Pkg</i>							1,150	1,260	1,220	1,260
Total Paper & Board Pkg	0	70	380	3,500	3,670	2,920	1,920	1,790	1,910	1,890
Plastics Packaging										
PET Bottles and Jars			Neg.	50	260	350	330	380	390	390
HDPE Natural Bottles			Neg.	90	90	100	100	110	110	110
Other Containers	0	Neg.	20	240	300	230	270	300	300	290
Bags and Sacks										
Wraps										
<i>Subtotal Bags, Sacks, and Wraps</i>			30	410	780	770	620	660	650	700
Other Plastics Packaging	0	Neg.	20	340	530	570	770	880	920	900
Total Plastics Packaging	0	Neg.	70	1,130	1,960	2,020	2,090	2,330	2,370	2,390

Table 26. Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2014
(With Detail on Containers and Packaging)
(In thousands of tons)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Other Packaging										
Wood Packaging	0	10	80	1,370	1,400	1,350	1,330	1,420	1,370	1,390
Other Misc. Packaging	0	Neg.	Neg.	20	50	60	60	70	70	70
Total Containers & Pkg	0	150	880	8,110	9,110	8,160	6,870	7,180	7,270	7,300
Total Product Wastes†	0	300	1,900	19,970	24,370	22,890	19,970	22,070	22,720	22,580
Other Wastes										
Food	0	50	260	4,060	5,820	5,870	6,150	6,830	6,970	7,150
Yard Trimmings	0	90	550	5,240	2,860	2,220	2,510	2,830	2,690	2,630
Miscellaneous Inorganic Wastes	0	10	50	490	680	670	680	770	780	780
Total Other Wastes	0	150	860	9,790	9,360	8,760	9,340	10,430	10,440	10,560
Total MSW Combusted with Energy Recovery - Weight	0	450	2,760	29,760	33,730	31,650	29,310	32,500	33,160	33,140

* Products and materials combusted with energy recovery estimated at percentage total MSW after recovery for recycling and composting. In 2014, 19.6 percent of MSW after recycling and composting was combusted with energy recovery. Details may not add to totals due to rounding.

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks, and ready-to-drink alcoholic coolers and cocktails.

‡ Includes milk, juice, and other products packaged in gable top cartons and liquid food aseptic cartons.

† Other than food products.

Neg. = Less than 5,000 tons or 0.05 percent. NA = Not Available - Detailed data not available.

Table 27. Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2014
(With Detail on Containers and Packaging)
(In percent of total combusted)

Products	Percent of Total Combusted									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods		13.3%	15.9%	15.1%	18.6%	21.3%	24.1%	25.1%	25.6%	25.4%
<i>(Detail in Table 16)</i>										
Nondurable Goods		19.9%	21.0%	24.8%	26.7%	25.2%	20.6%	20.7%	21.0%	20.7%
<i>(Detail in Table 20)</i>										
Containers and Packaging										
Glass Packaging										
Beer and Soft Drink Bottles**		4.5%	4.3%	2.2%	2.4%	2.6%	2.0%	2.0%	1.9%	2.0%
Wine and Liquor Bottles		2.2%	1.8%	1.0%	0.8%	0.8%	0.7%	0.8%	0.7%	0.7%
Other Bottles & Jars		4.4%	3.6%	2.1%	1.5%	1.1%	1.1%	1.0%	1.0%	1.0%
Total Glass Packaging		11.1%	9.8%	5.3%	4.7%	4.5%	3.8%	3.8%	3.6%	3.7%
Steel Packaging										
Beer and Soft Drink Cans		2.2%	0.4%	0.1%	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Cans		2.2%	1.8%	1.1%	0.6%	0.5%	0.4%	0.3%	0.3%	0.3%
Other Steel Packaging		Neg.	Neg.	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%
Total Steel Packaging		4.4%	2.2%	1.2%	0.7%	0.5%	0.5%	0.4%	0.4%	0.4%
Aluminum Packaging										
Beer and Soft Drink Cans		Neg.	0.4%	0.3%	0.4%	0.5%	0.4%	0.4%	0.3%	0.3%
Other Cans		Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	0.1%	0.1%	0.1%
Foil and Closures		Neg.	0.4%	0.2%	0.2%	0.2%	0.3%	0.2%	0.2%	0.2%
Total Aluminum Pkg		Neg.	0.7%	0.5%	0.6%	0.7%	0.7%	0.7%	0.6%	0.6%
Paper & Paperboard Pkg										
Corrugated Boxes		8.9%	7.6%	7.1%	5.7%	5.1%	2.6%	1.6%	2.1%	1.9%
Other Paper & Paperboard Pkg										
Gable Top/Aseptic Cartons†			0.7%	0.3%	0.3%	0.3%	-	-	-	-
Folding Cartons			2.5%	2.3%	3.1%	2.5%	-	-	-	-
Other Paperboard Packaging		4.5%	Neg.	0.2%	0.1%	0.1%	-	-	-	-
Bags and Sacks			2.5%	1.3%	0.7%	0.4%	-	-	-	-
Wrapping Papers			Neg.	0.1%	Neg.	Neg.	-	-	-	-
Other Paper Packaging		2.2%	0.4%	0.6%	1.0%	0.8%	-	-	-	-
<i>Subtotal Other Paper & Paperboard Pkg</i>							3.9%	3.9%	3.7%	3.8%
Total Paper & Board Pkg		15.6%	13.8%	11.8%	10.9%	9.2%	6.6%	5.5%	5.8%	5.7%
Plastics Packaging										
PET Bottles and Jars			Neg.	0.2%	0.8%	1.1%	1.1%	1.2%	1.2%	1.2%
HDPE Natural Bottles			Neg.	0.3%	0.3%	0.3%	0.4%	0.3%	0.3%	0.3%
Other Containers		Neg.	0.7%	0.8%	0.9%	0.7%	0.9%	0.9%	0.9%	0.9%
Bags and Sacks										
Wraps										
<i>Subtotal Bags, Sacks, and Wraps</i>			1.1%	1.4%	2.3%	2.4%	2.1%	2.0%	2.0%	2.1%
Other Plastics Packaging		Neg.	0.7%	1.1%	1.5%	1.8%	2.6%	2.7%	2.8%	2.7%
Total Plastics Packaging		Neg.	2.5%	3.8%	5.8%	6.4%	7.1%	7.1%	7.2%	7.2%
Other Packaging										
Wood Packaging		2.2%	2.9%	4.6%	4.2%	4.3%	4.5%	4.4%	4.1%	4.2%
Other Misc. Packaging		Neg.	Neg.	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%
Total Containers & Pkg		33.3%	31.9%	27.3%	27.0%	25.8%	23.4%	22.1%	21.9%	22.0%
Total Product Wastes†		66.6%	68.8%	67.1%	72.3%	72.3%	68.1%	67.9%	68.5%	68.1%

Table 27. Products Combusted with Energy Recovery* in Municipal Solid Waste, 1960 to 2014
(With Detail on Containers and Packaging)
(In percent of total combusted)

Products	Percent of Total Combusted									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Other Wastes										
Food		11.1%	9.4%	13.6%	17.3%	18.5%	21.0%	21.0%	21.0%	21.6%
Yard Trimmings		20.0%	20.0%	17.6%	8.5%	7.0%	8.6%	8.7%	8.1%	7.9%
Miscellaneous Inorganic Wastes		2.3%	1.8%	1.7%	1.9%	2.1%	2.3%	2.4%	2.4%	2.4%
Total Other Wastes		33.4%	31.2%	32.9%	27.7%	27.7%	31.9%	32.1%	31.5%	31.9%
Total MSW Combusted with Energy Recovery - %		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Products and materials combusted with energy recovery estimated at percentage total MSW after recovery for recycling and composting. In 2014, 19.6 percent of MSW after recycling and composting was combusted with energy recovery. Details may not add to totals due to rounding.

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks, and ready-to-drink alcoholic coolers and cocktails.

‡ Includes milk, juice, and other products packaged in gable top cartons and liquid food aseptic cartons.

† Other than food products.

Neg. = Less than 5,000 tons or 0.05 percent. NA = Not Available - Detailed data not available.

Table 28. Products Landfilled* in Municipal Solid Waste, 1960 to 2014
(With Detail on Containers and Packaging)
(In thousands of tons)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	9,570	13,660	20,000	21,870	26,030	30,340	32,890	33,210	34,370	34,490
<i>(Detail in Table 17)</i>										
Nondurable Goods	14,940	21,240	29,170	35,990	37,450	35,900	28,030	27,420	28,170	28,220
<i>(Detail in Table 21)</i>										
Containers and Packaging										
Glass Packaging										
Beer and Soft Drink Bottles**	1,310	5,420	5,890	3,110	3,370	3,710	2,730	2,640	2,550	2,610
Wine and Liquor Bottles	1,070	1,880	2,380	1,510	1,190	1,130	950	960	910	980
Other Bottles & Jars	3,710	4,420	4,680	3,020	2,010	1,600	1,440	1,370	1,440	1,400
Total Glass Packaging	6,090	11,720	12,950	7,640	6,570	6,440	5,120	4,970	4,900	4,990
Steel Packaging										
Beer and Soft Drink Cans	630	1,540	460	90	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Cans	3,740	3,470	2,650	1,620	890	650	630	430	440	390
Other Steel Packaging	260	270	240	120	60	70	70	60	90	80
Total Steel Packaging	4,630	5,280	3,350	1,830	950	720	700	490	530	470
Aluminum Packaging										
Beer and Soft Drink Cans	Neg.	90	520	460	560	650	570	470	460	460
Other Cans	Neg.	60	40	20	40	70	60	100	100	100
Foil and Closures	170	410	370	260	280	290	380	350	330	330
Total Aluminum Pkg	170	560	930	740	880	1,010	1,010	920	890	890
Paper & Paperboard Pkg										
Corrugated Boxes	4,810	9,960	10,480	10,360	7,960	7,220	3,590	2,140	2,770	2,580
Other Paper & Paperboard Pkg										
Gable Top/Aseptic Cartons‡			770	420	440	410	-	-	-	-
Folding Cartons			3,230	3,290	4,360	3,550	-	-	-	-
Other Paperboard Packaging	3,840	4,810	230	240	160	130	-	-	-	-
Bags and Sacks			3,310	1,860	960	650	-	-	-	-
Wrapping Papers			200	90	Neg.	Neg.	-	-	-	-
Other Paper Packaging	2,720	3,450	540	850	1,350	1,150	-	-	-	-
<i>Subtotal Other Paper & Paperboard Pkg</i>							5,320	5,160	4,930	5,170
Total Paper & Board Pkg	11,370	18,220	18,760	17,110	15,230	13,110	8,910	7,300	7,700	7,750
Plastics Packaging										
PET Bottles and Jars			250	240	1,080	1,600	1,560	1,550	1,590	1,620
HDPE Natural Bottles			230	420	390	470	480	450	450	440
Other Containers	60	910	870	1,170	1,270	1,050	1,260	1,240	1,200	1,200
Bags and Sacks										
Wraps										
<i>Subtotal Bags, Sacks, and Wraps</i>			1,200	2,000	3,240	3,450	2,860	2,710	2,620	2,850
Other Plastics Packaging	60	1,180	770	1,680	2,220	2,550	3,580	3,600	3,710	3,700
Total Plastics Packaging	120	2,090	3,320	5,510	8,200	9,120	9,740	9,550	9,570	9,810
Other Packaging										
Wood Packaging	2,000	2,060	3,860	6,680	5,840	6,050	6,160	5,780	5,570	5,720
Other Misc. Packaging	120	130	130	130	190	220	280	280	290	290
Total Containers & Pkg	24,500	40,060	43,300	39,640	37,860	36,670	31,920	29,290	29,450	29,920
Total Product Wastes†	49,010	74,960	92,470	97,500	101,340	102,910	92,840	89,920	91,990	92,630

Table 28. Products Landfilled* in Municipal Solid Waste, 1960 to 2014
(With Detail on Containers and Packaging)
(In thousands of tons)

Products	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Other Wastes										
Food	12,200	12,750	12,740	19,800	24,200	26,370	28,620	27,860	28,250	29,310
Yard Trimmings	20,000	23,110	26,950	25,560	11,900	9,990	11,690	11,540	10,910	10,790
Miscellaneous Inorganic Wastes	1,300	1,770	2,200	2,410	2,820	3,020	3,160	3,130	3,150	3,190
Total Other Wastes	33,500	37,630	41,890	47,770	38,920	39,380	43,470	42,530	42,310	43,290
Total MSW Landfilled - Weight	82,510	112,590	134,360	145,270	140,260	142,290	136,310	132,450	134,300	135,920

* Landfilling after recycling, composting, and combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes, or certain other wastes. Details may not add to totals due to rounding.

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks, and ready-to-drink alcoholic coolers and cocktails.

‡ Includes milk, juice, and other products packaged in gable top cartons and liquid food aseptic cartons.

† Other than food products.

Neg. = Less than 5,000 tons or 0.05 percent. NA = Not Available - Detailed data not available.

Table 29. Products Landfilled* in Municipal Solid Waste, 1960 to 2014
(With Detail on Containers and Packaging)
(In percent of total landfilled)

Products	Percent of Total Landfilled									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Durable Goods	11.6%	12.1%	14.9%	15.0%	18.6%	21.3%	24.1%	25.1%	25.6%	25.4%
<i>(Detail in Table 17)</i>										
Nondurable Goods	18.1%	18.9%	21.7%	24.8%	26.7%	25.2%	20.6%	20.7%	21.0%	20.8%
<i>(Detail in Table 21)</i>										
Containers and Packaging										
Glass Packaging										
Beer and Soft Drink Bottles**	1.6%	4.8%	4.4%	2.1%	2.4%	2.6%	2.0%	2.0%	1.9%	2.0%
Wine and Liquor Bottles	1.3%	1.7%	1.8%	1.0%	0.8%	0.8%	0.7%	0.8%	0.7%	0.7%
Other Bottles & Jars	4.5%	3.9%	3.5%	2.1%	1.5%	1.1%	1.1%	1.0%	1.0%	1.0%
Total Glass Packaging	7.4%	10.4%	9.6%	5.3%	4.7%	4.5%	3.8%	3.8%	3.6%	3.7%
Steel Packaging										
Beer and Soft Drink Cans	0.8%	1.4%	0.3%	0.1%	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Cans	4.5%	3.1%	2.0%	1.1%	0.6%	0.5%	0.5%	0.3%	0.3%	0.3%
Other Steel Packaging	0.3%	0.2%	0.2%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%
Total Steel Packaging	5.6%	4.7%	2.5%	1.3%	0.7%	0.5%	0.6%	0.4%	0.4%	0.4%
Aluminum Packaging										
Beer and Soft Drink Cans	Neg.	0.1%	0.4%	0.3%	0.4%	0.5%	0.4%	0.4%	0.3%	0.3%
Other Cans	Neg.	0.1%	0.0%	0.0%	Neg.	Neg.	Neg.	0.1%	0.1%	0.1%
Foil and Closures	0.2%	0.4%	0.3%	0.2%	0.2%	0.2%	0.3%	0.2%	0.2%	0.2%
Total Aluminum Pkg	0.2%	0.5%	0.7%	0.5%	0.6%	0.7%	0.7%	0.7%	0.6%	0.6%
Paper & Paperboard Pkg										
Corrugated Boxes	5.8%	8.8%	7.8%	7.1%	5.7%	5.1%	2.6%	1.6%	2.1%	1.9%
Other Paper & Paperboard Pkg										
Gable Top/Aseptic Cartons‡			0.6%	0.3%	0.3%	0.3%	-	-	-	-
Folding Cartons			2.4%	2.3%	3.1%	2.5%	-	-	-	-
Other Paperboard Packaging	4.7%	4.3%	0.2%	0.2%	0.1%	0.1%	-	-	-	-
Bags and Sacks			2.5%	1.3%	0.7%	0.4%	-	-	-	-
Wrapping Papers			0.1%	0.1%	Neg.	Neg.	-	-	-	-
Other Paper Packaging	3.3%	3.1%	0.4%	0.6%	1.0%	0.8%	-	-	-	-
<i>Subtotal Other Paper & Paperboard Pkg</i>							3.9%	3.9%	3.7%	3.8%
Total Paper & Board Pkg	13.8%	16.2%	14.0%	11.8%	10.9%	9.2%	6.5%	5.5%	5.8%	5.7%
Plastics Packaging										
PET Bottles and Jars			0.2%	0.2%	0.8%	1.1%	1.1%	1.2%	1.2%	1.2%
HDPE Natural Bottles			0.2%	0.3%	0.3%	0.3%	0.4%	0.3%	0.3%	0.3%
Other Containers	0.1%	0.8%	0.6%	0.8%	0.9%	0.7%	0.9%	0.9%	0.9%	0.9%
Bags and Sacks										
Wraps										
<i>Subtotal Bags, Sacks, and Wraps</i>			0.9%	1.4%	2.3%	2.4%	2.1%	2.0%	2.0%	2.1%
Other Plastics Packaging	0.1%	1.0%	0.6%	1.2%	1.5%	1.8%	2.6%	2.7%	2.8%	2.7%
Total Plastics Packaging	0.1%	1.9%	2.5%	3.8%	5.8%	6.4%	7.1%	7.1%	7.2%	7.2%
Other Packaging										
Wood Packaging	2.4%	1.8%	2.9%	4.6%	4.2%	4.3%	4.5%	4.4%	4.1%	4.2%
Other Misc. Packaging	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%
Total Containers & Pkg	29.7%	35.6%	32.2%	27.3%	27.0%	25.8%	23.4%	22.1%	21.9%	22.0%
Total Product Wastes†	59.4%	66.6%	68.8%	67.1%	72.3%	72.3%	68.1%	67.9%	68.5%	68.2%
Other Wastes										
Food	14.8%	11.3%	9.5%	13.6%	17.3%	18.5%	21.0%	21.0%	21.0%	21.6%
Yard Trimmings	24.2%	20.5%	20.1%	17.6%	8.5%	7.0%	8.6%	8.7%	8.1%	7.9%
Miscellaneous Inorganic Wastes	1.6%	1.6%	1.6%	1.7%	1.9%	2.2%	2.3%	2.4%	2.4%	2.3%
Total Other Wastes	40.6%	33.4%	31.2%	32.9%	27.7%	27.7%	31.9%	32.1%	31.5%	31.8%
Total MSW Landfilled - %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Landfilling after recycling, composting, and combustion with energy recovery. Does not include construction & demolition debris, industrial process wastes, or certain other wastes. Details may not add to totals due to rounding.

** Includes carbonated drinks and non-carbonated water, teas, flavored drinks, and ready-to-drink alcoholic coolers and cocktails.

‡ Includes milk, juice, and other products packaged in gable top cartons and liquid food aseptic cartons.

† Other than food products.

Neg. = Less than 5,000 tons or 0.05 percent. NA = Not Available - Detailed data not available.

Table 30. Selected Examples of Source Reduction Practices

Source Reduction Practice	MSW Product Categories			
	Durable Goods	Nondurable Goods	Containers & Packaging	Organics (Wood, Yard Waste, Food, etc.)
Product or Packaging Redesign				
Materials reduction	<ul style="list-style-type: none"> Downgauge metals in appliances 	<ul style="list-style-type: none"> Paperless purchase orders Concentrated products 	<ul style="list-style-type: none"> Container lightweighting Right size packaging Eliminate unnecessary layers of packaging Refillable/reusable containers, including use of flexible pouches for refills for rigid containers 	<ul style="list-style-type: none"> Xeriscaping Just in time ordering / inventory control Adjust menus to reduce frequently uneaten or wasted items
Materials substitution	<ul style="list-style-type: none"> Use of composites in appliances and electronic circuitry 		<ul style="list-style-type: none"> Replace rigid or heavy packaging with lighter or more compact options, e.g., cereal in bags, coffee in brick packs Use life cycle data to choose material with lower lifecycle impact 	
Lengthen Life	<ul style="list-style-type: none"> High mileage tires Electronic components reduce moving parts 	<ul style="list-style-type: none"> Regular servicing Consider purchasing warranties to make repair more affordable Extend warranties 	<ul style="list-style-type: none"> Design for secondary use Design for upgrades (e.g., add computer memory or processing capacity, battery upgrades) Reusable packaging 	<ul style="list-style-type: none"> Clearer label information on food expiration date Avoid spoilage by changing: <ul style="list-style-type: none"> Packaging Storage and transportation Supply chain management
Consumer Practices				
	<ul style="list-style-type: none"> Purchase long lived products Regular servicing Repair Buying less stuff 	<ul style="list-style-type: none"> Repair Duplex printing Sharing Reduce unwanted mail Purchasing concentrated products Buying less stuff 	<ul style="list-style-type: none"> Purchasing products in bulk (less packaging) Reusable bags and containers Buying less stuff 	<ul style="list-style-type: none"> Food donation Avoid spoilage by monitoring and tracking food and purchases and use Reduce over-purchasing Proper food storage and preparation Repurposing (e.g., older bread can be made into croutons) Backyard composting Vermi-composting Grasscycling
Reuse				
By Design	<ul style="list-style-type: none"> Document materials and methods for disassembly/repair/reuse Use materials and systems that exhibit modularity, and standardization to facilitate reuse and repair <ul style="list-style-type: none"> Minimize connections between parts and/or make connections more accessible for ease of repair and replacement of parts 	<ul style="list-style-type: none"> Reusable shipping or mailing envelopes 	<ul style="list-style-type: none"> Reusable pallets Returnable secondary packaging Reusable/refillable dispensers for cleaning products Reusable service ware in food service Use durable reusable water bottles instead of disposable bottles 	

Table 30. Selected Examples of Source Reduction Practices

Source Reduction Practice	MSW Product Categories			
	Durable Goods	Nondurable Goods	Containers & Packaging	Organics (Wood, Yard Waste, Food, etc.)
	<ul style="list-style-type: none"> — Mechanical connections with bolts and screws instead of glues, to facilitate repair — Minimize connections to increase ease of repair or part replacement — Provide adequate tolerances to allow for removal and replacement or repair of parts without affecting adjacent components 			
Secondary	<ul style="list-style-type: none"> ▪ Borrow or rent for temporary use ▪ Give to charity ▪ Buy or sell at garage sales 	<ul style="list-style-type: none"> ▪ Donate clothing, books ▪ Waste paper scratch pads 	<ul style="list-style-type: none"> ▪ Loosefill ▪ Grocery sacks ▪ Dairy containers ▪ Glass and plastic bottles and jars 	
Reduce/Eliminate Toxins				
	<ul style="list-style-type: none"> ▪ Eliminate PCBs 	<ul style="list-style-type: none"> ▪ Soy or waterbased inks ▪ Waterbased solvents ▪ Reduce mercury 	<ul style="list-style-type: none"> ▪ Replace lead foil on wine bottles ▪ Replace BPA-containing plastic products, liners, and coatings with alternative materials 	

Table 31. Residential Food Collection and Composting Programs in the U.S., 2014

State	Households Served	State	Households Served
California	1,339,076	New York	101,306
Colorado	54,113	Ohio	73,889
Iowa	39,630	Oregon	216,686
Maryland	18,350	Pennsylvania	580
Massachusetts	13,050	Texas	134,000
Michigan	63,000	Vermont	2,700
Minnesota	85,752	Washington	682,436
New Jersey	9,600	Wisconsin	600
Total U.S. Households Served		2,848,368	
Total U.S. Households		117,259,427	
		2.4%	

BioCycle January 2015. Residential Food Waste Collection in the U.S. — *BioCycle* Nationwide Survey. Additional web search to supplement *BioCycle* survey.

Table 32. Material Recovery Facilities (MRF), 2014*

Region	Number	Estimated Throughput (tpd)
NORTHEAST	175	29,792
SOUTH	238	45,375
MIDWEST	231	28,003
WEST	153	37,176
<i>U.S. Total</i>	797	140,346

*Number of facilities and throughput include bale and ship operations receiving fiber, mainly OCC, that bale and ship with no additional processing.

Source: Governmental Advisory Associates, Inc. Data provided December 2014.

Table 33. Municipal Waste-To-Energy Projects, 2014

Region	Number Operational	Design Capacity (tpd)
NORTHEAST	38	44,415
SOUTH	21	32,004
MIDWEST	14	11,524
WEST	7	7,310
<i>U.S. Total*</i>	80	95,253

* Excludes 4 inactive facilities (representing another 996 tpd capacity).

WTE includes mass burn, modular, and refuse-derived fuel combustion facilities.

Source: "The 2014 ERC Directory of Waste-to-Energy Facilities." Energy Recovery Council (ERC). May 2014.

Table 34. Landfill Facilities, 2014

Region	Number of Landfills
NORTHEAST	166
SOUTH	680
MIDWEST	381
WEST	729
<i>U.S. Total</i>	1,908

Source: State environmental websites.

Table 35. Generation, Recycling, Composting, Combustion with Energy Recovery, and Landfilling of Municipal Solid Waste, 1960 to 2014
(In thousands of tons and percent of total generation)

	Thousands of Tons									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Generation	88,120	121,060	151,640	208,270	243,450	253,730	251,050	251,840	255,020	258,460
Recycling	5,610	8,020	14,520	29,040	53,010	59,240	65,260	65,560	65,120	66,380
Composting*	Neg.	Neg.	Neg.	4,200	16,450	20,550	20,170	21,330	22,440	23,020
Combustion with energy recovery**	0	450	2,760	29,760	33,730	31,650	29,310	32,500	33,160	33,140
Discards to landfill, other disposal†	82,510	112,590	134,360	145,270	140,260	142,290	136,310	132,450	134,300	135,920
	Pounds per Person per Day									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Generation	2.68	3.25	3.66	4.57	4.74	4.69	4.45	4.40	4.42	4.44
Recycling	0.17	0.22	0.35	0.64	1.03	1.10	1.16	1.14	1.13	1.14
Composting*	Neg.	Neg.	Neg.	0.09	0.32	0.38	0.36	0.37	0.39	0.40
Combustion with energy recovery**	0.00	0.01	0.07	0.65	0.66	0.59	0.52	0.57	0.57	0.57
Discards to landfill, other disposal†	2.51	3.02	3.24	3.19	2.73	2.62	2.41	2.32	2.33	2.33
Population (thousands)	179,979	203,984	227,255	249,907	281,422	296,410	309,051	313,914	316,129	318,857

	Percent of Total Generation									
	1960	1970	1980	1990	2000	2005	2010	2012	2013	2014
Generation	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Recycling	6.4%	6.6%	9.6%	14.0%	21.8%	23.3%	26.0%	26.0%	25.5%	25.7%
Composting*	Neg.	Neg.	Neg.	2.0%	6.7%	8.1%	8.0%	8.5%	8.8%	8.9%
Combustion with energy recovery**	0.0%	0.3%	1.8%	14.2%	13.9%	12.5%	11.7%	12.9%	13.0%	12.8%
Landfilling and other disposal†	93.6%	93.1%	88.6%	69.8%	57.6%	56.1%	54.3%	52.6%	52.7%	52.6%

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

** Includes combustion with energy recovery 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). 2014 includes 29,540 MSW, 520 wood, and 3,080 tires (1,000 tons).

† Landfilling after recycling and composting minus combustion with energy recovery. Includes combustion without energy recovery. Details may not add to totals due to rounding.

Figure 1. Municipal Solid Waste in the Universe of Subtitle D Wastes

Subtitle D Wastes

The Subtitle D Waste included in this report as Municipal Solid Waste (MSW), which includes:

- 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 and yard trimmings.

Subtitle D Wastes not included as MSW in this report are:

- | | |
|--|--------------------------|
| ■ Municipal sludges | ■ Agricultural wastes |
| ■ Industrial nonhazardous process wastes | ■ Oil and gas wastes |
| ■ Construction and demolition debris* | ■ Mining wastes |
| ■ Land clearing debris | ■ Auto bodies |
| ■ Transportation parts and equipment | ■ Fats, grease, and oils |

*Combustion and demolition debris generation is included in this report, but is outside of the scope of MSW.

Figure 2. Definition of Terms

The materials flow methodology produces an estimate of total municipal solid waste (MSW) 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 recycling, composting, combustion or landfilling take 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 as used in this report refers to activities that reduce the amount 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.

Recycling as used in this report is defined as the recovery of useful materials, such as paper, glass, plastic, metals, construction and demolition (C&D) debris and organics from the waste stream (e.g. MSW), along with the transformation of the materials to make new products to reduce the amount of virgin raw materials needed to meet consumer demands. For recycled products, recycling equals reported purchases of postconsumer collected material (e.g., glass cullet, old newspapers) plus net exports (if any) of the material. Thus, recycling of old corrugated containers (OCC) is the sum of OCC purchases by paper mills plus net exports of OCC. If recycling as reported by a data source includes converting or fabrication (preconsumer) scrap, the preconsumer scrap is not counted towards the recycling estimates in this report. Imported secondary materials are not counted in recycling 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 recycling totals.

Composting is the decomposition of organic materials by aerobic microorganisms. Composting facilities manage the amount of moisture, amount of oxygen and mixture of organic materials for optimal composting conditions. The composting process emits heat, water vapor and biogenic carbon dioxide, reducing the raw organic materials in mass and volume to create compost.¹ Composting of materials as estimated in this report includes yard trimmings, food waste and mixed MSW containing food waste.

Combustion with energy recovery, often called “waste-to-energy,” as used in this report refers to confined and controlled burning with energy recovery, which not only decreases the volume of solid waste destined for landfills, but can also recover energy from the waste burning process.

Landfilling as used in this report refers to the MSW remaining after recycling, composting and combustion with energy recovery. These materials presumably would be landfilled in a discrete area of land or excavation that receives household waste. Some MSW however, 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 in this report, 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 three 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 three 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.

¹ Platt, B., Goldstein, N. 2014. State of Composting in the U.S. *BioCycle* 55(6): 19. <http://www.biocycle.net/2014/07/16/state-of-composting-in-the-us/>.

Figure 3. Paper and Paperboard Products Generated in MSW, 2014

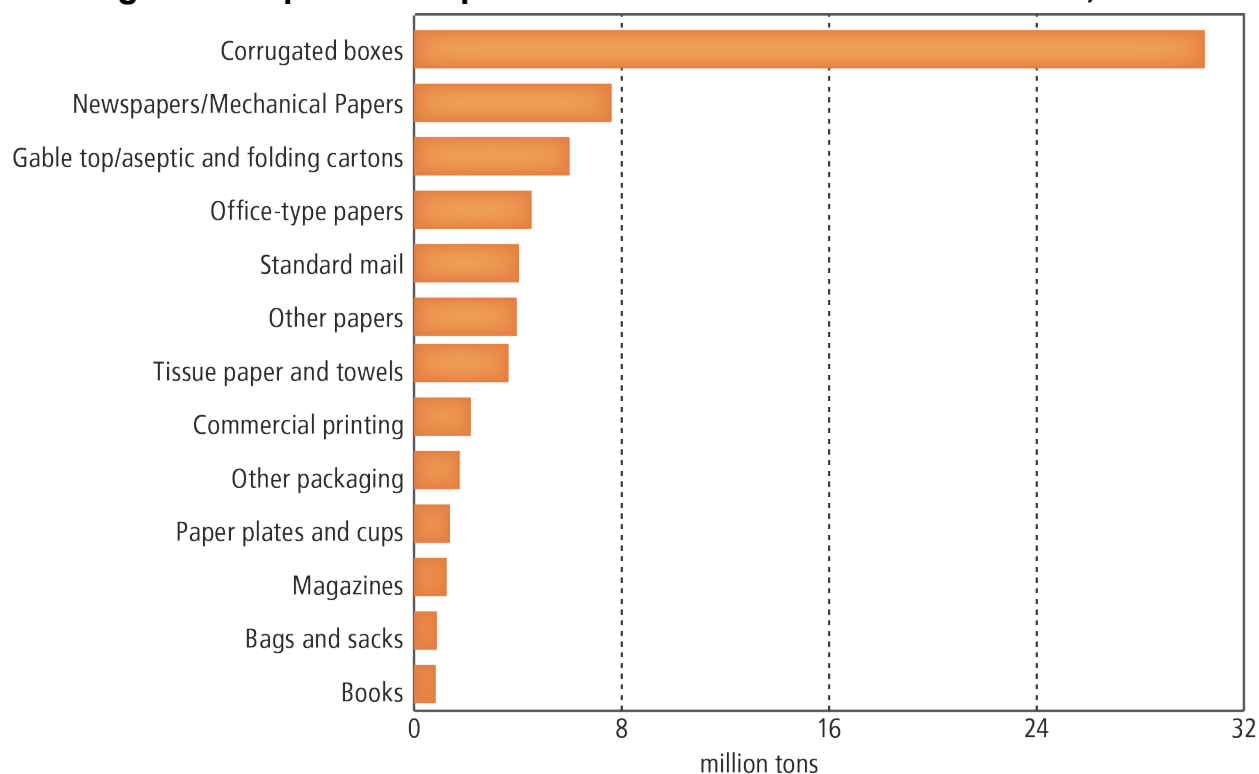


Figure 4. Paper and Paperboard Generation and Recycling, 1960 to 2014

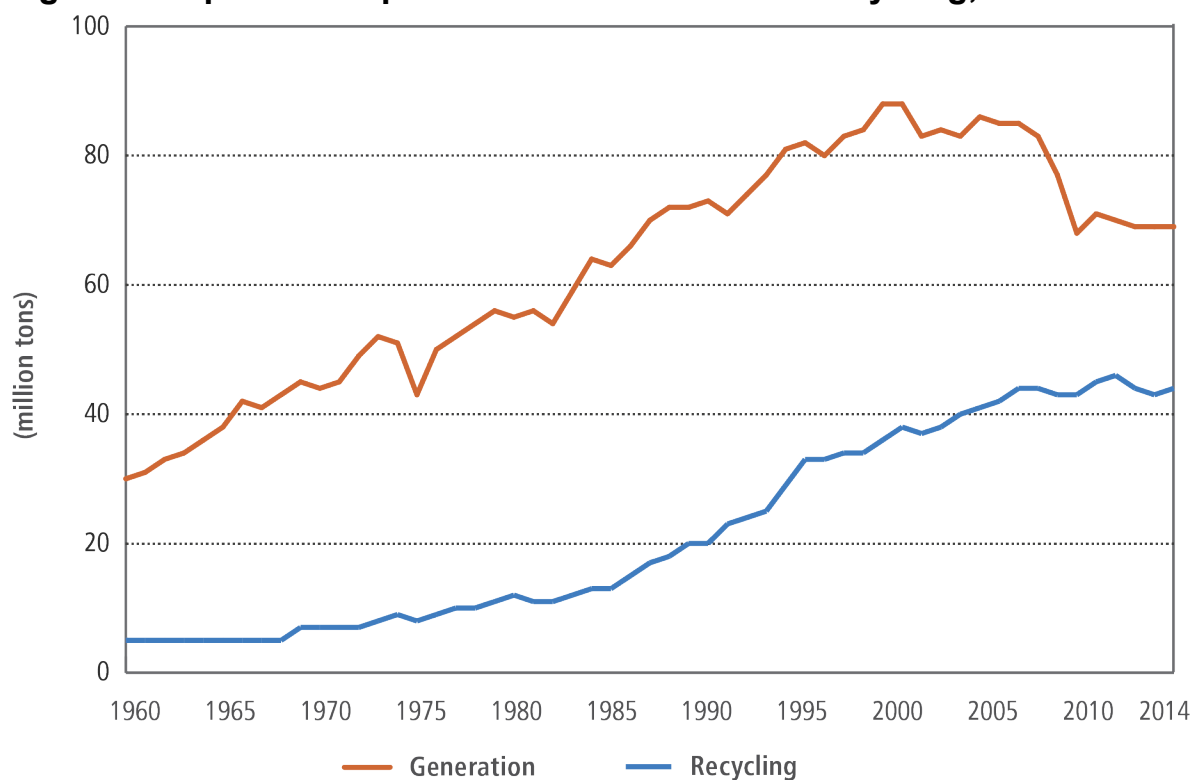


Figure 5. Glass Products Generated in MSW, 2014

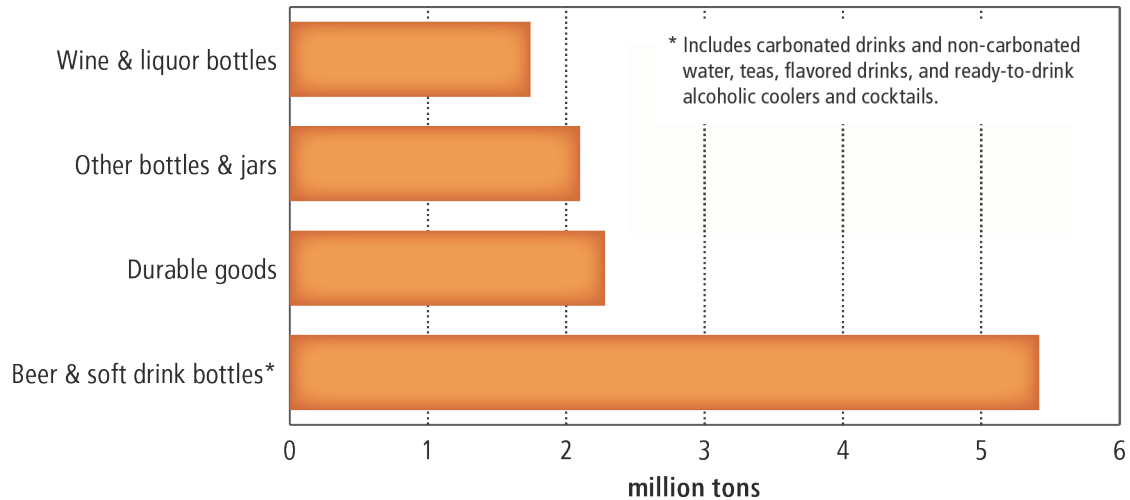


Figure 6. Glass Generation and Recycling, 1960 to 2014

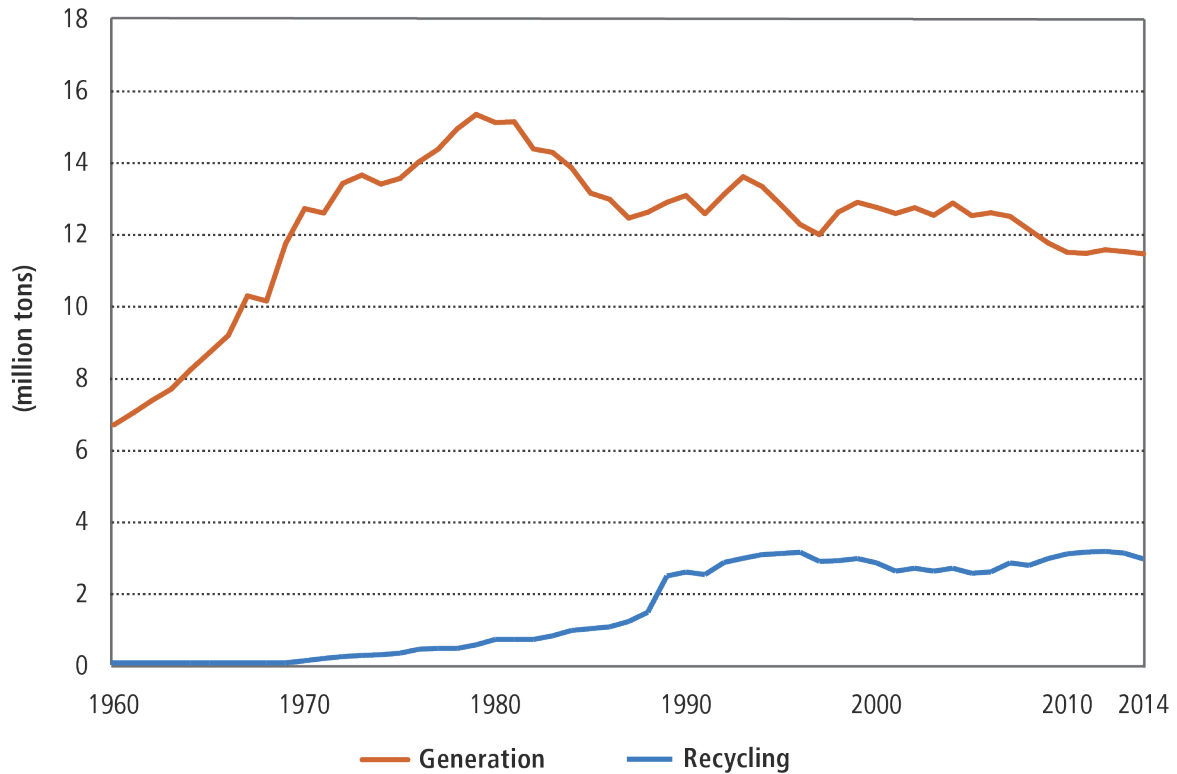


Figure 7. Metal Products Generated in MSW, 2014

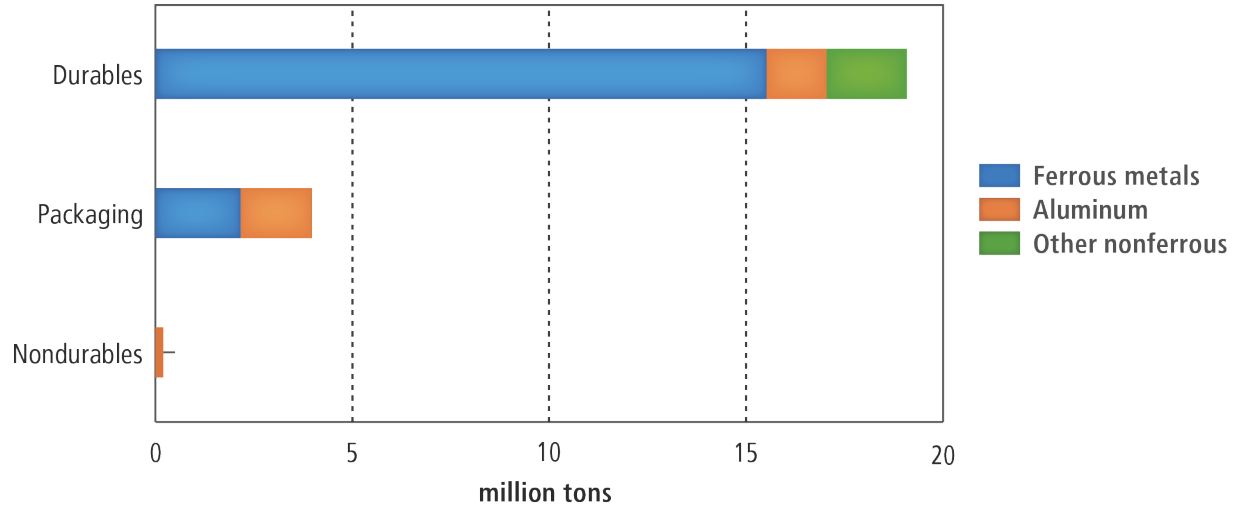


Figure 8. Metals Generation and Recycling, 1960 to 2014

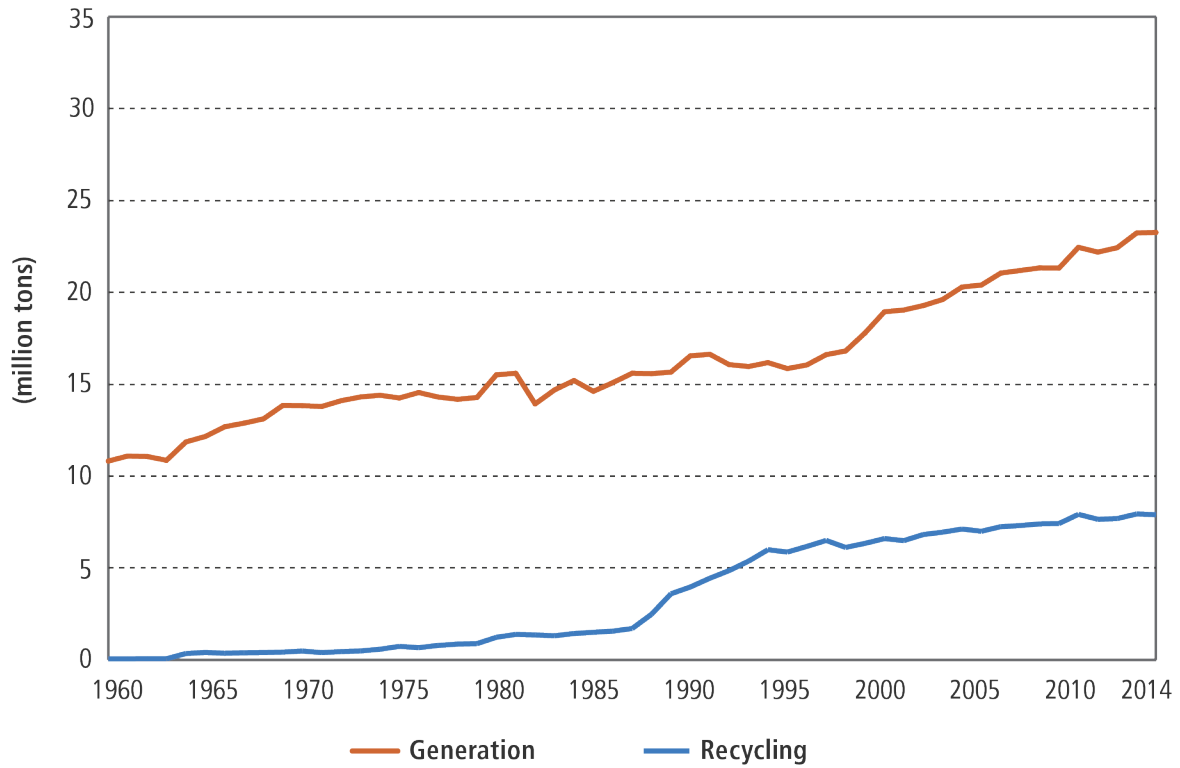


Figure 9. Plastics Products Generated in MSW, 2014

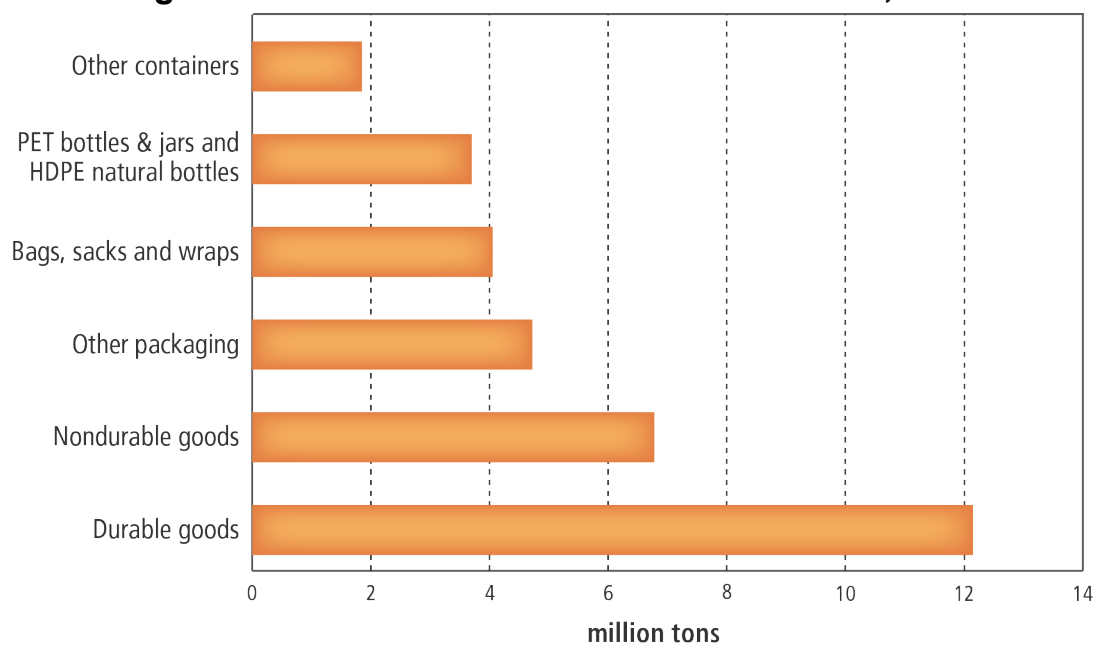


Figure 10. Plastics Generation and Recycling, 1960 to 2014

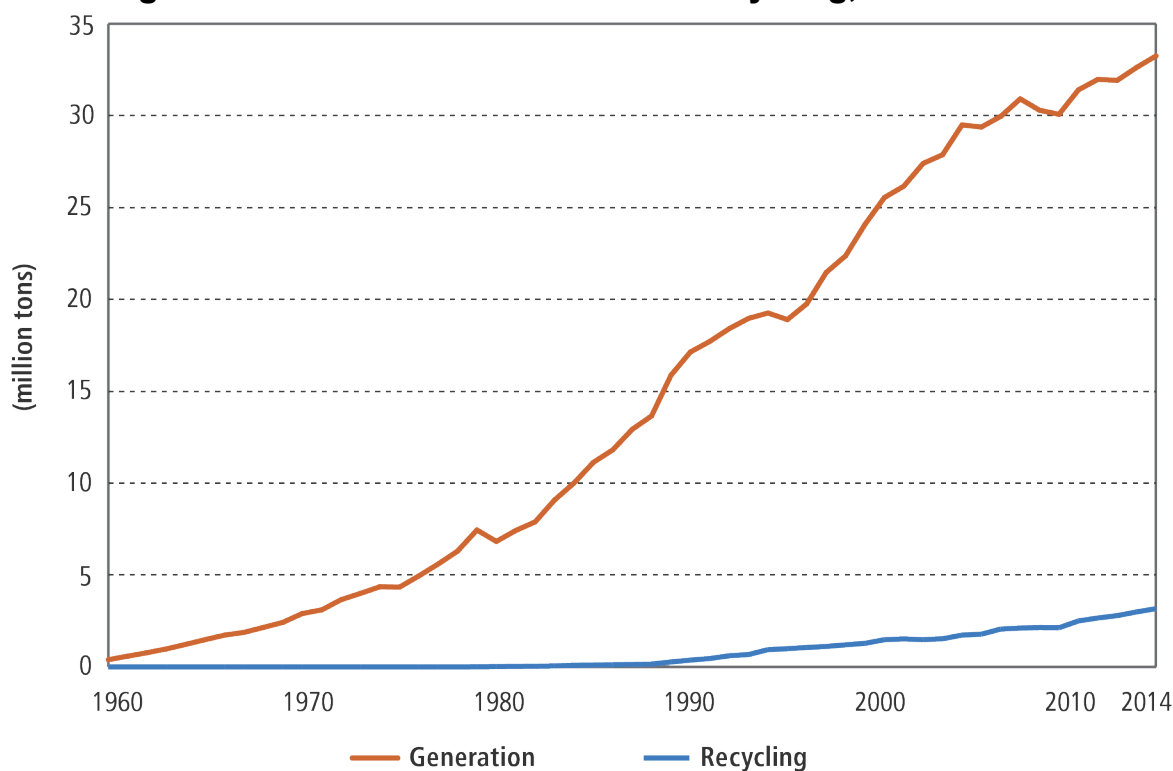
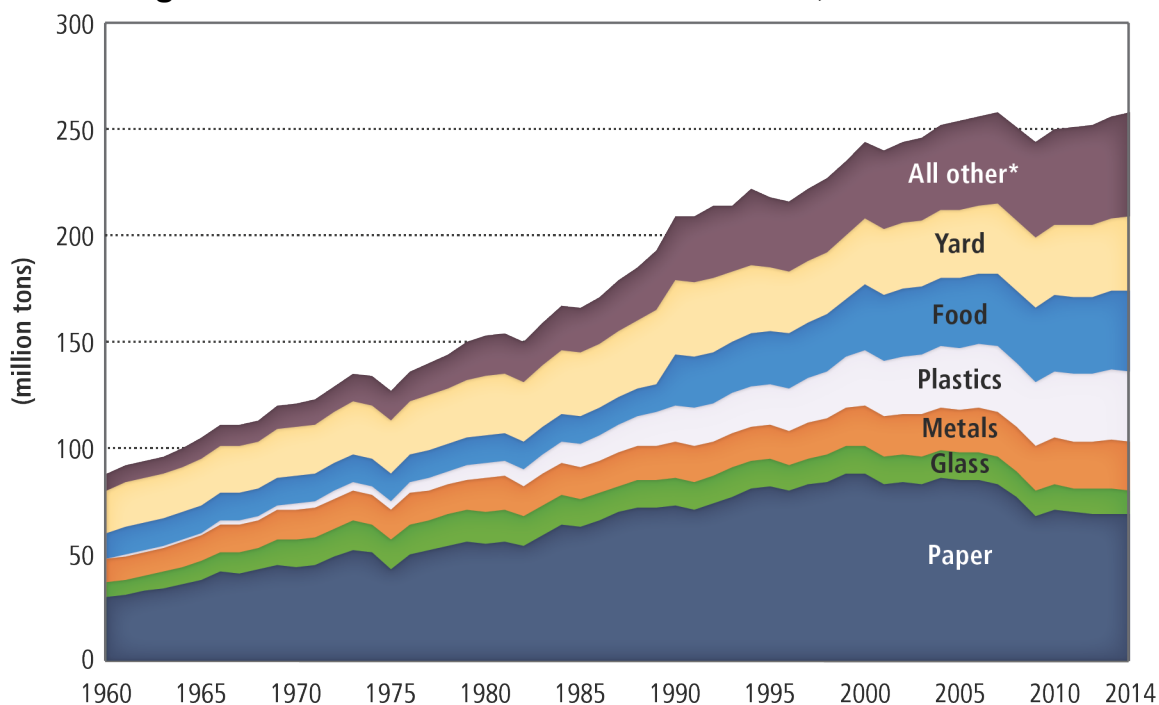
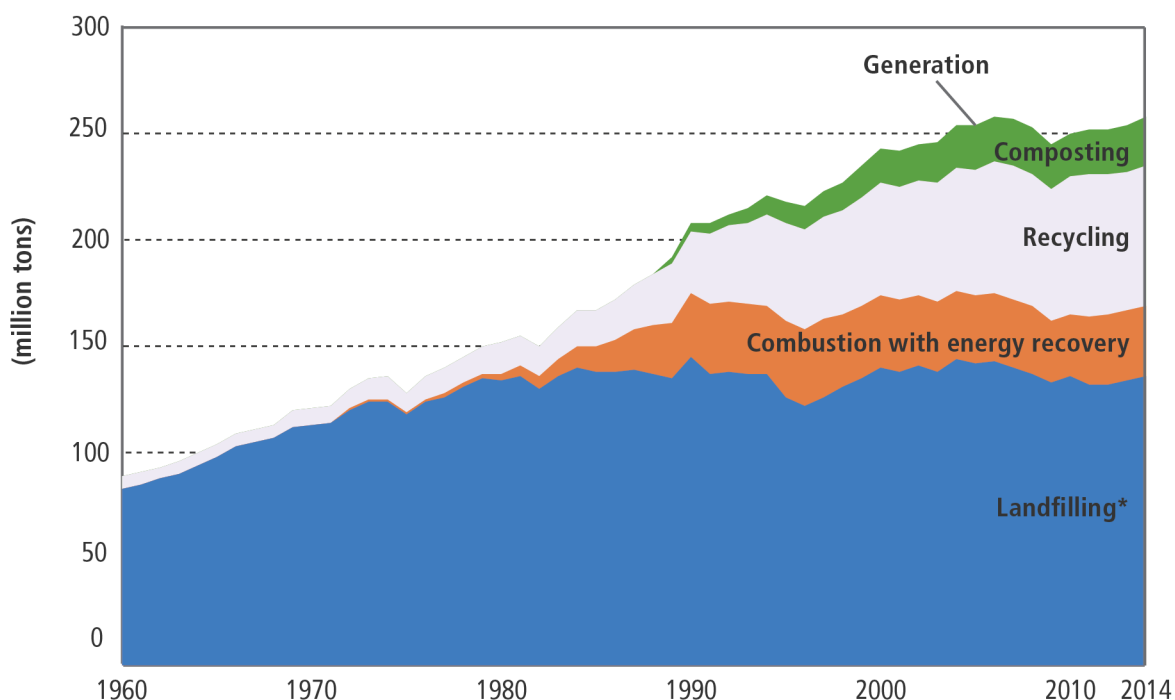


Figure 11. Generation of Materials in MSW, 1960 to 2014



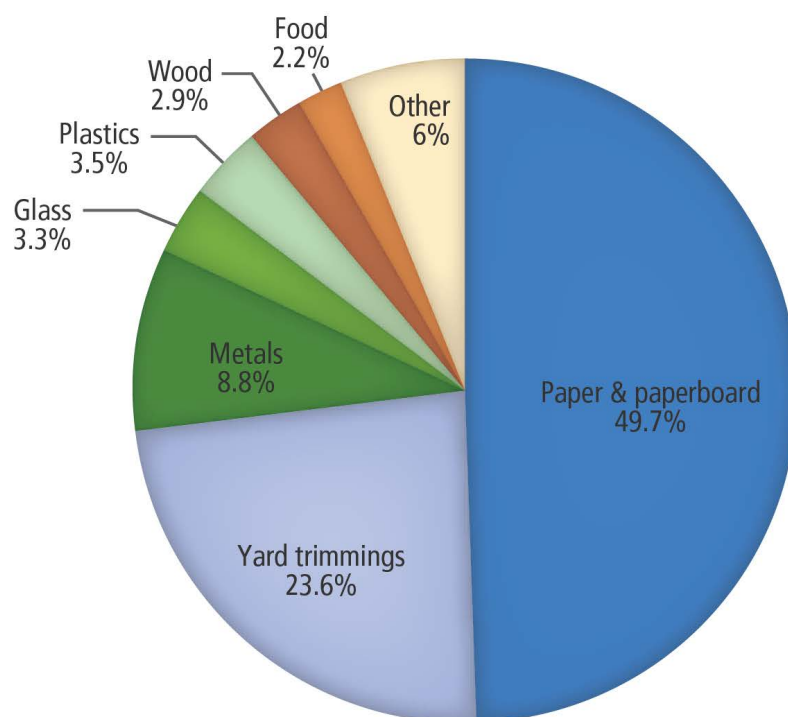
* "All other" includes primarily wood, rubber and leather, and textiles.

Figure 12. Recycling, Composting, Combustion with Energy Recovery and Landfilling of Materials in MSW, 1960 to 2014



*Landfilling after composting, recycling and combustion with energy recovery. Includes combustion without energy recovery.

Figure 13. Materials Recycling and Composting in MSW,* 2014
(89.4 Million tons)



* In percent by weight of total recycling and composting

Figure 14. Materials Generated, Combusted with Energy Recovery and Landfilled in MSW, 2014

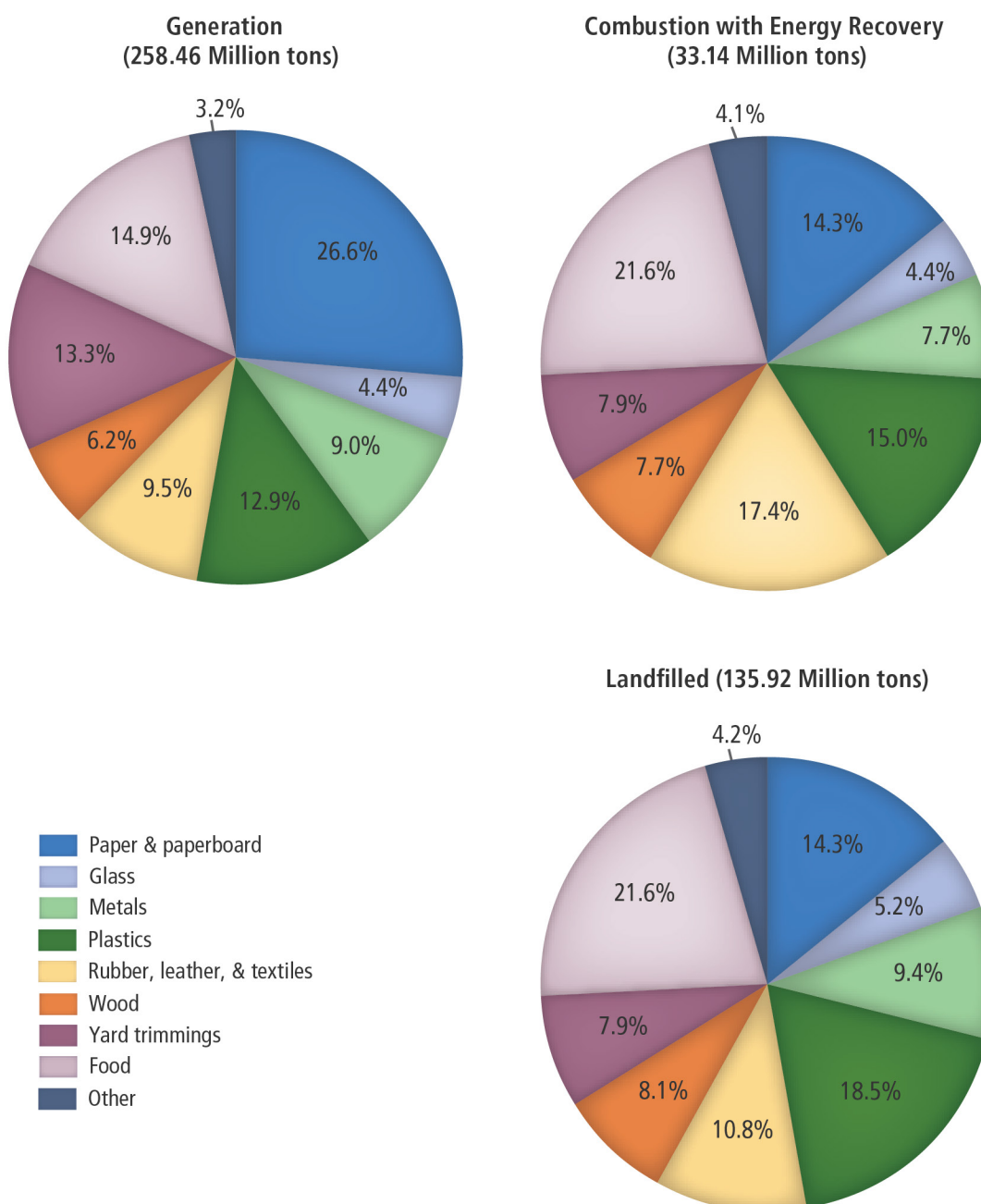


Figure 15. Generation of Products in MSW, 1960 to 2014

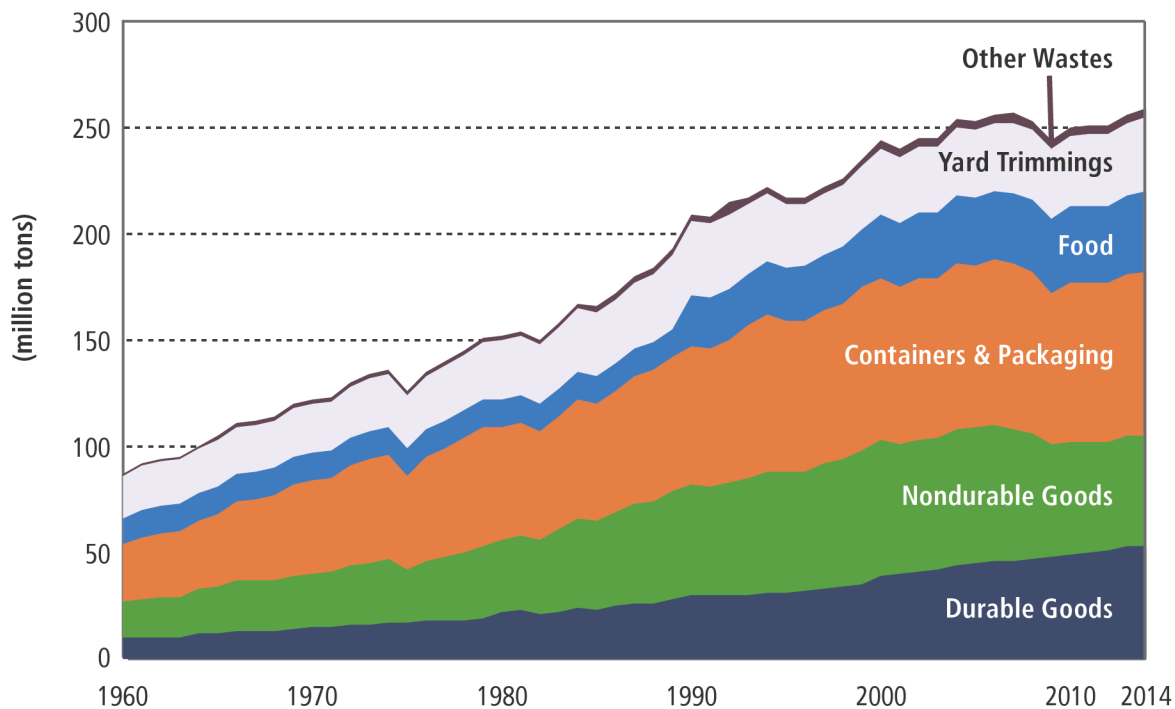


Figure 16. Nondurable Goods Generated, Recycled, Combusted with Energy Recovery and Landfilled in Municipal Solid Waste, 2014

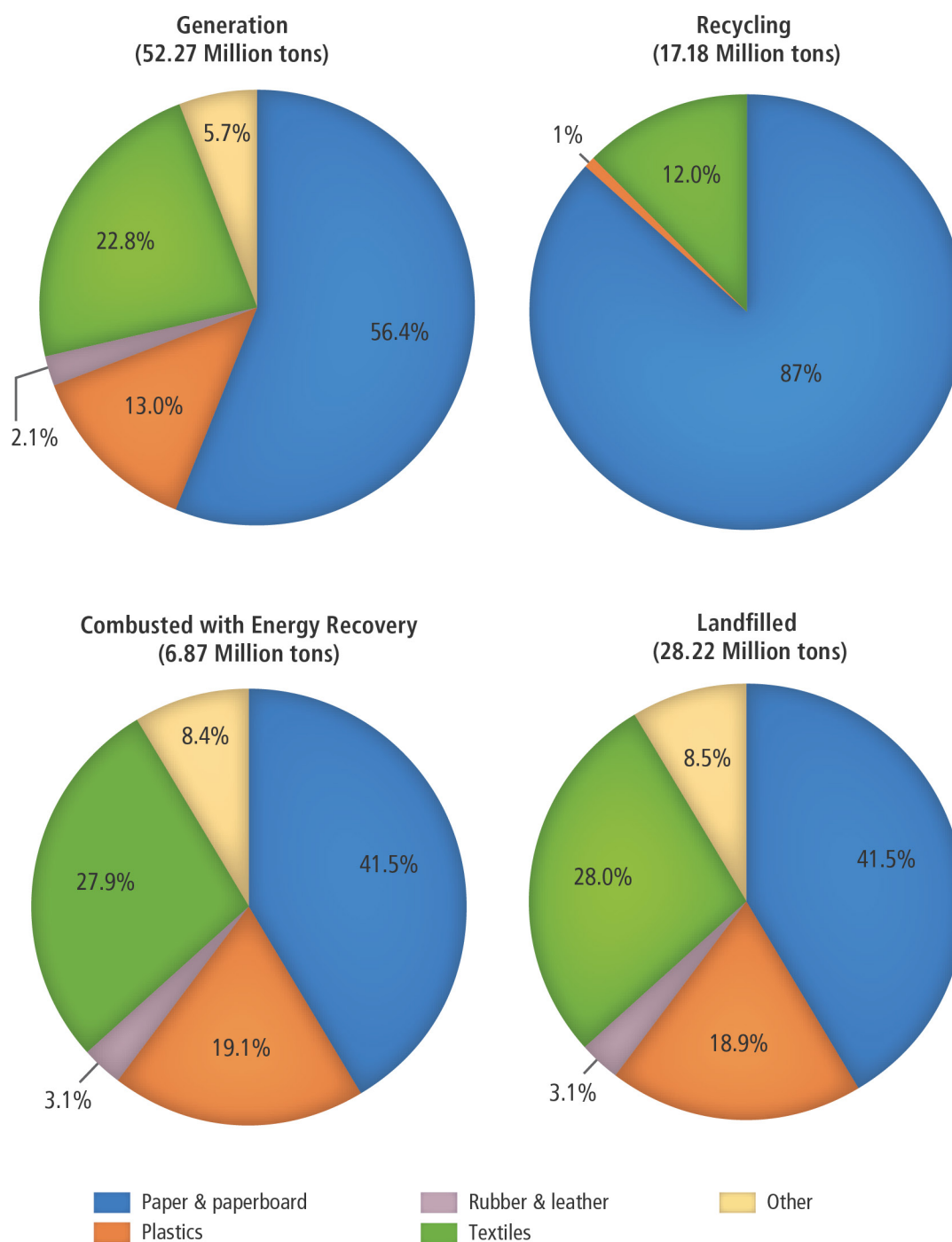


Figure 17. Containers and Packaging Materials Generated, Recycled, Combusted with Energy Recovery and Landfilled in Municipal Solid Waste, 2014

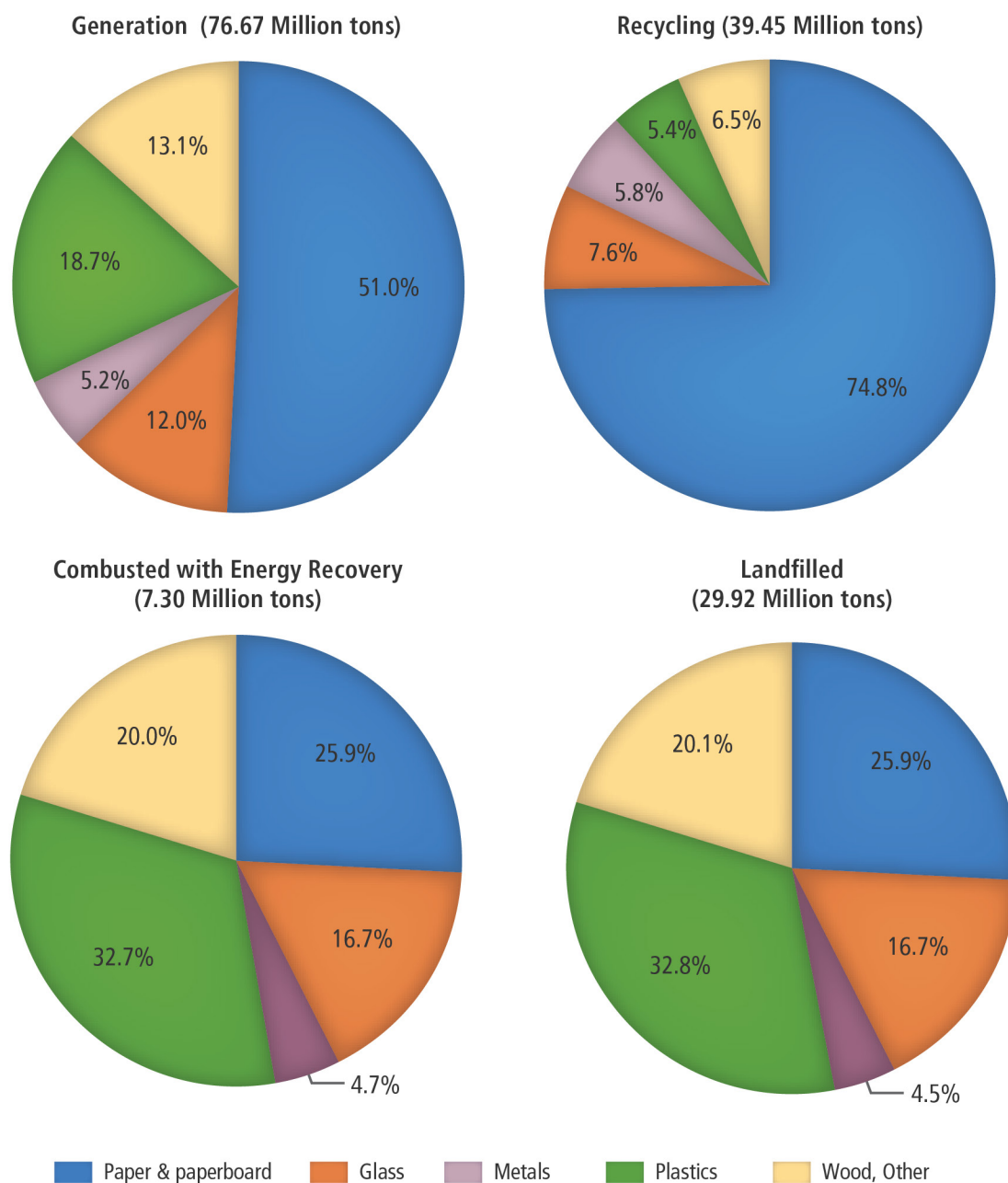


Figure 18. Containers and Packaging Generated, Recycled, Combusted with Energy Recovery and Landfilled in Municipal Solid Waste, 2014

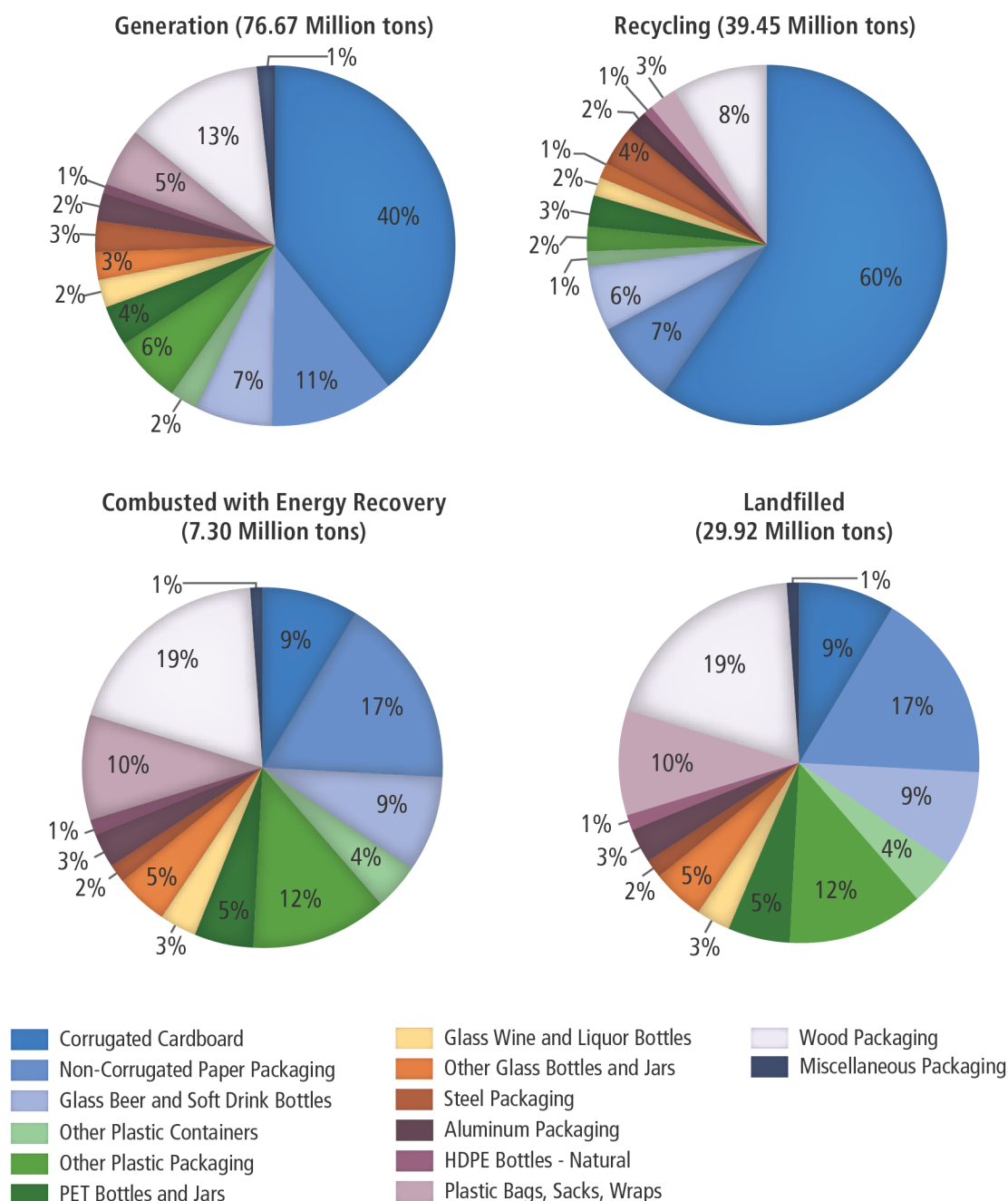
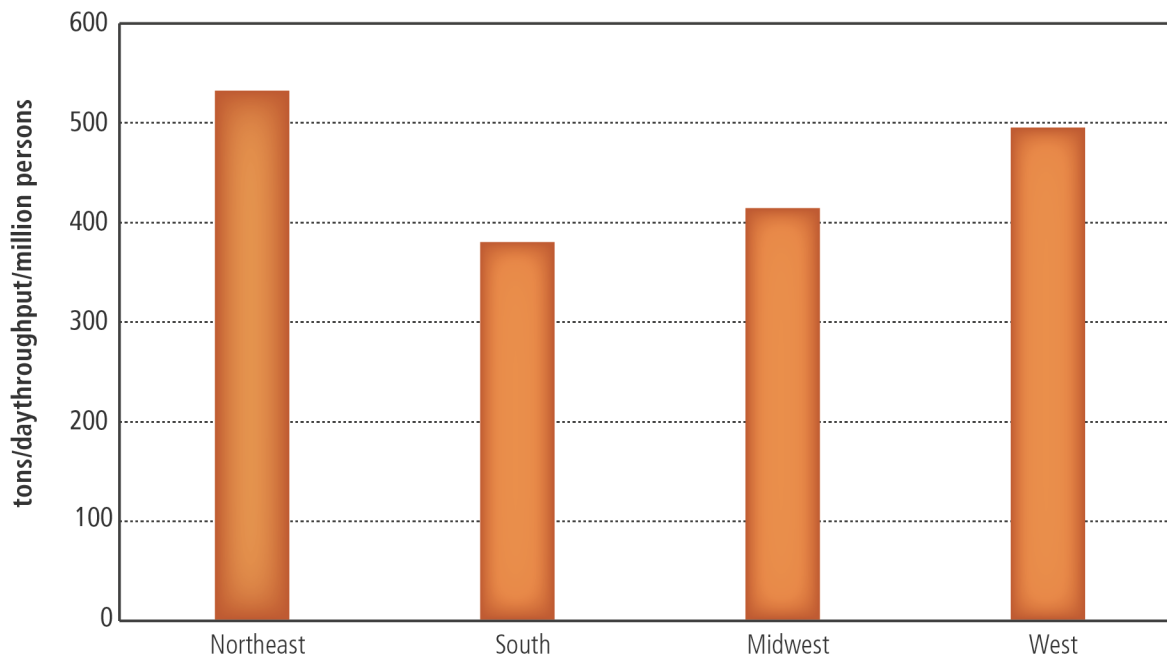
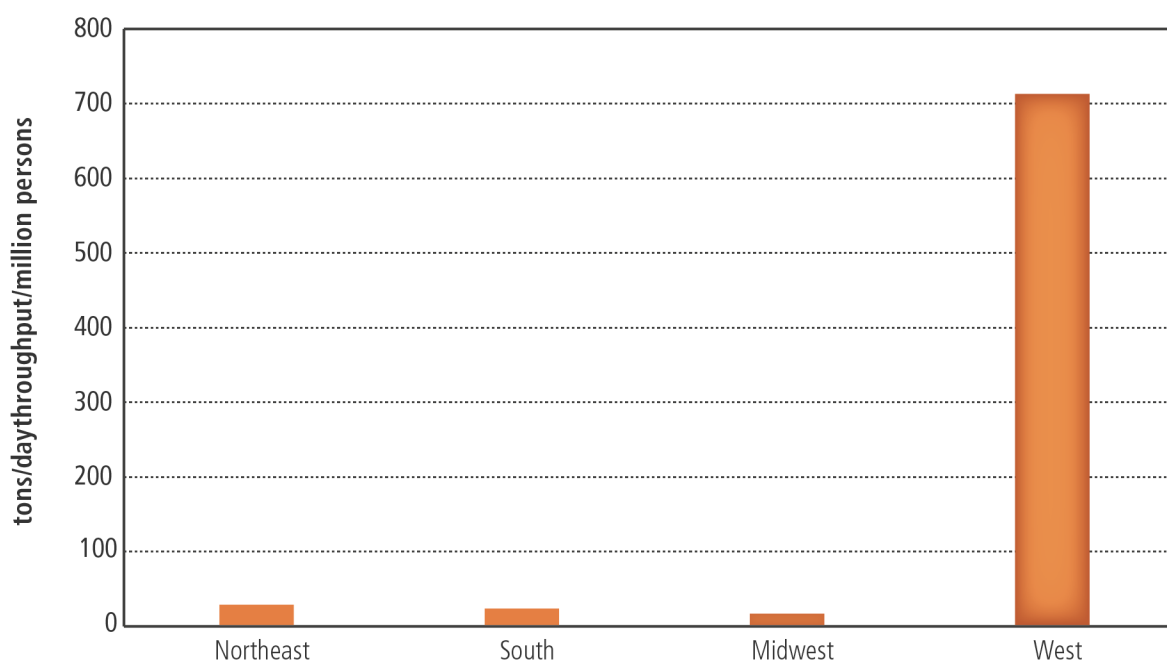


Figure 21. Estimated MRF Throughput, 2014
(Tons per day per million persons)



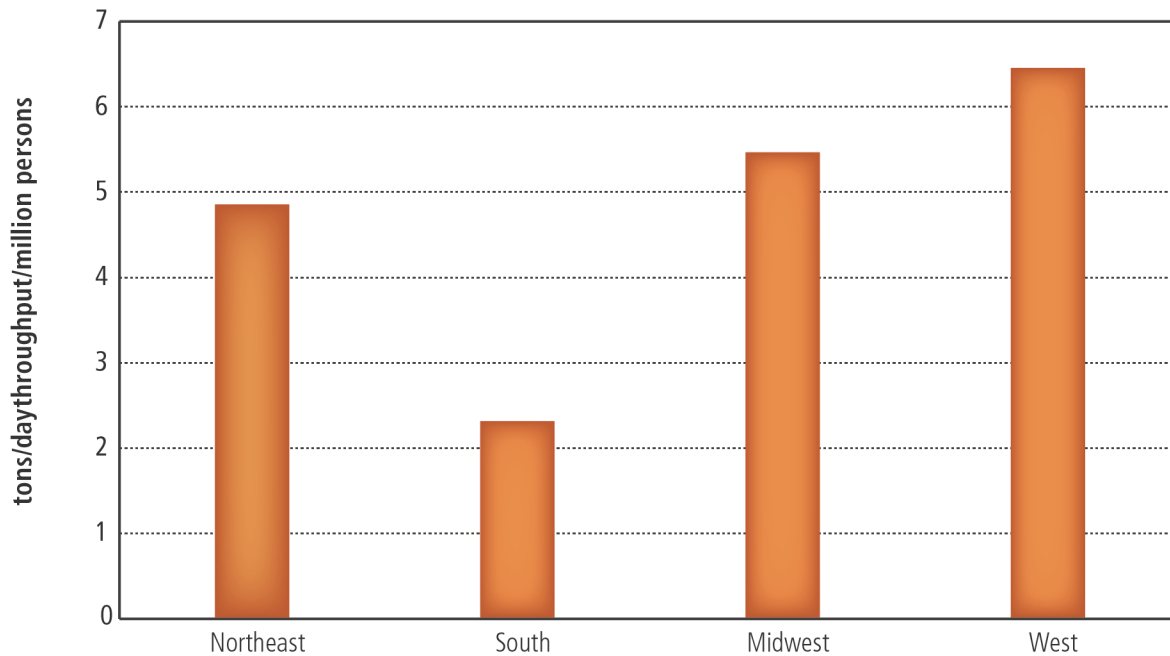
Source: U.S. Census Bureau, Governmental Advisory Associates, Inc. Data provided December 2014.

Figure 22. Mixed Waste Processing Estimated Throughput, 2014
(Tons per day per million persons)



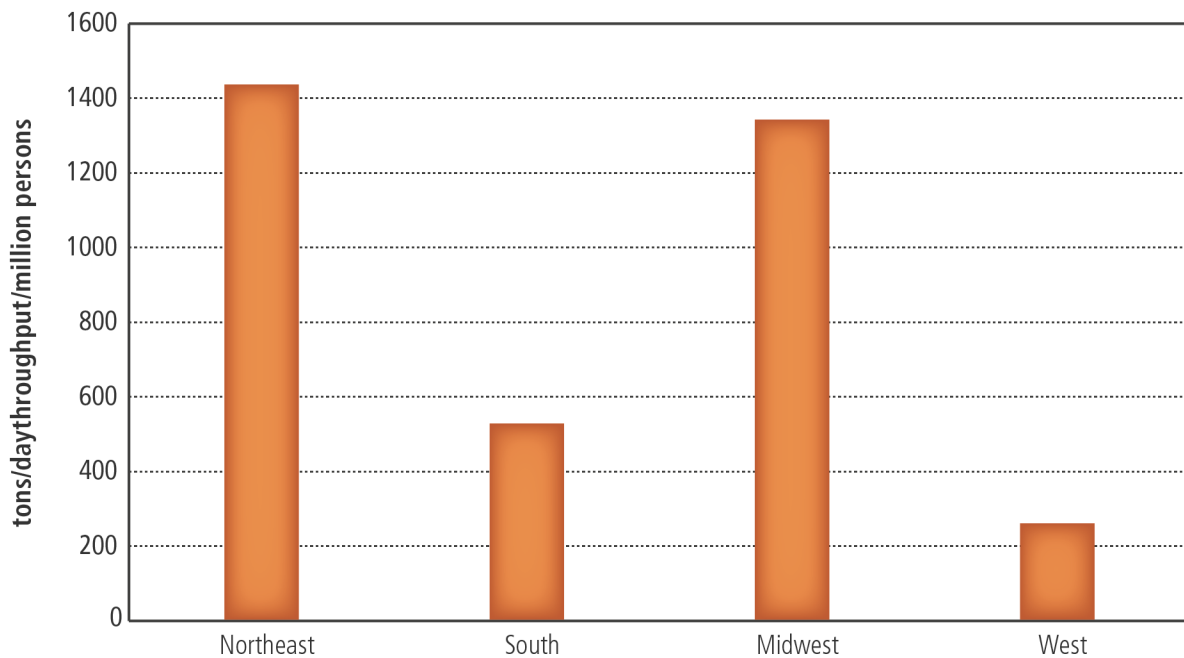
Source: U.S. Census Bureau, Governmental Advisory Associates, Inc. Data provided December 2014.

Figure 23. MSW Composting Capacity, 2014
(Capacity in tons per day per million persons)



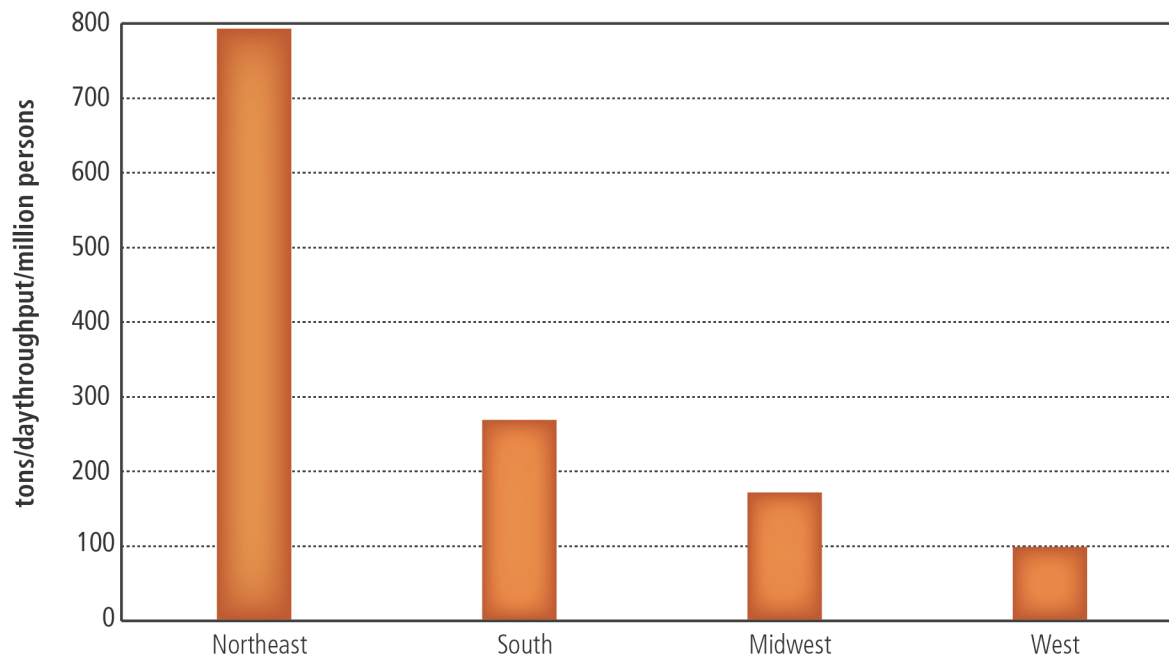
Source: U.S. Census Bureau; BioCycle, November 2011, Medina County, Ohio and West Wendover, Nevada websites.

Figure 24. Yard Trimmings Composting Facilities, 2014
(In number of facilities)



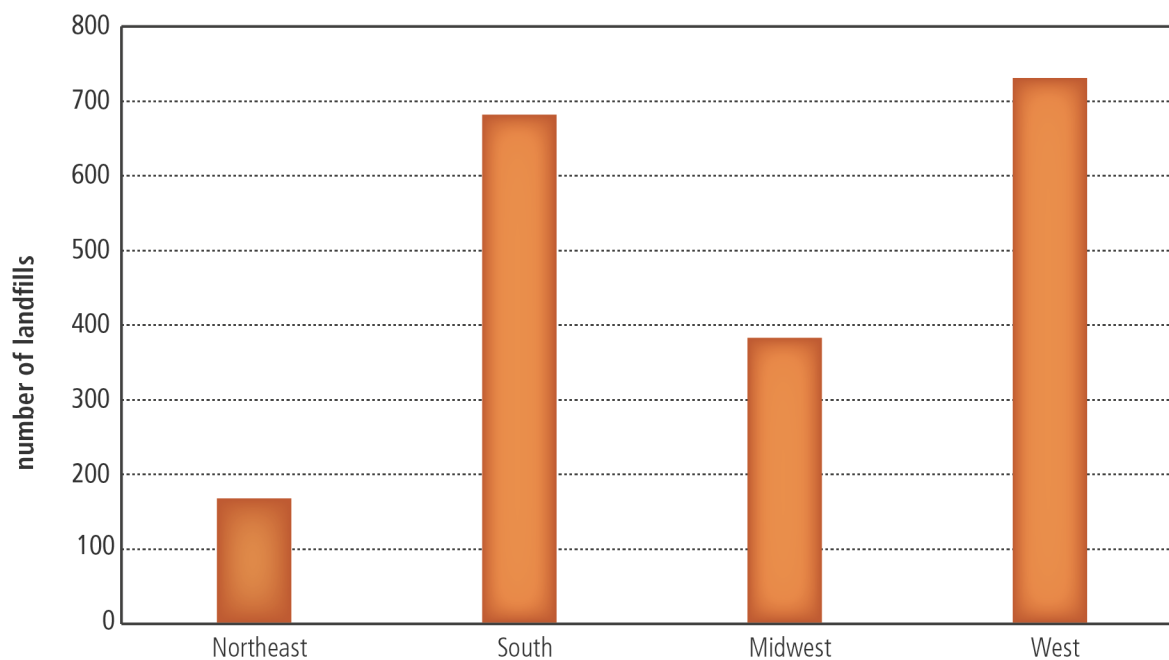
Source: Institute for Local Self-Reliance. July 2014 "State of Composting in the U.S." Facilities composting yard trimmings. Includes data for 48 states. An Internet search provided information for Alaska, Hawaii, Louisiana, Nevada, New Hampshire, Oklahoma, and West Virginia.

Figure 25. Municipal Waste-To-Energy Capacity, 2014
(Capacity in tons per million persons)



Source: U.S. Census Bureau, Energy Recovery Council (ERC). May 2014.

Figure 26. Number of Landfills in the U.S., 2014



Source: State environmental websites.