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Environmental Protection
Agency

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Environmental Fact Sheet

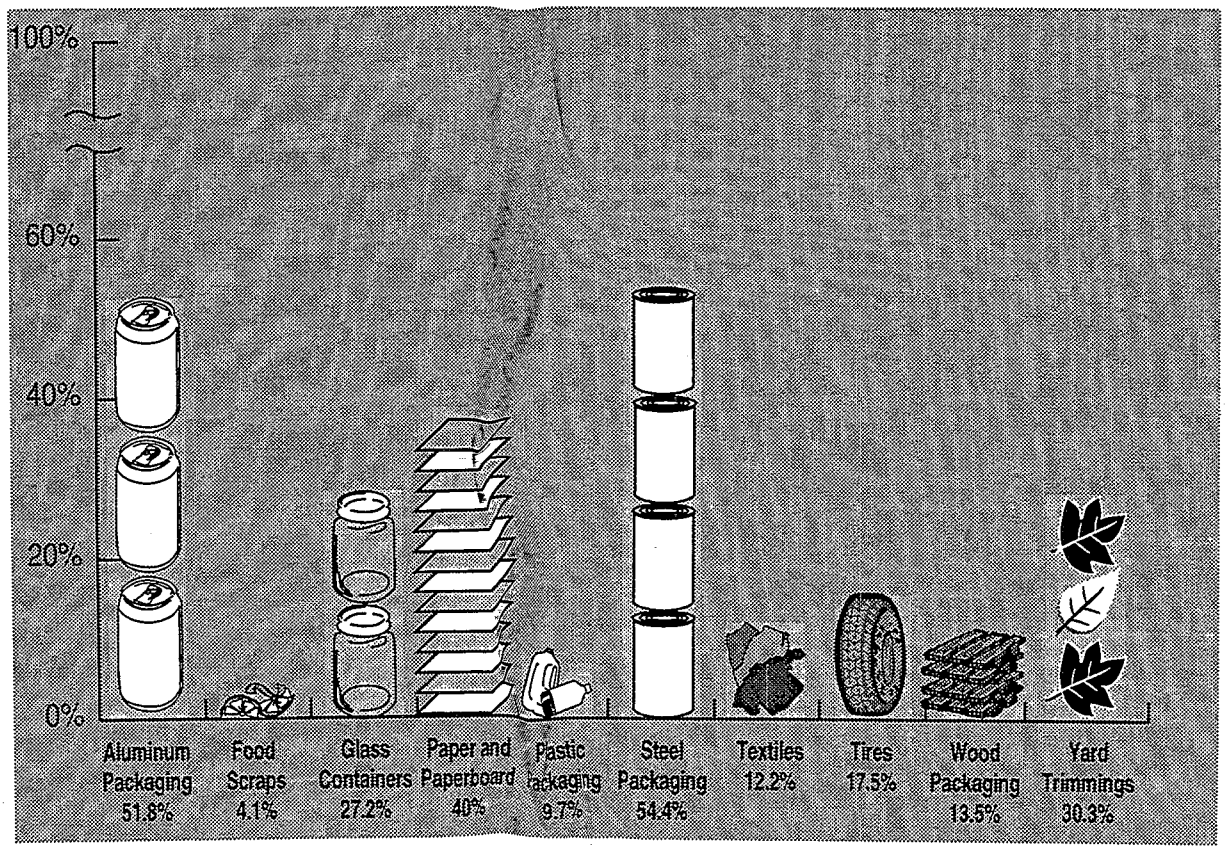
Recycling Municipal Solid Waste: 1995 Facts and Figures*

In the United States, we generated approximately 208 million tons of municipal solid waste (MSW) in 1995—a decrease of more than 1 million tons from 1994. The per capita MSW generation rate in 1995 was 4.3 pounds per person per day. This rate is expected to remain relatively stable through the year 2000 for two reasons. First, while the per capita consumption of products continues to rise, efforts by manufacturers to lightweight the packaging associated with these products is increasing. Second, efforts such as grasscycling and backyard composting are beginning to reduce the amount of yard trimmings entering the waste stream. Recovery rates for recycling (including composting) continue to grow. In 1995, the nation's overall recycling rate was 27 percent—up 2 percent from the previous year.

This fact sheet describes 10 of the primary components of the MSW stream, along with their generation rates, the percentages of the MSW stream they represent, and their recovery rates.

*U.S. EPA 1996. Characterization of Municipal Solid Waste in the United States: 1996 Update. EPA530-R-97-015. Washington, DC.

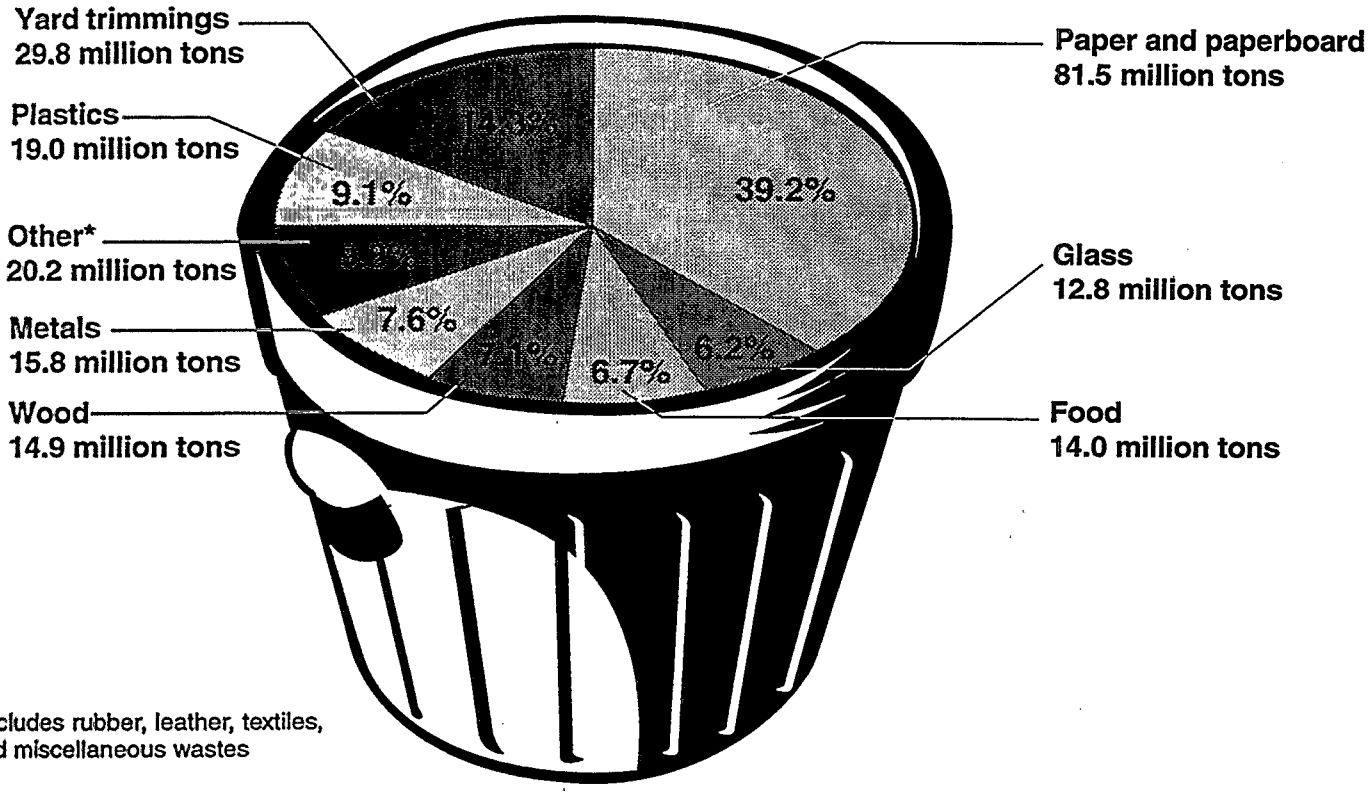
1995 Recovery Rates for Major MSW Components



Printed on paper that contains at least 20 percent postconsumer fiber.

Materials in MSW: By Weight and Percentage of Total Generated

Total weight = 208.0 million tons



*Includes rubber, leather, textiles, and miscellaneous wastes

Aluminum

GENERATION: A total of 3.0 million tons of aluminum waste was generated in 1995. Aluminum containers and packaging, such as soft drink and beer cans, contributed 2.0 million tons.

PERCENT: Aluminum made up 1.4 percent of the total MSW generated in 1995.

RECOVERY: Approximately 62.7 percent of aluminum containers were recycled in 1995. The overall recycling rate for aluminum packaging was 51.8 percent in 1995.

Aluminum cans and other packaging comprise the largest source of aluminum in MSW. Because of their high market value, aluminum cans generally supply a large percentage of revenues for many municipal recycling programs. Most of the aluminum recovered from the waste stream is used to manufacture new cans.

Ferrous Metals

GENERATION: About 11.6 million tons of ferrous metal waste (e.g., iron and steel) was generated in 1995.

PERCENT: Ferrous metals constituted 5.6 percent of the MSW stream in 1995.

RECOVERY: Overall, about 30.7 percent of ferrous metals from durable goods were recycled in 1995. Approximately 54.4 percent of steel packaging (e.g., cans and strapping) was recycled.

Ferrous metals are the largest category of metals by weight in the MSW stream. Most ferrous metals in MSW are found in durable goods, such as appliances, furniture, and tires. Steel cans and other packaging are another major source of ferrous metals in MSW.

Food Scraps

GENERATION: Nearly 14.0 million tons of food scraps were generated in 1995.

PERCENT: Food scraps comprised approximately 6.7 percent of the MSW stream in 1995.

RECOVERY: In 1995, approximately 4.1 percent of food scraps were composted.

Food scraps include uneaten food and food preparation wastes from homes; commercial establishments, such as restaurants; institutional sources, such as school cafeterias; and industrial sources, such as factory lunchrooms.

Glass Containers

GENERATION: Approximately 12.8 million tons of glass waste was generated in 1995. Food and beverage containers made up 90 percent of this amount; the remainder came from products such as cookware and glassware, home furnishings, and plate glass.

PERCENT: Glass constituted 6.2 percent of the MSW stream in 1995.

RECOVERY: About 27.2 percent of all glass food and beverage containers were recycled in 1995. Glass had an overall recovery rate of 24.5 percent in 1995.

Most of the glass recovered in the United States is used in new glass containers. A portion is also used in fiberglass and "glasphalt" for highway construction.

Paper and Paperboard

GENERATION: Nearly 81.5 million tons of paper and paperboard waste was generated in 1995.

PERCENT: Paper and paperboard constitute the largest portion of the MSW stream, representing 39.2 percent in 1995.

RECOVERY: Paper and paperboard had an overall recycling rate of 40.0 percent in 1995. About 64.2 percent of corrugated boxes, 53.0 percent of newspapers, 18.8 percent of books, 28.3 percent of magazines, and 44.3 percent of office papers were recycled in 1995.

Recovered paper and paperboard can be used to make a variety of products, including copier paper, paper towels and napkins, corrugated boxes, and hydraulic mulch. Demand for recovered paper is growing, as more mills are processing recovered paper and consumers continue to demand recycled paper products for their homes and offices.

Plastic Containers & Packaging

GENERATION: Approximately 19.0 million tons of plastic waste was generated in 1995.

PERCENT: Plastics comprised 9.1 percent of the total MSW stream in 1995.

RECOVERY: Recovery of plastic containers and packaging was 9.7 percent in 1995, with plastic soda bottles being the most commonly recycled product (an estimated 45.5 percent were recovered). Overall, recovery of plastics is 5.3 percent.

Plastic containers and packaging comprise the largest portion of the plastic that ends up in the waste stream. Other categories include plastics in durable goods and nondurables, e.g., plates, cups, and clothing. Although the overall recovery of plastic is fairly small, recovery of plastic soft drink, milk, and water bottles is increasing. Products made from recovered plastic bottles include drainage pipes, toys, carpet, filler for pillows and sleeping bags, and cassette casings.

Textiles

GENERATION: An estimated 7.4 million tons of textiles were generated in 1995.

PERCENT: Textiles made up nearly 3.6 percent of the MSW stream.

RECOVERY: About 12.2 percent of textiles were recovered from the MSW stream.

Textiles in MSW consist primarily of discarded clothing, although other sources include furniture, carpets, tires, footwear, and other nondurable goods, such as sheets and towels. A significant amount of textiles are recovered for reuse. These reused garments eventually re-enter the waste stream, and are, therefore, not included in the recovery for recycling estimate above. Textiles that are considered permanently recovered from the waste stream include clothing and items such as sheets and pillowcases that are recovered for export or reprocessing.

Tires

GENERATION: Approximately 3.8 million tons of rubber tires (or 257 million scrap tires—about 1 tire per person in the United States) were generated in 1995.

PERCENT: Tires made up about 1.8 percent of the MSW stream in 1995.

RECOVERY: In 1995, approximately 17.5 percent of scrap tires were recycled, excluding retreads and tires combusted for energy.

Because of the difficulties of disposing of scrap tires in landfills or waste combustors, most old tires generated in the United States each year are stockpiled. These huge stockpiles invite rodents and mosquitoes and pose fire hazards. Scrap tires can be retreaded, burned for energy, or converted into molded rubber products, rubberized asphalt paving, and athletic surfaces.

Wood Packaging

GENERATION: A total of 14.9 million tons of wood materials were generated in 1995. Wood packaging represents 10.6 million tons of the total amount generated.

PERCENT: Wood materials constituted 7.1 percent of the MSW stream.

RECOVERY: Approximately 9.6 percent of total wood discards were recovered in 1995. Recovery of wood packaging is estimated at 13.5 percent.

The sources of wood in MSW include furniture; wood packaging, such as crates and pallets; and miscellaneous durables, such as kitchen cabinets and other products. Recovery of wood pallets, usually by chipping, is increasing along with recovery of other wood materials. A growing number of pallets are also recovered for reuse, a trend that may impact generation and recovery numbers in the future.

Yard Trimmings

GENERATION: Approximately 29.8 million tons of yard trimmings (including grass, leaves, tree, and brush trimmings) were generated in 1995.

PERCENT: Yard trimmings made up 14.6 percent of the MSW stream in 1995.

RECOVERY: In 1995, nearly 30.3 percent of yard trimmings were composted. Communities sponsored 3,300 yard trimming programs in 1995.

Composting of yard trimmings has grown significantly in the past few years. In 1995, composting of these materials contributed to the second largest fraction of total MSW recovery (after paper and paperboard) at 9 million tons. This is largely due to state and local efforts to divert yard trimmings from landfills.

Source of data for this fact sheet: U.S. EPA 1996. *Characterization of Municipal Solid Waste in the United States: 1996 Update.* EPA530-R-97-015. Washington, DC.