

Measuring Your Impact 16

Understanding Household Solid Waste

The table below shows the percentage composition of typical municipal solid waste (MSW) generated by a household in the United States according to a 2007 report by the EPA.

Material	Percentage (%)
Food scraps	12.5
Paper and paperboard	32.7
Plastic	12.1
Metals	8.2
Glass	5.3
Yard trimmings	12.8

Consider a household that has four residents and generates 4 pounds of MSW per day per person. The tipping fee in this location is \$60 per U.S. ton. The household has already reduced its amount of garbage through reducing and reusing materials, but now wants to lower the amount further by recycling. The major recyclables in the waste stream of this household are paper, plastic, glass, and metals.

Use the preceding table and information to answer the following questions:

- How much MSW does the household generate in a month (31 days)?
- How much MSW does the household generate in a year (365 days)?
- How much does the household pay for tipping fees each year?
- Approximately how long does it take the household to generate a ton of MSW?
- If the household decided to compost all of its food scraps, paper, and yard trimmings, how much would it save on tipping fees each year?
- If the household decided to recycle all of its plastic and glass, how much would it save on tipping fees each year?
- How much would the household save if it did both composting and recycling as in (e) and (f) above, and how much MSW would it generate a year as a result?