

TABLE 8-3
Projection of average composition of U.S. solid waste by year^a

Composition	1970	1975	1980	1990	2000
Paper	37.4	39.2	40.1	43.4	48.0
Yard wastes	13.9	13.3	12.9	12.3	11.9
Food wastes	20.0	17.8	16.1	14.0	12.1
Glass	9.0	9.9	10.2	9.5	8.1
Metal	8.4	8.6	8.9	8.6	7.1
Wood	3.1	2.7	2.4	2.0	1.6
Textiles	2.2	2.3	2.3	2.7	3.1
Leather and rubber	1.2	1.2	1.2	1.2	1.3
Plastics	1.4	2.1	3.0	3.9	4.7
Miscellaneous	3.4	3.0	2.7	2.4	2.1

^a Percentage of waste stream as discarded on a dry mass basis.

Source: W. R. Niessen and S. H. Chansky, "The Nature of Refuse," *Proceedings of the ASME Incinerator Conference*, 1970, p. 1.

TABLE 8-6
Typical properties of uncompacted solid waste as discarded in Davis, California

Component	Mass (kg)	Density (kg/m ³)	Volume (m ³)
Food wastes	4.3	288	0.0149
Paper	19.6	81.7	0.240
Cardboard ^a	2.95	99.3	0.0297
Plastics	0.82	64	0.013
Textiles	0.091	64	0.0014
Rubber	—	128	—
Leather	0.68	160	0.0043
Garden trimmings	6.5	104	0.063
Wood	1.59	240	0.00663
Glass	3.4	194	0.018
Tin cans	2.36	88.1	0.0268
Nonferrous metals	0.68	160	0.0043
Ferrous metals	1.95	320	0.00609
Dirt, ashes, brick	0.50	480	0.0010
Total	45.4		0.429

^a Cardboard partially compressed by hand before being placed in container.

Source: G. Tchobanoglous, H. Theisen, R. Eliassen, *Solid Wastes Engineering Principles and Management Issues*. New York: McGraw-Hill, p. 135, 1977.