

How MassDEP Calculates Municipal Residential Recycling Rates

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Background

Each year, the Massachusetts Department of Environmental Protection (MassDEP) asks municipalities to complete a Municipal Recycling Data Sheet that provides solid waste, recycling, composting, and hazardous product collection information. MassDEP uses the information provided on the Data Sheets to calculate municipal and statewide diversion and recycling rates, evaluate municipal recycling grant applications, and evaluate state recycling and waste reduction progress. Municipalities must complete a data sheet to be eligible for MassDEP recycling grants.

Below is a brief explanation of how MassDEP calculates municipal recycling rates and what is counted and not counted in these rates. A historical listing of municipal recycling rates, a spreadsheet summarizing the major components of each municipality's rate for the most recent year, and a spreadsheet summarizing the major characteristics of each municipality's solid waste and recycling program is posted along with this explanation at <http://www.mass.gov/dep/recycle/priorities/dswmpu01.htm#recycling>.

Residential Recycling Rate

$$= \frac{\text{Residential Tons Diverted (recycled + composted + hazardous products collected)}}{\text{Residential Tons Generated (diverted + disposed)}}$$

Tons Generated

$$= \text{Tons Disposed} + \text{Tons Diverted}$$

- Generation is based on actual data reported by cities and towns.
- If a municipality does not report tons disposed, MassDEP estimates the tons generated by multiplying the municipality's population by a statewide average per-capita residential generation rate.

Tons Disposed – Data Sheet Sections 2 and 3

Includes:

- All reported residential disposal
- Bulky waste disposal
- Tons disposed by residents served by private subscription haulers. If this tonnage is not reported, MassDEP calculates it based on a statewide average of tons disposed per household. The statewide average of tons disposed per household is multiplied by the number of households served by private subscription haulers.
- If a municipality does not have disposal tonnage data, MassDEP calculates it by subtracting the tons diverted from the estimated tons generated. (See the Tons Generated section above.)

Does not Include:

- Disposal tonnage from businesses or construction and demolition debris disposal

Tons Diverted – Data Sheet Sections 6, 7 & 8

= Tons Recycled + Tons Composted + Tons of Hazardous Household Products/Difficult to Manage Waste Collected

Tons Recycled – Data Sheet Section 6

Includes:

- All residential recycling of paper, containers, textiles, scrap metal and white goods, textiles and swap shop diversion
- Residential recycling from residents served by private subscription haulers
- If a municipality does not have tonnage data for private subscription hauler recycling, but can demonstrate that private haulers are providing residential recycling services, then MassDEP assigns recycling tonnage credit on a per household basis

Does Not Include:

- Recycling tonnage from businesses

Tons Composted – Data Sheet Section 7

Includes:

- Tonnage reported for leaves and yard waste, Christmas trees, food waste and tonnage credit per home compost bin distributed (typically based on volume to weight conversions)
- When the municipality does not collect and report composting tonnage, but does confirm that it has specific composting initiatives in place, MassDEP calculates per capita default composting tonnage in lieu of actual reported tonnage

Does Not Include:

- Compost tonnage from commercial sources

Hazardous Household Products/Difficult to Manage Waste Diversion – Data Sheet Section 8

Includes:

- All hazardous household products and difficult to manage wastes reported (where necessary, volume to weight conversion factors are used to convert values into tons)
- Per-car and per-½ car tonnage credit for the number of cars reported served at comprehensive one-day collection events
- These two figures are mutually exclusive if properly reported, and are added together to calculate total tons