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Ann Arbor, Michigan

52% Residential Waste Reduction

Overview

Residential waste reduction in the City of Ann Arbor has come a long way since the creation of its first community-based non-profit drop-off station in 1970. Today the city contracts with the non-profit organization, Recycle Ann Arbor, for the collection — under mandatory ordinance — of recyclables from all city households and the operation of a drop-off facility for recyclables and yard debris.[1] In addition, city crews collect yard debris at curbside seasonally. In FY96 the city diverted 52% of its residential waste through recycling (30%) and composting (23%). Per household solid waste management costs have increased by less than 10% since FY89, even though per ton trash tip fees increased more than 70% in the same period.

DEMOGRAPHICS

POPULATION: 112,000 (1994)

HOUSEHOLDS: 22,000 single-family and duplexes; 24,000 multi-family

Keys to High Waste Reduction

Contributing factors to Ann Arbor's waste diversion level are a state ban on landfilling yard debris, curbside collection of 24 types of recyclables coupled with a mandatory ordinance, multi-family dwelling recycling service, and the bottle bill. The state ban spurred Ann Arbor to develop a compost site, draft an ordinance requiring residents to separate "compostables" from trash, and start curbside service for these materials. Nearly one-quarter of Ann Arbor's residential waste stream is diverted through the city's composting program. City ordinance requires residents to source-separate recyclables and compostables from trash. The city enforces this requirement by not collecting improperly sorted and prepared materials. As 52% of households are multi-family, the city recognized the importance of providing this sector with waste reduction services. Multi-family buildings receive recycling carts and can divert the same materials as do single-family homes, with the exception of motor oil and batteries.

RESIDENTIAL PROGRAM SUMMARY

	FY89	FY96
Tons Per Year	44,806	47,943
Percent Diverted	16%	52%
Recycled	16%	30%
Composted	0%	23%
Average lbs./HH/day	5.61	5.71
Net Program Costs/HH	$72.96	77.61
Disposal Services	63.68	42.17
Diversion Services	9.29	35.44

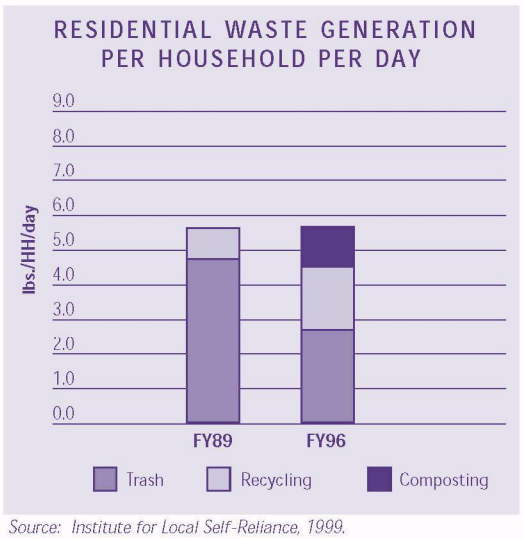
Notes: 43,774 households served in FY89; 46,000 in FY96. 1989 dollars adjusted to 1996 dollars using the GDP deflator. Numbers may not add to total due to rounding.

Source: Institute for Local Self-Reliance, 1999.

The bottle bill provides an incentive to recover designated containers. The city's waste reduction efforts are supported by city ownership of a material recovery facility and composting facility, and a comprehensive education program.

Cost-Effectiveness

In FY96, after subtracting material revenues, the city spent $78 per household served on trash, recycling, and yard debris services. This cost represents an increase of less than 10% over per household costs in FY89. In FY97, the average net per ton costs of waste reduction were $71. In contrast, FY97 trash collection and disposal costs averaged $86 per ton. Contracting with a nonprofit for curbside recyclables collection and operation of the drop-off facility, reduced total disposal costs, and yard debris diversion are primarily responsible for keeping the increase to a minimum.



Source: Institute for Local Self-Reliance, 1999.

Tips for Replication

Keep the program easy and user-friendly.

Include public input.

Look for ways to cooperate with other entities.

Use conservative projections for tonnages and market prices.

Notes:
[1]Residents in multi-family dwellings can recycle the same materials at curbside as residents in single-family dwellings with the exception of used motor oil and batteries.

MATERIALS RECOVERED

CURBSIDE:

- newspaper, magazines, and corrugated cardboard
- mixed paper (including paperback and phone books, office paper, mail, and paperboard)
- milk cartons and juice boxes
- steel and aluminum cans
- scrap metal (including ferrous metal, aluminum foil and pie tins, white goods, and aerosol cans)
- glass containers, dishes, and heat-resistant glass
- ceramics
- #1-#3 plastic bottles
- textiles
- household batteries
- used motor oil and oil filters
- yard waste (including leaves, grass clippings, brush, and holiday trees)

DROP-OFF:

all materials collected in curbside recycling program plus

- hardcover books
- polystyrene packing peanuts
- foam egg cartons
- car batteries

other materials can be (collected for a small fee)

Recyclables and yard debris set out for collection in Ann Arbor

Contact

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