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Visalia, California

50% Residential Waste Reduction



In 1991, Visalia began its waste reduction program in order to meet California's state mandated recycling goals. The city tried several curbside recycling pilot programs involving bins and bags and manual collection. However none of the programs were implemented due to poor productivity and high worker compensation rates as compared to the city's existing automated trash collection system. Instead the city, in partnership with a local trash equipment distributor, designed a special 110-gallon split container for trash and recyclables and a dual-compartmented automated truck that allows crews to collect trash and recyclables simultaneously. The city implemented this innovative automated dual-collection system citywide in 1996. At the same time, it reduced trash collection frequency to once a week (from twice a week) and added a weekly "green waste" collection program. In FY97, Visalia diverted 50% of its residential waste from disposal — 33% through composting and 16% through recycling.



Recycling program convenience, collection of 15 categories of recyclable materials, the replacement of the city's previous second-day trash pick-up with a green waste collection day, the state bottle bill, and an extensive outreach campaign contribute to the success of Visalia's waste reduction

program. Residents can commingle virtually all paper products, and metal, plastic, and glass containers for recycling in one side of their wheeled, split containers. Visalia diverts 33% of the city's residential waste through its yard debris program. All green waste is taken to a local compost facility. Visalia diverts nearly 3% of its residential waste through the state container deposit and redemption program.

The city undertook an extensive outreach campaign to teach residents



DEMOGRAPHICS

POPULATION: 91,314 (1996), 92,677 (1997) HOUSEHOLDS: 28,869 (1996), 25,346 singlefamily households, 3,523 multi-family units

RESIDENTIAL PROGRAM SUMMARY		
	FY94	FY97
Tons Per Year	45,395	50,806
Percent Diverted Recycled Composted	2% 2% 0%	50% 16% 33%
Average lbs./HH/day	10.58	10.71
Net Program Costs/HH Disposal Services Diversion Services ¹	\$190.33 \$190.33 \$0	\$202.20 \$108.77 \$93.43

Notes: 23,500 households served in 1994; 26,000 in 1996 and 1997. 1994 dollars adjusted to 1996 dollars using GDP deflator. Numbers may not add to total due to rounding. 1Diversion represents deposit container recovery only in FY94, therefore; there were no direct costs to the city.

Source: Institute for Local Self-Reliance, 1999.

how to use the new system and emphasize the importance of recycling.

Cost-Effectiveness

In 1996, the city spent about \$5.26 million for trash, recycling, and yard debris management services — about \$202 per household served. Of this, about 54% was spent on trash collection and disposal, 18% was spent on recycling, and 28% was spent on yard debris collection and processing. On a per-ton basis, trash cost \$117 and waste reduction programs cost \$96 —

recycling, \$114 and green waste recovery, \$87.1 Overall, net solid waste management costs per household served have increased from \$190 in FY94 to \$202 in FY97. During this same time period, per ton trash tip fees increased 10%. If these fees had not risen, per household waste management costs in FY97 would

have been within 5% of per household costs in FY94. In FY94, per ton trash costs were \$101 per ton, now waste reduction and trash services

RESIDENTIAL WASTE GENERATION PER HOUSEHOLD PER DAY 11.0 10.0 90 8.0 7.0 6.0 5.0 4.0 3.0 2.0 1.0 0.0 FY94 FY97 Trash Recycling Composting

Source: Institute for Local Self-Reliance, 1999.

cost \$106 per ton. Recyclables processing and composting costs are less expensive per ton than landfill tip fees, helping to contain costs.

Tips for Replication

Investigate the dual-collection split-container system and automated collection.

Focus on education to teach residents how to use the system.

Seek out committed staff and administration to ensure program.

Find processor willing to receive commingled recyclables.

Put together a Citizen Advisory Group or find other ways to obtain resident input.

Note:

The differences in the per-ton costs in these figures are largely reflections of the per-ton costs for recycling and composting processing and trash disposal. Visalia does not track curbside collection costs for recyclables, yard debris, and trash separately and reports per-ton collection costs for all materials as the total system average curbside collection cost.

MATERIALS RECOVERED

CURBSIDE:

newspaper, magazines, corrugated cardboard mixed paper (including mail, paperboard, and office paper) glass containers

cans

all plastic containers

milk and juice cartons

scrap wood and lumber (except creosote or treated wood) grass clippings, brush, leaves, and other yard and garden debris

DROP-OFF:

same materials as curbside plus holiday trees



Fully automated dual collection truck used to collect trash and recyclables in Visalia

Contact

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