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**2000 & 2001 Annual Report on
Solid Waste Reduction and
Recycling in Fort Collins**



City of Fort Collins

Community Planning and Environmental Services
Natural Resources Department

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Introduction

As part of licensing requirements in Fort Collins, trash haulers must provide reports to the City describing their recycling and solid waste collection services, as well as biannual data on volumes of materials collected and levels of participation in recycling. This information has been collected by the Natural Resources Department (NRD) since 1991 and is useful for the City to monitor progress in meeting its adopted policies and goals for recycling and solid waste reduction. The following report includes trash haulers' data from 2000 and 2001 (an annual report has not been published since 1999).

This report, however, does not contain information about waste diversion activities that are conducted by other, non-regulated entities. For instance, the City sponsors collection activities that result in about 7,000 cubic yards of fall leaves being diverted every year from landfill disposal and taken to a local commercial composter. The NRD undertakes an overall waste diversion study every other year, most recently in 2001.

Background

The City of Fort Collins has played an important role in designing and creating recycling and waste diversion programs for its residents based on adopted public policy, voluntary participation by citizens, and limited local authority over the trash hauling industry.

For the past twelve years, Fort Collins has steadily increased its interest and influence on local solid waste issues in the interests of environmental stewardship. Although the City does not operate a municipal trash utility, it plays an active role in managing solid waste through NRD. In order to assist citizens with options for recycling and waste reduction, NRD provides education and outreach, policy development and planning, and some limited materials collection projects, including Christmas tree, fall leaves, and computer recycling events.

In 1995, the City adopted two ordinances aimed at helping reduce the amount of solid waste generated in Fort Collins, and requiring trash haulers to, apply variable trash rates ("pay-as-you-throw") to their residential customers, and provide curbside recycling services at no extra charge to residential customers.

In December of 1999, the City Council increased its goal for diverting waste from disposal in landfills. The 20% diversion goal that was set in 1995 was raised to a new standard of 35% by 2004 and ultimately 50% diversion by 2010. This decision was based on calculations that showed the community had reached a level of 24% waste diversion through a variety of recycling and resource conservation strategies by February of 1999.

In March 2000, amendments were made to the existing solid waste and recycling ordinance adding provisions pertaining to procedural requirements, and adding a document retention requirement for haulers, to improve the City's ability to monitor, assess, and enforce compliance with the City's variable trash rate system.

Trends and Changes

Trends that have been occurring during the 1990's for increased recycling held steady or grew during 2000, but declined somewhat during 2001. One company, Waste Management of Northern Colorado Inc., reported seeing a decline in recycling at all their facilities that they believe was due to the economy.

Solid waste volumes that were reported for 2000 appear to be much lower than in 1999, but we think this anomaly is due to reporting problems. The trash industry does not rely on precise numbers for waste volumes and companies may find it difficult to provide highly accurate data. Further, conversion factors used for turning yardage data into tonnages vary depending on whether waste is loosely packed or compacted. The City's revised reporting form asks haulers to break down trash volumes down into three different categories to better quantify actual weights for packer truckloads and loose "roll-off" containers. Reporting categories were also added for commercial recycling to better reflect the variety of waste streams being collected from Fort Collins, such as yard wastes and construction debris. Staff is still concerned about the quality of data reported by haulers, but although trash volumes from 2000 seem unnaturally low, volumes for 2001 appear more consistent with past data.

Summary

Recycling

Between 2000 – 2001, Fort Collins' population grew by 4.3% to 122,377. The number of single-family and two-family households increased by 3% to 30,589. The reported participation rate in curbside recycling decreased slightly from 83.6% in 2000 to 80.2% in 2001.

Haulers reported that 13,925 tons of recyclable materials (aluminum and steel cans, bottles and jars, plastic #1 and #2 bottles, newspaper, office paper, and corrugated cardboard) were collected from residential curbside programs and commercial customers in 2001 - - a decrease of 8.6% from the previous reporting period. The annual amount of recycling per capita averaged 112 pounds per person, down from 140 pounds per person in 2000.

Another indicator that helps paint the picture of what is happening in Fort Collins is the Larimer County Recycling Center (LCRC), which acts as the regional processing plant for a broad variety of materials. The LCRC currently processes 100 to 120 tons of recyclables per day compared to 70 tons per day four years ago. (Since LCRC's design capacity is limited to 140 tons per day, future expansion is planned to allow for additional

processing and storage capacity, more room for indoor storage of paper products, and a bigger tipping floor.)

Solid Waste

Data compiled in early 2002 showed that 36% more solid waste was generated in Fort Collins from residential and commercial sources in 2001 than in the previous twelve-month reporting period.

As of December 2001, Fort Collins had 13 licensed solid waste haulers. Five haulers provide residential trash collection within city limits (one licensed hauler no longer provides service in Fort Collins). Seven hauling companies now specialize in roll-off containers or compactor services for commercial, industrial, and construction customers. The increased number of haulers is partly attributed to the housing construction market's demand for more roll-off container services.

Licensing Fees

Currently, the City collects a \$30 per vehicle license fee from solid waste hauling companies. Revenues generated through licensing 107 solid waste hauling vehicles (\$3,210 in 2001) are appropriated into the City's General Fund.

Conclusions

The findings of this report provide a good reminder about the large margin for error that exists when our sources of data are so variable. We are using the best information available, but it is important to recognize that it may be incomplete or incorrectly calculated. By working diligently with the haulers to improve the quality of our data, in time their information they report to the City will more accurately describe the situation.

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RESIDENTIAL CURBSIDE RECYCLING PARTICIPATION

December 1991 through December 2001

Population	Residential Curbside Recycling Participation				# Multi-Family Recycling Customers	% Commercial Customers Recycling *
	Year	# Total Single-Family Homes	# Single-Family Homes Recycling	% Homes Recycling		
88,439	June 1991	21,368				
	Dec 1991		3,843	18%	na	na
91,117	June 1992	21,913	4,176	19.1%	na	na
	Dec 1992		4,839	22.1%	na	4.0%
93,181	June 1993	22,660	7,799	34.4%	73	5.0%
	Dec 1993		8,501	37.5%	83	7.0%
95,899	June 1994	23,552	7,861	33.4%	67	13.2%
	Dec 1994		8,892	37.8%	68	14.8%
99,726	June 1995	24,488	13,111	53.5%	42	14.1%
	Dec 1995		14,813	60.5%	42	14.2%
102,569	June 1996	25,444	20,114	79.1%	142	15.4%
	Dec 1996		20,497	80.6%	94	16.0%
106,466	June 1997	26,435	20,797	78.7%	57	15.6%
	Dec 1997		22,633	85.6%	59	16.8%
108,981	June 1998	27,138	23,178	85.4%	57	17.2%
	Dec 1998		23,327	86.0%	59	17.3%
112,912	June 1999	28,527	24,174	84.7%	74	15.4%
	Dec 1999		23,668	83.0%	104	17.5%
117,280	June 2000	29,671	23,506	79.2%	84	18.6%
	Dec 2000		24,799	83.6%	305	16.5%
122,377	June 2001	30,589	23,448	76.7%	306	13.5%
	Dec 2001		24,526	80.2%	371	12.3%

* based on number of licensed businesses

RECYCLING MILESTONES

June 1, 1991 -- Ordinance requires trash haulers to provide recycling service (not "for free") to customers who desire the service.

December 1, 1992 - Larimer County Recycling Center opens.

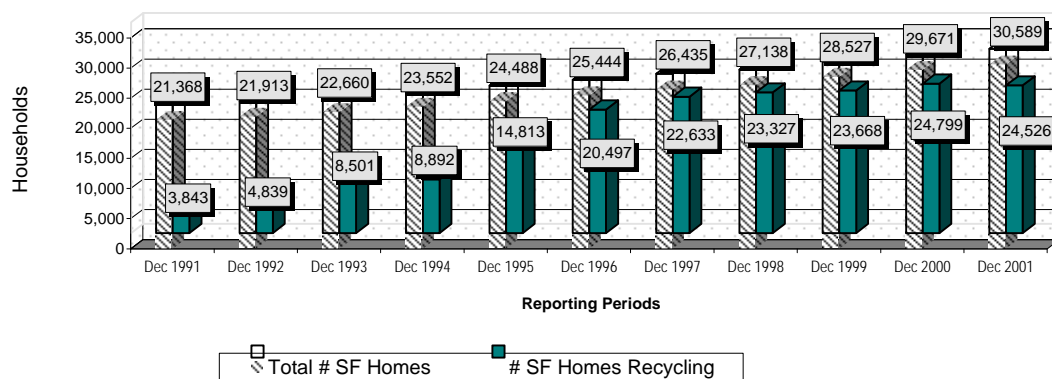
January 1, 1993 - All trash haulers in Larimer County are required to charge customers for the amount of trash disposed. Flat fees are no longer allowed.

October 1, 1995 - Ordinance requires trash haulers to provide weekly recycling collection as part of basic trash collection service.

January 1, 1996 - Ordinance requiring volume based rates becomes effective. Haulers permitted to establish a flat monthly base fee to recover fixed costs.

March 7, 2000 - Amendments were made to the Ordinance adding provisions pertaining to procedural requirements and adding a document retention requirement.

Residential Curbside Recycling Participation December 1991 to December 2001



GOAL INDICATOR: 80-90 Percent participation in residential curbside recycling services.

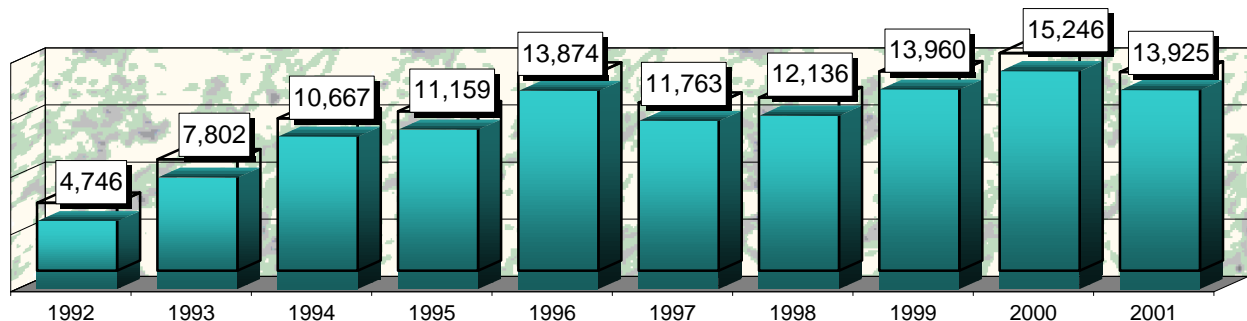
MEASUREMENT SOURCE: Semi-annual report from local solid waste haulers

Curbside Recycling Participation: Decreased from 83.6% in December 2000 to 80.2% in December 2001.

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TONS OF RECYCLABLE MATERIALS COLLECTED (wood & yard waste not included)
January 1992 through December 2001

Reporting Period	Tons	Total Tons Per Year	% Increase or Decrease from Previous Year
January - June 1992	2,137		
July - December 1992	2,609		
1992		4,746	
January - June 1993	3,156		
July - December 1993	4,646		
1993		7,802	+64.4%
January - June 1994	4,697		
July - December 1994	5,970		
1994		10,667	+36.7%
January - June 1995	5,290		
July - December 1995	5,869		
1995		11,159	+4.6%
January - June 1996	7,371		
July - December 1996	6,503		
1996		13,874	+24.3%
January - June 1997	5,731		
July - December 1997	6,032		
1997		11,763	-15.2%
January - June 1998	5,563		
July - December 1998	6,573		
1998		12,136	+3.2%
January - June 1999	6,535		
July - December 1999	7,425		
1999		13,960	+15%
January - June 2000	7,020		
July - December 2000	8,226		
2000		15,246	+9.2%
January - June 2001	7,290		
July - December 2001	6,635		
2001		13,925	-8.7%

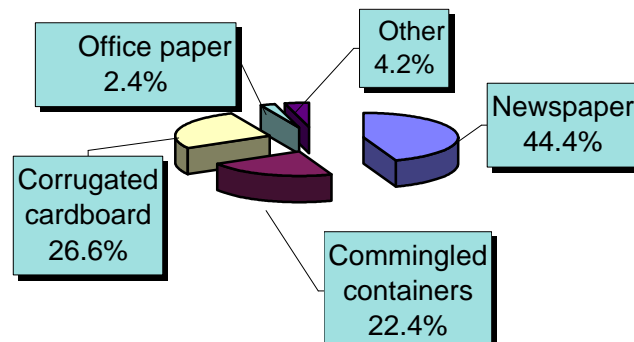
Tons of Recyclable Materials Collected
by Fort Collins Haulers from
Commercial, Multi-Family, and Residential Customers



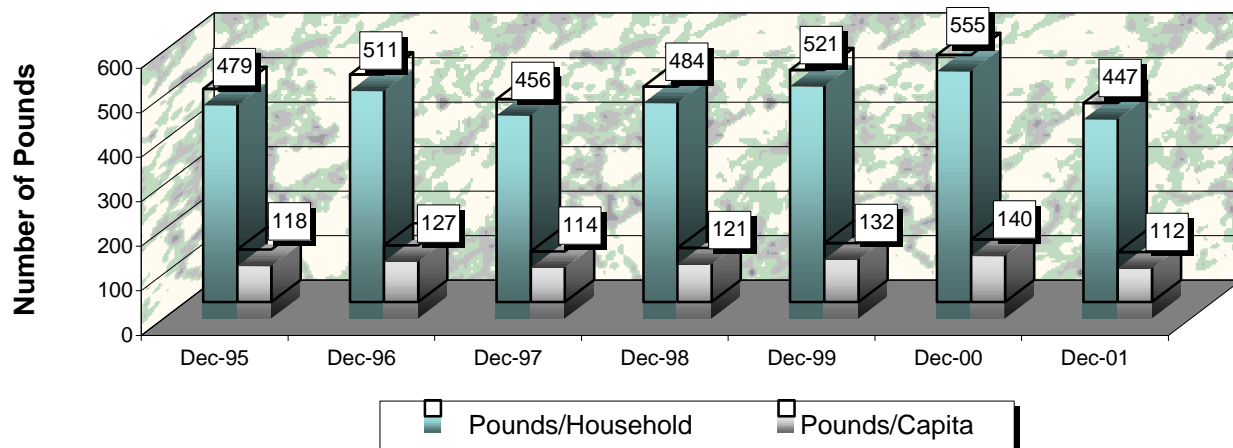
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BREAKDOWN OF RECYCLABLE MATERIALS COLLECTED
IN CURBSIDE PROGRAM AND AT DROP-OFF LOCATIONS IN FORT COLLINS
BY SOLID WASTE HAULERS
 (Residential and Commercial)

<i>Material</i>	<i>Number of Tons</i>		
	January-June 2001	July-December 2001	TOTAL
Newspaper	2,902	3,279	6,181
Commingled containers	1,476	1,639	3,115
Corrugated cardboard	2,154	1,554	3,708
Office paper	169	162	331
Other	589	1	590
TOTAL TONS	7,290	6,635	13,925
Yard Wastes (cubic yards)	0	0	0
Wood Wastes (cubic yards)	3,082 cy	3,913 cy	6,995 cy

Tons of Recyclables Collected by Commodity (excluding wood & yard waste)
 January - December 2001



Total Pounds of Recyclables Collected
 Per Capita and Per Household
 (includes residential and commercial sources)



Total Pounds of Recyclables Collected (June 1995 - December 2001)

Date	# hshlds	Tons	Total Pounds	Pounds/Household	Population	Pounds/Capita
Jun-95	24,488	5,290	10,580,000	432	99,726	106
Dec-95	24,488	5,869	11,738,000	479	99,726	118
Jun-96	25,444	7,371	14,742,000	579	102,569	144
Dec-96	25,444	6,503	13,006,000	511	102,569	127
Jun-97	26,435	5,731	11,462,000	434	106,223	108
Dec-97	26,435	6,032	12,064,000	456	106,223	114
Jun-98	27,138	5,563	11,126,000	410	108,981	102
Dec-98	27,138	6,573	13,146,000	484	108,981	121
Jun-99	28,527	6,535	13,070,000	458	112,912	116
Dec-99	28,527	7,425	14,850,000	521	112,912	132
Jun-00	29,671	7,020	14,040,000	473	117,280	120
Dec-00	29,671	8,226	16,452,000	555	117,280	140
Jun-01	30,589	7,290	14,580,000	477	122,377	119
Dec-01	30,589	6,634	13,680,000	447	122,377	112

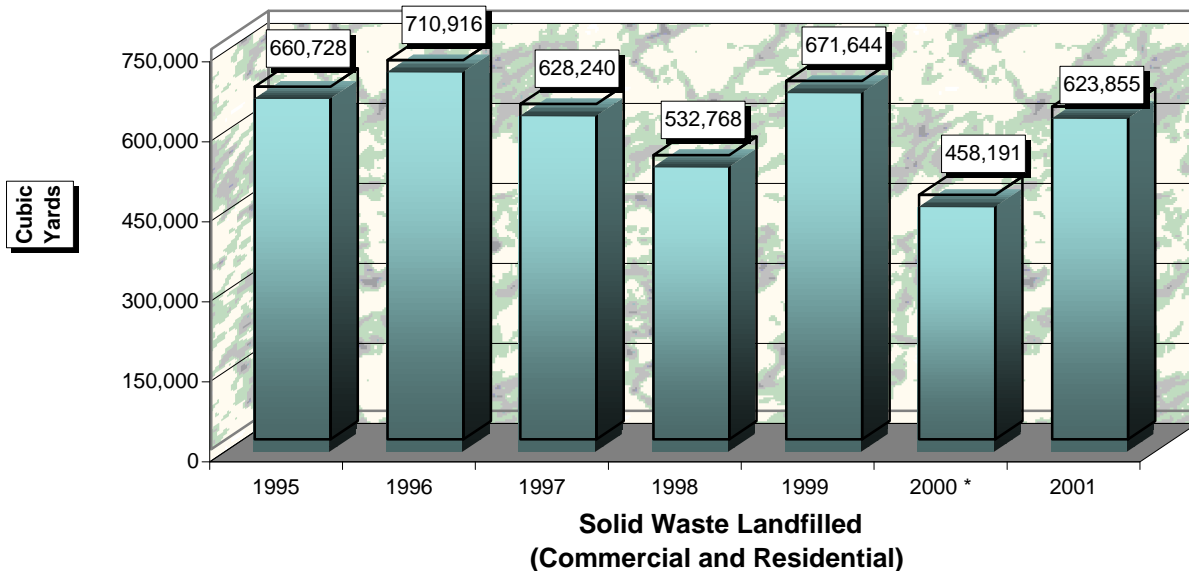
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CUBIC YARDS OF SOLID WASTE LANDFILLED (Reported by Haulers)

June 1995 - December 2001

	1995	1996	1997	1998	1999	2000 *	2001
Hauler 6	13,915	9,802	6,686	8,049	27,619	35,166	113,591
Hauler 4	23,480	22,860	25,300	25,680	26,722	26,698	26,895
Hauler 2	119,578	217,964	154,070	142,106	201,813	183,872	236,810
Hauler 3	44,201	36,788	36,550	36,130	36,006	35,609	33,997
Hauler 5	5,674	5,508	5,306	4,318	3,669	2,467	0
Hauler 1	453,880	417,994	400,328	316,485	368,705	157,209	187,846
Hauler 7					3,008	1,657	12,264
Hauler 8					150	660	300
Hauler 9					3,952	9,456	6,011
Hauler 10						2,817	2,430
Hauler 11						2,580	3,711
Hauler 12						0	0
TOTAL Cubic Yards Solid Waste Landfilled	660,728	710,916	628,240	532,768	671,644	458,191	623,855
Conversion to Tons	220,243	236,972	209,413	177,589	223,881	152,730	207,952
% Increase / Decrease		+7.6%	-11.6%	-15.2%	+26.1%	-31.8%	+36.2%

* Staff believes numbers here are a reporting error



GOAL INDICATOR: Decrease volume of Fort Collins waste disposed at landfills by 20 - 30% between 1995 and 2000.

MEASUREMENT SOURCE: Semi-annual report from local solid waste haulers

- ~ Reporting guidelines: information may be difficult to compare with previous years. In 1999, changes were made to the reporting form, asking haulers to break trash volumes down into three different categories to better quantify actual weights, e.g., for compacted loads. Unfortunately the weight category did not work and was deleted from the tonnage forms for 2001.
- ~ Haulers observe that roll-off container services to the construction industry have gone up significantly.