2014 FORT COLLINS WASTE REDUCTION & RECYCLING REPORT

Community Diversion Rate

A diversion rate compares the amount of material that was recycled or composted compared to the total waste generated by the community. It is useful for tracking trends in the community related to waste generation.

Fort Collins' overall Community-wide Diversion Rate (which includes all residential, commercial and industrially-generated trash and recyclable materials) increased from 62.5% in 2013 to 68.4% in 2014. The Industrial Diversion Rate – exclusive of residential/commercially generated discards – increased from 76.0% in 2012 to 81.7% in 2013. The combined residential and commercial waste diversion rate (which may be thought of as Non-Industrial Diversion) increased from 43.4% in 2013 to 44.8% in 2014.

Based on the 2014 population of 155,400 residents, Fort Collins generated 4.88 pounds of landfill-bound material (trash) per capita per day (in 2013, per capita trash measured 4.85 pounds per day).

FIGURE 1 – CHANGE IN MATERIALS GENERATED FROM 2013-2014

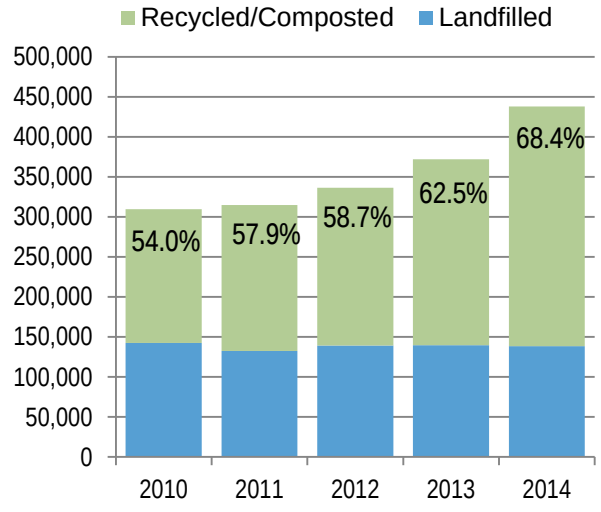
0.8% LANDFILL

6.1% ORGANICS COMPOSTED

32.6% RECYCLING

0.6% POUNDS OF MATERIAL LANDFILLED PER CAPITA PER DAY

FIGURE 2 – COMMUNITY DIVERSION RATES



By The Numbers

COMMUNITY-WIDE

- landfill down 0.8%, organics composted down 6.1%, recycling up 32.6%

INDUSTRIAL

- landfill down 1.9%, organics composted down 6.3%, recycling up 42.8%

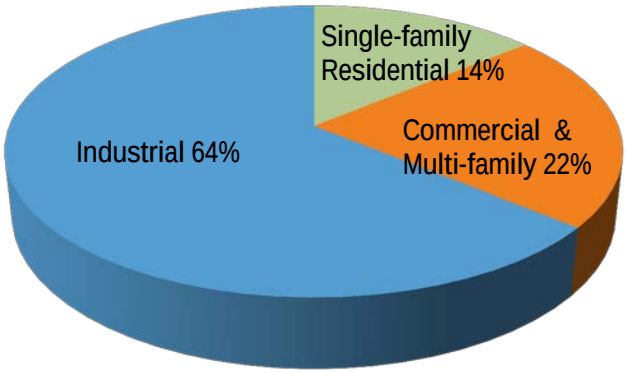
RESIDENTIAL-ONLY
(excluding commercial and industrial)

- landfill down 5.4%, organics composted up 10.5% recycling up 5.9%

COMMERCIAL-ONLY
(excluding residential and industrial)

- landfill up 4.3%, organics composted down 26.3%, recycling up 0.4%

FIGURE 3 - PERCENTAGE OF TOTAL COMMUNITY WASTE AND RECYCLING GENERATION BY SECTOR FOR 2013



Community Diversion Rate Drivers

The community diversion rate increased by 5.9 percentage points from 2013 to 2014, which is a significant increase for the second year in a row. Diversion rates rarely change that dramatically, especially two years in a row (there was also a significant increase in the diversion rate from 2012-2013). Like the 2012-2013 change, the increased diversion rate in 2014 is due primarily to an increase in recycling of asphalt and dirt at the City's Crushing Facility on Hoffman Mill Rd. While some of the increase in materials recycled at the City's Crushing Facility is due to an increase in construction activity in the community overall as well as a continuing improvement in the economy, a significant increase was due to a unique situation that arose in 2014 (described in detail in the City Crushing Facility section). It seems quite likely that a decrease in the community diversion rate would be anticipated for 2015, since the spike in dirt recycled in 2014 was possibly an anomaly.

Otherwise, landfill rates held steady for the community as a whole, and composting of yard waste increased slightly due to increased participation across the community.

City of Fort Collins Crushing Facility

The City of Fort Collins operates a Crushing Facility at 1380 Hoffman Mill Road, accepting concrete, asphalt, and clean dirt. The concrete and asphalt are then crushed and sold for use as road base, and dirt is sold for use as fill dirt.
One of the reasons for the unusual amount of dirt recycling reported in 2014 at the City's Crushing Facility is a unique data tracking aspect to the site. Unlike many locations that track incoming materials, the City's Crushing Facility primarily tracks outgoing materials as they are sold. (Incoming materials aren't tracked as closely because many loads of materials are delivered to the site after the scale house is closed.)

Over the years, the Crushing Facility had accumulated a significant amount of dirt, which was so substantial the site had refused new deliveries of dirt for eight months. In 2014, two construction projects in Fort Collins, the Woodward headquarters construction and Foothills Mall demolition / re-building, used all the historical pile. Since it is not clear exactly when in the past this dirt was delivered, it is included in the 2014 Community Diversion Rate calculations. It is important to note that this is a one-time occurrence, though, and it's quite likely that a decrease will occur in the Community Diversion Rate for 2015 since it will not include this one-time use of many tons of dirt.

The increase in Fort Collins' Community Diversion rate is due primarily to concrete, asphalt, and dirt recycling at the City's Crushing Facility.

For decades, the City has been operating the Crushing Facility on rented land on Hoffman Mill Road, and in 2014 opted to invest in the future of this important service by purchasing the land. This ensures the location can continue to be utilized for recycling significant amounts of concrete, asphalt and dirt and generating savings for the City's Streets operations. (The Streets Department makes extensive use of recycled asphalt in its own road construction and repair projects.) In addition, the City is assessing options for additional recycling opportunities on the site for materials generated by other municipal operations.

Municipal Self-Haul to Landfill Continues to Decrease

Through projects such as the Fort Collins Utility's soils recovery project, the City continues to decrease the amount of material it self-hauls to the landfill. From 2012 to 2014, the amount of material from municipal operations that was taken to the landfill for disposal was cut by 50%.

Plastic Bag Ordinance

In 2014, the Fort Collins City Council considered and then passed an ordinance that would have required merchants in Fort Collins to charge $0.05 / bag for single-use plastic and paper bags, with the merchants retaining all revenue generated. This would have impacted the 50 million disposable shopping bags estimated to be generated in Fort Collins each year. After the ordinance was passed, a citizen petition generated enough signatures for the City Council to either place the item on the ballot or repeal the ordinance. The plastic bag ordinance was repealed, and at the same time, City Council passed a resolution that reconfirmed their commitment to zero waste goals.

WRAP (Waste Reduction & Recycling Assistance Program)

The Waste Reduction and Recycling Assistance Program (WRAP) continued to grow in 2014. WRAP provides resources to apartment complexes and businesses in Fort Collins to start or improve their recycling programs. Since its inception in early 2012, over 13,000 residents or employees have been impacted by WRAP. In 2014, WRAP reached over 2,200 individuals, of whom over 1,700 have new access to recycling.

Also in 2014, the City's popular recycling guidelines and information poster was translated into Spanish for greater accessibility to Spanish-speaking residents.

Recycling at Foothills Mall Reconstruction Project

A project that received Urban Renewal financing assistance from the City, redevelopment of the old Foothills Mall, was successful at diverting significant quantities of concrete, asphalt, wood debris, and metals from being landfilled during 2014. The City's agreement with Alberta Development Partners called for a 100% diversion rate of concrete, rock, asphalt, dirt, bricks and metal, and a 70% diversion rate for all other materials. With extra care taken to apply deconstruction practices where possible, and to repurpose excavated soils on-site, the developer was able to optimize recovery rates. Alberta invited CSU's Institute for the Built Environment to participate in observing and to provide input; IBE documented an average rate of 76% diversion and reported a number of interesting case studies, such as wood flooring salvaged from the old mall used by local craftsmen to make furniture.

Foothills Mall reconstruction recycled 76% of the material generated by the project.

Impact from Landfill Ban on Cardboard

In 2014, City staff continued to conduct extensive outreach and education about the ban on disposal of cardboard in the waste stream, which was passed in March 2013. In addition to traditional methods such as advertisements, social media, and presentations, City staff conducted a 6-week door-to-door outreach campaign, reaching over 300 local businesses. Staff shared information about the City's cardboard ordinance as well as information about WRAP (Waste Reduction and Recycling Assistance Program), which provides recycling assistance and incentives to start recycling.

The cardboard ordinance has had a noticeable impact in Fort Collins. From 2012 to 2014, single-stream recycling increased 11% for residents and 14% for businesses in Fort Collins. (The majority of cardboard is recycled in "single-stream recycling" along with other recyclable materials.) Comparatively, landfill rates only increased 2% for residents and 8% for businesses during that time. In addition, cardboard collected by itself from businesses increased 28% from 2012-2014, and cardboard collected at the City's recycling drop-off center increased 15% during the same time. It is quite possible that these increases are due at least in part to the City's ban on disposal of cardboard in the waste stream.

Trash and Recycling Cart Sizes

The residents of Fort Collins continued to reduce the size of their trash cans and increase the size of their recycling carts. The number of residents with a 96-gallon trash cart reduced by 4%, while the number of residents using a 32-gallon cart increased by 4%. Overall, 36% of residents subscribed to 32-gallon trash cart service, 36% to the 64-gallon, and 27% to the 96-gallon service, with 1% using intermittent trash service via pre-paid bags.

Ten percent more residents started using a 96-gallon cart for recycling in 2014 than in the year before, and the community also saw a 10% decrease in use of the outdated 18-gallon recycle tubs. Overall, 77% of Fort Collins residents recycled in a 64- or 96-gallon cart and 23% used 18-gallon tubs.

Over a third of local residents now subscribe to the smallest trash can size, and over three-quarters of Fort Collins residents now use large 64- or 96-gallon carts to recycle.

Definitions

Non-industrial diversion rate: includes waste generated by single-family residential, multi-family residential and commercial sectors.

Industrial diversion rate: includes materials such as waste generated by City government's operations, concrete and asphalt recycled at crushing facilities, construction and demolition waste, brewery wastes, and biosolids that were land-applied.

Community diversion rate: the combined total of industrial and non-industrial wastes – provides an overall view of waste generation and waste diversion for the entire community.

Note about *Alternative Daily Cover*: Fort Collins does not include materials used for alternative daily cover at the landfill as recycling or diversion.

Report Prepared By

Caroline Mitchell, Environmental Planner
Environmental Services
City of Fort Collins
970-221-6288
cmitchell@fcgov.com
fcgov.com/recycling