

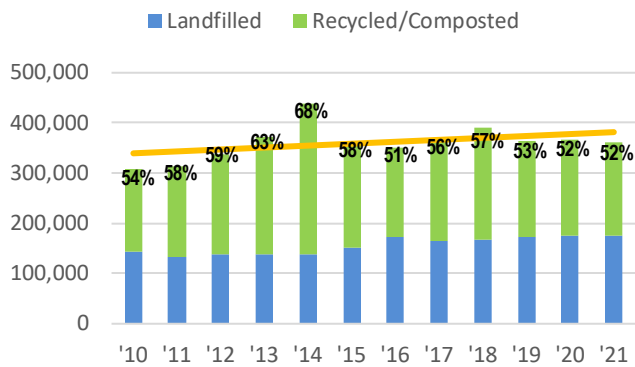
WASTE REDUCTION & RECYCLING REPORT

Community Diversion Rate

A diversion rate compares the amount of material that was recycled or composted with total waste generated by the community. Fort Collins tracks trends in the community by measuring diversion rates as well as per-capita volumes of trash generated.

The overall community-wide diversion rate includes residential, commercial, and industrial trash and recyclable materials. **The Fort Collins Community Diversion Rate in 2021 was 51.5%.**

COMMUNITY DIVERSION RATES SINCE 2010



CHANGE IN COMMUNITY DIVERSION RATE FROM 2020 – 2021



CHANGE IN POUNDS OF LANDFILLED MATERIAL PER CAPITA PER DAY FROM 2020 – 2021



Drivers for change in Community Diversion Rate from 2020 – 2021

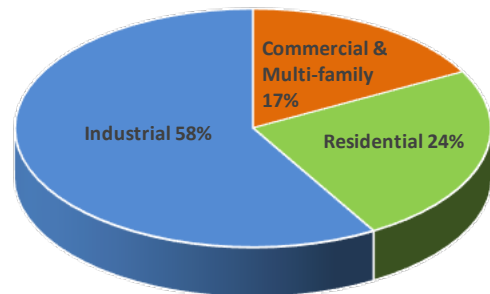
- Community Recycling Ordinance increased recycling from multi-unit housing and businesses
- Fluctuations in the amount of industrial materials recycled (concrete, asphalt, scrap metal, soil)
- Landfilled roofing materials from the 2019 hailstorm tapered off

Details are included in the text on page two.

DIVERSION RATES BY SECTOR IN 2020

RESIDENTIAL	29%
COMMERCIAL / MULTI-UNIT	32%
INDUSTRIAL	66%

PERCENTAGE OF TOTAL COMMUNITY WASTE AND RECYCLING GENERATED BY SECTOR IN 2021



CHANGES IN 2021 COMMUNITY DIVERSION RATE

Community Recycling Ordinance

The Community Recycling Ordinance came into effect in summer 2021 and required Fort Collins waste haulers to provide a minimum level of recycling collection to all multi-unit housing and commercial properties. The 2021 diversion data reflect this change. Recycling from these sectors increased by 44%, meaning an additional 2,500 tons of material was recycled compared with 2020.

This is particularly notable considering the amount landfilled by the multi-unit and commercial sector only increased by 5% in 2021.

Self-Hauled Landfill Waste

Residents continued to clean out their homes and do home renovation projects in 2021, generating 3,000 more tons of waste that residents took to the landfill themselves compared with 2020.

Industrial Waste and Recycling

Industrial materials are heavy and so changes in these materials impact the Community Diversion Rate significantly. The following industrial material changes are reflected in the 2021 Community Diversion Rate:

- Municipal industrial waste (including wet soil, rock, and other materials) fluctuates with the types of projects completed each year. Fewer waste-generating projects in 2021 meant there was 5,600 less tons of waste landfilled from this source than in 2020.
- There was an overall increase of 6,700 tons of construction and demolition waste landfilled in 2021 compared with 2020 as some construction projects moved past the initial COVID impacts and got back underway.
- There were 10,000 tons less asphalt and concrete recycled at the City's Hoffman Mill Crushing Facility in 2021.
- Over 2,500 tons of additional scrap metal was recycled in 2021 compared with 2020.

Food Scraps Recycling

While not a driver for the diversion rate, it is notable that the residential food scraps collected by two small local food scraps-only haulers increased by over 150% compared with 2020. They collected a total of 260 tons of food scraps for composting.

Roofing Waste

In July 2019, over 10,000 Fort Collins homes were impacted by a massive hailstorm, requiring many roof replacements in 2020 and 2021. Many roofs were replaced in 2021, but far fewer than in 2020, resulting in a 6,600 ton decrease in industrial waste from the roofing sector. Fort Collins now requires Class 4 impact-resistant shingles, which will hopefully help prevent roofing waste due to hailstorms in the future.

Residential Trash & Recycling Carts

Cart size	Residents subscribed	Change from 2020
Intermittent / pay-by-the bag	0.5%	↓ 0.5 percentage point
32 gal trash cart	38%	↓ 1 percentage point
64 gal trash cart	40%	↑ 2 percentage points
96 gal trash cart	21%	↓ 1 percentage point
18 gal recycling tub	9%	↓ 4 percentage points
32, 64 or 96 gal recycling cart	91%	↑ 4 percentage points
64 or 96 gal yard trimmings collection cart	17%	↑ 2 percentage points

2021 PROGRAM UPDATES

Plastic Pollution

In 2021, City Council adopted the Disposable Bag Ordinance and referred it to voters who approved it by 59%.

The [Disposable Bag Ordinance](#) will go into effect on May 1, 2022. It will ban plastic carryout bags and require a 10-cent fee on paper bags at large grocers.

Later in 2021 the Colorado State Legislature adopted a [plastic pollution reduction bill](#) that imposes fees on paper and plastic bags at large stores in 2023, bans plastic bags at those stores in 2024, and bans the use of expanded foam food packaging at restaurants in 2024.

The Waste Reduction and Recycling (WR&R) team engaged with community members to understand potential impacts of the Disposable Bag Ordinance in the fall of 2021 for updates to incorporate prior to the ordinance roll out.

At the end of 2021, staff held meetings with all major Fort Collins grocers in preparation for the Disposable Bag Ordinance implementation and sent out reusable cloth shopping bags to 1300 low-income households.

Community Recycling Ordinance

The [Community Recycling Ordinance](#) brought recycling services to all commercial and multi-unit properties in Fort Collins in 2021. Recycling from these sectors increased by 2,500 tons, an increase of 44% compared with 2020.

The WR&R team worked with Fort Collins haulers, businesses, and multi-unit property owners/managers to ensure that not only was recycling available but also successful.

Businesses and multi-unit complexes can apply for a variance from recycling service for certain circumstances. Over the summer of 2021, the WR&R team received 194 variance requests and conducted a site visit for each one. A total of 99 were approved.

The City's WR&R and Code Compliance teams partnered up in fall of 2021 to conduct a compliance sweep to ensure businesses and multi-unit complexes had recycling, which uncovered 125 locations out of compliance. The WR&R compliance team member then worked with haulers to get those properties into compliance.

Waste Reduction and Recycling Program (WRAP)

In 2021, City staff supported over 100 businesses and multi-unit properties (apartment and condo complexes) to understand new requirements and start or improve recycling programs. To support the implementation of the Community Recycling Ordinance, WR&R staff created toolkits for [businesses](#) and [multi-unit properties](#) and provided [other tools](#) to improve their recycling programs independently.

Our Climate Future

[Our Climate Future](#) (OCF) is an equity-centered combined update to the City's Climate Action Plan, Energy Policy, and Road to Zero Waste Plan, which was adopted in 2021.

OCF identified the following strategies for waste reduction in the first two-year implementation cycle:

Strategy	Status
Expand recycling education campaign	Underway
Explore additional community-needs donation options	Seeking community partner
Explore Universal Composting Ordinance and Related Composting Infrastructure/Facilities	Partnering for compost infrastructure via Regional Wasteshed collaboration
Identify barriers to accessing recycling services	Underway
Implement universal recycling ordinance	Implemented Community Recycling Ordinance
Facilitate the sharing of commonly needed items through libraries	Led by Poudre River Library District; Tool share through Eco-Thrift
Implement Disposable Grocery Bag Policy	Adopted in 2021; implementation in 2022
Support work on a digital marketplace for industrial waste	Working with Recycle Colorado's ReCircle project
Continue to explore ways to further reuse and recycle soil from City projects	Underway, led by Fort Collins Utilities' Water Field Operations department

Barriers to Recycling

The “Our Climate Future” waste, energy, and climate plan highlighted that historically underrepresented groups in Fort Collins experience barriers to recycling. To better understand these barriers and identify areas for action, City staff partnered with community members on a “Barriers to Recycling” project. The project uncovered challenges such as language accessibility in signage, access to trucks and trailers to haul bulky objects to the recycling center, and representation in materials and on-site at the recycling center. City staff will begin implementing project recommendations in 2022.

Timberline Recycling Center (TRC)

The City of Fort Collins’ Timberline Recycling Center celebrated its fifth anniversary in 2021. The Everyday Recyclables yard receives over 400 recyclers per day and recycled over 3.3 million pounds of recyclables. Over 11,000 recyclers utilized the Hard-to-Recycle Materials yard and delivered over 1 million pounds of material to be recycled.

In 2020, a significant increase in online shopping resulted in residents generating much more cardboard. This trend continued in 2021, as nearly 800 tons of cardboard was recycled at the TRC in 2021, a 12% increase from 2020.

The TRC website is one of the most used City websites, with an average of 3,000 visits per month.

Recycling Ambassadors Volunteer Program

The Recycling Ambassador volunteer program includes 31 volunteers who answer visitor questions and support the Timberline Recycling Center. Since the program was founded in 2017, Recycling Ambassadors have volunteered over 3,600 hours and engaged with over 15,500 community members.

Definitions and Notes

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 operations, concrete and asphalt recycled at crushing facilities, construction and demolition waste, brewery wastes, and biosolids that are 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 (ADC)*: Each day, landfills are legally required to cover the day’s contents with soil or another approved material. Various materials can be used as ADC, including wood, drywall or yard waste. Because many of these materials have “higher and better” uses, the City does not include ADC as diversion in its calculations, unlike some other entities, including the State of California.

Notes about Appendix 1 (detailing Fort Collins’ waste and recycling):

- Data are updated over time as new information becomes available or new methodologies emerge. Appendix 1 is updated yearly, which may result in the data in this appendix not matching the initial report.
- Yellow-shaded boxes are included in the Non-Industrial (MSW) totals
- Orange-shaded boxes are included in the Industrial totals.

Report Prepared By



Molly Saylor, Caroline Mitchell and the rest of the Waste Reduction and Recycling Team
Environmental Services Department
City of Fort Collins
970-221-6600
recycling@fcgov.com
fcgov.com/recycling

2021 Fort Collins Community Waste & Recycling Summary

Recyclables	
Residential Curbside Recycling	Tons
Single-stream	9,221
Curbside Total:	9,221
Multifamily & Commercial Recycling	
Commercial single-stream	6,225
Multi-family single-stream	872
Paper Mix (ONP, OMX, etc)	88
Office paper	3
Corrugated Cardboard	1,531
Glass	2,040
Commingled containers (aluminum, steel, glass, plastic)	83
Multi-Family & Commercial Total:	10,842
Drop-off Centers	
Corrugated cardboard	931
Paperboard, low-grade paper	0
Mixed Paper	408
Commingled containers	134
Glass	360
White Office Paper	23
Hard-to-recycle items from Timberline Recycling Center	26
Drop-off System Total:	1,881
Other Recyclables	
Electronics	121
Plastic bags / shrink wrap	89
Textiles	0
Total Other:	210
TOTAL MSW RECYCLING TONS	22,154
Industrial Recyclables	
Scrap metal (ferrous) -- iron, steel	25,376
Concrete	17,100
Asphalt	43,347

Organics	
Residential / Commercial Organics	Tons
Food Waste (Residential)	261
Food Waste (Commercial)	917
Yard Waste (Residential)	7,772
Yard Waste (Commercial)	8,927
Total MSW Organics	17,877
Industrial Organics	
Spent brewery grain	489
Wood waste (Commercial)	22,172
Other organics (Industrial)	7,306
Biosolids	2,055
Total Industrial Organics	32,021
TOTAL ORGANICS TONS	49,898

Landfill	
Tons of Solid Waste Landfilled	Tons
Residential	64,064
Multi-family	5,988
Commercial	35,249
Industrial	68,140
Alternative Daily Cover (soils used to meet landfill cover needs)	3,336
TOTAL LANDFILL TONS	176,776

Recycling Participation	
Customer Type	% of Customer w Recycling
Residential	97%
Residential yard trimmings collection	16%
Multi-family	117%
Commercial	61%
Industrial	12%
Total customers with recycling	92%

Non-Industrial Totals (MSW)	Residential	Commercial	Overall	Lbs / Capita / Day
Total Landfill	64,064	41,237	105,300	3.35
Total Organics Composted	8,033	9,844	17,877	0.57
Total Recycling	11,102	11,052	22,154	0.70
PAYT Source Reduction "tons"	4,992	n/a	4,992	0.16
Total Disposed	88,191	62,133	150,323	4.78
Diversion Rate	23.0%	33.6%	27.5%	
Diversion Rate w/ Source Reduction	27.4%	n/a	30.0%	

Industrial Totals	Tons	Lbs/Cap/Da
Total Landfill	68,140	2.17
Total ADC	3,336	0.11
Total Organics Composted	32,021	1.02
Total Recycling	108,000	3.43
Total Disposed	211,497	6.73
Diversion Rate	66.2%	
Diversion Rate, ADC as diversion	67.8%	

Combined Totals	MSW	Industrial	Overall	/Day
Total Landfill	105,300	68,140	173,440	5.52
Total ADC	n/a	3,336	3,336	0.11
Total Organics Composted	17,877	32,021	49,898	1.59
Total Recycling	22,154	108,000	130,155	4.14
PAYT Source Reduction	4,992	n/a	4,992	0.16
Total Disposed	150,323	211,497	361,821	11.51
Diversion Rate, no Source Reduction	27.5%	66.2%	50.5%	
Diversion Rate with PAYT Source Reduction	30.0%		51.1%	
Diversion Rate with PAYT Source Reduction, ADC as diversion			52.1%	

single stream recycling totals reduced by 13.7% to account for contamination (and trash totals increased commensurately)