

Municipal Sustainability & Adaptation

2021 PROGRESS REPORT AND ACCOMPLISHMENTS

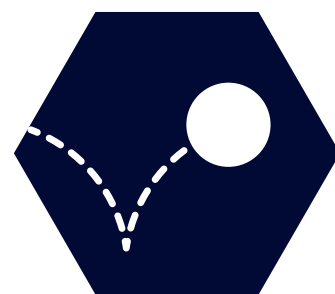


The City of Fort Collins is committed to providing world-class municipal services through operational excellence and a culture of innovation. Having a sustainable and resilient organization helps us grow and adapt to challenges, now and in the future. The [Municipal Sustainability and Adaptation Plan](#) is the employee road map for operating and building a healthy and sustainable organization.

The City of Fort Collins has a goal to reach an 80% reduction in Greenhouse Gas (GHG) emissions by 2030 and to be carbon neutral by 2050. Internal GHG emissions are mostly generated from energy use in City buildings and from petroleum-based fuels in City fleet vehicles. As of 2020, GHG emissions are 44% below the 2005 baseline, exceeding the 2020 target of 20% GHG reductions. Municipal energy efficiency projects, programs, and energy code improvements have helped reduce City-produced emissions. Future opportunities for further emission reductions include electrifying the building stock, improving lighting, and maintaining assets to optimize operation.

WE ARE RESILIENT

- Staff received a \$200,000 Colorado Department of Local Affairs grant to make the Northside Aztlan Center a Resilience Hub to support residents, coordinate communication, distribute resources, reduce pollution and increase grid flexibility.
- The Cameron Peak Fire Mulching Project reduced run-off and sedimentation from ending up in Cache la Poudre River by aerial wood mulching on 5,805 acres.
- Significant progress on the Halligan Reservoir project was made in 2021, which adds drought resilience to our raw water storage system.
- The interdepartmental Extreme Heat and Air Quality Response Partnership launched in 2021.
- Fort Collins provides leadership in the flood mitigation Colorado Community Rating System (CRS) committee and maintained a Class 2 CRS Rating (one of top 9 communities nationwide).
- A virtual flood exercise familiarized staff with the new Emergency Operations Center's role in response and recovery to floods.

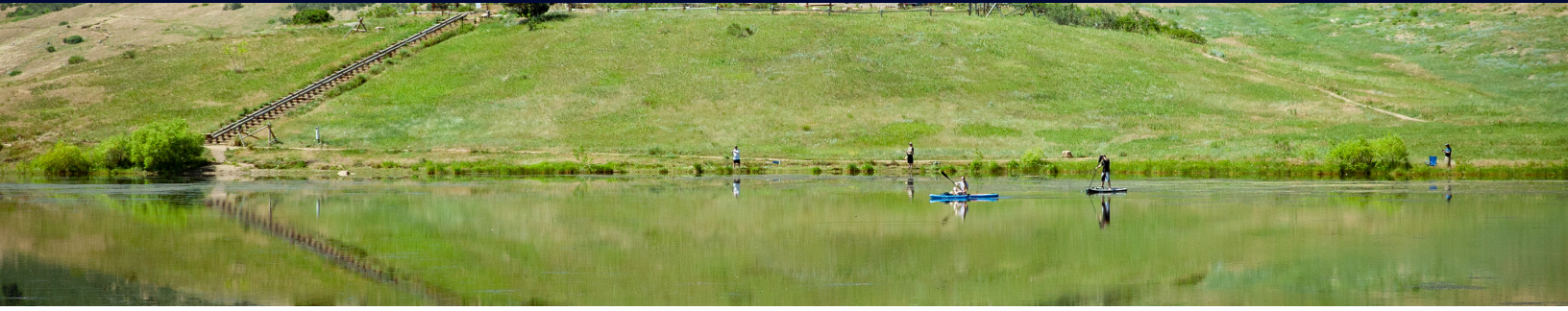


OUR PUBLIC LANDS THRIVE

- The 2021 employee engagement program focused on land. Over 150 staff toured sites, learned about land history and connected on projects during the three-month program.
- The Natural Areas Department acquired 5 new areas, totaling 207 acres.
- The Forestry Department planted 582 trees.
- Park Planning & Development collaborated with Stormwater, Parks, and Environmental Regulatory Affairs to use Nature in the City funding to improve drainage with low impact development strategies at the Spring Canyon Dog Park.
- The Gardens on Spring Creek Plant it Forward Program donated 5,643 pounds of produce grown onsite to the Food Bank for Larimer County.
- Bobcat Ridge Natural Area was restored and reopened after the Cameron Peak Fire burned 80% of the site in 2020. Burned trees adjacent to trails were removed and bridges, boardwalks and trails were reconstructed. Visitor improvements were made including a new equestrian ramp. Ecological restoration will continue for native wildlife and pollinators.



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WE ARE WATER SMART

- The Water Treatment Plant (WTP) maintained its ISO 14001:2015 Environmental Management System (EMS) certification and received the Colorado Environmental Leadership Program Gold Leader certification in 2021. In addition, the WTP successfully managed potential water quality challenges from the Cameron Peak Fire burn scar.
- The Water Conservation team developed an internal program to monitor continuous water use and send notifications, greatly reducing the time it takes to identify and fix a leak or break.
- The Parks Department irrigated at under 80% evapotranspiration after implementing WeatherTRAK, an upgraded water management system with real time data that allows staff to quickly address leaks and adjust water schedules. Most parks use raw water for irrigation to save energy and reduce emissions.
- Although not specifically called out in the [2021 Water Conservation Report](#), City sites contributed to water savings by converting turf to low-water plants, quickly fixing leaks and improving operations. An additional 6.4% water reduction is needed to meet the 2030 goal of 130 gallons/person/day.



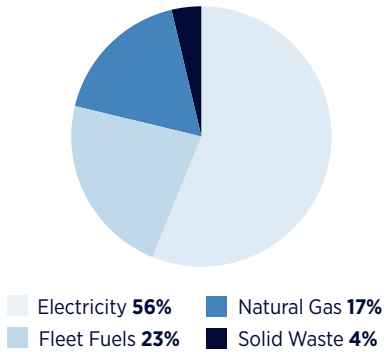
WE ARE ZERO WASTE

- The City used the Hughes Stadium as a free mulching site for downed trees and branches following the March 2021 snow storm. Zero trees or branches went to the landfill.
- Staff researched potential diversion routes for the disposal of the City's first failed solar panels. After thorough exploration of options, the panels were properly disposed of in the landfill.
- In 2021, City construction projects achieved the required minimum of 75% waste diversion by using recycled asphalt, crushed concrete and other tactics.
- The City received approval to pilot the use of water treatment residuals to treat storm water, diverting them from the landfill.
- 4,000 pounds of pumpkin were donated to local farmers from the Gardens on Spring Creek Pumpkins on Parade event.
- Staff renewed training efforts to include sustainability criteria in the Request for Proposals process.
- The City included advanced recycling requirements in its 5-year waste hauling contract renewal with Waste Management to assist in meeting zero waste goals.

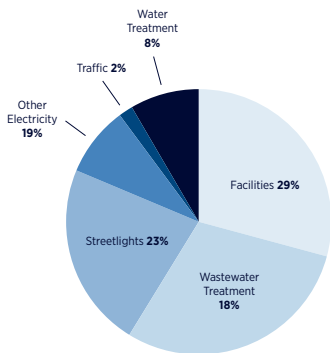


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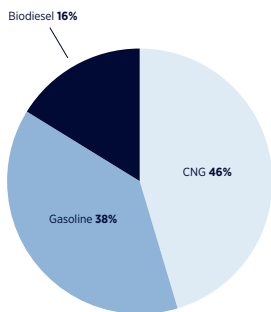
Emissions from Municipal Operations



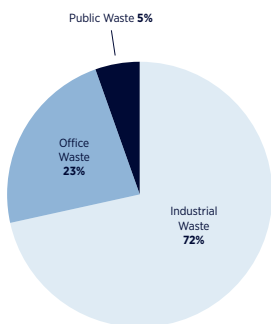
2020 Electricity Emissions



2020 Fleet Emissions



2020 Waste Emissions



WE ARE CARBON NEUTRAL

- The Natural Areas Nix campus is net positive producing more energy than they use through a combination of geothermal, solar PV arrays and Solatubes for lighting.
- The City tied for second place in the 2021 award for Government Green Fleet with 40 electric vehicles and the first electric street sweeper in Colorado.
- As of 2021, 49% of high-pressure sodium streetlights have been replaced with energy-efficient LEDs.
- The Water Treatment Facility total energy demand was 4,253 kBTU per million gallons produced; exceeding the target for energy efficiency. The facility met 22% of its electrical demand through on-site renewable electricity generation. 99% of the plant's lighting has been converted to LED.
- 53% of lawn and garden equipment owned by Parks Department has been converted to electric reducing air pollution. Natural Areas, Gardens on Spring Creek and Cemeteries uses almost all electric equipment, which also creates quiet grounds maintenance.
- All new buildings and renovations are LEED Gold or higher, per our 2013 administrative policy.



WE ARE A WORLD CLASS WORKPLACE

- Updated personnel policies include implementing a shift differential pay, teleworking policy update, inclusion of baby bonding time leave and expanded bereavement leave to include pregnancy loss.
- Engaging Local Government Leaders honored Fort Collins as the 2021 "Best Places to Work in Local Government" for our policies and programs.
- The Human Rights Campaign awarded the City of Fort Collins a 2021 Municipal Equality Index rating of 100 for a more inclusive culture for LGBTQ+ employees.
- The City hired its first Diversity, Equity and Inclusion Officer in support of incorporating an equity lens to internal and external City services and operations.



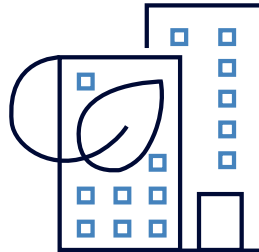
City Operations

BY THE NUMBERS



The City provides its services through 40 City departments that vary in size and scope. Approximately 2,500 people are employed by the City, at its seasonal peak.

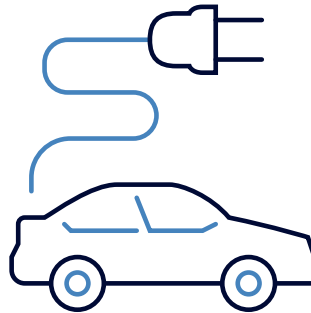
- **11** City buildings are LEED certified
- **11,479** municipal streetlights (5,718 LEDs) and **765** floodlights (428 High Pressure Sodium, 328 LED, 9 Mercury Vapor)



2021 Fleet Alternative Fuel Purchases

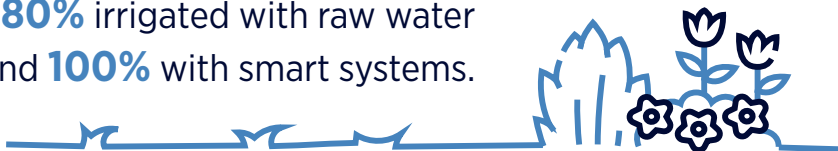
Goal: 100% non-gas/diesel purchased by 2025

- **58** Golf Carts (54 Electric and 4 Gas)
- **21** Police Vehicles (17 Hybrid and 4 Gas)
- **24** Light/Medium Duty Trucks (5 Hybrids, 1 Electric, 4 CNG and 14 Gas)
- **4** Heavy Duty (All CNG)
- **1** SUV (Hybrid)
- **1** Street Sweeper (Electric)
- **1** Van (Electric)
- **1** Forklift (Electric)
- **2** Electric Buses on order (coming in 2022)



Parks

- **966** acres of City parks including **7** community parks and **43** neighborhood parks.
- **45** miles of paved trails connect our community.
- **80%** irrigated with raw water and **100%** with smart systems.



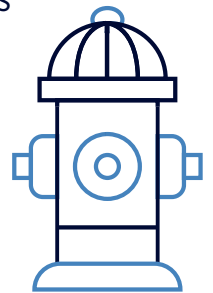
Natural Areas

- **52** natural areas
- **114** miles of trail
- **42,700** acres conserved



Utilities

- **565** miles of water mains
- **3,969** fire hydrants
- **458** miles of sanitary sewer mains lines
- **10,717** sanitary sewer manholes



2020 Emissions by End Use

