



SAFETY VISION STATEMENT

Safety is a key priority when planning, implementing and operating transportation elements in the city, as exemplified through the City's Vision Zero commitment to reduce and eliminate serious injury and fatal crashes.

SUPPORTING PRINCIPLE

PRINCIPLE T10

Support and enhance safety for all modes.

Where We Are Today

The Traffic Operations Department enters every reported crash into a database and uses that information in a detailed review of the city's roadway safety. The review includes basic crash information and trends, as well as overall data; analyzes specific types of crashes; looks for trends; involves a statistical review; undertakes pattern recognition; and evaluates locations to identify higher-than-expected crashes, trends and specific patterns that can lead to mitigation strategies. This information is summarized in the City's Annual Safety Report.

Information from the Annual Safety Report is used in an overall safety program, informs numerous City projects (from planning through construction), supports enforcement efforts and identifies specific safety-related projects. The safety program also evaluates and monitors efforts to continuously improve safety for all modes of travel.

Typically, during an average year, there are about 4,000 reported crashes in the City, including 260 significant-injury crashes and anywhere from five to 10 fatalities per year. The societal cost of crashes is estimated to be more than \$150 million per year as of 2018.

Opportunities for the Road Ahead

The City of Fort Collins strives to provide a safe and efficient transportation system for people using all modes of travel. Safety for roadway users is a top priority, and in 2016 the City became the first public local entity to join the Colorado Department of Transportation (CDOT) Moving Towards Zero Deaths initiative.

Trends

In the past three years (2016-18), the numbers of transportation-related crashes in the public right-of-way reported to Police Services have been on a slight downward trend. The total number of crashes, as well as the number of severe crashes, is similar to the number of crashes five years ago (2014) despite growth in both the city's population and overall VMT.

When comparing to peer cities of a similar population size throughout the country, Fort Collins has a fatal crash rate about 50% lower than the average.

Crashes involving cyclists and pedestrians are also on a downward trend. Over the past five years (2014-18), total crashes were down 23% for cyclists and 5% for pedestrians. Severe crashes for these vulnerable road users are down 35% for cyclists and about the same for pedestrians. Despite the downward trend, the reality is that vulnerable road users are overrepresented in severe crashes—for instance, bike crashes make up 3% of all crashes but 20% of severe crashes—because when crashes do occur, they tend to be more severe.

A significant concern involves motorcycles. In a crash, motorcyclists are more than three times as likely to be injured and 11 times as likely to be killed than people in vehicles. Fatalities involving motorcyclists exceed those involving pedestrians and cyclists combined.

A number of factors can be reviewed for safety trends. Examples include time of year (most bike crashes occur in September), day of the week (Fridays are overrepresented), and time of day (3 to 5 p.m.). The demographics of road users can also provide guidance for targeting safety concerns. For example, drivers under the age of 25 represent about 25% of licensed drivers but are involved in almost 40% of DUI crashes. Crash locations are also an important component of safety reviews. More than 70% of all crashes and 90% of bike crashes occur at an intersection or driveway.

The City uses the AASTHO Highway Safety Manual to complete statistical reviews of intersections to identify locations where more crashes are occurring than would be expected. Pattern recognition can further detail potential safety concerns.

These factors and additional information is used to inform all aspects of transportation in the City, from operations to planning, maintenance, construction, enforcement, outreach, programs, education, etc.



Vision Zero

In 2016, Fort Collins was the first public local entity to join the Colorado Department of Transportation (CDOT) Moving Towards Zero Deaths initiative. The proclamation reflects the City's commitment to the vision of zero traffic-related deaths. This CDOT initiative is related to the national, and international, Vision Zero safety project.

Making progress toward zero deaths requires a multifaceted, collaborative and focused effort. This includes ensuring that crash information and trends are understood and inform mitigation strategies as well as policies, standards, design and projects. The analysis is then applied to the various Es of roadway safety:

- » **Engineering.** Physical changes such as signs, striping, signal timing and geometric changes.
- » **Education/Encouragement.** Programs and outreach efforts for all road users to teach and support safer behaviors.
- » **Enforcement.** Collaboration with police services and justice system to conduct targeted education and enforcement and provide alternative sentencing that is focused on changing behavior.
- » **Evaluation.** Continue monitoring and evaluating all aspects of roadway safety in order to inform upcoming work and next year's report.



MOVING TOWARDS **ZERO** DEATHS

The City is working on an official Vision Zero Action Plan, which will outline a set of actions that are comprehensive, multidepartmental, and community-based to support safety for the traveling public. While related to the CDOT Moving Towards Zero Deaths Initiative, this Vision Zero Action Plan will take the City's commitment one step further. The Action Plan will be based on a data-driven approach and will support efforts that demonstrate improved safety outcomes. Many efforts have been ongoing for years, which is reflected in the city's strong safety record and transportation trends, but the Action Plan will compile these efforts into a single source of safety review.

The City is also involved with the Federal Highway Administration (FHWA) and CDOT in their update of Colorado's Strategic State Highway Safety Plan (SHSP) and is a contributing partner in Toward Zero Deaths workshops.

Other transportation-related improvements are important and enjoy significant community interest and support, such as improving pedestrian curb ramps and making cycling infrastructure more comfortable. These improvements may not specifically "move the needle" on the city's number of crashes, but they play a crucial role in improving community mobility for all modes of travel. These priority improvements will be tracked and reported through the City's Annual Mobility Report. The Mobility Report is a companion document to the Annual Safety Report and reflects the critical importance of improving accessibility and mobility for roadway users of all ages and travel modes in addition to the focus on safety.



Law enforcement is a key stakeholder in traffic safety.



SUSTAINABILITY & RESILIENCY

SUSTAINABILITY & RESILIENCY VISION STATEMENT

Fort Collins will be a leader in achieving environmental sustainability outcomes by pursuing a transportation system that reduces greenhouse gas emissions and air pollutants. The transportation network will display resiliency by continuing to effectively serve the community in the face of a changing climate.

SUPPORTING PRINCIPLE AND POLICIES

PRINCIPLE T9

Utilize the transportation system to support a healthy and equitable community.

Where We Are Today

Fort Collins has set aggressive goals for reducing greenhouse gas emissions and improving citywide sustainability outcomes in the face of a changing climate. However, at 24%, the share of emissions generated by transportation remains considerable, creating a need for more targeted intervention.

Opportunities for the Road Ahead

New technologies provide a clear avenue for making transportation more sustainable. Whether by supporting more electric-vehicle travel or making bike-share and transit more accessible through enhanced smartphone applications, Fort Collins can facilitate travel solutions that will improve environmental outcomes while helping residents and visitors enjoy enhanced mobility.

Alignment with the Climate Action Plan

Recognizing the relationship between GHG emissions and climate change, Fort Collins developed a Climate Action Plan (CAP) in 2015 to help reduce community GHG emissions. The CAP outlines strategies for achieving the goal of reducing GHG emissions to 20% below 2005 levels by 2020, to 80% below 2005 levels by 2030, and to achieve carbon neutrality by 2050. While overall emissions have been reduced, the share of emissions generated by ground travel in Fort Collins has risen from 24% in 2005 to 25% in 2013. Moreover, while total emissions are down, total metric tons of CO₂ emissions from transportation sources in Fort Collins are at their highest levels since 2010. The

TMP provides a roadmap for ensuring that ground travel represents a shrinking share of emissions in the community.

Lowering emissions from the transportation system will be critical to achieving the overall CAP goals. For example, a full bus emits just 0.18 pounds of CO₂ per passenger mile, compared to 0.96 pounds for each mile of SOV travel. Any strategies that replace SOV trips will help lower overall emissions. CAP includes three strategies for lowering emissions from transportation:

1. Shift land use patterns to shorten trips or reduce the need to drive;
2. Increase use of multimodal options; and
3. Increase adoption of fuel-efficient and EVs.

The vision and action items in the Transportation Master Plan align with the CAP strategy of lowering emissions by increasing the comfort, convenience and reliability of multimodal travel options, including biking, walking and transit. CAP outlines the following strategies for reducing driving, which closely align with the Transportation Master Plan action plan items:

- » Coordinating and expanding local and regional mass-transit commuting options;
- » Allowing third-party developers access to transit data so they can make travel tools for transit riders;
- » Facilitating car-share and ride-share growth;
- » Expanding bike-share;

- » Working with corporations to develop incentives for commuting by transit, walking and biking; and
- » Increasing awareness of the environmental costs of driving.

Planning for sustainability must be coordinated with planning for other aspects of community life such as housing, public health and transportation. Preparing the community for electric vehicles, for example, is a planning effort that combines transportation, land use, livability and environmental concerns. By taking on initiatives such as hiring a TDM coordinator, Fort Collins can ensure that sustainability remains a constant consideration.

Resiliency in Transportation

Fort Collins is a nationally recognized leader in planning for climate adaptation. As an early adopter of the National Institute of Standards and Technology's resiliency-planning process and one of the 30 local communities that participate in the Colorado Local Resilience Project, Fort Collins understands the need to effectively prepare for hazards posed by a changing climate. While potential climate hazards such as increased storm severity and extreme temperatures do not have a direct link to transportation, resiliency planning considers the role that transportation networks play in climate adaptation and considers the secondary impacts of climate events on mobility.

Flooding can disrupt a road network; extreme heat can pose travel hazards to older populations; and wildfires can reduce air quality to the point



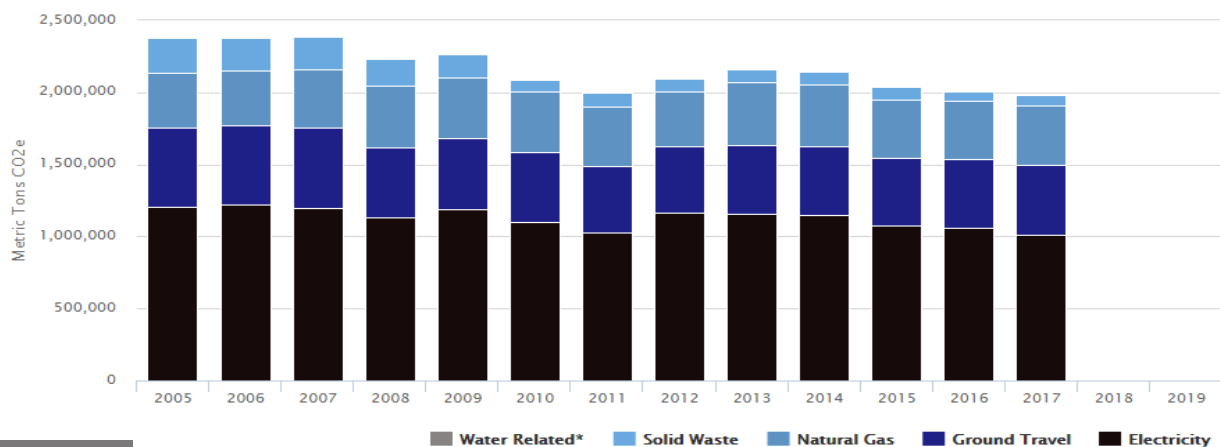
Environmental Indicators
Community Greenhouse Gas Inventory
2017
2 Million
Metric Tons CO₂e (-17%)

Down 17% since 2005
Down 34% per capita since 2005
Last updated 10.9.18



Emissions Down

Community Carbon Inventory



where pedestrians and cyclists face major health risks. Planning for climate adaptation also requires developing strategic approaches to ensuring that people in Fort Collins have continued access to mobility during disruptive climate events.

Additionally, resiliency planning also requires stipulating a role for the transportation network in mobilizing people, goods and services during times of climate emergency. A high-capacity, well-maintained transportation network that is redundant in the necessary places is the crucial tool for safely evacuating a community during a major storm, for example. Resiliency planning requires assessing not just how proposed infrastructure might serve daily community needs, but also its ability to function during times of hazard.

To ensure that the transportation network is fully prepared for a changing climate, the TMP recommends regular monitoring of the following climate impacts on transportation infrastructure and operations:

- » Assessing whether extreme heat, severe storms, and other discontinuous weather events impact the Travel Time Index (TTI) by incorporating weather into the TTI tracking methodology;
- » Monitoring the impact of extreme heat days on transit vehicles and determining whether heat causes above-average maintenance issues;
- » Tracking road closures caused by flooding or downed trees from severe storms; and
- » Monitoring pavement quality and assessing whether unusual fluctuations in temperature negatively impact road surfaces.

Knowing when severe weather is most likely to impact transportation operations, the City can be prepared to implement mitigation strategies when forecasted weather suggests there will be negative impacts on the transportation network.

For example, if a severe storm is forecasted and data shows the storm is likely to result in road closures and other travel disruptions, the City can take preemptive measures. This could include free transit rides or coordinating with local employers to institute flexible work arrangements to keep people off the roads during the event. Using a data-driven approach to understand how a shifting climate impacts transportation will enable Fort Collins to have a resilient transportation network.



2013 Fort Collins Flood



This statue stands outside the City of Fort Collins Traffic Operations Center.