

# FORT COLLINS VISION ZERO ACTION PLAN EVALUATION FRAMEWORK

March 7, 2023

---

## Introduction

The purpose of this memorandum is to provide a framework for the continuous evaluation of progress towards Vision Zero and the implementation of goals in the Fort Collins Vision Zero Action Plan (“the Plan”). Although the Plan is focused on one key performance metric – reducing serious traffic injuries and deaths to zero by 2032, it is critically important for the City to continually evaluate the performance of various Vision Zero strategies over time, so that they can be refined, revised, and targeted for better outcomes.

This memo outlines how the City will evaluate roadway safety trends, track the implementation of the Plan, and analyze the outcomes of roadway projects. The evaluation framework will be a guide to City staff to allow consistent and objective tracking of safety and safety-related actions within the City. The effort to track roadway safety metrics, implementation of the Plan, and before and after studies of roadway progress is related to a key action in the Plan (Transformative Action 8).

## Roadway Safety Trends

It is important to track trends in roadway safety data to understand the types of crashes that lead to fatalities or serious injuries and to track changes to locations that should be prioritized for implementing safety projects. Information on these metrics will be tracked annually to assess progress towards Fort Collins’ Vision Zero goal:

- Number of fatal and serious injury (KSI) crashes by year
- KSI crashes involving pedestrians, bicyclists, and motorcyclists
- KSI crashes by type or contributing factor
- Intersection-related KSI crashes
- KSI crashes occurring on the High-injury Network (HIN)

Information on crash trends will be provided via a public interactive dashboard on the City’s website (related to Supporting Action 4.5). The dashboard will help track progress towards Fort Collins’ Vision Zero goal by providing data on what type of KSI crashes are occurring, and where and when they are occurring. The data on the dashboard will help the City make informed decisions around what and where additional actions are needed to achieve the Vision Zero goal.

## Action Plan Implementation

The Fort Collins Vision Zero Action Plan has 30 action items for the City to implement to help achieve Vision Zero. To track the implementation of these actions, each one has metrics to track progress toward implementing the action. As action items are implemented by the respective implementing agency or department, these metrics will be tracked and reported.

The table below summarizes the progress metrics for each action item, which are categorized by Transformative Actions and Supporting Actions. The Transformative Actions are actions that have been identified to be the most impactful to move Fort Collins towards achieving Vision Zero. Progress on the Transformative Actions will be tracked individually. While less impactful than the Transformative Actions, the Supporting Actions are vital to incrementally achieving Vision Zero over time, and will be tracked by the progress metrics listed below less formally and as needed.

| Actions                       |  | Progress Metric(s)   |
|-------------------------------|--|--|
| <b>Transformative Actions</b> |  |  |
| 1                             | Increase transit frequency and make service improvements consistent with the actions for the Short-Term Transit Network in the Transit Master Plan | <ol style="list-style-type: none"> <li>1. Transit mode share.</li> <li>2. The number of bus routes operating at a 15-minute frequency or better.</li> <li>3. The number of transit service improvements implemented.</li> </ol>  |
| 2                             | Install or upgrade full pedestrian and bicycle networks and treatments consistent with the Active Modes Plan and Pedestrian Needs Assessment       | <ol style="list-style-type: none"> <li>1. Number of miles added to the low-stress bicycle network</li> <li>2. Number of pedestrian and bicycle spot improvements completed along roadway and at intersections</li> <li>3. Percent of miles of low-stress bicycle network or sidewalk on HIN</li> <li>4. Pedestrian, bicycle, and micromobility mode share</li> </ol> |
| 3                             | Promote alternatives to driving through the Shift Your Ride Program  | <ol style="list-style-type: none"> <li>1. Completion of the plan</li> <li>2. Single-occupant vehicle mode share</li> <li>3. Vehicle miles traveled</li> </ol>  |
| 4                             | Implement engineering countermeasures and design streets to manage traffic speeds  | <ol style="list-style-type: none"> <li>1. Number of projects implemented on the HIN</li> <li>2. Reduction of speed at project locations</li> </ol>   |
| 5                             | Test solutions without a big time and cost commitment with temporary and quick-build treatments  | <ol style="list-style-type: none"> <li>1. Number of locations on the HIN receiving temporary and quick-build treatments</li> <li>2. Collection of before/after data and public feedback to inform future decisions</li> </ol>  |
| 6                             | Review and revise standards and policies that are roadblocks to Vision Zero goals  | <ol style="list-style-type: none"> <li>1. Number of standards and policies reviewed</li> <li>2. Number of standards and policies revised</li> </ol>  |

|                           |   |  |
|---------------------------|---|--|
| 7                         | Include Vision Zero analysis as part of planning process for all infrastructure projects  | <ol style="list-style-type: none"> <li>1. Creation of a Vision Zero checklist</li> <li>2. Number of projects that include analysis of Vision Zero goals</li> </ol>   |
| 8                         | Create a Vision Zero program with dedicated staff who can apply a safety lens to all planning, design, and resource allocation decisions  | <ol style="list-style-type: none"> <li>1. Programs, projects, and policies reviewed to incorporate Vision Zero safety approach</li> <li>2. Number of equivalent full-time employees dedicated to Vision Zero</li> </ol>                              |
| 9                         | Perform annual analysis, before & after studies, and documentation on Vision Zero progress to celebrate successes and identify areas for improvement  | <ol style="list-style-type: none"> <li>1. Number of before and after studies completed</li> <li>2. Number of projects and types of countermeasures implemented</li> <li>3. Number of community engagements and media stories</li> </ol>              |
| 10                        | Ensure HIN projects and routine maintenance are implemented in historically underserved communities, as well as the entire City, to create self-enforcing roadways and reduce reliance on in-person traffic enforcement | <ol style="list-style-type: none"> <li>1. Percent of a two-year budget cycle of safety projects completed that benefit communities with a high Health Equity Index</li> <li>2. Number of maintenance staff supporting safety improvements</li> </ol> |
| 11                        | Neighborhood/Community grants to fund infrastructure projects with community involvement and engage historically underserved communities  | <ol style="list-style-type: none"> <li>1. Number of people engaged</li> <li>2. Number of people from historically underserved communities engaged</li> </ol>   |
| <b>Supporting Actions</b> |   |  |
| 1.1                       | Continue fare-less transit services through Transfort and implement the Transit Master Plan   | <ol style="list-style-type: none"> <li>1. Percent of Transfort routes that are fare-less</li> <li>2. The number of transit service improvements implemented</li> </ol>   |
| 1.2                       | Prioritize trail investments to promote trails for transportation   | <ol style="list-style-type: none"> <li>1. Number of trail improvements made</li> </ol>   |
| 1.3                       | Evaluate night-time transit hours and transit stop amenities  | <ol style="list-style-type: none"> <li>1. Number of night-time transit routes and transit stops evaluates</li> </ol>   |
| 2.1                       | Implement geometric intersection treatments with proven safety benefits   | <ol style="list-style-type: none"> <li>1. Number of intersections with modified geometry</li> </ol>  |
| 2.2                       | Implement signal and/or operational modifications that are proven to reduce serious crashes   | <ol style="list-style-type: none"> <li>1. Number of intersections with modified signal/operational treatments</li> </ol>   |
| 2.3                       | Evaluate all bus stop locations for the installation of pedestrian crossings  | <ol style="list-style-type: none"> <li>1. Number of bus stops evaluated</li> <li>2. Number of bus stops where pedestrian crossings are added</li> </ol>  |
| 3.1                       | Work with a broad range of agencies and organizations to promote traffic safety, such as CSU, school resource officers, mental health organizations   | <ol style="list-style-type: none"> <li>1. Number of agencies and organizations engaged</li> </ol>  |

|     |  |   |
|-----|--|---|
| 3.2 | Work with the media to more accurately report traffic crashes and avoid victim-blaming   | 1. Number of engagements (i.e., interviews and press releases) with the media regarding Vision Zero                     |
| 3.3 | Pair roadway design changes with communication on why changes are needed, and include branded Vision Zero signage during project construction  | 1. Number of roadway design projects that include Vision Zero education/outreach  |
| 3.4 | Engage City staff in trainings and facilitated conversations to better understand Vision Zero goals, and roadblocks and opportunities for successful implementation  | 1. Number of employees that participate in Vision Zero-related training   |
| 3.5 | Support the establishment of a victims' advocacy organization such as a local chapter of Families for Safe Streets   | 1. City's collaboration with advocacy organizations   |
| 3.6 | Incorporate safety features in City fleet vehicles and expand safe driver training and awareness among people who drive City fleet vehicles  | 1. Percent of City fleet vehicles with safe features<br>2. Number of staff driver trainings held                        |
| 3.7 | Fill current vacancies to fully staff the Traffic Enforcement Unit   | 1. Percent Traffic Enforcement Unit positions filled  |
| 4.1 | Expand current group of safety stakeholders into an interdisciplinary Vision Zero Task Force and continue regular meetings to review data and ongoing traffic safety performance and determine strategies for improvement                      | 1. Number of task force meetings held per year  |
| 4.2 | Work with Colorado Department of Transportation (CDOT) and Larimer County to provide more timely statewide or region-wide crash data   | 1. Average number of months between date of crashes to data availability  |
| 4.3 | Convene rapid response meetings after all severe crashes, investigate how roadway design contributed to the crashes, and implement near-term safety improvements as appropriate to subject location and locations with similar characteristics | 1. Annual ratio of meetings held to number of fatal crashes<br>2. Number of locations evaluated for safety improvements |
| 4.4 | Partner with medical and substance abuse organizations to share data and strategies  | 1. Number of organizations engaged  |
| 4.5 | Provide a dashboard with accessible data about traffic fatalities and serious injury crashes on the City's website and incorporate data and trends into the annual safety report   | 1. Progress toward dashboard being launched and updated   |
| 4.6 | Advocate for policies regulating automated vehicles that advance Vision Zero safety goals  | 1. Number of engagements held with advocacy organizations regarding automated vehicles                                  |
| 4.7 | Incorporate growth projections and anticipated development into safety planning  | 1. Number of safety plans that include growth and development projections   |

|     |  |  |
|-----|--|--|
| 5.1 | Pilot a diversion program with education to encourage safe behaviors over more punitive measures such as fines   | <ol style="list-style-type: none"> <li>1. Completion of pilot program</li> <li>2. Documentation of lessons learned to inform expansion or alteration of program or policies</li> </ol> |
| 5.2 | Engage youth to raise awareness of Vision Zero and solicit their input on programs and street design projects  | <ol style="list-style-type: none"> <li>1. Number of organizations engaged</li> <li>2. Number of students and Fort Collins youth engaged</li> </ol>                                     |
| 5.3 | Expand use of automated traffic enforcement (speed, red-light cameras) in place of in-person traffic enforcement and deploy throughout the HIN; any revenues received from fines should be used to improve traffic safety. | <ol style="list-style-type: none"> <li>1. Number of engagements held with advocacy organizations regarding automated traffic enforcement</li> </ol>                                    |
| 5.4 | Provide opportunities for community input on Vision Zero initiatives   | <ol style="list-style-type: none"> <li>1. Number of community input opportunities provided</li> </ol>  |

## Project Outcomes

As projects to address roadway safety issues are implemented on roadways, the City should conduct analyses to measure the effectiveness of the implemented projects. Particular attention to measuring project outcomes should be applied to temporary and quick-build projects (related to Transformative Action 4). A larger effort to perform before and after analysis on all projects that address roadway safety can be conducted as a separate effort.

### *Project Database*

- The City will use a GIS database to track projects during all phases as projects are planned, designed, and constructed. The database should include the location of the project, the type of countermeasure(s) being deployed, and the status of the project (planning, design, construction, completed).
- The spatialized database will be overlaid onto the HIN and Health Equity Index (HEI) maps to track if projects that are being deployed are on the HIN or in historically underserved communities.

### *Before and After Conditions*

- Data will be collected at a site or corridor before the construction of a project begins. The data collection may include data that is readily available (e.g., crash data), or data that is specifically collected for the project (e.g., automobile speed data). At a minimum, the data collection will include the most recent five years of crash data before construction, however, additional items may include:
  - automobile speeds,
  - traffic citation data,
  - user counts (automobile, bicycle, pedestrian),
  - near-miss crash data (video collection), and
  - qualitative information on user comfort (survey of users and residents).
- After a project is completed, “after” data will be collected at the project site. Care should be taken to ensure similar methodologies used to collect the “before” data are used to collect the “after” data (e.g., placing traffic counters at the same location). Additional guidelines for “after” data include:
  - Wait six months after the project is completed before collecting “after” data.
  - If the project construction led to closures or traffic reductions, consider the project as completed when it has been fully reopened to public use.
  - Consider observing “after” crash data for three years after project completion.
- In addition to comparing before and after conditions on a roadway where a project was implemented, consider observing a control location. The control location is a location with similar characteristics or configuration to the subject location where the project is being implemented.

## Next Steps

The implementation and evaluation of the Vision Zero Action Plan will help the City understand actions that are most effective or need adjustments. The next steps to initiate the evaluation framework are on two timelines.

### **Annual Report**

To effectively track progress and crash trends, an annual report of crash statistics will be developed and made publicly available. This reporting could be amended to the existing Annual Roadway Safety Report with a section specific to the HIN and fatal and serious injury crashes. The Annual Roadway Safety Report will complement the crash trends information provided via a public interactive dashboard on the City's website (related to Supporting Action 4.5).

### **Bi-Annual Report**

Every two years, a publicly available report specific to tracking progress toward Vision Zero will be developed. This report will include tracking roadway safety trends, implementation of actions in the Plan, and observation of project outcomes. A recommended outline of this report is below.

#### **Fort Collins Vision Zero Report**

##### Possible Outline

1. Introduction
2. Roadway Safety Trends
  - a. Descriptive crash statistics
  - b. HIN map
3. Action Plan Implementation
  - a. Transformative actions progress
  - b. Supporting actions summary
4. Project Outcomes
  - a. Completed projects map (with HIN and HEI overlay)
  - b. Summary of before and after conditions
5. Two-Year Outlook
  - a. Planned projects map
  - b. Upcoming actions or programs