

Section 5

Improving Roadway Safety

Successful improvement of roadway safety requires collaborative efforts from the City, the community, and individuals. It involves road users, vehicles, infrastructure, technology and emergency response. Roadway safety is complex, and both big and small initiatives are important.

The data in this report is used to inform the **Vision Zero Action Plan** – a companion document to this report that outlines the elements and actionable strategies to reduce the number and severity of crashes. The document (which is in the process of being finalized in 2019) acknowledges the complexity related to safety: some of the elements are policy related; some strategies are site specific and/or are identified to mitigate particular trends; and others (especially education-related efforts) are applicable across the City and address more behavioral issues.



Elements of the Vision Zero Action Plan

Incorporating safety into all City efforts

Roadway safety involves multiple City department and requires collaborative partnerships. A focus on safety is needed throughout transportation planning, adopted plans, project design, construction, operations, maintenance, enforcement incident management and more.

Robust annual review, evaluation, and understanding of safety data

This Roadway Safety Report is the compilation of safety data. The Vision Zero Action Plan is built using the safety data as a foundation. While there are numerous important transportation projects and efforts underway, only the ones that 'move the needle' on actual crash numbers and/or severity are reflected in the Vision Zero plan.

Apply all the elements of safety toolbox

Application of all elements in the 'safety toolbox' reflects a holistic systems approach to roadway safety that focuses on those projects that have an acutal impact on the number and/or severity of crashes. The toolbox incorporates the five "Es" of safety: Engineering, Education/Encouragement, Enforcement, and Evaluation.

Engineering

Engineering improvements can include low cost improvements such as the installation of flashing yellow arrows, or leading pedestrian intervals (LPIs) at intersections. Engineering improvements also include significant efforts such as capital projects.



A couple recent examples of improvements and their safety benefits are listed below:

College / Prospect – capital project:

College and Prospect was rebuilt as a joint City / CSU capital project with added lanes, right turn islands, and a new signal system. Both delay and crashes have decreased for improved operations and safety.

College / Prospect	
Before:	47 crashes / year
After:	34 crashes / year
Result:	27% reduction in crashes

Snow Mesa / Harmony – low cost signal change

Snow Mesa and Harmony had a crash pattern indicating a concern with approach turn (i.e. left turning) crashes. Signal changes were made to add protected left turns (red arrows).

This type of improvement can be very beneficial in addressing left turn crashes, but may contribute to added delay / congestion and can result in increased rear-end crashes. A site specific evaluation is important before implementing.

Snow Mesa / Harmony	
Before:	21 crashes / year 5.7 left turn crashes / yr
After:	11 crashes / year 1 left turn crash / yr
Result:	47% reduction in crashes 82% reduction in left turn crashes

Education / Encouragement

Education is an important component to a safer transportation system. This includes a broad range of efforts from staff in several departments, and the data in this report is used to inform specific education campaigns.

Recent efforts include the Bicycle and Pedestrian Safety Town, the bicycle friendly driver program, and tours and presentations to interested groups about safety.



Enforcement

Police Services is the lead entity for enforcement, and utilizes crash data to identify specific types or locations of crashes to target for enhanced presence and/or enforcement.

Other enforcement related efforts include:

- DUI campaigns and sobriety checkpoints are an important element.
- In the fall when school starts, a Bike Safety Week provides targeted education and enforcement by both Police Officers and Bicycle Ambassadors.
- Police Services partnered with others to create a Bicycle Traffic Citation Course for individuals who have received citations related to cycling. This alternative sentencing option teaches cycling laws and offers tips for safe cycling.
- In the past two years, Fort Collins Police Services has begun Community Impact Days to focus on traffic enforcement and reduce dangerous driving behaviors. Police Services works with Traffic Operations to identify locations for targeted enforcement based on crash data.

Evaluation

Finally, a key for the roadway safety program is to continue ongoing monitoring of the overall transportation system, trends, patterns as well as specific locations. Efforts to ensure data quality and completeness, robust analysis, and systematic use of the information in all aspects of roadway safety strategies will continue. The result of evaluation helps to determine the effect of the various safety projects, and identify the types of projects that are most beneficial.

Annual focus areas

There are numerous avenues that can be pursued for Vision Zero, and the various strategies listed in the Action Plan reflect the breadth of options. Incorporating an annual 'focus area' provides an opportunity to delve deeper into the causes and potential mitigation for certain types of crashes.

Collaborate on best practices

Vision Zero as a concept has gained significant traction in the public consciousness, and across the nation hundreds of Vision Zero Action Plans are being developed. The City can learn from others, as well as share what we experience in these efforts. It is especially important to differentiate efforts that 'move the needle' on crashes from other important transportation improvements that may be focused on perceived safety/comfort, accessibility, or advocacy for a particular mode.

Tracking Improvements and Overall Roadway Safety

The Vision Zero Action Plan anticipates an annual 'report card' on the efforts. This includes a compilation of the number and severity of crashes as well as detailed review of specific projects and/or initiatives and their impact on safety.