



Action Steps and Recommendations

This Safety Action Plan is a response to the lives lost or forever altered in Weld County due to preventable, traffic-related incidents; the SAP presents a comprehensive set of recommendations designed to guide communities towards safer roads for all users.

The following recommendations are based on discussions with the project team, the Safety Task Force, community priorities, and a review of the county's current policies, programs, and processes related to transportation safety.

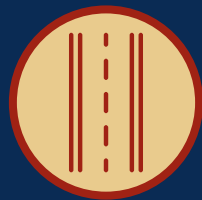
This set of recommendations spans three crucial principles based on the Safe Systems Approach:

Safer Speeds



Safer Speeds will explore measures to curtail excessive speeds, a key contributor to the severity of traffic collisions.

Safer Roads



Safer Roads will underscore the need for well-designed infrastructure that accommodates diverse modes of travel.

Safer People

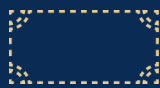


Safer People will tackle education and awareness, fostering a culture of shared responsibility among all road users.



Structure of Recommendations

Name: The title of the recommendation.
Recommendation: 1-2 sentences describing the action recommended.
Justification: 1-2 sentences providing further description and justification.
Cost: The relative cost associated with the recommendation.



(-) Not Applicable.



(\$) Implementable with current staff; minor training and limited costs for equipment or facilities may be necessary.



(\$\$) Requires some additional staff time, equipment, facilities, and/or publicity.

Timeline: Relative time frame associated with the descriptions; all timeframes were kept under 5 years to account for (1) the urgency of eliminating traffic fatalities and (2) the plan is anticipated to be updated every 3-5 years and timelines updated.

Timeline	Description
Short-term	Complete in 6 months – 2 years
Long-term	Complete in 2 – 5 years
Ongoing	Start within 1 year with no end date

Safe System: The applicable component of the Safe System Approach; these recommendations focus on **Safer Speeds**, **Safer Roads**, and **Safer People**, as these are the parts of the transportation network that Weld County can have the most impact on.

Emphasis Area: The emphasis area(s) that the recommendation is targeting for safety improvements.



Behavioral:
Impaired & Distracted Driving, Speeding



Environmental:
Land Use Context, Road Hazards



Infrastructure:
Lighting, Intersection & Roadway Design



Modes of Travel:
Vehicle Types, Vulnerable Road Users

Urban/Rural/Both: The land use context that the recommendation is suited for.





Safer Speeds

Dynamic Speed Display/Feedback Signs

Recommendation: Expand deployment of speed feedback signs (temporary/mobile or permanent) in locations determined through a data-driven process, targeting locations with high rates of speed-related crashes, a high rate of prevailing speeds, a high number of pedestrian and bicycle users, and based on public input.

Justification: Speed feedback signs dynamically show the driver's speed alongside the posted speed limits and have been shown to slow overall speeds where deployed. They also can help to educate drivers on the importance of safe speeds.

Cost:



Timeline:

Short-Term

Emphasis Area:



Urban/Rural/Both:

Both

Speed Management Plan

Recommendation: Develop a Speed Management Plan for county roads. Key elements of the speed management plan should include (1) system-wide speed data collection and analysis, (2) review of statutory speed limits, (3) traffic calming strategies, and (4) public education and awareness.

Justification: A Speed Management Plan (SMP) systematically reviews posted statutory speed limits and actual prevailing driver speeds across an entire county. SMPs also include a review of policies used in setting speed limits and making recommendations to change speed limits in specific locations, identifying speed management areas, and designating areas for traffic calming implementation. FHWA provides guidance on creating plans and other resources.

Cost:



Timeline:

Long-Term

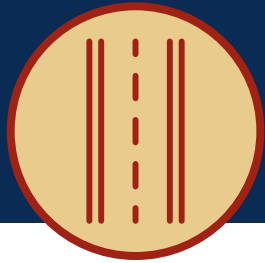
Emphasis Area:



Urban/Rural/Both:

Both





Safer Roads

CIP Project Identification and Prioritization

Recommendation: Develop and apply safety-focused criteria for transportation project identification and prioritization as part of each capital improvement plan update. The criteria should include fatal and serious injury crash reductions.

Justification: Capital Improvement Plans (CIP) outline their planned infrastructure improvements over the next period. The CIP process provides an opportunity to prioritize projects that align with a community's safety goals.

Cost:



Timeline:

Short-Term

Emphasis Area:



Urban/Rural/Both:

Both

Safety Lighting Action Plan

Recommendation: Develop and implement a Safety Lighting Action Plan to enhance roadway illumination, aiming to reduce nighttime traffic fatalities and serious injuries.

Justification: Adequate lighting is a proven countermeasure for improving traffic safety. Enhanced illumination at intersections, pedestrian crossings, and high-risk areas increases visibility for all road users, thereby reducing the likelihood of crashes during low-light conditions. FHWA provides guidance and resources for creating plans and overall best practices.

Cost:



Timeline:

Short-Term

Emphasis Area:



Urban/Rural/Both:

Both

Quick-Build Funding Program

Recommendation: Develop a funding program for quick-build or demonstration safety improvements. Include monitoring and data gathering to assess the effectiveness of these projects, allowing for improvements, replication, or making them more permanent.

Justification: Quick-build projects are easily adjustable safety improvements typically utilizing paint, posts, signage, and other widely available, low-cost materials. Examples of quick-build projects include installing paint-and-post curb extensions at pedestrian crossings and intersection access control (e.g. paint-and-post medians) at high conflict intersections.

Cost:



Timeline:

Short-Term

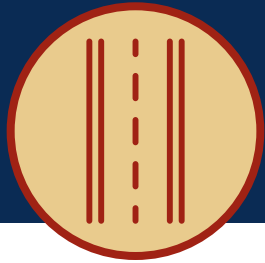
Emphasis Area:



Urban/Rural/Both:

Urban





Safer Roads

Intersection Control Evaluation Policy

Recommendation: Adopt an Intersection Control Evaluation (ICE) policy. ICE reports should be conducted for all intersections in capital improvement projects and for collector and arterial street intersections that are constructed or reconstructed as part of private development projects. Consider waiving the ICE requirement for improvements that choose roundabouts from the project’s outset.

Justification: Implementing an ICE process enables jurisdictions to make data-driven decisions, consider all viable intersection alternatives, and select cost-effective solutions, ultimately enhancing overall road safety. An ICE process evaluates safety, traffic operations, pedestrian and bicycle access, cost, right-of-way impact, and other factors to determine the appropriate intersection control type for a new or reconstructed intersection.

Cost:



Timeline:

Short-Term

Emphasis Area:



Urban/Rural/Both:

Both

Street Design Standards Updates

Recommendation: Update the Weld County Engineering and Construction Criteria manual to incorporate Safe Systems and context-sensitive design principles, such as:

- reducing some of the minimum roadway widths, lane widths, and posted speeds within Subdivisions;
- reducing the minimum design speed requirement to 5 mph over the posted speed (instead of the current 10 mph);
- increasing the level of separation of pedestrian and bike facilities from vehicle traffic (such as incorporating an off-street shared use path or separated bike lanes instead of on-street bike lanes in the “Urban Arterial” standard cross-section);
- changing the design vehicle for urban streets within subdivisions to an SU-30, except where necessary to accommodate large trucks; and
- including a wider shoulder width as part of the design standards for rural local roads.

Justification: Weld County’s Engineering and Construction Criteria manual guides the design, review, and construction of all improvements in the public right-of-way. Safety-focused revisions to the design standards can help to further emphasize a safe systems approach to the design of newly constructed streets and improvements along existing streets.

Cost:



Timeline:

Short-Term

Emphasis Area:



Urban/Rural/Both:

Both

Systemic Lane Departure Mitigation Strategy

Recommendation: With all rural county road resurfacing projects, consider incorporating systemic lane departure mitigation countermeasures such as rumble strips, wide edge lines, SafetyEdge, and curve delineation improvements. Develop specific criteria for selecting the appropriate countermeasures based on the existing roadway cross-section, traffic volumes and speeds, and crash history.

With all new construction and reconstruction, continue following the Transportation Plan TP.Policy 1.1. “Ensure County road facilities are constructed and maintained in accordance with the functional classification plan, as well as adopted County standards in the Weld County Engineering and Construction Guidelines” with emphasis on roadway shoulders.

Justification: Incorporating lane departure mitigation treatments into all capital construction and routine resurfacing projects is a cost-effective way to systematically incorporate these safety countermeasures on county roadways throughout the rural areas of the county. Crash types that are related to lane departures (such as overturning, sideswipes, head-on crashes, and embankment/ditch crashes) are significantly overrepresented in the county’s rural areas.

Cost:



Timeline:

Ongoing

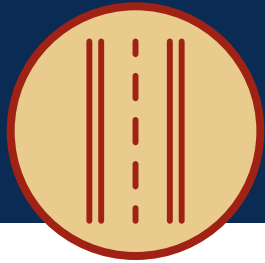
Emphasis Area:



Urban/Rural/Both:

Rural





Safer Roads

Road Safety Audits

Recommendation: Include a Road Safety Audit with every capital improvement project. Additionally, the county should choose at least one location on the High Injury Network or Highest Risk Network to perform a Road Safety Audit each year.

Justification: Road Safety Audits follow a formal process utilizing a multidisciplinary group that reviews street safety aspects and makes recommendations. Use of RSAs has shown up to 60% decrease in crashes where recommendations were implemented.

Cost:



Timeline:

Long-Term

Emphasis Area:



Urban/Rural/Both:

Both

Bicycle & Pedestrian Plan

Recommendation: Develop a strategic plan for developing a more bicycle and pedestrian friendly roadway and trail network in Weld County. The plan should inventory gaps in sidewalks, crossings, multi-use shoulders, and network gaps in trails and bike infrastructure—especially connecting schools, subdivisions/populated areas, employers, and parks. The plan should develop a prioritized list of potential projects to address these gaps as well as policy recommendations that could improve access to safe walking and bicycling.

Justification: Pedestrians and bicyclists are over-represented in fatal and serious injury crashes compared to other modes of travel in Weld County. A comprehensive plan for improving network connectivity for these active modes of travel can help to address key areas of safety concerns while increasing recreation opportunities and transportation options.

Cost:



Timeline:

Short-Term

Emphasis Area:



Urban/Rural/Both:

Both

Utilize Appropriate Safety Technology

Recommendation: Include technology-based improvements in roadway and intersection designs. These improvements could include installing Intersection Conflict Warning Systems at intersections or speed reduction notice approaching intersections or curves.

Justification: The Weld County Crash data shows ~43.7% of fatal and serious injury crashes happen at 0.7% of all intersections in the county. Installation of ICWS at high-conflict locations can reduce crashes up to 19% (FHWA). The judicious use of ICWS can reduce the number crashes at these locations.

Cost:



Timeline:

Short-Term

Emphasis Area:



Urban/Rural/Both:

Both





Safer People

Promote Motorcycle Rider Education

Recommendation: Promote and spread awareness of motorcycle rider training courses, such as those offered through the Colorado Motorcycle Operator Safety Training (MOST) program.

Justification: Motorcyclists are over-represented in fatal and serious injury crashes compared to other modes of travel in Weld County. Comprehensive training equips riders with critical skills and knowledge, promoting safer riding behaviors and better hazard perception.

Cost:



Timeline:

Long-Term

Emphasis Area:



Urban/Rural/Both:

Both

Vehicle Fleet Safety Training

Recommendation: Develop comprehensive safety policies for all county vehicle operators (excluding the Sherriff's office). These policies should include regular training on safe driving practices, routine vehicle maintenance checks, and monitoring systems to track driver behavior. The county may also consider distributing educational materials to companies to incorporate into their own fleet vehicle driver training.

Justification: Training programs for fleet vehicle drivers can lead to significant cost savings by decreasing accident-related expenses, enhancing operational efficiency, and promoting a safety culture within the fleet.

Cost:



Timeline:

Short-Term

Emphasis Area:



Urban/Rural/Both:

Both

Communications and Outreach Supporting Safe Travel Behaviors

Recommendation: To effectively promote traffic safety priorities and engage the public, develop a communication campaign focused on curtailing excessive speeding, impaired driving, distracted driving, and not wearing seatbelts. These campaigns may be most effective by using a "positive-community norms" strategy, using evidence-based messaging to emphasize that most drivers are typically not engaging in these risky behaviors, thus reducing the perceived social acceptability of these behaviors. The county should leverage outreach channels such as mailing lists, websites, public space signage, and coordinate with churches and schools (such as publishing safety campaign messaging in their newsletters) to ensure widespread dissemination of the messaging.

Justification: Research suggests that "positive community norms" (PMC) safety messaging campaigns (as opposed to traditional fear-evoking campaigns) may be more effective at creating lasting shifts in people's attitudes toward risky driving behaviors. For example, rural Montana counties where a PMC campaign targeting drinking and driving among young adults saw a 15% reduction in young adults drinking and driving, while similar counties saw an increase.

Cost:



Timeline:

Long-Term

Emphasis Area:



Urban/Rural/Both:

Both

