



Mesa County

Safety Action Plan

Enhancing Roadway Safety in Our Community

01 The Problem in Mesa County

The Problem in Mesa County

Between 2016 and 2022...

2,458 Total crashes/yr

17,208 Total Crashes 3.45% KSI Rate



17 Fatal crashes/yr

117
Fatal Crashes



68 Serious Injury crashes/yr

475
Serious Injury Crashes

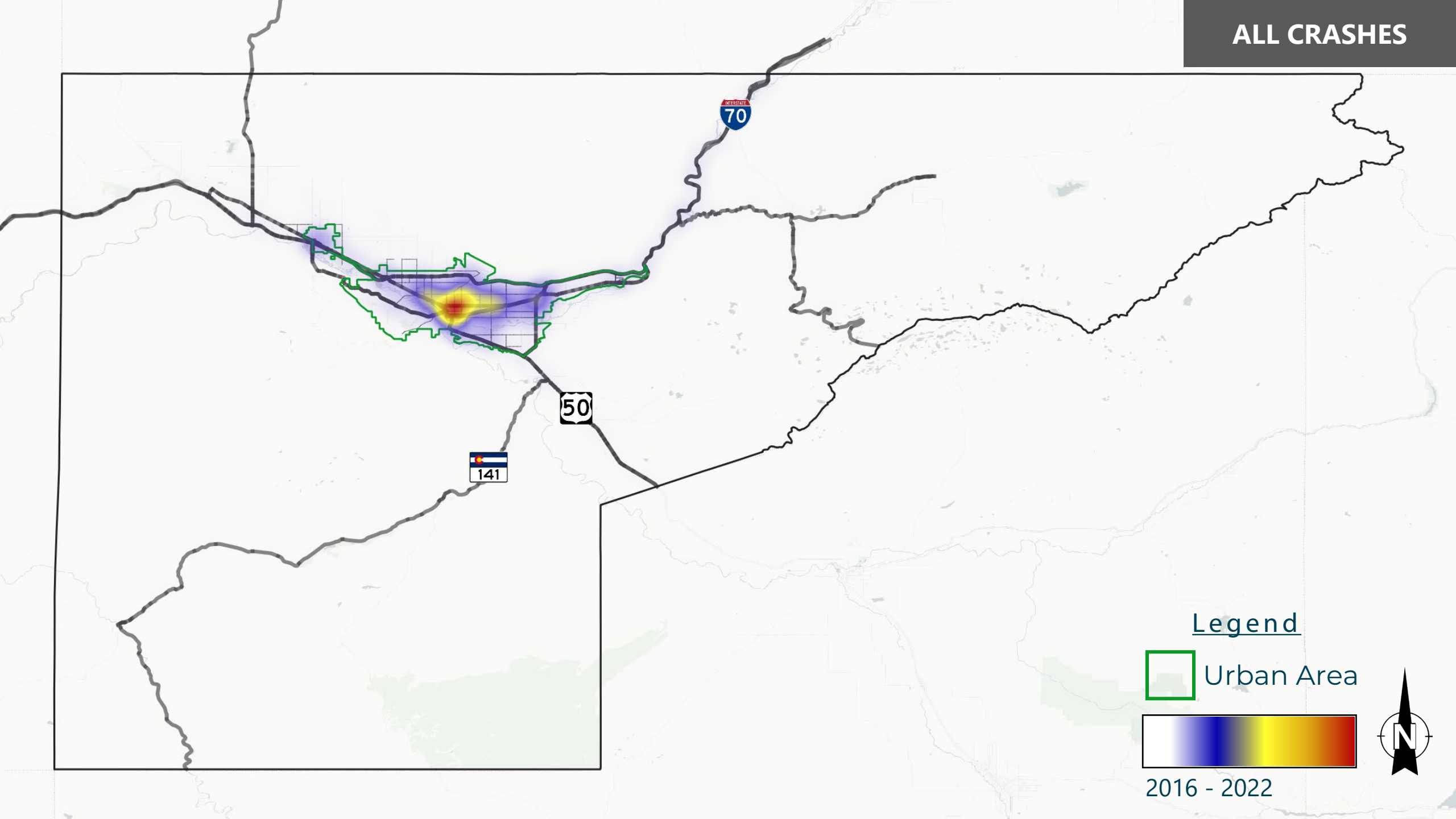


In 2022, the crash rate in Colorado was 13.1 deaths per 100,000 people
the crash rate in Mesa County was 17.6 deaths per 100,000 people



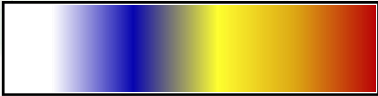
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ALL CRASHES



Legend

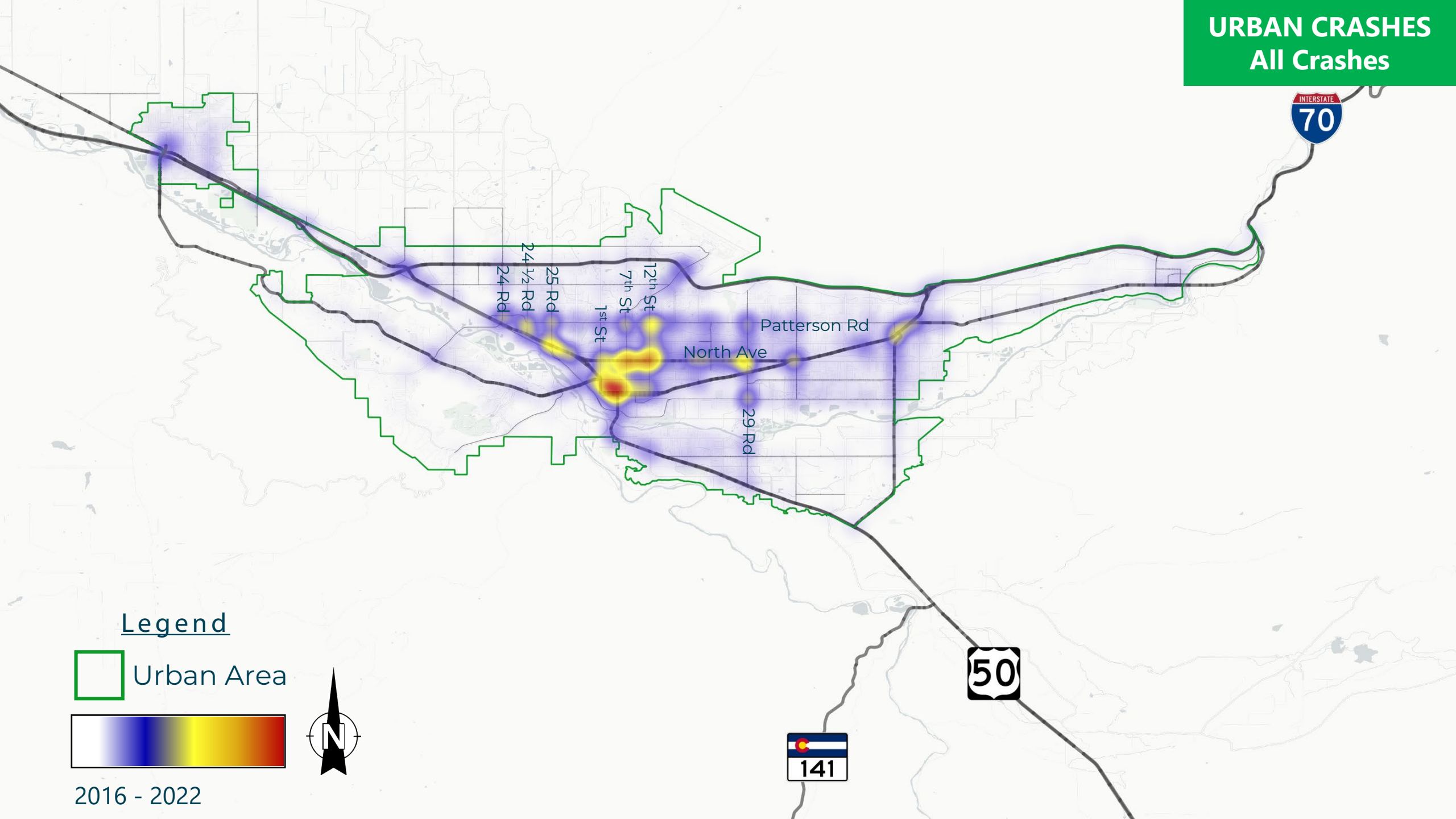
Urban Area



2016 - 2022

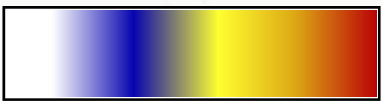


URBAN CRASHES All Crashes



Legend

Urban Area



2016 - 2022



Urban Crash Trends

Mesa County, 2016-2022

Crash Locations



60% of urban crashes were intersection related. About half, **56%** of these crashes were at unsignalized intersections.

Contributing Factors



Impairment is a factor in **23%** of urban fatal and serious injury crashes.



Speeding is a factor in **22%** of urban fatal and serious injury crashes. Aggressive driving is the most common contributing factor.



Urban areas accounted for **98%** of pedestrian and bicycle fatal and serious injury crashes.



31% of urban crashes involved drivers under the age of 25.

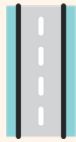


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Rural Crash Trends

Mesa County, 2016-2022

Crash Locations



85% of rural crashes were non-intersection crashes. The majority, **73%** occurred on state highways.

Contributing Factors



Impairment is a factor in **22%** of rural fatal and serious injury crashes.



Speeding is a factor in **44%** of rural fatal and serious injury crashes. Aggressive driving is the most common contributing factor.



Rural areas accounted for **49%** of fatal and serious injury motorcycle crashes.



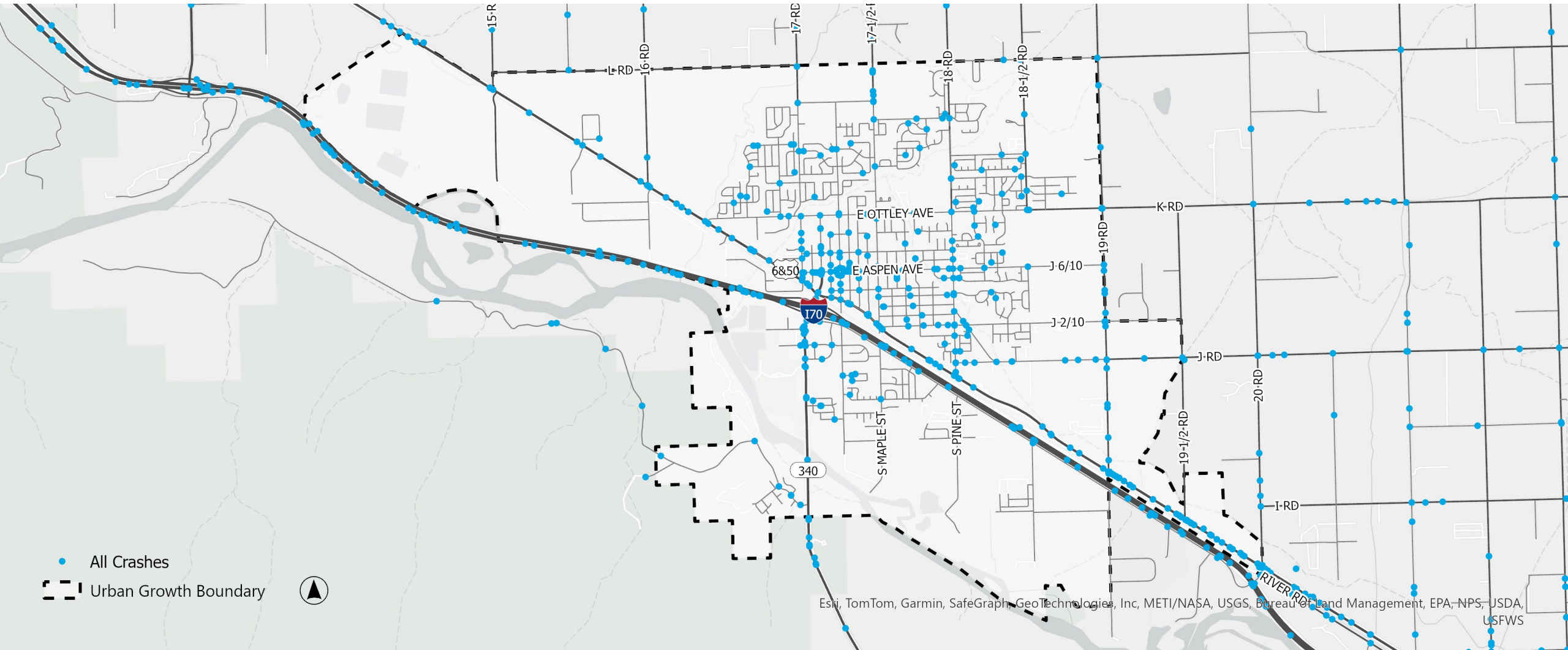
Wild animals contribute to **12%** of rural fatal and serious injury crashes (that do not include a vehicle-to-vehicle collision).



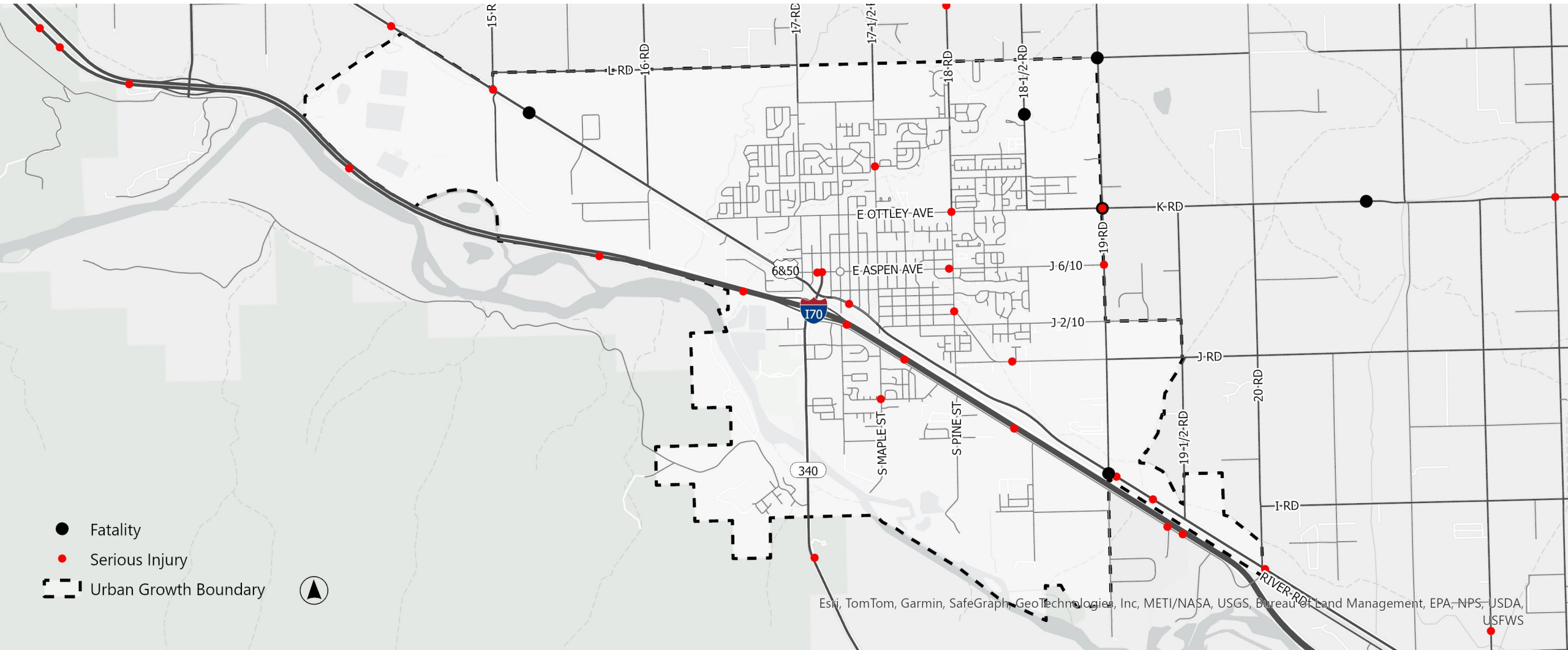
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Crashes In/Near Fruita

All Crashes 2016-2022



Crashes In/Near Fruita Killed and Serious Injuries 2016-2022



02 The Solution



Safe Streets and Roads for All (SS4A) Grant Program

In 2021, the Bipartisan Infrastructure Law established the SS4A program with \$5 Billion in appropriated funds between 2022 and 2026. The program provides financial support for the planning, infrastructure, behavioral, and operational initiatives to prevent death and serious injuries on roads and streets involving all roadway users.

Funding



Local Funding = Joint Contributions from Mesa County, Grand Junction, Fruita, and Palisade



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The Solution: Mesa County Safety Action Plan

Aimed to **identify solutions to reduce the number of deaths and serious injuries** on our roads across Mesa County.

The Mesa County Safety Action Plan looked at local data and peer research and ultimately was built on a foundation of partnerships between a diverse group of stakeholders who strive to find solutions to make Mesa County roads safer for all users.



Valued Stakeholder Coordination

Government

- Engineering & Planning
- Maintenance
- Public Health

Law Enforcement

- Colorado State Patrol
- Mesa County Sheriffs Office
- Grand Junction Police Department

Hospitals

- Intermountain Health – St. Mary's
- Community Hospital

Education

- District 51 + Student Transportation for America
- CMU/CU Boulder

Non-Profit Mother's Against Drunk Driving



Not all stakeholders pictured

Valued Public Input: Phase 1

March 18 – April 28, 2024



Booths at Community Events

1. Cesar Chavez Celebration
2. Sustainability and Adaptation Open House
3. Arbor Fest



754 Recorded Users



275 Survey Responses



245 Map Comments

Online Input Themes

1. Speeding and Aggressive Driving
2. Traffic Signal Timing and Red-Light Runners
3. Enforcement and Education
4. Bicycle and Pedestrian Infrastructure

Valued Public Input: Phase 2

August 6 – September 9, 2024



Booths at Community Events + Open Houses

1. Clifton National Night Out
2. **Cops N Cars Car Show**
3. Palisade Sunday Farmers Market
4. Unity in Community Festival
5. Central + Clifton Library Open House



450 Community Participants



35 Safety Pledges



60 Priority Board Responses

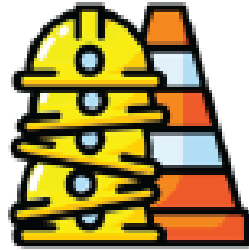


50 Strategy Board Responses

4 Focus Areas

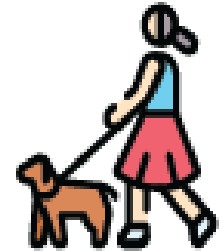
Build Safe Streets

Influences the physical design of urban and rural intersections and roadways.



Protect Vulnerable Road Users

Protecting people walking, biking, rolling, and motorcyclists.



Address Dangerous Behaviors

Focuses on influencing behaviors and attitudes. Addressing driving under the influence and speeding.



Create a Culture of Safety

Creates a community-wide commitment to the Mesa County Safety Action Plan.





Build Safe Streets

Objectives

Actions in this area will influence the physical design of urban and rural intersections and roadways.

Objective 1: Enhance intersection operations and visibility where conditions have been or could be a crash factor

Objective 2: Focus on proactively reducing severe crashes based on contextual factors

Objective 3: Ensure funding aligns with safety improvement projects

7 strategies:

6 Engineering

- Continue work:
 - Lighting
- New work:
 - Develop & fund a road safety audit program
- Prioritize High Injury Network (HIN):
 - Signalized intersection improvements
 - Segments/Roadways
 - Funding

1 Evaluation

- New work:
 - Finalize the High Risk Network (HRN) analysis



Protect Vulnerable Road Users

Objectives

Actions in this area will protect people walking, people biking, people rolling, and motorcyclists.

Objective 1: Host targeted events and education campaigns for the general public that promote safe behaviors and increase awareness of traffic laws

Objective 2: Prioritize vulnerable road user improvements on High Injury Network (HIN) segments

Objective 3: Build upon Safe Routes to School (SRTS) efforts

9 strategies:

7 Engineering

- Continue work:
 - Bicycle facilities
 - Sidewalk facilities
 - Bus stop improvements
 - Mid-block crossing improvements
- New work:
 - Right turn/slip lane improvements
 - Update SRTS audits and new plans
- Prioritize HIN and HRN:
 - SRTS Programs

2 Education & Engagement

- New/Expanded work:
 - Cycle Safety Summit
 - Education campaigns



Address Dangerous Behaviors

Objectives

Actions in this area focus on influencing the behavior and attitudes of people traveling throughout Mesa County. These actions address driving under the influence and speeding.

Objective 1: Reduce speeding and red-light running

Objective 2: Host targeted events and education campaigns for the public that promote safe behaviors and increase awareness of traffic laws

8 strategies:

3 Enforcement

- Continue work and Prioritize HIN/HRN:
 - Surge Operations
 - Saturation Patrols
- New work:
 - Pilot Automated Enforcement

2 Engineering

- New work:
 - Pilot Speed Feedback Signs
 - Video Monitoring

3 Education & Engagement

- New/Expanded work:
 - Education campaigns



Create a Culture of Safety

Objectives

Actions in this area focus on creating a community-wide commitment to the Mesa County Safety Action Plan.

Objective 1: Unite, equip, and empower multi-disciplinary leaders to actively work together in pursuit of implementing the Mesa County Safety Action Plan

Objective 2: Support a transparent and data driven safety crash analysis

6 strategies:

Cross-Cutting

- New work:
 - Fund a Safety Action Plan Coordinator
 - Evolve the Stakeholder Working Group to a Transportation Safety Task Force
 - Use and update the crash dashboard
 - Annual reporting and community input
 - Transportation Symposium
- **Continue/Prioritize**
 - Coordination with CDOT on HIN and funding partnerships

03 Plan Implementation & Next Steps



Future Funding Opportunities

After completion of the Mesa County Safety Action Plan, additional funding is available and will be pursued to implement recommendations from the plan.



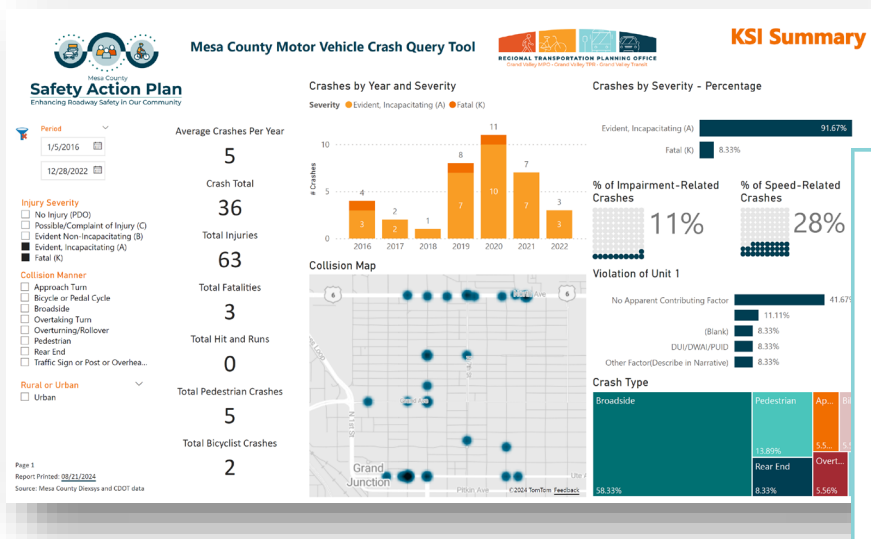
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Complementary Tools & Resources

Dashboard

Engineering Toolbox

Project Cards



Intersection Lighting

Description:

Evaluate lighting conditions at intersection crosswalks and intersection approaches to ensure illumination standards are met, positive crosswalk lighting is provided and pedestrian level lighting is provided where appropriate. Actions to mitigate lighting deficiencies include installation of new light posts and enhancement/replacement of existing luminaries.

When/Where to Use:

This tool addresses night-time collisions, in particular involving vulnerable road users. It should be used when there is a lighting gap or insufficient lighting, and prioritized in areas of over-represented crashes during dark lighted conditions are identified at an intersection.

Associated Crash Type: Night-Time



Cost:

\$\$\$\$\$

Effectiveness Prioritization Score:

40 / 50

Intersection lighting is associated with up to 42% reduction in nighttime injury crashes involving pedestrians.

Effectiveness Source: <https://highways.dot.gov/safety/proven-safety-countermeasures/lighting>

7th Street & Elm Avenue

7th Street and Elm Avenue is a four-legged minor stop-controlled intersection with the east and westbound approaches stopping. There is on-street parking on the west leg of the intersection. There is a two-way left turn lane in the center of the roadway on 7th Street.

This location was selected for improvements because the KSI % was 37.5% over the study period.



METRICS:

KSI % 37.5%
TOTAL KSI 3
EPDO 190.4
PEDESTRIAN 1

SEVERE CRASH SUMMARY

Crashes by Year and Injury Severity



The severe crash type at this intersection varies. There is an existing flashing beacon and striped crosswalk on the north leg of the intersection, which is recommended for enhancement to a High-Intensity Activated Crosswalk (HAWK) or a signalized intersection to improve safety and visibility for pedestrians. The crosswalk is recommended on the north side to avoid conflicts with the northbound left-turn movement, which is expected to have higher traffic volumes than the southbound left turns. Additionally, crosswalks are proposed for the east and west legs to facilitate pedestrian movement from the minor street to the signalized crossing. To further enhance pedestrian comfort and safety, bulb-outs and median islands are recommended to shorten the crossing distance and provide refuge, improving pedestrian safety and comfort.

PLANNING LEVEL COST ESTIMATE

NO.	DESCRIPTION	QTY	UNIT PRICE	AMOUNT
1	Pedestrian Crossing Enhancement	1	\$100,000	\$100,000
2	Signalized Pedestrian Crossing Enhancement	1	\$100,000	\$100,000
3	Signalized Intersection Enhancement	1	\$100,000	\$100,000
4	Signalized Intersection Enhancement	1	\$100,000	\$100,000
5	Signalized Intersection Enhancement	1	\$100,000	\$100,000
6	Signalized Intersection Enhancement	1	\$100,000	\$100,000
7	Signalized Intersection Enhancement	1	\$100,000	\$100,000
8	Signalized Intersection Enhancement	1	\$100,000	\$100,000
9	Signalized Intersection Enhancement	1	\$100,000	\$100,000
10	Signalized Intersection Enhancement	1	\$100,000	\$100,000



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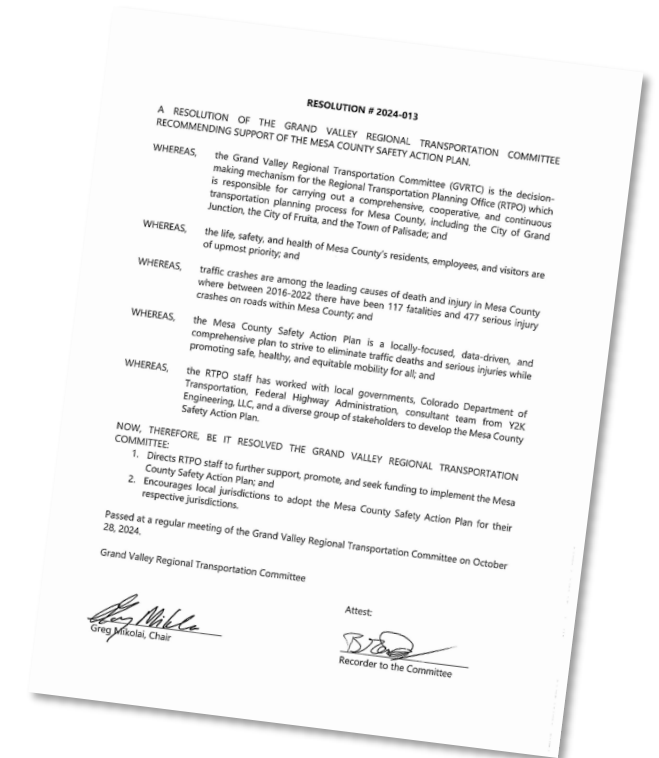
Today's Request & Upcoming Coordination

Regional Support: Resolution

- ✓ 10/28: Grand Valley Regional Transportation Committee

Local Support: Resolutions

- ✓ 11/12: Mesa County Board of County Commissioners
- ✓ 11/12: Palisade Board of Trustees
- 11/19: Fruita City Council
- 11/20: Grand Junction City Council



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THANK YOU!

Questions, Comments, or Feedback?

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