LOCAL ROAD SAFETY PLANS:

Your Map to *Safer Roadways*

No matter what your resources, a Local Road Safety Plan will guide you to data-driven solutions and safer roads.

https://safety.fhwa.dot.gov/provencountermeasures/local_road/

START HERE!

Identify Stakeholders

Law Enforcement · Public Health · EMS · Elected Officials

Café

Risks Ahead

Chevron signs reduce nighttime crashes by 25%.

Choose Proven Solutions

Chevrons · Roundabouts · Targeted Enforcement · Crosswalks

Use Safety Data

Crashes · Maintenance Logs · Safety Audits · Traffic Violations

In 2017, over 50% of fatalities occurred on rural roads, but just 19% of Americans live in rural areas.

Store

Implement Solutions

Education & Enforcement · Capital Projects · Maintenance Work

Safer Roads Ahead

LOCAL ROAD SAFETY PLANS

More than 75% of all roads are maintained by local agencies.

Help Get People Home Safely

U.S. Department of Transportation
Federal Highway Administration

https://www.youtube.com/watch?v=Wzdm798Mol8

What is a Local Road Safety Plan?

- Provides a comprehensive framework to reduce fatalities and serious injuries on the local system
- Utilizes the 4 Es
  - Engineering
  - Enforcement
  - Education
  - Emergency Response

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Why a Safety Emphasis on Local Roads?

- **Builds off of the State Strategic Highway Safety Plan (SHSP)**

- 72% of rural roads are owned by local entities and contribute approximately 54% of all fatal crashes

- Contribute to regional transportation safety goal and national performance measures

- Position your agency to apply for funding

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Steps in the LRSP Development Process

Step 1: Establish Leadership/ Stakeholder Collaboration

Step 2: Analyze the Safety Data

Step 3: Determine Emphasis Areas

Step 4: Identify Strategies

Step 5: Prioritize and Incorporate Strategies

Step 6: Evaluate and Update the LRSP

THE LRSP DEVELOPMENT PROCESS

6 Evaluate and Update

5 Prioritize and Incorporate Strategies

4 Identify Strategies

3 Determine Emphasis Areas

2 Analyze Safety Data

1 Establish Leadership

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Mono County Safety Partners:

Mono County Board of Supervisors
Local Transportation Commission (LTC)
Emergency Medical Services (EMS)
Public Works Road Department
Behavior Health Department
Public Health Department
Community Development / Planning
IT Department
Sheriff's Office
Town of Mammoth Lakes
Eastern Sierra Transit Authority
California Highway Patrol
County RPACs
Local Fire Protection Districts
Mono County Office of Education & Safe Kids of CA
Eastern Sierra Unified School District
Eastside Velo
Mammoth Tourism
Mono Health Care Districts
Mammoth Lakes Police Department
Others ?

Public Outreach:

Residents of Mono County know their communities best. Their input will be necessary to fully address road safety issues.

A Road Safety Survey has been created to obtain public input on Mono County Road safety.

Please participate in the survey:

https://monocounty.ca.gov/roads

Step 2: Analyze the Safety Data

Local Road Safety Plan Elements

Data driven

- Focused on fatal and serious injury crashes
- Identifies crash types to address

Identifies roadway characteristics (risk factors) common to fatal and serious injury crashes

Prioritizes the road network based on the presence of these risk factors (more risk factors = higher priority)

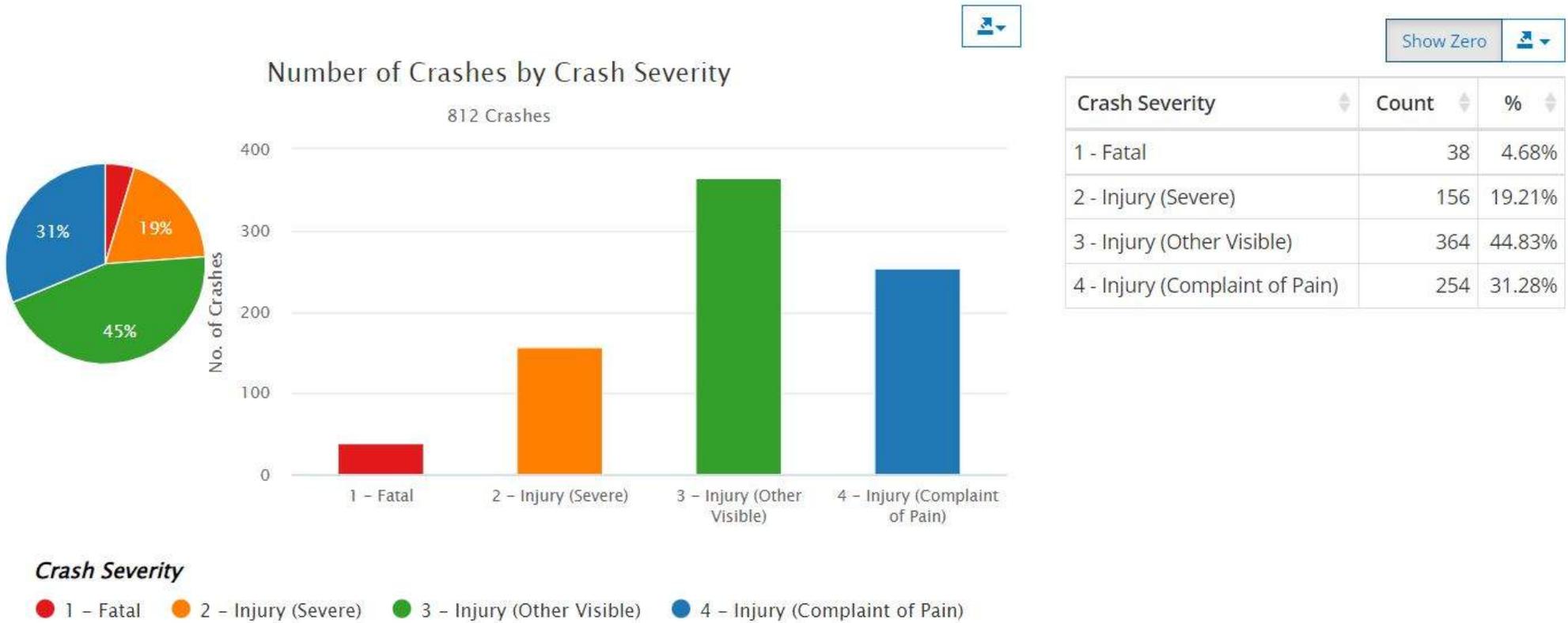Identifies countermeasures to address high priority locations

Prioritizes projects

Address behavioral and other risk factors contributing to traffic collisions through agency partnerships and collaboration

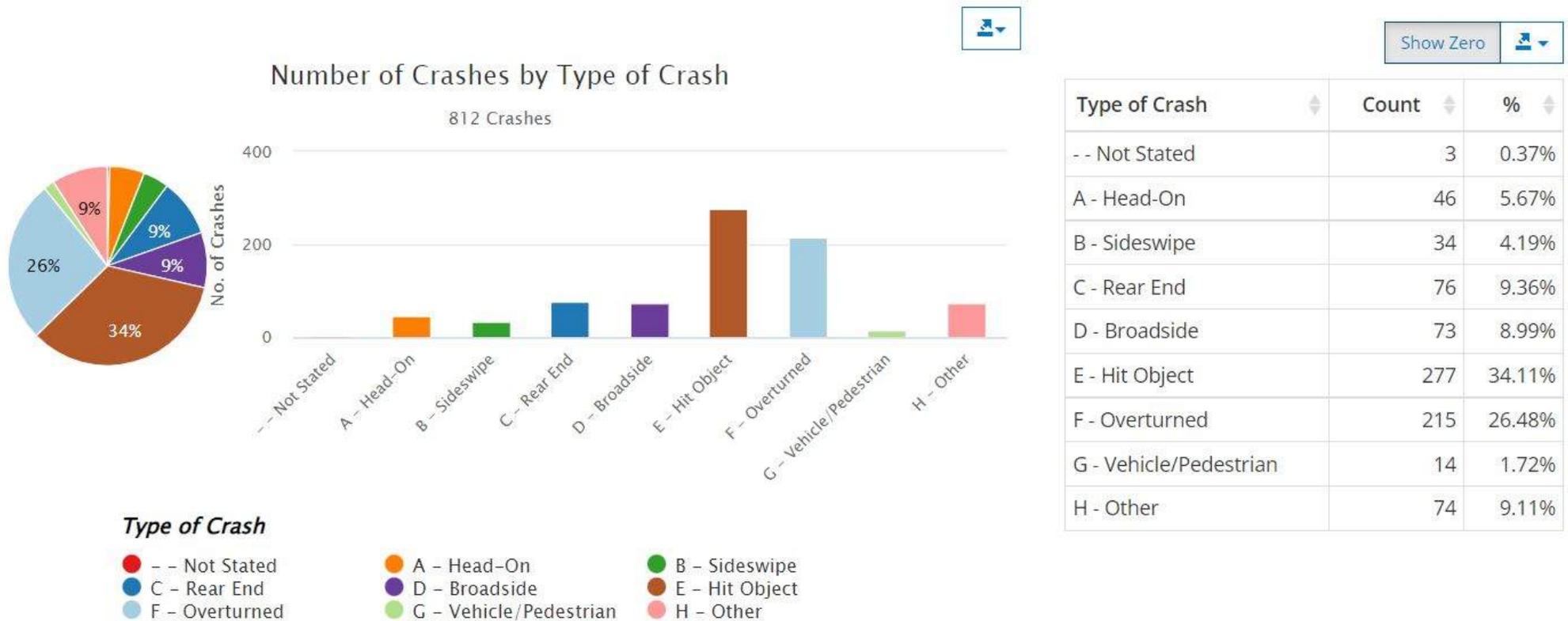# Traffic Collision Data for all of Mono County from 2011 to 2020.

Includes State Highways, Town of Mammoth Lakes, and Mono County Maintained Roads

Total Crashes	812	Total Victims	46 Killed & 1,142 Injured	State Highway	652 (80.3%)
Ped Crashes	16 (2%)	Bike Crashes	26 (3.2%)	Motorcycle Crashes	132 (16.3%)

Number of Crashes by Crash Severity

812 Crashes

Show Zero

Crash Severity	Count	%
1 - Fatal	38	4.68%
2 - Injury (Severe)	156	19.21%
3 - Injury (Other Visible)	364	44.83%
4 - Injury (Complaint of Pain)	254	31.28%

Crash Severity

● 1 – Fatal ● 2 – Injury (Severe) ● 3 – Injury (Other Visible) ● 4 – Injury (Complaint of Pain)

Traffic Collision Data for all of Mono County from 2011 to 2020.

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Number of Crashes by Type of Crash

812 Crashes

Type of Crash	Count	%
- - Not Stated	3	0.37%
A - Head-On	46	5.67%
B - Sideswipe	34	4.19%
C - Rear End	76	9.36%
D - Broadside	73	8.99%
E - Hit Object	277	34.11%
F - Overturned	215	26.48%
G - Vehicle/Pedestrian	14	1.72%
H - Other	74	9.11%

Show Zero

Type of Crash

- – – Not Stated
- A – Head–On
- B – Sideswipe
- C – Rear End
- D – Broadside
- E – Hit Object
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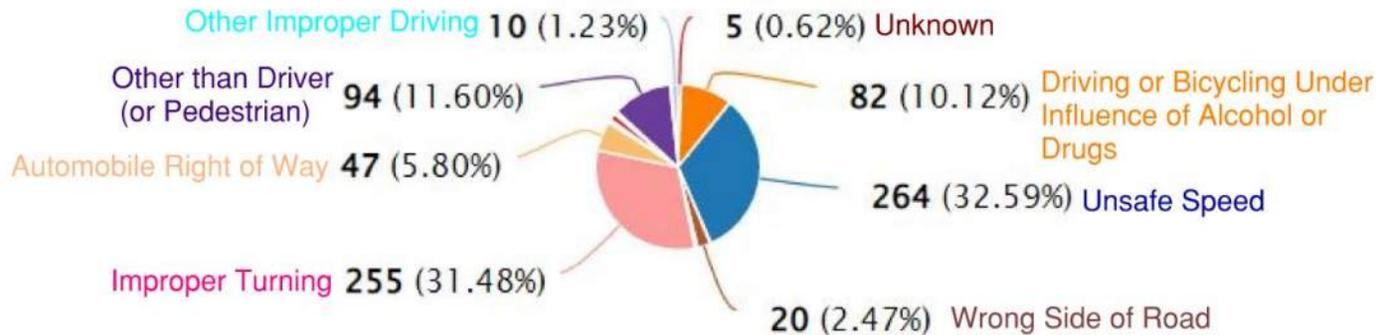- G – Vehicle/Pedestrian
- H – Other

Traffic Collision Data for all of Mono County from 2011 to 2020.

Includes State Highways, Town of Mammoth Lakes, and Mono County Maintained Roads

Number of Crashes by PCF Violation

810 Crashes

Other Improper Driving 10 (1.23%)

5 (0.62%) Unknown

Other than Driver (or Pedestrian) 94 (11.60%)

82 (10.12%) Driving or Bicycling Under Influence of Alcohol or Drugs

Automobile Right of Way 47 (5.80%)

264 (32.59%) Unsafe Speed

Improper Turning 255 (31.48%)

20 (2.47%) Wrong Side of Road

PCF Violation	Count	%
00 - Unknown	5	0.62%
01 - Driving or Bicycling Under the Influence of Alcohol or Drug	82	10.12%
02 - Impeding Traffic	1	0.12%
03 - Unsafe Speed	264	32.59%
04 - Following Too Closely	2	0.25%
05 - Wrong Side of Road	20	2.47%
06 - Improper Passing	2	0.25%
07 - Unsafe Lane Change	3	0.37%
08 - Improper Turning	255	31.48%
09 - Automobile Right of Way	47	5.80%
10 - Pedestrian Right of Way	2	0.25%
11 - Pedestrian Violation	4	0.49%
12 - Traffic Signals and Signs	10	1.23%
13 - Hazardous Parking	1	0.12%
16 - Other Equipment	2	0.25%
17 - Other Hazardous Violation	3	0.37%
18 - Other Than Driver (or Pedestrian)	94	11.60%
21 - Unsafe Starting or Backing	3	0.37%
22 - Other Improper Driving	10	1.23%

Step 3: Determine Emphasis Areas

What are Emphasis Areas?

Emphasis areas are an opportunity to improve safety and should reflect the input of the group and consider strategies from the 4 E's of roadway safety improvement when appropriate

Motorcycle Related	132 crashes (16%)
Alcohol Involved	108 crashes (13%)
Intersection Related	75 crashes (9%)
Snow Related	66 crashes (8%)
Animal Related	60 crashes (7%)
Bicycle Involved	26 crashes (3%)
Pedestrian Involved	16 crashes (2%)
Truck Involved	6 crashes (0.7%)

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Step 3: Determine Emphasis Areas

With Crash Data:

Emphasis areas should be consistent with trends identified in the data.

Mono County Traffic Collision Factors Based on Level of Injury
Statewide Integrated Traffic Records System (SWITRS) from 2011 to 2020

Mono County Ranking	Fatal Injury (Average Collisions per Year)	Fatal and Severe Injury* (Average Collisions per Year)	All Injuries (Average Collisions per Year)
1	DUI - Alcohol Involved (1.3)	Speeding Related (8.6)	Speeding Related (45.6)
2	Older Adult 65+ (1.2)	Motorcycle (5.9)	Older Adults 65+ (16.3)
3	DUI - Drugs Involved (1.0)	Older Adult 65+ (4.7)	Motorcyclist (15.0)
4	Unrestrained Occupant (1.0)	DUI - Alcohol Involved (4.3)	DUI - Alcohol Involved (14.5)
5	Speeding Related (0.9)	Unrestrained Occupant (3.1)	Distracted Driving (8.4)
6	Motorcycle (0.6)	DUI - Drugs Involved (2.3)	Unrestrained Occupant (6.3)
7	Distracted Driving (0.5)	Distracted Driving (1.5)	DUI - Drugs Involved (3.5)
8	Pedestrian (0.2)	Bicyclist (1.1)	Bicyclist (2.9)
9	Bicyclist (0.1)	Pedestrian (0.6)	Pedestrian (2.2)

Statewide Integrated Traffic Records System (SWITRS) Data obtained from SafeTREC Transportation Injury Mapping System (TIMS)

Note: This data includes all of Mono County including State Highways, County Roads, and Town of Mammoth Lakes roads.

* Severe Injury: **An injury other than a fatal injury** which results in broken bones, dislocated or distorted limbs, severe lacerations, or unconsciousness at or when. taken from the collision scene. It does not include minor laceration

Step 4: Identify Strategies

What are Strategies?

- Strategies focus on addressing specific emphasis areas.

- Consider contributing factors

- Reflect strategies employing the 4 E's.

- Address high-priority corridors or locations

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Step 5: Prioritize and Incorporate Strategies

Curve Chevrons

Curve Warning Sign
With Advisory Speed

Edgeline Rumble Strips

Roadway Safety Edge

Engineering:

- Implementation of Engineering Countermeasures
  Incorporation of road safety countermeasures into Capital Road Improvement Projects and Road Maintenance Projects - in progress

- Road Safety Engineering Projects Underway
    - Systemic Safety Curve Warning Sign Project
    - Mono County Guardrail Replacement Phase 1
    - Mono County Right-Edgeline Project
    - Benton Crossing Road Safety Assessment / Realignment of Wild Willy's Hot Tub Access Rd
    - June Lake Village Pedestrian Safety Project

Step 5: Prioritize and Incorporate Strategies

Engineering: (continued)

- Traffic Data Collection / Speed Management Plans for our Communities
  Data collection, Engineered Speed & Traffic Studies for specific roads and communities, collection of road horizontal and vertical geometry, etc.
  - in progress

- Engineering / Road Dept.
  Implementation of roadside messaging trailer with anti-speeding message and traffic data collector to slow down traffic at locations throughout the County - in progress

- Road Safety Hazard Location and Notification System (Partnership with TOML)
  The engineering dept is working with IT to develop an online GIS map-based system where the public can click a location on a map to identify existing road hazards, and the Road Dept / Engineering / TOML will be notified via email in real time – in progress

Questions?

Your input is an
important part of
the plan to make our
roads safer!

What road safety issues have you experienced in your community?

What emphasis areas are most relevant to your community?

Are there road safety concerns not present in the data?

Take the Road Safety Survey located at: https://monocounty.ca.gov/roads