

Appendix C2:
Alpine County Focus
Location Write Ups

Alpine County Focus Location Observations and Recommendations

State Route 88 [SSAR Segment No. 8]

From the Alpine/Amador County Line to the East side of Caples Lake (2.9 Miles)

Existing Conditions

This section of State Route 88 begins at the Alpine/Amador County Line near the Kirkwood Inn and continues past Caples Lake. This segment includes the portion of roadway known as the 'Ice Box' which experiences frequent icy conditions during winter months. Caltrans is investigating potential Road Weather Information Systems (RWIS) and a potential ice detection and warning system to deploy at the Ice Box area.

The roadway consists of two 12' lanes and a shoulder ranging from 0' to 30' for pullouts. Several improvements have been made to this segment to aid drivers during winter driving conditions. The pavement, signage, and striping have all been recently updated. Caltrans is developing plans to improve roadway safety along SR 88 in Alpine County with a project to install centerline rumble strips, repair existing asphalt surfaces, restriping the roadway and improve warning signs and markings.



Incident History

Based on SWITRS data from January 2013 to December 2017, there were 35 collisions on this segment. Most of the incidents were caused by travelling at an unsafe speed and resulted in hitting an object.

Two fatalities occurred on this segment. The first fatality occurred in 2013 approximately 300 feet east of Caples Lake. It was caused by unsafe speed which caused the vehicle to hit an object. Alcohol was involved and inclement weather

conditions were reported. The second fatality occurred in 2014 approximately 83' east of Caples Lake. It was caused by unsafe speed which led to overturning. No alcohol or inclement weather conditions were involved. Both fatal collisions occurred during the day.

Two severe injuries also occurred on this segment. The first occurred in 2015 approximately 20 feet east of Caples Lake. It was caused by a motorcycle travelling at an unsafe speed and resulted in hitting an object. Alcohol was not involved. The second severe injury occurred in 2017 approximately 3,168 feet west of Schneider Cow Camp Rd. It was caused by a motorcycle improperly turning and resulted in hitting an object. Alcohol was involved. Both severe injuries occurred during the day with no inclement weather reported.

Segment Collision Summary		
Crash Severity		
Fatal/Severe Injuries	4	11%
Other Visible Injury/Complaint of Pain	7	20%
Property Damage Only	24	69%
Most Frequent Collision Types		
Hit Object	22	63%
Overturn	4	11%
Rear End	4	11%
Sideswipe	4	22%
Collision Factors		
Unsafe Speed	20	57%
Automobile Right of Way	0	0%
DUI	3	9%
Night Time	5	14%
Inclement Weather	3	9%

Suggestions for Improvements

- Conduct a Roadside Signage Safety Audit (RSSA) and update roadside signage with a focus on curve warnings, edge delineation and nighttime visibility
- Planned Caltrans project scheduled for 2018 will install rumble strips, repair damaged pavement and upgrade signs and markings

State Route 88 [SSAR Segment No. 9]

From the East side of Caples Lake to East of Forestdale Rd (4.96 Miles)

Existing Conditions

This portion of State Route 88 shares the same features as the adjacent segment, described above. The roadway is winding and narrows in several areas, leaving vehicles driving next to steep embankments. These embankments, or the guardrails protecting them, result in the hit object type collisions caused by unsafe speed. Caltrans is developing plans to improve roadway safety along SR 88 in Alpine County with a project to install centerline rumble strips, repair of existing asphalt surfaces, restriping the roadway and improving warning signs and markings.



Incident History

Based on SWITRS data from January 2013 to December 2017, 40 collisions occurred on this segment. Most of the collisions were caused by unsafe speed and resulted in hitting an object.

One fatality occurred in 2017 approximately 5,808 feet west of Red Creek. It was caused by a truck improperly turning and resulted in a head on collision. The incident occurred during the day and no alcohol or inclement weather was involved. Two severe injuries occurred on this segment. The first took place in 2015 approximately 6,336 feet west of Meiss

Meadows Sno Park. It was caused by improper turning and resulted in hitting an object. The second severe injury occurred in 2017 approximately 258 feet west of Carson Pass. It was caused by a motorcycle travelling at an unsafe speed leading to overturning. Alcohol was involved. Both severe injuries occurred during the day with no inclement weather reported.

Segment Collision Summary		
Crash Severity		
Fatal/Severe Injuries	3	8%
Other Visible Injury/Complaint of Pain	8	20%
Property Damage Only	29	73%
Most Frequent Collision Types		
Hit Object	17	43%
Sideswipe	9	39%
Overturn	5	%
Collision Factors		
Unsafe Speed	19	48%
Automobile Right of Way	0	0%
DUI	3	8%
Night Time	11	28%
Inclement Weather	10	25%

Suggestions for Improvements

- Conduct a Roadside Signage Safety Audit (RSSA) and update roadside signage with a focus on curve warnings, edge delineation and nighttime visibility
- Planned Caltrans project scheduled for 2018 will install rumble strips, repair damaged pavement and upgrade signs and markings

State Route 88/89 [SSAR Segment No. 11]

Location (5.54 Miles)

Existing Conditions

This portion of State Route 88/89 connects the community of Sorensens to Woodfords and Alpine Village. Most of this segment has 12' lanes with 2' paved shoulders. The pavement, signage, and striping have all been recently upgraded. Large trees parallel the roadway on both sides. Caltrans is developing plans to improve roadway safety along SR 88/89 in Alpine County with a project to install centerline rumble strips, repair of existing asphalt surfaces, restriping the roadway and improving warning signs and markings.

This segment becomes difficult to traverse during winter driving conditions. Vehicles travelling at an unsafe speed during inclement weather do not have a lot of room for error when making turns, which results in a high number of hit object type collisions. Public comments have been provided regarding vehicles stopped in the shoulder and encroaching on the roadway when installing tire chains.



Incident History

Based on SWITRS data from January 2013 to December 2017, there were 44 collisions on this segment. An average traffic volume of 3,000 vehicles per day resulted in a crash rate of 1.32 Coll/MVM. Most of the crashes were due to unsafe speed and resulted in hitting an object.

There were 3 fatalities and 1 severe injury on this segment. One fatality occurred in 2015. It was caused by driving on the wrong side of the road and resulted in a head on collision. The other two fatalities occurred in 2017 and were

both caused by driving under the influence of alcohol or drugs. One resulted in hitting an object and the other resulted in a head on collision. The severe injury collision occurred in 2013 and was caused by improper turning which resulted in a sideswipe. All 4 collisions occurred during the day and no adverse weather conditions were reported.

Segment Collision Summary		
Crash Severity		
Fatal/Severe Injuries	4	9%
Other Visible Injury/Complaint of Pain	17	39%
Property Damage Only	23	52%
Most Frequent Collision Types		
Hit Object	24	55%
Head-On	6	14%
Overturn	4	9%
Collision Factors		
Unsafe Speed	14	32%
Automobile Right of Way	1	2%
DUI	4	9%
Night Time	15	34%
Inclement Weather	6	14%

Suggestions for Improvements

- Conduct a Roadside Signage Safety Audit (RSSA) and update roadside signage with a focus on curve warnings, edge delineation and nighttime visibility
- Planned Caltrans project scheduled for 2018 will install rumble strips, repair damaged pavement and upgrade signs and markings
- Consider adding new vehicle chain installation turn outs

SR 88 and SR 89 (Towards Markleeville)

Existing Conditions

To differentiate between two intersections with the same name, this intersection is with State Route 89 heading south towards Markleeville. SR 89 is stop controlled while SR 88 has the right of way. Flashing beacons overhead help warn motorists of the intersection. SR 88 has a designated right turn lane but not a left turn lane onto SR 89. SR 89 has one lane for left turns and one lane for right turns and through movements.

Due to the large trees, and a horizontal curve on SR 88, which limits sight distance for motorists on SR 89 to determine when it is safe for them to proceed through the stop sign.



Incident History

Based on SWITRS data from January 2013 to December 2017, there were 6 collisions at this intersection. Half of these collisions were caused by unsafe speed while 33% resulted in a rear end collision.

All the collisions reported for this intersection are also included in the SR 89 segment, described above.

Intersection Collision Summary		
Crash Severity		
Fatal/Severe Injuries	1	17%
Other Visible Injury/Complaint of Pain	3	50%
Property Damage Only	2	33%
Most Frequent Collision Types		
Rear End	2	33%
Broadside	1	17%
Head-On	1	17%
Collision Factors		
Unsafe Speed	3	50%
Improper Turning	0	0%
Automobile Right of Way	1	17%
DUI	1	17%
Night Time	0	0%
Inclement Weather	0	0%

Suggestions for Improvements

- Conduct a Roadside Signage Safety Audit (RSSA) and update roadside signage with a focus on intersection warning signs, edge delineation and nighttime visibility
- Planned Caltrans project scheduled for 2018 will install rumble strips, repair damaged pavement and upgrade signs and markings