

Roadway Departure Safety Workshop

Northwest California Counties

Sponsored by FHWA California Division
July 17, 2017
Crescent City, California

David Ragland, PhD, MPH, Co-Director, U.C. Berkeley, Safe Transportation
Research and Education Center (SafeTREC)

Topics

- A. Introduction
- B. Road Departure Injuries
- C. Comparison among Counties
- D. Del Norte County (Example)
- E. Potential Countermeasures
- F. Summary
- G. Questions / Contact Information
- H. Appendix (Maps for Individual Counties)

Focus on Northwest Counties





Northwest Counties Counties (Stats)

County	Population	Road Miles (Thousand)	VMT (100 Million)	Caltrans District	CHP Division
Del Norte	27,301	807	2.74	1	1
Humboldt	135,383	2,572	13.41	1	1
Mendocino	87,353	1,587	12.37	1	1
Trinity	13,068	1,340	1.79	2	1
Siskiyou	43,483	3,310	9.50	2	1
Total	306,588	9,617	39.80		
California	38,993,940	195,883	3,398.43		

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Road Way Departure FHWA Definition

Movement Preceding Crash

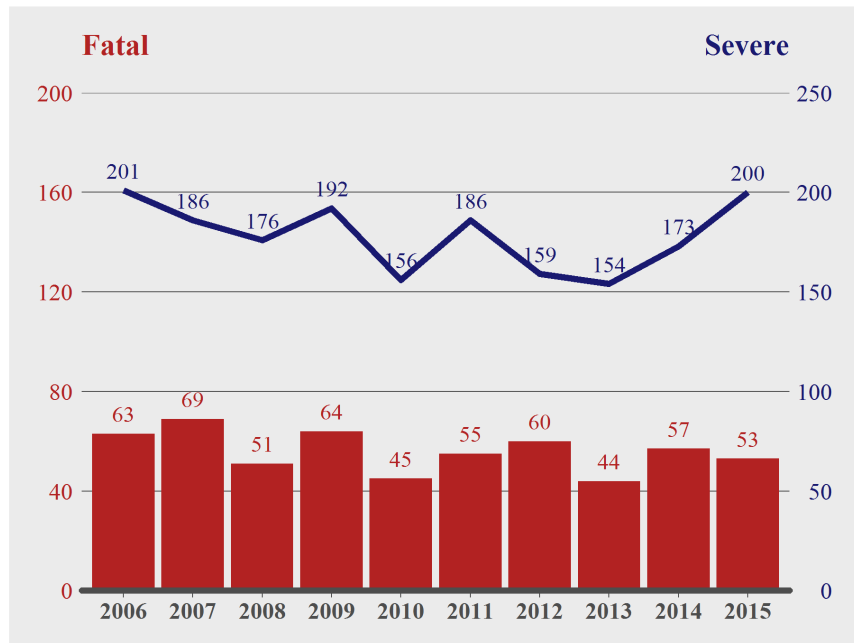
- ☐ Leave roadway left or right
- ☐ Cross over the center line

****and / or****

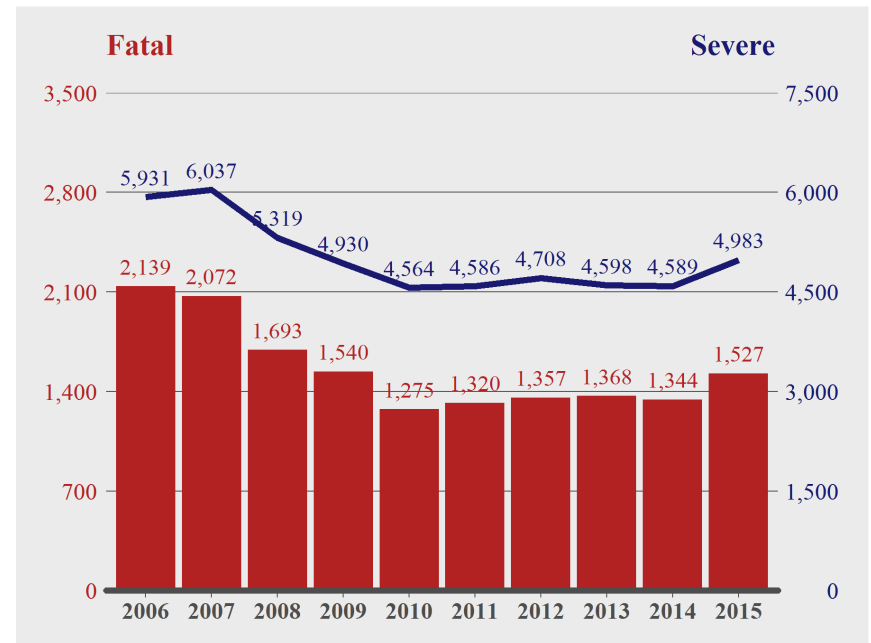
Outcome (If any of these happen its assumed vehicle left roadway)

- ☐ Hit object
- ☐ Roll over
- ☐ Head on

Fatal & Severe Injury Trends (Roadway Departure)



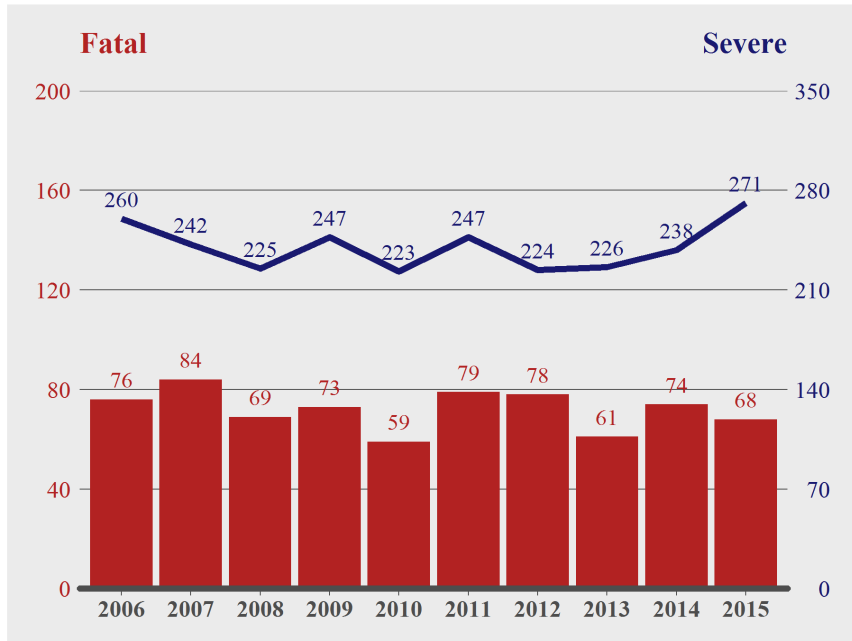
(a) Northwest Counties



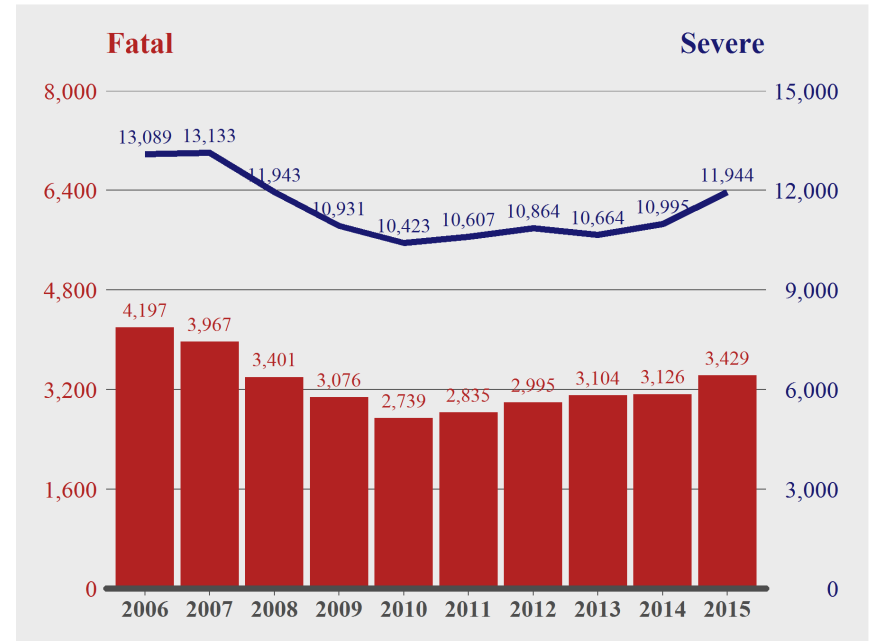
(b) Rest of the State

Source: SWITRS 2006 – 2015

All Fatal & Severe Injury Trends (Northwest Counties vs. California)



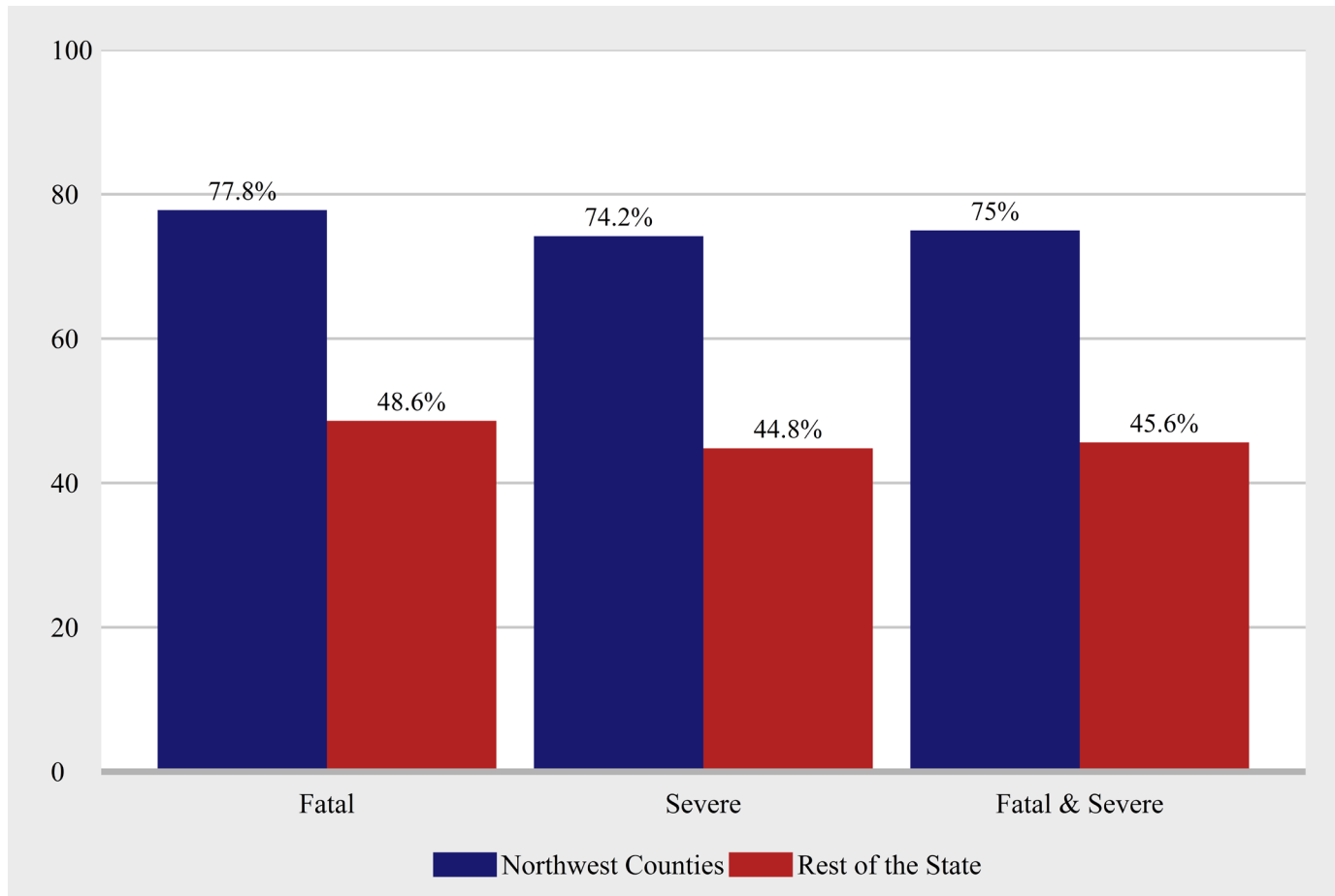
(a) Northwest Counties



(b) California

Source: SWITRS 2006 – 2015

% Fatal and Severe Injuries (Roadway Departure)



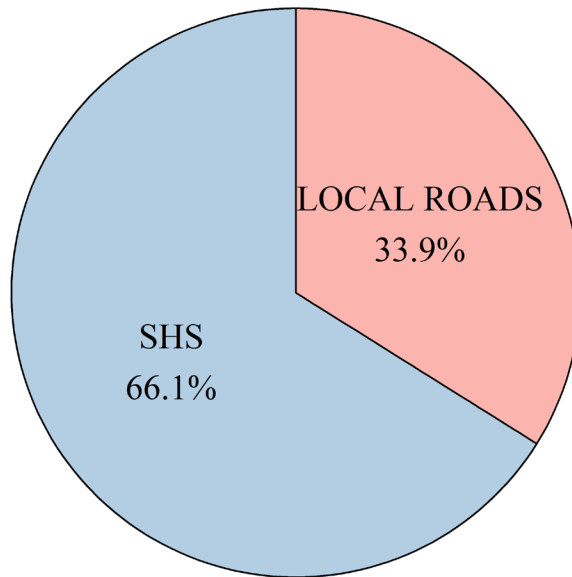
Source: SWITRS 2006 – 2015

7/17/17

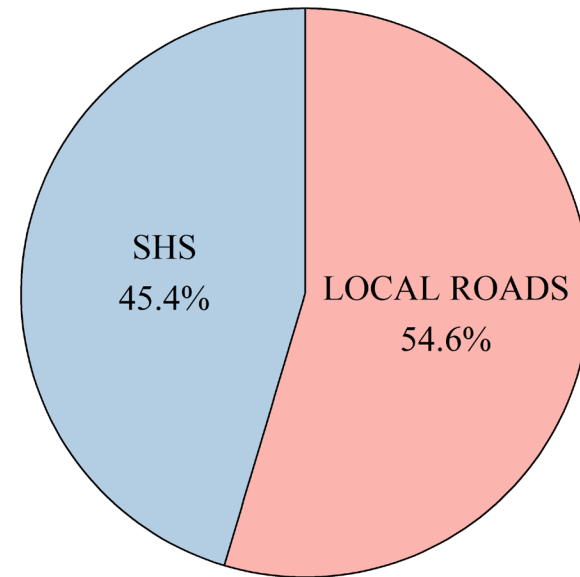
Note: Group injury percentage is defined as group injuries (lane departure) relative to group total injuries.

% Fatal & Severe Injuries (Lane Departures) on State Highway System (SHS) vs. Local Roads

Northwest Counties



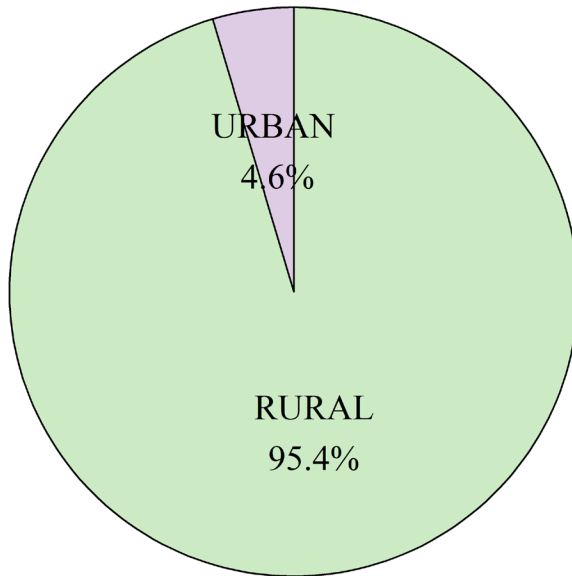
Rest of the State



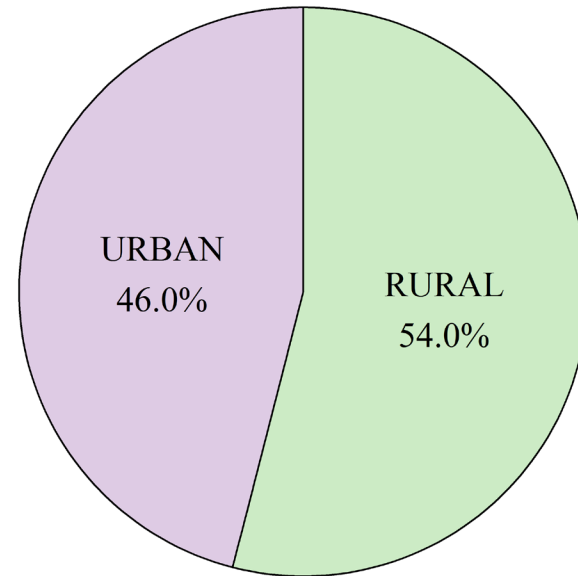
Source: SWITRS 2006 – 2015

% Fatal & Severe Injuries (Lane Departures) and Urbanicity

Northwest Counties

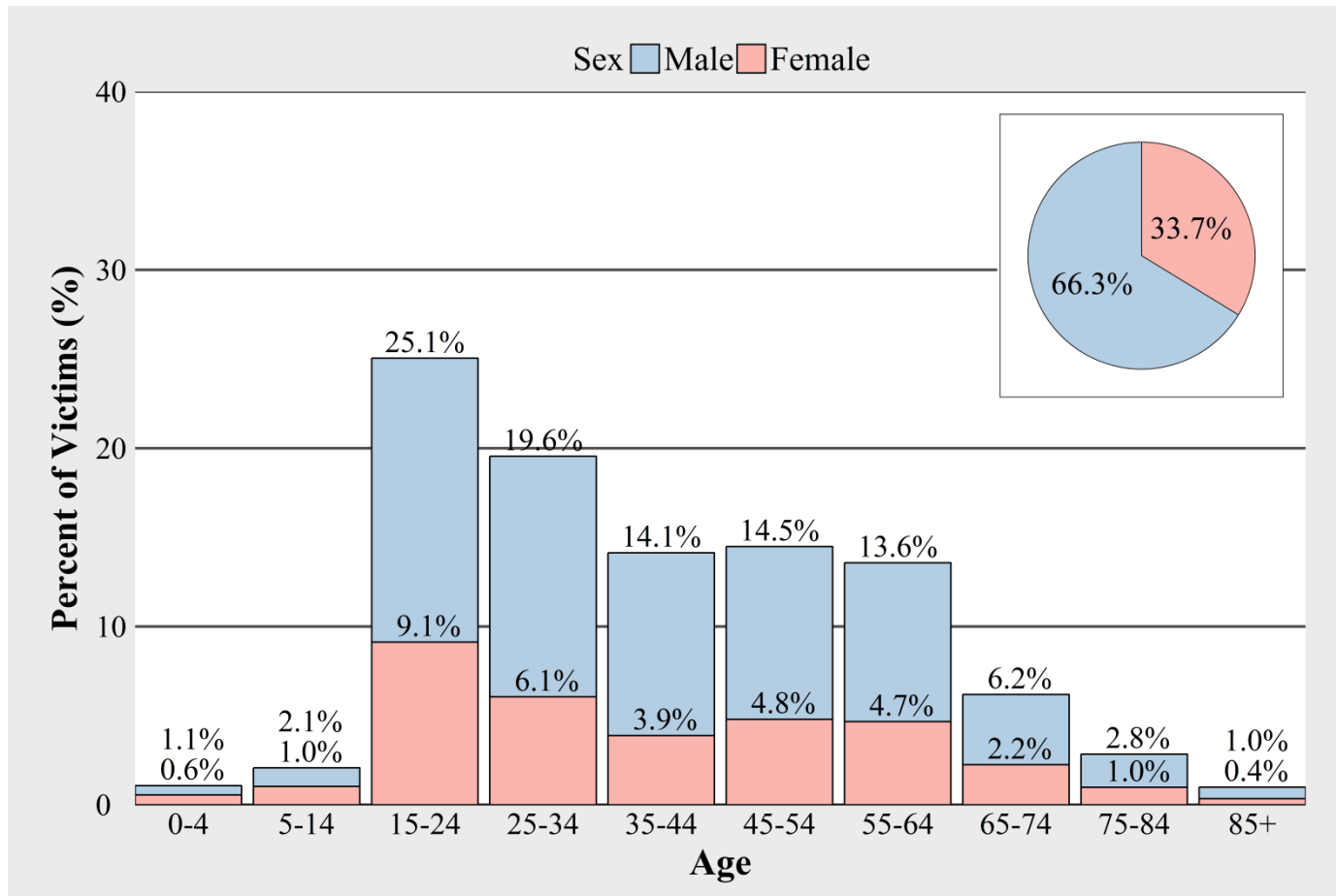


Rest of the State



Source: SWITRS 2006 – 2015

Fatal & Severe Injuries (Lane Departures) by Sex and Age (Northwest Counties)



Source: SWITRS 2006 – 2015

Northwest Counties and Rest of State (Summary)

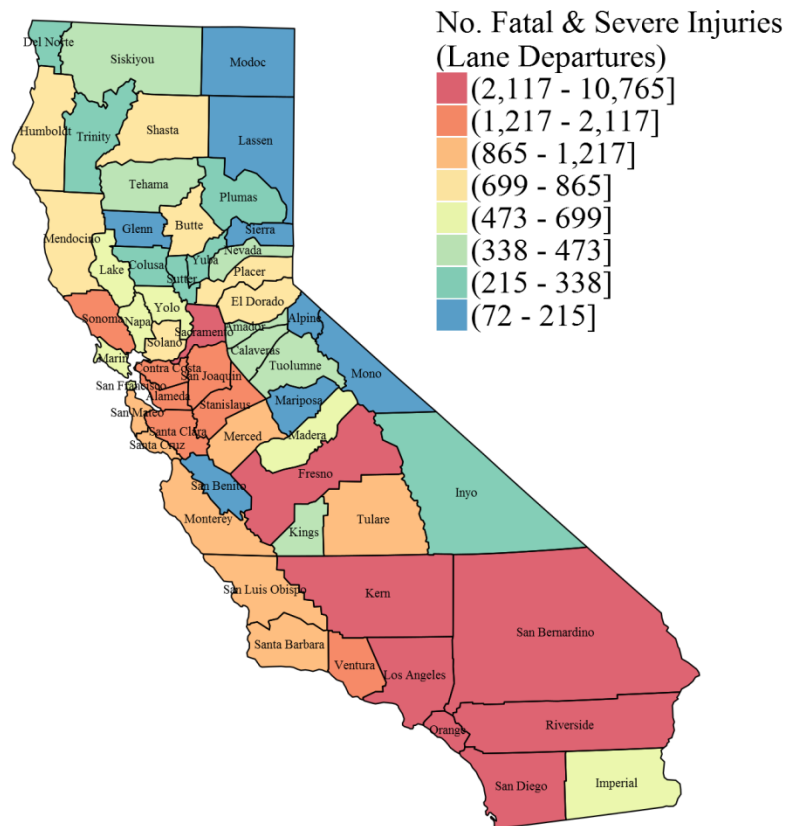
- From 2006-2015 trends downward to about 2010 and then shift upward, for both total and roadway departure injuries (for Northwest Counties and for the rest of the state)
- Percent of roadway departure injuries higher in Northwest Counties compared to rest of the state.
- Population-based roadway departure injuries higher in Northwest Counties compared to rest of the state.
- State Highway and rural involvement for roadway departure injuries higher in Northwest Counties compared to rest of the state.

Topics

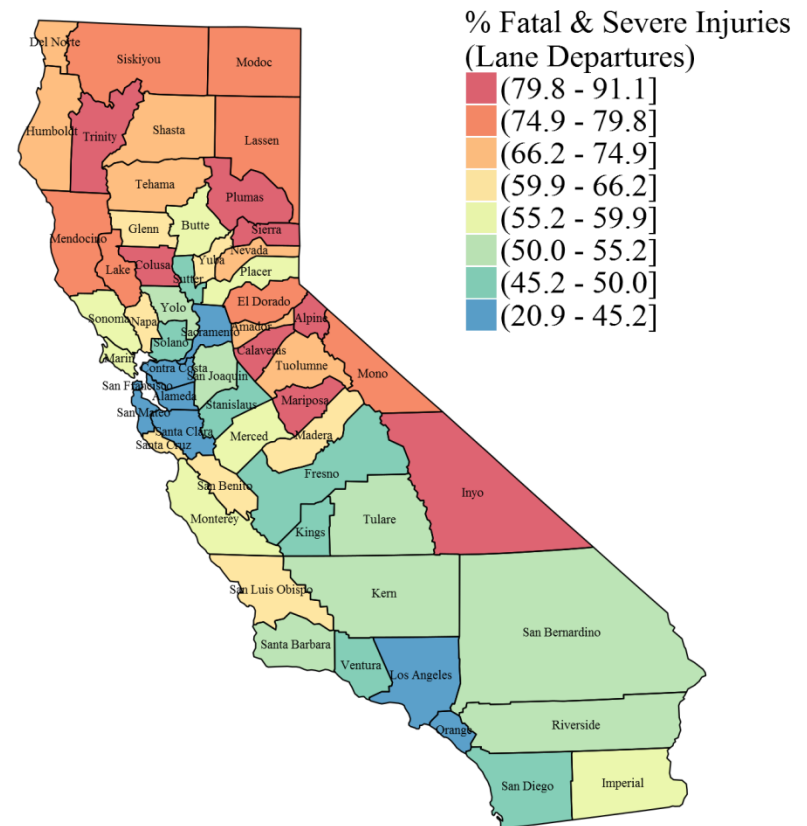
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Fatal and Severe Land Departure Injuries

Number (Left) and Percent of Total (Right) by County



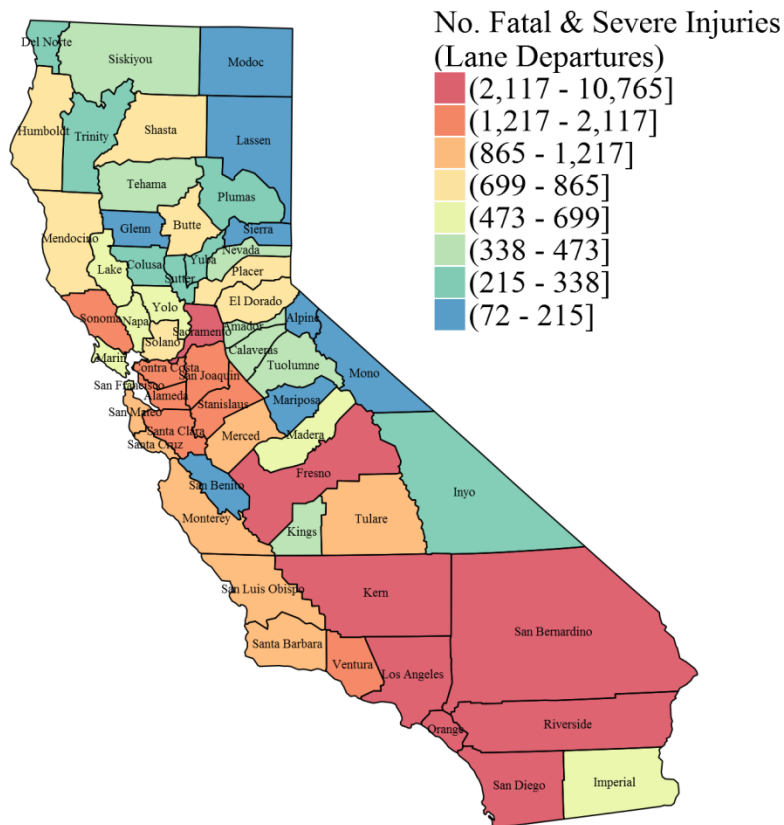
(a) Number of Fatal and Severe Injuries



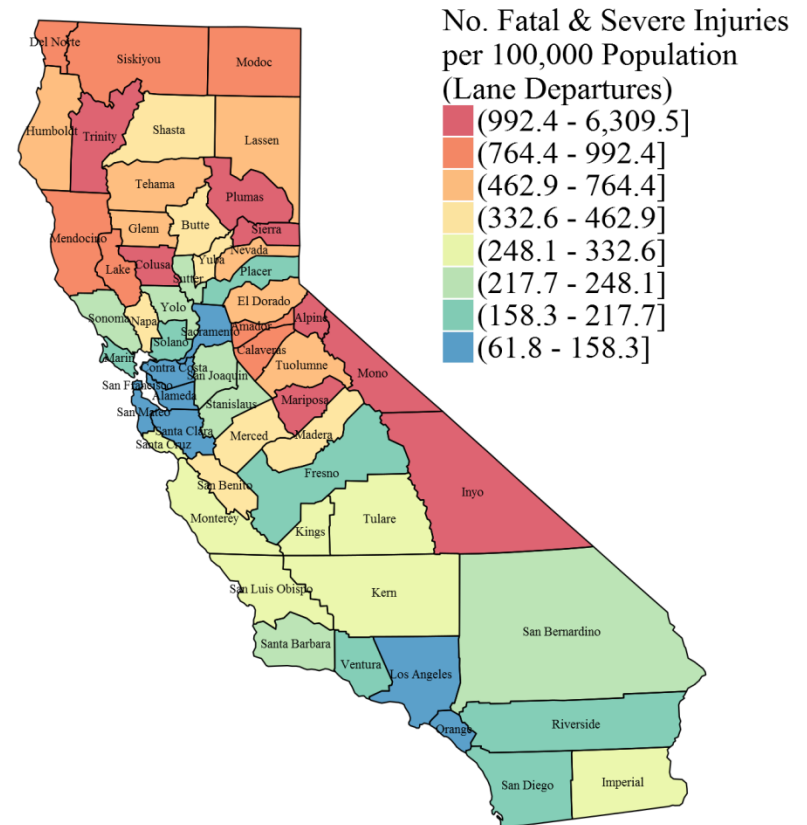
(b) Percent of Fatal and Severe Injuries

Fatal and Severe Lane Departure Injuries

Number (Left) and Population-Based Rate (Right) by County



(a) Number of Fatal and Severe Injuries



(b) Ratio of Fatal and Severe Injuries per 100,000 Population

Roadway Departure – Percent of Total by County

	Leave-Lane FSI Injuries			Total FSI Injuries			Percentage (%)		
County	Fatal	Severe Injuries	FSI	Fatal	Severe Injuries	FSI	Fatal	Severe Injuries	FSI
Del Norte	38	79	117	53	104	157	71.7	76.0	74.5
Humboldt	103	294	397	145	433	578	71.0	67.9	68.7
Mendocino	61	257	318	84	375	459	72.6	68.5	69.3
Siskiyou	46	144	190	56	184	240	82.1	78.3	79.2
Trinity	21	98	119	22	110	132	95.5	89.1	90.2
Total	269	872	1,141	360	1,206	1,566	74.7	72.3	72.9
California	7,187	24,337	31,524	15,487	55,072	70,559	46.4	44.2	44.7



Roadway Departure Fatal and Severe Injuries Population Based Rates Per Year (2011-2015)

County	RwD Fatal / Severe Injuries	Population	Number / 100,000 Population / Year
Del Norte	117	27,301	85.7
Humboldt	397	135,383	58.6
Mendocino	318	87,353	72.8
Trinity	119	13,068	182.1
Siskiyou	190	43,483	87.4
Total	1,141	306,588	74.4
California	31,521	38,993,940	16.2



Roadway Departure Fatal and Severe Injuries VMT Based Rates Per Year (2011-2015)

County	RwD Fatal / Severe Injuries	VMT	Number per 100 Million VMT / Year
Del Norte	117	2.74	8.5
Humboldt	397	13.41	5.9
Mendocino	318	12.37	5.1
Trinity	119	1.79	13.3
Siskiyou	190	9.50	4.0
Total	1,141	39.80	5.7
California	31,521	3,398.43	1.9

*Rate = number per 100 million miles



Roadway Departure Fatal and Severe Injuries Road Miles Based Rates Per Year (2011-2015)

County	RwD Fatal / Severe Injuries	Road Miles	Number per 1000 Road Miles/Year
Del Norte	117	807	29.0
Humboldt	397	2,572	30.9
Mendocino	318	1,587	40.1
Trinity	119	1,340	17.8
Siskiyou	190	3,310	11.5
Total	1,141	9,617	23.7
California	31,521	195,883	32.2

Comparison Among Counties (Summary)

- The percent of fatal and severe injury roadway departure numbers vary by county among Northwest Counties
- Population-based rates vary among Northwest Counties.
- VMT-based rates vary among counties and are substantially higher in Northwest Counties
- Road mile-based rates vary among counties and are somewhat lower in Northwest Counties (implications for systemic approach)

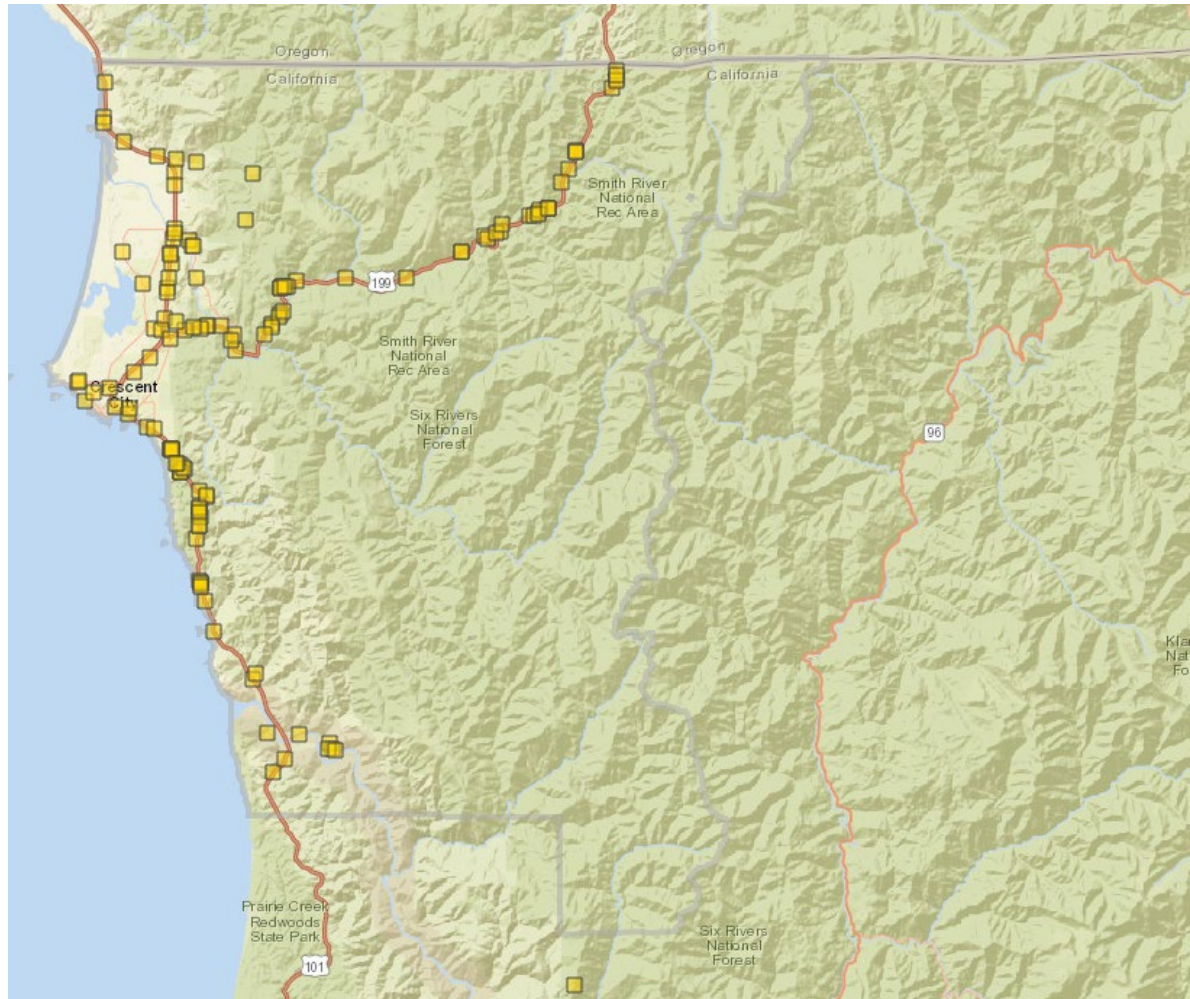
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Del Norte County Road Departure Collisions

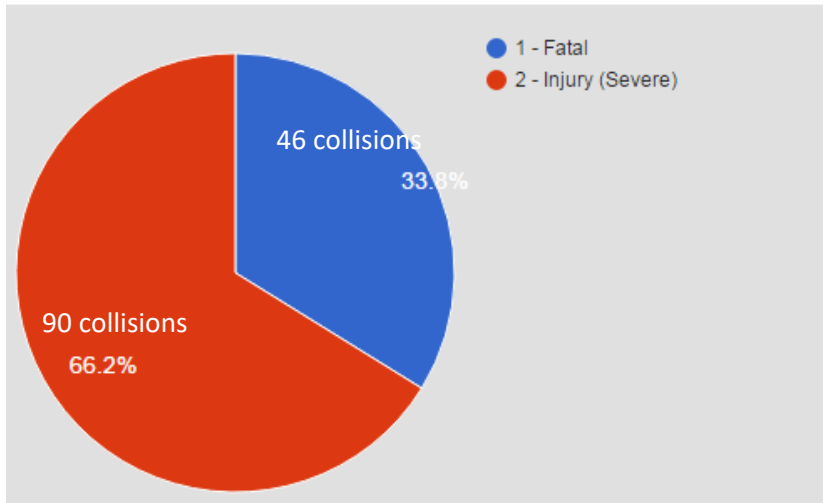
SWITRS Data 2006-2015

Del Norte County Road Departure collisions, from 2006-2015



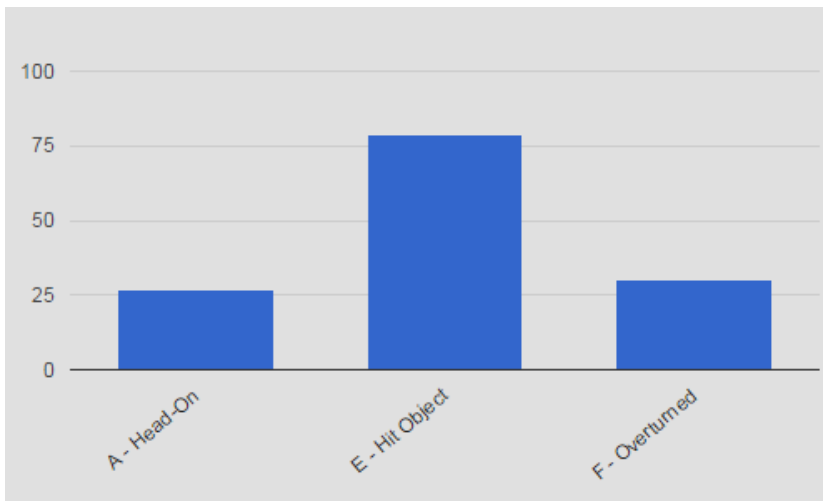
136 fatal or severe road departure collisions (head on, hit object and overturned collision factors) from 2006 to 2015 in all of Del Norte County

Del Norte County Summary Statistics



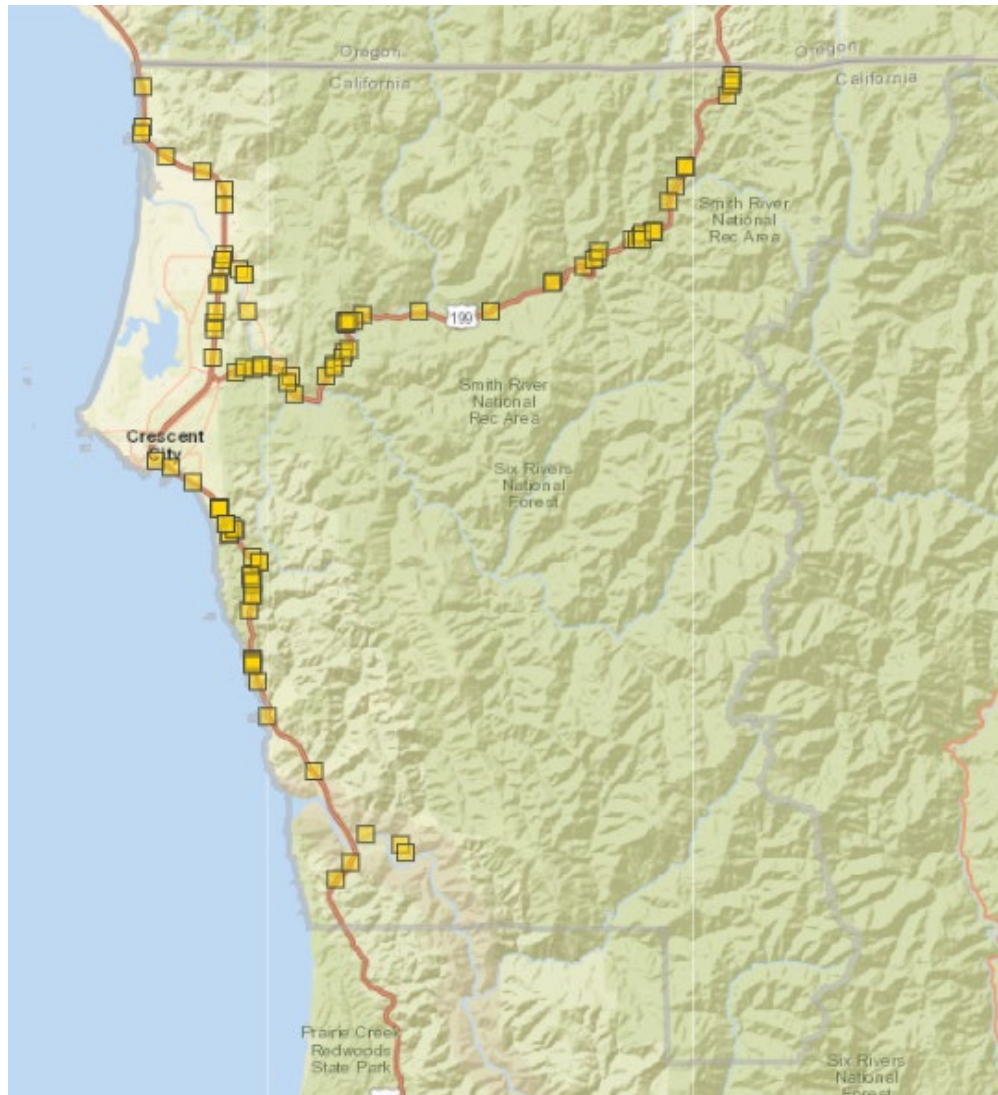
- Summary statistics for 136 collisions.

Primary Collision Factor	Collisions	Percentage
Improper Turning	51	37.5%
Driving or Bicycling Under the Influence of Alcohol or Drug	35	25.7%
Unsafe Speed	33	24.3%
Wrong Side of Road	5	3.7%
Other Than Driver (or Pedestrian)	4	2.9%
- - Not Stated	3	2.2%
Other Improper Driving	2	1.5%
Unknown	1	0.7%
Automobile Right of Way	1	0.7%
Other Equipment	1	0.7%



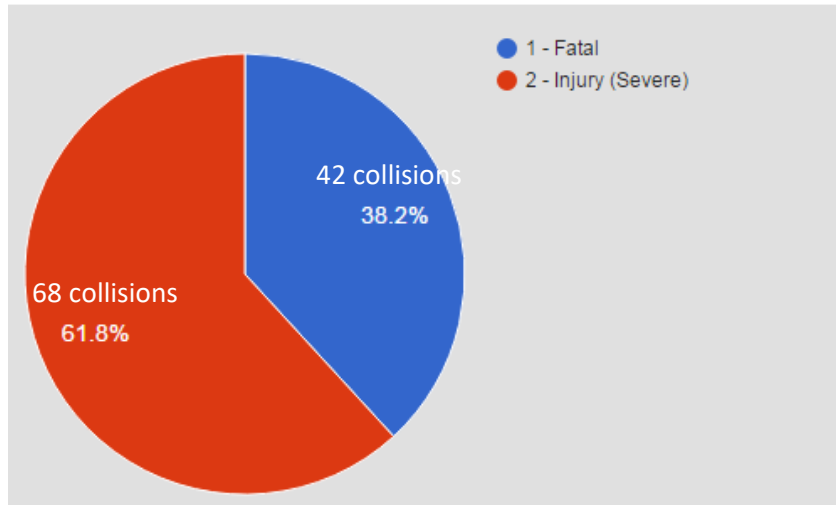
Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	81	59.6%
Other Motor Vehicle	26	19.1%
Non-Collision	25	18.4%
Other Object	3	2.2%
Motor Vehicle on Other Roadway	1	0.7%

Del Norte County State Highway Only Road Departure Collisions



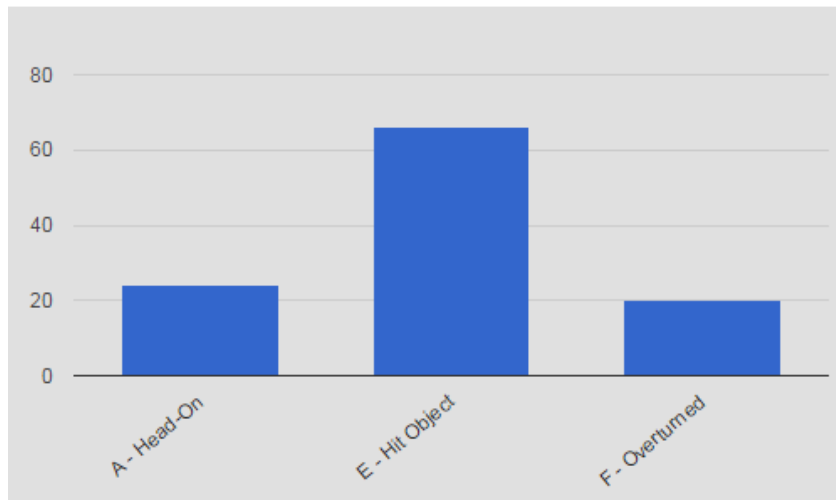
110 fatal or severe road departure collisions (head on, hit object and overturned collision factors) from 2006 to 2015

Del Norte County Summary Statistics for State Highway Only Road Departure Collisions

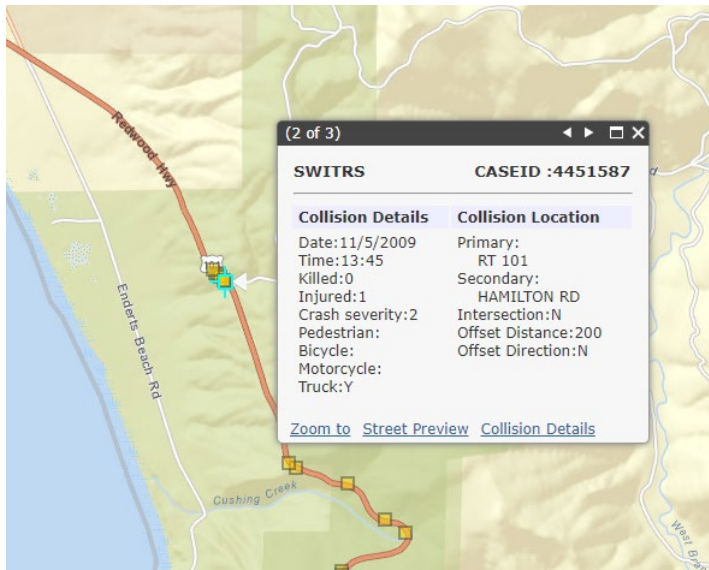


- Summary statistics for 110 collisions.

Primary Collision Factor	Collisions	Percentage
Improper Turning	44	40%
Unsafe Speed	31	28.2%
Driving or Bicycling Under the Influence of Alcohol or Drug	23	20.9%
Wrong Side of Road	5	4.5%
Other Than Driver (or Pedestrian)	3	2.7%
- - Not Stated	2	1.8%
Unknown	1	0.9%
Other Equipment	1	0.9%



Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	66	60%
Other Motor Vehicle	23	20.9%
Non-Collision	17	15.5%
Other Object	3	2.7%
Motor Vehicle on Other Roadway	1	0.9%



Example of Road Departure Collision on Highway-101

Collision Details: Case ID **4451587**

Collision Factors

County	DEL NORTE	City	UNINCORPORATED
Date (M-D-Y)	11-05-2009	Time	13:45
Intersection	RT 101 & HAMILTON RD		
Dist. & Dir. from intersection	200 ft North		
Coordinate Location	41.723988434, -124.13976574		
State Highway	Y	Route	101N Postmile 22.74
Killed & Injured	0 Killed 1 Injured	Crash Type	Hit Object
Alcohol	No	Weather	Cloudy
Primary Collision Factor	Unsafe Speed	Involved with	Fixed Object
Pedestrian Involved	No	Bicycle Involved	No

Party Factors

Number of Parties Involved	1
Party Type	At Fault
Party Direction	Movement Preceding Collision
Driver	Yes North Ran Off Road

Map View

Street View

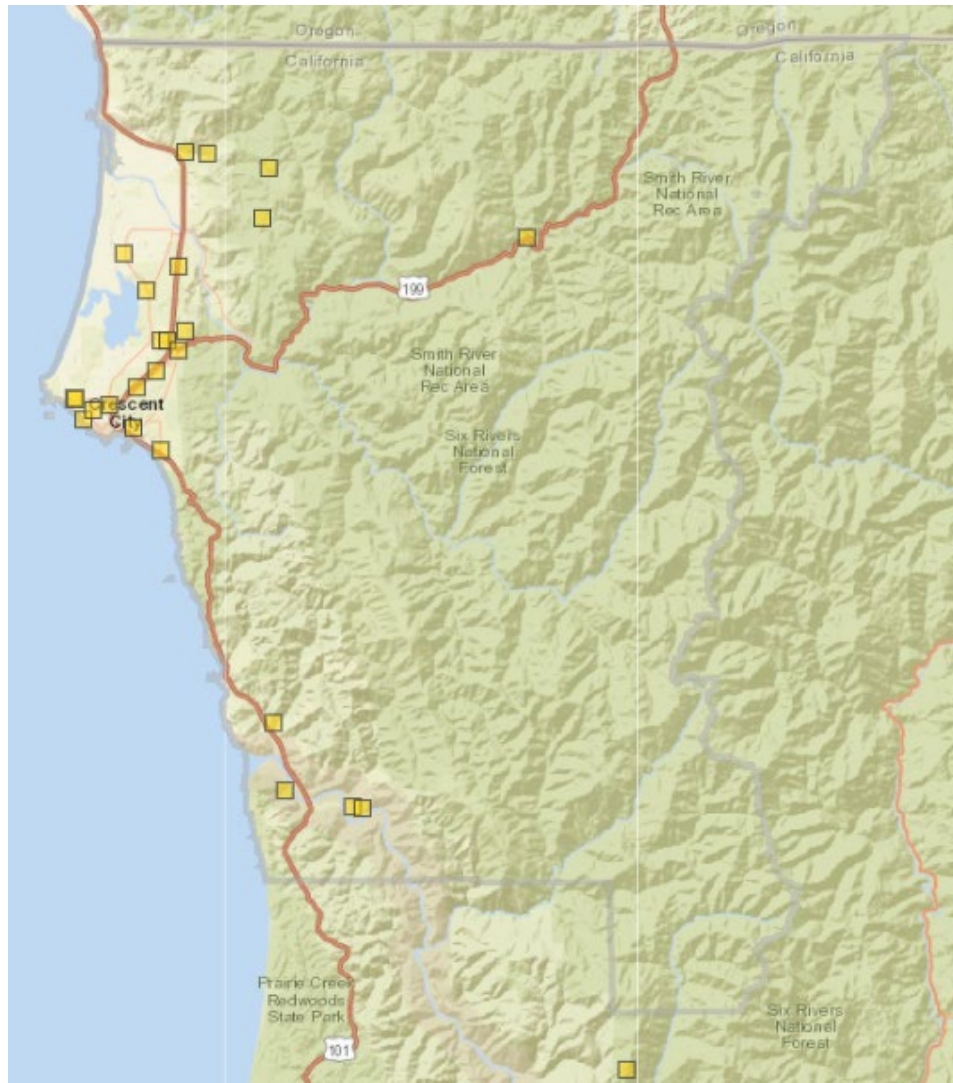
US-101
Crescent City, California
View on Google Maps

Google

Map Data Terms of Use Report a map error

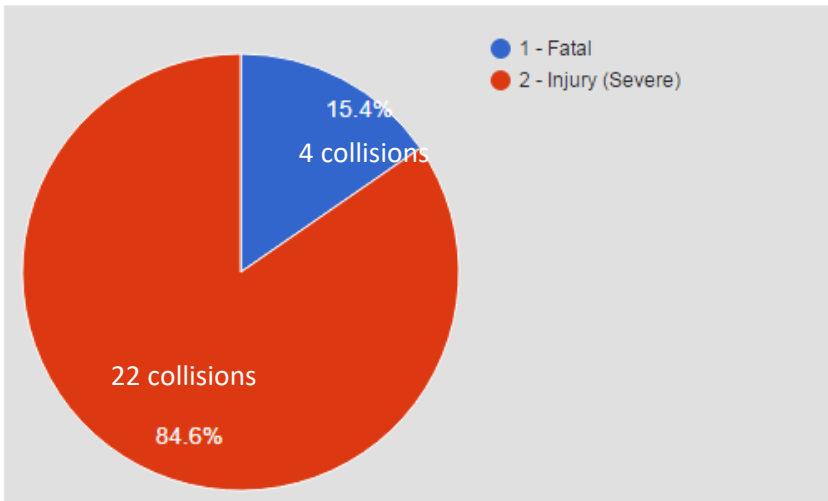
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Del Norte County Non-State Highway Road Departure Collisions



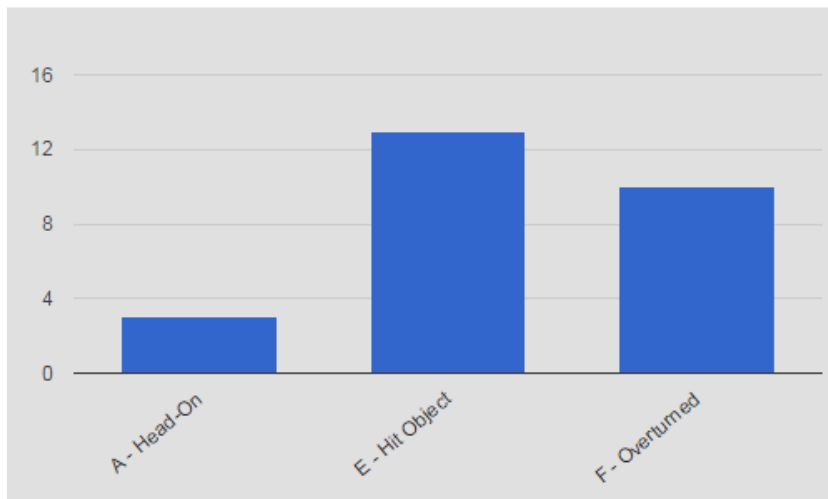
26 fatal or severe road departure collisions (head on, hit object and overturned collision factors) from 2006 to 2015

Del Norte County Summary Statistics for Non-State Highway Road Departure Collisions

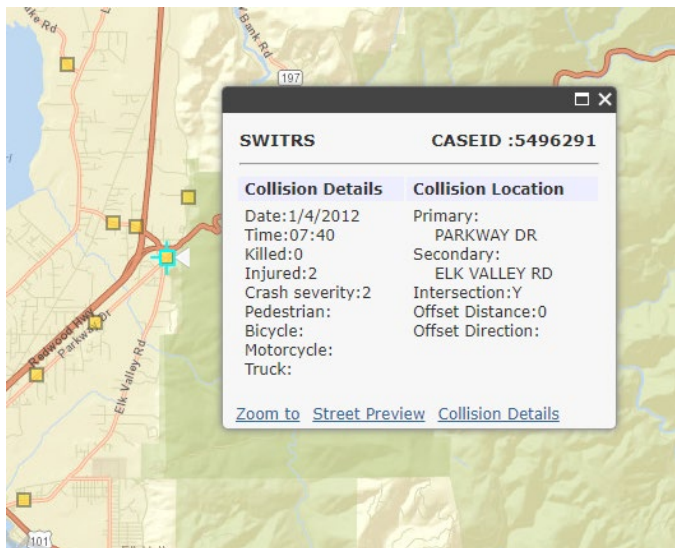


- Summary statistics for 26 collisions.

Primary Collision Factor	Collisions	Percentage
Driving or Bicycling Under the Influence of Alcohol or Drug	12	46.2%
Improper Turning	7	26.9%
Unsafe Speed	2	7.7%
Other Improper Driving	2	7.7%
- - Not Stated	1	3.8%
Automobile Right of Way	1	3.8%
Other Than Driver (or Pedestrian)	1	3.8%



Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	15	57.7%
Non-Collision	8	30.8%
Other Motor Vehicle	3	11.5%



Collision Details: Case ID 5496291

Collision Factors

County	DEL NORTE	City	UNINCORPORATED
Date (M-D-Y)	01-04-2012	Time	07:40
Intersection	PARKWAY DR & ELK VALLEY RD		
Dist. & Dir. from intersection	0 ft East		
Coordinate Location	41.8023349878, -124.140923913		

State Highway	N	Route	-	Postmile	-
Killed & Injured	0 Killed	2 Injured	Crash Type	Head-On	
Alcohol	No		Weather	Clear	
Primary Collision Factor	Automobile Right of Way		Involved with	Other Motor Vehicle	
Pedestrian Involved	No		Bicycle Involved	No	

Party Factors

Number of Parties Involved		2	
Party Type	At Fault	Party Direction	Movement Preceding Collision
Driver	No	North	Proceeding Straight
Driver	Yes	South	Making Left Turn

Map View

Street View

3025 Elk Valley Rd
Crescent City, California
[View on Google Maps](#)

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Example of Road Departure collision on non-state highway road

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Potential Countermeasures

(To be discussed later in the program)

- Start smart program,
- Age wise, Drive smart program
- DUI checkpoints and roving enforcement
- Radar trailer deployment
- High Friction Surface Treatment
- Rumble strips
- Safety Edge

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Summary

- From 2006-2015 trends downward to about 2010 and then shift upward, for both total and roadway departure injuries (for Northwest Counties and for the rest of the state)
- Percent of roadway departure injuries differ among counties and are higher in Northwest Counties compared to rest of the state.
- Population-based roadway departure injuries higher in Northwest Counties compared to rest of the state.
- State highway and rural involvement for roadway departure injuries higher in Northwest Counties compared to rest of the state.
- VMT-based rates vary among counties and are substantially higher in Northwest Counties
- Road mile-based rates vary among counties and are somewhat lower in Northwest Counties (implications for systemic approach)
- Effective Roadway Departure countermeasures are available and will be discussed later

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Contact Information

David Ragland, PhD, MPH

Emeritus Adjunct Professor, School of Public Health

Co-Director, Safe Transportation Research and Education Center (SafeTREC)

(<http://safetrec.berkeley.edu/>)

University of California, Berkeley

[925-457-3682](tel:925-457-3682)

davidr@berkeley.edu

Transportation Injury Mapping System (TIMS:

<http://tims.berkeley.edu/>

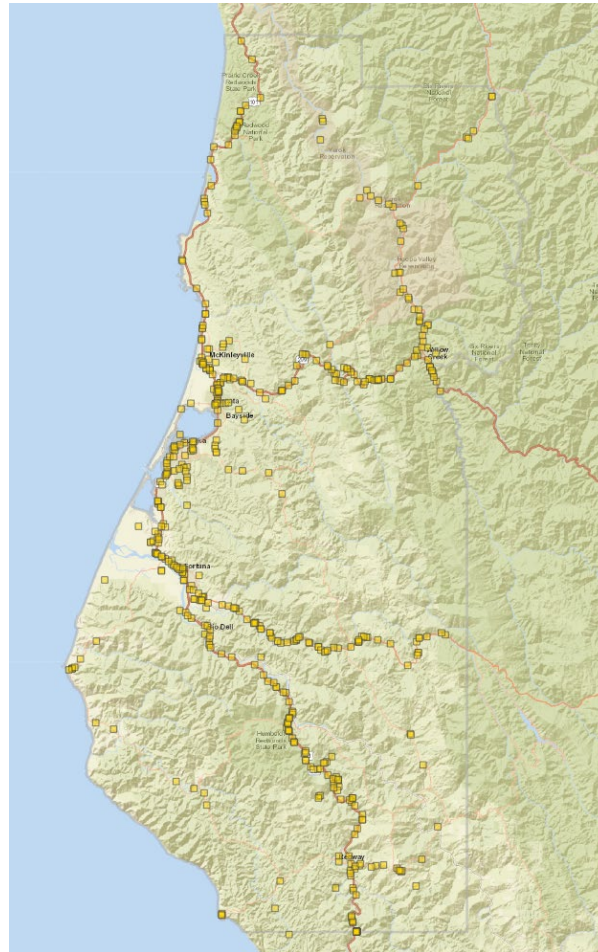
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Humboldt County Road Departure Collisions

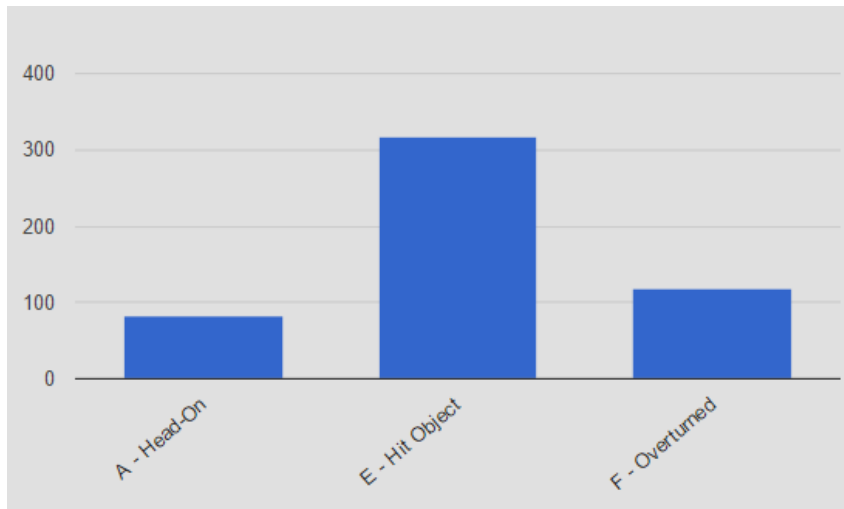
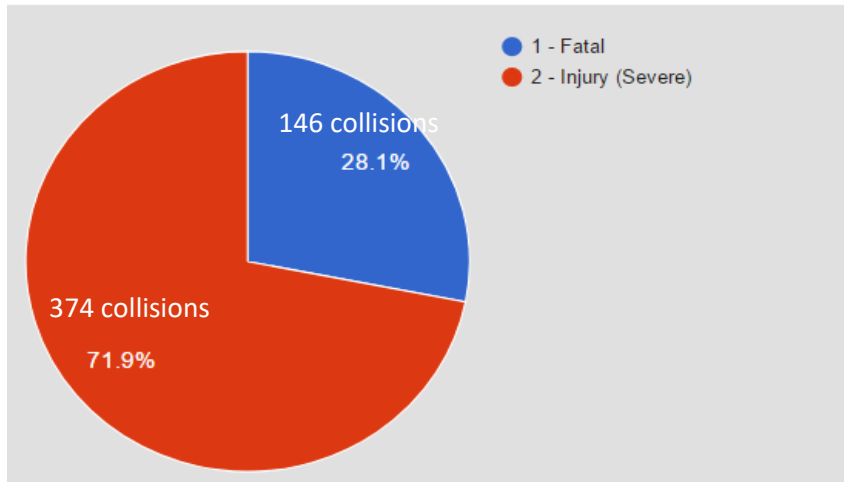
SWITRS Data 2006-2015

Humboldt County Road Departure collisions, from 2006-2015



520 fatal or severe road departure collisions (head on, hit object and overturned collision factors) from 2006 to 2015 in all of Humboldt County

Humboldt County Summary Statistics

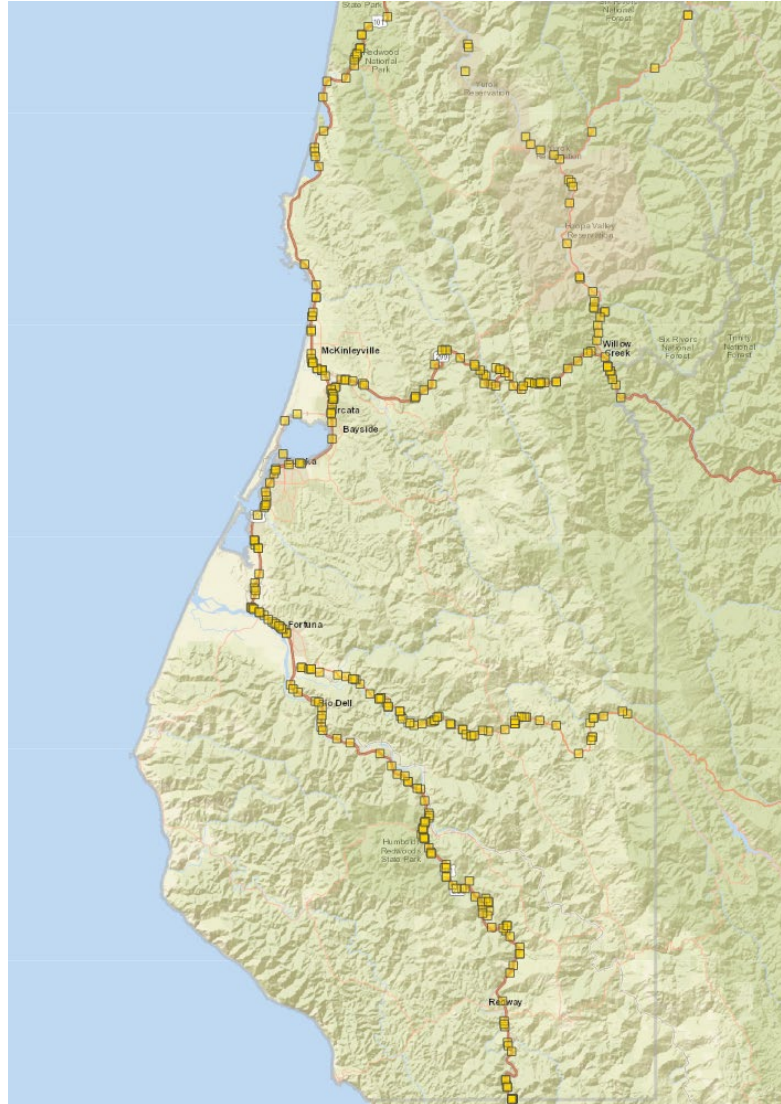


- Summary statistics for 520 collisions.

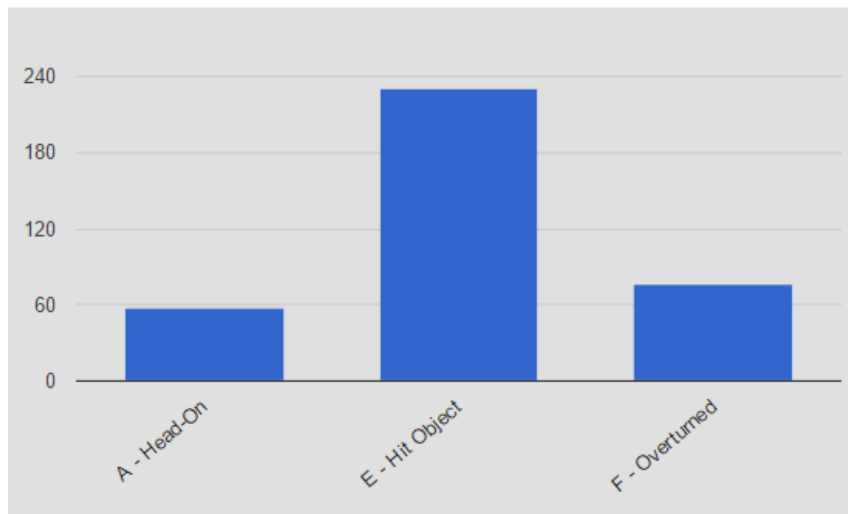
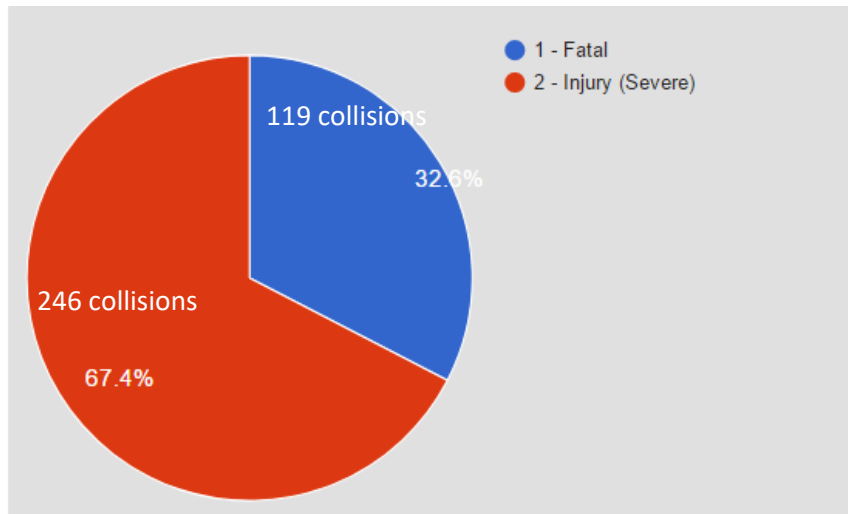
Primary Collision Factor	Collisions	Percentage
Improper Turning	190	36.5%
Driving or Bicycling Under the Influence of Alcohol or Drug	185	35.6%
Unsafe Speed	81	15.6%
Wrong Side of Road	23	4.4%
Other Than Driver (or Pedestrian)	14	2.7%
Automobile Right of Way	6	1.2%
Other Hazardous Violation	6	1.2%
- - Not Stated	4	0.8%
Unknown	2	0.4%
Other Improper Driving	2	0.4%
Improper Passing	1	0.2%
Unsafe Lane Change	1	0.2%
Traffic Signals and Signs	1	0.2%
Hazardous Parking	1	0.2%
Brakes	1	0.2%
Other Equipment	1	0.2%
Unsafe Starting or Backing	1	0.2%

Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	309	59.4%
Non-Collision	109	21%
Other Motor Vehicle	78	15%
Other Object	14	2.7%
Animal	4	0.8%
Bicycle	3	0.6%
- - Not Stated	2	0.4%
Pedestrian	1	0.2%

Humboldt County State Highway Only Road Departure Collisions



Humboldt County Summary Statistics for State Highway Only Road Departure Collisions

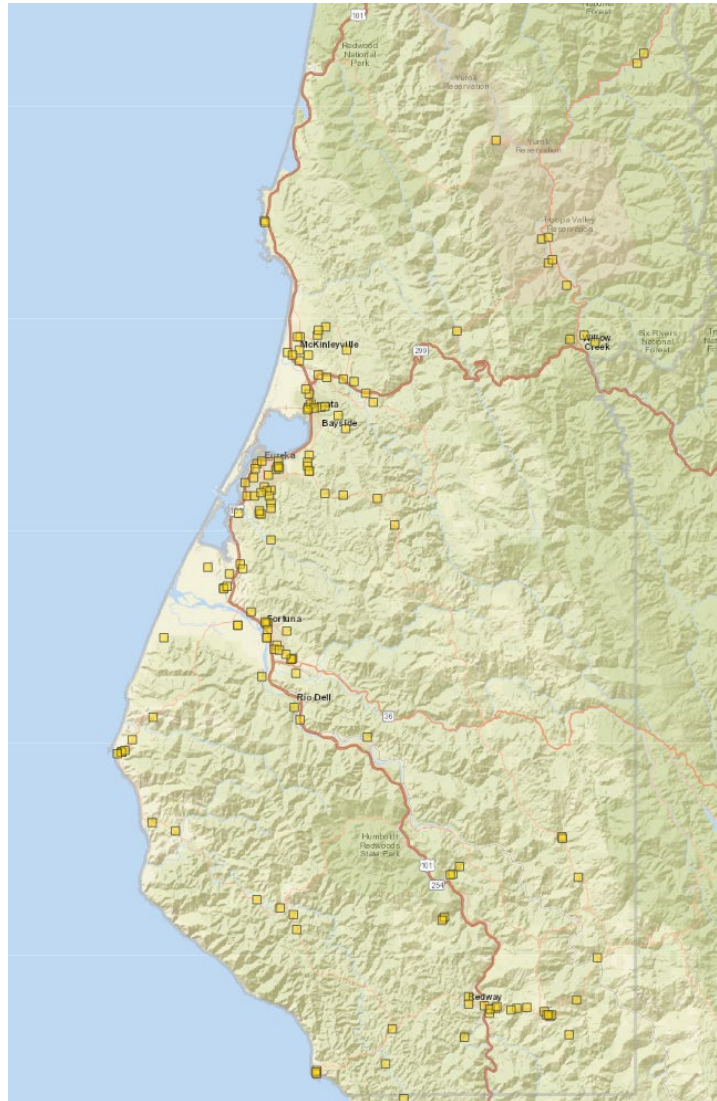


- Summary statistics for 365 collisions.

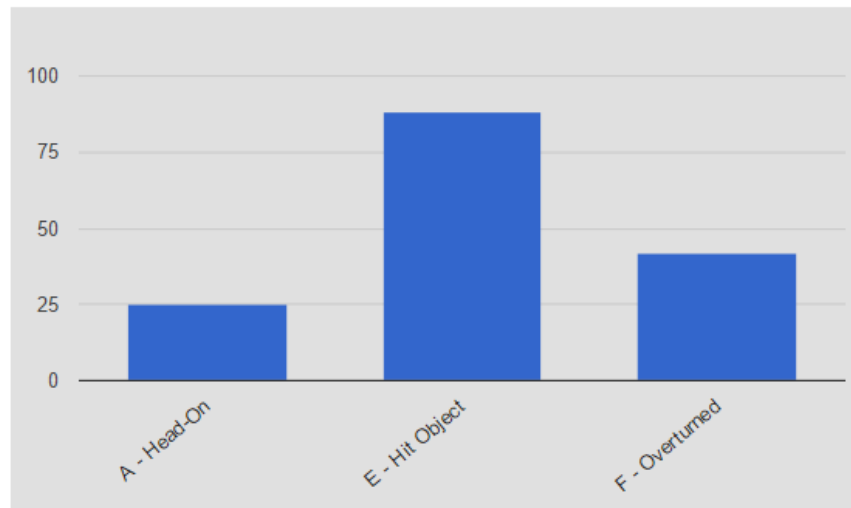
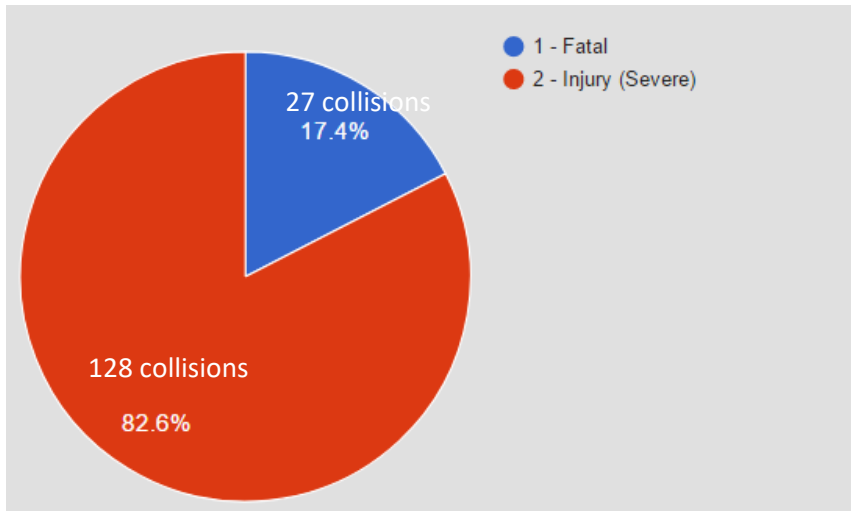
Primary Collision Factor	Collisions	Percentage
Improper Turning	150	41.1%
Driving or Bicycling Under the Influence of Alcohol or Drug	128	35.1%
Unsafe Speed	49	13.4%
Wrong Side of Road	14	3.8%
Other Than Driver (or Pedestrian)	11	3%
Automobile Right of Way	3	0.8%
- - Not Stated	2	0.5%
Unknown	2	0.5%
Other Hazardous Violation	2	0.5%
Improper Passing	1	0.3%
Unsafe Lane Change	1	0.3%
Other Equipment	1	0.3%
Unsafe Starting or Backing	1	0.3%

Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	230	63%
Non-Collision	70	19.2%
Other Motor Vehicle	55	15.1%
Other Object	6	1.6%
Animal	2	0.5%
- - Not Stated	1	0.3%
Bicycle	1	0.3%

Humboldt County Non-State Highway Road Departure Collisions



Humboldt County Summary Statistics for Non-State Highway Road Departure Collisions



- Summary statistics for 155 collisions.

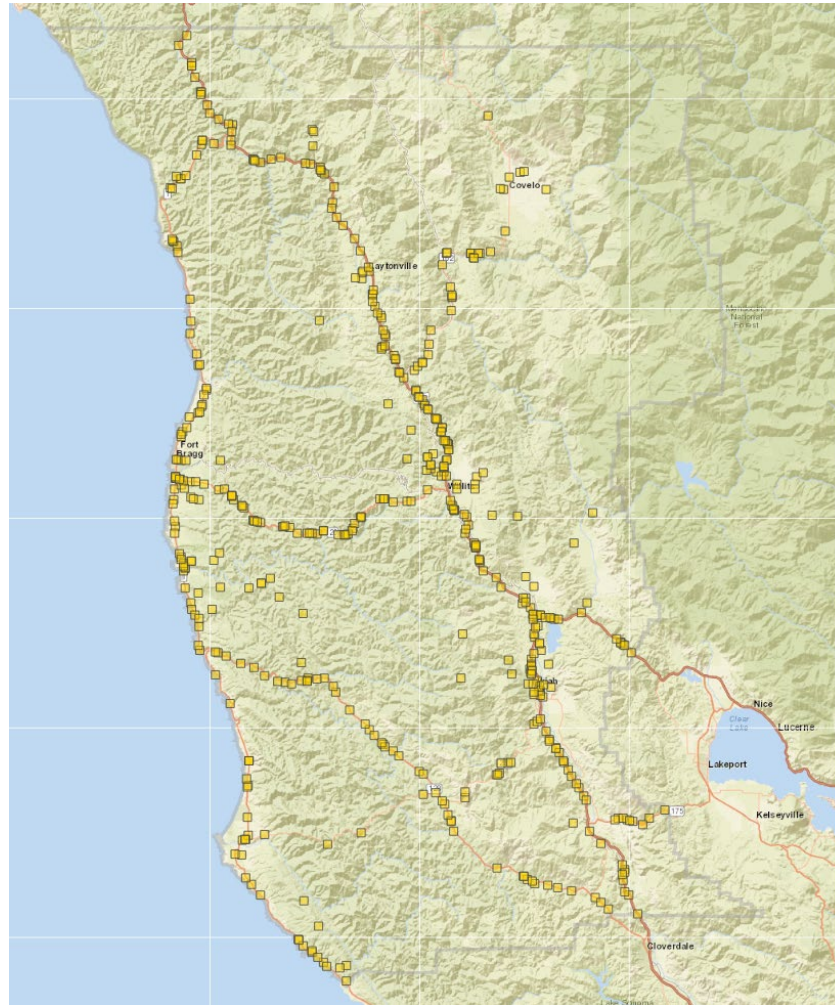
Primary Collision Factor	Collisions	Percentage
Driving or Bicycling Under the Influence of Alcohol or Drug	57	36.8%
Improper Turning	40	25.8%
Unsafe Speed	32	20.6%
Wrong Side of Road	9	5.8%
Other Hazardous Violation	4	2.6%
Automobile Right of Way	3	1.9%
Other Than Driver (or Pedestrian)	3	1.9%
-- Not Stated	2	1.3%
Other Improper Driving	2	1.3%
Traffic Signals and Signs	1	0.6%
Hazardous Parking	1	0.6%
Brakes	1	0.6%

Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	79	51%
Non-Collision	39	25.2%
Other Motor Vehicle	23	14.8%
Other Object	8	5.2%
Bicycle	2	1.3%
Animal	2	1.3%
-- Not Stated	1	0.6%
Pedestrian	1	0.6%

Mendocino County Road Departure Collisions

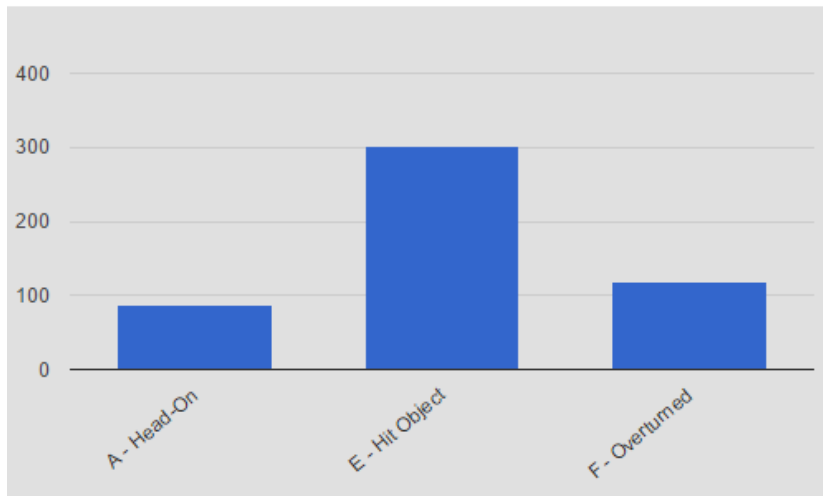
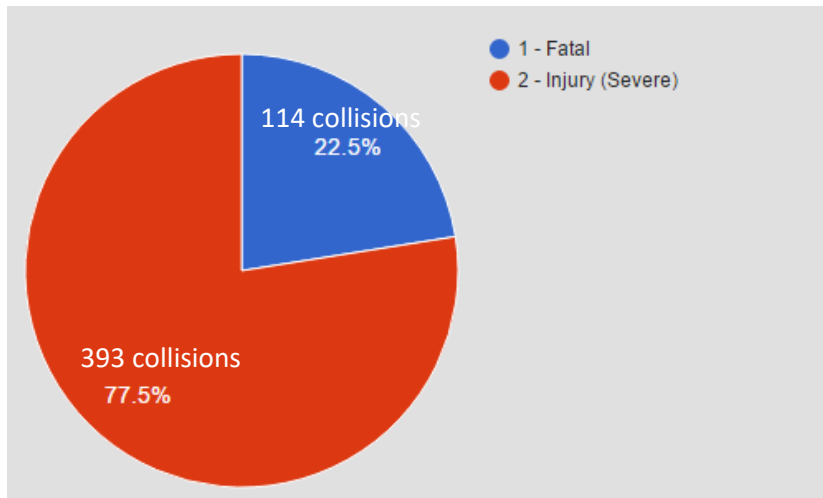
SWITRS Data 2006-2015

Mendocino County Road Departure collisions, from 2006-2015



507 fatal or severe road departure collisions (head on, hit object and overturned collision factors) from 2006 to 2015 in all of Mendocino County

Mendocino County Summary Statistics for Road Departure Collisions

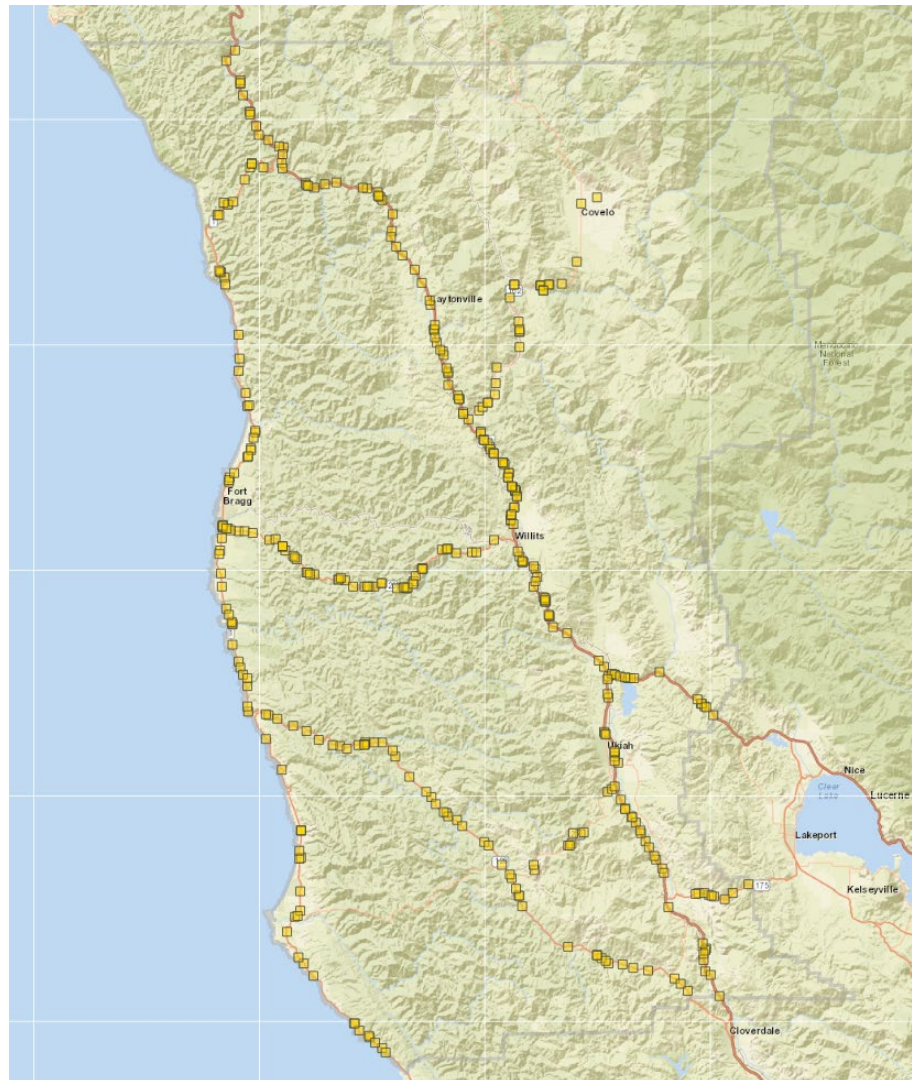


- Summary statistics for 507 collisions.

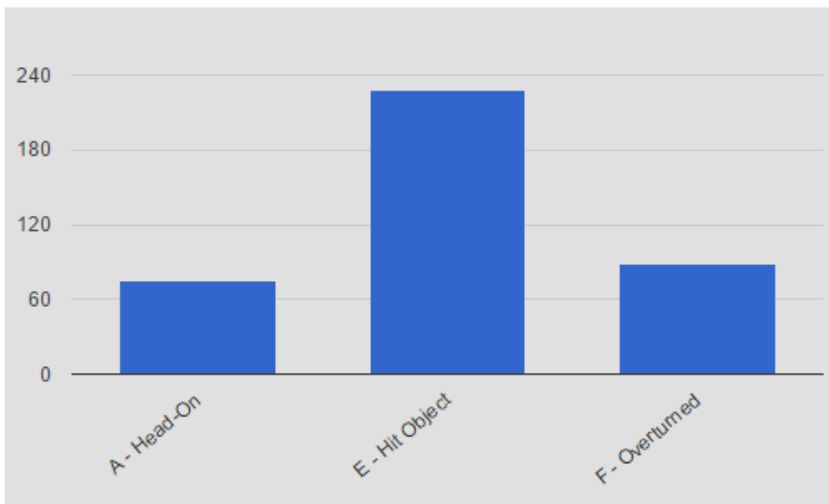
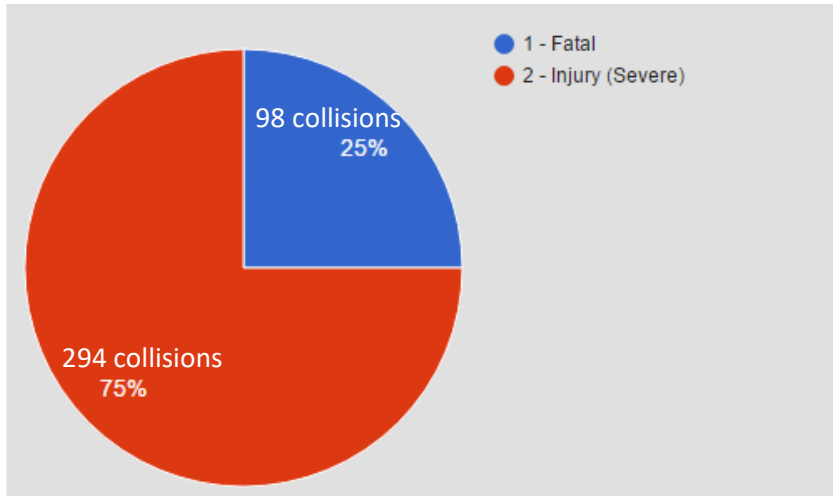
Primary Collision Factor	Collisions	Percentage
Improper Turning	181	35.7%
Driving or Bicycling Under the Influence of Alcohol or Drug	142	28%
Unsafe Speed	107	21.1%
Wrong Side of Road	39	7.7%
Other Than Driver (or Pedestrian)	13	2.6%
- - Not Stated	8	1.6%
Unknown	4	0.8%
Automobile Right of Way	4	0.8%
Other Hazardous Violation	3	0.6%
Unsafe Lane Change	2	0.4%
Hazardous Parking	2	0.4%
Improper Passing	1	0.2%
Other Improper Driving	1	0.2%

Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	298	58.8%
Non-Collision	112	22.1%
Other Motor Vehicle	82	16.2%
Animal	6	1.2%
Pedestrian	2	0.4%
Motor Vehicle on Other Roadway	2	0.4%
Parked Motor Vehicle	2	0.4%
- - Not Stated	1	0.2%
Bicycle	1	0.2%
Other Object	1	0.2%

Mendocino County State Highway Only Road Departure Collisions



Mendocino County Summary Statistics for State Highway Only Road Departure Collisions

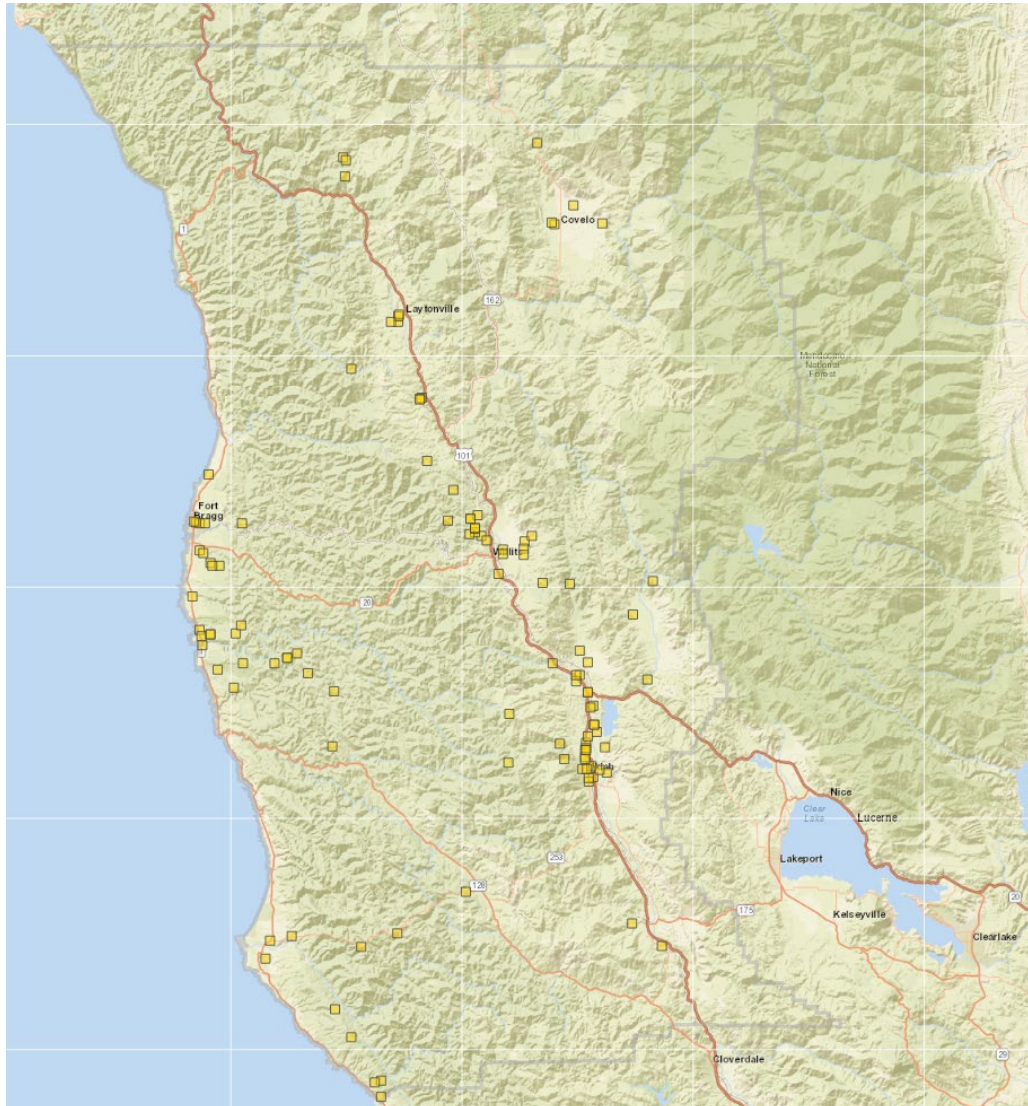


- Summary statistics for 392 collisions.

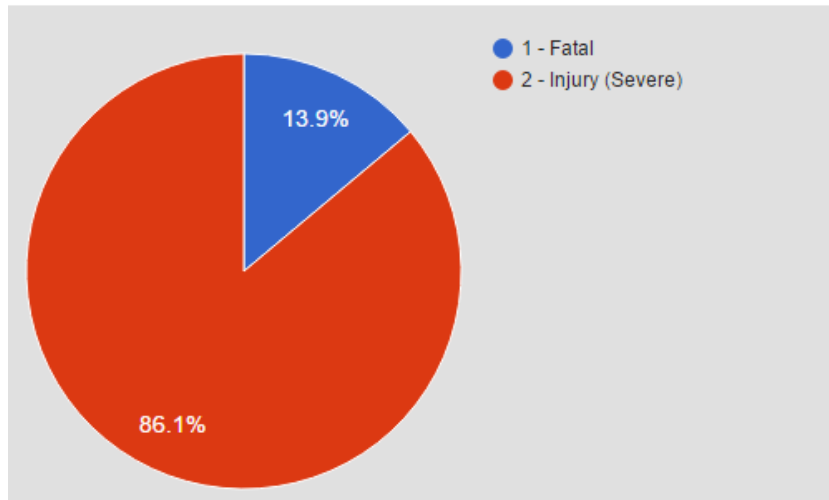
Primary Collision Factor	Collisions	Percentage
Improper Turning	145	37%
Driving or Bicycling Under the Influence of Alcohol or Drug	100	25.5%
Unsafe Speed	85	21.7%
Wrong Side of Road	36	9.2%
Other Than Driver (or Pedestrian)	9	2.3%
- - Not Stated	7	1.8%
Automobile Right of Way	4	1%
Unsafe Lane Change	2	0.5%
Unknown	1	0.3%
Improper Passing	1	0.3%
Hazardous Parking	1	0.3%
Other Hazardous Violation	1	0.3%

Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	225	57.4%
Non-Collision	84	21.4%
Other Motor Vehicle	73	18.6%
Animal	6	1.5%
Motor Vehicle on Other Roadway	2	0.5%
Parked Motor Vehicle	1	0.3%
Other Object	1	0.3%

Mendocino County Non-State Highway Road Departure Collisions

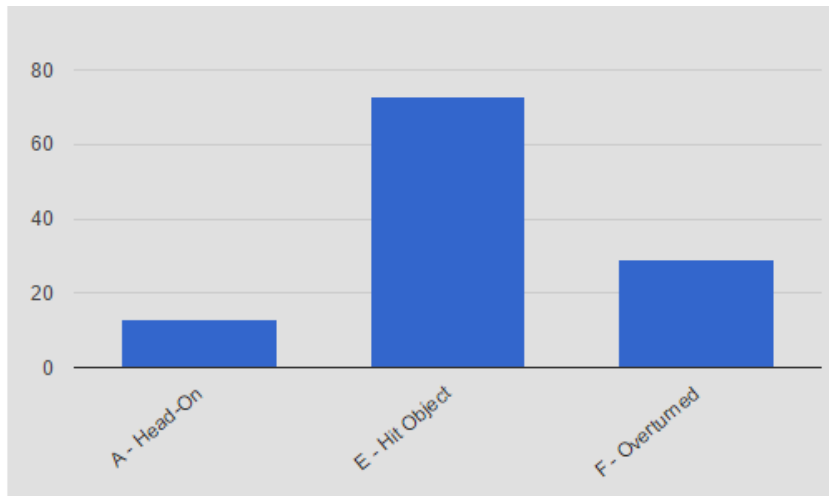


Mendocino County Summary Statistics for Non-State Highway Road Departure Collisions



- Summary statistics for 115 collisions.

Primary Collision Factor	Collisions	Percentage
Driving or Bicycling Under the Influence of Alcohol or Drug	42	36.5%
Improper Turning	36	31.3%
Unsafe Speed	22	19.1%
Other Than Driver (or Pedestrian)	4	3.5%
Unknown	3	2.6%
Wrong Side of Road	3	2.6%
Other Hazardous Violation	2	1.7%
- - Not Stated	1	0.9%
Hazardous Parking	1	0.9%
Other Improper Driving	1	0.9%

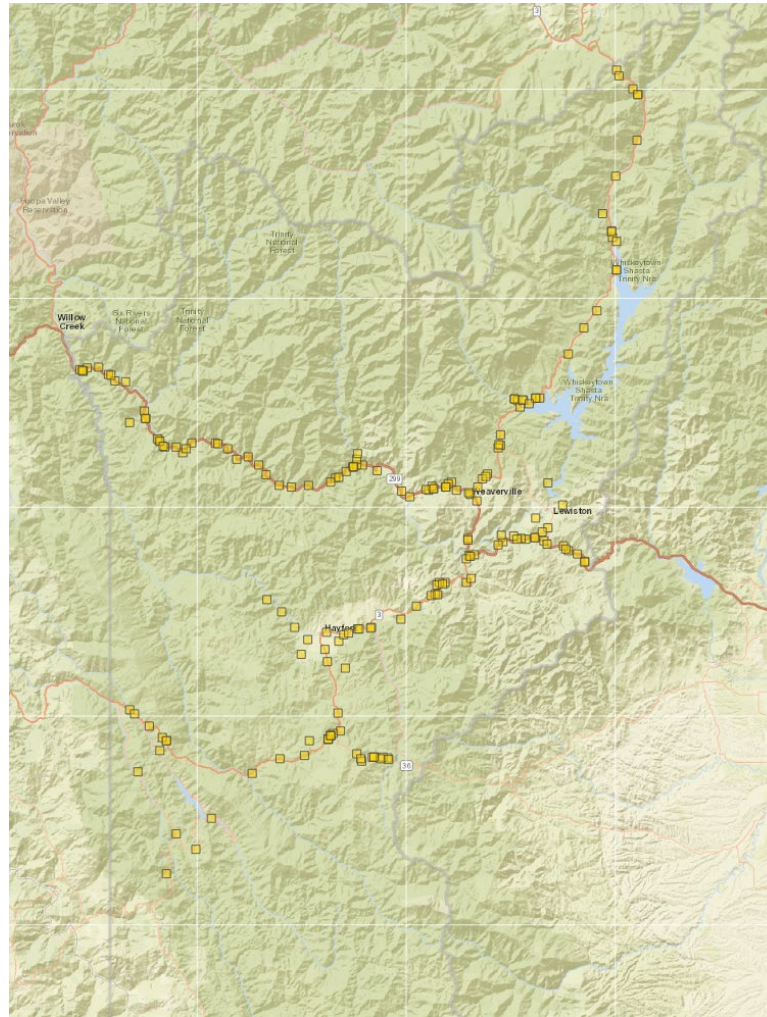


Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	73	63.5%
Non-Collision	28	24.3%
Other Motor Vehicle	9	7.8%
Pedestrian	2	1.7%
- - Not Stated	1	0.9%
Parked Motor Vehicle	1	0.9%
Bicycle	1	0.9%

Trinity County Road Departure Collisions

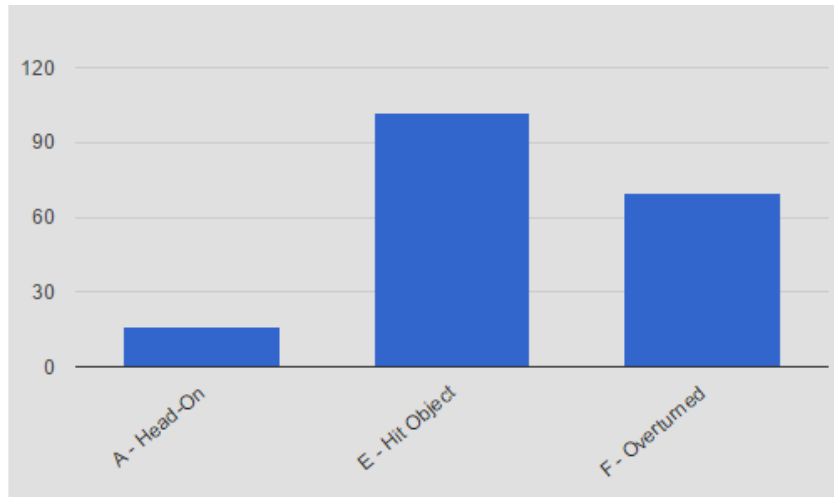
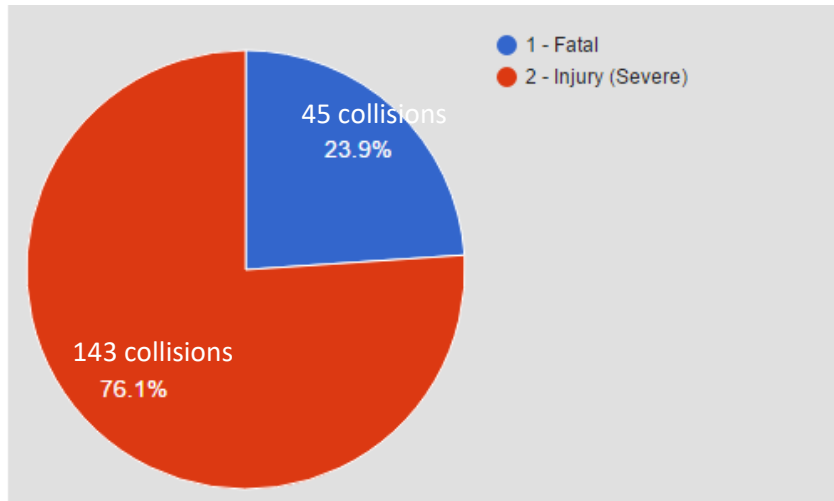
SWITRS Data 2006-2015

Trinity County Road Departure collisions, from 2006-2015



188 fatal or severe road departure collisions (head on, hit object and overturned collision factors) from 2006 to 2015 in all of Trinity County

Trinity County Summary Statistics for Road Departure Collisions

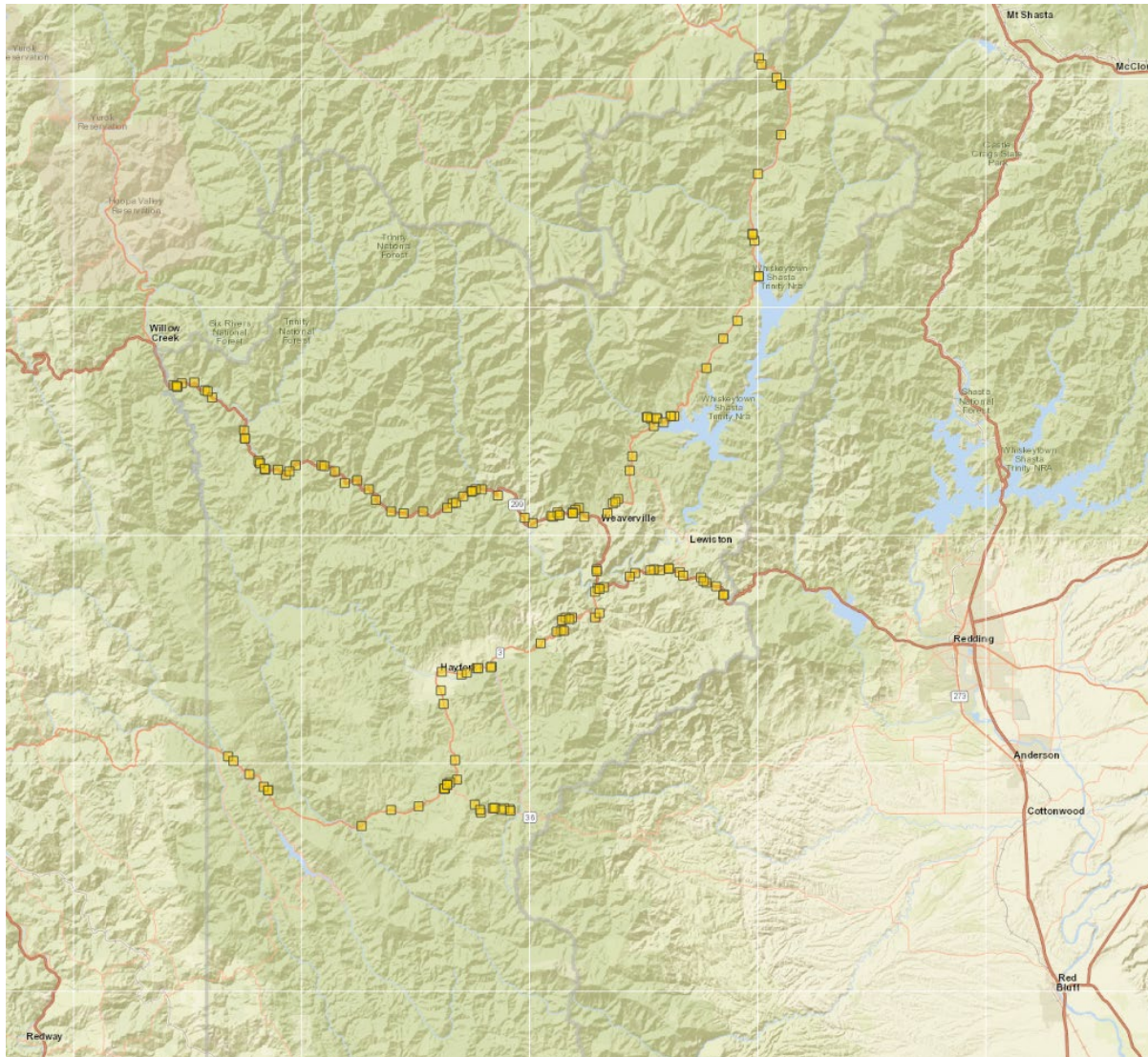


- Summary statistics for 188 collisions.

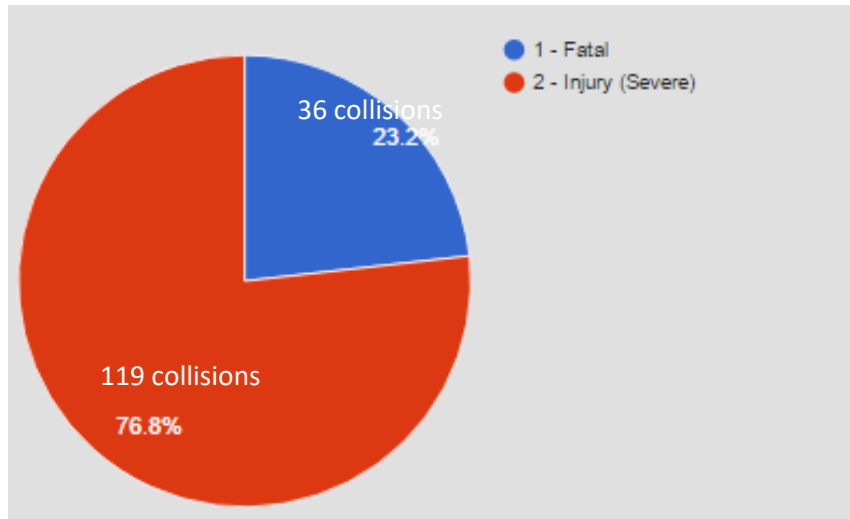
Primary Collision Factor	Collisions	Percentage
Improper Turning	72	38.3%
Driving or Bicycling Under the Influence of Alcohol or Drug	47	25%
Unsafe Speed	37	19.7%
Wrong Side of Road	10	5.3%
Other Hazardous Violation	9	4.8%
Other Than Driver (or Pedestrian)	7	3.7%
-- Not Stated	2	1.1%
Automobile Right of Way	2	1.1%
Unknown	1	0.5%
Traffic Signals and Signs	1	0.5%

Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	102	54.3%
Non-Collision	65	34.6%
Other Motor Vehicle	15	8%
Other Object	4	2.1%
Animal	2	1.1%

Trinity County State Highway Only Road Departure Collisions

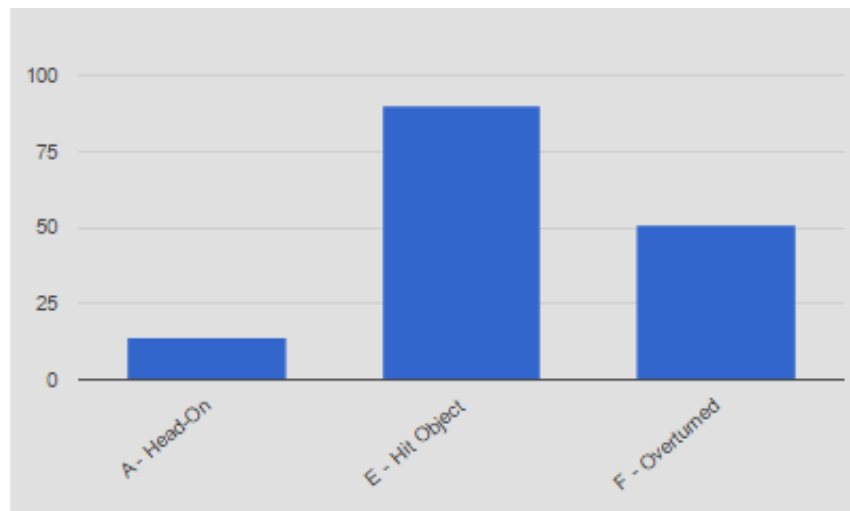


Trinity County Summary Statistics for State Highway Only Road Departure Collisions



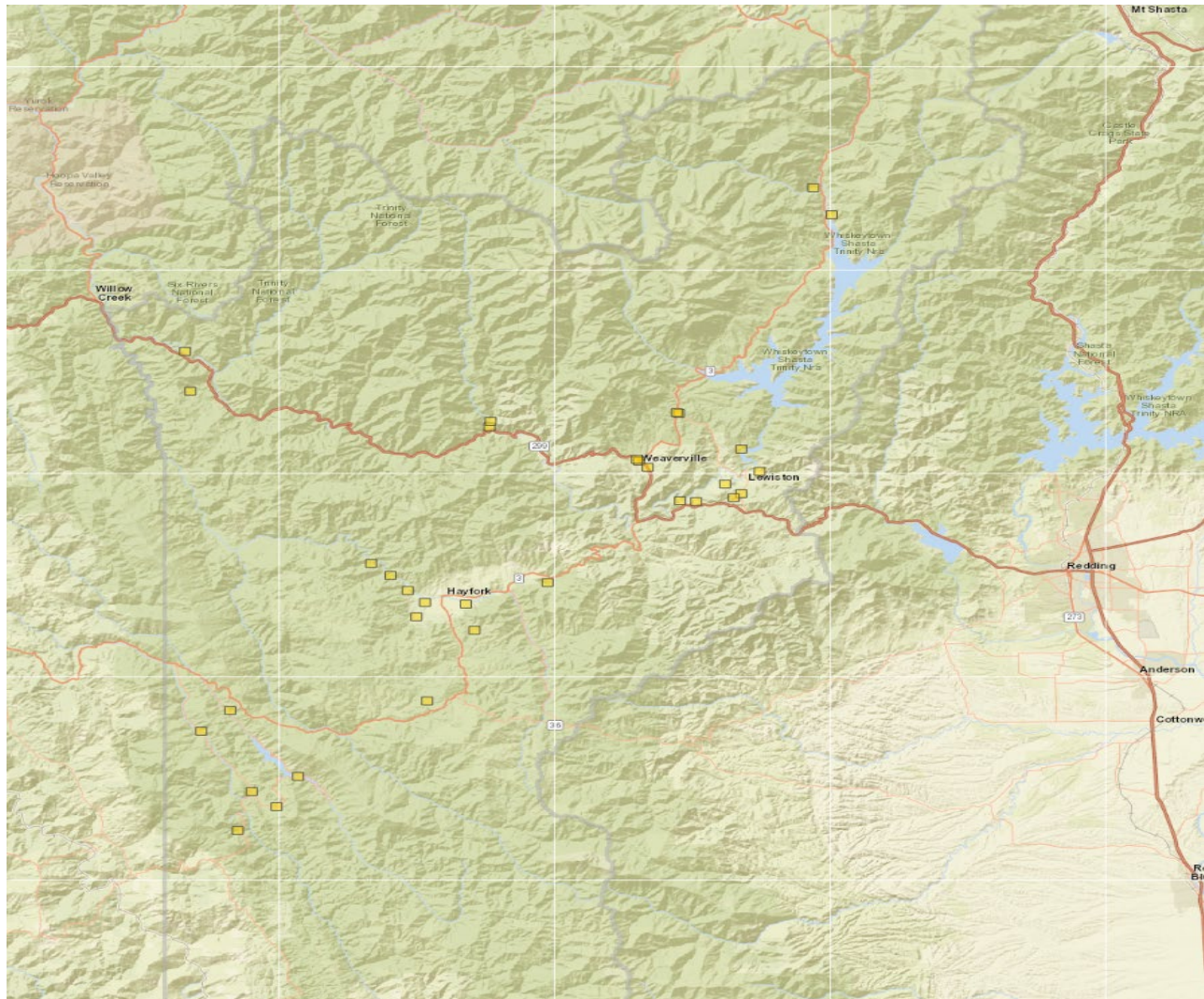
- Summary statistics for 155 collisions.

Primary Collision Factor	Collisions	Percentage
Improper Turning	68	43.9%
Driving or Bicycling Under the Influence of Alcohol or Drug	33	21.3%
Unsafe Speed	29	18.7%
Wrong Side of Road	10	6.5%
Other Hazardous Violation	5	3.2%
Other Than Driver (or Pedestrian)	5	3.2%
- - Not Stated	2	1.3%
Unknown	1	0.6%
Automobile Right of Way	1	0.6%
Traffic Signals and Signs	1	0.6%

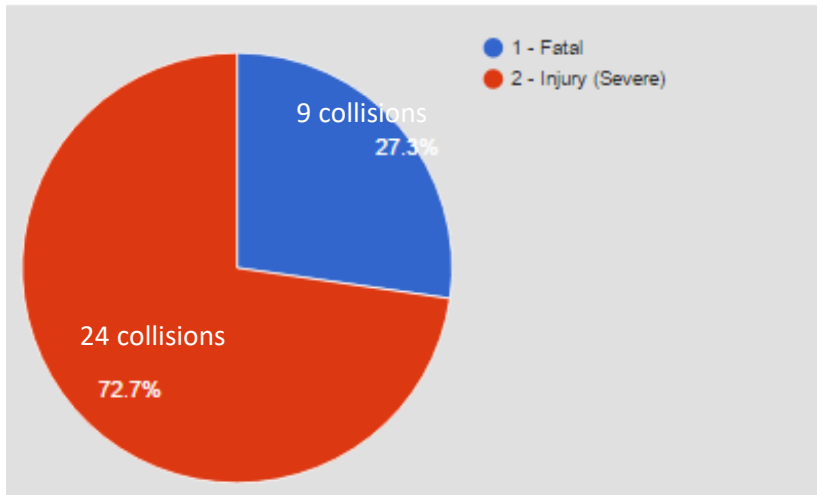


Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	88	56.8%
Non-Collision	49	31.6%
Other Motor Vehicle	13	8.4%
Other Object	4	2.6%
Animal	1	0.6%

Trinity County Non-State Highway Road Departure Collisions

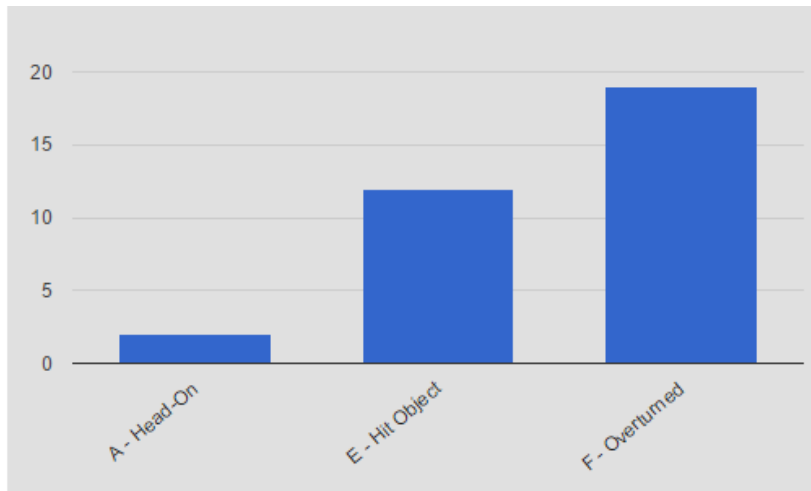


Trinity County Summary Statistics for Non-State Highway Road Departure Collisions



- Summary statistics for 33 collisions.

Primary Collision Factor	Collisions	Percentage
Driving or Bicycling Under the Influence of Alcohol or Drug	14	42.4%
Unsafe Speed	8	24.2%
Improper Turning	4	12.1%
Other Hazardous Violation	4	12.1%
Other Than Driver (or Pedestrian)	2	6.1%
Automobile Right of Way	1	3%

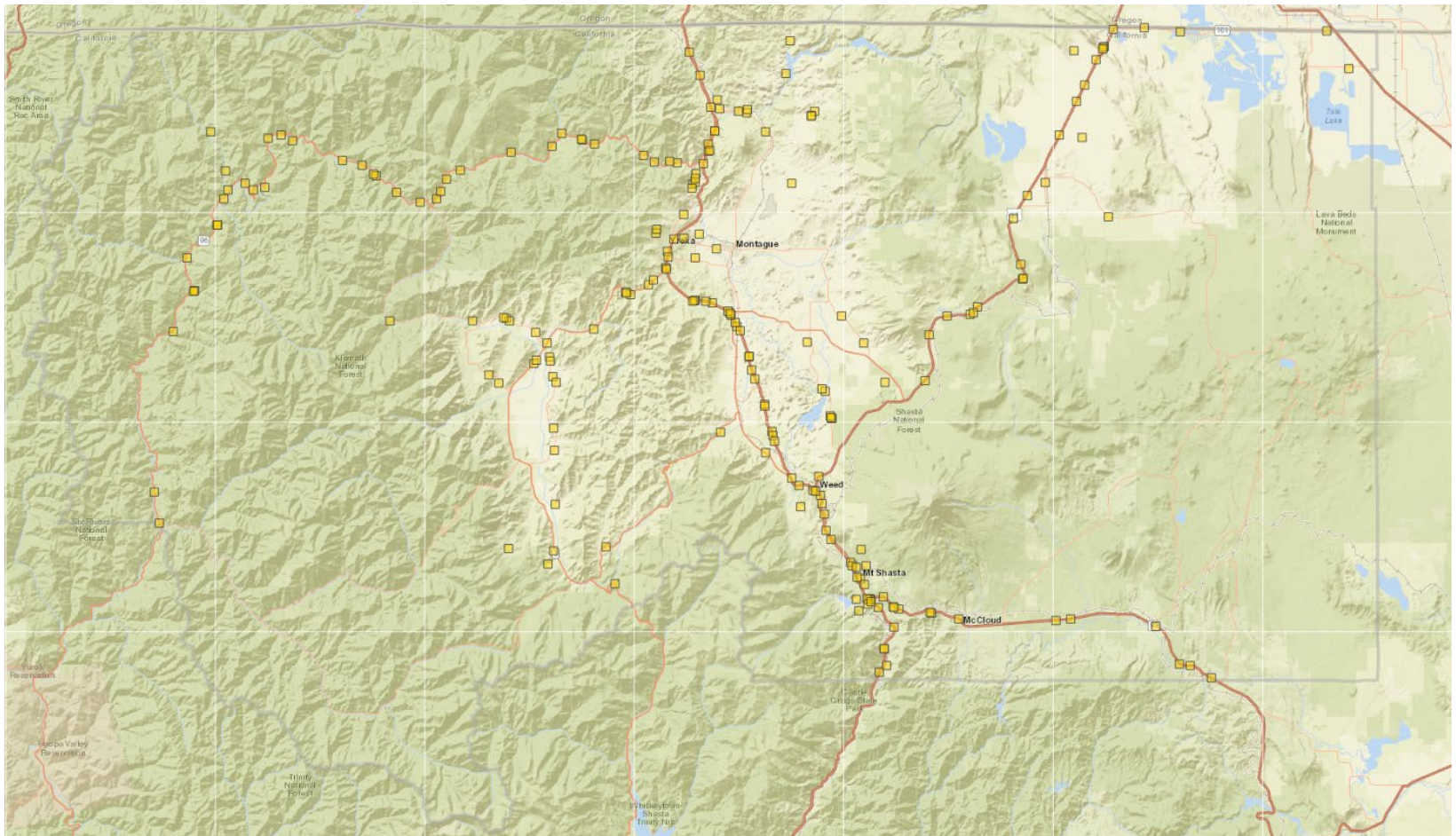


Motor Vehicle Involved With	Collisions	Percentage
Non-Collision	16	48.5%
Fixed Object	14	42.4%
Other Motor Vehicle	2	6.1%
Animal	1	3%

Siskiyou County Road Departure Collisions

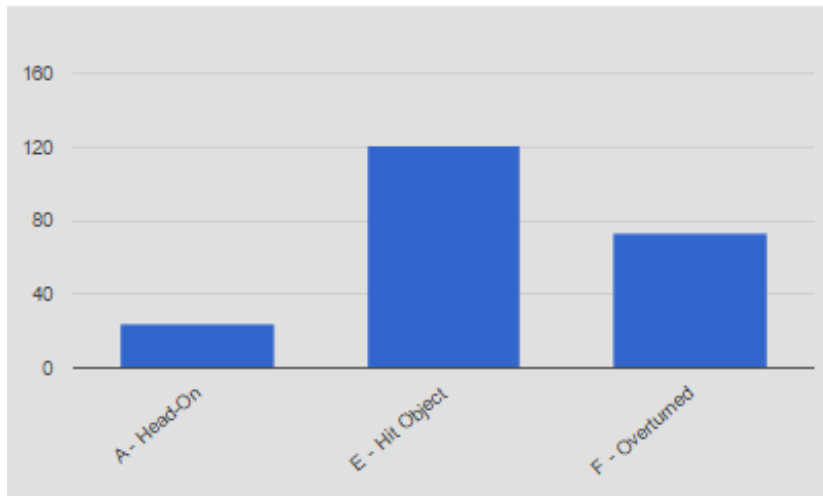
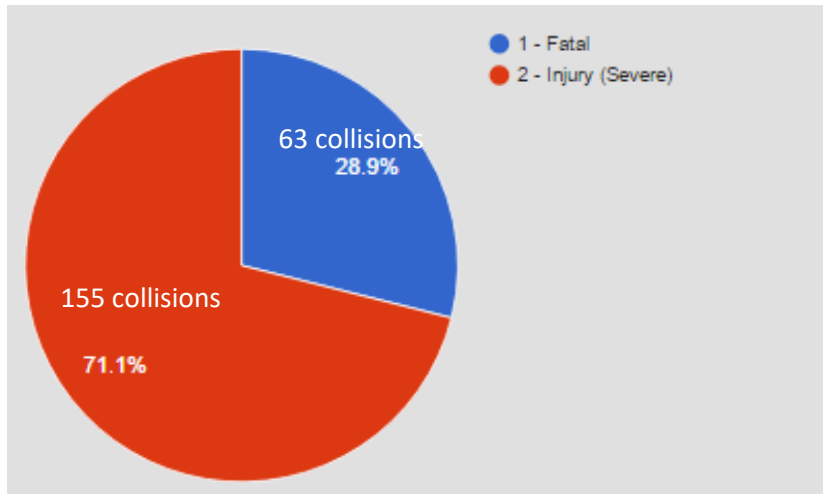
SWITRS Data 2006-2015

Siskiyou County Road Departure collisions, from 2006-2015



218 fatal or severe road departure collisions (head on, hit object and overturned collision factors) from 2006 to 2015 in all of Siskiyou County

Siskiyou County Summary Statistics

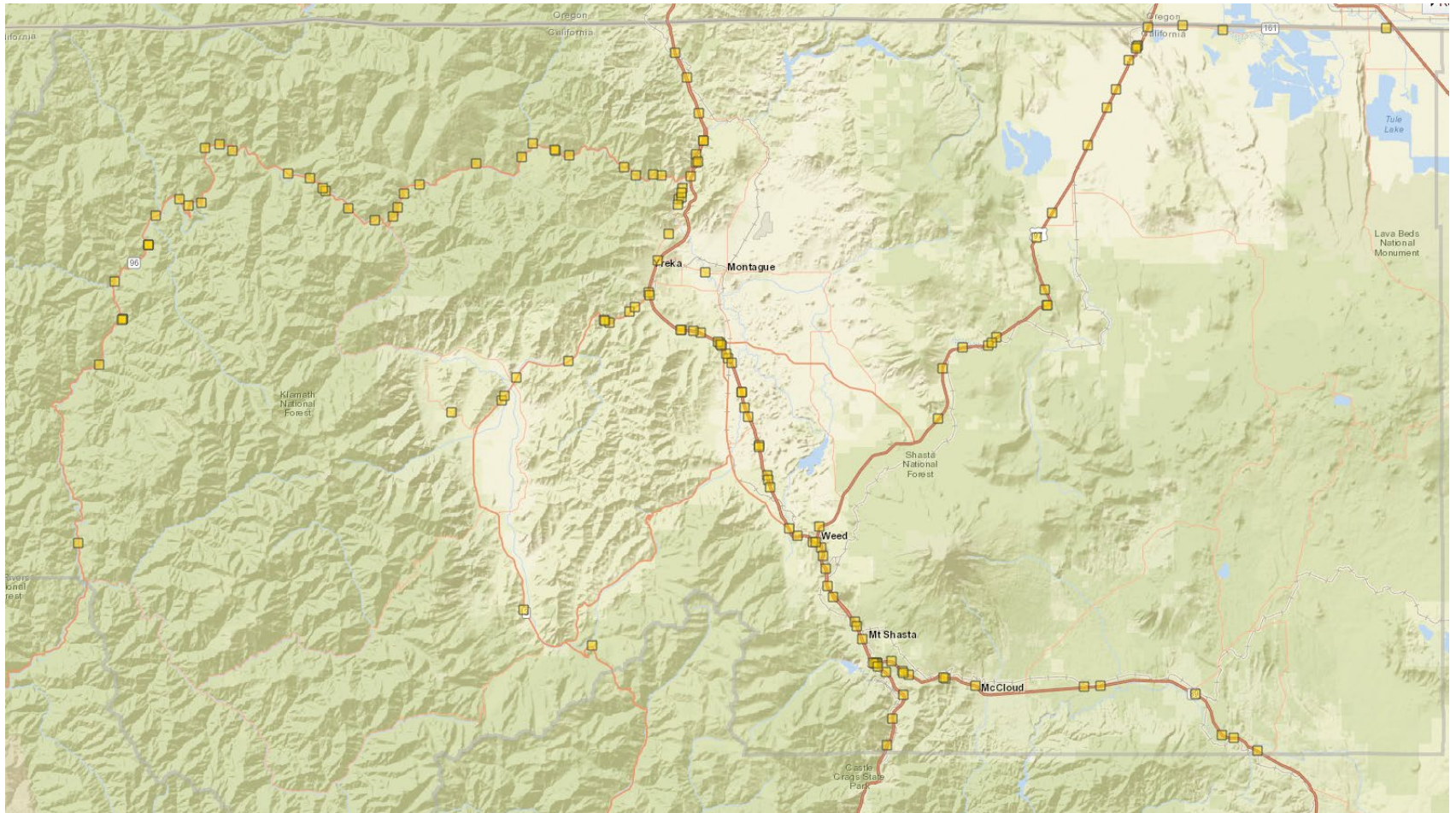


- Summary statistics for 218 collisions.

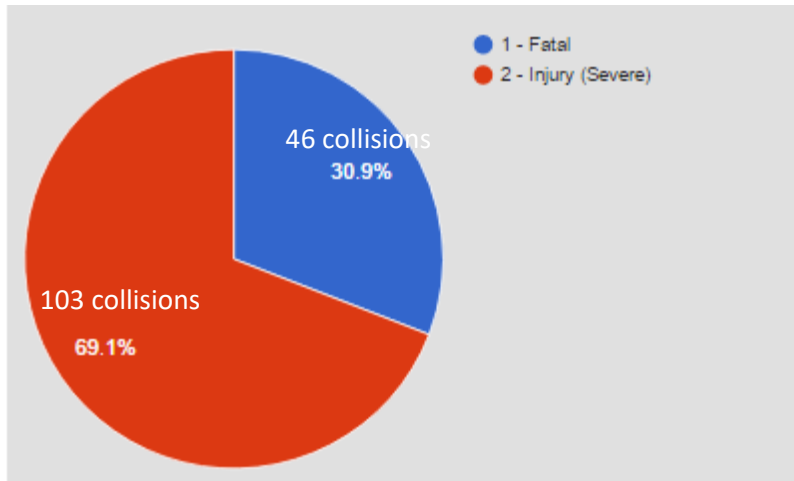
Primary Collision Factor	Collisions	Percentage
Improper Turning	91	41.7%
Driving or Bicycling Under the Influence of Alcohol or Drug	62	28.4%
Unsafe Speed	30	13.8%
Other Than Driver (or Pedestrian)	11	5%
Wrong Side of Road	10	4.6%
Other Hazardous Violation	4	1.8%
Unknown	3	1.4%
Improper Passing	2	0.9%
Unsafe Lane Change	2	0.9%
Automobile Right of Way	2	0.9%
-- Not Stated	1	0.5%

Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	118	54.1%
Non-Collision	70	32.1%
Other Motor Vehicle	21	9.6%
Other Object	7	3.2%
Parked Motor Vehicle	1	0.5%
Animal	1	0.5%

Siskiyou County State Highway Only Road Departure Collisions

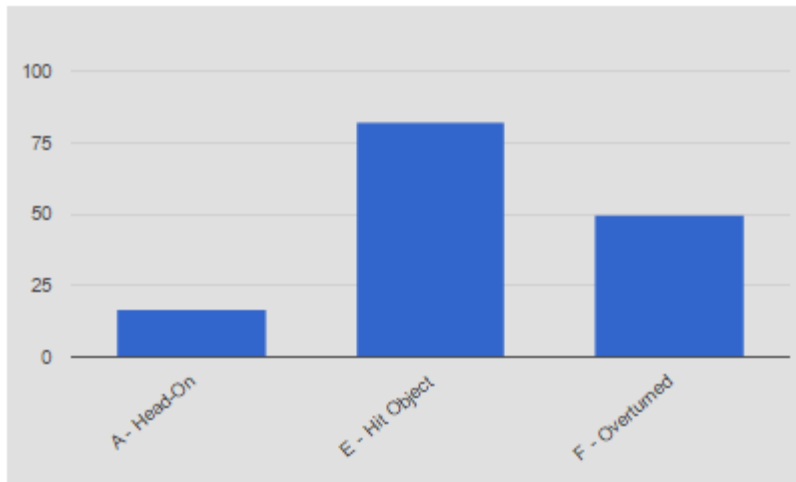


Siskiyou County Summary Statistics for State Highway Only Road Departure Collisions



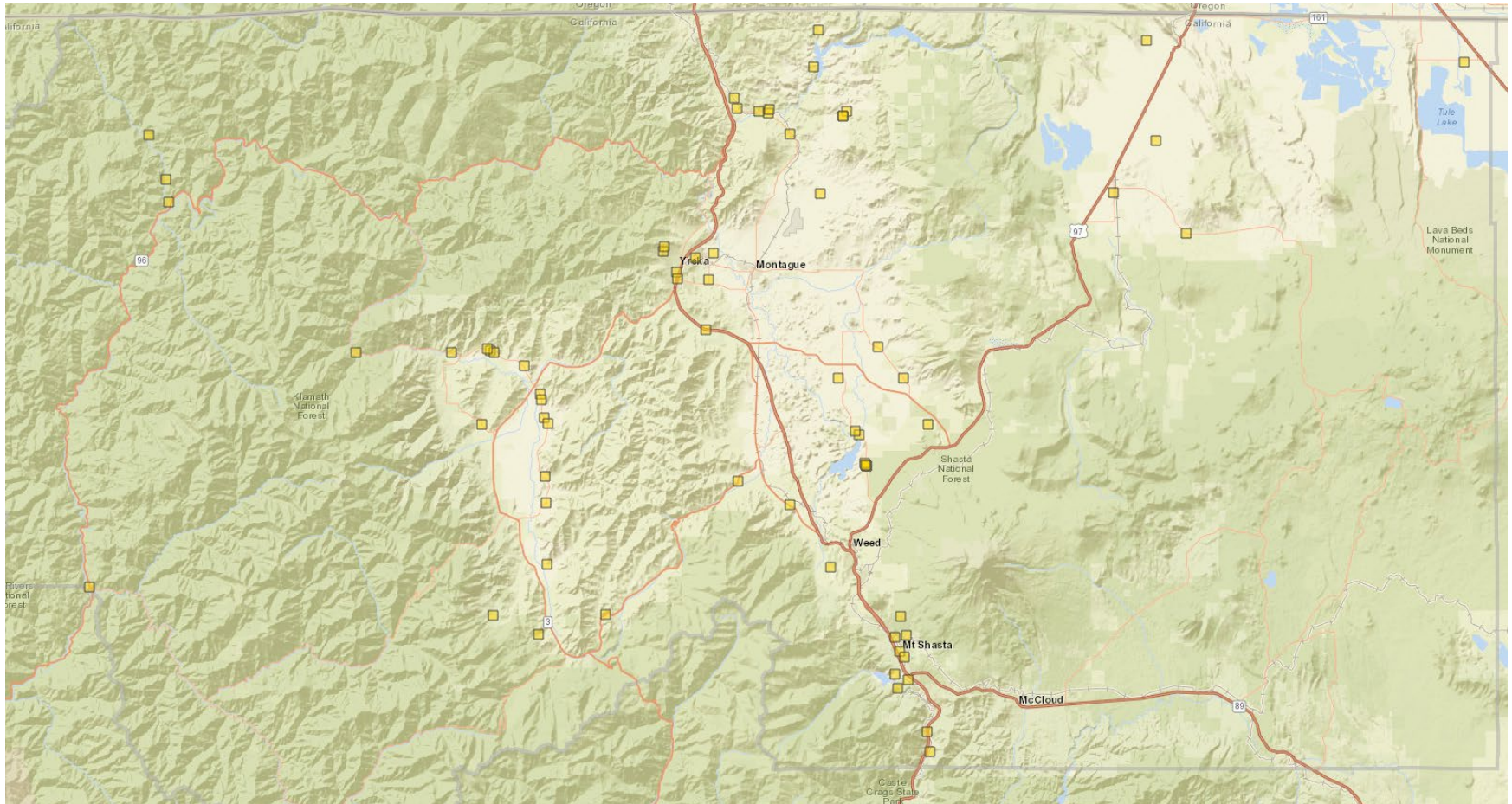
- Summary statistics for 149 collisions.

Primary Collision Factor	Collisions	Percentage
Improper Turning	67	45%
Driving or Bicycling Under the Influence of Alcohol or Drug	31	20.8%
Unsafe Speed	23	15.4%
Other Than Driver (or Pedestrian)	11	7.4%
Wrong Side of Road	6	4%
Other Hazardous Violation	4	2.7%
Unknown	2	1.3%
Improper Passing	2	1.3%
- - Not Stated	1	0.7%
Unsafe Lane Change	1	0.7%
Automobile Right of Way	1	0.7%

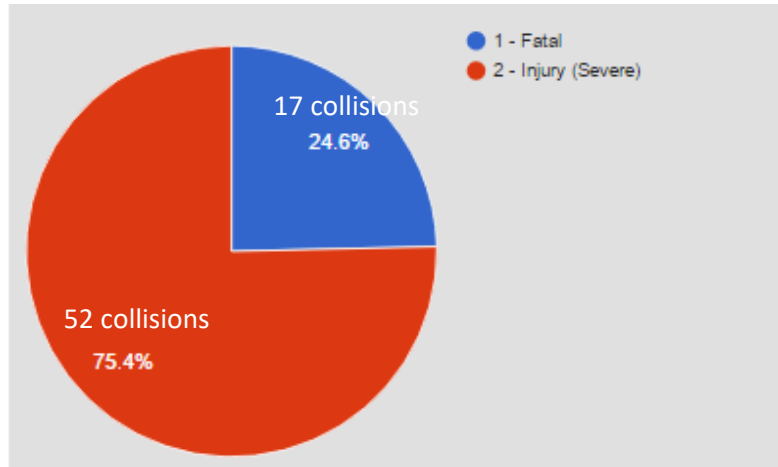


Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	81	54.4%
Non-Collision	47	31.5%
Other Motor Vehicle	15	10.1%
Other Object	6	4%

Siskiyou County Non-State Highway Road Departure Collisions

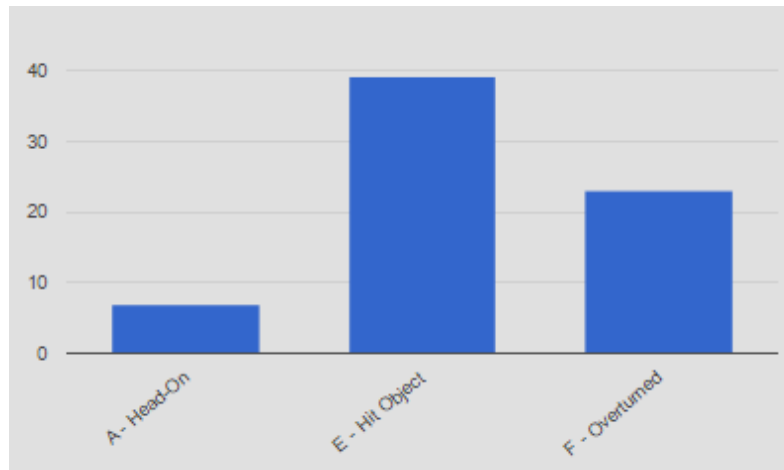


Siskiyou County Summary Statistics for Non-State Highway Road Departure Collisions



- Summary statistics for 69 collisions.

Primary Collision Factor	Collisions	Percentage
Driving or Bicycling Under the Influence of Alcohol or Drug	31	44.9%
Improper Turning	24	34.8%
Unsafe Speed	7	10.1%
Wrong Side of Road	4	5.8%
Unknown	1	1.4%
Unsafe Lane Change	1	1.4%
Automobile Right of Way	1	1.4%



Motor Vehicle Involved With	Collisions	Percentage
Fixed Object	37	53.6%
Non-Collision	23	33.3%
Other Motor Vehicle	6	8.7%
Parked Motor Vehicle	1	1.4%
Animal	1	1.4%
Other Object	1	1.4%