

Bicyclist Injuries and Fatalities for Santa Cruz County, 2013

This report presents bicycle injuries and fatalities that occurred in Santa Cruz County in 2013 based on data obtained from the California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS) ¹. According to SWITRS, in the 2013 calendar year there were 198 reported collisions that resulted in 197 cyclist injuries and 3 fatalities. Of these incidents, two were pedestrian/bicycle, two were bicycle/bicycle, 41 involved solo bicyclists, and the remainder were motor vehicle/bicycle.

It is important to note that this data was obtained by reviewing all bicycle-involved collisions for Santa Cruz County in 2013 as collected by the CHP in their SWITRS database from all local law enforcement agencies. This data does not include collisions that may have occurred off-road, nor does it examine data from medical providers or allow for self-reporting of incidents. According to hospital data from the California Department of Public Health, there were four fatalities, 622 emergency room visits, and 62 hospitalizations due to involvement in bicycle collisions in 2013 in Santa Cruz County².

In Federal Fiscal Year (FFY) 2013, the California Office of Traffic Safety (OTS) reported 215 cyclist injuries in Santa Cruz County and one death. Based on these numbers, the Santa Cruz County cycling injury/fatality rate per 100,000 was 80, the highest rate in the last ten years and more than double the California state rate of 37 for FFY 2013.

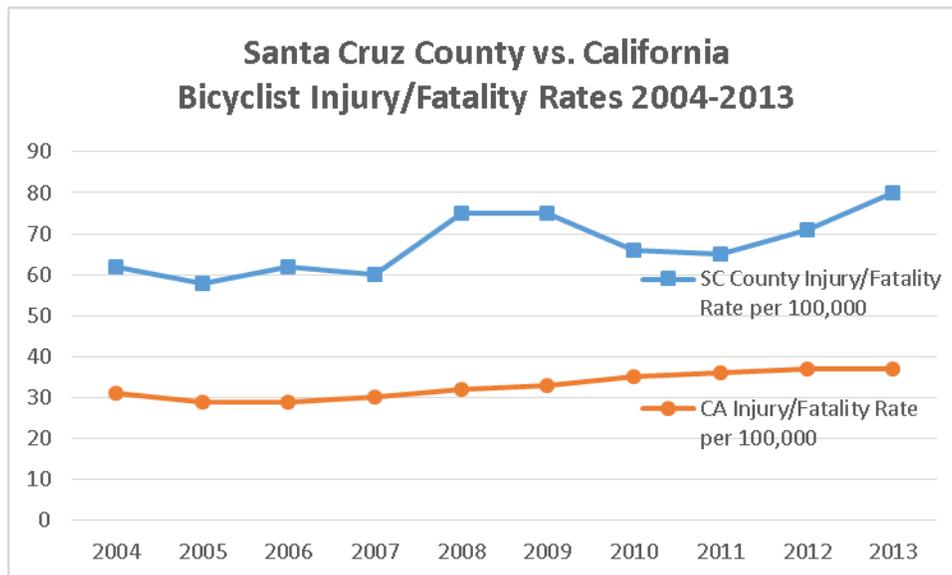


Table One: Bicyclist Injury and Fatality Rates per 100,000 Population 2004-2013

| Location | 2004 | 2005 | 2006 | 2007 | 2008 | 2009* | 2020 | 2011 | 2012 | 2013 |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| SCC Inj/Fat | 162 | 152 | 155 | 152 | 191 | 192 | 172 | 173 | 192 | 216 |
| SCC Rate | 62 | 58 | 62 | 60 | 75 | 75 | 66 | 65 | 71 | 80 |
| CA Inj/Fat | 11,092 | 10,605 | 10,507 | 10,714 | 11,890 | 12,059 | 12,862 | 13,474 | 14,115 | 13,795 |
| CA Rate | 31 | 29 | 29 | 30 | 32 | 33 | 35 | 36 | 37 | 37 |

* As of 2009, OTS reports the number of bicyclists injured and killed by federal fiscal year (FFY) rather than calendar year.

Injuries and Fatalities by Jurisdiction

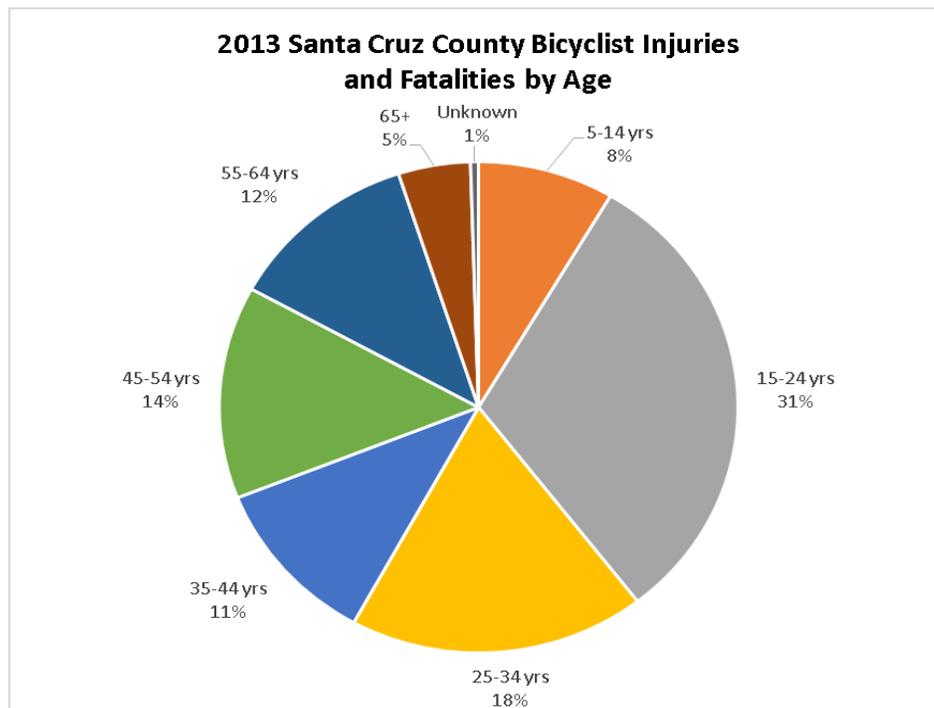
The majority of cycling injuries occurred in the City of Santa Cruz and the unincorporated area of Santa Cruz County. Of the 41 solo crashes, 22 occurred in the City of Santa Cruz. Two of the three deaths occurred in the unincorporated area and one death occurred in Watsonville. This is the first cyclist death in Watsonville since 2009. In the past ten years, neither Capitola nor Scotts Valley have seen a cyclist fatality, while Santa Cruz had a total of five deaths and the unincorporated area seven.

Table Two: SC County Bicycle Injuries/Fatalities by Jurisdiction, 2004-2013 Calendar Year

| Jurisdiction | Bicyclists Injured (Killed) | | | | | | | | | |
|------------------|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|
| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| Capitola | 20 | 7 | 5 | 6 | 8 | 4 | 9 | 9 | 8 | 8 |
| Santa Cruz | 63 | 71 | 82 | 64 (1) | 91 (2) | 68 | 57 | 70 (1) | 91 (1) | 112 |
| Scotts Valley | 6 | 2 | 0 | 14 | 4 | 8 | 1 | 2 | 4 | 3 |
| Watsonville | 17 | 12 | 13 | 3 | 16 | 18 (1) | 11 | 17 | 23 | 11 (1) |
| Unincorp. | 56 | 59 (1) | 54 (1) | 63 (1) | 70 | 76 (2) | 69 | 70 | 90 | 59 (2) |
| UCSC | n/a | n/a | n/a | n/a | n/a | 12 | 11 | 1 | 3 | 4 |
| SCC Total | 162 (0) | 151 (1) | 154 (1) | 150 (2) | 189 (2) | 186 (3) | 158 (0) | 169 (1) | 219 (1) | 197(3) |

There were a number of locations where multiple bicycle injury collisions occurred. In Santa Cruz, there were eight incidents each on Bay Street, Water Street and Soquel Avenue. In the unincorporated area, 14 injuries occurred on Soquel Drive with one death on Cathedral Drive. There were five incidents on Highway One, including one death near Dimeo Lane. The cyclist death in Watsonville occurred on Beach Street.

Injuries and Fatalities by Age



Countywide, those aged 15-24 years were injured more often than any other age group, accounting for 31% of county cycling injuries and fatalities in 2013. Nationally, those 15 to 24 years of age accounted for 33% of injuries and 15 % of fatalities³. Those aged 25-34 years were the second highest injury group in Santa Cruz County at 18%.

Collision Factors

In examining the SWITRS data for collision factors, the cyclist was listed at fault in 107 (54%) of the crashes, including two of the three fatalities. For cyclists at fault, the primary collision factors were improper turns (22) and unsafe speeds (19), followed by failure to yield to a motor vehicle with the right of way (17). In the deaths where the cyclist was listed at fault, one was due to unsafe speed and the other involved alcohol use by the cyclist. Unsafe speed and improper turns remained the two highest collision factors in incidents that involved a solo cyclist.

Drivers were at fault in 73 crashes, or 37% of the time. The most common factors were improper turns (30) and failure to yield to a cyclist with the right of way (20). In the cyclist death where the driver was listed at fault, improper turning was the primary collision factor. In 9% of collisions, fault was not determined.

A total of 16 hit-and-run injuries involving cyclists were reported in 2013. There were no collisions in which the driver's use of alcohol or drugs was considered the primary factor. There were five collisions in which the cyclist was cited for being under the influence, including four of the solo cyclist crashes and one bike/bike collision. Nationally, alcohol involvement for either the driver or the cyclist was reported in 34% of crashes that resulted in a cyclist's death³.

County and City Bicycle Safety Rankings

In 2013, the California Office of Traffic Safety (OTS) ranked Santa Cruz County second out of 55 counties reporting for cyclists injured or killed⁴. The City of Santa Cruz ranked first among 103 comparable cities for cyclist injuries and deaths and 5th for cyclists under the age of 15. Capitola ranked 7th out of 105 comparable cities for cyclists under 15.

Although Santa Cruz County tends to receive a high ranking for bicyclists injured and killed, the number of people cycling in Santa Cruz is also high. According to the American Community Survey, 0.6% of workers in the United States cycled to work as their primary means of transportation during the five-year period from 2009 to 2013, however 5.4% did so in Santa Cruz County⁵. The OTS rankings are primarily based on population and daily vehicle miles traveled. A more accurate indicator of relative safety or risk would be rankings based on the number of bicyclists or the number of miles traveled by bicycle, but those counts are not currently available.

Conclusions

Continued efforts are needed among traffic safety partners to reduce cyclist injuries and fatalities through education, enforcement and improvements in bicycle-friendly infrastructure in Santa Cruz

County. Based on the 2013 data, outreach and education needs to be directed at both drivers and cyclists about safe behavior on and around Santa Cruz County roads. Particular focus should be given to the City of Santa Cruz, where the majority of injuries occurred, including the majority of solo cyclist crashes. More information is needed to understand the underlying causes of these solo crashes, which in addition to cyclist behavior, may be related to infrastructure problems such as pot holes, narrow travel lanes, etc. Efforts should be made to reach teens and young adults, aged 15 to 24 years, as they are most likely to be injured while cycling. The issue of cycling while under the influence should also be addressed. Improved technology and procedures would ensure that the most accurate injury and fatality data is gathered and analyzed.

References

1. California Highway Patrol, Statewide Integrated Traffic Records System. Retrieved 3/13/15 from <http://iswitrs.chp.ca.gov/Reports/jsp/CollisionReports.jsp>
2. California Department of Public Health <http://epicenter.cdph.ca.gov/ReportMenus/DataSummaries.aspx>
3. National Highway Traffic Safety Administration: Traffic Safety Facts 2013: Bicyclists and Other Cyclists. Retrieved from <http://www-nrd.nhtsa.dot.gov/Pubs/812151.pdf>
4. California Office of Traffic Safety http://www.ots.ca.gov/Media_and_Research/Rankings/default.asp
5. United States Census Bureau, American Community Survey Reports. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

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