

# California Bike Collisions State 2004-2016

Data compiled from:

- CHP SWITERS Traffic Database
- Dept. of Finance - State of California

Draft

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Revised 7/2016 to 2q2016    refresh 2014-2016

State collision data is obtained and compiled from SWITRS.

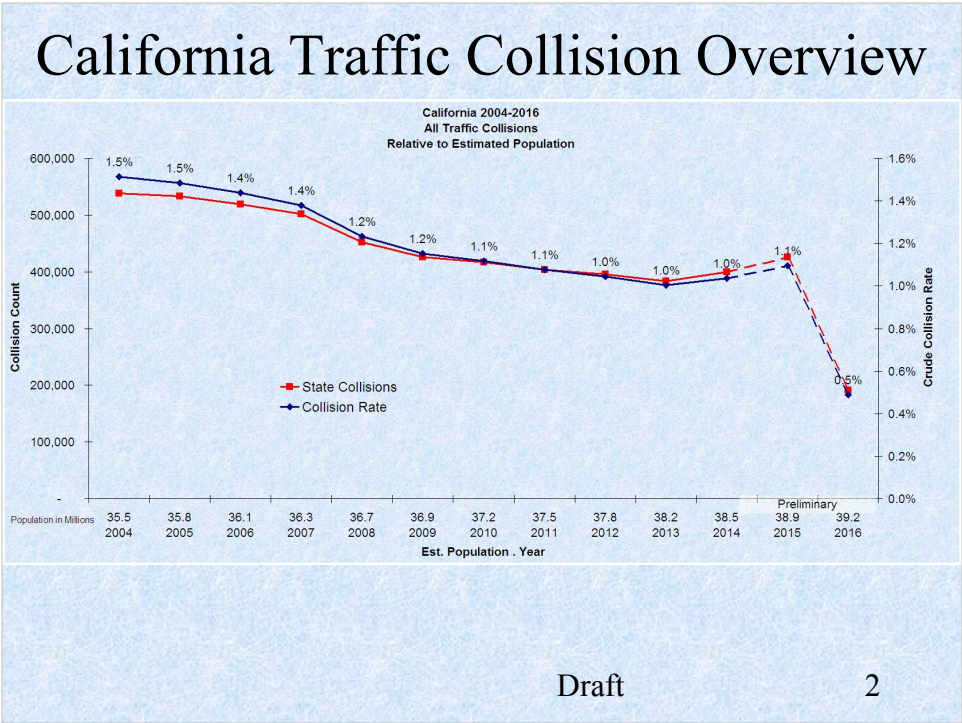
State population data is obtained and compiled from the State of California  
Dept. of Finance.

## Note on rates:

Rates shown in this report are used to represent the ability to convey the relation of bike collisions relative to the general population and do not reflect the bike riding population since that information does not exist; therefore the information presented should be viewed more as a potential of what would be possible if it did, and viewed as a item of interest in the most general sense.

If and when bike riding population counts are made available, the structure and scale are in place to accurately reflect their relationship.

Thank you



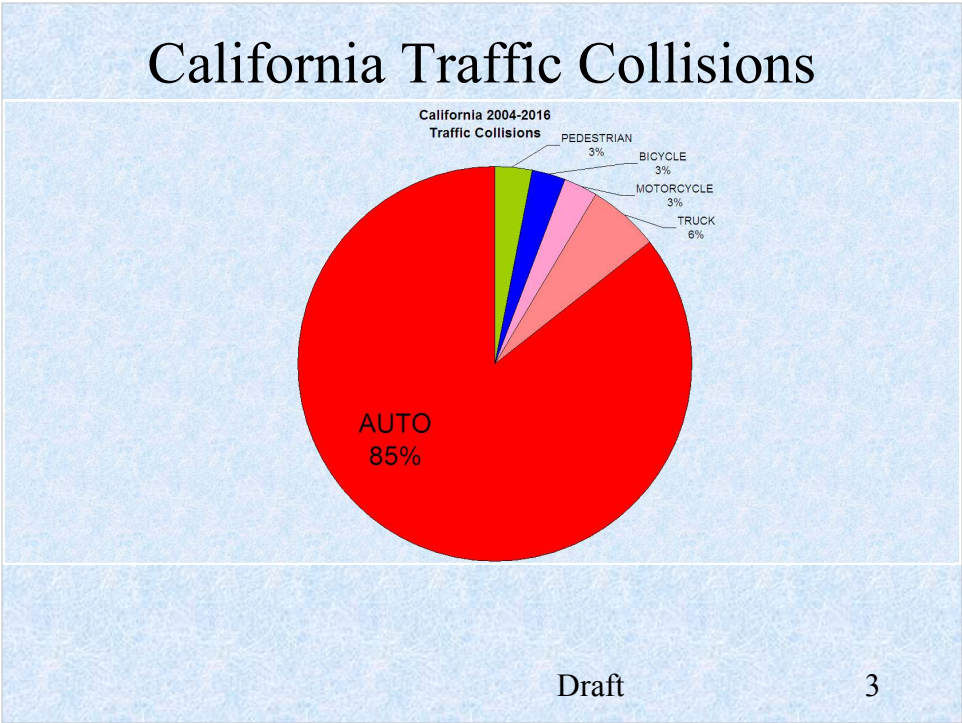
Shown here are the total traffic collisions for California from 2004-2016 with the estimated population (in millions) above each year.

While a slight but clear down trend is evident from 2004-2013, a disturbing upswing appears to be forming from 2013 to the present. From a collision rate of 1% of the population in 2013 the rate rose 4% to 1.04% in 2014, and rose another 4% to 1.09% in 2015. This increase of 42,022 collisions means at least an additional 42,000 people were directly impacted (pardon the pun) but since collisions are rarely a 1:1 occurrence, many more people are both directly and indirectly affected as the effects of collisions ripple through the fabric of our State.

The economic impact and productivity losses to the State, the locality, and the families of those involved due to collisions are better left to economists and productivity experts except to say that collisions carry enormous costs beyond the bent bumper or broken leg.

Why should I care?

You (and I) are paying for it, and lowering the collision rate will return more disposable income for you to do as you please, and tangentially provide a safer and healthier environment to go about spending it if you choose to do so.



Aggregated traffic collisions reveal 94% of traffic collisions in the State were between motorized vehicles with the remaining 6% divided somewhat evenly between some of the most vulnerable people on the road: people on bikes and people using their feet.

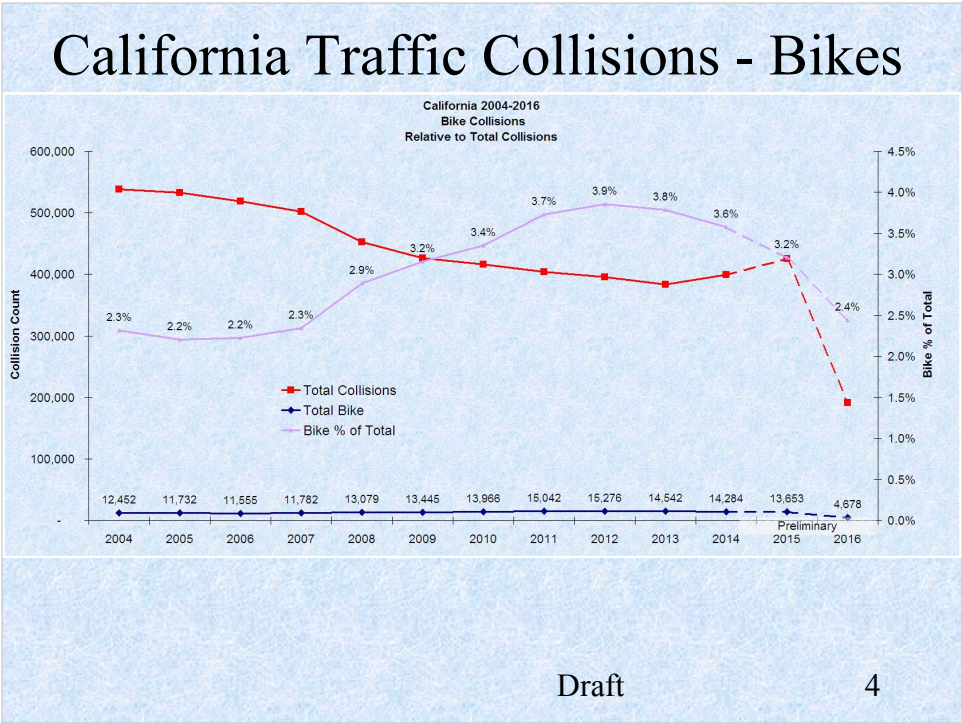
**Table of Collisions:**

2004 to 2Q-2016		Resulting in:		As a % of total	
Mode	Collisions	Death	Injury	Death%	Injury%
BICYCLE	203,687	2,009	182,672	1.0%	89.7%
MOTORCYCLE	199,980	6,330	164,770	3.2%	82.4%
PEDESTRIAN	215,098	10,667	205,807	5.0%	95.7%
Auto+Truck	6,574,990	35,137	3,473,711	0.5%	52.8%

Immediate costs for collisions can be as simple as a hidden percentage of every transaction you make, to death - the ultimate price.

This and subsequent reports will focus on the 3% of collisions involving people on bikes with the intent to quantify bike collision data to better identify areas of concern, suggest remedial actions, and measure whether those actions result in a positive outcome.

Similar but separate series are available for the other collision types.



Total traffic collisions for the State contained in the SWITRS database are compared to the number of bike collisions from 2004 to 2016 with the percentages for each year.

As seen in the chart, while the number of total collisions has been relatively decreasing year over year, the percentage of those collisions involving people on bikes has been increasing.

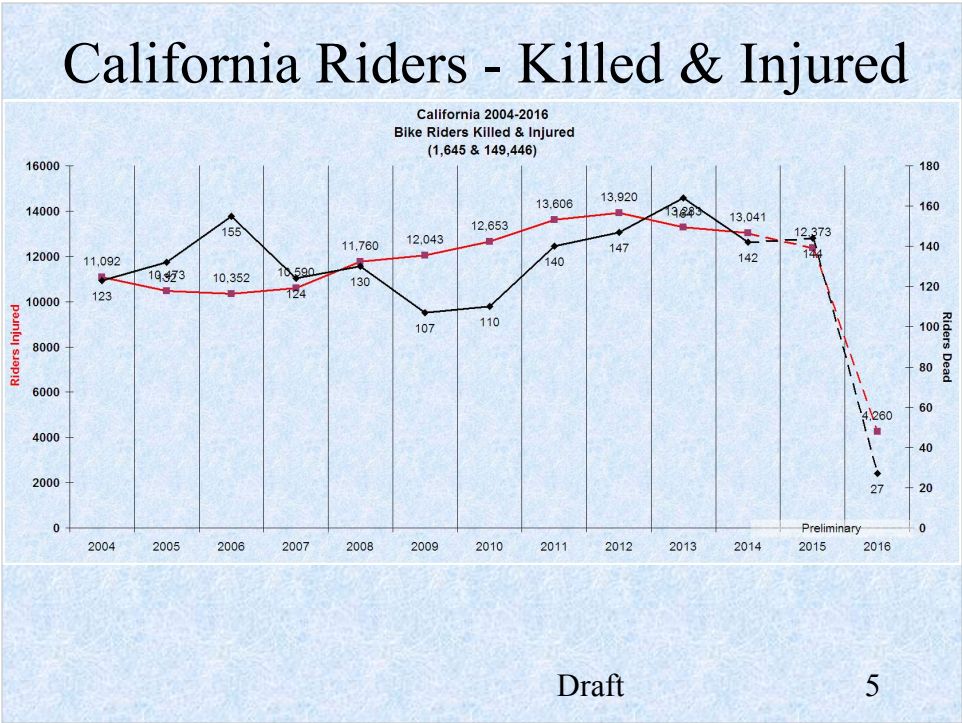
Why should this be?

This should serve as a call to arms for all stakeholders to identify causes, implement countermeasures, measure results, and adjust accordingly.

Planners and designers should integrate "best of breed" into new projects and seek to retrofit poor designs that prove causative to collisions.

Data for 2014-2016 are preliminary and are indicated by dotted lines.



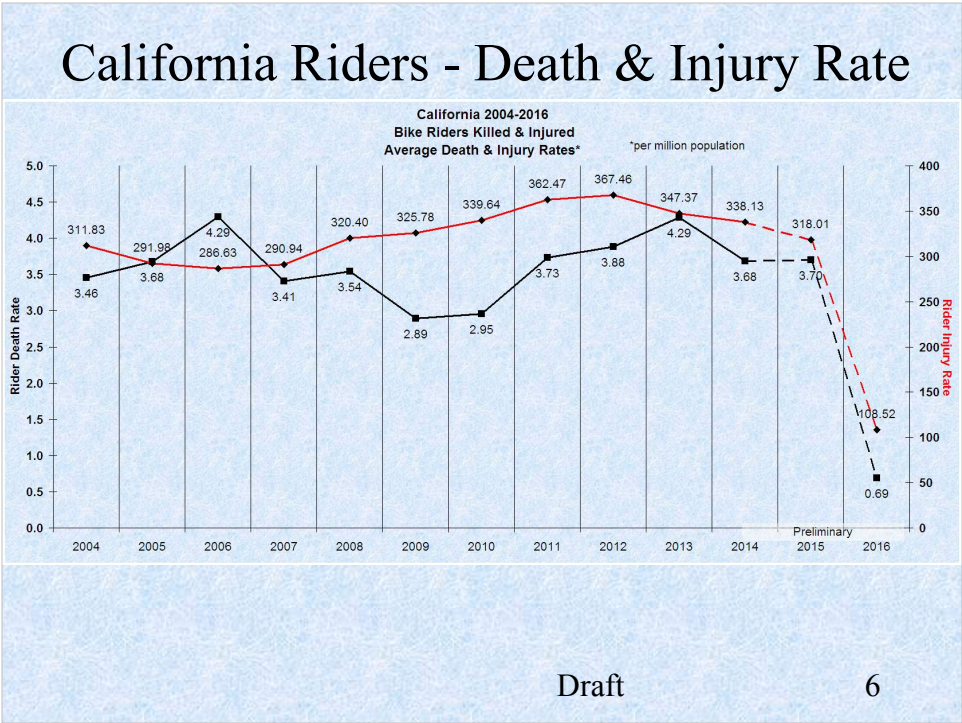


This chart shows the trend of bike riders killed and injured in California from 2004 to 2016.

Counts shown are the absolute number of fatalities and injuries as reflected from SWITRS.

2014-2016 are shown in dotted lines indicating the preliminary nature of these counts.

Data is still in-flowing for 2014-2016 so expect these counts to change at the next revision.



This chart shows the trend of the injury and death rate for bike riders killed and injured in California from 2004 to 2016.

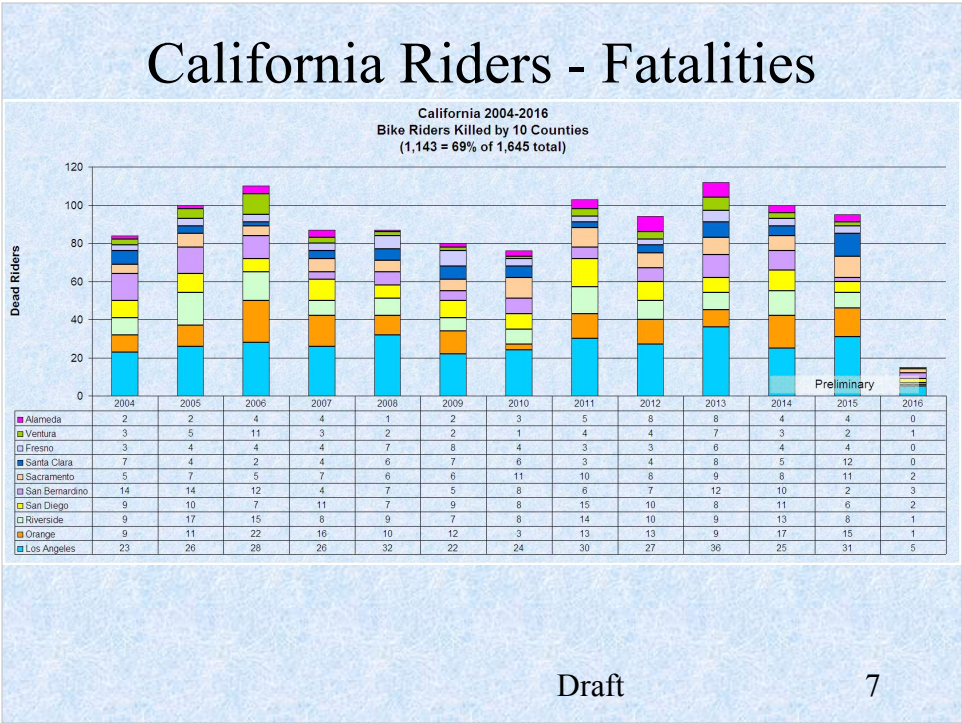
The rates are derived from the respective total annual collision count divided by the estimated population\* of the State for each year.

Counts shown are the number of fatalities and injuries per million while the counts in the previous chart were the actual number of reported bike collisions.

2014-2016 are shown in dotted lines indicating the preliminary nature of these rates.

Data is still in-flowing for 2014-2016 so expect these rates to change at the next revision.

\*Estimates done by the Dept. of Finance.



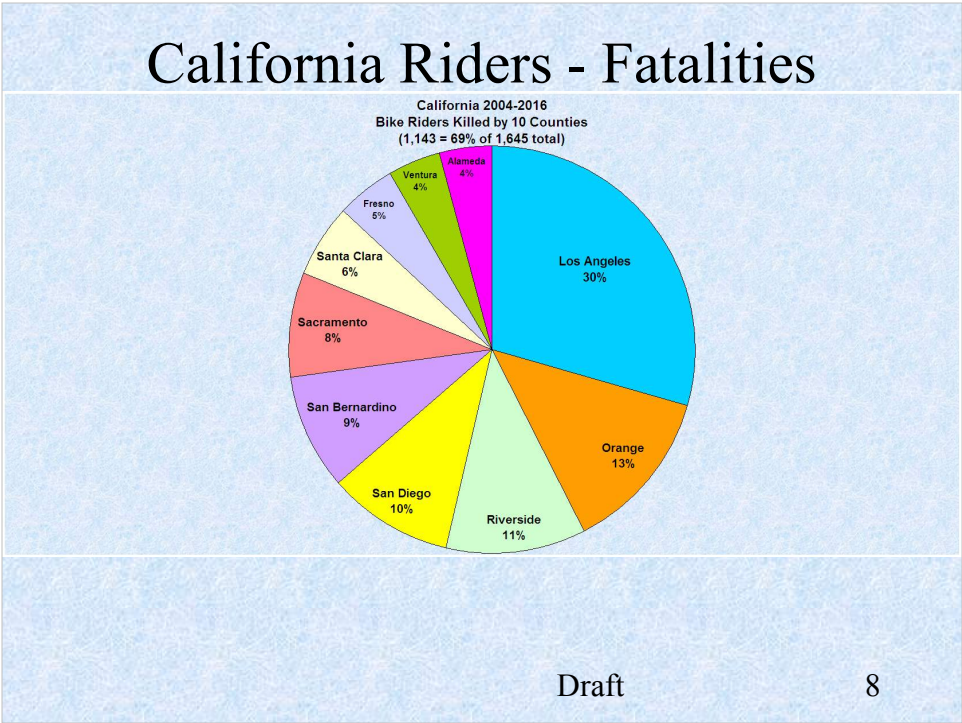
Here are 10 Counties of the 58 in the State with the highest count of rider fatalities from 2004-2016.

The Counties are arranged from less worse to worser, top to bottom with Los Angeles County taking the gold, Orange County for the silver, and Riverside County for the bronze.

Counts are provided in the table.

An overall sense of the trend over the years for these 10 Counties may be discerned by following the top of the bars from left to right.

Data is still in-flowing for 2014-2016 so expect these counts to change at the next revision.

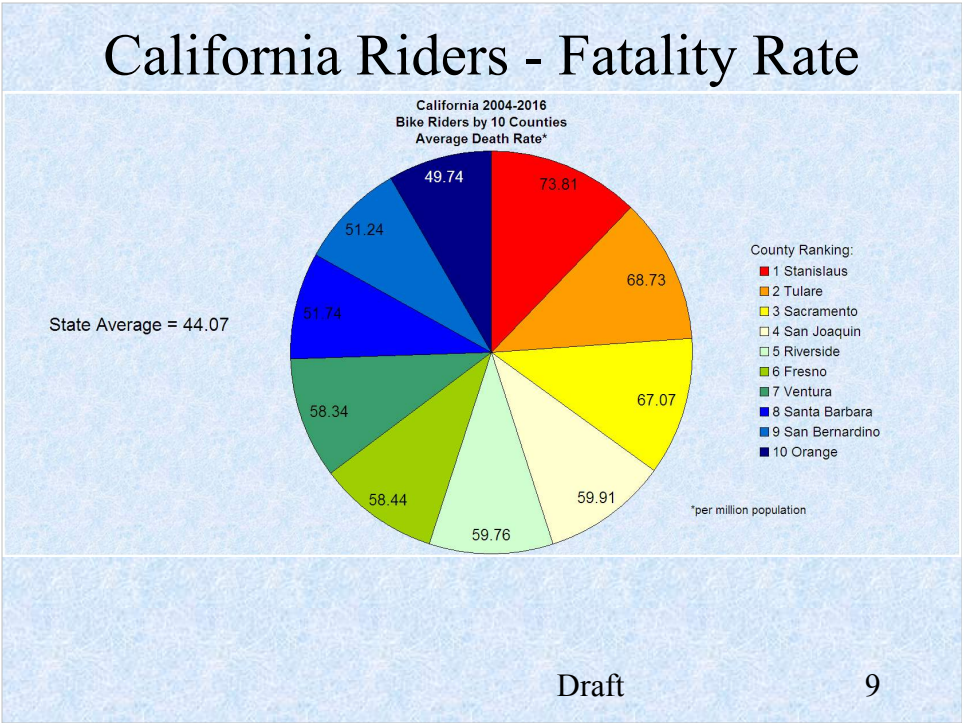


Here is the same information as the previous chart showing the percentage each of the 10 Counties contributed to the overall State fatality count from 2004 to 2016.

Here's how the "Top 10" stack up - worst to bad, top to bottom.

Rank	County	Rider Count
1	Los Angeles	335
2	Orange	151
3	Riverside	128
4	San Diego	113
5	San Bernardino	104
6	Sacramento	95
7	Santa Clara	68
8	Fresno	54
9	Ventura	48
10	Alameda	47
Total		1,143

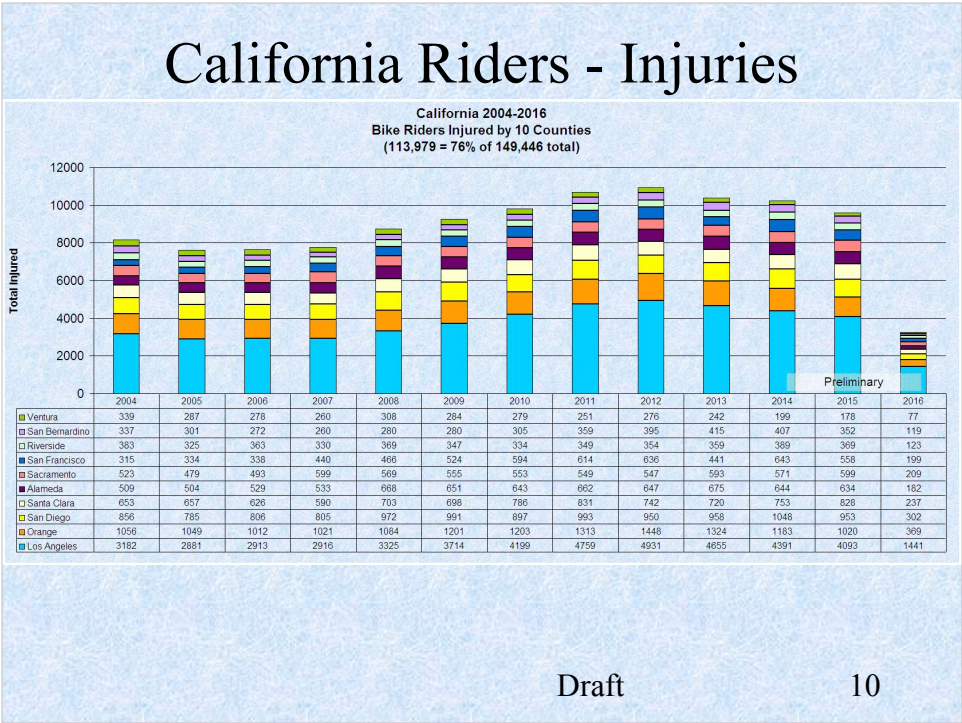




Welcome to the color wheel of death rates for bike riders in California. Shown here are the 10 Counties with the highest rate of bike rider fatalities relative to the population of the County from 2004-2016. Rates shown are relative per million population.

Here's the list:

Rank	County	Fatality Rate
1	Stanislaus	73.81
2	Tulare	68.73
3	Sacramento	67.07
4	San Joaquin	59.91
5	Riverside	59.76
6	Fresno	58.44
7	Ventura	58.34
8	Santa Barbara	51.74
9	San Bernardino	51.24
10	Orange	49.74
State Average		44.07



Here are the 10 Counties with the highest count of rider injuries in the State from 2004-2016.

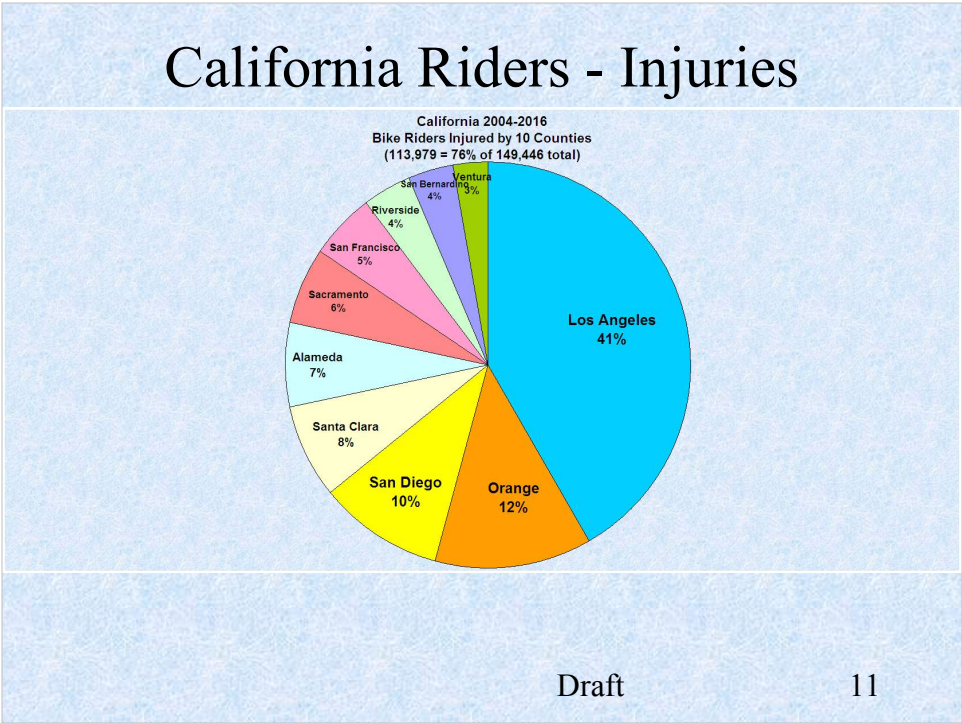
The Counties are arranged from less worse to worser, top to bottom with Los Angeles County taking the gold, Orange County for the silver, and San Diego County for the bronze.

While LA and Orange did not change their standings from fatalities presented earlier, Riverside County dropped from 3rd to 8th which could indicate bike riders in this County are more likely to be killed in a collision than not.

Counts are provided in the table.

An overall sense of the trend over the years for these 10 counties may be discerned by following the top of the bars from left to right.

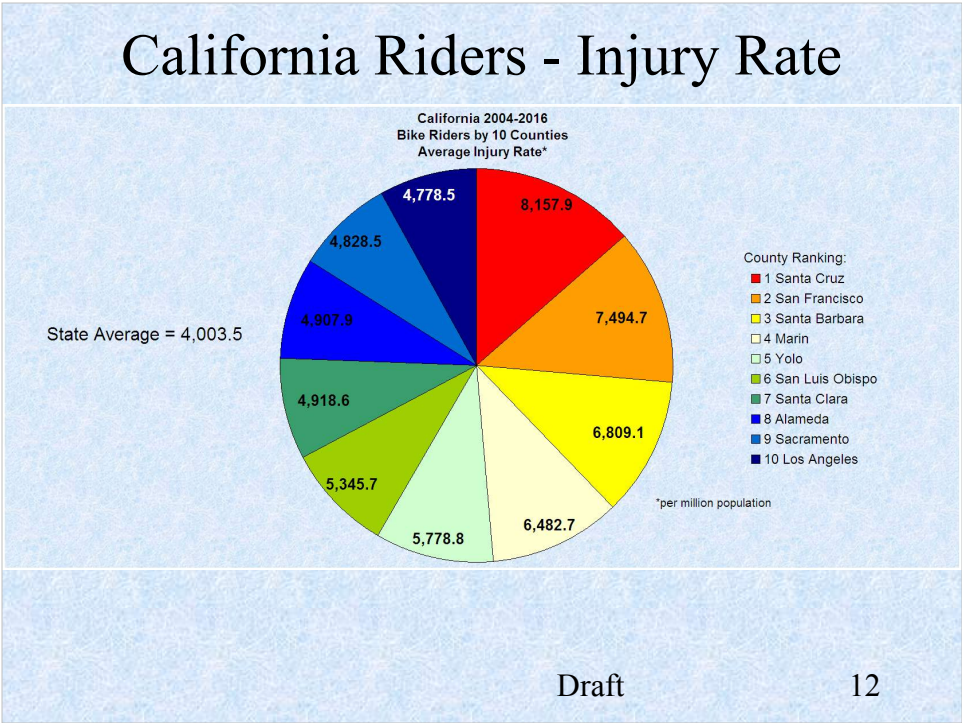
Data is still in-flowing for 2014-2016 so expect these counts to change at the next revision.



Here is the same information as the previous chart showing the percentage each County contributed to the overall State injury count from 2004 to 2016.

Here's how the "Top 10" stack up - worst to bad, top to bottom.

Rank	County	Rider Count
1	Los Angeles	57260
2	Orange	17290
3	San Diego	13809
4	Santa Clara	10691
5	Alameda	9088
6	Sacramento	8413
7	San Francisco	7061
8	Riverside	5339
9	San Bernardino	5099
10	Ventura	4210
Total		113,979

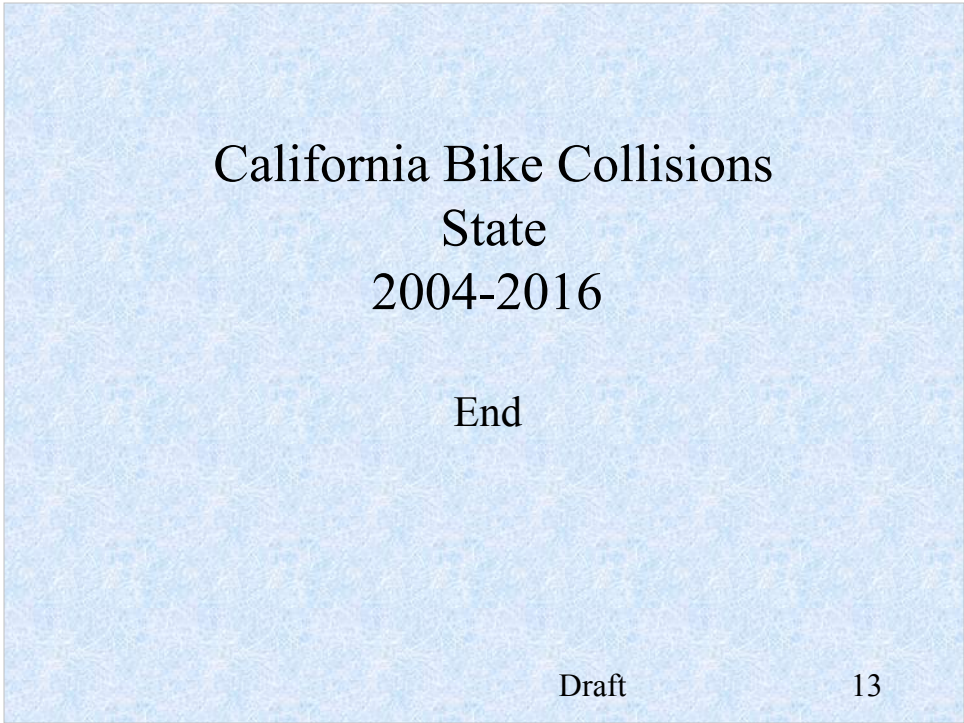


Welcome to the color wheel of injury rates for bike riders in California. Shown here are the 10 Counties with the highest rate of bike rider injuries relative to the population of the County from 2004-2016. Rates shown are relative per million population.

Here's the list:

Rank	County	Injury Rate
1	Santa Cruz	8,158.0
2	San Francisco	7,494.8
3	Santa Barbara	6,809.2
4	Marin	6,482.7
5	Yolo	5,778.8
6	San Luis Obispo	5,345.8
7	Santa Clara	4,918.6
8	Alameda	4,907.9
9	Sacramento	4,828.5
10	Los Angeles	4,778.5
State Average		4,003.5





Due to their high count or high relative rate, focus and priority to increase and improve roadway safety should begin with the following 18 Counties:

Alameda	Fresno	Los Angeles	Marin
Orange	Riverside	Sacramento	San Bernardino
San Francisco	San Joaquin	San Luis Obispo	Santa Barbara
Santa Clara	Santa Cruz	Stanislaus	Tulare
Ventura	Yolo		

Counties should view reducing collision costs as a revenue source and not a cost of doing business as usual. Reduction goals should be set and measured to adjust mitigation efforts accordingly. Goals could be a 5 year 20% reduction or a more aggressive 33% reduction target with the collision cost savings going back to the general fund.

Additional information is available in the individual County presentations. The intent and purpose of this and subsequent collision reports is to provide visibility and insight to a very small but vulnerable population in the universe of traffic collisions in the State.

Thank You