



CITY OF SAN LUIS OBISPO

2014 Annual Traffic Safety Report



Public Works and Police Department
January 2016

Table of Contents

EXECUTIVE SUMMARY	2
CITYWIDE COLLISION TRENDS.....	3
INJURY COLLISION TREND	3
FATAL COLLISION TREND	3
OVERALL COLLISION TREND	4
PEDESTRIAN COLLISION TREND.....	5
BICYCLE COLLISION TREND.....	5
TRAFFIC ENFORCEMENT MEASURES	6
CITATION TRENDS	6
DUI ARRESTS	6
CITATIONS BY VEHICLE CODE SECTION 2014	7
TRAFFIC SAFETY EDUCATION CAMPAIGNS	8
2014 HIGH COLLISION RATE LOCATIONS & RECOMMENDATIONS	9
PEDESTRIANS.....	9
PEDESTRIAN LOCATION RECOMMENDATIONS	10
BICYCLES	11
BICYCLE LOCATION RECOMMENDATIONS	12
ARTERIAL/ARTERIAL INTERSECTIONS	13
ARTERIAL/ARTERIAL INTERSECTIONS RECOMMENDATIONS.....	14
ARTERIAL/COLLECTOR INTERSECTIONS.....	15
ARTERIAL/COLLECTOR INTERSECTIONS RECOMMENDATIONS.....	15
ARTERIAL/LOCAL INTERSECTIONS.....	16
ARTERIAL/LOCAL INTERSECTIONS RECOMMENDATIONS.....	17
COLLECTOR/COLLECTOR INTERSECTIONS.....	18
COLLECTOR/LOCAL INTERSECTIONS.....	18
COLLECTOR/LOCAL INTERSECTIONS RECOMMENDATIONS	18
LOCAL/LOCAL INTERSECTIONS	19
ARTERIAL SEGMENTS	20
ARTERIAL SEGMENTS RECOMMENDATIONS	21
COLLECTOR SEGMENTS	22

Executive Summary

The Public Works & Police Departments are pleased to present the 14th cycle of the City's annual traffic safety program. The Annual Traffic Safety Program began in 2002 in an attempt to identify high collision locations within the City. In addition, the program actively pursues corrective measures that may reduce collision rates and improve safety for the citizen of San Luis Obispo. This program has had continued success with 55% collision reduction since the program began despite increasing traffic volumes. In 2009 the City received the International Public Agency Achievement award from the Institute of Traffic Engineers (ITE) for this program. This award is one of the highest recognitions a public agency can receive for its traffic engineering practices.

This safety program has had long lasting success and again in 2014, total collisions are the lowest on record, down by 4% from the previous year. However, to ensure that the most serious collisions are analyzed, the safety report program will begin to focus on collisions with injury. Injury collisions require a police report to be taken, along with an investigation by a peace officer. These reports give a clearer picture of the collision circumstances, and can establish a more reliable year-to-year trend as policies change with regard to collision response. In 2014, injury collisions decreased by 3% from the previous year, and are 16% lower since the safety program began.

The program also includes thorough evaluations of bicycle and pedestrian safety. Bicycle collision trends continue to decline since peaking in 2009, with a 21% drop over 2013 numbers. Overall annual pedestrian collisions have been relative static since 2008, in 2013 there was a significant peak however in 2014 the number of pedestrian collision have returned to the historical trend. There was one fatality in 2014 involving a pedestrian crossing S. Higuera near the County line south of Los Osos Valley Road.

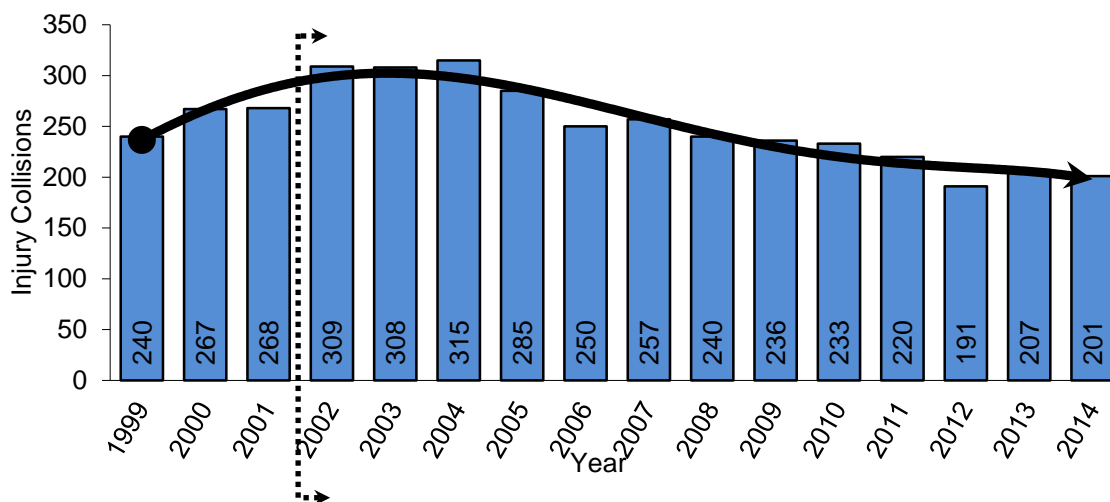
The following report displays trends in collision history, traffic safety measures and identifies high collision rate locations in 2014. As in previous Traffic Safety Reports, staff reviewed all high collision rate intersections and segment locations and has recommended mitigation measures to increase safety at the top five locations in each category. Additionally, the report tracks the enforcement of traffic citations and DUI arrests in the City, to address trends in the types of violations which cause collisions.

Our goal is that the combination of thorough analysis, appropriate mitigation, and consistent and focused education and enforcement will continue to reduce traffic collisions and injuries and improve the safety of our motoring, walking and bicycling public.

Citywide Collision Trends

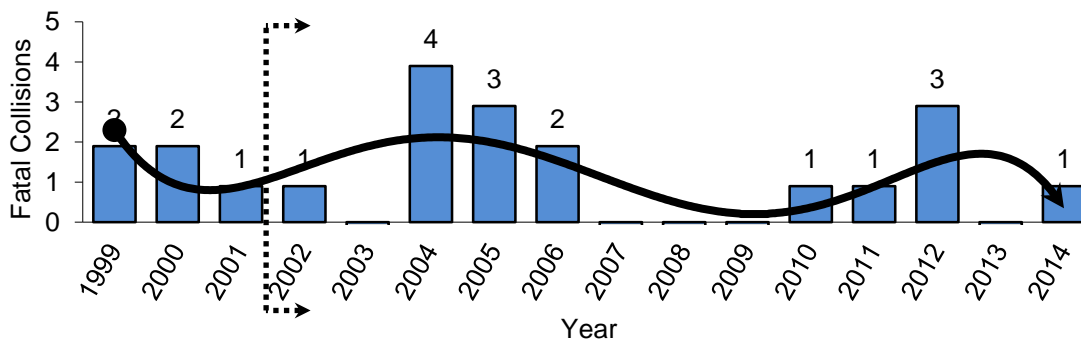
Injury collisions are the most accurate representation of City collision trends because these types of collision are most consistently reported and investigated. In 2014 the sustained downward trend since the beginning of the safety program continues with a 3% reduction from 2013.

Injury Collision Trend

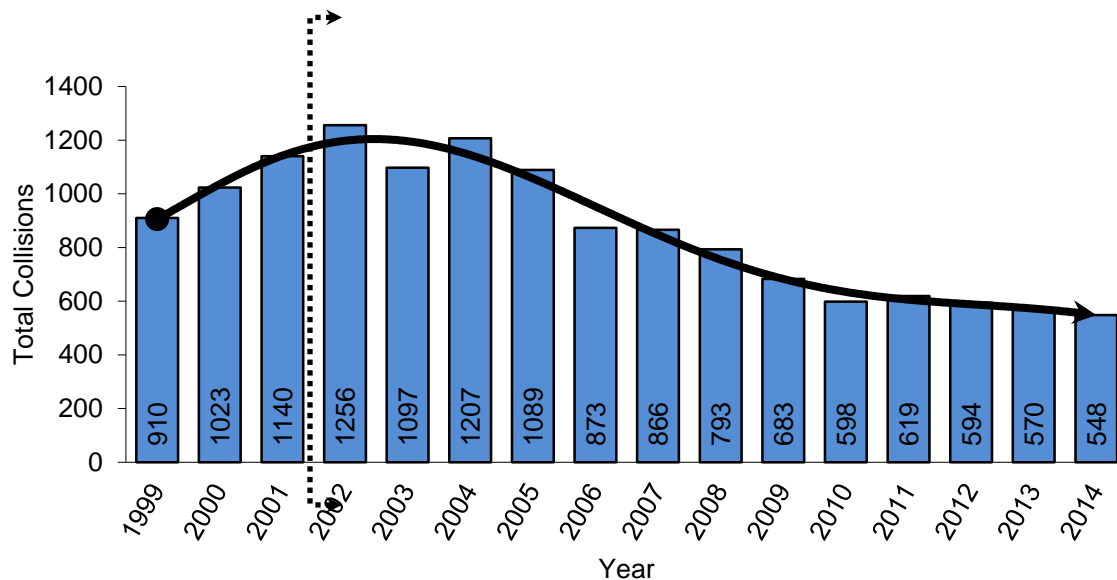


It's difficult to identify a trend in fatal collisions because these types of collisions are typically sporadic, uncommon, and occur under unusual circumstances. The single collision in 2014 occurred on S. Higuera Street near the City limits south of Los Osos Valley Road and involved a pedestrian standing in the roadway during evening hours.

Fatal Collision Trend



Overall Collision Trend

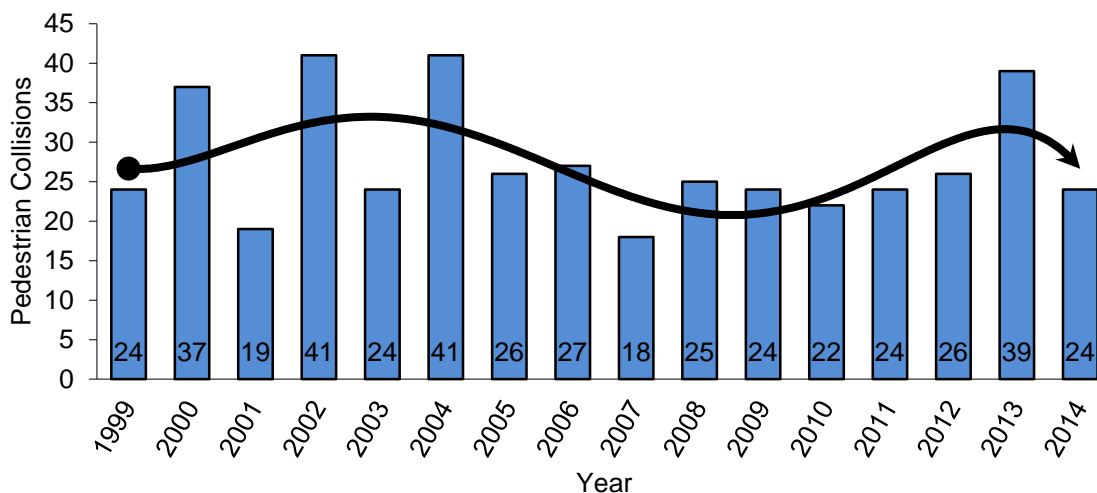


The Overall Collision chart does not represent all collisions that occur in the City, merely all reported collisions for which a report is generated. Many collisions are unreported by the involved parties, are reported by the parties without an officer investigation, or there is no response to the collision by emergency services. Therefore, the actual total collisions may vary between years. A more accurate measure are the injury and fatal collision trends, as police always respond to collisions where the reporting party indicates there is an injury.

Pedestrian & Bicycle Collision Trends

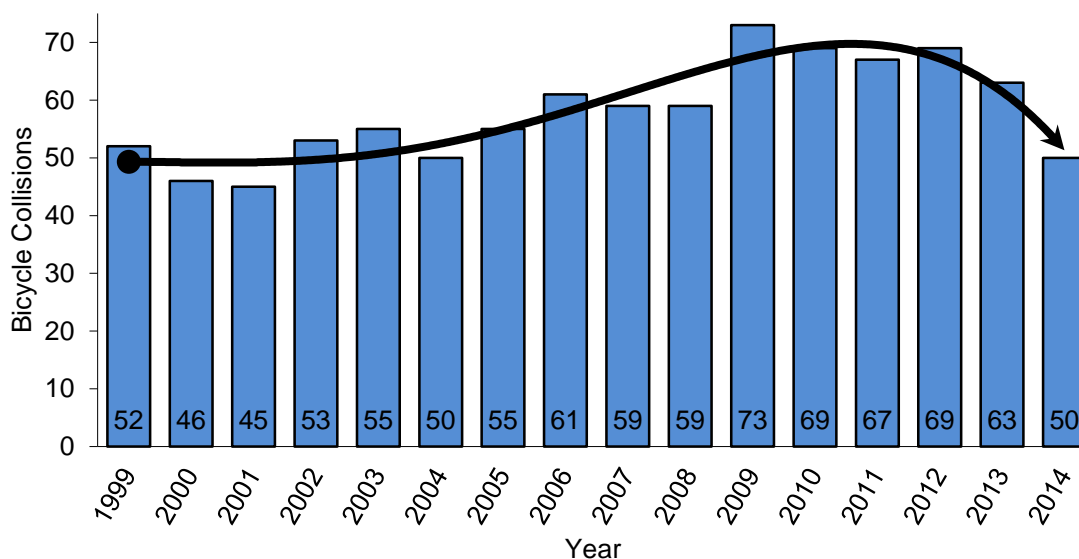
Despite rising pedestrian volumes, pedestrian collisions have remained relatively static since 2008. In 2013 there was an unexplained spike, however total pedestrian collisions in 2014 have return to the historical trend.

Pedestrian Collision Trend



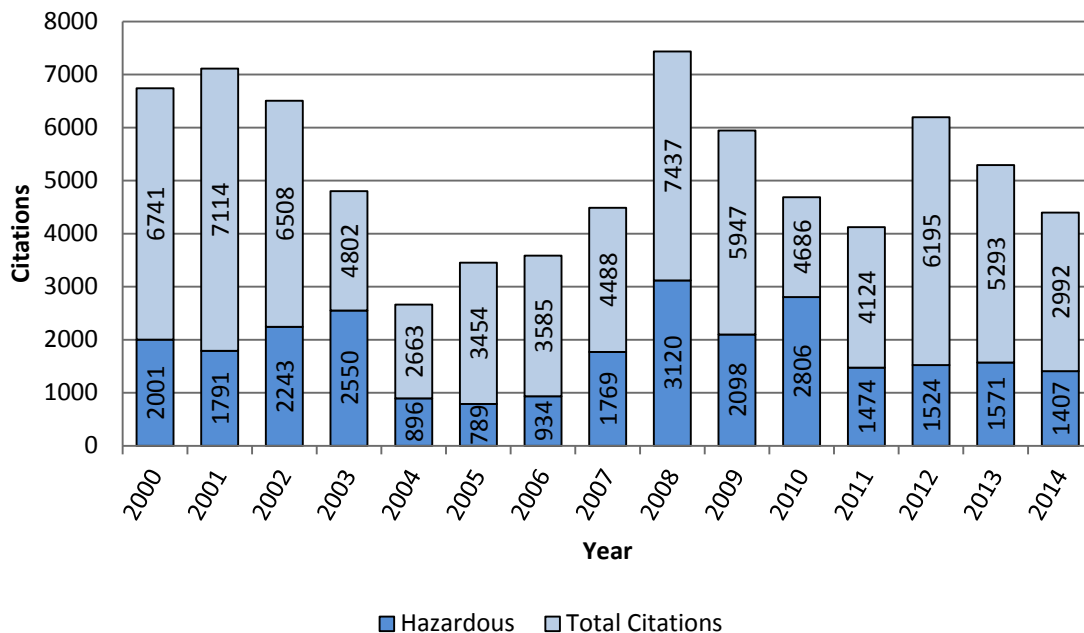
Despite rising bicycle volumes, bicycle collisions have actually been on the decline since 2009, bicycle collision are down by almost 30% over the last 5 years, 20% in just the last year. These reductions can be attributed to the City's investment in bicycle improvements, education, and enforcement.

Bicycle Collision Trend

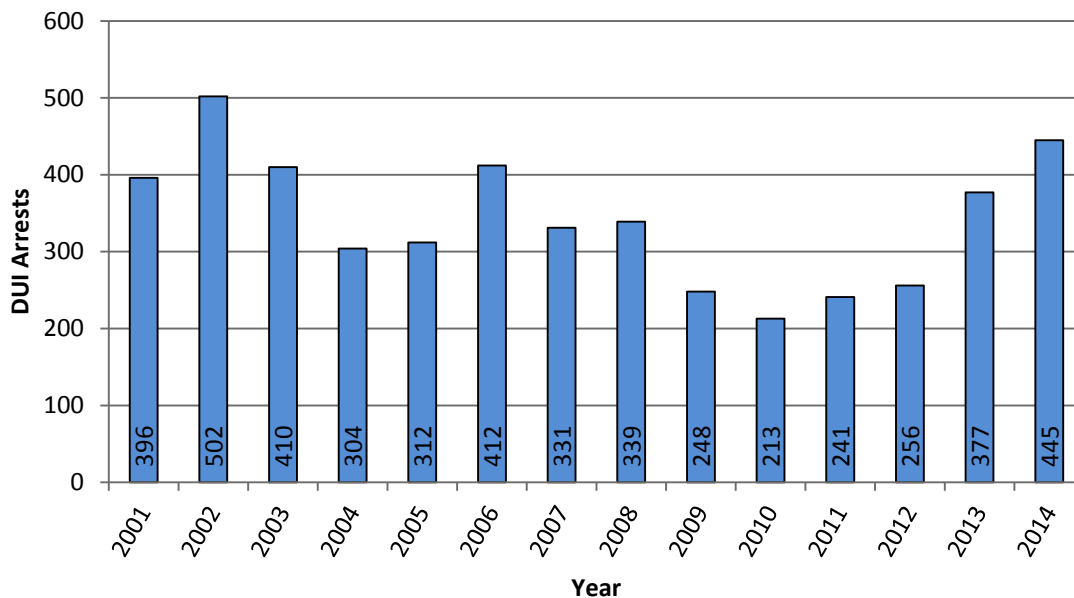


Traffic Enforcement Measures

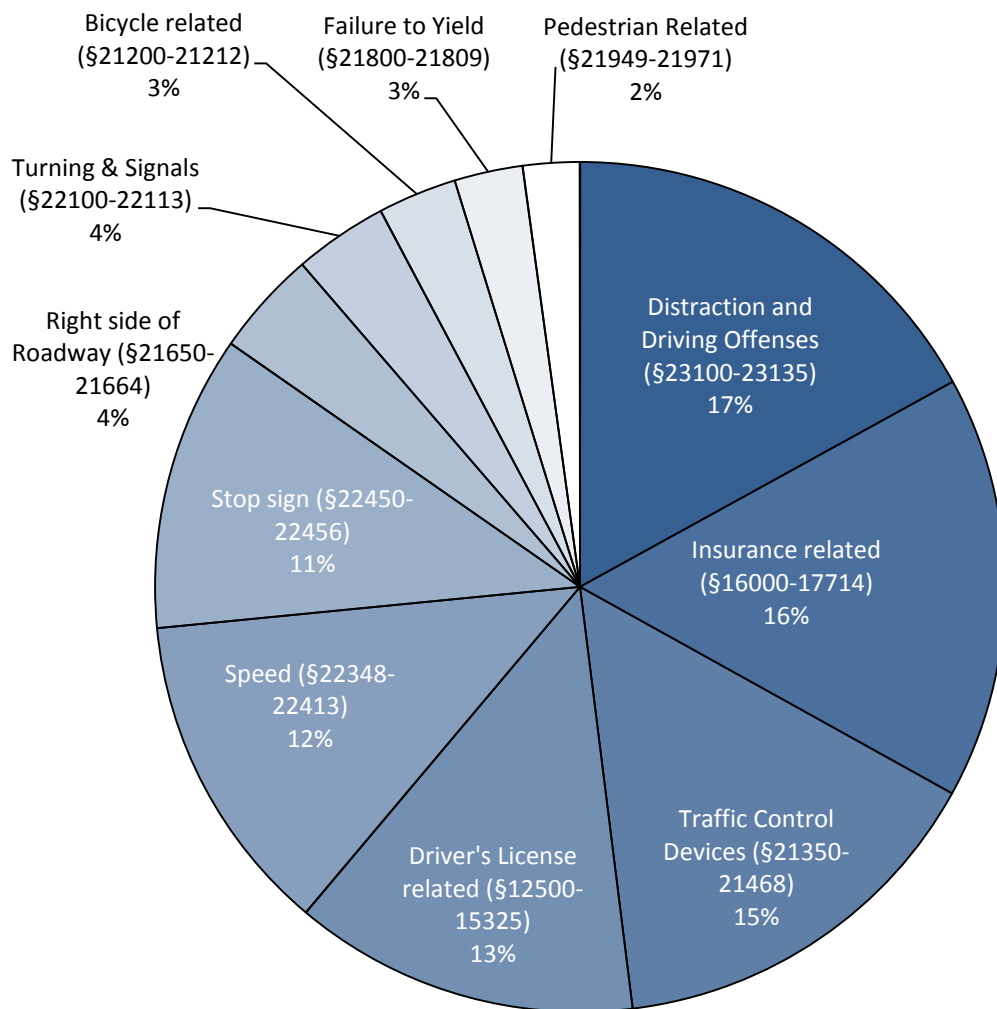
Citation Trends



DUI Arrests



Citations by Vehicle Code Section 2014



Traffic Safety Education Campaigns

Partnership with the California Office of Traffic Safety

A Selective Enforcement Grant funds a full-time DUI officer position. This officer is utilized specifically for DUI enforcement in an effort to further reduce the number of alcohol and drug related driving incidents.

Bicycle Rodeo

The City hosts a hands-on bicycle training class targeting youth teaching bicycle skills & operations.

Pedestrian Halloween Safety Campaign

The City provides reflective Halloween bags with safety tips to local schools free of cost.

Impaired Driver Offender Classes

City officers attend and supplement DUI offender courses to provide a unique positive opportunity to discuss, face to face, the impacts of driving under the influence.

Every Fifteen Minutes Program

The City participates in a multi department and agency event simulating the psychological effects of student fatalities as a result of traffic collisions.

Child Car Seat Instruction & Assistance

The City provides child safety seat installation and inspection free of cost.

Channel 20 Public Safety Announcements

Bicycle Safety Posters

City of SLO Partnerships:

SLO County Bicycle Coalition

- *Safety Education Courses*
- *Elementary School Safety Assemblies*
- *Safety Brown Bag Lunch at Participating Businesses*

SLO Rideshare

- *Safe Routes to School Program*

2014 High Collision Rate Locations & Recommendations

Pedestrians

2014							
Rank	Prev. Rank	Intersection	2014 Collisions	5 Yr. Collisions	PH Veh. Vol	PH Ped. Vol	REV
1	Not Ranked	Santa Rosa & Walnut	2	3	2606	13	3007
2	1	Foothill & Santa Rosa	1	3	3907	87	674
3	2	Monterey & Santa Rosa	1	3	2159	128	253
4	Not Ranked	Higuera & Nipomo	3	3	1115	138	121
5	3	Broad & Higuera	1	5	1052	469	56

PH = Peak Hour

REV = Relative Exposure Value

The method for evaluating pedestrian collision locations identifies all locations where at least one pedestrian collision has occurred in 2014 and ranks those locations based on a “relative exposure value” (REV) for the previous five year pedestrian collision history, with three or more pedestrian related collisions.

Pedestrian Location Recommendations

2014						
Rank	Prev. Year Rank	Intersection	5 Yr. Collisions	PH Veh. Vol	PH Ped. Vol	REV
1	Not Ranked	Santa Rosa & Walnut	3	2606	13	3007
<p>Pattern: Turning traffic failing to yield to pedestrians.</p> <p>Recommendation: Intersection under State Jurisdiction. Forward to Caltrans for study & continue to monitor in 2015.</p>						
2	1	Foothill & Santa Rosa	3	3907	87	674
<p>Pattern: Turning traffic failing to yield to pedestrians.</p> <p>Recommendation: Forward to Caltrans for study. Continue to monitor in 2015.</p>						
3	2	Monterey & Santa Rosa	3	2159	128	253
<p>Pattern: Left turning traffic not yielding to pedestrians.</p> <p>Recommendation: Yield to Pedestrian signs installed in April of 2011. Investigate Flashing Yellow Arrow and Advanced Pedestrian Phasing options as part of minor signal upgrade. Continue to monitor in 2015.</p>						
4	Not Ranked	Higuera & Nipomo	3	1115	138	121
<p>Pattern: Driving under the influence.</p> <p>Recommendation: Conduct focused DUI enforcement downtown and continue to monitor in 2015.</p>						
5	3	Broad & Higuera	5	1052	469	56
<p>Pattern: Ped vs. Left Turns from Broad to Higuera and Higuera to Broad</p> <p>Recommendation: Pedestrian warning signs upgraded in 2014, one collision since. Continue to monitor in 2015.</p>						

Bicycles

2014							
Rank	Prev. Yr Rank	Intersection	2014 Collisions	5 yr Collisions	PH Veh. Volume	PHBike Volume	REV
1	unranked	Santa Rosa & Walnut	2	6	2606	18	4343
2	unranked	Broad & Orcutt	2	4	3276	23	2849
3	6	California & Taft	2	6	1746	19	2757
4	unranked	Santa Rosa & Boysen	1	3	2750	20	2063
5	7	101 N/b On/off Ramp & California	2	4	1548	17	1821
6	3	California & Monterey	1	6	1935	40	1451
7	unranked	Broad & Santa Barbara / South	1	3	2762	36	1151
8	4	Foothill & Santa Rosa	2	4	3907	71	1101
9	unranked	California & Foothill	1	6	1995	88	680
10	unranked	Grand & Mill	1	3	722	20	542
11	8	California & Mill	1	4	1031	47	439
12	9	California & Palm	1	3	1000	44	341
13	unranked	Higuera & Garden	1	3	875	40	328

PH = Peak Hour

REV = Relative Exposure Value

The method for evaluating for bicycle collision locations identifies all locations where at least one bicycle collision has occurred in 2014 and ranks those locations based on a “relative exposure value” (REV) for the previous five year bicycle collision history, with three or more bicycle related collisions. This method of evaluation is often chosen over pure numbers because the number of collisions generally increases within proportion to bicycle volumes. These values are used to identify locations where more collisions are occurring than would be expected.

Bicycle Location Recommendations

2014						
Rank	Prev. Year Rank	Intersection	5 yr. Collisions	PH Veh. Volume	PH. Bike Volume	REV
1	unranked	Santa Rosa & Walnut	6	2606	18	4343
<p>Pattern: Cyclists vs. NB Motorists turning Right onto Walnut.</p> <p>Recommendation: Intersection under state jurisdiction. Green bike lane extensions thru intersection were installed in July of 2015, monitor as part of 2015 Traffic Safety Report.</p>						
2	unranked	Broad & Orcutt	4	3276	23	2849
<p>Pattern: No discernible pattern.</p> <p>Recommendation: Green bike lane extensions thru intersection were installed in August of 2015, Monitor as part of 2015 Traffic Safety Report.</p>						
3	6	California & Taft	6	1746	19	2757
<p>Pattern: Cyclists vs. SB motorists Left Turning onto Taft.</p> <p>Recommendation: Location approved for roundabout control as part of General Plan. Staff is actively pursuing grant funding and will prepare a CIP request in the upcoming budget. Cal Poly Housing EIR identified this as an impacted intersection and established a fair share cost responsibility for the University. Also grant funding for Railroad Safety Trail Extension thru this location approved, work expected to begin in Spring of 2016.</p>						
4	unranked	Santa Rosa & Boysen	3	2750	20	2063
<p>Pattern: Cyclists vs. NB Motorists turning Left onto Boysen.</p> <p>Recommendation: Intersection under state jurisdiction. Forward to Caltrans for study & continue to monitor in 2015.</p>						
5	7	101 N/b On/off Ramp & California	4	1548	17	1821
<p>Pattern: Cyclists vs. SB Motorists turning Left onto 101 On-Ramp.</p> <p>Recommendation: Intersection under state jurisdiction. Green bike lane extensions thru intersection were installed in Summer of 2014, monitor as part of 2015 Traffic Safety Report.</p>						

PH = Peak Hour

REV = Relative Exposure Value

Arterial/Arterial Intersections

Rank	Intersection	Control	Collisions	Volume	Rate*
1	California & Monterey	Signal	6	21,052	0.781
2	Grand & Monterey	Signal	4	14,312	0.766
3	Marsh & Santa Rosa	Signal	5	18,383	0.745
4	Los Osos Valley & Madonna	Signal	10	38,376	0.714
5	California & 101 Nb On/Off Ramp	Stop	4	15,758	0.695
6	Monterey & Santa Rosa	Signal	6	26,656	0.617
7	Chorro & Marsh	Signal	3	14,032	0.586
8	Foothill & Santa Rosa	Signal	9	50,288	0.490
9	Broad & South / Santa Barbara	Signal	6	34,841	0.472
10	California & Foothill	Signal	4	23,589	0.465
11	Higuera & Madonna	Signal	5	32,600	0.420
12	101 N/B On/Off Ramp & Los Osos Valley	Signal	4	27,350	0.401
13	Broad & Orcutt	Signal	5	34,988	0.392
14	Higuera & Prado	Signal	3	21,385	0.384
15	Higuera & Tank Farm	Signal	4	29,470	0.372
16	Broad & Tank Farm	Signal	5	40,333	0.340
17	101 N/B On/Off Ramp & Madonna	Signal	3	27,776	0.296
18	101 S/B On/Off Ramp & Madonna	Signal	3	28,518	0.288

*Rate = Collision frequency per million vehicles entering the intersection

Arterial/Arterial Intersections Recommendations

Rank	Intersection	Control	Collisions	Volume	Rate*
1	California & Monterey	Signal	7	21,052	0.911
<p>Pattern: No discernible pattern.</p> <p>Recommendation: Continue to monitor in 2015.</p>					
2	Grand & Monterey	Signal	4	14,312	0.766
<p>Pattern: Permissive EB Left Vs. WB Thru</p> <p>Recommendation: Evaluate conversion of permissive left turn phasing to protected left turn phasing and continue to monitor in 2015.</p>					
3	Marsh & Santa Rosa	Signal	5	18,383	0.745
<p>Pattern: Permissive SB Left Vs. NB Thru</p> <p>Recommendation: Evaluate conversion of permissive left turn phasing to protected left turn phasing and continue to monitor in 2015.</p>					
4	Los Osos Valley & Madonna	Signal	10	38,376	0.714
<p>Pattern: EB & WB rear ends, driver inattention.</p> <p>Recommendation: Continue to monitor in 2015.</p>					
5	California & 101 NB On/Offramp	Stop	4	15,758	0.695
<p>Pattern: Cyclists vs. SB Motorists turning Left onto 101 On-Ramp.</p> <p>Recommendation: Intersection under state jurisdiction. Green bike lane extensions thru intersection were installed in Summer of 2014, monitor as part of 2015 Traffic Safety Report.</p>					

*Rate = Collision frequency per million vehicles entering the intersection

Arterial/Collector Intersections

Rank	Intersection	Control	Collisions	Volume	Rate*
1	California & Mill	Signal	3	11,937	0.689
2	Osos & Pismo	Signal	3	14,439	0.569
3	Madonna & Oceanaire	Signal	4	24,184	0.566
4	Broad & Foothill	Signal	3	18,977	0.433
5	Mill & Santa Rosa	Signal	3	22,889	0.359

In 2014 there were 5 Arterial/Collector intersection locations that had 3+ collisions

Arterial/Collector Intersections Recommendations

Rank	Intersection	Control	Collisions	Volume	Rate*
1	California & Mill	Signal	3	11,937	0.689
Pattern: Red light violations. Recommendation: Upgrade 8" signal indications to 12" and continue to monitor in 2015.					
2	Osos & Pismo	Signal	3	14,439	0.569
Pattern: No discernible pattern. Recommendation: Continue to monitor in 2015.					
3	Madonna & Oceanaire	Signal	5	24,184	0.566
Pattern: No discernible pattern. Recommendation: Continue to monitor in 2015.					
4	Broad & Foothill	Signal	3	18,977	0.433
Pattern: EB Thru Vs. WB Left right of way violations. Recommendation: Upgrade 8" signal indications to 12" indications & continue to monitor in 2015.					
5	Mill & Santa Rosa	Signal	3	22,889	0.359
Pattern: EB & WB Mill Red Light Violations. Recommendation: Upgrade 8" signal indications to 12" indications & continue to monitor in 2015. Continue to monitor in 2015.					

*Rate = Collision frequency per million vehicles entering the intersection

Arterial/Local Intersections

Rank	Intersection	Control	Collisions	Volume	Rate*
1	Monterey & Osos	Signal	5	6,822	2.008
2	Marsh & Morro	Signal	4	11,222	0.977
3	California & Taft	Stop	6	17,813	0.923
4	Calle Joaquin & Los Osos Valley	Signal	10	33,320	0.822
5	Garden & Higuera	Stop	3	10,120	0.812
6	Higuera & Osos	Signal	3	12,313	0.668
7	Froom Ranch & Los Osos Valley	Signal	7	37,440	0.512
8	Santa Rosa & Walnut	Signal	6	33,171	0.496
9	Breck & Johnson	Stop	3	17,932	0.458
10	Higuera S & Suburban	Signal	4	25,792	0.425
11	Olive & Santa Rosa	Signal	5	44,039	0.311
12	Auto Park & Los Osos Valley	Stop	3	30,968	0.265

*Rate = Collision frequency per million vehicles entering the intersection

Arterial/Local Intersections Recommendations

Rank	Intersection	Control	Collisions	Volume	Rate*
1	Monterey & Osos	Signal	5	6,822	2.008
<p>Pattern: Red Light Violations All Directions</p> <p>Recommendation: Reconstruct signal with mast arms to increase visibility of indications. Project is funded as part of current CIP, construction is expected in 2016.</p>					
2	Marsh & Morro	Signal	4	11,222	0.977
<p>Pattern: No discernible pattern.</p> <p>Recommendation: Continue to monitor in 2015.</p>					
3	California & Taft	Stop	6	17,813	0.923
<p>Pattern: Broadside Collisions.</p> <p>Recommendation: Location approved for roundabout control as part of General Plan. Staff is actively pursuing grant funding and will prepare a CIP request in the upcoming budget as well. Cal Poly Housing EIR identified this as an impacted intersection and established a fair share cost responsibility for the University.</p>					
4	Calle Joaquin & Los Osos Valley	Signal	10	33,320	0.822
<p>Pattern: Rear End and Broadside Collisions.</p> <p>Recommendation: Intersection being reconfigured as part of the LOVR Interchange Project, continue to monitor after construction is complete.</p>					
5	Garden & Higuera	Stop	3	10,120	0.812
<p>Pattern: Parking Maneuvers</p> <p>Recommendation: Intersection being reconfigured as part of Garden Street Terraces project. Continue to monitor after construction is complete.</p>					

*Rate = Collision frequency per million vehicles entering the intersection

Collector/Collector Intersections

No Locations Ranked Under this Category

Collector/Local Intersections

Rank	Intersection	Control	Collisions	Volume	Rate*
1	Chorro & Peach	Stop	4	6,774	1.618

In 2014 there was a single Collector/Local intersection location that had 3+ collisions

Collector/Local Intersections Recommendations

Rank	Intersection	Control	Collisions	Volume	Rate*
1	Chorro & Peach	Stop	4	6,774	1.618

Pattern: Pattern: EB and WB vs. SB

Recommendation: Lane reconfigurations to Chorro Street near this intersection were completed in 2015, continue to monitor.

*Rate = Collision frequency per million vehicles entering the intersection

Local/Local Intersections

No Locations Ranked Under this Category



Arterial Segments

Rank	Prev. Rank	Segment	Collisions	Volume	Segment Length	Rate	Type	Location
1	Not Ranked	Santa Rosa, 200-600 Block	8	13390	0.27	6.063	Arterial	Oak to Walnut
2	3	Foothill, 1000-1200 Block	12	16527	0.33	6.028	Arterial	Santa Rosa to California
3	1	Higuera, 500-700 Block	6	23991	0.25	2.763	Arterial	Nipomo to Garden
4	6	Broad, 2900-3200 Block	7	27108	0.40	1.769	Arterial	Sweeny to Rockview
5	Not Ranked	LOVR, 12000 Block	13	32027	0.82	1.356	Arterial	NB 101 on/off ramps to Froom

*Rate = Collision frequency per million vehicle miles traveled along the segment

Arterial Segments Recommendations

Rank	Prev. Rank	Segment	Collisions	Volume	Segment Length	Rate	Type	Location
1	Not Ranked	Santa Rosa, 200-600 Block	8	13390	0.27	6.063	Arterial	Oak to Walnut
<p>Pattern: Rear end collisions in congestion</p> <p>Recommendation: Interchange planned for upgrade to address congestion as part of City General plan and regional transportation plan. Intersection under state jurisdiction, forward finding to CalTrans.</p>								
2	3	Foothill, 1000-1200 Block	12	16527	0.33	6.028	Arterial	Santa Rosa to California
<p>Pattern: Drivers entering and exiting driveways, failure to yield right of way.</p> <p>Recommendation: Work with property management companies to distribute safety fliers for residents of housing complexes along corridor.</p>								
3	1	Higuera, 500-700 Block	6	23991	0.25	2.763	Arterial	Nipomo to Garden
<p>Pattern: Parking maneuvers.</p> <p>Recommendation: Update any parking stalls that do not conform to current City Standards.</p>								
4	6	Broad, 2900-3200 Block	7	27108	0.40	1.769	Arterial	Sweeny to Rockview
<p>Pattern: Rear end collisions, attributed to vehicles turning at driveways.</p> <p>Recommendation: Pursue funding for and implementation of Broad St. Median, Signalized Intersections, and Victoria Ave. Extension as adopted under the South Broad Street Area Plan. Apply access management practices for new development projects along corridor.</p>								
5	Not Ranked	LOVR, 12000 Block	13	32027	0.82	1.356	Arterial	NB 101 on/off ramps to Froom
<p>Pattern: Rear end collisions. Construction of the LOVR 101 Overpass is a contributing factor.</p> <p>Recommendation: No recommendation, due to construction activities. Continue to monitor in 2015.</p>								

Collector Segments

No Locations Ranked Under this Category

