2006 annual traffic safety report



Traffic Engineering Division, Department of Public Works
August 2007

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2006 traffic safety report

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City Council

Dave Romero, Mayor
Allen Settle, Vice Mayor
Andrew Carter
Christine Mulholland
Paul Brown
John Ewan, Former Council Member

City Administration

Ken Hampian, City Administrative Officer Shelly Stanwyck, Assistant City Administrative Officer

Public Works Department

Jay Walter, Public Works Director
Timothy S. Bochum, Deputy Director of Public Works
Dario Senor, City Traffic Engineer
Peggy Mandeville, Principal Transportation Planner
Jake Hudson, Engineer III - Traffic
Chris Overby, Engineer I - Traffic
Bryan Wheeler, Transportation Intern

Contributing Staff

Chief Deborah Linden, Police Department Captain Ian Parkinson, Police Department Sergeant John Bledsoe, Police Department Lieutenant Chris Staley, Police Department

a message from the deputy director

Welcome to the 6th edition of the City of San Luis Obispo, Traffic Safety Report prepared by the Public Works Department with cooperation from the Police Department. The Annual Traffic Safety Report began in 2002 in an attempt to identify high collision locations within the City and actively pursue mitigation improvements that may reduce our collision rates and improve safety for our citizens.

Calendar year 2006 was a watershed year in the traffic safety program. Four of the last five years have seen reductions in collisions below those that occurred in calendar year 2001 – when the safety program commenced. In 2006, we saw significant reductions in the vehicular collisions occurring in the City.

Collisions in 2006 were just under 20% lower than recorded collisions in 2005. That number is also down, about 24%, from collisions recorded in the first year (2001) of the traffic safety program. In addition to total collisions being down, injury collisions (what we use as our benchmark) also declined by approximately 12% from 2005 numbers. Similar to total collisions this number was approximately 7% down from collision totals recorded in the first year of the traffic safety program. These reductions are statistically significant and a very positive reflection of City activities in it traffic safety program.

Traffic fatalities in any given year are usually random. The City experienced two (2) fatalities in 2006. This was consistent with our annual average of two fatalities per year experienced between 1999 and 2005 but was less than the previous two years when the City experienced three fatalities in 2005, and four fatalities in 2004.

The 2006 Traffic Safety Report again looks at bicycle and pedestrian collisions and tracks occurrences to identify potential high profile locations. Similar to fatal collisions, bicycle and pedestrian collision rates are normally sporadic from a location and occurrence perspective. This continues to be the case for the City with pedestrian collisions up 4% from 2005 totals and bicycle collisions up by 11%.

As in previous Traffic Safety Reports, staff reviewed the high collision rate intersections and segment locations and recommends mitigation as contained in this report. It is through programs such as this as well as the Police Department's traffic safety enforcement program that we hope to curb these unacceptable trends and improve the safety of our motoring, walking and bicycling public.

I would like to thank Jake Hudson, Dario Senor, Peggy Mandeville, Chris Overby, and Bryan Wheeler for their tireless work in compiling the necessary information that has gone into this report, the many hours disseminating the data to make recommendations for appropriate improvements, and for all the future work that will be necessary to complete our tasks, meet our objectives, and make our streets as safe as possible.

I would also like to give special thanks to the men and women of our Police Department, Traffic division, who have spent significant time and energy in the last four years providing the necessary education, enforcement and reporting to help the City's efforts in improving traffic safety for our community.

Timothy Scott Bochum, T.E.

Deputy Director of Public Works

executive summary

Annual Traffic Safety Report - 2006

In January 2002, the City initiated its first comprehensive Traffic Safety Program aimed at reducing collisions at the highest collision locations in the City. The program concentrates on identifying all intersections and roadway segments which have experienced three or more collisions in a one-year period and then prioritizes these locations based upon collision rates, as compared to similar locations within the City. Collision patterns at the highest collision rate locations are then analyzed using collision diagrams that are produced using state of the art computer software. Each of the locations is then reviewed by staff to determine if mitigation measures can be implemented to reduce the likelihood of occurrence for the identified collision patterns.

Mitigation measures for high collision rate locations for calendar year 2006 have been identified and are summarized in this report. The Annual Traffic Safety Report will be prepared each year to review and report on City traffic safety benchmarks, improve traffic safety performance and maintain high levels of service for our City residents, business owners and visitors.

Since the City initiated the Traffic Safety report in 2002, traffic collisions have been on a downward trend, with the exception of 2004 in which the City experienced a spike in accidents due in part to an influx of construction within the City right-of-way, namely the Foothill Bridge closure, substantial new construction in the downtown, and seismic retrofits in the downtown. In 2006, the number of reported collisions dropped and was the lowest in the six years of the safety program.

Injury collisions were also down 12% in 2006 (250), as compared to 2005 (285). Injury collisions as a percentage of all collisions have historically been on the rise by about 5 to 6% per year. However in 2006 the City again experienced the lowest number of injury collisions since the safety program was initiated in 2002.

The number of fatality collisions in any given year is usually very random and this was again the case in 2006. There were two (2) fatalities in 2006 which was less than the previous year, 2005 with three (3) fatalities.

Intersection collisions generally declined from 2001 thru 2006, however in 2004 intersection collisions peaked, primarily due to an influx of construction within City right-of-way, including the Foothill bridge closure.

The 2006 Traffic Safety Report again looks at bicycle and pedestrian collisions and tracks their occurrences to identify potential high profile locations. Similar to fatal collisions, bicycle and pedestrian collision rates are sporadic from a location and occurrence perspective. This continued to be the case for the City with pedestrian collisions up 4% from 2005 totals and bicycle collisions up 11%.

introduction

How to Use This Report

Every year the City of San Luis Obispo will prepare a Traffic Safety Report for the previous twelve month period in order to: 1) determine the locations within the City that have the highest collision rates in comparison to like locations, 2) identify the predominant pedestrian and bicycle collision types and high collision locations, 3) evaluate the effectiveness of mitigation measures implemented in the previous twelve month period, 4) identify if new locations should be mitigated, and 5) determine if the types of collisions and previous collision trends have changed. This report identifies locations that may require special attention or mitigation in order to the number of collisions or severity of future collisions. The report will normally be prepared after City collision statistics become available in April or May of the following year.

The locations mentioned in this report should not be interpreted as a list of dangerous or "least safe" intersections within the City of San Luis Obispo. The specific total of collisions for any location for any year is a function of various factors such as weather patterns, construction, roadway conditions and driver habits. Many of these factors are often difficult to identify and are most often beyond the ability of the engineer to change or control. However, the City's mitigation program attempts to identify roadway elements that can be modified so as to make the transportation infrastructure more driver friendly, reduce driver confusion, promote bicycle and pedestrian safety and limit impact severity.

It is natural to expect that any location in the City will experience years above or below the expected value of collision rates that might be common to similar locations City-wide. Traffic volumes play an important role in determining the likelihood of collision totals (The more pedestrians and vehicles that use a location...the more likely a collision will occur). This report looks to identify locations that fall above the expected rate of similar City locations and propose mitigation measures, if necessary to reduce collision potential and limit collision severity.

Background

2.1 Study Objectives

The objective of the Annual Traffic Safety Report is essentially to identify the high collision locations in the City and track collision reductions through the various City safety programs and projects that the City administers each year. The specific objectives of the 2006 Traffic Safety Report are:

- Identify the intersections and segments within the City associated with the highest collision rates, and thoroughly analyze collision diagrams so as to suggest remedial mitigation measures for the five highest locations that will reduce the potential for collisions, and;
- Identify other significant signalized and non-signalized intersections which meet State warrants for traffic control upgrades, and;
- Identify the predominant pedestrian and bicycle collision types and high collision locations, and thoroughly analyze collision diagrams and police reports so as to determine remedial mitigation measures for the five highest pedestrian and bicycle collision locations that may reduce the potential for collisions and;
- Report on engineering safety analysis conducted in the previous 12-month period that the City and general public have identified as areas of concern regarding appropriate traffic control.

2.2 Study Methodology

Collision Data

It is important to note that the data contained within the Public Works Traffic Collision Database will vary from other sources of collision data such as the California - Statewide Integrated Traffic Records System (SWITRS) or the City's Emergency Dispatch Records System.

While SWITRS data is similarly derived from official police collision reports, many times the reports are coded incorrectly due to jurisdictional boundary issues and/or agency reporting inaccuracies. An example of this might be a collision occurring on Highway 101 – because the facility is under Caltrans jurisdiction, this collision record and its potential remediation would not be included in this report. However, because the CHP report may state the collision occurred within the City of San Luis Obispo, the SWITRS database might contain this as a collision under our jurisdiction. Likewise, City emergency dispatch may receive a call regarding a traffic collision but when the dispatched officer arrives, the vehicles have been moved on or there is no evidence of occurrence. Therefore, statistics derived from this data may be inaccurate for engineering purposes because no official proof or record exists of the actual collision type.

Reported traffic collisions obtained by the City Police Department are the basis used by the City Traffic Engineering Section to determine traffic safety. Report totals were obtained for

each intersection and roadway segment within the City and entered into the City's traffic collision database. These locations were then grouped by street characteristic and collision type. Collision diagrams were then generated using this data and interpretations of collision patterns were formulated. The number of collisions reported by the Police Department annually is typically higher than the number reported in this Public Works report. The primary reason for this discrepancy is that the Police Department report includes collisions that may have occurred on private property, such as a parking lot, while the Public Works department does not track collisions on private property because it is outside of the department's jurisdiction.

Based on the collision patterns for the five highest ranked collision locations for each location and roadway segment sub-category, mitigation measures are formulated where a collision pattern can be identified. Mitigation measures for these sub-categories will be implemented in as projects are designed and funding becomes available.

Traffic Volumes

Vehicle and pedestrian volumes play an important role in establishing collision rates for selected locations within the City. Vehicle volume counts were collected in 2005 as a basis to establish actual conditions in the field environment. Where volume counts were not available, volumes were estimated based on previous experience and engineering judgment. Volume counts were then used for the majority of the locations to establish isolated and average collision rates for each intersection.

Collision Rate Calculations

Collision rates were calculated using the following formulas:

Intersections:

Segments:

RI =

N X 1.000.000 V X 365

RS =

N X 1.000.000 365 X V X L

Where:

Where:

RI = Intersection Collision Rate = Collision frequency per million vehicles entering the intersection.

RS = Segment Collision Rate = Collision frequency per million vehicle miles traveled along the segment.

N = Number of collisions (collision frequency) of the location.

V = Average daily vehicular volume using the street segment or intersection.

L = Length of street segment (in miles) being analyzed.

Pedestrians: Bicvcles:

PREV = BREV = 5 X N X PHVV 5 X N X PHVV **PHBV**

PHPV

PREV = Pedestrian relative exposure value.

BREV = Bicycle relative exposure value.

N = Number of collisions (collision frequency) of the location.

PHVV = Average peak hour vehicular volume.

PHPV = Average peak hour pedestrian volume.

PHBV = Average peak hour bicycle volume.

The pedestrian and bicycle relative exposure value formula is derived from the traditional collision rate calculation, however it factors the volume of either the bicycle or pedestrian with that of vehicles at a given location.

city-wide collision statistics

3.1 City-wide Collision Trends

Reportable collision statistics for the City are contained in Tables 3.1 and 3.2. Any reported collision within the public right-of-way that involved a fatality, personal injury or property damage was recorded as a collision. Collisions that occurred on private property, out of the public right of way, outside of City limits, or were not reported to the police department are not entered into the City's database.

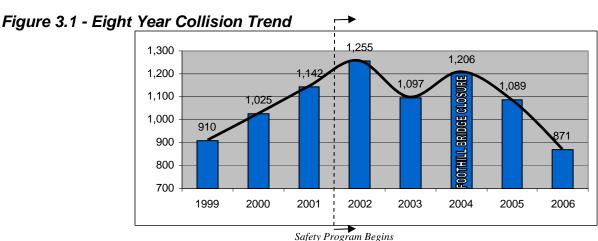
While reported collisions are not a total indicator of transportation collisions that occur within the City, they remain the basis with which the City determines both collision trends and effectiveness of City programs. The number of reported traffic collisions varies due to many social factors. Often minor traffic collisions, non-injury collisions and private property collisions go unreported and as such are highly unreliable in determining "high profile" collision locations or areas of concern. Table 3.1 indicates the reported traffic collision history of the City.

Table 3.1 - City-wide Annual Collision Data

Year	Total Reported Collisions on Public Streets									
	Intersections	% Change Total % Chang								
1999	587	-	910	-						
2000	646	+10.05	+11.22							
2001	768	+18.58	1,142	+10.24						
2002	751	- 2.13	1,255	+9.10						
2003	670	-12.08	1,097	-12.58						
2004	731	+9.10	1,206	+9.94						
2005	693	-5.20	1,089	-9.70						
2006	558	-19.48	871	-20.01						

Source: City of San Luis Traffic Collision Database

Variations in yearly collisions are to be expected. While total collisions are a good indicator of the overall collision performance of the City, injury collisions are better indicators of changes in collision trends and are the most reliable collision indicators when monitoring the safety of a transportation system.



With a continuing trend of reduced collision totals, we again saw a reduction in total collisions in 2006 that was about 12% lower than recorded collisions in 2005. In general, collisions in San Luis Obispo have been declining over the last few years. Total collisions have dropped approximately 6 % per year since the program was started in 2002. In 2006 total collisions were down by 20%.

3.2 Injury and Fatal Collision Trends

Injury Collisions

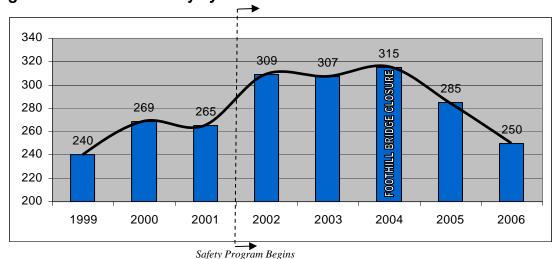
The Traffic Engineering Division tracks injury and fatal collisions as part the current Traffic Safety Program. Table & Figure 3.2 depicts the injury collision information as recorded by the City.

Table 3.2 - City-wide Annual Injury and Fatal Collisions

Year	Total Injury Collisions	% Change	% of Total Collisions	Fatal Collisions	% Change
1999	240	-	26.37	2	-
2000	269	+12.08	26.24	2	0
2001	265	-1.5	23.26	1	- 50
2002	309	+16.60	24.66	1	0
2003	307	-0.6	28.11	0	- 100
2004	315	+2.06	26.12	4	+400
2005	285	-9.52	26.17	3	-25
2006	250	-12.28	28.93	2	-33

In addition to total collisions being down in 2006, injury collisions were also down by 12% in 2006 (250) as compared to 2005 (285). This number is also lower than the previous six year period from 2000 through 2005. Injury collisions as a percentage of total collisions (as seen in Figure 3.3), has remained somewhat static since 2004, however in 2006 this percentage increased by 3%. The total number of injury collisions in 2006 is higher than the average period (2002 through 2005). The number of injury collisions during 2002 thorough 2005 has remained consistently near the 300/year mark; however 2006 had the lowest number of injury collisions since the traffic safety program was initiated.

Figure 3.2 - Seven Year Injury Collision Trend



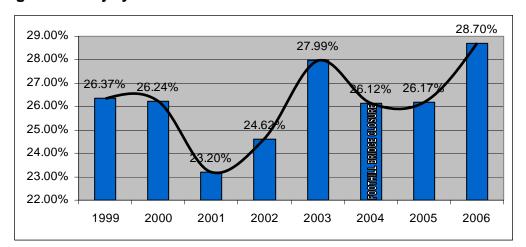


Figure 3.3 - Injury Collisions as Percent of Total Collisions

Fatal Collisions

Annual traffic fatalities have a tendency to fluctuate from year to year. This variation is due to many factors that are often beyond the control of engineering professionals or law enforcement officers. However, the City's Traffic Safety program attempts to reduce fatal collisions by removing conflicting vehicular and pedestrian movements at appropriate locations, limiting collision severity through improvements to roadway design features, and promoting traffic safety through a community outreach program.

As mentioned above, fatality collisions in any given year is usually very random and this was the case in 2004 & 2005 when the City experienced a sharp increase in the total fatalities (4) in 2004, (3) in 2005, and (2) in 2006 over the 2003 total of zero (0) fatalities. In previous years there have been between one and two fatalities per year except in 2003 when there were no fatalities.

Two fatalities were reported in 2006 within City limits. Of the 2 fatalities, 1 occurred on a State Highway which is under State (Caltrans) jurisdiction, involving a motorcyclist (driving while under the influence DUI) rear-ending a vehicle stopped for a traffic signal. The other fatality which occurred within the City's jurisdiction involved a vehicle turning left in front of on-coming traffic.

3.3 Comparison with National, State and County Rates

Author's Note: All national and state statistics and cost estimates contained in this section are the most up to date figures available at the time of this publication.

Table 3.3 demonstrates the significant difference between City death and injury rates and the National statistics. The numbers in this table represent the actual number of injuries or fatalities resulting from traffic collisions, not the number of collisions that involved injuries or fatalities.

Table 3.3 - Comparison of Injury & Death Rates

2006 Fatalities						
	Fatalities	Population (Thousands)	Rate Per 100,000 Population			
Nationally*	43,443	297,821	14.58			
State Wide*	4,329	36,728	11.78			
City of San Luis Obispo	2	44	4.54			
	2006 Injurie	S				
	Injuries	Population (Thousands)	Rate Per 100,000 Population			
Nationally*	2,699,000	297,821	906.25			
State Wide*	292,798	36,728	797.20			
City of San Luis Obispo	299	44	679.54			

^{*} National and State Statistics are from 2005 because 2006 information was not available at the time this report was being produced.

3.3 Benefit/Cost Analysis

The National Safety Council has provided the following information and estimates.

There are two methods currently used to measure the costs of motor-vehicle collisions. One is the economic cost framework and the other is the comprehensive cost framework.

Economic costs may be used by a community or state to estimate the economic impact of motor-vehicle collisions that occurred within its jurisdiction in a given time period. It is a measure of the productivity lost and expenses incurred because of the collisions. Economic costs, however, should not be used for cost-benefit analysis because they do not reflect what society is willing to pay to prevent a statistical fatality or injury.

There are five economic cost components: (a) wage and productivity losses, which include wages, fringe benefits, household production, and travel delay; (b) medical expenses including emergency service costs; (c) administrative expenses, which include the administrative cost of private and public insurance plus police and legal costs; (d) motor-vehicle damage including the value of damage to property; and (e) employer costs for collisions to workers.

The information in table 3.4 shows the average economic costs in 2006 per death (not per fatal collision), per injury (not per injury collision), and per property damage collision. These cost estimates are based upon 2002 actual collision cost calculations and adjusted to 2006 costs based on consumer price indexes.

Table 3.4 - Economic Costs, 2006

Collision Type	Dollar Loss
Death Nonfatal disabling injury Incapacitating injury Non-incapacitating evident injury	\$1,275,300 \$46,700 \$61,000 \$20,100
Possible injury Property damage collision (including minor injuries)	\$11,500 \$7,300

Source: National Highway Traffic Safety Administration (Traffic Safety Facts 2002) & Adjusted to Year 2006 \$'s

Comprehensive costs include not only the economic cost components, but also a measure of the value of lost quality of life associated with the deaths and injuries, that is, what society is willing to pay to prevent them. The values of lost quality of life were obtained through empirical studies of what people actually pay to reduce their safety and health risks, such as through the purchase of air bags or smoke detectors.

Comprehensive costs should be used for cost-benefit analysis, but because the lost quality of life represents only a dollar equivalence of intangible qualities, they do not represent real economic losses and should not be used to determine the economic impact of past collisions. The information below in table 3.5 shows the average comprehensive costs in 2006 on a per person basis. These cost estimates are based upon 2002 actual collision cost calculations and adjusted to 2006 dollars, which are the latest at the time of this publication.

Currently, the City's collision reports indicate injury collisions only if reported at the collision scene and no determinations are made regarding the injury type as shown in the above tables. Therefore, comprehensive cost estimates for this analysis will assume that all injury types fall into the category of "Non-incapacitating evident injury" as shown above. Table 3.6 shows the 2006 economic costs in collisions for the City using annual cost estimates.

Table 3.5 - Comprehensive Costs, 2006

Collision Type	Dollar Loss
Death Incapacitating injury (a) Non-incapacitating evident injury (a)	\$4,060,000 \$201,200 \$51,700
Possible injury (a)	\$24,600
No injury	\$2,300

Source: National Highway Traffic Safety Administration (Traffic Safety Facts 2002), adjusted to 2006 dollars

Table 3.6 - City of San Luis Obispo Economic Costs, 2001-2006 Traffic Collisions

	Collision Type								
Year		Death	Non-	incapacitating	Propert	y Damage Only	Total Dollar		
				Injury			Loss		
		Cost ^(a)	Cost ^(a)			Cost ^(a)			
2001	1	\$1,275,300	335 \$6,733,500		877	\$6,402,100	\$14,410,900		
2002	1	\$1,275,300	396	\$8,316,000	946	\$6,905,800	\$16,497,100		
2003	0	\$0	400	\$8,400,000	794	\$5,796,200	\$14,196,200		
2004	4	\$5,101,200	376	376 \$7,896,000		\$6,475,100	\$19,472,300		
2005	3	\$3,825,900	362 \$7,602,000		804	\$5,869,200	\$17,297,100		
2006	2	\$2,550,600	299 \$6,279,000		621	\$4,533,300	\$13,362,900		

(a) Economic costs are based upon 2002 cost estimates, adjusted to 2006 dollars

While the dollar amounts depicted in Table 3.6 do not equate to tangible monetary costs, it is evident that the annualized costs to city motorists, insurance companies and medical providers, depend on the number (and type) of traffic collisions that occur within the City. The total cost amount depends highly on the collision type and is proportional to the severity of each type of collision type.

BICYCLE & pedestrian transportation safety

4.1 Pedestrian Collisions

In January 2000 a City-wide pedestrian crossing policy was adopted by the City Council. This policy is designed to ultimately bring all of the pedestrian crossings in the City to a consistent standard. As the policy continues to be implemented over the next several years it is anticipated that pedestrian collisions will decline City-wide.

In general the number of annual pedestrian collisions has fluxuated up and down over the past six years, however this pattern did not continue in 2006. There were 27 total pedestrian related collisions reported in 2006, 4% higher than the previous 12 month period. Table 4.1 indicates the reported pedestrian related collision history of the City.

Table 4.1 – 1999-2006 Pedestrian Collisions

Year	Pedestri	al Reported an Collisions on blic Streets
	Pedestrian	% Change
1999	24	-
2000	37	+54%
2001	19	-49%
2002	41	+54%
2003	24	-41%
2004	41	+41%
2005	26	-36%
2006	27	+4%

Source: City of San Luis Traffic Collision Database

The study's method of evaluation follows the recommendations of the U.S. Federal Highway Administration (FHWA) as pertaining to bicycle collisions, by which pedestrian collisions are classified according to their collision type. In general the primary factor contributing to pedestrian collisions in 2006 were motorists violating the right-of-way to pedestrians in a crosswalk. The following tables lists the various types of pedestrian related collisions as detailed in Police Reports.

Table 4.2 – 2006 Pedestrian Collisions by Type, Location, & Fault

Pedestrian Collision Type			Ş	Severity	
redestrial collision type	# Cases	% of Total	Injury	Fatal	PDO
In X-Walk - Motorist Right of Way Violation	8	28.8%	8	0	0
In X-Walk - Motorist Left Turn in Front of Ped.	7	24.8%	7	0	0
In Road - At Parked Vehicle	3	10.3%	3	0	0
In X-Walk - Motorist Right Turn Facing Ped.	2	6.6%	2	0	0
In Road - Not Crossing	2	6.6%	2	0	0
In X-Walk - Motorist Right Turn in Front of Ped.	2	6.6%	2	0	0
In Road – Crossing Midblock	2	6.6%	2	0	0
In X-Walk - Midblock	2	6.6%	2	0	0
Other	1	3.2%	1	0	0
Total:	27	100%	27	0	0

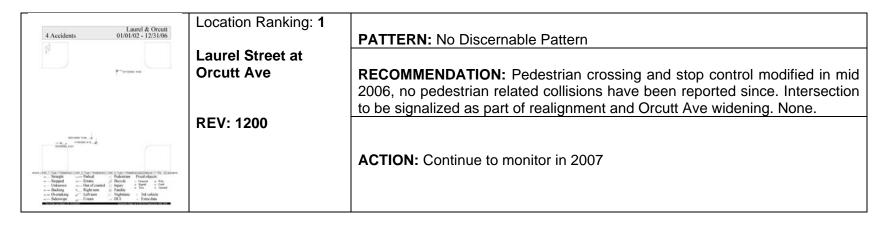
Pedestrian Collision Location		2003		20	004	2	005	20	06
	#	%		#	%	#	%	#	%
Signal	6	25%		13	32%	8	31%	9	33%
Out of Crosswalk - Midblock	7	29%		9	22%	7	27%	3	11%
Uncontrolled - Unmarked Crosswalk Major/Collector	0	0%		1	2%	1	4%	1	4%
Uncontrolled - Unmarked Crosswalk Local	0	0%		0	0%	1	4%	0	0%
Uncontrolled - Marked	0	0%		1	2%	1	4%	2	7%
Not in Road (Sidewalk)	0	0%		5	12%	0	0%	0	0%
In Road (not crossing)	3	12%		7	18%	3	11%	4	16%
Stop - Marked Crosswalk	4	17%		3	7%	2	8%	2	7%
Stop - Unmarked Crosswalk	4	17%		2	5%	3	11%	6	22%
Total:	24	100%		41	100%	26	100%	27	100%

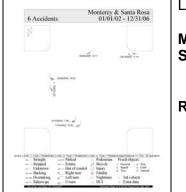
Party at Fault	2003		2004			20	005	2006			
Pedestrian Driver	8 16	33% 67%		15 37% 26 63%					6 21	22% 78%	
Total:	24	100%		41	100%		26	100%	27	100%	

Source: City of San Luis Traffic Collision Database

Variations in yearly pedestrian related collisions are to be expected. While this report is intended to evaluate and analyze collision trends in 2006, the number of annual pedestrian related collisions typically reported in the City is too few to identify collision patterns and establish mitigation measures. The method for evaluating pedestrian collision locations identifies all locations where at least one pedestrian collision has occurred in 2006 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.

Table 4.3 – Top Five Pedestrian Collision Locations





Location Ranking: 2

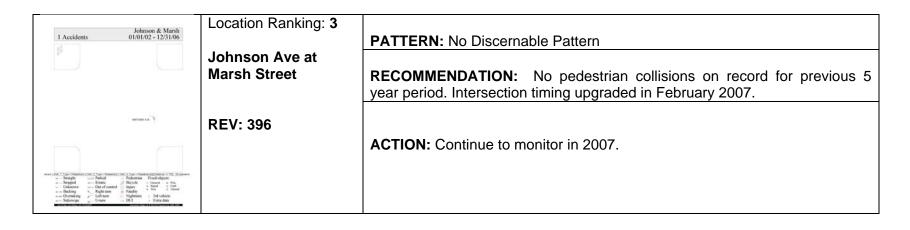
Monterey Street at Santa Rosa Street

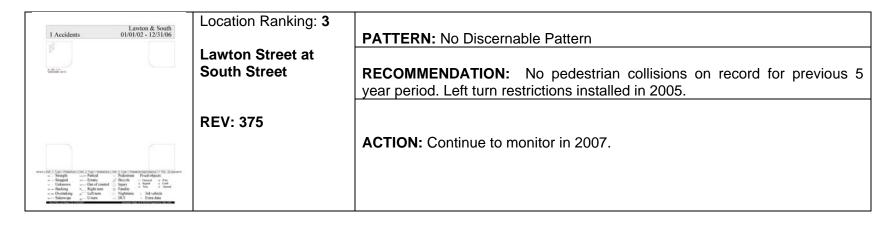
REV: 694

PATTERN: Left & Right Turn Vs. Pedestrian Starting in Crosswalk

RECOMMENDATION: Traffic signal upgrades, and upgraded signal timing installed in April 2006. None.

ACTION: Continue to monitor in 2007.







Location Ranking: 3

Santa Rosa Street at Walnut Street

REV: 240

PATTERN: No Discernable Pattern

RECOMMENDATION: Intersection under Caltrans Jurisdiction. No pedestrian collisions on record for previous 5 year period. Left turn restrictions installed in 2005. None.

ACTION: Forward findings to State Dept. of Transportation. Continue to monitor in 2007.

4.2 Bicycle Collisions

In general bicycle collisions have been on an upward trend over the past six years, in 2006 bicycle collisions were up. There were 61 total bicycle related collisions reported in 2006, 11% higher than the previous 12 month period and 21% higher than collisions reported in 2004.

Table 4.4 - 1999-2006 Bicycle Collisions

Year	Total Reported Bicycle Collisions on Public Streets					
	Bicycle	% Change				
1999	52	-				
2000	46	-12%				
2001	45	-2%				
2002	52	+13%				
2003	54	+ 3.7%				
2004	50	-7.4%				
2005	55	+10%				
2006	61	+11%				

Source: City of San Luis Traffic Collision Database

The study's method of evaluation follows the recommendations of the U.S. Federal Highway Administration (FHWA) by which bicycle collisions are classified according to their collision type. The FHWA's Classification system includes 38 different collision types of which only 15 occurred on City streets in 2006. In general the majority of factors contributing to bicycle collisions in 2006 were cyclists loosing control.

Table 4.5 – 2006 Bicycle Collision by Type & Fault

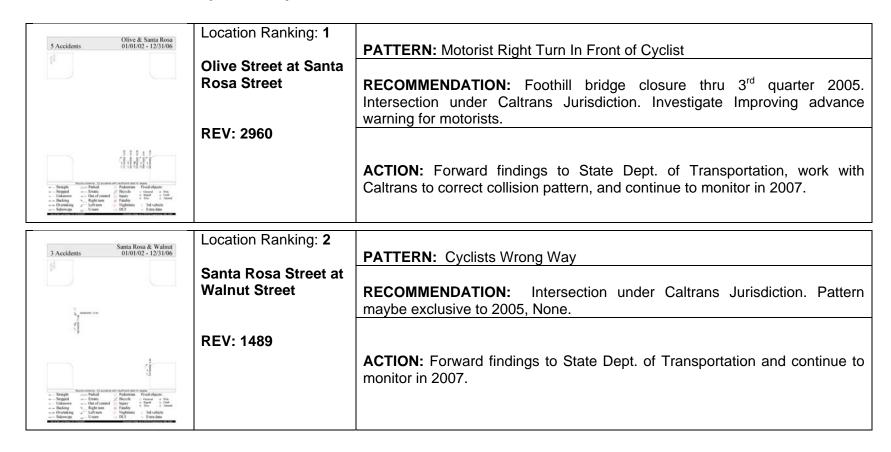
	Number of	% of	Cyclist's P	osition		Severity	
Collision Type	Cases	Total	Sidewalk	Road	Injury	Fatal	PDO
Cyclist Lost Control	11	18%	0	11	10	0	1
Motorist Left Turn - In Front of Cyclist	9	15%	0	9	8	0	1
Motorist Right Turn - In Front of Cyclist	9	15%	0	9	9	0	0
Wrong Way Cyclist	8	13%	0	8	6	0	2
Drive Out At Uncontrolled Intersection	6	10%	0	6	6	0	0
Cyclist Left Turn In Front Of Motorist	4	7%	0	4	3	0	1
Other (Not classifiable)	3	5%	0	3	1	0	2
Motorist Open Door Into Path of Cyclist	2	3%	0	2	2	0	0
Motorist Overtaking - Misjudged Passing Space	2	3%	0	2	2	0	0
Ride Out From Lane or Driveway	2	3%	2	0	2	0	0
Cyclist Right Turn In Front Of Motorist	1	2%	0	1	1	0	0
Drive Out At Controlled Intersection	1	2%	0	1	1	0	0
Motorist Left Turn - Facing Cyclist	1	2%	0	1	1	0	0
Ride Out At Controlled Intersection	1	2%	1	0	1	0	0
Ride Out At Uncontrolled Intersection	1	2%	1	0	1	0	0
	61	100%	4	57	54	0	7

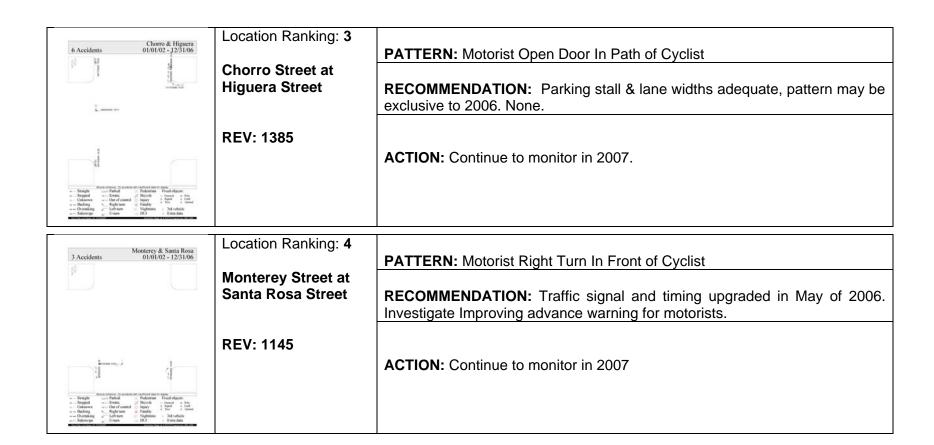
Source: City of San Luis Traffic Collision Database

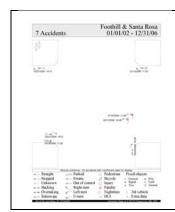
Party at Fault	2003		2004		2005			2006	
Cyclist	31	57%	21	42%	28	51%		30	49%
Driver	23	43%	29	58%	27	49%		31	51%
Total:	54	100%	50	100%	55	100%		61	100%

The method for evaluating for bicycle collision locations identifies all locations where at least one bicycle collision has occurred in 2006 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.

Table 4.6 – Top Five Bicycle Collision Locations







Location Ranking: 5

Foothill Ave at Santa Rosa Street

REV: 1115

PATTERN: Motorist Right Turn In Front of Cyclist

RECOMMENDATION: Intersection under Caltrans jurisdiction. Bike lane & right turn lane reconfigured 2nd quarter 2006, None. Investigate Improving advance warning for motorists.

ACTION: Forward findings to State Dept. of Transportation, work with Caltrans to correct collision pattern, and continue to monitor in 2007.

safety investigations

5.1 Neighborhood Traffic Management and Calming Program

In June 1998, the City Council adopted a Comprehensive Neighborhood Traffic Management (NTM) Program aimed at reducing traffic volumes and speeds on residential streets. The program offers different options to citizens wanting to implement traffic calming measures on their streets. The program identifies the petition process and neighborhood surveys that are used to demonstrate majority support for implementation of specific options.

Twenty (20) neighborhoods actively pursued the preparation of Neighborhood Traffic Management (NTM) Plans for their neighborhoods. Because so many neighborhoods are requesting NTM projects and implementation funds are limited, staff developed a method for prioritizing the projects. The criteria includes traffic speeds, volumes, presence or absence of continuous sidewalks, bicycle facilities, collisions, and presence of schools or other activity centers. In 2006 neighborhoods pursuing NTM projects included Johnson (divided into 3 sections), Broad, Oceanaire, Chorro, Atascadero, Ferrini, Rockview, Royal, Flora, Augusta, Galleon, Balboa, Coral, Islay, Grove, Pismo, and Buchon. Table 5.1 outlines the NTM actions implemented in 2006.

Table 5.1 - 2006 NTM Requests and Status

Street	Status	
Madonna Road	Traffic were counts taken on Madonna Road west of Los Osos Valley Road to measure the long term effects of the speed tables that were installed in 2005, the results indicated an average speed reduction of five (5) mph.	
Chorro Street	White edge lines were added between Lincoln and Foothill	
Highland Neighborhood	Traffic volume and speed studies were conducted on Cuesta Drive, Cerro Romauldo, N. Tassajara, Felton Way, Ferrini Road, Jeffrey Drive, Highland Drive, North Chorro, and Patricia Drive.	
Murray Avenue	Traffic volume and speed study was conducted.	
Albert Street	Traffic volume and speed study was conducted.	
Ella Street	Three speed tables were constructed between Sierra Way and Jennifer Street.	
Johnson Avenue	Design for a traffic signal at Ella Street continued. Speed trailer was placed on the street to display vehicle speeds.	

Table 5.2 - 2006 Completed Safety Projects

Each year the Traffic Engineering Section implements traffic safety improvement projects through a variety of programs and projects. These improvements are usually stand-alone projects but are often times included in other City CIP projects or as part of individual land development projects. The following notable traffic safety improvements were completed in 2006:

Traffic Signal Improvements	
Bishop & Johnson	Installed Protected Left Turn Phasing
Chorro, Morro, Osos at Monterey	Installed Pedstrian Signal Indications, upgraded pedestrian timing
Monterey & Santa Rosa	Installed Protected / Permissive Phasing
Palm & Santa Rosa	Installed Protected / Permissive Phasing
LOVR & Madonna	Reconfigured Signal Phasing and lane assignments

Pedestrian & Bicycle Improvements		
Santa Rosa & Marsh	Upgraded Bike Lane Configuration	
Johnson & Bishop	Upgraded Pedestrian Crossing	
Tank Farm & Poinsettia	Improved Pedestrian Crossing	
Johnson & Marsh	Upgraded Bike Lane Configuration	
South Street	Installed Advance Pedestrian Warning Signing	
City Wide	Distributed Pedestrian Safety Halloween Bags	

Roadway Improvements	
Ella Street	Installed Speed Tables
Pacific & Osos	Installed in pavement, textured bulbouts
Highland & Ferrini	Installed Raised Median Island

Signing & Striping Configuration Improvements		
Orcutt & Broad	Installed median object markers	
Tank Farm & Broad	Restricted U-turns and left turns at corner Gas Station	
Johnson & Ella	Restricted U-turns and left turns at corner apartment complex	
Morro & Pismo	Installed "Cross Traffic Does Not Stop" signing	
Osos & MIII	Installed oversized stop sign and "Cross Traffic Does Not Stop" signing	
Johnson & Pismo	Installed "All Way" stop sign supplement signing	
Chorro & Mill	Installed "Cross Traffic Does Not Stop" signing	
Santa Rosa & Pismo	Installed right turn lane striping	

Sight Distance Improvements		
Chorro & Murray	Removed parking per sight distance survey	
Higuera & Torro	Removed parking per sight distance survey	
Laurel & Southwood	Trimmed tree per sight distance survey	
Margarita & Estella	Trimmed tree per sight distance survey	
Ramona Street	Trimmed tree per sight distance survey	
Swazzeey & Pepper	Trimmed tree per sight distance survey	
Chorro & Peach	Trimmed tree per sight distance survey	
Beach & Pacific	Removed parking per sight distance survey	
Brookepine & Manzanita	Removed parking per sight distance survey	

2006 high collision rate locations

6.1 Intersections and Segments

Prioritization by Collision Rate

The evaluation of intersections using collision rates (number of collisions per million entering vehicles for intersections and million vehicle miles for segments) is standard practice in traffic engineering. This method of evaluation is often chosen over pure numbers because the number of collisions generally increases within proportion to traffic volumes. This relationship does not mean that there is an engineering deficiency where the number of collisions is highest. Traffic engineers use collision rates to determine locations where more collisions are occurring than would be expected to occur. These locations are then further evaluated to determine what is causing this higher than normal occurrence. In contrast, the Police Department utilizes the number of collisions to evaluate what intersections need to be patrolled. This method of evaluation puts the Police Officers at the locations where they can have the greatest effect on the largest number of road users. There may not be an engineering deficiency at a very busy intersection, however Police presence and enforcement at such locations ensures that drivers continue to drive prudently. Because of the difference in evaluation methods, the ranking of intersections in this report differs from the ranking of intersections in the Police report. Both methodologies are appropriate for their intended purposes, but would be likely to produce inappropriate and ineffective results if an attempt were made to use the same methodology for both the Police and Public Works reports. To address safety concerns at all types of locations, intersections & segments were broken down into the following subgroups:

TYPE OF INTERSECTION OR SEGMENT	APPENDIX
Arterial/Arterial Intersections	Appendix 1
Arterial/Collector Intersections Arterial/Local Intersections	Appendix 2 Appendix 3
Collector/Collector Intersections Collector/Local Intersections	Appendix 4 Appendix 5
Local/Local Intersections Other Significant Intersections	Appendix 6 Appendix 7
Arterial Segments	Appendix 8
Collector Segments Local Segments	Appendix 9 Appendix 10

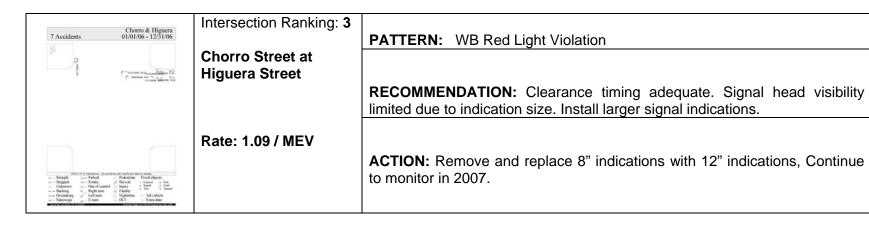
Collision rates per million vehicles entering an intersection & million vehicle miles traveled on a segment were calculated for all locations within the City with three or more collisions. These collision rates were then used to prioritize the top five intersections & segments in each category so that locations with the highest rates were ranked at the top of the list. Mitigation measures, including potential future CIP's were then identified based upon the perceived collision patterns for each location.

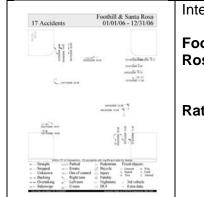
Safety Analysis

Collision diagrams were developed for the top five intersections based on collision rates in Tables 6.1 through 6.8 and these intersections were then analyzed using collision diagram interpretation techniques. Collision diagrams were also developed for the three segment classifications based on collision rates and are shown in Tables 6.9 through 6.11 and these intersections were then analyzed using collision diagram interpretation techniques. Based upon collision patterns as identified in each diagram, mitigation measures and safety improvement recommendations were proposed for each location as outlined in each intersection category. A thumbnail sketch of each intersection's collision diagram has been provided in the tables. Complete collision diagrams that include additional collision information for each of these locations are included in Appendices 1 through 10.

Table 6.1 - Recommendations for Intersections Involving Two Arterial Streets

101 N/b Off Ramp / Abbott & Grand 9 Accidents 01/01/06 - 12/31/06	Intersection Ranking: 1	PATTERN: EB Left & Right Vs SB Thru
	101 NB Off at Grand Ave	
organical and the second of th	Rate: 1.39 / MEV	RECOMMENDATION: City and Caltrans were recently awarded a grant to signalize this intersection. City will oversee design and construction, Caltrans will operate and maintain the traffic signal.
Straight - Fraid - Fra		ACTION: Begin design phase, continue to monitor in 2007.
Monterey & Sunta Rosa 11 Accidents 01/01/06 - 12/31/06	Intersection Ranking: 2	PATTERN: SB Rear Ends
S To	Monterey Street at Santa Rosa Street	
Ÿ	Rate: 1.10 / MEV	RECOMMENDATION: Traffic signal upgraded with NB & SB Protected/Permissive phasing and timing in April of 2006. None.
mono sa j mono sa j	Rate: 1.10/MEV	ACTION. Continue to monitor in 2007
Sergidi - Francis Construit no Francis and Francis objects. Sergidi - Francis - Francis Francis objects. Support - Francis Construit / Short - Stand - Park Support - Francis Construit / Short - Stand - Park Support - Francis Construit / Short - Stand - Park Support - Francis - Francis - Park Support - Francis - Park Support - Francis - Park Support - Park		ACTION: Continue to monitor in 2007.





Foothill Ave at Santa Rosa Street

Rate: 0.94 / MEV

PATTERN: WB Rear Ends

RECOMMENDATION: Intersection under Caltrans Jurisdiction. Collisions primarily due to driver inattention. None.

ACTION: Forward findings to State Dept. of Transportation, continue to monitor in 2007.

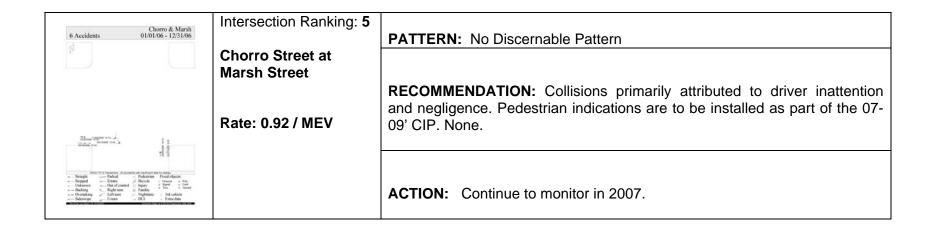
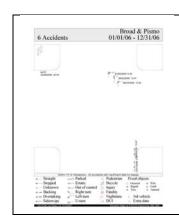


Table 6.2 - Recommendations for Intersections Involving Arterial/Collector Streets

5 Accidents Chorro & Pismo 01/01/06 - 12/31/06	Intersection Ranking: 1	PATTERN: NB Vs. WB Thru, Right Angles
\$ ·	Chorro Street at	FATTERN. NO VS. WD Tillu, Night Aligies
	Pismo Street	
Francisco con	Pismo Street	
		RECOMMENDATION: All-way stop control installed July 2007, None.
	Rate: 2.16 / MEV	
		ACTION: Continue to monitor in 2007.
Stringful and Personal Committee of the telephone Stringful and Personal Personal Stringful and Personal Person		
Unknown		
Sidewipe U-turn DUT Extra data		
	Intersection Ranking: 2	
Chorro & Palm 5 Accidents 01/01/06 - 12/31/06	intersection Nanking. 2	PATTERN: NB & EB Red Light Violations
5 Accidents 01/01/06 - 12/51/06		PALIERN' INDAED REGILIONI VIOISIIONS
43	Observe Ctresst at Dalm	THE ALE NO LIGHT VIOLATION
\$	Chorro Street at Palm	1777 ETTT
\$	Chorro Street at Palm Street	1771 ETTT
\$		RECOMMENDATION: Limited signal head visibility to due indication size and
\$		RECOMMENDATION: Limited signal head visibility to due indication size and
p ³		RECOMMENDATION: Limited signal head visibility to due indication size and pole placement. Remove and replace 8" indications with 12" indications, if pattern
R ³	Street	RECOMMENDATION: Limited signal head visibility to due indication size and
manus est T	Street	RECOMMENDATION: Limited signal head visibility to due indication size and pole placement. Remove and replace 8" indications with 12" indications, if pattern
Manager of the same of the sam	Street	RECOMMENDATION: Limited signal head visibility to due indication size and pole placement. Remove and replace 8" indications with 12" indications, if pattern persists investigation reconstructing signal to meet Federal standards.
manus et a	Street	RECOMMENDATION: Limited signal head visibility to due indication size and pole placement. Remove and replace 8" indications with 12" indications, if pattern



Broad Street & Pismo Street

Rate: 1.12 / MEV

PATTERN: NB Red Light Violations

RECOMMENDATION: Clearance timing adequate. Signal head visibility limited due to indication size. Install larger signal indications.

ACTION: Remove and replace 8" indications with 12" indications, Continue to monitor in 2007.



Intersection Ranking: 4

Fredericks/Hope Street & Grand Ave

Rate: 1.05 / MEV

PATTERN: WB Diagonal Crossing Vs SB Thru

RECOMMENDATION: Improve roadway delineation across the two intersections.

ACTION: Install painted median, If pattern persists in investigate raised median installation or modifications. Continue to monitor in 2007.



El Mercado Street at Madonna Road

Estimated Rate: 0.77 / MEV

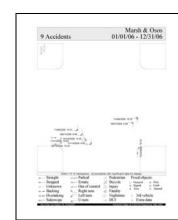
PATTERN: WB Red Light Violation

RECOMMENDATION: Signal was modified to improve WB head visibility in March of 2007. None.

ACTION: Continue to monitor in 2007.

Table 6.3 - Recommendations for Intersections Involving Arterial/Local Streets

Higuera & Nipomo 7 Accidents 01/01/06 - 12/31/06	Intersection Ranking: 1	DATTERN. W.D. Dod Links Violetica
ß	Himmore Street of	PATTERN: WB Red Light Violation
and the same of th	Higuera Street at	
mission pro-	Nipomo Street	
		RECOMMENDATION: Clearance timing adequate. Signal head visibility
	D 4 47 / 145 /	limited due to indication size. Install larger signal indications. Pedestrian
	Rate: 1.47 / MEV	indications are to be installed as part of the 07-09' CIP.
Общины		
When III is become in the most in any in the state of the		ACTION: Remove and replace 8" indications with 12" indications, Continue
— Backing — Right nam		to monitor in 2007.
_		
Monterey & Osos	Intersection Ranking: 2	
4 Accidents Monterey & Osos 01/01/06 - 12/31/06		PATTERN: Parking Maneuvers
29	Monterey Street at	
1960an was associate 0 4	Osos Street	
		RECOMMENDATION: Parking stalls lengths are smaller than City
		Standards. Increase parking stall lengths on SEC. Modifications to parking
	Rate: 1.23 / MEV	space dimensions are to take place during upcoming paving project.
E Section to		5
- Straight — Parked Poderston Plant of page.		ACTION: Increase length of parking stalls on SE corner per SLO City Engr.
Uskaron Out of control harry States - Hacking Right nam Fankly - Octotiking Left nam Splitting Jod vehicle		Std. 7410. Continue to monitor in 2007.
+ Sideswipe U-turn DUI Estra data		- Ctd. 1



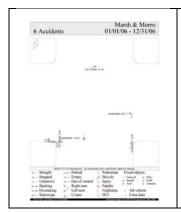
Marsh Street & Osos Street

PATTERN: Red Light Violations, All Directions

Estimated Rate: 1.17 / MEV

RECOMMENDATION: Limited signal head visibility. Upgrades were identified and funded from previous reports, however the project was deferred and funding moved to higher priority projects due to increasing construction costs. Revive project and pursue additional funding.

ACTION: Request additional funding and move forward with proposed signal modifications. Continue to monitor in 2007.



Intersection Ranking: 4

Marsh Street & Morro Street

PATTERN: No Discernable Pattern

RECOMMENDATION: Pedestrian indications are to be installed as part of the 07-09' CIP. None.

Estimated Rate: 1.09 / MEV

ACTION: Continue to Monitor in 2007.



Marsh Street & Nipomo Street

Rate: .93 / MEV

PATTERN: Red Light Violations

RECOMMENDATION: Clearance timing adequate. Signal head visibility limited due to indication size. Install larger signal indications. Pedestrian indications are to be installed as part of the 07-09' CIP.

ACTION: Remove and replace 8" indications with 12" indications, Continue to monitor in 2007.

Table 6.4 - Recommendations for Intersections Involving Collector/Collector Streets

NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 3 COLLISIONS IN 2006

Table 6.5 - Recommendations for Intersections Involving Collector/Local Streets

3 Accidents Morro & Pismo 01/01/06 - 12/31/06	Intersection Ranking: 1	PATTERN: No Discernable Pattern
P	Morro Street at Pismo Street	
S. Sections on S. S. Sections of the	Estimated Rate:	RECOMMENDATION: All-way stop installed at Chorro & Pismo in August of 2007. None.
Straight 1971 (Frenches Related of Frenches and Frenches - Straight - Frenches Related of Frenches Frenches and Frenches - Straight - Frenches Physics Physics Physics - Straight - Frenches Physics Physics Physics - Straight - Frenches Physics Physics Physics - Obstitute Full train Physics Physics - Straight - Union DEC Physics - Straight - Union DEC Physics - Straight - Physics Physics - Stra		ACTION: Continue to monitor in 2007.

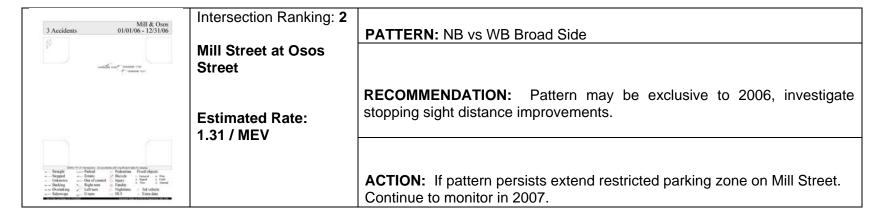
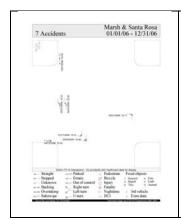


Table 6.6 - Recommendations for Intersections Involving Local/Local Streets

Garden & Pacific	Intersection Ranking: 1	
4 Accidents 01/01/06 - 12/31/06		PATTERN: No Discernable Pattern
P	Garden Street at	
Terrore tale	Pacific Street	
		RECOMMENDATION: None.
	Estimated Rate:	
040000 104 A	3.91 / MEV	ACTION: Continue to monitor in 2007.
24		
Veneral a researce ill austern art reactives and to many. - Senight — Facial Pederation Freed objects Support — Errain — Resylve — Gound — Fals - Unknown — Out of compt Injury — Stand — Out - Backing — Facility — Facility — Facility — Inne		
Rocking Right nam Fanaley Overtaking Left nam Nightanio 3rd vehicle Sdownipe Union DUI Estra data		
_	Latana atian Bankia m 0	
3 Accidents	Intersection Ranking: 2	DATTERN ED V. OD
ß	Inlaw Street at Santa	PATTERN: EB Vs SB
1	Islay Street at Santa Rosa Street	
	Rosa Street	
		RECOMMENDATION: limited stopping sight distance, pattern maybe
	Estimated Rate:	exclusive to 2006. Investigate stopping sight distance improvements and
tamasan en j	2.32 / MEV	continue to monitor in 2007.
resoure visit. J	Z.3Z / IVIE V	
With II of Telescope, III accelerate with conflicted data to purpose		
- Stringht - Parkard Pedestrian Fixed objects: - Stopped - Ermit S Biggel Omnet n this - Ukknown - Out of compl. Injury - Name - Corb - Backing - Right new - Fankly - True - Immed		ACTION Continue to manifestic 0007
- Octubing Left tern Nightnine 3rd vehicle - Sidewipe Untern DLT Estra data		ACTION: Continue to monitor in 2007.

Table 6.7 - Recommendations for Other Significant Intersections: 5+ Left Turn Collisions at Signalized Intersections



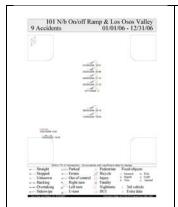
Marsh Street at Santa Rosa Street

Estimated Rate: 0.84 / MEV

PATTERN: EB & SB Red Light Violations

RECOMMENDATION: Signal head visibility limited due pole location and indication configurations. Project identified and funded from previous year reports, however additional funding necessary to complete project. Revive project and pursue additional funding.

ACTION: Request additional funding and proceed with project.



Intersection Ranking: 2

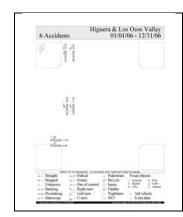
101 NB Off/On at Los Osos Valley Road

Estimated Rate: .81 / MEV

PATTERN: WB Left Vs. EB Thru

RECOMMENDATION: Intersection under Caltrans Jurisdiction. Drivers fail to see oncoming traffic or fail to differentiate between the protected and permissive phases. Investigate improved signing and possibly installing protected only phasing.

ACTION: Forward findings to State Dept. of Transportation, work with Caltrans to correct pattern. Continue to monitor in 2007.



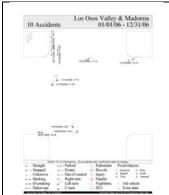
Higuera Street & Los Osos Valley Road

Estimated Rate: .71 / MEV

PATTERN: No Discernable Pattern

RECOMMENDATION: None.

ACTION: Continue to monitor in 2007.



Intersection Ranking: 4

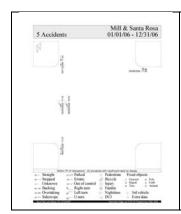
Los Osos Valley Road & Madonna Ave

Estimated Rate: .70 / MEV

PATTERN: WB Rear Ends

RECOMMENDATION: Traffic signal modifications and Intersection lane reconfigurations installed in June of 2006. None.

ACTION: Continue to monitor in 2007.



Mill Street & Santa Rosa Street

Estimated Rate: .57 / MEV

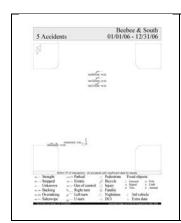
PATTERN: SB Left Vs NB Thru

RECOMMENDATION: Drivers fail to see oncoming traffic or assume movement is protected as opposed to permissive. Investigate signal head reconfiguration.

ACTION: Investigate installing protected/permissive phasing. Continue to monitor in 2007.

Table 6.8 - Recommendations for Other Significant Intersections: 5+ Collisions at Intersections Without All-way Control

7 Accidents California & Taft 01/01/06 - 12/31/06	Intersection Ranking: 1	PATTERN: WB Rear Ends
Communication of the control of the	California Street & Taft Street	TATTERIN WE ROUT ENGE
months Tol	Estimated Rate:	RECOMMENDATION: Signal and All-Way Stop warrants not met. Collision pattern primarily due to driver inattention and negligence. None.
Sneight — Parket — National Front Species - Sneight — Parket — Pa		ACTION: Continue to monitor in 2007.
7 Accidents Calle Joaquin & Los Osos Valley 01/01/06 - 12/31/06	Intersection Ranking: 2	PATTERN: SB Rear Ends
A to the second of the second	Calle Joaquin & Los Osos Valley Road	
F_man nr	Estimated Rate: .74/ MEV	RECOMMENDATION: Intersection signalized and realigned in May 2007. None.
Sengel - Transaction International Security Production Control		ACTION: Continue to monitor in 2007.



BeeBee Street & South Street

Estimated Rate: .72 / MEV

PATTERN: Left turn Vs Thru

RECOMMENDATION: Intersection under CalTrans jurisdiction. Intersection widened in late 2006, and under design for further modifications as part of "South Street Corridor Road Diet" project. None.

ACTION: Forward findings to State Dept. of Transportation, work with Caltrans to develop construction plans for the "South Street Corridor Road Diet" project, continue to monitor in 2007.



Intersection Ranking: 4

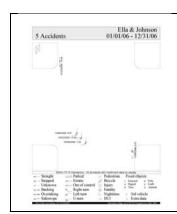
Long Street & Tank Farm Road

Estimated Rate: .41 / MEV

PATTERN: SB Vs WB Broad Sides

RECOMMENDATION: Sight distance adequate for approach speed. None.

ACTION: Continue to monitor in 2007.



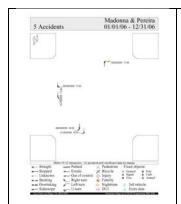
Ella Street & Johnson Avenue

Estimated Rate: .63 / MEV

PATTERN: EB vs SB Broad Sides

RECOMMENDATION: Signalization identified as part of approval for adjacent development projects. The traffic signal is currently under construction. None.

ACTION: Continue to move forward with signal construction and continue to monitor in 2007.



Intersection Ranking: 6

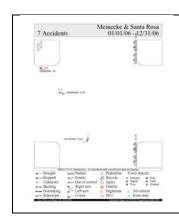
Madonna Road & Pereira Street

Estimated Rate: .55 / MEV

PATTERN: Broad Sides, All Directions

RECOMMENDATION: Traffic signal modifications and Intersection lane reconfigurations installed in June of 2006. EB approach to be reconfigured as part of upcoming street reconstruction project. None.

ACTION: Continue to monitor in 2007.



Meinecke Street & Santa Rosa Street

Estimated Rate: .48 / MEV

PATTERN: NB Rear Ends & Side Street Lefts Vs. Main Street Through

RECOMMENDATION: Intersection under Caltrans Jurisdiction. Investigate restricting left turns, None.

ACTION: Forward findings to State Dept. of Transportation and continue to monitor in 2007.



Intersection Ranking: 8

Montalban Street & Santa Rosa Street

Estimated Rate: .41 / MEV

PATTERN: SB Rear Ends & Side Street Lefts Vs. Main Street Through

RECOMMENDATION: Intersection under Caltrans Jurisdiction. Investigate restricting left turns, None.

ACTION: Forward findings to State Dept. of Transportation and continue to monitor in 2007.

Table 6.9 - Recommendations for Arterial Segments

5 Accidents HIGUERA 800 BLK 01/01/06 - 12/31/06	Segment Ranking: 1	PATTERN: Parking Maneuvers
S MINISTER MANAGEMENT	Higuera St. 800 Block	
constant of an constant of a	(Chorro – Morro)	RECOMMENDATION: Parking stalls lengths are smaller than City Standards. Increase parking stall lengths. Modifications to parking space
	Estimated Rate: 16.89 / MVM	dimensions are to take place during upcoming paving project. Pedestrian indications are to be installed as part of the 07-09' CIP.
Senight		
- Dakking Right nem - Fanday Saw Joseph - Octobing Left new Nghine Met Ackele - Salawaya Union Dill Forn data - Salawaya Union Dill Forn data		ACTION: Increase length of parking stalls SLO City Engr. Std. 7410. Continue to monitor in 2007.
3 Accidents BROAD 1100 BLK 3 In 101/01/06 - 12/31/06	Segment Ranking: 2	PATTERN: No Discernable Pattern
S).	Broad St. 1100 Block (Higuera – Marsh)	
		RECOMMENDATION: Primarily DUI incidents, None.
, among	Estimated Rate: 15.60 / MVM	
		ACTION: Continue to monitor in 2007.
Straight - Telescope of the Parisin Straight on V Januar - Parisin		



Segment Ranking: 3

Higuera St. 400 Block (Marsh – Carmel)

Estimated Rate: 9.92 / MVM

PATTERN: WB Left Vs. SB Thru

RECOMMENDATION: Motorists turning left into gas station from outside lane, pattern maybe exclusive to 2006. None.

ACTION: Continue to monitor in 2007.



Segment Ranking: 4

Higuera St. 700 Block (Broad – Garden)

Estimated Rate: 9.18 / MVM

PATTERN: WB Thru Vs. Parked Vehicle, Sideswipes

RECOMMENDATION: Construction / Seismic Retro fit at the Warden building thru out 2006. Investigate possible travel & parking lane modifications. Pedestrian indications are to be installed as part of the 07-09' CIP. None.

ACTION: Continue to monitor in 2007.

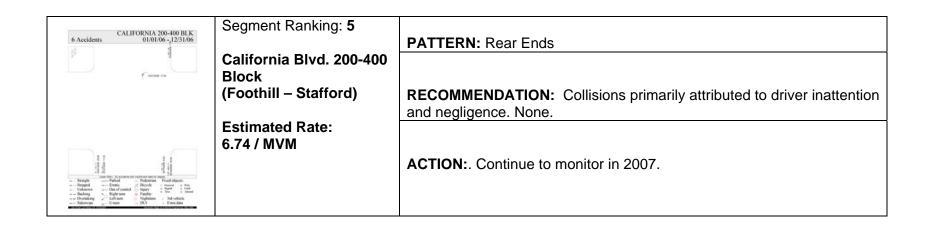


Table 6.10 - Recommendations for Collector Segments

NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 3 COLLISIONS IN 2006

Table 6.11 - Recommendations for Local Segments

NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 3 COLLISIONS IN 2006

appendix1

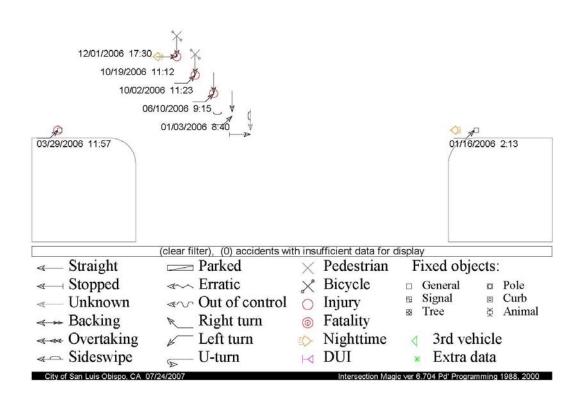
Arterial / Arterial Intersections

Arterial / Arterial Intersections Prioritized by Accident Rate

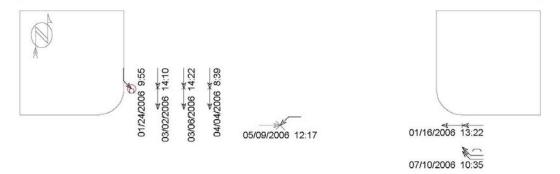
Rank	Prev. Rank	Intersection	Collisions	Volume	Rate	Control	EB	WB	NB	SB
1	4	101 NB Offramp / Abbott & Grand	9	15,804	1.56	2-STOP	3,45	<u>500</u>	4,478	7,376
2	1	Monterey & Santa Rosa	11	27,280	1.10	SIG	2,67	3,219	11,117	10,271
3	3	Chorro & Higuera	7	17,534	1.09	SIG	NA	9,518	4,001	4,015
4	6	Foothill & Santa Rosa	17	49,484	0.94	SIG	9,85	7 10,065	14,005	15,557
5	14	Chorro & Marsh	6	17,962	0.92	SIG	13,03	3 NA	1,909	3,020
6	2	Marsh & Santa Rosa	7	22,891	0.84	SIG	12,60	9 NA	3,203	7,079
7	22	101 NB On/Off Ramp & LOVR	9	30,615	0.81	SIG	11,81	8 12,247	6,550	NA
8	17	Higuera & Los Osos Valley	6	23,041	0.71	SIG	11,00	5 NA	2,770	9,266
9	11	Los Osos Valley & Madonna	10	39,165	0.70	SIG	14,49	6 12,151	2,778	9,740
10	5	California & Monterey	5	24,500	0.56	SIG	6,38	7,370	6,413	4,336
11	7	Broad & Marsh	4	21,444	0.51	SIG	12,27	3 NA	5,350	3,821
12	Not Ranked	Higuera & Osos	3	16235	0.51	SIG	NA	9,518	4,117	2,600
13	Not Ranked	California & Foothill	5	29162	0.47	SIG	9,48	10,065	5,252	4,365
14	Not Ranked	Higuera & Santa Rosa	5	29882	0.46	SIG	NA	8,306	10,818	10,758
15	9	Johnson & Marsh	3	18,672	0.44	SIG	7,47	1,385	5,202	4,609
16	20	Higuera & Prado	3	20,640	0.40	SIG	2,02	2 1,563	8,574	8,481
17	8	Broad & Tank Farm	5	36,464	0.38	SIG	9,65	5,358	9,932	11,523
18	15	Broad & Orcutt	5	36,617	0.37	SIG	<u>500</u>	7,319	14,952	13,846
19	Not Ranked	Laurel & Orcutt	3	23372	0.35	2-STOP	7,37	7 7,319	4,143	4,533
20	23	Higuera & South	4	34,433	0.32	SIG	1,50	9,015	15,107	8,811
21	Not Ranked	101 SB Offramp & Madonna	5	43806	0.31	SIG	19,99	4 12,887	10,925	NA
22	Not Ranked	101 SB Offramp & LOVR	4	36165	0.30	SIG	6,65	5,450	12,247	11,818
23	21	Broad & South	3	36,925	0.22	SIG	6,12	8,445	15,206	7,146
24	Not Ranked	Higuera & Tank Farm	3	40092	0.21	SIG	9,66	5 10,170	10,665	9,592

101 N/b Off Ramp / Abbott & Grand 9 Accidents 01/01/06 - 12/31/06



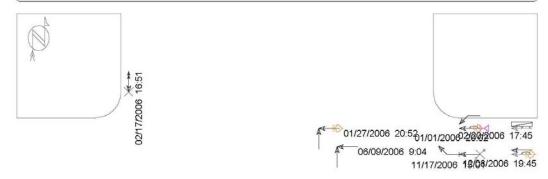


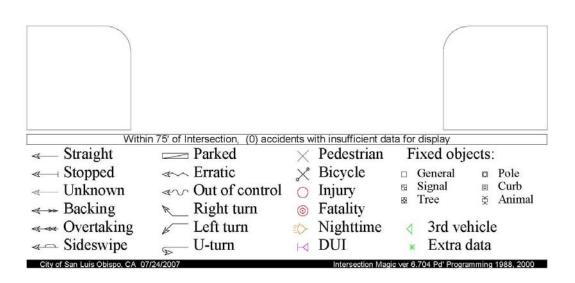
Monterey & Santa Rosa 01/01/06 - 12/31/06



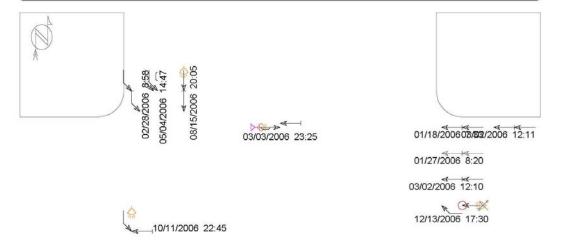
12/21/2006 21:59 09/14/2006 9:50 (clear filter), (0) accidents with insufficient data for display Straight - Parked × Pedestrian Fixed objects: × Bicycle Stopped ≪ Erratic □ General Curb Signal Unknown Out of control Injury Tree Right turn → Backing Fatality Overtaking Left turn Nighttime 3rd vehicle - U-turn → DUI Extra data City of San Luis Obispo, CA 07/24/2007

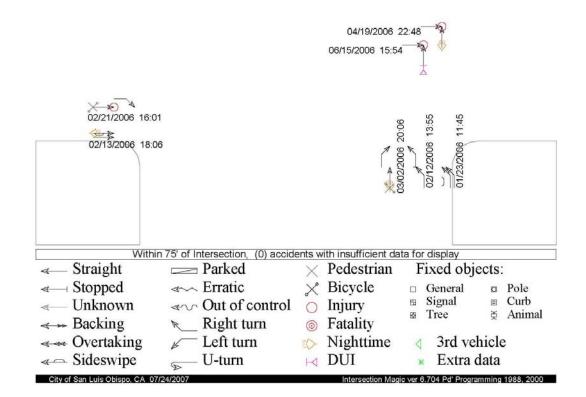
Chorro & Higuera 01/01/06 - 12/31/06





Foothill & Santa Rosa 01/01/06 - 12/31/06

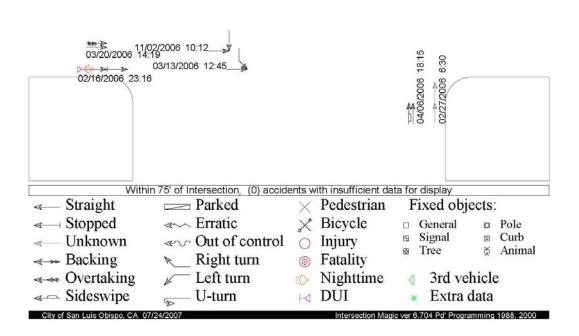




Chorro & Marsh 01/01/06 - 12/31/06







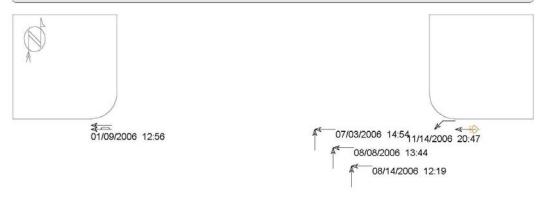
appendix 2

Arterial / Collector Intersections

Arterial / Collector Intersections Prioritized by Accident Rate

Rank	Prev. Rank	Intersection	Collisions	Volume	Rate	Control	EB	WB	NB	SB
1	1	Chorro & Pismo	5	6,355	2.16	2-STOP	N/	3,747	1,209	1,399
2	5	Chorro & Palm	5	11,077	1.24	SIG	2,31	2 791	3,993	3,981
3	Not Ranked	Broad & Pismo	6	14,689	1.12	SIG	NA	3,622	5,350	5,717
4	Not Ranked	Fredricks / Hope & Grand	6	15,681	1.05	2-STOP	<u>50</u>	<u>500</u>	7,305	7,376
5	7	El Mercado & Madonna	8	28,519	0.77	SIG	12,8	30 12,139	<u>3,500</u>	NA
6	Not Ranked	California & Mill	3	12,568	0.65	SIG	1,52	4 1,752	4,956	4,336
7	10	Mill & Santa Rosa	5	24,049	0.57	SIG	1,21	7 1,752	9,829	11,251
8	11	Foothill & La Entrada	3	15,065	0.55	1-STOP	5,93	8 5,761	<u>1,500</u>	1,866
9	Not Ranked	Broad & Foothill	3	22,911	0.36	SIG	10,8	9,763	2,300	NA

Chorro & Pismo 01/01/06 - 12/31/06

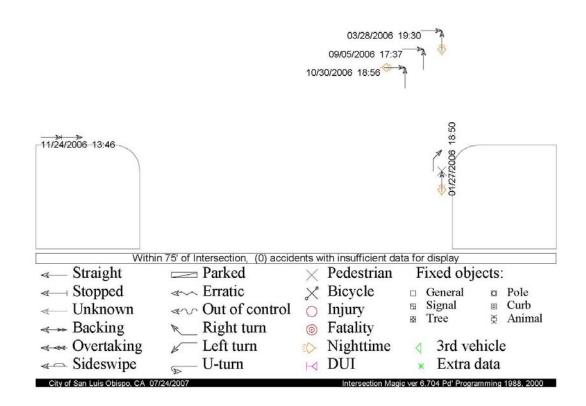


		ents with insufficient da	
≪ Straight ≪ Stopped	□ Parked ≪ Erratic	✓ Pedestrian✓ Bicycle	Fixed objects:
- Unknown	Out of control	O Injury	🖪 Signal 📵 Curb
→ Backing	№ Right turn	Fatality	⊠ Tree ∮ Animal
Overtaking		Nighttime	3rd vehicle
Sideswipe	S U-turn	⊢⊲ DUI	 Extra data
City of San Luis Obispo, CA 07	/24/2007	Intersection Mag	ic ver 6.704 Pd' Programming 1988, 2000

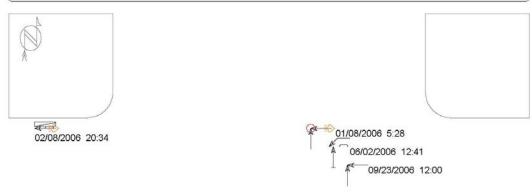
Chorro & Palm 01/01/06 - 12/31/06

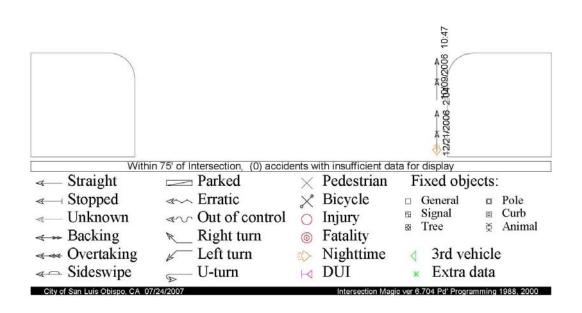




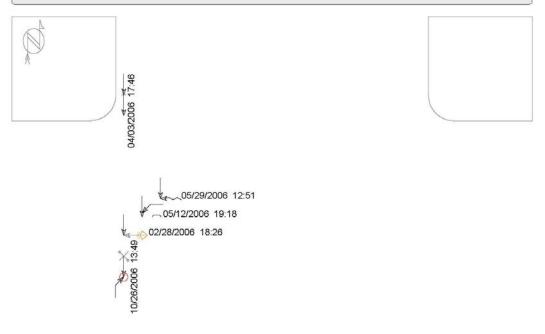


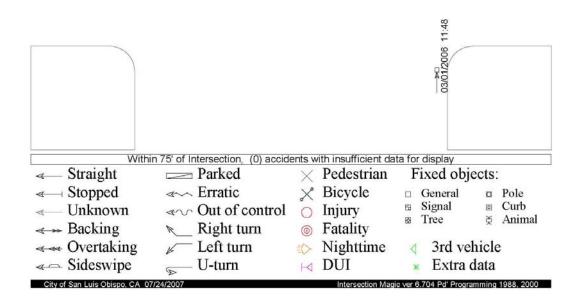
Broad & Pismo 01/01/06 - 12/31/06





Fredericks / Hope & Grand 01/01/06 - 12/31/06





El Mercado & Madonna 01/01/06 - 12/31/06



09/16/2006 15:52 12/22/2006 16:57 03/23/2006 7:26 01/25/2006 17:48 Within 75' of Intersection, (0) accidents with insufficient data for display Straight × Pedestrian Fixed objects: - Parked × Bicycle ≪ Stopped ≪ Erratic □ General Curb Signal Out of control | Injury <-- Unknown Tree Right turn → Backing Fatality Overtaking Nighttime 3rd vehicle U-turn → DUI Extra data City of San Luis Obispo, CA 07/24/2007

appendix 3

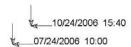
Arterial / Local Intersections

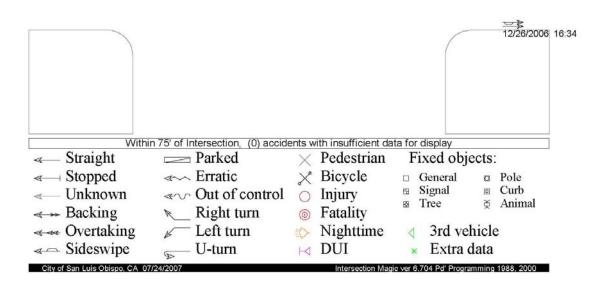
Arterial / Local Intersections Prioritized by Accident Rate

Rank	Prev. Rank	Intersection	Collisions	Volume	Rate	Control		EB	WB	NB	SB
1	15	Higuera & Nipomo	7	13,019	1.47	SIG		NA	10,019	<u>1,500</u>	<u>1,500</u>
2	18	Marsh & Osos	9	18,667	1.32	SIG	11	,515	NA	5,462	1,690
3	1	Monterey & Osos	4	8,921	1.23	SIG	2	673	3,038	2,008	1,202
4	Not Ranked	Marsh & Morro	6	15,015	1.09	SIG	11	,515,	NA	<u>1,750</u>	<u>1,750</u>
5	4	Marsh & Nipomo	6	16,273	1.01	SIG	12	,273	NA	2.000	2,000
6	11	Broad & Pacific	4	11,002	1.00	2-STOP	<u> </u>	<u>300</u>	<u>800</u>	5,350	4,052
7	Not Ranked	California & Taft	7	20,120	0.95	1-STOP	2	775	3,700	8,060	5,585
8	Not Ranked	Garden & Marsh	4	14,200	0.77	1-STOP	<u>13</u>	3,000	<u>NA</u>	<u>600</u>	<u>600</u>
9	Not Ranked	Roundhouse & Santa Barbara	4	14,240	0.77	1-STOP		NA	<u>300</u>	7,812	6,128
10	8	Calle Joaquin & Los Osos Valley	7	26,065	0.74	1-STOP	11	,818,	12,247	<u>NA</u>	2,000
11	20	Beebee & South	5	18,991	0.72	2-STOP	8.	,443	9,150	<u>750</u>	648
12	Not Ranked	High & Santa Barbara	4	15,416	0.71	1-STOP		<u>500</u>	<u>500</u>	7,812	6,604
13	36	Long & Tank Farm	5	21,325	0.64	2-STOP	9	,655	10,170	<u>1,000</u>	<u>500</u>
14	16	Ella & Johnson	5	21,896	0.63	SIG	10	,470	8,800	1326	<u>1,300</u>
15	29	Lawton & South	4	18,258	0.60	1-STOP	8.	,443	9,015	<u>800</u>	NA
16	Not Ranked	Foothill & Tassajara	4	18,535	0.59	SIG	8,	346	8,283	923	983
17	Not Ranked	Branch & Broad	3	14,101	0.58	1-STOP		<u>300</u>	NA	6,655	7,146
18	Not Ranked	Church & Santa Barbara	3	14,692	0.56	SIG	3	<u>300</u>	NA	7,788	6,604
19	39	Madonna & Pereira	5	24,994	0.55	2-STOP	10	,197	10,797	<u>1,000</u>	<u>3,000</u>
20	25	Buchon & Johnson	4	21,248	0.52	2-STOP	7	,088	8,022	5,988	<u>150</u>
21	33	Meinecke & Santa Rosa	7	39,697	0.48	2-STOP	1	<u>,500</u>	NA	19,310	18,887
22	Not Ranked	Higuera & Vachell	4	22,858	0.48	1-STOP		NA	<u>1,576</u>	12,016	9,266
23	17	Elks & Higuera	3	17,784	0.46	1-STOP	1	,500	NA	7,158	9,126
24	Not Ranked	Cuesta & Foothill	3	18,129	0.45	2-STOP	8,	346	8,283	NA	<u>1,500</u>
25	Not Ranked	Parker & South	3	18,458	0.45	1-STOP	9	,015	8,443	<u>500</u>	<u>500</u>
26	32	Granada & Higuera	3	19,601	0.42	SIG		NA	2,000	8,860	8,741
27	40	Descanso & Los Osos Valley	4	26,470	0.41	SIG	11	,238	13,832	<u>700</u>	<u>700</u>
28	23	Montalban & Santa Rosa	6	40,197	0.41	2-STOP		<u>500</u>	<u>1,500</u>	19,310	18,887
29	37	Foothill & Mustang	3	22,545	0.36	1-STOP	9	480	10,065	NA	<u>3,000</u>
30	7	Los Osos Valley & Royal	4	31,010	0.35	SIG	13	3,003	15,007	2,000	<u>1,000</u>
31	26	Murray & Santa Rosa	3	27,448	0.30	SIG	2	,000	2,000	9,829	13,619
32	12	Boysen & Santa Rosa	3	28,624	0.29	1-STOP	1.	000	NA	14,005	13,619
33	Not Ranked	Broad & Sweeney	3	29,051	0.28	1-STOP	8	<u> 375</u>	NA	14,330	13,846
34	Not Ranked	Froom Ranch & LOVR	3	31,089	0.26	SIG	6	,500	1,000	12,151	11,438
35	21	Olive & Santa Rosa	4	42,931	0.26	SIG	11	,398	2,500	10,146	18,887
36	19	Santa Rosa & Walnut	3	32,910	0.25	SIG	2,	183	7,279	9,829	13,619

7 Accidents Higuera & Nipomo 01/01/06 - 12/31/06

08/18/2006 2:09

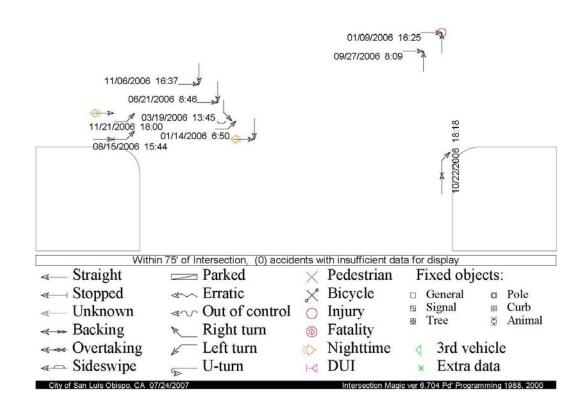




Marsh & Osos 01/01/06 - 12/31/06

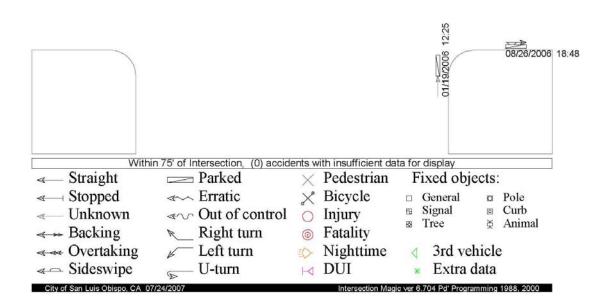






Monterey & Osos 01/01/06 - 12/31/06



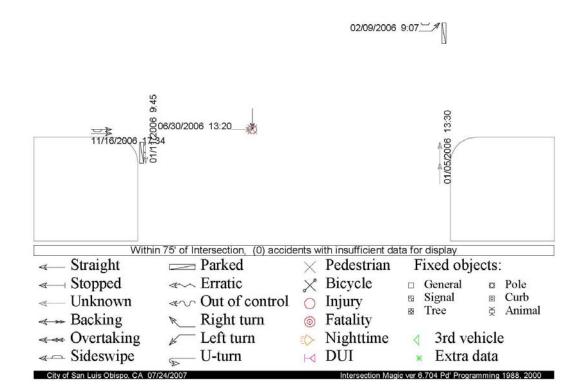


Marsh & Morro 01/01/06 - 12/31/06





07/17/2006 11:42

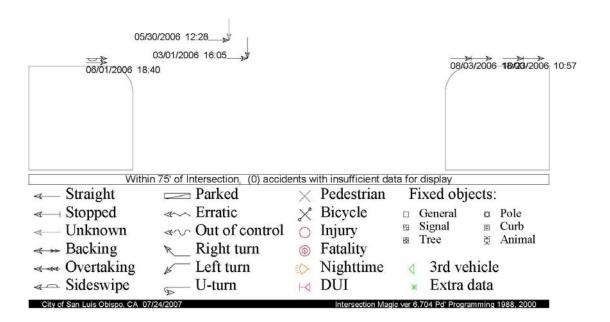


Marsh & Nipomo 01/01/06 - 12/31/06









appendix 4

Collector / Collector Intersections

Collector / Collector Intersection Prioritized by Accident Rate

NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 3 COLLISIONS IN 2006

appendix 5

Collector / Local Intersections

Collector / Local Intersections prioritized by Accident Rate

Rank	Prev. Rank	Intersection	Collisions	Volume	Rate	Control	EB	WB	NB	SB
1	2	Morro & Pismo	3	4,438	1.85	2-STOP	NA	3,622	371	445
2	Not Ranked	Mill & Osos	3	6,278	1.31	2-STOP	1,339	2,019	1,410	1,510

Morro & Pismo 01/01/06 - 12/31/06

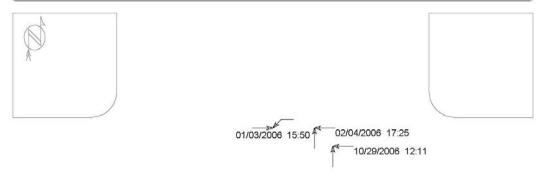


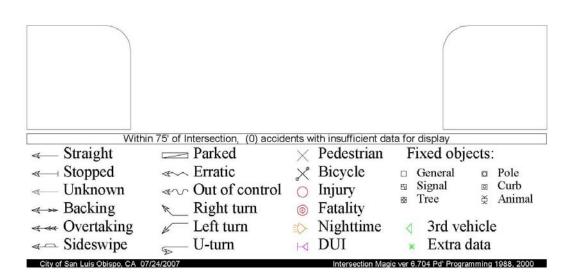




Within	n 75' of Intersection. (0) accid	ents with insufficient da	ata for display
≪ Straight	Parked	× Pedestrian	Fixed objects:
«— Stopped	« Erratic	× Bicycle	□ General □ Pole
< Unknown	≪ Out of control	Injury	⊞ Signal □ Curb ☑ Tree ♂ Animal
→ Backing	Right turn	Fatality	⊠ Tree \ \ Animal
Overtaking		Nighttime	
Sideswipe	U-turn	⊢⊲ DUI	Extra data

Mill & Osos 01/01/06 - 12/31/06





appendix 6

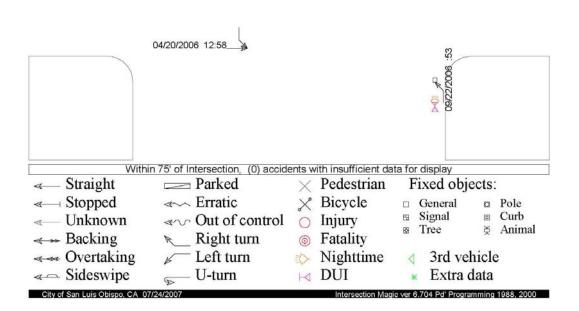
Local / Local Intersections

Local / Local Intersections Prioritized by Accident Rate

Rank	Prev. Rank	Intersection	Collisions	Volume	Rate	Control	EB	WB	NB	SB
1	Not Ranked	Garden & Pacific	4	2800	3.91	1-STOP	800	<u>800</u>	<u>600</u>	<u>600</u>
2	Not Ranked	Islay & Santa Rosa	3	3546	2.32	2-STOP	600	<u>600</u>	1,138	1,208

Garden & Pacific 01/01/06 - 12/31/06

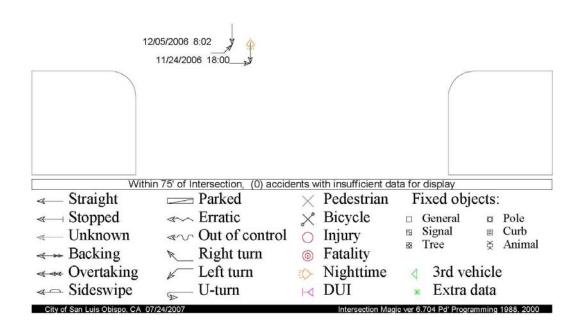




Islay & Santa Rosa 01/01/06 - 12/31/06







appendix 7

Other Significant Intersections

Other Significant Intersections Prioritized by Accident Rate Left turn collisions at signalized intersections

Rank	Prev. Rank	Intersection	Collisions	Volume	Rate	Control	EB	WB	NB	SB
1	Not Ranked	Marsh & Santa Rosa	7	22,891	0.84	SIG	12,609	NA	3,203	7,079
2	Not Ranked	101 NB On/Off Ramp & LOVR	9	30,615	0.81	SIG	11,818	12,247	6,550	NA
3	12	Higuera & Los Osos Valley	6	23,041	0.71	SIG	11,005	NA	2,770	9,266
4	6	Los Osos Valley & Madonna	10	39,165	0.70	SIG	14,496	12,151	2,778	9,740
5	13	Mill & Santa Rosa	5	24,049	0.57	1-STOP	1,217	1,752	9,829	11,251
6	Not Ranked	California & Monterey	5	24,500	0.56	SIG	6,381	7,370	6,413	4,336
7	Not Ranked	California & Foothill	5	29162	0.47	SIG	9,480	10,065	5,252	4,365
8	Not Ranked	Higuera & Santa Rosa	5	29882	0.46	SIG	NA	8,306	10,818	10,758
9	3	Broad & Tank Farm	5	36,464	0.38	SIG	9,651	5,358	9,932	11,523
10	10	Broad & Orcutt	5	36,617	0.37	SIG	<u>500</u>	7,319	14,952	13,846
11	Not Ranked	101 SB Offramp & Madonna	5	43806	0.31	SIG	19,994	12,887	10,925	NA

Marsh & Santa Rosa 7 Accidents 01/01/06 - 12/31/06 05/21/2006 10:11 07/17/2006 15:31 05/30/2006 18:49 04/12/2006 15:54 Within 75' of Intersection, (0) accidents with insufficient data for display Straight Fixed objects: Parked × Pedestrian × Bicycle ✓ Stopped ≪ Erratic □ General Curb Signal Injury Unknown Out of control Tree

Fatality

⋈ DUI

Nighttime

3rd vehicle

Extra data

tersection Magic ver 6.704 Pd' Programming 1988, 2000

Right turn

Left turn

U-turn

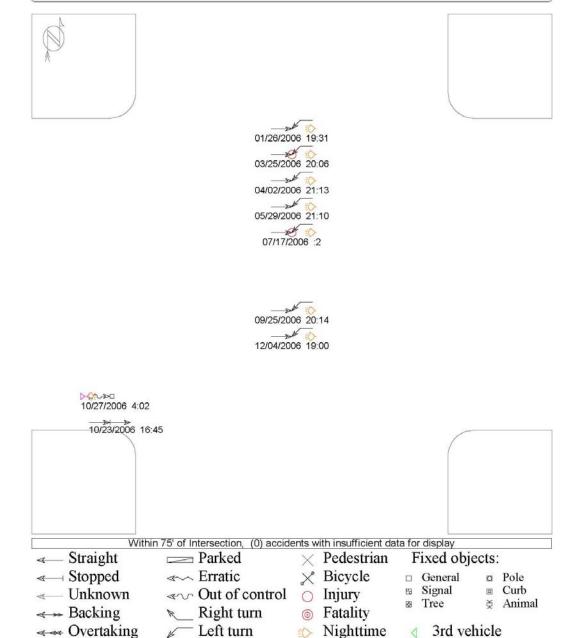
→ Backing

Overtaking

✓ Sideswipe

City of San Luis Obispo, CA 07/24/2007

101 N/b On/off Ramp & Los Osos Valley 9 Accidents 01/01/06 - 12/31/06



- U-turn

✓ Sideswipe

City of San Luis Obispo, CA 07/24/2007

⋈ DUI

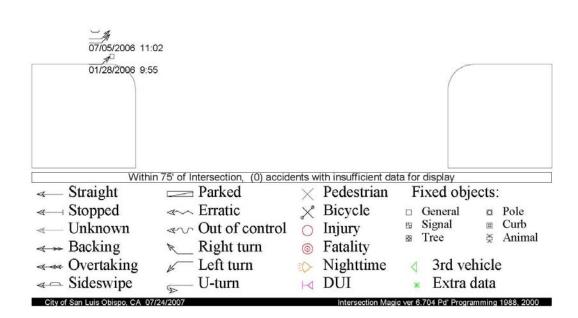
II * Extra data

tersection Magic ver 6.704 Pd' Programming 1988, 2000

Higuera & Los Osos Valley 01/01/06 - 12/31/06



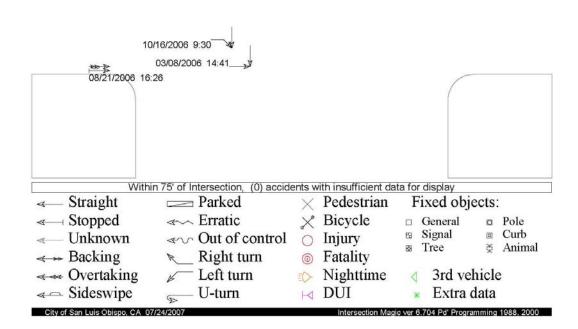




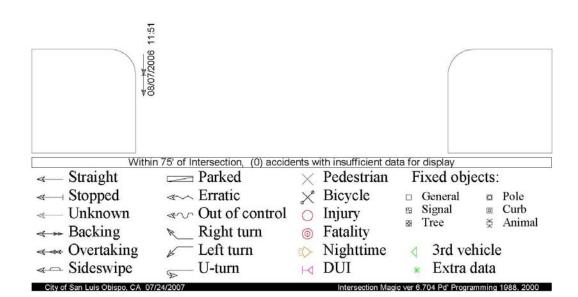
Los Osos Valley & Madonna 01/01/06 - 12/31/06



01/18/2006 11:35



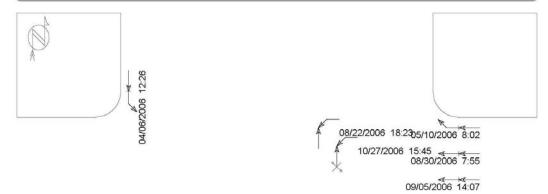
Mill & Santa Rosa 01/01/06 - 12/31/06



Other Significant Intersections Prioritized by Accident Rate Collision at intersections without all-way control

Rank	Prev. Rank	Intersection	Collisions	Volume	Rate	Control	EB	WB	NB	SB
1	Not Ranked	California & Taft	7	20,120	0.95	1-STOP	2,775	3,700	8,060	5,585
2	5	Calle Joaquin & Los Osos Valley	7	26,065	0.74	1-STOP	11,818	12,247	<u>NA</u>	2,000
3	Not Ranked	Beebee & South	5	18,991	0.72	2-STOP	8,443	9,150	<u>750</u>	648
4	Not Ranked	Long & Tank Farm	5	21,325	0.64	2-STOP	9,655	10,170	<u>1,000</u>	<u>500</u>
5	Not Ranked	Ella & Johnson	5	21,896	0.63	1-STOP	10,470	8,800	1326	<u>1,300</u>
6	Not Ranked	Madonna & Pereira	5	24,994	0.55	2-STOP	10,197	10,797	<u>1,000</u>	<u>3,000</u>
7	4	Meinecke & Santa Rosa	7	39,697	0.48	2-STOP	<u>1,500</u>	NA	19,310	18,887
8	3	Montalban & Santa Rosa	6	40,197	0.41	2-STOP	<u>500</u>	<u>1,500</u>	19,310	18,887

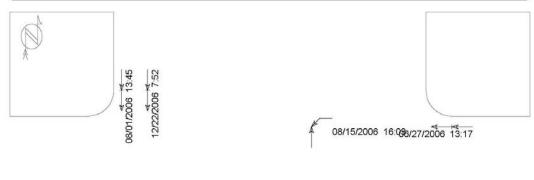
California & Taft 01/01/06 - 12/31/06



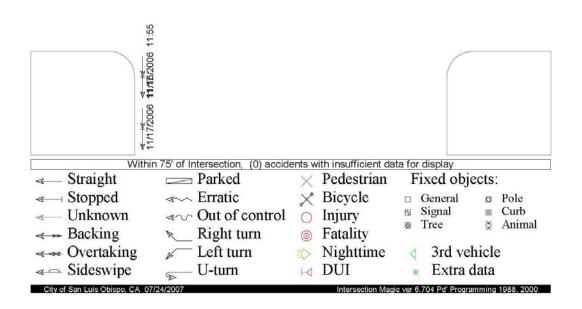
11/17/2006 17:43

Withi	n 75' of Intersection, (0) accide	ents with insufficient da	ta for display
Straight	Parked	× Pedestrian	Fixed objects:
< Stopped	« Erratic	× Bicycle	□ General □ Pole
< Unknown	Out of control	Injury	🖪 Signal 🏻 Curb
→ Backing	Right turn	Fatality	
← Overtaking	Left turn	Nighttime	∃rd vehicle
Sideswipe		⊢ DÜI	 Extra data

7 Accidents Calle Joaquin & Los Osos Valley 01/01/06 - 12/31/06



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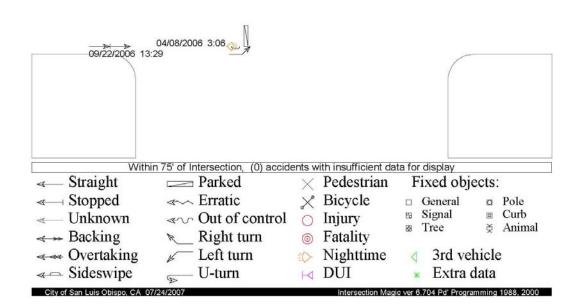


Beebee & South 01/01/06 - 12/31/06

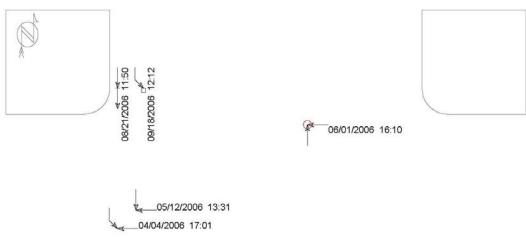


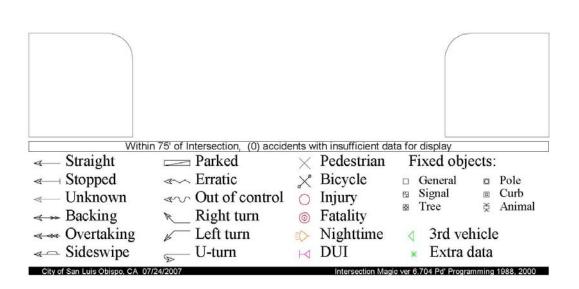


04/09/2006 18:00 04/19/2006 13:54 09/21/2006 16:33

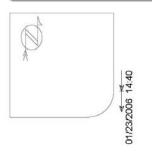


Long & Tank Farm 01/01/06 - 12/31/06

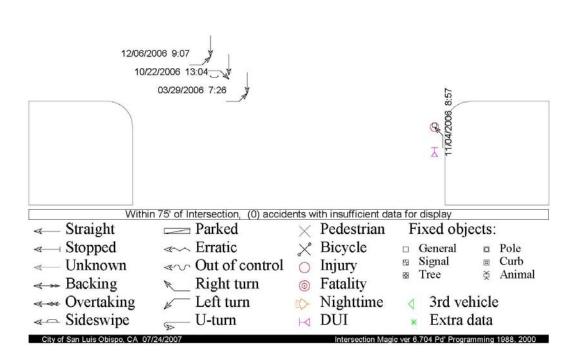


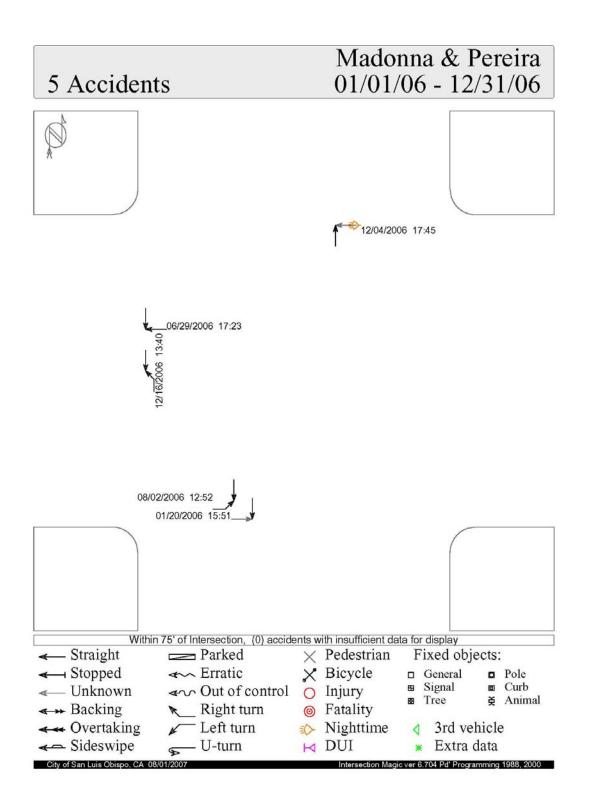


Ella & Johnson 01/01/06 - 12/31/06



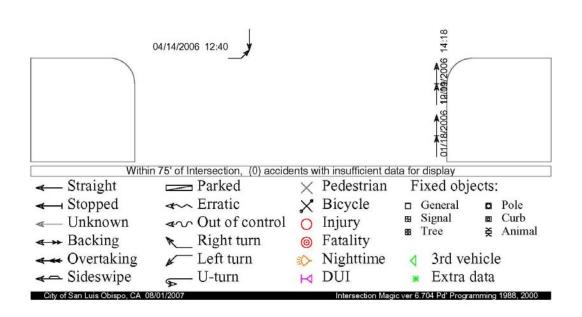






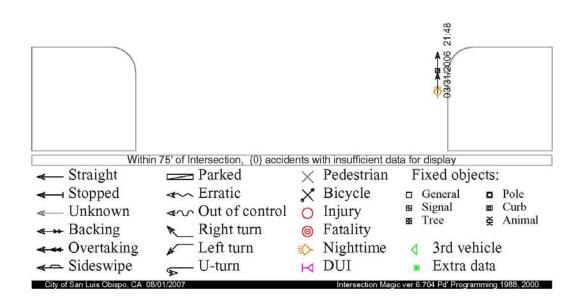
Meinecke & Santa Rosa 7 Accidents 01/01/06 - ₹12/31/06

05/25/2006 14:30



Montalban & Santa Rosa 01/01/06 - 12/31/06

10/26/2006 19:27



appendix 8 Arterial Segments

Arterial Segments Prioritized by Accident Rate

Rank	Prev. Rank	Segment	Collisions	Volume	Seg. Len.	Rate	Туре	Location
1	5	Higuera 800 Block	5	9,518	0.09	16.89	Arterial	Chorro to Morro
2	Not Ranked	Broad 1100 Block	3	7,532	0.07	15.6	Arterial	Higuera to Marsh
3	Not Ranked	Higuera 400 Block	4	<u>12,273</u>	0.09	9.92	Arterial	Marsh to Carmel
4	2	Higuera 700 Block	4	10,331	0.12	9.18	Arterial	Broad to Garden
5	14	California 200-400 Block	6	9,617	0.25	6.74	Res. Arterial	Foothill to Stafford
6	Not Ranked	Broad 3000 Block	4	<u> 28,176</u>	0.10	3.89	Arterial	Sweeney to Orcutt
7	6	Foothill 1000 Block	3	19,545	0.12	3.42	Arterial	Santa Rosa to Casa
8	15	Madonna 400-100 Block	9	25,199	0.32	3.09	Arterial	Dalidio to 101 Freeway
9	Not Ranked	Higuera 100 Block	3	29,587	0.09	3.09	Arterial	Madonna to South
10	24	Broad 3800-3900 Block	5	21,700	0.21	3.03	State Hwy.	Industrial to Tank Farm
11	Not Ranked	Los Osos Valley 11400-11500 Block	5	29,573	0.17	2.72	Arterial	Royal to Madonna
12	Not Ranked	Higuera 200 Block	3	16,279	0.19	2.66	Arterial	High to South
13	25	Broad 3200-3400 Block	6	30,549	0.20	2.64	State Hwy.	Orcutt to Rockview
14	10	Foothill 800-900 Block	3	18,562	0.17	2.54	Arterial	Chorro to Santa Rosa
15	21	Higuera 10 Block	4	16,644	0.31	2.16	Arterial	Madonna to Elks
16	13	Foothill 400-600 Block	3	16,629	0.23	2.13	Res.Arterial	North Tassajara to Ferrini
17	Not Ranked	Madonna 500 Block	5	24,735	0.27	2.05	Arterial	Oceanaire to Dalidio
18	Not Ranked	Los Osos Valley 11200 Block	4	27,093	0.20	2.02	Arterial	Laguna to Oceanaire
19	26	Higuera 2800-2900 Block	3	15,047	0.33	1.67	Arterial	Elks to Chumash
20	27	Madonna 1300-1100 Block	3	21,651	0.42	0.91	Arterial	Los Osos Valley to Oceanaire

HIGUERA 800 BLK 01/01/06 - 12/31/06

ntersection Magic ver 6.704 Pd' Programming 1988, 2000



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08/28/2006 17:45

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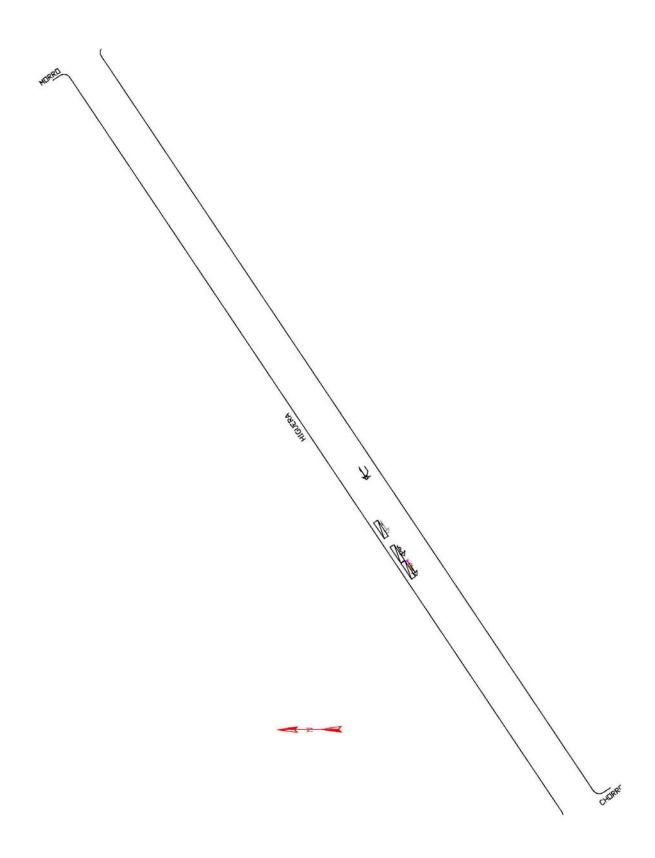
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City of San Luis Obispo, CA 07/24/2007 (modified)

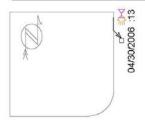


03/21/2006 22:17

	(clear filter), (0) accidents wi	th insufficient data for c	
Straight	Parked	× Pedestrian	Fixed objects:
< → Stopped	« Erratic	× Bicycle	□ General □ Pole
< Unknown	Out of control	O Injury	☐ Signal ☐ Curb
→ Backing	Right turn	Second Fatality	⊠ Tree
Overtaking		Nighttime	3rd vehicle
Sideswipe	₅ U-turn	⊢⊲ DUI	 Extra data

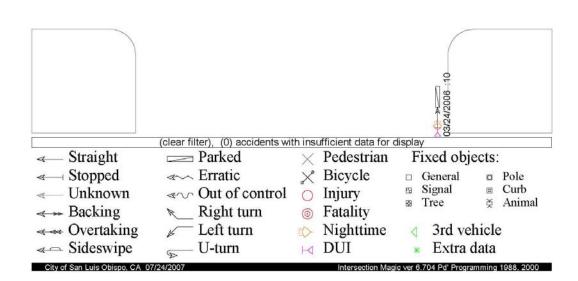


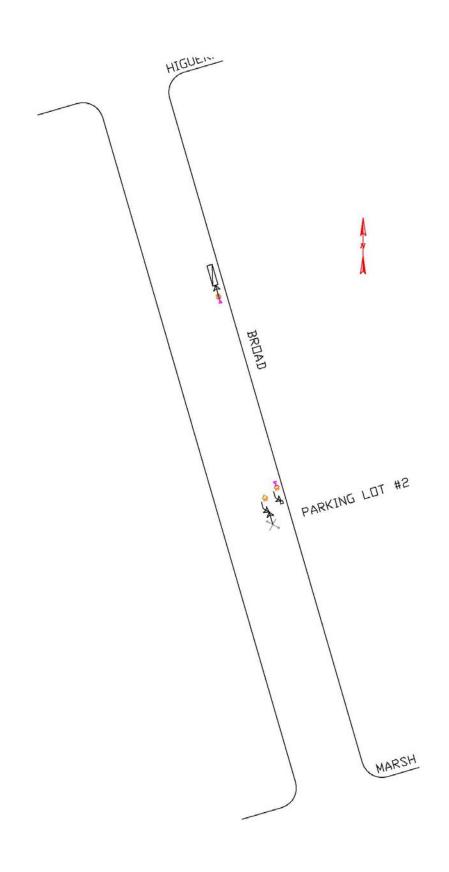
BROAD 1100 BLK 01/01/06 - 12/31/06







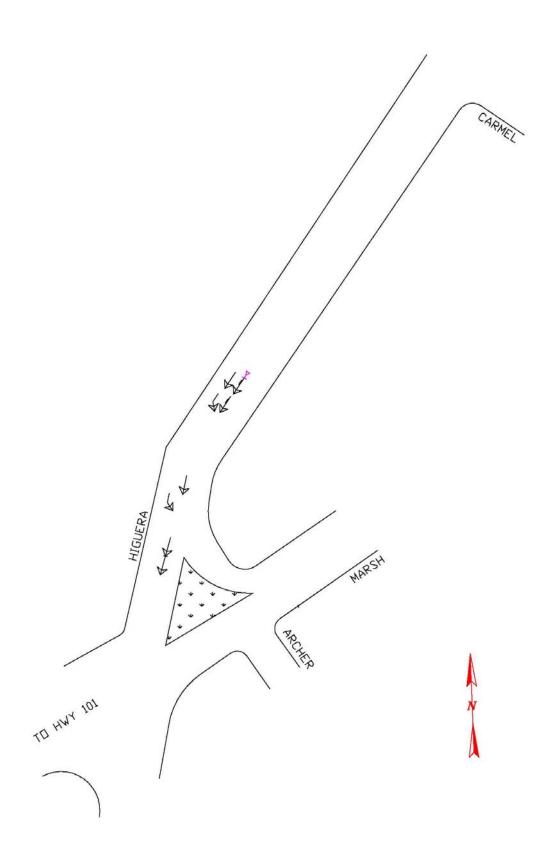




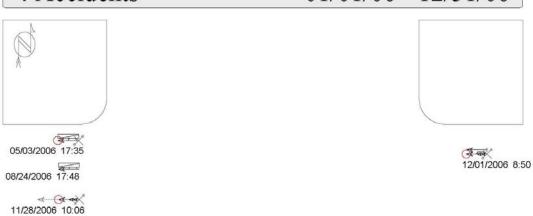
HIGUERA 400 BLK 01/01/06 - 12/31/06

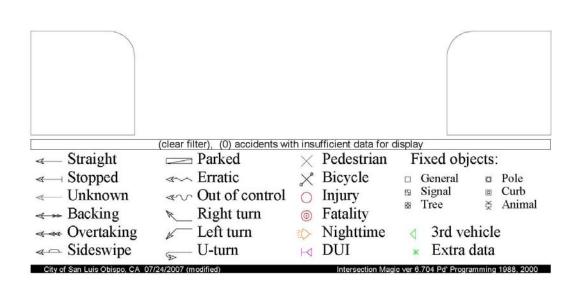


< Straight	North) & (Distance >= 75)), (C	× Pedestrian	Fixed objects:
< Stopped	Erratic	× Bicycle	 □ General □ Pole □ Signal □ Curb
< Unknown	≪ Out of control	Injury	™ Tree
→ Backing	Right turn	Fatality	a rice & Amma
Overtaking	Left turn	Nighttime	∃rd vehicle
≪ Sideswipe		⊢ DŬI	 Extra data
City of San Luis Obispo, CA 07	/24/2007	Intersection Mag	ic ver 6.704 Pd' Programming 1988, 2000

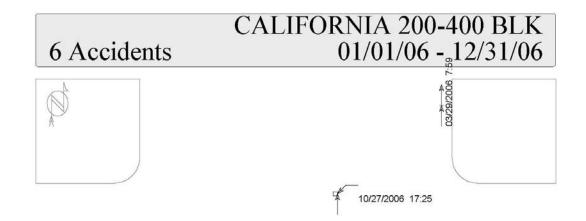


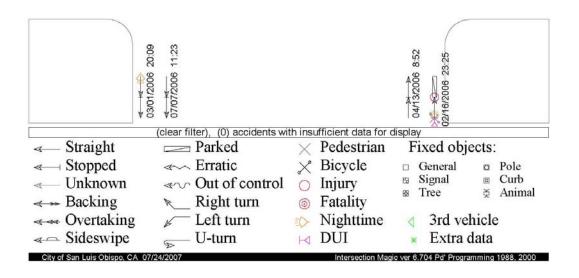
HIGUERA 700 BLK 01/01/06 - 12/31/06

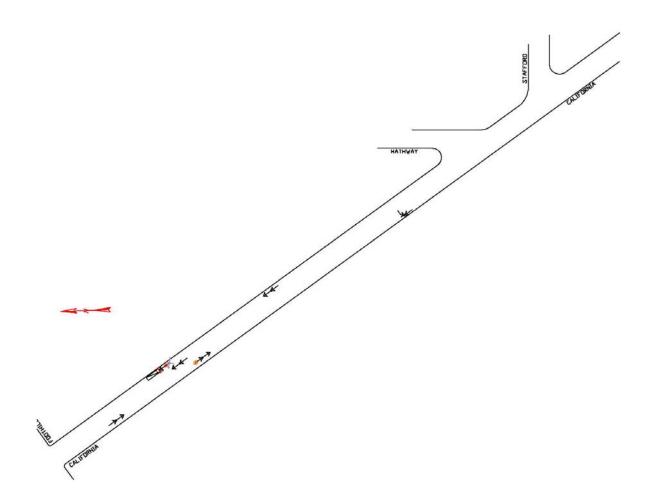












appendix 9 Collector Segments

Collector Segments Prioritized by Accident Rate NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 3 COLLISIONS IN 2006

appendix 10

Local Segments

Local Segments Prioritized by Accident Rate

NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 3 COLLISIONS IN 2006

appendix 11

2006 Police Department Traffic Safety Unit Operations Report



Police department 1042 Walnut Street San Luis Obispo CA 93401



2006 San Luis Obispo Police Department Traffic Safety Report

2006 Summary

Each year, the Police Department produces a report documenting the enforcement and education activities conducted by the Traffic Safety Unit (motorcycle officers) and patrol personnel throughout the previous year. The report includes collision statistics gathered by the Police Department, which differ somewhat from those reported by Public Works since Police Department statistics include injury collisions and hit-and-run incidents on both public and private property.

In 2006, the number of collisions city-wide decreased 18.5% from 2005, and the number of citations issued increased almost 33%. This significant increase in citations is partly due to the filling of a vacant motorcycle officer position in 2006, bringing the unit complement up to four officers and one supervisor. This position had been held vacant in 2005 due to staffing shortages and the need to keep patrol positions staffed. In addition to their enforcement and investigative responsibilities, the Traffic Unit was responsible for various education efforts and special event duties, such as the SLO Triathlon, Tour of California bicycle race, and the Holiday Parade.

In addition to the overall decrease in collisions, pedestrian-involved collisions also decreased by 3% in 2006 from the previous year. Bicycle collisions increased 20% from 2005. There were two fatal traffic collisions in 2006 as compared to three in 2005.

This report provides details about the Police Department's traffic enforcement and education activities and the statistics for the various types of collisions and locations.

Traffic Safety Unit Personnel

The Traffic Safety Unit is comprised of four experienced and well-qualified officers, led by Sergeant John Bledsoe. All four officers are certified in basic collision investigation. Three are certified in intermediate collision investigation and two hold advanced certification. One of the officers is certified in child safety seat inspections.

Collaboration with Public Works

Employees from the Public Works Traffic Engineering the Police Department Traffic Safety Units continue to work closely together on traffic-related issues. The two groups meet quarterly to discuss and resolve collision and enforcement related issues. Traffic Engineering personnel are contacted after major injury and fatal collisions to review and discuss the specifics of the investigation and share information and expertise. Officers and traffic engineering personnel are constantly working together to identify areas and roadways that could benefit from engineering improvements, especially those at collision locations. The two units coordinate regarding the placement of traffic-related signage and signals, and the deployment of speed warning devices.

Special Enforcement Programs

<u>Driving Under the Influence (DUI) Enforcement:</u>

The number of DUI arrests increased 36% in 2006 from the prior year. The department was able to increase DUI enforcement efforts by utilizing grant funding for special DUI patrols. Unfortunately, the number of DUI-related collisions in 2006 was 46% greater than in 2005, indicating that driving while intoxicated is an increasing problem in the City.

The Police Department continues to be a member of the county-wide DUI Task Force which coordinates enforcement and education efforts among all the law enforcement agencies in the county. Officer Waterlander was the Police Department's representative at the monthly DUI Task Force meetings.

Vehicle Impound Program:

Enforcement of vehicle laws related to individuals who drive cars while their licenses are suspended continues to be a focus of the Traffic Safety Unit and Patrol Division. In 2006, officers impounded 82 vehicles for 30 days from drivers who were driving with suspended licenses or were never licensed. The number of vehicles impounded was fewer than 2005 due primarily to a court ruling that limited the circumstances under which an officer could impound a vehicle from an unlicensed driver.

Seatbelt Enforcement Program:

In 2006, the Police Department participated in the annual statewide "Click it or Ticket" enforcement campaign, which is funded with state grant money. During the campaign, media messages urge motorists to use their seatbelts while driving and warn them about the enforcement campaign if they fail to use their seatbelt as required by law. Surveys are conducted before and after the enforcement period to measure the effectiveness of the campaign and the rate of compliance. The post-enforcement survey conducted in San Luis Obispo indicated an extremely high compliance rate.

Education Programs

Bicycle Safety Rodeo:

For the ninth year in a row, the San Luis Obispo Police Department and the Parks and Recreation Department conducted a very successful bicycle rodeo for children in the community. The event was held at Hawthorne Elementary School with approximately 250 children participating - about 50 more than the previous year. Each participant received lunch, a tee shirt, and a prize bag containing bicycle safety-related items. Each participant's helmet and bicycle were inspected by technicians from local bicycle shops who made minor repairs on bicycles and identified damaged or defective helmets for replacement. New bicycle helmets were given to underprivileged children and children with defective helmets. As part of the bicycle safety program, a professional bicycle stunt group performed at the bicycle rodeo, at four schools, and during the Thursday night Farmer's Market to promote safety and a healthy lifestyle.

Car Safety Seat Inspection Program:

The Police Department is a member of a countywide car safety seat coalition that conducts free inspections of child car seats for motorists. Three Police Department employees who are certified to conduct car seat inspections participate in inspection events in the City and surrounding communities throughout the year. The Police Department also obtained grant funds to purchase car seats for parents and caregivers who cannot afford to purchase or replace their own.

Drug and Alcohol Services Presentations:

During 2006 an officer from the Traffic Unit gave two presentations regarding DUI driving to groups of people on probation for alcohol-related offenses. The presentations are part of the court-required education program for people convicted of DUI.

Special Events

Officers from the Traffic Unit assisted in the following city-sponsored and major events:

- Tour of California Bicycle Race
- MS Walk and Run
- SLO Triathlon
- Wheels of SLO
- City to Sea Marathon
- Cal Poly Homecoming Parade
- San Luis Obispo High School Homecoming Parade
- SLO Holiday Parade
- Mardi Gras

Officers from the Traffic Unit assisted neighboring law enforcement agencies with the following special events in their communities. In turn, officers from these communities assisted with events in San Luis Obispo that required additional officers, such as Tour of California and Mardi Gras:

- The Elks Parade, Santa Maria
- Fourth of July events in Pismo Beach and Cayucos
- Car show in Paso Robles
- Lompoc Flower Festival
- Arroyo Grande Car Cruise

Traffic Index

The traffic index - the ratio of hazardous citations issued to the number of injury and fatal collisions - is a gauge used by the California Office of Traffic Safety (OTS) to measure cities' traffic safety and effectiveness of their traffic enforcement programs. Hazardous citations include moving violations for traffic offenses, as opposed to non-moving and mechanical violations. The OTS considers a traffic index of 25 to be the minimum effective rate. Higher index numbers represent greater traffic safety and more effective traffic programs. The 2006 index for the City of San Luis Obispo was 9.1, up from 7.6 in 2005. This reflects a 20% improvement from 2005 and a 43% improvement from 2004.

Staff believes this improvement may be attributed to filling the vacant motorcycle officer position, which resulted in greater capacity to generate citations and to the decrease in the number of collisions city-wide. Continuing to improve our traffic index will be a focus and priority for the Police Department.

Upcoming Programs

The Police Department has been awarded grant funds from the California Office of Traffic Safety for specialized traffic enforcement during 2007 and 2008. The funds are programmed to target traffic violations at the City's intersections that have the highest collision rates and to conduct DUI checkpoints and patrols. In addition, two additional OTS grants will fund the addition of a fifth traffic officer beginning in October 2007, the purchase of new radar enforcement equipment, and the creation and implementation of electronic citation and collision reporting hardware and software. The addition of the traffic officer will bring the Traffic Unit back up to the staffing levels that existed prior to the budget cuts in 2003 and 2005. This will further increase the capacity of the team to pro-actively enforce traffic laws. The additional technology tools will allow more efficient reporting and citation processes and exchange of critical information with Traffic Engineering staff.

2006 STATISTICS

COLLISIONS								
Collision Type	2000	2001	2002	2003	2004	2005	2006	CHANGE
Fatal	2	1	1	0	4	3	2	-33%
Injury	280	278	327	327	325	290	262	-9.7%
Non-Injury	925	981	1060	903	980	870	683	-21%
Total	1207	1260	1388	1230	1310	1163	947	-18.5%
Bicycle Involved*	36	42	54	53	41	45	54	+20%
Pedestrian Involved*	29	25	43	29	34	29	28	-3.4%
Hit and Run				140	368	366	343	-6.2%

^{*} Included in collision statistics above

TRAFFIC ENFORCEMENT								
Citation Type 2000 2001 2002 2003 2004 2005 2006 CHANGE								
Non Hazardous	2335	2049	2051	2603	1308	956	1817	+90%
Hazardous	4526	5191	4837	2414	1708	2234	2413	+8.0%
Total	6115	6861	7240	5017	3016	3190	4230	+32.6%

DUI ENFORCEMENT								
DUI Enforcement 2000 2001 2002 2003 2004 2005 2006 CHANGE								
DUI Arrests	487	392	493	405	302	303	412	+36%
DUI Collisions	47	49	53	48	63	63	92	+46%

DUI COST RECOVERY						
Year	Amount Billed	Amount Received	% Recovered			
2006	\$41,109	\$15,639	38%			
2005	\$35,465	\$10,117	28%			
2004	\$26,784	\$6,897	26%			
2003	\$18,986	\$8,185	43%			
2002	\$21,332	\$10,000	47%			
2001	\$18,761	\$5,667	30%			
2000	\$17,374	\$5,640	32%			
1999	\$7,448	\$3,226	43%			

HIGHEST COLLISION INTERSECTIONS 2006				
Rank	Location	Number of Collisions		
1	Foothill at Santa Rosa	25		
2	Broad at Orcutt	11		
3	California at Foothill	10		
3	Higuera at Chorro	10		
3	LOVR at Madonna	10		
4	Tank Farm at Broad	9		
4	Santa Rosa at Monterey	9		
5	Higuera at Nipomo	8		

HIGHEST COLLISION INTERSECTIONS 2005				
Rank	Location	Number of Collisions		
1	Foothill at Santa Rosa	16		
2	Monterey at Santa Rosa	14		
3	Marsh at Santa Rosa	11		
4	Broad at Tank Farm	10		
4	LOVR at Madonna	10		
4	LOVR at Royal	10		
5	Monterey at Osos	9		
5	Olive at Santa Rosa	9		

CAUSE OF INJURY COLLISIONS 2006				
# of Collisions	Cause	% of Total		
64	Failure to yield	23%		
54	Unsafe speed	20%		
20	Disregard traffic signal	7.5%		
15	Improper turn	5.6%		
15	Other improper driving	5.6%		
10	Unsafe starting	3.8%		
4	Stop sign	1.5%		
2	Follow too close	0.8%		
2	Unsafe lane change	0.8%		

CAUSE OF INJURY COLLISIONS 2005					
# of Collisions	Cause	% of Total			
84	Failure to yield	28.7%			
50	Unsafe speed	17.1%			
28	Improper turning	9.6%			
22	Other improper driving	7.5%			
20	Disregarding traffic signal	6.8%			
16	DUI	5.5%			
15	Following too close	5.1%			
12	Stop sign violations	4.1%			
8	Unsafe starting	2.7%			
5	Unsafe lane change	1.7%			