

2003 Annual Traffic Safety Report



Traffic Engineering Division
Department of Public Works
July 2004

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A MESSAGE FROM THE DEPUTY DIRECTOR

Welcome to the 3rd 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 was begun in 2002 in an attempt to identify high collision locations within the City and actively pursue mitigation improvements that hopefully, over time, will reduce our collision rates and improve safety for our citizens.

There are some things old and some things new in the 2003 Report. We again identify high collision locations for intersections and roadway segments within the City. In addition, this year we have included a more detailed bicycle and pedestrian collision analysis.

Overall, we have seen an improvement in 2003 from the previous year. Our total number of collisions actually decreased by 13% and injury collisions are down by 0.6%. Now that we have included roadway segments and a more extensive pedestrian and bicycle study in this report, we expect to continue to see reductions in future editions of this report.

It's through programs such as this report as well as programs like 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 Senior, Peggy Mandeville, Michelle Sindorf and members of the City Police Department for their tireless work in compiling the necessary information that has gone into this report, the many hours disseminating that 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 we can.

Sincerely

Timothy Scott Bochum, P.E.
Deputy Director of Public Works

EXECUTIVE SUMMARY

Annual Traffic Safety Report - 2003

In January 2002, the City initiated its comprehensive Traffic Safety Program aimed at reducing collisions at the highest collision locations in the City. This 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.

In this report for 2003, the analysis was expanded to include a more comprehensive analysis of bicycle and pedestrian collision types and high collision locations. Similar to vehicle collision analysis, collision patterns are analyzed using collision diagrams, police accident reports, and field surveys to identify possible mitigation measures aimed at reducing the likelihood of occurrence for the identified collision patterns.

Mitigation measures for high collision rate locations for calendar year 2003 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.

Although traffic collisions have been on an upward trend in San Luis Obispo for the previous three years, this year the number of reported collisions actually dropped and were the lowest in the four years of the safety program. There were 1,092 total collisions in 2003, **13%** below the previous 12 month period and 4% below collisions reported in 2001.

Intersection collisions have continued to decline over the past two years, down 15% from 2002, 17% from 2001, and 1% from 2000 but remained above the 1999 calendar year total.

Injury collisions were also down by a small percentage (0.6%) in 2003 (307) as compared to 2002 (309) but were up by 13% as compared to 2001 (265). Injury collisions as a percentage of all collisions have historically been on the rise, up by 3% from 2002 and by 4% in 2001.

In previous years there have been between one and two fatalities per year. However, in 2003 there were no fatalities on streets controlled by the City.

Section 1

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 are available in April or March 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.

Section 2

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 2003 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.

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 reporting 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 approximately 100 to 150 higher than the number reported in this Public Works report. One 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 perceived 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 FY 2004-05 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 2001 & 2002 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:

$$RI = \frac{N \times 1,000,000}{V \times 365}$$

Segments:

$$RS = \frac{N \times 1,000,000}{365 \times V \times L}$$

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.

Section 3

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, on other jurisdictions facilities, 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.

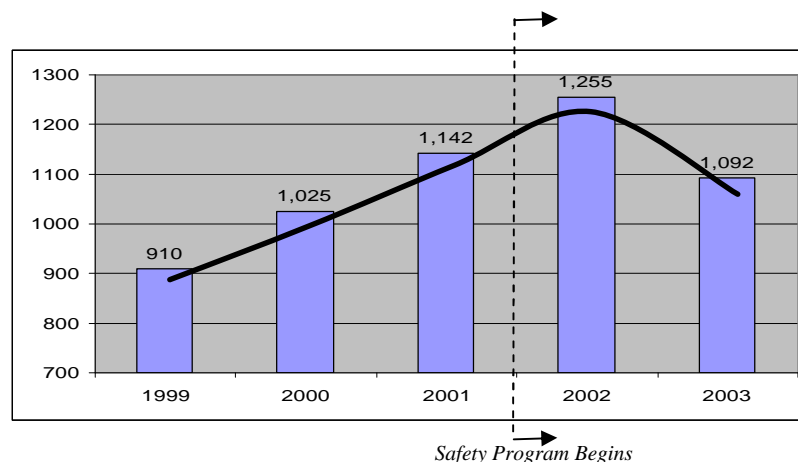
Table 3.1 - City-wide Annual Collision Data

Year	Total Reported Collisions on Public Streets			
	Intersections	% Change	Total	% Change
1999	587	-	910	-
2000	646	+10.05	1,025	+11.22
2001	766	+18.58	1,142	+10.24
2002	750	- 2.13	1,255	+9.10
2003	637	-15.00	1,092	-13.99

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 and fatality collisions are better indicators of changes in collision trends and are the most reliable collision indicators when monitoring the safety of a transportation system.

Figure 3.1 - Five Year Collision Trend



In general, collisions in San Luis Obispo have been increasing over the last few years. Total collisions have increased approximately 10.9 % per year for the three year period from 1999 to 2002, however in 2003 total collisions were down by 14%.

3.2 Injury and Fatal Collision Trends

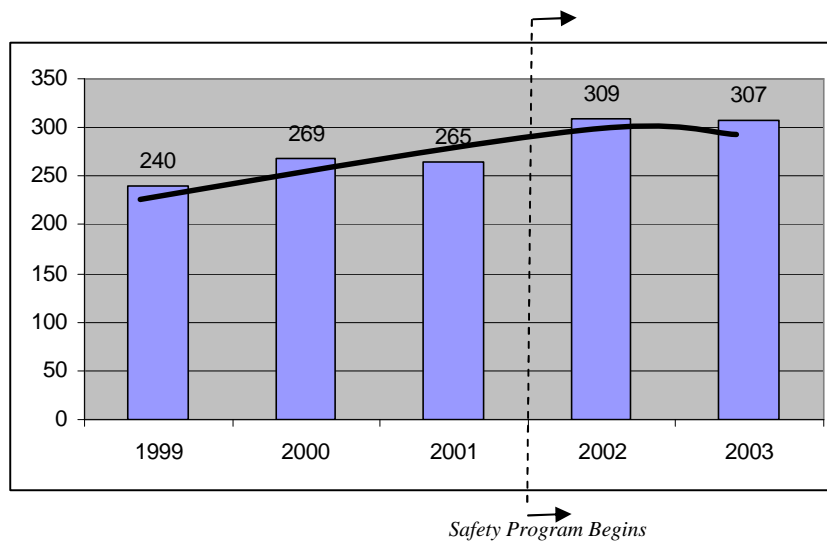
Injury Collisions

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

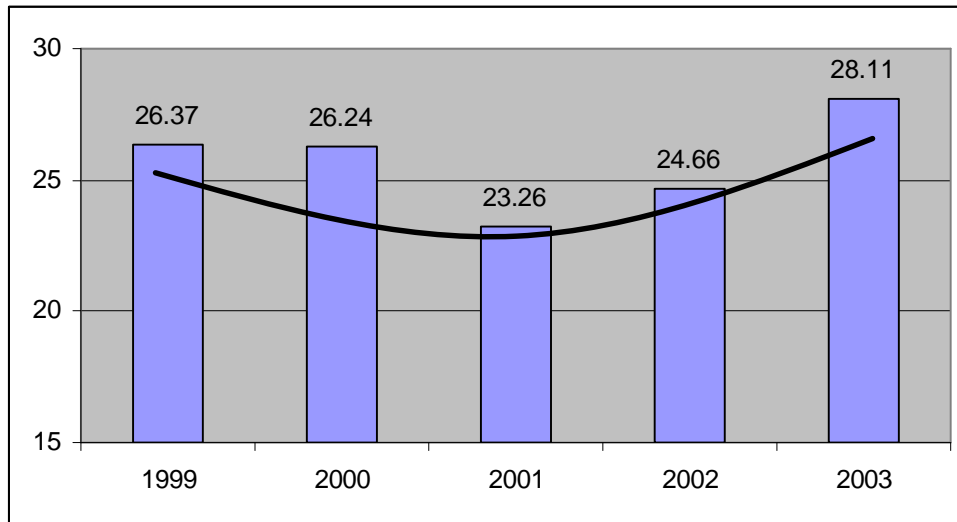
Year	Total Injury Collisions	% Change	% of Total Collisions	Fatal Collisions	% Change
1999	240	-	26.37	2	-
2000	269	+12.08	26.24	2	0
2001	265	-1.5	23.26	1	- 50
2002	309	+16.60	24.66	1	0
2003	307	-0.6	28.11	0	- 100

Figure 3.2 - Five Year Injury Collision



Injury collisions were down by 0.6% in 2003 (307) as compared to 2002 (309) but up by 13.7% when compared to 2001 (265). However, due to the reduction in “property damages only” collisions, injury collisions as a percentage of total collisions (as seen in Figure 3.3) are actually higher than the previous four years.

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. 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 an aggressive community outreach program.

There was no traffic fatalities recorded in 2003 under City jurisdiction.

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

2003 Fatalities			
	Fatalities	Population (Thousands)	Rate Per 100,000 Population
Nationally*	42,815	288,368	14.85
State Wide*	4,708	35,116	11.61
City of San Luis Obispo	0	45	0
2003 Injuries			
	Injuries	Population (Thousands)	Rate Per 100,000 Population
Nationally*	2,926,000	288,358	1,015
State Wide*	310,689	35,116	885
City of San Luis Obispo	307	45	686

* National and State Statistics are from 2002 because 2003 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 below shows the average economic costs in 2003 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.

Table 3.4 - Economic Costs, 2003

Collision Type	Dollar Loss
Death	\$1,090,000
Nonfatal disabling injury	\$39,900
Incapacitating injury	\$52,100
Non-incapacitating evident injury	\$17,200
Possible injury	\$9,800
Property damage collision (including minor injuries)	\$6,200

Source: National Highway Traffic Safety Administration (Traffic Safety Facts 2002)

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 2003 on a per person basis. These cost estimates are based upon 2002 actual collision cost calculations.

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 2003 economic costs in collisions to the City using annual cost estimates.

Table 3.5 - Comprehensive Costs, 2003

Collision Type	Dollar Loss
Death	\$3,470,000
Incapacitating injury (a)	\$172,000
Non-incapacitating evident injury (a)	\$44,200
Possible injury (a)	\$21,000
No injury	\$2,000

Source: National Highway Traffic Safety Administration (Traffic Safety Facts 2002)

Table 3.6 - City of San Luis Obispo Economic Costs, 2001-2003 Traffic Collisions

Year	Collision Type						Total Dollar Loss
	Death		Non-incapacitating Injury		Property Damage Only		
	Cost ^(a)		Cost ^(a)		Cost ^(a)		
2001	1	\$1,000,000	335	\$5,762,000	877	\$5,700,500	\$12,462,500
2002	1	\$1,000,000	396	\$6,811,200	946	\$6,149,000	\$13,960,200
2003	0	\$0.00	400	\$6,880,000	794	\$4,922,800	\$11,802,800

(a) Economic costs are based upon 2002 cost estimates.

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.

Section 4

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.

This years Traffic Safety Report has been expanded to include a more comprehensive analysis of pedestrian collision types and high collision locations. Although pedestrian collisions were down 41% from the previous 12 month period, pedestrian collisions have been on an upward trend over the past five years. There were 24 total pedestrian related collisions reported in 2003, 41% lower than the pervious 12 month period and 21% higher than collisions reported in 2001. Table 4.1 indicates the reported pedestrian related collision history of the City.

Table 4.1 – 2003 Pedestrian Collisions

Year	Total Reported Pedestrian and Bicycle Collisions on Public Streets	
	Pedestrian	% Change
1999	24	-
2000	37	+54%
2001	19	-49%
2002	41	+54%
2003	24	-41%

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 two primary factors contributing to pedestrian collisions in 2003 were pedestrians crossing outside of a crosswalk at a mid-block location, and motorists watching on-coming traffic at their left while turning right against a pedestrian. The following tables lists the various types of pedestrian related collisions as detailed in Police Reports.

Table 4.2 – 2003 Pedestrian Collisions by Type



Collision Type	# Cases	% of Total	Severity		
			Injury	Fatal	PDO
In Road - At Parked Vehicle	2	8.3%	2	0	0
In Road - Crossing Midblock	5	20.8%	3	0	2
In X-Walk - On Don't Walk Indication	1	4.2%	1	0	0
In X-Walk - Motorist Right Turn in Front of Ped.	4	16.6%	2	0	2
In X-Walk - Motorist Right Turn Facing Ped.	1	4.2%	0	0	1
In X-Walk - Motorist Left Turn Facing Ped.	2	8.3%	1	0	1
In X-Walk - Motorist Left Turn in Front of Ped.	1	4.2%	0	0	1
In X-Walk - Failed to Cross in Time	1	4.2%	1	0	0
In X-Walk - Motorist Right of Way Violation	2	8.3%	2	0	0
Not in X-Walk - Motorist Evasive Maneuver	1	4.2%	0	0	1
Not in X-Walk - Motorist Right in Front of Ped.	1	4.2%	0	0	1
Other - Non Classifiable	3	12.5%	2	0	0
Total:	24	100.00%	14	0	9



Pedestrian Collision Type	2001	%	2002	%	2003	%
Signal	8	42%	14	34%	6	25%
Out of Crosswalk - Midblock	3	16%	13	32%	7	29%
Uncontrolled - Unmarked Crosswalk Major/Collector	N/A	0%	N/A	0%	N/A	0%
Uncontrolled - Unmarked Crosswalk Local	N/A	0%	N/A	0%	N/A	0%
Uncontrolled - Marked	1	5%	3	7%	N/A	0%
Not in Road (Sidewalk)	N/A	0%	2	5%	N/A	0%
In Road (not crossing)	2	11%	2	5%	3	12%
Stop - Marked Crosswalk	1	5%	3	7%	4	17%
Stop - Unmarked Crosswalk	4	21%	4	10%	4	17%
Total:	19	100%	41	100%	24	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 2003, 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 for pedestrian collision locations identifies all locations where at least one pedestrian collision has occurred in 2003 and ranks those top five locations with three or more pedestrian related collisions having occurred within the past five years based on accident rate (pedestrian related accidents per million vehicles entering the facility).

Table 4.3 – Top Five Pedestrian Collision Locations

	<p>Location Ranking: 1</p> <p>Chorro Street at Monterey Street</p> <p>2003 Collisions: 1 5yr History: 5</p> <p>Rate: .251 / MEV</p>	<p>PATTERN: In Crosswalk – Motorist Left Turn Facing Pedestrian</p> <p>RECOMMENDATION: Amber and all-red clearance interval extended as part of the 2002 downtown signal timing project. Further improvements to pedestrian awareness and visibility should be made.</p> <p>ACTION: Install pedestrian traffic signal heads. Install Crosswalk lines when Chorro and Monterey are resurfaced. Issue public service announcements.</p>
	<p>Location Ranking: 2</p> <p>Chorro Street at Higuera Street</p> <p>2003 Collisions: 1 5yr History: 7</p> <p>Rate: .233 / MEV</p>	<p>PATTERN: In Crosswalk – Motorist Right Turn In Front of Pedestrian</p> <p>RECOMMENDATION: This collision pattern represents a typical driver error, looking for oncoming traffic at their left while making a right turn. Public should be educated on common collision types and how to avoid them through public service announcements. Pedestrian signal heads installed in 2002.</p> <p>ACTION: Install crosswalk lines when Chorro and Higuera are resurfaced. Issue public service announcements.</p>

	<p>Location Ranking: 3</p> <p>Higuera Street at Morro Street</p> <p>2003 Collisions: 1 5yr History: 5</p> <p>Rate: .185 / MEV</p>	<p>PATTERN: In Crosswalk – Motorist ROW Violation & Not In Crosswalk Midblock</p> <p>RECOMMENDATION: Area under construction since October 2003 through September 2004</p> <p>ACTION: Issue traffic safety public service announcements regarding the dangers of jay walking. Continue to monitor in 2004.</p>
	<p>Location Ranking: 4</p> <p>Monterey Street at Santa Rosa Street</p> <p>2003 Collisions: 1 5yr History: 8</p> <p>Rate: .138 / MEV</p>	<p>PATTERN: In Crosswalk – Motorist Right Turn In Front of Pedestrian & Left Turn Facing Pedestrian.</p> <p>RECOMMENDATION: These collision patterns represent a typical driver error, looking for oncoming traffic at their left while making a right turn or looking for on coming traffic ahead while making a left turn. Public should be educated on common collision types and how to avoid them. Construction throughout 2003.</p> <p>ACTION: Issue traffic safety public service announcements. Continue to monitor in 2004.</p>

	Location Ranking: 5	PATTERN: No discernable pattern
	Palm Street at Santa Rosa Street	RECOMMENDATION: None
	2003 Collisions: 1 5yr History: 4	ACTION: Issue traffic safety public service announcements. Continue to monitor in 2004.
	Rate: .085 / MEV	

4.2 Bicycle Collisions

This years traffic safety report has been expanded to include a more comprehensive analysis of bicycle collision types and high collision locations. In general bicycle collisions have been on an upward trend over the past five years. There were 54 total bicycle related collisions reported in 2003, 3.7% higher than the previous 12 month period and 11% higher than collisions reported in 2001.

Table 4.4 – 2003 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%

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 2003. In general the majority of factors contributing to bicycle collisions in 2003 were darkness/poor visibility, driver error or cyclist error. In most cases of darkness/poor visibility, the cause was determined as the cyclist not riding a bicycle equipped with adequate reflectors and/or wearing dark clothing after sunset.

The following table lists the various types of bicycle related collisions as detailed in the Police Reports.



Table 4.5 – 2003 Bicycle Collision by Type



Collision Type	Number of Cases	% of Total	Cyclist's Position		Severity		
			Sidewalk	Road	Injury	Fatal	PDO
Drive Out At Controlled Intersection	3	5.56%	0	3	3	0	0
Motorist Opens Vehicle Door	6	11.11%	0	6	5	0	1
Motorist Left Turn - Facing Cyclist	6	11.11%	0	6	4	0	2
Motorist Right Turn (Not at Red Light)	6	11.11%	0	6	4	0	2
Motorist Right Turn At Red Light	6	11.11%	2	4	5	0	1
Drive Out From Lane or Driveway	1	1.85%	0	1	0	0	1
Ride Out At Controlled Intersection	4	7.41%	0	4	3	0	1
Wrong Way Cyclist	2	3.70%	0	2	1	0	1
Ride Out At Mid-block	1	1.85%	0	1	1	0	0
Ride Out From Sidewalk	1	1.85%	1	0	1	0	0
Cyclist Lost Control	5	9.26%	0	5	4	0	1
Cyclist Left Turn In Front Of Motorist	5	9.26%	0	5	4	0	1
Motorist Reversing	3	5.56%	1	2	3	0	0
Ride Out From Lane or Driveway	1	1.85%	0	1	1	0	0
Other (Not classifiable)	4	7.41%	0	4	3	0	1
	54	100.00%	4	50	42 (78%)	0	12 (22%)

Source: City of San Luis Traffic Collision Database

The evaluation of locations using collision rates (number of collisions per million vehicles entering the facility) 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. These rates are used to identify locations where more collisions are occurring than would be expected. The top five bicycle collision locations with two or more collisions are then further evaluated to determine what is causing this higher than normal occurrence and to identify any mitigation measure that might decrease the probability of a collision type at that location. In 2003 only four locations had two or more bicycle related collisions.

Table 4.6 – Top Five Bicycle Collision Locations

	<p>Location Ranking: 1</p> <p>Chorro Street at Higuera Street</p> <p>Rate: .5 / MEV</p>	<p>PATTERN: No discernable pattern</p> <p>RECOMMENDATION: One correctable collision involving a bicyclist whose front tire became lodged in a drain with no crossbars and was thrown from their bicycle. Crossbars were installed shortly after collision.</p> <p>ACTION: Continue to monitor in 2004</p>
	<p>Location Ranking: 2</p> <p>Broad Street at Foothill Boulevard</p> <p>Rate: .26 / MEV</p>	<p>PATTERN: No discernable pattern</p> <p>RECOMMENDATION: Two non-correctable collisions, one involving a bicyclist riding on the sidewalk and one involving a bicyclist who was riding on the wrong side of the roadway.</p> <p>ACTION: Continue to monitor in 2004</p>

	<p>Location Ranking: 3</p> <p>California Boulevard at Foothill Boulevard</p> <p>Rate: .17 / MEV</p>	<p>PATTERN: No discernable pattern</p> <p>RECOMMENDATION: Two non-correctable collisions, one involving a motorist opening a door in the path of the cyclist and one involving a motorist turning left facing the cyclist, which was visibly obstructed from stopped traffic.</p> <p>ACTION: Continue to monitor in 2004</p>
	<p>Location Ranking: 4</p> <p>California Boulevard at Monterey Street</p> <p>Rate: .26 / MEV</p>	<p>PATTERN: No discernable pattern</p> <p>RECOMMENDATION: Two non-correctable collisions, one involving a bicyclist losing control and colliding with a tree and one involving a motorist who made a right turn in front of a bicyclist.</p> <p>ACTION: Continue to monitor in 2004</p>

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. Table 5.1 outlines the NTM actions implemented in 2003.

Table 5.1 - 2003 NTM Requests and Status

Street	Status
Patricia Drive	Council approved the installation of an all-way stop with curb extensions at the Craig Way entry to Bishop's Peak/Teach elementary school and a centerline stripe on Patricia Drive between Foothill Blvd. and Highland Drive. Construction began in December 2003 and was completed in January 2004.
Rockview Drive*	NTM ballots returned indicate the neighborhood's desire to process an NTM project to reduce traffic speeds. The next step in the process is the formation of an Action Team.
Flora Street*	NTM ballots returned indicate the neighborhood's desire to process an NTM project to reduce traffic speeds. The next step in the process is the formation of an Action Team.
Ferrini Road*	NTM ballots returned indicate the neighborhood's desire to process an NTM project to reduce traffic speeds. The next step in the process is the formation of an Action Team.
Poinsettia Street*	NTM ballots returned indicate the neighborhood's desire to process an NTM project to reduce traffic speeds. The next step in the process is the formation of an Action Team.
Broad/Chorro*	Initial contact with residents made to begin NTM process. Traffic calming strategies that can be implemented at a staff level are being considered.
Oceanaire Drive*	Initial contact with residents made to begin NTM process. NTM ballots to be sent out in 2004.
Ella Street*	Initial contact with residents made to begin NTM process. NTM ballots to be sent out in 2004.
Spanish Oaks Drive	NTM ballots returned indicate that a majority of the neighborhood does <u>not</u> support the installation of thirteen speed tables between Orcutt Road and Purple Sage. No further work has been done by the Action Team.
Fredericks Street	Stop sign petition processed for an all-way stop at Fredericks Street and Albert Drive. Stop signs installed.
Pismo Street	In an effort to slow traffic speeds and reduce collisions, Pismo Street between Broad and Walker Streets was re-striped from two travel lanes and two parking lanes to one travel lane, one bike lane, and two parking lanes.

* Due to reduced staffing in the Transportation Division, minimal progress was made on this project in 2003.

5.2 Completed Traffic Safety Improvements

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 2003:

➤ Pedestrian & Bicycle Facility Improvements

1. Story & Sandercock: Upgraded crosswalk per the city crosswalk policy.
2. Orcutt & McMillan: Installed Crosswalk across McMillan.
3. Orcutt & Duncan: Installed Crosswalk across Duncan.
4. Balboa Street: Installed Pedestrian loading zone for CL Smith School
5. Johnson (San Luis Dr. to Orcutt): Installed Bike Lane Stencils
6. Santa Rosa (Walnut to Monterey): Installed Bike Lane Stencils
7. Laurel & Orcutt: Improved crosswalk configuration
8. Chorro & Higuera: Installed pedestrian signal heads
9. Handicapped Ramp Program – Installations Citywide

➤ Signing & Striping Configuration Improvements

1. Peach & Toro: Installed All-Way Stop Control
2. High & Broad: Installed dedicated right turn and through left
3. Laurel & Orcutt: Improved delineation and crosswalk configuration installed
4. Fredericks & Albert: Installed All-Way Stop Control

➤ Sight Distance Improvements

1. Santa Rosa & Buchon: Extended Red Curb
2. Prefumo Canyon & Hedley: Extended Red Curb
3. Islay & Osos: Removed Parking
4. Dalidio & Madonna: Installed Red Curb

➤ Roadway Improvements

1. Pismo Street: Paved & restriped from Broad to Walker
2. Elks Lane: Modified to create 90° intersection at Higuera Street

2003 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	Appendix 2
Arterial/Local Intersections	Appendix 3
Collector /Collector Intersections	Appendix 4
Collector /Local Intersections	Appendix 5
Local / Local Intersections	Appendix 6
Other Significant Intersections	Appendix 7
Arterial Segments	Appendix 8
Collector Segments	Appendix 9
Local Segments	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 in order 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 6.6 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 6.7 through 6.9 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 are 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

	<p>Intersection Ranking: 1</p> <p>Laurel Avenue at Orcutt Road</p> <p>Rate: 1.49 / MEV</p>	<p>PATTERN: EB Left vs. WB Through</p> <hr/> <p>RECOMMENDATION: This intersection should be aligned and signalized. Interim mitigation should include modification of the approach lane configuration.</p> <hr/> <p>ACTION: Extend WB left turn lane further into the intersection.</p>
	<p>Intersection Ranking: 2</p> <p>Broad Street at Marsh Street</p> <p>Rate: 1.32 / MEV</p>	<p>PATTERN: No Discernable Pattern</p> <hr/> <p>RECOMMENDATION: No correctable collisions, all of which are attributed to driver negligence.</p> <hr/> <p>ACTION: Continue to monitor in 2004</p>

	<p>Intersection Ranking: 3</p> <p>Marsh Street at Santa Rosa Street</p> <p>Rate: 1.29 / MEV</p>	<p>PATTERN: Left Turn Vs. Thru</p> <hr/> <p>RECOMMENDATION: Improve signal timing to allow more clearance time through the intersection. Improve visibility by extending mast arm</p> <hr/> <p>ACTION: Extend mast arm and retime signal for clearance phase.</p>
	<p>Intersection Ranking: 4</p> <p>Broad Street at Higuera Street</p> <p>Rate: .99 / MEV</p>	<p>PATTERN: No Discernable Pattern</p> <hr/> <p>RECOMMENDATION: None</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>




	<p>Intersection Ranking: 5</p> <p>Higuera Street at Santa Rosa Street</p> <p>Rate: 0.95 / MEV</p>	<p>PATTERN: Left Turn Vs. Thru, Red Light Violations</p> <hr/> <p>RECOMMENDATION: Lane closures due to construction throughout most of the year.</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>
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Table 6.2 - Recommendations for Intersections Involving Arterial/Collector Streets

	<p>Intersection Ranking: 1</p> <p>Chorro Street at Pismo Street</p> <p>Rate: 2.16 / MEV</p>	<p>PATTERN: NB & SB Vs. Thru, Right Angle</p> <hr/> <p>RECOMMENDATION: All-way stop warrant conducted, Collision warrant met. Improve sight distance, if pattern persists install all-way stop control.</p> <hr/> <p>ACTION: As part of redevelopment of adjacent property, install bulbouts for WB flow. Continue to monitor in 2004.</p>
	<p>Intersection Ranking: 2</p> <p>Broad Street at Pismo Street</p> <p>Rate: 1.21 / MEV</p>	<p>PATTERN: No Discernable Pattern</p> <hr/> <p>RECOMMENDATION: None</p> <hr/> <p>ACTION: Continue to monitor in 2004</p>

	<p>Intersection Ranking: 3</p> <p>Broad Street at Buchon Street</p> <p>Rate: 1.01 / MEV</p>	<p>PATTERN: Red Light Violations</p> <hr/> <p>RECOMMENDATION: Reviewed signal head visibility and operations, visibility is adequate and operations are normal.</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>
	<p>Intersection Ranking: 4</p> <p>Broad Street at Foothill Boulevard</p> <p>Rate: 0.88 / MEV</p>	<p>PATTERN: No Discernable Pattern</p> <hr/> <p>RECOMMENDATION: None</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>






	<p>Intersection Ranking: 5</p> <p>Osos Street at Palm Street</p> <p>Estimated Rate: 0.78 / MEV</p>	<p>PATTERN: No discernable pattern</p> <hr/> <p>RECOMMENDATION: None</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>
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Table 6.3 - Recommendations for Intersections Involving Arterial/Local Streets

	<p>Intersection Ranking: 1</p> <p>Madonna Road at Pereira Street</p> <p>Rate: 1.68 / MEV</p>	<p>PATTERN: SB Left & Right Vs. EB Thru Broadside</p> <p>RECOMMENDATION: Some construction in the area due to new housing tract and utilities project. Number of broadside collisions satisfies State warrant for signalization however, location is not appropriate due to close proximity to Madonna/LOVR intersection. Improve stopping sight distance and left turn egress visibility. Contact property owner and management company to determine if driveway reconfiguration is possible. Reconfigure right turn access into shopping center.</p> <p>ACTION: Trim bottlebrush bushes on north side of LOVR to improve visibility. Contact property owner to request driveway modifications. Investigate realignment of intersection by restriping Pereira egress lanes. Prohibit permissive pedestrian movements across Madonna. Monitor intersection after actions have been implemented to determine if patterns continue.</p>
	<p>Intersection Ranking: 2</p> <p>Monterey Street at Osos Street</p> <p>Rate: 1.51 / MEV</p>	<p>PATTERN: No Discernable Pattern</p> <p>RECOMMENDATION: None</p> <p>ACTION: Continue to monitor in 2004.</p>

	<p>Intersection Ranking: 3</p> <p>Broad Street at Pacific Street</p> <p>Estimated Rate: 1.45 / MEV</p>	<p>PATTERN: No Discernable Pattern</p> <hr/> <p>RECOMMENDATION: Signal installation warranted from 2003 Traffic Safety review.</p> <hr/> <p>ACTION: Install traffic signal. Signal currently under design with installation scheduled to commence in summer 2004.</p>
	<p>Intersection Ranking: 4</p> <p>Garden Street at Higuera Street</p> <p>Estimated Rate: 1.41 / MEV</p>	<p>PATTERN: No Discernable Pattern</p> <hr/> <p>RECOMMENDATION: None</p> <hr/> <p>ACTION: Continue to Monitor in 2004.</p>


	<p>Intersection Ranking: 5</p> <p>Monterey Street at Morro Street</p> <p>Rate: 1.14 / MEV</p>	<p>PATTERN: No Discernable Pattern</p>
	<p>RECOMMENDATION: Construction impacted intersection through most of 2003.</p>	
	<p>ACTION: Continue to monitor in 2004.</p>	

Table 6.4 - Recommendations for Intersections Involving Collector/Collector Streets


	<p>Intersection Ranking: 1</p> <p>Chorro Street at Mill Street</p> <p>Estimated Rate: 0.82 / MEV</p>	<p>PATTERN: No Discernable Pattern – broadsides in all directions.</p> <hr/> <p>RECOMMENDATION: Reviewed visibility from side street approaches, visibility is adequate.</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>
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Table 6.5 - Recommendations for Intersections Involving Collector/Local Streets




	<p>Intersection Ranking: 1</p> <p>Nipomo Street at Pismo Street</p> <p>Estimated Rate: 3.26 / MEV</p>	<p>PATTERN: SB Thru Vs. Cross Traffic, Broadside</p> <hr/> <p>RECOMMENDATION: Pismo Street Lane configuration was changed in September 2003 to a single approach lane at the intersection.</p> <hr/> <p>ACTION: Continue to monitor 2004</p>
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Table 6.6 - Recommendations for Intersections Involving Local/Local Streets

	<p>Intersection Ranking: 1</p> <p>Buena Vista Street at Garfield Street</p> <p>Estimated Rate: 6.71 / MEV</p>	<p>PATTERN: SB Thru Vs. WB Thru, Broadside</p> <hr/> <p>RECOMMENDATION: Intersection meets all-way stop collision warrants. Reconfigure intersection to mitigate uncontrolled collision pattern</p> <hr/> <p>ACTION: Tighten radius at Monterey Street, Extend centerline through intersection, and reconfigure intersection approach controls.</p>
	<p>Intersection Ranking: 2</p> <p>Garden Street at Pacific Street</p> <p>Estimated Rate: 2.94 / MEV</p>	<p>PATTERN: No discernable pattern</p> <hr/> <p>RECOMMENDATION: Reverse 2-way stop control configuration to stop lower volume approaches.</p> <hr/> <p>ACTION: Remove stop control on Pacific Street and install stop control on Garden Street.</p>

	<p>Intersection Ranking: 3</p> <p>Morro Street at Pacific Street</p> <p>Estimated Rate: 2.11 / MEV</p>	<p>PATTERN: No Discernable Pattern</p> <hr/> <p>RECOMMENDATION: None</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>
	<p>Intersection Ranking: 4</p> <p>Casa Street at Murray Street</p> <p>Estimated Rate: 2.10 / MEV</p>	<p>PATTERN: No Discernable Pattern</p> <hr/> <p>RECOMMENDATION: None</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>






	<p>Intersection Ranking: 5</p> <p>Islay Street at Santa Rosa Street</p> <p>Estimated Rate: 2.01 / MEV</p>	<p>PATTERN: No discernable pattern</p> <hr/> <p>RECOMMENDATION: None</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>
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Table 6.7 - Recommendations for Other Significant Intersections: Left Turn Collisions at Signalized Intersections

	<p>Intersection Ranking: 1</p> <p>Higuera at South</p> <p>Estimated Rate: .79 / MEV</p>	<p>PATTERN: No discernable pattern</p> <hr/> <p>RECOMMENDATION: Field observations conclude conflicts exist with U-Turning traffic on WB 227. Prohibit left turns from WB 227.</p> <hr/> <p>ACTION: Install “No U-Turn” signing for WB Hwy 227.</p>
	<p>Intersection Ranking: 2</p> <p>Bishop at Johnson</p> <p>Estimated Rate: .93 / MEV</p>	<p>PATTERN: SB Left Vs. NB Thru</p> <hr/> <p>RECOMMENDATION: Evaluate roadway and signal head visibility. Visibility adequate for established speed limit. Re-phase traffic signal to allow only for protected left movements.</p> <hr/> <p>ACTION: Re-phase traffic signal to eliminate protected/permissive phases and allow only for protected left movements. Continue to monitor in 2004.</p>

	<p>Intersection Ranking: 3</p> <p>EI Mercado & Madonna</p> <p>Estimated Rate: .47 / MEV</p>	<p>PATTERN: WB Left Vs. EB Through</p> <hr/> <p>RECOMMENDATION: Improve signal head visibility for WB Left Turns.</p> <hr/> <p>ACTION: Relocate WB Left signal head onto new overhead mast arm and signal pole.</p>
	<p>Intersection Ranking: 4</p> <p>Los Osos Valley & Royal</p> <p>Estimated Rate: .39 / MEV</p>	<p>PATTERN: SB Left Vs. NB Through</p> <hr/> <p>RECOMMENDATION: Construction in the vicinity impacted the intersection intermittently in 2003.</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>








	<p>Intersection Ranking: 5</p> <p>Grand & Monterey</p> <p>Estimated Rate: .29 / MEV</p>	<p>PATTERN: EB Left Vs. WB Through</p> <hr/> <p>RECOMMENDATION: Pattern may be exclusive to 2003.</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>
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Table 6.7 - Recommendations for Other Significant Intersections: Collisions at Intersections Without All-way Control

	<p>Intersection Ranking: 1</p> <p>Lawton & South</p> <p>Estimated Rate: .97 / MEV</p>	<p>PATTERN: NB Left Vs. EB Thru</p> <hr/> <p>RECOMMENDATION: Investigate prohibition of left turn movements from Lawton.</p> <hr/> <p>ACTION: Implement restrictions in FY 04-05.</p>
	<p>Intersection Ranking: 2</p> <p>Monterey & Toro</p> <p>Estimated Rate: .97 / MEV</p>	<p>PATTERN: NB Thru Vs. EB Thru</p> <hr/> <p>RECOMMENDATION: Improve horizontal sight distance</p> <hr/> <p>ACTION: Investigate the installation of bulbouts at intersection and moving Toro stop bars forward.</p>

	<p>Intersection Ranking: 3</p> <p>Carmel & Marsh</p> <p>Estimated Rate: .93 / MEV</p>	<p>PATTERN: NB Thru vs. EB Left</p> <p>RECOMMENDATION: Investigate prohibition of NB through movements.</p> <p>ACTION: Implement restrictions in FY 04-05.</p>
	<p>Intersection Ranking: 4</p> <p>Roundhouse & Santa Barbara</p> <p>Estimated Rate: .92 / MEV</p>	<p>PATTERN: No discernable pattern</p> <p>RECOMMENDATION: Intersection is part of Santa Barbara widening project scheduled for summer 2005.</p> <p>ACTION: Continue to monitor through widening project.</p>

	<p>Intersection Ranking: 5</p> <p>Osos & Pacific</p> <p>Estimated Rate: .87 / MEV</p>	<p>PATTERN: Right angle</p> <p>RECOMMENDATION: Intersection impacted by area construction in FY 03-04 & FY 04-05. Collision warrant met for all-way stop control. Improve horizontal sight distance and stop sign visibility. Review signalization warrant.</p> <p>ACTION: Install bulbouts at intersection and move Pacific stop bars forward. If collision pattern persists install all-way stop control.</p>
	<p>Intersection Ranking: 6</p> <p>Meinecke & Santa Rosa</p> <p>Estimated Rate: .55/ MEV</p>	<p>PATTERN: No discernable pattern</p> <p>RECOMMENDATION: Intersection partially under CalTrans jurisdiction. CalTrans is working on mitigation project to restrict left turns from Meinecke.</p> <p>ACTION: Work with CalTrans to implement left turn restriction. Continue to monitor in 2004.</p>

	<p>Intersection Ranking: 7</p> <p>Montalban & Santa Rosa</p> <p>Estimated Rate: .54 / MEV</p>	<p>PATTERN: EB Left Vs. SB Thru</p> <p>RECOMMENDATION: Intersection partially under CalTrans jurisdiction.</p> <p>ACTION: Work with CalTrans to mitigate collision pattern. Continue to monitor in 2004.</p>
	<p>Intersection Ranking: 8</p> <p>Grand & Loomis</p> <p>Estimated Rate: .47/ MEV</p>	<p>PATTERN: No discernable pattern</p> <p>RECOMMENDATION: None</p> <p>ACTION: Continue to monitor in 2004</p>



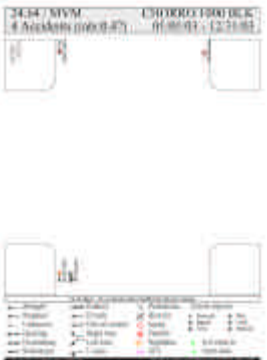


	<p>Intersection Ranking: 9</p> <p>Oak & Santa Rosa</p> <p>Estimated Rate: .40 / MEV</p>	<p>PATTERN: Rear End</p> <hr/> <p>RECOMMENDATION: None, collision pattern due to driver negligence and inattention.</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>
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Table 6.8 - Recommendations for Arterial Segments

	<p>Segment Ranking: 1</p> <p>Chorro St. 1200 Block</p> <p>Estimated Rate: 36.43 / MVM</p>	<p>PATTERN: No discernable pattern</p> <hr/> <p>RECOMMENDATION: None</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>
	<p>Segment Ranking: 2</p> <p>Chorro St. 1000 Block</p> <p>Estimated Rate: 24.64 / MVM</p>	<p>PATTERN: No discernable pattern</p> <hr/> <p>RECOMMENDATION: None</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>

	Segment Ranking: 3 Higuera St. 400 Block Estimated Rate: 8.45 / MVM	PATTERN: No discernable pattern
		RECOMMENDATION: None
		ACTION: Continue to monitor in 2004.

	Segment Ranking: 4 Broad St. 3000 Block Estimated Rate: 8.04 / MVM	PATTERN: No discernable pattern
		RECOMMENDATION: None
		ACTION: Continue to monitor in 2004.


	<p>Segment Ranking: 5</p> <p>Higuera St. 200 Block</p> <p>Estimated Rate: 7.46 / MVM</p>	<p>PATTERN: Rear End Vs. Traffic Stopped at Signal</p> <hr/> <p>RECOMMENDATION: Driveways and traffic signal queue are at the termination of a lane taper. Widen Higuera between High and Madonna.</p> <hr/> <p>ACTION: Widen S. Higuera Street as part of Mid-Higuera Improvement Plan.</p>
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Table 6.9 - Recommendations for Collector Segments



	<p>Segment Ranking: 1</p> <p>Broad St. 400 Block</p> <p>Estimated Rate: 17.39 / MVM</p>	<p>PATTERN: No discernable pattern</p>
		<p>RECOMMENDATION: None</p>
		<p>ACTION: Continue to monitor in 2004.</p>

Table 6.10 - Recommendations for Local Segments

	<p>Segment Ranking: 1</p> <p>Casa St. 10-200 Block</p> <p>Estimated Rate: 16.59 / MVM</p>	<p>PATTERN: No discernable pattern</p> <hr/> <p>RECOMMENDATION: None</p> <hr/> <p>ACTION: Continue to monitor in 2004.</p>
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Appendix 1

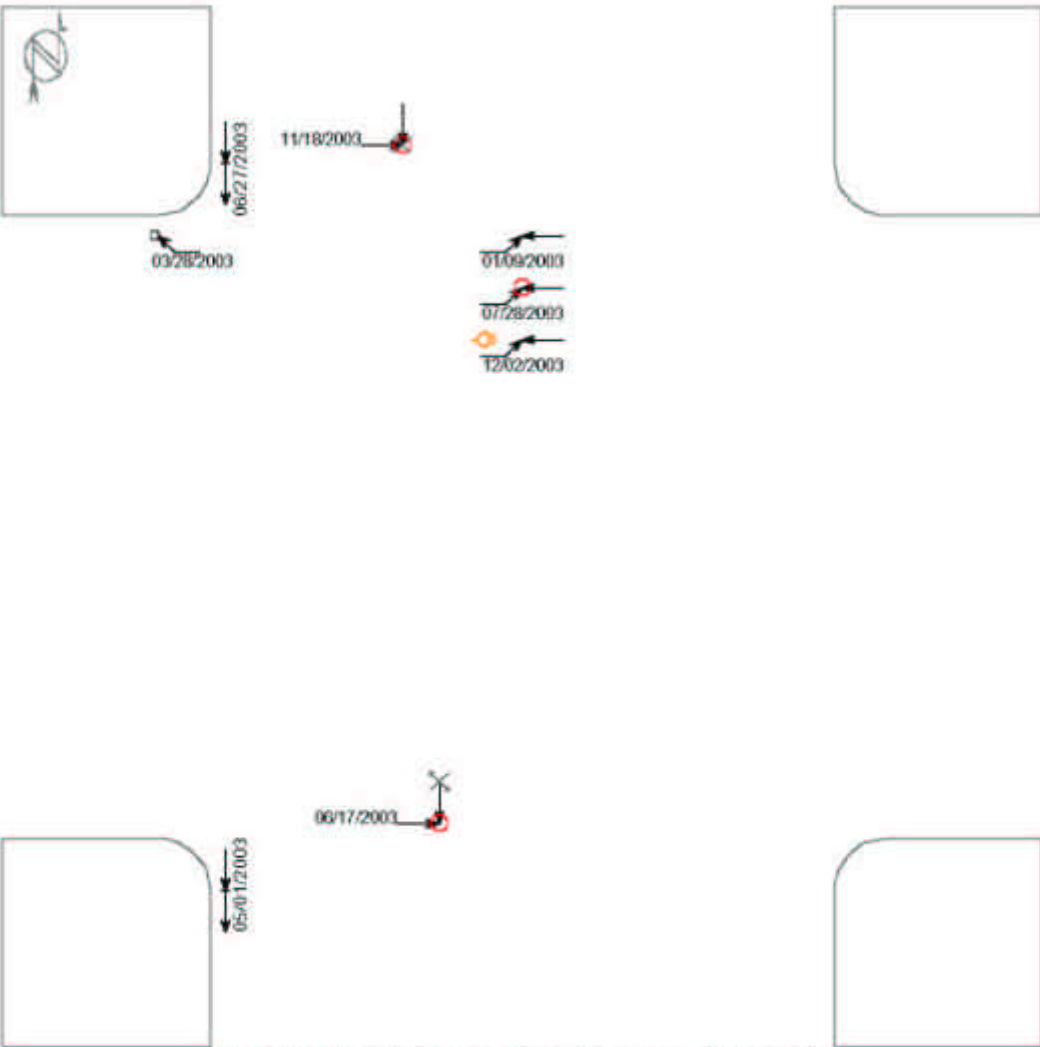
Arterial / Arterial Intersections

Arterial / Arterial Intersections Prioritized by Accident Rate

Rank	Prev. Rank	Intersection	Count	Volume	Rate	Class	Control	EB	WB	NB	SB
1	2	Laurel & Orcutt	8	14,734	1.49	A/A	1-STOP	7,671	1,274	NA	5,789
2	16	Broad & Marsh	11	22,907	1.32	A/A	SIG	13,305	NA	5,266	4,336
3	1	Marsh & Santa Rosa	8	17,033	1.29	A/A	SIG	NA	6,804	2,818	7,411
4	6	Broad & Higuera	6	16,567	0.99	A/A	SIG	NA	9,650	3,417	<u>3,500</u>
5	9	Higuera & Santa Rosa	9	25,954	0.95	A/A	SIG	NA	4,566	9,245	12,143
6	4	Monterey & Santa Rosa	10	31,621	0.87	A/A	SIG	2,612	6,385	10,211	12,413
7	25	Higuera & South	8	27,767	0.79	A/A	SIG	<u>50</u>	6,650	11,250	9,817
8	18	Broad & Orcutt	10	35,485	0.77	A/A	SIG	NA	7,735	12,750	15,000
9	17	Johnson & Monterey	6	21,359	0.77	A/A	SIG	4,807	7,546	7,488	1,518
10	13	Marsh & Osos	7	25,215	0.76	A/A	SIG	12,939	NA	9,580	2,696
11	3	Los Osos Valley & Madonna	8	31,648	0.69	A/A	SIG	10,956	10,422	<u>1,500</u>	8,770
12	22	Higuera & Tank Farm	6	24,814	0.66	A/A	SIG	NA	9,377	8,302	7,135
13	21	Higuera & Madonna	7	29,375	0.65	A/A	SIG	11,250	NA	6,875	11,250
14	19	Broad & Tank Farm	7	36,001	0.53	A/A	SIG	9,847	5,754	7,650	12,750
15	12	Higuera & Los Osos Valley	4	21,030	0.52	A/A	SIG	8,995	NA	2,879	9,156
16	27	Broad & South	6	32,088	0.51	A/A	SIG	6,650	6,081	15,000	4,357
17	32	Dalidio & Madonna	6	32,517	0.51	A/A	SIG	9,317	16,200	<u>7,000</u>	NA
18	5	Chorro & Marsh	3	17,861	0.46	A/A	SIG	12,932	NA	1,909	3,020
19	23	Higuera & Marsh	5	29,879	0.46	A/A	SIG	5,648	NA	15,385	8,846
20	10	Foothill & Santa Rosa	10	59,960	0.46	A/A	SIG	19,837	8,373	16,750	15,000
21	29	California & Monterey	5	33,666	0.41	A/A	SIG	6,305	8,530	13,362	5,469
22	30	Highway 101 & Los Osos Valley	3	24,220	0.34	A/A	SIG	8,838	10,268	NA	5,114
23	28	California & Foothill	4	32,519	0.34	A/A	SIG	10,860	<u>500</u>	17,134	4,025
24	31	Grand & Monterey	3	28,809	0.29	A/A	SIG	12,375	3,934	NA	<u>12,500</u>
25	Not Ranked	Highway 101 SB OFF& Madonna	3	42,196	0.19	A/A	SIG	15,254	12,359	14,583	NA

1.49 / MEV
8 Accidents

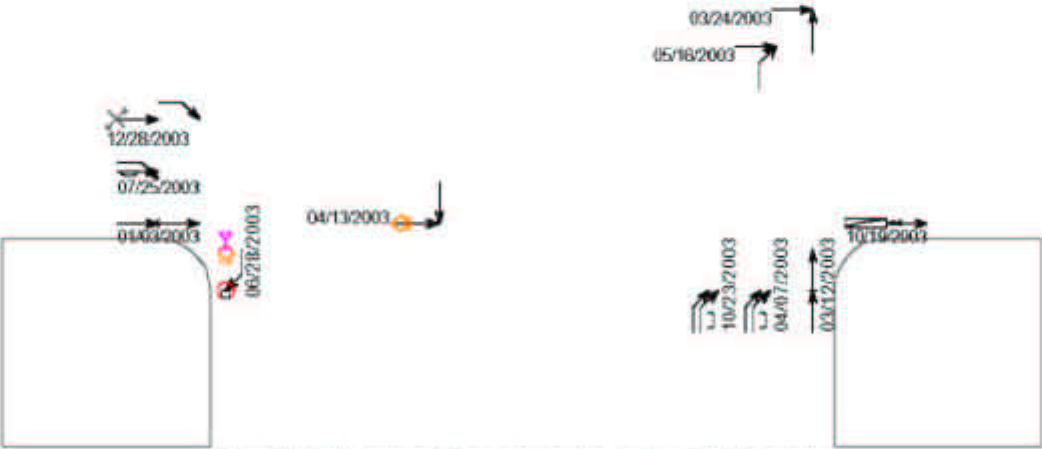
Laurel & Orcutt
01/01/03 - 12/31/03



Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▨ Parked	× Pedestrian	Fixed objects:	
← Stopped	⚡ Erratic	⊗ Bicycle	□ General	▣ Pole
← Unknown	⚡ Out of control	○ Injury	▣ Signal	▣ Curb
← Backing	↘ Right turn	⊙ Fatality	▣ Tree	▣ Animal
↔ Overtaking	↙ Left turn	🕒 Nighttime	◁ 3rd vehicle	
← Sideswipe	↵ U-turn	🚔 DUI	★ Extra data	

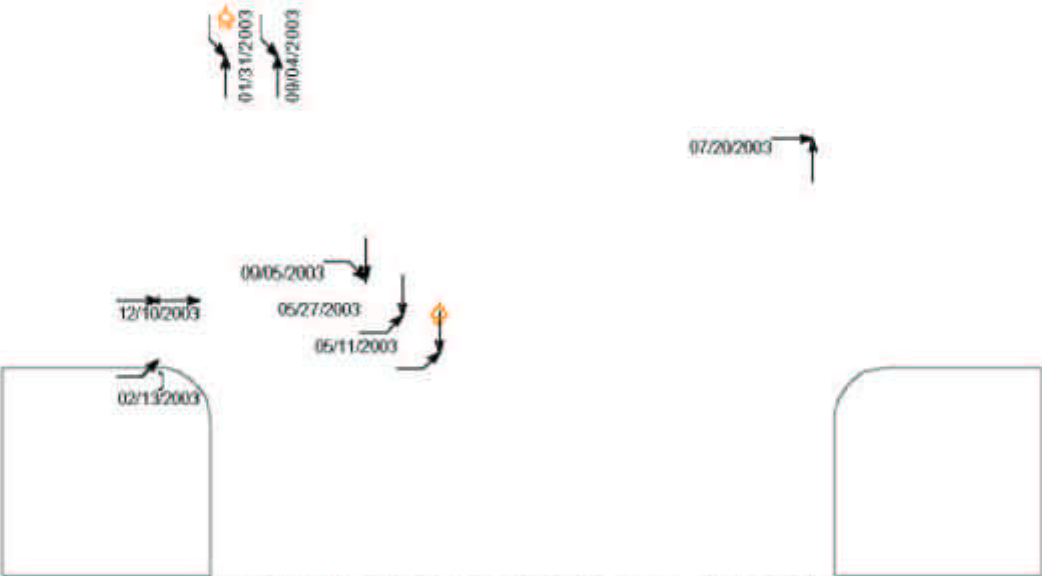
1.32/MEV 11 Accidents	Broad & Marsh 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▭ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	▭ General
← Unknown	← Out of control	○ Injury	▭ Signal
↔ Backing	↘ Right turn	● Fatality	▭ Tree
↔ Overtaking	↙ Left turn	🕒 Nighttime	◀ 3rd vehicle
↔ Sideswipe	↵ U-turn	🚗 DUI	★ Extra data
			▭ Pole
			▭ Curb
			▭ Animal

1.29/MEV 8 Accidents	Marsh & Santa Rosa 01/01/03 - 12/31/03
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Within 75' of intersection. (0) accidents with insufficient data for display

← Straight	▬ Parked	× Pedestrian	Fixed objects:	
← Stopped	↪ Erratic	⊗ Bicycle	□ General	▣ Pole
← Unknown	↪ Out of control	○ Injury	▣ Signal	▣ Curb
↔ Backing	↪ Right turn	⊙ Fatality	▣ Tree	▣ Animal
↔ Overtaking	↪ Left turn	👤 Nighttime	◀ 3rd vehicle	
↔ Sideswipe	↪ U-turn	🚗 DUI	★ Extra data	

0.99/MEV 6 Accidents	Broad & Higuera 01/01/03 - 12/31/03
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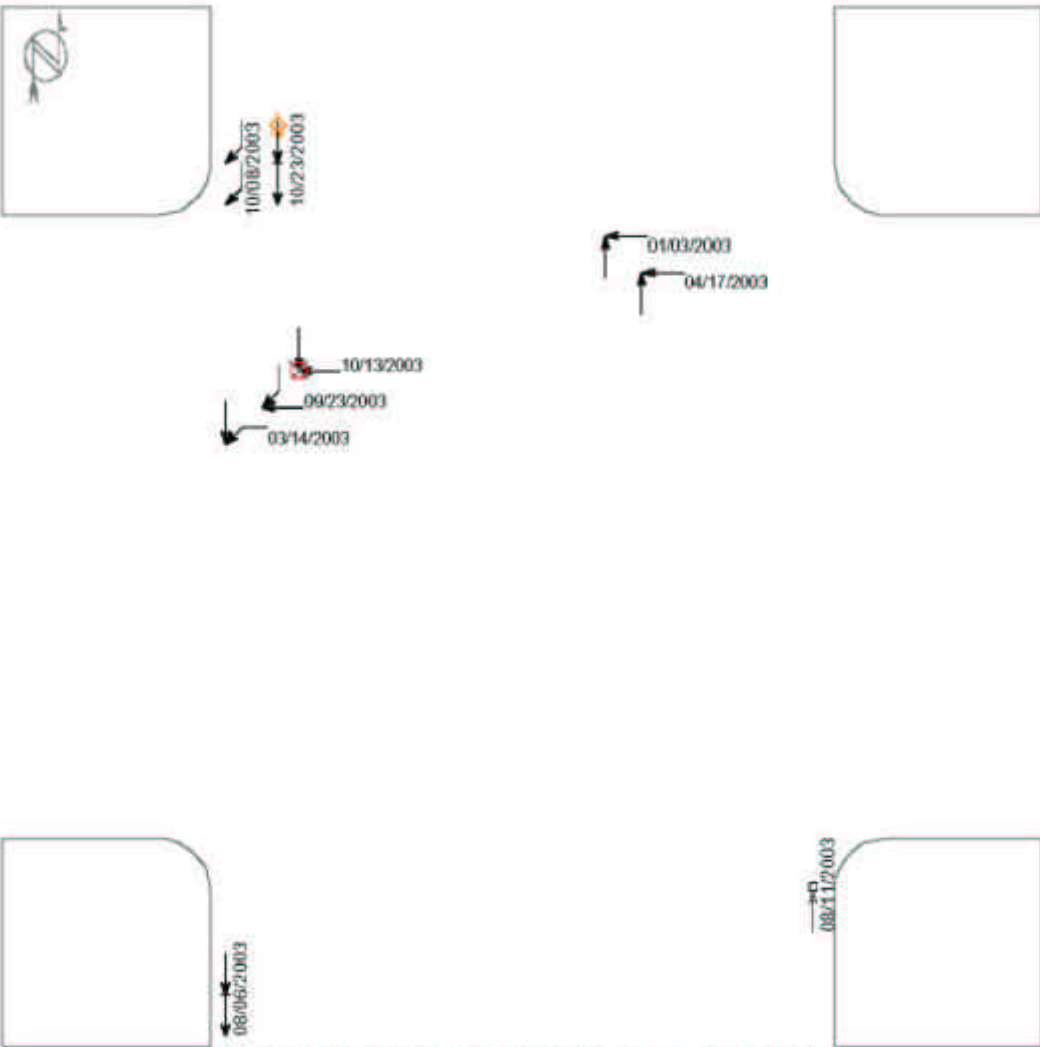


Within 75' of intersection. (0) accidents with insufficient data for display

← Straight	▨ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General ▣ Pole
← Unknown	← Out of control	○ Injury	▤ Signal ▥ Curb
← Backing	↘ Right turn	⊙ Fatality	■ Tree ▧ Animal
← Overtaking	↙ Left turn	👤 Nighttime	◁ 3rd vehicle
← Sideswipe	↺ U-turn	🚗 DUI	★ Extra data

0.95/MEV
9 Accidents

Higuera & Santa Rosa
01/01/03 - 12/31/03



Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▨ Parked	× Pedestrian	Fixed objects:
← Stopped	↪ Erratic	× Bicycle	□ General
← Unknown	↪ Out of control	○ Injury	▣ Signal
↔ Backing	↪ Right turn	● Fatality	■ Tree
↔ Overtaking	↪ Left turn	👤 Nighttime	◁ 3rd vehicle
↔ Sideswipe	↪ U-turn	🚔 DUI	★ Extra data
			▣ Pole
			▣ Curb
			▣ Animal

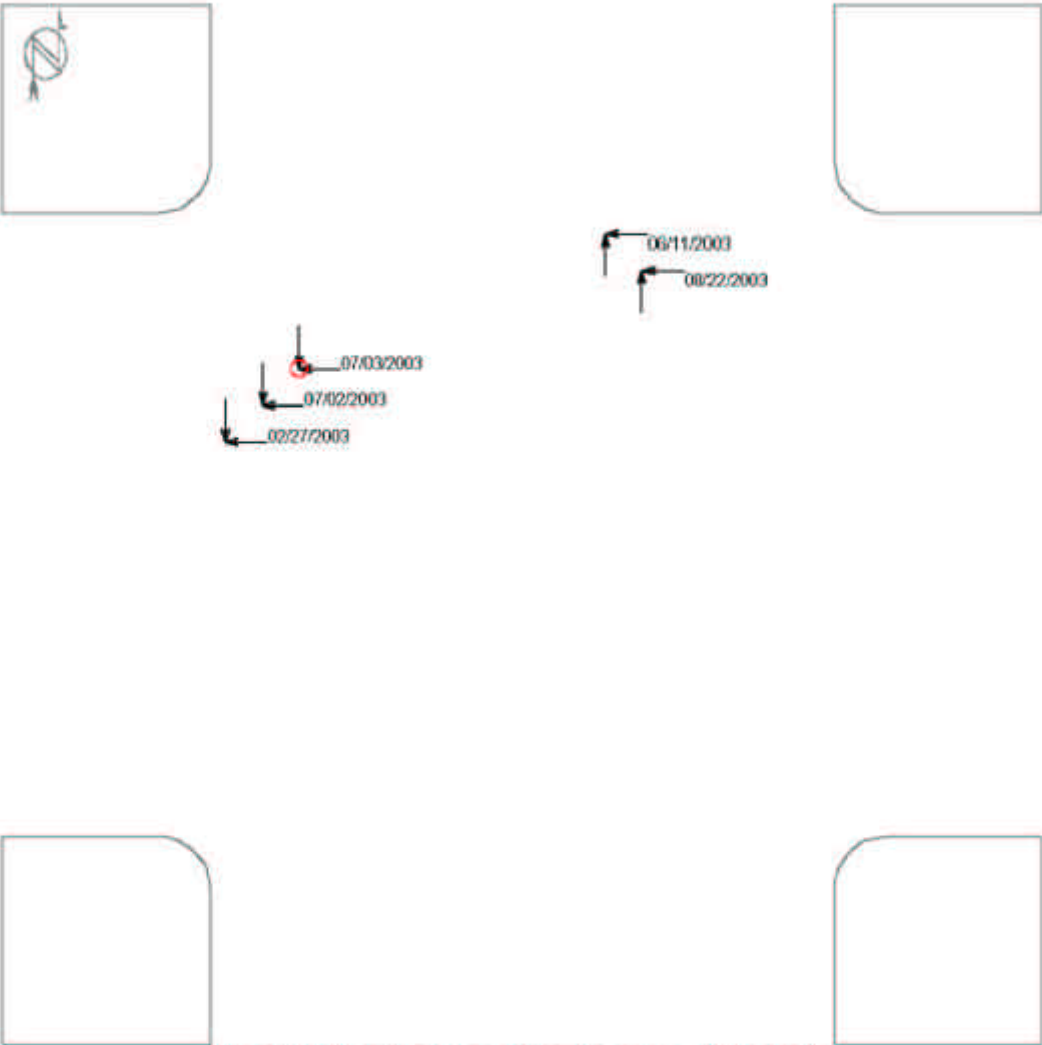
Appendix 2

Arterial / Collector Intersections

Arterial / Collector Intersections Prioritized by Accident Rate

Rank	Prev. Rank	Intersection	Count	Volume	Rate	Class	Control	EB	WB	NB	SB
1	1	Chorro & Pismo	5	6355	2.156	A/C	2-STOP	NA	3,747	1,209	1,399
2	8	Broad & Pismo	6	13617	1.207	A/C	SIG	NA	2,902	5,263	5,452
3	5	Broad & Buchon	5	13555	1.011	A/C	SIG	1,085	825	5,263	6,382
4	Not Ranked	Broad & Foothill	7	21871	0.877	A/C	SIG	8,893	10,675	2,303	NA
5	Not Ranked	Osos & Palm	3	10571	0.778	A/C	SIG	<u>500</u>	<u>2,500</u>	3,285	4,286
6	Not Ranked	Bishop & Johnson	5	18449	0.743	A/C	SIG	<u>600</u>	462	7,610	9,777
7	2	Mill & Santa Rosa	6	23396	0.703	A/C	SIG	2,232	1,566	8,097	11,501
8	Not Ranked	Laurel & Southwood	3	13327	0.617	A/C	4-STOP	<u>1,500</u>	<u>1,500</u>	5,138	5,189
9	Not Ranked	Palm & Santa Rosa	6	26917	0.611	A/L	SIG	<u>2,602</u>	<u>2,603</u>	10,211	11,501
10	10	Chorro & Foothill	6	27898	0.589	A/C	SIG	8,420	9,923	7,574	1,981
11	8	California & Mill	4	18940	0.579	A/C	SIG	1,380	877	11,214	5,469
12	Not Ranked	Pismo & Santa Rosa	3	14965	0.549	A/C	4-STOP	NA	4,216	4,919	5,830
13	Not Ranked	Bullock & Orcutt	3	16406	0.501	A/C	1-STOP	7,671	7,735	<u>1,000</u>	NA
14	12	El Mercado & Madonna	6	34954	0.470	A/C	SIG	15,254	16,200	<u>3,500</u>	NA

2.16/MEV 5 Accidents	Chorro & Pismo 01/01/03 - 12/31/03
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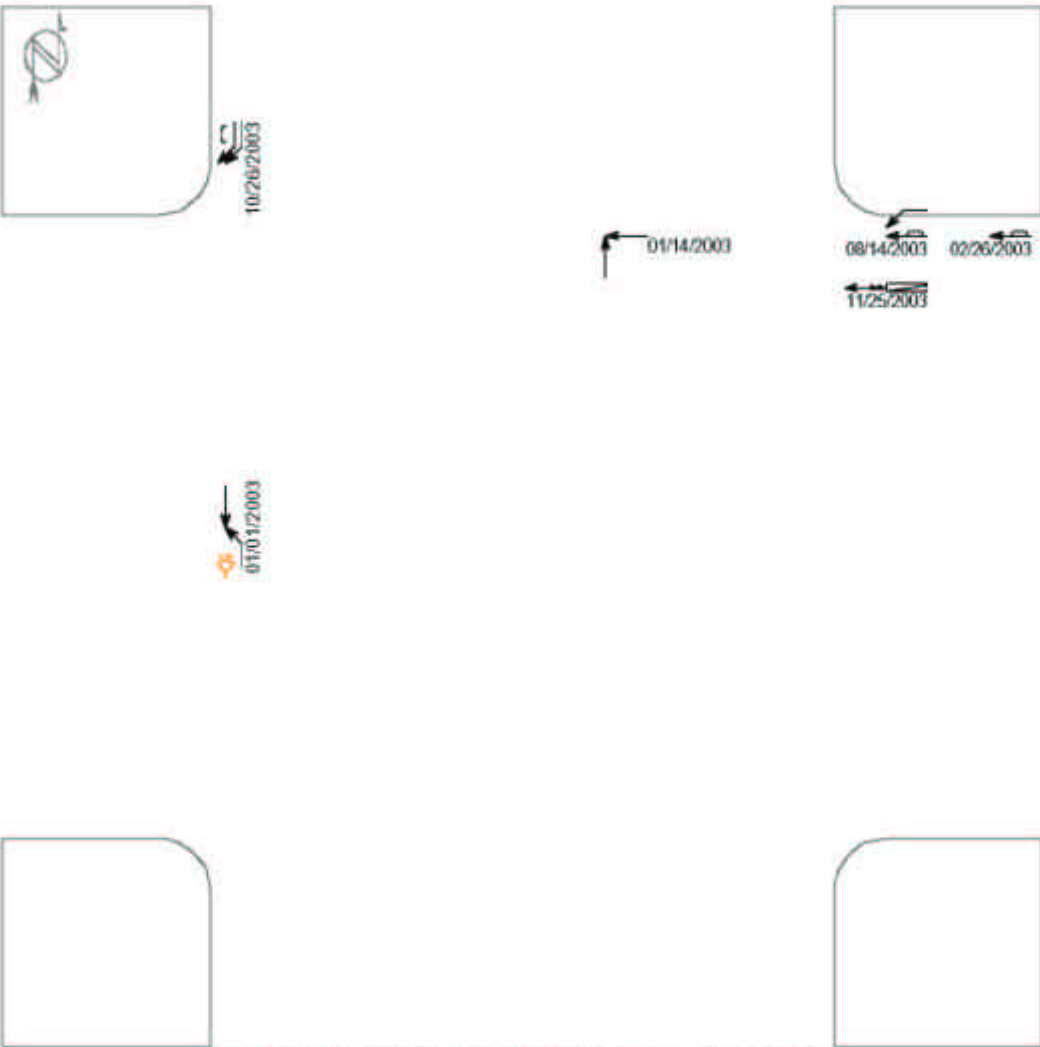


Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▬ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General ■ Pole
← Unknown	← Out of control	○ Injury	■ Signal ■ Curb
← Backing	↘ Right turn	● Fatality	■ Tree ☒ Animal
← Overtaking	↙ Left turn	🕒 Nighttime	◀ 3rd vehicle
← Sideswipe	↺ U-turn	🚔 DUI	★ Extra data

1.21/MEV
6 Accidents

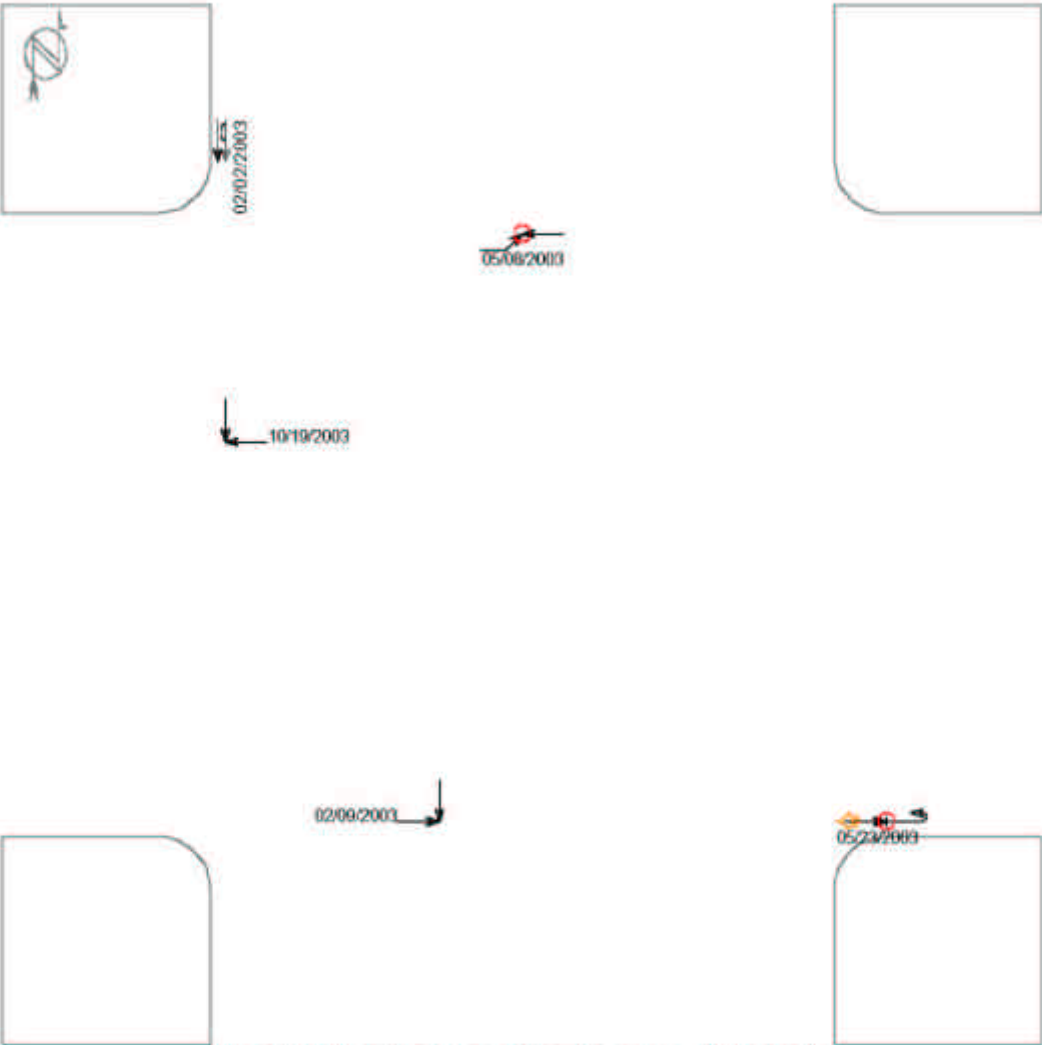
Broad & Pismo
01/01/03 - 12/31/03



Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▨ Parked	× Pedestrian	Fixed objects:	
← Stopped	⚡ Erratic	⊗ Bicycle	□ General	▣ Pole
← Unknown	⚡ Out of control	○ Injury	▣ Signal	▣ Curb
↔ Backing	↘ Right turn	⊙ Fatality	▣ Tree	▣ Animal
↔ Overtaking	↙ Left turn	👤 Nighttime	◀ 3rd vehicle	
↔ Sideswipe	↘ U-turn	🚔 DUI	★ Extra data	

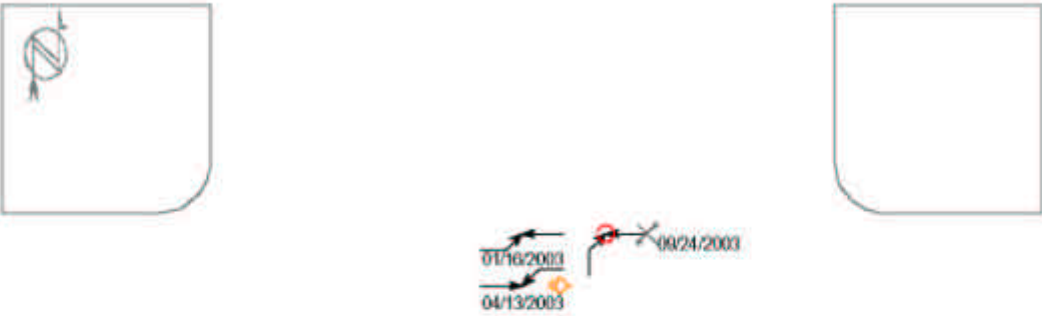
1.01/MEV 5 Accidents	Broad & Buchon 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▬ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General ▣ Pole
← Unknown	← Out of control	○ Injury	▣ Signal ▣ Curb
← Backing	↘ Right turn	● Fatality	■ Tree ▣ Animal
← Overtaking	↙ Left turn	🕒 Nighttime	◀ 3rd vehicle
← Sideswipe	↺ U-turn	🚔 DUI	★ Extra data

0.88/MEV 7 Accidents	Broad & Foothill 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▨ Parked	✕ Pedestrian	Fixed objects:
← Stopped	↪ Erratic	✕ Bicycle	□ General
← Unknown	⚡ Out of control	○ Injury	▣ Signal
↔ Backing	↪ Right turn	☠ Fatality	■ Tree
↔ Overtaking	↪ Left turn	🕒 Nighttime	◀ 3rd vehicle
↔ Sideswipe	↪ U-turn	🚗 DUI	★ Extra data
			▣ Pole
			▣ Curb
			▣ Animal

0.78/MEV 3 Accidents	Osos & Palm 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

- | | | | |
|--------------|------------------|--------------|---------------------|
| ← Straight | ▬ Parked | × Pedestrian | Fixed objects: |
| ← Stopped | ↪ Erratic | × Bicycle | □ General ■ Pole |
| ← Unknown | ↪ Out of control | ○ Injury | ■ Signal ■ Curb |
| ↔ Backing | ↪ Right turn | ● Fatality | ■ Tree ☒ Animal |
| ↔ Overtaking | ↪ Left turn | 🕒 Nighttime | ◀ 3rd vehicle |
| ↔ Sideswipe | ↪ U-turn | 🚔 DUI | ★ Extra data |

Appendix 3

Arterial / Local Intersections

Arterial / Local Intersections Prioritized by Accident Rate

Rank	Prev. Rank	Intersection	Count	Volume	Rate	Class	Control	EB	WB	NB	SB
1	4	Madonna & Pereira	11	17,905	1.683	A/L	2-STOP	8,073	8,770	1,062	NA
2	1	Monterey & Osos	6	10,897	1.51	A/L	SIG	2,612	3,093	3,137	2,055
3	9	Broad & Pacific	7	13,276	1.445	A/L	2-STOP	<u>814</u>	<u>814</u>	5,266	6,382
4	11	Garden & Higuera	7	13,645	1.406	A/L	1-STOP	<u>1,000</u>	<u>1,000</u>	5,263	6,382
5	Not Ranked	Monterey & Morro	3	7,204	1.141	A/L	SIG	1,347	3,093	<u>1,382</u>	<u>1,382</u>
6	21	Lawton & South	5	14,146	0.968	A/L	1-STOP	6,650	6,650	846	NA
7	Not Ranked	Monterey & Toro	5	14,192	0.965	A/L	2-STOP	4,807	6,385	<u>1,500</u>	<u>1,500</u>
8	8	Carmel & Marsh	5	14,752	0.929	A/L	2-STOP	13,305	NA	587	860
9	Not Ranked	Roundhouse & Santa Barbara	5	14,978	0.915	A/L	1-STOP	NA	<u>300</u>	8,597	6,081
10	2	Higuera & Morro	4	12,352	0.887	A/L	SIG	NA	8,826	<u>1,763</u>	<u>1,763</u>
11	24	Osos & Pacific	5	15,714	0.872	A/L	2-STOP	<u>1,395</u>	<u>1,395</u>	9,580	3,344
12	25	Marsh & Morro	5	16,435	0.834	A/L	SIG	12,939	NA	<u>1,748</u>	<u>1,748</u>
13	Not Ranked	Parker & South	4	14,300	0.766	A/L	2-STOP	6,650	6,650	<u>500</u>	<u>500</u>
14	Not Ranked	Meadow & South	4	14,376	0.762	A/L	1-STOP	6,650	6,650	1,076	NA
15	23	Higuera & Nipomo	4	14,622	0.749	A/L	SIG	NA	8,846	2,888	2,888
16	3	Beebee & South	4	14,698	0.746	A/L	2-STOP	6,650	6,650	<u>750</u>	648
17	12	Calle Joaquin & Los Osos Valley	5	20,916	0.655	A/L	SIG	8,838	10,268	NA	1,810
18	Not Ranked	High & Santa Barbara	4	17,040	0.643	A/L	1-STOP	<u>500</u>	<u>500</u>	8,597	7,443
19	14	California & Taft	4	18,284	0.599	A/L	1-STOP	<u>3,000</u>	NA	7,234	8,050
20	Not Ranked	Garden & Marsh	3	14,132	0.582	A/L	4-STOP	12,932	NA	<u>600</u>	<u>600</u>
21	29	Higuera & Vachell	4	19,043	0.575	A/L	1-STOP	NA	<u>1,576</u>	8,302	9,165
22	17	Meinecke & Santa Rosa	7	35,077	0.547	A/L	2-STOP	<u>1,577</u>	NA	16,750	16,750
23	13	Montalban & Santa Rosa	7	35,593	0.539	A/L	2-STOP	500	1,593	16,750	16,750
24	Not Ranked	Casa & Foothill	4	21,273	0.515	A/L	1-STOP	10,860	8,373	2,040	NA
25	7	Murray & Santa Rosa	7	37,844	0.507	A/L	SIG	2,172	2,172	16,750	16,750
26	36	Foothill & Mustang	4	21,933	0.500	A/L	1-STOP	10,860	8,373	NA	<u>2,700</u>
27	5	Granada & Higuera	3	16,701	0.492	A/L	2-STOP	NA	<u>1,500</u>	8,066	7,135
28	Not Ranked	Mcmillan & Orcutt	3	16,844	0.488	A/L	1-STOP	7,671	7,735	NA	1,438
29	Not Ranked	Grand & Loomis	5	29,257	0.468	A/L	1-STOP	NA	3,925	12,666	12,666
30	18	Foothill & Tassajara	3	18,115	0.454	A/L	2-STOP	6,799	8,066	<u>1,625</u>	<u>1,625</u>
31	32	Garcia & Los Osos Valley	3	20,151	0.408	A/L	1-STOP	9,329	10,422	NA	<u>400</u>
32	26	Oak & Santa Rosa	5	34,200	0.401	A/L	2-STOP	NA	<u>700</u>	16,750	16,750
33	Not Ranked	Los Osos Valley & Royal	4	27,752	0.395	A/L	SIG	11,816	12,899	<u>2,037</u>	<u>1,000</u>
34	35	Peach & Santa Rosa	3	21,098	0.390	A/L	2-STOP	<u>750</u>	<u>750</u>	8,097	11,501
35	38	Higuera & Suburban	3	22,482	0.366	A/L	SIG	5,015	NA	8,302	9,165
36	Not Ranked	Santa Rosa & Walnut	4	30,389	0.361	A/L	SIG	2,232	8,559	8,097	11,501
37	Not Ranked	Descanso & Los Osos Valley	3	22,896	0.359	A/L	SIG	8,963	12,533	<u>700</u>	<u>700</u>
38	28	Auto Park & Los Osos Valley	3	23,606	0.348	A/L	1-STOP	8,838	10,268	NA	<u>4,500</u>
39	27	Higuera & Pacific	3	23,668	0.347	A/L	1-STOP	NA	<u>1,000</u>	15,385	7,283
40	Not Ranked	Leff & Osos	3	24,831	0.331	A/L	2-STOP	<u>650</u>	<u>650</u>	8,033	15,498
41	40	Laguna & Los Osos Valley	3	25,775	0.319	A/L	SIG	11,861	12,533	NA	1,381
42	22	Olive & Santa Rosa	5	47,613	0.288	A/L	SIG	11,113	<u>3,000</u>	16,750	16,750
43	Not Ranked	Broad & Sweeney	3	30,873	0.266	A/L	1-STOP	873	NA	15,000	15,000
44	6	Boysen & Santa Rosa	3	31,000	0.265	A/L	1-STOP	NA	1,000	15,000	15,000

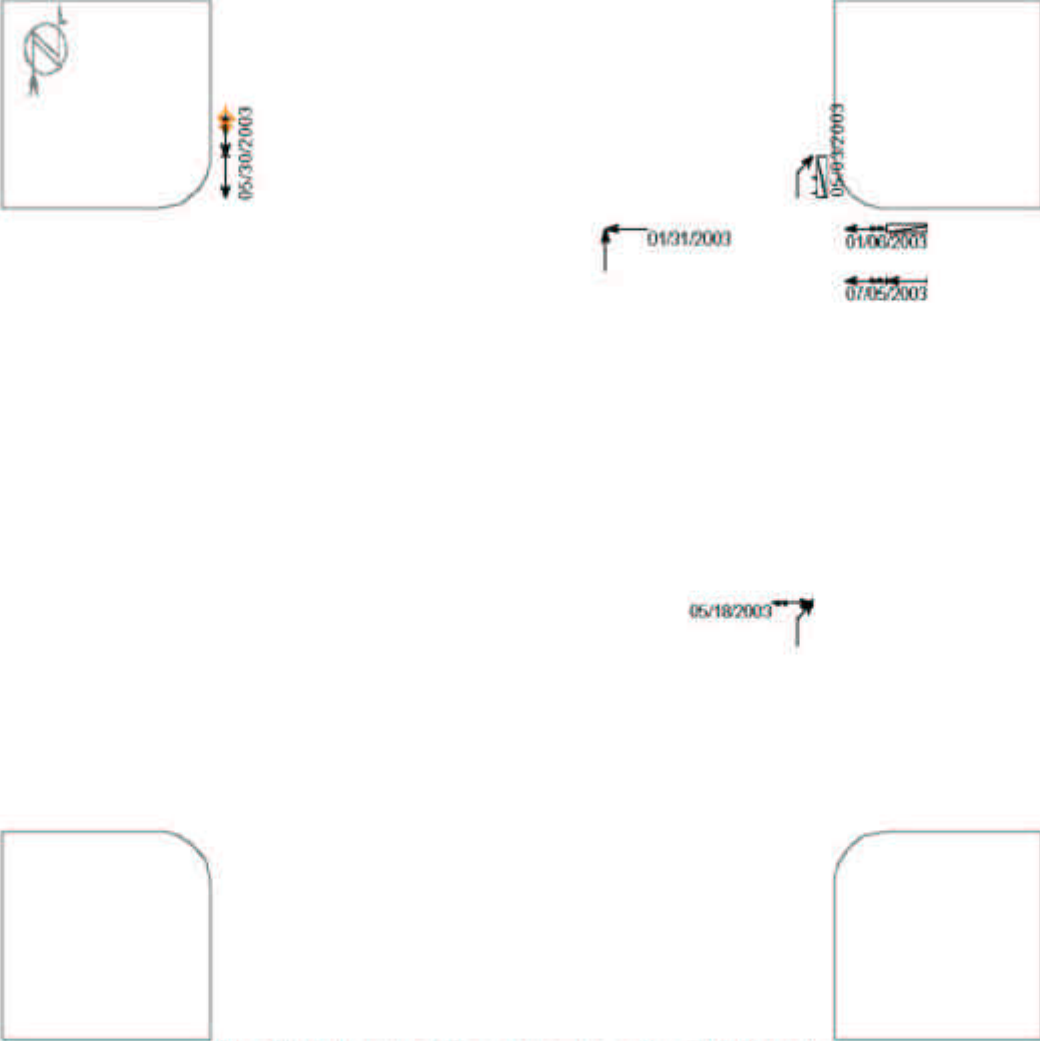
1.68/MEV 11 Accidents	Madonna & Pereira 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▨ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General ■ Pole
← Unknown	← Out of control	○ Injury	■ Signal ■ Curb
← Backing	↘ Right turn	● Fatality	■ Tree ☒ Animal
← Overtaking	↙ Left turn	🕒 Nighttime	◁ 3rd vehicle
← Sideswipe	↺ U-turn	🚔 DUI	★ Extra data

1.51/MEV 6 Accidents	Monterey & Osos 01/01/03 - 12/31/03
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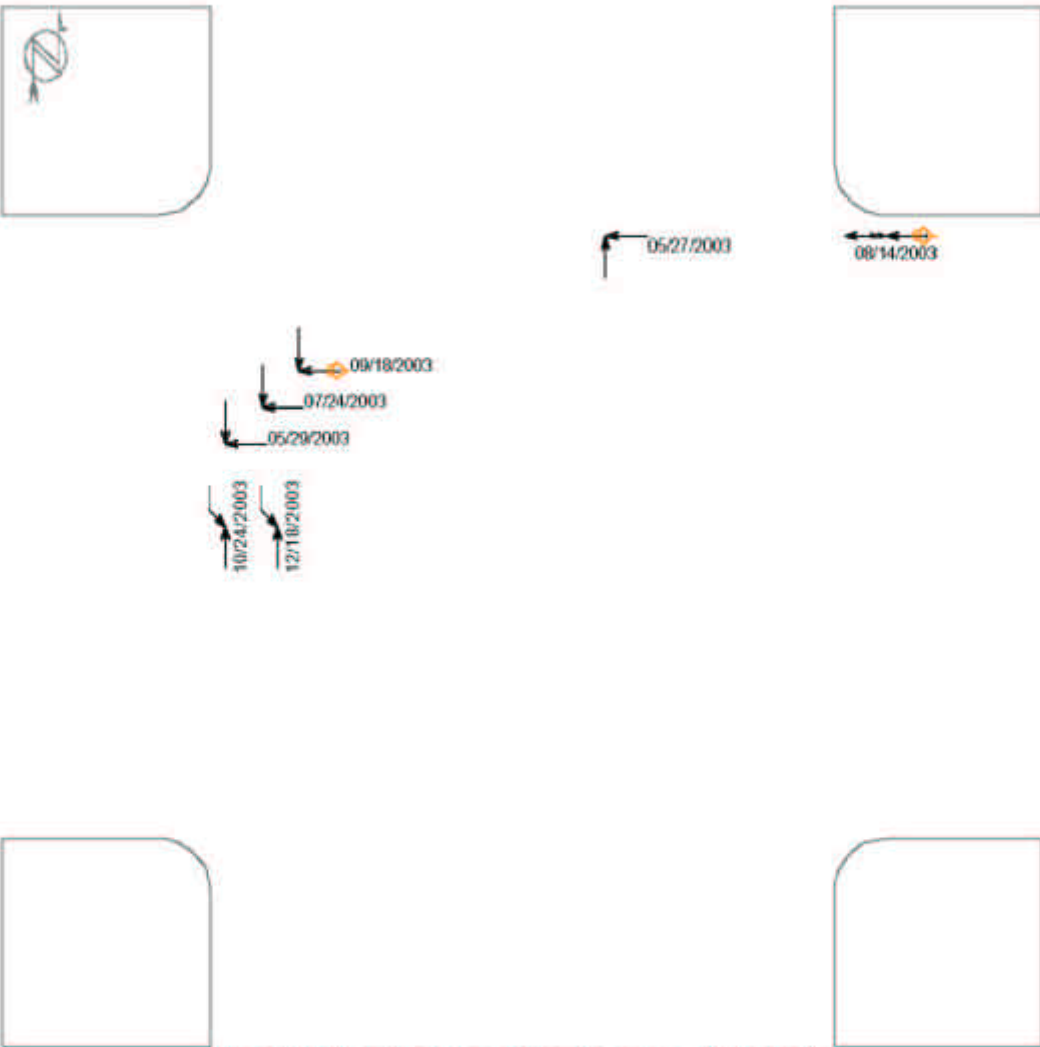


Within 75' of intersection. (0) accidents with insufficient data for display

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1.45/MEV
7 Accidents

Broad & Pacific
01/01/03 - 12/31/03



Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▨ Parked	× Pedestrian	Fixed objects:
← Stopped	⚡ Erratic	⊗ Bicycle	□ General
← Unknown	⚡ Out of control	○ Injury	▣ Signal
← Backing	↘ Right turn	⊙ Fatality	■ Tree
← Overtaking	↙ Left turn	🕒 Nighttime	▣ Pole
← Sideswipe	↺ U-turn	🚔 DUI	▣ Curb
			▣ Animal
			◀ 3rd vehicle
			★ Extra data

1.41 / MEV 7 Accidents	Garden & Higuera 01/01/03 - 12/31/03
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12/26/2003

06/12/2003
11/18/2003

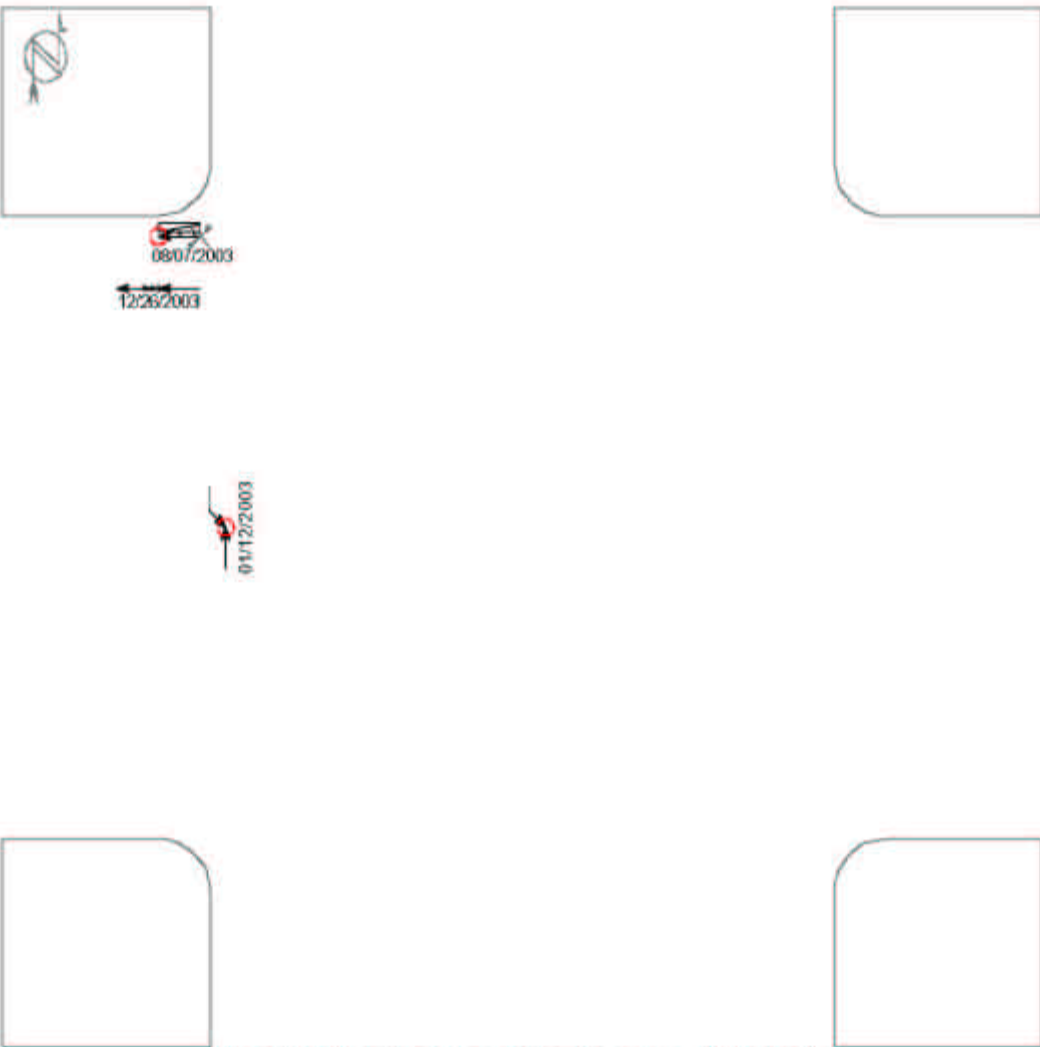
05/04/2003
08/19/2003



Within 75' of intersection, (1) accidents with insufficient data for display

← Straight	▨ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General
← Unknown	← Out of control	○ Injury	▣ Signal
← Backing	↘ Right turn	● Fatality	■ Tree
← Overtaking	↙ Left turn	👤 Nighttime	◁ 3rd vehicle
← Sideswipe	↺ U-turn	🚗 DUI	★ Extra data
			▣ Pole
			▣ Curb
			▣ Animal

1.14/MEV 3 Accidents	Monterey & Morro 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▬ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General ■ Pole
← Unknown	← Out of control	○ Injury	■ Signal ■ Curb
← Backing	↘ Right turn	● Fatality	■ Tree ☒ Animal
← Overtaking	↙ Left turn	👤 Nighttime	◁ 3rd vehicle
← Sideswipe	↺ U-turn	🚗 DUI	★ Extra data

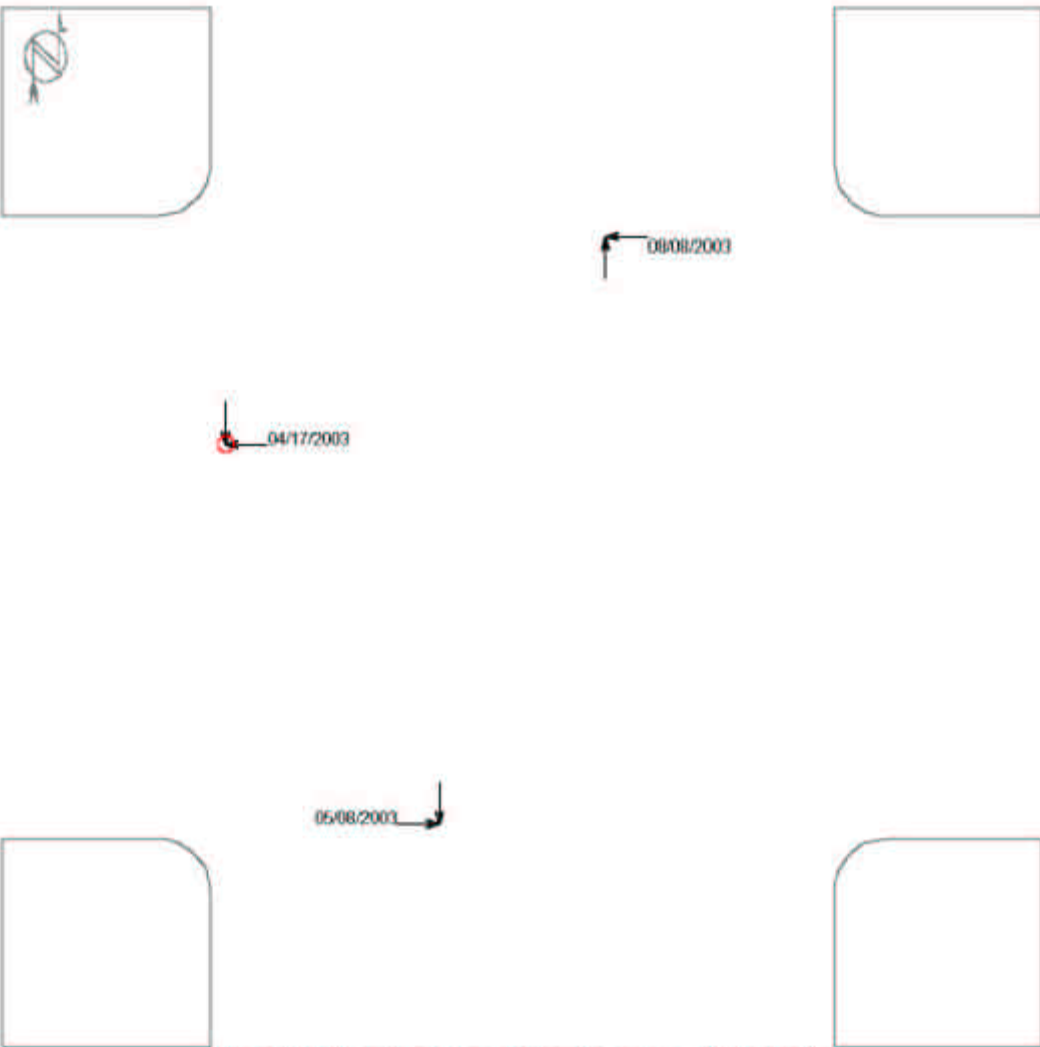
Appendix 4

Collector / Collector Intersections

Collector / Collector Intersection Prioritized by Accident Rate

Rank	Prev. Rank	Intersection	Count	Volume	Rate	Class	Control		EB	WB	NB	SB
1	1	Chorro & Mill	3	9,963	0.82	C/C	2-STOP		862	965	3,850	4,286

0.82/MEV 3 Accidents	Chorro & Mill 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▨ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General ■ Pole
← Unknown	← Out of control	○ Injury	■ Signal ■ Curb
← Backing	↘ Right turn	● Fatality	■ Tree ☒ Animal
← Overtaking	↙ Left turn	👤 Nighttime	◁ 3rd vehicle
← Sideswipe	↺ U-turn	🚗 DUI	★ Extra data

Appendix 5

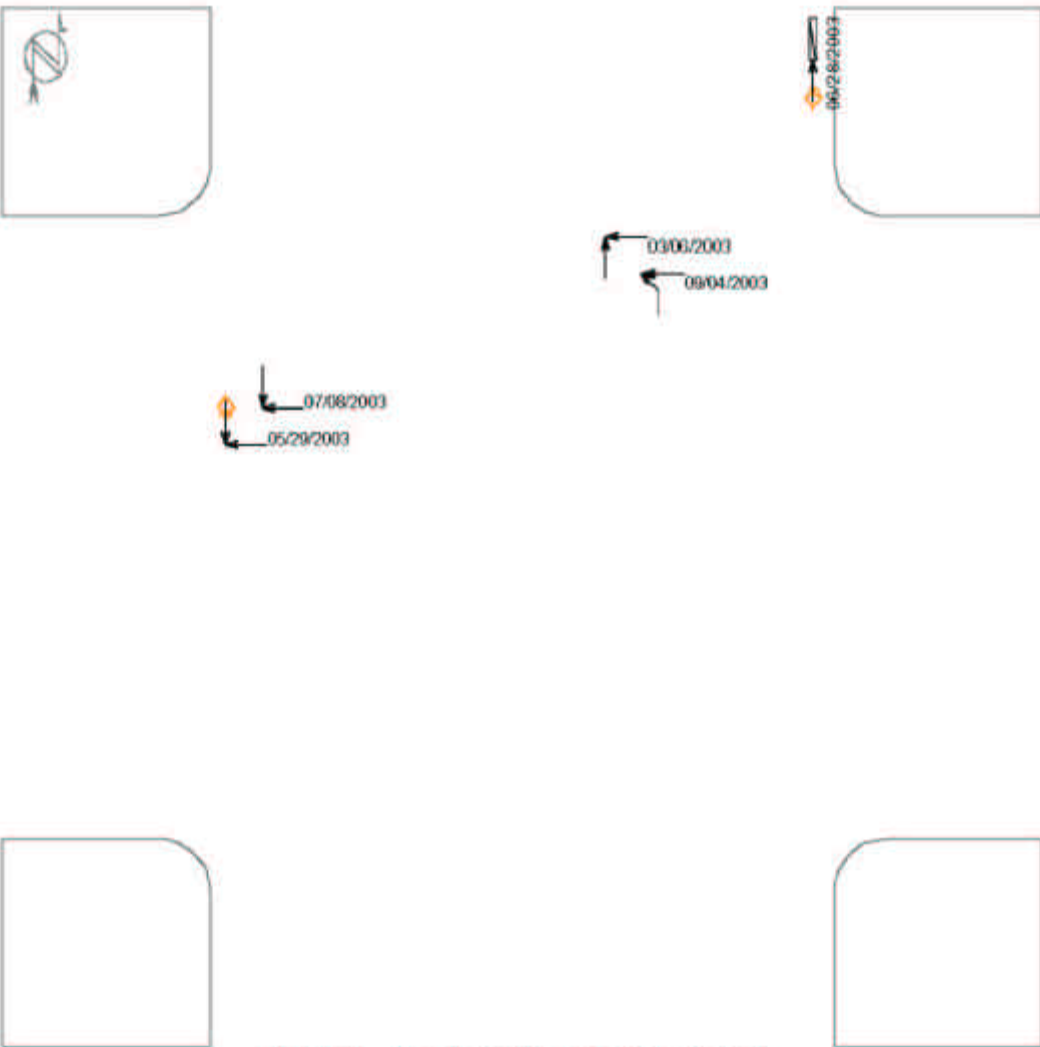
Collector / Local Intersections

Collector / Local Intersections prioritized by Accident Rate

Rank	Prev. Rank	Intersection	Count	Volume	Rate	Class	Control		EB	WB	NB	SB
1	7	Nipomo & Pismo	5	4,202	3.26	C/L	2-STOP		NA	2,902	<u>650</u>	<u>650</u>

3.26/MEV
5 Accidents

Nipomo & Pismo
01/01/03 - 12/31/03



(clear filter), (0) accidents with insufficient data for display

← Straight	▬ Parked	× Pedestrian	Fixed objects:
← Stopped	⚡ Erratic	⌘ Bicycle	□ General
← Unknown	⚡ Out of control	○ Injury	▣ Signal
↔ Backing	↘ Right turn	⊙ Fatality	■ Tree
↔ Overtaking	↙ Left turn	🕒 Nighttime	◀ 3rd vehicle
↔ Sideswipe	↺ U-turn	🚔 DUI	★ Extra data
			▣ Pole
			▣ Curb
			▣ Animal

Appendix 6

Local / Local Intersections

Local / Local Intersections Prioritized by Accident Rate

Rank	Prev. Rank	Intersection	Count	Volume	Rate	Class	Control		EB	WB	NB	SB
1	2	Buena Vista & Garfield	6	2,450	6.71	L/L	2-STOP		<u>1,000</u>	<u>500</u>	<u>950</u>	NA
2	3	Garden & Pacific	3	2,800	2.94	L/L	1-STOP		<u>800</u>	<u>800</u>	<u>600</u>	<u>600</u>
3	Not Ranked	Morro & Pacific	4	5,200	2.11	L/L	4-STOP		<u>850</u>	<u>850</u>	<u>1,750</u>	<u>1,750</u>
4	1	Casa & Murray	3	3,923	2.10	L/L	2-STOP		<u>1,000</u>	<u>1,000</u>	NA	1,923
5	Not Ranked	Islay & Santa Rosa	3	4,085	2.01	L/L	2-STOP		<u>600</u>	<u>600</u>	1,824	1,061

6.71/MEV 6 Accidents	Buena Vista & Garfield 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▨ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General ■ Pole
← Unknown	← Out of control	○ Injury	■ Signal ■ Curb
← Backing	↘ Right turn	● Fatality	■ Tree ☒ Animal
← Overtaking	↙ Left turn	🕒 Nighttime	◁ 3rd vehicle
← Sideswipe	↺ U-turn	🚔 DUI	★ Extra data

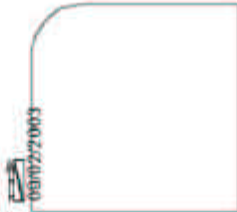
2.94/MEV 3 Accidents	Garden & Pacific 01/01/03 - 12/31/03
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04/17/2003



02/11/2003



Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▬ Parked	× Pedestrian	Fixed objects:
← Stopped	↪ Erratic	× Bicycle	□ General ■ Pole
← Unknown	↪ Out of control	○ Injury	■ Signal ■ Curb
↔ Backing	↪ Right turn	● Fatality	■ Tree ☒ Animal
↔ Overtaking	↪ Left turn	👤 Nighttime	◀ 3rd vehicle
↔ Sideswipe	↪ U-turn	🚗 DUI	★ Extra data

2.11/MEV 4 Accidents	Morro & Pacific 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▬ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General ■ Pole
← Unknown	← Out of control	○ Injury	■ Signal ■ Curb
← Backing	↘ Right turn	● Fatality	■ Tree □ Animal
← Overtaking	↙ Left turn	👤 Nighttime	◀ 3rd vehicle
← Sideswipe	↺ U-turn	🚗 DUI	★ Extra data

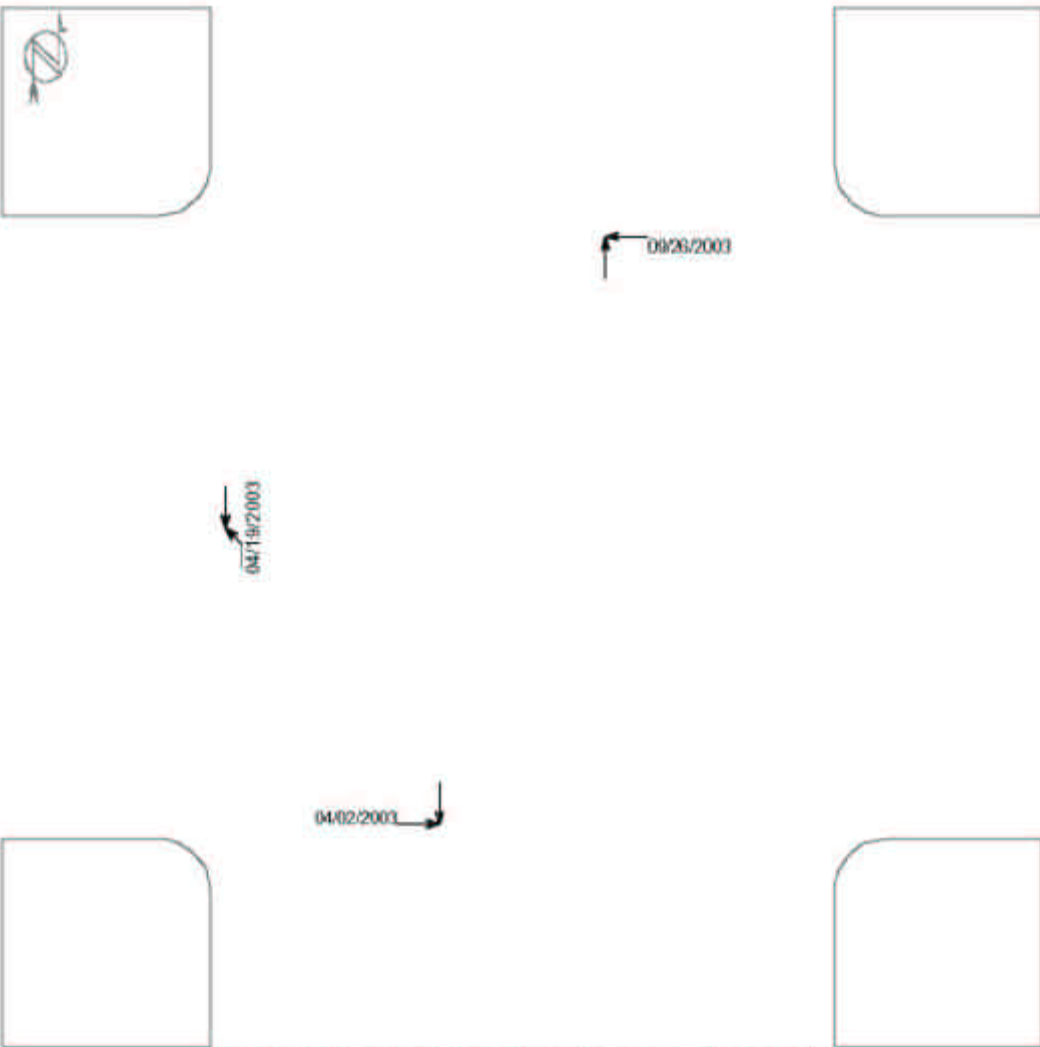
2.10/MEV 3 Accidents	Casa & Murray 01/01/03 - 12/31/03
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Within 75' of Intersection, (0) accidents with insufficient data for display

<ul style="list-style-type: none"> ← Straight ← Stopped ← Unknown ↔ Backing ↔ Overtaking ↔ Sideswipe 	<ul style="list-style-type: none"> ▨ Parked ↪ Erratic ↪ Out of control ↪ Right turn ↪ Left turn ↪ U-turn 	<ul style="list-style-type: none"> × Pedestrian × Bicycle ○ Injury ⊙ Fatality 🕒 Nighttime 🚔 DUI 	<p>Fixed objects:</p> <ul style="list-style-type: none"> <li style="width: 50%;">□ General <li style="width: 50%;">▣ Pole <li style="width: 50%;">▣ Signal <li style="width: 50%;">▣ Curb <li style="width: 50%;">▣ Tree <li style="width: 50%;">▣ Animal <li style="width: 50%;">◁ 3rd vehicle <li style="width: 50%;">✱ Extra data
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2.01/MEV 3 Accidents	Islay & Santa Rosa 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▨ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General ■ Pole
← Unknown	← Out of control	○ Injury	■ Signal ■ Curb
← Backing	↘ Right turn	● Fatality	■ Tree ☒ Animal
← Overtaking	↙ Left turn	👤 Nighttime	◁ 3rd vehicle
← Sideswipe	↺ U-turn	🚔 DUI	★ Extra data

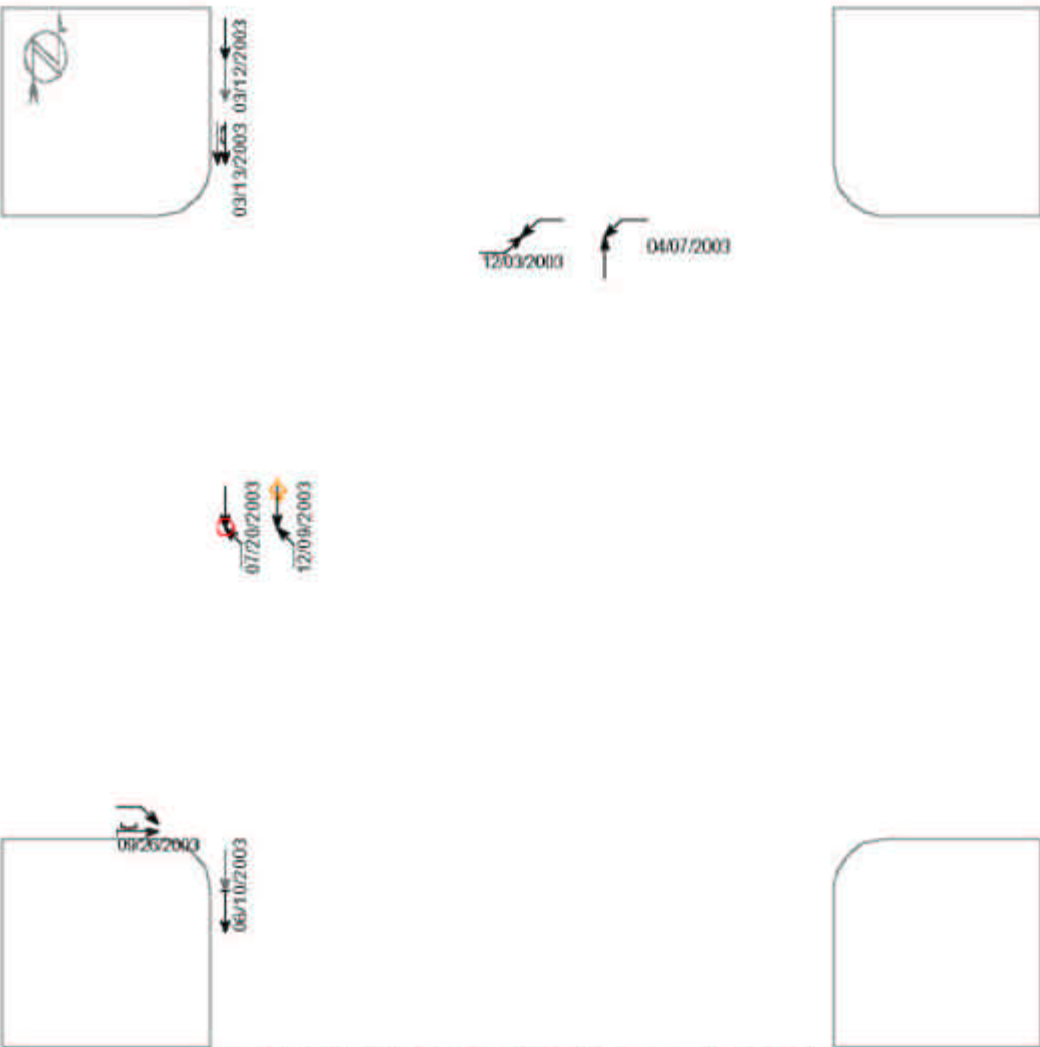
Appendix 7

Other Significant Intersections

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

Rank	Prev. Rank	Intersection	Count	Volume	Rate	Class	Control	EB	WB	NB	SB
1	N/A	Higuera & South	8	27,767	0.79	A/A	SIG	<u>50</u>	6,650	11,250	9,817
2	N/A	Bishop & Johnson	5	18449	0.74	A/C	SIG	<u>600</u>	462	7,610	9,777
3	N/A	El Mercado & Madonna	6	34954	0.47	A/C	SIG	15,254	16,200	<u>3,500</u>	NA
4	N/A	Los Osos Valley & Royal	4	27,752	0.39	A/L	SIG	11,816	12,899	<u>2,037</u>	<u>1,000</u>
5	N/A	Grand & Monterey	3	28,809	0.29	A/A	SIG	12,375	3,934	NA	<u>12,500</u>

.79 / MEV 8 Accidents	Higuera & South 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▨ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General ▣ Pole
← Unknown	← Out of control	○ Injury	▣ Signal ▣ Curb
← Backing	↘ Right turn	● Fatality	■ Tree ▣ Animal
← Overtaking	↙ Left turn	👤 Nighttime	◁ 3rd vehicle
← Sideswipe	↺ U-turn	🚔 DUI	★ Extra data

.74 / MEV 5 Accidents	Bishop & Johnson 01/01/03 - 12/31/03
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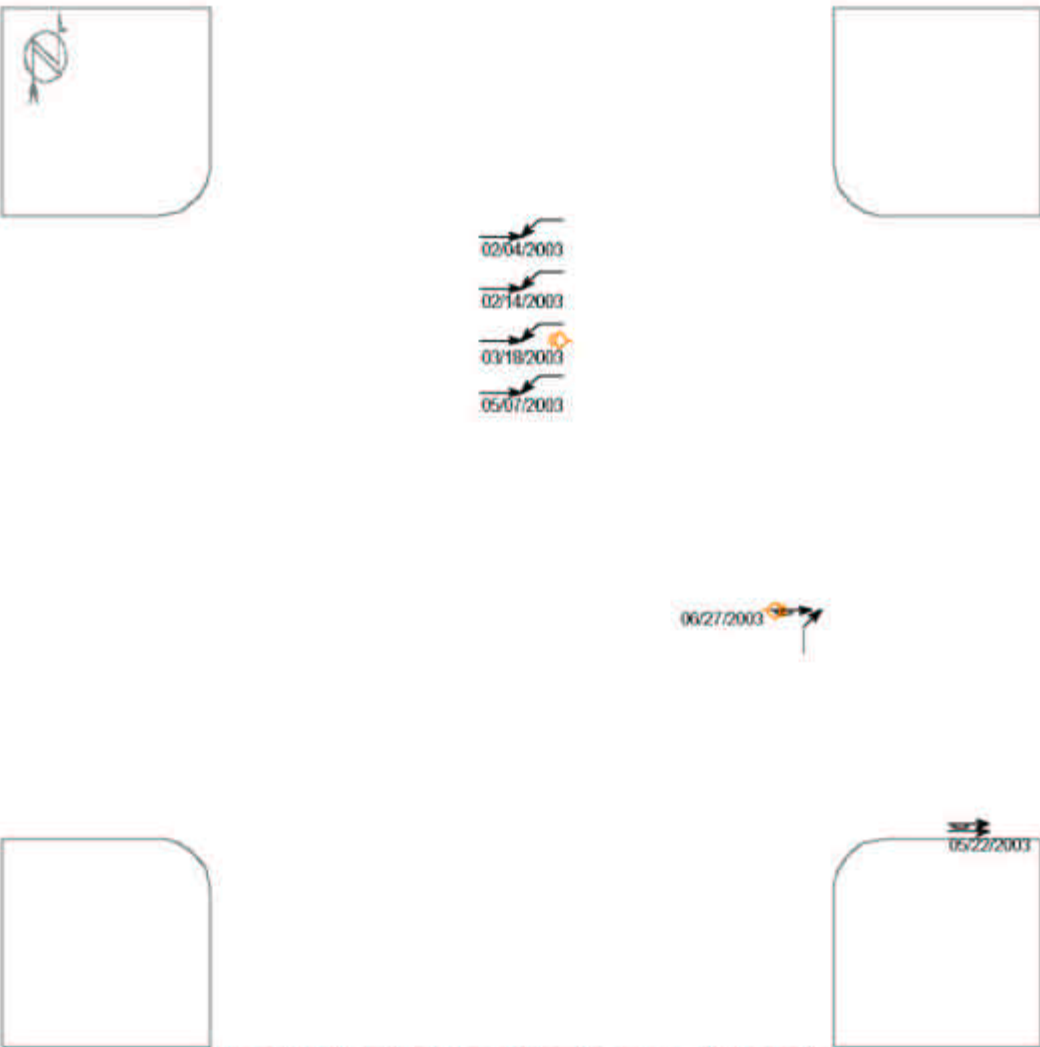
- 05/08/2003
- 05/28/2003
- 07/01/2003
- 11/10/2003



Within 75' of intersection, (0) accidents with insufficient data for display

<ul style="list-style-type: none"> ← Straight ← Stopped ← Unknown ↔ Backing ↔ Overtaking ↔ Sideswipe 	<ul style="list-style-type: none"> ▭ Parked ↪ Erratic ↪ Out of control ↪ Right turn ↪ Left turn ↪ U-turn 	<ul style="list-style-type: none"> × Pedestrian × Bicycle ○ Injury ⊙ Fatality ⊙ Nighttime ⊙ DUI 	<p>Fixed objects:</p> <ul style="list-style-type: none"> <li style="width: 50%;">□ General <li style="width: 50%;">▣ Pole <li style="width: 50%;">▣ Signal <li style="width: 50%;">▣ Curb <li style="width: 50%;">▣ Tree <li style="width: 50%;">▣ Animal <ul style="list-style-type: none"> ◁ 3rd vehicle ✱ Extra data
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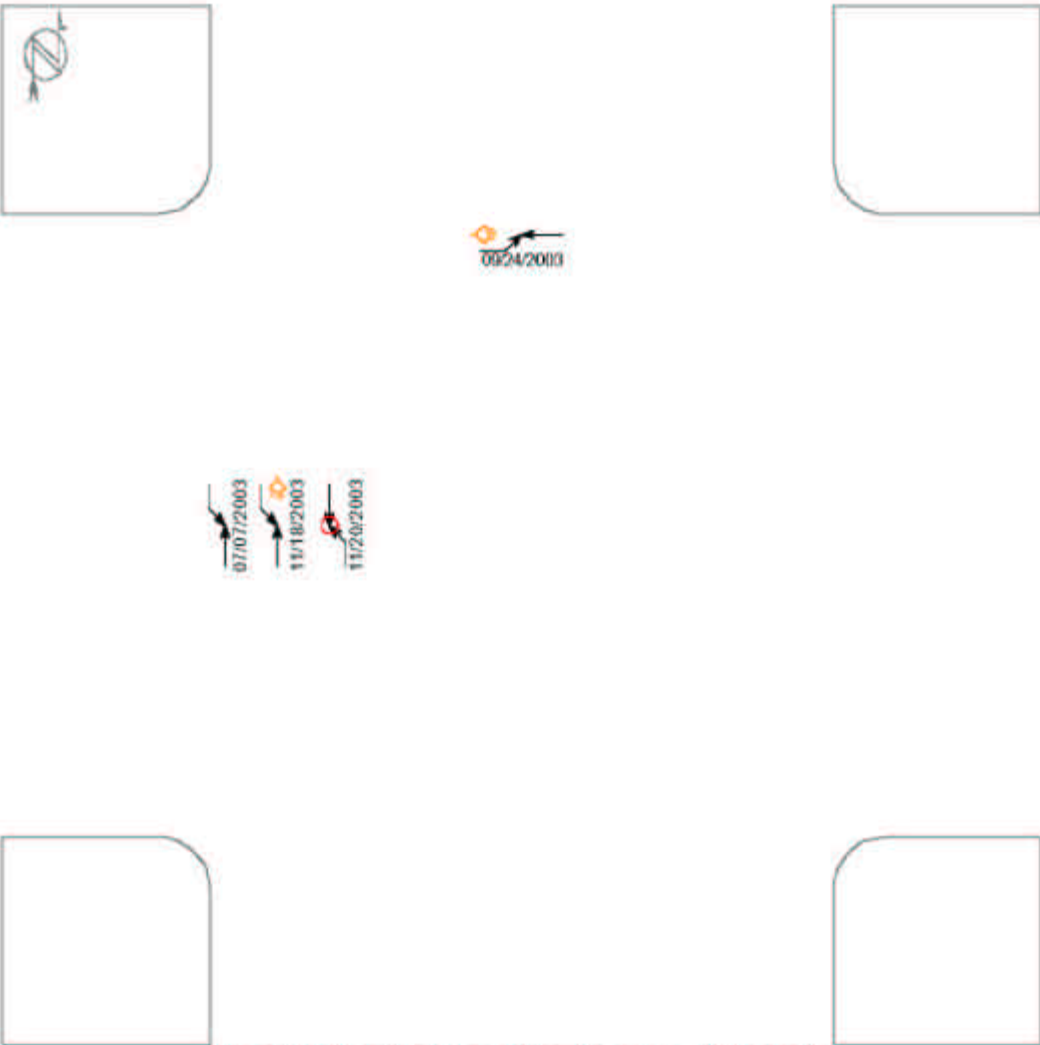
.47 / MEV 6 Accidents	El Mercado & Madonna 01/01/03 - 12/31/03
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Within 75' of intersection. (0) accidents with insufficient data for display

← Straight	▬ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General ■ Pole
← Unknown	← Out of control	○ Injury	■ Signal ■ Curb
← Backing	↘ Right turn	● Fatality	■ Tree □ Animal
← Overtaking	↙ Left turn	👤 Nighttime	◀ 3rd vehicle
← Sideswipe	↺ U-turn	🚗 DUI	★ Extra data

.39 / MEV 4 Accidents	Los Osos Valley & Royal 01/01/03 - 12/31/03
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07/07/2003
 11/18/2003
 11/20/2003

08/24/2003

Within 75' of Intersection, (0) accidents with insufficient data for display			
← Straight	⊞ Parked	× Pedestrian	Fixed objects:
← Stopped	⚡ Erratic	⌘ Bicycle	□ General ■ Pole
← Unknown	⚡ Out of control	○ Injury	■ Signal ■ Curb
↔ Backing	↘ Right turn	☠ Fatality	■ Tree ☒ Animal
↔ Overtaking	↙ Left turn	🕒 Nighttime	◀ 3rd vehicle
↔ Sideswipe	↵ U-turn	🚔 DUI	★ Extra data

.29 / MEV 3 Accidents	Grand & Monterey 01/01/03 - 12/31/03
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- 01/18/2003
- 02/04/2003
- 02/08/2003



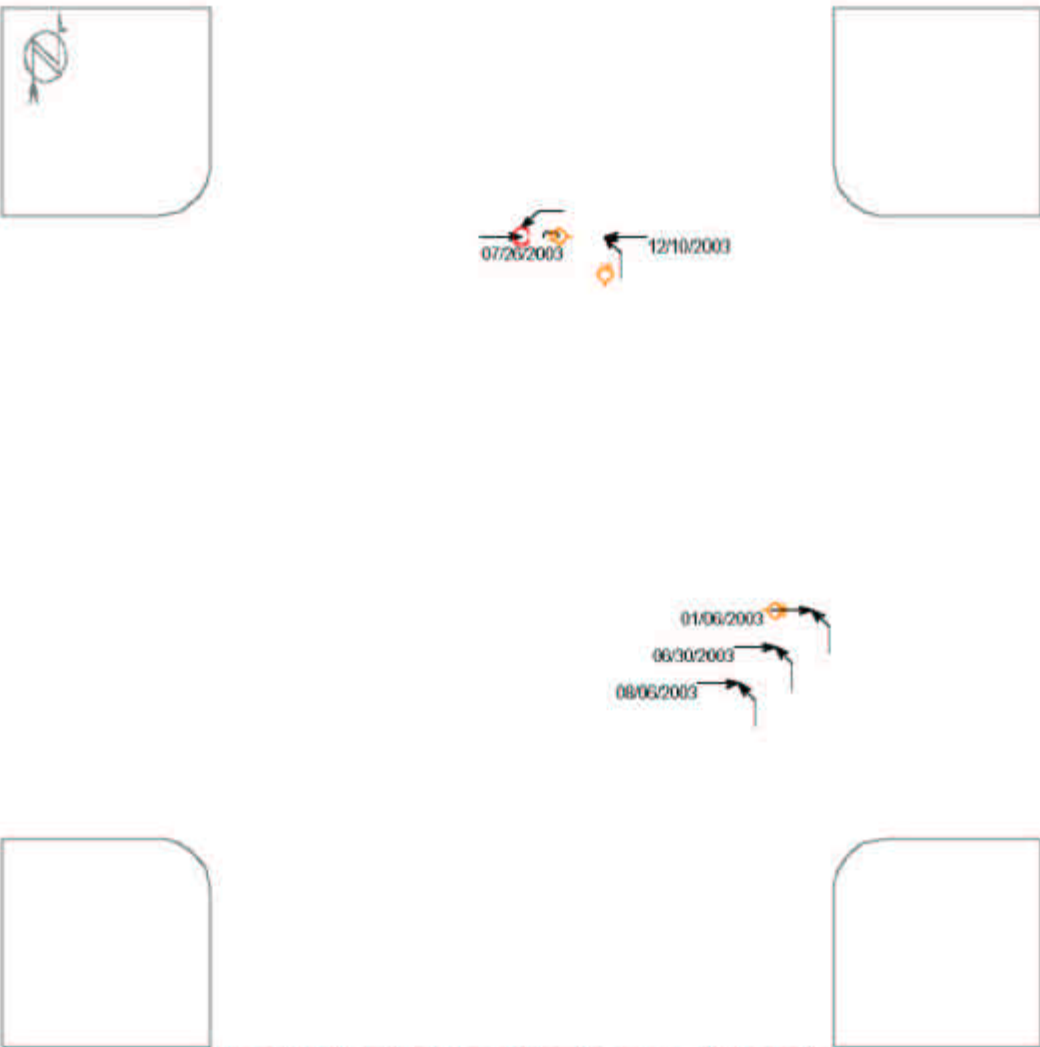
Within 75' of Intersection. (0) accidents with insufficient data for display

<ul style="list-style-type: none"> ← Straight ← Stopped ← Unknown ↔ Backing ↔ Overtaking ↔ Sideswipe 	<ul style="list-style-type: none"> ▬ Parked ↪ Erratic ⚡ Out of control ↪ Right turn ↪ Left turn ↪ U-turn 	<ul style="list-style-type: none"> × Pedestrian × Bicycle ○ Injury ⊙ Fatality ⏰ Nighttime ⚡ DUI 	<p>Fixed objects:</p> <ul style="list-style-type: none"> □ General ▣ Signal ■ Tree ▣ Pole ▣ Curb ▣ Animal ◀ 3rd vehicle ★ Extra data
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Other Significant Intersections Prioritized by Accident Rate
Collision at intersections without all-way control

Rank	Prev. Rank	Intersection	Count	Volume	Rate	Class	Control	EB	WB	NB	SB
1	N/A	Lawton & South	5	14,146	0.968	A/L	1-STOP	6,650	6,650	846	NA
2	N/A	Monterey & Toro	5	14,192	0.965	A/L	2-STOP	4,807	6,385	<u>1,500</u>	<u>1,500</u>
3	N/A	Carmel & Marsh	5	14,752	0.929	A/L	2-STOP	13,305	NA	587	860
4	N/A	Roundhouse & Santa Barbara	5	14,978	0.915	A/L	1-STOP	NA	<u>300</u>	8,597	6,081
5	N/A	Osos & Pacific	5	15,714	0.872	A/L	2-STOP	<u>1,395</u>	<u>1,395</u>	9,580	3,344
6	N/A	Meinecke & Santa Rosa	7	35,077	0.547	A/L	2-STOP	<u>1,577</u>	NA	16,750	16,750
7	N/A	Montalban & Santa Rosa	7	35,593	0.539	A/L	2-STOP	500	1,593	16,750	16,750
8	N/A	Grand & Loomis	5	29,257	0.468	A/L	1-STOP	NA	3,925	12,666	12,666
9	N/A	Oak & Santa Rosa	5	34,200	0.401	A/L	2-STOP	NA	<u>700</u>	16,750	16,750

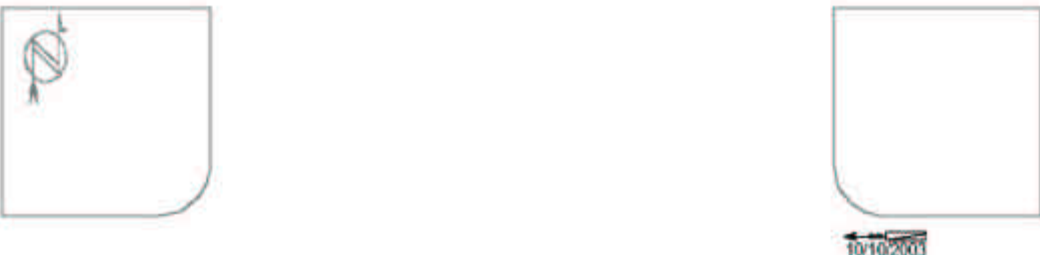
<p>.97 / MEV 5 Accidents</p>	<p style="text-align: right;">Lawton & South 01/01/03 - 12/31/03</p>
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▬ Parked	✕ Pedestrian	Fixed objects:
← Stopped	← Erratic	✕ Bicycle	□ General ■ Pole
← Unknown	← Out of control	○ Injury	■ Signal ■ Curb
← Backing	↘ Right turn	● Fatality	■ Tree ☒ Animal
← Overtaking	↙ Left turn	👤 Nighttime	◁ 3rd vehicle
← Sideswipe	↺ U-turn	🚗 DUI	★ Extra data

.97 / MEV 5 Accidents	Monterey & Toro 01/01/03 - 12/31/03
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Within 75' of Intersection, (0) accidents with insufficient data for display

← Straight	▬ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General ■ Pole
← Unknown	← Out of control	○ Injury	■ Signal ■ Curb
← Backing	↘ Right turn	● Fatality	■ Tree □ Animal
← Overtaking	↙ Left turn	👤 Nighttime	◀ 3rd vehicle
← Sideswipe	↺ U-turn	🚗 DUI	★ Extra data

.93 / MEV 5 Accidents	Carmel & Marsh 01/01/03 - 12/31/03
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04/18/2003
07/02/2003

05/10/2003

08/06/2003
02/12/2003



Within 75' of Intersection, (0) accidents with insufficient data for display

- | | | | |
|--------------|------------------|--------------|---------------------|
| ← Straight | ▨ Parked | × Pedestrian | Fixed objects: |
| ← Stopped | ← Erratic | × Bicycle | □ General ▣ Pole |
| ← Unknown | ← Out of control | ○ Injury | ▣ Signal ▣ Curb |
| ← Backing | ↘ Right turn | ⊙ Fatality | ■ Tree ▣ Animal |
| ← Overtaking | ↙ Left turn | 👤 Nighttime | ◁ 3rd vehicle |
| ← Sideswipe | ↔ U-turn | 🚗 DUI | ★ Extra data |

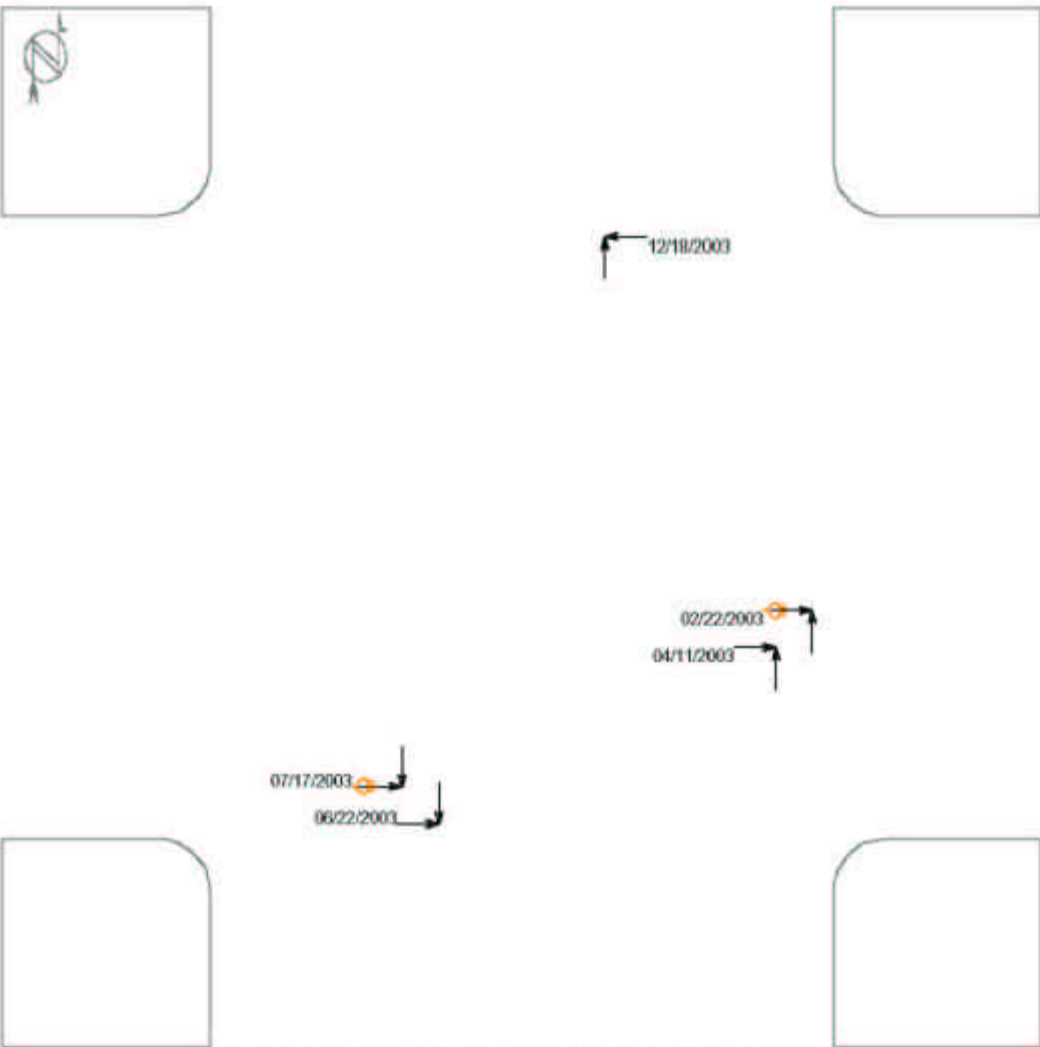
.92 / MEV 5 Accidents	Roundhouse & Santa Barbara 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▬ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General
← Unknown	← Out of control	○ Injury	▣ Signal
← Backing	↘ Right turn	● Fatality	■ Tree
← Overtaking	↙ Left turn	👤 Nighttime	◁ 3rd vehicle
← Sideswipe	↺ U-turn	🚗 DUI	★ Extra data
			▣ Pole
			▣ Curb
			▣ Animal

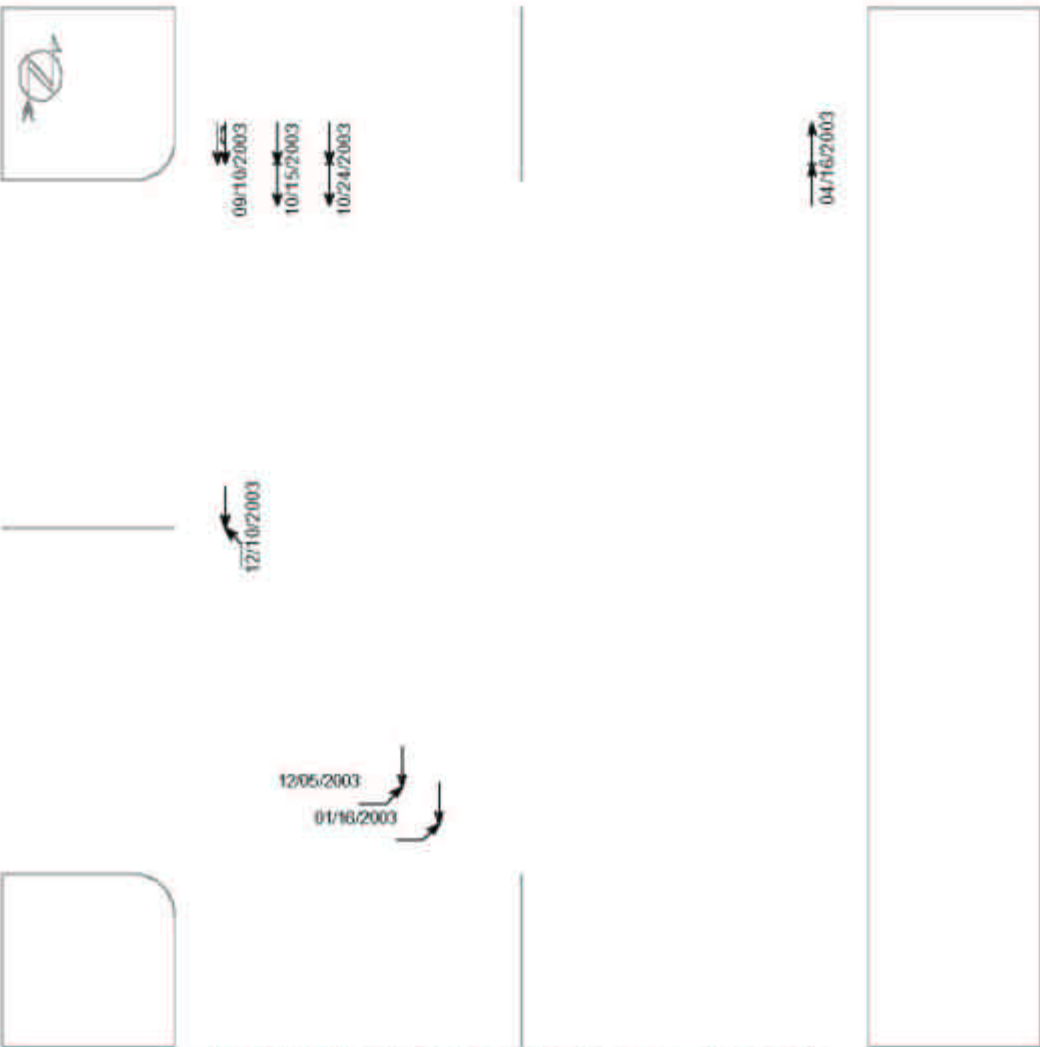
.87 / MEV 5 Accidents	Osos & Pacific 01/01/03 - 12/31/03
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Within 75' of intersection. (0) accidents with insufficient data for display

← Straight	▬ Parked	× Pedestrian	Fixed objects:
← Stopped	↪ Erratic	× Bicycle	□ General ■ Pole
← Unknown	↪ Out of control	○ Injury	■ Signal ■ Curb
↔ Backing	↪ Right turn	⊙ Fatality	■ Tree ☒ Animal
↔ Overtaking	↪ Left turn	👤 Nighttime	◀ 3rd vehicle
↔ Sideswipe	↪ U-turn	🚗 DUI	★ Extra data

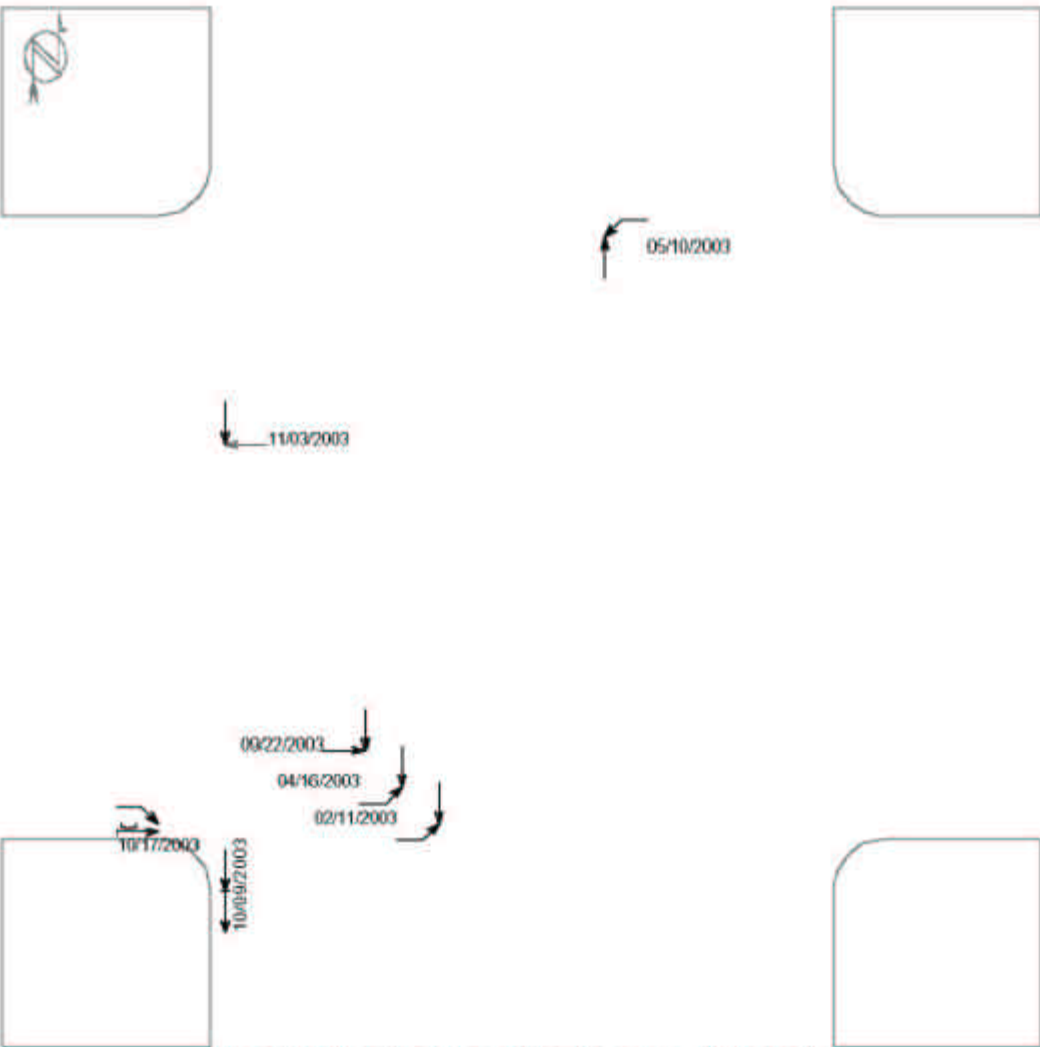
.55 / MEV 7 Accidents	Meinecke & Santa Rosa 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▨ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General ▣ Pole
← Unknown	← Out of control	○ Injury	▣ Signal ▣ Curb
← Backing	↘ Right turn	⊙ Fatality	■ Tree ☒ Animal
← Overtaking	↙ Left turn	🕒 Nighttime	◁ 3rd vehicle
← Sideswipe	↵ U-turn	🚔 DUI	★ Extra data

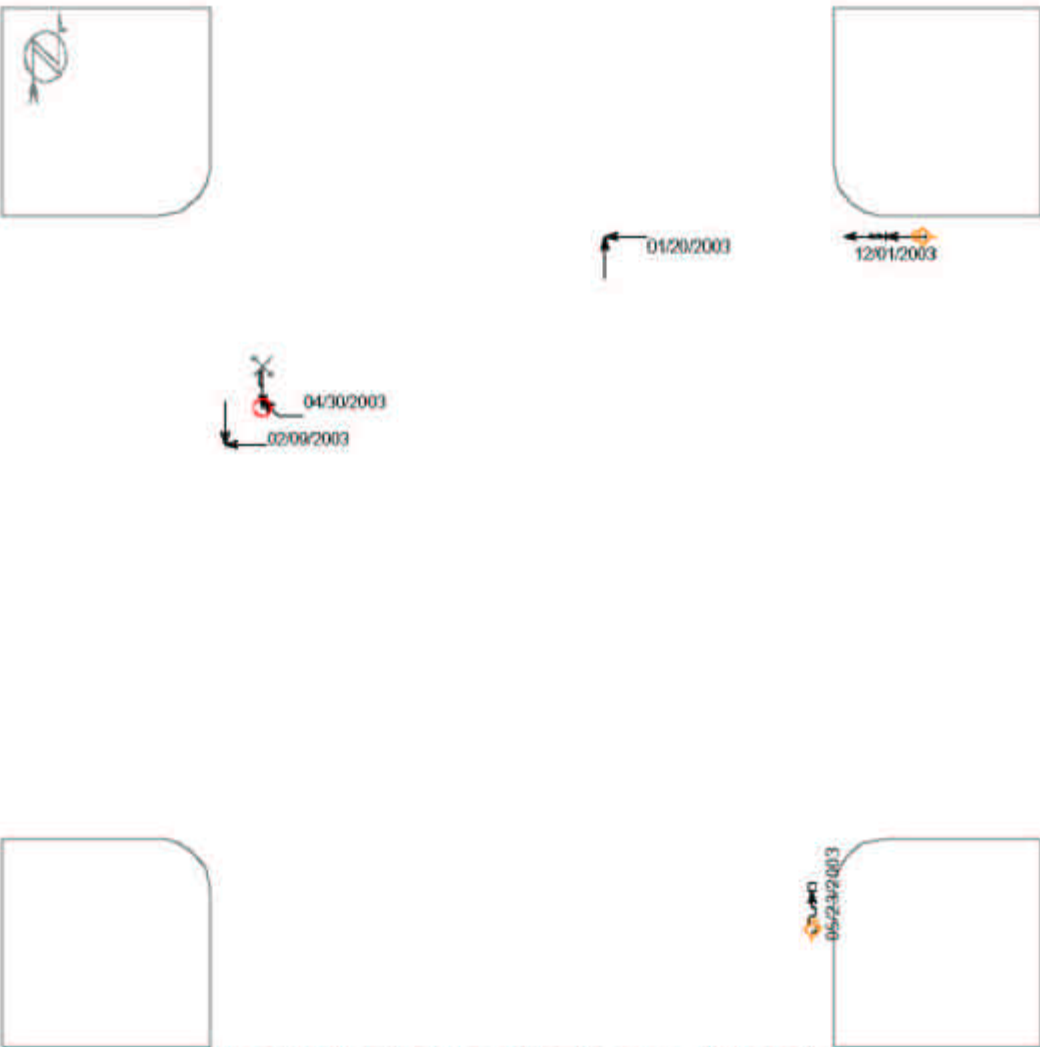
.54 / MEV 7 Accidents	Montalban & Santa Rosa 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▬ Parked	× Pedestrian	Fixed objects:
← Stopped	↪ Erratic	× Bicycle	□ General ■ Pole
← Unknown	↪ Out of control	○ Injury	■ Signal ■ Curb
↔ Backing	↪ Right turn	⊙ Fatality	■ Tree ☒ Animal
↔ Overtaking	↪ Left turn	🕒 Nighttime	◀ 3rd vehicle
↔ Sideswipe	↪ U-turn	🚔 DUI	★ Extra data

.47 / MEV 5 Accidents	Grand & Loomis 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▨ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General
← Unknown	← Out of control	○ Injury	▣ Signal
← Backing	↘ Right turn	⊙ Fatality	■ Tree
← Overtaking	↙ Left turn	👤 Nighttime	◁ 3rd vehicle
← Sideswipe	↺ U-turn	🚔 DUI	★ Extra data

.40 / MEV 5 Accidents	Oak & Santa Rosa 01/01/03 - 12/31/03
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Within 75' of intersection, (0) accidents with insufficient data for display

← Straight	▬ Parked	× Pedestrian	Fixed objects:
← Stopped	← Erratic	× Bicycle	□ General
← Unknown	← Out of control	○ Injury	▣ Signal
← Backing	↘ Right turn	⊙ Fatality	■ Tree
← Overtaking	↙ Left turn	⊠ Nighttime	◁ 3rd vehicle
← Sideswipe	↺ U-turn	⊡ DUI	✱ Extra data
			▣ Pole
			▣ Curb
			▣ Animal

Appendix 8

Arterial Segments

Arterial Segments Prioritized by Accident Rate

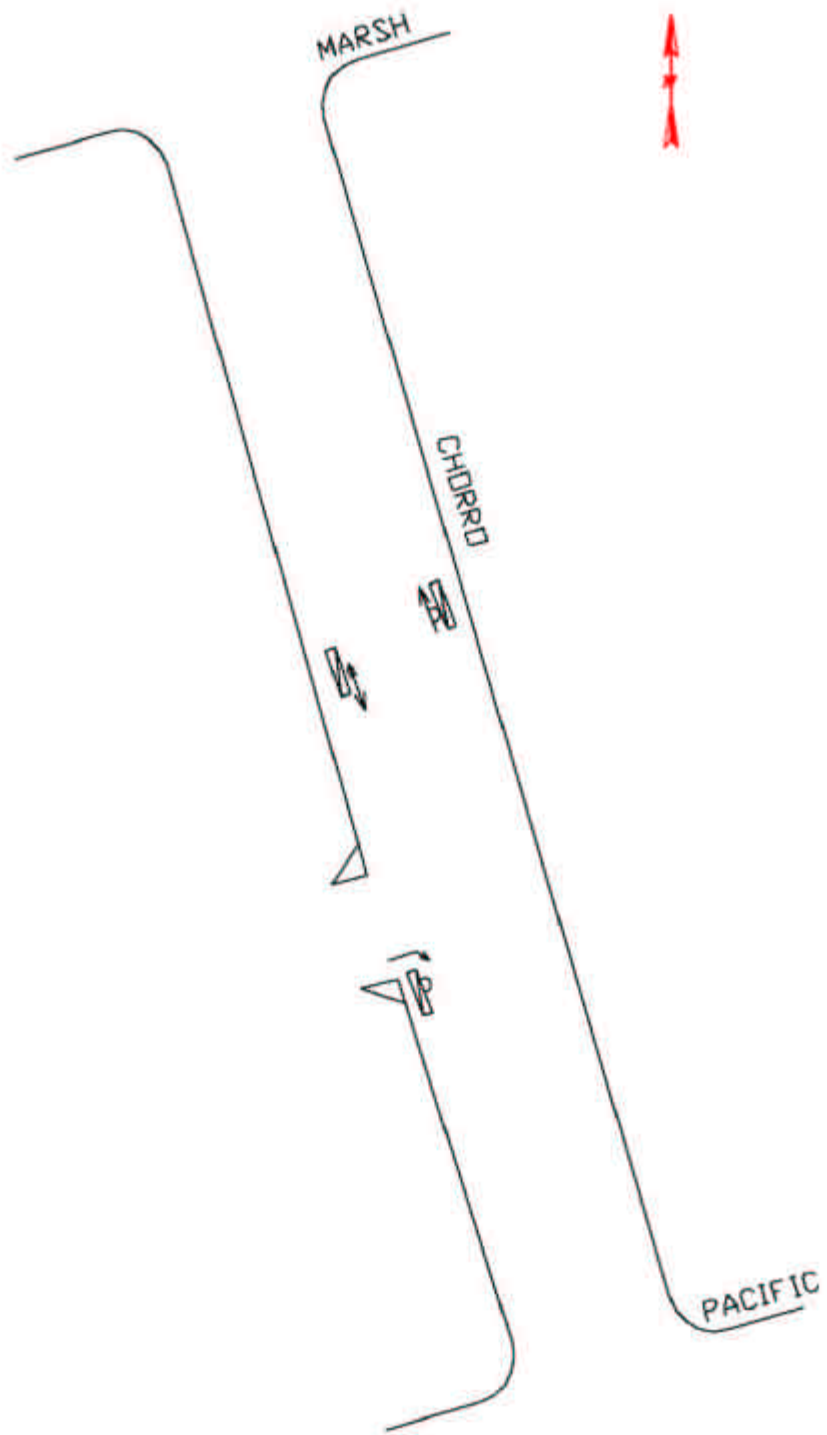
Rank	Prev. Rank	Class	Segment	Collisions	Volume	SegLen	Rate
1	Not Ranked	A	CHORRO 1200 BLK	3	3609	0.06	36.43859
2	Not Ranked	A	CHORRO 1000 BLK	4	7827	0.06	24.64249
3	16	A	HIGUERA 400 BLK	3	8846	0.11	8.458385
4	Not Ranked	A	BROAD 3000 BLK	8	30000	0.09	8.036531
5	17	A	HIGUERA 200	8	15987	0.18	7.462639
6	14	A	MARSH 800 BLK	3	12939	0.09	7.45331
7	Not Ranked	A	HIGUERA 700 BLK	3	9650	0.12	7.372338
8	18	A	FOOTHILL 1100 BLK	5	19233	0.12	5.876032
9	8	A	FOOTHILL 1000 BLK	5	19233	0.12	5.785631
10	20	A	ORCUTT 700 BLK	3	15406	0.11	4.941942
11	26	A	CALIFORNIA 200-400 BLK	11	25184	0.25	4.715246
12	Not Ranked	A	TANKFARM 700 BLK	3	11057	0.16	4.617492
13	Not Ranked	A	FOOTHILL 300 BLK	3	13710	0.13	4.587498
14	22	A	HIGUERA 500 BLK	3	8846	0.21	4.459876
15	23	A	FOOTHILL 800-900 BLK	8	29760	0.17	4.226787
16	31	A	LOS OSOS VALLEY 11400-11500 BLK	5	23855	0.17	3.368909
17	Not Ranked	A	SANTA BARBARA 2000-2100 BLK	3	14678	0.17	3.303486
18	37	A	LOS OSOS VALLEY 12200-12400 BLK	7	19106	0.30	3.291877
19	Not Ranked	A	HIGUERA 3900 BLK	4	17458	0.22	2.894684
20	Not Ranked	A	JOHNSON 2000-2100 BLK	5	19260	0.27	2.68242
21	Not Ranked	A	MONTEREY 1600-1700 BLK	3	20905	0.15	2.661446
22	Not Ranked	A	JOHNSON 2800-3000 BLK	3	14510	0.22	2.600741
23	Not Ranked	A	BROAD 3800-3900 BLK	4	25500	0.21	2.062853
24	34	A	MADONNA 400-100 BLK	7	31454	0.32	1.927733
25	29	A	LOS OSOS VALLEY 11600-11800 BLK	3	19751	0.23	1.831016
26	33	A	HIGUERA 10 BLK	3	15104	0.31	1.782401
27	Not Ranked	A	LOS OSOS VALLEY 11200 BLK	3	24394	0.19	1.779014
28	Not Ranked	A	BROAD 3500-3700 BLK	6	25500	0.38	1.701854
29	Not Ranked	A	BROAD 3200-3400 BLK	3	25500	0.20	1.58312
30	32	A	MADONNA 500 BLK	3	21209	0.27	1.461552
31	38	A	BROAD 2200 BLK	3	30000	0.79	0.345245

36.43 / MVM CHORRO 1200 BLK
 3 Accidents (rate:0.69) 01/01/03 - 12/31/03



(clear filter), (0) accidents with insufficient data for display

- | | | | |
|--------------|------------------|--------------|----------------|
| ← Straight | ▬ Parked | × Pedestrian | Fixed objects: |
| ← Stopped | ⤿ Erratic | ⊗ Bicycle | □ General |
| ← Unknown | ⤿ Out of control | ○ Injury | ▣ Signal |
| ↔ Backing | ↘ Right turn | ⊙ Fatality | ■ Tree |
| ↔ Overtaking | ↙ Left turn | 🕒 Nighttime | ◀ 3rd vehicle |
| ↔ Sideswipe | ↵ U-turn | 🚔 DUI | ★ Extra data |
| | | | ▣ Pole |
| | | | ▣ Curb |
| | | | ▣ Animal |

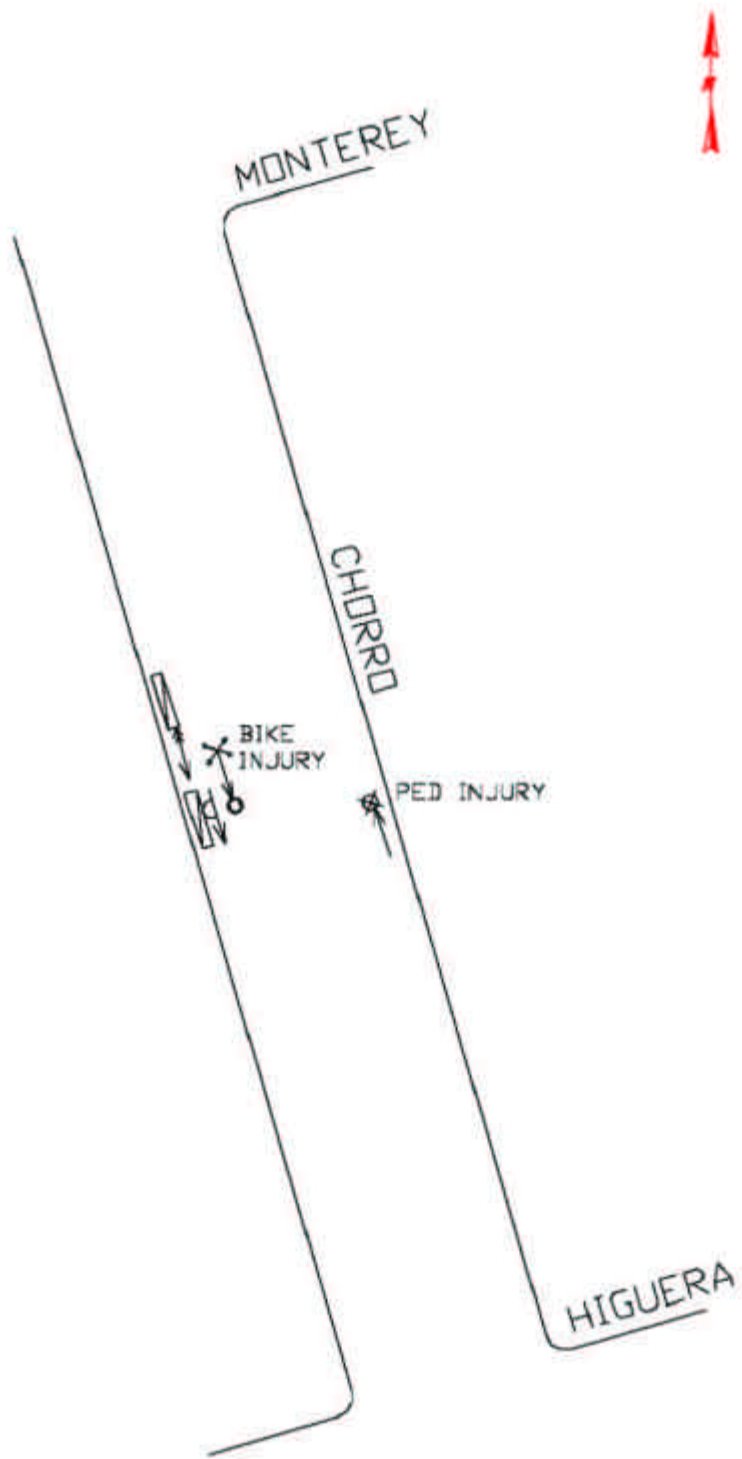


24.64 / MVM CHORRO 1000 BLK
 4 Accidents (rate:0.47) 01/01/03 - 12/31/03



(clear filter), (0) accidents with insufficient data for display

- | | | | | |
|--------------|------------------|--------------|----------------|----------|
| ← Straight | ▬ Parked | × Pedestrian | Fixed objects: | |
| ← Stopped | ⤿ Erratic | ⊗ Bicycle | □ General | ▣ Pole |
| ← Unknown | ⤿ Out of control | ○ Injury | ▣ Signal | ▣ Curb |
| ↔ Backing | ↘ Right turn | ⊙ Fatality | ▣ Tree | ⊠ Animal |
| ↔ Overtaking | ↙ Left turn | 🕒 Nighttime | ◀ 3rd vehicle | |
| ↔ Sideswipe | ↵ U-turn | 🚔 DUI | ★ Extra data | |



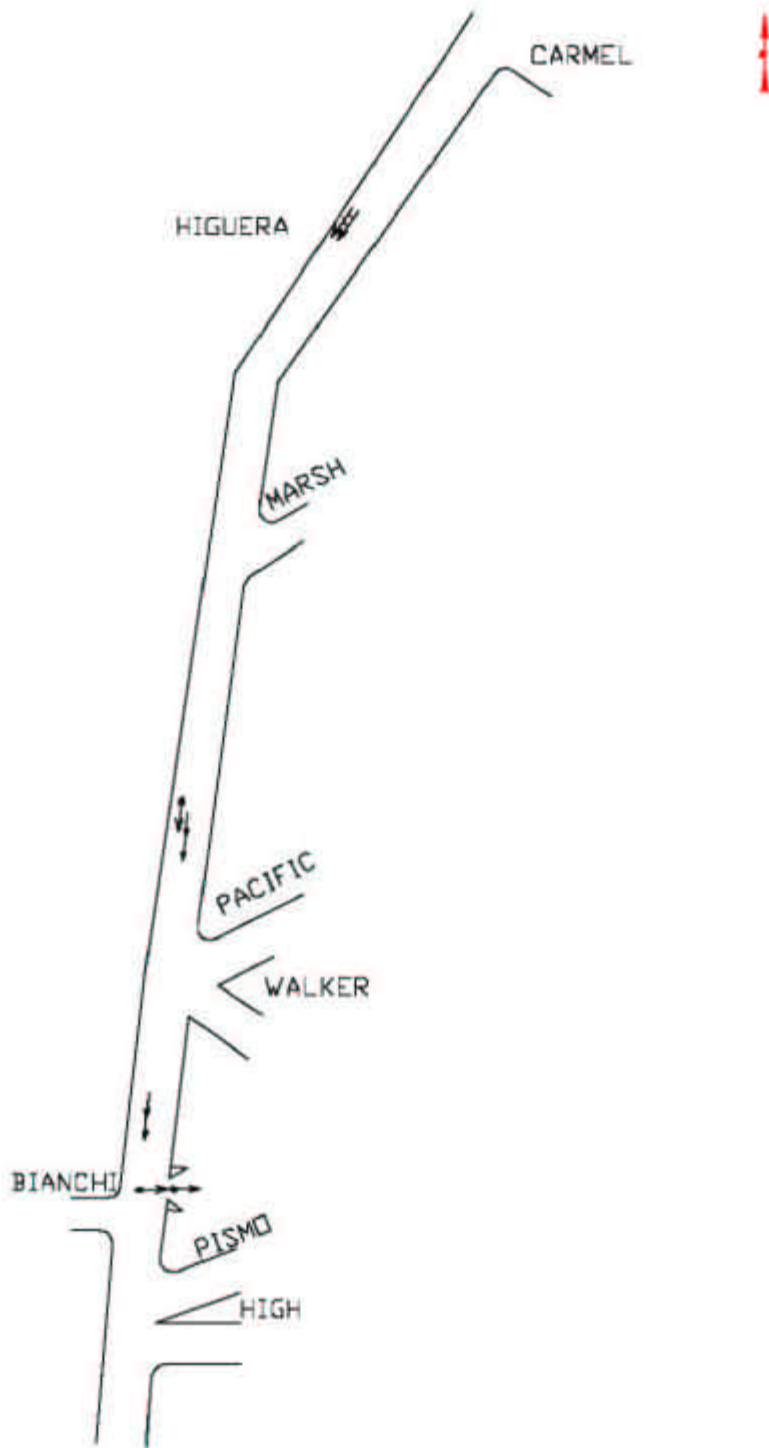
8.45 / MVM HIGUERA 400 BLK
 3 Accidents (rate:0.16) 01/01/03 - 12/31/03



05/14/2003
 09/11/2003



- (clear filter), (0) accidents with insufficient data for display
- | | | | |
|--------------|------------------|--------------|----------------------|
| ← Straight | ▬ Parked | × Pedestrian | Fixed objects: |
| ← Stopped | ↪ Erratic | × Bicycle | □ General ■ Pole |
| ← Unknown | ⚡ Out of control | ○ Injury | ■ Signal ■ Curb |
| ↔ Backing | ↘ Right turn | ⊙ Fatality | ■ Tree ☒ Animal |
| ↔ Overtaking | ↙ Left turn | 🕒 Nighttime | ◀ 3rd vehicle |
| ↔ Sideswipe | ↺ U-turn | 🚔 DUI | ★ Extra data |



8.04 / MVM BROAD 3000 BLK
 8 Accidents (rate:0.15) 01/01/03 - 12/31/03



(clear filter), (0) accidents with insufficient data for display

- | | | | |
|--------------|------------------|--------------|----------------|
| ← Straight | ▨ Parked | × Pedestrian | Fixed objects: |
| ← Stopped | ↪ Erratic | ⊗ Bicycle | □ General |
| ← Unknown | ⚡ Out of control | ○ Injury | ▣ Signal |
| ↔ Backing | ↘ Right turn | ⊙ Fatality | ■ Tree |
| ↔ Overtaking | ↙ Left turn | 🕒 Nighttime | ◀ 3rd vehicle |
| ↔ Sideswipe | ↺ U-turn | 🚔 DUI | ★ Extra data |
| | | | ▣ Pole |
| | | | ▣ Curb |
| | | | ▣ Animal |

SWEENEY



BROAD



INJURY



ORCUTT

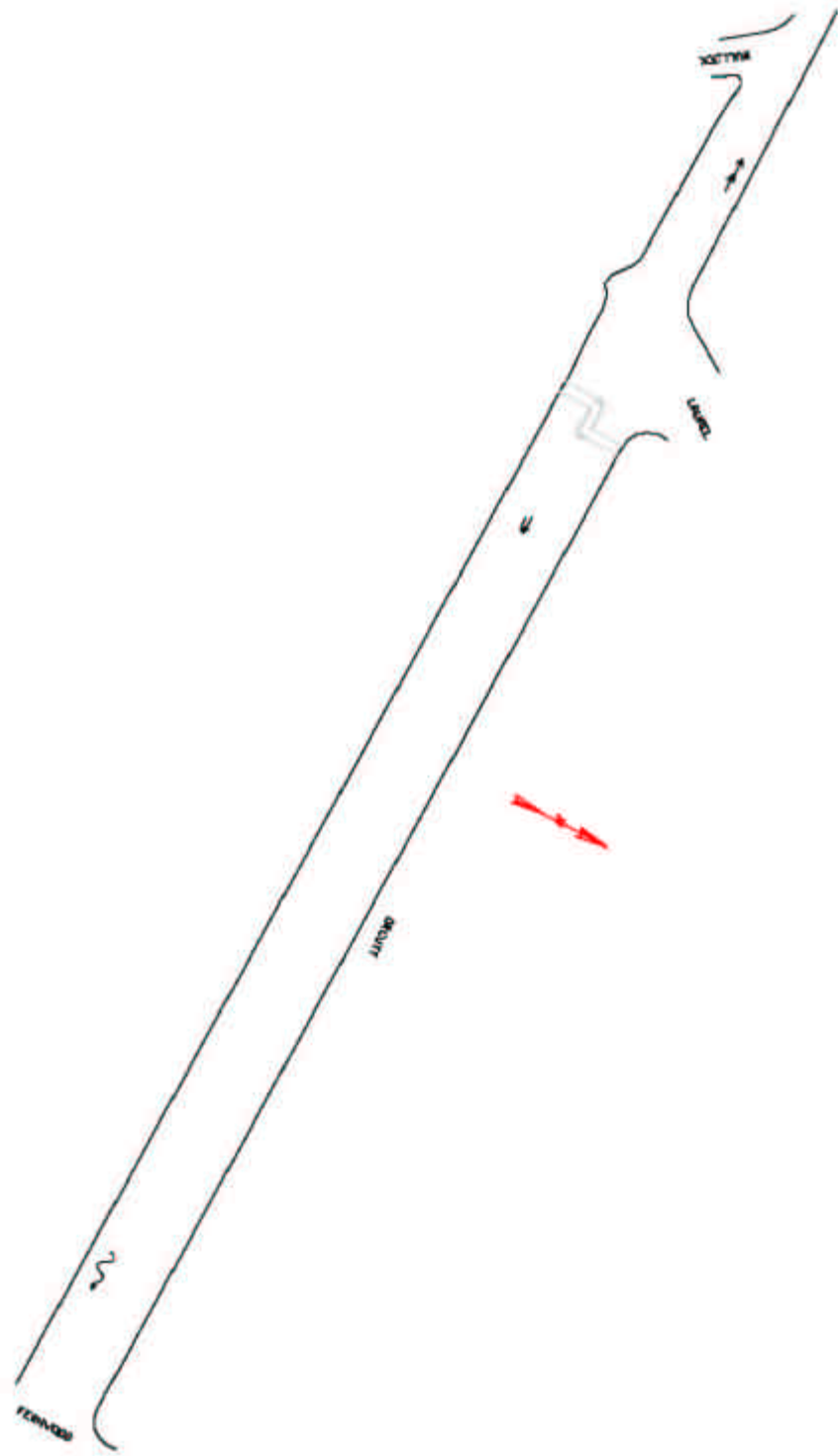


7.46 / MVM HIGUERA 200
 8 Accidents (rate:0.14) 01/01/03 - 12/31/03



(clear filter), (0) accidents with insufficient data for display

- | | | | | |
|--------------|------------------|--------------|----------------|----------|
| ← Straight | ▨ Parked | × Pedestrian | Fixed objects: | |
| ← Stopped | ↪ Erratic | × Bicycle | □ General | ▣ Pole |
| ← Unknown | ↪ Out of control | ○ Injury | ▣ Signal | ▣ Curb |
| ↔ Backing | ↪ Right turn | ⊙ Fatality | ▣ Tree | ▣ Animal |
| ↔ Overtaking | ↪ Left turn | 👤 Nighttime | ◀ 3rd vehicle | |
| ↔ Sideswipe | ↪ U-turn | 🚗 DUI | ★ Extra data | |



Appendix 9

Collector Segments

Collector Segments Prioritized by Accident Rate

Rank	Prev. Rank	Class	Segment	Collisions	Volume	SegLen	Rate
1	Not Ranked	C	BROAD 400 BLK	3	6932	0.068182	17.39007

17.39 / MVM BROAD 400 BLK
 3 Accidents (rate:0.33) 01/01/03 - 12/31/03

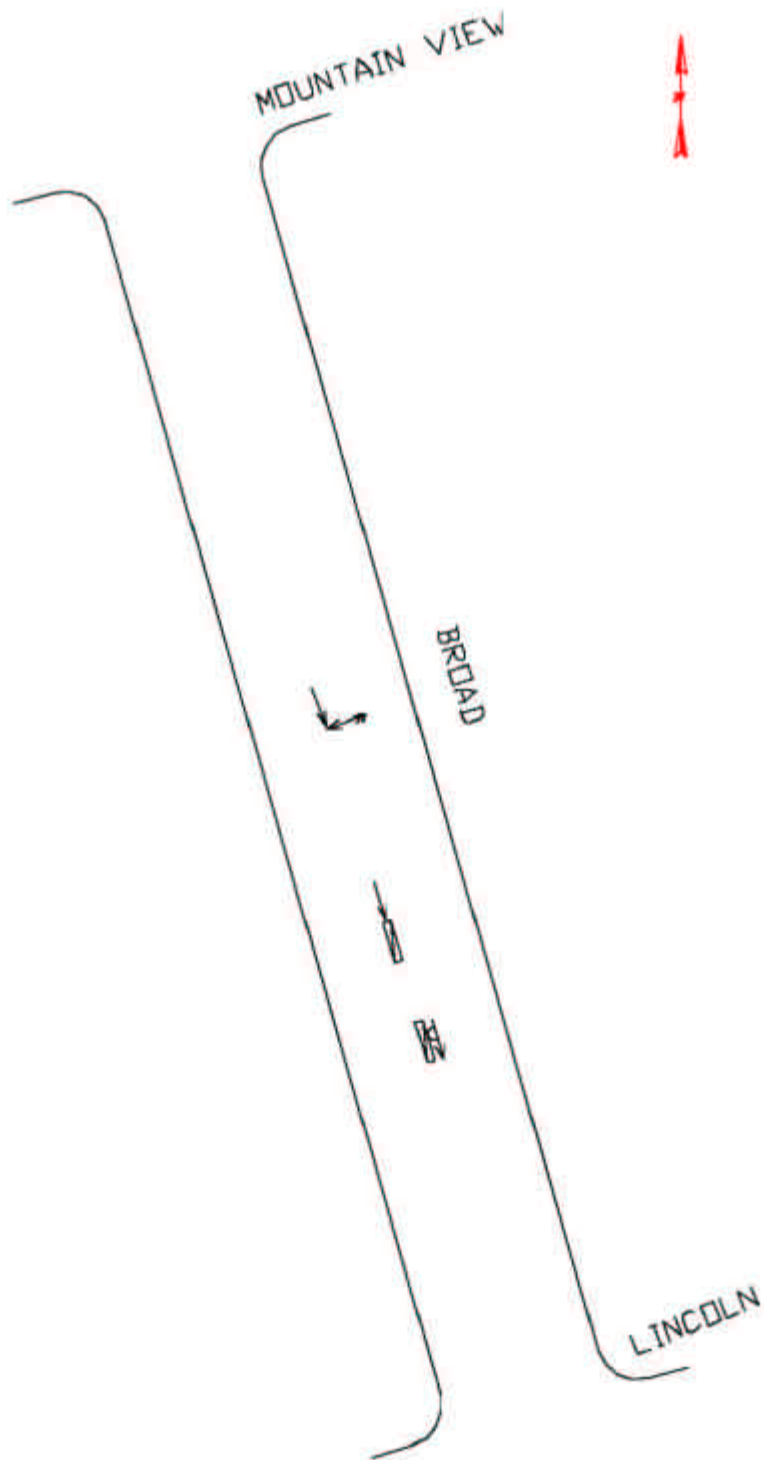


12/02/2003



(clear filter), (0) accidents with insufficient data for display

- | | | | |
|--------------|------------------|--------------|--|
| ← Straight | ▬ Parked | × Pedestrian | Fixed objects: |
| ← Stopped | ↪ Erratic | × Bicycle | <input type="checkbox"/> General <input type="checkbox"/> Pole |
| ← Unknown | ↪ Out of control | ○ Injury | <input type="checkbox"/> Signal <input type="checkbox"/> Curb |
| ↔ Backing | ↪ Right turn | ⊙ Fatality | <input type="checkbox"/> Tree <input type="checkbox"/> Animal |
| ↔ Overtaking | ↪ Left turn | ⊙ Nighttime | ◁ 3rd vehicle |
| ↔ Sideswipe | ↪ U-turn | ⊙ DUI | ★ Extra data |



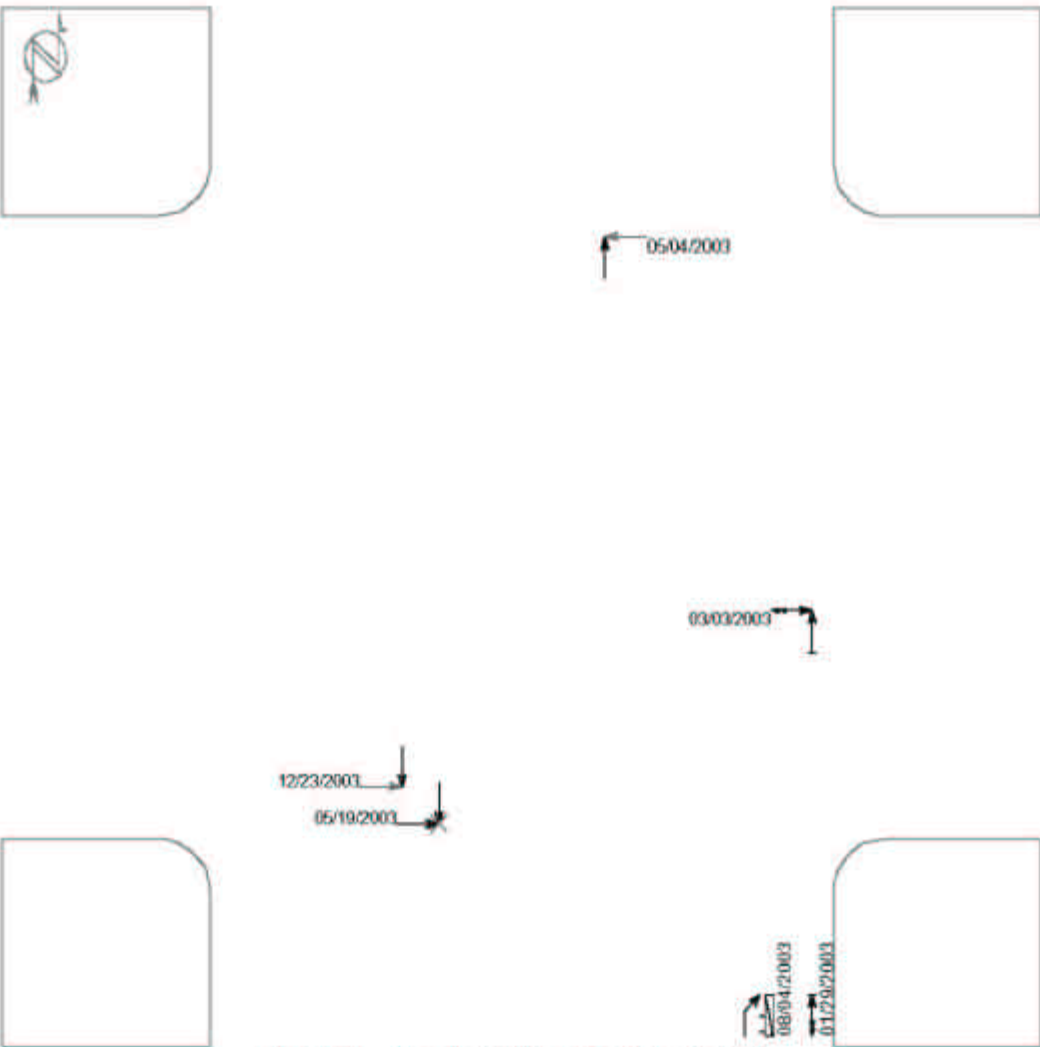
Appendix 10

Local Segments

Local Segments Prioritized by Accident Rate

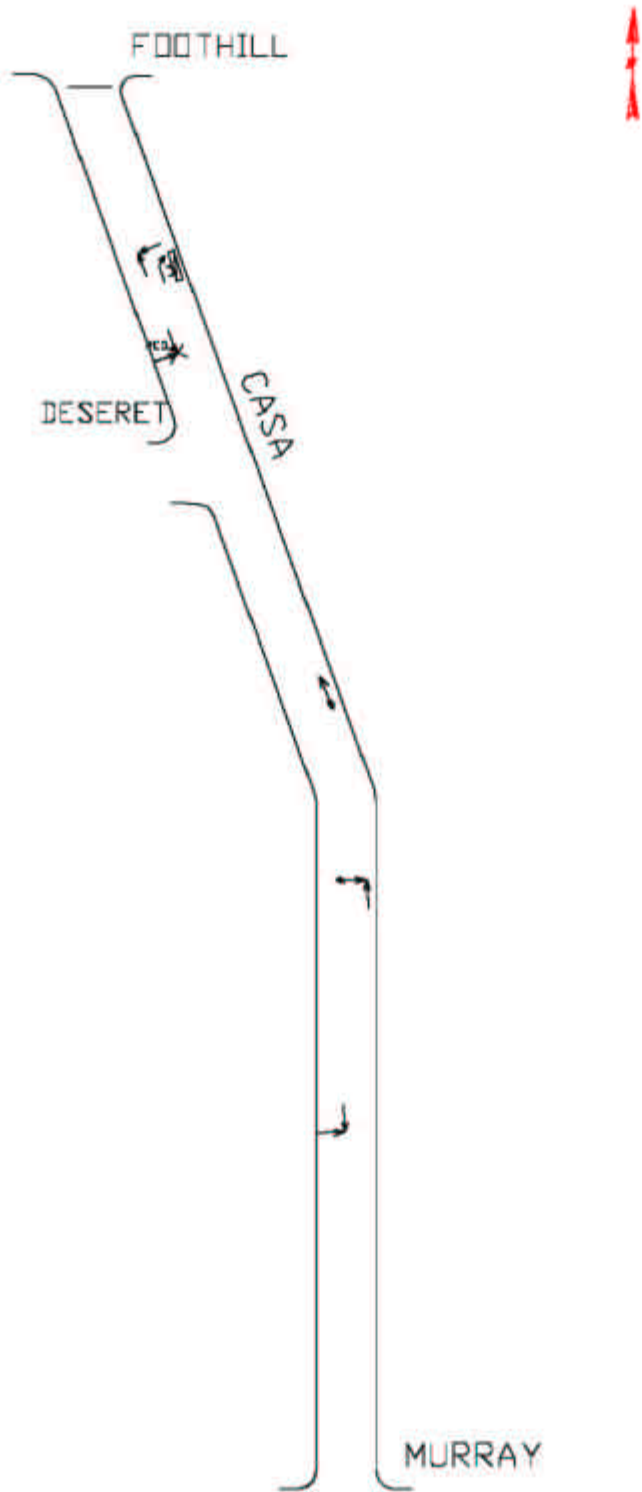
Rank	Prev. Rank	Class	Segment	Collisions	Volume	SegLen	Rate
1	5	L	CASA 10-200 BLK	6	3963	0.25	16.59183

16.59 / MVM	CASA 10-200 BLK
6 Accidents (rate:0.31)	01/01/03 - 12/31/03



(clear filter), (0) accidents with insufficient data for display

- | | | | |
|--------------|------------------|--------------|----------------|
| ← Straight | ▬ Parked | × Pedestrian | Fixed objects: |
| ← Stopped | ⚡ Erratic | ⊗ Bicycle | □ General |
| ← Unknown | ⚡ Out of control | ○ Injury | ▣ Signal |
| ↔ Backing | ↘ Right turn | ⊙ Fatality | ■ Tree |
| ↔ Overtaking | ↙ Left turn | 🕒 Nighttime | ◀ 3rd vehicle |
| ↔ Sideswipe | ↺ U-turn | 🚔 DUI | ★ Extra data |
| | | | ▣ Pole |
| | | | ▣ Curb |
| | | | ▣ Animal |



Appendix 11

2003 Police Department Traffic Safety Unit Operations Report



2003 Traffic Safety Unit Report.

City of San Luis Obispo

Police department
1042 Walnut Street
San Luis Obispo CA 93401

"Service, Pride, Integrity"

2003 SUMMARY

The San Luis Obispo Police Department Traffic Unit had another busy year. During 2003, officers from the Unit were assigned to supplement the Patrol Division due to personnel shortages. Manpower shortages in the department resulted in less time for enforcement activities by Patrol Officers and Traffic Officers. The Traffic Officers who were assigned to the Traffic Unit were extremely busy investigating collisions and handling special events such as the Christmas Parade, the Bicycle Rodeo, etc,

We did not have any fatal traffic collisions in 2003.

The number of collisions decreased slightly from 1,388 in 2002 to 1,230 in 2003—an 11 % reduction.

Pedestrian collisions dropped significantly from 43 in 2002 to 29 in 2003—a 33% reduction.

Bicycle collisions remained about the same-- with 54 in 2002 and 53 in 2003.

Traffic Unit Personnel

The following officers were assigned to the Traffic Unit:

Sergeant. Tolley supervised the Unit for approx three months. Sergeant. Tolley was promoted to Lieutenant and transferred to Patrol.

Sergeant LaHargoue assumed supervision of the Unit until his retirement in December 2003.

Officer Owen is certified in child safety seat inspections and is a certified collision reconstructionist. He is a certified basic, intermediate and advanced collision investigator.

Officer Kevany is certified in basic, intermediate and advanced collision investigation and is a certified collision reconstructionist with a specialty in occupant kinematics. Additionally, she is a certified police motorcycle trainer.

Officer Booth is certified in basic, intermediate and advanced collision investigation.

Officer Gallo is certified in basic collision investigation.

PROGRAMS

San Luis Obispo Traffic Committee

Public Works and the Police Department continued to work together on traffic-related issues. The committee met on a number of occasions to resolve collision and enforcement related issues.

DUI Enforcement

The number of DUI arrests for 2003 was 18% less than in 2002. The number of DUI-related collisions for 2003 dropped by .09%.

Officer Booth became the department's representative at the monthly DUI Task Force meetings.

The traffic team coordinated one DUI checkpoint with the Cal Poly State University Police Department. During the checkpoint, 456 drivers were screened, four drivers were arrested for DUI, and 11 drivers were cited for being unlicensed or for having suspended licenses. All the drivers who had drivers' license problems had their cars towed and impounded for 30 days.

Vehicle Impound Program

Enforcement of vehicle laws related to individuals who drive cars while their licenses are suspended continues to be a strong focus of the Traffic Safety Unit and the entire Patrol Division. In 2003, officers impounded 123 cars for 30 days from drivers who had suspended licenses or were never licensed.

Bicycle Safety Rodeo

For the sixth year in a row, the San Luis Obispo Police Department and the Parks and Recreation Department conducted a very successful bicycle rodeo. The event was held at the Madonna plaza and approximately 150 youths participated in the event. Each participant received a tee shirt and a prize bag containing a flashing red reflector and other items.

As part of the bicycle safety program, a professional bicycle stunt group performed at the bicycle rodeo at six schools and during the Thursday night Farmer's Market.

American Association of Retired Persons (AARP)- "55 Alive"

Officers Gallo and Owen spoke to a group of seniors who were attending an AARP-sponsored class on traffic safety. Issues relating to traffic safety and safe driving were covered.

Special Events

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

- Mardi Gras Parade
- Cirque du Earth Day

- Hospice Fun Run
- Lost Drive-In Car Cruise
- Wheels of SLO
- City to Sea Marathon
- Cal Poly Homecoming Parade
- San Luis High School Homecoming Parade
- SLO Holiday Parade

Officers from the Traffic Unit assisted the following agencies with special events:

- The Elks Parade, Santa Maria
- Fourth of July events in Pismo Beach and Cayucos
- Car show in Paso Robles
- Two funerals in Atascadero

Traffic Index

The traffic index--the ratio of hazardous citations issued divided by the number of injury and fatal collisions--is a gauge of how effective a traffic safety program is. The Office of Traffic Safety considers an enforcement index of 25 to be the minimum effective rate. In cities where there is high tourism, the rate is expected to be between 25-35, as tourists are not aware of traffic issues and problem areas and are therefore more likely to commit violations. The current index for the City of San Luis Obispo is 7.4. The index is determined by dividing the 2,414 hazardous citations by 327 injury and 0 fatal collisions.

During 2003 the traffic team and Patrol traffic enforcement were hampered by the manpower shortage that was created when several employees retired during the year. In order to meet staffing and work load requirements, traffic officers were assigned to Patrol. This resulted in a higher workload for the remaining traffic officers and less time was available for enforcement efforts--not only for traffic officers but also for patrol officers.

TRAFFIC SAFETY UNIT GOALS FOR 2004

- Have an additional officer certified as a Motorcycle Training Officer.
- Have Officer Gallo obtain his intermediate and advanced collision certificates.
- Have an additional officer certified as a collision reconstructionist.
- Once Patrol and Traffic are fully staffed, take the lead to improve the traffic index to above 20.
- Finish the major collision call-out protocol and policy.

2003 STATISTICS

COLLISIONS

Collision Type	1997	1998	1999	2000	2001	2002	2003	% CHANGE
Fatal	3	1	2	2	1	1	0	-100%
Injury	285	192	195	280	278	327	*327	0%
Non-Injury	1163	981	990	925	981	1060	**903	-15%
Total	1451	1174	1187	1207	1260	1388	1230	-11%
Bicycle	59	43	36	36	42	54	53	-.02%
Pedestrian Involved	26	18	28	29	25	43	***29	-33%
Hit and Run							****140	

* 9 injury collisions occurred on private property.

** 91 non-injury collisions occurred on private property.

*** 5 pedestrian collisions occurred on private property.

**** 98 were on public roadways, of which 13 resulted in minor injuries. 42 hit and run collisions were on private property, which resulted in 2 minor injuries.

TRAFFIC ENFORCEMENT

Citation Type	1997	1998	1999	2000	2001	2002	2003	% CHANGE
Non Hazardous	4002	2335	2635	2335	2049	2051	2603	+ 27%
Hazardous	3081	3153	3480	4526	5191	4837	2414	-50%
Total	5706	7083	5478	6115	6861	7240	5017	-31%

DUI ENFORCEMENT

DUI Enforcement	1997	1998	1999	2000	2001	2002	2003	% CHANGE
DUI Arrests	367	393	450	487	392	493	405	-18%
SLOCOPS	43	56	43	68	33	0	0	
DUI Collisions	37	38	31	47	49	53	48	-.09%

COST RECOVERY

DUI Cost Recovery	Billed	Received	% recovered
2003	\$18,986	\$8,185*	43%
2002	\$21,332	\$10,000	47%
2001	\$18,761	*\$5,667	
2000	\$17,374	\$5,640	32%
1999	\$7,448	\$3,226	43%
1998	\$12,295	\$4,751	39%

* \$10,800 was sent to collections. On average, the collection agency collects on 47% of the amount that is sent to them.

TOP COLLISION INTERSECTIONS

2003

Rank	LOCATION	Number of Collisions
1	Broad at Marsh	11
1	Madonna at Pereira	11
2	Broad at Orcutt	10
2	Foothill at Santa Rosa	10
2	Monterey at Santa Rosa	10
3	Higuera at Santa Rosa	9
4	Higuera at South	8
4	Laurel at Orcutt	8
4	Los Osos Valley at Madonna	8
4	Marsh at Santa Rosa	8

2002

Rank	LOCATION	Number of Collisions
1	Santa Rosa at Foothill	46
2	Los Osos Valley at Madonna	21
3	Santa Rosa at Murray	20
4	Broad at Orcutt	18
5	Santa Rosa at Monterey	16
6	Santa Rosa at Montalban	15
6	Foothill at California	15
7	Broad at Tank Farm	14
8	Santa Rosa at Oak	13
8	Santa Rosa at Olive	13

Cause of Injury Collisions 2003

Number of Collisions	Cause	% of Total
115	Failure to yield	41.3
65	Unsafe Speed	23.3
22	Improper Turning	7.9
17	DUI	6.1
15	Other Improper Driving	5.3
13	Wrong side of the road	4.6
9	Pedestrian Right-of-way	3.2
8	Unsafe Lane Change	2.8
7	Following Too Closely	2.5
7	Unsafe Backing	2.5

Cause of Injury Collisions 2002

Number of Collisions	Cause	% of Total
88	Failure to Yield	27
79	Unsafe Speed	25
37	Other Improper Driving*	12
36	Stop Sign/Signal light	12
16	Improper turns	5
12	DUI	4
11	Following too Closely	4