PUBLIC WORKS DEPARTMENT

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SAN LUIS OBISPO POLICE DEPARTMENT

2010 annual traffic safety report

CITY OF SAN LUIS OBISPO

Traffic Engineering Division & Police Department

October 2011

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a message from the public works and police departments

Welcome to the 10th edition of the City of San Luis Obispo Traffic Safety Report, prepared by staff from the Public Works and Police Departments. The Annual Traffic Safety Report began in 2002 in an attempt to identify high collision locations within the City and actively pursue mitigation measures that may reduce collision rates and improve safety for the citizens of San Luis Obispo.

Calendar year 2010 was yet another watershed year for the City's traffic safety program. Total reported collisions were the *lowest* in the 10 year history of the traffic safety program. Total collisions in 2010 were about 12% lower than recorded collisions in 2009, and approximately 52% lower than recorded in the first year (2002) of the traffic safety program. Injury collisions were also down in 2010 by approximately 1% from 2009, and approximately 25% lower than the total recorded in the first year (2002). These reductions are statistically significant and a very positive indication of the effectiveness of the traffic safety program. Traffic fatalities in any given year are usually random and there was one traffic fatality in the City in 2010, this was the first traffic fatalities reported on City streets since 2006.

The 2010 Traffic Safety Report again looks at bicycle and pedestrian collisions and tracks occurrences to identify potential high profile locations. Similar to fatal collisions, bicycle and pedestrian collision rates tend to occur sporadically both in location and number of occurrences. The overall pedestrian collision trend is down and this continues to be the case in 2010, pedestrian collisions declined by 8% from 2009 to 2010. Bicycle collisions have also declined; from 2009 to 2010 bicycle collisions are down by 4%.

As in previous Traffic Safety Reports, staff reviewed all high collision rate intersections and segment locations and has recommended mitigation measures to increase safety at the top five locations in each category. Our goal is that the combination of thorough analysis, appropriate mitigation, and consistent and focused education and enforcement will continue to reduce traffic collisions and injuries and improve the safety of our motoring, walking and bicycling public.

We would like to thank and acknowledge Public Works employees Tim Bochum, Jake Hudson, Peggy Mandeville, Chris Overby, Matt Crisp, Mateo Echabarne, and Anais Malinge, and Police Department employees Janice Goodwin, Kerri Rosenblum, and Tom DePriest for their tireless work in compiling the necessary information that has gone into this report and disseminating the data to make recommendations for appropriate improvements. Staff from both departments will diligently implement the recommendations outlined in this report in order to continue to make our City streets safer.

Jay Walter
Director of Public Works

Deborah Linden
Chief of Police

executive summary

Annual Traffic Safety Report - 2010

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

Mitigation measures for high collision rate locations for calendar year 2010 have been identified and are summarized in this report. The Annual Traffic Safety Report will be prepared each year to review and report on City traffic safety benchmarks, improve traffic safety performance and maintain high levels of service for our City residents, business owners and visitors.

Since the City initiated the Traffic Safety report in 2002, traffic collisions have been on a downward trend, with the exception of 2004 when the City experienced a spike in accidents due in part to an influx of construction within the City right-of-way, namely the Foothill Bridge closure, substantial new construction in the downtown, and seismic retrofits in the downtown. In 2010, the number of reported collisions are down by 12% and the lowest total reported in the 12 years of the safety program.

The overall pedestrian collision trend is down and this continued to be the case in 2010, pedestrian collisions declined by 8% from 2009 to 2010. Bicycle collisions also declined, down 4% from 2009.

The number of fatality collisions in any given year is usually very random; in 2010 there were was one traffic related fatalities. This fatality was the first reported fatality on streets under the City's jurisdiction since 2006. Since 2004 overall traffic collisions have continued to decline as a direct result of the program.

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)** establish 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 efforts in order to reduce the total number of collisions and the severity of future collisions. The report will normally be prepared after City collision statistics become available in June or July 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 total number of collisions for any location in a given 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 beyond the ability of the engineer to change or control. However, the City's mitigation program attempts to identify those roadway elements that can be modified in order 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, as it is more likely that a collision will occur at a location that more pedestrians and vehicles use. This report recognizes locations that fall above the expected collision rates of similar City locations and proposes 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 2010 Traffic Safety Report are:

- Identify the intersections and roadway segments in the City with the highest collision rates, and thoroughly analyze collision diagrams in order to suggest remedial mitigation measures for the five highest locations to 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 in order to determine remedial mitigation measures for the five highest pedestrian and bicycle collision locations to reduce the potential for collisions, and;

- Report on engineering safety analysis conducted in the previous 12-month period that the City and general public have identified as areas of concern regarding appropriate traffic control.

2.2 Study Methodology

Collision Data

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

While SWITRS data is similarly derived from official police collision reports, many times the reports are coded incorrectly due to jurisdictional boundary issues and/or agency reporting inaccuracies. An example of this might be a collision occurring on Highway 101 – because the facility is under Caltrans jurisdiction, this collision record and its potential remediation would not be included in this report. However, because the CHP report may state that the collision occurred within the City of San Luis Obispo, the SWITRS database might contain this as a collision under our jurisdiction. Likewise, City emergency dispatch may receive a call regarding a traffic collision but when the dispatched officer arrives, the vehicles have 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. Using this data, collision diagrams were then generated and interpretations of collision patterns were formulated.

Based on the collision patterns for the five highest ranked collision locations for each location and roadway segment sub-category, mitigation measures were formulated where a collision pattern could be identified. Mitigation measures for these sub-categories will be implemented 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 2007/08 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.

Pedestrians:

$$PREV = \frac{5 \times N \times PHVV}{PHPV}$$

Bicycles:

$$BREV = \frac{5 \times N \times PHVV}{PHBV}$$

Where:

PREV = Pedestrian relative exposure value.
BREV = Bicycle relative exposure value.
N = Number of collisions (collision frequency) of the location.
PHVV = Average peak hour vehicular volume.
PHPV = Average peak hour pedestrian volume.
PHBV = Average peak hour bicycle volume.

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

section 3

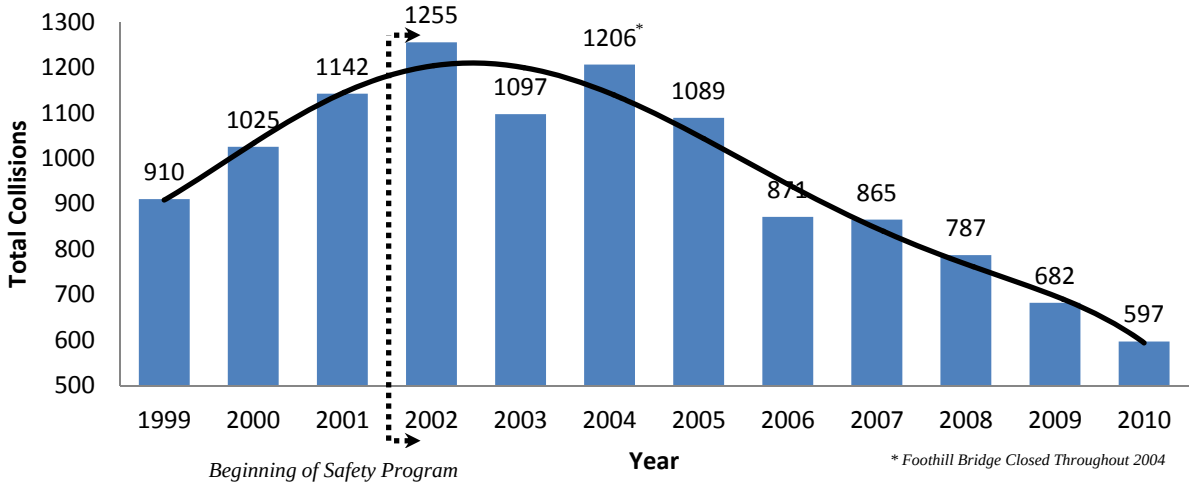
city-wide collision statistics

3.1 City-wide Collision Trends

Reportable collision statistics for the City are included in this section. Any reported collision within the public right of way that involved a fatality, personal injury, or property damage was recorded as a collision. Collisions that occurred on private property, out of the public right of way, outside of City limits, on Highway 101, or that were not reported to the police department were not entered into the City's database.

While reported collisions do not represent all 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, therefore, are highly unreliable in determining "high profile" collision locations or areas of concern. Figure 3.1 shows the reported traffic collision history of the City.

Figure 3.1 - Twelve Year Collision Trend



The City again saw a reduction in total collisions from 2009 to 2010 by approximately 12%. In general, collisions in San Luis Obispo have been declining since 2002. Total collisions have dropped approximately 6% per year since the program was started in 2002. In 2010, total collisions were down 52% since the program was started.

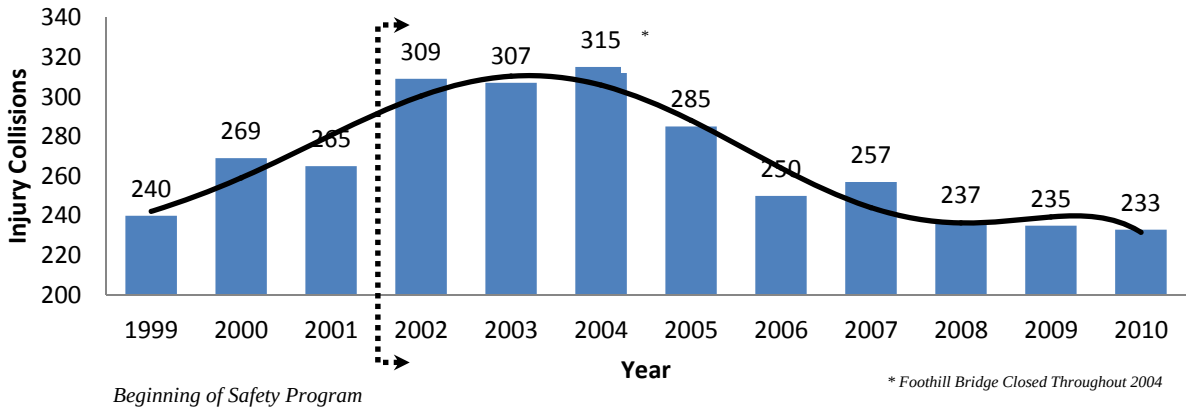
3.2 Injury and Fatal Collision Trends

The Traffic Engineering Division tracks injury and fatal collisions as an important part of the current Traffic Safety Program. Injury collisions are seldom left unreported and greater help to indicate locations of higher significance than do minor collisions. Figures 3.2.1 & 3.2.2 shows the City's reported injury & fatal collision.

Injury Collisions

Injury collisions in the City are once again down in 2010, approximately 1% from 2009. Total injury collisions have been steadily declining since their highest number in 2004, injury collisions this past year were the lowest on record for the Traffic Safety Report.

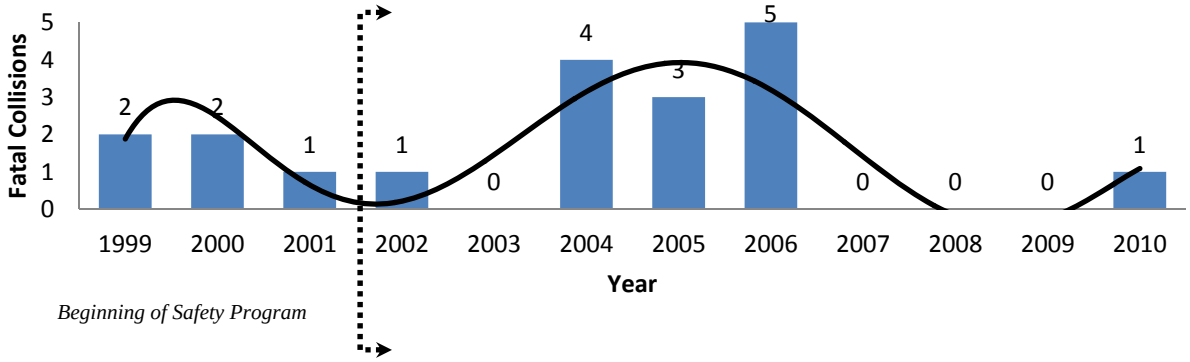
Figure 3.2.1 - Twelve Year Injury Collision Trend



Fatal Collisions

Traffic fatalities have a tendency to fluctuate from year to year. This variation is due to many factors that are often beyond the City's control. However, thru this program the City attempts to minimize fatal collisions by identifying and correcting collision patterns. As mentioned, fatality collisions in any given year is usually very random. There was one fatal collision in 2010, this was the first traffic related fatality on City streets since 2006.

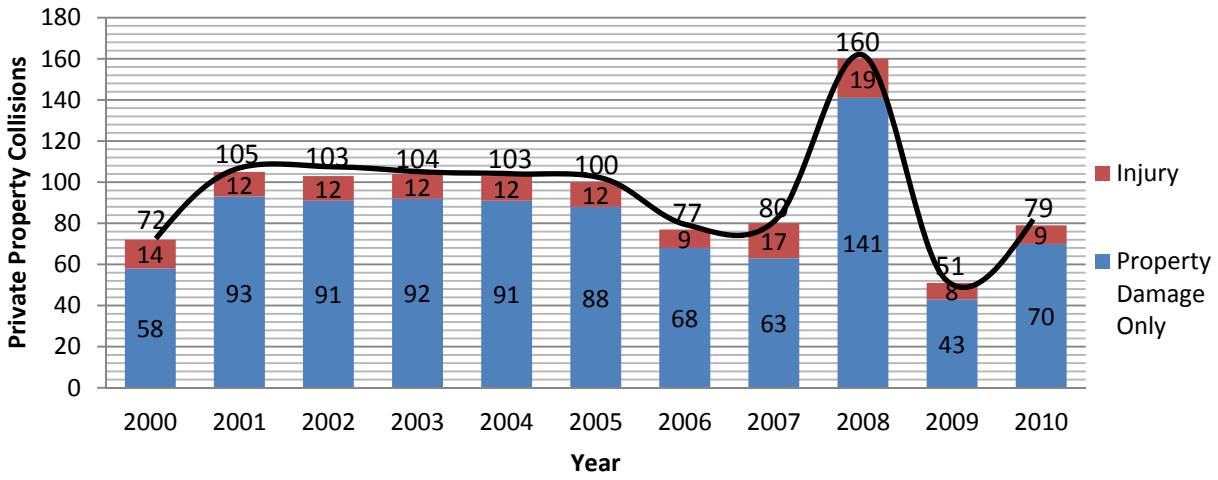
Figure 3.2.2 - Twelve Year Fatal Collision Trend



3.3 Private Property Collision Trend

Private property collisions are not typically utilized to analyze traffic safety because these collisions occur outside the public right of way and are not subject to corrective measures by City staff. However, some collisions that occur on private property are subject to investigation and enforcement action by the Police Department, specifically collisions that result in an injury, involve a DUI driver or in which a party flees the scene (hit and run collisions). These are collisions that utilize enforcement and investigative resources so tracking them is helpful in considering the overall collision activity throughout the City for the purposes of resource allocation.

Figure 3.3 – Private Property Collision Trends, 2000-2010

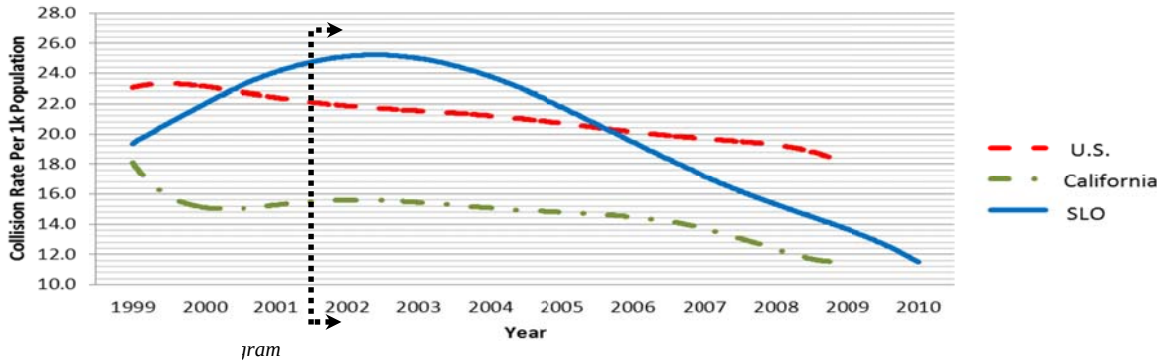


3.4 Comparison with National & State Rates

It's important to accurately compare the City's collision rates to National and State collision rates to gauge the effectiveness of the program. Figure 3.4 below show this comparison, 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.

Prior to this Annual Traffic Safety Program the City's collision rate was rising by approximately 10% annually as compared to National and California State rates that were declining by approximately 3% annually. By 2002/03 when the City's traffic safety program first began, the City collision rate was 20% higher than the National rate and 66% higher than the California State rate. As shown in Figure 3.4 below, although traffic collision rates have been declining nationwide 2000, since the safety program began in 2002 the City's collision rate has declined more than twice as fast as either the national or state rates. In 2010 the City's collision rate is lowest on record and lower than both the National and State collision rates. This is a particularly significant achievement for the City because limited access highways and freeways, which have substantially lower collision rates than regular street systems, are included in State and National statistics and inherently deflate those rates.

Figure 3.4 - Twelve Year Collision Rate Comparison



Source: National Highway Traffic Safety Administration, Traffic Safety Facts 2009; California Highway Patrol , SWITRS 2009; City of San Luis Obispo Traffic Collision Database 2010

The City does not utilize Office of Traffic Safety (OTS) rankings for agency performance comparisons due to the level of accuracy needed for the purposes of this safety program. OTS rankings are based on Statewide statistics which are subject to inaccuracies from jurisdictional boundary miscoding and/or agency reporting errors. The Office of Traffic Safety gives direction to local agencies to use their own locally generated collision statistics when available because this information is more accurate.

3.5 Benefit/Cost Analysis

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

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

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

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

The information in table 3.5.1 shows the average economic costs in 2010 per death (not per fatal collision), per injury (not per injury collision), and per property damage collision. These cost estimates are based upon 2007 actual collision cost calculations and adjusted to 2010 costs based on consumer price indexes.

Table 3.5.1 - Economic Costs, 2010

Collision Type	Dollar Loss
Death	$1,302,580
Nonfatal disabling injury	$58,990
Incapacitating injury	$67,420
Non-incapacitating evident injury	$21,850
Possible injury	$21,850
Property damage collision (including minor injuries)	$8,840

Source: National Highway Traffic Safety Administration (Traffic Safety Facts 2006) & Adjusted to Year 2010 $'s

Table 3.5.3 - City of San Luis Obispo Economic Costs, 2001-2010 Traffic Collisions

Collision Type							
Year	Death		Non-incapacitating Injury		Property Damage Only		Total Dollar Loss
	Number	Cost[(a)]	Number	Cost[*]	Number	Cost[(a)]	
2001	1	$1,302,580	268	$5,855,800	866	$7,655,440	$14,813,820
2002	1	$1,302,580	309	$6,751,650	944	$8,344,960	$16,399,190
2003	0	$0	308	$6,729,800	784	$6,930,560	$13,660,360
2004	4	$5,210,320	315	$6,882,750	862	$7,620,080	$19,713,150
2005	3	$3,907,740	285	$6,227,250	803	$7,098,520	$17,233,510
2006	2	$2,605,160	250	$5,462,500	621	$5,489,640	$13,557,300
2007	0	$0	257	$5,615,450	588	$5,197,920	$10,813,370
2008	0	$0	238	$5,200,300	544	$4,808,960	$10,009,260
2009	0	$0	235	$5,134,750	439	$3,880,760	$9,015,510
2010	1	$1,302,580	288	$6,292,800	363	$3,208,920	$10,804,300

*Economic costs are based upon 2007 cost estimates, adjusted to 2010 $'s

While the dollar amounts depicted in Table 3.5.3 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. The comprehensive dollar amounts depicted in Table 3.5.4 better represent the overall societal costs of traffic collision within the City.

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 smoke detectors or vehicles with air bags.

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 2010 on a per person basis. These cost estimates are based upon 2007 actual collision cost calculations and adjusted to 2010 dollars based on consumer price indexes.

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 3.5.2 shows the 2010 economic costs in collisions for the City using annual cost estimates.

Table 3.5.2 - Comprehensive Costs, 2010

Collision Type	Dollar Loss
Death	$4,136,600.00
Incapacitating injury (a)	$208,400.00
Non-incapacitating evident injury (a)	$51,800.00
Possible injury (a)	$25,000.00
No injury	$2,300.00

Source: National Highway Traffic Safety Administration (Traffic Safety Facts 2006), adjusted to 2010 $'s

Table 3.5.4 - City of San Luis Obispo Comprehensive Costs, 2001-2010 Traffic Collisions

Collision Type							
Year	Death		Non-incapacitating Injury		Property Damage Only		Total Dollar Loss
	Number	Cost[(a)]	Number	Cost[*]	Number	Cost[(a)]	
2001	1	$4,136,600	268	$13,882,400	866	$1,991,800	$20,010,800
2002	1	$4,136,600	309	$16,006,200	944	$2,171,200	$22,314,000
2003	0	$0	308	$15,954,400	784	$1,803,200	$17,757,600
2004	4	$16,546,400	315	$16,317,000	862	$1,982,600	$34,846,000
2005	3	$12,409,800	285	$14,763,000	803	$1,846,900	$29,019,700
2006	2	$8,273,200	250	$12,950,000	621	$1,428,300	$22,651,500
2007	0	$0	257	$13,312,600	588	$1,352,400	$14,665,000
2008	0	$0	238	$12,328,400	544	$1,251,200	$13,579,600
2009	0	$0	235	$12,173,000	439	$1,009,700	$13,182,700
2010	1	$4,136,600	288	$14,918,400	363	$834,900	$19,889,900

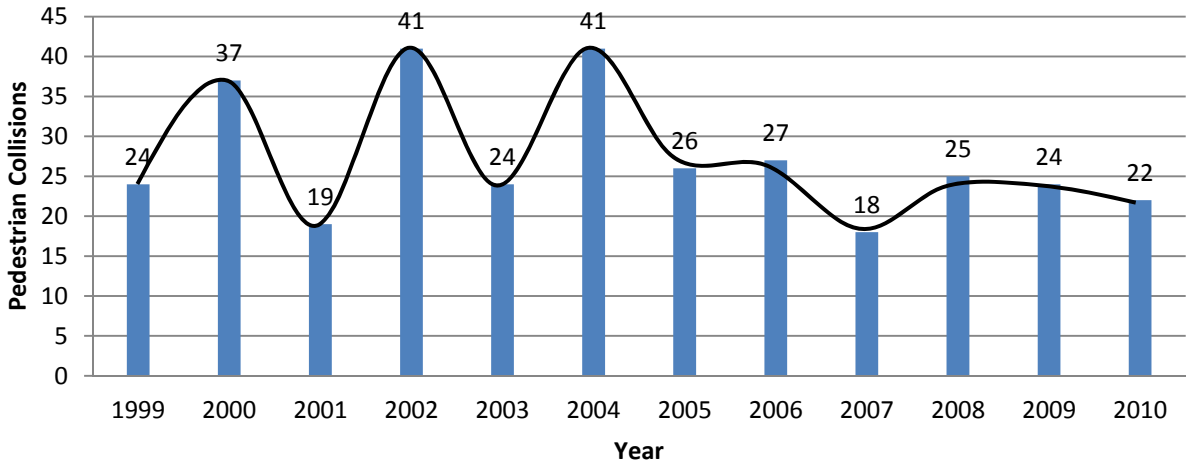
*Economic costs are based upon 2007 cost estimates, adjusted to 2010 $'s

In the first years of the traffic safety program the average annual societal cost of traffic collisions in the City was approximately $26.8 million. Over the course of the last ten years that average annual societal cost has been reduced by approximately $6.1 million. Based on annual staffing and construction costs the estimated cost of the program is approximately $400,000 annually. Based on these estimates, the City's return from this program is approximately $15 to $1.

3.6 Pedestrian Collisions

In general, the number of annual pedestrian collisions has fluxuated up and down over the past twelve years. The number of pedestrian collisions that occurred in 2010 were slightly down from 2009. There were 22 total pedestrian related collisions reported, which was 8% fewer than in 2009. Figure 3.6 indicates the reported pedestrian related collision history of the City.

Figure 3.6 – 1999-2010 Pedestrian Collision Trend



Source: City of San Luis Obispo Traffic Collision Database

The study's method of evaluation follows the recommendations of the U.S. Federal Highway Administration (FHWA) as pertaining to pedestrian collisions, by which pedestrian collisions are classified according to their collision type. In general, the primary factor contributing to pedestrian collisions in 2010 were motorists turning left while facing pedestrians. The following table lists the various types of pedestrian related collisions, the locations of pedestrians in those collisions and the determination of fault as detailed in police reports.

Table 3.6.1 –2010 Pedestrian Collisions by Type, Location, & Fault

Pedestrian Collision Type	# Cases	% of Total	Severity		
			Injury	Fatal	PDO
In Road – Not Crossing	5	23%	5	0	0
Other	4	18%	3	0	1
In X-Walk – Motorist Left Turn Facing Pedestrian	3	14%	3	0	0
In X-Walk – Pedestrian Yield Violation	3	14%	3	0	0
In Road – Crossing Midblock	3	14%	2	1	0
In X-Walk – Motorist Left Turn in Front of Pedestrian	3	14%	3	0	0
In X-Walk - Motorist Right of Way Violation	1	5%	1	0	0
In X-Walk – Motorist Right Turn in Front of Pedestrian	0	0%	0	0	0
In X-Walk – Midblock	0	0%	0	0	0
Total:	**24**	**100%**	**19**	**0**	**5**

Pedestrian Collision Location	2006		2007		2008		2009		2010	
	#	%	#	%	#	%	#	%	#	%
Signal	9	33%	8	44%	10	40%	13	54%	8	36%
In Road (not crossing)	4	16%	3	17%	0	0%	1	4%	6	27%
Out of Crosswalk - Midblock	3	11%	2	11%	6	24%	2	8%	3	14%
Stop - Unmarked Crosswalk	6	22%	2	11%	4	16%	1	4%	2	9%
Not in Road (Sidewalk)	0	0%	0	0%	0	0%	3	13%	2	9%
Stop - Marked Crosswalk	2	7%	0	0%	0	0%	1	4%	1	5%
Uncontrolled - Unmarked Crosswalk Local	0	0%	0	0%	3	12%		0%	0	0%
Uncontrolled - Unmarked Crosswalk Major/Collector	1	4%	0	0%	1	4%	1	4%	0	0%
Uncontrolled - Marked	2	7%	3	17%	1	4%	2	8%	0	0%
Total:	**26**	**100%**	**27**	**100%**	**18**	**100%**	**25**	**100%**	**24**	**100%**

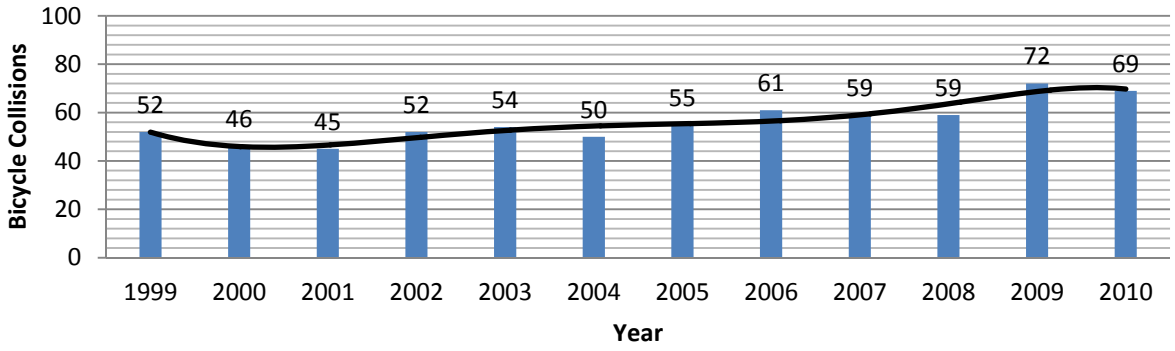
Party at Fault	2006		2007		2008		2009		2010	
Driver	21	78%	14	71%	14	56%	18	75%	14	64%
Pedestrian	6	22%	4	29%	11	44%	6	25%	8	36%
Total:	**27**	**100%**	**18**	**100%**	**25**	**100%**	**24**	**100%**	**22**	**100%**

Source: City of San Luis Obispo Traffic Collision Database

3.7 Bicycle Collisions

The number of bicycle collisions has also fluctuated over the past eleven years. There were 69 bicycle collisions reported in 2010, which is about 4% lower than 2009. The 2010 number was slightly higher than the average number of collisions (56 / Year) for the 12 years that the report has been published, however this is somewhat expected with the volume of cyclists also increasing.

Figure 3.7 – 1999-2010 Bicycle Collisions



Source: City of San Luis Obispo 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, which only 18 of occurred on City streets in 2010. In general, the majority of factors contributing to bicycle collisions in 2010 were cyclists losing control and motorists turning right in front of cyclists. Under *Party at Fault,* table 3.7.2 has an area for "Other / None" parties at fault, which represents bicycle mechanical failure, a roadway surface causing a bicycle to overturn, and cases where fault cannot be determined.

Table 3.7.2 – 2010 Bicycle Collision by Type & Fault

Collision Type	Number of Cases	% of Total	Cyclist's Position			Severity		
			Sidewalk	Road	X-Walk	Injury	Fatal	PDO
Motorist Left Turn - Facing Cyclist	12	18%	0	12	0	11	0	1
Cyclist Lost Control	11	16%	0	11	0	10	0	1
Motorist Right Turn - In Front of Cyclist	8	12%	0	8	0	8	0	0
Drive Out From Lane or Driveway	7	10%	0	8	0	6	0	1
Wrong Way Cyclist	6	9%	1	5	0	6	0	0
Other (Not classifiable)	5	7%	0	5	0	4	0	1
Cyclist Left Turn In Front Of Motorist	5	7%	0	5	0	5	0	0
Ride Out At Controlled Intersection	3	4%	0	3	0	3	0	0
Motorist Open Door Into Path of Cyclist	3	4%	0	3	0	3	0	0
Bicyclist Overtaking	3	4%	0	3	0	2	0	1
Motorist Overtaking	2	3%	0	2	0	2	0	0
Bicyclist Strikes Parked Vehicle	1	1%	0	1	0	0	0	1
Motorist Overtaking - Failed to Detect	1	1%	0	1	0	1	0	0
Ride Out From Lane or Driveway	1	1%	0	1	0	1	0	0
Bicyclist DUI	0	0%	0	0	0	0	0	0
Total	68	100%	1	68	0	62	0	6

Party at Fault	**2006**		**2007**		**2008**		**2009**		**2010**	
Cyclist	30	49%	32	54%	43	73%	52	72%	30	44%
Driver	31	51%	27	46%	16	27%	20	28%	38	56%
Total:	**61**	**100%**	**59**	**100%**	**59**	**100%**	**72**	**100%**	**68**	**100%**

Source: City of San Luis Obispo Traffic Collision Database

section 4

enforcement statistics

4.1 Annual Traffic Citation Data

Traffic citations are one of the methods used to promote compliance with the vehicle code and create a safer environment for motorists. The vehicle code includes many sections for enforcement. Some vehicle code violations are more serious than others and are designated as "Hazardous Violations." Vehicle Code violations are tracked by the Department of Motor Vehicles and hazardous violations are weighted by a point system. All vehicle code sections deemed "hazardous" by DMV carry at least one point and some carry two points.

The point system is used to assess the driving behavior of motorists and place restrictions on negligent drivers. The restriction or suspension of driving privileges helps make the roadways safer by removing drivers with hazardous driving habits. The Department of Motor Vehicles' Violation Point Assessment list is posted on their website: http://www.dmv.ca.gov/dl/vioptct.htm.

Table 4.1.1 depicts the total number of citations issued by the Police Department each year since 2001 and the number of these citations classified as hazardous violations by the DMV.

The citation trend indicates a fairly significant drop off in citations issued in 2003 and 2004, before increasing steadily through 2008. This trend coincides with the elimination of one traffic officer position in 2003 and one police patrol officer position in 2005 due to budget reductions and the temporary redeployment of other traffic officers to cover patrol shift shortages. These staffing reductions impacted the ability of officers to proactively enforce traffic violations. The positions were restored in July 2007 and traffic enforcement increased; however, in July 2009, budget reductions again required the elimination of one traffic officer position and three patrol officer positions which affected traffic enforcement.

The decline in the number of citations and the number of hazardous citations in 2009 was partly due to two reporting errors discovered by staff during the preparation of the 2009 Traffic Safety Report. First, staff realized that in prior years some non-traffic related citations were inadvertently included in the total number of traffic citations reported. Second, staff inadvertently included citations issued for the new "hands free" cellular phone law in the count of hazardous citations, which accounted for a substantial number of violations in 2009. Staff learned that cell phone violations are not classified as a hazardous citation; however emphasis was placed on enforcement due to the correlation between this violation and collision rates. Staff corrected these errors in the 2009 report and the correct data collection methods are reflected in this report as well.

In 2010, the total number of citations issued declined from 2009; however, the number of hazardous citations issued increased by nearly 34%, which has the greatest impact on traffic safety. Despite the reduction in citations issued, total collision and injury collision rates have continued to decline.

Table 4.1 - Traffic Citations Issued

Year	Total Citations	% Change	Hazardous Citations	% Change
2000	6741	+17.56	2001	-16.41
2001	7114	+5.53	1791	-10.49
2002	6508	-8.51	2243	+25.23
2003	4802	-26.21	2550	+13.68
2004	2663	-44.54	896	-64.86
2005	3484	+30.82	789	-11.94
2006	3585	+2.89	934	+18.37
2007	4488	+25.18	1769	+89.40
2008	7437	+65.7	3120	+76.37
2009	5947	-20.03%	2098	-34.35
2010	4686	-21.2%	2806	+33.75%

Source: Spillman RMS database query

4.2 Traffic Safety Index

The Traffic Safety Index is the ratio of hazardous citations issued to the number of injury and fatal collisions. This index is a gauge used by the California Office of Traffic Safety (OTS) to measure cities' traffic safety and the effectiveness of their traffic enforcement programs. Hazardous citations include moving violations for traffic offenses, as opposed to non-moving and mechanical violations. Higher index numbers represent greater traffic safety and more effective traffic programs.

Table 4.2.1 reflects the City's Traffic Safety Index for the past ten years. The index is calculated by dividing the number of hazardous citations issued by the number of injury collisions. A separate column depicts the number of municipal code violations that were issued in lieu of a hazardous vehicle code violation. The Traffic Safety Index has been calculated twice: the first index was calculated utilizing vehicle code violations tracked by OTS as hazardous and violations which can be considered a primary collision factor, the second index includes hazardous municipal code violations as well. The latter index number is most reflective of the City's actual level of traffic safety.

Table 4.2 – Traffic Safety Index

Year	Total Hazardous Vehicle Code Citations	Total Hazardous Municipal Code Citations	Total Injury Collisions*	Traffic Index Vehicle Code Only	Adj. Index with Vehicle and Muni.Code Citations
2001	1791	2080	277	6.5	14.0
2002	2243	1585	321	7.0	11.9
2003	2550	969	219	8.0	11.0
2004	896	390	327	2.7	4.0
2005	789	493	297	2.7	3.9
2006	934	1123	259	3.6	7.9
2007	1769	1131	274	6.5	10.6
2008	3120	230	271	11.5	12.4
2009	2098	147	251	8.4	8.9
2010	2806	88	257	10.9	11.3

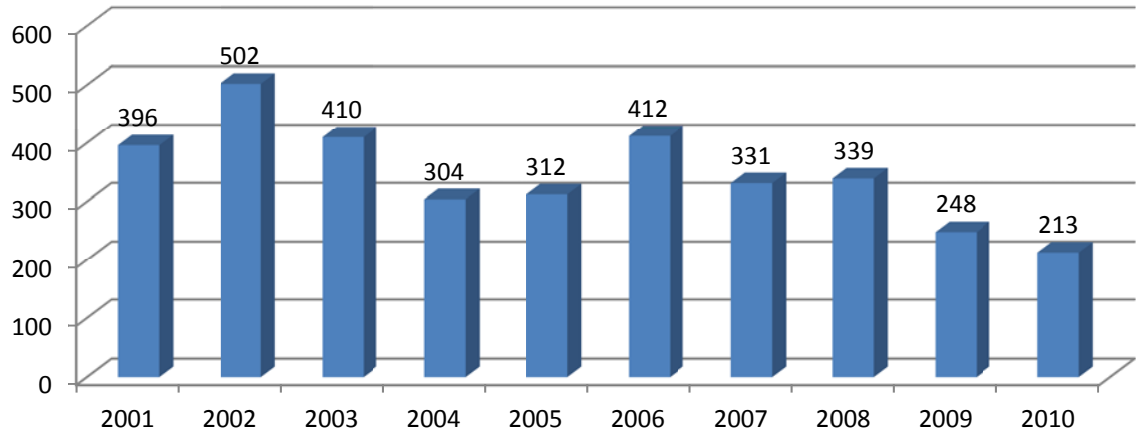
Source: Spillman RMS database query

4.3 Driving Under the Influence

Driving under the influence (DUI) violations have been a focal point of enforcement in an effort to reduce injury traffic collisions. Enforcement is dependent upon officers having available time when they are not assigned to calls for service or other duties. Arrests peaked in 2002 and again in 2006 and have been declining since then. Of the 213 DUI arrests made in 2010, four individuals were arrested for felony DUI after they caused a collision in which another person was injured.

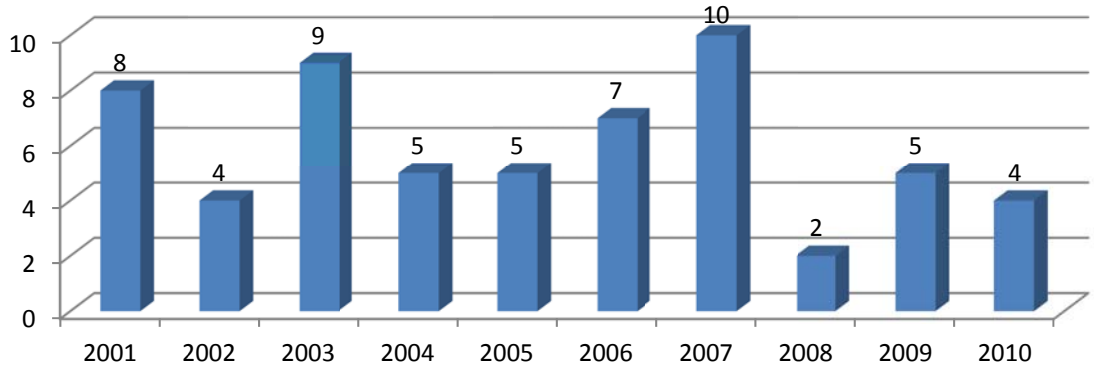
California Office of Traffic Safety statistics indicated an upward trend in DUI arrests statewide from 2004 to 2008 before declining 3% in 2009. The statewide DUI statistics for 2010 were not available at the time of this report.

Figure 4.3.1 –SLOPD DUI Arrests 2001-2010



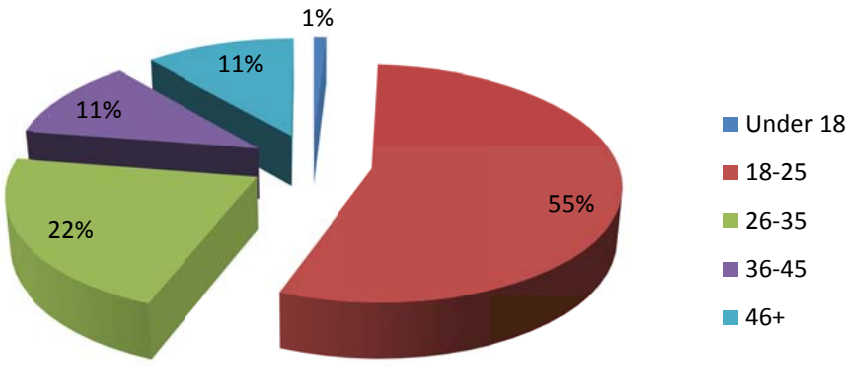
Source: Spillman RMS database query

Figure 4.3.2 – SLOPD Felony DUI Arrests 2001-2010



Source: Spillman RMS database query

Figure 4.3.3 – SLOPD 2010 DUI Arrests by Age



Source: Spillman RMS database query

4.4 Alcohol Involved Collisions

In 2010, alcohol was determined to be a factor in 50 collisions. Nine of those collisions resulted in one or more of the parties being injured. Over the last ten years there have been 632 alcohol related collisions. Twenty-seven percent of these collisions resulted in injury to a driver or passenger; two collisions resulted in a fatality.

4.5 Top Primary Collision Factors

Collisions on public and private property were analyzed to determine the top six primary factors that caused the collisions. These factors are listed in order of frequency:

Table 4.5.1 – Primary Collision Factors by Collision Severity

Non-Injury	**Minor Injury**	**Major Injury**
Speed	Failure to yield	Failure to yield
Failure to yield	Speed	Improper turns
Improper turns	Improper turns	DUI
Unsafe Backing	Other Improper Driving	Disregard traffic signal
DUI Alcohol	Disregard Traffic Signal	Other Improper Driving
Other Improper Driving	DUI Alcohol	

Source: Spillman RMS database query

The following table depicts the number of vehicle code citations issued for the violations identified as the most common causes of collisions in 2010:

Table 4.5.2 – Citations by Collision Factor

Violation	Speeding	Traffic Signal	DUI	Stop Sign	Failure to Yield	Improper Turn
Citation	1311	313	218	191	111	84

Source: Spillman RMS database query

section 5

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.

Current funding cycles permit the implementation of one major NTM project every one to two years. There are four (4) neighborhoods currently in the NTM program. These neighborhoods include Pismo & Buchon Streets, Fixlini Street, South Chorro Street, and High Street.

Pismo/Buchon Area NTM
The Pismo/Buchon NTM project includes a portion of Johnson Avenue and is one of the largest and most complex NTM projects that the City has undertaken. In November 2009 and April 2010 the neighborhood voted on a draft Action Plan. The City Council approved the Action Plan in June 2010. The components of the plan include; road striping changes on both Johnson Avenue and Pismo Street, speed feedback signs on Johnson Avenue, bulbouts and a raised crosswalk at the intersection of Pismo/Toro and Buchon/Toro, along with a series of speed humps on Pismo Street and one speed hump on Islay Street. Construction of the Action Plan projects is currently underway and is expected to be completed in September 2011.

Fixlini Street NTM
Residents on Fixlini petitioned for NTM in 2007 citing concerns of excessive speed, school traffic bypassing Johnson to access San Luis High School and a lack of contiguous sidewalks. Traffic study results indicate the average daily traffic volume is approximately 260 vehicles and that 1/3 of the traffic volume occurs during the high school commute time of 7:45 am-8:00 am. Preparation of an action plan for the Fixlini Street neighborhood is currently queued behind the Pismo/Buchon neighborhood. In the interim this neighborhood routinely has the City's speed feedback trailer deployed. Once construction is completed in the Pismo/Buchon neighborhood, staff will begin working with the Fixlini neighborhood residents to develop an Action Plan.

South Chorro Street NTM
Residents of Chorro Street between Broad and Buchon Street petitioned for NTM in June 2009 citing concerns of excessive vehicle speeds and volumes. The results of a 2010 traffic study indicate that average daily traffic volumes and speeds exceed Circulation Element desired maximums by an average of 30%. Development of an Action Plan for the Chorro Street neighborhood will follow completion of other NTM projects that are currently in the queue, e.g. Pismo & Buchon and Fixlini.

High Street NTM
Residents of High Street petitioned for NTM in April 2011 citing concerns of excessive vehicle speeds and a lack of pedestrian crossings. The results of a 2011 traffic study indicate that average daily traffic volumes are consistent with Circulation Element desired maximums and that traffic speeds exceed the speed limit of 30 mph by more than 20% and Circulation Element desired maximums by 48%. Development of an Action Plan for the Chorro Street neighborhood will follow completion of other NTM projects that are currently in the queue.

Table 5.2 - 2010 Completed Safety Projects

Each year the Traffic Engineering Section implements traffic safety improvement projects through a variety of programs and projects. These improvements are usually stand-alone projects but are often times included in other City CIP projects or as part of individual land development projects. The following notable traffic safety improvements were completed in 2010:

Traffic Signal Improvements

Marsh & Chorro	Signal indications upgraded from 8" to 12"
Osos & Pismo	Signal indications upgraded from 8" to 12"
Calle Joaquin & LOVR	New nearside signal indication installed on EB approach
Broad & Higuera	New pedestrian signal heads installed on all approaches

Roadway Improvements

Mill & Santa Rosa	Striping modifications
LOVR & Higuera	Striping and median modifications
Iris & Fixilini	New stop sign installed
Ella & Fixilini	New stop sign installed
Johnson & Orcutt	Stop sign and street light upgrades
Osos & Pacific	Stop sign upgrades
Osos & Pismo	Stop sign upgrades
LOVR & Laguna	School zone signing enchancements
Marsh & Johnson	Directional /warning sign upgrades
Hathway & Montalban	Directional /warning sign upgrades
California & Phillips	Directional /warning sign upgrades

Sight Distance Improvements

Loomis & San Miguel	On-Street Parking Restrictions
Marsh & Beach	On-Street Parking Restrictions
Grand & 101	Vegetation Trimming
Tank Farm & Brook Pine	Vegetation Trimming
Broad & Caudill	Vegetation Trimming
Boysen & Chorro	On-Street Parking Restrictions
Osos & Leff	On-Street Parking Restrictions

Pedestrian & Bicycle Improvements

Farmer's Market	Developed new standard traffic control plan
Johnson & Bishop	New school zone flashing beacons installed
Broad & Upham	New school zone flashing beacons installed
Poinsettia & Larkspur	New pedestrian crossing warnings installed
Hawthorne School	Installed new pedestrian ramps and crosswalks
Pacheco School	Installed new pedestrian ramps and crosswalks
Sinsheimer School	Installed new pedestrian ramps and crosswalks
Prefumo Cyn. Rd.	Enhanced bicycle lane striping and clearances

section 6

2010 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 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.

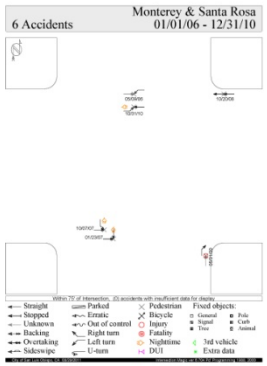
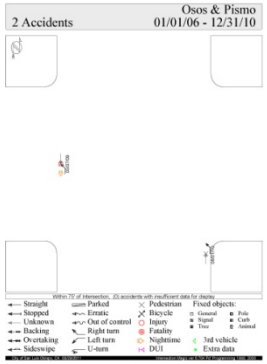
Safety Analysis

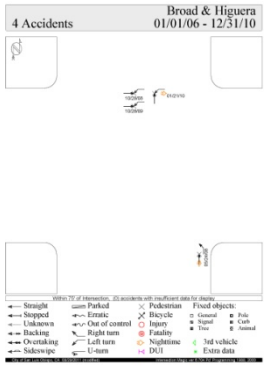
Collision diagrams were developed for the top five intersections based on collision rates in Tables 6.1 through 6.10 and these intersections were then analyzed using collision diagram interpretation techniques. Collision diagrams were also developed for the three segment classifications based on collision rates and are shown in Tables 6.11 through 6.13 and these intersections were then analyzed using collision diagram interpretation techniques. Based upon collision patterns as identified in each diagram, mitigation measures and safety improvement recommendations were proposed for each location as outlined in each intersection category. A thumbnail sketch of each intersection's collision diagram has been provided in the tables. Complete collision diagrams that include additional collision information for each of these locations are included in Appendices 1 through 10.

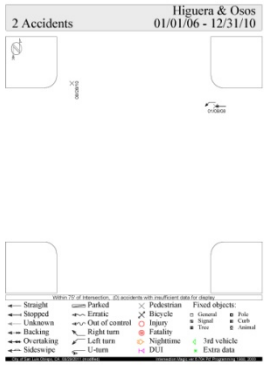
Variations in yearly pedestrian related collisions are to be expected. While this report is intended to evaluate and analyze collision trends in 2010, the number of annual pedestrian related collisions typically reported in the City is too few to identify collision patterns and establish mitigation measures. The method for evaluating pedestrian collision locations identifies all locations where at least one pedestrian collision has occurred in 2010 and ranks those locations based on a "relative exposure value" (REV) for the previous five year pedestrian collision history, with three or more pedestrian related collisions.

The method for evaluating for bicycle collision locations identifies all locations where at least one bicycle collision has occurred in 2010 and ranks those locations based on a "relative exposure value" (REV) for the previous five year bicycle collision history, with three or more bicycle related collisions. This method of evaluation is often chosen over pure numbers because the number of collisions generally increases within proportion to bicycle volumes. These values are used to identify locations where more collisions are occurring than would be expected.

Table 6.1 – Top Five Pedestrian Collision Locations

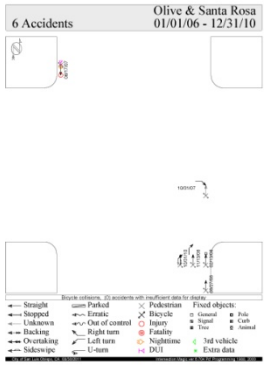
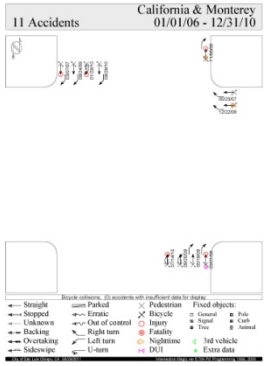
	Location Ranking: **1** **Monterey at Santa Rosa** **REV: 572**	**PATTERN:** Pedestrian red light violations & drivers not yielding to pedestrian. **RECOMMENDATION:** Pedestrian warning signs & audible push buttons installed in June of 2011. Evaluate changes to left turn control type on WB/EB Approaches. **ACTION:** Evaluate conversion of left turn protected/permissive phasing to protected only phasing on WB & EB approaches and proceed with changes as determined. Continue to monitor in 2011.
	Location Ranking: **2** **Osos at Pismo** **REV: 94**	**PATTERN:** NB Left Vs. NB & SB pedestrian **RECOMMENDATION:** NB dedicated left turn lane installed in Summer of 2011 to help separate left turns from thru movements. **ACTION:** Continue to monitor in 2011, if pattern persists investigate pedestrian warning signs.

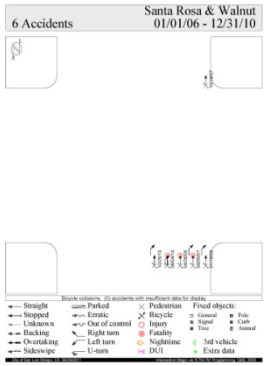
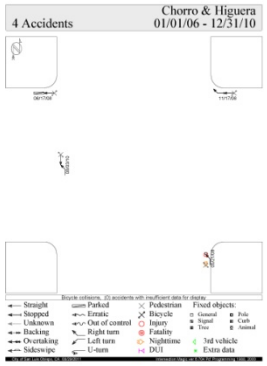
	Location Ranking: **3** **Broad at Higuera** **REV: 69**	**PATTERN:** Drivers failing to yield to pedestrian in crosswalk. **RECOMMENDATION:** Pedestrian indications installed in summer of 2010. Further increase pedestrian visibility. **ACTION:** Install pedestrian warning signs and remove one parking space. Continue to monitor in 2011.

	Location Ranking: **4** **Higuera at Osos** **REV: 23**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** None at this time. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.

Note: Only four intersections had enough pedestrian collisions to rank in this category

Table 6.2 – Top Five Bicycle Collision Locations

	Location Ranking: **1** **Olive at Santa Rosa** **REV: 1880**	**PATTERN:** NB driver right turns over cyclist. **RECOMMENDATION:** Improve cyclist visibility and delineation. Intersection under State Department of Transportation jurisdiction. **ACTION:** Forward finding to State Department of Transportation for review & consideration. Recommend consideration for painted bike lanes, intersection extensions, and possibly a bike slot. Continue to monitor in 2011.
	Location Ranking: **2** **California at Monterey** **REV: 1623**	**PATTERN:** NB & SB driver right turn over cyclist. **RECOMMENDATION:** Improve cyclist visibility & delineation. Painted bike lanes and intersection extensions scheduled for installation in winter of 2011. **ACTION:** Proceed with painted bike lane and intersection extensions. Continue to monitor in 2011.

	Location Ranking: **3** **Santa Rosa at Walnut** **REV: 1226**	**PATTERN:** NB driver right turns over cyclist. **RECOMMENDATION:** Improve cyclist visibility and delineation. Intersection under State Department of Transportation jurisdiction. **ACTION:** Forward finding to State Department of Transportation for review & consideration. Recommend consideration for painted bike lanes & intersection extensions. Continue to monitor in 2011.
	Location Ranking: **4** **Chorro at Higuera** **REV: 834**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** None at this time. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.

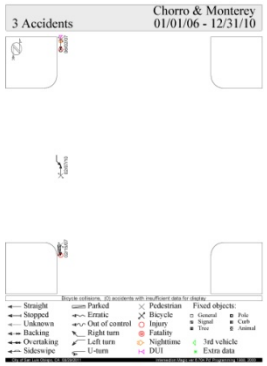
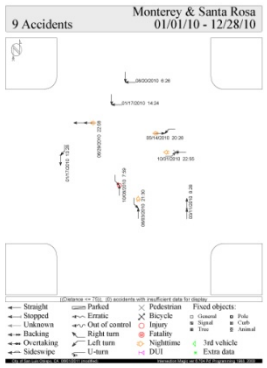
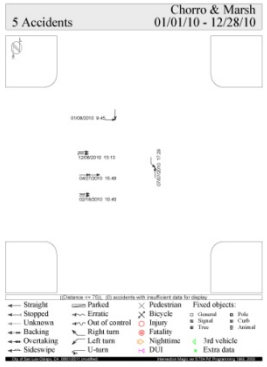
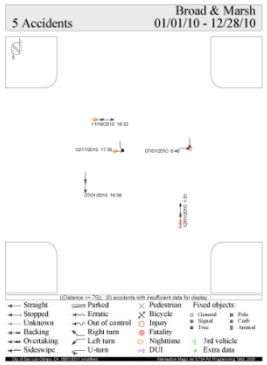
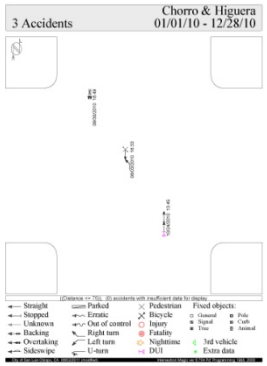
	Location Ranking: **5** **Chorro at Monterey** **REV: 347**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** None at this time. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.

Table 6.3 - Recommendations for Intersections Involving Two Arterial Streets

	Intersection Ranking: **1** **Monterey Street at Santa Rosa Street** **Rate: 0.90 / MEV**	**PATTERN:** WB/EB right of way violations & red light violation in all directions. **RECOMMENDATION:** Improve signal visibility & control type. **ACTION:** Upgrade all 8" indications with 12". Evaluate changes to protected/permissive phasing on WB & EB approaches, proceed with changes as determined. Continue to monitor in 2011.
	Intersection Ranking: **2** **Chorro Street at Marsh Street** **Rate: 0.83 / MEV**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** Signal indications upgraded in September of 2010, only one collision since. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.

	Intersection Ranking: **3** **Broad Street at Marsh Street** **Rate: 0.75 / MEV**	**PATTERN:** Red light violations. **RECOMMENDATION:** Improve signal head visibility. **ACTION:** Upgrade 8” indications to 12”. Continue to monitor in 2011.

	Intersection Ranking: **4** **Chorro Street at Higuera Street** **Rate: 0.52 / MEV**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** None at this time. **ACTION:** Conduct focused enforcement and continue to monitor in 2011.

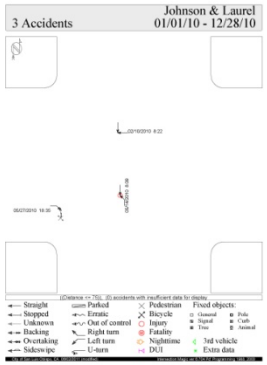
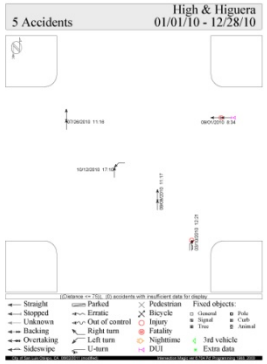
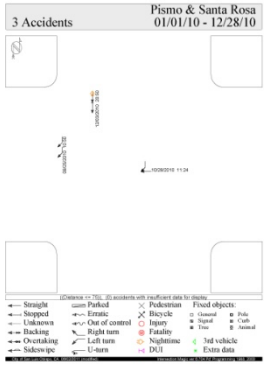
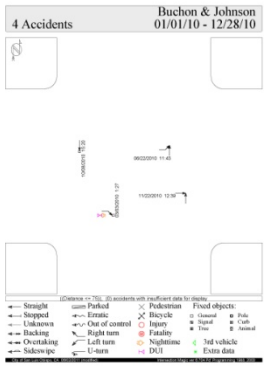
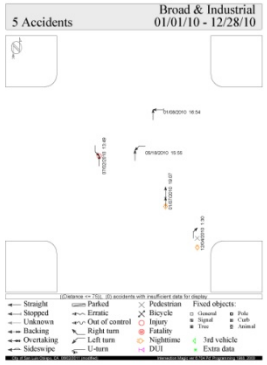
	Intersection Ranking: **5** **Johnson Avenue at Laurel Lane** **Rate: 0.48 / MEV**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** None at this time. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.

Table 6.4 - Recommendations for Intersections Involving Arterial/Collector Streets

	Intersection Ranking: **1** **High Street at Higuera Street** **Rate: 0.91 / MEV**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** Traffic signal is to be reconstructed & intersection reconfigured as part of the Mid-Higuera enhancement project currently scheduled for November of 2012. **ACTION:** Proceed with signal and intersection modification as part of the Mid-Higuera enhancement project. Continue to monitor in 2011.
	Intersection Ranking: **2** **Pismo Street at Santa Rosa Street** **Rate: 0.77 / MEV**	**PATTERN:** SB right turn from thru lane. **RECOMMENDATION:** SB striping reconfigured in September of 2011 to separate right turn and thru movements. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.

	Intersection Ranking: **3** **Buchon Street at Johnson Avenue** **Rate: 0.68 / MEV**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** Major intersection reconstruction as part of Pismo/Buchon NTM project. **ACTION:** Complete improvement project and continue to monitor in 2011.

	Intersection Ranking: **4** **Broad Street at Industrial Way** **Rate: 0.52 / MEV**	**PATTERN:** NB red light violations **RECOMMENDATION:** Improve signal head visibility. **ACTION:** Upgrade 8” signal indications to 12” as part of the Hwy 227 signal conversion project in November of 2011. Continue to monitor in 2011.

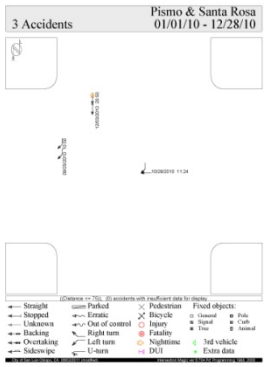
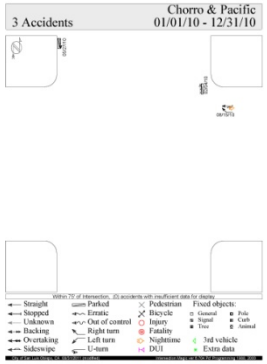
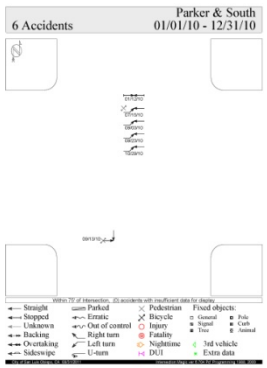
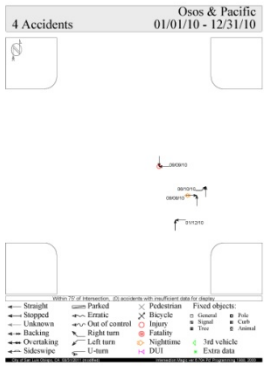
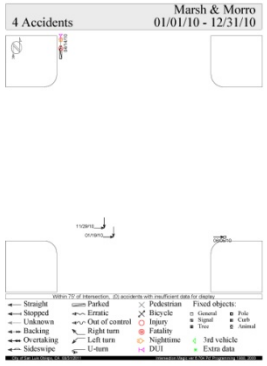
	Intersection Ranking: **5** **Palm Street at Santa Rosa Street** **Rate: 0.38 / MEV**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** None at this time. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.

Table 6.5 - Recommendations for Intersections Involving Arterial/Local Streets

	Intersection Ranking: **1** **Chorro at Pacific** **Estimated Rate: 1.34 / MEV**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** None at this time. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.
	Intersection Ranking: **2** **South at Parker** **Estimated Rate: 1.15 / MEV**	**PATTERN:** Left turn vs. thru **RECOMMENDATION:** Drivers making left turns thru gaps in traffic queued back from the South & Higuera intersection. Investigate turning restrictions. **ACTION:** Develop design options for turn restrictions at this intersection and begin public outreach for potentially affected properties. Proceed with necessary corrective measures.

	Intersection Ranking: **3** **Osos at Pacific** **Estimated Rate: 1.08 / MEV**	**PATTERN:** WB left vs. NB thru. **RECOMMENDATION:** Drivers turning from Pacific having difficulty identifying and judging oncoming traffic. Investigate intersection control upgrades. **ACTION:** Conduct traffic signal and stop sign warrant studies in 2011 and proceed with necessary corrective measures.

	Intersection Ranking: **4** **Marsh at Morro** **Estimated Rate: 0.98 / MEV**	**PATTERN:** EB red light violations **RECOMMENDATION:** Improve signal head visibility. **ACTION:** Upgrade 8” indications to 12”. Continue to monitor in 2011.

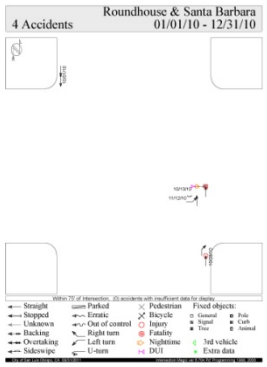
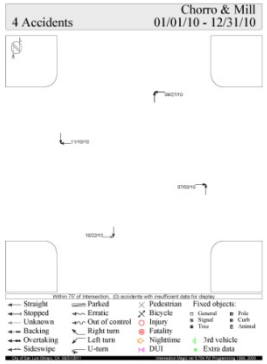
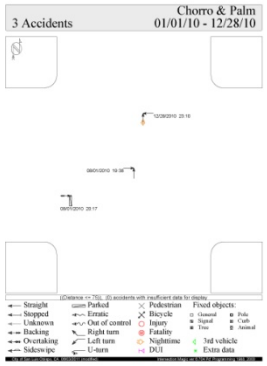
	Intersection Ranking: **5** **Roundhouse at Santa Barbara** **Estimated Rate: 0.77 / MEV**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** None at this time. Major Intersection construction thru out 2010. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.

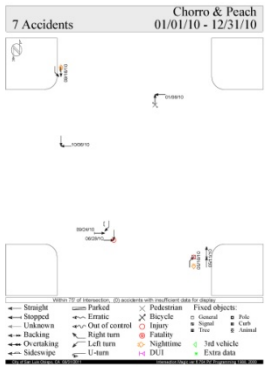
Table 6.6 - Recommendations for Intersections Involving Collector/Collector Streets

	Intersection Ranking: **1** **Chorro Street at Mill Street** **Estimated Rate: 1.25 / MEV**	**PATTERN:** EB & WB left vs. NB Thru **RECOMMENDATION:** Intersection meets minimum sight distance requirements and does not satisfy all-way stop control warrants. None at this time. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.

	Intersection Ranking: **2** **Chorro Street at Palm Street** **Estimated Rate: 0.74/ MEV**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** None at this time. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.

Note: Only two intersections had enough collisions to rank in this category

Table 6.7 - Recommendations for Intersections Involving Collector/Local Streets

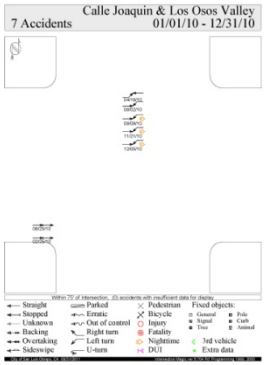
	Intersection Ranking: **1** **Chorro Street at Peach Street** **Estimated Rate: 2.30 / MEV**	**PATTERN:** EB & WB left vs. NB Thru **RECOMMENDATION:** Intersection meets minimum sight distance requirements and does not satisfy all-way stop control warrants. None at this time. **ACTION:** Conduct focused enforcement and continue to monitor in 2011.

Note: Only one intersection had enough collisions to rank in this category

Table 6.8 - Recommendations for Intersections Involving Local/Local Streets

NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 3 COLLISIONS IN 2010

Table 6.9 - Recommendations for Other Significant Intersections: 5+ Left Turn Collisions at Signalized Intersections

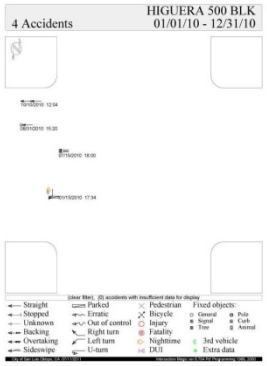
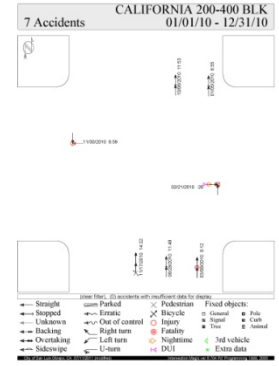
	Intersection Ranking: **1** **Calle Joaquin & LOVR** **Rate: 0.67 / MEV**	**PATTERN:** WB Left vs. EB Thru **RECOMMENDATION:** WB left drivers having difficulty judging gaps in LOVR traffic under permissive left turn phase. Change intersection control type. **ACTION:** Change left turn control type from protected/permissive phasing to protected only phasing. Continue to monitor in 2011.

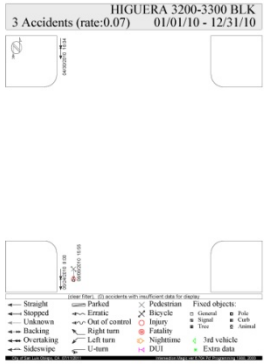
Note: Only one intersection had enough collisions to rank in this category

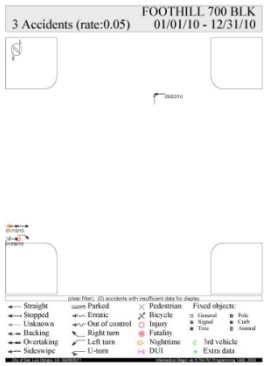
Table 6.10 - Recommendations for Other Significant Intersections: 5+ Collisions at Intersections Without All-way Control

NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 5 COLLISIONS IN 2010

Table 6.11 - Recommendations for Arterial Segments

	Segment Ranking: **1** **Higuera 500 Block (Broad to Nipomo)** **Rate: 5.80 / MVM**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** None at this time. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.
	Segment Ranking: **2** **California 200-400 Block (Foothill to Stafford)** **Rate: 4.42 / MVM**	**PATTERN:** NB rear-ends in traffic queued at Foothill & California **RECOMMENDATION:** Intersection of Foothill & California reconstructed in summer of 2011. None at this time. **ACTION:** Conduct focused enforcement and continue to monitor in 2011.

	Segment Ranking: **3** **Higuera 3200-3300 Block (Margarita to Prado)** **Rate: 3.96 / MVM**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** None at this time. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.

	Segment Ranking: **4** **Foothill 700 Block (Chorro to Ferrini)** **Rate: 2.86 / MVM**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** None at this time. **ACTION:** Conduct focused enforcement and Continue to monitor in 2011.

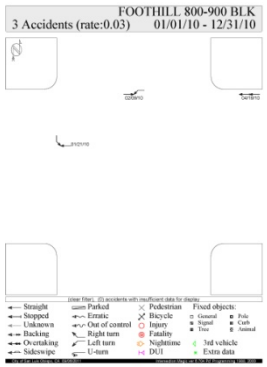
	Segment Ranking: **5** **Foothill 800-900 Block (Chorro to Santa Rosa)** **Rate: 2.64 / MVM**	**PATTERN:** No discernible pattern. **RECOMMENDATION:** None at this time. **ACTION:**Conduct focused enforcement and Continue to monitor in 2011.

Table 6.12 - Recommendations for Collector Segments

NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 3 COLLISIONS IN 2010

Table 6.13 - Recommendations for Local Segments

NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 3 COLLISIONS IN 2010

section 7

2010 traffic enforcement activities

7.1 Enforcement at High Collision Intersections and Segments

Traffic enforcement at intersections and street segments with high collision rates is a high priority for the Police Department. Officers conduct enforcement activities, high visibility patrols and saturation deployment in areas identified as having the highest concentration of collisions, or which present special risks such as school zones. These enforcement efforts result in citations and have a lasting impact on drivers who are concerned about receiving a citation even after a saturation effort ends and change their driving behavior as a result. In fact, often the presence of officers in a specific area results in drivers obeying the law without the need to issue large numbers of citations.

The Police Department attempts to correlate these focused enforcement efforts with locations that have been identified as having high collision rates. A Traffic Enforcement Calendar is generated each quarter and posted in different areas of the police department in order to focus officers' efforts on a specific area or type of violation. In addition to enforcement in high collision areas, the Traffic Safety Unit frequently adjusts its enforcement activities based on citizen complaints and observations of violations.

7.2 DUI Special Enforcement

The enforcement of Driving under the Influence (DUI) laws continues to be a high priority for the Police Department, particularly for officers working night shifts. The Police Department participated in the county-wide "Avoid the 14" DUI education and enforcement campaign, funded by the California Office of Traffic Safety. Officers conducted coordinated efforts with other law enforcement agencies for DUI enforcement during peak periods such as holiday weekends and participated in DUI media campaigns. The Police Department and the Avoid the 14 coalition conducted two DUI checkpoints in the City in 2010.

7.3 Seatbelt Enforcement

According to the National Highway Traffic Safety Administration (NHTSA), research has shown that the use of a lap/shoulder seatbelt can reduce the risk of a fatal injury by 45 percent and the risk of a moderate injury by 50 percent. In order to encourage seatbelt use to increase safety, the Police Department strictly enforces seatbelt violations and conducts special education and enforcement campaigns under the annual statewide "Click it or Ticket" program. During "Click it or Ticket" enforcement periods, seatbelt use is measured before and after the enforcement campaign in order to gauge the level of compliance and effectiveness of enforcement.

In 2010 the Police Department issued 590 seatbelt citations. Two mobilization periods were scheduled during the year with officers conducting specialized enforcement during these times using grant funds. Surveys conducted before and after the enforcement periods indicated that compliance with seatbelt laws remained consistent at 98% which represents a high level of seatbelt use.

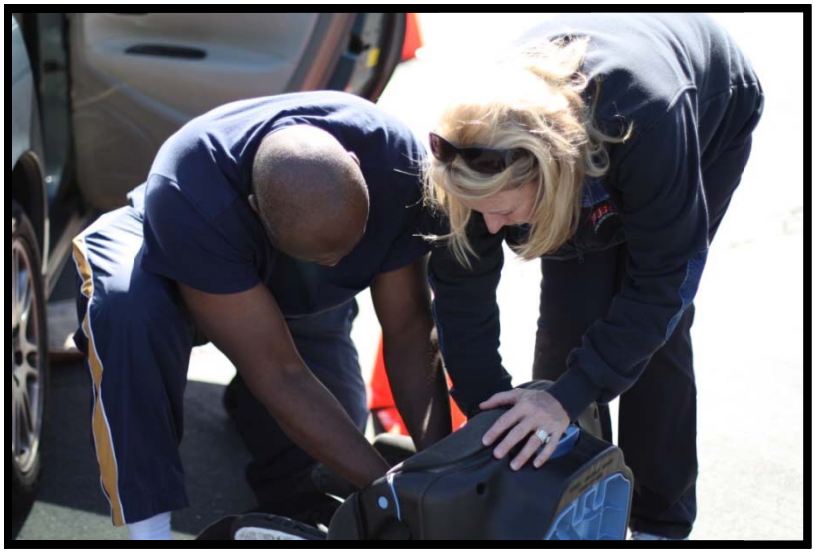
7.4 Repeat Offenders - Suspended Licenses

The Department of Motor Vehicles suspends the privilege to drive based upon driving behavior, utilizing the Violation Point Assessment tool to identify negligent and dangerous drivers. Individuals who continue to drive once their license has been suspended or revoked pose an increased risk to the public over licensed drivers. In 2010, the Police Department continued its pro-active enforcement against these offenders by conducting a Court Sting Operation funded through an Office of Traffic Safety grant. Individuals with suspended driver's licenses seen driving away from court were issued citations and their vehicles impounded according to law.

section 8

ongoing education campaigns

8.1 Child Safety Seats



In order to reduce the likelihood that an infant or child is injured in a traffic collision, the Police and Fire Departments offer child safety seat inspection and installation at no cost to members of the public. The Departments are part of a county-wide Car Seat Safety Coalition which organizes several Child Seat Check-up events each year to make sure child seats are properly installed in vehicles and to answer questions about the laws regulating the transportation of children. When a child seat is identified as being unsafe or subject to recall, a new seat is provided to the parent or caregiver at no cost.

8.2 Bicycle Safety

Each year, the Police and Parks and Recreation Departments co-host a “Bicycle Rodeo” for children in order to promote safe and responsible bicycle skills and operation. During the five days leading up to the Rodeo, a professional BMX stunt team travels to several elementary schools and puts on an exciting bicycle safety demonstration that includes messaging promoting a healthy lifestyle free of drugs and alcohol.

The week concludes with a free Bicycle Rodeo featuring a “Safety Town” that includes signaled intersections, stop signs, a railroad crossing, pedestrian traffic, car doors opening into the roadway, as well as specialized cone courses to develop riding skills. Individuals and organizations volunteer their time to staff the course, and local professional bicycle mechanics check and adjust children’s bicycles prior to entry on the course. Helmets are checked and if they are determined to be unsafe a new one is provided free of charge. The annual attendance ranges from 200 to 300 children.

8.3 Impaired Driver Offender Classes

When a driver is convicted of DUI, they are normally required to attend a DUI offender class as part of their sentence. The goal of the class is to provide education and dialog about DUI offenses in order to increase the chances an individual will not re-offend. The classes are offered by the County Behavioral Health Department, Drug and Alcohol Services, and serve approximately 50 people per class.

The Police Department participates in the program by providing a traffic officer to make a presentation at the DUI offender classes to discuss the impacts of DUI on traffic safety and collisions. The class offers a unique opportunity for officers to interact with DUI offenders in a positive and educational way, rather than during an enforcement action. Class attendees are provided an opportunity to ask questions of the officer and to discuss the impact of DUI driving on them and others.

8.4 Every Fifteen Minutes Program

In February 2010 the Police Department participated in presenting the “Every Fifteen Minutes” program at San Luis Obispo High School in order to educate students regarding the dangers of impaired driving. This event involves staff from the Police and Fire Departments, San Luis Obispo High School, local hospitals, San Luis Ambulance, a video production crew, various community officials, the District Attorney's Office, funeral homes, parents, and various community members. The goal of the program is to prevent drunk driving and texting while driving by offering a simulated collision and fatality. Students are removed from the classroom every fifteen minutes, which dramatically demonstrates that one young person is killed in the US approximately every fifteen minutes as a result of drunk driving or texting while driving. The program exposes students to a simulated fatal crash, response of emergency personnel, and subsequent investigation. The program includes obituaries of the students removed from class, and a simulated funeral at the conclusion of the two-day program.

This program is funded through an Office of Traffic Safety grant and presented cooperatively with California Highway Patrol, OTS, the San Luis Obispo Police and Fire Departments, SLO County “Friday Night Live” Partnership, and San Luis Obispo High School.

appendix 1

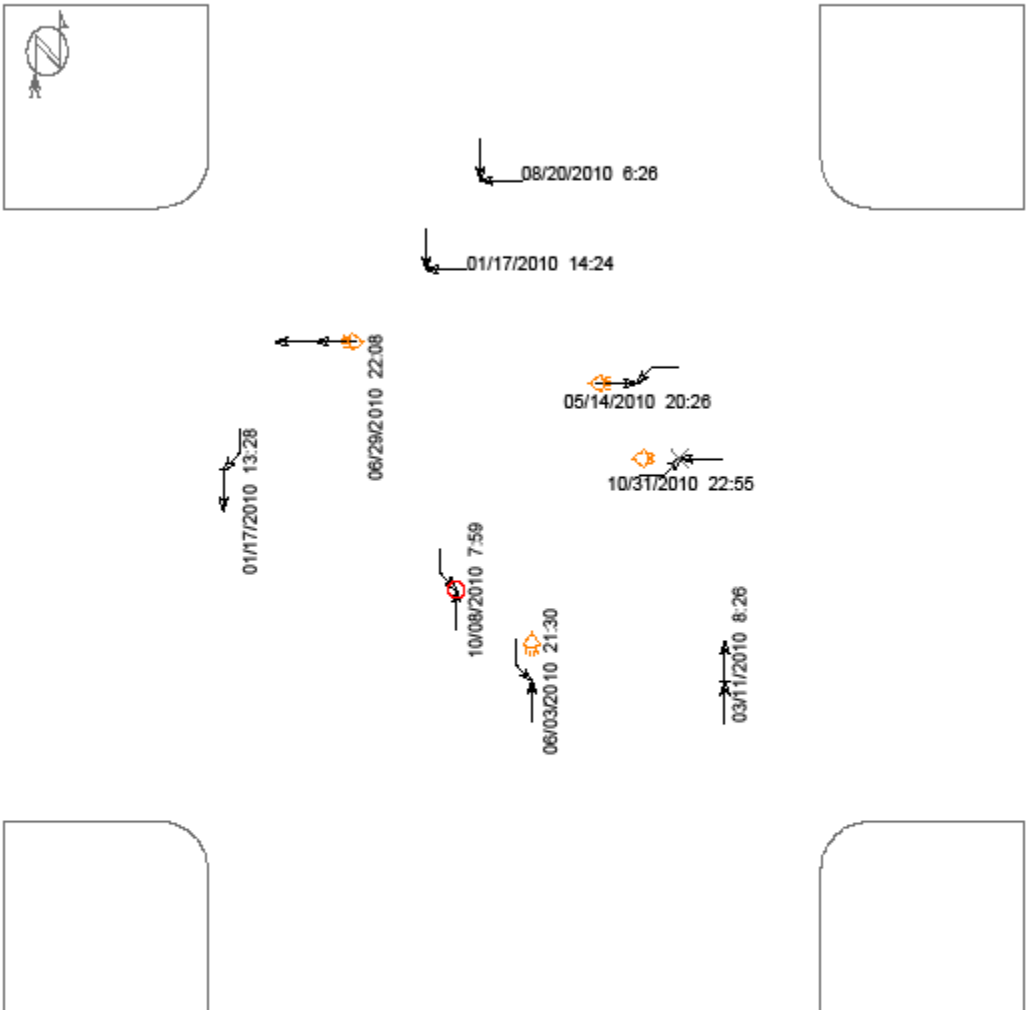
Arterial / Arterial Intersections

Arterial / Arterial Intersections Prioritized by Accident Rate

Rank	Prev. Rank	Intersection	Collisions	Volume	Rate	Control	EB	WB	NB	SB
1	**Not Ranked**	**Monterey & Santa Rosa**	**9**	**27,292**	**0.90**	**SIG**	**2,781**	**6,540**	**9,034**	**8,937**
2	**6**	**Chorro & Marsh**	**5**	**16,570**	**0.83**	**SIG**	**11,877**	***N/A***	**1,665**	**3,028**
3	**9**	**Broad & Marsh**	**5**	**18,196**	**0.75**	**SIG**	**10,639**	***N/A***	**4,633**	**2,924**
4	**Not Ranked**	**Chorro & Higuera**	**3**	**15,659**	**0.52**	**SIG**	***N/A***	**8,553**	**3,095**	**4,011**
5	**Not Ranked**	**Johnson & Laurel**	**3**	**17,264**	**0.48**	**SIG**	**4,267**	***1,500***	**4,273**	**7,224**
6	2	California & Monterey	4	24,278	0.45	SIG	5,912	6,526	6,801	5,039
7	5	Marsh & Santa Rosa	3	18,949	0.43	SIG	10,650	*N/A*	2,367	5,932
8	4	Higuera & Marsh	4	26,350	0.42	SIG	10,639	9,441	6,270	*N/A*
9	14	California & Foothill	5	33,990	0.40	SIG	9,193	*4,000*	11,604	9,193
10	Not Ranked	Higuera & Santa Rosa	3	23,581	0.35	SIG	*N/A*	3,102	9,852	10,627
11	Not Ranked	Higuera & Los Osos Valley	3	27,141	0.30	SIG	8,106	*N/A*	6,245	12,790
12	13	Higuera & Tank Farm	3	27,932	0.29	SIG	*N/A*	9,426	10,165	8,341
13	12	Broad & Tank Farm	4	37,575	0.29	SIG	4,976	10,138	10,037	12,424
14	11	Higuera & Madonna	3	31,664	0.26	SIG	12,434	*N/A*	*6,000*	13,230
15	3	Foothill & Santa Rosa	5	54,143	0.25	SIG	9,019	9,963	17,669	17,492
16	7	Broad & Orcutt	3	34,179	0.24	SIG	*N/A*	7,178	12,774	14,227
17	Not Ranked	Higuera & Prado	3	17,686	0.46	SIG	1966	610	8410	*6700*

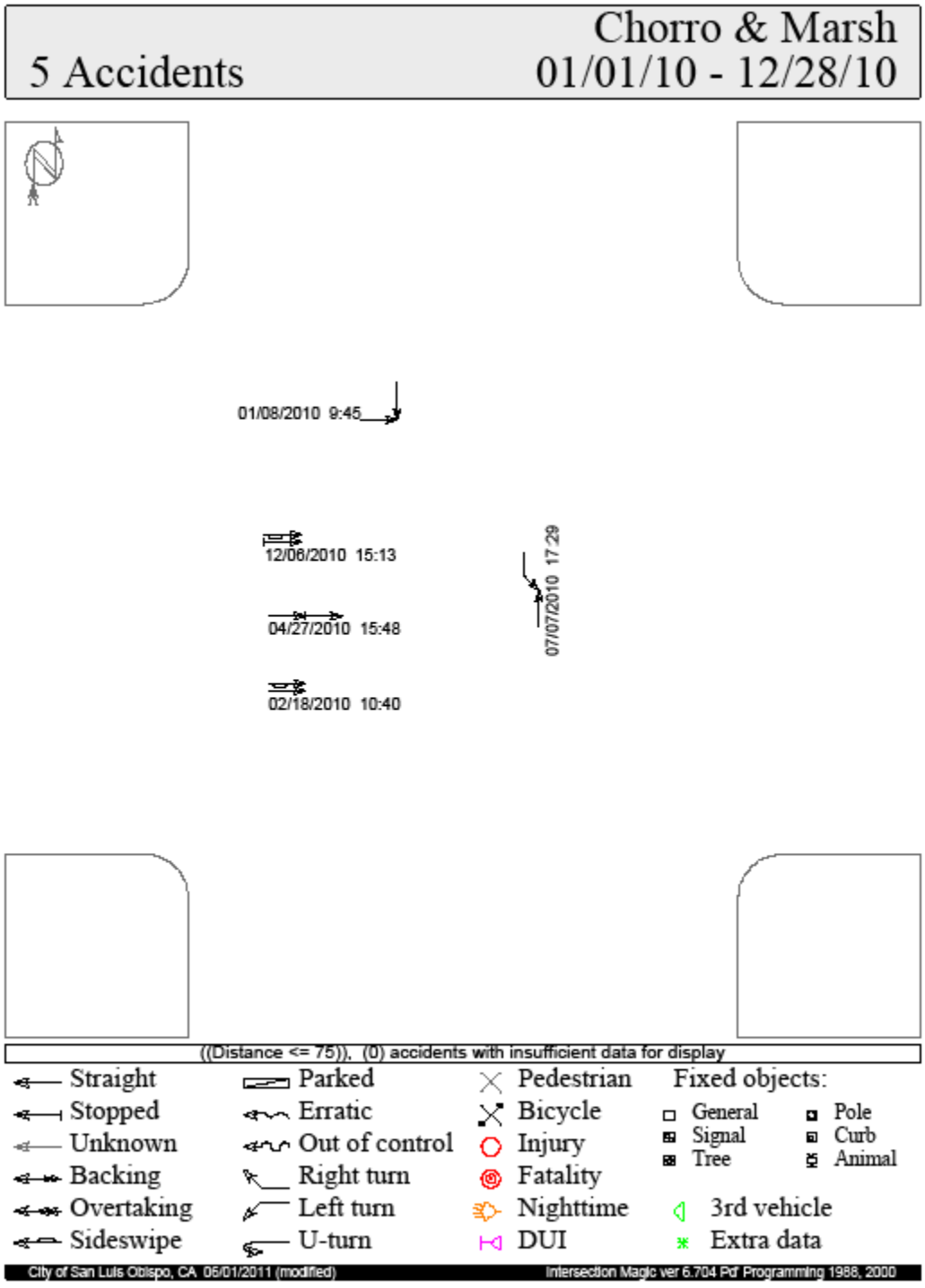
9 Accidents

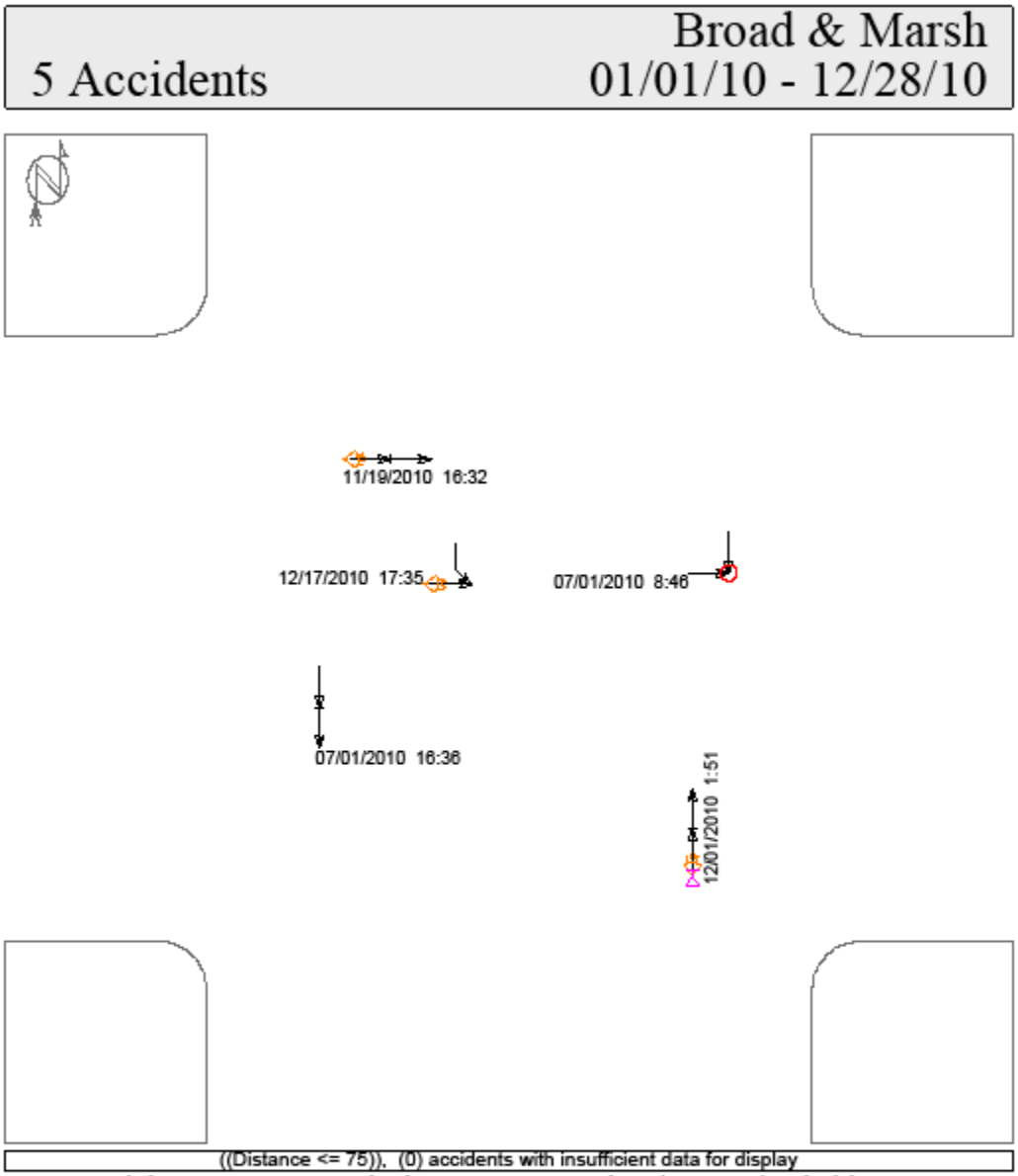
Monterey & Santa Rosa
01/01/10 - 12/28/10

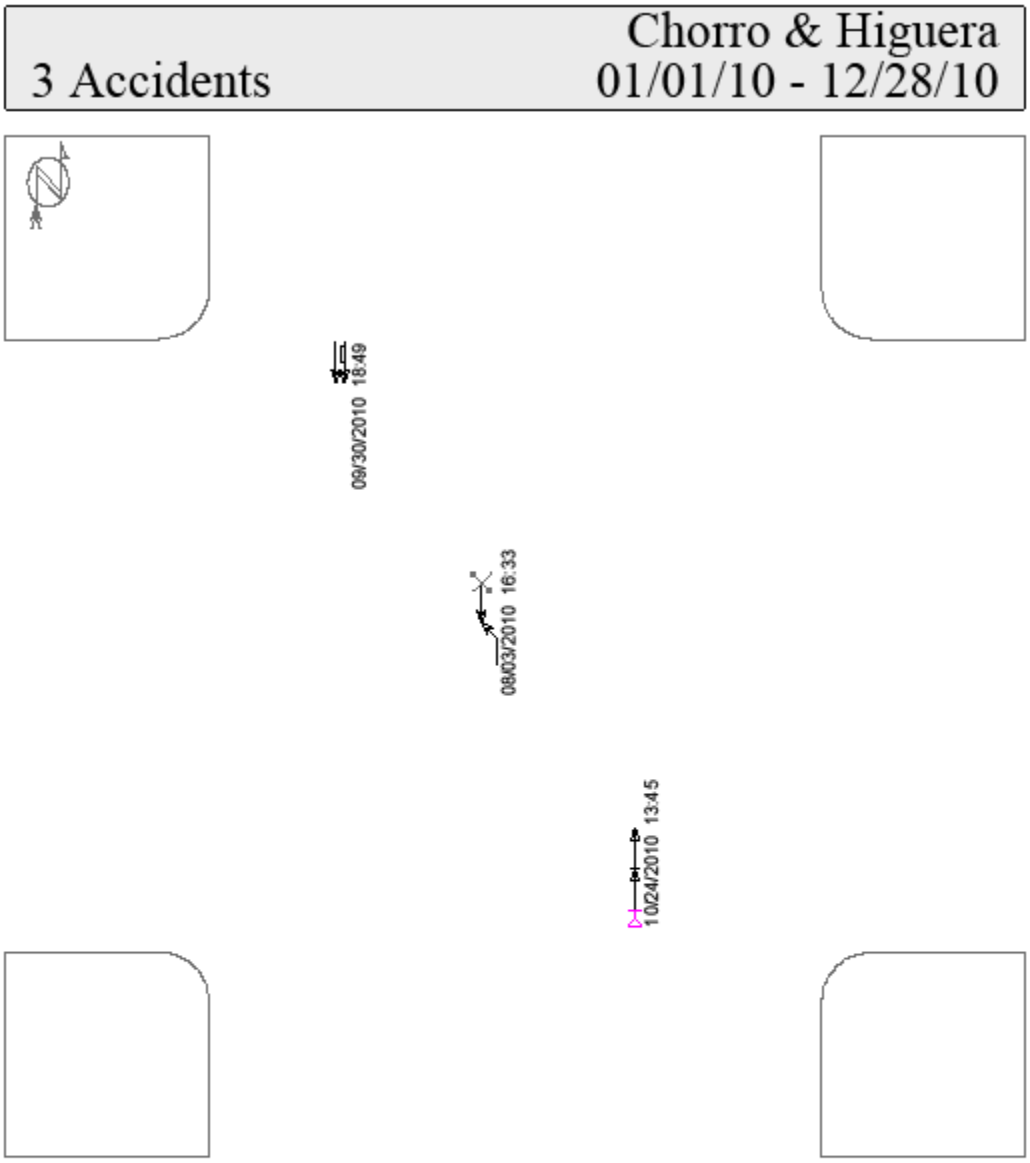


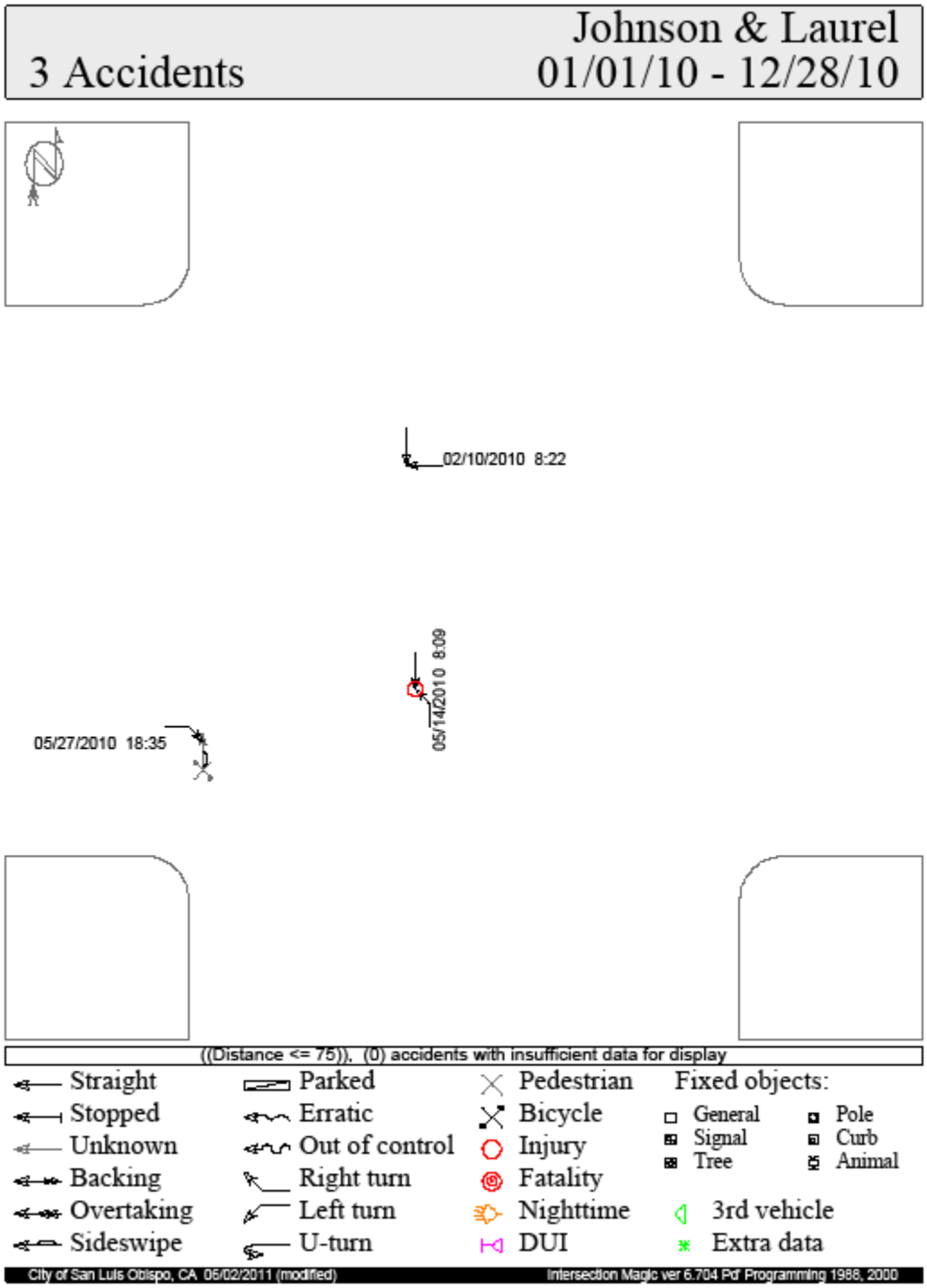
((Distance <= 75)). (0) accidents with insufficient data for display

Straight	Parked	Pedestrian	Fixed objects:
Stopped	Erratic	Bicycle	General, Pole, Signal, Curb, Tree, Animal
Unknown	Out of control	Injury	
Backing	Right turn	Fatality	
Overtaking	Left turn	Nighttime	3rd vehicle
Sideswipe	U-turn	DUI	Extra data


5 Accidents
Chorro & Marsh
01/01/10 - 12/28/10
01/08/2010 9:45
12/06/2010 15:13
04/27/2010 15:48
02/18/2010 10:40
07/07/2010 17:29
((Distance <= 75)), (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 06/01/2011 (modified)
Intersection Magic ver 6.704 Pd Programming 1988, 2000


5 Accidents
Broad & Marsh
01/01/10 - 12/28/10
11/19/2010 16:32
12/17/2010 17:35
07/01/2010 8:46
07/01/2010 16:36
12/01/2010 1:51
((Distance <= 75)), (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 06/01/2011 (modified)
Intersection Magic ver 6.704 Pd Programming 1988, 2000


3 Accidents
Chorro & Higuera
01/01/10 - 12/28/10
09/30/2010 18:49
08/03/2010 16:33
10/24/2010 13:45
((Distance <= 75)), (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 06/02/2011 (modified)
Intersection Magic ver 6.704 Pd Programming 1988, 2000

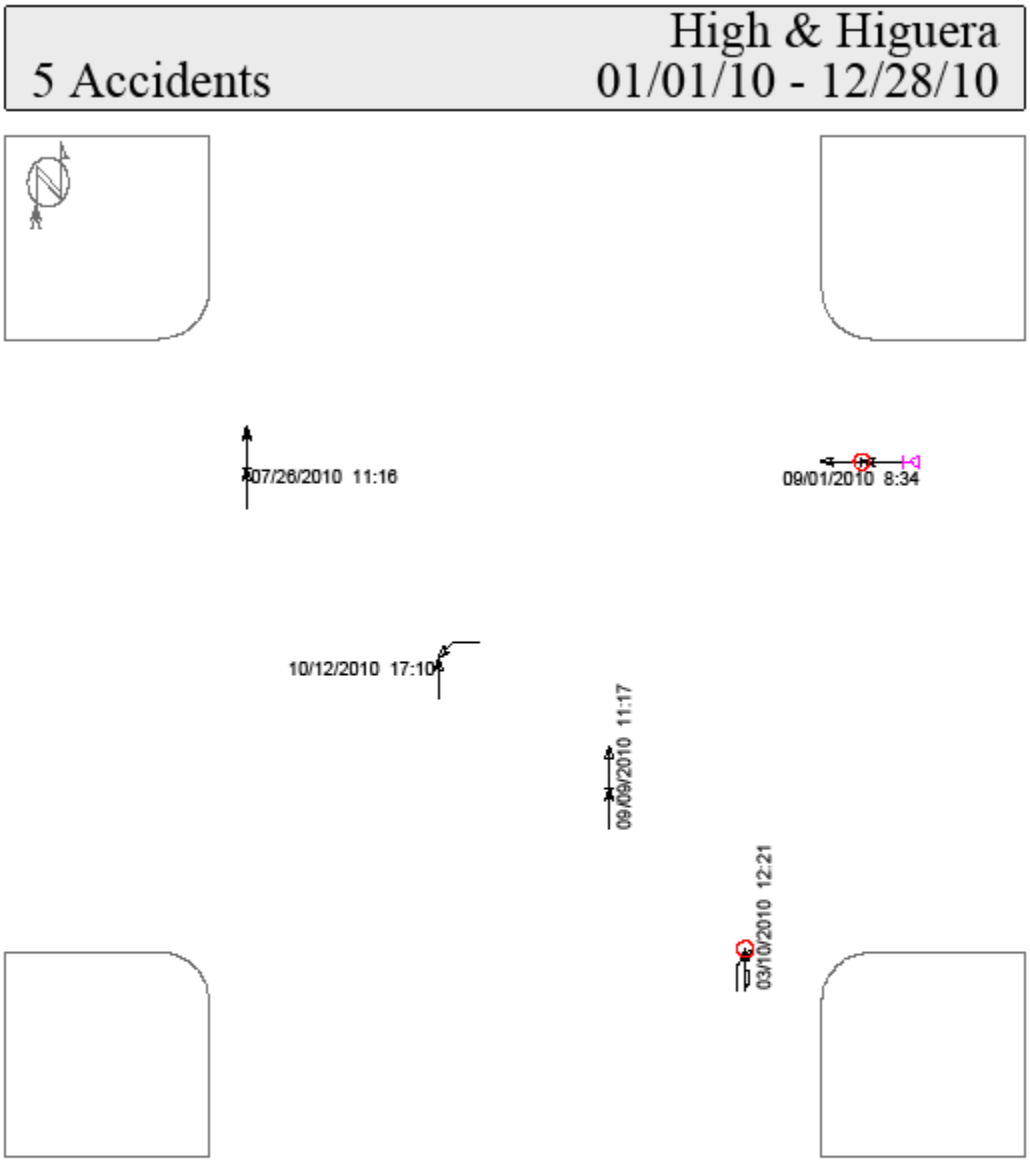

3 Accidents
Johnson & Laurel
01/01/10 - 12/28/10
02/10/2010 8:22
05/14/2010 8:09
05/27/2010 18:35
((Distance <= 75)), (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 06/02/2011 (modified)
Intersection Magic ver 6.704 Pd Programming 1988, 2000

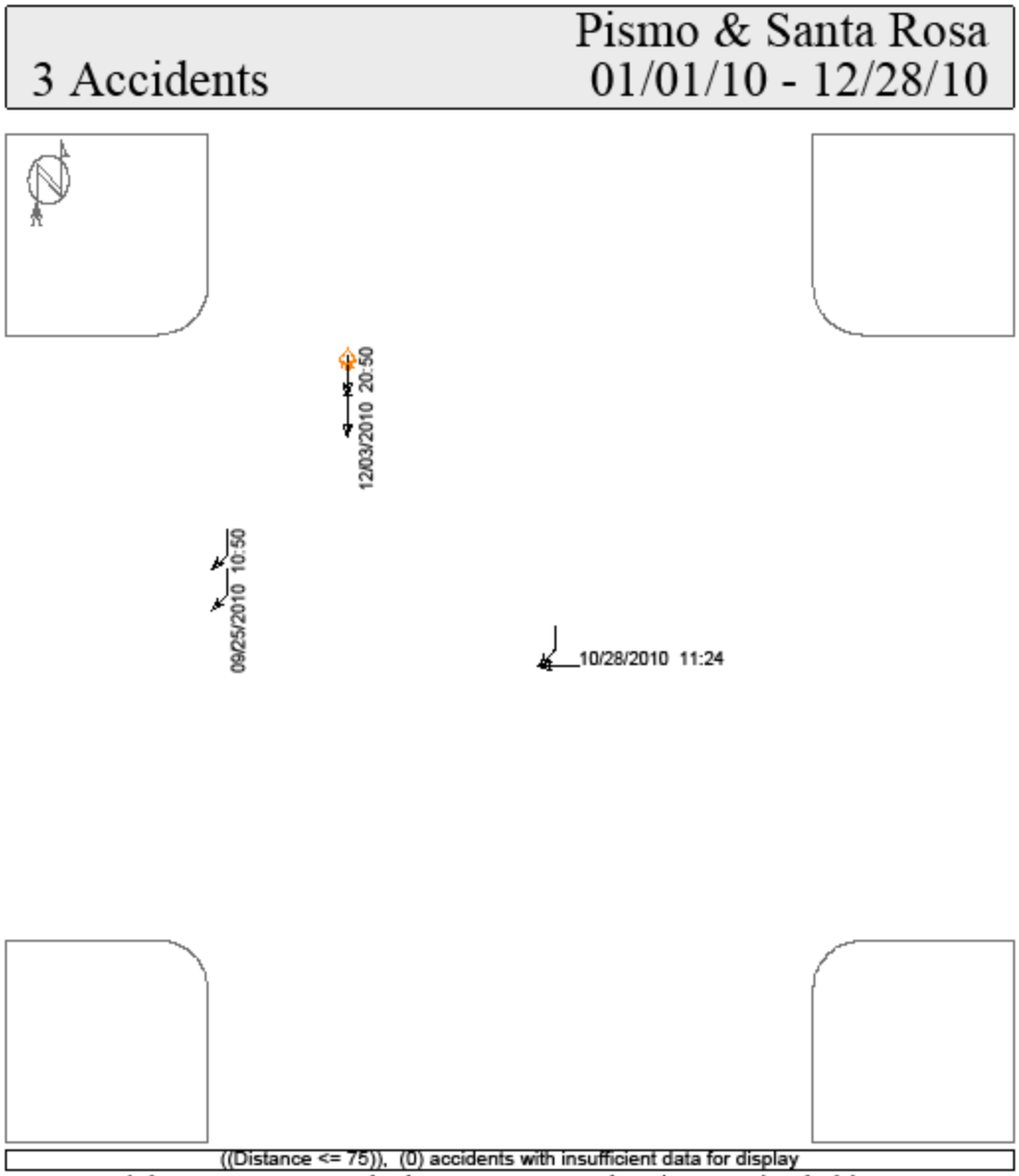
appendix 2

Arterial / Collector Intersections

Arterial / Collector Intersections Prioritized by Accident Rate

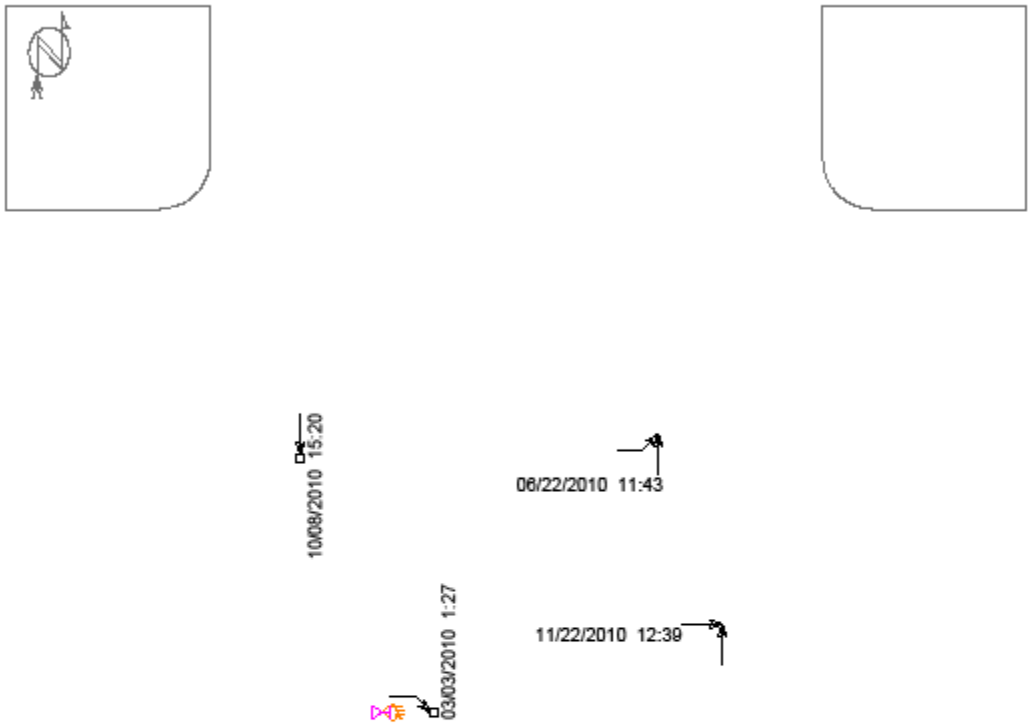
Rank	Prev. Rank	Intersection	Collisions	Volume	Rate	Control	EB	WB	NB	SB
1	**Not Ranked**	**High & Higuera**	**5**	**15,038**	**0.91**	**SIG**	***N/A***	**2,286**	**6,087**	**6,665**
2	**1**	**Pismo & Santa Rosa**	**3**	**10,707**	**0.77**	**3-STOP**	***N/A***	**4,035**	**2,086**	**4,586**
3	**2**	**Buchon & Johnson**	**4**	**16,103**	**0.68**	**2-STOP**	**3,065**	***20***	**7,151**	**5,867**
4	**8**	**Broad & Industrial**	**5**	**26,100**	**0.52**	**SIG**	***150***	**2,015**	**11,799**	**12,136**
5	**6**	**Palm & Santa Rosa**	**3**	**21,722**	**0.38**	**SIG**	**2,531**	**516**	**8,344**	**10,331**
6	Not Ranked	Madonna & Oceanaire	3	24,544	0.33	SIG	1,140	610	10,831	11,963


5 Accidents
High & Higuera
01/01/10 - 12/28/10
07/26/2010 11:16
09/01/2010 8:34
10/12/2010 17:10
09/09/2010 11:17
03/10/2010 12:21
((Distance <= 75)), (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 06/02/2011 (modified)
Intersection Magic ver 6.704 Pd Programming 1988, 2000


3 Accidents
Pismo & Santa Rosa
01/01/10 - 12/28/10
12/03/2010 20:50
09/25/2010 10:50
10/28/2010 11:24
((Distance <= 75)), (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 06/02/2011 (modified)
Intersection Magic ver 6.704 Pd' Programming 1988, 2000

4 Accidents

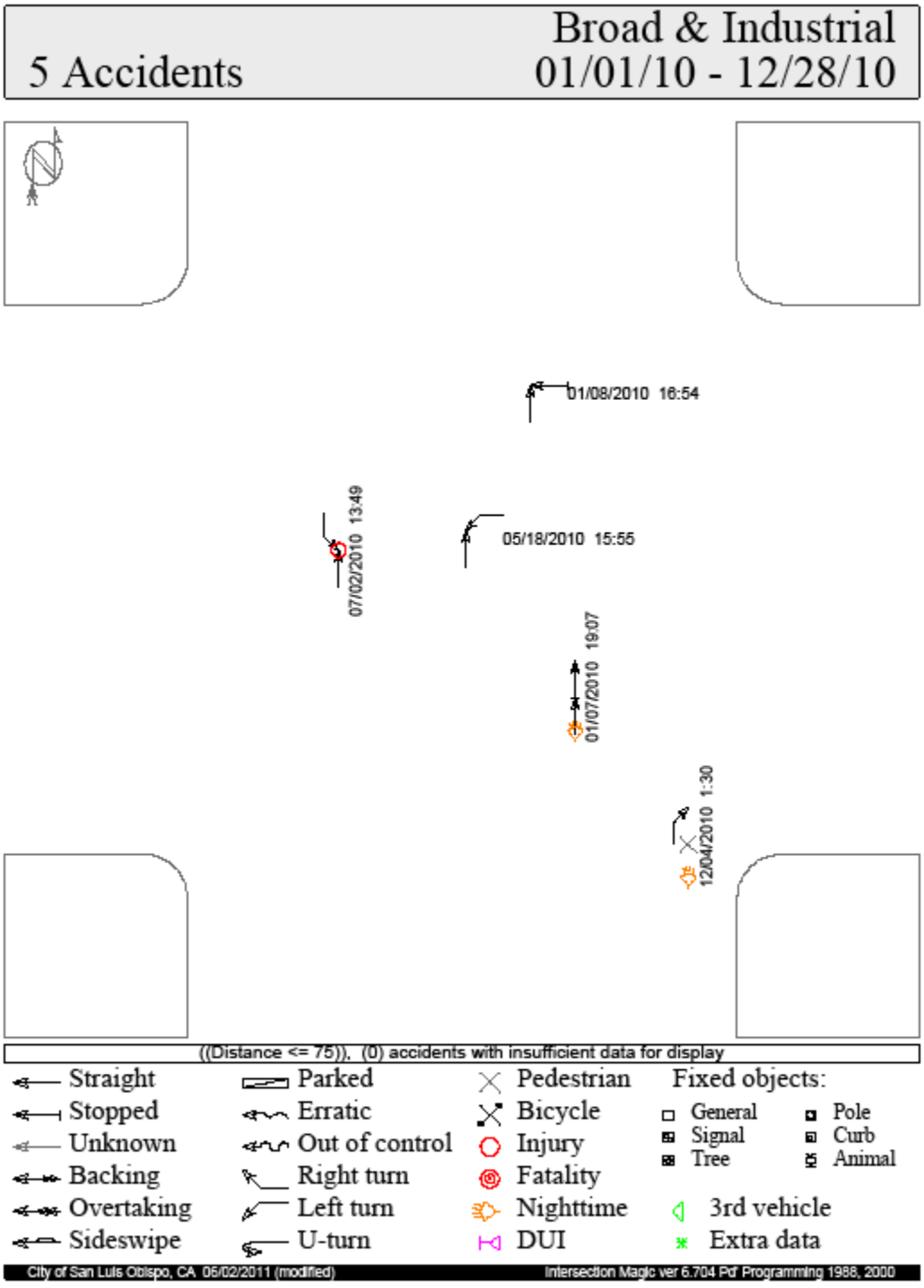
Buchon & Johnson
01/01/10 - 12/28/10

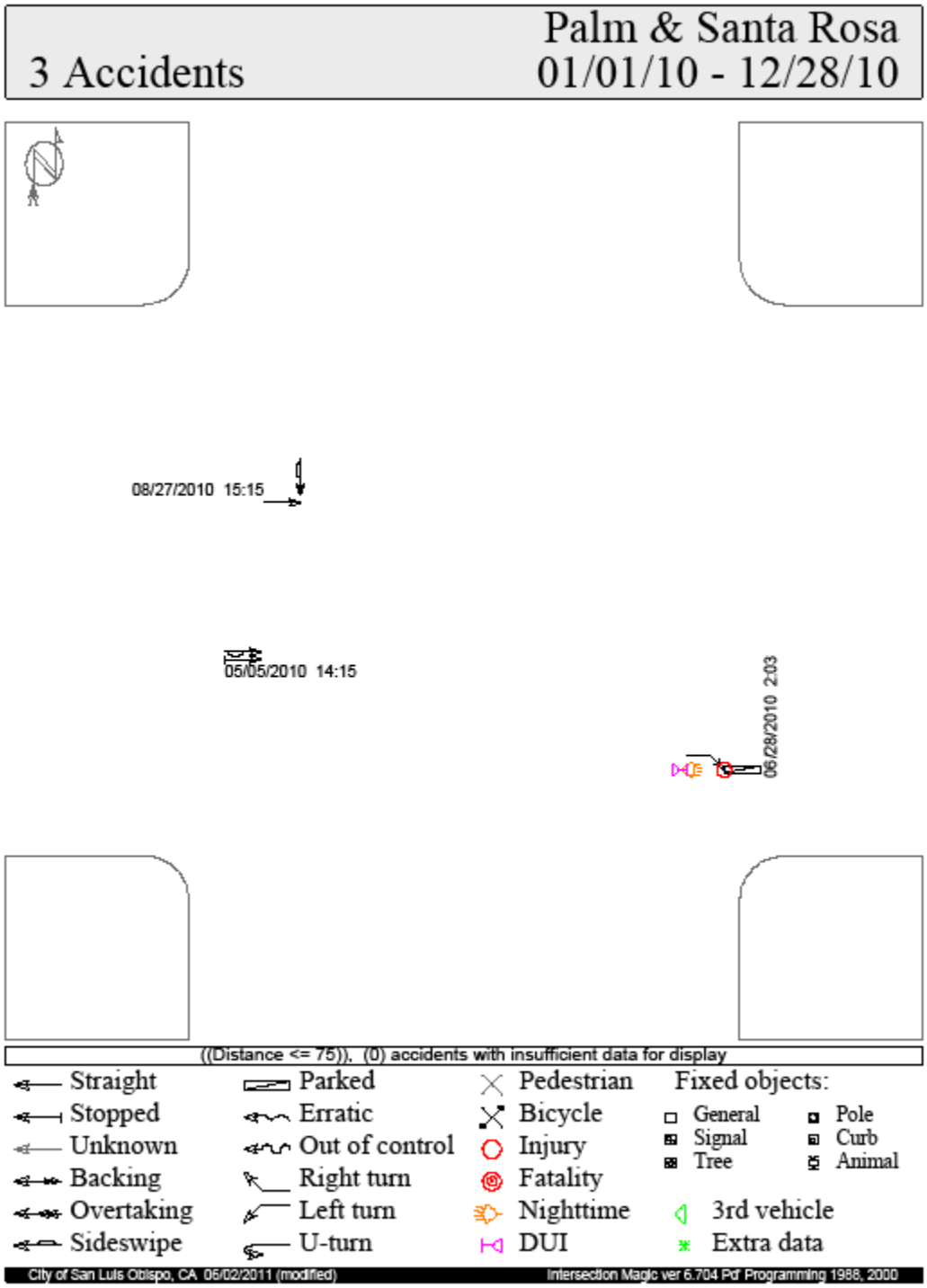


((Distance <= 75)), (0) accidents with insufficient data for display

Straight	Parked	Pedestrian	Fixed objects:
Stopped	Erratic	Bicycle	General, Pole, Signal, Curb, Tree, Animal
Unknown	Out of control	Injury	
Backing	Right turn	Fatality	
Overtaking	Left turn	Nighttime	3rd vehicle
Sideswipe	U-turn	DUI	Extra data

City of San Luis Obispo, CA 06/02/2011 (modified) Intersection Magic ver 6.704 Pdf Programming 1988, 2000


5 Accidents
Broad & Industrial
01/01/10 - 12/28/10
01/08/2010 16:54
07/02/2010 13:49
05/18/2010 15:55
01/07/2010 19:07
12/04/2010 1:30
((Distance <= 75)), (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 06/02/2011 (modified)
Intersection Magic ver 6.704 Pdf Programming 1988, 2000

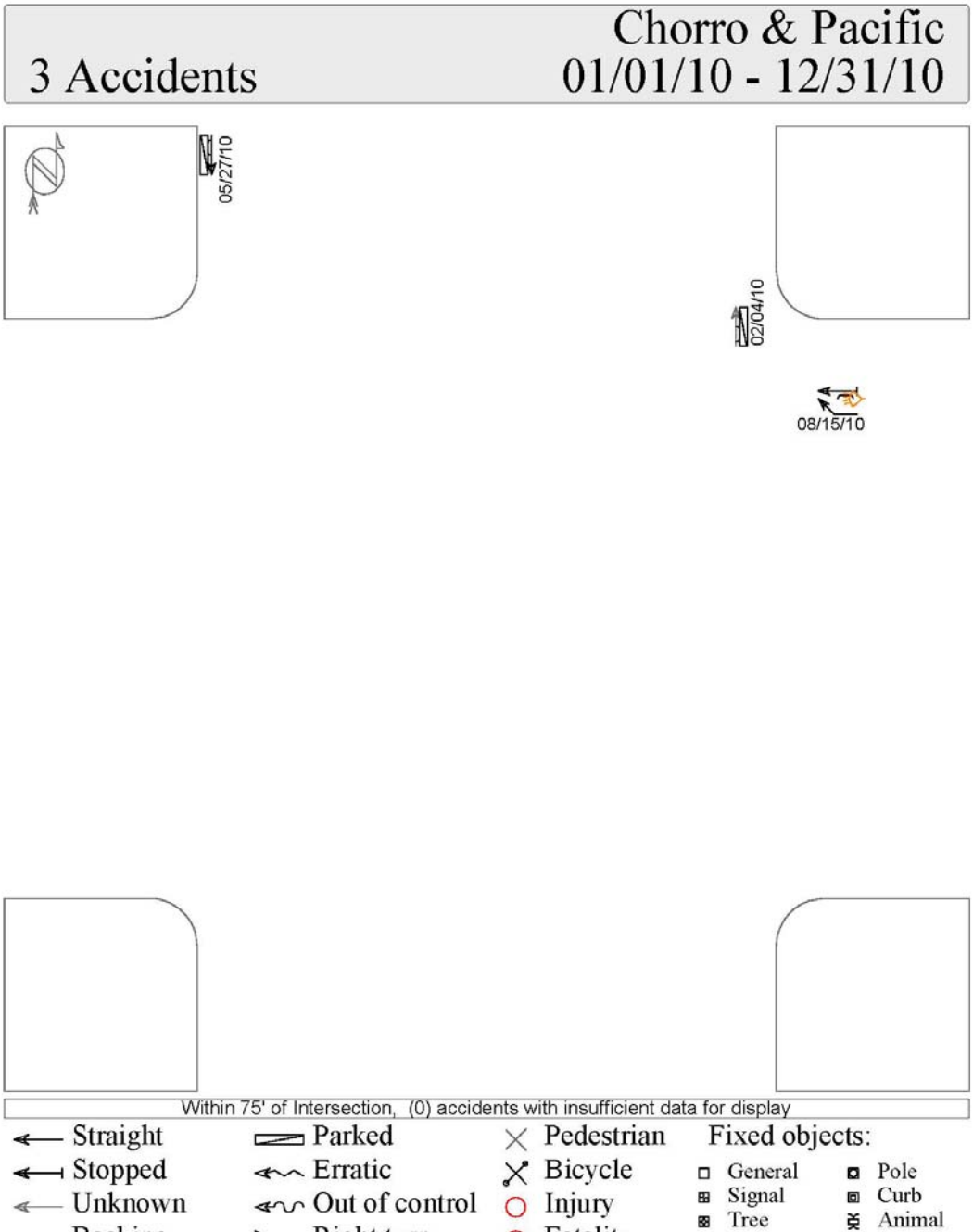

3 Accidents
Palm & Santa Rosa
01/01/10 - 12/28/10
08/27/2010 15:15
05/05/2010 14:15
06/28/2010 2:03
((Distance <= 75)), (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 06/02/2011 (modified)
Intersection Magic ver 6.704 Pdf Programming 1988, 2000

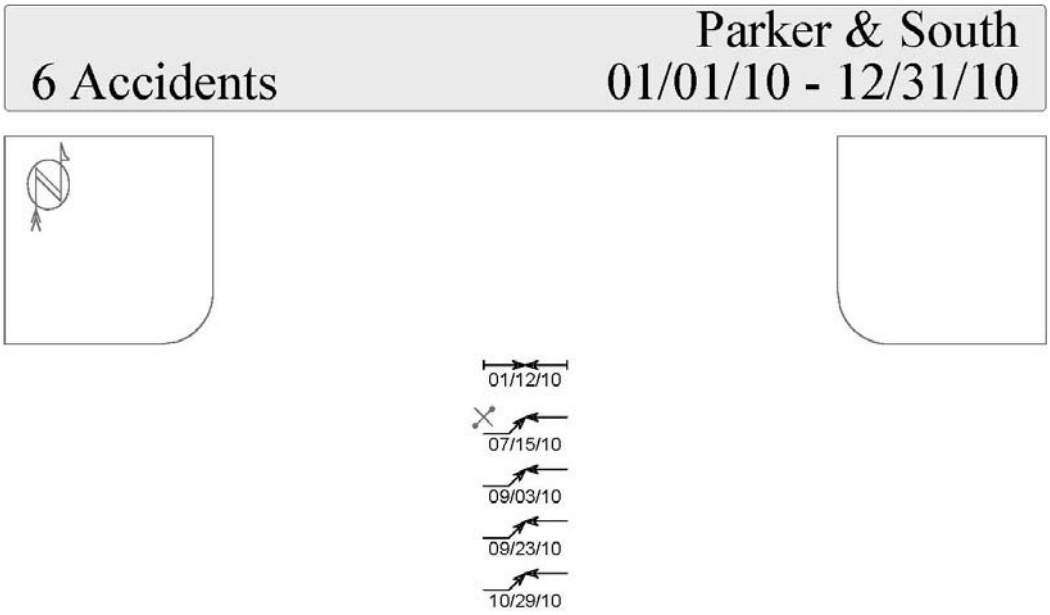
appendix 3

Arterial / Local Intersections

Arterial / Local Intersections Prioritized by Accident Rate

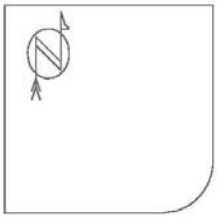
Rank	Prev. Rank	Intersection	Collisions	Volume	Rate	Control	EB	WB	NB	SB
1	**Not Ranked**	**Chorro & Pacific**	**3**	**6,123**	**1.34**	**4-STOP**	***1,000***	***1,750***	**1,665**	**1,708**
3	**Not Ranked**	**Parker & South**	**6**	**14,254**	**1.15**	**1-STOP**	**5,986**	**7,768**	***N/A***	***500***
2	**2**	**Osos & Pacific**	**4**	**10,123**	**1.08**	**2-STOP**	***1,500***	***1,500***	**4,809**	**2,314**
4	**3**	**Marsh & Morro**	**4**	**11,172**	**0.98**	**SIG**	**9,602**	***N/A***	**750**	**820**
5	**Not Ranked**	**Roundhouse & Santa Barbara**	**4**	**14,284**	**0.77**	**1-STOP**	***N/A***	***200***	**7,287**	**6,797**
6	14	Calle Joaquin & Los Osos Valley	7	28,540	0.67	SIG	14,970	10,570	*1,000*	*2,000*
7	Not Ranked	Los Osos Valley & Royal	6	26,096	0.63	SIG	11,926	11,310	*2200*	*660*
8	5	California & Taft	4	18,355	0.60	1-STOP	*N/A*	*3,000*	6,197	9,158
9	Not Ranked	Church & Santa Barbara	3	13,925	0.59	1-STOP	*330*	*N/A*	7,135	6,460
10	19	Madonna & Pereira	4	23,733	0.46	1-STOP	*1,400*	*3,000*	9,394	9,939
11	Not Ranked	Foothill & Mustang	3	19,406	0.42	*N/A*	9,193	9,963	*N/A*	*250*
12	Not Ranked	Olive & Santa Rosa	6	40,646	0.40	SIG	*900*	*400*	19,521	19,825
13	18	Higuera & Vachell	4	28,030	0.39	1-STOP	*N/A*	*2,300*	12,940	12,790
14	9	Froom Ranch & Los Osos Valley	5	36,200	0.38	SIG	13,715	14,135	*7900*	*450*
15	Not Ranked	Meinecke & Santa Rosa	4	39,494	0.28	1-STOP	*1,000*	*1,000*	17,669	19,825
16	15	Santa Rosa & Walnut	3	30,485	0.27	SIG	*950*	*6,100*	10,395	13,040
17	Not Ranked	Murray & Santa Rosa	3	42,094	0.20	SIG	*600*	*4000*	17,669	19,825

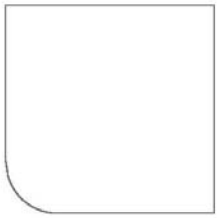

3 Accidents
Chorro & Pacific
01/01/10 - 12/31/10
05/27/10
02/04/10
08/15/10
Within 75' of Intersection, (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 08/31/2011 (modified)
Intersection Magic ver 6.704 Pd' Programming 1988, 2000

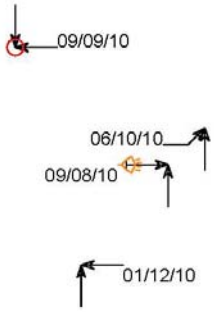

6 Accidents
Parker & South
01/01/10 - 12/31/10
01/12/10
07/15/10
09/03/10
09/23/10
10/29/10
09/13/10
Within 75' of Intersection, (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 08/31/2011
Intersection Magic ver 6.704 Pd' Programming 1988, 2000

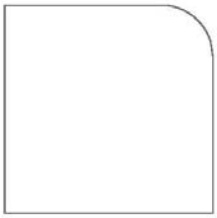
4 Accidents

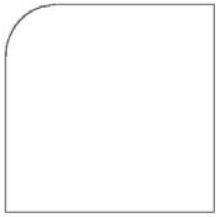
Osos & Pacific
01/01/10 - 12/31/10











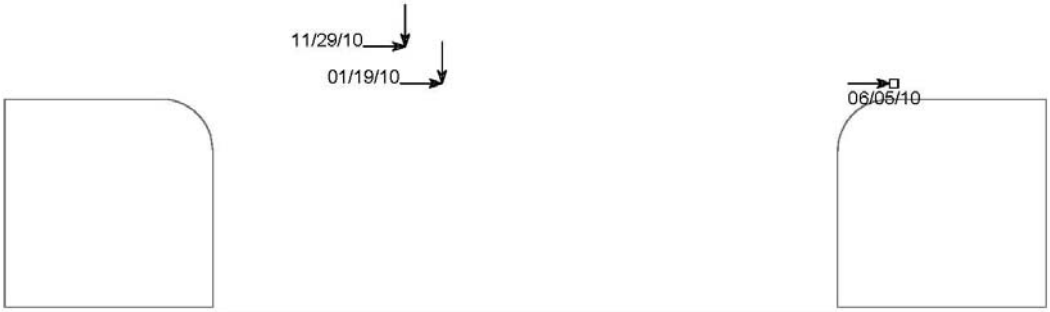
Within 75' of Intersection, (0) accidents with insufficient data for display

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	

City of San Luis Obispo, CA 08/31/2011 (modified) Intersection Magic ver 6.704 Pd' Programming 1988, 2000

4 Accidents

Marsh & Morro
01/01/10 - 12/31/10



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

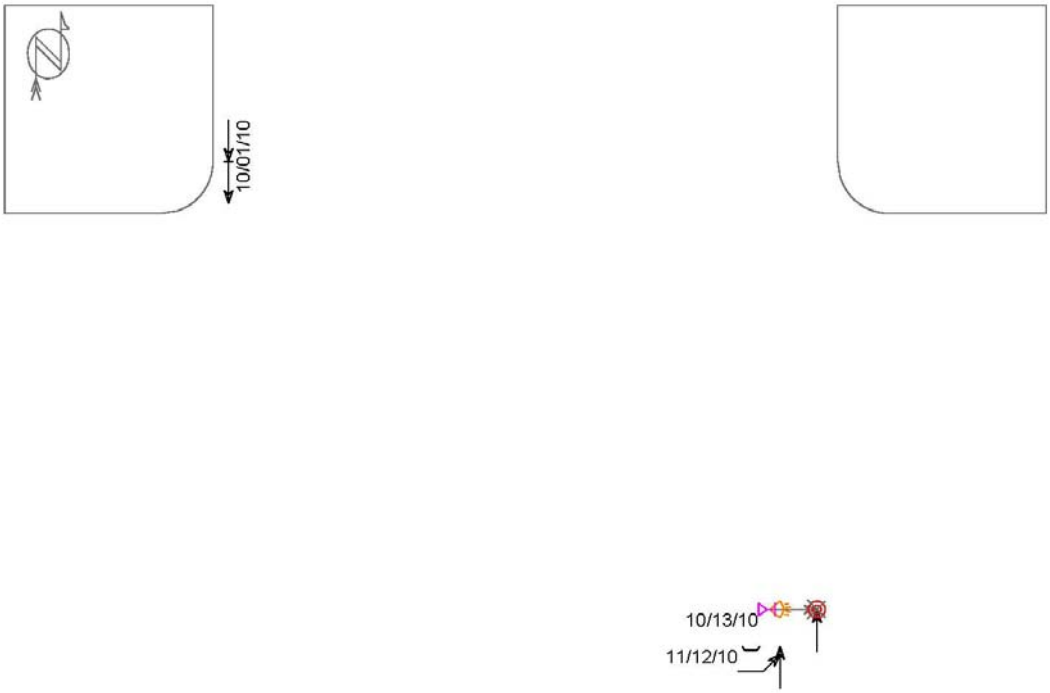
Straight	Parked	Pedestrian	Fixed objects:
Stopped	Erratic	Bicycle	General, Pole
Unknown	Out of control	Injury	Signal, Curb
Backing	Right turn	Fatality	Tree, Animal
Overtaking	Left turn	Nighttime	3rd vehicle
Sideswipe	U-turn	DUI	Extra data

City of San Luis Obispo, CA 08/31/2011 — Intersection Magic ver 6.704 Pd' Programming 1988, 2000

Roundhouse & Santa Barbara

4 Accidents

01/01/10 - 12/31/10



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

Straight	Parked	Pedestrian	Fixed objects:
Stopped	Erratic	Bicycle	General, Pole, Signal, Curb, Tree, Animal
Unknown	Out of control	Injury	
Backing	Right turn	Fatality	
Overtaking	Left turn	Nighttime	3rd vehicle
Sideswipe	U-turn	DUI	Extra data

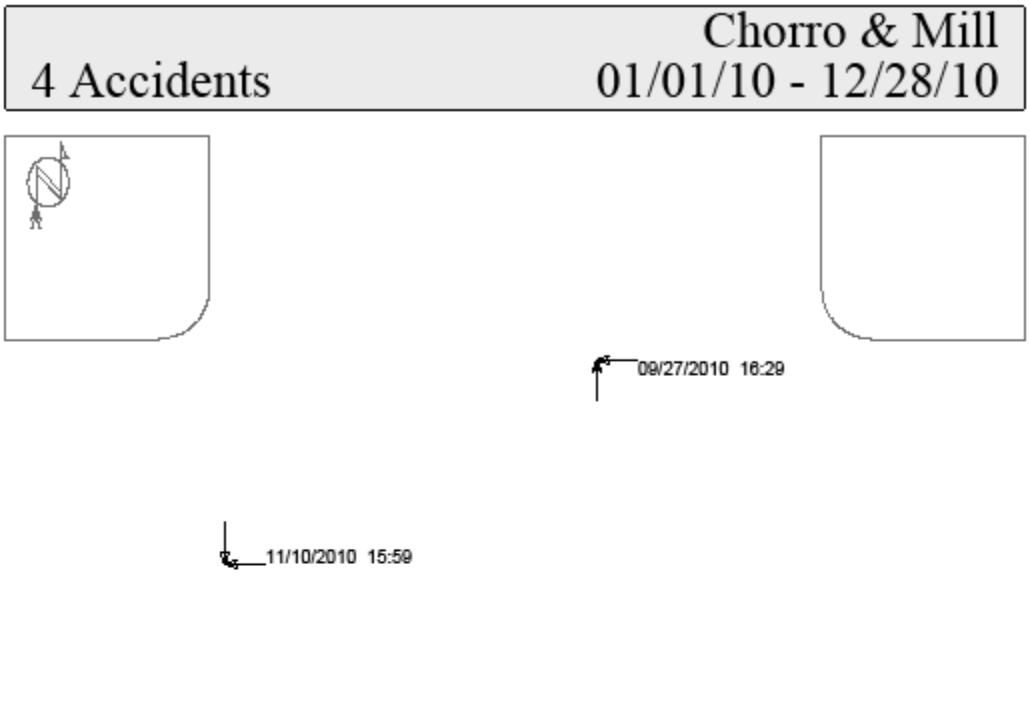
City of San Luis Obispo, CA 08/31/2011 — Intersection Magic ver 6.704 Pd' Programming 1988, 2000

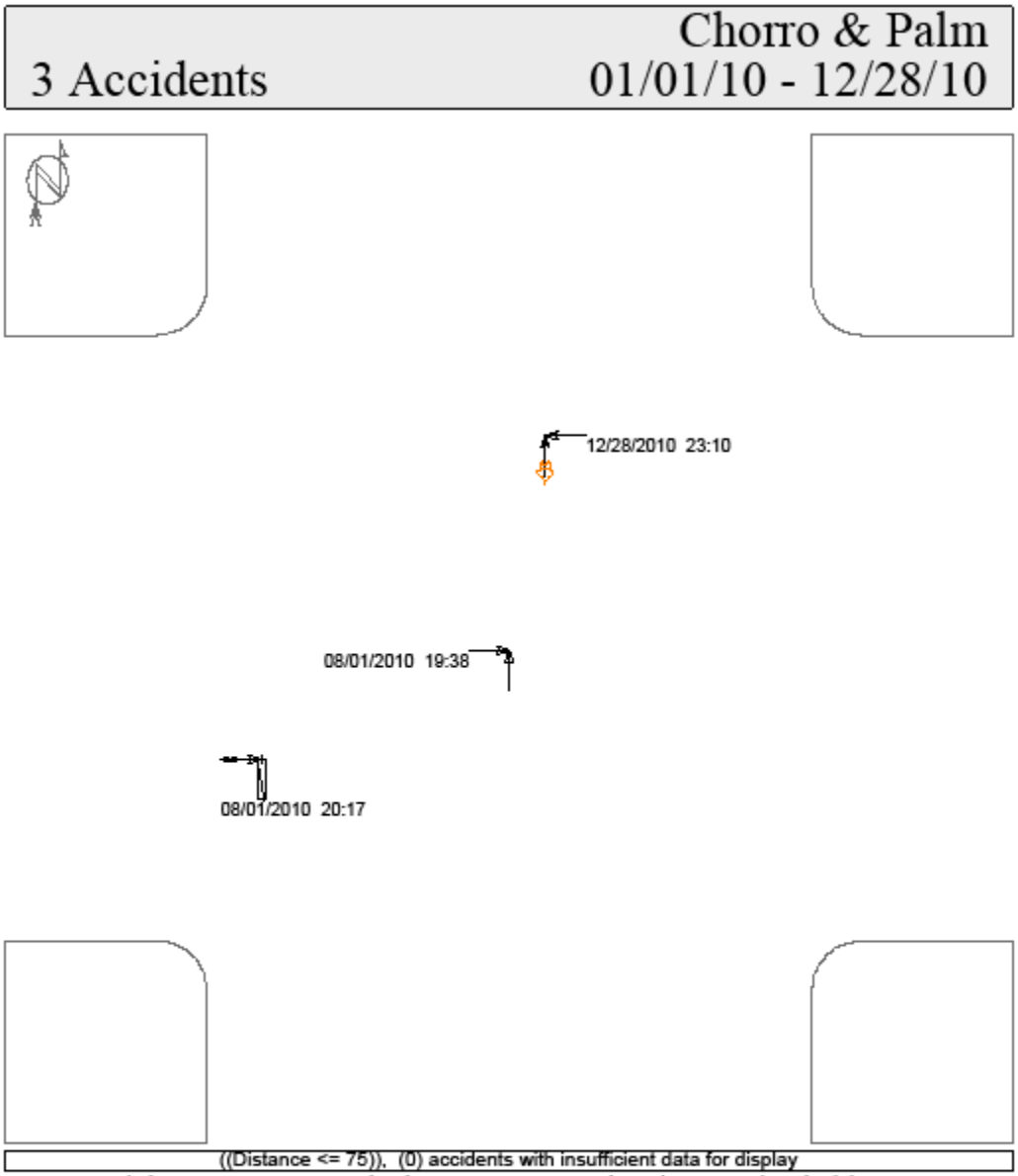
appendix 4

Collector / Collector Intersections

Collector / Collector Intersection Prioritized by Accident Rate

Rank	Prev. Rank	Intersection	Collisions	Volume	Rate	Control	EB	WB	NB	SB
1	Not Ranked	Chorro & Mill	4	8,796	1.25	2-STOP	405	1,059	3,599	3,733
2	1	Chorro & Palm	3	11,040	0.74	SIG	953	2,755	3,599	3,733


4 Accidents
Chorro & Mill
01/01/10 - 12/28/10
09/27/2010 16:29
11/10/2010 15:59
07/02/2010 14:57
10/22/2010 12:59
((Distance <= 75)), (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 06/03/2011
Intersection Magic ver 6.704 Pd Programming 1988, 2000

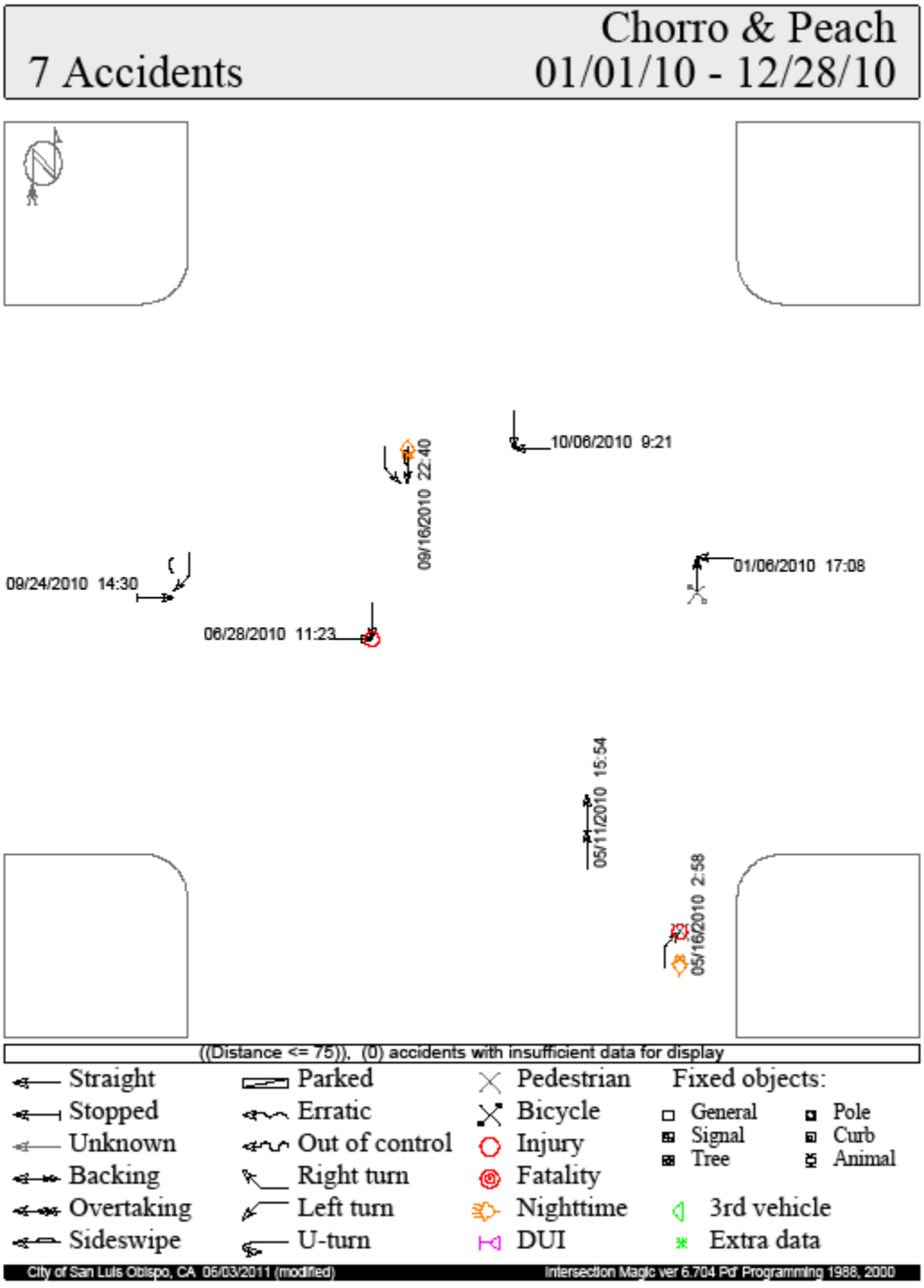

Chorro & Palm
3 Accidents
01/01/10 - 12/28/10
12/28/2010 23:10
08/01/2010 19:38
08/01/2010 20:17
((Distance <= 75)), (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 06/03/2011 (modified)
Intersection Magic ver 6.704 Pd' Programming 1988, 2000

appendix 5

Collector / Local Intersections

Collector / Local Intersection Prioritized by Accident Rate

Rank	Prev. Rank	Intersection	Collisions	Volume	Rate	Control	EB	WB	NB	SB
1	Not Ranked	Chorro & Peach	7	8,332	2.3	2-STOP	***500***	***500***	3,599	3,733


7 Accidents
Chorro & Peach
01/01/10 - 12/28/10
10/08/2010 9:21
09/16/2010 22:40
09/24/2010 14:30
01/06/2010 17:08
06/28/2010 11:23
05/11/2010 15:54
05/16/2010 2:58
((Distance <= 75)), (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 06/03/2011 (modified)
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appendix 6

Local / Local Intersections

Local / Local Intersections Prioritized by Accident Rate

NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 3 COLLISIONS IN 2010

appendix 7

Other Significant Intersections

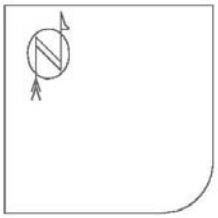
Other Significant Intersections Prioritized by Accident Rate
Left turn collisions at signalized intersections

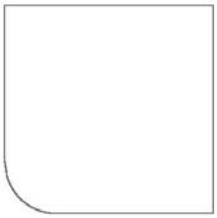
Rank	Prev. Rank	Intersection	Collisions	Volume	Rate	Control	EB	WB	NB	SB
1	6	Calle Joaquin & Los Osos Valley	7	28,540	0.67	SIG	14,970	10,570	*1,000*	*2,000*

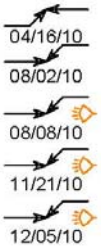
Calle Joaquin & Los Osos Valley

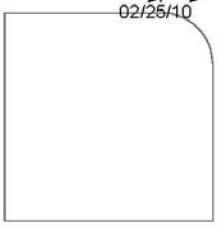
7 Accidents

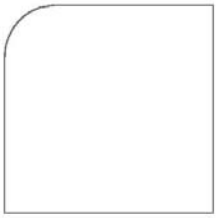
01/01/10 - 12/31/10











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

Straight	Parked	Pedestrian	Fixed objects:
Stopped	Erratic	Bicycle	General, Pole, Signal, Curb, Tree, Animal
Unknown	Out of control	Injury	
Backing	Right turn	Fatality	
Overtaking	Left turn	Nighttime	3rd vehicle
Sideswipe	U-turn	DUI	Extra data

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

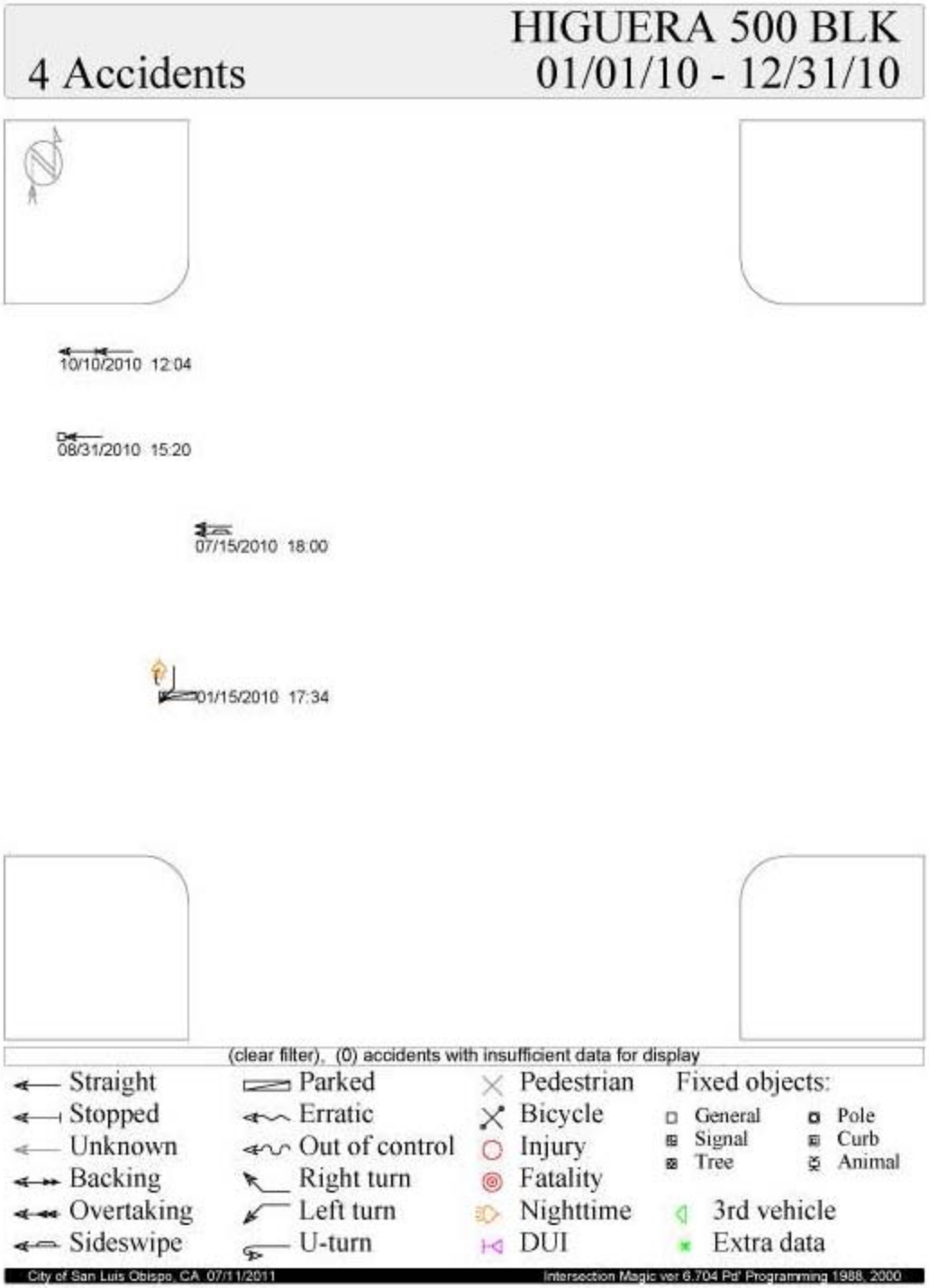
NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 5 COLLISIONS IN 2010

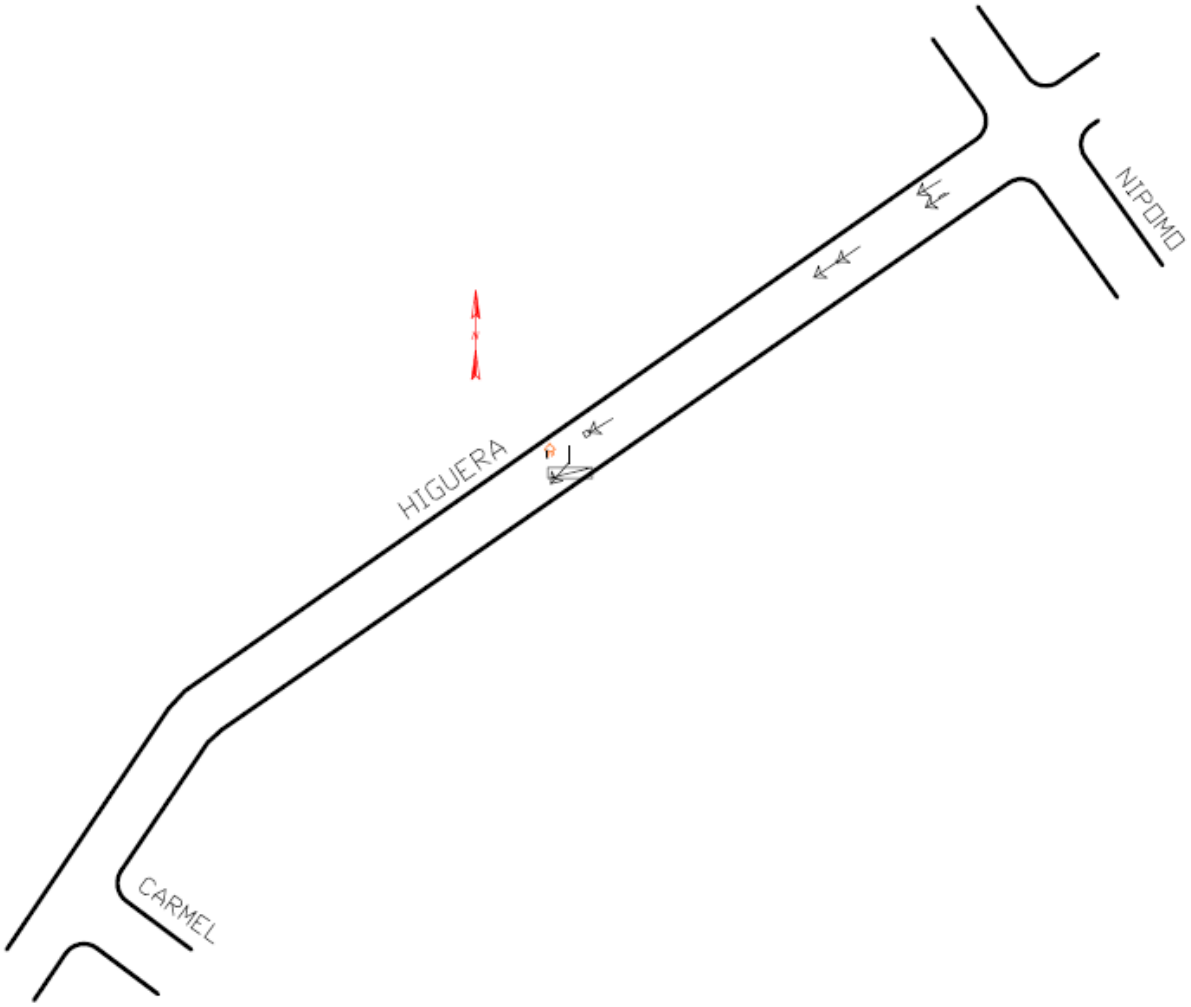
appendix 8

Arterial Segments

Arterial Segments Prioritized by Accident Rate

Rank	Prev. Rank	Segment	Collisions	Volume	Seg. Len.	Rate	Type	Location
1	3	Higuera, 500	4	9,441	0.20	5.80	Arterial	Marsh to Carmel
2	Not Ranked	CALIFORNIA 200-400 BLK	7	17,347	0.25	4.42	Res. Arterial	Foothill to Stafford
3	Not Ranked	HIGUERA 3200-3300 BLK	3	12,200	0.17	3.96	Arterial	Margarita to Prado
4	7	Foothill, 700 Block	3	16,923	0.17	2.86	Res. Arterial	Chorro to Ferrini
5	9	Foothill, 800-900 Block	3	18,296	0.17	2.64	Arterial	Chorro to Santa Rosa

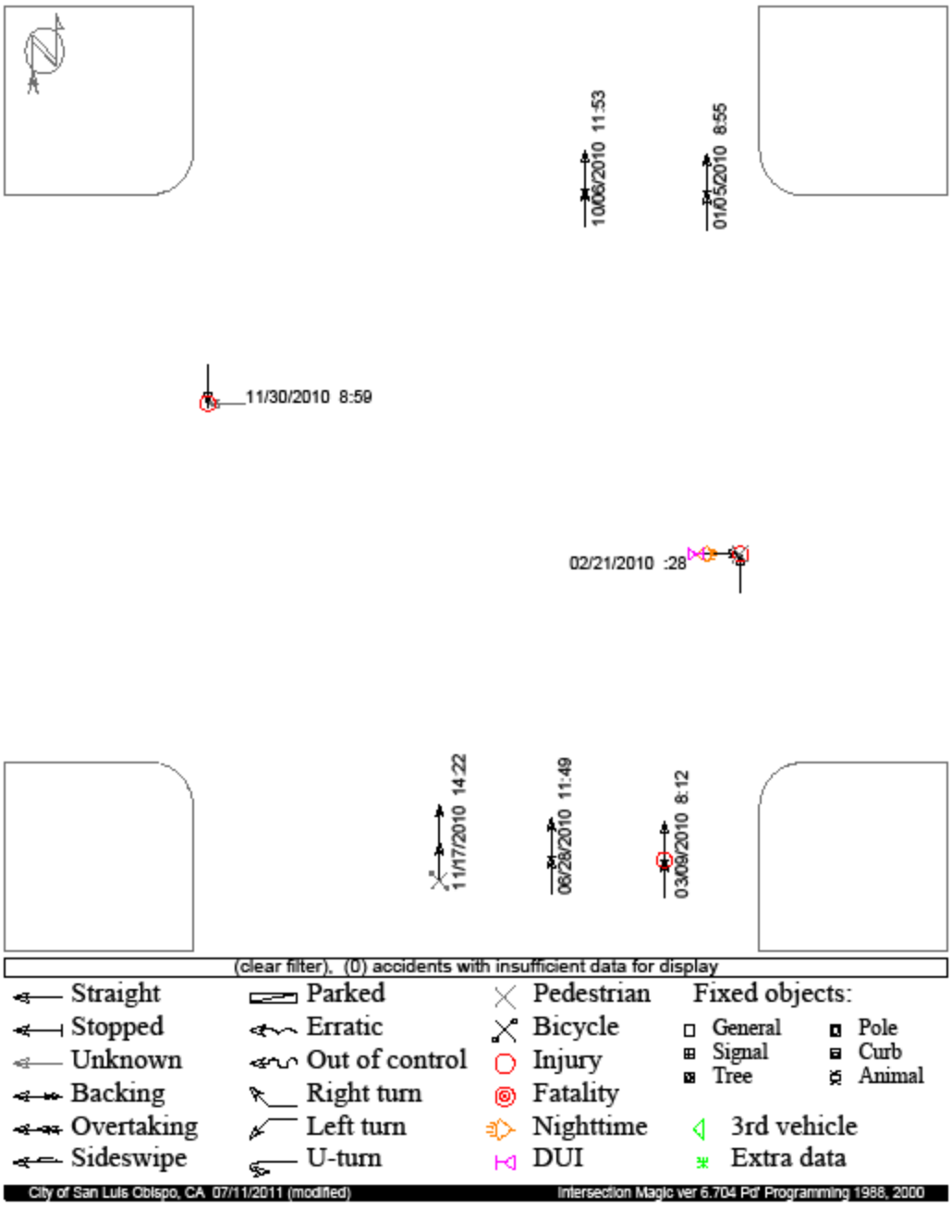

4 Accidents
HIGUERA 500 BLK
01/01/10 - 12:31/10
10/10/2010 12:04
08/31/2010 15:20
07/15/2010 18:00
01/15/2010 17:34
(clear filter). (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 07/11/2011
Intersection Magic ver 6.704 Pd' Programming 1988, 2000

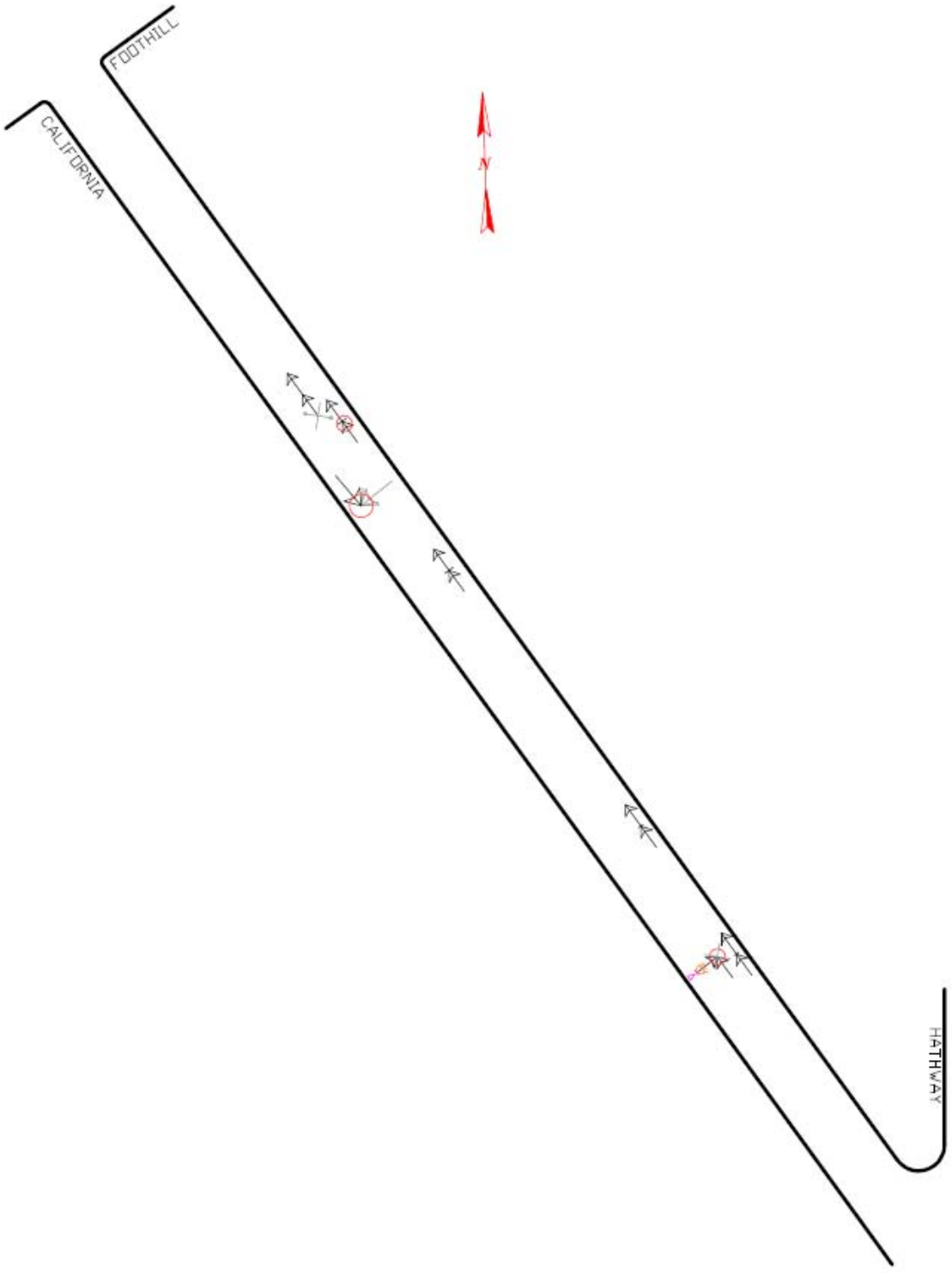

HIGUERA
NIPOMO
CARMEL

CALIFORNIA 200-400 BLK

7 Accidents

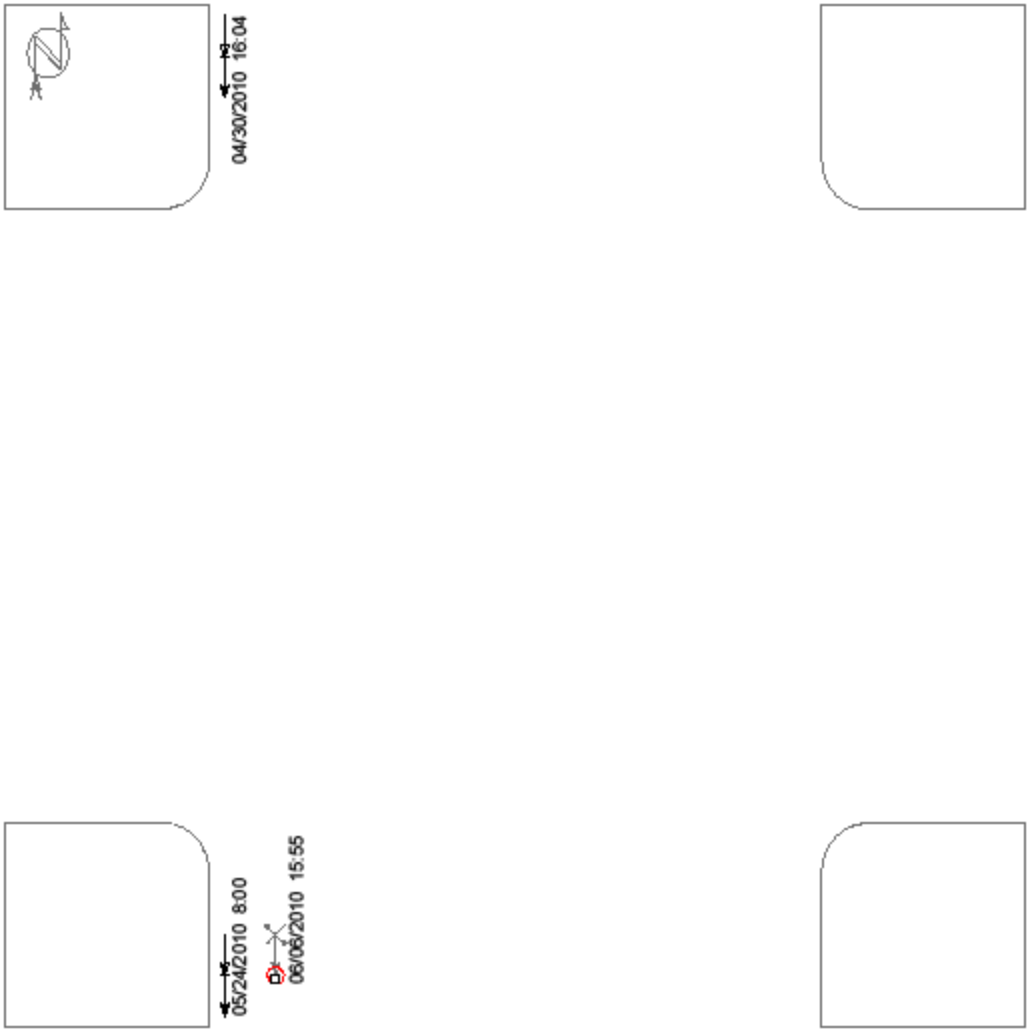
01/01/10 - 12/31/10

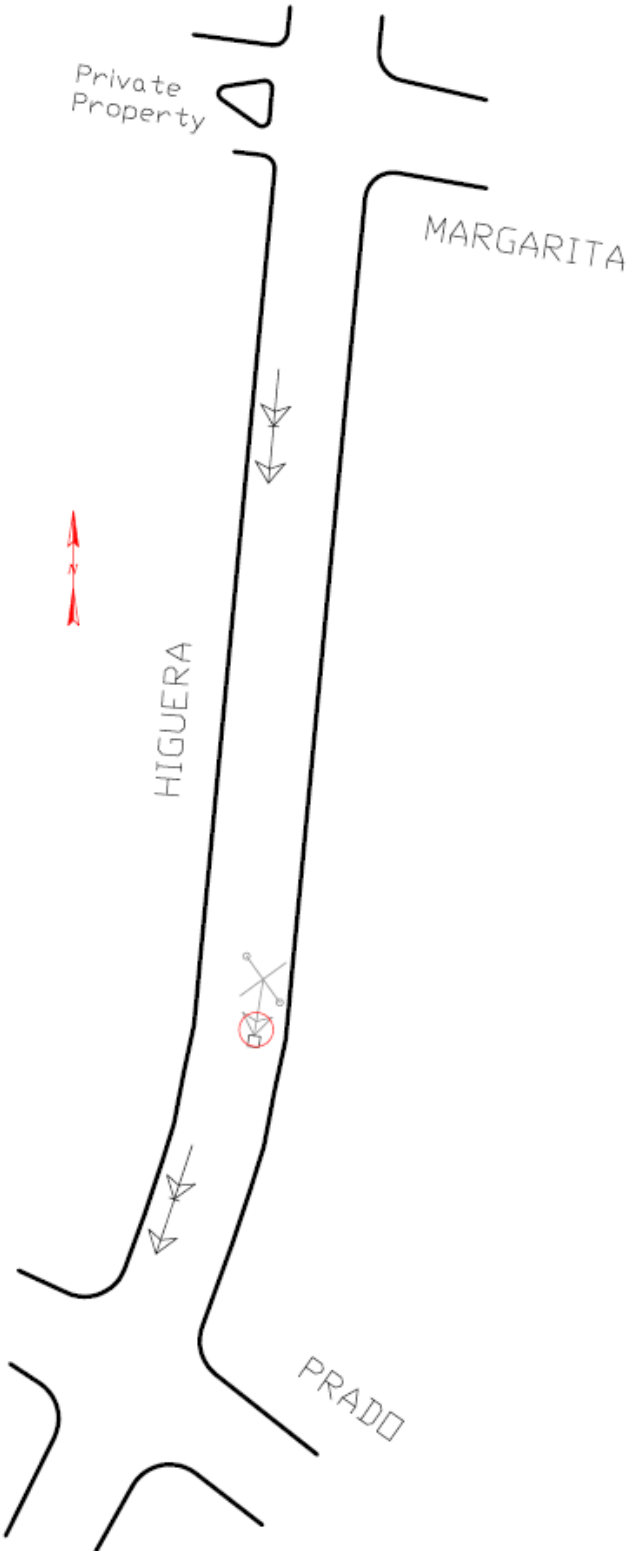


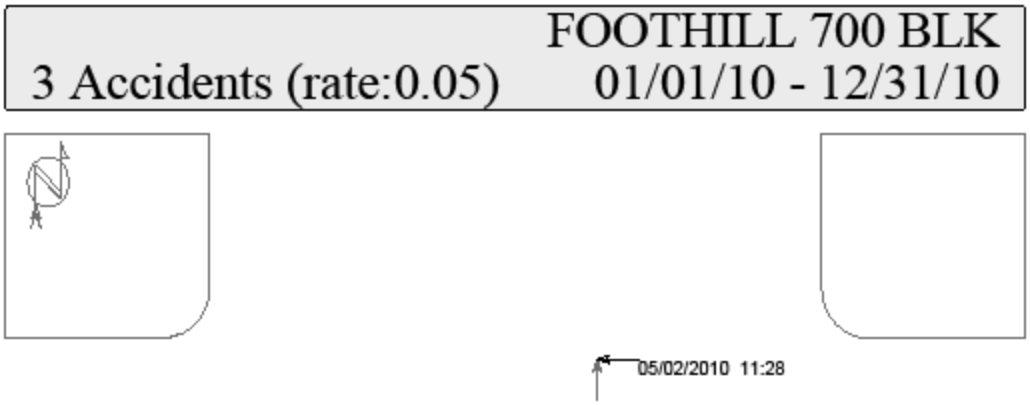

FOOTHILL
CALIFORNIA
N
HATHWAY

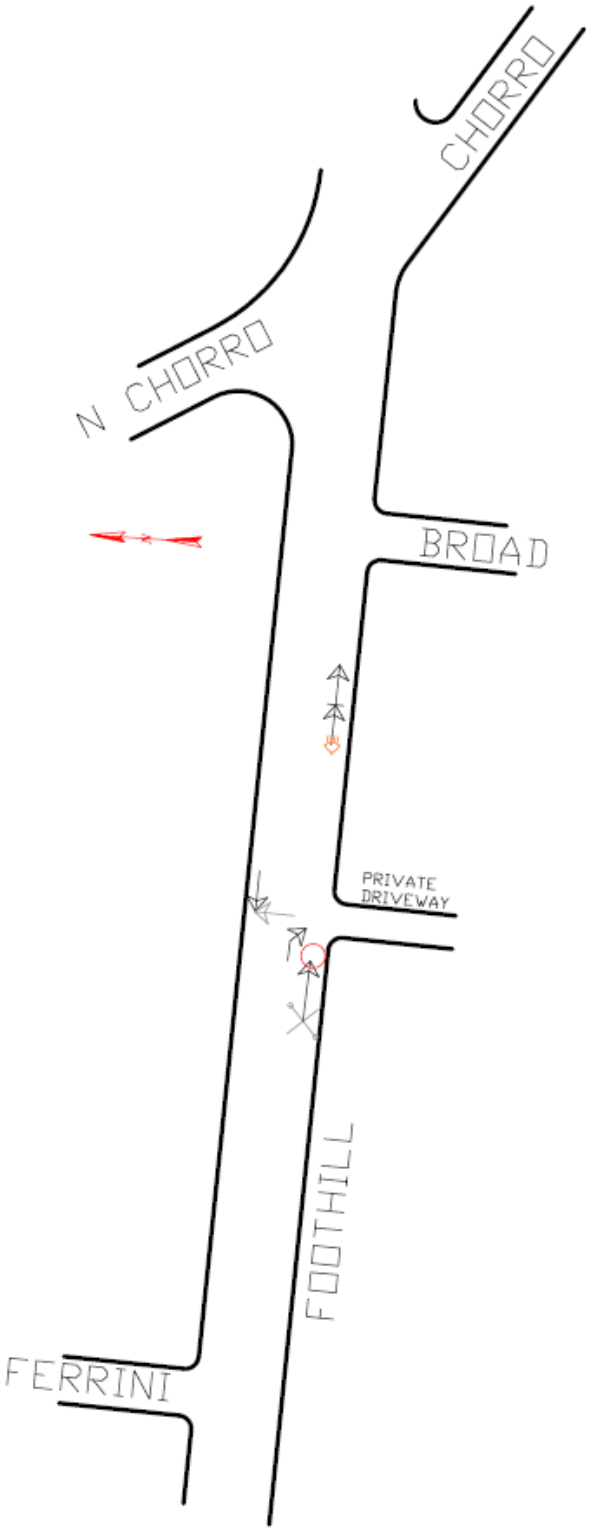
HIGUERA 3200-3300 BLK

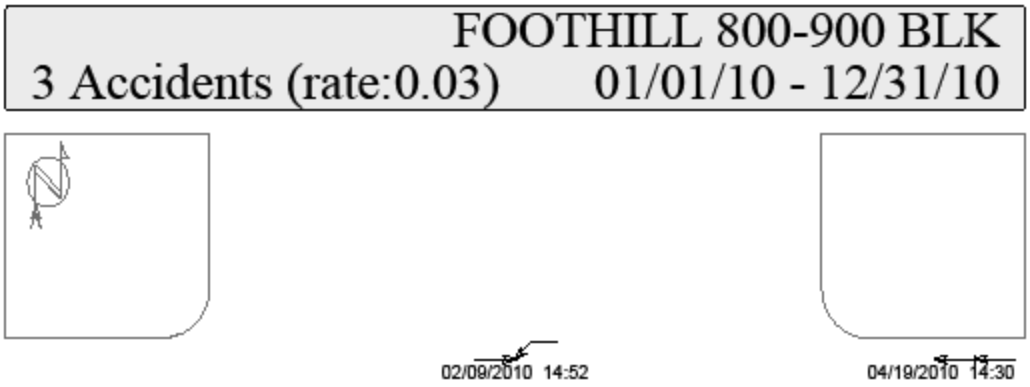
3 Accidents (rate:0.07) 01/01/10 - 12/31/10

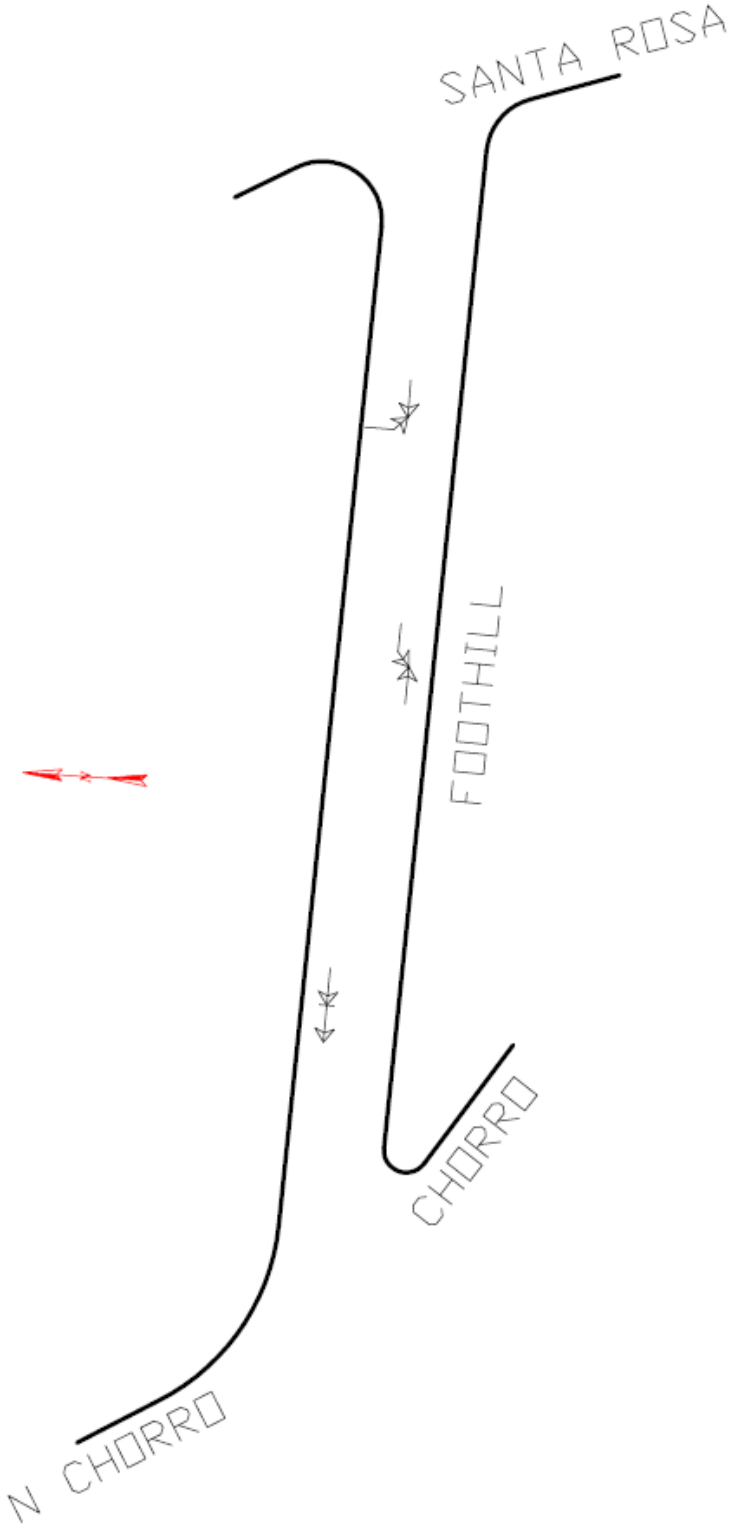



Private
Property
MARGARITA
HIGUERA
PRADO


FOOTHILL 700 BLK
3 Accidents (rate:0.05)
01/01/10 - 12/31/10
05/02/2010 11:28
01/15/2010 17:55
01/09/2010 16:11
(clear filter). (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 07/11/2011
Intersection Magic ver 6.704 Pdf Programming 1988, 2000


CHORRO
N CHORRO
BROAD
PRIVATE
DRIVEWAY
FOOTHILL
FERRINI


FOOTHILL 800-900 BLK
3 Accidents (rate:0.03) 01/01/10 - 12/31/10
02/09/2010 14:52
04/19/2010 14:30
01/21/2010 8:36
(clear filter). (0) accidents with insufficient data for display
Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe
Parked
Erratic
Out of control
Right turn
Left turn
U-turn
Pedestrian
Bicycle
Injury
Fatality
Nighttime
DUI
Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
3rd vehicle
Extra data
City of San Luis Obispo, CA 07/11/2011
Intersection Magic ver 6.704 Pdf Programming 1988, 2000


SANTA ROSA
FOOTHILL
CHORRO
N CHORRO

appendix 9

Collector Segments

Collector Segments Prioritized by Accident Rate

NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 3 COLLISIONS IN 2010

appendix 10

Local Segments

Local Segments Prioritized by Accident Rate

NO LOCATIONS UNDER THIS CATEGORY HAD MORE THAN 3 COLLISIONS IN 2010