



Fort Pierce Police Department Crime Analysis Unit

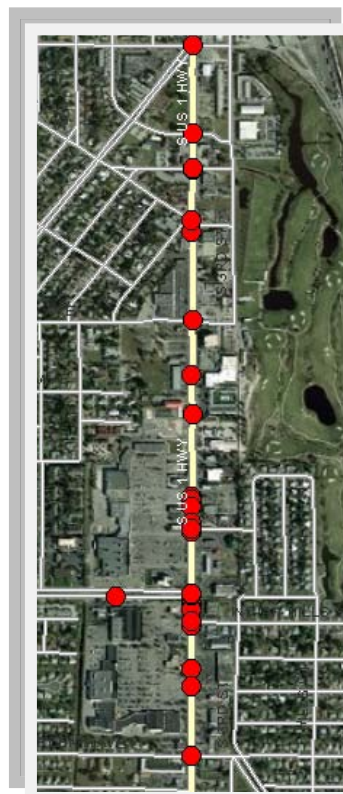
ANALYSIS OF TRAFFIC CRASHES ALONG US 1 HIGHWAY

From Gardenia Avenue to Georgia Avenue

Prepared for Chief R. Sean Baldwin

The purpose of this analysis is to study the number of vehicle crashes that occurred on US 1 Highway between Virginia Avenue and Ohio Avenue. The study was conducted to determine if there has been an increase or decrease in crashes since the completion of the road construction project along this corridor. The study area was extended to include Gardenia Avenue and Georgia Avenue to account for those crashes that occurred just south of Virginia Avenue and just north of Ohio Avenue. The length of the target roadway is approximately 1.28 miles.

This analysis will consider crashes for 2007 through 2009 along the specified section of road where a report was generated. It does not take into account unreported incidents or those incidents where a Blue Form was issued. The Blue Forms are exchange of information forms issued in minor "fender benders".



COMPARISON OF THE NUMBER OF CRASHES

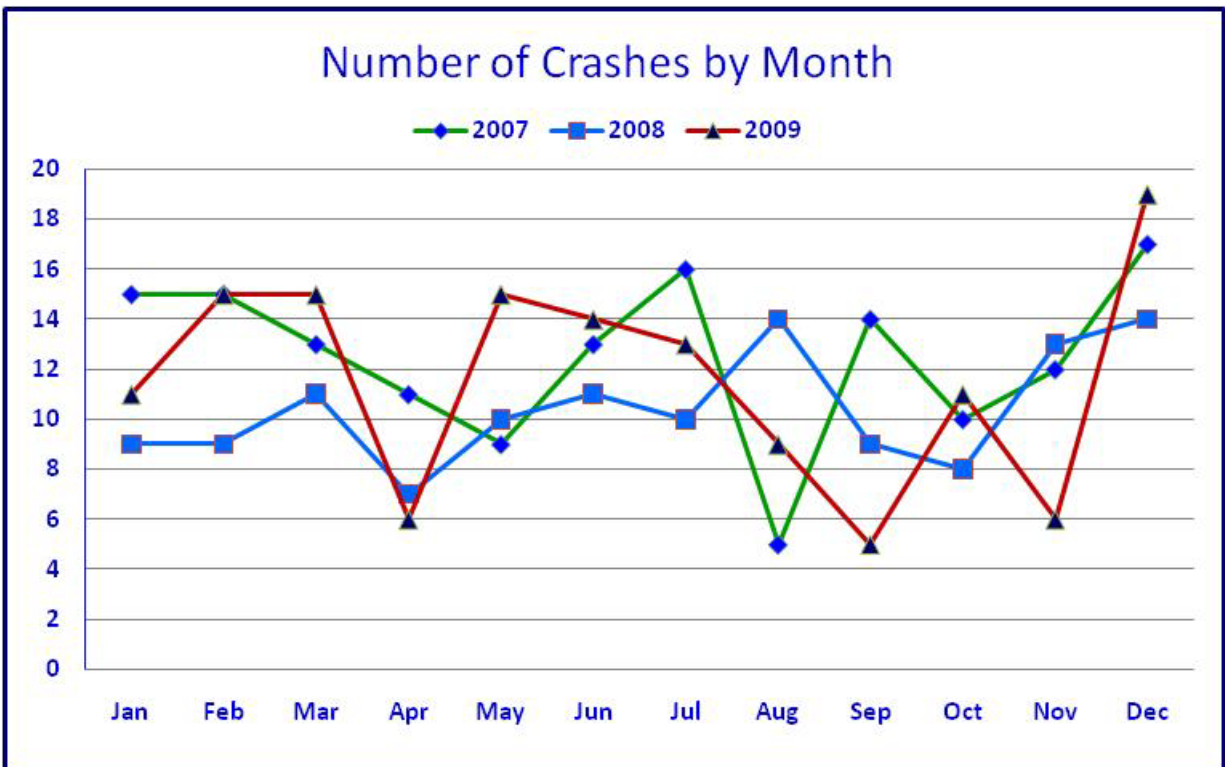
The chart on the right compares the number of traffic crashes city-wide to the number that occurred between Gardenia Avenue and Ohio Avenue. The total number of reported accidents city-wide has steadily decreased by an average of 12%. The number along the target roadway has fluctuated with the least amount occurring during 2008. There was a 16% decrease in 2008 compared to 2007 and a 10% increase in 2009 when compared to 2008.

TRAFFIC CRASH COMPARISON				
YEAR	Total Crashes	% Change	Gardenia to Georgia	% Change
2007	2083	-	150	-
2008	1816	-13%	126	-16%
2009	1625	-11%	139	10%

Although the number of accidents along the target roadway appears to have decreased in 2008, the percentage of crashes along the target area compared to the total citywide crashes for 2007 and 2008 remained the same, 7%. However, the percentage of total crashes increased to 9% in 2009.

PERCENTAGE OF TOTAL			
	Total	Gardenia	
YEAR	Crashes	to Georgia	% of Total Crashes
2007	2083	150	7%
2008	1816	126	7%
2009	1625	139	9%

The following chart outlines the number of accidents by month. A review of the number of calls per month per year indicates a decrease in calls during the month of April and



increase during December. It is speculated that the decrease in April may be attributed to a decrease in population due to spring break when families are out of town and our winter residents returning to their summer destinations. The decrease may be attributed to an increase in traffic during the Christmas and New Year holidays. However, further studies will need to be conducted to determine if these are indeed contributing factors.

The table below indicates the location along the roadway where the crash occurred. In all three years, approximately 40% of the crashes occurred at an intersection. The top two crash intersections were Virginia Avenue and Ohio Avenue.

CRASH SITE LOCATION	2007	2008	2009
ALL OTHER (EXPLAIN)	5	1	1
AT INTERSECTION	61	53	51
BRIDGE			1
DRIVEWAY ACCESS	10	9	15
INFLUENCED BY INTERSECTION	11	13	20
NOT AT INTERSECTION / RR X'ING / BRIDGE	63	50	51
GRAND TOTAL	150	126	139

The table to the right indicates the total cost of property damage that occurred as a result of crashes along the target roadway. This total includes utility poles, palm trees, shrubbery, road signs, etc. Information on the owners of this property was unavailable at the time of this report.

**PERSON ACTIONS AND
OTHER POSSIBLE
CONTRIBUTING FACTORS
TO TRAFFIC CRASHES**

Many times the lighting conditions can contribute to the causes of traffic crashes. Lighting conditions can affect an individual's ability to see

oncoming traffic. As such, we looked at the total number of accidents that occurred during dusk, dawn, and/or dark lighting. Approximately, 19% of the crashes occurred under these lighting conditions (on average).

The weather can also play a factor in traffic crashes. However, in the crashes along the target roadway, only 30% of the crashes occurred when the cloudy and/or rainy.

The following table outlines the frequency of the listed contributing factors in the traffic crashes as indicated in the crash reports. Careless driving and failing to yield right-of-way are the top two factors.

TRAFFIC CRASH INCIDENT SUMMARY				
<i>2007 - 2009 Crashes on US 1 Highway: Wisteria Avenue to Georgia Avenue</i>				
Statistics	2007	2008	2009	Total
Crashes	150	126	139	415
Property Damage	\$5,450	\$31,850	\$13,001	\$50,301
Dawn, Dusk, or Dark	32	22	24	78
Pedestrians Involved	3	2	7	12

CONTRIBUTING FACTORS	FREQ
NO IMPROPER DRIVING / ACTION	425
CARELESS DRIVING	150
FAILED TO YIELD RIGHT-OF-WAY	76
ALL OTHER (EXPLAIN IN NARRATIVE)	68
FOLLOWED TOO CLOSELY	52
IMPROPER LANE CHANGE	33
IMPROPER BACKING	23
IMPROPER TURN	19
DISREGARDED TRAFFIC SIGNAL	9
ALCOHOL - UNDER INFLUENCE	4
DISREGARDED STOP SIGN	3
DRIVER DISTRACTION (EXPLAIN IN NARRATIVE)	1
DRIVING WRONG SIDE / WAY	1
EXCEEDED SAFE SPEED LIMIT	1
FAILED TO MAINTAIN EQUIP. / VEHICLE	1
IMPROPER LOAD	1
IMPROPER PASSING	1

REPORT SUMMARY

The analysis of the traffic crashes along the target roadway indicates that although there was a slight increase in crashes after the completion of the construction and the medians were in place, the increase is not significant enough to determine that the new design of the roadway played a part in these crashes. This conclusion is based on the fact that the percentage of reported crashes along the target roadway only increased approximately 2% when comparing to the number of accidents along this stretch of road to the total of crashes city-wide. Also, before, during, and after construction, the average number of accidents per month was approximately 11 accidents (2007 – 12.5, 2008 – 10.5, and 2009 – 11.6).

In conclusion, since the completion of the construction along US 1 Highway, there has been a slight decrease in the risk factor of driving along the target roadway when compared to 2007 (*see table on left*). Therefore, the implementation of medians and other enhancements to the roadway has made traveling along this stretch of roadway a little safer for all motorists.

YEAR	FREQ	Length of Road (Miles)	Risk Factor
2007	150	1.28	117.2
2008	126	1.28	98.4
2009	139	1.28	108.6