



An Intersection Public Safety Program

An Analysis of the St. Petersburg
Automated For-Profit Red Light Camera
Enforcement Program

By Paul Henry

June 22, 2012

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A. Predication

1. Purpose of automated for-profit law enforcement devices

It is noted that proponents of automated for-profit law enforcement devices state without exception their sole purpose is safety. Safety therefore is best defined as not having a traffic crash due to red light running. Safety is not defined as having an increase in injury crashes or other types of crashes regardless of those caused by red light running.

2. Purpose of this analysis

This analysis was undertaken to research the June 8, 2012 allegation made and reported on the website Tampa Bay Online by the City of St. Petersburg's Director of Transportation and Parking that "red-light related crashes at intersections are down 60 percent¹".

This statement would lead a reasonable person to believe the cameras have reduced red light violation crashes by a large amount.

The Director's statement included that the data his department utilized was an average of three years prior to camera use compared to six (6) months after camera use. While I am not a statistician, others have pointed out that is an invalid means of comparing data, as the periods must be equal in length for a proper assessment, so the statement is flawed from the start.

The term "city report" used herein refers to the "Intersection Public Safety Program" published report on the City of St. Petersburg's website as downloaded on June 8, 2012. This report was obtained by the city via a paid consultant and offers numerous data relating to pre-camera periods and intersections. A detailed analysis of that document was prepared; however, due to the issue being the validity of the 60% reduction statement, and the city report not playing a role in the statement, the detailed analysis will not be added to this one other than as noted herein.

B. Executive Summary

After compiling the 38 crash reports and verifying each was caused by a red light running violation and took place at one of the ten (10) listed intersections, it was found that the post-camera crash rate did not decrease. It in fact increased from 9.33 per six (6) month period to 10, an increase of 7%.

C. Analysis

1. History

St. Petersburg's automated for-profit red light camera program was in place and working as of September 15, 2011, and tickets were issued starting November 1, 2011. There were ten (10) intersections that received automated for-profit law enforcement devices.

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2. Locations

The intersections with camera installations are listed below and were obtained from the City of St. Petersburg's website on June 8, 2012. While this site indicates there are eleven (11) cameras in use, it was determined after downloading these locations that there were only ten (10) cameras installed. The camera not installed is indicated below, and no data for that intersection is considered in this analysis.

The locations reviewed in this analysis are as follows:

1. 4th Street and Gandy Boulevard
2. 4th Street and 54th Avenue North
3. 4th Street and 22nd Avenue North
4. 6th Street and 5th Avenue South* **Not installed**
5. 34th Street and 38th Avenue North
6. 34th Street and 1st Avenue North
7. 34th Street and 1st Avenue South
8. 34th Street and 22nd Avenue South
9. 66th Street and 38th Avenue North
10. 66th Street and Tyrone Boulevard
11. 66th Street and 22nd Avenue North

3. Intersection excluded

An eleventh intersection at 6th St. and 5th Av. S was excluded due to no device being installed there.

4. National numbers (data from the city report)

The below table shows the national numbers for red light running crashes.

Table 1: National statistics according to the NHTSA

Year	Miles traveled	Red light running fatalities	Intersection fatalities	% Intersection fatalities due to RLR	Total fatalities	RLR fatalities as % of miles traveled	% Total fatalities due to RLR
2000	2,746,924	937	8,689	10.78%	41,945	0.034%	2.23%
2001	2,795,548	1009	8,922	11.31%	42,196	0.036%	2.39%
2002	2,855,262	939	9,273	10.13%	43,005	0.033%	2.18%
2003	2,889,675	954	9,362	10.19%	42,884	0.033%	2.22%
2004	2,964,167	941	9,176	10.26%	42,836	0.032%	2.20%
2005	2,989,395	813	9,238	8.80%	43,510	0.027%	1.87%
2006	3,014,336	895	8,850	10.11%	42,708	0.030%	2.10%
2007	3,029,791	913	8,703	10.49%	41,259	0.030%	2.21%
2008	2,973,471	768	7,809	9.83%	37,423	0.026%	2.05%
2009	2,979,394	676	7,043	9.60%	33,808	0.023%	2.00%

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It is noted the Florida Department of Highway Safety and Motor Vehicles publication *Traffic Crash Facts* lists red light running as the cause of between 2 and 3 percent of all crashes (fatal, injury, and property damage) in recent years, so the state is slightly higher than the national average.

5. Time frame and data source

- a. The Transportation and Parking Director advised the data periods utilized were from November through April. This was due to the cameras being activated on September 15, 2011 and a warning period being in effect from September 15, 2011 through October 31, 2011. Full enforcement began on November 1, 2011.
- b. On June 8, 2012, the data utilized to support this statement was requested from the City Clerk of St. Petersburg. On June 22, 2012, it was received in the form of 38 PDF copies of Florida Traffic Crash Reports. The crash reports were each verified to have been caused by red light running, and having taken place at an intersection from the above list.
- c. It is noted this data is not typical due to the date ranges; it in fact is limited to a six (6) month period comprised of November through April of a total of four (4) years. Three (3) of the years are pre-camera and the fourth is post-camera. Traditional analysis relies upon a full year of data, which would minimize any seasonal variations.

The data was reduced to a spreadsheet for easier analysis.

6. Results

The results of the data for following 6-month intervals were as follows:

a. Pre-camera periods:

November 2008 through April 2009 (total of 6 crashes)

November 2009 through April 2010 (total of 12 crashes)

November 2010 through April 2011 (total of 10 crashes)

b. Post-camera period:

November 2011 through April 2012 (total of 10 crashes)

D. How to use this report

For the post-camera date ranges, pre-camera data will be compared. If there was an increase in the data, it will be shown in **red**. If there was a decrease, it will be shown in **blue**. If there is no change, no color-coding will be used. **Red** data does not favor automated for-profit law enforcement devices, while **blue** data does.

A graphical section follows the intersection analysis for an easier view of the data.

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1. Table data

The following data table was generated utilizing this data:

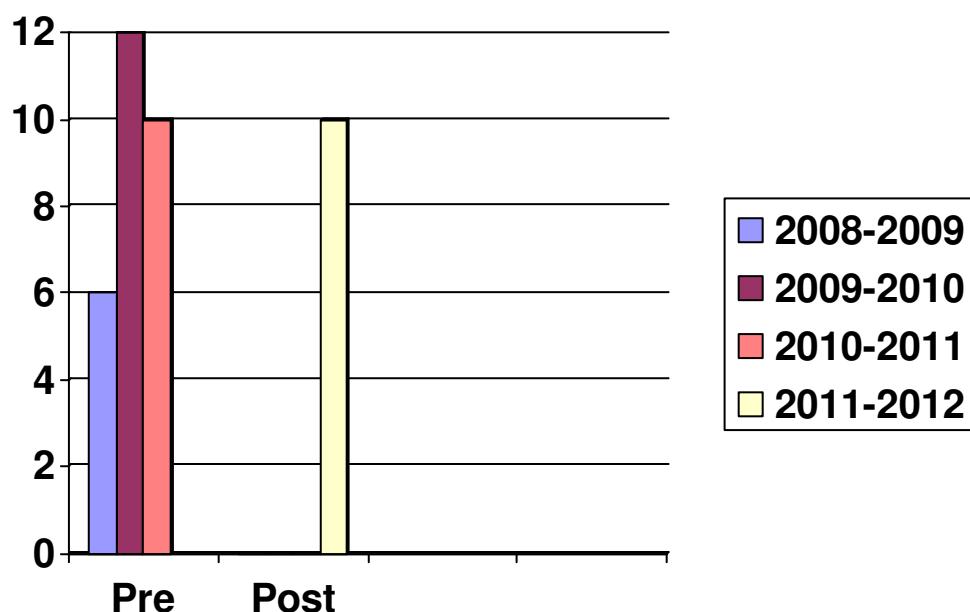
Table 2: Crash data for each intersection

Intersection	# Crashes Pre-Camera	Three-year Average	# Crashes Post-Camera	Post-Camera is:
4 St / Gandy Bv	3	1	2	Higher
4 St. / 54 Av N	0	0	1	Higher
4 St. / 22 Av N	2	.66	0	Lower
34 St / 38 Av N	3	1	1	Unchanged
34 St / 1 Av N	1	.33	1	Higher
34 St / 1 Av S	10	3.33	1	Lower
34 St / 22 Av S	3	1	2	Higher
66 St / 38 Av N	0	0	1	Higher
66 St / Tyrone Bv	4	1.33	1	Lower
66 St / 22 Av N	2	.66	0	Lower
Totals	28	9.33 average	10	Higher

Synopsis: Based on this data, the post-camera period shows **higher** than the prior average at five (5) of the intersections, **lower** at four (4) and unchanged at one (1), and an overall **increase** of 7% from the three-year average.

2. Graphical analysis:

St. Petersburg, FL crashes caused by red light running for the periods of November through April for selected years, pre-camera and post-camera:



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E. Conclusion

My conclusion is that the Director's statement to the media was inaccurate and misleading. Utilizing the data from the city, there is no way to arrive at a 60% reduction in crashes caused by red light running. However, the Director did not say crashes **caused** by red light running, he used the term "red-light **related**" crashes. This parsing of words is of little relevance in light of the factual data obtained and analyzed. The statement of any reduction cannot be supported with the data available, which shows **the average increased post-camera by 7%**.

About the author-

Paul Henry served as a Florida Deputy Sheriff and State Trooper for over 25 years. During his employment with the Florida Highway Patrol, he investigated numerous traffic crashes and worked as a traffic homicide investigator. He later promoted to the rank of Sergeant and supervised traffic homicide investigators and at the same time a squad of troopers. His final five years with the FHP prior to retirement were in the Bureau of Investigations at the rank of Lieutenant. Paul is notable for locating one of Florida's most-wanted fugitives, Walter Rhodes, in 2003. Paul currently works for pro-liberty political issues in the Tallahassee area, to include driver license (REAL ID) and red light camera laws. Paul is the author of the 2012 Florida Motorist Rights Restoration Act, which would have affected how red light camera cases are handled in court.

Footnotes-

1. Quotation by Mr. Kubicki, City of St. Petersburg Director of Transportation and Parking, June 8, 2012 on the website [Tampa Bay Online](#).

In St. Petersburg, Kubicki said, rear-end crashes are down 45 percent since the cameras were put in, and red-light related crashes at intersections are down 60 percent.

He said his department compared the average number of red-light accidents in the three years before the cameras were installed to the numbers in the six months since the cameras were installed.

The number of accidents related to red-light running at the 10 intersections with cameras has dropped 60 percent.