

Electronic Red Light Safety Program

2011 Program Update



*Shailen P. Bhatt, Secretary
Delaware Department of Transportation
February 28, 2012*



February 28, 2012

Members of the Joint Legislative Committee
On Capitol Improvement
Legislative Hall
P.O. Box 1401
Dover, Delaware 19901

Dear Senators and Representatives:

In accordance with Article 118 of Senate Bill 130 of the 146th General Assembly of the State of Delaware, the Department of Transportation (DelDOT) hereby submits an update of the Electronic Red Light Safety Program (ERLSP).

Red light running (RLR) continues to be a serious traffic safety issue nationwide. According to the Federal Highway Administration:

- In the last decade, red-light running crashes have killed nearly 9,000 people.
- An estimated 165,000 motorists, cyclists, and pedestrians are injured annually by red-light runners.
- Half of the people killed by red-light runners are not the signal violators – they are passengers, other motorists, pedestrians, and cyclists.
- At urban intersections, someone runs a red light an average of every 20 minutes.
- There are an average of 7 fatal crashes and over 1,000 injury crashes *every day* at signalized intersections across the United States.

DelDOT's number one priority is the safety of all users, motorists, bicyclists and pedestrians on our roads. Our research shows the ERLSP has reduced the total incidences of crashes at red light monitored intersections by 7 percent since the inception of the program, with a 57 percent reduction in right-angle crashes and a 41 percent reduction in red light running. Rear end crashes, which have been the source of much debate with red light camera installations across the country, show a reduction of 5 percent since the inception of the program.

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The department is entering its eighth year of operations in the ERLSP. Updates and progress on the assignments identified in the Bond Bill epilogue section above will be briefly summarized in the attached executive summary, followed by greater detail in the actual body of the report.

If you would like more information on the program, please contact Dawn Hopkins, Executive Assistant to the Secretary, at 302-760-2727.

Sincerely,

Shailen P. Bhatt
Secretary

SB:dh

cc: Cathy Rossi, Director of Communications, Office of the Governor
Patrick Wlachin, Chief of Staff, DelDOT
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2011 Electronic Red Light Safety Program Update

Executive Summary

The Electronic Red Light Safety Program (ERLSP) is an electronic monitoring system located at specific intersections with historically high incidences of red light running related crashes. The technology utilizes a camera which is tied to the traffic signal. The device detects the movement of vehicles into intersections after a signal turns red. The technology takes a picture of the violator's license plate to identify the vehicle. Using this information a violation notice is generated and sent to the registered owner of the vehicle.

Title 21 §4101(d) allows the Delaware Department of Transportation (DelDOT) to install and monitor traffic light violation enforcement systems and assess fines accordingly. DelDOT is responsible for identifying intersections with high crash incidents as potential candidates for the placement of electronic red light camera systems. In addition, DelDOT qualifies the engineering of any new cameras installed. The Department also manages the contract obligations for the private company(s) through which the camera systems are installed and maintained, and through which violations are captured, processed and collected. Lastly, the Department bears fiduciary responsibility for the accounting and auditing of the program.

Section 118 of the Fiscal Year (FY) 2012 Bond Bill (House Bill 130) of the 146th General Assembly contains the authorizing language to continue DelDOT's Electronic Red Light Safety Program (ERLSP) on an open-ended basis, and outlines guidance for the program's operation.

2011 Electronic Red Light Safety Program Update

Recommendations from the 2010 Report:

DelDOT provided a report to the Legislature on the ESLR Program in February 2011. In this report, the Department outlined recommendations of improvement for the following years' program. An update on each of these recommendations is presented below.

1. *DelDOT recommends the addition of ten new intersections to the inventory. These intersections would be authorized in the Fiscal Year 2012 and will be on-line by June 2012. An assessment of the new locations is currently underway.*

DelDOT has elected not to move forward with new installations until such time as a new solicitation for vendors is completed in FY 2013. The contract for the ERLSP is due to expire in June 2014. The Department will begin the solicitation for vendors in June 2012, take one year to complete and be ready for any installation of new technology (if needed) at least one year prior to the termination of the existing agreement. The addition of these new cameras will be included in the specifications for the request for proposals.

2. *The Department of Transportation (DelDOT) and the Department of Safety and Homeland Security (DSHS) are prepared to enter into a Memorandum of Understanding regarding the transfer of the administrative operation of the Electronic Red Light Safety Program from DelDOT to DSHS. This transfer will require epilogue language in the FY 2012 Bond Bill in order for appropriate authorization.*

The Department of Transportation elected not to pursue the transfer of the program with the Department of Safety and Homeland Security, since DelDOT has undergone leadership changes and is re-evaluating operations to determine if the program should remain with the Department. The Department will be providing a final recommendation in next year's annual report.

3. *DelDOT recommends an updated status report be submitted to the Joint Legislative Committee on Capital Improvement no later than February 28, 2012.*

This report represents fulfillment of the above listed requirement.

2011 Electronic Red Light Safety Program Update

Crash Data Analysis:

DelDOT's Statewide Electronic Red Light Safety Program (ERLSP) has resulted in significant reductions in crashes - specifically angle and red light running crashes which are typically the most severe in nature. In February 2007, DelDOT produced the first ERLSP report for the Legislature. Results compared a 36-month period before installation to an "after" period based on staggered installation/start-up dates. Current crash data at the twenty intersections equipped with enforcement technology has been reviewed for an "after" period through December 2011, ranging from 75 to 89 months. The average "after" period was approximately 6.5 years. The following types of crashes were reviewed for the "before" and "after" periods:

- **Total crashes** include all crashes occurring within the vicinity of the intersection.
- **Angle crashes** include right angle crashes, as well as left-turn crashes caused by motorists proceeding through a red light. Crashes caused by motorists turning left on a "permissive" signal indication (i.e., a circular green or flashing red arrow) are not included in angle crashes.
- **Red light running crashes** include crashes where a law enforcement officer cited at least one driver for disregarding a traffic signal.
- **Rear end crashes** include crashes when the rear vehicle fails to stop and strikes the front vehicle.

Crash data was reviewed to determine the overall reduction in crashes for the four crash types. The following is a summary of the results:

- **Total crashes** were reduced by 7 percent in the "after" period
- **Angle crashes** were reduced by 57 percent in the "after" period
- **Red light running crashes** were reduced by 41 percent in the "after" period
- **Rear end crashes** were reduced by 5 percent in the "after" period

Data was also reviewed to determine whether individual intersections had crash reductions in the "after" period for the four crash types. The following is a summary of the results:

- 11 of 20 of intersections (55%) had fewer **total crashes** per year during the "after" period than during the "before" period.
- 19 of 20 intersections (95%) had fewer **angle crashes** per year during the "after" period than during the "before" period. The one intersection that had an increase in angle crashes during the "after" period had no angle crashes reported during the most recent study period between July 2010 and December 2011.

- 15 of 20 intersections (75%) had fewer *red light running crashes* per year during the “after” period than during the “before” period.
- 11 of 20 intersections (55%) had fewer *rear end crashes* per year during the “after” period than during the “before” period.

As demonstrated by the significant reduction in angle and red light running crashes, the safety benefits of the ERLSP continue to be realized by the traveling public. As the duration of the “after” evaluation period continues to expand, the results of the “before” and “after” studies will become more statistically reliable. As such, DelDOT will continue to monitor crash data at the locations equipped with enforcement technology.

Data Method Technology:

In 2010, the Delaware Criminal Justice Information System (DelJIS) implemented a new crash reporting system called E-Crash. In response to E-Crash, DelDOT put into practice the Crash Analysis Reporting System (CARS). E-Crash generates X, Y coordinates when law enforcement officers identify the location of crashes in the field. These coordinates are then transferred to DelDOT for inclusion in CARS. This process results in a more accurate method of establishing the location of crashes, and provides more inclusive crash data. Data for the 2011 and 2012 Program Updates was obtained using CARS. As such, recent crash data (i.e., July 1, 2010 through December 31, 2011) contained in the data analysis is based on a more accurate and complete reporting methodology.

Because the new reporting system has only been in use for approximately one year, the application of this new system alone with such a short period of data is not practical. “Before” crash material, which is required as early as 2001 through 2003 for the first camera installations, must be compared to current crash data. The new crash reporting system (CARS) currently only contains data from 2005 through present. However, the mixing of data collected through the old methodology and the new methodology may produce uneven, unscientific results. At least a two to three year monitoring period is recommended to adequately determine the effects of the system on crash data. As we move forward, DelDOT will continue to monitor the impact that the new crash reporting systems have on the “before” and “after” crash breakdown. It will begin to report these results beginning with the calendar year 2013 report (February 2014 Report to the General Assembly).

Camera Installations:

In 2010, DelDOT implemented 21 cameras at ten new intersections throughout the state. When performing studies to compare the crash benefits resulting from safety improvements, a minimum “after” period of three years is typically used. The “after” period for the purposes of the ERLSP crash data analysis is defined as 3 months after the date when citations begin to be

issued. The “after” period for the ten new intersections ranges from 13 to 16 months. Reviewing crash data for short time periods can potentially produce misleading results due to short-term changes in travel patterns or other factors that affect driver behavior. Therefore, in future year ERLSP updates when sufficient “after” data is available, crash data for the new ten camera locations will be reviewed to determine the effectiveness of the ERLSP at these intersections.

Supporting Contractor:

American Traffic Solutions, Inc. (ATS) is the contractor supporting the ERLSP. American Traffic Solutions, located in Arizona, provides complete, turnkey installation, operational and financial work for the ERLSP program. The company is the largest provider of electronic red light enforcement and other digital or video based enforcement products. The company is in the second year of the second extension of the original contract signed in 2004. In 2009, American Traffic Solutions acquired the previous contractor, Nestor Traffic Systems, in a bankruptcy purchase, thereby acquiring Nestor’s contractual rights with the Department of Transportation.

The Department will begin the solicitation for a new contract in June 2012, taking a year to develop the request for proposal, solicit and approve a contract prior to June 2013. This will provide the Department an opportunity to implement a new camera system if necessary. If the Department retains the current contractor, it will take the year to implement new cameras at 10 new intersections prior to June 2014.

Camera Locations:

Thirty-two cameras at 20 locations were installed by the department in 2004. Another 21 cameras were placed at 10 locations in 2010. The ERLSP has operating agreements with four local jurisdictions – Dover, Newark, Seaford and Elsmere. These agreements allow the department to place cameras at locations within these areas. Base fine revenue from these specific violations is provided to the jurisdiction. Violations are reviewed by local police personnel. Areas not included within the four incorporated locations are administered by the State with the Delaware State Police reviewing all violations. The locations are listed below, along with the year of installation:

New Castle County:

- Old Baltimore Pike at Salem Church Road/Salem Woods Drive (2010)
- Route 2 at Harmony Road (2010)
- Route 2 at Red Mill Road/Polly Drummond Hill Road (2010)
- Route 2 at Route 41 (2004)
- Route 2 at Route 7 (2004)
- Route 4 at Marrows Road (2004)
- Route 40 at Route 72 (2004)

New Castle County (Continued):

- Route 40 at Route 896 (2004)
- Route 40 at Scotland Drive (2004)
- Route 58/Churchman's Road at Route 1 NB Ramps (2010)
- Route 92/Naamans Road at Shipley Road/Brandywine Parkway (2010)
- Route 273 at Harmony Road/Gerald Drive (2010)
- Route 273 at Route 7 (2010)
- U.S.13 at Roosevelt Avenue (2004)
- U.S.202 at Route 92 (2004)

Sussex County:

- Route 1 at Munchy Branch Road/Miller Road (2010)
- Route 1 at Old Landing Road (2010)
- U.S. 13 at Road 40/Redden Road (2004)
- U.S. 113 at Route 20 (2004)

City of Newark (Enforced by Newark Police):

- Route 896 at Route 4 (2004)
- Elkton Road at Route 4 (2004)

City of Elsmere (Enforced by Elsmere Police):

- Route 2 at Dupont Road (2004)

City of Dover (Enforced by Dover Police):

- Governor's Avenue at North Street (2004)
- U.S. 13 at Division Street/Route 8 (2004)
- U.S. 13 at Kings Highway/White Oak Road (2004)
- U.S. 13 at Loockerman Street (2004)
- U.S. 13 at Roosevelt Avenue (2004)
- U.S. 13 at Scarborough Road (2010)
- U.S. 13 at Webbs Lane (2004)

City of Seaford (Enforced by Seaford Police):

- U.S. 13 at Tharp Road (2004)

Violations:

The violation fine for the ERLSP is \$112.50. This amount is calculated using two components: a base fine of \$75.00 and a surcharge of \$37.50. The \$75.00 fee is authorized under Title 21 §4101 (d) (2). In addition, Title 11 Delaware Code §4101 requires that any fines or fees levied for violations of Title 21 include an additional 50% surcharge or, in the case of the ERLSP, an additional \$37.50. Unpaid violations are subject to restrictions on renewal at time of vehicle registration. If delinquent, the Department increases the fine by \$10 for each 30 day period past the event, up to \$30 for 90 days.

The 2011 General Assembly considered and approved a bill to allow state and municipalities to increase their red light violation base fines to \$110 though the Department of Transportation has elected not to increase the fine from its \$75 base. Currently, the City of Wilmington is the only jurisdiction to increase fines.

Violation notices are sent directly to the registered owner of the vehicle. Unlike traditional violations cited by a police officer, the camera violations are considered a civil offense and not a criminal offense. Because of this, the violation and fine do not impact the motorist's insurance rate or accumulate points on their driving record.

In calendar year 2011, 48,503 Notices of Civil Violation were issued for red light running. This is a decrease of 13% from calendar year 2010 (54,892). The Department is reluctant to speculate on the rationale for this reduction. Multiple factors may account for this, including fewer vehicle miles traveled on Delaware roads due to the economy, the presence of the camera at various intersections, and greater enforcement of traffic laws in other areas of the roadway by law enforcement.

Table I: Comparison of Violations from 2010 to 2011.

Total ERLSP Violation Data						
Calendar Year 2010 vs. 2011						
	Violations			Gross Value of Citations		
	<u>2010</u>	<u>2011</u>	<u>Diff.</u>	<u>2010</u>	<u>2011</u>	<u>Diff.</u>
State ¹	28,737	28,271	-1.6%	\$ 3,018,627	2,891,726	-4.2%
Dover	16,532	11,377	-31.2%	\$ 1,566,321	1,220,186	-22.1%
Newark	8,035	7,069	-12.0%	\$ 741,153	728,180	-1.8%
Seaford	1,119	1,250	11.7%	\$ 108,928	118,569	8.9%
Elsmere	469	536	14.3%	\$ 48,465	47,673	-1.6%
Total	54,892	48,503	-11.6%	\$ 5,483,494	\$ 5,006,334	-8.7%
ERLSP Violation Data - Original Locations						
Calendar Year 2010 vs. 2011						
	Violations			Gross Value of Citations		
	<u>2010</u>	<u>2011</u>	<u>Diff.</u>	<u>2010</u>	<u>2011</u>	<u>Diff.</u>
State ¹	19,842	14,837	-25.2%	\$ 2,076,804	\$ 1,533,459	-26.2%
Dover	16,321	10,976	-32.7%	\$ 1,555,001	\$ 1,183,456	-23.9%
Newark	8,035	7,069	-12.0%	\$ 741,153	\$ 728,180	-1.8%
Seaford	1,119	1,250	11.7%	\$ 108,928	\$ 118,569	8.9%
Elsmere	469	536	14.3%	\$ 48,465	\$ 47,673	-1.6%
Total	45,786	34,668	-24.3%	\$ 4,530,351	\$ 3,611,337	-20.3%
ERLSP Violation Data - New Locations						
Calendar Year 2010 vs. 2011						
	Violations			Gross Value of Citations		
	<u>2010</u>	<u>2011</u>	<u>Diff.</u>	<u>2010</u>	<u>2011</u>	<u>Diff.</u>
State ¹	8,895	13,434	151.0%	\$ 941,823	\$ 1,358,327	144.2%
Dover	211	401	190.0%	\$ 11,320	\$ 36,730	324.5%
Newark	0	0	0.0%	\$ -	\$ -	0.0%
Seaford	0	0	0.0%	\$ -	\$ -	0.0%
Elsmere	0	0	0.0%	\$ -	\$ -	0.0%
Total	9,106	13,835	151.9%	\$ 953,143	\$ 1,395,057	146.4%
1/ Does not include revenue from the 50% surcharge authorized under Title 11.						

Revenues / Expenses:

Although the ERLSP’s priority is safety, and not revenue generation, the program continues to generate more money than it costs to operate the system. The total receipts collected through the program in calendar year 2011 were \$6,825,133.75. These receipts total more than the gross value of violations issued during the year due to collection of past due violations and the inclusion of the 50% surcharge on moving violations authorized under Title 11.

Table II: Cash Flow (unaudited)

Summary of Cash Flow for Period of January 2011 through December 2011						
All Cameras at All Locations						
Jurisdiction	State	Dover	Seaford	Elsmere	Newark	Total
Number of Citations Processed	28,271.00	11,377.00	1,250.00	536.00	7,069.00	48,503.00
Revenues						
Base Fine Revenue Received	\$ 2,891,786.21	\$ 1,220,185.90	\$ 118,568.70	\$ 47,672.70	\$ 728,180.21	\$ 5,006,393.72
DelDOT Surcharge	\$ 1,818,862.50	\$ -	\$ -	\$ -	\$ -	\$ 1,818,862.50
Adjustments ¹	\$ 122.50	\$ -	\$ -	\$ -	\$ -	\$ 122.50
Net Amount Received	\$ 4,710,771.21	\$ 1,220,185.90	\$ 118,568.70	\$ 47,672.70	\$ 728,180.21	\$ 6,825,378.72
Expenses						
Equipment Lease Fee	\$ 1,640,220.00	\$ 399,040.00	\$ 80,220.00	\$ 45,840.00	\$ 137,520.00	\$ 2,302,840.00
Citation Processing Fee	\$ 334,084.63	\$ 141,952.31	\$ 15,662.50	\$ 6,716.08	\$ 88,574.57	\$ 586,990.09
Lockbox Fee	\$ 42,406.50	\$ 17,065.50	\$ 1,875.00	\$ 804.00	\$ 10,603.50	\$ 72,754.50
Other Processing ²	\$ 18,386.91	\$ 12,410.79	\$ 12,410.79	\$ 12,410.79	\$ 12,410.79	\$ 68,030.07
Engineering	\$ 94,743.09	\$ -	\$ -	\$ -	\$ -	\$ 94,743.09
Refunds	\$ 3,067.00	\$ -	\$ -	\$ -	\$ -	\$ 3,067.00
Subtotal - Expenses	\$ 2,132,908.13	\$ 570,468.60	\$ 110,168.29	\$ 65,770.87	\$ 249,108.86	\$ 3,128,424.75
Surplus/Deficit	\$ 2,577,863.08	\$ 649,717.30	\$ 8,400.41	\$ (18,098.17)	\$ 479,071.35	\$ 3,696,953.97
1 - Includes bounced checks and bank transaction fees						
2 - Includes lockbox reconciliation fees and DSL line charges						

The expenses of the program are deducted from the gross receipts prior to the distribution of revenue to jurisdictions. ERLSP’s expenditures for calendar year 2011 totaled \$6,860,392.02. Costs for the program included:

- \$2,968,062.70 American Traffic Systems (ATS) for operation/maintenance;
- \$ 80,597.39 Whitman & Requardt (WRA) for engineering support;
- \$ 14,145.70 Allied Tube & Conduit for make ready work at intersection sites;
- \$ 3,067.00 Overpayment Refunds to individual violators.

Partnering municipalities retain the base fine amount on violations. For CY 2011, the following was distributed to the jurisdictions. Totals include all collections, including delinquencies, accruals from previous years and sinking funds distributions.

Dover:	\$696,333.34
Seaford	\$ 13,258.00
Elsmere:	\$ 117.96
Newark:	\$473,984.27

For intersections in which revenue does not cover the cost of the cameras and other operational costs, expenses are paid from a sinking fund established at the beginning of the program. Municipal costs are covered by this sinking fund, which is replenished based on the prorated revenue of the jurisdictions. During the course of the year, the Town of Elsmere and the City of Seaford withdrew from this sinking fund, totaling \$18,216.10 and \$5,119.00, respectively. The City of Dover has drawn from the sinking fund for the new intersections installed last year, totaling \$54,094.53

Court Data:

In calendar year 2011, of the 48,503 violations, 304 cases of red light violation were scheduled for trial. Of these, 283 were upheld by the court and 21 were dismissed. When appeals do occur, most are settled prior to a hearing in court due to the quality of evidence collected by the monitoring system.

Affidavits:

Under 21 Del. Code §4101 (d) (9), Delaware law permits a registered vehicle owner to divert responsibility for a video offense if another driver was operating their vehicle at the time the violation occurred.

If a registered owner identifies another driver as the violator on the affidavit, the identified driver has the same legal options the registered owner had originally – to accept responsibility and pay the fine or to challenge the allegation in Court. Should the identified driver opt to challenge the allegation, the prosecution must subpoena the registered owner to Court. This allows a judge to hear from both the registered owner and the identified driver as to who may be responsible for the violation.

In 2011, 1,645 affidavits were filed out of a total population of 48,503 violations. Affidavits are used by the Registered Owner to assert that they were not the driver of the automobile at the time of the violation.

Delinquent Fine Payments:

For every 30 days that an ERLSP violation is not paid after the due date, the fine increases by \$10. After 90 days of not being paid, the fine is capped at \$142.50. The fine becomes delinquent after it is 120 days overdue.

The collection rate for non-delinquent payments for the program was 91.0%. Delinquencies in calendar year 2011 were 4,414 violations out of 48,503 violations processed, totaling \$628,995. Currently, there are 34,124 outstanding violations from a six year period, totaling over \$4.86 million. Approximately 53.0% of the violations are from in-state registered vehicles. Maryland tags accounted for 4,941 violations, New Jersey tags equaled 1,800 and Pennsylvania tags accounted for 4,753 violations.

Table III: Current Percentage of Delinquencies

Summary of Delinquent Violators by Year and State					
<u>Year</u>	<u>Instate</u>		<u>Out-of-State</u>		<u>Total</u>
2004	427	52.1%	392	47.9%	819
2005	2,799	63.9%	1,584	36.1%	4,383
2006	2,964	54.5%	2,478	45.5%	5,442
2007	2,583	53.6%	2,236	46.4%	4,819
2008	2,235	52.2%	2,048	47.8%	4,283
2009	2,331	54.0%	1,986	46.0%	4,317
2010	2,031	36.0%	3,616	64.0%	5,647
2011	2,703	61.2%	1,711	38.8%	4,414
Total	18,073	53.0%	16,051	47.0%	34,124

Currently, in-state violations have their registration placed on hold if there is a delinquent violation. Effective January 1, 2012, the State offers vehicle owners up to eight years for registration renewal. Previously the number was five years. Because of this, violations may begin to take longer in cycling through the system. This change may impact violation numbers until the eight year system balances out.

Delaware does not have a reciprocal agreement with other states at this time, due to the additional administrative and financial burden this would place on the Division of Motor Vehicles. The processing of “holds” for other states would require far greater time and cost than the benefit Delaware would derive from other states doing the same.

The Department contracted with Linebarger, Goggan, Blair, and Sampson, LLP. which began collections in October 2011. Linebarger, Goggan, Blair and Sampson, LLP. receives 25 percents of the revenue collected from outstanding fines as a result of their collection process. As of December 2011, Linebarger, Goggan, Blair, and Sampson, LLP., has collected 208 violations totaling \$29,907 with \$7,477.76 retained by Linebarger, Goggan, Blair, and Sampson, LLP., for collection activities.

Staff Organization:

The program is administered utilizing employees in the Office of the Secretary, the Delaware Transit Corporation and the Traffic Section. Delaware Transit Corp (DTC) cross-trained two employees in the Office of Safety and Security to help administer this program. There are now three staff members in addition to a Safety and Security Officer, who work with the program and attend court challenges. When DTC Staff are unable to be in court, our Traffic Section personnel will perform those duties. The DelDOT Traffic Section may also participate in proceedings to discuss timing of signals, review vendor plans and oversee field activities related to the program. The Delaware State Police currently have three staff members reviewing violations for consistency to rules and approving qualified violations for remittance to violators. The program is managed out of the Office of the Secretary by the Intergovernmental Policy Advisor.

New Intersections:

As part of its on-going effort to reduce crash incidents at all intersections, the Department continuously evaluates the need for the placement of cameras throughout the state. Intersections selected into the ERLSP are determined eligible through engineering-based criteria and the use of recent crash data.

The most important criterion for the selected intersections is the frequency of angle crashes due to red light running. Another factor includes the intersections' geometry; in other words, whether the physical design of the intersection allows for installation of ERLSP equipment. Once locations are identified, additional analysis such as the use of countermeasures in lieu of cameras, the efficacy of capturing images at approaches, and impacts on other aspects of the intersection's performance is researched. Each of these steps are taken prior to any final recommendations.

The Department identifies new intersections as potential candidates for the placement of cameras based on high crash incidences. The positioning of cameras at new intersections has been placed on hold until the solicitation of a new (vendor) contract occurs. At that time, the most recent statewide crash data will be utilized to determine recommended locations for camera installation.

At the time of implementation, concurrence from the appropriate Senator and Representative of the District wherein a candidate intersection lies will be requested for installation of enforcement equipment.

Current Intersections:

Cameras at the original 20 intersections are reaching their useful life and ATS has new technology available for their replacement. The Department has given approval for ATS to retrofit the existing cameras with new ATS technology at no cost to the Department. To date, one intersection has been retrofitted with new cameras. DelDOT's Traffic Section recently approved plans for a second retrofit at the location of Elkton Road and Christina Parkway.

2011 Electronic Red Light Safety Program Update

2012 Report Recommendations:

Over the last eight years, the Electronic Red Light Safety Program has demonstrated successful reductions in crashes at intersections with red light camera installations. The program also has demonstrated a successful record of collection of outstanding fines and well managed costs. Over the course of the next year, the Department is recommending the following occur:

- a) Creation, implementation and approval of a new contract for the ERLSP vendor. The Department intends to begin this process in June 2012, with the identification of a vendor for the program by June 2013.
- b) Identification and installation of cameras at new intersections where necessary. Previously, the Department identified 10 potential intersection candidates for camera placement. As this data is beginning to “age”, a new analysis will occur statewide to determine the most up to date crash history and identify appropriate placement. These cameras will be included in the specifications for the request for proposal to be offered in 2012-2013. Implementation will occur once a new contract is approved.
- c) Performance Data: The data for CY 2011 have demonstrated a drop in the number of violators under CY 2010 data. This may be attributable to a number of factors, including reductions in overall vehicle miles traveled, camera performance, fewer violations due to the presence of the camera, etc. Evaluation of these data by individual intersections will provide insight into whether there is an overall (lower vehicle miles travelled) or more specific reasons (e.g. camera performance or better enforcement) for the drop in violations. While this is the intent of the program, the Department will work with the engineering firm (Whitman Requardt and Associates) to identify any unusual circumstances in the reductions.
- d) The certain intersections in Seaford, Elsmere and Dover have experienced less revenue than necessary to pay for the individual costs of operating the cameras. The Department will be reaching out to these jurisdictions to evaluate the traffic data to determine if there are different configurations or intersections for which these cameras should be placed. It may result in simply leaving the cameras at these locations if the Department can demonstrate that the lowering of the violations is due to the presence of the camera. Until the Department and municipality looks at the data, it is uncertain whether any changes are necessary.
- e) The Department will be evaluating a different arrangement for the payment of violations at the Division of Motor Vehicles in order for violators to have holds lifted quickly when registering vehicles. Currently, the owners of vehicles must pay through a separate system with ATS before registration holds can be lifted. We will implement these changes in FY 2013.

APPENDIX

Figure 1: Total Crashes by Year

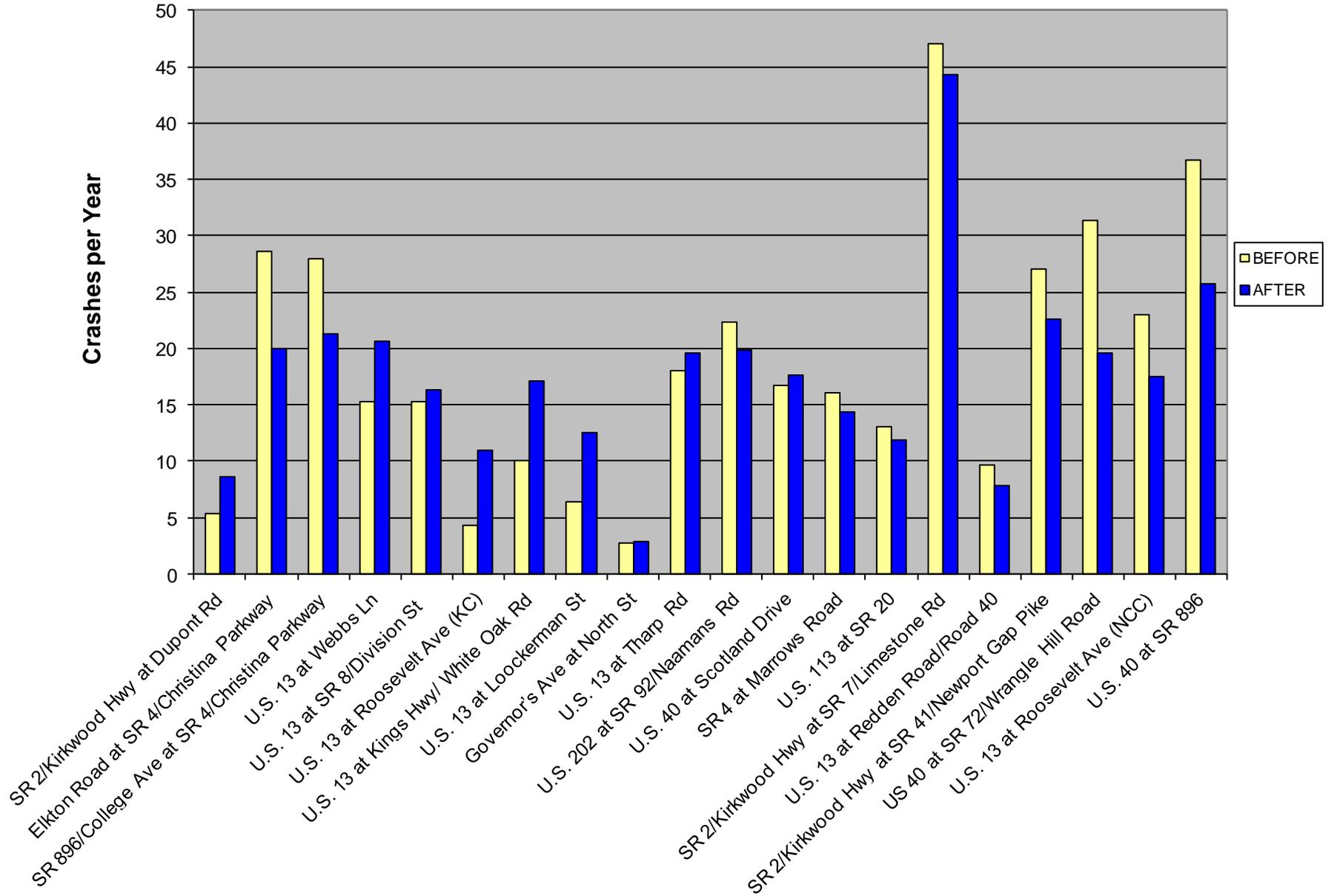


Figure 2: Angle Crashes by Year

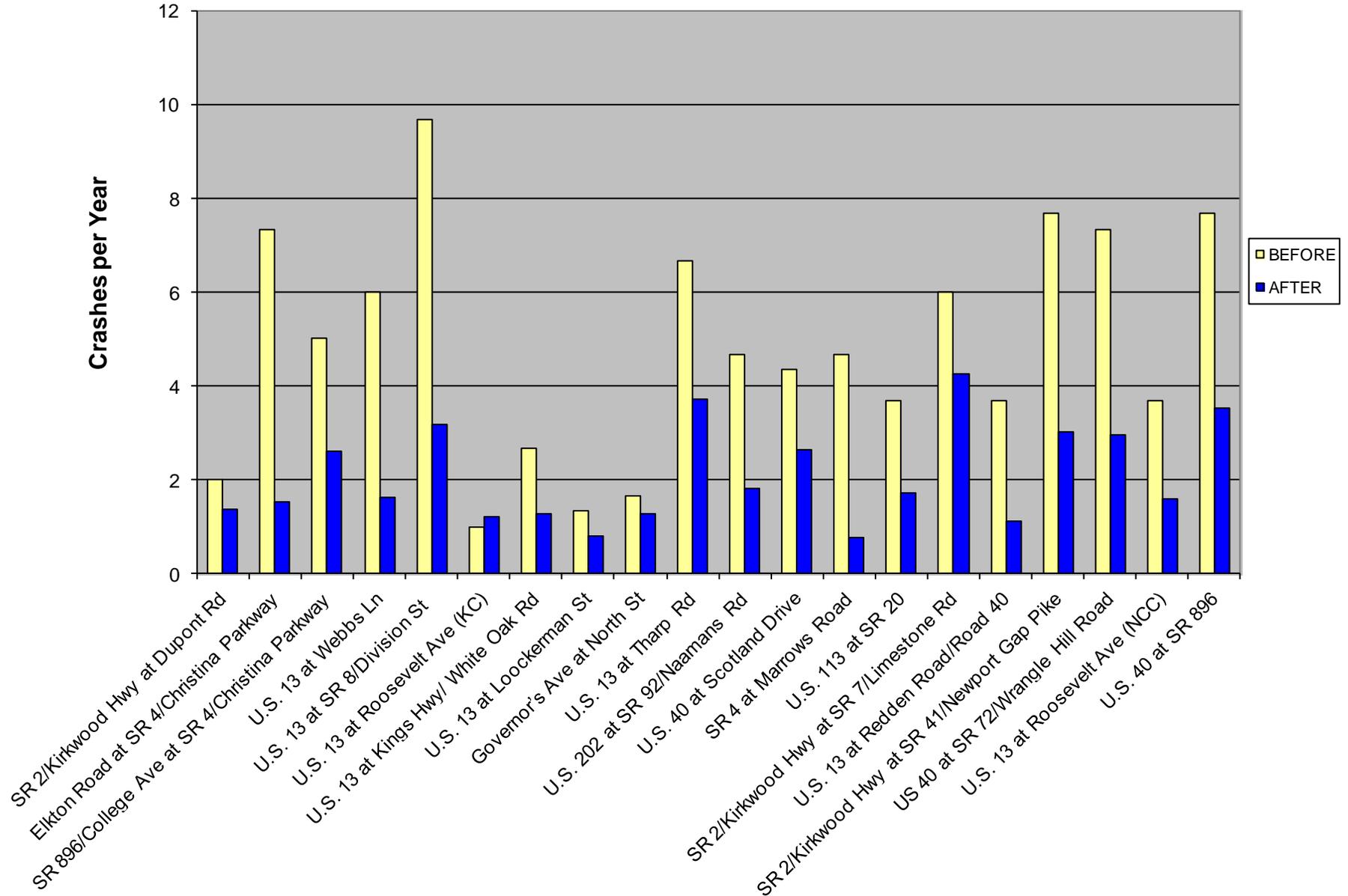


Figure 3: Red Light Running Crashes by Year

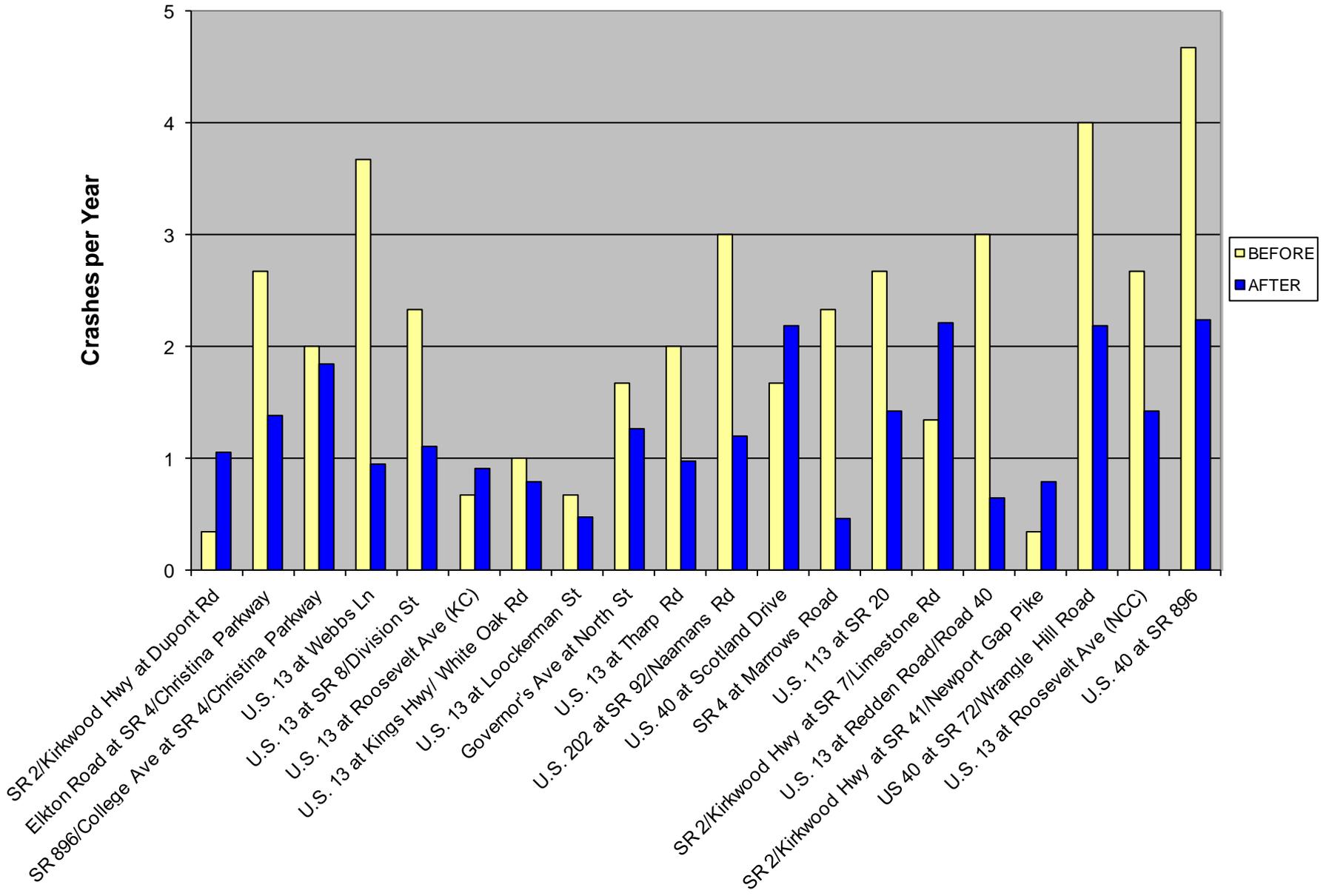


Figure 4: Rear End Crashes by Year

