

Electronic Red Light Safety Program

Program Report for CY 2012

Delaware Department of Transportation

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CY 2012 Electronic Red Light Safety Program Report

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Introduction

In accordance with **Article 98 of Senate Bill 190 of the 145th General Assembly of the State of Delaware**, the Department of Transportation (DelDOT) hereby acknowledges the directive to continue operations of the Red Light Safety Camera Program on an open-ended basis under specified conditions. For Calendar Year 2012, the conditions are as follows:

- a.) The Department shall continue to use recognized safety and accident criteria in determining whether and where to add any new enforcement locations to this program, and in any event shall continue to confirm that any such new locations are not objected to by the incumbent state Senator and Representative for the districts in which such locations are proposed.
- b.) To assure integrity and propriety, no person involved in the administration or enforcement of this program shall own any interest or equity in the vendor used by the Department to support the administrative elements of the program. Any such person with an ownership or equity interest in such vendor must divest from the ownership or investment no later than ninety days after the effective date of this act. This restriction applies to anyone with either direct involvement in administering or enforcing this program and those in any supervisory capacity above such persons.

The above criterion is referenced in **Article 118 of Senate Bill 130 of the 146th General Assembly of the State of Delaware**.

DelDOT's number one priority is the safety of all users, motorists, bicyclists and pedestrians on our roads. Our research shows the Electronic Red Light Safety Program (ERLSP) has greatly reduced the combined total number of crashes at red light monitored intersections since its inception. Red light running continues to be a serious traffic safety issue nationwide. According to the Federal Highway Administration:

- Red-light running crashes cause an estimated 762 deaths and 165,000 injuries annually.
- In a study including individuals of all ages, gender, income status and background, over 50% of drivers admit to deliberately running red lights because of being in a "hurry".
- You are more likely to be injured due to a red-light running related crash than any other type of crash.
- Ninety-three percent of drivers believe running a red light is unacceptable, yet 1 in 3 drivers reported doing so in the past 30 days. *AND*
- The Insurance Institute for Highway Safety found that one-half of the people killed in red-light running crashes are not the signal violators; they are drivers, passengers and pedestrians hit by red-light runners.

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Executive Summary

The Electronic Red Light Safety Program (ERLSP) is an electronic monitoring system located at thirty qualifying intersections across the State of Delaware. The current camera locations met eligibility having historically high incidences of red light running related crashes.

The technology for electronic enforcement utilizes a specialized camera, coupled with a 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 Department of Transportation and/or the governing body of any city or county to install and operate traffic light signal violation monitoring systems and assess fines accordingly. If camera installation is performed on state-maintained streets or roads by an entity other than DelDOT, the Department must first approve such installation.

All intersections using a traffic control photographic system or other traffic light signal violation monitoring system must adhere to the exact duration of the yellow light change interval. This time-period must be no less than the yellow light change interval duration specified in the design manual developed by the Department of Transportation.

Title 21 exclusively directs DelDOT to identify intersections with high crash incidents as potential candidates for the placement of electronic red light camera systems. In addition, DelDOT must qualify the engineering of any new cameras installed. The Department also manages the contractual obligations of the private company(s) through which the camera systems are installed and maintained, and through which violations are captured, processed, and collected.

Title 2 Transportation, Delaware Administrative Code; Section 1200 Office of Highway Safety, Section 1205, Electronic Red Light Safety Program regulations became effective in 2005, in accordance with Title 21. In 2011, Governor Jack Markell signed Executive Order 36, requiring department wide *and* public participation to review Delaware Regulations dated three years or older. The Electronic Red Light Safety Program regulations meet the qualifications for review and are currently under revision. Anticipated updates include but are not limited to:

- Changing the number of current camera locations listed from 10 to 30.
- Modifying camera system vendor information to reflect name of current system vendor.
- Review and make necessary revisions to list of "exemptions" allowed under **1205 (7.0 Exemptions)**.
- Revise "Fine" data to reflect current standards approved by the General Assembly.

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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 types of crashes. In February 2007, DelDOT was asked to produce 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 thirty intersections equipped with enforcement technology has been reviewed for an "after" period through December 2012, ranging from 25 to 101 months. The average "after" period was approximately five years. It should be noted that crash data was reviewed for all intersection approaches; however, cameras are not present on all approaches to the monitored intersections. 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 3 percent in the "after" period
- **Angle crashes** were reduced by 47 percent in the "after" period
- **Red light running crashes** were reduced by 29 percent in the "after" period
- **Rear end crashes** were unchanged in the "after" 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, especially at the ten intersections where cameras were installed in 2010. DelDOT continues to monitor crash data at the locations equipped with enforcement technology.

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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 communicated 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 CY 2010 through CY 2012, Program Updates was acquired using CARS methodology. As such, data included during that time-period is determined through a more accurate and complete reporting methodology.

Because the new reporting system has only been in use for approximately two years, 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, is compared to existing 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. A 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.

Supporting Contractor:

In 2004, DelDOT entered into a camera system agreement with Nestor Traffic Systems, Inc. (Nestor). At that time, DelDOT and Nestor signed a five-year contract with options to extend the agreement (in writing), for two additional time-periods. Each extension was limited to three years.

In 2009, Nestor filed bankruptcy and was acquired by American Traffic Solutions, Inc. (ATS). Upon purchase, ATS attained Nestor’s contractual rights with the Department of Transportation. Currently in its second and final extension, ATS remains under contract with the Department through June 2014.

The initial contract will be ten years old at the time of expiration. Camera enforcement technology has significantly changed since then, offering enhanced clarity and accuracy for violation reviews. Since 2004, the number of camera system vendors has also increased, providing a more open and competitive market of choice and pricing.

In mid-2012, the Department started the process of solicitation for a new contracted camera system vendor. In calculating the Request for Information (RFI) time-period, the development and solicitation of a Request for Proposal (RFP), the review and selection of a

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Supporting Contractor (Continued):

qualified vendor, and lastly the physical change-out of camera systems if necessary, the Department is on track to meet the June 2014 deadline (date of expiration for current contract).

The first meeting to develop the timeline and preparation for procuring a new system vendor/contract included ERLSP experts from participating municipalities, the Delaware State Police, representatives from the state court system, DelDOT Engineers and Traffic Section staff, DelDOT's engineering consultant, and department personnel representing Finance, Contract Administration, and our program management sections. It was at this meeting where concerns for the performance of our enforcement cameras and the current system vendor (ATS) were brought to light. Specifically, our participating municipalities reported non-working cameras and significant reductions in red light running violations.

Immediately, the ERLSP team began extensive research on camera activity statewide and initiated conversations with ATS to resolve both camera and program-related issues. Several problematic areas were discovered, including aging/malfunctioning traffic cameras, poor/erroneous reporting and billing by the vendor, and unacceptable response time to problems identified in the field (at camera locations.)

As a result, aggressive measures began, addressing our apprehension with vendor activities. The procedures implemented included, but are not limited to the following steps:

- Prior to payment of ATS camera invoices, our Traffic Section will review each invoice and make recommendations for payment or non-payment based on knowledge of camera operability. Our Traffic Section has also requested monthly maintenance reports and status updates for each intersection (provided by the vendor.)
- Once approved, Traffic officially "signs-off" on the invoice, and presents the acceptable documentation to our Finance Section for recording and payment activity.
- The ERLSP team identified overcharges made by the department to ATS. For one monitored intersection, the company billed DelDOT for three enforcement cameras, rather than the two existing cameras. We requested and received full reimbursement for this and similar issues.
- Both accounting and system operation reports will be provided to the department on a routine basis.
- ATS had made substantial efforts to improve customer service / increased outreach to DelDOT since these steps were put into place.

Internally, ERLSP team members remain in constant contact with one another. Each member regularly monitors the efforts of our vendor to assure a quality program. Our Finance Section is currently reviewing their internal Red Light Camera Enforcement Program policies and procedures to validate documentation and reinforce report methods.

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Camera Locations:

In 2004, Nestor installed thirty-two cameras at 20 locations in Delaware. An additional 21 cameras were placed at 10 locations in 2010 by ATS. The ERLSP has operating agreements with four local jurisdictions – The City of Dover, City of Newark, City of Seaford and the Town of Elsmere. These agreements allow the department to place cameras at locations within municipal areas. Base fine revenue collected from municipal violations is imparted to the appropriate jurisdiction. Local police personnel review recorded red light running events, which occur within municipality areas.

The Department in conjunction with the Delaware State Police (DSP), administers areas not included within the four incorporated locations. DSP is responsible for reviewing all non-municipal violations. The entire list of red light enforcement camera locations in Delaware, along with the year of installation, follows:

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)
- 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)

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Camera Locations (Continued):

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).

The \$37.50 surcharge originates from Title 11. Title 11 Delaware Code §4101 requires any fines or fees levied for violations of Title 21 (such as red light camera enforcement violations) include an additional 50% surcharge. In the case of the ERLSP, the additional 50% charge equals \$37.50.

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Violations (Continued):

The 2011 General Assembly passed legislation allowing both the state and municipalities to increase their red light violation *base fines* to \$110. **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 its base fine to \$110. Unlike the jurisdictions mentioned previously, the City of Wilmington is not a part of DelDOT's ERLSP. In 2001, the City implemented its independent system at thirty-four locations, choosing to contract with a different vendor.

Under the State of Delaware's ERLSP, 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 affect the motorist's insurance rate or accumulate points on their driving record. 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.

In calendar year 2012, 37,922 Notices of Civil Violation were issued for red light running. This is a decrease of 22% from calendar year 2011, when 48,503 violations were distributed. Multiple factors may account for this, including improved driver behavior, inadequate camera operations and reporting (vendor issue as noted earlier), greater enforcement of traffic laws in other areas of the roadway, potentially fewer vehicle miles traveled on Delaware roads due to the economy/gas prices.

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Total ERLSP Violation Data							
Calendar Year 2011 vs. Calendar Year 2012							
Jurisdiction	Violations			Jurisdiction	Gross Value of Citations		
	2011	2012 (*)	Difference		2011	2012	Difference
State (1)	28,271	23,194	(18 %)	State (1)	\$2,891,726	\$2,609,325.00	(9.7%)
Dover	11,377	6,843	(40 %)	Dover	\$1,220,186	\$ 769,837.50	(40%)
Newark	7,069	7,362	4.10 %	Newark	\$ 728,180	\$ 828,225.00	(4.0%)
Seaford	1,250	406	(67.5 %)	Seaford	\$ 118,569	\$ 45,675.00	(44%)
Elsmere	536	117	(78.17 %)	Elsmere	\$ 47,673	\$ 13,162.50	(56.9%)
TOTAL ALL	48,503	37,922	(21.80 %)	TOTAL ALL	\$5,006,334	\$4,266,225.00	(14.80%)

(*) "State" number values do not include additional 834 cases in "Pending" status at time of Report.

(1) Does not include revenue from the 50% surcharge authorized under Title 11.

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Revenues / Expenses:

Although the ERLSP's priority is safety and not revenue generation, the program does produce more money than it costs to operate. This number gradually decreases each year.

The total receipts collected through the program in calendar year 2012 were \$5,443,384.25. These receipts are actually greater than the \$4,266,225.00 gross value of violations issued during the year as a result of the collection of past due violations and the inclusion of the 50% surcharge on moving violations authorized under Title 11.

Summary of Cash Flow (Unaudited) Period of January 2012 through December 2012						
All Cameras at All Locations						
Jurisdiction	State	Dover	Seaford	Elsmere	Newark	Total
Number of Citations Processed	23,194	6,483	406	117	7,362	37,922
Revenues						
Total Amount Received	\$ 2,502,886.50	\$ 732,254.89	\$ 66,095.00	\$ 20,524.85	\$ 699,548.11	\$ 4,021,309.35
DelDOT Surcharge	\$ 1,422,075.00	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Amount Received	\$ 3,924,961.50	\$ 729,966.29	\$ 66,095.00	\$ 20,525.85	\$ 699,548.11	\$ 5,443,384.35
Expenses						
Equipment Lease Fee	\$ 1,640,220.00	\$ 349,380.00	\$ 91,680.00	\$ 45,840.00	\$ 133,700.00	\$ 2,260,820.00
Citation Processing Fee	\$ 272,097.32	\$ 85,279.29	\$ 5,087.18	\$ 1,466.01	\$ 92,245.86	\$ 456,175.66
Lockbox Fee	\$ 34,791.00	\$ 10,264.50	\$ 609.00	\$ 175.50	\$ 11,043.00	\$ 56,883.00
TDEC Fees	\$ 12,410.79	\$ 12,410.79	\$ 12,410.79	\$ 12,410.79	\$ 12,410.79	\$ 62,053.95
DSL Line Charge (Wilmington)	\$ 5,976.12	\$ -	\$ -	\$ -	\$ -	\$ 5,976.12
Subtotal - Expenses	\$ 1,965,495.23	\$ 457,334.58	\$ 109,786.97	\$ 59,892.30	\$ 249,399.65	\$ 2,841,908.73
Surplus/Deficit	\$ 1,959,466.27	\$ 272,631.71	\$ (43,691)	\$ (39,367.45)	\$ 450,148.46	\$ 2,599,187.99

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 2012 also covered program costs including:

- American Traffic Systems (ATS) for operation/maintenance - \$2,841,908.72
- Whitman & Requardt (WRA) for engineering support - \$147,531.18
- Linebarger, Goggan, Blair, and Sampson, LLP for delinquent fee collections - \$59,504.00

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Revenues / Expenses (Continued):

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 calendar year 2012, the Town of Elsmere and the City of Seaford withdrew from this sinking fund, totaling \$39,367.42 and \$46,352.66, respectively. The City of Dover has drawn from the sinking fund for \$58,576.17.

Current sinking fund balances are:

- **Seaford - \$2,610.73**
- **Elsmere - \$2,906.66**
- **Newark - \$7,086.04**
- **Dover - \$2,973.43**

Court Data:

In calendar year 2012, of the 37,922 violations, 229 cases were scheduled for trial. Of these, 204 were upheld by the court and 25 were dismissed. When appeals do occur, most are settled prior to a court hearing. This is largely due to the quality of evidence collected.

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.

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Delinquent Fine Payments:

For every 30 days that an ERLSP violation remains unpaid after the due date, the fine increases by \$10. After 90 days of non-payment, the fine is capped at \$142.50. The fine becomes delinquent after it is 120 days overdue.

The number of delinquencies in calendar year 2012 was 4,889, out of 37,922 violations processed, totaling \$695,855.63. Currently, there are 5,958 outstanding violations from a two-year period, totaling over \$850,845.63. Approximately 64% of the violations are from in-state registered vehicles. Maryland tags accounted for 13% violations, New Jersey tags equaled 4% and Pennsylvania tags accounted for 12% violations.

If the in-state owner of a vehicle ignores the court-ordered fine, the Division of Motor Vehicle (DMV) puts a hold on vehicle registration renewals. Currently, Delaware does not have a reciprocal agreement with other states. This may change in the future as noted in the "Recommendation" section of this document.

The Department contracts with Linebarger, Goggan, Blair, and Sampson, LLP (LGBS) for delinquent fee collections. This relationship began in October 2011. As of December 2012, LGBS collected funds for 1,670 violations, totaling \$237,986.00. A total of \$59,504.00 was retained by the organization for collection activities.

In 2012, the State of Delaware began offering vehicle owners the option to renew their registration for as many as eight years at a time. Previously, the number was five years. Because of the relatively new change, violations may take longer to cycle through the system - potentially influencing the accuracy of violation statistics until renewal time balances out.

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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 the most recent crash data.

The most important criterion in selecting an intersection 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 is on temporary hold until the solicitation of a new (vendor) contract occurs.*** As mentioned previously, the current contract ends in June 2014. At that time, ***the most recent statewide crash data will be utilized to determine qualifying locations for camera placement.***

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.

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Program Recommendations Based on CY 2012 Data:

For the past nine years, the Electronic Red Light Safety Program has demonstrated successful reductions in crashes at intersections with red light camera installations. Our primary focus remains on safety, and not the monetary aspects of the program.

Our camera contract will soon expire after a ten-year term. Since the initiation of the program, camera enforcement technology has improved dramatically. Prior to entering into our Request for Proposal (RFP) process, the department formally initiated a Request for Information (RFI) period. The RFI will provide an opportunity for red light camera vendors to display their technology on an open and equal playing field. Once this process has occurred, our Contract Administration section will be better prepared to draft the most suitable vendor proposal for our needs.

During the past several months, our current vendor (ATS) has undergone staffing changes and an unfortunate downturn in performance and quality customer service. In early fall 2012, three of our four partnering municipalities notified the Department of camera operating concerns - raising issues of non-performing equipment, outdated technology, inadequate engineering skills of ATS employees, and an already mentioned demise in quality customer service. While the City of Newark and the Delaware State Police had minor concerns, the Town of Elsmere, City of Seaford, the City of Dover have noted significant challenges in working with the vendor, and the results of poor work performance. DelDOT's administrative staff also identified concerns and now submits routine "punch lists" of issues to discuss with the vendor.

Improperly working cameras located in the Cities of Seaford and Dover, in addition to the Town of Elsmere, most likely played a role in the reduction of statistics for CY 2012. Similar, but not as aggressive decreases can be measured throughout the state. The "Violation Data Chart" on page 10 of this document clearly indicates a substantial loss of assessed violations and fines.

While we believe in the effectiveness of the program, and the expected lowering of crash and violation numbers from past data, the disparate counts from CY 2011 to CY 2012 leads one to believe camera inoperability had a much larger impact than customary. DelDOT continues to work with ATS in hopes of resolving issues and successfully completing the contract. We maintain positive communication and carefully document requests made to the vendor, including the much-desired request to retrofit Nestor cameras, which remain in our network.

Our path forward began in 2012, when we started the extensive Request for Proposal process, currently on task. Future mileposts include the selection of a vendor in 2013, allowing an appropriate amount of time for the winning bidder to perform camera "switch outs" if necessary (with minimal inconvenience to the traveling public). The timing of this process should enable the winning vendor to be operational at or before the end of the current June 2014 contract.

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Program Recommendations Based on CY 2012 Data (Continued):

The Department recommends the following operating strategy for CY 2013~

- a) **Review and identify potential intersection candidates** for camera placement through DelDOT's Traffic Section. Implementation will occur shortly thereafter.
- b) **Create, implement and approve of a new contract for the ERLSP system vendor.** The Request for Information (RFI) currently advertised will close in mid-March, allowing time for the development of a comprehensive proposal request. We are on target to identify a vendor for the program during summer 2013.
- c) **If the Current Vendor is not selected,** begin working with selected vendor to coordinate a seamless camera exchange with minimal impact to the traveling public. If the current vendor is selected, begin to upgrade cameras to vendor specified models.
- d) **Performance Data:** The data for CY 2012 demonstrate a drop in the number of violators compared to CY 2011. As mentioned earlier, this may be the result of several causes. With newly requested and enhanced operation reports for cameras, we will have better oversight of intersection data in a more timely fashion. We will also expect our future contract to include the ability for the department to monitor camera operations as needed through technology.
- e) **Address intersections in Seaford, Elsmere and Dover producing less revenue than necessary to pay for the individual costs of operating the cameras.** The Department will reach out to these jurisdictions and evaluate traffic data to determine if there are different configurations for which these cameras should be placed. It may result in simply leaving the cameras at these locations - if the Department can demonstrate the lowering of the violations is due to the presence of the camera. Until the Department and municipality look at the data, it is uncertain whether any changes are necessary.
- f) **The Department will continue to evaluate different arrangements for the payment of violations at the Division of Motor Vehicle (DMV)** 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 DMV registration "holds" can be lifted. This often leads to a delay in DMV's receipt of registration renewal approvals. We will continue to work with DMV and the vendor to determine a more efficient manner to lift registration holds. This is also an issue to resolve while drafting our future contract.
- e) **Review collections process to determine if changes need to be made** to obtain greater efficiency and recoupment. Included in the review will be the pursuit of reciprocity with other states as part of an effort through the Division of Motor Vehicles for general reciprocity among neighboring states.

APPENDIX *, **

- (*) Figures 1 through 4 following this section depict the average number of crashes per year for the four crash types at each of the twenty intersections with enforcement technology.
- (**) Please note “Before” (Yellow) and “After” (Blue) counts over an *average period of 5 years*, ending in December 2012.
Depending on the date of camera placement, *the “Before” period ranges from 25 to 101 months, ending in December 2012.*

Figure 1: Total Crashes by Year

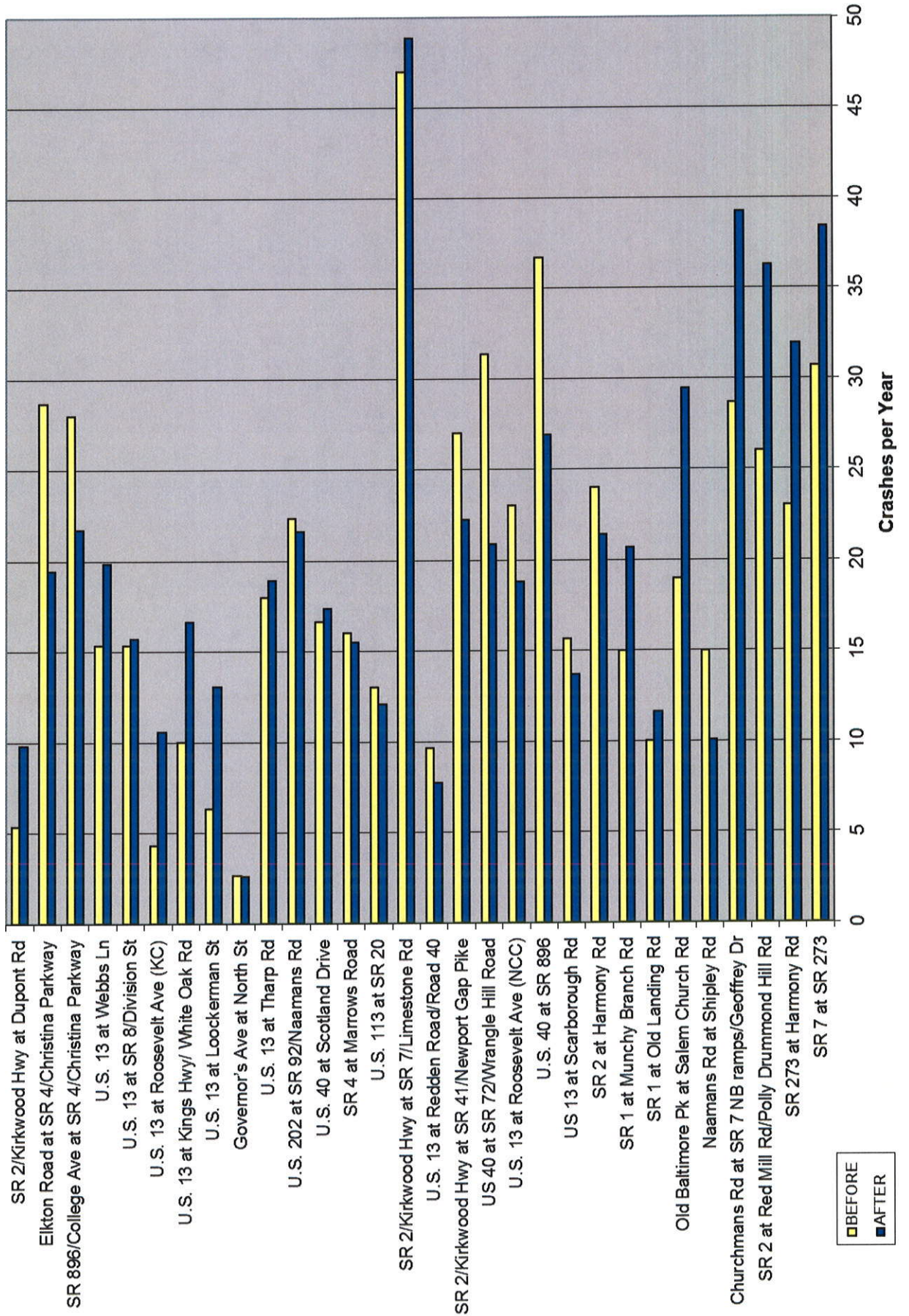


Figure 2: Angle Crashes by Year

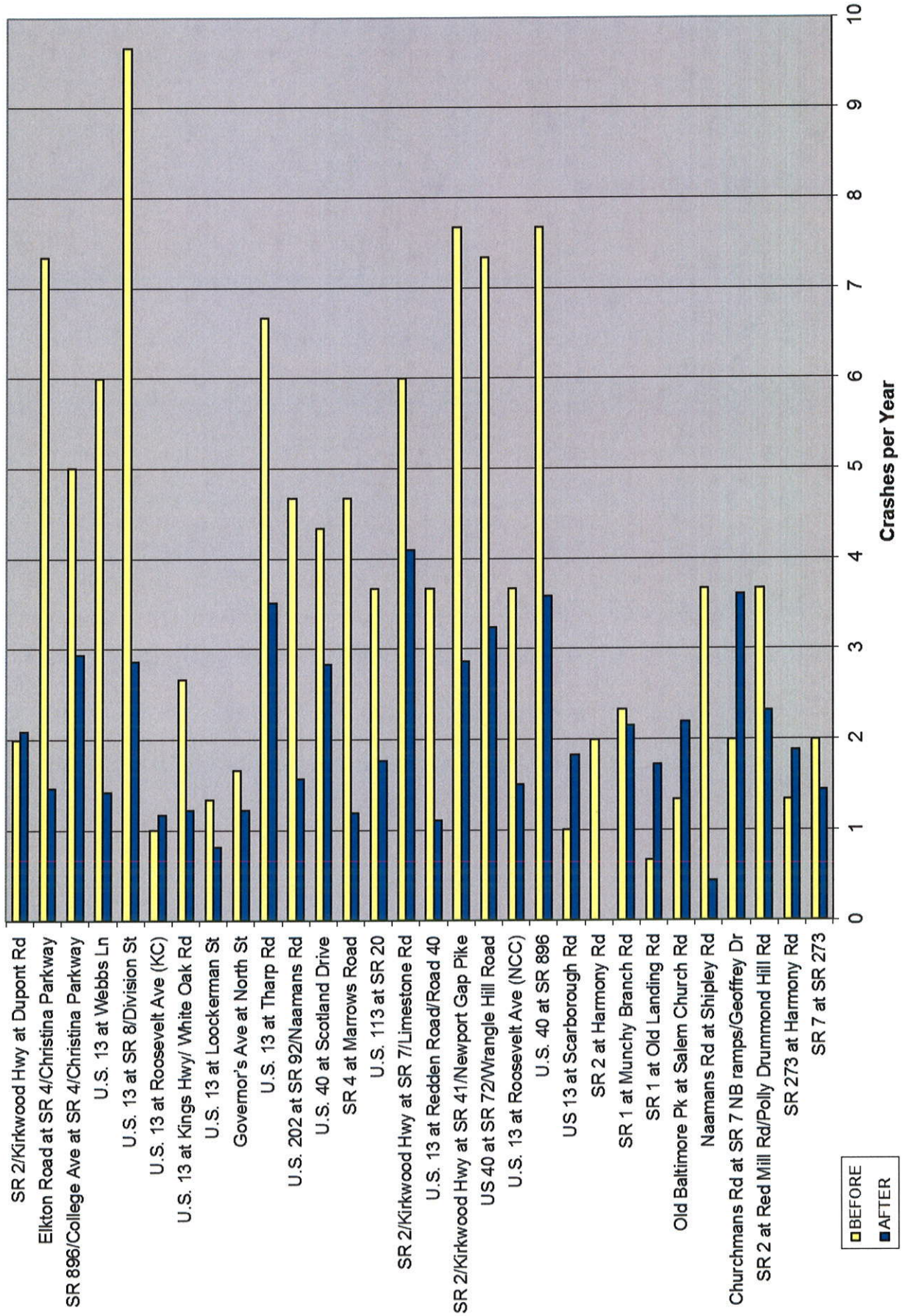


Figure 3: Red Light Running Crashes by Year

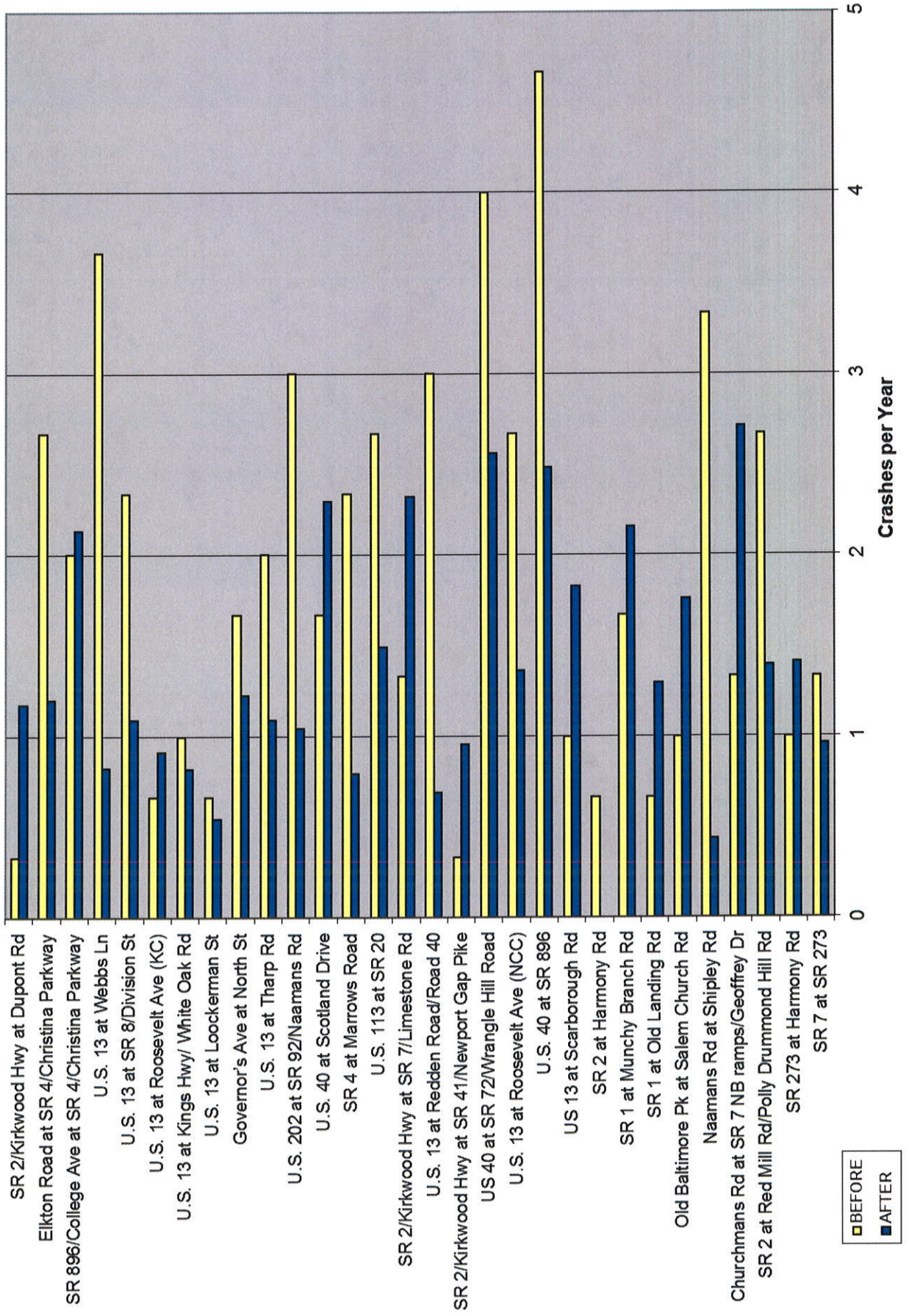


Figure 4: Rear End Crashes by Year

